Lenovo System x3550 M4
Installation and Service Guide

Machine Type: 7914

Note

Before using this information and the product it supports, read the general information in Appendix D “Getting help and technical assistance” on page 975, Appendix E “Notices” on page 979, the *Warranty Information* document, and the *Safety Information* and *Environmental Notices and User Guide* documents on the *Documentation* CD.

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Contents

Safety v
Guidelines for trained service technicians vi
Inspecting for unsafe conditions vi
Guidelines for servicing electrical equipment . vii
Safety statements viii

Chapter 1. The Lenovo System x3550 M4 server 1
The Documentation CD 3
Hardware and software requirements 3
Using the Documentation Browser 4
Related documentation 4
Notices and statements in this document 5
Server features and specifications 6
What your server offers 9
Reliability, availability, and serviceability. 12
Systems Director. 13
Server controls, LEDs, and power 14
Front view. 14
Operator information panel 15
Light path diagnostics panel 17
Rear view 18
Server power features 21

Chapter 2. Installing optional devices 23
Instructions for Business Partners 23
How to send DSA data 24
Server components. 24
System-board internal connectors 26
System-board external connectors 26
System-board switches, jumpers, and buttons. 27
System-board LEDs. 29
System-board optional-device connectors . . 30
Installation guidelines 31
System reliability guidelines. 32
Working inside the server with the power on . 33
Handling static-sensitive devices 33
Removing the cover 34
Removing the air baffle 34
Installing drives 35
Drive IDs 36
Installing hot-swap hard disk drives 37
Installing simple-swap hard disk drives . . . 38
Installing an optional DVD drive 39
Installing an optional DVD drive cable 43
Installing a memory module 45
DIMM installation sequence. 48
Memory mirrored channel 48
Memory rank sparing 50
Installing a memory module. 50
Installing an adapter 52
Installing a ServeRAID SAS/SATA controller . . . 55
Installing the ServeRAID adapter memory module 60
Installing a RAID adapter battery or flash power module 61
Installing the dual-port network adapter. 63
Installing a power supply. 67
Installing a hot-swap ac power supply . . . 67
Installing a hot-swap dc power supply . . . 70
Installing a hot-swap fan. 75
Installing a USB embedded hypervisor flash device 77
Installing an additional microprocessor and heat sink 78
Thermal grease 86
Installing a SAS/SATA 4 Pac HDD option 87
Installing the operator information panel assembly. 87
Completing the installation 89
Replacing the air baffle 90
Replacing the cover. 90
Connecting the cables. 91
Updating the server configuration 92

Chapter 3. Configuring 93
Updating the firmware. 93
Configuring the server. 94
Using the ServerGuide Setup and Installation CD 96
Using the Setup utility 97
Using the Boot Manager 103
Starting the backup server firmware 104
The Update*Xpress* System Pack Installer . . 104
Using the integrated management module . . 104
Using the remote presence and blue-screen capture features 105
Using the embedded hypervisor 107
Configuring the Ethernet controller 108
Enabling Features on Demand Ethernet software 108
Enabling Features on Demand RAID software 108

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Configuring RAID arrays 108
Advanced Settings Utility program 109
Using Lenovo XClarity Administrator 109
Updating Systems Director 110
Updating the Universal Unique Identifier (UUID) 111
Updating the DMI/SMBIOS data 113

Chapter 4. Troubleshooting 117
Start here. 117
Diagnosing a problem 117
Undocumented problems 119
Service bulletins 119
Checkout procedure 120
About the checkout procedure 120
Performing the checkout procedure 120
Diagnostic tools 121
Light path diagnostics 123
Event logs. 135
POST 137
Dynamic System Analysis 137
Automated service request (call home) 140
Electronic Service Agent 140
Error messages 140
Troubleshooting by symptom 140
CD/DVD drive problems 141
General problems. 141
Hard disk drive problems. 142
Hypervisor problems 143
Intermittent problems 144
Keyboard, mouse, or USB-device problems 144
Memory problems 145
Microprocessor problems 146
Monitor and video problems 147
Network connection problems. 149
Optional-device problems 150
Power problems 150
Serial-device problems 155
ServerGuide problems. 156
Software problems 157
Universal Serial Bus (USB) port problems . . 157
Video problems 158
Solving power problems 158
Solving Ethernet controller problems 159
Solving undetermined problems. 160
Problem determination tips. 161
Recovering the server firmware (UEFI update failure) 162
In-band manual recovery method 162
In-band automated boot recovery method . . 164
Out-of-band method 164
Automated boot recovery (ABR) 164
Nx-boot failure. 165

Chapter 5. Parts listing, Lenovo System x3550 M4 Type 7914 167
Replaceable server components. 167
Structural parts. 177
Power cords 178

Chapter 6. Removing and replacing components. 181
Returning a device or component 181
Internal cable routing and connectors. 181
Cabling SAS/SATA ServeRAID Controller . . 181
Cabling backplane 183
Cabling RAID adapter battery or flash power module 186
Cabling SPECpower 187
Cabling DVD drive 188
Cabling operator information panel 189
Cabling front USB and video connector . . . 190
Removing and replacing server components . . . 191
Removing and replacing structural parts. . . 191
Removing and replacing Tier 1 CRUs 200
Removing and replacing Tier 2 CRUs 287

Appendix A. Integrated management module II (IMM2) error messages . 311
IMM Events that automatically notify Support . . 312
List of IMM events 317

Appendix B. UEFI/POST diagnostic codes 793
List of UEFI events 793

Appendix C. DSA diagnostic test results 817
DSA Broadcom network test results 817
Test results for the DSA Broadcom network test 817
DSA Brocade test results 827
Test results for the DSA Brocade test 827
DSA checkpoint panel test results 836
Test results for the DSA checkpoint panel test 836
DSA CPU stress test results 838
Test results for the DSA CPU stress test . . . 838
DSA Emulex adapter test results. 841
Test results for the DSA Emulex adapter test 841
DSA EXA port ping test results 845

Test results for the DSA EXA port ping test . . 845
DSA hard drive test results 848
Test results for the DSA hard drive test . . . 848
DSA Intel network test results 849
Test results for the DSA Intel network test . . 849
DSA LSI hard drive test results 856
Test results for the DSA LSI hard drive test . . 856
DSA Mellanox adapter test results 857
Test results for the DSA Mellanox adapter test 858
DSA memory isolation test results 860
Test results for the DSA memory isolation test 860
DSA memory stress test results 938
Test results for the DSA memory stress test . . 938
DSA Nvidia GPU test results 941
Test results for the DSA Nvidia GPU test . . . 942
DSA optical drive test results 948
Test results for the DSA optical drive test . . 948
DSA system management test results 953
Test results for the DSA system management test 953
DSA tape drive test results 968
Test results for the DSA tape drive test . . . 968

Appendix D. Getting help and technical assistance 975
Before you call. 975
Using the documentation 976
Getting help and information from the World Wide Web 976
How to send DSA data 976
Creating a personalized support web page . . . 976
Software service and support 977
Hardware service and support 977
Taiwan product service 977

Appendix E. Notices 979
Trademarks 980
Important notes 980
Recycling information 980
Particulate contamination 981
Telecommunication regulatory statement 981
Electronic emission notices. 981
Federal Communications Commission (FCC) statement 981
Industry Canada Class A emission compliance statement 982
Avis de conformité à la réglementation d'Industrie Canada 982
Australia and New Zealand Class A statement 982
European Union EMC Directive conformance statement 982
Germany Class A statement 982
Japan VCCI Class A statement 983
Japanese statement for ac power consumption for JEITA harmonics guideline 984
Japanese statement of compliance for products less than or equal to 20A per phase for JEITA harmonics guideline 984
Korea Communications Commission (KCC) statement 984
Russia Electromagnetic Interference (EMI) Class A statement 984
People's Republic of China Class A electronic emission statement 984
Taiwan Class A compliance statement . . . 985
Taiwan BSMI RoHS declaration 986

Index. 987

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Safety

Before installing this product, read the Safety Information.

قبل تركيب هذا المنتج، يجب قراءة الملاحظات الآمنية

Antes de instalar este produto, leia as Informações de Segurança.

在安装本产品之前，请仔细阅读 Safety Information
(安全信息)。

安裝本產品之前，請先閱讀「安全資訊」。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Ennen kuin asennat tämän tuotteen, lue turvaohjeet kohdasta Safety Information.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας
(safety information).

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

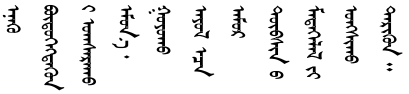
A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza.

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.



Les sikkerhetsinformasjonen (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się
z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Antes de instalar este produto, leia as Informações sobre Segurança.

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Перед установкой продукта прочтите инструкции по технике безопасности.

Pred inštaláciou tohto zariadenia si pečítaje Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto, lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

ཐོན་རྫས་འདི་བདེ་སྒྲིང་མ་བྱས་གོང་། ་སྐོར་གྱི་ཡིད་གཟབ་བྱ་འདུ་མེན་ཡོད་པའི་འོད་སྣེར་བལྟ་དགོས།

Bu ürünü kurmadan önce güvenlik bilgilerini okuyun.

ەزكۇر مەھسۇلاتنى ئورنىتىشتىن بۇرۇن بىخەتەرلىك ئۇچۇرلىرىنى ئوقۇپ چىقىڭ.

Youq mwngz yungh canjbinj neix gaxgonq, itdingh aeu doeg aen canjbinj soengq cungj vahgangj ancien siusik.

Guidelines for trained service technicians

This section contains information for trained service technicians.

Inspecting for unsafe conditions

Use this information to help you identify potential unsafe conditions in a device that you are working on.

Each device, as it was designed and manufactured, has required safety items to protect users and service technicians from injury. The information in this section addresses only those items. Use good judgment to identify potential unsafe conditions that might be caused by unsupported alterations or attachment of unsupported features or optional devices that are not addressed in this section. If you identify an unsafe condition, you must determine how serious the hazard is and whether you must correct the problem before you work on the product.

Consider the following conditions and the safety hazards that they present:

- Electrical hazards, especially primary power. Primary voltage on the frame can cause serious or fatal electrical shock.
- Explosive hazards, such as a damaged CRT face or a bulging capacitor.
- Mechanical hazards, such as loose or missing hardware.

To inspect the product for potential unsafe conditions, complete the following steps:

1. Make sure that the power is off and the power cords are disconnected.
2. Make sure that the exterior cover is not damaged, loose, or broken, and observe any sharp edges.
3. Check the power cords:
   - Make sure that the third-wire ground connector is in good condition. Use a meter to measure third-wire ground continuity for 0.1 ohm or less between the external ground pin and the frame ground.
   - Make sure that the power cords are the correct type.
   - Make sure that the insulation is not frayed or worn.
4. Remove the cover.

5. Check for any obvious unsupported alterations. Use good judgment as to the safety of any unsupported alterations.
6. Check inside the system for any obvious unsafe conditions, such as metal filings, contamination, water or other liquid, or signs of fire or smoke damage.
7. Check for worn, frayed, or pinched cables.
8. Make sure that the power-supply cover fasteners (screws or rivets) have not been removed or tampered with.

Guidelines for servicing electrical equipment

Observe these guidelines when you service electrical equipment.

- Check the area for electrical hazards such as moist floors, nongrounded power extension cords, and missing safety grounds.
- Use only approved tools and test equipment. Some hand tools have handles that are covered with a soft material that does not provide insulation from live electrical current.
- Regularly inspect and maintain your electrical hand tools for safe operational condition. Do not use worn or broken tools or testers.
- Do not touch the reflective surface of a dental mirror to a live electrical circuit. The surface is conductive and can cause personal injury or equipment damage if it touches a live electrical circuit.
- Some rubber floor mats contain small conductive fibers to decrease electrostatic discharge. Do not use this type of mat to protect yourself from electrical shock.
- Do not work alone under hazardous conditions or near equipment that has hazardous voltages.
- Locate the emergency power-off (EPO) switch, disconnecting switch, or electrical outlet so that you can turn off the power quickly in the event of an electrical accident.
- Disconnect all power before you perform a mechanical inspection, work near power supplies, or remove or install main units.
- Before you work on the equipment, disconnect the power cord. If you cannot disconnect the power cord, have the customer power-off the wall box that supplies power to the equipment and lock the wall box in the off position.
- Never assume that power has been disconnected from a circuit. Check it to make sure that it has been disconnected.
- If you have to work on equipment that has exposed electrical circuits, observe the following precautions:
  - Make sure that another person who is familiar with the power-off controls is near you and is available to turn off the power if necessary.
  - When you work with powered-on electrical equipment, use only one hand. Keep the other hand in your pocket or behind your back to avoid creating a complete circuit that could cause an electrical shock.
  - When you use a tester, set the controls correctly and use the approved probe leads and accessories for that tester.
  - Stand on a suitable rubber mat to insulate you from grounds such as metal floor strips and equipment frames.
- Use extreme care when you measure high voltages.
- To ensure proper grounding of components such as power supplies, pumps, blowers, fans, and motor generators, do not service these components outside of their normal operating locations.
- If an electrical accident occurs, use caution, turn off the power, and send another person to get medical aid.

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Safety statements

These statements provide the caution and danger information that is used in this documentation.

Important: Each caution and danger statement in this documentation is labeled with a number. This number is used to cross reference an English-language caution or danger statement with translated versions of the caution or danger statement in the *Safety Information* document.

For example, if a caution statement is labeled `Statement 1`, translations for that caution statement are in the *Safety Information* document under `Statement 1`.

Be sure to read all caution and danger statements in this documentation before you perform the procedures. Read any additional safety information that comes with your system or optional device before you install the device.

Statement 1

DANGER

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- **Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.**
- **Connect all power cords to a properly wired and grounded electrical outlet.**
- **Connect to properly wired outlets any equipment that will be attached to this product.**
- **When possible, use one hand only to connect or disconnect signal cables.**
- **Never turn on any equipment when there is evidence of fire, water, or structural damage.**
- **Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.**
- **Connect and disconnect cables as described in the following table when installing, moving, or opening covers on this product or attached devices.**

To Connect:	**To Disconnect:**
1. Turn everything OFF.	1. Turn everything OFF.
2. First, attach all cables to devices.	2. First, remove power cords from outlet.
3. Attach signal cables to connectors.	3. Remove signal cables from connectors.
4. Attach power cords to outlet.	4. Remove all cables from devices.
5. Turn device ON.	

Statement 2

CAUTION:
When replacing the lithium battery, use only Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

Do not:

- **Throw or immerse into water**
- **Heat to more than 100°C (212°F)**
- **Repair or disassemble**

Dispose of the battery as required by local ordinances or regulations.

Statement 3

CAUTION:
When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- **Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.**
- **Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

DANGER

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following.

Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

Class 1 Laser Product
Laser Klasse 1
Laser Klass 1
Luokan 1 Laserlaite
Appareil À Laser de Classe 1

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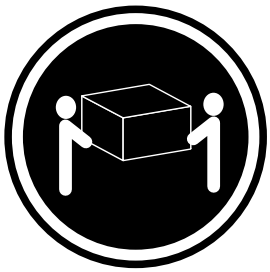
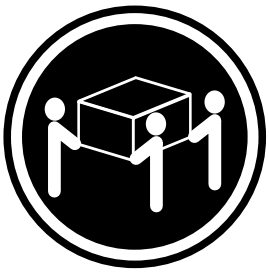
Statement 4

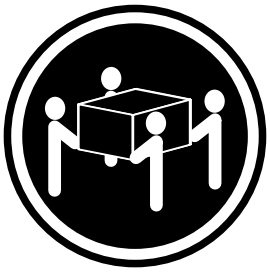
CAUTION: Use safe practices when lifting.



≥ 18 kg (39.7 lb)



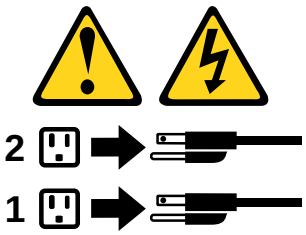
≥ 32 kg (70.5 lb)



≥ 55 kg (121.2 lb)

Statement 5

CAUTION:
The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



Statement 6

CAUTION:
If you install a strain-relief bracket option over the end of the power cord that is connected to the device, you must connect the other end of the power cord to an easily accessible power source.

Statement 8

CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.

Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

Statement 12

CAUTION:
The following label indicates a hot surface nearby.

Statement 26

CAUTION:
Do not place any object on top of rack-mounted devices.

Statement 27

CAUTION:
Hazardous moving parts are nearby.

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Rack Safety Information, Statement 2

DANGER

- **Always lower the leveling pads on the rack cabinet.**
- **Always install stabilizer brackets on the rack cabinet.**
- **Always install servers and optional devices starting from the bottom of the rack cabinet.**
- **Always install the heaviest devices in the bottom of the rack cabinet.**

Chapter 1. The Lenovo System x3550 M4 server

This publication contains information and instructions for setting up your Lenovo System x3550 M4 server, instructions for installing some optional devices, cabling and configuring the server, removing and replacing devices, and diagnostics and troubleshooting information.

In addition to the instructions in Chapter 2 “Installing optional devices” on page 23 for installing optional hardware devices, updating firmware and device drivers, and completing the installation, Business Partners must also complete the steps in “Instructions for Business Partners” on page 23.

The Lenovo System x3550 M4 server is a 1-U-high[1] rack model server for high-volume network transaction processing. This high-performance, multicore server is ideally suited for networking environments that require superior microprocessor performance, input/output (I/O) flexibility, and high manageability.

Performance, ease of use, reliability, and expansion capabilities were key considerations in the design of the server. These design features make it possible for you to customize the system hardware to meet your needs today and provide flexible expansion capabilities for the future.

The server comes with a limited warranty. For information about the terms of the warranty, see the *Warranty Information* document that comes with the server.

The server contains Lenovo X-Architecture technologies, which help increase performance and reliability. For more information, see “What your server offers” on page 9 and “Reliability, availability, and serviceability” on page 12.

You can obtain up-to-date information about the server and other server products at http://shop.lenovo.com/us/ en/systems/. At http://www.ibm.com/support/mysupport/, you can create a personalized support page by identifying products that are of interest to you. From this personalized page, you can subscribe to weekly email notifications about new technical documents, search for information and downloads, and access various administrative services.

If you participate in the client reference program, you can share information about your use of technology, best practices, and innovative solutions; build a professional network; and gain visibility for your business. For more information about the client reference program, see http://www.ibm.com/ibm/clientreference/.

The hot-swap server models support up to eight 2.5-inch hot-swap hard disk drives or three 3.5-inch hot-swap hard disk drives. The simple-swap server models support up to three 3.5-inch simple-swap hard disk drives. It supports 2.5-inch hot-swap Serial Attached SCSI (SAS) or SATA hard disk drives, 3.5-inch hot-swap Serial Attached SCSI (SAS) or SATA hard disk drives, or 3.5-inch simple-swap SATA hard disk drives.

Note: The illustrations in this document might differ slightly from your model.

The following illustration shows the 2.5-inch hot-swap server models with an optional optical drive bay.

1. Racks are marked in vertical increments of 1.75 inches each. Each increment is referred to as a unit, or a U. A 1-U-high device is approximately 1.75 inches tall.

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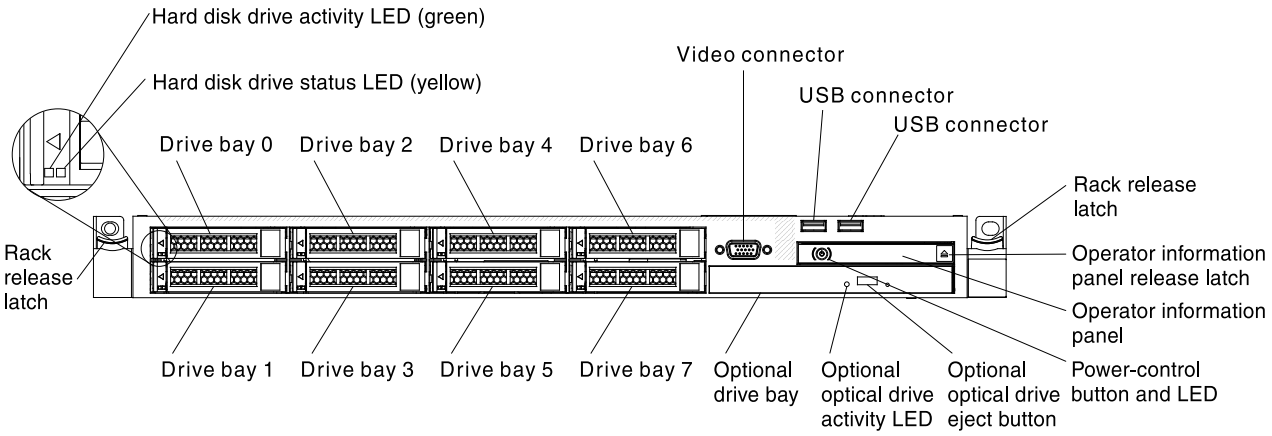


Figure 1. Front view: 2.5-inch model

The following illustration shows the 3.5-inch hot-swap or simple-swap server models. The servers support up to three 3.5-inch hot-swap SAS/SATA or simple-swap SATA hard disk drives.

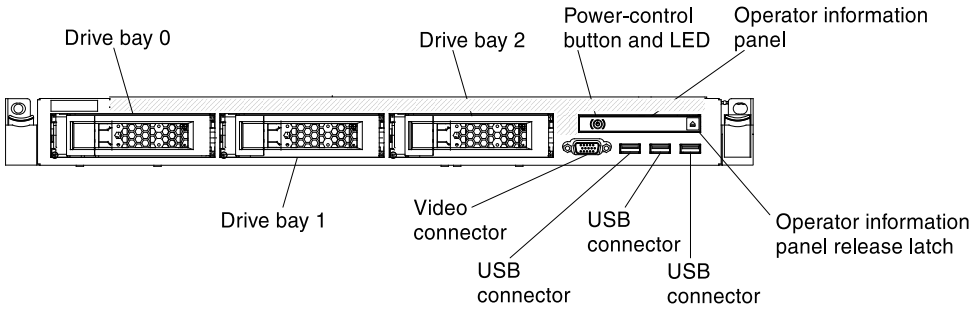


Figure 2. Front view: 3.5-inch model

If firmware and documentation updates are available, you can download them from the website. The server might have features that are not described in the documentation that comes with the server, and the documentation might be updated occasionally to include information about those features, or technical updates might be available to provide additional information that is not included in the server documentation. To check for updates, go to http://www.lenovo.com/support.

Record information about the server in the following table.

Product name	Lenovo System x3550 M4 server
Machine type	7914
Model number	_____
Serial number	_____

The model number and serial number are on the ID label on the front of the server, as shown in the following illustration.

Note: The illustrations in this document might differ slightly from your hardware.

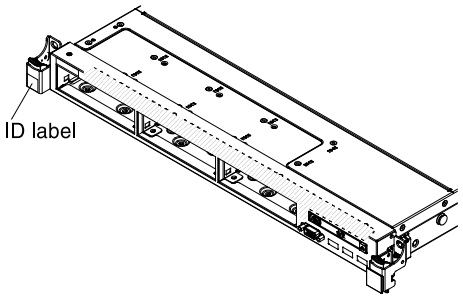


Figure 3. ID label

In addition, the system service label, which is on the cover of the server, provides a QR code for mobile access to service information. You can scan the QR code using a QR code reader and scanner with a mobile device and get quick access to the Service Information website. The Service Information website provides additional information for parts installation and replacement videos, and error codes for server support.

The following illustration shows the QR code (http://ibm.co/114FFrw):

Figure 4. QR code

You can download an *ServerGuide Setup and Installation* CD to help you configure the hardware, install device drivers, and install the operating system.

For a list of supported optional devices for the server, see http://www.lenovo.com/ serverproven/.

See the *Rack Installation Instructions* document on the *System x Documentation* CD for complete rack installation and removal instructions.

The Documentation CD

The *Documentation* CD contains documentation for the server in Portable Document Format (PDF) and includes the Documentation Browser to help you find information quickly.

Hardware and software requirements

The *Documentation* CD requires the following minimum hardware and software:

- Microsoft Windows XP, Windows 2000, or Red Hat Linux
- 100 MHz microprocessor
- 32 MB of RAM
- Adobe Acrobat Reader 3.0 (or later) or xpdf, which comes with Linux operating systems

Using the Documentation Browser

Use the Documentation Browser to browse the contents of the CD, read brief descriptions of the documents, and view documents, using Adobe Acrobat Reader or xpdf.

The Documentation Browser automatically detects the regional settings in use in your server and displays the documents in the language for that region (if available). If a document is not available in the language for that region, the English-language version is displayed.

Use one of the following procedures to start the Documentation Browser:

- If Autostart is enabled, insert the CD into the CD or DVD drive. The Documentation Browser starts automatically.
- If Autostart is disabled or is not enabled for all users, use one of the following procedures:
  - If you are using a Windows operating system, insert the CD into the CD or DVD drive and click **Start → Run**. In the **Open** field, type
    `e:\win32.bat`
    where *e* is the drive letter of the CD or DVD drive, and click **OK**.
  - If you are using Red Hat Linux, insert the CD into the CD or DVD drive; then, run the following command from the /mnt/cdrom directory:
    `sh runlinux.sh`

Select the server from the **Product** menu. The **Available Topics** list displays all the documents for the server. Some documents might be in folders. A plus sign (+) indicates each folder or document that has additional documents under it. Click the plus sign to display the additional documents.

When you select a document, a description of the document is displayed under **Topic Description**. To select more than one document, press and hold the `Ctrl` key while you select the documents. Click **View** to view the selected document or documents in Acrobat Reader or xpdf. If you selected more than one document, all the selected documents are opened in Acrobat Reader or xpdf.

To search all the documents, type a word or word string in the **Search** field and click **Search**. The documents in which the word or word string appears are listed in order of the most occurrences. Click a document to view it, and press `Crtl+F` to use the Acrobat search function, or press `Alt+F` to use the xpdf search function within the document.

Click **Help** for detailed information about using the Documentation Browser.

Related documentation

This *Installation and Service Guide* contains general information about the server including how to set up and cable the server, how to install supported optional devices, how to configure the server, and information to help you solve problems yourself and information for service technicians. The following documentation also comes with the server:

- *Environmental Notices and User Guide*

  This document is in PDF format on the *Documentation* CD. It contains translated environmental notices.
- *License Agreement for Machine Code*

  This document is in PDF format on the *Documentation* CD. It provides translated versions of the *License Agreement for Machine Code* for your product.
- *Important Notices*

  This document is in printed format and comes with the server. It contains information about the safety, environmental, and electronic emission notices for your Lenovo product.

- *Licenses and Attributions Documents*

  This document is in PDF format on the *Documentation* CD. It provides the open source notices.

- *Rack Installation Instructions*

  This printed document contains instructions for installing the server in a rack and comes with the rack kit.

- *Rack Safety Information*

  This multilingual document provides translated versions of the caution and danger statements that appear in the rack documentation. Each caution and danger statement has an assigned number, which you can use to locate the corresponding statement in your native language.

- *Safety Information*

  This document is in PDF format on the *Documentation* CD. It contains translated caution and danger statements. Each caution and danger statement that appears in the documentation has a number that you can use to locate the corresponding statement in your language in the *Safety Information* document.

- *Safety Information Labels*

  This document provides the Simplified Chinese, Mongolian, Tibetan, Uygur, and Zhuang translated versions of the product safety labels.

- *Warranty Information*

  This document is in printed format and comes with the server. It contains warranty terms and a pointer to the Lenovo Statement of Limited Warranty on the website.

Depending on the server model, additional documentation might be included on the *Documentation* CD.

The ToolsCenter for System x and BladeCenter is an online information center that contains information about tools for updating, managing, and deploying firmware, device drivers, and operating systems. The ToolsCenter for System x and BladeCenter is at http://publib.boulder.ibm.com/infocenter/toolsctr/v1r0/.

The server might have features that are not described in the documentation that you received with the server. The documentation might be updated occasionally to include information about those features, or technical updates might be available to provide additional information that is not included in the server documentation. These updates are available from the website. To check for updates, go to http://www.lenovo.com/support.

Notices and statements in this document

The caution and danger statements in this document are also in the multilingual *Safety Information* document, which is on the *System x Documentation* CD. Each statement is numbered for reference to the corresponding statement in your language in the *Safety Information* document.

The following notices and statements are used in this document:

- **Note:** These notices provide important tips, guidance, or advice.
- **Important:** These notices provide information or advice that might help you avoid inconvenient or problem situations.
- **Attention:** These notices indicate potential damage to programs, devices, or data. An attention notice is placed just before the instruction or situation in which damage might occur.
- **Caution:** These statements indicate situations that can be potentially hazardous to you. A caution statement is placed just before the description of a potentially hazardous procedure step or situation.
- **Danger:** These statements indicate situations that can be potentially lethal or extremely hazardous to you. A danger statement is placed just before the description of a potentially lethal or extremely hazardous procedure step or situation.

Server features and specifications

The following information is a summary of the features and specifications of the server.

Depending on the model, some features might not be available, or some specifications might not apply.

Table 1. Server features and specifications

Microprocessor (depending on the model): • Supports up to two multi-core microprocessors (one installed) • Level-3 cache • Two QuickPath Interconnect (QPI) links speed up to 8.0 GT per second **Notes:** • Use the Setup utility program to determine the type and speed of the microprocessors. • For a list of supported microprocessors, see http://www.lenovo.com/serverproven/.	**Memory (depending on the model):** • Minimum: 2 GB • Maximum: 768 GB – 64 GB using unbuffered DIMMs (UDIMMs) – 384 GB using registered DIMMs (RDIMMs) – 768 GB using load reduction DIMMs (LRDIMMs) • Type: – PC3-8500 (DDR3-1066), PC3-10600 (DDR3-1333), PC3-12800 (DDR3-1600), or PC3-14900 (DDR3-1866) – Single-rank, dual-rank, or quad-rank – Registered DIMM (RDIMM), unbuffered DIMM (UDIMM), or load reduced DIMM (LRDIMM) • Slots: 24 dual inline • Supports (depending on the model): – 4 GB UDIMM – 2 GB, 4 GB, 8 GB, and 16 GB RDIMMs – 32 GB LRDIMM	**SATA optical drives (optional for 2.5-inch models):** • DVD-ROM • Multi-burner **Hard disk drive expansion bays (depending on the model):** • 2.5-inch models: Up to eight 2.5-inch hot-swap SAS/SATA hard disk drive bays (with an optional optical drive bay) • 3.5-inch models: Up to three 3.5-inch hot-swap SAS/SATA or simple-swap SATA hard disk drive bays **Attention:** • As a general consideration, do not mix standard 512-byte and advanced 4-KB format drives in the same RAID array because it may lead to potential performance issues. **PCI expansion slots:** Supports two PCI riser slots: • Slot 1 supports low-profile cards. – PCI Express 3.0 x16 • Slot 2 supports half-length, full-height cards. – PCI Express 3.0 x8 – PCI Express 3.0 x16 (two microprocessors installed) – PCI-X 64-bit/133 MHz
Video controller (integrated into IMM2): • Matrox G200eR2 **Note:** The maximum video resolution is 1600 x 1200 at 75 Hz. – SVGA compatible video controller – DDR3 528 MHz SDRAM video memory controller – Avocent Digital Video Compression – 16 MB of video memory (not expandable)	**Integrated functions:** • Integrated Management Module II (IMM2), which consolidates multiple management functions in a single chip. • Intel I350AM4 Quad Port Gigabit Ethernet controller with Wake on LAN support • Eight Universal Serial Bus (USB) ports for 3.5-inch models. Seven Universal Serial Bus (USB) ports for 2.5-inch models. One port is for optional USB flash device with embedded hypervisor software is installed.	**RAID controllers (depending on the model):** • A ServeRAID H1110 SAS/SATA adapter that provides RAID 0, 1, and 10. • A ServeRAID M1115 SAS/SATA adapter that provides RAID 0, 1, and 10 with optional FoD RAID 5/50 and SED (Self Encrypting Drive) upgrade. • A ServeRAID M5110 SAS/SATA adapter that provides RAID 0, 1, and 10. Optional upgrade:

Table 1. Server features and specifications (continued)

Hot-swap fans: • One microprocessor: 4 dual-motor hot-swap fans. • Two microprocessors: 6 dual-motor hot-swap fans. **Power supply:** • Up to two hot-swap power supplies for redundancy support – 550-watt ac – 750-watt ac – 750-watt dc **Note:** Power supplies in the server must be with the same power rating or wattage.	• Six network ports (four 1 Gb Ethernet ports on the system board and two additional ports when the optional Dual-Port 10 Gb Network Adapter is installed) • One System Management 1 Gb Ethernet port on the rear connected to a systems management network. This system management connector is dedicated to the IMM2 functions. • One serial port	– RAID 5/50 (512 MB Cache) with optional FoD RAID 6/60 and SED upgrade – RAID 5/50 (512 MB Flash) with optional FoD RAID 6/60 and SED upgrade – RAID 5/50 (1 GB Flash) with optional FoD RAID 6/60 and SED upgrade – RAID 5/50 and SED (Zero Cache) • A ServeRAID M5120 SAS/SATA adapter that provides RAID 0, 1, and 10. Optional upgrade: – RAID 5/50 (512 MB Cache) with optional FoD RAID 6/60 and SED upgrade – RAID 5/50 (512 MB Flash) with optional FoD RAID 6/60 and SED upgrade – RAID 5/50 (1 GB Flash) with optional FoD RAID 6/60 and SED upgrade – RAID 5/50 and SED (Zero Cache)
Environment: compliant with ASHRAE class A3 specifications. **Server on**: • Temperature: – 5°C to 40°C (41°F to 104°F) – Altitude: 0 to 950 m (3,117 ft); decrease the maximum system temperature by 1°C for every 175-m increase in altitude. • Maximum altitude: 3,050 m (10,000 ft), 5°C to 28°C (41°F to 82.4°F) • Humidity: – Non-condensing: -12°C dew point (10.4°F) – Relative humidity: 8% to 85% • Maximum dew point: 24°C (75.2°F) • Maximum rate of temperature change: – Tape drives: 5°C/hr (41°F/hr) – Hard disk drives: 20°C/hr (68°F/hr) **Server off**:	Particulate contamination: airborne particulates and reactive gases acting alone or in combination with other environmental factors such as humidity or temperature might pose a risk to the server. For information about the limits for particulates and gases, see “Particulate contamination” on page 981. **Attention:** • Design to ASHRAE Class A3, ambient of 40°C, with relaxed support: – Support cloud like workload with no performance degradation acceptable (Turbo-Off) – Under no circumstance, can any combination of worst case workload and configuration result in system shutdown or design exposure at 40°C • Specific microprocessors supported environment: – Microprocessor Intel Xeon E5-2690, 135W:	**Heat output:** Approximate heat output: • Minimum configuration: 461 Btu per hour (AC 135 watts) • Maximum configuration: 3378 Btu per hour (AC 990 watts) **Electrical input:** • Sine-wave input (50 - 60 Hz) required • Input voltage low range: – Minimum: 100 V ac – Maximum: 127 V ac • Input voltage high range: – Minimum: 200 V ac – Maximum: 240 V ac • Input kilovolt-amperes (kVA), approximately: – Minimum: 0.14 kVA – Maximum: 0.993 kVA **Notes:** 1. Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use.

Table 1. Server features and specifications (continued)

• Temperature: 5°C to 45°C (41°F to 113°F) • Relative humidity: 8% to 85% • Maximum dew point: 27°C (80.6°F) **Storage** (non-operating): • Temperature: 1°C to 60°C (33.8°F to 140°F) • Maximum altitude: 3,050 m (10,000 ft) • Relative humidity: 5% to 80% • Maximum dew point: 29°C (84.2°F) **Shipment** (non-operating): • Temperature: -40°C to 60°C (-40°F to 140°F) • Maximum altitude: 10,700 m (35,105 ft) • Relative humidity: 5% to 100% • Maximum dew point: 29°C (84.2°F)	– Temperature: 10°C to 27°C (50°F to 80.6°F) – Altitude: 0 to 304.8 m (1,000 ft) – Microprocessor models with 115W and 130W: – Temperature: 10°C to 35°C (50°F to 95°F) – Altitude: 0 to 914.4 m (3,000 ft) **Size:** • 1U • Height: 43 mm (1.7 inches) • Depth: 734 mm (28.9 inches) • Width: 429 mm (16.9 inches) • Weight: approximately 16.4 kg (36.16 lb) when fully configured **Acoustical noise emissions:** • Sound power, idling: 6.5 bels maximum • Sound power, operating: 6.5 bels maximum	2. The noise emission level stated is the declared (upper limit) sound power level, in bels, for a random sample of machines. All measurements are made in accordance with ISO 7779 and reported in conformance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average values stated because of room reflections and other nearby noise sources. The noise emission level stated in the declared (upper limit) sound-power level, in bels, for a random sample of system.

EU Regulation 617/2013 Technical Documentation:

International Business Machines Corporation

New Orchard Road

Armonk, New York 10504

http://www.ibm.com/customersupport/

For more information on the energy efficiency program, go to http://www.ibm.com/systems/x/hardware/energy-star/index.html

Product Type:
Computer server

Year first manufactured:
2012

Internal/external power supply efficiency:

- http://www.plugloadsolutions.com/psu_reports/IBM_FSA011_550W_SO-301_Report.pdf
- http://www.plugloadsolutions.com/psu_reports/IBM_7001676-XXXX_550W_SO-458_Report.pdf
- http://www.plugloadsolutions.com/psu_reports/IBM_7001605-XXXX_750W_SO-258_Report.pdf
- http://www.plugloadsolutions.com/psu_reports/SO-299_IBM_DPS-750AB-1_750W_Report.pdf
- http://www.plugloadsolutions.com/psu_reports/IBM_DPS-750AB-14%20A_750W_SO-527_Report.pdf

Maximum power (watts):
See Power supply.

Idle state power (watts):
219

Sleep mode power (watts):
Not applicable for servers.

Off mode power (watts):
17

Noise levels (the declared A-weighed sound power level of the computer):
See Acoustical noise emissions.

Test voltage and frequency:
230V / 50 Hz or 60 Hz

Total harmonic distortion of the electricity supply system:
The maximum harmonic content of the input voltage waveform will be equal or less than 2%. The qualification is compliant with EN 61000-3-2.

Information and documentation on the instrumentation set-up and circuits used for electrical testing:
ENERGY STAR Test Method for Computer Servers; ECOVA Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies.

Measurement methodology used to determine information in this document:
ENERGY STAR Servers Version 2.0 Program Requirements; ECOVA Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies.

What your server offers

This section introduces features and technologies the server uses and provides.

- **Active Energy Manager**

  The Active Energy Manager solution is an Systems Director plug-in that measures and reports server power consumption as it occurs. This enables you to monitor power consumption in correlation to specific software application programs and hardware configurations. You can obtain the measurement values through the systems-management interface and view them, using Systems Director. For more information, including the required levels of Systems Director and Active Energy Manager, see the Systems Director Information Center at http://pic.dhe.ibm.com/infocenter/director/pubs/index.jsp?topic=%2Fcom.ibm.director.main.helps.doc%2Ffqm0_main.html or see http://www.ibm.com/systems/management/director/downloads.html.

- **Dynamic System Analysis (DSA)**

  The server comes with the Dynamic System Analysis (DSA) Preboot diagnostic program. DSA collects and analyzes system information to aid in diagnosing server problems, as well as offering a rich set of diagnostic tests of the major components of the server. DSA creates a DSA log, which is a chronologically ordered merge of the system-event log (as the IPMI event log), the integrated management module (IMM) event log (as the ASM event log), and the operating-system event logs. You can send the DSA log as a file to Lenovo Support or view the information as a text file or HTML file.

  Two editions of Dynamic System Analysis are available: DSA Portable and DSA Preboot. For more information about both editions, see “DSA editions” on page 138.

- **Features on Demand**

  If a Features on Demand feature is integrated in the server or in an optional device that is installed in the server, you can purchase an activation key to activate the feature. For information about Features on Demand, see http://www.ibm.com/systems/x/fod/.

- ***ServerGuide Setup and Installation* CD**

  The *ServerGuide Setup and Installation* CD, which you can download from the web, provides programs to help you set up the server and install a Windows operating system. The ServerGuide program detects installed optional hardware devices and provides the correct configuration programs and device drivers.

For more information about the *ServerGuide Setup and Installation* CD, see “Using the ServerGuide Setup and Installation CD” on page 96.

- **Systems Director**

  Systems Director is a platform-management foundation that streamlines the way you manage physical and virtual systems in a heterogeneous environment. By using industry standards, Systems Director supports multiple operating systems and virtualization technologies. For more information, see the Systems Director Information Center at http://pic.dhe.ibm.com/infocenter/director/pubs/index.jsp?topic=%2Fcom.ibm.director.main.helps.doc%2Ffqm0_main.html and “Systems Director” on page 13.

- **Lenovo XClarity Administrator**

  Lenovo XClarity Administrator is a centralized, resource-management solution that simplifies infrastructure management, speeds responses, and enhances the availability of Lenovo server systems and solutions. It runs as a virtual appliance that automates discovery, inventory, tracking, and monitoring for Lenovo servers in a secure environment. For more information, see “Using Lenovo XClarity Administrator” on page 109.

- **Integrated Management Module II (IMM2)**

  The integrated management module II (IMM2) combines service processor functions, video controller, and remote presence and blue-screen capture features in a single chip. The IMM provides advanced service-processor control, monitoring, and alerting function. If an environmental condition exceeds a threshold or if a system component fails, the IMM lights LEDs to help you diagnose the problem, records the error in the IMM event log, and alerts you to the problem. Optionally, the IMM also provides a virtual presence capability for remote server management capabilities. The IMM provides remote server management through the following industry-standard interfaces:

  – Intelligent Platform Management Interface (IPMI) version 2.0

  – Simple Network Management Protocol (SNMP) version 3.0

  – Common Information Model (CIM)

  – Web browser

  Some of the features that are unique to the IMM are enhanced performance, higher-resolution remote video, expanded security options, and Feature on Demand enablement for hardware and firmware options.

  For additional information, see “Using the integrated management module” on page 104 and the Integrated Management Module II Users Guide at http://publib.boulder.ibm.com/infocenter/systemx/documentation/topic/ com.lenovo.sysx.imm2.doc/ printable_doc.html.

- **Integrated network support**

  The server comes with an integrated dual-port Intel Gigabit Ethernet controller, which supports connection to a 10 Mbps, 100 Mbps, or 1000 Mbps network. For more information, see “Configuring the Ethernet controller” on page 108.

- **Integrated Trusted Platform Module (TPM)**

  This integrated security chip performs cryptographic functions and stores private and public secure keys. It provides the hardware support for the Trusted Computing Group (TCG) specification. You can download the software to support the TCG specification, when the software is available. You can enable TPM support through the Setup utility under the **System Security** menu option.

- **Large data-storage capacity and hot-swap capability**

  The hot-swap server models support a maximum of eight 2.5-inch or three 3.5-inch hot-swap Serial Attached SCSI (SAS) hard disk drives or hot-swap Serial ATA (SATA) hard disk drives. The simple-swap server models support a maximum of three 3.5-inch simple-swap SATA hard disk drives.

  With the hot-swap feature, you can add, remove, or replace hard disk drives without turning off the server.

- **Large system-memory capacity**

The server can support up to 768 GB of system memory. The server provides 24 dual inline memory module (DIMM) connectors. The server memory controller supports error correcting code (ECC) for PC3-8500 (DDR3-1066), PC3-10600 (DDR3-1333), PC3-12800 (DDR3-1600), or PC3-14900 (DDR3-1866), DDR3 (third-generation double-data-rate), synchronous dynamic random access memory (SDRAM) DIMMs.

- **Light path diagnostics**

  Light path diagnostics provides LEDs to help you diagnose problems. For more information about light path diagnostics and the LEDs, see “Light path diagnostics” on page 123 and “Light path diagnostics LEDs” on page 126.

- **Mobile access to Service Information website**

  The server provides a QR code on the system service label, which is on the cover of the server, that you can scan using a QR code reader and scanner with a mobile device to get quick access to the Service Information website. The Service Information website provides additional information for parts installation and replacement videos, and error codes for server support. For the QR code, see QR code information on page Chapter 1 “The Lenovo System x3550 M4 server” on page 1.

- **Multi-core processing**

  The server supports up to two multi-core microprocessors. The server comes with a minimum of one microprocessor.

- **PCI adapter capabilities**

  The server has two PCI interface slots (one supports low-profile cards, and one supports half-length, full-height cards). Slot 2 can support PCI Express or PCI-X adapters through an optional PCI riser card. See “Replacing an adapter” on page 228 for detailed information.

- **Redundant connection**

  The addition of the optional Ethernet adapter provides failover capability to a redundant Ethernet connection with the applicable application installed. If a problem occurs with the primary Ethernet connection and the optional Ethernet adapter is installed on the server, all Ethernet traffic that is associated with the primary connection is automatically switched to the optional redundant Ethernet adapter connection. If the applicable device drivers are installed, this switching occurs without data loss and without user intervention.

- **Redundant cooling and optional power capabilities**

  The server supports a maximum of two 550-watt or 750-watt hot-swap power supplies and six dual-motor hot-swap fans, which provide redundancy and hot-swap capability for a typical configuration. The redundant cooling by the fans in the server enables continued operation if one of the fans fails. The server comes with the minimum of one 550-watt or 750-watt hot-swap power supply and four fans.

  You must install the fourth and sixth fans when you install the second microprocessor in the server. You can order the second optional power supply for power redundancy.

  Note: You cannot mix 550-watt and 750-watt power supplies in the server.

- **ServeRAID support**

  The ServeRAID adapter provides hardware redundant array of independent disks (RAID) support to create configurations. The standard RAID adapter provides RAID levels 0, 1, and 10. An optional RAID adapter is available for purchase.

- **Systems-management capabilities**

  The server comes with an integrated management module II (IMM2). When the IMM is used with the systems-management software that comes with the server, you can manage the functions of the server locally and remotely. The IMM also provides system monitoring, event recording, and network alert capability. The systems-management connector on the rear of the server is dedicated to the IMM. The dedicated systems-management connector provides additional security by physically separating the

management network traffic from the production network. You can use the Setup utility to configure the server to use a dedicated systems-management network or a shared network.

- **UEFI-compliant server firmware**

  System x Server Firmware (server firmware) offers several features, including Unified Extensible Firmware Interface (UEFI) 2.1 compliance; Active Energy Manager technology; enhanced reliability, availability, and serviceability (RAS) capabilities; and basic input/output system (BIOS) compatibility support. UEFI replaces the BIOS and defines a standard interface between the operating system, platform firmware, and external devices. UEFI-compliant System x servers are capable of booting UEFI-compliant operating systems, BIOS-based operating systems, and BIOS-based adapters as well as UEFI-compliant adapters.

  Note: The server does not support DOS (Disk Operating System).

- **VMware ESXi embedded hypervisor**

  An optional USB flash device with VMware ESXi embedded hypervisor software is available for purchase. Hypervisor is virtualization software that enables multiple operating systems to run on a host system at the same time. The USB embedded hypervisor flash device can be installed in the internal USB connector on the system board. For more information about using the embedded hypervisor, see “Using the embedded hypervisor” on page 107.

Reliability, availability, and serviceability

Three important computer design features are reliability, availability, and serviceability (RAS). The RAS features help to ensure the integrity of the data that is stored in the server, the availability of the server when you need it, and the ease with which you can diagnose and correct problems.

Your server has the following RAS features:

- 3-year parts and 3-year labor limited warranty (Machine Type 7914)
- 24-hour support center
- Automatic error retry and recovery
- Automatic restart on nonmaskable interrupt (NMI)
- Automatic restart after a power failure
- Back up basic input/output system switching under the control of the integrated management module (IMM)
- Built-in monitoring for fan, power, temperature, voltage, and power-supply redundancy
- Cable-presence detection on most connectors
- Chipkill memory protection
- Double-device data correction (DDDC) for x4 DRAM technology DIMMs (available on 16 GB DIMMs only). Ensures that data is available on a single x4 DRAM DIMM after a hard failure of up to two DRAM DIMMs. One x4 DRAM DIMM in each rank is reserved as a space device.
- Diagnostic support for ServeRAID and Ethernet adapters
- Error codes and messages
- Error correcting code (ECC) L3 cache and system memory
- Full Array Memory Mirroring (FAMM) redundancy
- Hot-swap cooling fans with speed-sensing capability
- Hot-swap hard disk drives
- Information and light path diagnostics LED panels
- Integrated Management Module (IMM)
- Light path diagnostics LEDs for memory DIMMs, microprocessors, hard disk drives, solid state drives, power supplies, and fans
- Memory mirroring and memory sparing support
- Memory error correcting code and parity test
- Memory down sizing (non-mirrored memory). After a restart of the server after the memory controller detected a non-mirrored uncorrectable error and the memory controller cannot recover operationally, the IMM logs the uncorrectable error and informs POST. POST logically maps out the memory with the uncorrectable error, and the server restarts with the remaining installed memory.

- Menu-driven setup, system configuration, and redundant array of independent disks (RAID) configuration programs
- Microprocessor built-in self-test (BIST), internal error signal monitoring, internal thermal trip signal monitoring, configuration checking, and microprocessor and voltage regulator module failure identification through light path diagnostics
- Nonmaskable interrupt (NMI) button
- Parity checking on the small computer system interface (SCSI) bus and PCI-E and PCI/PCI-X buses
- Power management: Compliance with Advanced Configuration and Power Interface (ACPI)
- Power-on self-test (POST)
- Predictive Failure Analysis (PFA) alerts on memory, microprocessors, SAS/SATA hard disk drives or solid state drives, fans, power supplies, and VRM
- Redundant Ethernet capabilities with failover support
- Redundant hot-swap power supplies and redundant hot-swap fans
- Redundant network interface card (NIC) support
- Remind button to temporarily turn off the system-error LED
- Remote system problem-determination support
- ROM-based diagnostics
- ROM checksums
- Serial Presence Detection (SPD) on memory, VPD on system board, power supply, and hard disk drive or solid state drive backplanes, microprocessor and memory expansion tray, and Ethernet cards
- Single-DIMM isolation of excessive correctable error or multi-bit error by the Unified Extensible Firmware Interface (UEFI)
- Solid state drives
- Standby voltage for system-management features and monitoring
- Startup (boot) from LAN through remote initial program load (RIPL) or dynamic host configuration protocol/boot protocol (DHCP/BOOTP)
- System auto-configuring from the configuration menu
- System-error logging (POST and IMM)
- Systems-management monitoring through the Inter-Integrated Circuit (IC) protocol bus
- Uncorrectable error (UE) detection
- Upgradeable POST, Unified Extensible Firmware Interface (UEFI), diagnostics, IMM firmware, and read-only memory (ROM) resident code, locally or over the LAN
- Vital product data (VPD) on microprocessors, system board, power supplies, and SAS/SATA (hot-swap hard disk drive or solid state drive) backplane
- Wake on LAN capability

Systems Director

Systems Director is a platform-management foundation that streamlines the way you manage physical and virtual systems supports multiple operating systems and virtualization technologies in Lenovo and non-Lenovo x86 platforms.

Through a single user interface, Systems Director provides consistent views for viewing managed systems, determining how these systems relate to one other, and identifying their statuses, helping to correlate technical resources with business needs. A set of common tasks that are included with Systems Director provides many of the core capabilities that are required for basic management, which means instant out-of-the-box business value. The common tasks include the following items:

- Discovery
- Inventory
- Configuration
- System health
- Monitoring
- Updates

- Event notification
- Automation for managed systems

The Systems Director Web and command-line interfaces provide a consistent interface that is focused on driving these common tasks and capabilities:

- Discovering, navigating, and visualizing systems on the network with the detailed inventory and relationships to the other network resources
- Notifying users of problems that occur on systems and the ability to isolate the sources of the problems
- Notifying users when systems need updates and distributing and installing updates on a schedule
- Analyzing real-time data for systems and setting critical thresholds that notify the administrator of emerging problems
- Configuring settings of a single system and creating a configuration plan that can apply those settings to multiple systems
- Updating installed plug-ins to add new features and functions to the base capabilities
- Managing the life cycles of virtual resources

For more information about Systems Director, see the documentation on the *Systems Director* DVD that comes with the server, the Systems Director Information Center at http://pic.dhe.ibm.com/infocenter/director/pubs/index.jsp?topic=%2Fcom.ibm.director.main.helps.doc%2Ffqm0_main.html, and the Systems Management website at http://shop.lenovo.com/us/en/systems/solutions/, which presents an overview of Systems Management and Systems Director.

Server controls, LEDs, and power

This section describes the controls and light-emitting diodes (LEDs) and how to turn the server on and off.

For the locations of other LEDs on the system board, see “System-board LEDs” on page 29.

Front view

The following illustrations show the controls, LEDs, and connectors on the front of your server model.

2.5-inch hard disk drive server model.

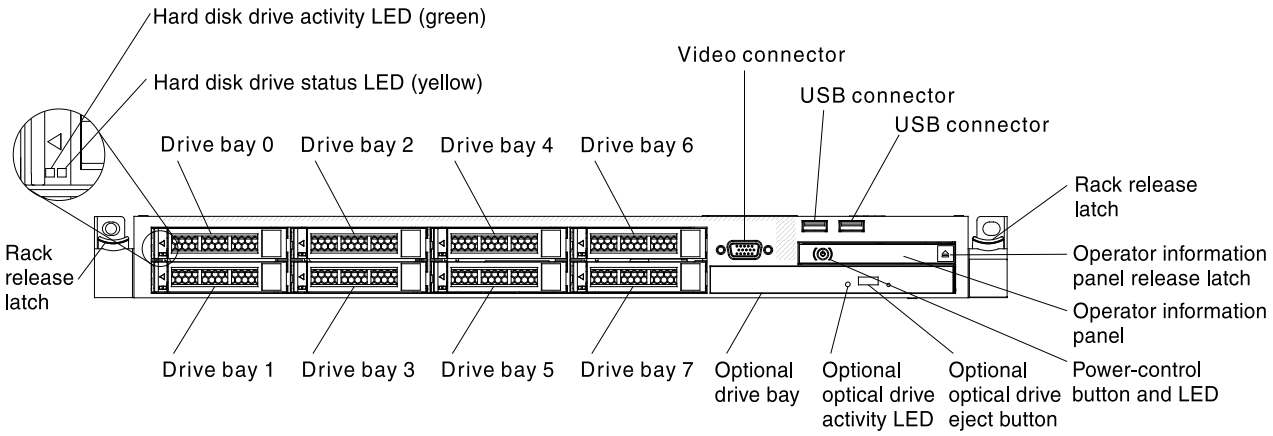


Figure 5. Front view: 2.5-inch

3.5-inch hard disk drive server model.

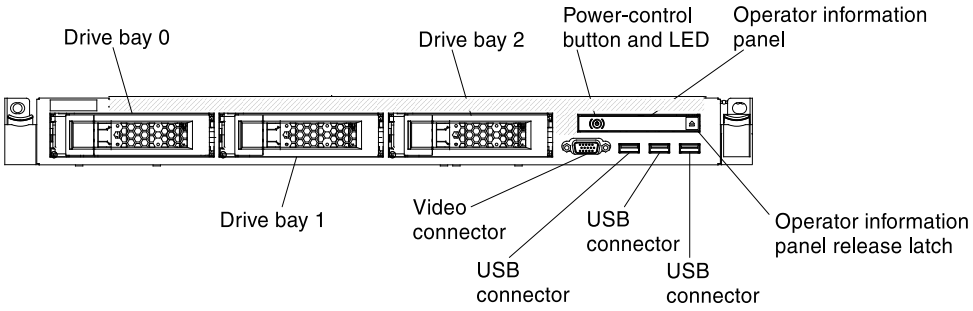


Figure 6. Front view: 3.5-inch

- **Rack release latches:** Press the latches on each front side of the server to remove the server from the rack.
- **Hard disk drive activity LEDs:** This LED is used on hot-swap SAS or SATA hard disk drives. Each hot-swap hard disk drive has an activity LED, and when this LED is flashing, it indicates that the drive is in use.
- **Hard disk drive status LEDs:** This LED is used on hot-swap SAS or SATA hard disk drives. When this LED is lit, it indicates that the drive has failed. If an optional ServeRAID controller is installed in the server, when this LED is flashing slowly (one flash per second), it indicates that the drive is being rebuilt. When the LED is flashing rapidly (three flashes per second), it indicates that the controller is identifying the drive.
- **Optional DVD eject button:** Press this button to release a DVD or CD from the optional DVD drive.
- **Optional DVD drive activity LED:** When this LED is lit, it indicates that the optional DVD drive is in use.
- **Operator information panel:** This panel contains controls and LEDs that provide information about the status of the server. For information about the controls and LEDs on the operator information panel, see “Operator information panel” on page 15.
- **Operator information panel release latch:** Press the blue release latch to pull out the light path diagnostics panel and view the light path diagnostics LEDs and buttons. See “Light path diagnostics panel” on page 17 for more information about the light path diagnostics.
- **Video connector:** Connect a monitor to this connector. The video connectors on the front and rear of the server can be used simultaneously.

  Note: The maximum video resolution is 1600 x 1200 at 75 Hz.
- **USB connectors:** Connect a USB device, such as a USB mouse or keyboard to any of these connectors.

Operator information panel

The following illustrations show the controls and LEDs on the advanced operator information panel and the operator information panel depending on your server model.

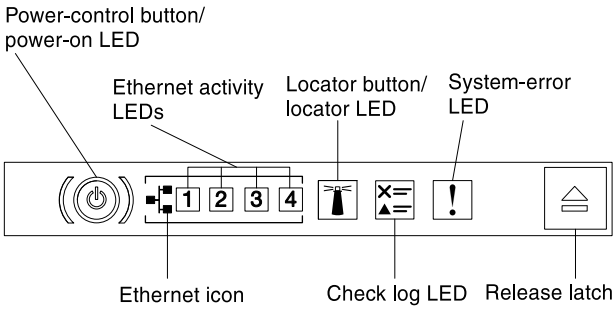


Figure 7. Advanced operator information panel

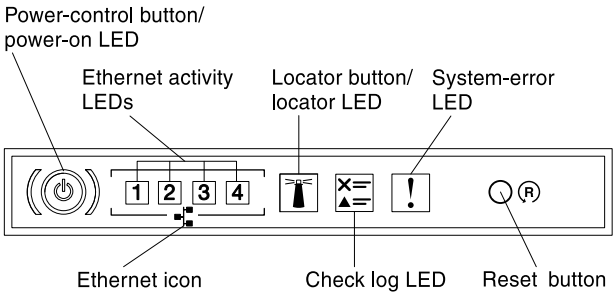


Figure 8. Operator information panel

- **Power-control button and power-on LED:** Press this button to turn the server on and off manually. The states of the power-on LED are as follows:

  Off: Power is not present or the power supply, or the LED itself has failed.

  Flashing rapidly (4 times per second): The server is turned off and is not ready to be turned on. The power-control button is disabled. This will last approximately 5 to 10 seconds.

  Flashing slowly (once per second): The server is turned off and is ready to be turned on. You can press the power-control button to turn on the server.

  Lit: The server is turned on.
- **Ethernet activity LEDs:** When any of these LEDs is lit, they indicate that the server is transmitting to or receiving signals from the Ethernet LAN that is connected to the Ethernet port that corresponds to that LED.
- **System-locator button/LED:** Use this blue LED to visually locate the server among other servers. A system-locator LED is also on the rear of the server. This LED is used as a presence detection button as well. You can use Systems Director or IMM web interface to light this LED remotely. This LED is controlled by the IMM. The locator button is pressed to visually locate the server among the others servers.
- **Check log LED:** When this yellow LED is lit, it indicates that a system error has occurred. Check the event log for additional information. See “Event logs” on page 135 for more information about event logs.
- **System-error LED:** When this yellow LED is lit, it indicates that a system error has occurred. A system-error LED is also on the rear of the server. An LED on the light path diagnostics panel on the operator information panel or on the system board is also lit to help isolate the error. This LED is controlled by the IMM.

Notes:

1. Depending on the type of operator information panel installed in your server, the **Reset button** is on the operator information panel or the light path diagnostics panel.

2. You don't have to pull out the operator information panel to obtain more information if there's no release latch existed in your server model.

Light path diagnostics panel

The light path diagnostics panel is located on the top of the operator information panel.

For additional information about the LEDs on the light path diagnostics panel, see “Light path diagnostics LEDs” on page 126.

Note: The system service label inside the server cover also provides information about the location of the light path diagnostics LEDs.

To access the light path diagnostics panel, press the blue release latch on the operator information panel. Pull forward on the panel until the hinge of the operator information panel is free of the server chassis. Then pull down on the panel, so that you can view the light path diagnostics panel information.

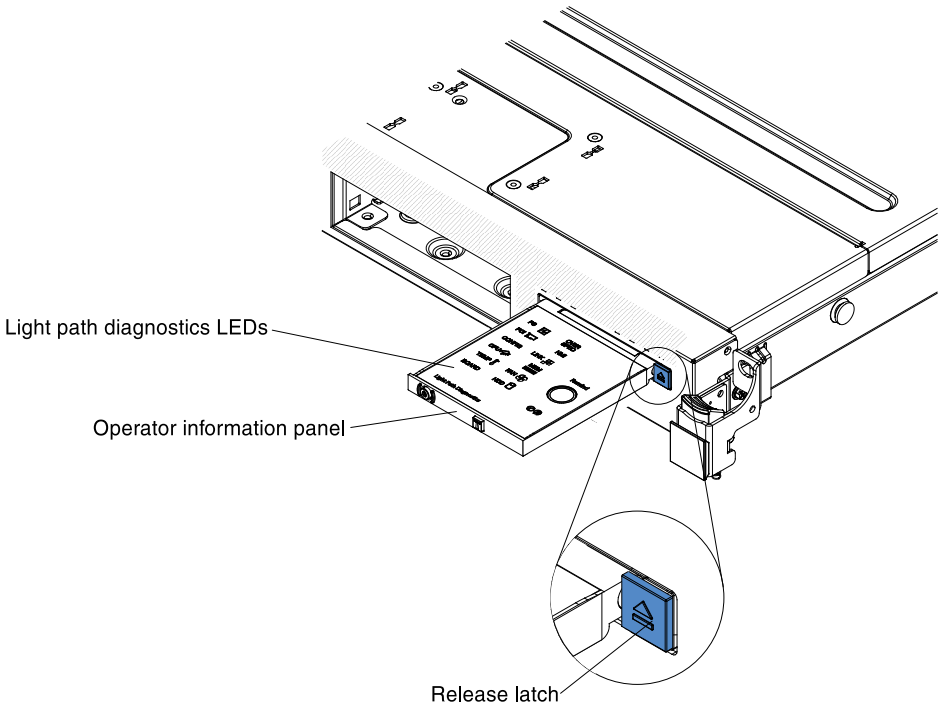


Figure 9. Light path diagnostics panel exposure

The following illustration shows the LEDs and controls on the light path diagnostics panel.

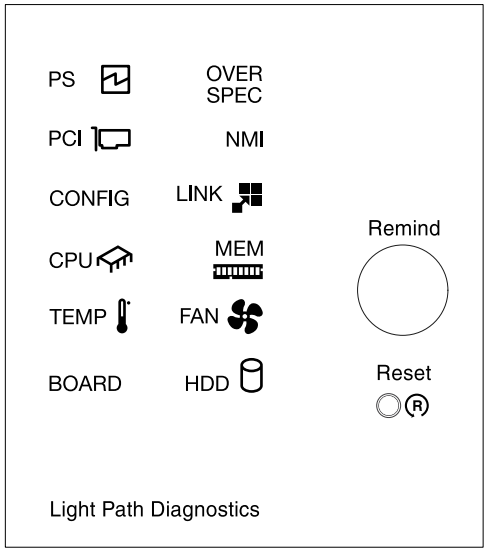


Figure 10. Light path diagnostics panel

- **Remind button:** This button places the system-error LED on the operator information panel into Remind mode. In Remind mode, the system-error LED flashes once every 2 seconds until the problem is corrected, the server is restarted, or a new problem occurs. By placing the system-error LED indicator in Remind mode, you acknowledge that you are aware of the last failure but will not take immediate action to correct the problem.
- **Reset button:** Press this button to reset the server and run the power-on self-test (POST). You might have to use a pen or the end of a straightened paper clip to press the button. The Reset button is in the lower-right corner of the light path diagnostics panel.

Rear view

The following illustration shows the connectors on the rear of the server.

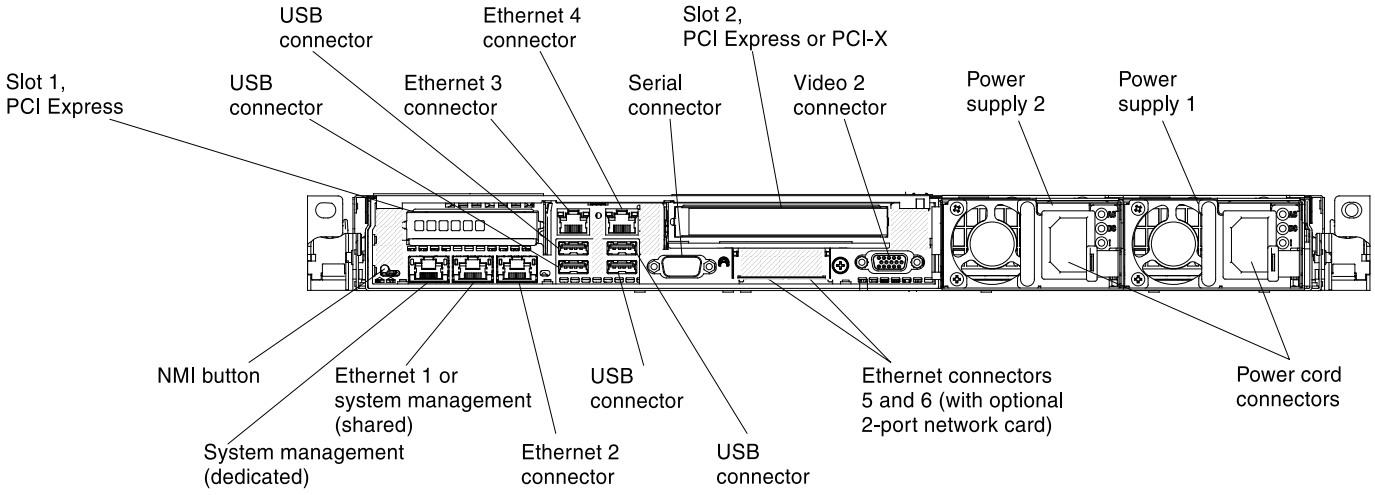


Figure 11. Rear view connectors

- **NMI button:** Press this button to force a nonmaskable interrupt to the microprocessor. It allows you to blue screen the server and take a memory dump (use this button only when directed by the Lenovo service support). You might have to use a pen or the end of a straightened paper clip to press the button. The NMI button is in the lower left-hand corner on the rear of the server.
- **PCI slot 1:** Insert a low-profile PCI Express adapter into this slot.
- **PCI slot 2:** Insert a half-length, full-height PCI Express or PCI-X adapter into this slot.
- **Power connector:** Connect the power cord to this connector.

  Note: Power supply 1 is the default/primary power supply. If power supply 1 fails, you must replace it immediately.
- **Video connector:** Connect a monitor to this connector. The video connectors on the front and rear of the server can be used simultaneously.

  Note: The maximum video resolution is 1600 x 1200 at 75 Hz.
- **Serial connector:** Connect a 9-pin serial device to this connector. The serial port is shared with the integrated management module II (IMM2). The IMM2 can take control of the shared serial port to redirect serial traffic, using Serial over LAN (SOL).
- **USB connectors:** Connect a USB device, such as a USB mouse or keyboard to any of these connectors.
- **Systems-management Ethernet connector:** Use this connector to connect the server to a network for full systems-management information control. This connector is used only by the integrated management module (IMM2). A dedicated management network provides additional security by physically separating the management network traffic from the production network. You can use the Setup utility to configure the server to use a dedicated systems management network or a shared network.
- **Ethernet connectors:** Use either of these connectors to connect the server to a network. When you enable shared Ethernet for IMM2 in the Setup utility, you can access the IMM2 using either the Ethernet 1 or the system-management Ethernet (default) connector.

The following illustration shows the LEDs on the rear of the server.

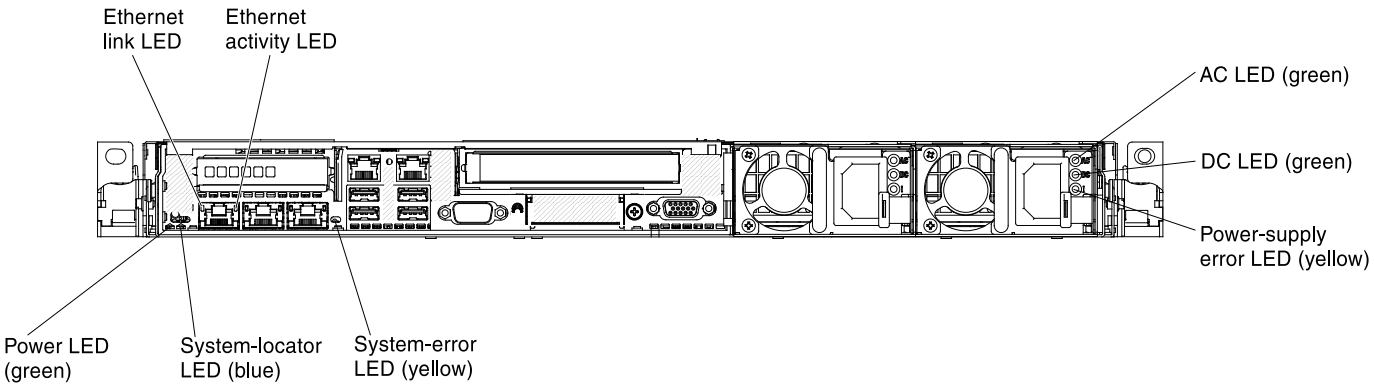


Figure 12. Rear view LEDs

The following illustration shows the LEDs on a dc power supply.

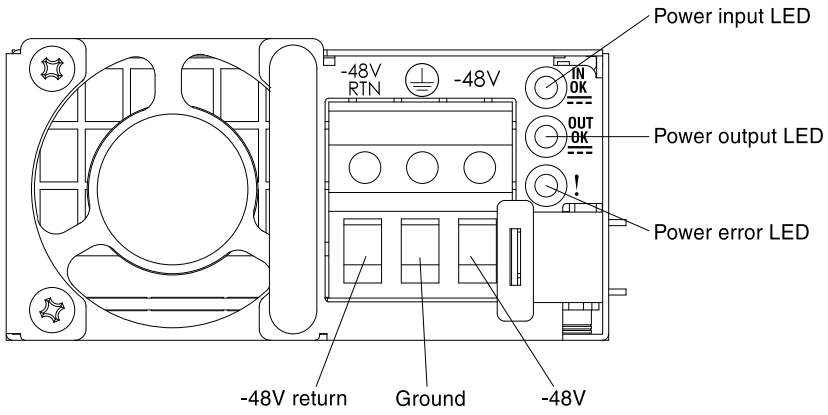


Figure 13. DC power supply LEDs

- **Ethernet activity LEDs:** When these LEDs are lit, they indicate that the server is transmitting to or receiving signals from the Ethernet LAN that is connected to the Ethernet port.
- **Ethernet link LEDs:** When these LEDs are lit, they indicate that there is an active link connection on the 10BASE-T, 100BASE-TX, or 1000BASE-TX interface for the Ethernet port.
- **AC power LED:** Each hot-swap ac power supply has an ac power LED. When the ac power LED is lit, it indicates that sufficient power is coming into the power supply through the power cord. During typical operation, the ac power LED is lit. For any other combination of LEDs, see “AC power-supply LEDs” on page 131.
- **DC power LED:** Each hot-swap ac power supply has a dc power LED. When the dc power LED is lit, it indicates that the power supply is supplying adequate dc power to the system. During typical operation, both the ac and dc power LEDs are lit. For any other combination of LEDs, see “AC power-supply LEDs” on page 131.
- **IN OK power LED:** Each hot-swap dc power supply has an IN OK power LED. When the IN OK power LED is lit, it indicates that sufficient power is coming into the power supply through the power cord. During typical operation, both the IN OK and OUT OK power LEDs are lit. For any other combination of LEDs, see “DC power-supply LEDs” on page 132.
- **OUT OK power LED:** Each hot-swap dc power supply has an OUT OK power LED. When the OUT OK power LED is lit, it indicates that the power supply is supplying adequate dc power to the system. During typical operation, both the IN OK and OUT OK power LEDs are lit. For any other combination of LEDs, see “DC power-supply LEDs” on page 132.
- **Power-supply error LED:** When the power-supply error LED is lit, it indicates that the power supply has failed.

  Note: Power supply 1 is the default/primary power supply. If power supply 1 fails, you must replace the power supply immediately.
- **Power-on LED:** When this LED is lit and not flashing, it indicates that the server is turned on. The states of the power-on LED are as follows:

  Off: Power is not present, or the power supply or the LED itself has failed.

  Flashing rapidly (4 times per second): The server is turned off and is not ready to be turned on. The power-control button is disabled. This will last approximately 5 to 10 seconds.

  Flashing slowly (once per second): The server is turned off and is ready to be turned on. You can press the power-control button to turn on the server.

  Lit: The server is turned on.

- **System-locator LED:** Use this LED to visually locate the server among other servers. You can use Systems Director or IMM2 web interface to light this LED remotely.
- **System-error LED:** When this LED is lit, it indicates that a system error has occurred. An LED on the light path diagnostics panel is also lit to help isolate the error.

Server power features

When the server is connected to an ac power source but is not turned on, the operating system does not run, and all core logic except for the integrated management module is shut down.

However, the server can respond to requests from IMM, such as a remote request to turn on the server. The power-on LED flashes to indicate that the server is connected to an ac power source but is not turned on.

Turning on the server

Use this information to turn on the server.

Approximately 5 seconds after the server is connected to power, one or more fans might start running to provide cooling while the server is connected to power and the power-on button LED will blink quickly. Approximately 5 to 10 seconds after the server is connected to power, the power-control button becomes active (the power-on LED will blink slowly), and one or more fans might start running to provide cooling while the server is connected to power. You can turn on the server by pressing the power-control button.

The server can also be turned on in any of the following ways:

- If a power failure occurs while the server is turned on, the server will restart automatically when power is restored.
- If your operating system supports the Wake on LAN feature, the Wake on LAN feature can turn on the server.

Notes:

1. When 4 GB or more of memory (physical or logical) is installed, some memory is reserved for various system resources and is unavailable to the operating system. The amount of memory that is reserved for system resources depends on the operating system, the configuration of the server, and the configured PCI options.
2. Ethernet 1 connector supports Wake on LAN feature.
3. When you turn on the server with the graphical adapters installed, the logo displays on the screen after approximately 3 minutes. This is normal operation while the system loads.

Turning off the server

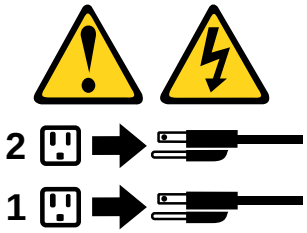
Use this information to turn off the server.

When you turn off the server and leave it connected to power, the server can respond to requests to the service processor, such as a remote request to turn on the server. While the server remains connected to power, one or more fans might continue to run. To remove all power from the server, you must disconnect it from the power source.

Some operating systems require an orderly shutdown before you turn off the server. See your operating-system documentation for information about shutting down the operating system.

Statement 5

CAUTION:
The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



The server can be turned off in any of the following ways:

- You can turn off the server from the operating system, if your operating system supports this feature. After an orderly shutdown of the operating system, the server will turn off automatically.
- You can press the power-control button to start an orderly shutdown of the operating system and turn off the server, if your operating system supports this feature.
- If the operating system stops functioning, you can press and hold the power-control button for more than 4 seconds to turn off the server.
- The server can be turned off by Wake on LAN feature with the following limitation:

  Note: When you install any PCI adapter, the power cords must be disconnected from the power source before you remove the PCI Express riser-card assembly and the PCI-X riser-card assembly. Otherwise, the Wake on LAN feature might not work.
- The Integrated Management Module (IMM) can turn off the server as an automatic response to a critical system failure.

Chapter 2. Installing optional devices

This section provides detailed instructions for installing optional hardware devices in the server.

In addition to the instructions in this chapter for installing optional hardware devices, updating the firmware and device drivers, and completing the installation, Business Partners must also complete the steps in “Instructions for Business Partners” on page 23.

Important: To help ensure that the devices that you install work correctly and do not introduce problems, observe the following precautions:

1. Make sure that the server and the installed firmware levels support the devices that you are installing. If necessary, update the UEFI and IMM firmware and any other firmware that is stored on the system board. For information about where firmware is stored in the server, see “Updating the firmware” on page 93. For a list of supported optional devices for the server, see http://www.lenovo.com/ serverproven/.
2. Use the best practices to apply current firmware and device-driver updates for the server and optional devices. To download the “ System x Firmware Update Best Practices” document, go to www.ibm.com/support/entry/portal/docdisplay?lndocid=MIGR-5082923&brandind=5000008. Additional hints and tips are available from the following sites:
   - Support website: http://www.lenovo.com/support
   - System x configuration tools: http://shop.lenovo.com/us/ en/systems/server-library/ #comboFilters[category]=.Tools
3. Before you install optional hardware devices, make sure that the server is working correctly. Start the server and make sure that the operating system starts, if an operating system is installed, or that a 19990305 error code is displayed, indicating that an operating system was not found but the server is otherwise working correctly. If the server is not working correctly, see “Running the DSA Preboot diagnostic programs” on page 139 for information about how to run diagnostics.
4. Follow the installation procedures in this chapter and use the correct tools. Incorrectly installed devices can cause system failure because of damaged pins in sockets or connectors, loose cabling, or loose components.

Instructions for Business Partners

In addition to the instructions in this section for installing optional hardware devices, updating firmware and device drivers, and completing the installation, Business Partners must also complete the following steps.

1. After you have confirmed that the server starts correctly and recognizes the newly installed devices and that no error LEDs are lit, run the Dynamic System Analysis (DSA) stress test. For information about using DSA, see “Dynamic System Analysis” on page 137.
2. Shut down and restart the server multiple times to ensure that the server is correctly configured and functions correctly with the newly installed devices.
3. Save the DSA log as a file and send it to Lenovo. For information about transferring data and logs, see “How to send DSA data” on page 24.
4. To ship the server, repackage it in the original undamaged packing material and observe Lenovo procedures for shipping.

Support information for Business Partners is available at http://www.ibm.com/partnerworld.

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How to send DSA data

You can use the Enhanced Customer Data Repository to send diagnostic data to IBM.

Before you send diagnostic data to IBM, read the terms of use at http://www.ibm.com/de/support/ecurep/terms.html.

You can use any of the following methods to send diagnostic data:

- **Standard upload**:
  http://www.ibm.com/de/support/ ecurep/send_http.html
- **Standard upload with the system serial number**:
  http://www.ecurep.ibm.com/app/ upload_hw
- **Secure upload**:
  http://www.ibm.com/de/support/ ecurep/send_http.html#secure
- **Secure upload with the system serial number**:
  https://www.ecurep.ibm.com/ app/upload_hw

Server components

The following illustration shows the major components in the server.

The illustrations in this document might differ slightly from your hardware.

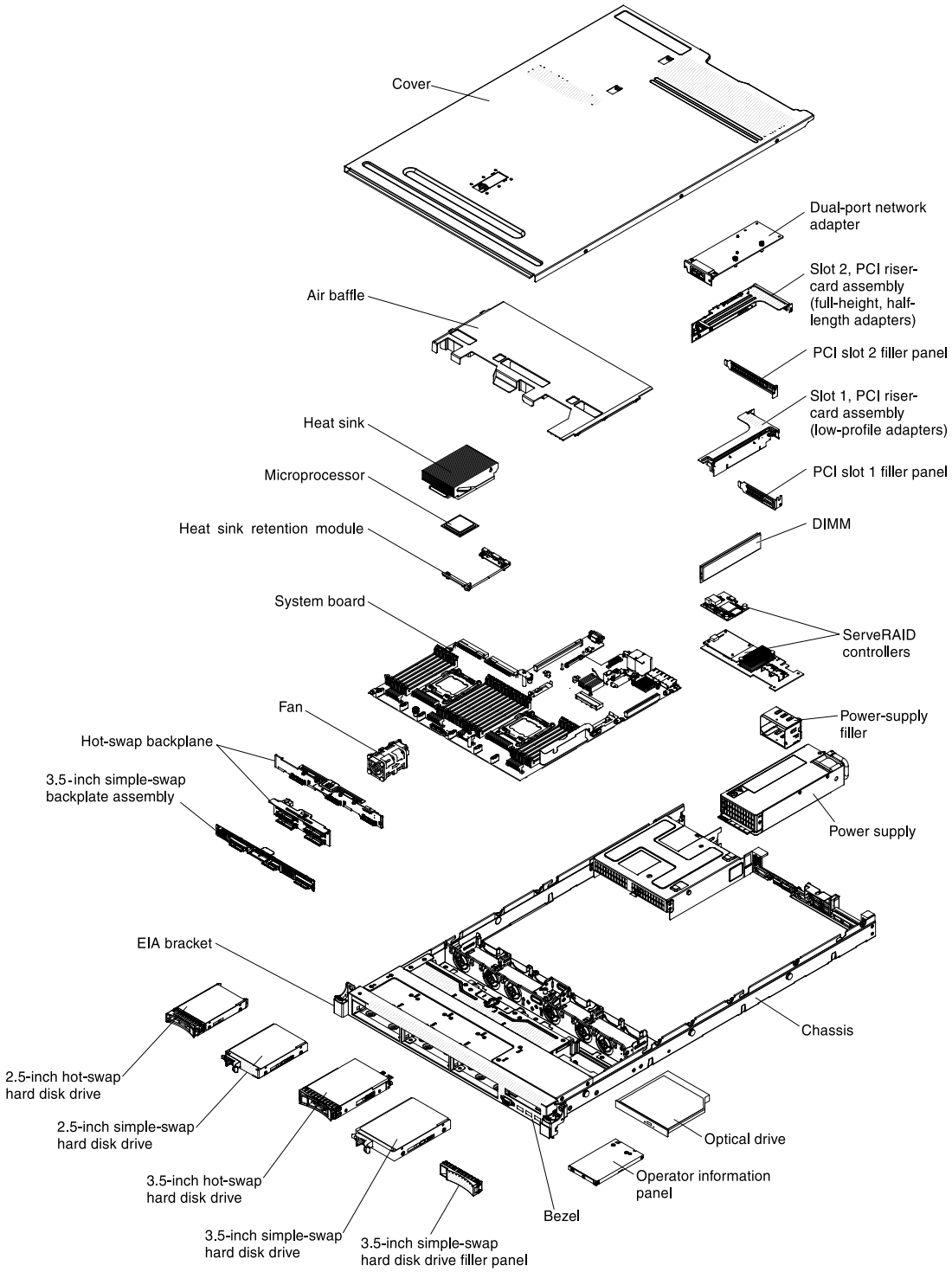


Figure 14. Server components

Blue on a component indicates touch points, where you can grip the component to remove it from or install it in the server, open or close a latch, and so on.

Orange on a component or an orange label on or near a component indicates that the component can be hot-swapped, which means that if the server and operating system support hot-swap capability, you can

remove or install the component while the server is running. (Orange can also indicate touch points on hot-swap components.) See the instructions for removing or installing a specific hot-swap component for any additional procedures that you might have to perform before you remove or install the component.

System-board internal connectors

The following illustration shows the internal connectors on the system board.

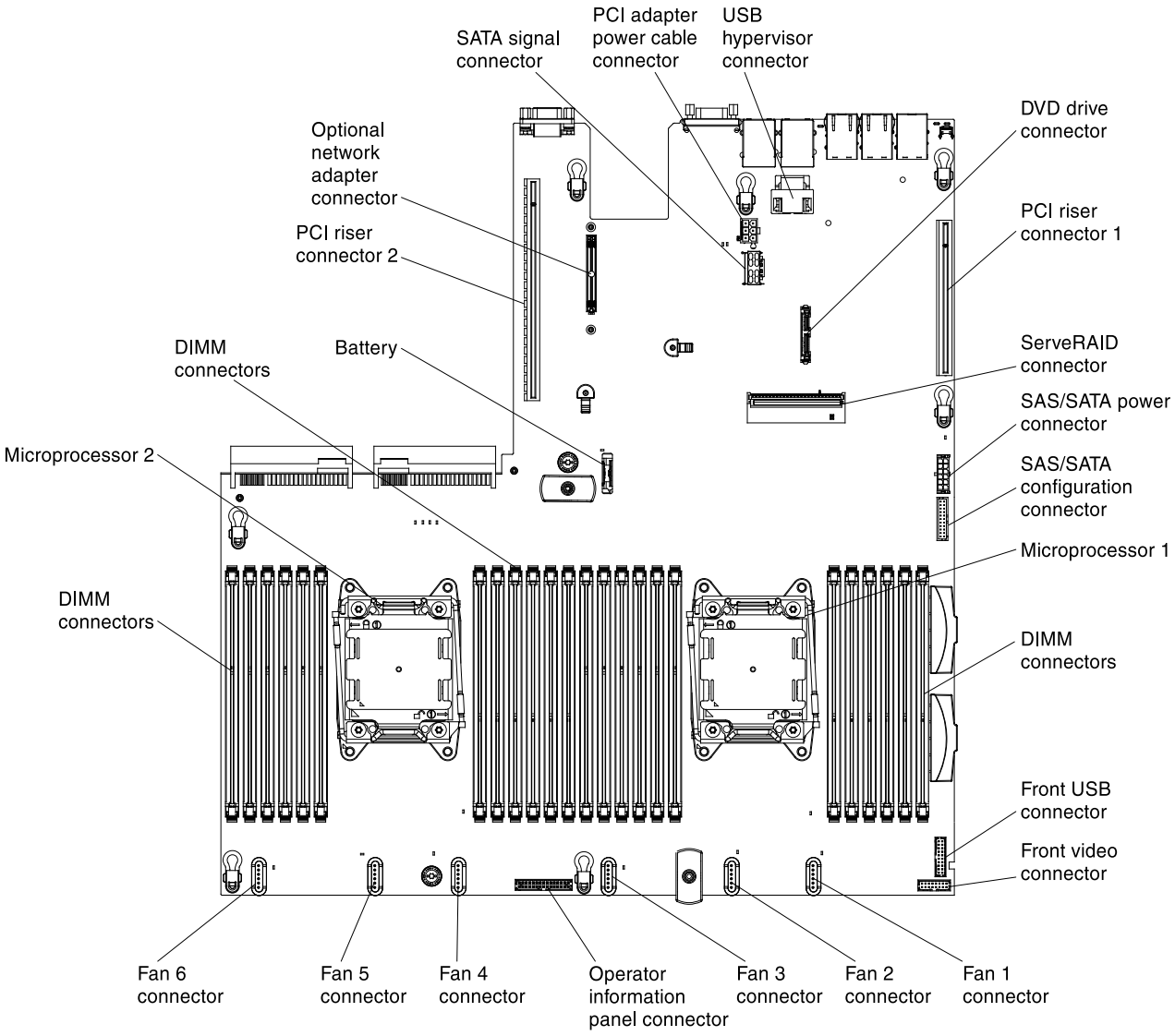


Figure 15. System-board internal connectors

System-board external connectors

The following illustration shows the external connectors on the system board.

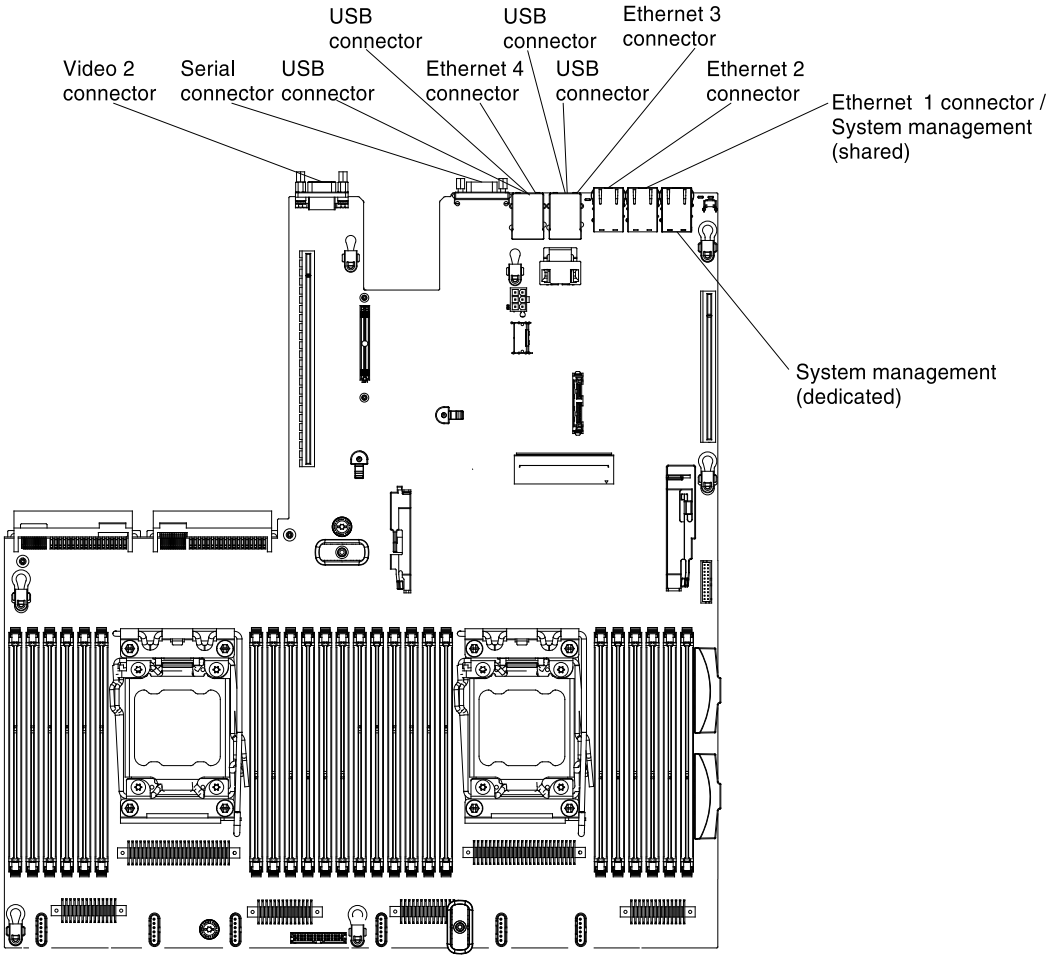


Figure 16. System-board external connectors

System-board switches, jumpers, and buttons

The following illustration shows the location of the switches, jumpers, and buttons on the server.

Important:

1. Before you change any switch settings or move any jumpers, turn off the server; then, disconnect all power cords and external cables. Review the information in “Safety” on page v, “Installation guidelines” on page 31, “Handling static-sensitive devices” on page 33, and “Turning off the server” on page 21.
2. Any system-board switch or jumper block that is not shown in the illustrations in this document are reserved.
3. If there is a clear protective sticker on the top of the switch blocks, you must remove and discard it to access the switches.

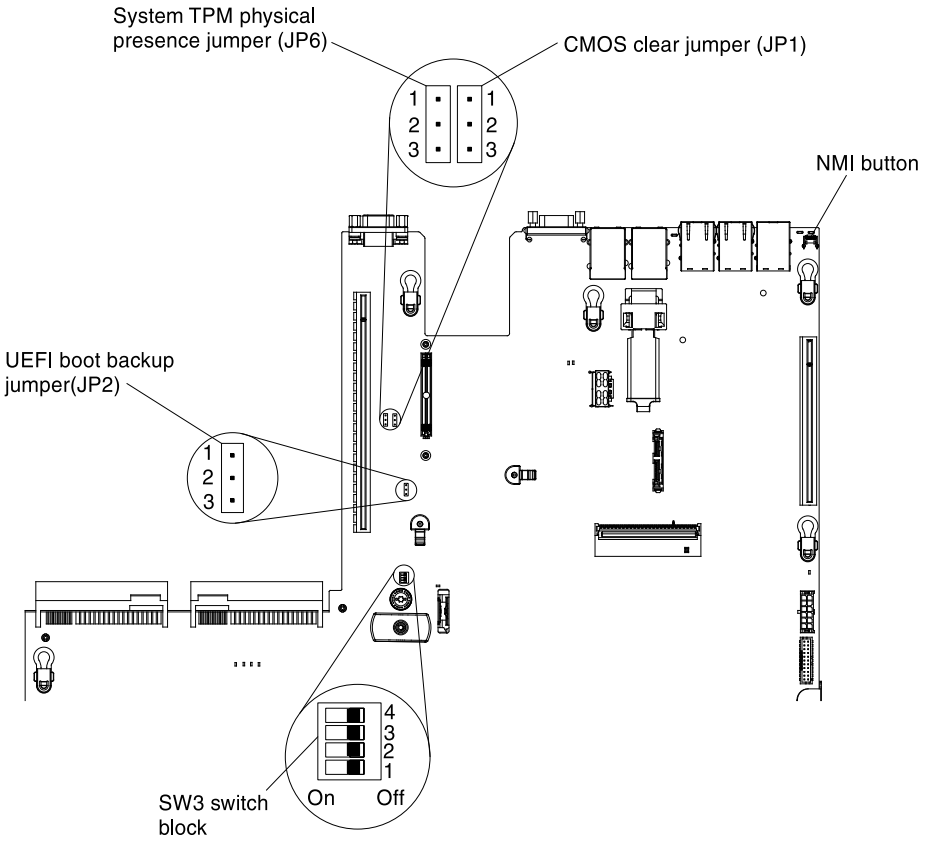


Figure 17. System-board switches, jumpers, and buttons

The following table describes the jumpers on the system board.

Table 2. System board jumpers

Jumper number	Jumper name	Jumper setting
JP1	CMOS clear jumper	• Pins 1 and 2: Normal (default). • Pins 2 and 3: Clears the real-time clock (RTC) registry.
JP2	UEFI boot backup jumper	• Pins 1 and 2: Normal (default). Loads the primary server firmware ROM page. • Pins 2 and 3: Loads the secondary (backup) server firmware ROM page.
JP6	System TPM physical presence jumper	• Pins 1 and 2: Normal (default). • Pins 2 and 3: Indicates a physical presence to the system TPM.

Notes:

1. If no jumper is present, the server responds as if the pins are set to the default.
2. Changing the position of the UEFI boot backup jumper (JP2) from pins 1 and 2 to pins 2 and 3 before the server is turned on alters which flash ROM page is loaded. Do not change the jumper pin position after the server is turned on. This can cause an unpredictable problem.

The following table describes the functions of the SW3 switch block on the system board.

Table 3. System board SW3 switch block definition

Switch number	Default position	Description
1	Off	Reserved.
2	Off	Reserved.
3	Off	Reserved.
4	Off	Power-on password override. Changing the position of this switch bypasses the power-on password check the next time the server is turned on and starts the Setup utility so that you can change or delete the power-on password. You do not have to move the switch back to the default position after the power-on password in overridden. Changing the position of this switch does not affect the administrator password check if an administrator password is set. See “Passwords” on page 101 for additional information about passwords.

The following table describes the functions of the button on the system board.

Table 4. Button on the server

Button name	Function
Force NMI button	This button is on the rear of the server. Press this button to force a nonmaskable interrupt to the microprocessor. You might have to use a pen or the end of a straightened paper clip to press the button. You can also use it to force a blue-screen memory dump (use this button only when you are directed to do so by Lenovo Support).

System-board LEDs

The following illustration shows the light-emitting diodes (LEDs) on the system board.

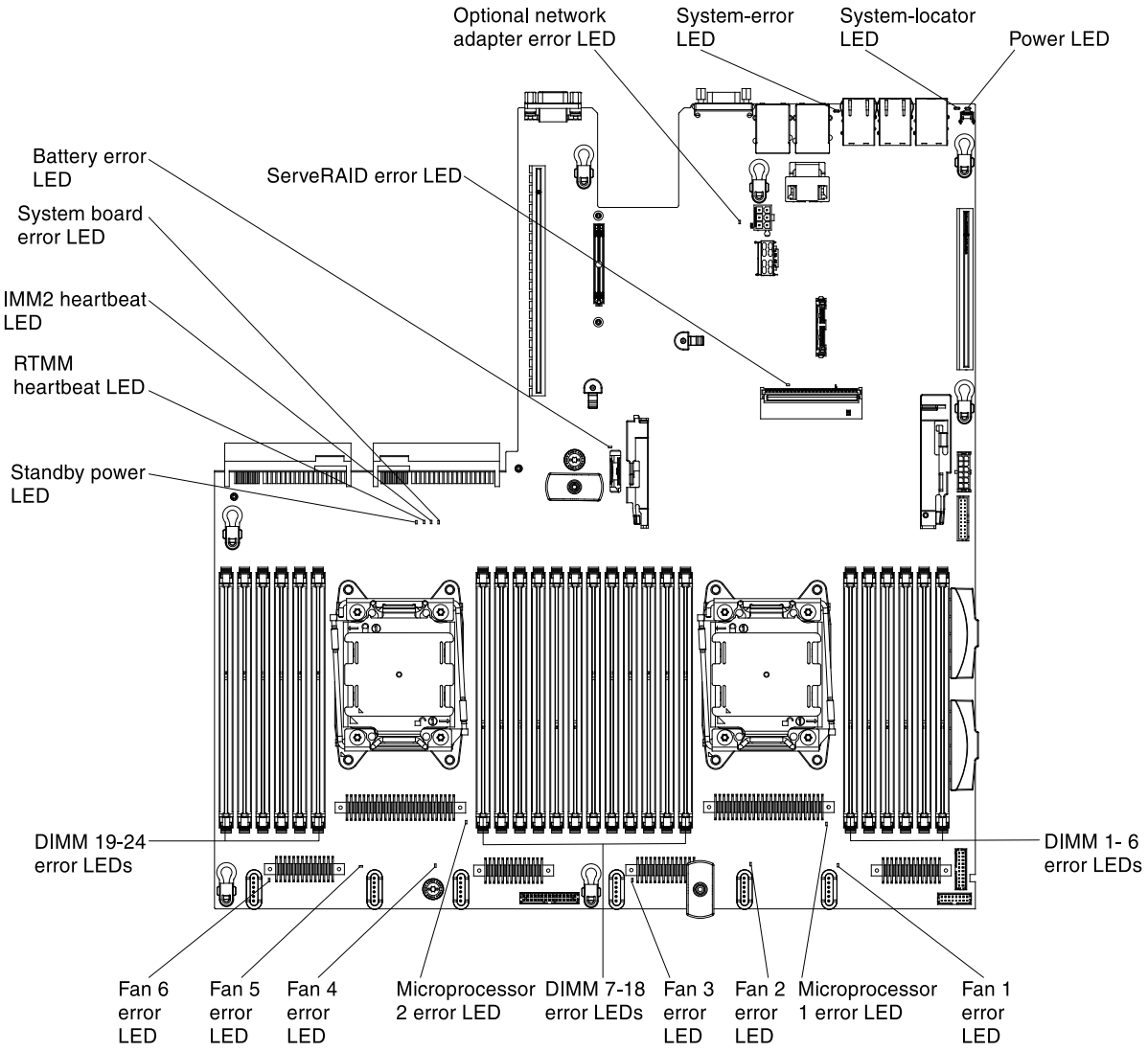


Figure 18. System-board LEDs

System-board optional-device connectors

The following illustration shows the connectors on the system board for the optional devices.

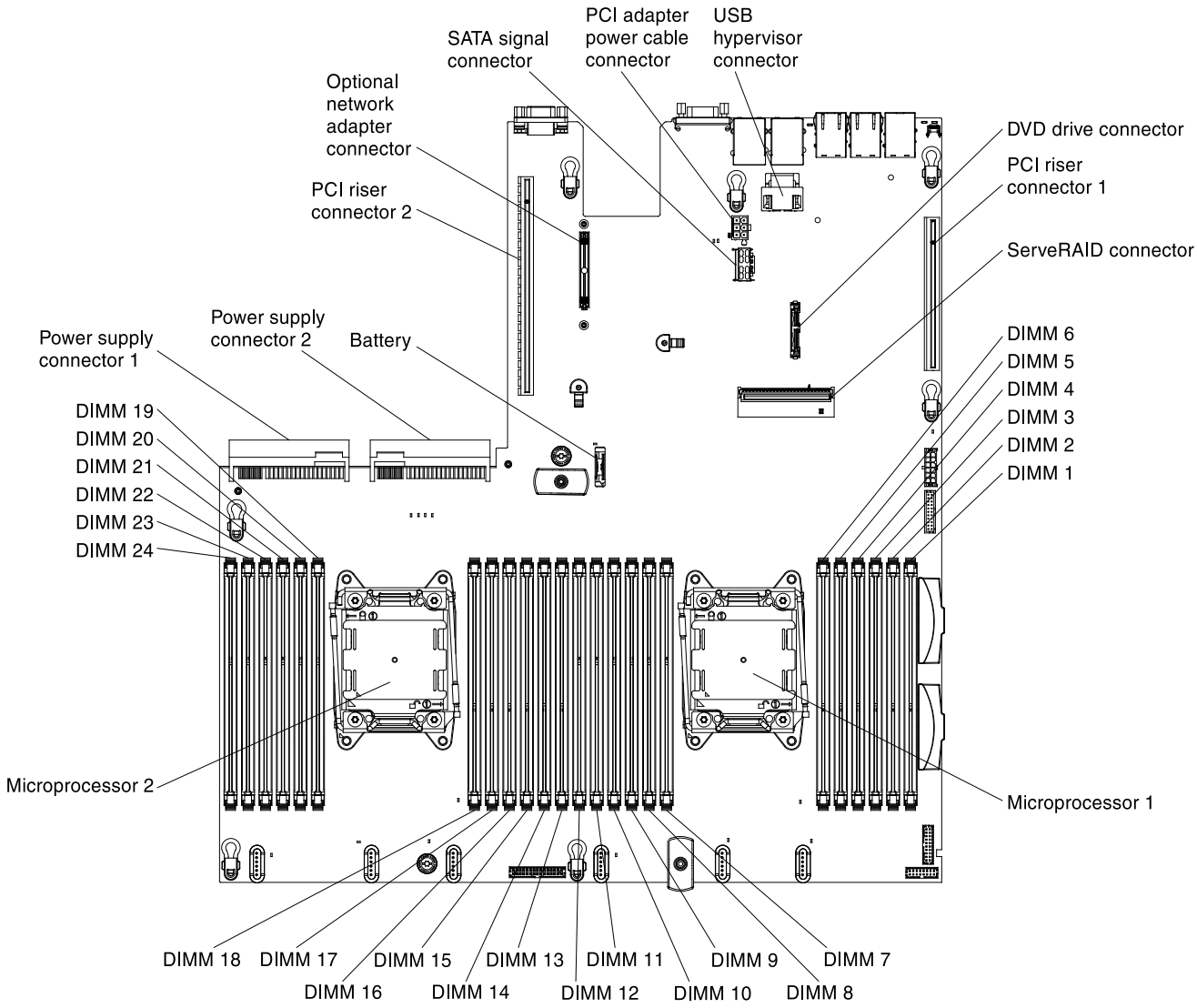


Figure 19. System-board optional-device connectors

Installation guidelines

Use this information for installation.

Attention: Static electricity that is released to internal server components when the server is powered-on might cause the system to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when removing or installing a hot-swap device.

Before you install optional devices, read the following information:

- Read the safety information in “Safety” on page v, the guidelines in “Working inside the server with the power on” on page 33, and “Handling static-sensitive devices” on page 33. This information will help you work safely.
- Make sure that the devices that you are installing are supported. For a list of supported optional devices for the server, see http://www.lenovo.com/ serverproven/.

- When you install your new server, take the opportunity to download and apply the most recent firmware updates. This step will help to ensure that any known issues are addressed and that your server is ready to function at maximum levels of performance. To download firmware updates for your server, go to http://www.ibm.com/support/ fixcentral.

  Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

  For additional information about tools for updating, managing, and deploying firmware, see the ToolsCenter for System x and BladeCenter at http://publib.boulder.ibm.com/infocenter/toolsctr/v1r0/.
- Before you install optional hardware, make sure that the server is working correctly. Start the server, and make sure that the operating system starts, if an operating system is installed, or that a 19990305 error code is displayed, indicating that an operating system was not found but the server is otherwise working correctly. If the server is not working correctly, see “Running the DSA Preboot diagnostic programs” on page 139 for information about how to run diagnostics.
- Observe good housekeeping in the area where you are working. Place removed covers and other parts in a safe place.
- Do not attempt to lift an object that you think is too heavy for you. If you have to lift a heavy object, observe the following precautions:
  - Make sure that you can stand safely without slipping.
  - Distribute the weight of the object equally between your feet.
  - Use a slow lifting force. Never move suddenly or twist when you lift a heavy object.
  - To avoid straining the muscles in your back, lift by standing or by pushing up with your leg muscles.
- Make sure that you have an adequate number of properly grounded electrical outlets for the server, monitor, and other devices.
- Back up all important data before you make changes to disk drives.
- Have a small flat-blade screwdriver, a small Phillips screwdriver, and a T8 torx screwdriver available.
- To view the error LEDs on the system board and internal components, leave the server connected to power.
- You do not have to turn off the server to install or replace hot-swap power supplies, hot-swap fans, or hot-plug Universal Serial Bus (USB) devices. However, you must turn off the server before you perform any steps that involve removing or installing adapter cables and you must disconnect the power source from the server before you perform any steps that involve removing or installing a riser card.
- Blue on a component indicates touch points, where you can grip the component to remove it from or install it in the server, open or close a latch, and so on.
- Orange on a component or an orange label on or near a component indicates that the component can be hot-swapped, which means that if the server and operating system support hot-swap capability, you can remove or install the component while the server is running. (Orange can also indicate touch points on hot-swap components.) See the instructions for removing or installing a specific hot-swap component for any additional procedures that you might have to perform before you remove or install the component.
- When you are finished working on the server, reinstall all safety shields, guards, labels, and ground wires.

System reliability guidelines

To help ensure proper system cooling and system reliability, make sure that the following requirements are met.

- Each of the drive bays has a drive or a filler panel and electromagnetic compatibility (EMC) shield installed in it.

- Each of the power-supply bays has a power supply or a filler installed in it.
- If the server has redundant power, each of the power-supply bays has a power supply installed in it.
- There is adequate space around the server to allow the server cooling system to work properly. Leave approximately 50 mm (2.0 in.) of open space around the front and rear of the server. Do not place objects in front of the fans. For proper cooling and airflow, replace the server cover before you turn on the server. Operating the server for extended periods of time (more than 30 minutes) with the server cover removed might damage server components.
- You have followed the cabling instructions that come with optional adapters.
- You have replaced a failed fan within 48 hours.
- You have replaced a hot-swap fan within 30 seconds of removal.
- You have replaced a hot-swap drive within 2 minutes of removal.
- You have replaced a failed hot-swap power supply within 2 minutes of removal.
- You do not operate the server without the air baffle installed. Operating the server without the air baffle might cause the microprocessor to overheat.
- Microprocessor socket 2 always contains either a socket cover or a microprocessor and heat sink.
- You have installed the fourth and sixth fans when you installed the second microprocessor option.

Working inside the server with the power on

Use this information when working inside the server with the power on.

Attention: Static electricity that is released to internal server components when the server is powered-on might cause the server to halt, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap or other grounding system when you work inside the server with the power on.

You might have to have the server turned on while the cover is off, to look at light path diagnostics LEDs or replace hot swap components. Follow these guidelines when you work inside a server that is turned on:

- Avoid wearing loose-fitting clothing on your forearms. Button long-sleeved shirts before working inside the server; do not wear cuff links while you are working inside the server.
- Do not allow your necktie or scarf to hang inside the server.
- Remove jewelry, such as bracelets, necklaces, rings, and loose-fitting wrist watches.
- Remove items from your shirt pocket, such as pens and pencils, that could fall into the server as you lean over it.
- Avoid dropping any metallic objects, such as paper clips, hairpins, and screws, into the server.

Handling static-sensitive devices

Use this information to handle static-sensitive devices.

Attention: Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.

To reduce the possibility of damage from electrostatic discharge, observe the following precautions:

- Limit your movement. Movement can cause static electricity to build up around you.
- The use of a grounding system is recommended. For example, wear an electrostatic-discharge wrist strap, if one is available. Always use an electrostatic-discharge wrist strap or other grounding system when working inside the server with the power on.
- Handle the device carefully, holding it by its edges or its frame.

- Do not touch solder joints, pins, or exposed circuitry.
- Do not leave the device where others can handle and damage it.
- While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.
- Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.
- Take additional care when handling devices during cold weather. Heating reduces indoor humidity and increases static electricity.

Removing the cover

Use this information to remove the cover.

To remove the server cover, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. If the server has been installed in a rack, slide the server out from the rack enclosure.

Step 4. Pull up firmly on the blue latch on the top (in the center of the front of the server) of the cover and slide the cover toward the rear of the server until the cover has disengaged from the chassis.

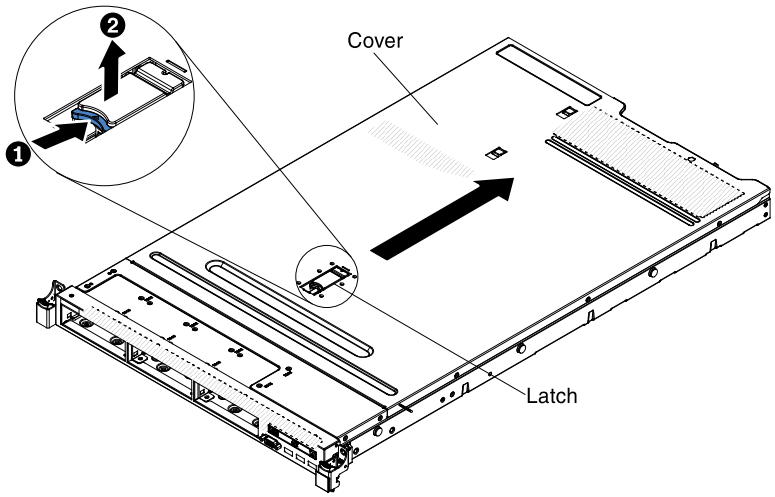


Figure 20. Cover removal

Step 5. Lift the server cover off the server and set it aside.

Attention: For proper cooling and airflow, replace the server cover before you turn on the server.

Removing the air baffle

Use this information to remove the air baffle.

To remove the air baffle, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables (see “Turning off the server” on page 21).

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. Grasp the air baffle, disengage pins from pin holes; then, lift the air baffle up.

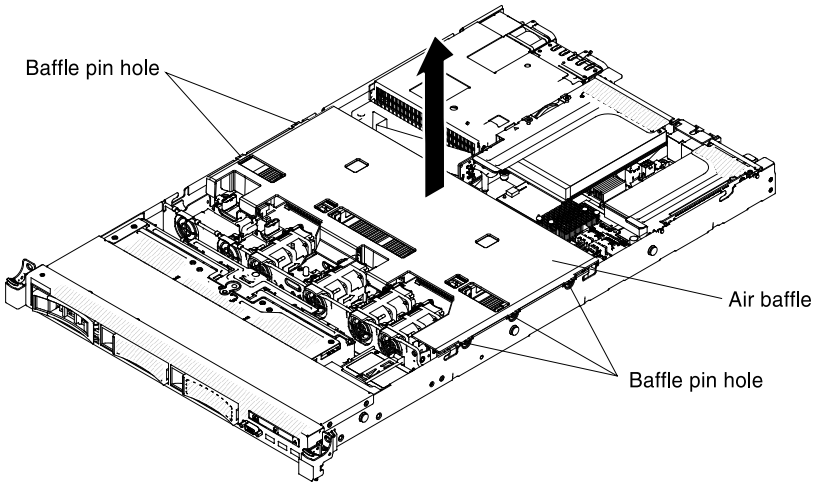


Figure 21. Air baffle removal

Step 5. Remove the air baffle from the server and set it aside.

Attention: For proper cooling and airflow, replace the air baffle before you turn on the server. Operating the server with the air baffle removed might damage server components.

Installing drives

The following notes describe the type of hard disk drives that the server supports and other information that you must consider when you install a hard disk drive.

For a list of supported hard disk drives, see http://www.lenovo.com/ serverproven/.

- Locate the documentation that comes with the drive and follow those instructions in addition to the instructions in this chapter.
- Make sure that you have all the cables and other equipment that are specified in the documentation that comes with the drive.
- Select the bay in which you want to install the drive.
- Check the instructions that come with the drive to determine whether you have to set any switches or jumpers on the drive. If you are installing a SAS or SATA hard disk drive, be sure to set the SAS or SATA ID for that device.
- The hot-swap server models support up to eight 2.5-inch or three 3.5-inch hot-swap SAS or SATA hard disk drives.
- The simple-swap server models support up to three 3.5-inch simple-swap SATA hard disk drives.

- The electromagnetic interference (EMI) integrity and cooling of the server are protected by having all bays and PCI and PCI Express slots covered or occupied. When you install a drive, PCI, or PCI Express adapter, save the EMC shield and filler panel from the bay or PCI adapter or PCI Express adapter slot cover in the event that you later remove the device.

Drive IDs

The drive ID that is assigned to each drive is printed on the front of the server. The following illustrations show the locations of the IDs of the drives. The ID numbers and the drive bay numbers are the same.

2.5-inch hot-swap hard disk drive IDs

The hot-swap-drive ID that is assigned to each drive is printed on the front of the server.

The following illustration shows the location of the IDs of the hard disk drives. The ID numbers and the drive bay numbers are the same.

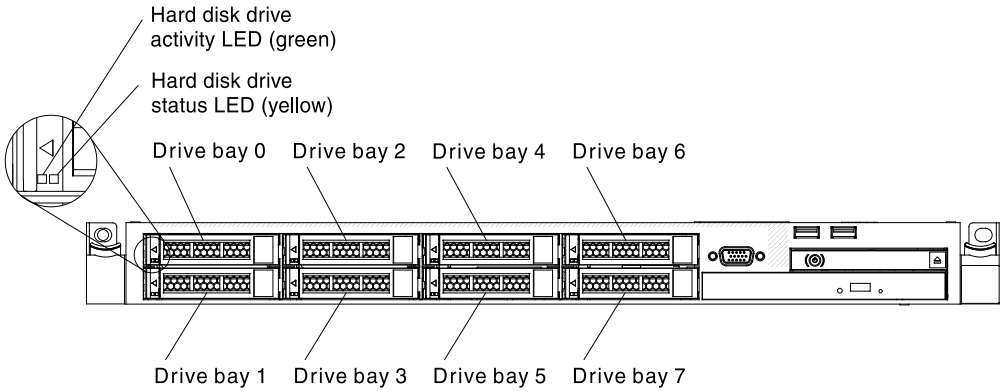


Figure 22. 2.5-inch hot-swap hard disk drive IDs

3.5-inch hot-swap hard disk drive IDs

The hot-swap-drive ID that is assigned to each drive is printed on the front of the server.

The following illustration shows the location of the IDs of the hard disk drives. The ID numbers and the drive bay numbers are the same.

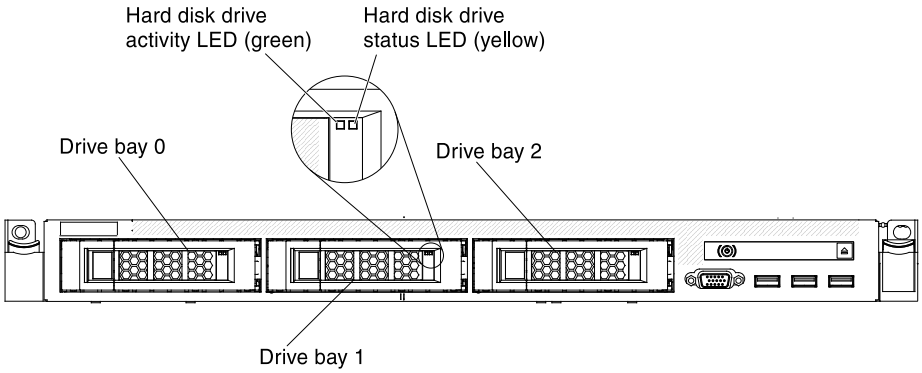


Figure 23. 3.5-inch hot-swap hard disk drive IDs

2.5-inch simple-swap hard disk drive IDs

The simple-swap-drive ID that is assigned to each drive is printed on the front of the server.

The following illustration shows the location of the IDs of the hard disk drives. The ID numbers and the drive bay numbers are the same.

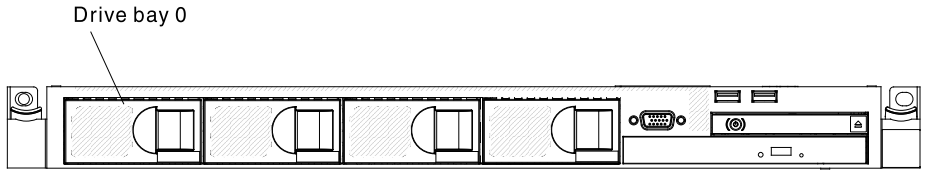


Figure 24. 2.5-inch simple-swap hard disk drive IDs

3.5-inch simple-swap hard disk drive IDs

The simple-swap-drive ID that is assigned to each drive is printed on the front of the server.

The following illustration shows the location of the IDs of the hard disk drives. The ID numbers and the drive bay numbers are the same.

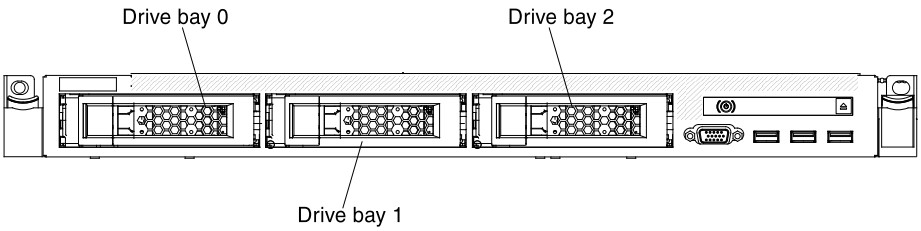


Figure 25. 3.5-inch simple-swap hard disk drive IDs

Installing hot-swap hard disk drives

Use this information to install hot-swap hard disk drives.

To install a hot-swap SAS or SATA hard disk drive, complete the following steps.

Note: If you have only one hard disk drive, you must install it in the bay 0 (upper-left).

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Remove the filler panel from the empty drive bay. Keep the filler panel in a safe place.

Step 3. Touch the static-protective package that contains the drive to any unpainted metal surface on the server; then, remove the drive from the package and place it on a static-protective surface.

Step 4. Install the hard disk drive in the drive bay:

a. Make sure that the tray handle is in the open (unlocked) position.

b. Align the drive with the guide rails in the bay.

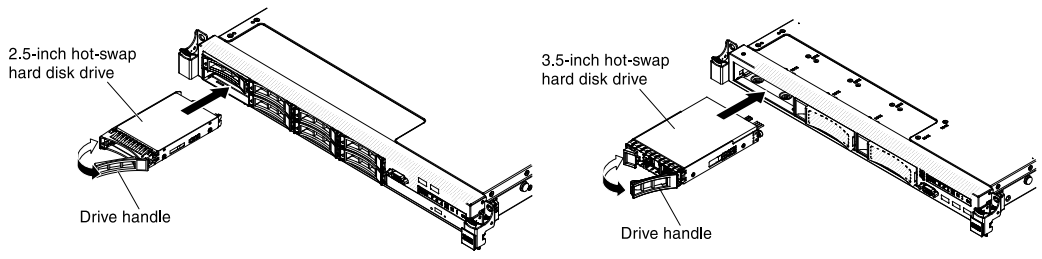


Figure 26. Hot-swap hard disk drives installation

c. Gently push the drive into the bay until the drive stops.

d. Rotate the tray handle to the closed (locked) position.

e. Check the hard disk drive status LED to verify that the hard disk drive is operating correctly. If the yellow hard disk drive status LED of a drive is lit continuously, that drive is faulty and must be replaced. If the green hard disk drive activity LED is flashing, the drive is being accessed.

Note: If the server is configured for RAID operation using a ServeRAID adapter, you might have to reconfigure your disk arrays after you install hard disk drives. See the ServeRAID adapter documentation for additional information about RAID operation and complete instructions for using the ServeRAID adapter.

Step 5. If you are installing additional hot-swap hard disk drives, do so now.

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 89.

Installing simple-swap hard disk drives

Use this information to install simple-swap hard disk drives.

You must turn off the server before installing simple-swap drives in the server. Before you install a simple-swap SATA hard disk drive, read the following information. For a list of supported hard disk drives, see http://www.lenovo.com/ serverproven/.

- Locate the documentation that comes with the hard disk drive and follow those instructions in addition to the instructions in this chapter.
- Make sure that you have all the cables and other equipment that are specified in the documentation that comes with the drive.
- Select the bay in which you want to install the drive.
- Check the instructions that come with the drive to determine whether you have to set any switches or jumpers on the drive. If you are installing a SATA device, be sure to set the SATA ID for that device.
- You can install up to three 3.5-inch simple-swap SATA hard disk drives in the server. Do not install hot-swap drives into a simple-swap server model, it is not supported.
- You can install one 2.5-inch simple-swap SATA hard disk drives in bay 0 in the server. Do not install hot-swap drives into a simple-swap server model, it is not supported.
- The simple-swap server models are available only in non-RAID configurations.
- The electromagnetic interference (EMI) integrity and cooling of the server are protected by having all bays and PCI and PCI Express slots covered or occupied. When you install a drive, PCI, or PCI Express adapter, save the EMC shield and filler panel from the bay or PCI or PCI Express adapter slot cover in the event that you later remove the device.

To install a simple-swap hard disk drive, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Step 3. Remove the filler panel from the empty drive bay.

Step 4. Touch the static-protective package that contains the drive to any unpainted metal surface on the server; then, remove the drive from the package and place it on a static-protective surface.

Step 5. Install the hard disk drive in the drive bay:

a. Grasp the black drive handle and slide the blue release latch to the right and align the drive assembly with the guide rails in the bay.

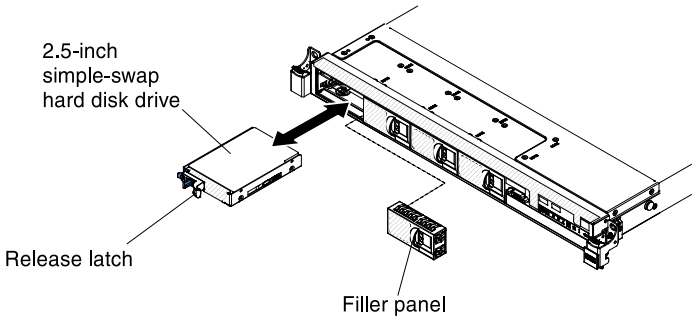


Figure 27. 2.5-inch simple-swap hard disk drive installation

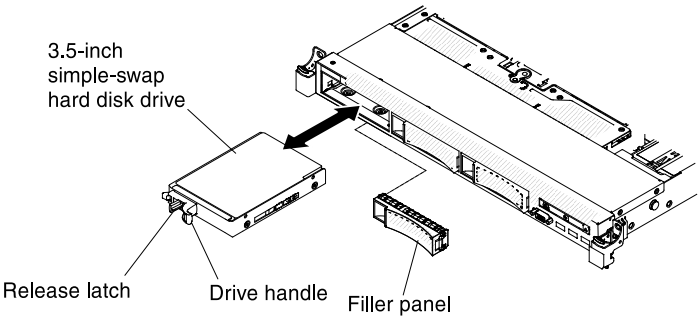


Figure 28. 3.5-inch simple-swap hard disk drive installation

b. Gently push the drive into the bay until the drive stops.

Step 6. Reinstall the drive bay filler panel that you removed earlier.

Step 7. If you are installing additional simple-swap hard disk drives, do so now.

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 89.

Installing an optional DVD drive

Use this information to install an optional DVD drive.

To install an optional DVD drive, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Note: When you disconnect the power source from the server, you lose the ability to view the LEDs because the LEDs are not lit when the power source is removed. Before you disconnect the power source, make a note of which LEDs are lit, including the LEDs that are lit on the operation information panel, on the light path diagnostics panel, and LEDs inside the server on the system board.

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. Remove the DVD drive filler panel if it is installed. Locate the blue release tab on the rear of the DVD drive filler panel; then, while you press the tab, push the DVD drive filler panel out of the drive bay.

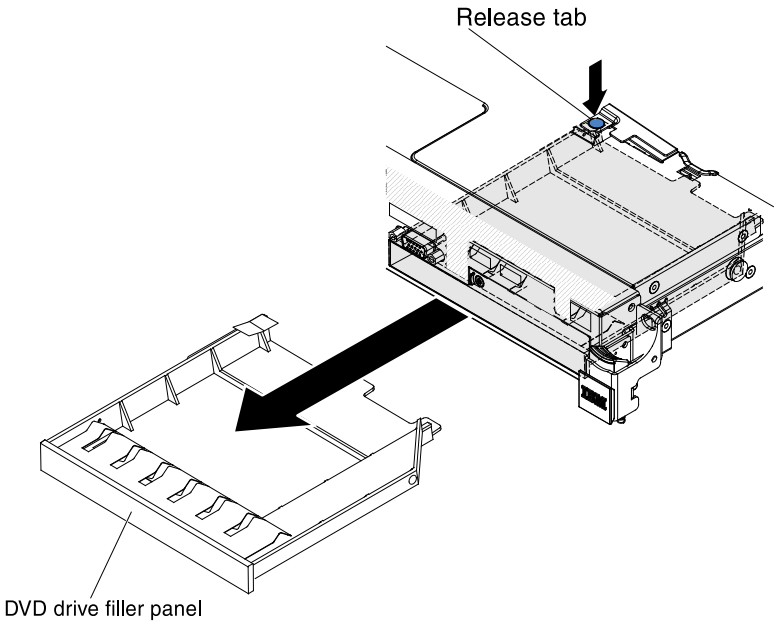


Figure 29. DVD drive filler panel removal

Step 5. Remove the retention clip from the side of the DVD drive filler panel. Save the DVD drive filler panel for future use.

Note: If you are installing an optical drive that contains a laser, observe the following safety precautions.

Statement 3

CAUTION:
When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- **Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.**

- **Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

DANGER

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following.

Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

Class 1 Laser Product
Laser Klasse 1
Laser Klass 1
Luokan 1 Laserlaite
Appareil À Laser de Classe 1

Step 6. Touch the static-protective package that contains the new optical drive to any unpainted metal surface on the server; then, remove the optical drive from the package and place it on a static-protective surface.

Step 7. Follow the instructions that come with the DVD drive to set any jumpers or switches.

Step 8. Attach the drive retention clip that you removed from the DVD drive filler panel to the side of the new DVD drive.

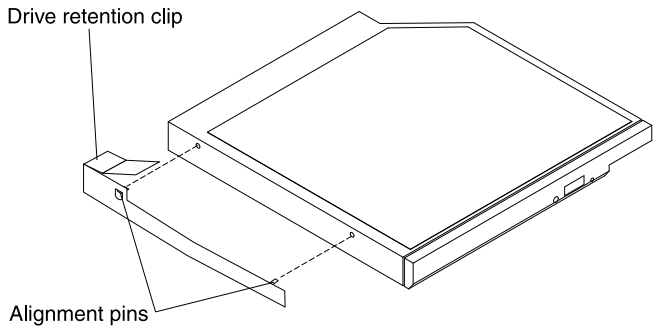


Figure 30. DVD drive retention clip installation

Step 9. Align the DVD drive in the drive bay and slide the DVD drive into the optical drive bay until the DVD drive clicks into place.

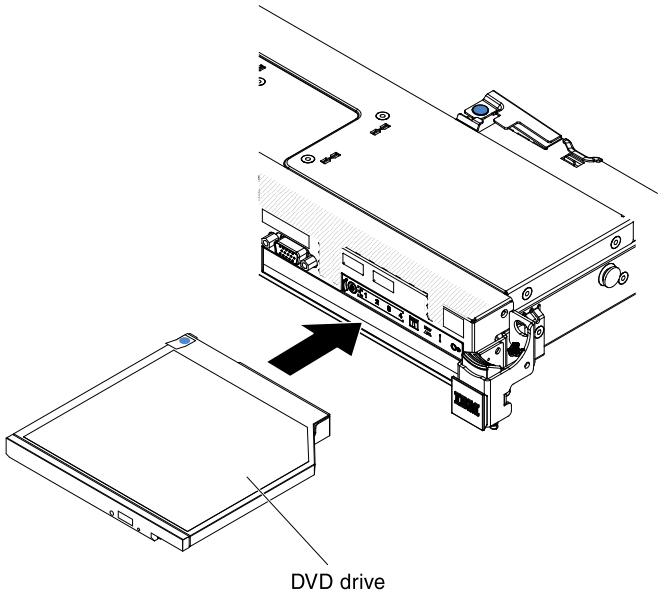


Figure 31. DVD drive installation

Step 10. Connect the DVD drive cable (see “Replacing the DVD drive cable” on page 213). The following illustration shows the cable routing for the DVD drive:

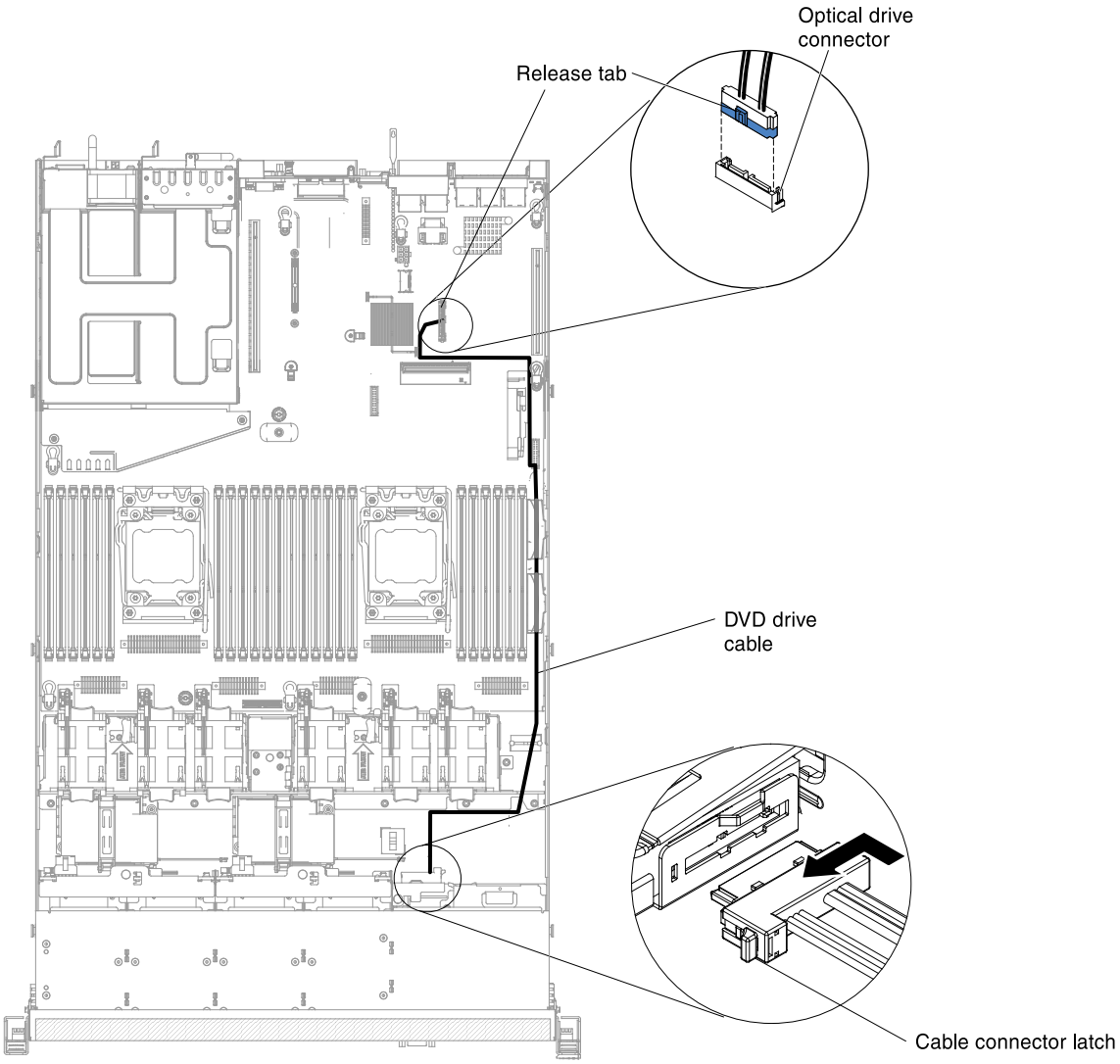


Figure 32. DVD drive cable routing

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 89.

Installing an optional DVD drive cable

Use this information to install an optional DVD drive cable.

To install the DVD drive cable, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. Remove the air baffle (see “Removing the air baffle” on page 34).

Step 5. Align the cable connector with the connector on the rear of the DVD drive cage. Press the cable connector into the optical drive cage connector and slide it to the left until it is firmly seated.

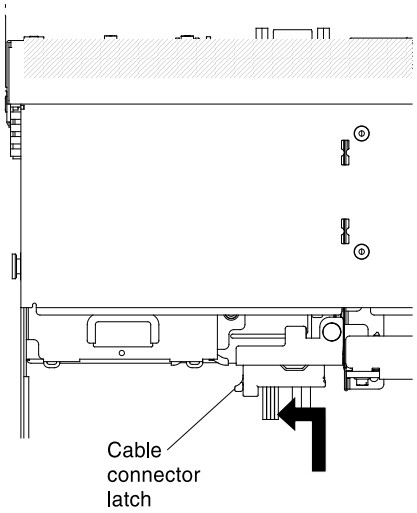


Figure 33. DVD drive cable latch

The following illustration shows cable routing for the DVD cable:

Attention: Follow the optical drive cable routing as the illustration shows. Make sure that the cable is not pinched and does not cover any connectors or obstruct any components on the system board.

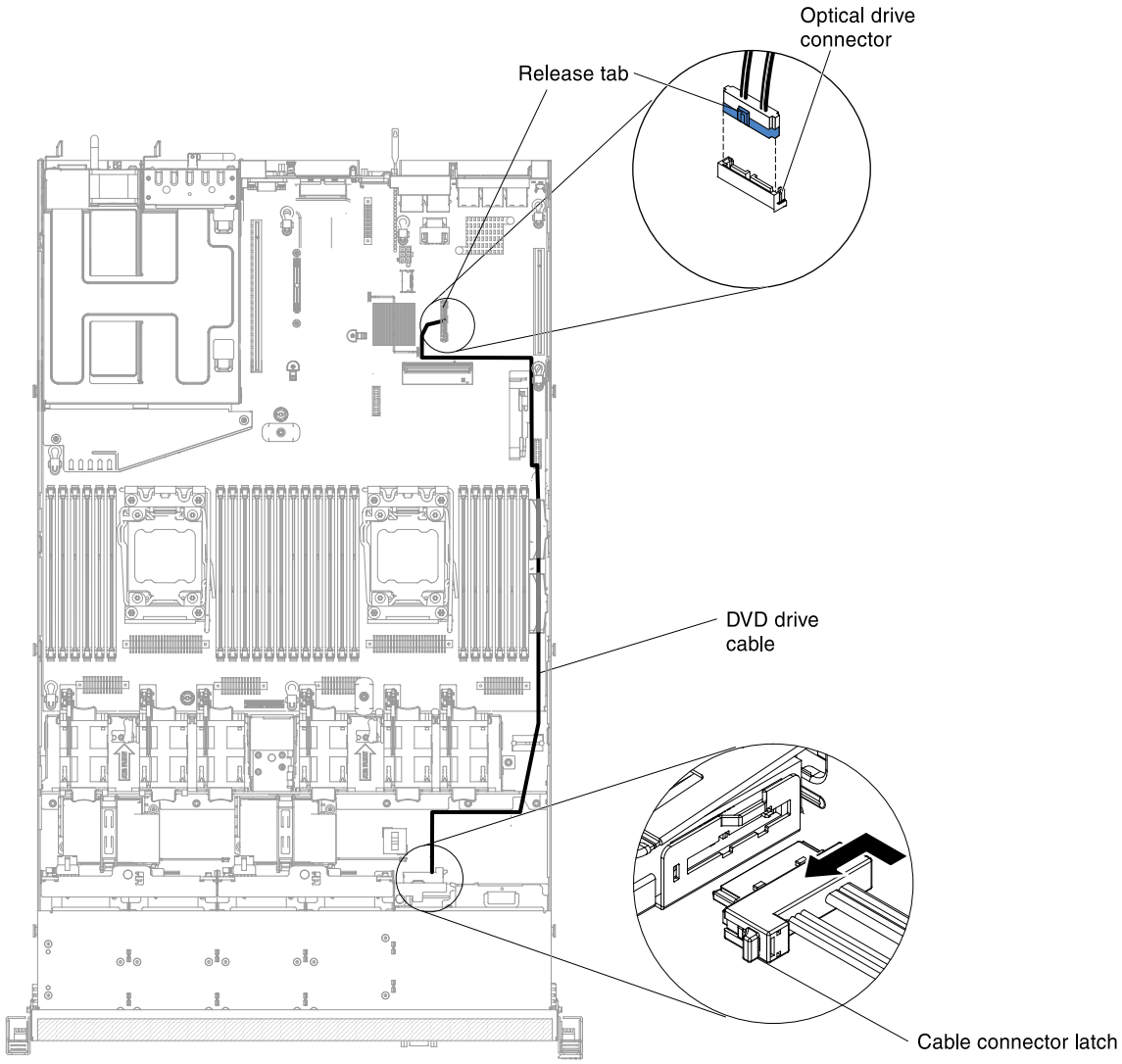


Figure 34. DVD drive cable routing

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 89.

Installing a memory module

The following notes describe the types of DIMMs that the server supports and other information that you must consider when you install DIMMs.

- When you install or remove DIMMs, the server configuration information changes. When you restart the server, the system displays a message that indicates that the memory configuration has changed.
- The server supports only industry-standard double-data-rate 3 (DDR3), 1066, 1333, 1600, or 1866 MHz, PC3-8500, PC3-10600, PC3-12800, or PC3-14900 registered or unbuffered, synchronous dynamic random-access memory (SDRAM) dual inline memory modules (DIMMs) with error correcting code (ECC). See http://www.lenovo.com/ serverproven/ for a list of supported memory modules for the server.
  - The specifications of a DDR3 DIMM are on a label on the DIMM, in the following format.

    ggggeRxff PC3*v-wwwwwm-aa-bb-ccd*

where:

- *ggggg* is the total capacity of the DIMM (for example, 1 GB, 2 GB, or 4 GB)
- *eR* is the number of ranks

  1R = single-rank

  2R = dual-rank

  4R = quad-rank
- *xff* is the device organization (bit width)

  x4 = x4 organization (4 DQ lines per SDRAM)

  x8 = x8 organization

  x16 = x16 organization
- *v* is the SDRAM and support component supply voltage (VDD)
  - Blank = 1.5 V specified
  - L = 1.35 V specified, 1.5 V operable

  Note: Values for these voltages are “specified” which means the device characteristics such as timing are supported at this voltage. Values are “operable” which means that the devices can be operated safely at this voltage. However, device characteristics such as timing may not be guaranteed. All devices must be “tolerant” of the highest DDR3 nominal voltage of 1.5 V, meaning that they may not operate at 1.5 V but may be powered at that voltage without damage to the devices.
- *wwwww* is the DIMM bandwidth, in MBps

  6400 = 6.40 GBps (DDR3-800 SDRAMs, 8-byte primary data bus)

  8500 = 8.53 GBps (DDR3-1066 SDRAMs, 8-byte primary data bus)

  10600 = 10.66 GBps (DDR3-1333 SDRAMs, 8-byte primary data bus)

  12800 = 12.80 GBps (DDR3-1600 SDRAMs, 8-byte primary data bus)

  14900 = 14.93 GBps (DDR3-1866 SDRAMs, 8-byte primary data bus)
- *m* is the DIMM type

  E = Unbuffered DIMM (UDIMM) with ECC (x72-bit module data bus)

  L = Load Reduction DIMM (LRDIMM)

  R = Registered DIMM (RDIMM)

  U = Unbuffered DIMM with no ECC (x64-bit primary data bus)
- *aa* is the CAS latency, in clocks at maximum operating frequency
- *bb* is the JEDEC SPD Revision Encoding and Additions level
- *cc* is the reference design file for the design of the DIMM
- *d* is the revision number of the reference design of the DIMM

Note: To determine the type of a DIMM, see the label on the DIMM. The information on the label is in the format xxxxx *n*Rxxx PC3v-xxxxxx-xx-xx-xxx. The numeral in the sixth numerical position indicates whether the DIMM is single-rank (*n*=1), dual-rank (*n*=2), or quad-rank (*n*=4).

- The following rules apply to DDR3 RDIMM speed as it relates to the number of RDIMMs in a channel:
  - When you install 1 RDIMM per channel, the memory runs at 1866 MHz
  - When you install 2 RDIMMs per channel, the memory runs at 1600 MHz
  - When you install 3 RDIMMs per channel, the memory runs at 1066 MHz

  - All channels in a server run at the fastest common frequency
  - Do not install registered, unbuffered, and load reduction DIMMs in the same server
- The maximum memory speed is determined by the combination of the microprocessor, DIMM speed, DIMM type, Operating Modes in UEFI settings, and the number of DIMMs installed in each channel.
- In two-DIMM-per-channel configuration, the server automatically operates with a maximum memory speed of up to 1600 MHz when the following condition is met:
  - Two 1.35 V single-rank, dual-ranl, or quad-rank UDIMMs, RDIMMs or LRDIMMs are installed in the same channel. In the Setup utility, **Memory speed** is set to **Max performance** and **LV-DIMM power** is set to **Enhance performance** mode. The 1.35 V UDIMMs, RDIMMs or LRDIMMs will function at 1.5 V.
- The server supports a maximum of 16 dual-rank UDIMMs. The server supports up to two UDIMMs per channel.
- The server supports a maximum of 24 single-rank, dual-rank, or 16 quad-rank RDIMMs. The server does not support three quad-rank RDIMMs in the same channel.
- The following table shows an example of the maximum amount of memory that you can install using ranked DIMMs:

Table 5. Maximum memory installation using ranked DIMMs

Number of DIMMs	DIMM type	DIMM size	Total memory
16	Dual-rank UDIMM	4 GB	64 GB
24	Single-rank RDIMM	2 GB	48 GB
24	Single-rank RDIMM	4 GB	96 GB
24	Dual-rank RDIMM	4 GB	96 GB
24	Dual-rank RDIMM	8 GB	192 GB
24	Dual-rank RDIMM	16 GB	384 GB
16	Quad-rank RDIMM	8 GB	128 GB
24	Quad-rank LRDIMM	32 GB	768 GB

- The UDIMM option that is available for the server is 4 GB. The server supports a minimum of 4 GB and a maximum of 64 GB of system memory using UDIMMs.
- The RDIMM options that are available for the server are 2 GB, 4 GB, 8 GB, and 16 GB. The server supports a minimum of 2 GB and a maximum of 384 GB of system memory using RDIMMs.
- The LRDIMM option that is available for the server is 32 GB. The server supports a minimum of 32 GB and a maximum of 768 GB of system memory using LRDIMMs.

  Note: The amount of usable memory is reduced depending on the system configuration. A certain amount of memory must be reserved for system resources. To view the total amount of installed memory and the amount of configured memory, run the Setup utility. For additional information, see “Configuring the server” on page 94.
- A minimum of one DIMM must be installed for each microprocessor. For example, you must install a minimum of two DIMMs if the server has two microprocessors installed. However, to improve system performance, install a minimum of four DIMMs for each microprocessor.
- DIMMs in the server must be the same type (RDIMM, UDIMM, or LRDIMM) to ensure that the server will operate correctly.
- When you install one quad-rank DIMM in a channel, install it in the DIMM connector furthest away from the microprocessor.

Notes:

1. You can install DIMMs for microprocessor 2 as soon as you install microprocessor 2; you do not have to wait until all of the DIMM slots for microprocessor 1 are filled.
2. DIMM slots 13-24 are reserved for microprocessor 2; thus, DIMM slots 13-24 are enabled when microprocessor 2 is installed.

The following illustration shows the location of the DIMM connectors on the system board.

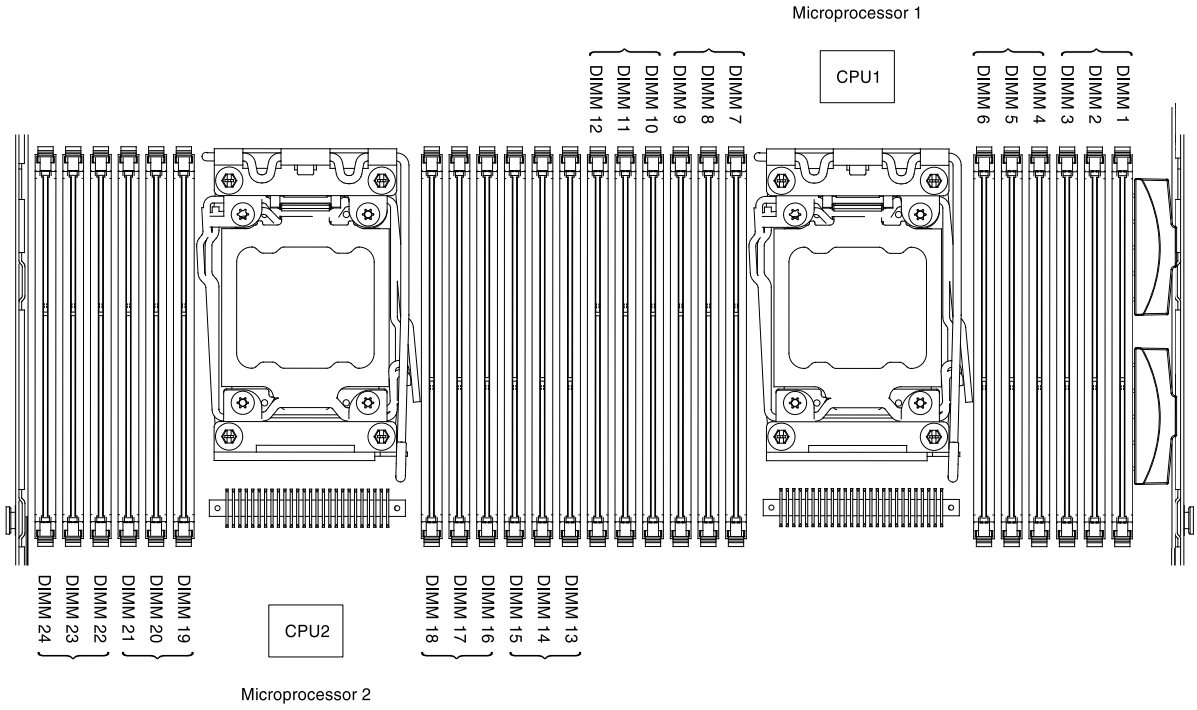


Figure 35. DIMM connectors location

DIMM installation sequence

Depending on the server model, the server may come with a minimum of one 2 GB or 4 GB DIMM installed in slot 1. When you install additional DIMMs, install them in the order shown in the following table to optimize system performance.

In general, all three channels on the memory interface for each microprocessor can be populated in any order and have no matching requirements.

Table 6. Normal mode DIMM installation sequence

Number of installed microprocessor	**DIMM connector population sequence**
One microprocessor installed	1, 4, 9, 12, 2, 5, 8, 11, 3, 6, 7, 10
Two microprocessors installed	1, 13, 4, 16, 9, 21, 12, 24, 2, 14, 5, 17, 8, 20, 11, 23, 3, 15, 6, 18, 7, 19, 10, 22

Memory mirrored channel

Memory mirrored channel mode replicates and stores data on two pairs of DIMMs within two channels simultaneously.

If a failure occurs, the memory controller switches from the primary pair of memory DIMMs to the backup pair of DIMMs. To enable memory mirrored channel through the Setup utility, select **System Settings → Memory**. For more information, see “Using the Setup utility” on page 97. When you use the memory mirrored channel feature, consider the following information:

- When you use memory mirrored channel, you must install a pair of DIMMs at a time. The two DIMMs in each pair must be identical in size, type, and rank (single, dual, or quad), and organization, but not in speed. The channels run at the speed of the slowest DIMM in any of the channels.
- The maximum available memory is reduced to half of the installed memory when memory mirrored channel is enabled. For example, if you install 64 GB of memory using RDIMMs, only 32 GB of addressable memory is available when you use memory mirrored channel.
- For UDIMMs, DIMM connectors 3, 6, 7, and 10 for microprocessor 1 and DIMM connectors 15, 18, 19, and 22 for microprocessor 2 are not used in memory mirrored channel mode.

The following diagram lists the DIMM connectors on each memory channel.

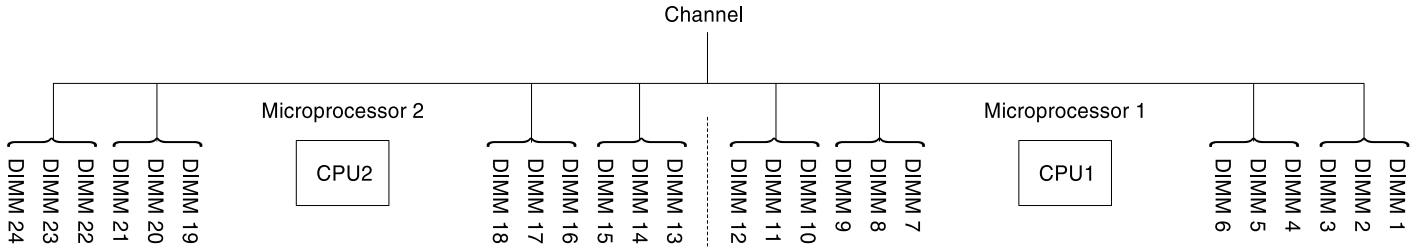


Figure 36. Connectors on each memory channel

The following table shows the installation sequence for memory mirrored channel mode:

Table 7. Memory mirrored channel mode DIMM population sequence

Number of DIMMs	**Number of installed microprocessor**	**DIMM connector**
First pair of DIMMs	1	1, 4
Second pair of DIMMs	1	9, 12
Third pair of DIMMs	1	2, 5
Fourth pair of DIMMs	1	8, 11
Fifth pair of DIMMs	1	3, 6
Sixth pair of DIMMs	1	7, 10
Seventh pair of DIMMs	2	13, 16
Eighth pair of DIMMs	2	21, 24
Ninth pair of DIMMs	2	14, 17
Tenth pair of DIMMs	2	20, 23
Eleventh pair of DIMMs	2	15, 18
Twelfth pair of DIMMs	2	19, 22
DIMM connectors 3, 6, 7, 10, 15, 18, 19, and 22 are not used in memory mirrored channel mode when UDIMMs are installed in the server.		

Memory rank sparing

The memory rank sparing feature disables the failed memory from the system configuration and activates a rank sparing DIMM to replace the failed active DIMM.

You can enable rank sparing memory in the Setup utility, select **System Settings → Memory**. For more information, see “Using the Setup utility” on page 97.

The maximum available memory is reduced when memory rank sparing mode is enabled.

The following diagram lists the DIMM connectors on each memory channel.

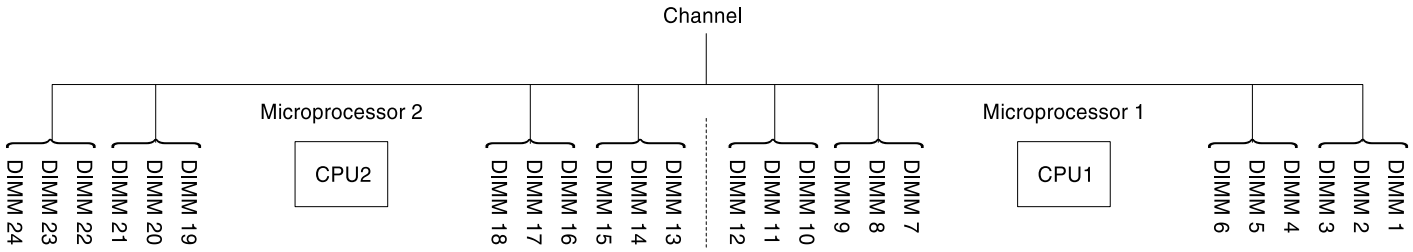


Figure 37. Connectors on each memory channel

Follow the installation sequence for rank sparing mode:

- Install at least one quad-rank DIMM in a channel.
- Install at least two single-rank or dual-rank DIMMs in a channel.

Table 8. Memory rank sparing mode DIMM population sequence

Number of DIMMs	Number of installed microprocessor	DIMM connector
First pair of DIMMs	1	1, 2
Second pair of DIMMs	1	4, 5
Third pair of DIMMs	1	8, 9
Fourth pair of DIMMs	1	11, 12
Fifth pair of DIMMs	1	7, 10
Sixth pair of DIMMs	1	3, 6
Seventh pair of DIMMs	2	13, 14
Eighth pair of DIMMs	2	16, 17
Ninth pair of DIMMs	2	20, 21
Tenth pair of DIMMs	2	23, 24
Eleventh pair of DIMMs	2	19, 22
Twelfth pair of DIMMs	2	15, 18
DIMM connectors 3, 6, 7, 10, 15, 18, 19, and 22 are not used in memory rank sparing mode when UDIMMs are installed in the server.		

Installing a memory module

Use this information to install a memory module.

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. Remove the air baffle (see “Removing the air baffle” on page 34).

Step 5. Carefully open the retaining clips on each end of the DIMM connector and remove the DIMM.

Attention: To avoid breaking the retaining clips or damaging the DIMM connectors, open and close the clips gently.

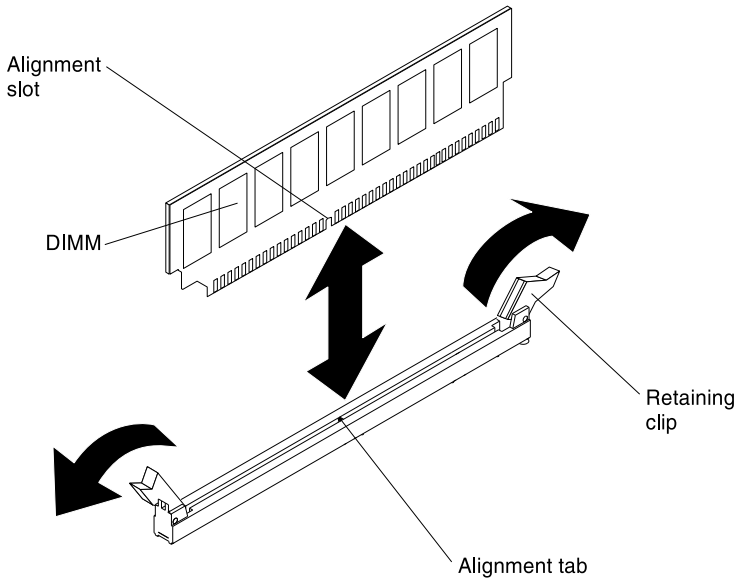


Figure 38. DIMM removal

Step 6. Touch the static-protective package that contains the DIMM to any unpainted metal surface on the outside of the server. Then, remove the DIMM from the package.

Step 7. Turn the DIMM so that the alignment slot align correctly with the alignment tab.

Step 8. Insert the DIMM into the connector by aligning the edges of the DIMM with the slots at the ends of the DIMM connector (see “System-board optional-device connectors” on page 30 for the locations of the DIMM connectors).

Step 9. Firmly press the DIMM straight down into the connector by applying pressure on both ends of the DIMM simultaneously. The retaining clips snap into the locked position when the DIMM is firmly seated in the connector.

Note: If there is a gap between the DIMM and the retaining clips, the DIMM has not been correctly inserted; open the retaining clips, remove the DIMM, and then reinsert it.

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 89.

Installing an adapter

The following notes describe the types of adapters that the server supports and other information that you must consider when you install an adapter.

- Locate the documentation that comes with the adapter and follow those instructions in addition to the instructions in this section.
- The server provides one internal SAS/SATA RAID connector and two PCI slots on the system board. See “System-board optional-device connectors” on page 30 for the location of the internal SAS/SATA RAID connector and riser-card slots. You can replace the ServeRAID SAS/SATA adapter with an optional ServeRAID SAS/SATA adapter in the slot. For configuration information, see the ServeRAID documentation at http://www.lenovo.com/support.
- Do not set the maximum digital video adapter resolution above 1600 x 1200 at 75 Hz for an LCD monitor. This is the highest resolution that is supported for any add-on video adapter that you install in the server.
- Read the following table before installing memory modules when any Quadro adapters is installed.

Table 9. NVIDIA Quadro video adapter configurations

Description	Supported maximum total memory size
Quadro 600 adapter	128 GB
Quadro 2000 adapter	512 GB

- Read the following table before installing NAND flash adapters.

Table 10. Adapter configurations

Description	Option part number	PCI riser 1	PCI riser 2
Emulex dual-port 10GbE SFP+ embedded adapter	00D8540	Six fans installed required[1]	Six fans installed required[1]
365 GB High IOPS MLC mono adapter	46C9078	Six fans installed required[1]	Six fans installed required[1]
785 GB High IOPS MLC mono adapter	46C9081	Six fans installed required[1]	Six fans installed required[1]
1.2 TB High IOPS MLC mono adapter	90Y4377	Six fans installed required[1]	Six fans installed required[1]
2.4 TB High IOPS MLC duo adapter	90Y4397	Not supported	Six fans installed required[1]
Flash Adapter F825 Enterprise Value	00AE861	Six fans installed required[1]	Six fans installed required[1]
Flash Adapter F1650 Enterprise Value	00AE864	Six fans installed required[1]	Six fans installed required[1]
300GB High IOPS MLC modular adapter	90Y4361	Six fans installed required[1]	Six fans installed required[1]
600GB High IOPS MLC modular adapter	90Y4365	Six fans installed required[1]	Six fans installed required[1]
800GB High IOPS MLC modular adapter	90Y4369	Six fans installed required[1]	Six fans installed required[1]
Flash Adapter F3200 Enterprise Value	00AE867	Not supported	Six fans installed required[1]

Table 10. Adapter configurations (continued)

Description	Option part number	PCI riser 1	PCI riser 2
Qlogic 8200 dual-port 10GbE SFP+ VFA	90Y4600	Six fans installed required[1]	Six fans installed required[1]
ServeRAID M5120 SAS/SATA controller	81Y4478	Six fans installed required[1]	Six fans installed required[1]
ServeRAID M5225 SAS/SATA controller	00AE938	Not supported	Four fans installed required
Solarflare SFN5162F midrange dual-port 10GbE SFP+ adapter	47C9952	Six fans installed required[1]	Six fans installed required[1]
Solarflare SFN6122F low latency dual-port 10GbE SFP+ adapter	47C9960	Six fans installed required[1]	Six fans installed required[1]
Solarflare SFN7122F 2x10GbE SFP+ flareon ultra adapter for System x	47C9977	Six fans installed required[1]	Six fans installed required[1]

1. You can purchase Lenovo System x3550 M4 Thermal Solution Kit (option part number 00Y7117) to acquire two additional fans for your server.

- Any high-definition video-out connector or stereo connector on any add-on video adapter is not supported
- The server does not support full-length, full-height PCI adapters or legacy 5V PCI adapters.
- When you install any PCI adapter, the power cords must be disconnected from the power source before you remove the PCI Express riser-card assembly and the PCI-X riser-card assembly. Otherwise, the active power management event signal will be disabled by the system-board logic, and the Wake on LAN feature might not work. However, after the server is powered-on locally, the active power manager active power management event signal will be enabled by the system-board logic.
- The server provides two PCI riser-card slots on the system board. The following information describes the PCI riser-card slots and the type of adapters that the riser cards support:
  - If you want to install a PCI Express or PCI-X adapter, you must order the PCI riser-card option.
  - PCI riser slot 1. This slot supports only low-profile adapters.
  - PCI riser slot 2. This slot supports full-height, half-length adapters.

  The following table lists the supported configurations for the PCI riser-card slots.

Table 11. PCI riser slots supported configurations

PCI riser-card slot number	Configuration 1	Configuration 2 (Two microprocessors installed)	Configuration 3
Slot 1	PCI Express 3.0 (x16) card with a PCI Express riser card with a standard bracket	PCI Express 3.0 (x16) card with a PCI Express riser card with a standard bracket	PCI Express 3.0 (x16) card with a PCI Express riser card with a standard bracket
Slot 2	PCI Express 3.0 (x8) card with a PCI Express riser card with a standard bracket	PCI Express 3.0 (x16) card with a PCI Express riser card with a standard bracket	PCI-X 64-bit/133 MHz card with a PCI-X riser card with a standard bracket

Notes:

1. The instructions in this section apply to any PCI adapter (for example, video graphics adapters or network adapters).
2. Do not set the maximum digital video adapter resolution above 1600 x 1200 at 75 Hz for an LCD monitor. This is the highest resolution that is supported for any add-on video adapter that you install in the server.

3. Any high-definition video-out connector or stereo connector on any add-on video adapter is not supported.

To install an adapter, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Step 3. Remove the server cover (see “Removing the cover” on page 34).

Step 4. Follow the cabling instructions, if any come with the adapter. Route the adapter cables before you install the adapter.

Step 5. Insert the adapter into the PCI riser-card assembly, aligning the edge connector on the adapter with the connector on the PCI riser-card assembly. Press the edge of the connector *firmly* into the PCI riser-card assembly. Make sure that the adapter snaps into the PCI riser-card assembly securely.

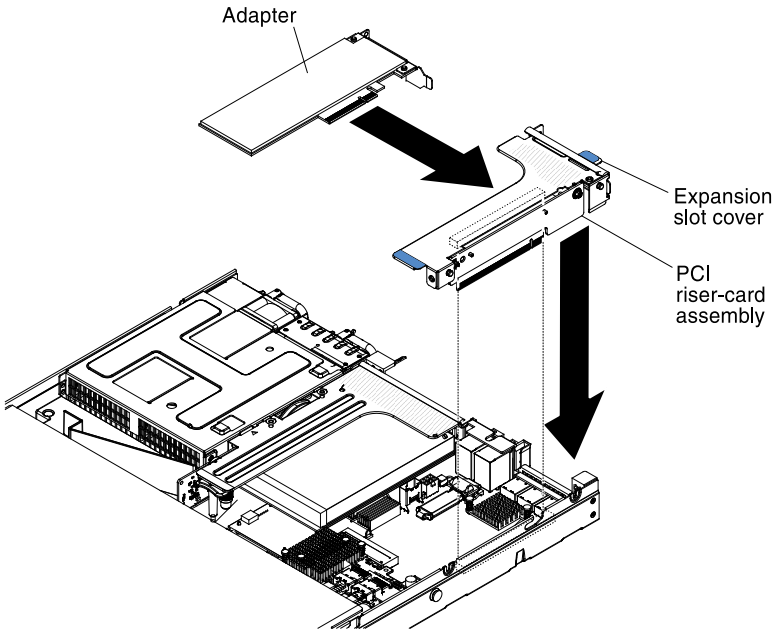


Figure 39. Adapter installation

Attention: When you install an adapter, make sure that the adapter is correctly seated in the riser-card assembly and that the riser-card assembly is securely seated in the riser-card connector on the system board before you turn on the server. An incorrectly seated adapter might cause damage to the system board, the riser-card assembly, or the adapter.

Step 6. Install the PCI riser-card assembly in the server (see “Replacing a PCI riser-card assembly” on page 223).

Step 7. Connect the cable to the newly-installed adapter.

Note: You might need to remove the blue latch from PCI riser-card assembly 2 to easily connect the cables.

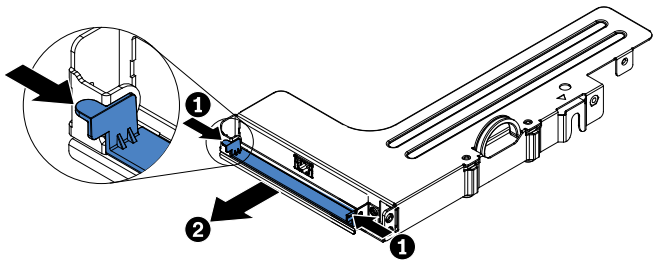


Figure 40. Latch removal

Step 8. Perform any configuration tasks that are required for the adapter.

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 89.

Installing a ServeRAID SAS/SATA controller

Use this information to install a ServeRAID SAS/SATA controller.

Note: For brevity, in this documentation the ServeRAID SAS/SATA controller is often referred to as the *SAS/SATA adapter* or the *ServeRAID adapter*.

The ServeRAID SAS/SATA controller can be installed in the dedicated connector on the system board or PCI riser-card slots (see “System-board internal connectors” on page 26 for the location of the connectors). To install a SAS/SATA adapter, complete the following steps:

Depending on the server model, the server comes with a ServeRAID H1110, a ServeRAID M1115, a ServeRAID M5110, or a ServeRAID 5210 SAS/SATA adapter installed.

Note: Remove the PCI bracket that come with ServeRAID H1110, ServeRAID M1115, ServeRAID M5110 SAS/SATA, or a ServeRAID 5210 adapter before installing a SAS/SATA adapter in the dedicated connector on the system board.

Attention:

- You can not install ServeRAID H1110 when microprocessor Intel Xeon E5-2637 (FRU part number 49Y8124) is installed.
- You can not install ServeRAID M1115 or 6Gb performance optimized HBA when Quadro 2000 is installed.

You can replace the ServeRAID controller with another supported ServeRAID controller. For a list of supported ServeRAID controllers, see http://www.lenovo.com/ serverproven/.

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. Remove PCI riser-card assembly 1 if necessary (see “Removing a PCI riser-card assembly” on page 222).

Step 5. If you are installing a new or replacement SAS/SATA adapter, touch the static-protective package that contains the new SAS/SATA adapter to any unpainted metal surface on the server. Then, remove the new SAS/SATA adapter from the package.

Step 6. Align the SAS/SATA adapter so that the keys align correctly with the connector on the system board.

Step 7. Insert the SAS/SATA adapter in the dedicated connector on the system board or PCI riser-card slots.

Attention: Incomplete insertion might cause damage to the server or the adapter.

a. Insert the SAS/SATA adapter into the RAID connector on the system board until it is firmly seated. The retention brackets secure the SAS/SATA adapter in place when the adapter is firmly seated into the connector.

Note: Remove the PCI bracket that come with ServeRAID H1110, ServeRAID M1115, or ServeRAID M5110 SAS/SATA adapter before installing a SAS/SATA adapter in the dedicated connector on the system board.

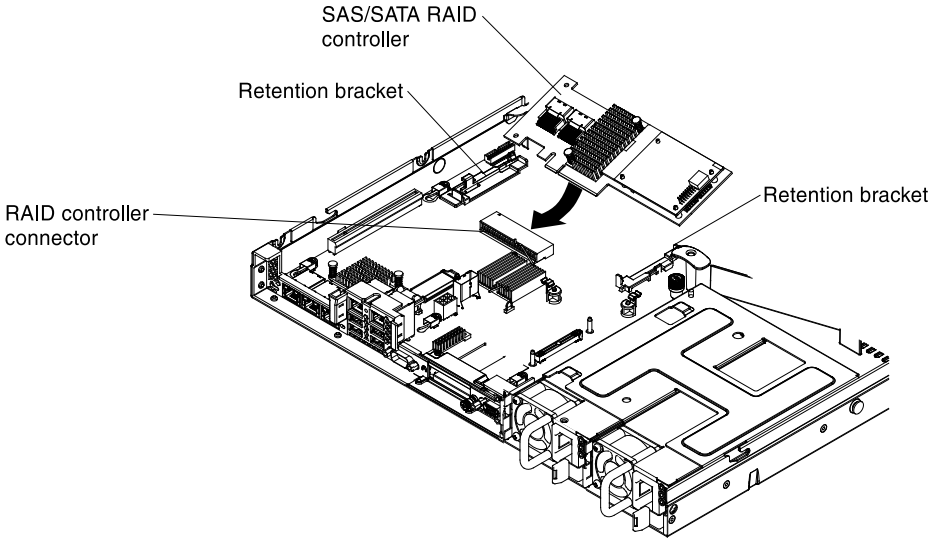


Figure 41. ServeRAID adapter installation

b. Insert the SAS/SATA adapter into the PCI riser cards (see “Replacing an adapter” on page 228).

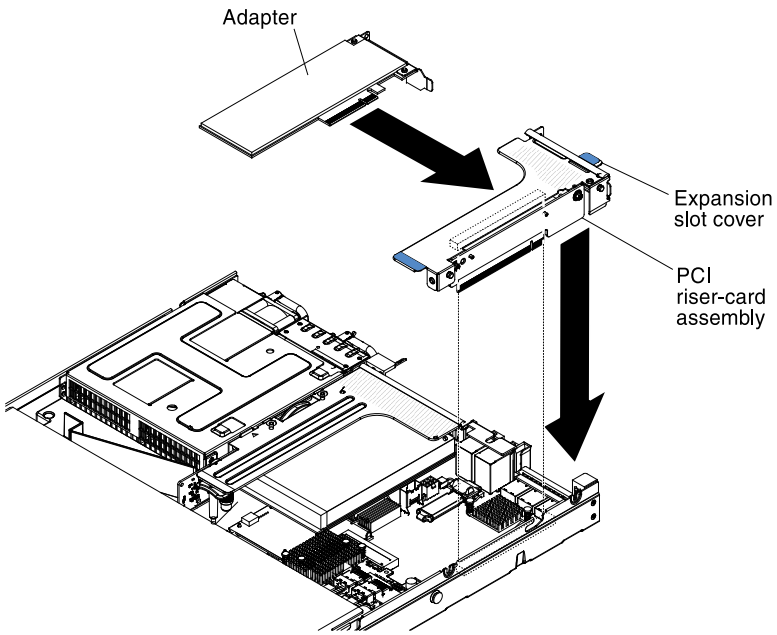


Figure 42. Adapter installation

Step 8. Route the backplane signal cables (see “Cabling backplane” on page 183).

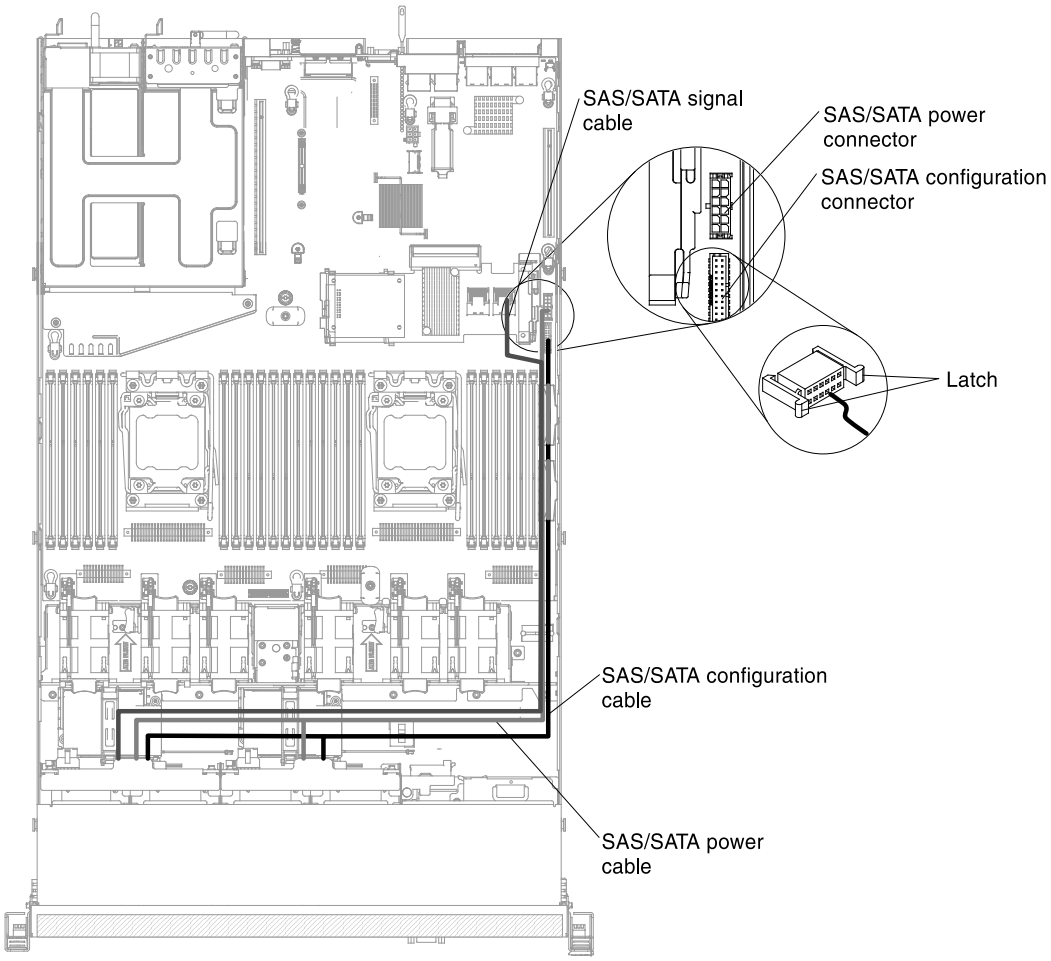


Figure 43. ServeRAID adapter cable routing

Step 9. Connect the signal cables to the SAS/SATA adapter:

a. **ServeRAID H1110 adapter**: Take the signal cable that is attached to the drive backplane for drive bays 0 through 3 and connect it to the SAS/SATA connector on the ServeRAID adapter.

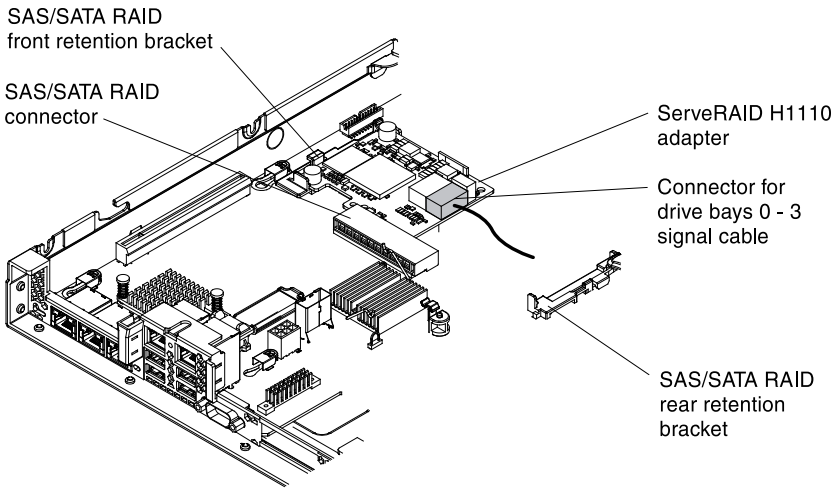


Figure 44. ServeRAID H1110 adapter cable routing

b. **ServeRAID M1115 adapter**: Take the signal cable that is attached to the drive backplane for drive bays 4 through 7 and connect it to the ServeRAID adapter connector for drive bays 4 through 7 (port 1). Connect the other signal cable that is attached to the drive backplane for drive bays 0 through 3 and connect it to the other connector (port 0) on the adapter.

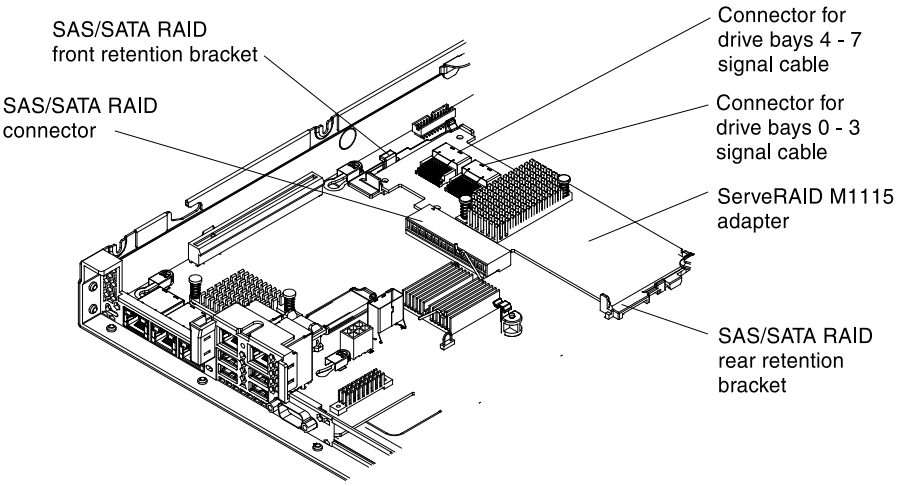


Figure 45. ServeRAID M1115 adapter cable routing

c. **ServeRAID M5110 adapter**: Take the signal cable that is attached to the drive backplane for drive bays 4 through 7 and connect it to the ServeRAID adapter connector for drive bays 4 through 7 (port 1). Connect the other signal cable that is attached to the drive backplane for drive bays 0 through 3 and connect it to the other connector (port 0) on the adapter.

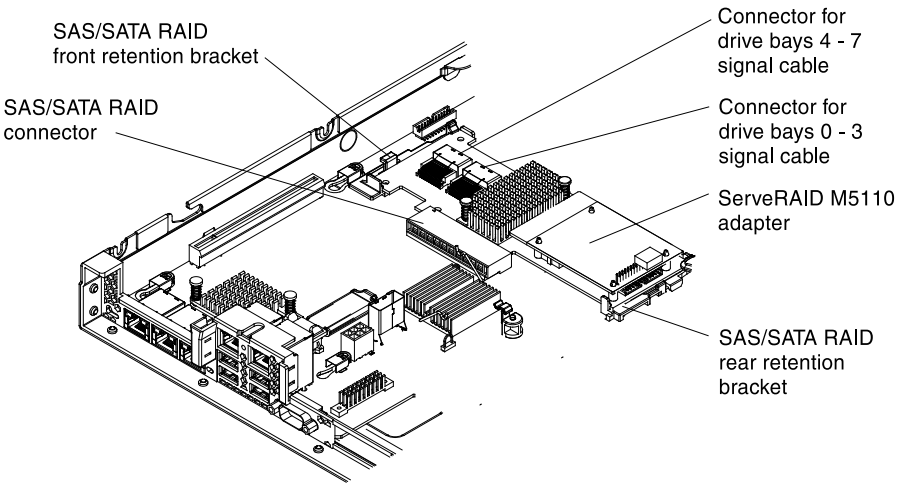


Figure 46. ServeRAID M5110 adapter cable routing

Note: When you restart the server, you are prompted to import the existing RAID configuration to the new ServeRAID adapter.

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 89.

Installing the ServeRAID adapter memory module

Use this information to install the ServeRAID adapter memory module.

To install the ServeRAID adapter memory module, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. Remove the ServeRAID SAS/SATA controller (see “Removing a ServeRAID SAS/SATA controller” on page 232).

Step 5. Align the memory module with the connector on the ServeRAID adapter and push it into the connector until it is firmly seated.

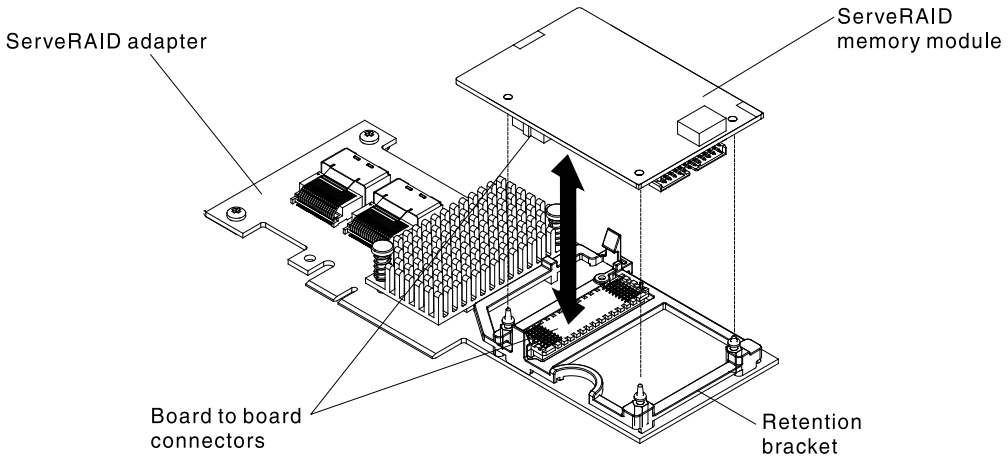


Figure 47. ServeRAID memory module installation

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 89.

Installing a RAID adapter battery or flash power module

When you install any RAID adapter that comes with batteries or flash power modules, it is sometimes necessary to install the batteries or flash power modules in another location in the server to prevent the batteries or flash power modules from overheating.

Depending on your server model, a battery or flash power module must be installed remotely near the optical drive cage or the backplane. The 2.5-inch HDD server models support up to two batteries or flash power modules.

To install a RAID adapter battery or flash power module in the server, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords and external devices.

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. Install the ServeRAID adapter on the system board (see “Installing a ServeRAID SAS/SATA controller” on page 55) or install the ServeRAID adapter on the riser card and install the riser-card assembly in the server (see “Replacing an adapter” on page 228).

Step 5. Connect one end of the cable to the RAID adapter memory module.

Step 6. Route the cable along the chassis.

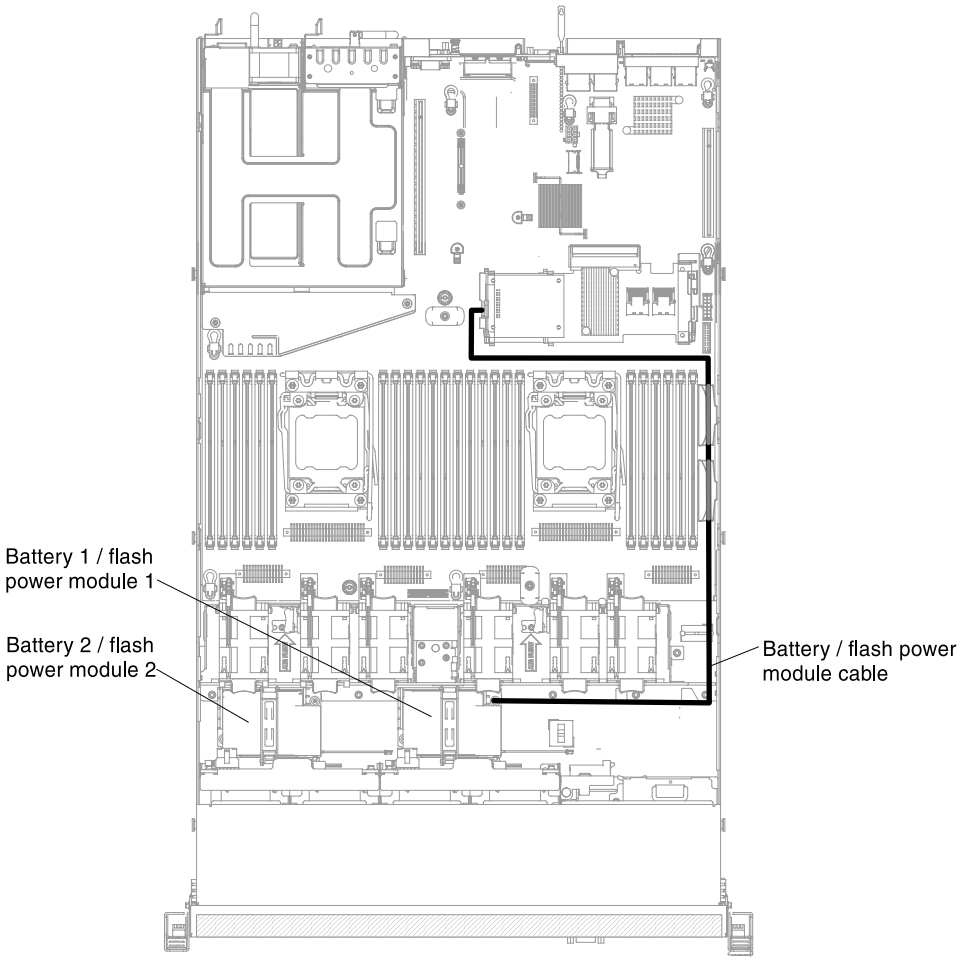


Figure 48. RAID adapter battery or flash power module cable connection

Attention: Make sure that the cable is not pinched and does not cover any connectors or obstruct any components on the system board.

Step 7. Remove any cable covering or obstructing the battery holder before opening the battery holder.

Step 8. Install the battery or flash power module:

a. Release the retention clip in the open position.

b. Align the cable connector with the slot on the holder. Place the battery or flash power module into the holder and make sure that the holder engages the battery or flash power module securely.

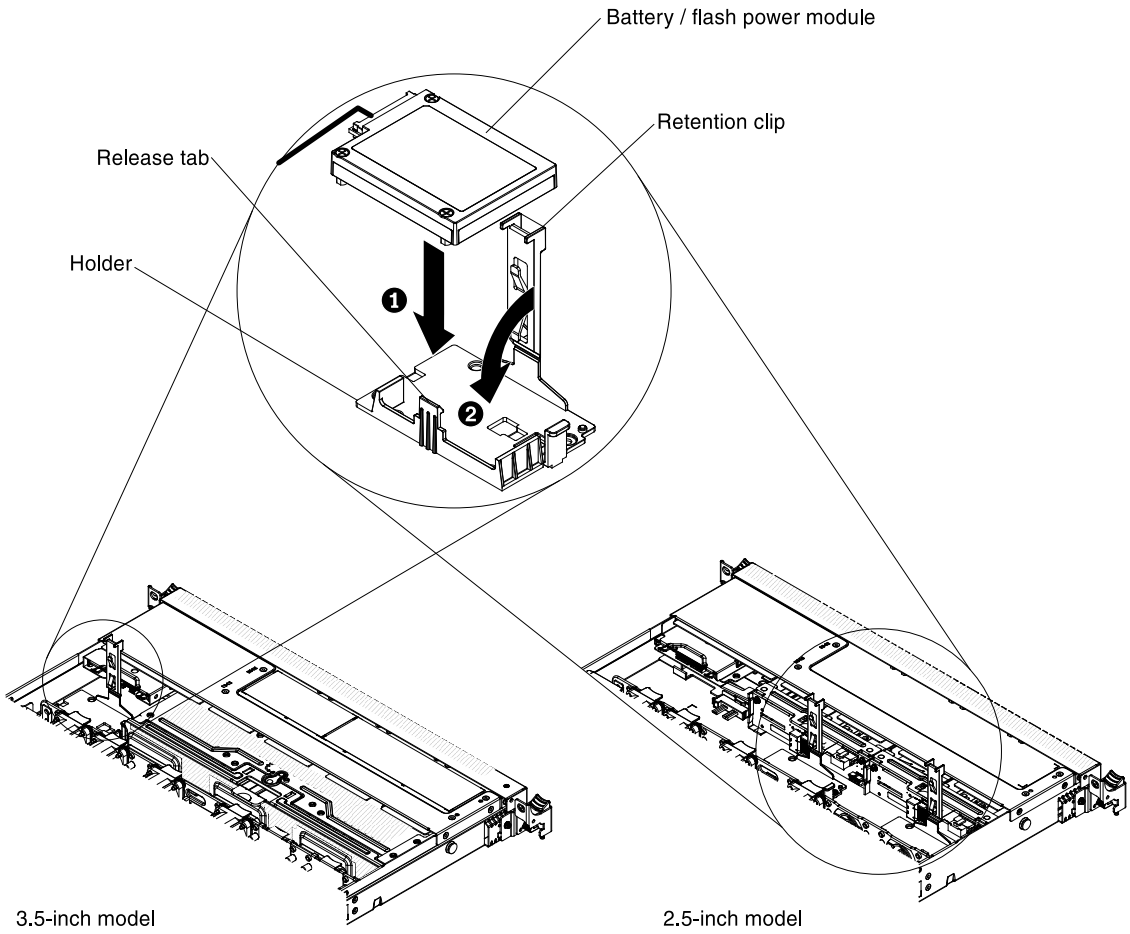


Figure 49. RAID adapter battery or flash power module installation

Note: The positioning of the battery or flash power module depends on the type of the battery or flash power module that you install.

c. Connect the other end of the cable to the battery or flash power module.

d. Lower and press down on the retention clip until it snaps in place to hold the battery or flash power module firmly in place.

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 89.

Installing the dual-port network adapter

You can purchase one of the following dual-port network adapters to add two additional network ports in the server.

To order a dual-port network adapter option, contact your sales representative or reseller.

Table 12. Supported dual-port network adapters on the network connector

Dual-port network adapter	Option part number	FRU part number	Remark
Mellanox ConnectX-3 dual-port QDR/FDR10 mezz card	90Y6338	90Y4956	
Qlogic dual-port 10GbE SFP+ Embedded VFA	90Y6454	90Y5099	Six fans installed required[1]
Emulex dual-port 10GbE SFP+ Embedded VFA III	90Y6456	90Y5100	
Dual-port FDR embedded adapter	00D4143	90Y6606	
Broadcom dual port 10GbE SFP+ embedded adapter for System x	44T1360	00AL195	Six fans installed required[1]

1. You can purchase Lenovo System x3550 M4 Thermal Solution Kit (option part number 00Y7117) to acquire two additional fans for your server.

The following notes describe the types of adapters that the server supports and other information that you must consider when you install an adapter:

- To configure network adapters, complete the following steps:
  1. From the Setup utility main menu (see "Using the Setup utility" on page 97), select **System Settings → Network**.
  2. From the **Network Device List**, select one network adapter.

     Note: You might need to enter each item (displaying MAC address) to see detailed information.
  3. Press Enter to configure the network adapter settings.
- To convert the NIC/iSCSI/FCoE for Emulex Dual Port 10GbE SFP+ Embedded VFA III, complete the following steps:
  1. From the Setup utility main menu (see "Using the Setup utility" on page 97), select **System Settings → Network** and press Enter.
  2. From the **Network Device List**, select Emulex network adapter.

     Note: You might need to enter each item (displaying MAC address) to see detailed information.
  3. Press Enter to configure Emulex network adapter, select **Personality** and press Enter to change the settings.
     - NIC
     - iSCSI (enabled after FoD installed)
     - FCoE (enabled after FoD installed)
- To download the latest version of drivers for iSCSI and FCoE from the website, complete the following steps:
  1. Go to http://www.ibm.com/support/ fixcentral.
  2. Click **Product support → System x → Product family → Lenovo System x3550 M4 → 7914**.
  3. From the **Operating system** menu, select your operating system, and then click **Search** to display the available drivers.
  4. Download the latest version of drivers.
     - Emulex iSCSI Device Driver for Windows 2008
     - Emulex FCoE Device Driver for Windows 2008

  Note: Changes are made periodically to the website. The actual procedure might vary slightly from what is described in this document.

- Port 0 on the Emulex Dual Port 10GbE SFP+ Embedded VFA III can be configured as shared system management.
- When the server is in standby mode, both ports on the Emulex Dual Port 10GbE SFP+ Embedded VFA III function at 100M connection speed with Wake on LAN feature.

The Emulex Dual Port 10GbE SFP+ Embedded VFA III is automatically disabled if one of the following errors occurs:

- An error log indicates a temperature warning for the Ethernet adapter.
- All power supplies are removed or the server is disconnected from the power source.

To install the dual-port network adapter, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. Remove the PCI riser-card assembly (if installed) from PCI riser connector 2 (see “Removing a PCI riser-card assembly” on page 222).

Step 5. Remove the adapter filler panel on the rear of the chassis (if it has not been removed already).

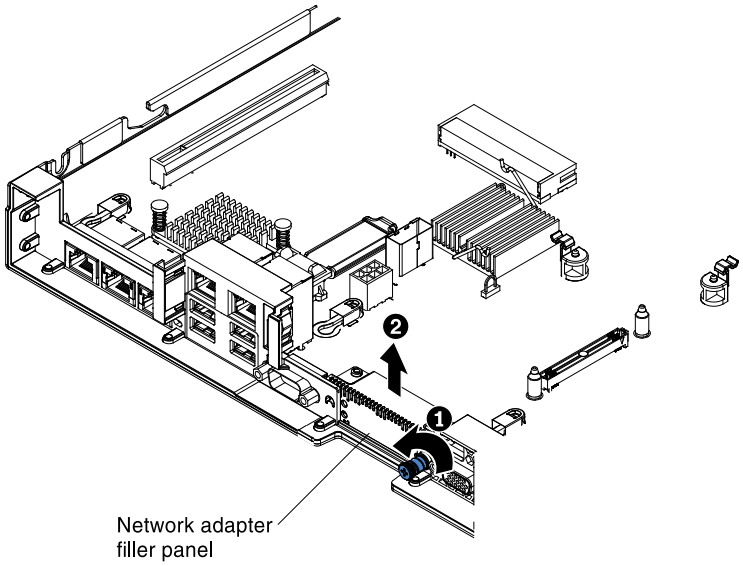


Figure 50. Adapter filler panel removal

Step 6. Touch the static-protective package that contains the new adapter to any unpainted metal surface on the server. Then, remove the adapter from the package.

Step 7. Align the adapter so that the port connectors on the adapter line up with the pin and thumbscrew on the chassis; then, align the connector of the adapter with the adapter connector on the system board.

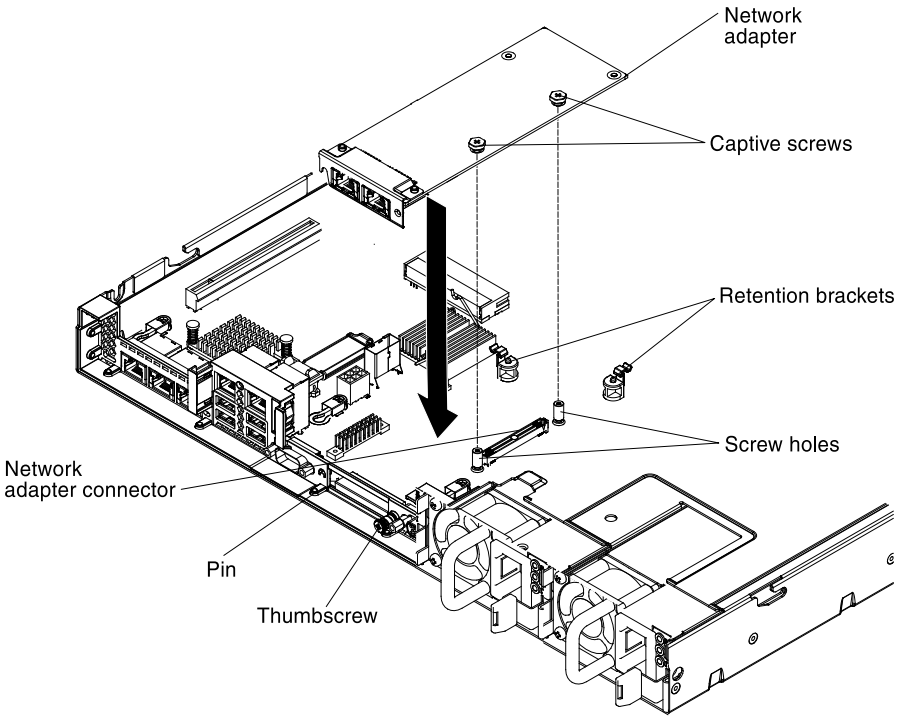


Figure 51. Network adapter installation

Step 8. Press the adapter firmly until the pin, and retention brackets engage the adapter. Make sure the adapter is securely seated on the connector on the system board.

Attention: Make sure the port connectors on the adapter are aligned properly with the chassis on the rear of the server. An incorrectly seated adapter might cause damage to the system board or the adapter.

Step 9. Fasten the thumbscrew on the rear side of the chassis.

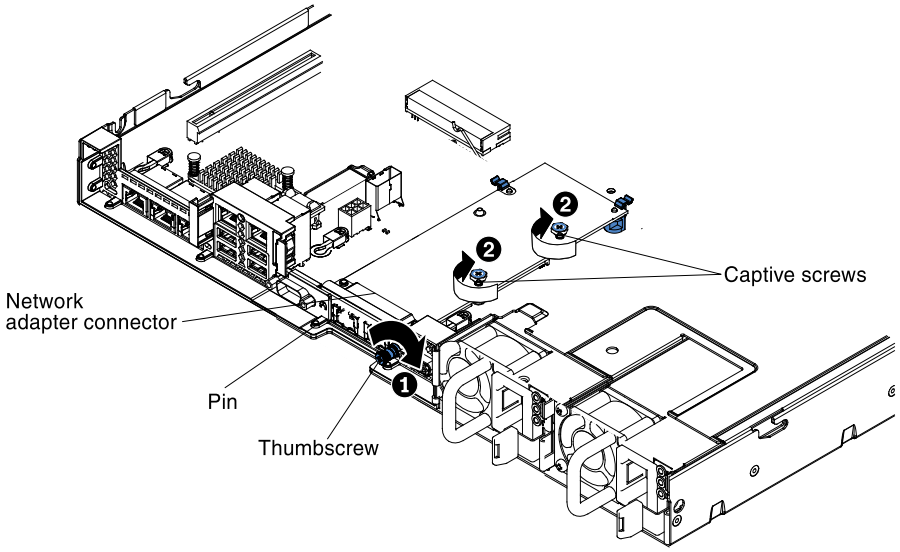


Figure 52. Screws engagement

Step 10. Fasten the two captive screws on the network adapter.

Step 11. Reinstall the PCI riser-card assembly in PCI riser connector 2 if you have removed it previously (see "Replacing a PCI riser-card assembly" on page 223).

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 89.

Installing a power supply

Use this information to install a power supply.

Installing a hot-swap ac power supply

Use this information to install a hot-swap ac power supply.

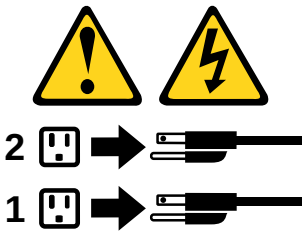
The following notes describe the type of power supply that the server supports and other information that you must consider when you install a power supply:

- Before you install an additional power supply or replace a power supply with one of a different wattage, you may use the Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www.ibm.com/systems/bladecenter/resources/powerconfig.html.
- The server comes with one hot-swap 12-volt output power supply that connects to power supply bay 1. The input voltage is 100-127 V ac or 200-240 V ac auto-sensing.
- Power supplies in the server must be with the same power rating or wattage to ensure that the server will operate correctly. For example, you cannot mix 550-watt and 750-watt power supplies in the server.
- Power supply 1 is the default/primary power supply. If power supply 1 fails, you must replace the power supply with the same wattage immediately.
- You can order an optional power supply for redundancy.

- These power supplies are designed for parallel operation. In the event of a power-supply failure, the redundant power supply continues to power the system. The server supports a maximum of two power supplies.

Statement 5

CAUTION:
The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



Statement 8

CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.

Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

To install a hot-swap ac power supply, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Touch the static-protective package that contains the hot-swap power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.

Step 3. If you are installing a hot-swap power supply into an empty bay, remove the power-supply filler from the power-supply bay.

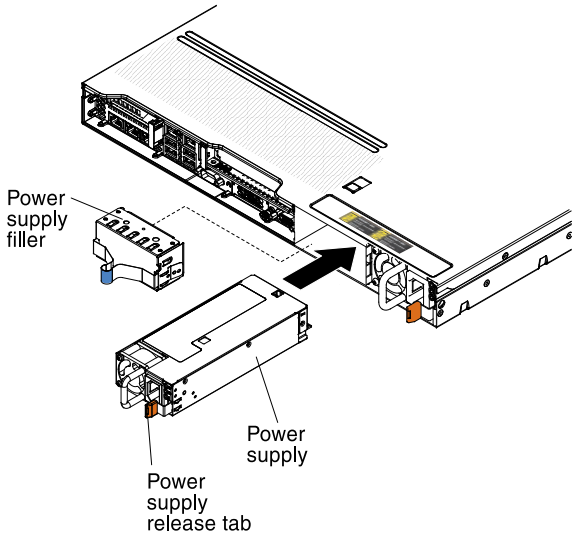


Figure 53. Power supply installation

Step 4. Grasp the handle on the rear of the power supply and slide the power supply forward into the power-supply bay until it clicks. Make sure that the power supply connects firmly into the power-supply connector.

Attention: Do not mix 550-watt and 750-watt power supplies in the server.

Step 5. Route the power cord through the handle and cable tie if any, so that it does not accidentally become unplugged.

Step 6. Connect the power cord for the new power supply to the power-cord connector on the power supply.

Step 7. Connect the other end of the power cord to a properly grounded electrical outlet.

Step 8. Make sure that the ac power LED and the dc power LED on the ac power supply are lit, indicating that the power supply is operating correctly. The two green LEDs are to the right of the power-cord connector.

Step 9. If you are replacing a power supply with one of a different wattage in the server, apply the new power information label provided over the existing power information label on the server. Power supplies in the server must be with the same power rating or wattage to ensure that the server will operate correctly.

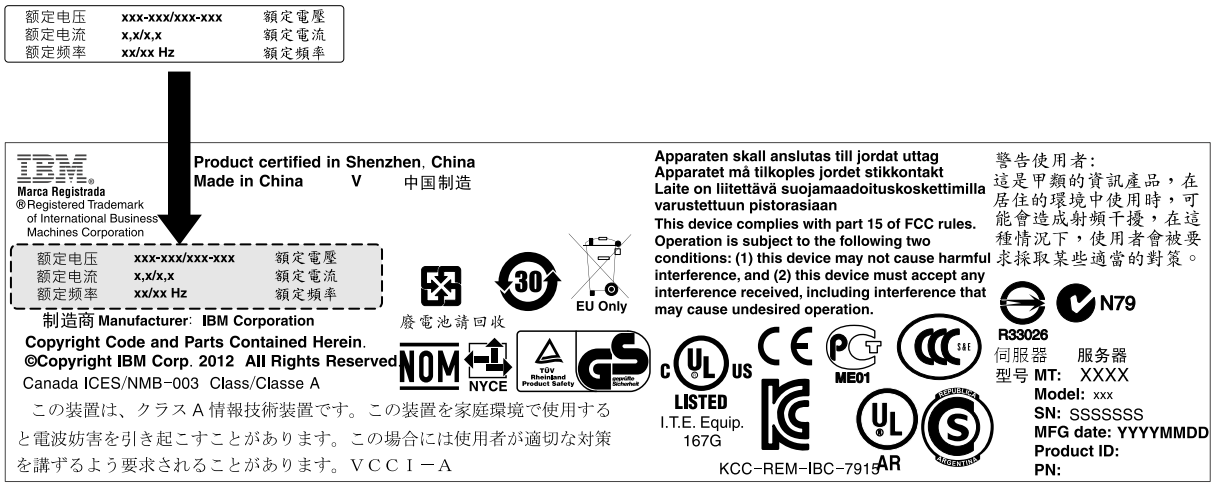


Figure 54. Power information label

Step 10. If you are adding a power supply to the server, attach the redundant power information label that comes with this option on the server cover near the power supplies.

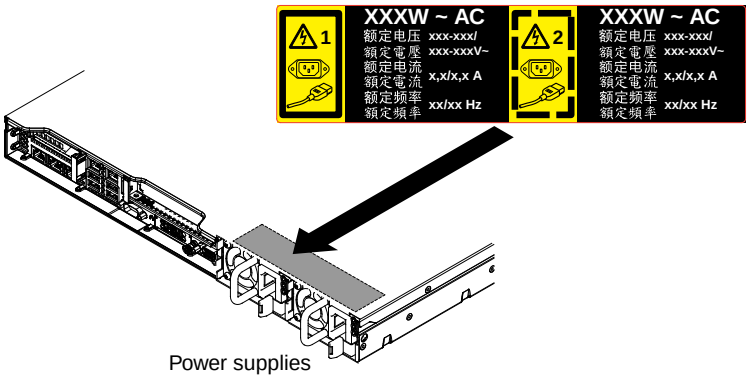


Figure 55. Redundant power information label

Installing a hot-swap dc power supply

Observe the following precautions when you install a hot-swap dc power supply.

The following notes describe the type of power supply that the server supports and other information that you must consider when you install a power supply:

- Before you install an additional power supply or replace a power supply with one of a different wattage, you may use the Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www.ibm.com/systems/bladecenter/resources/powerconfig.html.
- The server comes with one hot-swap 12-volt output power supply that connects to power supply bay 1. The input voltage is -48 V dc or -60 V dc auto-sensing.
- Before you install a dc power supply in the server, you must remove all ac power supplies. Do not use both ac and dc power supplies in the same server. Install up to two dc power supplies or up to two ac power supplies, but not a combination.

- Power supply 1 is the default/primary power supply. If power supply 1 fails, you must replace the power supply with the same wattage immediately.
- You can order an optional power supply for redundancy.
- These power supplies are designed for parallel operation. In the event of a power-supply failure, the redundant power supply continues to power the system. The server supports a maximum of two power supplies.

Regulations

- It is the customer's responsibility to supply the necessary power cable. **To reduce the risk of electric shock or energy hazards:**
  - **Use a circuit breaker that is rated at 25 amps.**
  - **Use 2.5 mm² (12 AWG) at 90°C copper wire.**
  - **Torque the wiring-terminal screws to 0.50 ~ 0.60 newton-meters (4.43 ~ 5.31 inch-pounds).**

  For more information, see "Statement 34" on page 73.
- If the power source requires ring terminals, you must use a crimping tool to install the ring terminals to the power cord wires. The ring terminals must be UL approved and must accommodate the wire that is described in the above-mentioned note .

Statement 29

CAUTION:
This equipment is designed to permit the connection of the earthed conductor of the dc supply circuit to the earthing conductor at the equipment.

This equipment is designed to permit the connection of the earthed conductor of the dc supply circuit to the earthing conductor at the equipment. If this connection is made, all of the following conditions must be met:

- This equipment shall be connected directly to the dc supply system earthing electrode conductor or to a bonding jumper from an earthing terminal bar or bus to which the dc supply system earthing electrode conductor is connected.
- This equipment shall be located in the same immediate area (such as, adjacent cabinets) as any other equipment that has a connection between the earthed conductor of the same dc supply circuit and the earthing conductor, and also the point of earthing of the dc system. The dc system shall not be earthed elsewhere.
- The dc supply source shall be located within the same premises as this equipment.
- Switching or disconnecting devices shall not be in the earthed circuit conductor between the dc source and the point of connection of the earthing electrode conductor.

Statement 31

DANGER

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- **Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.**
- **Connect all power cords to a properly wired and grounded power source.**
- **Connect to properly wired power sources any equipment that will be attached to this product.**
- **When possible, use one hand only to connect or disconnect signal cables.**
- **Never turn on any equipment when there is evidence of fire, water, or structural damage.**
- **Disconnect the attached ac power cords, dc power sources, network connections, telecommunications systems, and serial cables before you open the device covers, unless you are instructed otherwise in the installation and configuration procedures.**
- **Connect and disconnect cables as described in the following table when you install, move, or open covers on this product or attached devices.**

To Connect:

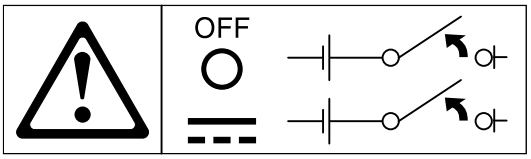
1. Turn OFF all power sources and equipment that is to be attached to this product.
2. Attach signal cables to the product.
3. Attach power cords to the product.
   - For ac systems, use appliance inlets.
   - For dc systems, ensure correct polarity of -48 V dc connections: RTN is + and -48 V dc is -. Earth ground should use a two-hole lug for safety.
4. Attach signal cables to other devices.
5. Connect power cords to their sources.
6. Turn ON all the power sources.

To Disconnect:

1. Turn OFF all power sources and equipment that is to be attached to this product.
   - For ac systems, remove all power cords from the chassis power receptacles or interrupt power at the ac power distribution unit.
   - For dc systems, disconnect dc power sources at the breaker panel or by turning off the power source. Then, remove the dc cables.
2. Remove the signal cables from the connectors.
3. Remove all cables from the devices.

Statement 33

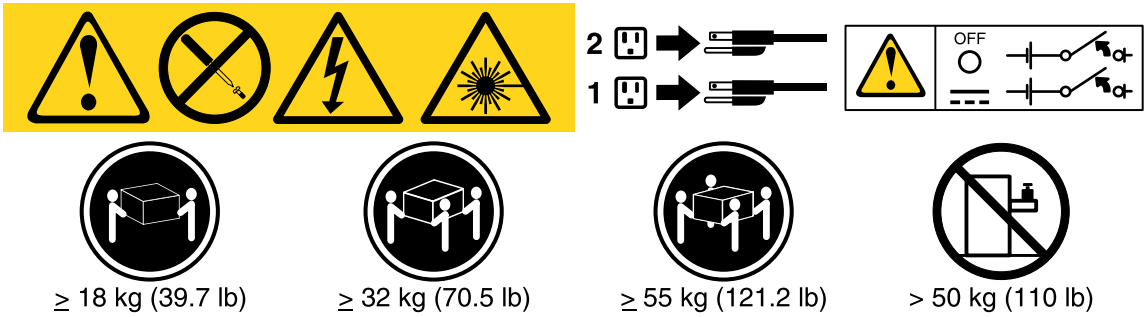
CAUTION:
This product does not provide a power-control button. Turning off blades or removing power modules and I/O modules does not turn off electrical current to the product. The product also might have more than one power cord. To remove all electrical current from the product, make sure that all power cords are disconnected from the power source.



Statement 34

CAUTION:
To reduce the risk of electric shock or energy hazards:

- **This equipment must be installed by trained service personnel in a restricted-access location, as defined by the NEC and IEC 60950-1, First Edition, The Standard for Safety of Information Technology Equipment.**
- **Connect the equipment to a properly grounded safety extra low voltage (SELV) source. A SELV source is a secondary circuit that is designed so that normal and single fault conditions do not cause the voltages to exceed a safe level (60 V direct current).**
- **Incorporate a readily available approved and rated disconnect device in the field wiring.**
- **See the specifications in the product documentation for the required circuit-breaker rating for branch circuit overcurrent protection.**
- **Use copper wire conductors only. See the specifications in the product documentation for the required wire size.**
- **See the specifications in the product documentation for the required torque values for the wiring-terminal screws.**



Important: Be sure to read the multilingual safety instructions on the CD that comes with the server before you use the product.

Installing a hot-swap dc power supply

To install a hot-swap dc power supply, complete the following steps.

Attention: Only trained service personnel other than Lenovo service technicians are authorized to install and remove the -48 volt dc power supply, and make the connections to and disconnections from the -48 volt dc power source. Lenovo service technicians are not certified or authorized to install or remove the -48 volt power cable. The customer is responsible for ensuring that only trained service personnel install or remove the -48 volt power cable.

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Touch the static-protective package that contains the hot-swap power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.

Step 3. Turn off the circuit breaker for the dc power source to which the new power supply will be connected. Disconnect the power cord from the dc power source.

Step 4. Attach the dc power cable to the new power supply.

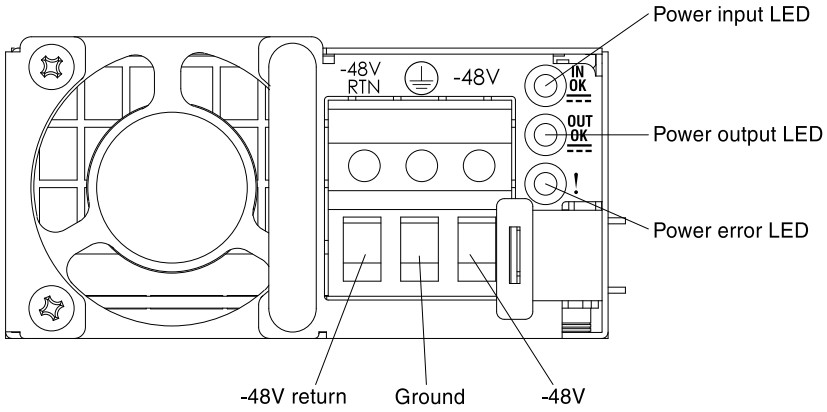


Figure 56. DC power supply rear view

Step 5. If you are installing a hot-swap power supply into an empty bay, remove the power-supply filler from the power-supply bay.

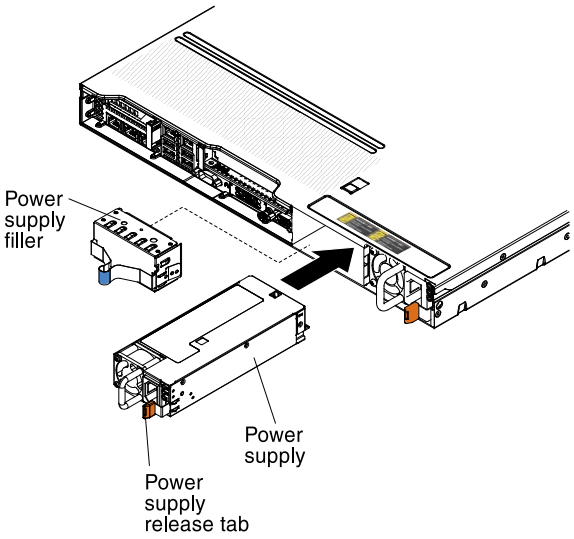


Figure 57. Power supply installation

Step 6. Grasp the handle on the rear of the power supply and slide the power supply forward into the power-supply bay until it clicks. Make sure that the power supply connects firmly into the power-supply connector.

Step 7. Route the power cord through the handle and cable tie if any, so that it does not accidentally become unplugged.

Step 8. Connect the other ends of the dc power cable to the dc power source. Cut the wires to the correct length, but do not cut them shorter than 150 mm (6 inch). If the power source requires ring terminals, you must use a crimping tool to install the ring terminals to the power cord wires. The ring terminals must be UL approved and must accommodate the wires that are described in “Regulations” on page 71. The minimum nominal thread diameter of a pillar or stud type of terminal must be 4 mm; for a screw type of terminal the diameter must be 5.0 mm.

Step 9. Turn on the circuit breaker for the dc power source to which the new power supply is connected.

Step 10. Make sure that the green power LEDs on the power supply are lit, indicating that the power supply is operating correctly.

Step 11. If you are replacing a power supply with one of a different wattage in the server, apply the new power information label provided over the existing power information label on the server. Power supplies in the server must be with the same power rating or wattage to ensure that the server will operate correctly.

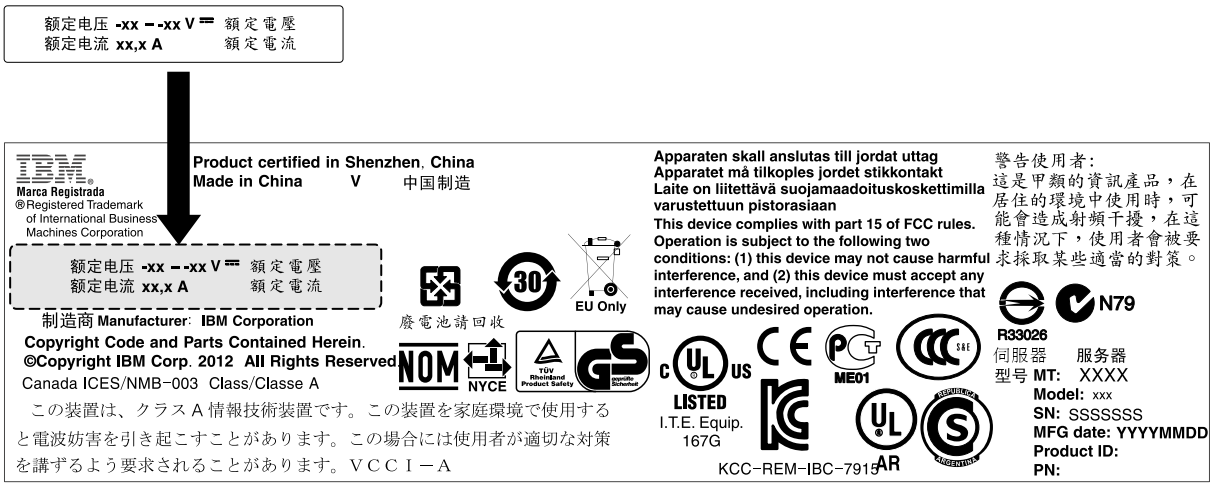


Figure 58. Power information label

Step 12. If you are adding a power supply to the server, attach the redundant power information label that comes with this option on the server cover near the power supplies.

Figure 59. Redundant power information label

Installing a hot-swap fan

Use this information to install a hot-swap fan.

The server comes standard with four dual-motor hot-swap cooling fans. When there is one microprocessor installed, install fan 1, 2, 3, and 5 for proper cooling.

Attention: To ensure proper operation, replace a failed hot-swap fan within 30 seconds.

To install an additional hot-swap fan, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Remove the cover (see “Removing the cover” on page 34).

Step 3. Remove the fan filler panel (if it has not been removed already). Keep the filler panel in a safe place.

Step 4. Touch the static-protective package that contains the new fan to any unpainted metal surface on the server. Then, remove the new fan from the package.

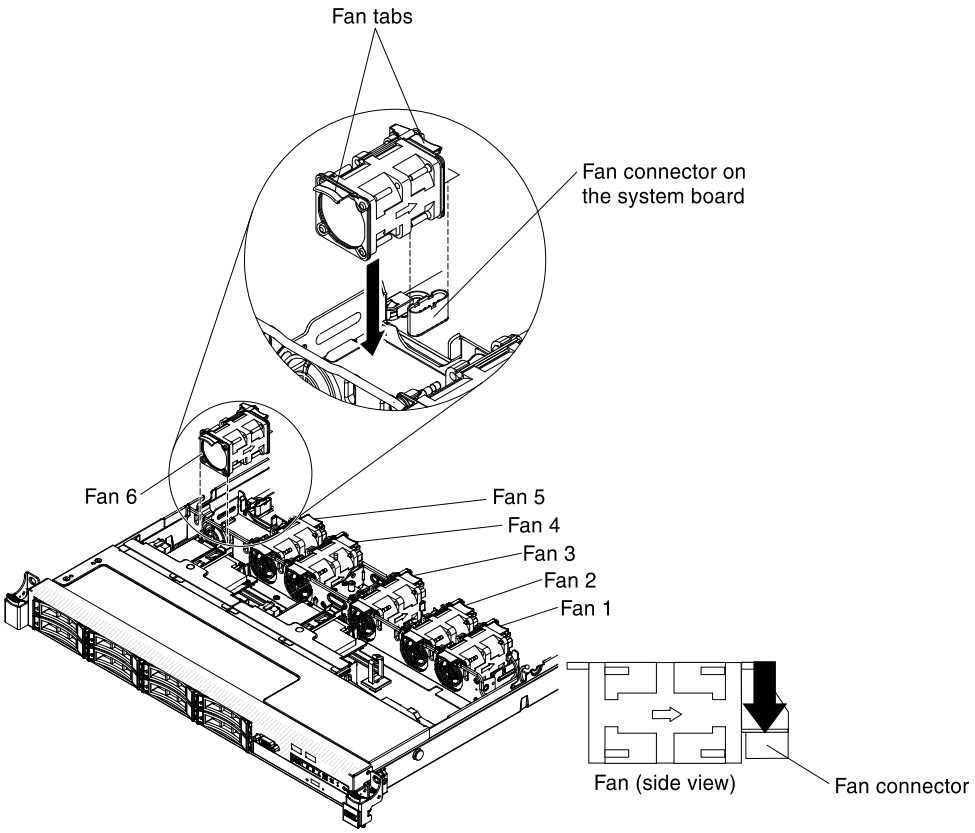


Figure 60. Fan installation

Step 5. Orient the fan over the fan slot in the fan assembly bracket so that the fan connector aligns with the connector on the system board.

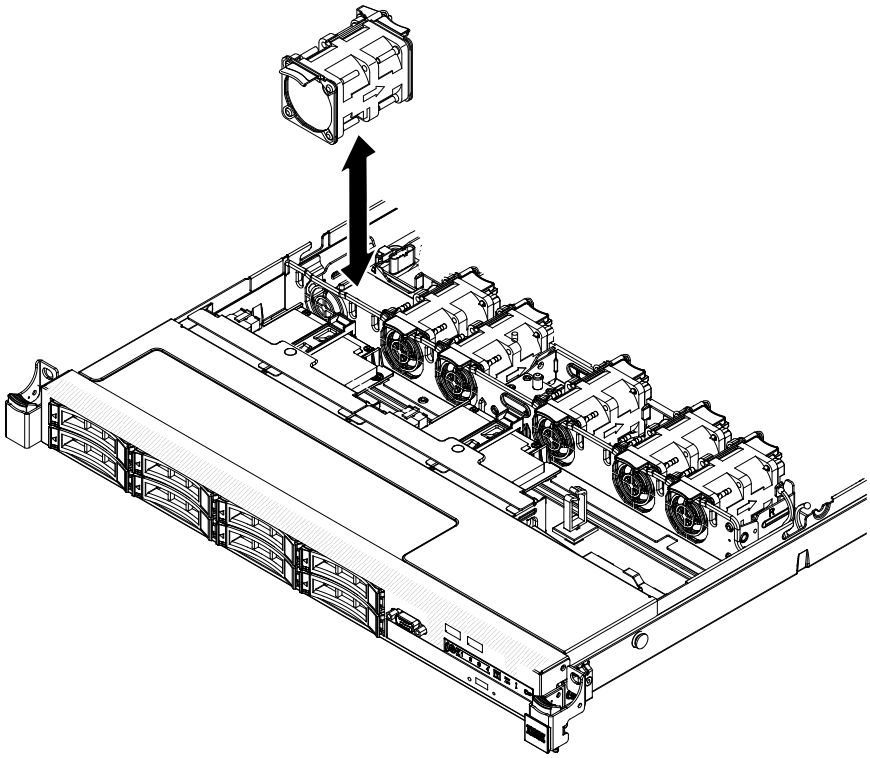


Figure 61. Fan installation

Step 6. Insert the fan into the fan slot in the fan assembly bracket and press it down until it is seated correctly in the slot and the fan connector is seated correctly in the connector on the system board.

Note: Make sure that the newly-installed fan aligns horizontally with other correctly-seated fans for proper installation.

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 89.

Installing a USB embedded hypervisor flash device

Use this information to install a USB embedded hypervisor flash device.

To install a USB hypervisor flash device, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords.

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. Install the flash device:

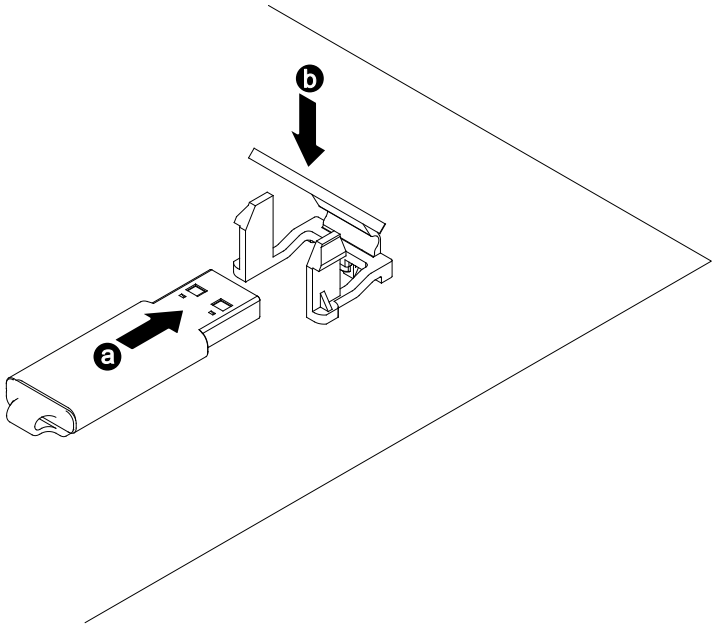


Figure 62. USB hypervisor flash device installation

a. Align the flash device with the connector on the system board and push it into the USB connector until it is firmly seated.
b. Press down on the retention latch to lock the flash device into the USB connector.

If you have other devices to install or remove, do so now. Otherwise, go to "Completing the installation" on page 89.

Installing an additional microprocessor and heat sink

The following notes describe the type of microprocessor that the server supports and other information that you must consider when you install a microprocessor and heat sink.

- Microprocessors are to be installed only by trained technicians.

  Important: Always use the microprocessor installation tool to install a microprocessor. Failing to use the microprocessor installation tool may damage the microprocessor sockets on the system board. Any damage to the microprocessor sockets may require replacing the system board.
- Be extremely careful, the microprocessor socket contacts are very fragile. Do not touch the microprocessor socket contacts. Contaminants on the microprocessor contacts or microprocessor socket contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.
- Do not allow the thermal grease on the microprocessor and heat sink to come in contact with anything. Contact with any surface can contaminate the thermal grease and the microprocessor socket.
- Do not use any tools or sharp objects to lift the locking levers on the microprocessor socket. Doing so might result in permanent damage to the system board.
- Each microprocessor socket must always contain either a socket cover or a microprocessor and heat sink.
- Be sure to use only the installation tools provided with the new microprocessor to remove or install the microprocessor. Do not use any other tool.
- When installing multiple microprocessors, open one microprocessor socket at a time to avoid damaging other microprocessor socket contacts.

- The microprocessor installation tool has the microprocessor installed on the tool, and may have a protective cover over the microprocessor. Do not use the tool, or remove the cover until you are instructed to do so.

  Note: Be sure to use the installation tool that comes with your microprocessor installation tool assembly.
- The server supports up to two multi-core microprocessors. See http://www.lenovo.com/ serverproven/ for a list of supported microprocessors.
- The first microprocessor must always be installed in microprocessor socket 1 on the system board.
- When one microprocessor is installed, the air baffle must be installed to provide proper system cooling.
- Do not remove the first microprocessor from the system board when you install the second microprocessor.
- When you install the second microprocessor, you must also install additional memory, the fourth and sixth fans. See “Installing a memory module” on page 45 for details about the installation sequence.
- Do not mix microprocessors with different cores in the same server.
- To ensure proper server operation when you install an additional microprocessor, use microprocessors that have the same QuickPath Interconnect (QPI) link speed, integrated memory controller frequency, core frequency, power segment, internal cache size, and type.
- Mixing microprocessors of different stepping levels within the same server model is supported.
- When mixing microprocessors with different stepping levels within the same server model, you do not have to install the microprocessor with lowest stepping level and features in microprocessor socket 1.
- Both microprocessor voltage regulator modules are integrated on the system board.
- Read the documentation that comes with the microprocessor to determine whether you have to update the server firmware. To download the latest level of server firmware and other code updates for your server, go to http://www.ibm.com/support/ fixcentral.
- The microprocessor speeds are automatically set for this server; therefore, you do not have to set any microprocessor frequency-selection jumpers or switches.
- If the thermal-grease protective cover (for example, a plastic cap or tape liner) is removed from the heat sink, do not touch the thermal grease on the bottom of the heat sink or set down the heat sink. For more information about applying or working with thermal grease, see “Thermal grease” on page 86.

  Note: Removing the heat sink from the microprocessor destroys the even distribution of the thermal grease and requires replacing the thermal grease.
- To order an additional optional microprocessor, contact your sales representative or reseller.

There are two types of microprocessor installation tools. The tools are similar in function and design, however Tool A has one setting for installing one size of microprocessor, and supports the following families of microprocessors: E5-26xx, E5-46xx. Installation Tool B has two settings for installing two different sizes of microprocessors. The settings that are marked on Tool B are “L” for smaller low core microprocessors, and “H” for larger high core microprocessors. Installation Tool B supports the following families of microprocessors: E5-26xx, E5-46xx, E5-26xx v2, E5-46xx v2.

Microprocessor Installation Tools A and B are shown in the following illustration.

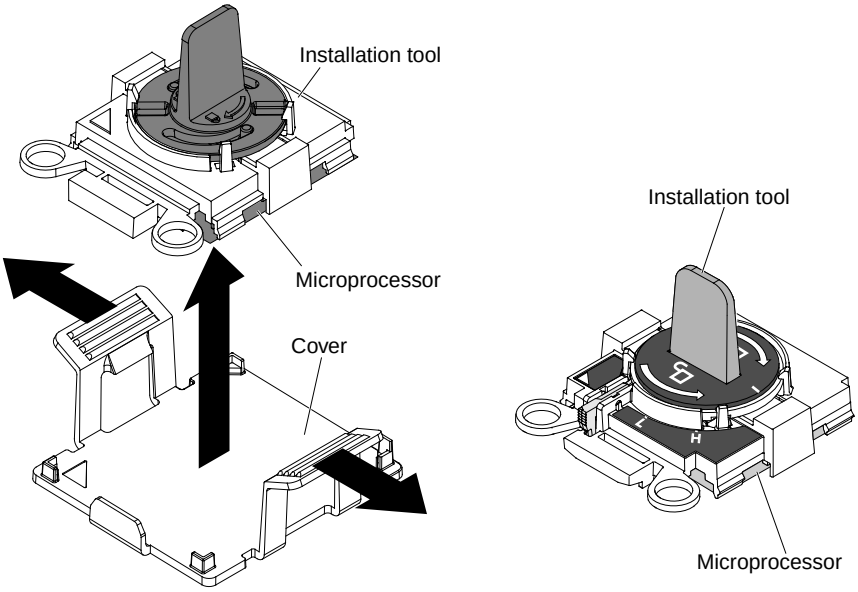


Figure 63. Microprocessor installation tools

To install an additional microprocessor and heat sink, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Attention: When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see “Handling static-sensitive devices” on page 33.

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. Remove the air baffle (see “Removing the air baffle” on page 34).

Step 5. Rotate the heat sink retention module release lever to the open position.

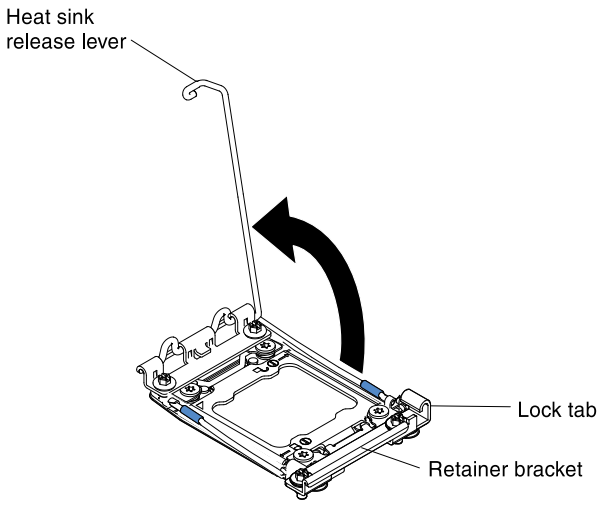


Figure 64. Heat-sink lever rotation

Step 6. Open the microprocessor socket release levers and retainer:

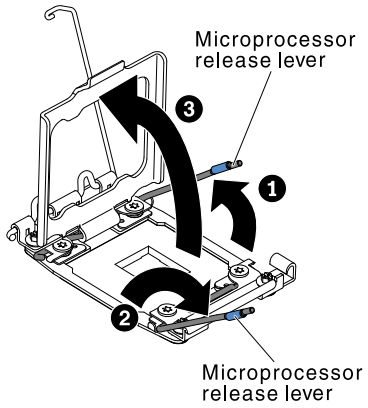


Figure 65. Microprocessor socket levers and retainer disengagement

a. Identify which release lever is labeled as the first release lever to open and open it.
b. Open the second release lever on the microprocessor socket.
c. Open the microprocessor retainer.

Attention: Do not touch the connectors on the microprocessor and the microprocessor socket.

Step 7. Install the microprocessor in the microprocessor socket:

a. Open the packaging that contains the new microprocessor installation tool assembly and carefully remove the installation tool assembly from the package.

Note: Do not touch the microprocessor contacts. Contaminants on the microprocessor contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.

b. Remove the microprocessor protective cover if one is present. The microprocessor is preinstalled on the installation tool.

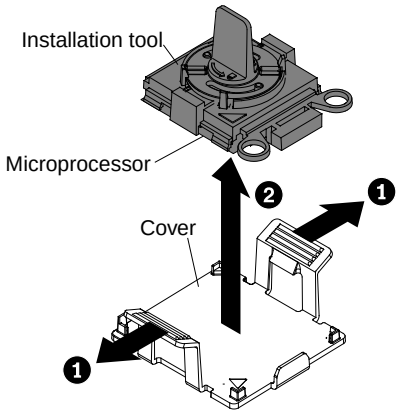


Figure 66. Installation tool cover removal

c. Align the installation tool with the microprocessor socket. The installation tool rests flush on the socket only if properly aligned.

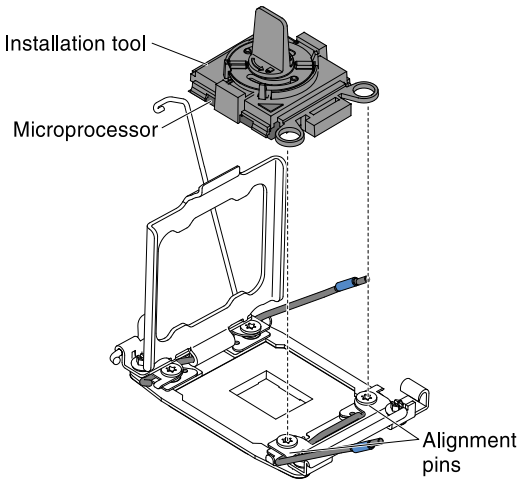


Figure 67. Installation tool alignment

d. Install the microprocessor using the following instructions for your installation tool.

- If using Installation Tool A, twist the handle on the microprocessor tool assembly counterclockwise to the open position to insert the microprocessor into the socket, and lift the installation tool out of the socket.
- If using Installation Tool B, twist the handle of the installation tool assembly counterclockwise until the microprocessor is inserted into the socket, and lift the installation tool out of the socket. The following illustration shows the tool handle in the open position.

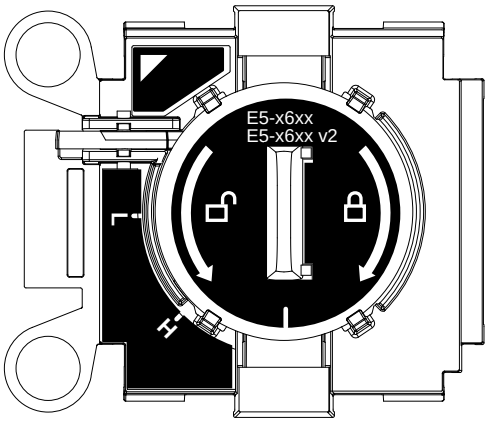


Figure 68. Installation Tool B

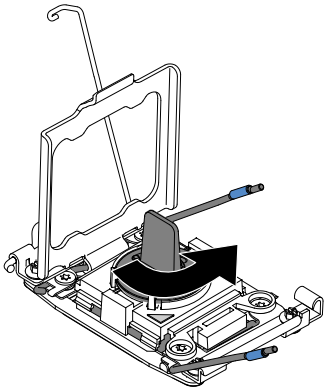


Figure 69. Installation tool handle adjustment

Attention:

- Do not press the microprocessor into the socket.
- Make sure that the microprocessor is oriented and aligned correctly in the socket before you try to close the microprocessor retainer.
- Do not touch the thermal material on the bottom of the heat sink or on top of the microprocessor. Touching the thermal material will contaminate it.

Step 8. Remove the microprocessor socket cover, tape, or label from the surface of the microprocessor socket, if one is present. Store the socket cover in a safe place.

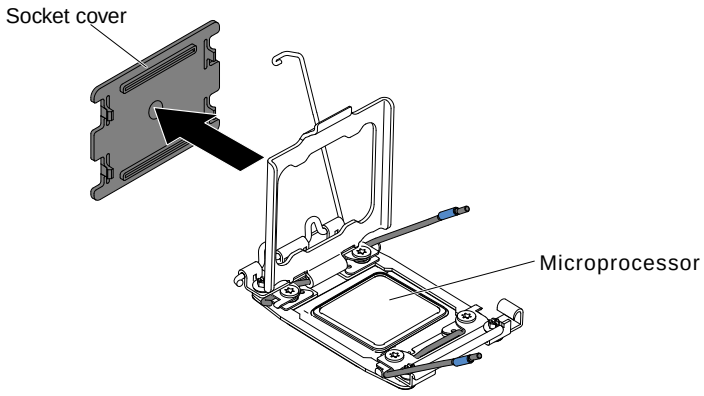


Figure 70. Socket cover removal

Attention: When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see “Handling static-sensitive devices” on page 33.

Step 9. Close the microprocessor socket release levers and retainer:

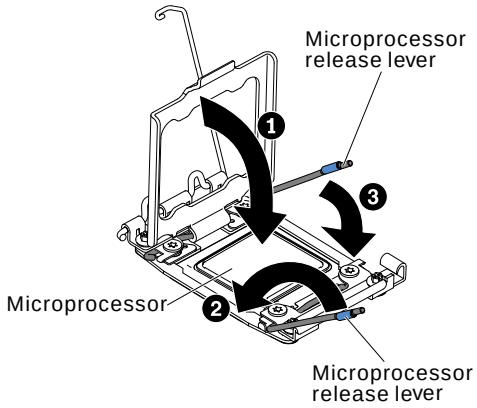


Figure 71. Microprocessor socket levers and retainer engagement

a. Close the microprocessor retainer on the microprocessor socket.
b. Identify which release lever is labeled as the first release lever to close and close it.
c. Close the second release lever on the microprocessor socket.

Attention:

- If you are installing a new heat sink, do not set down the heat sink after you remove the plastic cover.
- Do not touch the thermal grease on the bottom of the heat sink. Touching the thermal grease will contaminate it.

Step 10. Install the heat sink.

Attention:

- Do not set down the heat sink after you remove the plastic cover.

- Do not touch the thermal grease on the bottom of the heat sink after you remove the plastic cover. Touching the thermal grease will contaminate it. See “Thermal grease” on page 86 for more information.

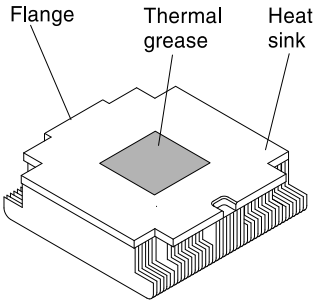


Figure 72. Thermal grease

a. Remove the plastic protective cover from the bottom of the heat sink.
b. Position the heat sink over the microprocessor. The heat sink is keyed to assist with proper alignment.

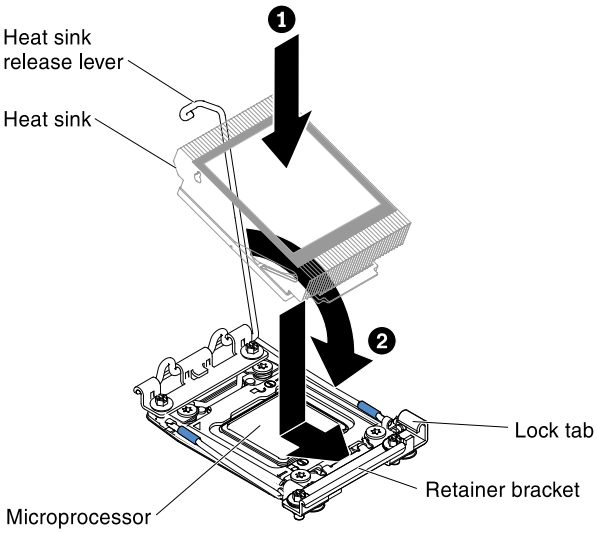


Figure 73. Heat sink installation

c. Align and place the heat sink on top of the microprocessor in the retention bracket, thermal material side down.
d. Press firmly on the heat sink.
e. Rotate the heat sink retention module release lever to the closed position and hook it underneath the lock tab.

Step 11. If you installed the second microprocessor, install the fourth and sixth fans (see “Replacing a hot-swap fan” on page 246).

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 89.

Thermal grease

The thermal grease must be replaced whenever the heat sink has been removed from the top of the microprocessor and is going to be reused or when debris is found in the grease.

When you are installing the heat sink on the same microprocessor that it was removed from, make sure that the following requirements are met:

- The thermal grease on the heat sink and microprocessor is not contaminated.
- Additional thermal grease is not added to the existing thermal grease on the heat sink and microprocessor.

Notes:

- Read the safety information that begins on "Safety" on page v.
- Read the "Installation guidelines" on page 31.
- Read "Handling static-sensitive devices" on page 33.

To replace damaged or contaminated thermal grease on the microprocessor and heat sink, complete the following steps:

Step 1. Place the heat sink on a clean work surface.

Step 2. Remove the cleaning pad from its package and unfold it completely.

Step 3. Use the cleaning pad to wipe the thermal grease from the bottom of the heat sink.

Note: Make sure that all of the thermal grease is removed.

Step 4. Use a clean area of the cleaning pad to wipe the thermal grease from the microprocessor; then, dispose of the cleaning pad after all of the thermal grease is removed.

Step 5. Use the thermal-grease syringe to place 9 uniformly spaced dots of 0.02 ml each on the top of the microprocessor. The outermost dots must be within approximately 5 mm of the edge of the microprocessor; this is to ensure uniform distribution of the grease.

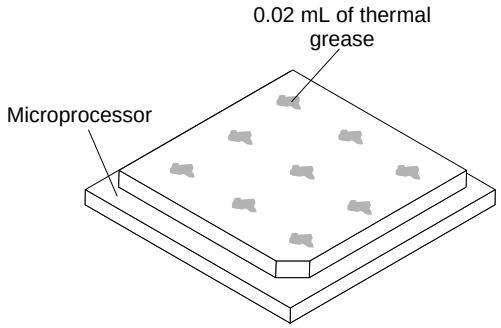


Figure 74. Thermal grease distribution

Note: If the grease is properly applied, approximately half of the grease will remain in the syringe.

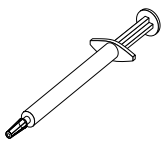


Figure 75. Syringe

Step 6. Install the heat sink onto the microprocessor.

Installing a SAS/SATA 4 Pac HDD option

You can install an Lenovo System x3550 M4 Hot-swap SAS/SATA 4 Pac HDD option to add four additional 2.5-inch hot-swap hard disk drives in the server.

See http://www.lenovo.com/ serverproven/ for a list of supported optional devices. To order a SAS/SATA 4 Pac HDD option, contact your sales representative or reseller.

The SAS/SATA 4 Pac HDD option kit contains the following components:

- One 2.5-inch hot-swap hard disk drive backplane (with bracket)
- Four drive bay filler panels
- One SAS signal cable

Note: The 4 pac HDD option including structural parts and Tier 1 parts.

To install a SAS/SATA 4 Pac HDD option, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. Install the 2.5-inch hot-swap hard disk drive backplane (see “Replacing the hot-swap drive backplane” on page 264).

Step 5. Pull existing filler panels out of the server. Keep them in a safe place.

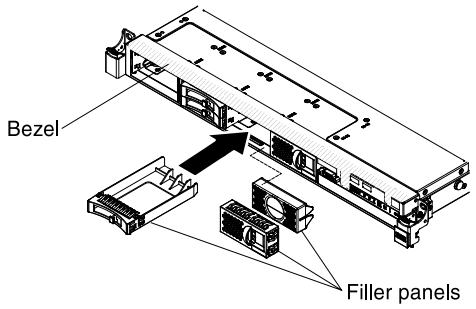


Figure 76. Filler panels

Step 6. Install the 2.5-inch hard disk drives (see “Replacing hot-swap hard disk drives” on page 201).

Step 7. Install the filler panels that come with the SAS/SATA 4 Pac HDD option into empty drive bays.

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 89.

Installing the operator information panel assembly

Use this information to install the operator information panel assembly.

To install the operator information panel, complete the following steps.

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. From the front of the server, slide the operator information panel into the server until it clicks into place.

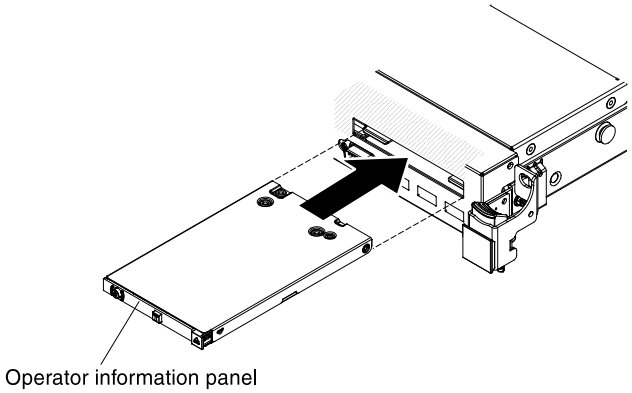


Figure 77. Operator information panel installation

Step 5. Inside the server, connect the cable to the rear of the operator information panel assembly.The following illustration shows the cable routing for the operator information panel.

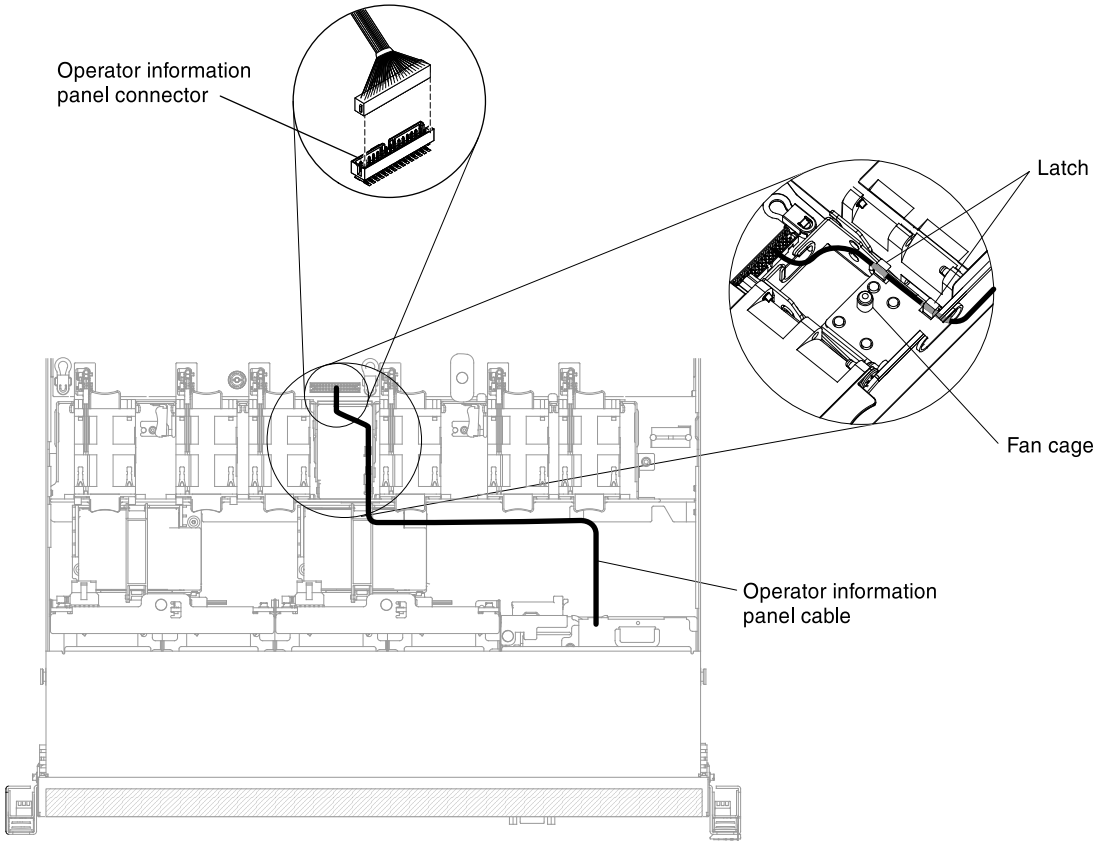


Figure 78. Operator information panel cable connection

The following notes describe additional information when you install the cable:

- To connect the operator information panel cable on the system board, press evenly on the cable. Pressing on one side of the cable might cause damage to the cable or connector.
- The operator information panel cable must pass through the chassis latch between fan 3 and fan 4 in order not to impede the fan cage.

Step 6. Replace the cover (see “Replacing the cover” on page 192).

Step 7. Slide the server into the rack.

Step 8. Reconnect the power cords and any cables that you removed.

Step 9. Turn on the peripheral devices and the server.

Completing the installation

Use this information to complete the installation.

To complete the installation, complete the following steps:

Step 1. If you removed the air baffle, reinstall it (see “Replacing the air baffle” on page 90).

Step 2. If you removed the server cover, replace it (see “Replacing the cover” on page 90).

Step 3. Install the server in the rack cabinet (see the *Rack Installation Instructions* that comes with the server for instructions).

Step 4. Reconnect the cables and power cords (see “Connecting the cables” on page 91).

Step 5. Update the server configuration (see “Updating the server configuration” on page 92).

Step 6. Slide the server back into the rack, if necessary.

Step 7. Start the server. Confirm that it starts correctly and recognizes the newly installed devices, and make sure that no error LEDs are lit.

Step 8. (Business Partners only) Complete the additional steps in “Instructions for Business Partners” on page 23.

Replacing the air baffle

Use this information to replace the air baffle.

To replace the air baffle (if it has been removed), complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables (see “Turning off the server” on page 21).

Step 3. Align the air baffle pins with the baffle pin holes on both sides of the chassis; then, lower the air baffle into the server. Press the air baffle down until it is securely seated.

Note: Close the retaining clip on each end of the DIMM connector before installing the air baffle for proper cooling.

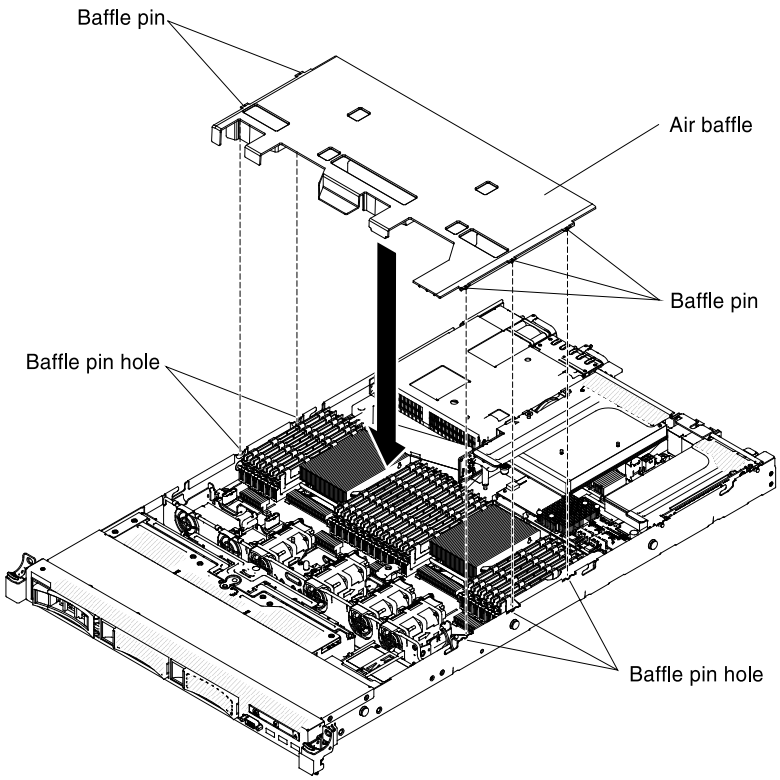


Figure 79. Air baffle installation

Replacing the cover

Use this information to replace the cover.

To replace the server cover, complete the following steps:

Step 1. Make sure that all cables, adapters, and other components are installed and seated correctly and that you have not left loose tools or parts inside the server. Also, make sure that all internal cables are correctly routed.

Important: Before you slide the cover forward, make sure that all the tabs on the front, rear, and side of the cover engage the chassis correctly. If all the tabs do not engage the chassis correctly, it will be very difficult to remove the cover later.

Step 2. Position the cover on top of the server.

Step 3. Slide the cover toward the front of the server.

Step 4. Make sure that the cover correctly engages all the inset tabs on the server.

Step 5. Press down the blue latch on the top (in the center of the front of the server) of the cover.

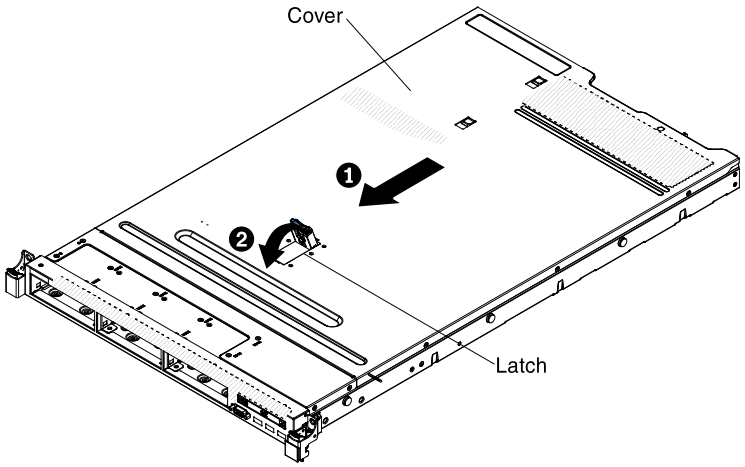


Figure 80. Cover installation

Step 6. Slide the server all the way into the rack until it latches.

Connecting the cables

The following illustrations show the locations of the input and output connectors of the server.

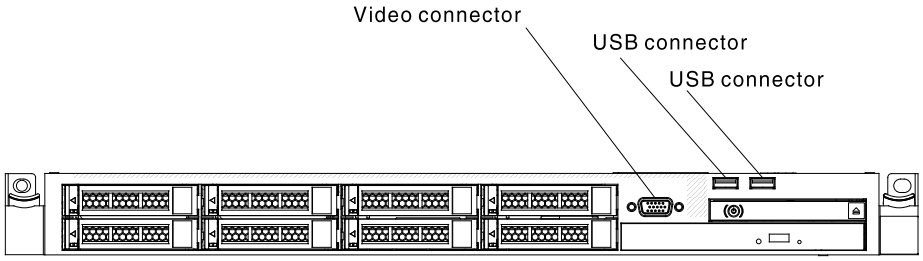


Figure 81. 2.5-inch model front of server

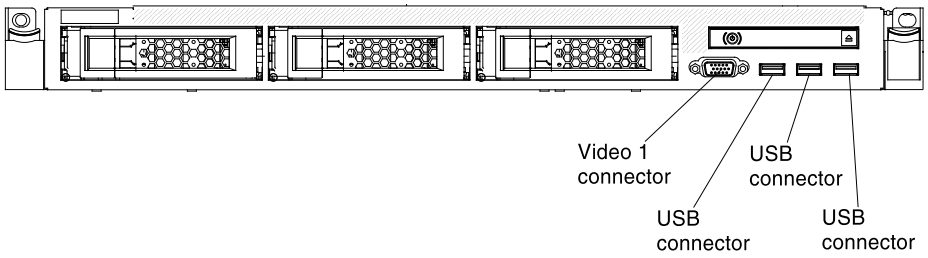


Figure 82. 3.5-inch model front of server

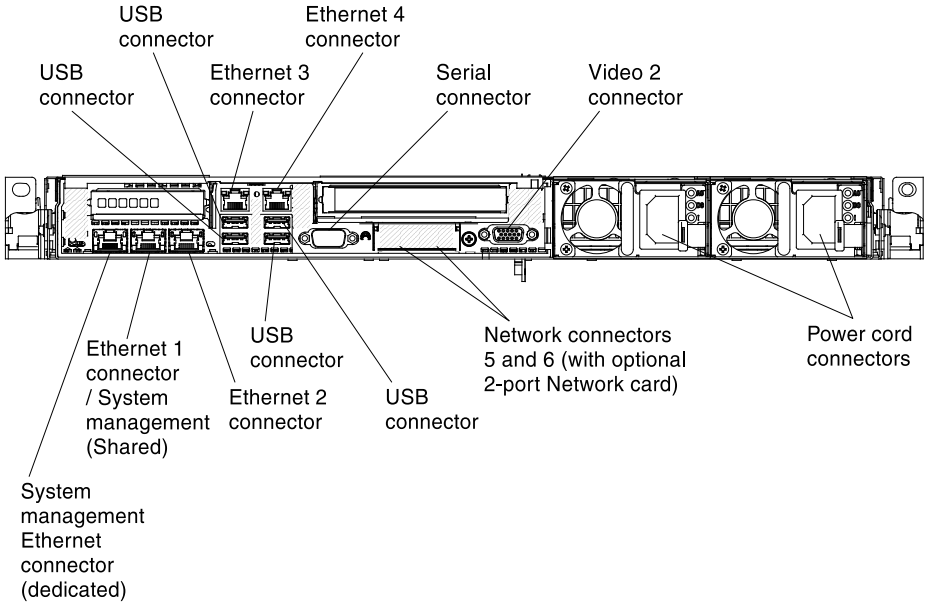


Figure 83. Rear of server

You must turn off the server before you connect or disconnect cables.

See the documentation that comes with any external devices for additional cabling instructions. It might be easier for you to route cables before you connect the devices to the server.

Updating the server configuration

When you start the server for the first time after you add or remove a device, you might receive a message that the configuration has changed. The Setup utility starts automatically so that you can save the new configuration settings.

Some optional devices have device drivers that you must install. For information about installing device drivers, see the documentation that comes with each device.

If the server has an optional RAID adapter and you have installed or removed a hard disk drive, see the documentation that comes with the RAID adapter for information about reconfiguring the disk arrays.

For information about configuring the integrated Gigabit Ethernet controller, see “Configuring the Ethernet controller” on page 108.

Chapter 3. Configuring

This chapter provides information about updating the firmware and using the configuration utilities.

Updating the firmware

Use this information to update the firmware.

Important:

1. Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
2. Before you update the firmware, be sure to back up any data that is stored in the Trusted Platform Module (TPM), in case any of the TPM characteristics are changed by the new firmware. For instructions, see your encryption software documentation.
3. Installing the wrong firmware or device-driver update might cause the server to malfunction. Before you install a firmware or device-driver update, read any readme and change history files that are provided with the downloaded update. These files contain important information about the update and the procedure for installing the update, including any special procedure for updating from an early firmware or device-driver version to the latest version.

You can install code updates that are packaged as an Update*Xpress* System Pack or Update*Xpress* CD image. An Update*Xpress* System Pack contains an integration-tested bundle of online firmware and device-driver updates for your server. Use Update*Xpress* System Pack Installer to acquire and apply Update*Xpress* System Packs and individual firmware and device-driver updates. For additional information and to download the Update*Xpress* System Pack Installer, go to the ToolsCenter for System x and BladeCenter at https://support.lenovo.com/us/en/ documents/LNVO-CENTER and click **UpdateXpress System Pack Installer**.

When you click an update, an information page is displayed, including a list of the problems that the update fixes. Review this list for your specific problem; however, even if your problem is not listed, installing the update might solve the problem.

Be sure to separately install any listed critical updates that have release dates that are later than the release date of the Update*Xpress* System Pack or Update*Xpress* image.

The firmware for the server is periodically updated and is available for download on the website. To check for the latest level of firmware, such as the UEFI firmware, device drivers, and integrated management module (IMM) firmware, go to http://www.ibm.com/support/ fixcentral.

Download the latest firmware for the server; then, install the firmware, using the instructions that are included with the downloaded files.

When you replace a device in the server, you might have to update the firmware that is stored in memory on the device or restore the pre-existing firmware from a CD or DVD image.

The following list indicates where the firmware is stored:

- UEFI firmware is stored in ROM on the system board.
- IMM2 firmware is stored in ROM on the system board.
- Ethernet firmware is stored in ROM on the Ethernet controller and on the system board.

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- ServeRAID firmware is stored in ROM on the system board and the RAID adapter (if one is installed).
- SAS/SATA firmware is stored in ROM on the SAS/SATA controller on the system board.

Configuring the server

The following configuration programs come with the server:

- **Setup utility**

  The Setup utility is part of the UEFI firmware. Use it to perform configuration tasks such as changing interrupt request (IRQ) settings, changing the startup-device sequence, setting the date and time, and setting passwords. For information about using this program, see “Using the Setup utility” on page 97.

- **Boot Manager program**

  The Boot Manager is part of the UEFI firmware. Use it to override the startup sequence that is set in the Setup utility and temporarily assign a device to be first in the startup sequence. For more information about using this program, see “Using the Boot Manager” on page 103.

- ***ServerGuide Setup and Installation* CD**

  The ServerGuide program provides software-setup tools and installation tools that are designed for the server. Use this CD during the installation of the server to configure basic hardware features, such as an integrated SAS/SATA controller with RAID capabilities, and to simplify the installation of your operating system. For information about using this CD, see “Using the ServerGuide Setup and Installation CD” on page 96.

- **FastSetup**

  FastSetup is a no-cost software tool that helps simplify the maintenance and deployment of selected BladeCenter chassis, servers, and components. The intuitive graphical interface initializes all phases of server setup, including discovery, update, and configuration. Features include templates that enable replication of settings to many servers and automation that reduces hands-on time and user errors. Wizards and other default settings enable customization capabilities. The low-touch, set-once and walk-away feature reduces the hands-on server setup time from days to minutes, particularly for larger deployments. For information about this tool, see http://www.ibm.com/support/entry/portal/docdisplay?lndocid=TOOL-FASTSET.

- **Integrated management module**

  Use the integrated management module II (IMM2) for configuration, to update the firmware and sensor data record/field replaceable unit (SDR/FRU) data, and to remotely manage a network. For information about using the IMM, see “Using the integrated management module” on page 104 and the *Integrated Management Module II User's Guide* at http://publib.boulder.ibm.com/infocenter/systemx/documentation/topic/ com.lenovo.sysx.imm2.doc/ printable_doc.html.

- **VMware ESXi embedded hypervisor**

  An optional USB flash device with VMware ESXi embedded hypervisor software is available for purchase. Hypervisor is virtualization software that enables multiple operating systems to run on a host system at the same time. The USB embedded hypervisor flash device can be installed in USB connectors 3 and 4 on the system board. For more information about using the embedded hypervisor, see “Using the embedded hypervisor” on page 107.

- **Remote presence capability and blue-screen capture**

  The remote presence and blue-screen capture features are integrated functions of the integrated management module (IMM2). The remote presence feature provides the following functions:

  – Remotely viewing video with graphics resolutions up to 1600 x 1200 at 75 Hz, regardless of the system state

  – Remotely accessing the server, using the keyboard and mouse from a remote client

– Mapping the CD or DVD drive, diskette drive, and USB flash drive on a remote client, and mapping ISO and diskette image files as virtual drives that are available for use by the server
– Uploading a diskette image to the IMM memory and mapping it to the server as a virtual drive

The blue-screen capture feature captures the video display contents before the IMM restarts the server when the IMM detects an operating-system hang condition. A system administrator can use the blue-screen capture feature to assist in determining the cause of the hang condition. For more information, see “Using the remote presence and blue-screen capture features” on page 105.

- **Ethernet controller configuration**

  For information about configuring the Ethernet controller, see “Configuring the Ethernet controller” on page 108.

- **Features on Demand software Ethernet software**

  The server provides Features on Demand software Ethernet support. You can purchase a Features on Demand software upgrade key for Fibre Channel over Ethernet (FCoE) and iSCSI storage protocols. For more information, see “Enabling Features on Demand Ethernet software” on page 108.

- **Features on Demand software RAID software**

  The server provides Features on Demand software RAID support. You can purchase a Features on Demand software upgrade key for RAID. For more information, see “Enabling Features on Demand RAID software” on page 108.

- **Advanced Settings Utility (ASU) program**

  Use this program as an alternative to the Setup utility for modifying UEFI settings and IMM settings. Use the ASU program online or out of band to modify UEFI settings from the command line without the need to restart the server to run the Setup utility. For more information about using this program, see “Advanced Settings Utility program” on page 109.

- **Configuring RAID arrays**

  For information about configuring RAID arrays, see “Configuring RAID arrays” on page 108.

  The following table lists the different server configurations and the applications that are available for configuring and managing RAID.

Table 13. Server configuration and applications for configuring and managing RAID arrays

Server configuration	RAID array configuration (before operating system is installed)	RAID array management (after operating system is installed)
ServeRAID-H1110 adapter	LSI Utility (Setup utility, press Ctrl+C), ServerGuide, Human Interface Infrastructure (HII)	MegaRAID Storage Manager (MSM), SAS2IRCU (Command Line) Utility for Storage Management
ServeRAID-M1115 adapter	MegaRAID BIOS Configuration Utility (press Ctrl+H to start), pre-boot CLI (press Ctrl+P to start), ServerGuide, HII	MegaRAID Storage Manager (MSM), MegaCLI (Command Line Interface), and Systems Director
ServeRAID-M5110 adapter	MegaRAID BIOS Configuration Utility (press Ctrl+H to start), pre-boot CLI (press Ctrl+P to start), ServerGuide, HII	MegaRAID Storage Manager (MSM), MegaCLI, and Systems Director
ServeRAID-M5120 adapter	MegaRAID BIOS Configuration Utility (press Ctrl+H to start), pre-boot CLI (press Ctrl+P to start), ServerGuide, HII	MegaRAID Storage Manager (MSM), MegaCLI, and Systems Director

Notes:

1. For more information about the Human Interface Infrastructure (HII) and SAS2IRCU, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=MIGR-5088601.
2. For more information about the MegaRAID, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=MIGR-5073015.

Using the ServerGuide Setup and Installation CD

Use this information as an overview for using the ServerGuide Setup and Installation CD.

The *ServerGuide Setup and Installation* CD provides software setup tools and installation tools that are designed for your server. The ServerGuide program detects the server model and optional hardware devices that are installed and uses that information during setup to configure the hardware. The ServerGuide simplifies the operating-system installations by providing updated device drivers and, in some cases, installing them automatically.

You can download a free image of the *ServerGuide Setup and Installation CD* from http://www.ibm.com/support/entry/portal/ docdisplay?lndocid=SERV-GUIDE.

In addition to the *ServerGuide Setup and Installation* CD, you must have your operating-system CD to install the operating system.

ServerGuide features

This information provides an overview of the ServerGuide features.

Features and functions can vary slightly with different versions of the ServerGuide program. To learn more about the version that you have, start the *ServerGuide Setup and Installation* CD and view the online overview. Not all features are supported on all server models.

The ServerGuide program has the following features:
- An easy-to-use interface
- Diskette-free setup, and configuration programs that are based on detected hardware
- Device drivers that are provided for the server model and detected hardware
- Operating-system partition size and file-system type that are selectable during setup

The ServerGuide program performs the following tasks:
- Sets system date and time
- Detects the RAID adapter or controller and runs the SAS/SATA RAID configuration program
- Checks the microcode (firmware) levels of a ServeRAID adapter and determines whether a later level is available from the CD
- Detects installed hardware options and provides updated device drivers for most adapters and devices
- Provides diskette-free installation for supported Windows operating systems
- Includes an online readme file with links to tips for your hardware and operating-system installation

Setup and configuration overview

ServerGuide setup and configuration overview

When you use the *ServerGuide Setup and Installation* CD, you do not need setup diskettes. You can use the CD to configure any supported Lenovo server model. The setup program provides a list of tasks that are required to set up your server model. On a server with a ServeRAID adapter or SAS/SATA controller with RAID capabilities, you can run the SAS/SATA RAID configuration program to create logical drives.

Note: Features and functions can vary slightly with different versions of the ServerGuide program.

Typical operating-system installation

ServerGuide typical operating-system installation

The ServerGuide program can reduce the time it takes to install an operating system. It provides the device drivers that are required for your hardware and for the operating system that you are installing. This section describes a typical ServerGuide operating-system installation.

Note: Features and functions can vary slightly with different versions of the ServerGuide program.

1. After you have completed the setup process, the operating-system installation program starts. (You will need your operating-system CD to complete the installation.)
2. The ServerGuide program stores information about the server model, service processor, hard disk drive controllers, and network adapters. Then, the program checks the CD for newer device drivers. This information is stored and then passed to the operating-system installation program.
3. The ServerGuide program presents operating-system partition options that are based on your operating-system selection and the installed hard disk drives.
4. The ServerGuide program prompts you to insert your operating-system CD and restart the server. At this point, the installation program for the operating system takes control to complete the installation.

Installing your operating system without using ServerGuide

Use this information to install the operating system on the server without using ServerGuide.

If you have already configured the server hardware and you are not using the ServerGuide program to install your operating system, you can download operating-system installation instructions for the server from http://www.lenovo.com/support.

Using the Setup utility

Use these instructions to start the Setup utility.

Use the Unified Extensible Firmware Interface (UEFI) Setup Utility program to perform the following tasks:

- View configuration information
- View and change assignments for devices and I/O ports
- Set the date and time
- Set and change passwords
- Set the startup characteristics of the server and the order of startup devices
- Set and change settings for advanced hardware features
- View, set, and change settings for power-management features
- View and clear error logs
- Change interrupt request (IRQ) settings
- Resolve configuration conflicts

Starting the Setup utility

Use this information to start the Setup utility.

To start the Setup utility, complete the following steps:

Step 1. Turn on the server.

Note: Approximately 5 to 10 seconds after the server is connected to power, the power-control button becomes active.

Step 2. When the prompt <F1> Setup is displayed, press F1. If you have set an administrator password, you must type the administrator password to access the full Setup utility menu. If you do not type the administrator password, a limited Setup utility menu is available.

Step 3. Select settings to view or change.

Setup utility menu choices

Use the Setup utility main menu to view and configure server configuration data and settings.

The following choices are on the Setup utility main menu for the UEFI. Depending on the version of the firmware, some menu choices might differ slightly from these descriptions.

- **System Information**

  Select this choice to view information about the server. When you make changes through other choices in the Setup utility, some of those changes are reflected in the system information; you cannot change settings directly in the system information. This choice is on the full Setup utility menu only.

  - **System Summary**

    Select this choice to view configuration information, including the ID, speed, and cache size of the microprocessors, machine type and model of the server, the serial number, the system UUID, and the amount of installed memory. When you make configuration changes through other options in the Setup utility, the changes are reflected in the system summary; you cannot change settings directly in the system summary.

  - **Product Data**

    Select this choice to view the system-board identifier, the revision level or issue date of the firmware, the integrated management module and diagnostics code, and the version and date.

  This choice is on the full Setup utility menu only.

- **System Settings**

  Select this choice to view or change the server component settings.

  - **Adapters and UEFI Drivers**

    Select this choice to view information about the UEFI 1.10 and UEFI 2.0 compliant adapters and drivers installed in the server.

  - **Processors**

    Select this choice to view or change the processor settings.

  - **Memory**

    Select this choice to view or change the memory settings.

  - **Devices and I/O Ports**

    Select this choice to view or change assignments for devices and input/output (I/O) ports. You can configure the serial ports, configure remote console redirection, enable or disable integrated Ethernet controllers, the SAS/SATA controllers, SATA optical drive channels, PCI slots, and video controller. If you disable a device, it cannot be configured, and the operating system will not be able to detect it (this is equivalent to disconnecting the device).

  - **Power**

    Select this choice to view or change power capping to control consumption, processors, and performance states.

  - **Operating Modes**

    Select this choice to view or change the operating profile (performance and power utilization).

  - **Legacy Support**

    Select this choice to view or set legacy support.

Note: In the legacy mode, this system has limited ROM space for installed options. At most four network interface cards (NICs) are supported for legacy PXE boot. If more than four NICs are installed, legacy PXE boot will not be attempted on some of the NICs. To enable legacy PXE boot on the desired NIC connectors, prioritize the desired NIC connectors by changing the **ROM execution Order** or disable the NIC connectors that you do not use from the **Enable/Disable Adapter Option ROM Support** menu.

- **Force Legacy Video on Boot**

  Select this choice to force INT video support, if the operating system does not support UEFI video output standards.

- **Rehook INT 19h**

  Select this choice to enable or disable devices from taking control of the boot process. The default is **Disable**.

- **Legacy Thunk Support**

  Select this choice to enable or disable UEFI to interact with PCI mass storage devices that are non-UEFI compliant. The default is **Enable**.

- **Infinite Boot Retry**

  Select this choice to enable or disable UEFI to infinitely retry the legacy boot order. The default is **Disable**.

- **BBS Boot**

  Select this choice to enable or disable legacy boot in BBS manner. The default is **Enable**.

- **System Security**

  Select this choice to view or configure Trusted Platform Module (TPM) support.

- **Integrated Management Module**

  Select this choice to view or change the settings for the integrated management module.

  - **Power Restore Policy**

    Select this choice to set the mode of operation after the power lost.

  - **Commands on USB Interface**

    Select this choice to enable or disable the Ethernet over USB interface on IMM. The default is **Enable**.

  - **Network Configuration**

    Select this choice to view the system management network interface port, the IMM MAC address, the current IMM IP address, and host name; define the static IMM IP address, subnet mask, and gateway address, specify whether to use the static IP address or have DHCP assign the IMM2 IP address, save the network changes, and reset the IMM.

  - **Reset IMM to Defaults**

    Select this choice to view or reset IMM to the default settings.

  - **Reset IMM**

    Select this choice to reset IMM.

- **Recovery**

  Select this choice to view or change the system recovery parameters.

  - **POST Attempts**

    Select this choice to view or change the number of attempts to POST.

    - **POST Attempts Limit**

      Select this choice to view or change the Nx boot failure parameters.

- **System Recovery**

  Select this choice to view or change system recovery settings.

  - **POST Watchdog Timer**

    Select this choice to view or enable the POST watchdog timer.

  - **POST Watchdog Timer Value**

    Select this choice to view or set the POST loader watchdog timer value.

  - **Reboot System on NMI**

    Select this choice to enable or disable restarting the system whenever a nonmaskable interrupt (NMI) occurs. **Enable** is the default.

  - **Halt on Severe Error**

    Select this choice to enable or disable the system from booting into OS, displaying the POST event viewer whenever a severe error was detected. **Disable** is the default.

- **Storage**

  Select this choice to view or change the storage device settings.

- **Network**

  Select this choice to view or change the network device options, such as iSCSI.

- **Drive Health**

  Select this choice to view the status of the controllers installed in the blade server.

- **Date and Time**

  Select this choice to set the date and time in the server, in 24-hour format (*hour*:*minute*:*second*).

  This choice is on the full Setup utility menu only.

- **Start Options**

  Select this choice to view or change the start options, including the startup sequence, keyboard NumLock state, PXE boot option, and PCI device boot priority. Changes in the startup options take effect when you start the server.

  The startup sequence specifies the order in which the server checks devices to find a boot record. The server starts from the first boot record that it finds. If the server has Wake on LAN hardware and software and the operating system supports Wake on LAN functions, you can specify a startup sequence for the Wake on LAN functions. For example, you can define a startup sequence that checks for a disc in the CD-RW/DVD drive, then checks the hard disk drive, and then checks a network adapter.

  This choice is on the full Setup utility menu only.

- **Boot Manager**

  Select this choice to view, add, delete, or change the device boot priority, boot from a file, select a one-time boot, or reset the boot order to the default setting.

- **System Event Logs**

  Select this choice to enter the System Event Manager, where you can view the POST event log and the system-event log. You can use the arrow keys to move between pages in the error log. This choice is on the full Setup utility menu only.

  The POST event log contains the most recent error codes and messages that were generated during POST.

  The system-event log contains POST and system management interrupt (SMI) events and all events that are generated by the baseboard management controller that is embedded in the integrated management module (IMM).

Important: If the system-error LED on the front of the server is lit but there are no other error indications, clear the system-event log. Also, after you complete a repair or correct an error, clear the system-event log to turn off the system-error LED on the front of the server.

  - **POST Event Viewer**

    Select this choice to enter the POST event viewer to view the POST error messages.

  - **System Event Log**

    Select this choice to view the system event log.

  - **Clear System Event Log**

    Select this choice to clear the system event log.

- **User Security**

  Select this choice to set, change, or clear passwords. See “Passwords” on page 101 for more information.

  This choice is on the full and limited Setup utility menu.

  - **Set Power-on Password**

    Select this choice to set or change a power-on password. See “Power-on password” on page 102 for more information.

  - **Clear Power-on Password**

    Select this choice to clear a power-on password. See “Power-on password” on page 102 for more information.

  - **Set Administrator Password**

    Select this choice to set or change an administrator password. An administrator password is intended to be used by a system administrator; it limits access to the full Setup utility menu. If an administrator password is set, the full Setup utility menu is available only if you type the administrator password at the password prompt. See “Administrator password” on page 103 for more information.

  - **Clear Administrator Password**

    Select this choice to clear an administrator password. See “Administrator password” on page 103 for more information.

- **Save Settings**

  Select this choice to save the changes that you have made in the settings.

- **Restore Settings**

  Select this choice to cancel the changes that you have made in the settings and restore the previous settings.

- **Load Default Settings**

  Select this choice to cancel the changes that you have made in the settings and restore the factory settings.

- **Exit Setup**

  Select this choice to exit from the Setup utility. If you have not saved the changes that you have made in the settings, you are asked whether you want to save the changes or exit without saving them.

Passwords

From the **User Security** menu choice, you can set, change, and delete a power-on password and an administrator password.

The **User Security** choice is on the full Setup utility menu only.

If you set only a power-on password, you must type the power-on password to complete the system startup and to have access to the full Setup utility menu.

An administrator password is intended to be used by a system administrator; it limits access to the full Setup utility menu. If you set only an administrator password, you do not have to type a password to complete the system startup, but you must type the administrator password to access the Setup utility menu.

If you set a power-on password for a user and an administrator password for a system administrator, you can type either password to complete the system startup. A system administrator who types the administrator password has access to the full Setup utility menu; the system administrator can give the user authority to set, change, and delete the power-on password. A user who types the power-on password has access to only the limited Setup utility menu; the user can set, change, and delete the power-on password, if the system administrator has given the user that authority.

Power-on password

If a power-on password is set, when you turn on the server, you must type the power-on password to complete the system startup. You can use any combination of 6 - 20 printable ASCII characters for the password.

When a power-on password is set, you can enable the Unattended Start mode, in which the keyboard and mouse remain locked but the operating system can start. You can unlock the keyboard and mouse by typing the power-on password.

If you forget the power-on password, you can regain access to the server in any of the following ways:

- If an administrator password is set, type the administrator password at the password prompt. Start the Setup utility and reset the power-on password.
- Remove the battery from the server, wait 30 seconds, and then reinstall it.
- Change the position of the power-on password switch (switch 4) on the system board switch block (SW3) to bypass the power-on password check (see Table 3 “System board SW3 switch block definition” on page 29 for more information).

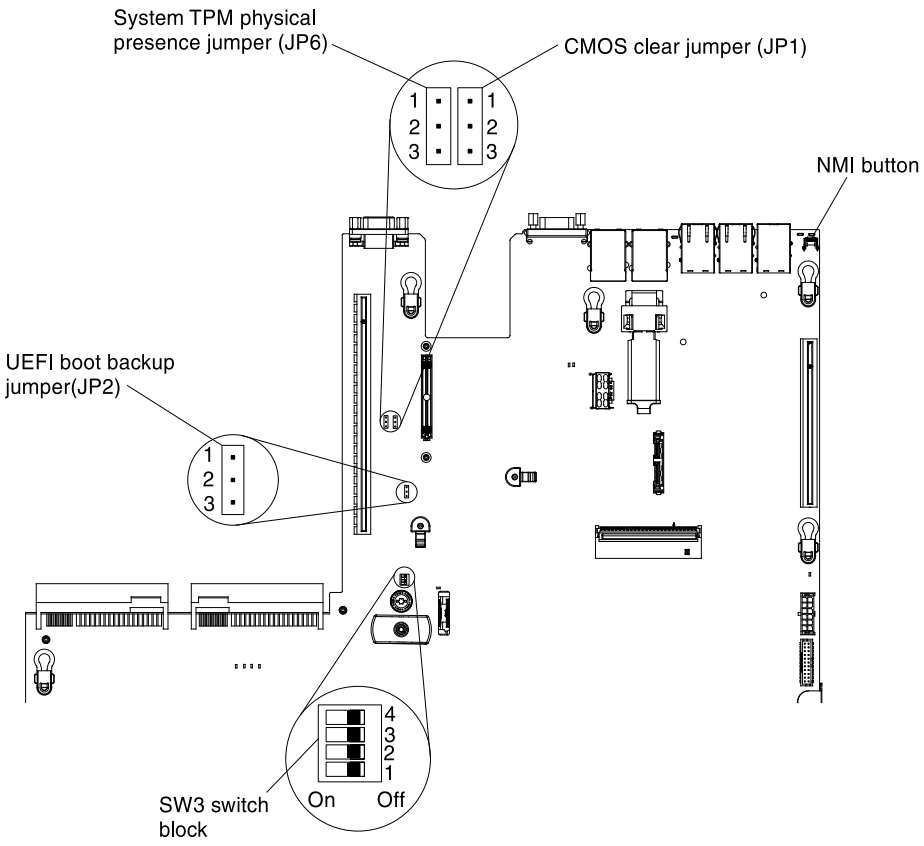

Figure 84. System-board switches, jumpers, and buttons

Attention: Before you change any switch settings or move any jumpers, turn off the server; then, disconnect all power cords and external cables. See the safety information that begins "Safety" on page v. Do not change settings or move jumpers on any system-board switch or jumper blocks that are not shown in this document.

While the server is turned off, move power-on password switch (switch 4) on the system board switch block (SW3) to the On position to enable the power-on password override. You can then start the Setup utility and reset the power-on password. You do not have to return the switch to the previous position.

The power-on password override switch does not affect the administrator password.

Administrator password

If an administrator password is set, you must type the administrator password for access to the full Setup utility menu. You can use any combination of 6 to 20 printable ASCII characters for the password.

Attention: If you set an administrator password and then forget it, there is no way to change, override, or remove it. You must replace the system board.

Using the Boot Manager

The Boot Manager program is a built-in, menu-driven configuration utility program that you can use to temporarily redefine the first startup device without changing settings in the Setup utility.

To use the Boot Manager program, complete the following steps:

Step 1. Turn off the server.

Step 2. Restart the server.

Step 3. When the prompt `<F12> Select Boot Device` is displayed, press F12.

Step 4. Use the Up arrow and Down arrow keys to select an item from the menu and press Enter.

The next time the server starts, it returns to the startup sequence that is set in the Setup utility.

Starting the backup server firmware

The system board contains a backup copy area for the server firmware. This is a secondary copy of the server firmware that you update only during the process of updating the server firmware. If the primary copy of the server firmware becomes damaged, use this backup copy.

To force the server to start from the backup copy, turn off the server; then, place the UEFI boot backup jumper (JP2) in the backup position (pins 2 and 3). See “System-board switches, jumpers, and buttons” on page 27 for the location of the UEFI boot backup jumper (JP2).

Use the backup copy of the server firmware until the primary copy is restored. After the primary copy is restored, turn off the server; then, move the UEFI boot backup jumper (JP2) back to the primary position (pins 1 and 2).

The Update*Xpress* System Pack Installer

The Update*Xpress* System Pack Installer detects supported and installed device drivers and firmware in the server and installs available updates.

For additional information and to download the Update*Xpress* System Pack Installer, go to the ToolsCenter for System x and BladeCenter at http://publib.boulder.ibm.com/infocenter/toolsctr/v1r0/ and click **UpdateXpress System Pack Installer**.

Using the integrated management module

The integrated management module (IMM) is a second generation of the functions that were formerly provided by the baseboard management controller hardware. It combines service processor functions, video controller, and remote presence function in a single chip.

The IMM supports the following basic systems-management features:

- Active Energy Manager.
- Alerts (in-band and out-of-band alerting, PET traps - IPMI style, SNMP, e-mail).
- Auto Boot Failure Recovery (ABR).
- Automatic microprocessor disable on failure and restart in a two-microprocessor configuration when one microprocessor signals an internal error. When one of the microprocessors fail, the server will disable the failing microprocessor and restart with the other microprocessor.
- Automatic Server Restart (ASR) when POST is not complete or the operating system hangs and the operating system watchdog timer times-out. The IMM might be configured to watch for the operating system watchdog timer and reboot the system after a timeout, if the ASR feature is enabled. Otherwise, the IMM allows the administrator to generate a nonmaskable interrupt (NMI) by pressing an NMI button on the light path diagnostics panel for an operating-system memory dump. ASR is supported by IPMI.
- A virtual media key, which enables remote presence support (remote video, remote keyboard/mouse, and remote storage).
- Boot sequence manipulation.
- Command-line interface.
- Configuration save and restore.

- DIMM error assistance. The Unified Extensible Firmware Interface (UEFI) disables a failing DIMM that is detected during POST, and the IMM lights the associated system error LED and the failing DIMM error LED.
- Environmental monitor with fan speed control for temperature, voltages, fan failure, power supply failure, and power backplane failure.
- Intelligent Platform Management Interface (IPMI) Specification V2.0 and Intelligent Platform Management Bus (IPMB) support.
- Invalid system configuration (CONFIG) LED support.
- Light path diagnostics LEDs indicators to report errors that occur with fans, power supplies, microprocessor, hard disk drives, and system errors.
- Local firmware code flash update
- Nonmaskable interrupt (NMI) detection and reporting.
- Operating-system failure blue screen capture.
- PCI configuration data.
- Power/reset control (power-on, hard and soft shutdown, hard and soft reset, schedule power control).
- Query power-supply input power.
- ROM-based IMM firmware flash updates.
- Serial over LAN (SOL).
- Serial port redirection over telnet or ssh.
- SMI handling
- System event log (SEL) - user readable event log.

The IMM2 also provides the following remote server management capabilities through the ipmitool, management utility program:

- **Command-line interface (IPMI Shell)**

  The command-line interface provides direct access to server management functions through the IPMI 2.0 protocol. Use the command-line interface to issue commands to control the server power, view system information, and identify the server. You can also save one or more commands as a text file and run the file as a script.

- **Serial over LAN**

  Establish a Serial over LAN (SOL) connection to manage servers from a remote location. You can remotely view and change the UEFI settings, restart the server, identify the server, and perform other management functions. Any standard Telnet client application can access the SOL connection.

For more information about IMM, see the *Integrated Management Module II User's Guide* at http://publib.boulder.ibm.com/infocenter/ systemx/documentation/topic/ com.lenovo.sysx.imm2.doc/ printable_doc.html.

Using the remote presence and blue-screen capture features

The remote presence and blue-screen capture features are integrated functions of the integrated management module II (IMM2).

The remote presence feature provides the following functions:

- Remotely viewing video with graphics resolutions up to 1600 x 1200 at 75 Hz, regardless of the system state
- Remotely accessing the server, using the keyboard and mouse from a remote client

- Mapping the CD or DVD drive, diskette drive, and USB flash drive on a remote client, and mapping ISO and diskette image files as virtual drives that are available for use by the server
- Uploading a diskette image to the IMM memory and mapping it to the server as a virtual drive

The blue-screen capture feature captures the video display contents before the IMM restarts the server when the IMM detects an operating-system hang condition. A system administrator can use the blue-screen capture to assist in determining the cause of the hang condition.

Obtaining the IMM host name

Use this information to obtain the IMM host name.

If you are logging on to the IMM for the first time after installation, the IMM defaults to DHCP. If a DHCP server is not available, the IMM uses a static IP address of 192.168.70.125. The default IPv4 host name is "IMM-" (plus the last 12 characters on the IMM MAC address). The default host name also comes on the IMM network access tag that comes attached to the power supply on the rear of the server. The IMM network access tag provides the default host name of the IMM and does not require you to start the server.

The IPv6 link-local address (LLA) is derived from the IMM default host name. The IMM LLA is on the IMM network access tag is on the power supply on the rear of the server. To derive the link-local address, complete the following steps:

Step 1. Take the last 12 characters on the IMM MAC address (for example, 5CF3FC5EAAD0).

Step 2. Separate the number into pairs of hexadecimal characters (for example, 5C:F3:FC:5E:AA:D0).

Step 3. Separate the first six and last six hexadecimal characters.

Step 4. Add "FF" and "FE" in the middle of the 12 characters (for example, 5C F3 FC FF FE 5E AA D0).

Step 5. Convert the first pair of hexadecimal characters to binary (for example, 5=0101, C=1100, which results in 01011100 F3 FC FF FE 5E AA D0).

Step 6. Flip the 7th binary character from left (0 to 1 or 1 to 0), which results in 01011110 F3 FF FE 5E AA D0.

Step 7. Convert the binary back to hexadecimal (for example, 5E F3FCFFFE5EAAD0).

Obtaining the IP address for the IMM

To access the web interface to use the remote presence feature, you need the IP address or host name of the IMM. You can obtain the IMM IP address through the Setup utility and you can obtain the IMM host name from the IMM network access tag.

The server comes with a default IP address for the IMM of 192.168.70.125.

To obtain the IP address, complete the following steps:

Step 1. Turn off the server.

Note: Approximately 5 to 10 seconds after the server is connected to power, the power-control button becomes active.

Step 2. When the prompt `<F1> Setup` is displayed, press F1. (This prompt is displayed on the screen for only a few seconds. You must press F1 quickly.) If you have set both a power-on password and an administrator password, you must type the administrator password to access the full Setup utility menu.

Step 3. From the Setup utility main menu, select **System Settings**.

Step 4. On the next screen, select **Integrated Management Module**.

Step 5. On the next screen, select **Network Configuration**.

Step 6. Find the IP address and write it down.

Step 7. Exit from the Setup utility.

Logging on to the web interface

Use this information to log on to the web interface.

To log on to the IMM web interface, complete the following steps:

Step 1. On a system that is connected to the server, open a web browser. In the **Address** or **URL** field, type the IP address or host name of the IMM to which you want to connect.

Note: If you are logging on to the IMM for the first time after installation, the IMM defaults to DHCP. If a DHCP host is not available, the IMM assigns a static IP address of 192.168.70.125. The IMM network access tag provides the default host name of the IMM and does not require you to start the server.

Step 2. On the Login page, type the user name and password. If you are using the IMM for the first time, you can obtain the user name and password from your system administrator. All login attempts are documented in the system-event log.

Note: The IMM is set initially with a user name of USERID and password of PASSW0RD (with a zero, not a the letter O). You have read/write access. You must change the default password the first time you log on.

Step 3. Click **Log in** to start the session. The System Status and Health page provides a quick view of the system status.

Note: If you boot to the operating system while in the IMM GUI and the message `Booting OS or in unsupported OS` is displayed under **System Status → System State**, disable Windows 2008 or 2012 firewall or type the following command in the Windows 2008 or 2012 console. This might also affect blue-screen capture features.

```
netsh firewall set icmpsetting type=8 mode=ENABLE
```

By default, the icmp packet is blocked by Windows firewall. The IMM GUI will then change to “OS booted” status after you change the setting as indicated above in both the Web and CLI interfaces.

Using the embedded hypervisor

The VMware ESXi embedded hypervisor software is available on the optional USB flash device with embedded hypervisor.

The USB flash device can be installed in USB connectors on the system board (see “System-board internal connectors” on page 26 for the location of the connectors). Hypervisor is virtualization software that enables multiple operating systems to run on a host system at the same time. The USB flash device is required to activate the hypervisor functions.

To start using the embedded hypervisor functions, you must add the USB flash device to the startup sequence in the Setup utility.

To add the USB flash device to the startup sequence, complete the following steps:

Step 1. Turn on the server.

Note: Approximately 5 to 10 seconds after the server is connected to power, the power-control button becomes active.

Step 2. When the prompt `<F1> Setup` is displayed, press F1.

Step 3. From the Setup utility main menu, select **Boot Manager**.

Step 4. Select **Add Boot Option**; then, select **Generic Boot Option → Embedded Hypervisor**. Press Enter, and then select Esc.

Step 5. Select **Change Boot Order → Change the order**. Use the Up arrow and Down Arrow keys to select **Embedded Hypervisor** and use the plus (+) and minus (-) keys to move Embedded Hypervisor in the boot order. When **Embedded Hypervisor** is in the correct location in the boot order, press Enter. Select **Commit Changes** and press Enter.

Step 6. Select **Save Settings** and then select **Exit Setup**.

If the embedded hypervisor flash device image becomes corrupt, you can download the image from http://www-03.ibm.com/systems/x/os/vmware/esxi/.

For additional information and instructions, see VMware vSphere 4.1 Documentation at http://www.vmware.com/ support/pubs/vs_pages/ vsp_pubs_esxi41_e_vc41.html or the *VMware vSphere Installation and Setup Guide* at http://pubs.vmware.com/vsphere-50/ topic/com.vmware.ICbase/PDF/ vsphere-esxi-vcenter-server-50-installation-setup-guide.pdf.

Configuring the Ethernet controller

The Ethernet controllers are integrated on the system board. They provide an interface for connecting to a 10 Mbps, 100 Mbps, or 1 Gbps network and provide full-duplex (FDX) capability, which enables simultaneous transmission and reception of data on the network.

If the Ethernet ports in the server support auto-negotiation, the controllers detect the data-transfer rate (10BASE-T, 100BASE-TX, or 1000BASE-T) and duplex mode (full-duplex or half-duplex) of the network and automatically operate at that rate and mode.

You do not have to set any jumpers or configure the controllers. However, you must install a device driver to enable the operating system to address the controllers.

To find device drivers and information about configuring the Ethernet controllers, go to http://www.lenovo.com/support.

Enabling Features on Demand Ethernet software

You can activate the Features on Demand (FoD) software upgrade key for Fibre Channel over Ethernet (FCoE) and iSCSI storage protocols that is integrated in the integrated management module.

For more information and instructions for activating the Features on Demand Ethernet software key, see the *Features on Demand Users Guide*. To download the document, go to http://www.ibm.com/systems/x/fod/, log in, and click **Help**.

Enabling Features on Demand RAID software

You can activate the Features on Demand (FoD) software upgrade key for RAID that is integrated in the integrated management module.

For more information and instructions for activating the Features on Demand RAID software key, see the *Features on Demand Users Guide*. To download the document, go to http://www.ibm.com/systems/x/fod/, log in, and click **Help**.

Configuring RAID arrays

Through the Setup utility, you can access utilities to configure RAID.

The specific procedure for configuring arrays depends on the RAID controller that you are using. For details, see the documentation for your RAID controller. To access the utility for your RAID controller, complete the following steps:

Step 1. Turn on the server.

Note: Approximately 10 seconds after the server is connected to power, the power-control button becomes active.

Step 2. When prompted, <F1 Setup> is displayed, press F1. If you have set an administrator password, you must type the administrator password to access the full Setup utility menu. If you do not type the administrator password, a limited Setup utility menu is available.

Step 3. Select **System Settings → Storage**.

Step 4. Press Enter to refresh the list of device drivers.

Step 5. Select the device driver for your RAID controller and press Enter.

Step 6. Follow the instructions in the documentation for your RAID controller.

Advanced Settings Utility program

The Advanced Settings Utility (ASU) program is an alternative to the Setup utility for modifying UEFI settings.

Use the ASU program online or out of band to modify UEFI settings from the command line without the need to restart the system to access the Setup utility.

You can also use the ASU program to configure the optional remote presence features or other IMM2 settings. The remote presence features provide enhanced systems-management capabilities.

In addition, the ASU program provides IMM LAN over USB interface configuration through the command-line interface.

Use the command-line interface to issue setup commands. You can save any of the settings as a file and run the file as a script. The ASU program supports scripting environments through a batch-processing mode.

For more information and to download the ASU program, go to https://support.lenovo.com/us/en/documents/LNVO-ASU.

Using Lenovo XClarity Administrator

The initial setup of Lenovo XClarity Administrator includes the following:

- Preparing the network
- Installing and configuring the Lenovo XClarity Administrator virtual appliance
- Managing systems
- Setting up automatic problem notification optionally

To manage systems based on the network topology that is implemented in your environment, there are a number of different ways to connect manageable systems to the network and to set up the Lenovo XClarity Administrator. If you plan to use Lenovo XClarity Administrator to manage the server, you must check for the latest applicable Lenovo XClarity Administrator updates. For installing the Lenovo XClarity Administrator in VMware ESXi-based and Hyper-V environments and downloading Lenovo XClarity Administrator updates, go to:
https://support.lenovo.com/us/en/ documents/LNVO-XCLARIT

Lenovo XClarity Administrator offers a free, 90-day trial license that enables you to use all available features for a limited time. To continue using Lenovo XClarity Administrator after the 90–day trial period, you are

required to purchase a full-function-enablement license for each Lenovo XClarity Administrator instance. You can purchase and download the license from:
https://support.lenovo.com/us/en/documents/lnvo-lxcaupd

Updating Systems Director

If you plan to use Systems Director to manage the server, you must check for the latest applicable Systems Director updates and interim fixes.

Note: Changes are made periodically to the website. The actual procedure might vary slightly from what is described in this document.

Installing a newer version

To locate and install a newer version of Systems Director, complete the following steps:

Step 1. Check for the latest version of Systems Director:
   a. Go to http://www.ibm.com/systems/management/director/downloads.html.
   b. If a newer version of Systems Director than what comes with the server is shown in the drop-down list, follow the instructions on the web page to download the latest version.

Step 2. Install the Systems Director program.

Installing updates with your management server is connected to the Internet

If your management server is connected to the Internet, to locate and install updates and interim fixes, complete the following steps:

Step 1. Make sure that you have run the Discovery and Inventory collection tasks.

Step 2. On the Welcome page of the Systems Director web interface, click **View updates**.

Step 3. Click **Check for updates**. The available updates are displayed in a table.

Step 4. Select the updates that you want to install, and click Install to start the installation wizard.

Installing updates with your management server is not connected to the Internet

If your management server is not connected to the Internet, to locate and install updates and interim fixes, complete the following steps:

Step 1. Make sure that you have run the Discovery and Inventory collection tasks.

Step 2. On a system that is connected to the Internet, go to http://www.ibm.com/support/ fixcentral.

Step 3. From the **Product family** list, select **Systems Director**.

Step 4. From the **Product** list, select **Systems Director**.

Step 5. From the **Installed version** list, select the latest version, and click**Continue**.

Step 6. Download the available updates.

Step 7. Copy the downloaded files to the management server.

Step 8. On the management server, on the Welcome page of the Systems Director web interface, click the **Manage** tab, and click **Update Manager**.

Step 9. Click **Import updates** and specify the location of the downloaded files that you copied to the management server.

Step 10. Return to the Welcome page of the Web interface, and click **View updates**.

Step 11. Select the updates that you want to install, and click **Install** to start the installation wizard.

Updating the Universal Unique Identifier (UUID)

The Universal Unique Identifier (UUID) must be updated when the system board is replaced. Use the Advanced Settings Utility to update the UUID in the UEFI-based server.

The ASU is an online tool that supports several operating systems. Make sure that you download the version for your operating system. You can download the ASU from the website. To download the ASU and update the UUID, complete the following steps.

Note: Changes are made periodically to the website. The actual procedure might vary slightly from what is described in this document.

Step 1. Download the Advanced Settings Utility (ASU) at https://support.lenovo.com/us/en/documents/LNVO-ASU.

Step 2. ASU sets the UUID in the Integrated Management Module (IMM). Select one of the following methods to access the Integrated Management Module (IMM) to set the UUID:

- Online from the target system (LAN or keyboard console style (KCS) access)
- Remote access to the target system (LAN based)
- Bootable media containing ASU (LAN or KCS, depending upon the bootable media)

Step 3. Copy and unpack the ASU package, which also includes other required files, to the server. Make sure that you unpack the ASU and the required files to the same directory. In addition to the application executable (asu or asu64), the following files are required:

- For Windows based operating systems:
  - ibm_rndis_server_os.inf
  - device.cat
- For Linux based operating systems:
  - cdc_interface.sh

Step 4. After you install ASU, use the following command syntax to set the UUID:

```
asu set SYSTEM_PROD_DATA.SysInfoUUID <uuid_value> [access_method]
```

Where:

<uuid_value>
Up to 16-byte hexadecimal value assigned by you.

[access_method]
The access method that you selected to use from the following methods:

- Online authenticated LAN access, type the command:

  ```
  [host <imm_internal_ip>] [user <imm_user_id>][password <imm_password>]
  ```

  Where:

  imm_internal_ip
  The IMM internal LAN/USB IP address. The default value is 169.254.95.118.

  imm_user_id
  The IMM `account` (1 of 12 accounts). The default value is USERID.

  imm_password
  The IMM account password (1 of 12 accounts). The default value is PASSW0RD (with a zero 0 not an O).

Note: If you do not specify any of these parameters, ASU will use the default values. When the default values are used and ASU is unable to access the IMM using the online authenticated LAN access method, ASU will automatically use the unauthenticated KCS access method.

The following commands are examples of using the userid and password default values and not using the default values:

Example that does not use the userid and password default values:

```
asu set SYSTEM_PROD_DATA.SYsInfoUUID <uuid_value> -user <user_id>
-password <password>
```

Example that does use the userid and password default values:

```
asu set SYSTEM_PROD_DATA.SysInfoUUID <uuid_value>
```

- Online KCS access (unauthenticated and user restricted):

  You do not need to specify a value for *access_method* when you use this access method.

  Example:

  ```
  asu set SYSTEM_PROD_DATA.SysInfoUUID <uuid_value>
  ```

  The KCS access method uses the IPMI/KCS interface. This method requires that the IPMI driver be installed. Some operating systems have the IPMI driver installed by default. ASU provides the corresponding mapping layer. See the *Advanced Settings Utility User's Guide* for more details. You can download the *Advanced Settings Utility User's Guide* at https://support.lenovo.com/us/en/ documents/LNVO-ASU.

- Remote LAN access, type the command:

  Note: When using the remote LAN access method to access IMM using the LAN from a client, the *host* and the *imm_external_ip* address are required parameters.

  ```
  host <imm_external_ip> [user <imm_user_id>][password <imm_password>]
  ```

  Where:

  imm_external_ip
  The external IMM LAN IP address. There is no default value. This parameter is required.

  imm_user_id
  The IMM `account` (1 of 12 accounts). The default value is USERID.

  imm_password
  The IMM account password (1 of 12 accounts). The default value is PASSW0RD (with a zero 0 not an O).

  The following commands are examples of using the userid and password default values and not using the default values.

  Example that does not use the userid and password default values:

  ```
  asu set SYSTEM_PROD_DATA.SYsInfoUUID <uuid_value> -host <imm_ip>
  -user <user_id> -password <password>
  ```

  Example that does use the userid and password default values:

  ```
  asu set SYSTEM_PROD_DATA.SysInfoUUID <uuid_value> -host <imm_ip>
  ```

- Bootable media:

  You can also build a bootable media using the applications available through the ToolsCenter website at https://support.lenovo.com/us/en/ documents/LNVO-CENTER. From the **ToolsCenter** page, scroll down for the available tools.

Step 5. Restart the server.

Updating the DMI/SMBIOS data

The Desktop Management Interface (DMI) must be updated when the system board is replaced. Use the Advanced Settings Utility to update the DMI in the UEFI-based server.

The ASU is an online tool that supports several operating systems. Make sure that you download the version for your operating system. You can download the ASU from the website. To download the ASU and update the DMI, complete the following steps.

Note: Changes are made periodically to the website. The actual procedure might vary slightly from what is described in this document.

Step 1. Download the Advanced Settings Utility (ASU) at https://support.lenovo.com/us/en/documents/LNVO-ASU.

Step 2. ASU sets the DMI in the Integrated Management Module (IMM). Select one of the following methods to access the Integrated Management Module (IMM) to set the DMI:

- Online from the target system (LAN or keyboard console style (KCS) access)
- Remote access to the target system (LAN based)
- Bootable media containing ASU (LAN or KCS, depending upon the bootable media)

Step 3. Copy and unpack the ASU package, which also includes other required files, to the server. Make sure that you unpack the ASU and the required files to the same directory. In addition to the application executable (asu or asu64), the following files are required:

- For Windows based operating systems:
  - ibm_rndis_server_os.inf
  - device.cat
- For Linux based operating systems:
  - cdc_interface.sh

Step 4. After you install ASU, type the following commands to set the DMI:

```
asu set SYSTEM_PROD_DATA.SysInfoProdName <m/t_model> [access_method]
asu set SYSTEM_PROD_DATA.SysInfoSerialNum <s/n> [access_method]
asu set SYSTEM_PROD_DATA.SysEncloseAssetTag <asset_tag> [access_method]
```

Where:

<m/t_model>
The server machine type and model number. Type `mtm xxxxyyy`, where *xxxx* is the machine type and *yyy* is the server model number.

<s/n>
The serial number on the server. Type `sn zzzzzzz`, where *zzzzzzz* is the serial number.

<asset_method>
The server asset tag number. Type `asset aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa`, where *aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa* is the asset tag number.

[access_method]
The access method that you select to use from the following methods:

- Online authenticated LAN access, type the command:

  `[host <imm_internal_ip>] [user <imm_user_id>][password <imm_password>]`

  Where:

imm_internal_ip
The IMM internal LAN/USB IP address. The default value is 169.254.95.118.

imm_user_id
The IMM `account` (1 of 12 accounts). The default value is USERID.

imm_password
The IMM account password (1 of 12 accounts). The default value is PASSW0RD (with a zero 0 not an O).

Note: If you do not specify any of these parameters, ASU will use the default values. When the default values are used and ASU is unable to access the IMM using the online authenticated LAN access method, ASU will automatically use the unauthenticated KCS access method.

The following commands are examples of using the userid and password default values and not using the default values.

Examples that do not use the userid and password default values:
```
asu set SYSTEM_PROD_DATA.SysInfoProdName <m/t_model>
-user <imm_user_id> -password <imm_password>
asu set SYSTEM_PROD_DATA.SysInfoSerialNum <s/n> -user <imm_user_id>
-password <imm_password>
asu set SYSTEM_PROD_DATA.SysEncloseAssetTag <asset_tag>
-user <imm_user_id> -password <imm_password>
```

Examples that do use the userid and password default values:
```
asu set SYSTEM_PROD_DATA.SysInfoProdName <m/t_model>
asu set SYSTEM_PROD_DATA.SysInfoSerialNum <s/n>
asu set SYSTEM_PROD_DATA.SysEncloseAssetTag <asset_tag>
```

- Online KCS access (unauthenticated and user restricted):

  You do not need to specify a value for *access_method* when you use this access method.

  The KCS access method uses the IPMI/KCS interface. This method requires that the IPMI driver be installed. Some operating systems have the IPMI driver installed by default. ASU provides the corresponding mapping layer. You can download the *Advanced Settings Utility User's Guide* at https://support.lenovo.com/us/en/ documents/LNVO-ASU.

- The following commands are examples of using the userid and password default values and not using the default values.

  Examples that do not use the userid and password default values:
  ```
  asu set SYSTEM_PROD_DATA.SysInfoProdName <m/t_model>
  asu set SYSTEM_PROD_DATA.SysInfoSerialNum <s/n>
  asu set SYSTEM_PROD_DATA.SysEncloseAssetTag <asset_tag>
  ```

  Remote LAN access, type the command:

  Note: When using the remote LAN access method to access IMM using the LAN from a client, the *host* and the *imm_external_ip* address are required parameters.

  ```
  host <imm_external_ip> [user <imm_user_id>][password <imm_password>]
  ```

  Where:

  imm_external_ip
  The external IMM LAN IP address. There is no default value. This parameter is required.

  imm_user_id
  The IMM `account` (1 of 12 accounts). The default value is USERID.

  imm_password
  The IMM account password (1 of 12 accounts). The default value is PASSW0RD (with a zero 0 not an O).

The following commands are examples of using the userid and password default values and not using the default values.

Examples that do not use the userid and password default values:

```
asu set SYSTEM_PROD_DATA.SysInfoProdName <m/t_model> -host <imm_ip>
-user <imm_user_id> -password <imm_password>
asu set SYSTEM_PROD_DATA.SysInfoSerialNum <s/n> -host <imm_ip>
-user <imm_user_id> -password <imm_password>
asu set SYSTEM_PROD_DATA.SysEncloseAssetTag <asset_tag> -host <imm_ip>
-user <imm_user_id> -password <imm_password>
```

Examples that do use the userid and password default values:

```
asu set SYSTEM_PROD_DATA.SysInfoProdName <m/t_model> -host <imm_ip>
asu set SYSTEM_PROD_DATA.SysInfoSerialNum <s/n> -host <imm_ip>
asu set SYSTEM_PROD_DATA.SysEncloseAssetTag <asset_tag> -host <imm_ip>
```

- Bootable media:

  You can also build a bootable media using the applications available through the ToolsCenter website at https://support.lenovo.com/us/en/ documents/LNVO-CENTER. From the **ToolsCenter** page, scroll down for the available tools.

Step 5. Restart the server.

Chapter 4. Troubleshooting

This section describes the diagnostic tools and troubleshooting information that are available to help you solve problems that might occur in the server.

If you cannot diagnose and correct a problem by using the information in this chapter, see Appendix D “Getting help and technical assistance” on page 975 for more information.

Start here

You can solve many problems without outside assistance by following the troubleshooting procedures in this documentation and on the World Wide Web.

This document describes the diagnostic tests that you can perform, troubleshooting procedures, and explanations of error messages and error codes. The documentation that comes with your operating system and software also contains troubleshooting information.

Diagnosing a problem

Before you contact IBM or an approved warranty service provider, follow these procedures in the order in which they are presented to diagnose a problem with your server.

Step 1. **Return the server to the condition it was in before the problem occurred.**

If any hardware, software, or firmware was changed before the problem occurred, if possible, reverse those changes. This might include any of the following items:

- Hardware components
- Device drivers and firmware
- System software
- UEFI firmware
- System input power or network connections

Step 2. **View the light path diagnostics LEDs and event logs.**

The server is designed for ease of diagnosis of hardware and software problems.

- **Light path diagnostics LEDs:** See “Light path diagnostics” on page 123 for information about using light path diagnostics LEDs.
- **Event logs:** See “Event logs” on page 135 for information about notification events and diagnosis.
- **Software or operating-system error codes:** See the documentation for the software or operating system for information about a specific error code. See the manufacturer's website for documentation.

Step 3. **Run IBM Dynamic System Analysis (DSA) and collect system data.**

Run Dynamic System Analysis (DSA) to collect information about the hardware, firmware, software, and operating system. Have this information available when you contact IBM or an approved warranty service provider. For instructions for running DSA, see the *Dynamic System Analysis Installation and User's Guide*.

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To download the latest version of DSA code and the *Dynamic System Analysis Installation and User's Guide*, go to https://support.lenovo.com/us/ en/documents/LNVO-DSA.

Step 4. **Check for and apply code updates.**

Fixes or workarounds for many problems might be available in updated UEFI firmware, device firmware, or device drivers. To display a list of available updates for the server, go to http://www.ibm.com/support/ fixcentral.

Attention: Installing the wrong firmware or device-driver update might cause the server to malfunction. Before you install a firmware or device-driver update, read any readme and change history files that are provided with the downloaded update. These files contain important information about the update and the procedure for installing the update, including any special procedure for updating from an early firmware or device-driver version to the latest version.

Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

a. **Install UpdateXpress system updates.**

You can install code updates that are packaged as an UpdateXpress System Pack or UpdateXpress CD image. An UpdateXpress System Pack contains an integration-tested bundle of online firmware and device-driver updates for your server. In addition, you can use IBM ToolsCenter Bootable Media Creator to create bootable media that is suitable for applying firmware updates and running preboot diagnostics. For more information about UpdateXpress System Packs, see http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-XPRESS and “Updating the firmware” on page 93. For more information about the Bootable Media Creator, see https://support.lenovo.com/us/en/documents/LNVO-BOMC.

Be sure to separately install any listed critical updates that have release dates that are later than the release date of the UpdateXpress System Pack or UpdateXpress image (see b).

b. **Install manual system updates.**

1. **Determine the existing code levels.**

   In DSA, click **Firmware/VPD** to view system firmware levels, or click **Software** to view operating-system levels.

2. **Download and install updates of code that is not at the latest level.**

   To display a list of available updates for the server, go to http://www.ibm.com/support/fixcentral.

   When you click an update, an information page is displayed, including a list of the problems that the update fixes. Review this list for your specific problem; however, even if your problem is not listed, installing the update might solve the problem.

Step 5. **Check for and correct an incorrect configuration.**

If the server is incorrectly configured, a system function can fail to work when you enable it; if you make an incorrect change to the server configuration, a system function that has been enabled can stop working.

a. **Make sure that all installed hardware and software are supported.**

See http://www.lenovo.com/ serverproven/ to verify that the server supports the installed operating system, optional devices, and software levels. If any hardware or software component is not supported, uninstall it to determine whether it is causing the problem.

You must remove nonsupported hardware before you contact IBM or an approved warranty service provider for support.

b. **Make sure that the server, operating system, and software are installed and configured correctly.**

Many configuration problems are caused by loose power or signal cables or incorrectly seated adapters. You might be able to solve the problem by turning off the server, reconnecting cables, reseating adapters, and turning the server back on. For information about performing the checkout procedure, see “About the checkout procedure” on page 120. For information about configuring the server, see Chapter 3 “Configuring” on page 93.

Step 6. **See controller and management software documentation.**

If the problem is associated with a specific function (for example, if a RAID hard disk drive is marked offline in the RAID array), see the documentation for the associated controller and management or controlling software to verify that the controller is correctly configured.

Problem determination information is available for many devices such as RAID and network adapters.

For problems with operating systems or IBM software or devices, go to http://www.lenovo.com/support.

Step 7. **Check for troubleshooting procedures and RETAIN tips.**

Troubleshooting procedures and RETAIN tips document known problems and suggested solutions. To search for troubleshooting procedures and RETAIN tips, go to http://www.lenovo.com/support.

Step 8. **Use the troubleshooting tables.**

See “Troubleshooting by symptom” on page 140 to find a solution to a problem that has identifiable symptoms.

A single problem might cause multiple symptoms. Follow the troubleshooting procedure for the most obvious symptom. If that procedure does not diagnose the problem, use the procedure for another symptom, if possible.

If the problem remains, contact IBM or an approved warranty service provider for assistance with additional problem determination and possible hardware replacement. To open an online service request, go to http://www.ibm.com/support/ entry/portal/Open_service_request. Be prepared to provide information about any error codes and collected data.

Undocumented problems

If you have completed the diagnostic procedure and the problem remains, the problem might not have been previously identified by IBM. After you have verified that all code is at the latest level, all hardware and software configurations are valid, and no light path diagnostics LEDs or log entries indicate a hardware component failure, contact IBM or an approved warranty service provider for assistance.

To open an online service request, go to http://www.ibm.com/support/ entry/portal/Open_service_request. Be prepared to provide information about any error codes and collected data and the problem determination procedures that you have used.

Service bulletins

Lenovo continually updates the support website with the latest tips and techniques that you can use to solve problem that you might have with the Lenovo System x3550 M4 server.

To find service bulletins that are available for the Lenovo System x3550 M4 server, go to http://www.lenovo.com/support and search for `7914`, and `retain`.

Checkout procedure

The checkout procedure is the sequence of tasks that you should follow to diagnose a problem in the server.

About the checkout procedure

Review the following information before you perform the checkout procedure for diagnosing hardware problems.

- Read the safety information that begins on “Safety” on page v.
- Dynamic System Analysis (DSA) provides the primary methods of testing the major components of the server, such as the system board, Ethernet controller, keyboard, mouse (pointing device), serial ports, and hard disk drives. You can also use them to test some external devices. If you are not sure whether a problem is caused by the hardware or by the software, you can use the diagnostic programs to confirm that the hardware is working correctly.
- When you run DSA, a single problem might cause more than one error message. When this happens, correct the cause of the first error message. The other error messages usually will not occur the next time you run DSA.

  Important: If multiple error codes or light path diagnostics LEDs indicate a microprocessor error, the error might be in the microprocessor or in the microprocessor socket. See “Microprocessor problems” on page 146 for information about diagnosing microprocessor problems.
- Before you run DSA, you must determine whether the failing server is part of a shared hard disk drive cluster (two or more servers sharing external storage devices). If it is part of a cluster, you can run all diagnostic programs except the ones that test the storage unit (that is, a hard disk drive in the storage unit) or the storage adapter that is attached to the storage unit. The failing server might be part of a cluster if any of the following conditions is true:
  - You have identified the failing server as part of a cluster (two or more servers sharing external storage devices).
  - One or more external storage units are attached to the failing server and at least one of the attached storage units is also attached to another server or unidentifiable device.
  - One or more servers are located near the failing server.

  Important: If the server is part of a shared hard disk drive cluster, run one test at a time. Do not run any suite of tests, such as “quick” or “normal” tests, because this might enable the hard disk drive diagnostic tests.
- If the server is halted and a POST error code is displayed, see Appendix B “UEFI/POST diagnostic codes” on page 793. If the server is halted and no error message is displayed, see “Troubleshooting by symptom” on page 140 and “Solving undetermined problems” on page 160.
- For information about power-supply problems, see “Solving power problems” on page 158, “Power problems” on page 150, and “Power-supply LEDs” on page 131.
- For intermittent problems, check the event log; see “Event logs” on page 135 and Appendix C “DSA diagnostic test results” on page 817.

Performing the checkout procedure

Use this information to perform the checkout procedure.

To perform the checkout procedure, complete the following steps:

Step 1. Is the server part of a cluster?

- **No:** Go to step 2.
- **Yes:** Shut down all failing servers that are related to the cluster. Go to step 2.

Step 2. Complete the following steps:

a. Check the power supply LEDs (see "Power-supply LEDs" on page 131).
b. Turn off the server and all external devices.
c. Check all internal and external devices for compatibility at http://www.lenovo.com/serverproven/.
d. Check all cables and power cords.
e. Set all display controls to the middle positions.
f. Turn on all external devices.
g. Turn on the server. If the server does not start, see "Troubleshooting by symptom" on page 140.
h. Check the system-error LED on the operator information panel. If it is lit, check the light path diagnostics LEDs (see "Light path diagnostics" on page 123).
i. Check for the following results:
   - Successful completion of POST (see "POST" on page 137 for more information)
   - Successful completion of startup, which is indicated by a readable display of the operating-system desktop

Step 3. Is there a readable image on the monitor screen?

- **No:** Find the failure symptom in "Troubleshooting by symptom" on page 140; if necessary, see "Solving undetermined problems" on page 160.
- **Yes:** Run DSA (see "Running the DSA Preboot diagnostic programs" on page 139).
  - If DSA reports an error, follow the instructions in Appendix C "DSA diagnostic test results" on page 817.
  - If DSA does not report an error but you still suspect a problem, see "Solving undetermined problems" on page 160.

Diagnostic tools

The section introduces available tools to help you diagnose and solve hardware-related problems.

- **Light path diagnostics**

  Use light path diagnostics to diagnose system errors quickly. See "Light path diagnostics" on page 123 for more information.

- **Event logs**

  The event logs list the error codes and messages that are generated when an error is detected for the subsystems IMM2, POST, DSA, and the server baseboard management controller. See "Event logs" on page 135 for more information.

- **Integrated management module II**

  The integrated management module II (IMM2) combines service processor functions, video controller, and remote presence and blue-screen capture features in a single chip. The IMM provides advanced service-processor control, monitoring, and alerting function. If an environmental condition exceeds a threshold or if a system component fails, the IMM lights LEDs to help you diagnose the problem, records the error in the IMM event log, and alerts you to the problem. Optionally, the IMM also provides a virtual presence capability for remote server management capabilities. The IMM provides remote server management through the following industry-standard interfaces:

- Intelligent Platform Management Protocol (IPMI) version 2.0
- Simple Network Management Protocol (SNMP) version 3
- Common Information Model (CIM)
- Web browser

For more information about the integrated management module II (IMM2), see "Using the integrated management module" on page 104, Appendix A "Integrated management module II (IMM2) error messages" on page 311, and the *Integrated Management Module II User's Guide* at http://publib.boulder.ibm.com/infocenter/ systemx/documentation/topic/ com.lenovo.sysx.imm2.doc/ printable_doc.html.

- **Dynamic System Analysis**

  Two editions of Dynamic System Analysis (DSA) are available for diagnosing problems, DSA Portable and DSA Preboot:

  - DSA Portable

    DSA Portable collects and analyzes system information to aid in diagnosing server problems. DSA Portable runs on the server operating system and collects the following information about the server:

    - Drive health information
    - Event logs for ServeRAID controllers and service processors
    - IMM2 configuration information
    - IMM2 environmental information
    - Installed hardware, including PCI and USB information
    - Installed applications and hot fixes
    - Kernel modules
    - Light path diagnostics status
    - Microprocessor, input/out hub, and UEFI error logs
    - Network interfaces and settings
    - Option card driver and firmware information
    - RAID controller configuration
    - Service processor (integrated management module) status and configuration
    - System configuration
    - Vital product data, firmware, and UEFI configuration

    DSA Portable creates a DSA log, which is a chronologically ordered merge of the system-event log (as the IPMI event log), the integrated management module (IMM) event log (as the ASM event log), and the operating-system event logs. You can send the DSA log as a file to Lenovo Support (when requested by Lenovo Support) or view the information as a text file or HTML file.

    Note: Use the latest available version of DSA to make sure you are using the most recent configuration data. For documentation and download information for DSA, see http://shop.lenovo.com/us/en/systems/solutions/.

    For additional information, see "Dynamic System Analysis" on page 137 and Appendix C "DSA diagnostic test results" on page 817.

  - DSA Preboot

    DSA Preboot diagnostic program is stored in the integrated USB memory on the server. DSA Preboot collects and analyzes system information to aid in diagnosing server problems, as well as offering a rich set of diagnostic tests of the major components of the server. DSA Preboot collects the following information about the server:

- Drive health information
- Event logs for ServeRAID controllers and service processors
- IMM2 configuration information
- IMM2 environmental information
- Installed hardware, including PCI and USB information
- Light path diagnostics status
- Microprocessor, input/output hub, and UEFI error logs
- Network interfaces and settings
- Option card driver and firmware information
- RAID controller configuration
- Service processor (integrated management module) status and configuration
- System configuration
- Vital product data, firmware, and UEFI configuration

DSA Preboot also provides diagnostics for the following system components (when they are installed):

1. Emulex network adapter
2. IMM I2C bus
3. Light path diagnostics panel
4. Memory modules
5. Microprocessors
6. Optical devices (CD or DVD)
7. SAS or SATA drives
8. LSI controller
9. Broadcom network adapter
10. FusionIO storage
11. Intel GPU
12. Nvidia GPU

See “Running the DSA Preboot diagnostic programs” on page 139 for more information on running the DSA Preboot program on the server.

- **Troubleshooting by symptom**

  These tables list problem symptoms and actions to correct the problems. See “Troubleshooting by symptom” on page 140 for more information.

Light path diagnostics

Light path diagnostics is a system of LEDs on various external and internal components of the server that leads you to the failed component. When an error occurs, LEDs are lit along the path of the front panel, the light path diagnostics panel, then on the failed component. By viewing the LEDs in a particular order, you can often identify the source of the error.

When LEDs are lit to indicate an error, they remain lit when the server is turned off, provided that the server is still connected to power and the power supply is operating correctly.

Before you work inside the server to view light path diagnostics LEDs, read the safety information “Safety” on page v and “Handling static-sensitive devices” on page 33.

If an error occurs, view the light path diagnostics LEDs in the following order:

1. Look at the operator information panel on the front of the server.
   - If the check log LED is lit, it indicates that information about an un-isolated fault condition in the server is available in the IMM event log or in the system-event log.
   - If the system-error LED is lit, it indicates that an error has occurred; go to 2.

   The following illustration shows the operator information panel.

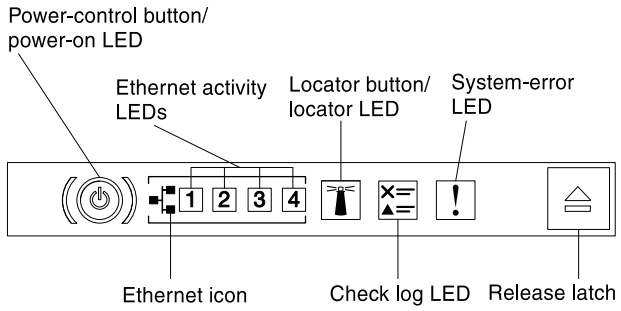

Figure 85. Operator information panel

2. To view the light path diagnostics panel, press the blue release latch on the operator information panel. Pull forward on the panel until the hinge of the operator information panel is free of the server chassis. Then pull down on the panel so that you can view the light path diagnostics panel information. This reveals the light path diagnostics panel. Lit LEDs on this panel indicate the type of error that has occurred.

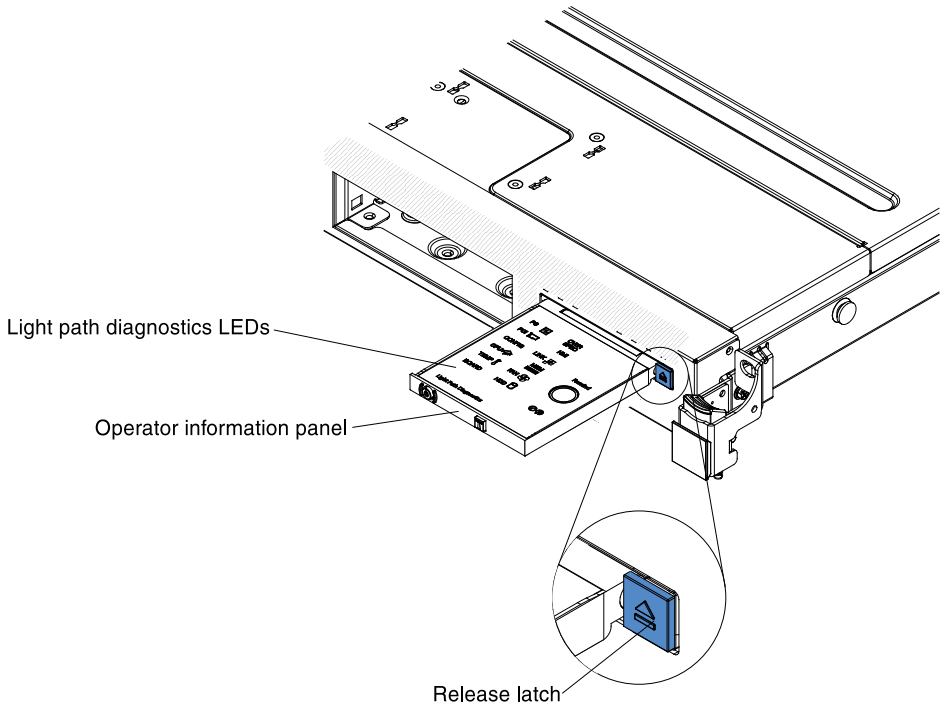

Figure 86. Light path diagnostics panel disengagement

The following illustration shows the light path diagnostics panel.

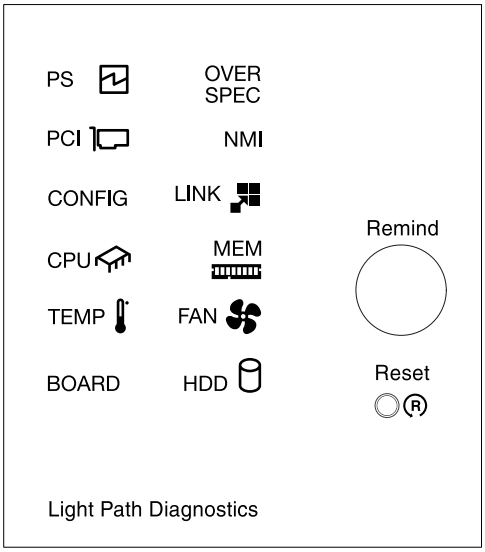

Figure 87. Light path diagnostics panel

Note any LEDs that are lit, and then reinstall the light path diagnostics panel in the server.

- **Remind button:** Press this button to place the system-error LED/check log LED on the front information panel into Remind mode. By placing the system-error LED indicator in Remind mode, you acknowledge that you are aware of the last failure but will not take immediate action to correct the problem. In Remind mode, the system-error LED flashes every 2 seconds until one of the following conditions occurs:
  - All known errors are corrected.
  - The server is restarted.
  - A new error occurs, causing the system-error LED to be lit again.
- **Reset button:** Press this button to reset the server and run the power-on self-test (POST). You might have to use a pen or the end of a straightened paper clip to press the button. The Reset button is in the lower-right corner of the light path diagnostics panel.

The system service label inside the server cover provides an overview of internal components that correspond to the LEDs on the light path diagnostics panel. This information and the information in “Light path diagnostics LEDs” on page 126 can often provide enough information to diagnose the error.

3. Remove the server cover and look inside the server for lit LEDs. Certain components inside the server have LEDs that are lit to indicate the location of a problem.

   Note: You do not have to remove the server cover to view the LEDs on hard disk drives and power supplies.

   The following illustration shows the LEDs on the system board.

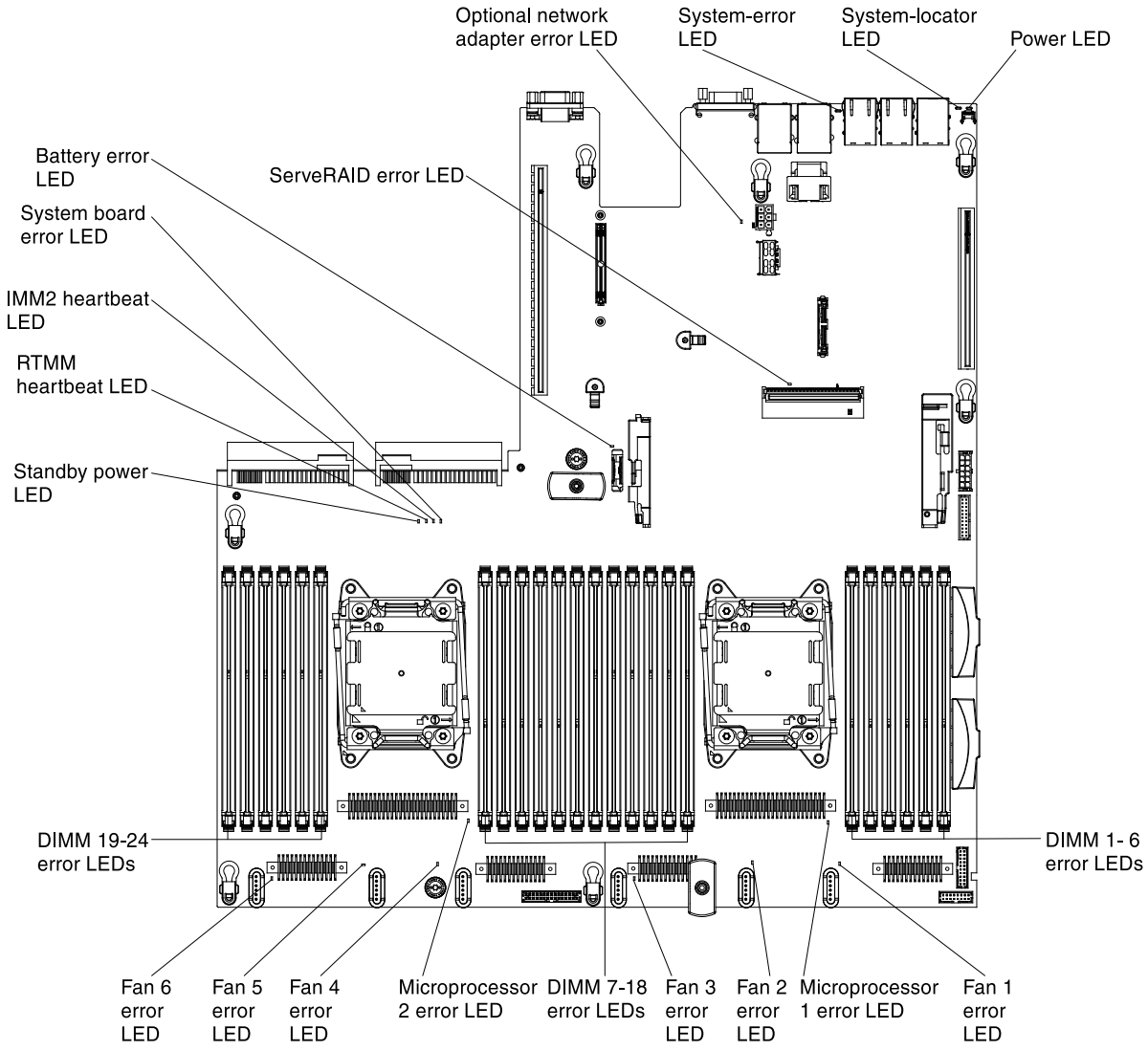

Figure 88. System board error LEDs

Light path diagnostics LEDs

This section describes the LEDs on the light path diagnostics panel and suggested actions to correct the detected problems.

For additional information, see “Server controls, LEDs, and power” on page 14 and “System-board LEDs” on page 29 for the location of the system board LEDs.

Table 14. Light path diagnostics panel LEDs

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(trained technician only)," that step must be performed only by a trained technician.**

LED	Description	Action
Check log LED	An error has occurred and cannot be isolated without performing certain procedures.	1. Check the IMM2 system event log and the system-error log for information about the error. 2. Save the log if necessary and clear the log afterwards.
System-error LED	An error has occurred.	1. Check the light path diagnostics LEDs and follow the instructions. 2. Check the IMM2 system event log and the system-error log for information about the error. 3. Save the log if necessary and clear the log afterwards.
PS	When only the PS LED is lit, a power supply has failed.	The system might detect a power supply error. Complete the following steps to correct the problem: 1. Check the power-supply with a lit yellow LED (see "Power-supply LEDs" on page 131). 2. Make sure that the power supplies are seated correctly and plugged in a good AC outlet. 3. Remove one of the power supplies to isolate the failed power supply. 4. Make sure that both power supplies installed in the server are of the same AC input voltage. 5. Replace the failed power supply.
	PS + CONFIGWhen both the PS and CONFIG LEDs are lit, the power supply configuration is invalid.	If the PS LED and the CONFIG LED are lit, the system issues an invalid power configuration error. Make sure that both power supplies installed in the server are of the same rating or wattage.
OVER SPEC	The system consumption reaches the power supply over-current protection point or the power supplies are damaged.	1. If the Pwr Rail (1, 2, 3, 4, 5, or 6) error was not detected, complete the following steps: a. Use the Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www.ibm.com/systems/bladecenter/resources/powerconfig.html. b. Replace the failed power supply. 2. If the Pwr Rail (1, 2, 3, 4, 5, or 6) error was also detected, follow actions listed in "Power problems" on page 150 and "Solving power problems" on page 158.

Table 14. Light path diagnostics panel LEDs (continued)

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(trained technician only)," that step must be performed only by a trained technician.**

LED	Description	Action
PCI	An error has occurred on a PCI card, a PCI bus, or on the system board. An additional LED is lit next to a failing PCI slot.	1. Check the riser-card LEDs, the ServeRAID error LED, and the dual-port network adapter error LED to identify the component that caused the error. 2. Check the system-error log for information about the error. 3. If you cannot isolate the failing component by using the LEDs and the information in the system-error log, remove one component at a time; and restart the server after each component is removed. 4. Replace the following components, in the order shown, restarting the server each time: • PCI riser cards • ServeRAID adapter • Optional network adapter • (Trained technician only) System board 5. If the failure remains, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-CALL.
NMI	A nonmaskable interrupt has occurred, or the NMI button was pressed.	1. Check the system-error log for information about the error. 2. Restart the server.
CONFIG	CONFIG + PS An invalid power configuration error has occurred.	If the CONFIG LED and the PS LED are lit, the system issues an invalid power configuration error. Make sure that both power supplies installed in the server are of the same rating or wattage.
	CONFIG + CPU A hardware configuration error has occurred.	If the CONFIG LED and the CPU LED are lit, complete the following steps to correct the problem: 1. Check the microprocessors that were just installed to make sure that they are compatible with each other (see “Replacing a microprocessor and heat sink” on page 292 for additional information about microprocessor requirements). 2. (Trained technician only) Replace the incompatible microprocessor. 3. Check the system-error logs for information about the error. Replace any component that is identified in the error log.
	CONFIG + MEM A hardware configuration error has occurred.	If the CONFIG LED and the MEM LED are lit, check the system-event log in the Setup utility or IMM2 error messages. Follow steps indicated in Appendix B “UEFI/POST diagnostic codes” on page 793 and Appendix A “Integrated management module II (IMM2) error messages” on page 311.
LINK	Reserved.	

Table 14. Light path diagnostics panel LEDs (continued)

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(trained technician only)," that step must be performed only by a trained technician.**

LED	Description	Action
CPU	When only the CPU LED is lit, a microprocessor has failed.	If the CONFIG LED is not lit, a microprocessor failure occurs, complete the following steps: 1. (Trained technician only) Make sure that the failing microprocessor and its heat sink, which are indicated by a lit LED on the system board, are installed correctly. See "Replacing a microprocessor and heat sink" on page 292 for information about installation and requirements. 2. (Trained technician only) Replace the failing microprocessor (see "Removing a microprocessor and heat sink" on page 287 and "Replacing a microprocessor and heat sink" on page 292). 3. For more information, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-CALL.
	CPU + CONFIG When both the CPU LED and the CONFIG LED are lit, the microprocessor configuration is invalid.	If the CONFIG LED and the CPU LED are lit, the system issues an invalid microprocessor configuration error. Complete the following steps to correct the problem: 1. Check the microprocessors that were just installed to make sure that they are compatible with each other (see "Replacing a microprocessor and heat sink" on page 292 for additional information about microprocessor requirements). 2. (Trained technician only) Replace the incompatible microprocessor. 3. Check the system-error logs for information about the error. Replace any component that is identified in the error log.
MEM	When only the MEM LED is lit, a memory error has occurred.	**Note:** Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server. If the CONFIG LED is not lit, the system might detect a memory error. Complete the following steps to correct the problem: 1. Update the server firmware to the latest level (see "Updating the firmware" on page 93). 2. Reseat or swap the DIMMs with lit LED. 3. Check the system-event log in the Setup utility or IMM error messages. Follow steps indicated in Appendix B "UEFI/POST diagnostic codes" on page 793 and Appendix A "Integrated management module II (IMM2) error messages" on page 311. 4. Replace the failing DIMM (see "Removing a memory module" on page 215 and "Installing a memory module" on page 45).
	MEM + CONFIG When both the MEM and CONFIG LEDs are	If the MEM LED and the CONFIG LED are lit, check the system-event log in the Setup utility or IMM2 error messages.

Table 14. Light path diagnostics panel LEDs (continued)

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(trained technician only)," that step must be performed only by a trained technician.**

LED	Description	Action
	lit, the memory configuration is invalid.	Follow steps indicated in Appendix B “UEFI/POST diagnostic codes” on page 793 and Appendix A “Integrated management module II (IMM2) error messages” on page 311.
TEMP	The system or the system component temperature has exceeded a threshold level. A failing fan can cause the TEMP LED to be lit.	1. Make sure that the heat sink is seated correctly. 2. Determine whether a fan has failed. If it has, replace it. 3. Make sure that the room temperature is not too high. See “Server features and specifications” on page 6 for the server temperature information. 4. Make sure that the air vents are not blocked. 5. Make sure that the heat sink or the fan on the adapter, or the optional network adapter is seated correctly. If the fan has failed, replace it. 6. For more information, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-CALL.
FAN	A fan has failed, is operating too slowly, or has been removed. The TEMP LED might also be lit.	1. Check if your server installed with any of the adapters mentioned in Table 25 “Adapter configurations” on page 229 and Table 27 “Supported dual-port network adapters on the network connector” on page 241. If yes, make sure your server compile with the configuration with six fans installed. 2. Reseat the failing fan, which is indicated by a lit LED near the fan connector on the system board. 3. Replace the failing fan (see “Removing a hot-swap fan” on page 245 and “Replacing a hot-swap fan” on page 246).
BOARD	An error has occurred on the system board or the system battery.	1. Check the LEDs on the system board to identify the component that caused the error. The BOARD LED can be lit due to any of the following reasons: • Battery • (Trained technician only) System board 2. Check the system-error log for information about the error. 3. Replace the failing component: • Battery (see “Removing the system battery” on page 271 and “Replacing the system battery” on page 273). • (Trained technician only) System board (see “Removing the system board” on page 302 and “Replacing the system board” on page 306).
HDD	A hard disk drive has failed or is missing.	1. Check the LEDs on the hard disk drives for the drive with a lit status LED and reseat the hard disk drive. 2. Reseat the hard disk drive backplane. 3. For more information, see “Light path diagnostics LEDs” on page 126.

Table 14. Light path diagnostics panel LEDs (continued)

• **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.** • **If an action step is preceded by "(trained technician only)," that step must be performed only by a trained technician.**		
LED	**Description**	**Action**
		4. If the error remains, replace the following components one at a time, in the order listed, restarting the server after each: a. Replace the hard disk drive. b. Replace the hard disk drive backplane. 5. If the problem remains, go to http://www.ibm.com/support/entry/portal/docdisplay?lndocid=SERV-CALL.

Power-supply LEDs

Use this information to view power-supply LEDs.

The following minimum configuration is required for the server to start:
- One microprocessor in microprocessor socket 1
- One 2 GB DIMM on the system board
- One power supply
- Power cord
- Four cooling fans (fan 1, 2, 3, and 5)
- One PCI riser-card assembly in PCI connector 1

AC power-supply LEDs

Use this information to view AC power-supply LEDs.

The following minimum configuration is required for the DC LED on the power supply to be lit:
- Power supply
- Power cord

Note: You must turn on the server for the DC LED on the power supply to be lit.

The following illustration shows the locations of the power-supply LEDs on the ac power supply.

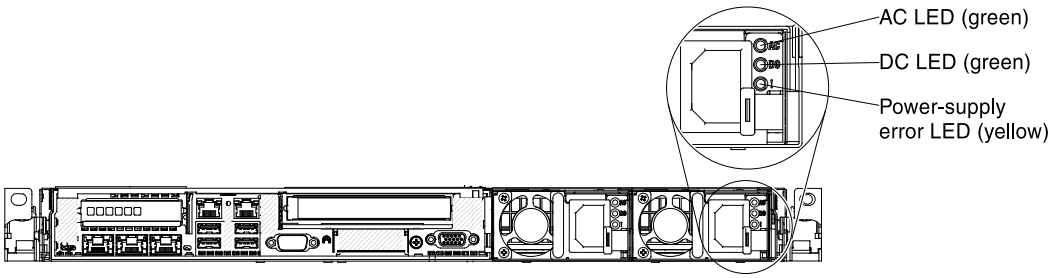

Figure 89. AC power-supply LEDs

The following table describes the problems that are indicated by various combinations of the power-supply LEDs on an ac power supply and suggested actions to correct the detected problems.

AC power-supply LEDs			Description	Action	Notes
AC	DC	Error (!)			
On	On	Off	Normal operation.		
Off	Off	Off	No ac power to the server or a problem with the ac power source.	1. Check the ac power to the server. 2. Make sure that the power cord is connected to a functioning power source. 3. Restart the server. If the error remains, check the power-supply LEDs. 4. If the problem remains, replace the power-supply.	This is a normal condition when no ac power is present.
Off	Off	On	The power supply has failed.	Replace the power supply.	
Off	On	Off	The power supply has failed.	Replace the power supply.	
Off	On	On	The power supply has failed.	Replace the power supply.	
On	Off	Off	Power-supply not fully seated, faulty system board, or the power supply has failed.	1. Reseat the power supply. 2. Follow actions in the “Power problems” on page 150. 3. If the OVER SPEC LED on the light path diagnostics is lit, follow the actions in “Light path diagnostics LEDs” on page 126. 4. If the OVER SPEC LED on the light path diagnostics is not lit, check the error LEDs on the system board and the IMM2 error messages. Follow steps in “Power problems” on page 150 and “Solving power problems” on page 158 until the problem is solved.	Typically indicates a power-supply is not fully seated.
On	Off	On	The power supply has failed.	Replace the power supply.	
On	On	On	The power supply has failed.	Replace the power supply.	

DC power-supply LEDs

Use this information to view DC power-supply LEDs.

The following illustration shows the locations of the power-supply LEDs on the dc power supply.

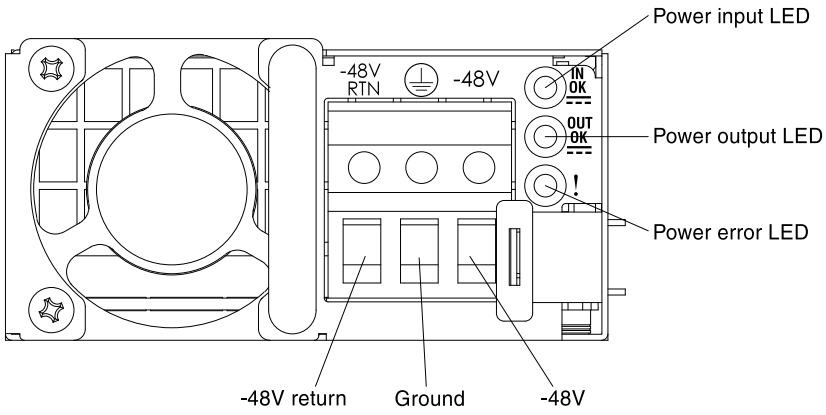

Figure 90. DC power-supply LEDs

The following table describes the problems that are indicated by various combinations of the power-supply LEDs on a dc power supply and suggested actions to correct the detected problems.

DC power-supply LEDs					
IN OK	**OUT OK**	**Error (!)**	**Description**	**Action**	**Notes**
On	On	Off	Normal operation.		
Off	Off	Off	No dc power to the server or a problem with the dc power source.	1. Check the dc power to the server. 2. Make sure that the power cord is connected to a functioning power source. 3. Restart the server. If the error remains, check the power-supply LEDs. 4. If the problem remains, replace the power-supply.	This is a normal condition when no dc power is present.
Off	Off	On	The power supply has failed.	Replace the power supply.	
Off	On	Off	The power supply has failed.	Replace the power supply.	
Off	On	On	The power supply has failed.	Replace the power supply.	
On	Off	Off	Power-supply not fully seated, faulty system board, or the power supply has failed.	1. Reseat the power supply. 2. Follow actions in the “Power problems” on page 150. 3. If the OVER SPEC LED on the light path diagnostics is lit, follow the actions in “Light path diagnostics LEDs” on page 126. 4. If the OVER SPEC LED on the light path diagnostics is not lit, check the error LEDs on the system board and the IMM2 error messages. Follow steps in “Power problems” on	Typically indicates a power-supply is not fully seated.

DC power-supply LEDs			Description	Action	Notes
IN OK	OUT OK	Error (!)			
				page 150 and “Solving power problems” on page 158 until the problem is solved.	
On	Off	On	The power supply has failed.	Replace the power supply.	
On	On	On	The power supply has failed.	Replace the power supply.	

System pulse LEDs

Use this information to diagnose possible errors that are indicated by the system pulse LEDs.

The following LEDs are on the system board and help you to monitor the system power-on and power-off sequencing and boot progress (see “System-board LEDs” on page 29 for the location of these LEDs).

Table 15. System pulse LEDs

LED	Description	Action
RTMM heartbeat	Power-on and power-off sequencing.	1. If the LED blinks at 1Hz, it is functioning properly and no action is necessary. 2. If the LED is not blinking, (trained technician only) replace the system board.
IMM heartbeat	IMM2 heartbeat boot process.	The following steps describe the different stages of the IMM2 heartbeat sequencing process. 1. When this LED is blinking fast (approximately 4Hz), this indicates, that the IMM2 code is in the loading process. 2. When this LED goes off momentarily, this indicates that the IMM2 code has loaded completely. 3. When this LED goes off momentarily and then starts blinking slowing (approximately 1Hz), this indicates that IMM2 is fully operational. You can now press the power-control button to power-on the server. 4. If this LED does not blink within 30 seconds of connecting a power source to the server, (trained technician only) replace the system board.

PCI riser-card LEDs

Use this information to view PCI riser-card LEDs.

The following illustration shows the location of the PCI riser-card LEDs.

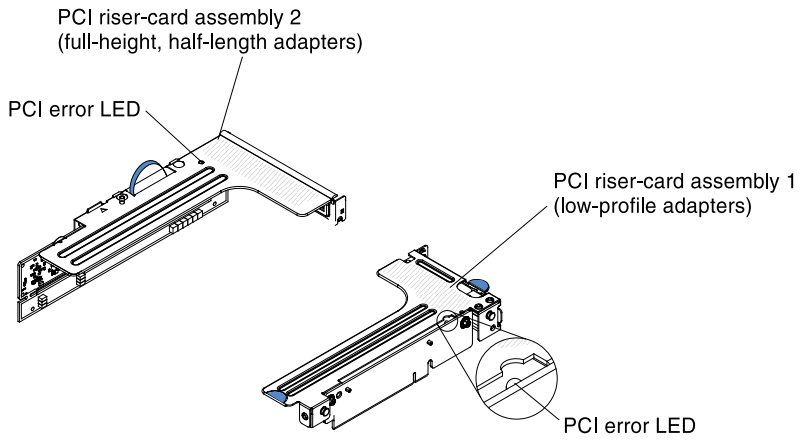

Figure 91. PCI riser-card LEDs

Event logs

Error codes and messages displayed in POST event log, system-event log, integrated management module (IMM2) event log, and DSA event log.

- **POST event log:** This log contains the most recent error codes and messages that were generated during POST. You can view the contents of the POST event log from the Setup utility (see “Starting the Setup utility” on page 97). For more information about POST error codes, see Appendix B “UEFI/POST diagnostic codes” on page 793.
- **System-event log:** This log contains POST and system management interrupt (SMI) events and all events that are generated by the baseboard management controller that is embedded in the integrated management module (IMM). You can view the contents of the system-event log through the Setup utility and through the Dynamic System Analysis (DSA) program (as IPMI event log).The system-event log is limited in size. When it is full, new entries will not overwrite existing entries; therefore, you must periodically clear the system-event log through the Setup utility. When you are troubleshooting an error, you might have to save and then clear the system-event log to make the most recent events available for analysis. For more information about the system-event log, see Appendix A “Integrated management module II (IMM2) error messages” on page 311.

  Messages are listed on the left side of the screen, and details about the selected message are displayed on the right side of the screen. To move from one entry to the next, use the Up Arrow (-) and Down Arrow (‾) keys.

  Some IMM sensors cause assertion events to be logged when their setpoints are reached. When a setpoint condition no longer exists, a corresponding deassertion event is logged. However, not all events are assertion-type events.
- **Integrated management module II (IMM2) event log:** This log contains a filtered subset of all IMM, POST, and system management interrupt (SMI) events. You can view the IMM event log through the IMM web interface. For more information, see “Logging on to the web interface” on page 107. You can also view the IMM event log through the Dynamic System Analysis (DSA) program (as the ASM event log). For more information about IMM error messages, see Appendix A “Integrated management module II (IMM2) error messages” on page 311.
- **DSA event log:** This log is generated by the Dynamic System Analysis (DSA) program, and it is a chronologically ordered merge of the system-event log (as the IPMI event log), the IMM chassis-event log (as the ASM event log), and the operating-system event logs. You can view the DSA event log through the DSA program (see “Viewing event logs without restarting the server” on page 136). For more information about DSA and DSA messages, see “Dynamic System Analysis” on page 137 and Appendix C “DSA diagnostic test results” on page 817.

Viewing event logs through the Setup utility

Use this information to view event logs through the Setup utility.

To view the POST event log or system-event log, complete the following steps:

Step 1. Turn on the server.

Step 2. When the prompt `<F1> Setup` is displayed, press `F1`. If you have set both a power-on password and an administrator password, you must type the administrator password to view the event logs.

Step 3. Select **System Event Logs** and use one of the following procedures:

- To view the POST event log, select **POST Event Viewers**.
- To view the system-event log, select **System Event Log**.

Viewing event logs without restarting the server

If the server is not hung and the IMM is connected to a network, methods are available for you to view one or more event logs without having to restart the server.

If you have installed Dynamic System Analysis (DSA) Portable, you can use it to view the system-event log (as the IPMI event log), or the IMM event log (as the ASM event log), the operating-system event logs, or the merged DSA log. You can also use DSA Preboot to view these logs, although you must restart the server to use DSA Preboot. To install DSA Portable or check for and download a later version of DSA Preboot CD image, go to https://support.lenovo.com/us/ en/documents/LNVO-DSA.

If IPMItool is installed in the server, you can use it to view the system-event log. Most recent versions of the Linux operating system come with a current version of IPMItool. For an overview of IPMI, go to http://www.ibm.com/developerworks/linux/blueprints/ and click **Using Intelligent Platform Management Interface (IPMI) on IBM Linux platforms**.

You can view the IMM event log through the **Event Log** link in the integrated management module II (IMM2) web interface. For more information, see “Logging on to the web interface” on page 107.

The following table describes the methods that you can use to view the event logs, depending on the condition of the server. The first three conditions generally do not require that you restart the server.

Table 16. Methods for viewing event logs

Condition	Action
The server is not hung and is connected to a network (using an operating system controlled network ports).	Use any of the following methods: • Run DSA Portable to view the diagnostic event log (requires IPMI driver) or create an output file that you can send to Lenovo service and support (using ftp or local copy). • Use IPMItool to view the system-event log (requires IPMI driver). • Use the web browser interface to the IMM to view the system-event log locally (requires RNDIS USB LAN driver).
The server is not hung and is not connected to a network (using an operating system controlled network ports).	• Run DSA Portable to view the diagnostic event log (requires IPMI driver) or create an output file that you can send to Lenovo service and support (using ftp or local copy). • Use IPMItool to view the system-event log (requires IPMI driver). • Use the web browser interface to the IMM to view the system-event log locally (requires RNDIS USB LAN driver).

Table 16. Methods for viewing event logs (continued)

Condition	Action
The server is not hung and the integrated management module II (IMM2) is connected to a network.	In a web browser, type the IP address for the IMM2 and go to the **Event Log** page. For more information, see “Obtaining the IMM host name” on page 106 and “Logging on to the web interface” on page 107.
The server is hung, and no communication can be made with the IMM.	• If DSA Preboot is installed, restart the server and press F2 to start DSA Preboot and view the event logs (see “Running the DSA Preboot diagnostic programs” on page 139 for more information). • Alternatively, you can restart the server and press F1 to start the Setup utility and view the POST event log or system-event log. For more information, see “Viewing event logs through the Setup utility” on page 136.

Clearing the event logs

Use this information to clear the event logs.

To clear the event logs, complete the following steps:

Note: The POST error log is automatically cleared each time the server is restarted.

Step 1. Turn on the server.

Step 2. When the prompt <F1> Setup is displayed, press F1. If you have set both a power-on password and an administrator password, you must type the administrator password to view the event logs.

Step 3. To clear the IMM system-event log, select **System Event Logs → Clear System Event Log**, then, press Enter twice.

POST

When you turn on the server, it performs a series of tests to check the operation of the server components and some optional devices in the server. This series of tests is called the power-on self-test, or POST.

Note: This server does not use beep codes for server status.

If a power-on password is set, you must type the password and press Enter (when you are prompted), for POST to run.

If POST detects a problem, an error message is displayed. See Appendix B “UEFI/POST diagnostic codes” on page 793 for more information.

If POST detects a problem, an error message is sent to the POST event log, see “Event logs” on page 135 for more information.

Dynamic System Analysis

Dynamic System Analysis (DSA) collects and analyzes system information to aid in diagnosing server problems.

DSA collects the following information about the server:

- Drive health information
- Event logs for ServeRAID controllers and service processors
- Hardware inventory, including PCI and USB information

- Installed applications and hot fixes (available in DSA Portable only)
- Kernel modules (available in DSA Portable only)
- Light path diagnostics status
- Network interfaces and settings
- Performance data and details about processes that are running
- RAID controller configuration
- Service processor (integrated management module) status and configuration
- System configuration
- Vital product data and firmware information

For system-specific information about the action that you should take as a result of a message that DSA generates, see Appendix C “DSA diagnostic test results” on page 817.

If you cannot find a problem by using DSA, see “Solving undetermined problems” on page 160 for information about testing the server.

Note: DSA Preboot might appear to be unresponsive when you start the program. This is normal operation while the program loads.

Make sure that the server has the latest version of the DSA code. To obtain DSA code and the *Dynamic System Analysis Installation and User's Guide*, go to https://support.lenovo.com/us/en/documents/LNVO-DSA.

DSA editions

Two editions of Dynamic System Analysis are available.

- **DSA Portable**

  DSA Portable Edition runs within the operating system; you do not have to restart the server to run it. It is packaged as a self-extracting file that you download from the web. When you run the file, it self-extracts to a temporary folder and performs comprehensive collection of hardware and operating-system information. After it runs, it automatically deletes the temporary files and folder and leaves the results of the data collection and diagnostics on the server.

  If you are unable to restart the server, use DSA Portable.

- **DSA Preboot**

  DSA Preboot runs outside of the operating system; you must restart the server to run it. It is provided in the flash memory on the server, or you can create a bootable media such as a CD, DVD, ISO, USB, or PXE using the ToolsCenter Bootable Media Creator (BoMC). For more details, see the BoMC *Installation and User's Guide* at https://support.lenovo.com/ us/en/documents/LNVO-BOMC. In addition to the capabilities of the other editions of DSA, DSA Preboot includes diagnostic routines that would be disruptive to run within the operating-system environment (such as resetting devices and causing loss of network connectivity). It has a graphical user interface that you can use to specify which diagnostics to run and to view the diagnostic and data collection results.

  DSA Preboot provides diagnostics for the following system components, if they are installed:

  – Emulex network adapter
  – Optical devices (CD or DVD)
  – Tape drives (SCSI, SAS, or SATA)
  – Memory
  – Microprocessor
  – Checkpoint panel

- I2C bus
- SAS and SATA drives

If you are able to restart the server or if you need comprehensive diagnostics, use DSA Preboot.

For more information and to download the utilities, go to https://support.lenovo.com/us/en/documents/LNVO-DSA.

Running the DSA Preboot diagnostic programs

Use this information to run the DSA Preboot diagnostic programs.

Note: The DSA memory test might take up to 30 minutes to run. If the problem is not a memory problem, skip the memory test.

To run the DSA Preboot diagnostic programs, complete the following steps:

Step 1. If the server is running, turn off the server and all attached devices.

Step 2. Turn on all attached devices; then, turn on the server.

Step 3. When the prompt `<F2> Diagnostics` is displayed, press `F2`.

Note: The DSA Preboot diagnostic program might appear to be unresponsive for an unusual length of time when you start the program. This is normal operation while the program loads. The loading process may take up to 10 minutes.

Step 4. Optionally, select **Quit to DSA** to exit from the stand-alone memory diagnostic program.

Note: After you exit from the stand-alone memory diagnostic environment, you must restart the server to access the stand-alone memory diagnostic environment again.

Step 5. Type **gui** to display the graphical user interface, or type **cmd** to display the DSA interactive menu.

Step 6. Follow the instructions on the screen to select the diagnostic test to run.

If the diagnostic programs do not detect any hardware errors but the problem remains during normal server operation, a software error might be the cause. If you suspect a software problem, see the information that comes with your software.

A single problem might cause more than one error message. When this happens, correct the cause of the first error message. The other error messages usually will not occur the next time you run the diagnostic programs.

If the server stops during testing and you cannot continue, restart the server and try running the DSA Preboot diagnostic programs again. If the problem remains, replace the component that was being tested when the server stopped.

Diagnostic text messages

Diagnostic text messages are displayed while the tests are running.

A diagnostic text message contains one of the following results:

Passed: The test was completed without any errors.

Failed: The test detected an error.

Aborted: The test could not proceed because of the server configuration.

Additional information concerning test failures is available in the extended diagnostic results for each test.

Viewing the test log results and transferring the DSA collection

To view the test log for the results when the tests are completed, click the **Success** link in the Status column, if you are running the DSA graphical user interface, or type `:x` to exit the Execute Tests menu, if you are running the DSA interactive menu, or select **Diagnostic Event Log** in the graphical user interface. To transfer DSA Preboot collections to an external USB device, type the `copy` command in the DSA interactive menu.

- If you are running the DSA graphical user interface (GUI), click the **Success** link in the Status column.
- If you are running the DSA interactive menu (CLI), type `:x` to exit the Execute Tests menu; then, select **completed tests** to view the results.

You can also send the DSA error log to Lenovo support to aid in diagnosing the server problems.

Automated service request (call home)

Lenovo provides tools that can automatically collect and send data or call Lenovo Support when an error is detected. These tools can help Lenovo Support speed up the process of diagnosing problems.

The following sections provide information about the call home tools.

Electronic Service Agent

Electronic Service Agent monitors, tracks, and captures system hardware errors and hardware and software inventory information, and reports serviceable problems directly to Lenovo Support.

You can also choose to collect data manually. It uses minimal system resources, and can be downloaded from the website. For more information and to download Electronic Service Agent, go to http://www-01.ibm.com/support/esa/.

Error messages

This section provides the list of error codes and messages for UEFI/POST, IMM, and DSA that are generated when a problem is detected.

See Appendix B “UEFI/POST diagnostic codes” on page 793, Appendix A “Integrated management module II (IMM2) error messages” on page 311, and Appendix C “DSA diagnostic test results” on page 817 for more information.

Troubleshooting by symptom

Use the troubleshooting tables to find solutions to problems that have identifiable symptoms.

If you cannot find a solution to the problem in these tables, see Appendix C “DSA diagnostic test results” on page 817 for information about testing the server and “Running the DSA Preboot diagnostic programs” on page 139 for additional information about running DSA Preboot program. For additional information to help you solve problems, see “Start here” on page 117.

If you have just added new software or a new optional device and the server is not working, complete the following steps before you use the troubleshooting tables:

Step 1. Check the system-error LED on the operator information panel; if it is lit, check the light path diagnostics LEDs (see “Light path diagnostics” on page 123).

Step 2. Remove the software or device that you just added.

Step 3. Run Dynamic System Analysis (DSA) to determine whether the server is running correctly (for information about using DSA, see Appendix C “DSA diagnostic test results” on page 817).

Step 4. Reinstall the new software or new device.

CD/DVD drive problems

Use this information to solve CD/DVD drive problems.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a Trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
The optional DVD drive is not recognized.	1. Make sure that: • The SATA connector to which the DVD drive is attached (primary or secondary) is enabled in the Setup utility. • All cables and jumpers are installed correctly. • The correct device driver is installed for the DVD drive. 2. Run the DVD drive diagnostic programs. 3. Reseat the following components: a. DVD drive b. DVD drive cable 4. Replace the components listed in step 3 one at a time, in the order shown, restarting the server each time. 5. (Trained technician only) Replace the system board.
A CD or DVD is not working correctly.	1. Clean the CD or DVD. 2. Replace the CD or DVD with new CD or DVD media. 3. Run the DVD drive diagnostic programs. 4. Reseat the DVD drive. 5. Replace the DVD drive.
The DVD drive tray is not working.	1. Make sure that the server is turned on. 2. Insert the end of a straightened paper clip into the manual tray-release opening. 3. Reseat the DVD drive. 4. Replace the DVD drive.

General problems

Use this information to solve general problems.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
A cover latch is broken, an LED is not working, or a similar problem has occurred.	If the part is a CRU, replace it. If the part is a microprocessor or the system board, the part must be replaced by a trained technician.
The server is hung while the screen is on. Cannot start the Setup utility by pressing F1.	1. See "Nx-boot failure" on page 165 for more information. 2. See "Recovering the server firmware (UEFI update failure)" on page 162 for more information.

Hard disk drive problems

Use this information to solve hard disk drive problems.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
A hard disk drive has failed, and the associated yellow hard disk drive status LED is lit.	Replace the failed hard disk drive (see "Removing hot-swap hard disk drives" on page 200 and "Replacing hot-swap hard disk drives" on page 201).
A newly installed hard disk drive is not recognized.	1. Make sure that the installed hard disk drive or ServeRAID adapter is supported. For a list of supported optional devices, see http://www.lenovo.com/serverproven/. 2. Observe the associated yellow hard disk drive status LED. If the LED is lit, it indicates a drive fault. 3. If the LED is lit, remove the drive from the bay, wait 45 seconds, and reinsert the drive, making sure that the drive assembly connects to the hard disk drive backplane. 4. Observe the associated green hard disk drive activity LED and the yellow status LED: • If the green activity LED is flashing and the yellow status LED is not lit, the drive is recognized by the controller and is working correctly. Run the DSA diagnostics program to determine whether the drive is detected. • If the green activity LED is flashing and the yellow status LED is flashing slowly, the drive is recognized by the controller and is rebuilding. • If neither LED is lit or flashing, check the hard disk drive backplane (go to 5). • If the green activity LED is flashing and the yellow status LED is lit, replace the drive. If the activity of the LEDs remains the same, go to 5. If the activity of the LEDs changes, return to 2. 5. Make sure that the hard disk drive backplane is correctly seated. When it is correctly seated, the drive assemblies correctly connect to the backplane without bowing or causing movement of the backplane. 6. Reseat the backplane power cable and repeat steps 2 through 4.

• **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.** • **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.** • **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**	
Symptom	**Action**
	7. Reseat the backplane signal cable and repeat steps 2 through 4. 8. Suspect the backplane signal cable or the backplane: • If the server has eight hot-swap bays: a. Replace the affected backplane signal cable. b. Replace the affected backplane. 9. See "Problem determination tips" on page 161.
Multiple hard disk drives fail.	Make sure that the hard disk drive, SAS/SATA adapter, and server device drivers and firmware are at the latest level. **Important:** Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
Multiple hard disk drives are offline.	1. Review the storage subsystem logs for indications of problems within the storage subsystem, such as backplane or cable problems. 2. See "Problem determination tips" on page 161.
A replacement hard disk drive does not rebuild.	1. Make sure that the hard disk drive is recognized by the adapter (the green hard disk drive activity LED is flashing). 2. Review the SAS/SATA adapter documentation to determine the correct configuration parameters and settings.
A green hard disk drive activity LED does not accurately represent the actual state of the associated drive.	If the green hard disk drive activity LED does not flash when the drive is in use, run the DSA Preboot diagnostic programs to collect error logs (see "Running the DSA Preboot diagnostic programs" on page 139). • If there is a hard disk drive error log, replace the affected hard disk drive. • If there is no disk drive error log error log, replace the affected backplane.
An yellow hard disk drive status LED does not accurately represent the actual state of the associated drive.	1. If the yellow hard disk drive LED and the RAID adapter software do not indicate the same status for the drive, complete the following steps: a. Turn off the server. b. Reseat the SAS/SATA adapter. c. Reseat the backplane signal cable and backplane power cable. d. Reseat the hard disk drive. e. Turn on the server and observe the activity of the hard disk drive LEDs. 2. See "Problem determination tips" on page 161.

Hypervisor problems

Use this information to solve hypervisor problems.

• **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.** • **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.** • **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**	
Symptom	**Action**
If an optional embedded hypervisor flash device is not listed in the expected boot order, does not appear in the list of boot devices, or a similar problem has occurred.	1. Make sure that the optional embedded hypervisor flash device is selected on the boot manager **<F12> Select Boot Device** at startup. 2. Make sure that the embedded hypervisor flash device is seated in the connector correctly (see "Removing a USB embedded hypervisor flash device" on page 270 and "Replacing a USB embedded hypervisor flash device" on page 270). 3. See the documentation that comes with the optional embedded hypervisor flash device for setup and configuration information. 4. Make sure that other software works on the server.

Intermittent problems

Use this information to solve intermittent problems.

• **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.** • **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.** • **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**	
Symptom	**Action**
A problem occurs only occasionally and is difficult to diagnose.	1. Make sure that: • All cables and cords are connected securely to the rear of the server and attached devices. • When the server is turned on, air is flowing from the fan grille. If there is no airflow, the fan is not working. This can cause the server to overheat and shut down. 2. Check the system-error log or IMM event logs (see "Event logs" on page 135).
The server resets (restarts) occasionally.	1. If the reset occurs during POST and the POST watchdog timer is enabled (click **System Settings → Recovery → System Recovery → POST Watchdog Timer** in the Setup utility to see the POST watchdog setting), make sure that sufficient time is allowed in the watchdog timeout value (**POST Watchdog Timer**). If the server continues to reset during POST, see Appendix B "UEFI/POST diagnostic codes" on page 793 and Appendix C "DSA diagnostic test results" on page 817. 2. If neither condition applies, check the system-error log or IMM system-event log (see "Event logs" on page 135).

Keyboard, mouse, or USB-device problems

Use this information to solve keyboard, mouse, or USB-device problems.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
All or some keys on the keyboard do not work.	1. Make sure that: • The keyboard cable is securely connected. • The server and the monitor are turned on. 2. If you are using a USB keyboard, run the Setup utility and enable the operation. 3. If you are using a USB keyboard and it is connected to a USB hub, disconnect the keyboard from the hub and connect it directly to the server. 4. Replace the keyboard.
The mouse or USB-device does not work.	1. Make sure that: • The mouse or USB device cable is securely connected to the server. • The mouse or USB device drivers are installed correctly. • The server and the monitor are turned on. • The mouse option is enabled in the Setup utility. 2. If you are using a USB mouse or USB device and it is connected to a USB hub, disconnect the mouse or USB device from the hub and connect it directly to the server. 3. Replace the mouse or USB-device.

Memory problems

Use this information to solve memory problems.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
The amount of system memory that is displayed is less than the amount of installed physical memory.	**Note:** Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server. 1. Make sure that: • No error LEDs are lit on the operator information panel. • No DIMM error LEDs are lit on the system board. • Memory mirrored channel does not account for the discrepancy. • The memory modules are seated correctly. • You have installed the correct type of memory. • If you changed the memory, you updated the memory configuration in the Setup utility. • All banks of memory are enabled. The server might have automatically disabled a memory bank when it detected a problem, or a memory bank might have been manually disabled.

• **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.** • **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.** • **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**	
Symptom	**Action**
	• There is no memory mismatch when the server is at the minimum memory configuration. 2. Reseat the DIMMs, and then restart the server. 3. Check the POST error log: • If a DIMM was disabled by a systems-management interrupt (SMI), replace the DIMM. • If a DIMM was disabled by the user or by POST, reseat the DIMM; then, run the Setup utility and enable the DIMM. 4. Check that all DIMMs are initialized in the Setup utility; then, run memory diagnostics (see "Running the DSA Preboot diagnostic programs" on page 139). 5. Reverse the DIMMs between the channels (of the same microprocessor), and then restart the server. If the problem is related to a DIMM, replace the failing DIMM. 6. Re-enable all DIMMs using the Setup utility, and then restart the server. 7. (Trained technician only) Install the failing DIMM into a DIMM connector for microprocessor 2 (if installed) to verify that the problem is not the microprocessor or the DIMM connector. 8. (Trained technician only) Replace the system board.
Multiple DIMMs in a channel are identified as failing.	**Note:** Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server. 1. Reseat the DIMMs; then, restart the server. 2. Remove the highest-numbered DIMM of those that are identified and replace it with an identical known good DIMM; then, restart the server. Repeat as necessary. If the failures continue after all identified DIMMs are replaced, go to step 4. 3. Return the removed DIMMs, one at a time, to their original connectors, restarting the server after each DIMM, until a DIMM fails. Replace each failing DIMM with an identical known good DIMM, restarting the server after each DIMM replacement. Repeat step 3 until you have tested all removed DIMMs. 4. Replace the highest-numbered DIMM of those identified; then, restart the server. Repeat as necessary. 5. Reverse the DIMMs between the channels (of the same microprocessor), and then restart the server. If the problem is related to a DIMM, replace the failing DIMM. 6. (Trained technician only) Install the failing DIMM into a DIMM connector for microprocessor 2 (if installed) to verify that the problem is not the microprocessor or the DIMM connector. 7. (Trained technician only) Replace the system board.

Microprocessor problems

Use this information to solve microprocessor problems.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
The server goes directly to the POST Event Viewer when it is turned on.	1. Correct any errors that are indicated by the light path diagnostics LEDs (see "Light path diagnostics" on page 123). 2. Make sure that the server supports all the microprocessors and that the microprocessors match in speed and cache size. To view the microprocessor information, run the Setup utility and select **System Information → System Summary → Processor Details**. 3. (Trained technician only) Make sure that microprocessor 1 is seated correctly. 4. (Trained technician only) Remove microprocessor 2 and restart the server. 5. Replace the following components one at a time, in the order shown, restarting the server each time: a. (Trained technician only) Microprocessor b. (Trained technician only) System board

Monitor and video problems

Use this information to solve monitor and video problems.

Some Lenovo monitors have their own self-tests. If you suspect a problem with your monitor, see the documentation that comes with the monitor for instructions for testing and adjusting the monitor. If you cannot diagnose the problem, call for service.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
Testing the monitor.	1. Make sure that the monitor cables are firmly connected. 2. Try using a different monitor on the server, or try using the monitor that is being tested on a different server. 3. Run the diagnostic programs. If the monitor passes the diagnostic programs, the problem might be a video device driver. 4. (Trained technician only) Replace the system board.
The screen is blank.	1. If the server is attached to a KVM switch, bypass the KVM switch to eliminate it as a possible cause of the problem: connect the monitor cable directly to the correct connector on the rear of the server. 2. The IMM2 remote presence function is disabled if you install an optional video adapter. To use the IMM2 remote presence function, remove the optional video adapter. 3. If the server installed with the graphical adapters while turning on the server, the logo displays on the screen after approximately 3 minutes. This is normal operation while the system loads. 4. Make sure that:

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
	• The server is turned on. If there is no power to the server, see "Power problems" on page 150. • The monitor cables are connected correctly. • The monitor is turned on and the brightness and contrast controls are adjusted correctly. 5. Make sure that the correct server is controlling the monitor, if applicable. 6. Make sure that damaged server firmware is not affecting the video; see "Updating the firmware" on page 93. 7. Observe the checkpoint LEDs on the system board; if the codes are changing, go to step 6. 8. Replace the following components one at a time, in the order shown, restarting the server each time: a. Monitor b. Video adapter (if one is installed) c. (Trained technician only) System board. 9. See "Solving undetermined problems" on page 160.
The monitor works when you turn on the server, but the screen goes blank when you start some application programs.	1. Make sure that: • The application program is not setting a display mode that is higher than the capability of the monitor. • You installed the necessary device drivers for the application. 2. Run video diagnostics (see "Running the DSA Preboot diagnostic programs" on page 139). • If the server passes the video diagnostics, the video is good; see "Solving undetermined problems" on page 160. • (Trained technician only) If the server fails the video diagnostics, replace the system board.
The monitor has screen jitter, or the screen image is wavy, unreadable, rolling, or distorted.	1. If the monitor self-tests show that the monitor is working correctly, consider the location of the monitor. Magnetic fields around other devices (such as transformers, appliances, fluorescents, and other monitors) can cause screen jitter or wavy, unreadable, rolling, or distorted screen images. If this happens, turn off the monitor. **Attention:** Moving a color monitor while it is turned on might cause screen discoloration. Move the device and the monitor at least 305 mm (12 inch) apart, and turn on the monitor. **Notes:** a. To prevent diskette drive read/write errors, make sure that the distance between the monitor and any external diskette drive is at least 76 mm (3 inch). b. Non-Lenovo monitor cables might cause unpredictable problems. 2. Reseat the monitor cable.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
	3. Replace the components listed in step 2 one at a time, in the order shown, restarting the server each time: a. Monitor cable b. Video adapter (if one is installed) c. Monitor d. (Trained technician only) System board.
Wrong characters appear on the screen.	1. If the wrong language is displayed, update the server firmware to the latest level (see "Updating the firmware" on page 93) with the correct language. 2. Reseat the monitor cable. 3. Replace the components listed in step 2 one at a time, in the order shown, restarting the server each time: a. Monitor cable b. Video adapter (if one is installed) c. Monitor d. (Trained technician only) System board.

Network connection problems

Use this information to solve network connection problems.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
Unable to wake the server using the Wake on LAN feature.	1. If you are using the dual-port network adapter and the server is connected to the network using Ethernet 5 connector, check the system-error log or IMM2 system event log (see "Event logs" on page 135), make sure: a. Fan 3 is running in standby mode, if Emulex dual port 10GBase-T embedded adapter is installed. b. The room temperature is not too high (see "Server features and specifications" on page 6). c. The air vents are not blocked. d. The air baffle is installed securely. 2. Reseat the dual-port network adapter (see "Removing the dual-port network adapter" on page 240 and "Replacing the dual-port network adapter" on page 241). 3. Turn off the server and disconnect it from the power source; then, wait 10 seconds before restarting the server.

• **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.** • **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.** • **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**	
Symptom	**Action**
	4. If the problem still remains, replace the dual-port network adapter.
Log in failed by using LDAP account with SSL enabled.	1. Make sure the license key is valid. 2. Generate a new license key and log in again.

Optional-device problems

Use this information to solve optional-device problems.

• **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.** • **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.** • **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**	
Symptom	**Action**
An optional device that was just installed does not work.	1. Make sure that: • The device is designed for the server (see http://www.lenovo.com/serverproven/). • You followed the installation instructions that came with the device and the device is installed correctly. • You have not loosened any other installed devices or cables. • You updated the configuration information in the Setup utility. Whenever memory or any other device is changed, you must update the configuration. 2. Reseat the device that you just installed. 3. Replace the device that you just installed.
An optional device that worked previously does not work now.	1. Make sure that all of the cable connections for the device are secure. 2. If the device comes with test instructions, use those instructions to test the device. 3. If the failing device is a SCSI device, make sure that: • The cables for all external SCSI devices are connected correctly. • The last device in each SCSI chain, or the end of the SCSI cable, is terminated correctly. • Any external SCSI device is turned on. You must turn on an external SCSI device before you turn on the server. 4. Reseat the failing device. 5. Replace the failing device.

Power problems

Use this information to solve power problems.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
The power-control button does not work, and the reset button does not work (the server does not start). **Note:** The power-control button will not function until approximately 5 to 10 seconds after the server has been connected to power.	1. Make sure that the power-control button is working correctly: a. Disconnect the server power cords. b. Reconnect the power cords. c. (Trained technician only) Reseat the operator information panel cable, and then repeat steps a and b. • (Trained technician only) If the server starts, reseat the operator information panel. If the problem remains, replace the operator information panel. • If the server does not start, bypass the power-control button by using the force power-on jumper (see "System-board switches, jumpers, and buttons" on page 27). If the server starts, reseat the operator information panel. If the problem remains, replace the operator information panel. 2. Make sure that the reset button is working correctly: a. Disconnect the server power cords. b. Reconnect the power cords. c. (Trained technician only) Reseat the operator information panel cable, and then repeat steps a and b. • (Trained technician only) If the server starts, replace the operator information panel. • If the server does not start, go to 3. 3. Make sure that both power supplies installed in the server are of the same type. Mixing different power supplies in the server will cause a system error (the system-error LED on the front panel turns on and the PS and CONFIG LEDs on the operator information panel are lit). 4. Make sure that: • The power cords are correctly connected to the server and to a working electrical outlet. • The type of memory that is installed is correct. • The DIMMs are fully seated. • The LEDs on the power supply do not indicate a problem. • The microprocessors are installed in the correct sequence. 5. Reseat the following components: a. Operator information panel connector b. Power supplies 6. Replace the components listed in 5 one at a time, in the order shown, restarting the server each time. 7. If you just installed an optional device, remove it, and restart the server. If the server now starts, you might have installed more devices than the power supply supports. 8. See "Power-supply LEDs" on page 131. 9. See "Solving undetermined problems" on page 160.
The OVER SPEC LED on the light path diagnostics panel is lit, or the Pwr rail 1 error	1. Disconnect the server power cords. 2. (Trained technician only) remove microprocessor 1 if the Pwr rail 1 error has been recorded in the IMM event log.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
has been recorded in the IMM event log.	3. (Trained technician only) replace the system board (see "Removing the system board" on page 302 and "Replacing the system board" on page 306). 4. Reinstall the component; then, restarting the server. If the Pwr rail 1 error has been recorded in the IMM event log again, the component that you just reinstalled is defective. Replace the defective component. • (Trained technician only) Microprocessor 1 (see "Removing a microprocessor and heat sink" on page 287 and "Replacing a microprocessor and heat sink" on page 292). 5. Replace the power supply if the OVER SPEC LED on the light path diagnostics panel is still lit.
The OVER SPEC LED on the light path diagnostics panel is lit, or the Pwr rail 2 error has been recorded in the IMM event log.	1. Disconnect the server power cords. 2. (Trained technician only) remove microprocessor 2 if Pwr rail 2 error has been recorded in the IMM event log. 3. Restart the server. If the Pwr rail 2 error has been recorded in the IMM event log again, (trained technician only) replace the system board (see "Removing the system board" on page 302 and "Replacing the system board" on page 306). 4. Reinstall the component; then, restarting the server. If the Pwr Rail 2 error has been recorded in the IMM event log again, the component that you just reinstalled is defective. Replace the defective component. • (Trained technician only) Microprocessor 2 (see "Removing a microprocessor and heat sink" on page 287 and "Replacing a microprocessor and heat sink" on page 292). 5. Replace the power supply if the OVER SPEC LED on the light path diagnostics panel is still lit.
The OVER SPEC LED on the light path diagnostics panel is lit, or the Pwr rail 3 error has been recorded in the IMM event log.	1. Disconnect the server power cords. 2. Remove the following components if Pwr rail 3 error has been recorded in the IMM2 event log: • Optional adapter (if one is present) installed in PCI riser-card assembly 1 • PCI riser-card assembly 1 • ServeRAID SAS/SATA adapter (if one is present) • DIMMs 1 through 6 3. Restart the server. If the Pwr rail 3 error has been recorded in the IMM event log again, (trained technician only) replace the system board (see "Removing the system board" on page 302 and "Replacing the system board" on page 306). 4. Reinstall the components one at a time, in the order shown, restarting the server each time. If the Pwr rail 3 error has been recorded in the IMM event log again, the component that you just reinstalled is defective. Replace the defective component. • DIMMs 1 through 6 (see "Removing a memory module" on page 215 and "Installing a memory module" on page 45). • ServeRAID SAS/SATA adapter (see "Removing a ServeRAID SAS/SATA controller" on page 232 and "Replacing a ServeRAID SAS/SATA controller" on page 233).

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
	• PCI riser-card assembly 1 (see "Removing a PCI riser-card assembly" on page 222 and "Replacing a PCI riser-card assembly" on page 223). • Optional adapter (if one is present) installed in PCI riser-card assembly 1 (see "Removing an adapter" on page 227 and "Replacing an adapter" on page 228). 5. Follow actions in "Solving power problems" on page 158, if the OVER SPEC LED on the light path diagnostics panel is still lit. 6. Replace the power supply if the OVER SPEC LED on the light path diagnostics panel is still lit.
The OVER SPEC LED on the light path diagnostics panel is lit, or the Pwr rail 4 error has been recorded in the IMM event log.	1. Disconnect the server power cords. 2. Remove the following components if the Pwr rail 4 error has been recorded in the IMM event log: • Optional PCI adapter power cable (if one is present) • Fan 1 • Fan 2 • Hard disk drives • DIMMs 7 through 12 3. Restart the server. If the Pwr rail 4 error has been recorded in the IMM event log again, (trained technician only) replace the system board (see "Removing the system board" on page 302 and "Replacing the system board" on page 306). 4. Reinstall the components one at a time, in the order shown, restarting the server each time. If the Pwr Rail 4 error has been recorded in the IMM event log again, the component that you just reinstalled is defective. Replace the defective component. • DIMMs 7 through 12 (see "Removing a memory module" on page 215 and "Installing a memory module" on page 45). • Hard disk drives • Fan 2 (see "Removing a hot-swap fan" on page 245 and "Replacing a hot-swap fan" on page 246). • Fan 1 • Optional PCI adapter power cable (if one is present) 5. Follow actions in "Solving power problems" on page 158, if the OVER SPEC LED on the light path diagnostics panel is still lit. 6. Replace the power supply if the OVER SPEC LED on the light path diagnostics panel is still lit.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
The OVER SPEC LED on the light path diagnostics panel is lit, or the Pwr rail 5 error has been recorded in the IMM event log.	1. Disconnect the server power cords. 2. Remove the following components if the Pwr rail 5 error has been recorded in the IMM event log: • DVD drive (if one is installed) • Fan 3 • Fan 4 • Hard disk drives • DIMMs 13 through 18 3. Restart the server. If the Pwr rail 5 error has been recorded in the IMM event log again, (trained technician only) replace the system board (see "Removing the system board" on page 302 and "Replacing the system board" on page 306). 4. Reinstall the components one at a time, in the order shown, restarting the server each time. If the Pwr Rail 5 error has been recorded in the IMM event log again, the component that you just reinstalled is defective. Replace the defective component. • DIMMs 13 through 18 (see "Removing a memory module" on page 215 and "Installing a memory module" on page 45). • Hard disk drives • Fan 4 (see "Removing a hot-swap fan" on page 245 and "Installing a memory module" on page 45). • Fan 3 • DVD drive, if one is present (see "Removing a DVD drive" on page 206 and "Replacing a DVD drive" on page 208). 5. Follow actions in "Solving power problems" on page 158, if the OVER SPEC LED on the light path diagnostics panel is still lit. 6. Replace the power supply if the OVER SPEC LED on the light path diagnostics panel is still lit.
The OVER SPEC LED on the light path diagnostics panel is lit, or the Pwr rail 6 error has been recorded in the IMM event log.	1. Disconnect the server power cords. 2. Remove the following components if the Pwr rail 6 error has been recorded in the IMM event log: • Optional adapter (if one is present) installed in PCI riser-card assembly 2 • PCI riser-card assembly 2 • Dual-port network adapter (if one is present) • Fan 5 • Fan 6 • DIMMs 19 through 24 3. Restart the server. If the Pwr rail 6 error has been recorded in the IMM event log again, (trained technician only) replace the system board (see "Removing the system board" on page 302 and "Replacing the system board" on page 306). 4. Reinstall the components one at a time, in the order shown, restarting the server each time. If the Pwr Rail 6 error has been recorded in the IMM event

• **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.** • **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.** • **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**	
Symptom	**Action**
	log again, the component that you just reinstalled is defective. Replace the defective component. • DIMMs 19 through 24 (see "Removing a memory module" on page 215 and "Installing a memory module" on page 45). • Fan 6 (see "Removing a hot-swap fan" on page 245 and "Replacing a hot-swap fan" on page 246). • Fan 5 • Dual-port network adapter, if one is present (see "Removing the dual-port network adapter" on page 240 and "Replacing the dual-port network adapter" on page 241). • PCI riser-card assembly 2 (see "Removing a PCI riser-card assembly" on page 222 and "Replacing a PCI riser-card assembly" on page 223). • Optional adapter (if one is present) installed in PCI riser-card assembly 2 (see "Removing an adapter" on page 227 and "Replacing an adapter" on page 228). 5. Follow actions in "Solving power problems" on page 158, if the OVER SPEC LED on the light path diagnostics panel is still lit. 6. Replace the power supply if the OVER SPEC LED on the light path diagnostics panel is still lit.
The server does not turn off.	1. Determine whether you are using an Advanced Configuration and Power Interface (ACPI) or a non-ACPI operating system. If you are using a non-ACPI operating system, complete the following steps: a. Press `Ctrl+Alt+Delete`. b. Turn off the server by pressing the power-control button and hold it down for 5 seconds. c. Restart the server. d. If the server fails POST and the power-control button does not work, disconnect the power cord for 20 seconds; then, reconnect the power cord and restart the server. 2. If the problem remains or if you are using an ACPI-aware operating system, suspect the system board.
The server unexpectedly shuts down, and the LEDs on the operator information panel are not lit.	See "Solving undetermined problems" on page 160.

Serial-device problems

Use this information to solve serial-device problems.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
The number of serial ports that are identified by the operating system is less than the number of installed serial ports.	1. Make sure that: • Each port is assigned a unique address in the Setup utility and none of the serial ports is disabled. • The serial-port adapter (if one is present) is seated correctly. 2. Reseat the serial port adapter. 3. Replace the serial port adapter.
A serial device does not work.	1. Make sure that: • The device is compatible with the server. • The serial port is enabled and is assigned a unique address. • The device is connected to the correct connector (see "System-board internal connectors" on page 26). 2. Reseat the following components: a. Failing serial device b. Serial cable 3. Replace the components listed in 2 one at a time, in the order shown, restarting the server each time. 4. (Trained technician only) Replace the system board.

ServerGuide problems

Use this information to solve ServerGuide problems.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
The *ServerGuide Setup and Installation* CD will not start.	1. Make sure that the server supports the ServerGuide program and has a startable (bootable) CD or DVD drive. 2. If the startup (boot) sequence settings have been changed, make sure that the CD or DVD drive is first in the startup sequence. 3. If more than one CD or DVD drive is installed, make sure that only one drive is set as the primary drive. Start the CD from the primary drive.
The MegaRAID Storage Manager program cannot view all installed drives, or the operating system cannot be installed.	1. Make sure that the hard disk drive is connected correctly. 2. Make sure that the SAS/SATA hard disk drive cables are securely connected.
The operating-system installation program continuously loops.	Make more space available on the hard disk.

• **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.** • **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.** • **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**	
Symptom	**Action**
The ServerGuide program will not start the operating-system CD.	Make sure that the operating-system CD is supported by the ServerGuide program. For a list of supported operating-system versions, go to http://www.ibm.com/support/entry/portal/ docdisplay?lndocid=SERV-GUIDE, click the link for your ServerGuide version, and scroll down to the list of supported Microsoft Windows operating systems.
The operating system cannot be installed; the option is not available.	Make sure that the server supports the operating system. If it does, either no logical drive is defined (SCSI RAID servers), or the ServerGuide System Partition is not present. Run the ServerGuide program and make sure that setup is complete.

Software problems

Use this information to solve software problems.

• **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.** • **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.** • **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**	
Symptom	**Action**
You suspect a software problem.	1. To determine whether the problem is caused by the software, make sure that: • The server has the minimum memory that is needed to use the software. For memory requirements, see the information that comes with the software. If you have just installed an adapter or memory, the server might have a memory-address conflict. • The software is designed to operate on the server. • Other software works on the server. • The software works on another server. 2. If you received any error messages when using the software, see the information that comes with the software for a description of the messages and suggested solutions to the problem. 3. Contact the software vendor.

Universal Serial Bus (USB) port problems

Use this information to USB port problems.

- **Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.**
- **If an action step is preceded by "(Trained technician only)," that step must be performed only by a trained technician.**
- **Go to the support website at http://www.lenovo.com/support to check for technical information, hints, tips, and new device drivers or to submit a request for information.**

Symptom	Action
A USB device does not work.	1. Make sure that: • The correct USB device driver is installed. • The operating system supports USB devices. 2. Make sure that the USB configuration options are set correctly in the Setup utility (see "Using the Setup utility" on page 97 for more information). 3. If you are using a USB hub, disconnect the USB device from the hub and connect it directly to the server.

Video problems

Use this information to solve video problems.

See "Monitor and video problems" on page 147.

Solving power problems

Use this information to solve power problems.

Power problems can be difficult to solve. For example, a short circuit can exist anywhere on any of the power distribution buses. Usually, a short circuit will cause the power subsystem to shut down because of an overcurrent condition. To diagnose a power problem, use the following general procedure:

Step 1. Turn off the server and disconnect all power cords.

Step 2. Check for loose cables in the power subsystem. Also check for short circuits, for example, if a loose screw is causing a short circuit on a circuit board.

Step 3. Check the lit LEDs on the light path diagnostics panel (see "Light path diagnostics LEDs" on page 126).

Step 4. If the check log LED on the light path diagnostics panel is lit, check the IMM event log for faulty Pwr rail and complete the following steps. Table 17 "Components associated with power rail errors" on page 159 identifies the components that are associated with each Pwr rail and the order in which to troubleshoot the components.

   a. Disconnect the cables and power cords to all internal and external devices (see "Internal cable routing and connectors" on page 181). Leave the power-supply cords connected.

   b. For Pwr rail 1 error, complete the following steps:

      1. (Trained technician only) Replace the system board.
      2. (Trained technician only) Replace the microprocessor.

   c. For other rail errors (Pwr rail 1 error, see Step b), remove each component that is associated with the faulty Pwr rail, one at a time, in the sequence indicated in Table 17 "Components associated with power rail errors" on page 159, restarting the server each time, until the cause of the overcurrent condition is identified.

Table 17. Components associated with power rail errors

Pwr rail error in the IMM event log	Components
Pwr rail 1 error	• Microprocessor 1
Pwr rail 2 error	• Microprocessor 2
Pwr rail 3 error	• Optional adapter (if one is installed) in PCI riser-card assembly 1 • PCI riser-card assembly 1 • ServeRAID SAS/SATA adapter • DIMMs 1 through 6
Pwr rail 4 error	• PCI adapter power cable (if one is installed) • Fan 1 • Fan 2 • Hard disk drives • DIMMs 7 through 12
Pwr rail 5 error	• DVD drive (if one is installed) • Fan 3 • Fan 4 • Hard disk drives • DIMMs 13 through 18
Pwr rail 6 error	• Optional adapter (if one is installed) in PCI riser-card assembly 2 • PCI riser-card assembly 2 • Dual-port network adapter (if one is installed) • Fan 5 • Fan 6 • DIMMs 19 through 24

d. Replace the identified component.

Step 5. Remove the adapters and disconnect the cables and power cords to all internal and external devices until the server is at the minimum configuration that is required for the server to start (see “Power-supply LEDs” on page 131 for the minimum configuration).

Step 6. Reconnect all power cords and turn on the server. If the server starts successfully, reseat the adapters and devices one at a time until the problem is isolated.

If the server does not start from the minimum configuration, see “Power-supply LEDs” on page 131 to replace the components in the minimum configuration one at a time until the problem is isolated.

Solving Ethernet controller problems

The method that you use to test the Ethernet controller depends on which operating system you are using. See the operating-system documentation for information about Ethernet controllers, and see the Ethernet controller device-driver readme file.

Try the following procedures:

Step 1. Make sure that the correct device drivers, which come with the server are installed and that they are at the latest level.

Step 2. Make sure that the Ethernet cable is installed correctly.

- The cable must be securely attached at all connections. If the cable is attached but the problem remains, try a different cable.
- If you set the Ethernet controller to operate at 100 Mbps, you must use Category 5 cabling.
- If you directly connect two servers (without a hub), or if you are not using a hub with X ports, use a crossover cable. To determine whether a hub has an X port, check the port label. If the label contains an X, the hub has an X port.

Step 3. Determine whether the hub supports auto-negotiation. If it does not, try configuring the integrated Ethernet controller manually to match the speed and duplex mode of the hub.

Step 4. Check the Ethernet controller LEDs on the rear panel of the server. These LEDs indicate whether there is a problem with the connector, cable, or hub.

- The Ethernet link status LED is lit when the Ethernet controller receives a link pulse from the hub. If the LED is off, there might be a defective connector or cable or a problem with the hub.
- The Ethernet transmit/receive activity LED is lit when the Ethernet controller sends or receives data over the Ethernet network. If the Ethernet transmit/receive activity is off, make sure that the hub and network are operating and that the correct device drivers are installed.

Step 5. Check the LAN activity LED on the rear of the server. The LAN activity LED is lit when data is active on the Ethernet network. If the LAN activity LED is off, make sure that the hub and network are operating and that the correct device drivers are installed.

Step 6. Check for operating-system-specific causes of the problem.

Step 7. Make sure that the device drivers on the client and server are using the same protocol.

If the Ethernet controller still cannot connect to the network but the hardware appears to be working, the network administrator must investigate other possible causes of the error.

Solving undetermined problems

If Dynamic System Analysis (DSA) did not diagnose the failure or if the server is inoperative, use the information in this section.

If you suspect that a software problem is causing failures (continuous or intermittent), see “Software problems” on page 157.

Corrupted data in CMOS memory or corrupted UEFI firmware can cause undetermined problems. To reset the CMOS data, use the CMOS clear jumper (JP1) to clear the CMOS memory and override the power-on password; see Table 2 “System board jumpers” on page 28 for more information. If you suspect that the UEFI firmware is corrupted, see “Recovering the server firmware (UEFI update failure)” on page 162.

If the power supplies are working correctly, complete the following steps:

Step 1. Turn off the server.

Step 2. Make sure that the server is cabled correctly.

Step 3. Remove or disconnect the following devices, one at a time, until you find the failure. Turn on the server and reconfigure it each time.

- Any external devices.
- Surge-suppressor device (on the server).
- Printer, mouse, and non-Lenovo devices.
- Each adapter.
- Hard disk drives.
- Memory modules. The minimum configuration requirement is 2 GB DIMM in slot 1.

Step 4. Turn on the server.

If the problem is solved when you remove an adapter from the server but the problem recurs when you reinstall the same adapter, suspect the adapter; if the problem recurs when you replace the adapter with a different one, suspect the riser card.

If you suspect a networking problem and the server passes all the system tests, suspect a network cabling problem that is external to the server.

Problem determination tips

Because of the variety of hardware and software combinations that can encounter, use the following information to assist you in problem determination. If possible, have this information available when requesting assistance from Lenovo.

The model name and serial number are located on the ID label on the front of the server as shown in the following illustration.

Note: The illustrations in this document might differ slightly from your hardware.

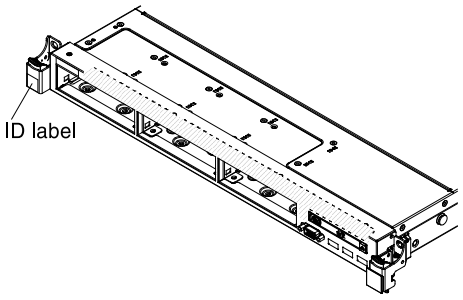

Figure 92. ID label

- Machine type and model
- Microprocessor or hard disk drive upgrades
- Failure symptom
  - Does the server fail the diagnostic tests?
  - What occurs? When? Where?
  - Does the failure occur on a single server or on multiple servers?
  - Is the failure repeatable?
  - Has this configuration ever worked?
  - What changes, if any, were made before the configuration failed?
  - Is this the original reported failure?
- Diagnostic program type and version level
- Hardware configuration (print screen of the system summary)
- UEFI firmware level
- IMM firmware level
- Operating system software

You can solve some problems by comparing the configuration and software setups between working and nonworking servers. When you compare servers to each other for diagnostic purposes, consider them identical only if all the following factors are exactly the same in all the servers:

- Machine type and model
- UEFI firmware level
- IMM firmware level
- Adapters and attachments, in the same locations
- Address jumpers, terminators, and cabling
- Software versions and levels
- Diagnostic program type and version level
- Configuration option settings
- Operating-system control-file setup

See Appendix D “Getting help and technical assistance” on page 975 for information about calling Lenovo for service.

Recovering the server firmware (UEFI update failure)

Use this information to recover the server firmware.

Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

If the server firmware has become corrupted, such as from a power failure during an update, you can recover the server firmware in the following way:

- **In-band method:** Recover server firmware, using either the boot block jumper (Automated Boot Recovery) and a server Firmware Update Package Service Pack.
- **Out-of-band method:** Use the IMM web interface to update the firmware, using the latest server firmware update package.

Notes: You can obtain a server update package from one of the following sources:

- Download the server firmware update from the World Wide Web.
- Contact your service representative.

To download the server firmware update package from the World Wide Web, go to http://www.lenovo.com/support.

The flash memory of the server consists of a primary bank and a backup bank. You must maintain a bootable UEFI firmware image in the backup bank. If the server firmware in the primary bank becomes corrupted, you can either manually boot the backup bank with the UEFI boot backup jumper (JP2), or in the case of image corruption, this will occur automatically with the Automated Boot Recovery function.

In-band manual recovery method

Use this information to recover the server firmware and restore the server operation to the primary bank.

To recover the server firmware and restore the server operation to the primary bank, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server, and disconnect all power cords and external cables.

Step 3. Remove the cover (see “Removing the cover” on page 34).

Step 4. Locate the UEFI boot backup jumper (JP2) on the system board.

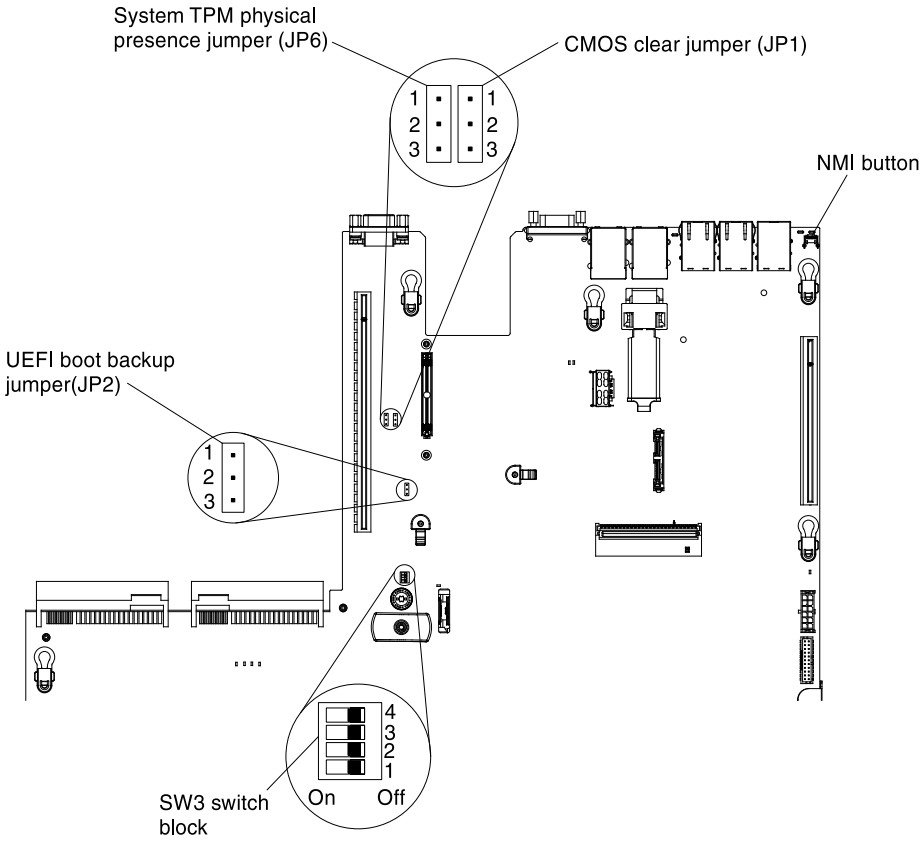

Figure 93. UEFI boot backup jumper (JP2) location

Step 5. Move the UEFI boot backup jumper (JP2) from pins 1 and 2 to pins 2 and 3 to enable the UEFI recovery mode.

Step 6. Reinstall the server cover; then, reconnect all power cords.

Step 7. Restart the server. The system begins the power-on self-test (POST).

Step 8. Boot the server to an operating system that is supported by the firmware update package that you downloaded.

Step 9. Perform the firmware update by following the instructions that are in the firmware update package readme file.

Step 10. Turn off the server and disconnect all power cords and external cables, and then remove the cover (see “Removing the cover” on page 34).

Step 11. Move the UEFI boot backup jumper (JP2) from pins 2 and 3 back to the primary position (pins 1 and 2).

Step 12. Reinstall the cover (see “Replacing the cover” on page 192).

Step 13. Reconnect the power cord and any cables that you removed.

Step 14. Restart the server. The system begins the power-on self-test (POST). If this does not recover the primary bank, continue with the following steps.

Step 15. Remove the cover (see “Removing the cover” on page 34).

Step 16. Reset the CMOS by removing the system battery (see “Removing the system battery” on page 271).

Step 17. Leave the system battery out of the server for approximately 5 to 15 minutes.

Step 18. Reinstall the system battery (see “Replacing the system battery” on page 273).

Step 19. Reinstall the cover (see “Replacing the cover” on page 192).

Step 20. Reconnect the power cord and any cables that you removed.

Step 21. Restart the server. The system begins the power-on self-test (POST).

Step 22. If these recovery efforts fail, contact your service representative for support.

In-band automated boot recovery method

Use this information to recover the server firmware and restore the server operation to the primary bank.

Note: Use this method if the BOARD LED on the light path diagnostics panel is lit and there is a log entry or `Booting Backup Image` is displayed on the firmware splash screen; otherwise, use the in-band manual recovery method.

Step 1. Boot the server to an operating system that is supported by the firmware update package that you downloaded.

Step 2. Perform the firmware update by following the instructions that are in the firmware update package readme file.

Step 3. Restart the server.

Step 4. At the firmware splash screen, press F3 when prompted to restore to the primary bank. The server boots from the primary bank.

Out-of-band method

Use this information to recover the server firmware and restore the server operation to the primary bank.

See the IMM2 documentation (*Integrated Management Module II User's Guide*) at http://publib.boulder.ibm.com/infocenter/ systemx/documentation/topic/ com.lenovo.sysx.imm2.doc/ printable_doc.html.

Automated boot recovery (ABR)

While the server is starting, if the integrated management module II detects problems with the server firmware in the primary bank, the server automatically switches to the backup firmware bank and gives you the opportunity to recover the firmware in the primary bank.

For instructions for recovering the UEFI firmware, see “Recovering the server firmware (UEFI update failure)” on page 162. After you have recovered the firmware in the primary bank, complete the following steps:

Step 1. Restart the server.

Step 2. When the prompt `Press F3 to restore to primary` is displayed, press F3 to start the server from the primary bank.

Nx-boot failure

Configuration changes, such as added devices or adapter firmware updates, and firmware or application code problems can cause the server to fail POST (the power-on self-test).

If this occurs, the server responds in either of the following ways:

- The server restarts automatically and attempts POST again.
- The server hangs, and you must manually restart the server for the server to attempt POST again.

After a specified number of consecutive attempts (automatic or manual), the Nx-boot failure feature causes the server to revert to the default UEFI configuration and start the Setup utility so that you can make the necessary corrections to the configuration and restart the server. If the server is unable to successfully complete POST with the default configuration, there might be a problem with the system board.

To specify the number of consecutive restart attempts that will trigger the Nx-boot failure feature, in the Setup utility, click **System Settings → Recovery → POST Attempts → POST Attempts Limit**. The available options are 3, 6, 9, and 255 (disable Nx-boot failure).

Chapter 5. Parts listing, Lenovo System x3550 M4 Type 7914

The following replaceable components are available for the Lenovo System x3550 M4 Type 7914 server.

For an updated parts listing, go to http://www.lenovo.com/support.

Replaceable server components

Replaceable components consist of consumable parts, structural parts, and field replaceable units (FRUs).

- **Structural parts:** Purchase and replacement of structural parts (components, such as chassis assembly, top cover, and bezel) is your responsibility. If Lenovo acquires or installs a structural component at your request, you will be charged for the service. See “Structural parts” on page 177 for the list of structural parts.
- **Tier 1 customer replaceable unit (CRU):** Replacement of Tier 1 CRUs is your responsibility. If Lenovo installs a Tier 1 CRU at your request, you will be charged for the installation.
- **Tier 2 customer replaceable unit:** You may install a Tier 2 CRU yourself or request Lenovo to install it, at no additional charge, under the type of warranty service that is designated for your server.

For information about the terms of the warranty and getting service and assistance, see the *Warranty Information* document that comes with the server. For more information about getting service and assistance, see Appendix D “Getting help and technical assistance” on page 975.

The following illustration shows the major components in the server. The illustrations in this document might differ slightly from your hardware. For a list of structural parts, see “Structural parts” on page 177.

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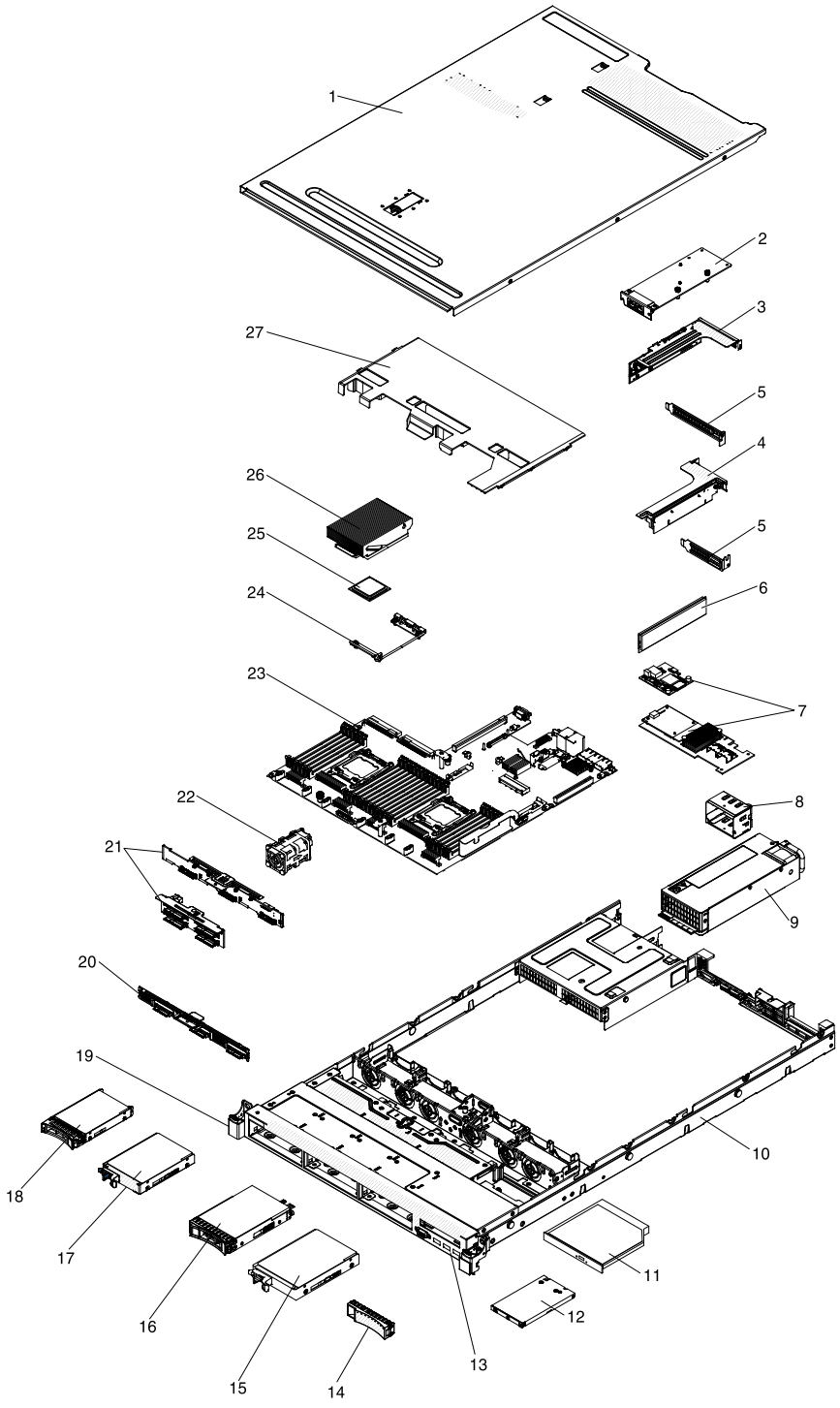

Figure 94. Server components

The following table lists the part numbers for the server replaceable components.

Table 18. Parts listing, Type 7914

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
2	Mellanox ConnectX-3 dual-port QDR/FDR10 mezz card	90Y4956	
2	Qlogic dual-port 10GbE SFP+ Embedded VFA	90Y5099	
2	Emulex dual-port 10GbE SFP+ Embedded VFA III	90Y5100	
2	Emulex dual port 10GbE SFP+ Embedded VFA IIIr	00Y7731	
2	Dual-port FDR embedded adapter	00J6248	
3	PCI bracket 2	94Y7566	
3	PCI Express riser card, Gen3 x8 (full-height/half-length slot)	94Y7589	
3	PCI-X riser card (full-height/half-length slot)	94Y7590	
3	PCI Express riser card, Gen3 x16 (full-height/half-length slot)	94Y7591	
4	PCI bracket 1	00AM326	
4	PCI Express riser card, Gen3 x16 (low-profile slot)	94Y7588	
6	Memory, 2 GB single-rank 1.35 V, DDR3, 1333MHz, RDIMM	49Y1423	
6	Memory, 4 GB single-rank 1.35 V, DDR3, 1333MHz, RDIMM	49Y1424	
6	Memory, 4 GB single-rank 1.35 V, DDR3, 1600MHz, RDIMM	00D5026	
6	Memory, 4 GB single-rank 1.5 V, DDR3, 1600MHz, RDIMM	49Y1561	
6	Memory, 4 GB single-rank 1.5 V, DDR3, 1866MHz, RDIMM	00D5022	
6	Memory, 4 GB dual-rank 1.35 V, DDR3, 1333MHz, UDIMM	49Y1422	
6	Memory, 4 GB dual-rank 1.35 V, DDR3, 1333MHz, RDIMM	49Y1425	
6	Memory, 4 GB dual-rank 1.5 V, DDR3, 1600MHz, RDIMM	90Y3180	
6	Memory, 8 GB single-rank 1.35 V, DDR3, 1600MHz, RDIMM	00D5038	
6	Memory, 8 GB single-rank 1.5 V, DDR3, 1866MHz, RDIMM	00D5034	
6	Memory, 8 GB dual-rank 1.35 V, DDR3, 1333MHz, RDIMM	49Y1415	
6	Memory, 8 GB dual-rank 1.5 V, DDR3, 1600MHz, RDIMM	90Y3111	
6	Memory, 8 GB dual-rank 1.5 V, DDR3, 1866MHz, RDIMM	00D5042	
6	Memory, 8 GB quad-rank 1.35 V, DDR3, 1333MHz, RDIMM	49Y1417	
6	Memory, 16 GB dual-rank 1.35 V, DDR3, 1333MHz, RDIMM	49Y1565	
6	Memory, 16 GB dual-rank 1.5 V, DDR3, 1600MHz, RDIMM	00D4970	
6	Memory, 16 GB dual-rank 1.5 V, DDR3, 1866MHz, RDIMM	46W0670	
6	Memory, 16 GB (1x16GB, 2Rx4, 1.35V) 1600MHz LP RDIMM	46W0674	
6	Memory, 32 GB dual-rank 1.35 V, DDR3, 1333MHz, LRDIMM	90Y3107	
6	Memory, 32 GB quad-rank 1.5 V, DDR3, 1866MHz, LRDIMM	46W0763	
7	6Gb performance optimized HBA	46C8937	
7	ServeRAID H1110 SAS/SATA adapter	81Y4494	
7	ServeRAID M1115 SAS/SATA adapter	46C8928	
7	ServeRAID M5100 series 512 MB cache (RAID 5 upgrade)	81Y4485	
7	ServeRAID M5100 series 512 MB flash (RAID 5 upgrade)	46C9027	

Table 18. Parts listing, Type 7914 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
7	ServeRAID M5100 series 1 GB flash (RAID 5 upgrade)	46C9029	
7	ServeRAID M5200 Series 1 GB Cahe (RAID 5 Upgrade)	47C8657	
7	ServeRAID M5200 Series 1 GB Flash (RAID 5 Upgrade)	47C8661	
7	ServeRAID M5200 Series 2 GB Flash (RAID 5 Upgrade)	47C8665	
7	ServeRAID M5110 SAS/SATA adapter	00AE807	
7	ServeRAID M5120 SAS/SATA adapter	00AE811	
7	ServeRAID M5210 SAS/SATA adapter	46C9111	
9	Power supply (Acbel), 550 Watt, ac	94Y8105	
9	Power supply (Emerson), 550 Watt	94Y8065	
9	Power supply, 550 Watt	94Y8110	
9	Power supply, 550 Watt	94Y8112	
9	Power supply (Emerson), 750 Watt, ac (This part is interchangeable with part number 94Y8079)	94Y8071	
9	Power supply (Delta), 750 Watt, ac (This part is interchangeable with part number 94Y8071)	94Y8079	
9	Power supply (Emerson), 750 Watt, dc	69Y5742	
9	Power supply, 750 Watt	69Y5872	
9	Power supply, 750 Watt	94Y8114	
9	Power supply, 750 Watt	94Y8116	
11	DVD-ROM drive	44W3254	
11	DVD-RW drive	44W3256	
12	Operator information panel assembly	90Y5821	
12	Operator information panel assembly, advanced	00AM393	
	USB assembly, front	00J6143	
	USB assembly, front dual-port	00J6144	
13	Bezel, 2.5-inch hard disk bays and 1 optical drive bay	94Y7606	
13	Bezel, 3.5-inch hard disk bays	94Y7607	
15	Hard disk drive, 3.5-inch simple-swap, 500 GB, 7.2 K	81Y9803	
15	Hard disk drive, 3.5-inch simple-swap, Near-Line SATA, 1 TB, 7.2 K	81Y9807	
15	Hard disk drive, 3.5-inch simple-swap, 2 TB, 7.2 K	81Y9811	
15	Hard disk drive, 3.5-inch simple-swap, 3 TB, 7.2 K	81Y9815	
15	Hard disk drive, 3.5-inch simple-swap, 4 TB, 7.2 K	49Y6013	
16	Hard disk drive, 3.5-inch hot-swap, 300 GB, 15 K	49Y6093	
16	Hard disk drive, 3.5-inch hot-swap, 500 GB, 7.2 K	81Y9787	
16	Hard disk drive, 3.5-inch hot-swap, 600 GB, 15 K	49Y6103	
16	Hard disk drive, 3.5-inch hot-swap, Near-Line SATA, 1 TB, 7.2 K	81Y9791	
16	Hard disk drive, 3.5-inch hot-swap, 2 TB, 7.2 K	81Y9795	

Table 18. Parts listing, Type 7914 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
16	Hard disk drive, 3.5-inch hot-swap, 3 TB, 7.2 K	81Y9799	
16	Hard disk drive, 3.5-inch hot-swap, 4 TB, 7.2 K	49Y6003	
16	Hard disk drive, 3.5-inch hot-swap, 1 TB, 7.2 K	90Y8568	
16	Hard disk drive, 3.5-inch hot-swap, 2 TB, 7.2 K	90Y8573	
16	Hard disk drive, 3.5-inch hot-swap, 3 TB, 7.2 K	90Y8578	
17	Solid state drive, 2.5-inch simple-swap, SATA, 100 GB	00W1131	
17	Solid state drive, 2.5-inch simple-swap, SATA, 120 GB	00AJ376	
17	Solid state drive, 2.5-inch simple-swap, SATA, 128 GB	90Y8669	
17	Solid state drive, 2.5-inch simple-swap, SATA, 200 GB	43W7745	
17	Solid state drive, 2.5-inch simple-swap, SATA, 240 GB	00AJ381	
17	Solid state drive, 2.5-inch simple-swap, SATA, 256 GB	90Y8664	
17	Solid state drive, 2.5-inch simple-swap, SATA, 480 GB	00AJ386	
17	Solid state drive, 2.5-inch simple-swap, SATA, 800 GB	00AJ391	
18	Solid state drive, 2.5-inch hot-swap, SATA, 64 GB	49Y5840	
18	Solid state drive, 2.5-inch hot-swap, SATA, 100GB	00W1126	
18	Solid state drive, 2.5-inch hot-swap, SATA, 120GB	00AJ356	
18	Solid state drive, 2.5-inch hot-swap, SATA, 128 GB	90Y8649	
18	Solid state drive, 2.5-inch hot-swap, SAS, 200 GB	49Y6130	
18	Solid state drive, 2.5-inch hot-swap, SATA, 200 GB	43W7721	
18	Solid state drive, 2.5-inch hot-swap, SATA, 240 GB	00AJ361	
18	Solid state drive, 2.5-inch hot-swap, SATA, 256 GB	90Y8644	
18	Solid state drive, 2.5-inch hot-swap, SAS, 400 GB	49Y6135	
18	Solid state drive, 2.5-inch hot-swap, SATA, 480 GB	00AJ366	
18	Solid state drive, 2.5-inch hot-swap, SATA, 512 GB	49Y5845	
18	Solid state drive, 2.5-inch hot-swap, SATA, 800 GB	00AJ371	
18	Solid state drive, 2.5-inch hot-swap, SAS, 800 GB	49Y6140	
18	Solid state drive, 2.5-inch hot-swap, enterprise entry, SATA, 120GB	00YC366	
18	Solid state drive, 2.5-inch hot-swap, enterprise entry, SATA, 240 GB	00YC371	
18	Solid state drive, 2.5-inch hot-swap, enterprise entry, SATA, 480 GB	00YC376	
18	Solid state drive, 2.5-inch hot-swap, enterprise entry, SATA, 960 GB	00YC381	
18	Hard disk drive, 2.5-inch hot-swap, 900 GB, 10 K	81Y9651	
18	Hard disk drive, 2.5-inch hot-swap, 300 GB, 15 K	81Y9671	
18	Hard disk drive, 2.5-inch hot-swap, 1 TB, 7.2 K	81Y9691	
18	Hard disk drive, 2.5-inch hot-swap, 250 GB, 7.2 K	81Y9723	
18	Hard disk drive, 2.5-inch hot-swap, 500 GB, 7.2 K	81Y9727	
18	Hard disk drive, 2.5-inch hot-swap, 1 TB, 7.2 K	81Y9731	

Table 18. Parts listing, Type 7914 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
18	Hard disk drive, 2.5-inch hot-swap, 600 GB, 10 K	90Y8873	
18	Hard disk drive, 2.5-inch hot-swap, 300 GB, 10 K	90Y8878	
18	Hard disk drive, 2.5-inch hot-swap, 300 GB, 10 K, SED	90Y8914	
18	Hard disk drive, 2.5-inch hot-swap, 146 GB, 15 K	90Y8927	
18	Hard disk drive, 2.5-inch hot-swap, 146 GB, 15 K, SED	90Y8945	
18	Hard disk drive, 2.5-inch hot-swap, 500 GB, 7.2 K	90Y8954	
18	Hard disk drive, 2.5-inch hot-swap, 600 GB, 10 K, SED	90Y8909	
18	Hard disk drive, 2.5-inch hot-swap, 900 GB, 10 K, SED	81Y9663	
20	Backplate assembly, 3.5-inch simple-swap hard disk drive	94Y7611	
21	Backplane, 3.5-inch hot-swap hard disk drive	90Y5088	
21	Backplane, 2.5-inch hot-swap hard disk drive	94Y7587	
22	Fan module, hot-swap	94Y7564	
23	System board (Server base assembly for use with Intel Xeon Processor E5-2600 series) Machine Type 7914 - A2Y, B2Y, C2Y, C4Y, D2Y, 52Y,62Y, E1Y, E2Y, E3Y, E4Y, E5Y, EAY, EBY, ECY, EDY, F2Y, G2Y, H2Y, J2Y, L2Y, 32Y ,DDY, M2Y, EMY, ENY		01GR491/ 01GR492
23	System board (Server base assembly for use with Intel Xeon Processor E5-2600 V2 series) Machine Type 7914 - 23Y, 33Y, 43Y, 53Y, 73Y, 83Y, A3Y, B3Y, C3Y, C5Y, D3Y, E6Y, E7Y, E8Y, E9Y, EFY, EGY, EHY, EJY, EKY, ELY, EOY, EPY, EQY, ESY, ETY, EVY, EWY, F3Y, G3Y, H3Y, J3Y, L3Y, M3Y, CCY, CEY, ERY, EUY, EXY, EYY, EZY		01GR493
23	System board, Baidu		00KA904
24	Retention module, heat sink		94Y7739
25	Microprocessor, Intel E5-2630L v2, 2.4 GHz, 15 MB, 600 MHz, 60 W (6-core)		00Y2792
25	Microprocessor, Intel E5-2628L v2, 1.9 GHz, 20 MB, 1600 MHz, 70 W (8-core)		00AE525
25	Microprocessor, Intel E5-2648L v2, 1.9 GHz, 25 MB, 1866 MHz, 70 W (10-core)		00AE523
25	Microprocessor, Intel E5-2650L v2, 1.7 GHz, 25 MB, 1600 MHz, 70 W (10-core)		00Y2793
25	Microprocessor, Intel E5-2603 v2, 1.8 GHz, 10 MB, 1333 MHz, 80 W (4-core)		00Y2778
25	Microprocessor, Intel E5-2609 v2, 2.5 GHz, 10 MB, 1333 MHz, 80 W (4-core)		00Y2779
25	Microprocessor, Intel E5-2620 v2, 2.1 GHz, 15 MB, 1600 MHz, 80 W (6-core)		00Y2780
25	Microprocessor, Intel E5-2630 v2, 2.6 GHz, 15 MB, 1600 MHz, 80 W (6-core)		00Y2781

Table 18. Parts listing, Type 7914 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
25	Microprocessor, Intel E5-2640 v2, 2.0 GHz, 20 MB, 1600 MHz, 95 W (8-core)		00Y2782
25	Microprocessor, Intel E5-2650 v2, 2.6 GHz, 20 MB, 1866 MHz, 95 W (8-core)		00Y2783
25	Microprocessor, Intel E5-2660 v2, 2.2 GHz, 25 MB, 1866 MHz, 95 W (10-core)		00Y2784
25	Microprocessor, Intel E5-2670 v2, 2.5 GHz, 25 MB, 1866 MHz, 115 W (10-core)		00Y2785
25	Microprocessor, Intel E5-2680 v2, 2.8 GHz, 25 MB, 1866 MHz, 115 W (10-core)		00Y2786
25	Microprocessor, Intel E5-2695 v2, 2.4 GHz, 30 MB, 1866 MHz, 115 W (12-core)		00Y2776
25	Microprocessor, Intel E5-2637 v2, 3.5 GHz, 15 MB, 1866 MHz, 130 W (4-core)		00Y2789
25	Microprocessor, Intel E5-2643 v2, 3.5 GHz, 25 MB, 1866 MHz, 130 W (6-core)		00Y2790
25	Microprocessor, Intel E5-2667 v2, 3.3 GHz, 25 MB, 1866 MHz, 130 W (8-core)		00Y2791
25	Microprocessor, Intel E5-2690 v2, 3.0 GHz, 25 MB, 1866 MHz 130 W (10-core)		00Y2787
25	Microprocessor, Intel E5-2697 v2, 2.7 GHz, 30 MB, 1866 MHz, 130 W (12-core)		00Y2777
25	Microprocessor, Intel Xeon E5-2637, 3.00 GHz, 5 MB, 1066 MHz, 80 W (2-core)		49Y8124
25	Microprocessor, Intel Xeon E5-2665, 2.40 GHz, 20 MB, 115 W (8-core)		49Y8142
25	Microprocessor, Intel Xeon E5-2650L, 1.80 GHz, 20 MB, 1600 MHz, 70 W (8-core)		81Y5160
25	Microprocessor, Intel Xeon E5-2603, 1.80 GHz, 10 MB, 1066 MHz, 80 W (4-core)		81Y5161
25	Microprocessor, Intel Xeon E5-2609, 2.40 GHz, 10 MB, 1066 MHz, 80 W (4-core)		81Y5163
25	Microprocessor, Intel Xeon E5-2620, 2.00 GHz, 15 MB, 1333 MHz, 95 W (6-core)		81Y5164
25	Microprocessor, Intel Xeon E5-2630, 2.30 GHz, 15 MB, 1333 MHz, 95 W (6-core)		81Y5165
25	Microprocessor, Intel Xeon E5-2640, 2.50 GHz, 15 MB, 1333 MHz, 95 W (6-core)		81Y5166
25	Microprocessor, Intel Xeon E5-2650, 2.00 GHz, 20 MB, 1600 MHz, 95 W (8-core)		81Y5167
25	Microprocessor, Intel Xeon E5-2660, 2.20 GHz, 20 MB, 1600 MHz, 95 W (8-core)		81Y5168
25	Microprocessor, Intel Xeon E5-2680, 2.70 GHz, 20 MB, 1600 MHz, 130 W (8-core)		81Y5169

Table 18. Parts listing, Type 7914 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
25	Microprocessor, Intel Xeon E5-2667, 2.90 GHz, 15 MB, 1600 MHz, 130 W (6-core)		81Y5170
25	Microprocessor, Intel Xeon E5-2630L 2.00 GHz, 15 MB, 1333 MHz, 60 W (6-core)		81Y5204
25	Microprocessor, Intel Xeon E5-2670, 2.60 GHz, 20 MB, 1600 MHz, 115 W (8-core)		81Y9419
25	Microprocessor, Intel Xeon E5-2648L, 1.80 GHz, 20 MB, 1600 MHz, 70 W (8-core)		95Y4671
25	Microprocessor, Intel Xeon E5-2658, 1.80 GHz, 20 MB, 1600 MHz, 95 W (8-core)		95Y4676
	Microprocessor installation tool		94Y9955
	Microprocessor installation tool		94Y9960
26	Heat sink assembly, 95 W		94Y7602
26	Heat sink assembly, 130 W		94Y7603
	Thermal grease kit		41Y9292
	Alcohol wipes		59P4739
	Mellanox ConnectX-3 VPI single-port QSFP FDR14 40GbE HCA	00W0039	
	Qlogic 10Gb converged network adapter (CNA)	00Y3274	
	Adapter, DVI to VGA adapter	25R9043	
	HBA 4Gb FC PCIe dual-port adapter	00Y5627	
	NetXtreme II 1000 Express Ethernet adapter	39Y6070	
	Intel PRO/1000 PF server adapter	42C1752	
	QLogic 10Gb CNA converged network adapter (CNA)	42C1802	
	QLogic 10Gb virtual fabric and SR optical transceiver	42C1816	
	Brocade 10Gb SFP+ SR optical transceiver	42C1819	
	Brocade 10Gb adapter	42C1822	
	Emulex 8Gb FC single-port host bus adapter	42D0491	
	Emulex 8Gb FC dual-port host bus adapter	42D0500	
	QLogic 8Gb FC single-port host bus adapter	00Y5628	
	QLogic 8Gb FC dual-port host bus adapter	00Y5629	
	Video adapter, NVIDIA Quadro 600	43V5931	
	Video adapter, NVIDIA Quadro K600	90Y2383	
	Video adapter, NVIDIA Quadro 2000	43V5939	
	4Gb FC PCIe single-port adapter	43W7510	
	4Gb FC PCIe dual-port adapter	43W7512	
	6Gb SAS host bus adapter (HBA)	46C8935	
	Brocade 10Gb virtual fabric and SR optical transceiver	46C9297	
	Brocade 8Gb FC single-port host bus adapter	46M6061	

Table 18. Parts listing, Type 7914 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
	Brocade 8Gb FC dual-port host bus adapter	46M6062	
	Intel I340-T2 Ethernet dual-port adapter	94Y5166	
	Intel I340-T4 Ethernet quad-port adapter	94Y5167	
	Broadcom NetXtreme II dual-port 10Gb adapter	49Y7912	
	NetXtreme II 1000 express Ethernet dual-port adapter	49Y7947	
	NetXtreme II 1000 express Ethernet quad-port adapter	49Y7949	
	Intel X520-DA2 dual-port 10GbE SFP+ adapter	49Y7962	
	Brocade 4Gb FC single-port host bus adapter	59Y1992	
	Brocade 4Gb FC dual-port host bus adapter	59Y1998	
	Emulex 16Gb FC single-port HBA	81Y1658	
	Emulex 16Gb FC dual-port HBA	81Y1665	
	Brocade 16Gb FC single-port HBA	81Y1671	
	Brocade 16Gb FC dual-port HBA	81Y1678	
	N2215 SAS/SATA HBA	47C8676	
	Mellanox ConnectX-3 EN dual-port QSFP+ 40GbE adapter	95Y3461	
	Emulex 10GbE virtual fabric adapter III	95Y3766	
	Solarflare SFN5162F MR dual-port 10GbE SFP+ Adapter	47C9955	
	Solarflare SFN6122F LL dual-port 10GbE SFP+ Adapter	47C9963	
	Battery, 3.0 volt	33F8354	
	Battery, ServeRAID	81Y4579	
	Bracket assembly, rear I/O	94Y7567	
	Cable, 6Gbps external mini-SAS, 1 m (SFF-8088 to SFF-8088)	00YE299	
	Cable, 6Gbps external mini-SAS, 2 m (SFF-8088 to SFF-8088)	00YE300	
	Cable, 6Gbps external mini-SAS, 4 m (SFF-8088 to SFF-8088)	00YE301	
	Cable, 6Gbps external mini-SAS, 6 m (SFF-8088 to SFF-8088)	00YE302	
	Cable, 6Gbps external mini-SAS, 0.5 m (SFF-8644 to SFF-8088)	00YE303	
	Cable, 6Gbps external mini-SAS, 1 m (SFF-8644 to SFF-8088)	00YE304	
	Cable, 6Gbps external mini-SAS, 2 m (SFF-8644 to SFF-8088)	00YE305	
	Cable, 6Gbps external mini-SAS, 4 m (SFF-8644 to SFF-8088)	00YE306	
	Cable, 6Gbps external mini-SAS, 6 m (SFF-8644 to SFF-8088)	00YE307	
	Cable, power cord	39M5377	
	Cable, mini SAS 1 m	39R6530	
	Cable, mini SAS 3 m	39R6532	
	Cable, mini SAS 610 mm	00Y8634	
	Cable, SAS 610 mm	00D3276	
	Cable, mini SAS 710 mm	00Y8633	

Table 18. Parts listing, Type 7914 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
	Cable, SAS 710 mm	69Y1328	
	Cable, SAS 820 mm	81Y6674	
	Cable, SAS Y-cable	44E8878	
	Cable, USB	00J6142	
	Cable, USB conversion	39M2909	
	Cable, USB	44E8883	
	Cable, USB 1 m	44E8893	
	Cable, USB 3 m	44E8891	
	Cable, USB dongle	44E8894	
	Cable, USB 3.0	46C2598	
	Cable, USB	46M6475	
	Cable, USB	46M6477	
	Cable, USB	81Y3643	
	Cable, serial conversion	46M4027	
	Cable, virtual media Gen 3	00AK113	
	Cable, power, 3.5-inch HDD	81Y6661	
	Cable, power, 2.5-inch HDD	81Y6663	
	Cable, backplane, 3.5-inch hot-swap HDD	81Y6665	
	Cable, backplane, 2.5-inch hot-swap HDD	81Y6667	
	Cable, operator information panel	81Y6669	
	Cable, SATA DVD	81Y6671	
	Cable, video	81Y6673	
	Cable, adapter power	81Y6676	
	Cable, ServeRAID battery	90Y7309	
	Cable, ServeRAID power module	90Y7310	
	Cable, SPECpower	00W2465	
	Cable, flash power module cable, 925 mm (for ServRAID M5200 Series Flash)	46C9793	
	Cable, MLNX QSFP, 1m	00W0051	
	Drive, 5.25-inch, 36 GB, USB	99Y3868	
	Drive, 5.25-inch, 80 GB, USB	99Y3870	
	Hypervisor, embedded USB flash device	42D0545	
	Labels, system service and FRU/CRU (3.5-inch)	00D4097	
	Labels, chassis	94Y7604	
	Labels, system service and FRU/CRU (2.5-inch)	94Y7605	
	Half high LTO Gen 3 SAS tape drive	46X5663	
	Half high LTO Gen 4 SAS tape drive	46X5672	

Table 18. Parts listing, Type 7914 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)
	Half high LTO Gen 5 SAS tape drive	46X5683	
	RDX 160 GB cartridge	46C5393	
	RDX 320 GB cartridge	46C5394	
	RDX 500 GB cartridge	46C5395	
	Internal RDX USB 3.0 drive dock	46C2346	
	External RDX USB 3.0 drive dock	46C2347	
	External RDX power adapter	81Y8905	
	Screw, four M3x5 screws	42C3933	
	Supercap pack	47C8696	

Structural parts

Structural parts are not covered by the Lenovo Statement of Limited Warranty. The following structural parts are available for purchase from the retail store.

Table 19. Structural parts, Type 7914

Index	Description	Part number
1	Top cover	94Y7569
1	Safety cover	94Y7575
5	Filler, PCI	94Y7608
8	Filler, power supply bay	94Y7610
	Filler, single 2.5-inch hot-swap hard disk drive bay	44T2248
	Filler, DVD drive bay	49Y4868
	Filler, 2x2.5-inch simple-swap hard disk drive bay	59Y3925
14	Filler, 3.5-inch hot-swap hard disk drive	69Y5364
14	Filler, 3.5-inch simple-swap hard disk drive	69Y5368
	Filler, fan	94Y7572
10	Chassis assembly, 2.5-inch HDD (without front bezel)	00AM324
10	Chassis assembly, 3.5-inch HDD (without front bezel)	00AM325
19	EIA brackets	94Y7570
27	Air baffle	94Y7568
	Remote RAID battery/power module tray	94Y7609
	ServeRAID M5110 series battery kit	81Y4491
	Bracket, 3.5-inch to 5.25-inch conversion kit	32P4743
	Bracket, tape mount kit	41Y7711
	CMA kit	49Y4817
	CMA kit, Gen-III	94Y6626
	Slide rail kit, Gen-III	94Y6625

Table 19. Structural parts, Type 7914 (continued)

Index	Description	Part number
	Slide rail kit, universal	94Y6719
	Miscellaneous parts kit includes: Cable clip (front, internal) Cable retainer (rear, external) DVD filler DVD retention bracket Logo (EIA bracket) Fan filler M2.5x3.5 screw M3x0.5 screw M3.5x5 screw PCI riser 1 bracket PCI riser 2 bracket Power supply filler Rubber stopper	94Y7571

To order a structural part, complete the following steps:

1. Go to http://www.ibm.com.
2. From the **Products** menu, select **Upgrades, accessories & parts**.
3. Click **Obtain maintenance parts**; then, follow the instructions to order the part from the retail store.

Note: Changes are made periodically to the website. The actual procedure might vary slightly from what is described in this document.

If you need help with your order, call the toll-free number that is listed on the retail parts page, or contact your local representative for assistance.

Power cords

For your safety, a power cord with a grounded attachment plug is provided to use with this product. To avoid electrical shock, always use the power cord and plug with a properly grounded outlet.

Power cords used in the United States and Canada are listed by Underwriter's Laboratories (UL) and certified by the Canadian Standards Association (CSA).

For units intended to be operated at 115 volts: Use a UL-listed and CSA-certified cord set consisting of a minimum 18 AWG, Type SVT or SJT, three-conductor cord, a maximum of 15 feet in length and a parallel blade, grounding-type attachment plug rated 15 amperes, 125 volts.

For units intended to be operated at 230 volts (U.S. use): Use a UL-listed and CSA-certified cord set consisting of a minimum 18 AWG, Type SVT or SJT, three-conductor cord, a maximum of 15 feet in length and a tandem blade, grounding-type attachment plug rated 15 amperes, 250 volts.

For units intended to be operated at 230 volts (outside the U.S.): Use a cord set with a grounding-type attachment plug. The cord set should have the appropriate safety approvals for the country in which the equipment will be installed.

Power cords for a specific country or region are usually available only in that country or region.

Power cord part number	Used in these countries and regions
39M5206	China
39M5102	Australia, Fiji, Kiribati, Nauru, New Zealand, Papua New Guinea
39M5123	Afghanistan, Albania, Algeria, Andorra, Angola, Armenia, Austria, Azerbaijan, Belarus, Belgium, Benin, Bosnia and Herzegovina, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo (Democratic Republic of), Congo (Republic of), Cote D'Ivoire (Ivory Coast), Croatia (Republic of), Czech Republic, Dahomey, Djibouti, Egypt, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Finland, France, French Guyana, French Polynesia, Germany, Greece, Guadeloupe, Guinea, Guinea Bissau, Hungary, Iceland, Indonesia, Iran, Kazakhstan, Kyrgyzstan, Laos (People's Democratic Republic of), Latvia, Lebanon, Lithuania, Luxembourg, Macedonia (former Yugoslav Republic of), Madagascar, Mali, Martinique, Mauritania, Mauritius, Mayotte, Moldova (Republic of), Monaco, Mongolia, Morocco, Mozambique, Netherlands, New Caledonia, Niger, Norway, Poland, Portugal, Reunion, Romania, Russian Federation, Rwanda, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, Slovakia, Slovenia (Republic of), Somalia, Spain, Suriname, Sweden, Syrian Arab Republic, Tajikistan, Tahiti, Togo, Tunisia, Turkey, Turkmenistan, Ukraine, Upper Volta, Uzbekistan, Vanuatu, Vietnam, Wallis and Futuna, Yugoslavia (Federal Republic of), Zaire
39M5130	Denmark
39M5144	Bangladesh, Lesotho, Macao, Maldives, Namibia, Nepal, Pakistan, Samoa, South Africa, Sri Lanka, Swaziland, Uganda
39M5151	Abu Dhabi, Bahrain, Botswana, Brunei Darussalam, Channel Islands, China (Hong Kong S.A.R.), Cyprus, Dominica, Gambia, Ghana, Grenada, Iraq, Ireland, Jordan, Kenya, Kuwait, Liberia, Malawi, Malaysia, Malta, Myanmar (Burma), Nigeria, Oman, Polynesia, Qatar, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Seychelles, Sierra Leone, Singapore, Sudan, Tanzania (United Republic of), Trinidad and Tobago, United Arab Emirates (Dubai), United Kingdom, Yemen, Zambia, Zimbabwe
39M5158	Liechtenstein, Switzerland
39M5165	Chile, Italy, Libyan Arab Jamahiriya
39M5172	Israel
39M5095	220 - 240 V Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia, Caicos Islands, Canada, Cayman Islands, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guam, Guatemala, Haiti, Honduras, Jamaica, Mexico, Micronesia (Federal States of), Netherlands Antilles, Nicaragua, Panama, Peru, Philippines, Saudi Arabia, Thailand, Taiwan, United States of America, Venezuela
39M5081	110 - 120 V Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia, Caicos Islands, Canada, Cayman Islands, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guam, Guatemala, Haiti, Honduras, Jamaica, Mexico, Micronesia (Federal States of), Netherlands Antilles, Nicaragua, Panama, Peru, Philippines, Saudi Arabia, Thailand, Taiwan, United States of America, Venezuela
39M5219	Korea (Democratic People's Republic of), Korea (Republic of)
39M5199	Japan
39M5068	Argentina, Paraguay, Uruguay

Power cord part number	Used in these countries and regions
39M5226	India
39M5240	Brazil

Chapter 6. Removing and replacing components

There are three types of replaceable components.

- **Structural parts:** Purchase and replacement of structural parts (components, such as chassis assembly, top cover, and bezel) is your responsibility. If Lenovo acquires or installs a structural component at your request, you will be charged for the service.
- **Tier 1 customer replaceable unit (CRU):** Replacement of Tier 1 CRUs is your responsibility. If Lenovo installs a Tier 1 CRU at your request, you will be charged for the installation.
- **Tier 2 customer replaceable unit:** You may install a Tier 2 CRU yourself or request Lenovo to install it, at no additional charge, under the type of warranty service that is designated for your server.

See Chapter 5 “Parts listing, Lenovo System x3550 M4 Type 7914” on page 167 to determine whether a component is a structural part, Tier 1 CRU, or Tier 2 CRU.

For information about the terms of the warranty, see the *Warranty Information* document that comes with the server.

For more information about getting service and assistance, see Appendix D “Getting help and technical assistance” on page 975.

Returning a device or component

If you are instructed to return a device or component, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Internal cable routing and connectors

This section provides information about routing the cables when you install some components in the server.

For more information about the requirements for cables and connecting devices, see the documentation that comes with these devices.

Cabling SAS/SATA ServeRAID Controller

Use this information to cable the SAS/SATA ServeRAID controller.

The following illustrations show the internal routing and connectors for the SAS/SATA signal cables.

Notes:

1. To connect the SAS/SATA signal cables, make sure that you first connect the signal cable, and then the power cable and configuration cable.
2. To disconnect the SAS/SATA signal cables, make sure that you first disconnect the power cable, and then the signal cable and configuration cable.

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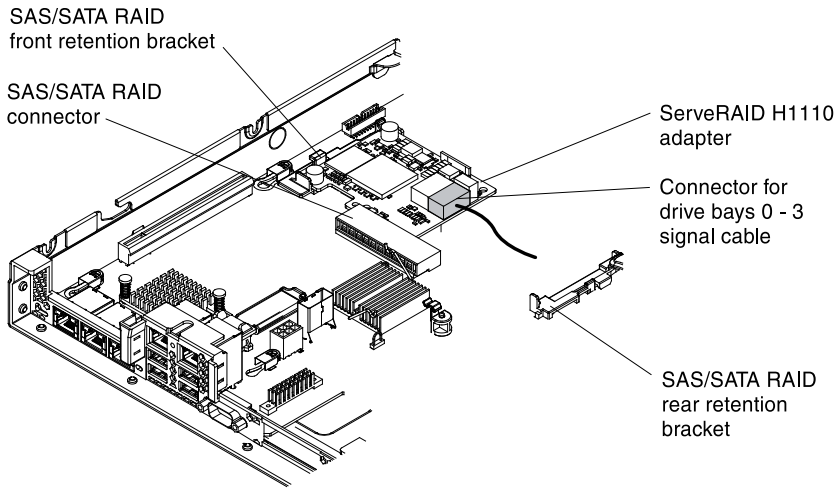


Figure 95. ServeRAID-H1110 cable connection

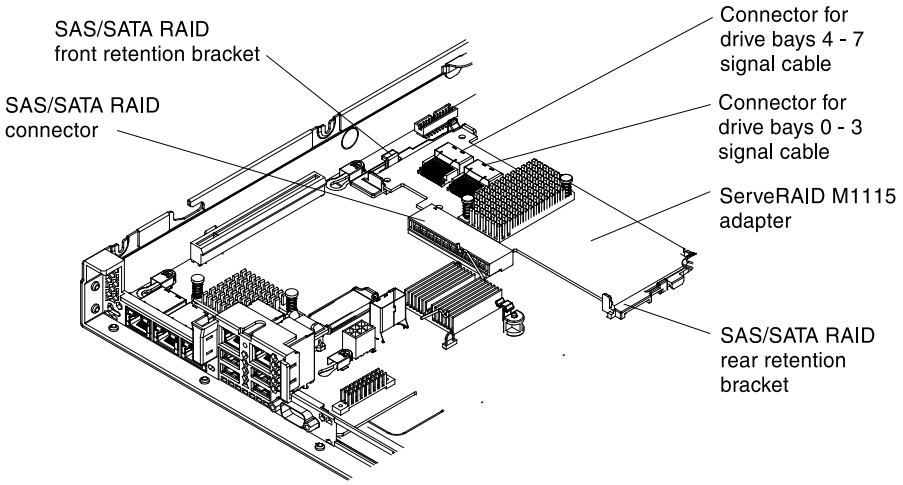


Figure 96. ServeRAID-M1115 cable connection

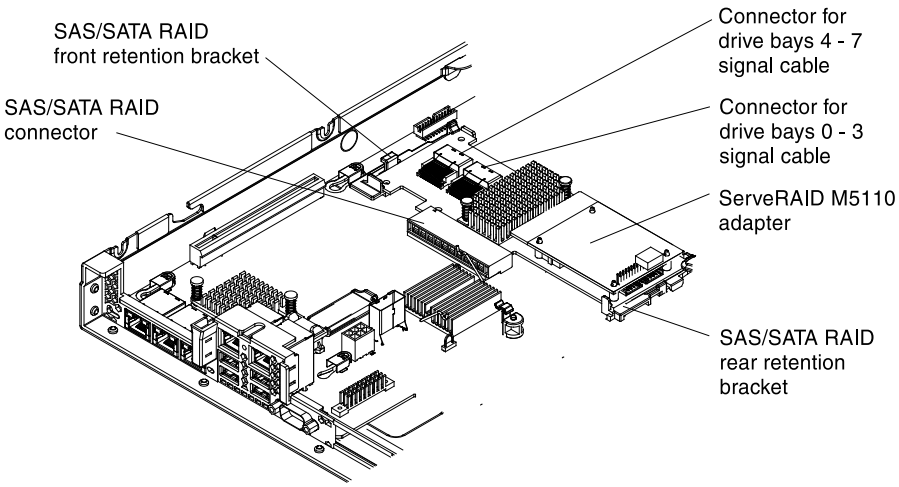


Figure 97. ServeRAID-M5110 cable connection

Cabling backplane

Use this information to cable the backplane.

The following illustration shows the internal routing and connectors for the 3.5-inch simple-swap hard disk drives SATA signal and power cables.

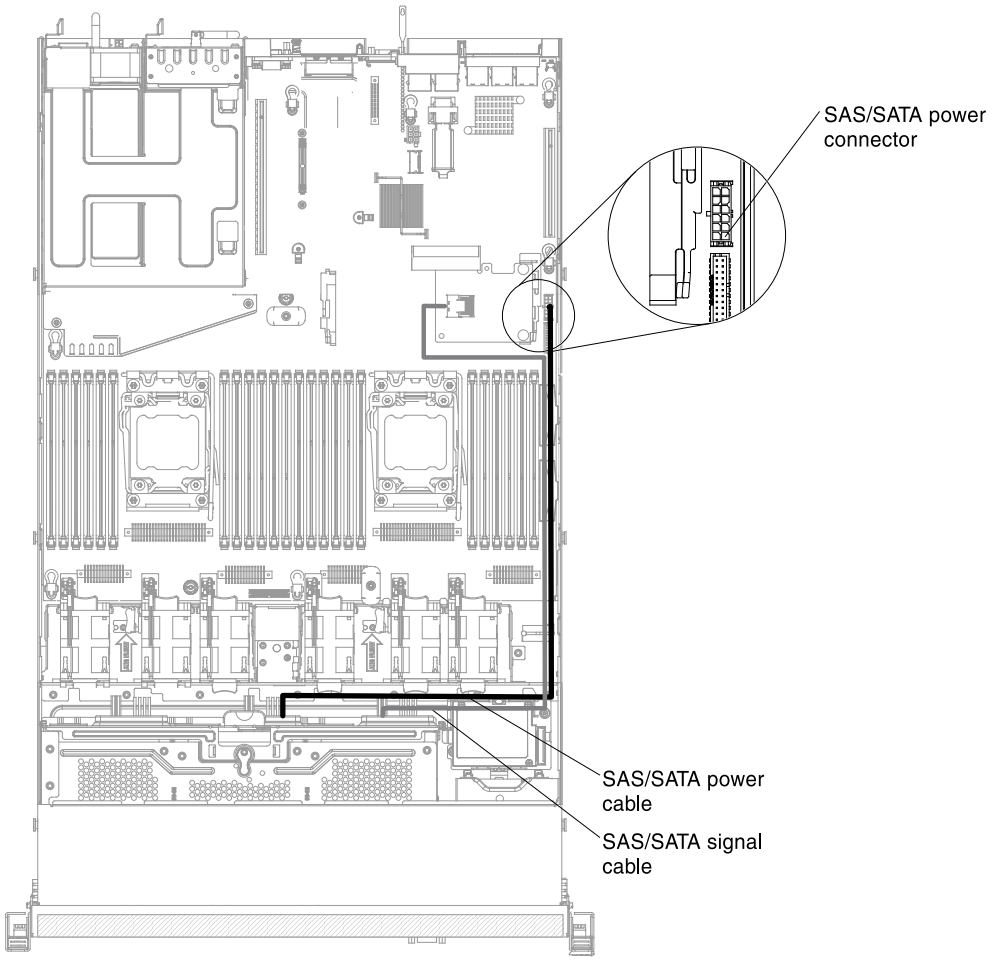


Figure 98. 3.5-inch simple-swap backplate assembly cable connection

The following illustration shows the internal routing and connectors for the 3.5-inch hot-swap hard disk drives SAS/SATA signal, power and configuration cables with the SAS/SATA adapter installed.

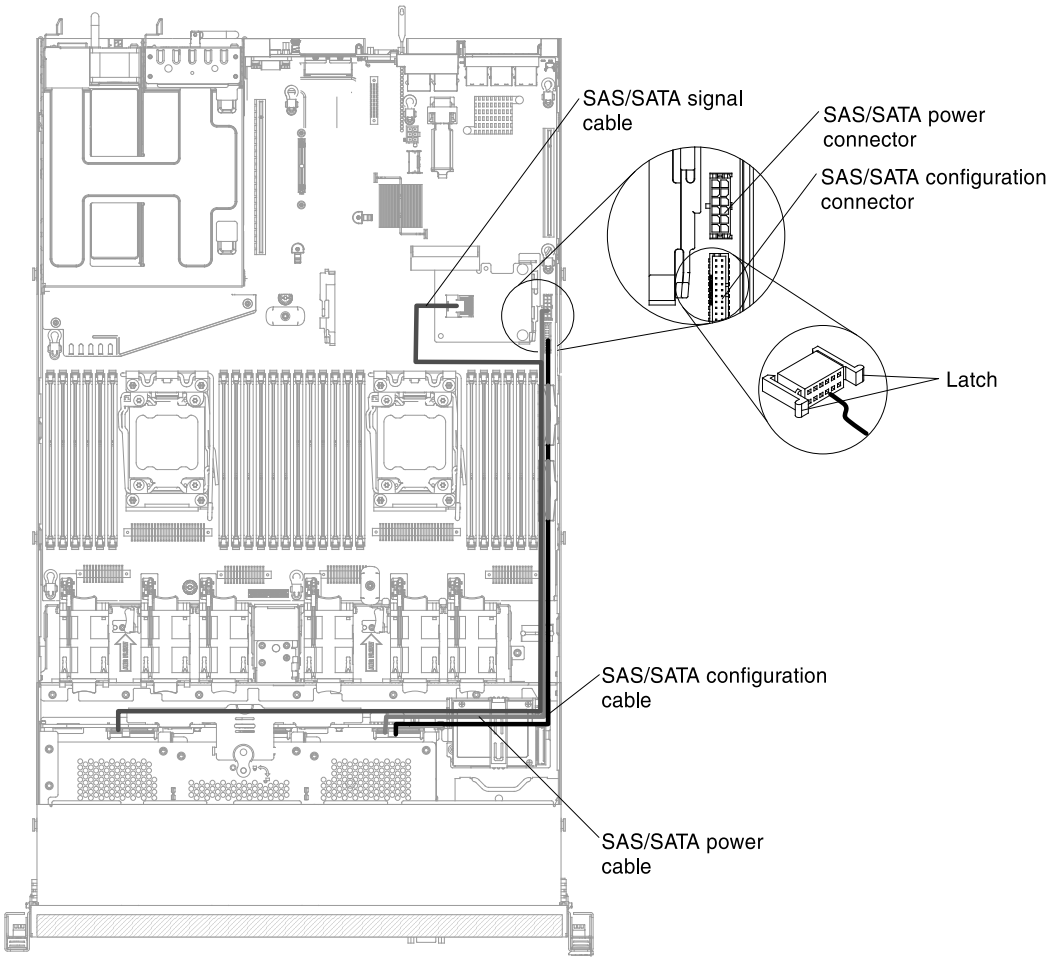


Figure 99. 3.5-inch hot-swap backplane cable connection

The following illustration shows the internal routing and connectors for the SAS/SATA signal, power and configuration cables with the SAS/SATA adapter installed.

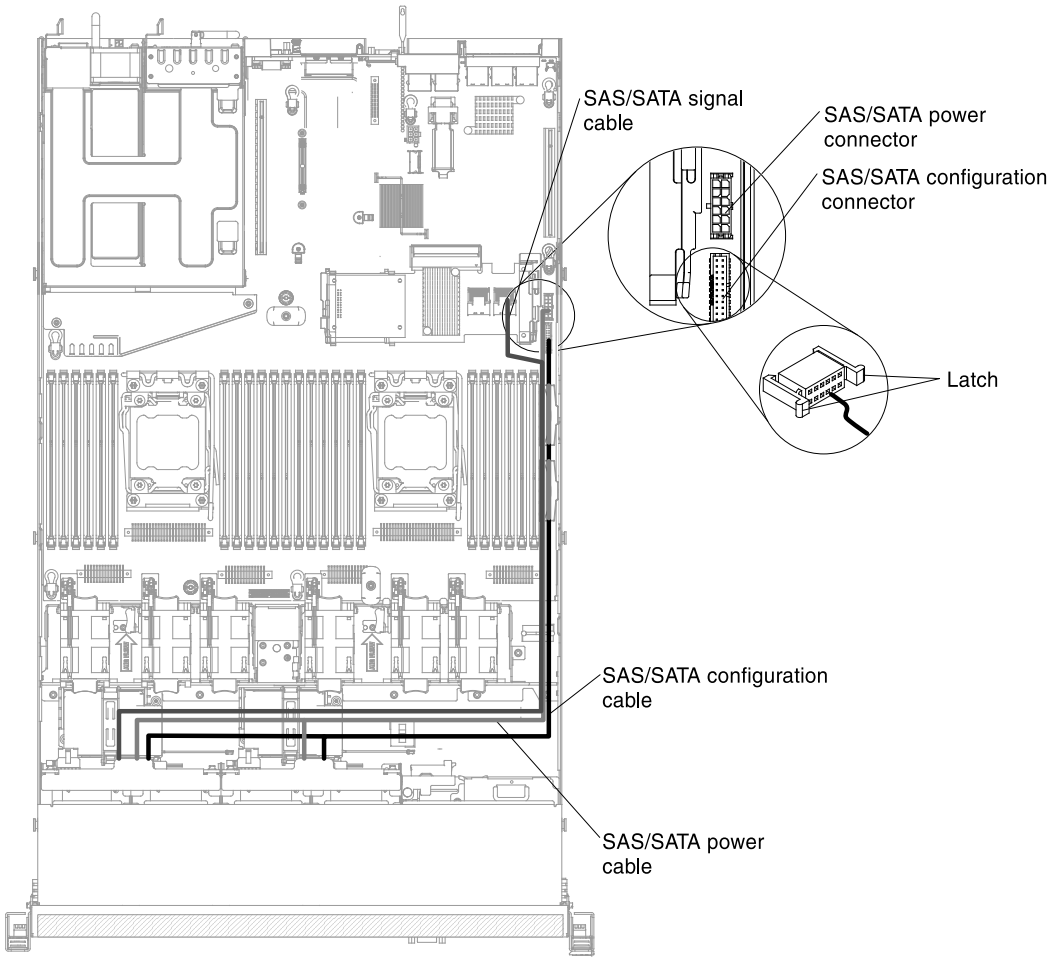


Figure 100. 2.5-inch hot-swap backplane cable connection

Cabling RAID adapter battery or flash power module

Use this information to cable the RAID adapter battery or flash power module.

The following illustration shows the internal routing and connectors for the RAID adapter battery or flash power module cable with the RAID adapter memory module installed.

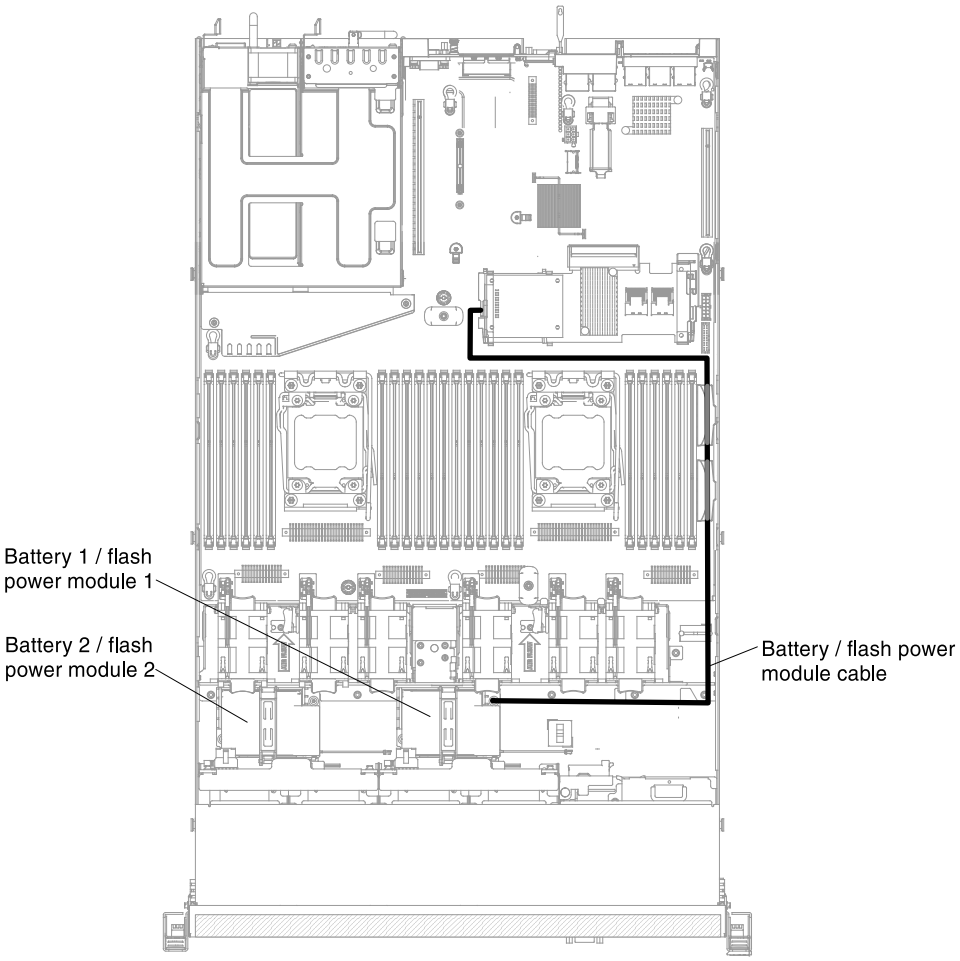


Figure 101. RAID adapter battery or flash power module cable connection

Cabling SPECpower

Use this information to cable the SPECpower.

The following illustration shows the internal routing and connectors for the server models with one 2.5-inch simple-swap hard disk drives.

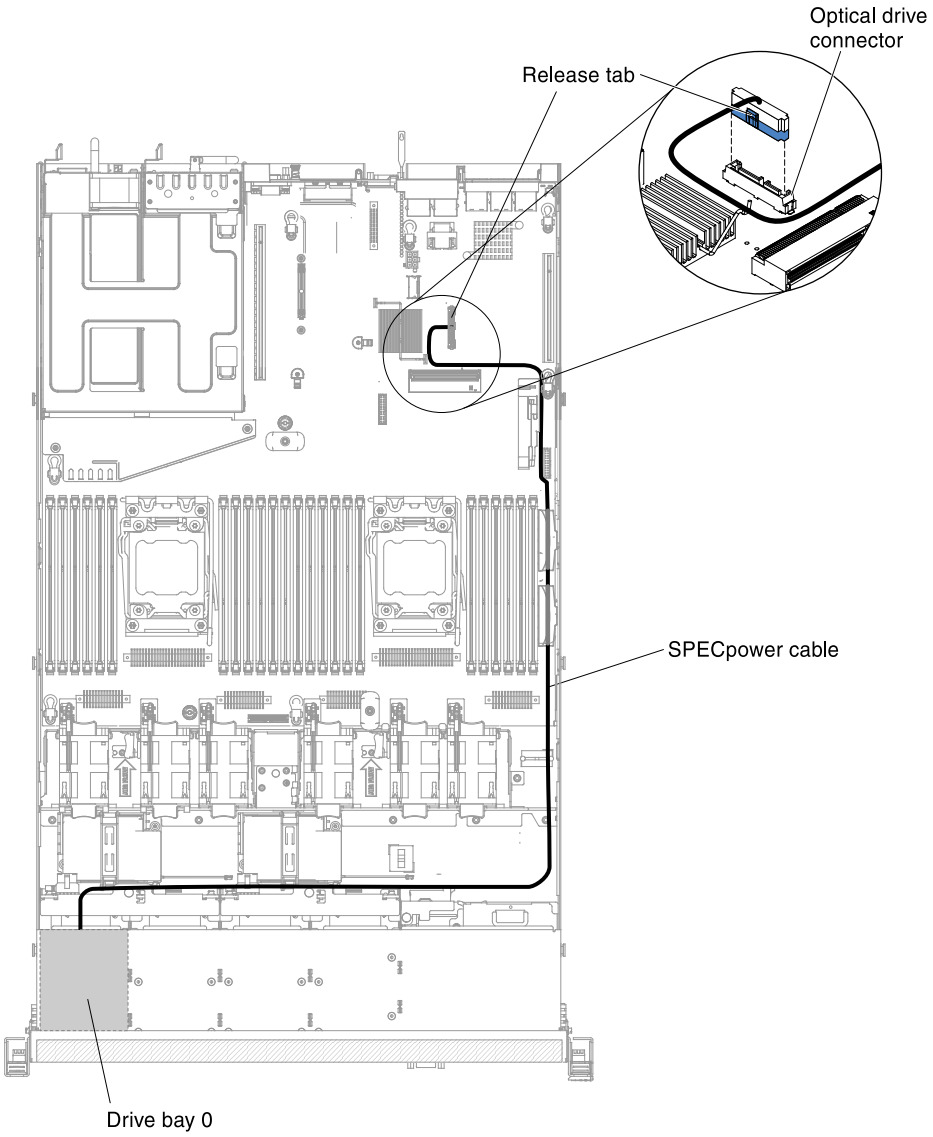


Figure 102. SPECpower cable connection

Cabling DVD drive

The internal routing and connectors for the DVD drive.

Notes:

1. To disconnect the optional optical drive cable, you must first press the connector release tab, and then disconnect the cable from the connector on the system board. Do not disconnect the cable by using excessive force.
2. Follow the optical drive cable routing as the illustration shows. Route the cable from the connector on the system board along PCI assembly 1. Do not bend the cable under PCI assembly 1.
3. Make sure that the cable is not pinched and does not cover any connectors or obstruct any components (for example, the ServeRAID adapter or PCI assembly 1) on the system board.

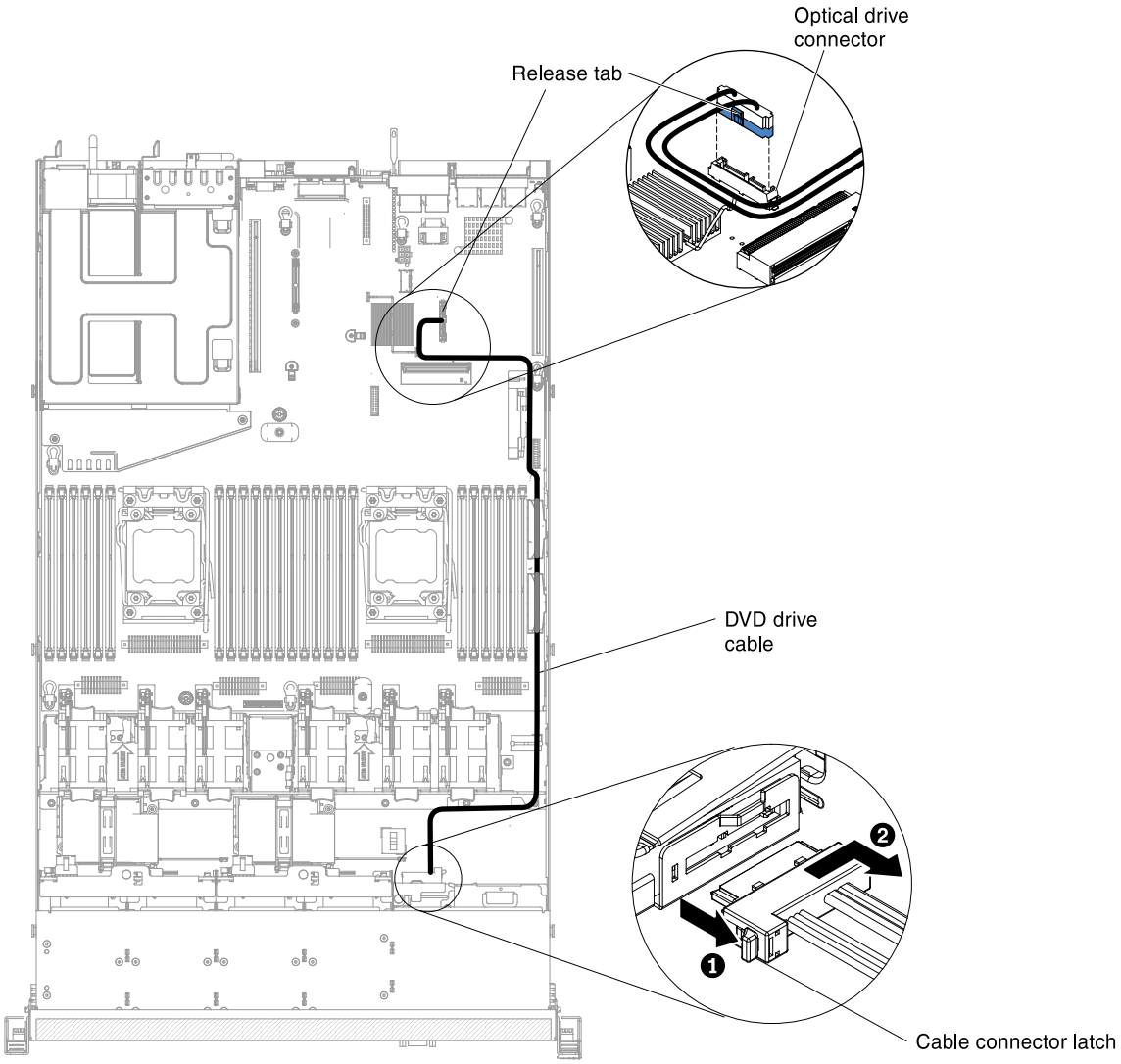


Figure 103. DVD drive cable connection

Cabling operator information panel

The internal routing and connectors for the operator information panel.

The following notes describe additional information you must consider when you install or remove the operator information panel cable:

- To remove the operator information panel cable, slightly press the cable toward the fan cage; then, pull to remove the cable from the connector on the system board. Pulling the cable out of the connector by excessive force might cause damage to the cable or connector.
- To connect the operator information panel cable on the system board, press evenly on the cable. Pressing on one side of the cable might cause damage to the cable or connector.

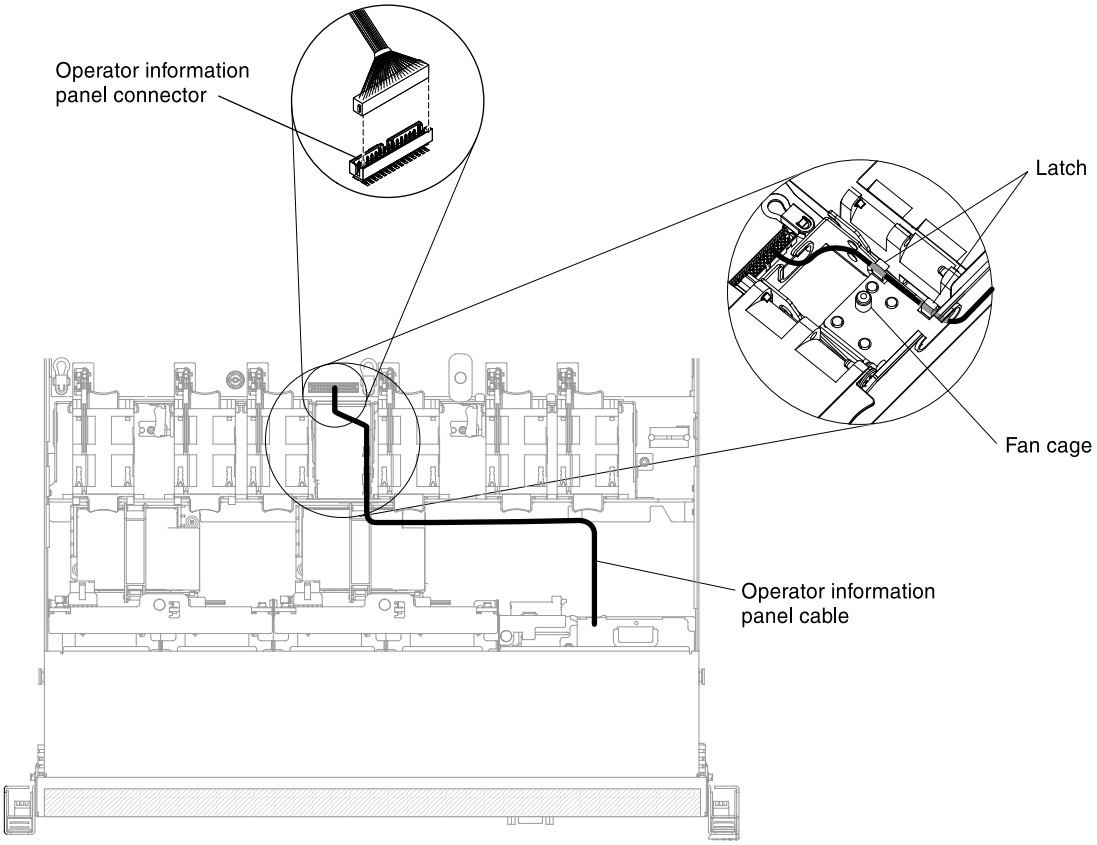


Figure 104. Operator information panel cable connection

Cabling front USB and video connector

The internal routing and connectors for the front USB and video cables.

The following notes describe additional information you must consider when you install or remove the front USB and video cables:

- To remove the front USB and video cables, slightly press the cables toward the chassis; then, pull to remove the cables from the connectors on the system board. Pulling the cable out of the connector by excessive force might cause damage to the cable or connector.
- To connect the front USB and video cables on the system board, press evenly on the cables. Pressing on one side of the cable might cause damage to the cable or connector.

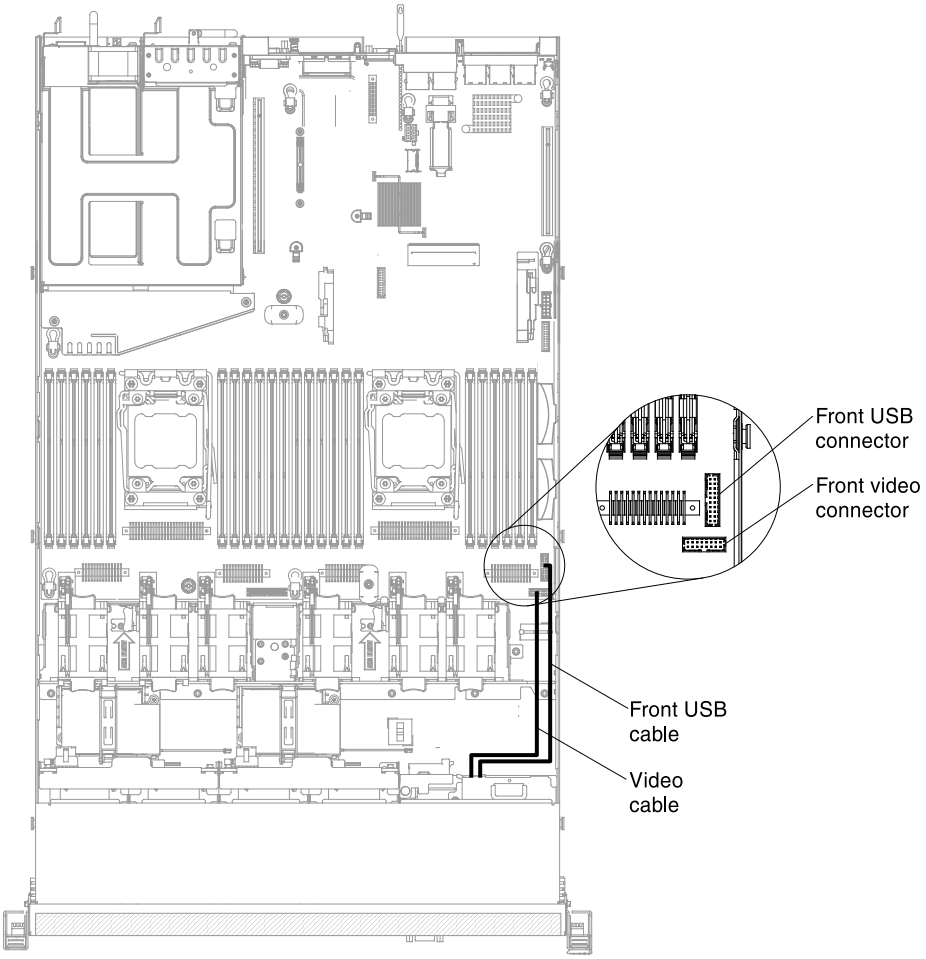


Figure 105. Front USB and video cables connection

Removing and replacing server components

This section provides information for removing and replacing components in the server.

Removing and replacing structural parts

Replacement of structural parts is your responsibility. If Lenovo installs a structural part at your request, you will be charged for the installation.

The illustrations in this document might differ slightly from your hardware.

Removing the cover

Use this information to remove the cover.

To remove the server cover, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. If the server has been installed in a rack, slide the server out from the rack enclosure.

Step 4. Pull up firmly on the blue latch on the top (in the center of the front of the server) of the cover and slide the cover toward the rear of the server until the cover has disengaged from the chassis.

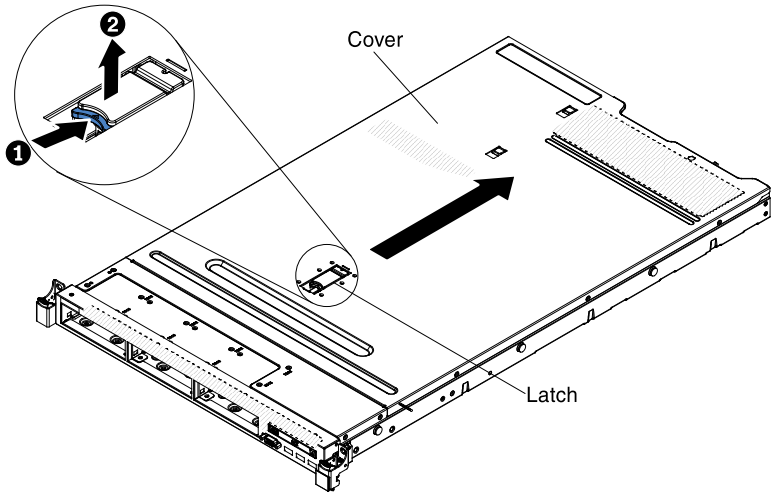


Figure 106. Cover removal

Step 5. Lift the server cover off the server and set it aside.

Attention: For proper cooling and airflow, replace the server cover before you turn on the server.

Replacing the cover

Use this information to replace the cover.

To replace the server cover, complete the following steps:

Step 1. Make sure that all cables, adapters, and other components are installed and seated correctly and that you have not left loose tools or parts inside the server. Also, make sure that all internal cables are correctly routed.

Important: Before you slide the cover forward, make sure that all the tabs on the front, rear, and side of the cover engage the chassis correctly. If all the tabs do not engage the chassis correctly, it will be very difficult to remove the cover later.

Step 2. Position the cover on top of the server.

Step 3. Slide the cover toward the front of the server.

Step 4. Make sure that the cover correctly engages all the inset tabs on the server.

Step 5. Press down the blue latch on the top (in the center of the front of the server) of the cover.

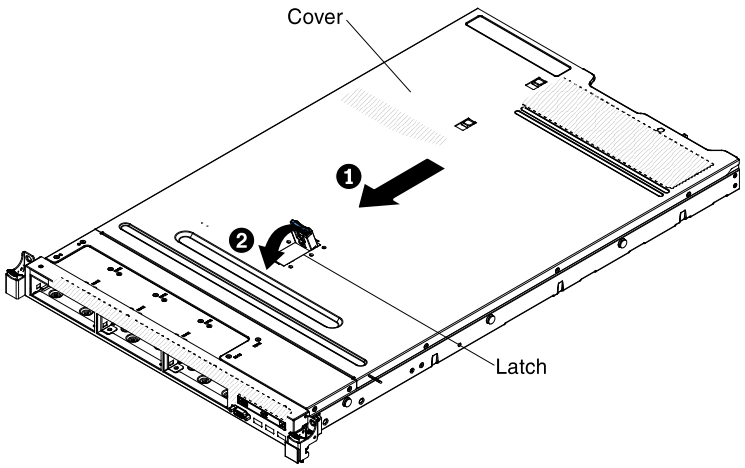


Figure 107. Cover installation

Step 6. Slide the server all the way into the rack until it latches.

Step 7. Reconnect the external cables and power cords.

Removing the air baffle

Use this information to remove the air baffle.

To remove the air baffle, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables (see “Turning off the server” on page 21).

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Grasp the air baffle, disengage pins from pin holes; then, lift the air baffle up.

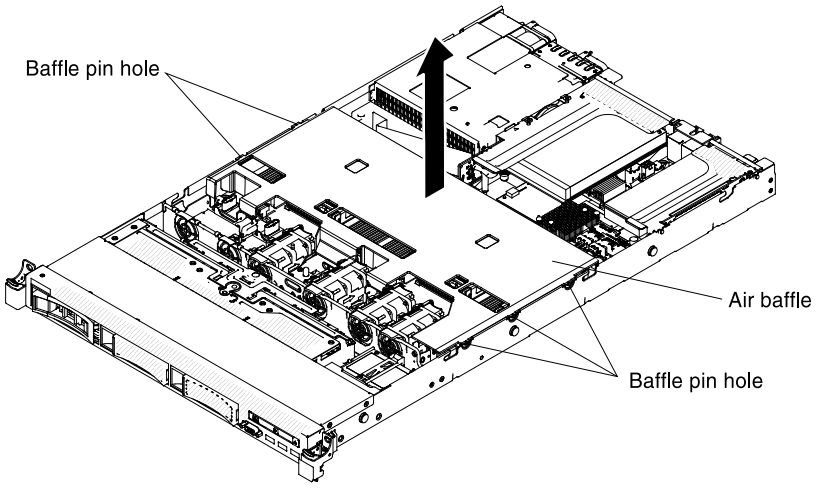


Figure 108. Air baffle removal

Step 5. Remove the air baffle from the server and set it aside.

Attention: For proper cooling and airflow, replace the air baffle before you turn on the server. Operating the server with the air baffle removed might damage server components.

Replacing the air baffle

Use this information to replace the air baffle.

To install the air baffle, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Align the air baffle pins with the baffle pin holes on both sides of the chassis; then, lower the air baffle into the server. Press the air baffle down until it is securely seated.

Note: Close the retaining clip on each end of the DIMM connector before installing the air baffle for proper cooling.

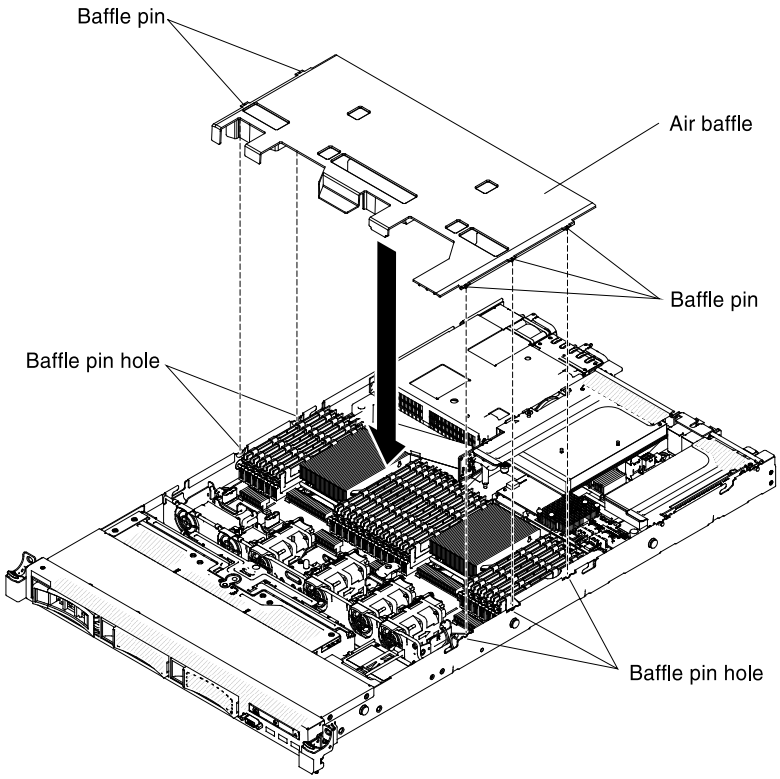


Figure 109. Air baffle installation

Step 5. Reinstall the cover (see “Replacing the cover” on page 192).

Step 6. Slide the server into the rack.

Step 7. Reconnect the power cords and any cables that you removed.

Step 8. Turn on the peripheral devices and the server.

Removing a RAID adapter battery or flash power module

Use this information to remove a remotely installed RAID adapter battery or flash power module.

If a RAID adapter battery or flash power module is installed near the fan cage and you need to replace it, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove any cable covering or obstructing the holder before opening the holder.

Step 5. Pull the release tab toward the fan cage and unlock the retention clip.

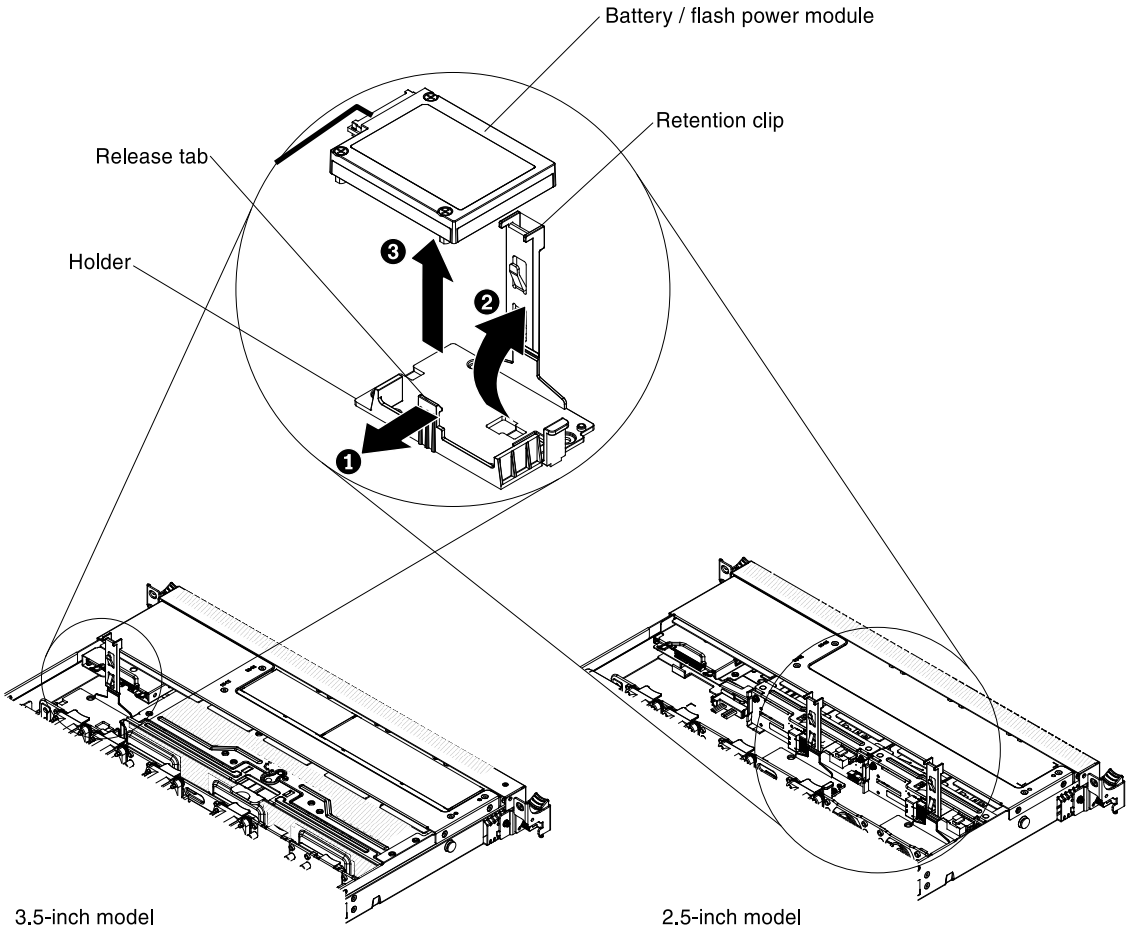


Figure 110. RAID adapter battery or flash power module removal

Attention: Make sure that the cable is not pinched and does not cover any connectors or obstruct any components on the system board.

Step 6. Disconnect the cable from the connector on the battery.

Note: You don't have to disconnect the cable from the flash power module.

Step 7. Lift the battery or flash power module up to remove the it from the holder.

If you are instructed to return the RAID adapter battery or flash power module, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a RAID adapter battery or flash power module

Use this information to replace a RAID adapter battery or flash power module.

When you install any RAID adapter that comes with batteries or flash power modules, it is sometimes necessary to install the batteries or flash power modules in another location in the server to prevent the batteries or flash power modules from overheating. Depending on your server model, a battery or flash power module must be installed remotely near the optical drive cage or the backplane. The 2.5-inch server models support up to two batteries or flash power modules.

To install a RAID adapter battery in the server, complete the following steps:

Step 1. Read the safety information that begins on "Safety" on page v and "Installation guidelines" on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords and external devices.

Step 3. Remove the cover (see "Removing the cover" on page 191).

Step 4. Install the ServeRAID adapter on the system board (see "Replacing a ServeRAID SAS/SATA controller" on page 233) or install the ServeRAID adapter on the riser card and install the riser-card assembly in the server (see "Replacing an adapter" on page 228).

Step 5. Connect one end of the cable to the RAID adapter memory module.

Step 6. Route the cable along the chassis.

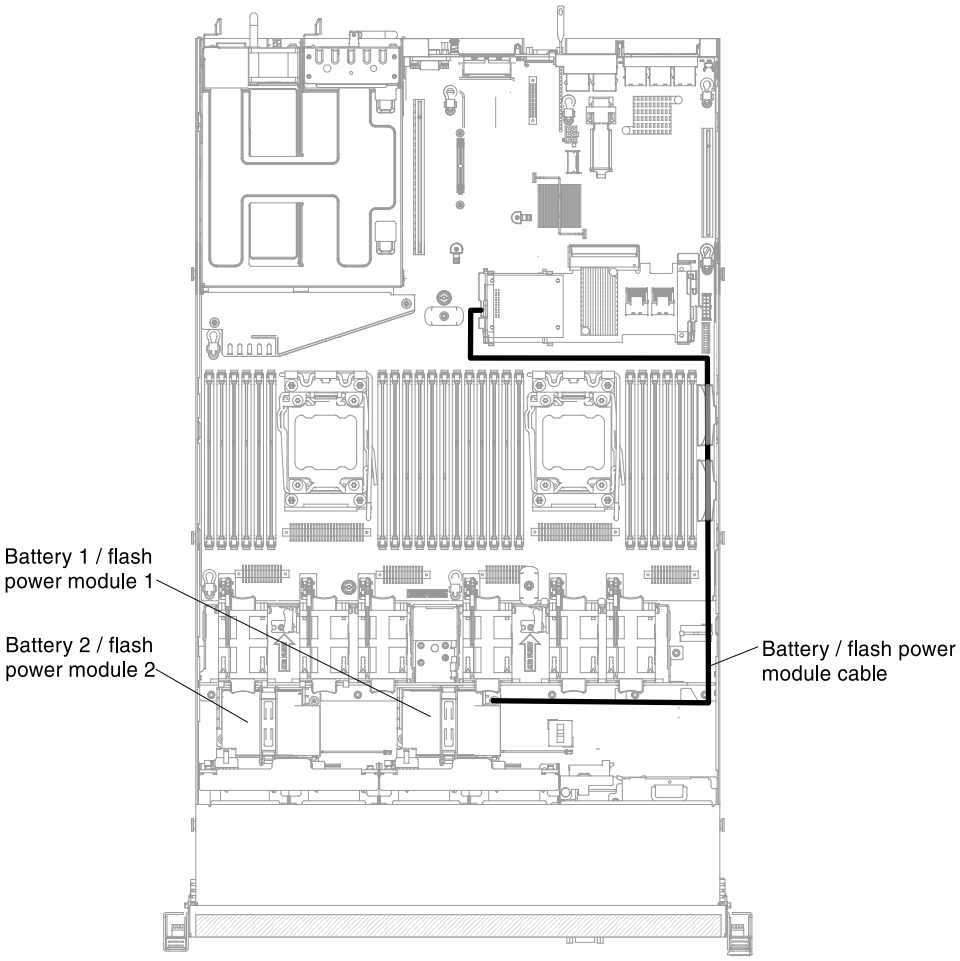


Figure 111. RAID adapter battery or flash power module cable connection

Attention: Make sure that the cable is not pinched and does not cover any connectors or obstruct any components on the system board.

Step 7. Remove any cable covering or obstructing the holder before opening the holder.

Step 8. Install the battery or flash power module:

a. Release the retention clip in the open position.

b. Align the cable connector with the slot on the holder. Place the battery or flash power module into the holder and make sure that the holder engages the battery or flash power module securely.

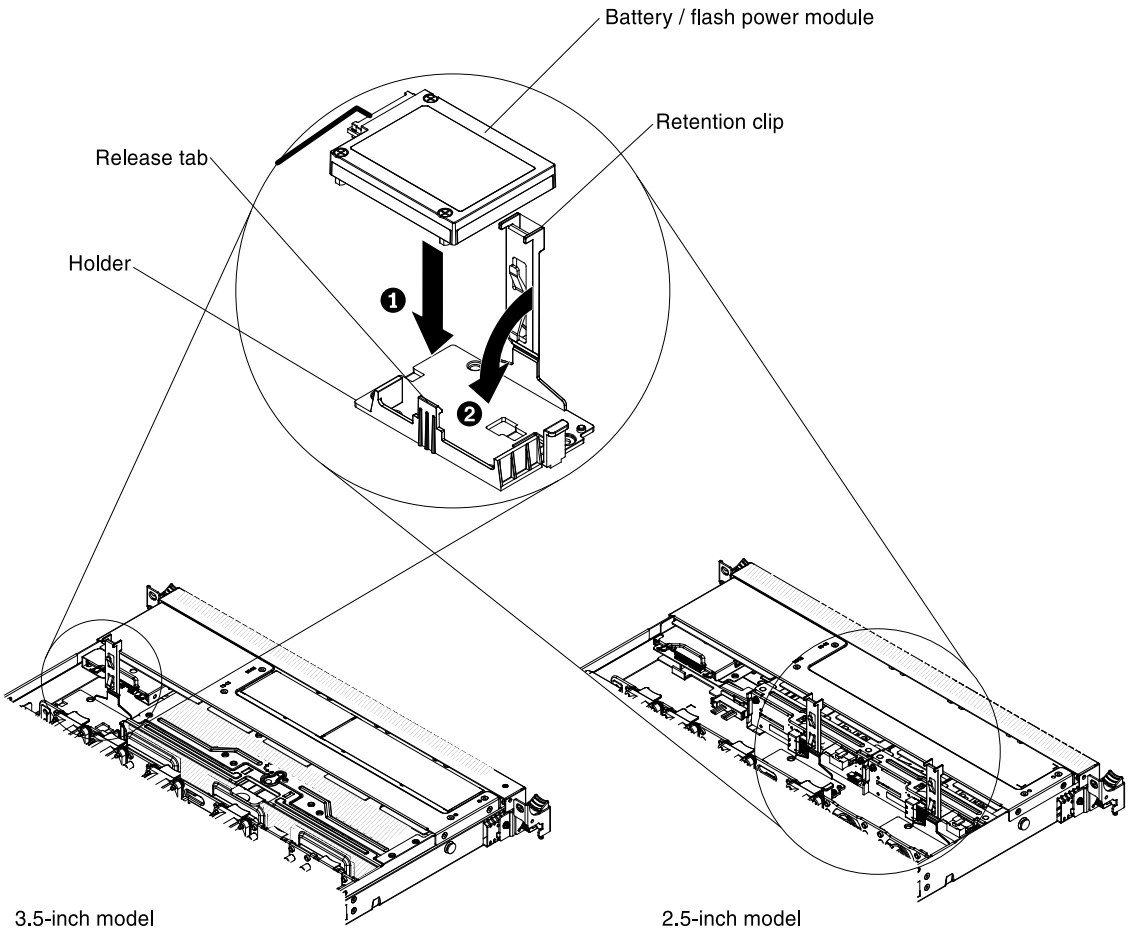


Figure 112. RAID adapter battery or flash power module installation

Note: The positioning of the battery or flash power module depends on the type of the battery or flash power module that you install.

c. Connect the other end of the cable to the battery or flash power module.

d. Lower and press down on the retention clip until it snaps in place to hold the battery or flash power module firmly in place.

Step 9. Reinstall the cover (see “Replacing the cover” on page 192).

Step 10. Slide the server into the rack.

Step 11. Reconnect the power cords and all external cables, and turn on the server and peripheral devices.

Removing a RAID adapter battery or flash power module holder

Use this information to remove a RAID adapter battery or flash power module holder.

If a RAID adapter battery or flash power module is installed remotely near the fan cage and you need to replace it, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords; then, remove the cover (see “Removing the cover” on page 191).

Step 3. Remove the RAID adapter battery or flash power module (see “Removing a RAID adapter battery or flash power module” on page 195).

Step 4. Loosen the two screws from the system tray.

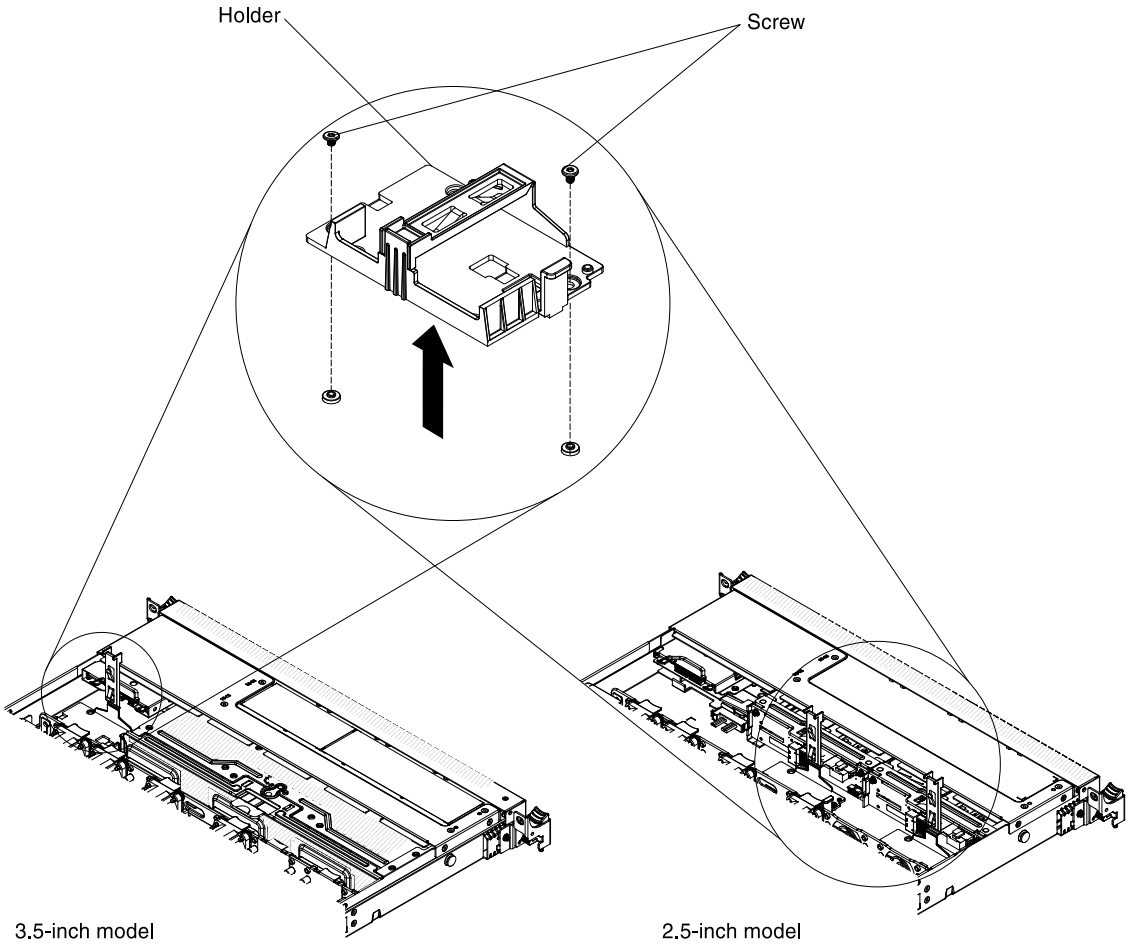


Figure 113. RAID adapter battery or flash power module holder removal

Step 5. Lift the holder up to remove it from the system tray.

If you are instructed to return the RAID adapter battery or flash power module holder, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a RAID adapter battery or flash power module holder

Use this information to replace a RAID adapter battery or flash power module holder.

To install a RAID adapter battery or flash power module holder, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords and external devices; then, remove the cover (see “Removing the cover” on page 191).

Step 3. Align the holder and place the holder on the system tray.

Notes:

- There is one holder can be installed in the 3.5-inch models.
- There are two holders can be installed in the 2.5-inch models.

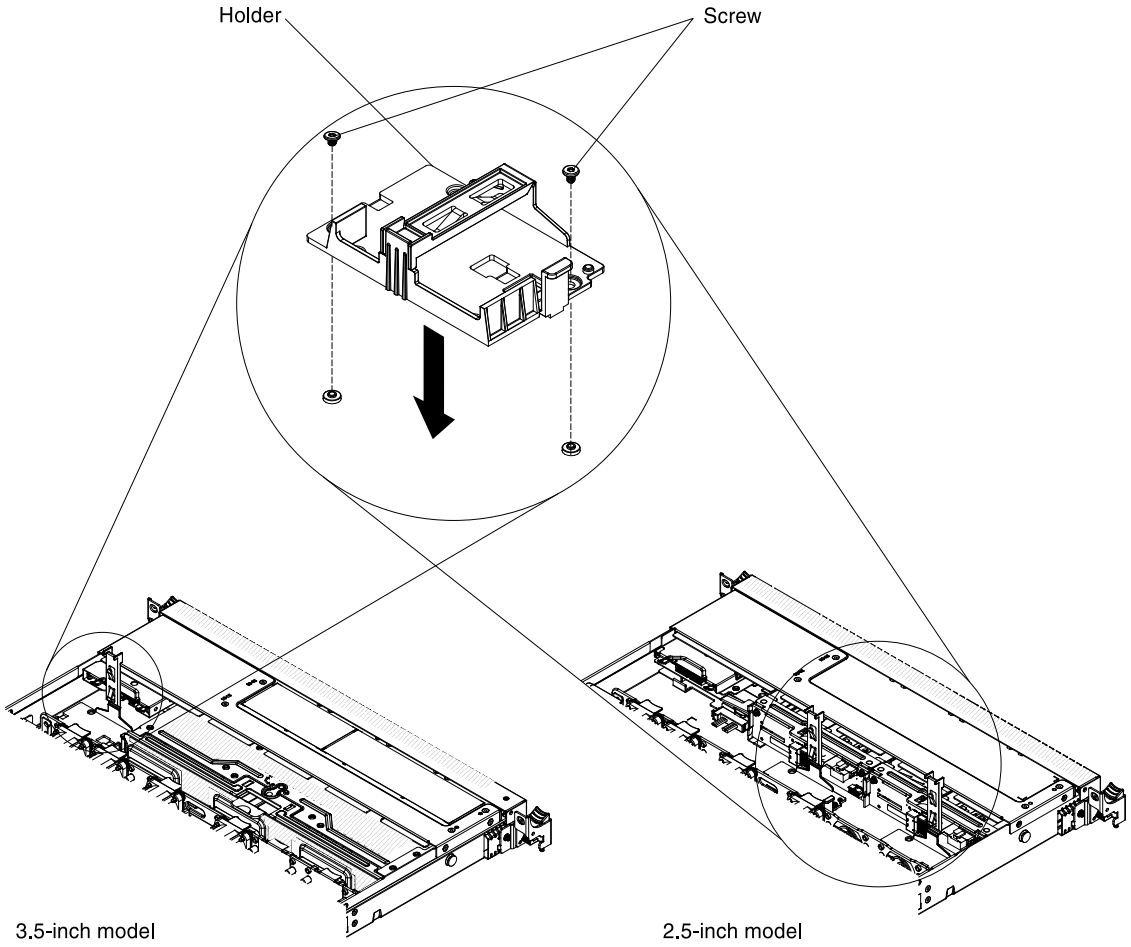


Figure 114. RAID adapter battery or flash power module holder installation

Step 4. Fasten the two screws come with the holder and make sure that the holder is secured firmly on the system tray.

Step 5. Replacing the cover (see “Replacing the cover” on page 192).

Step 6. Slide the server into the rack.

Step 7. Reconnect the power cords and all external cables, and turn on the server and peripheral devices.

Removing and replacing Tier 1 CRUs

Replacement of Tier 1 CRUs is your responsibility. If Lenovo installs a Tier 1 CRU at your request, you will be charged for the installation.

The illustrations in this document might differ slightly from your hardware.

Removing hot-swap hard disk drives

Use this information to remove hot-swap hard disk drives.

Attention:

- To avoid damage to the hard disk drive connectors, make sure that the server cover is in place and fully closed whenever you install or remove a hard disk drive.
- To make sure that there is adequate system cooling, do not operate the server for more than 2 minutes without either a hard disk drive or a filler panel installed in each bay.
- Before you make changes to disk drives, disk drive controllers (including controllers that are integrated on the system board), disk drive backplanes, or disk drive cables, back up all important data that is stored on hard disks.
- Before you remove any component of a RAID array, back up all RAID configuration information.

To remove a hot-swap hard disk drive, complete the following steps.

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Make sure you save the data on your drive, especially if it is part of a RAID array, before you remove it from the server.

Step 3. Slide the release latch (orange) gently to the left to unlock the drive handle.

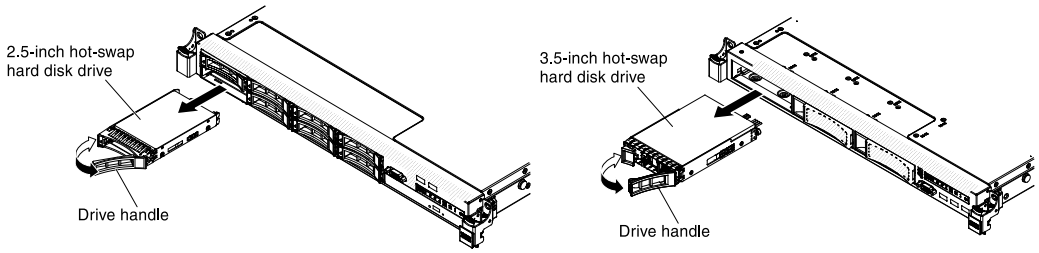


Figure 115. Hot-swap hard disk drives removal

Step 4. Grasp the handle and slide the drive out of the drive bay.

Step 5. Reinstall the drive bay filler panel.

Step 6. If you are instructed to return the drive assembly, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing hot-swap hard disk drives

Use this information to replace hot-swap hard disk drives.

The following notes describe the type of hard disk drives that the server supports and other information that you must consider when you install a hard disk drive. For a list of supported hard disk drives, see http://www.lenovo.com/ serverproven/.

- Locate the documentation that comes with the hard disk drive and follow those instructions in addition to the instructions in this chapter.
- Make sure that you have all the cables and other equipment that are specified in the documentation that comes with the drive.
- Select the bay in which you want to install the drive.
- Check the instructions that come with the drive to determine whether you have to set any switches or jumpers on the drive. If you are installing a SAS or SATA hard disk drive, be sure to set the SAS or SATA ID for that device.

- The hot-swap server models support up to eight 2.5-inch or three 3.5-inch hot-swap SAS or SATA hard disk drives.
- The electromagnetic interference (EMI) integrity and cooling of the server are protected by having all bays and PCI and PCI Express slots covered or occupied. When you install a drive, PCI, or PCI Express adapter, save the EMC shield and filler panel from the bay or PCI or PCI Express adapter slot cover in the event that you later remove the device.
- For a complete list of supported optional devices for the server, see http://www.lenovo.com/serverproven/.

To install a hot-swap SAS or SATA hard disk drive, complete the following steps:

Note: If you have only one hard disk drive, you must install it in the bay 0 (upper-left).

Step 1. Read the safety information that begins on "Safety" on page v and "Installation guidelines" on page 31.

Step 2. Remove the filler panel from the empty drive bay. Keep the filler panel in a safe place.

Step 3. Touch the static-protective package that contains the drive to any unpainted metal surface on the server; then, remove the drive from the package and place it on a static-protective surface.

Step 4. Install the hard disk drive in the drive bay:

a. Make sure that the tray handle is in the open (unlocked) position.

b. Align the drive with the guide rails in the bay.

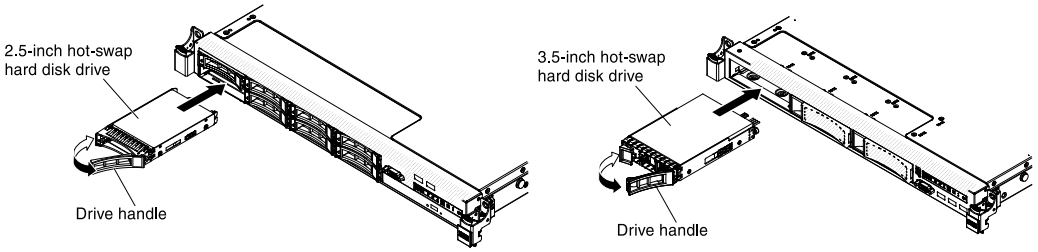


Figure 116. Hot-swap hard disk drives installation

c. Gently push the drive into the bay until the drive stops.

d. Rotate the tray handle to the closed (locked) position.

e. Check the hard disk drive status LED to verify that the hard disk drive is operating correctly. If the yellow hard disk drive status LED of a drive is lit continuously, that drive is faulty and must be replaced. If the green hard disk drive activity LED is flashing, the drive is being accessed.

Note: If the server is configured for RAID operation using a ServeRAID adapter, you might have to reconfigure your disk arrays after you install hard disk drives. See the ServeRAID adapter documentation for additional information about RAID operation and complete instructions for using the ServeRAID adapter.

Step 5. If you are installing additional hot-swap hard disk drives, do so now.

Step 6. Turn on the peripheral devices and the server.

Drive IDs

The drive ID that is assigned to each drive is printed on the front of the server. The following illustrations show the locations of the IDs of the drives. The ID numbers and the drive bay numbers are the same.

2.5-inch hot-swap hard disk drive IDs

The hot-swap-drive ID that is assigned to each drive is printed on the front of the server.

The following illustration shows the location of the IDs of the hard disk drives. The ID numbers and the drive bay numbers are the same.

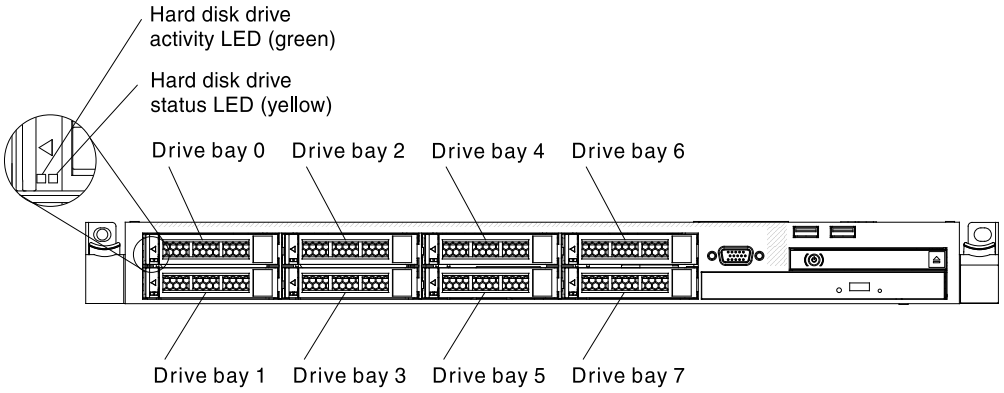


Figure 117. 2.5-inch hot-swap hard disk drive IDs

3.5-inch hot-swap hard disk drive IDs

The hot-swap-drive ID that is assigned to each drive is printed on the front of the server.

The following illustration shows the location of the IDs of the hard disk drives. The ID numbers and the drive bay numbers are the same.

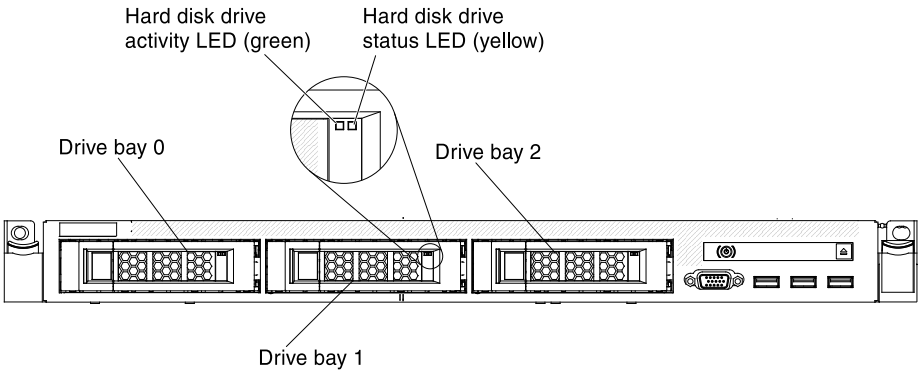


Figure 118. 3.5-inch hot-swap hard disk drive IDs

Removing simple-swap hard disk drives

Use this information to remove simple-swap hard disk drives.

You must turn off the server before removing simple-swap drives from the server. To remove a simple-swap SATA hard disk drive, complete the following steps.

Attention:

- To avoid damage to the hard disk drive connectors, make sure that the server cover is in place and fully closed whenever you install or remove a hard disk drive.

- To make sure that there is adequate system cooling, do not operate the server for more than 2 minutes without either a hard disk drive or a filler panel installed in each bay.

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Step 3. Slide the blue release latch to the right with one finger (to release the drive) while using another finger to grasp the black drive handle and pull the hard disk drive out of the drive bay.

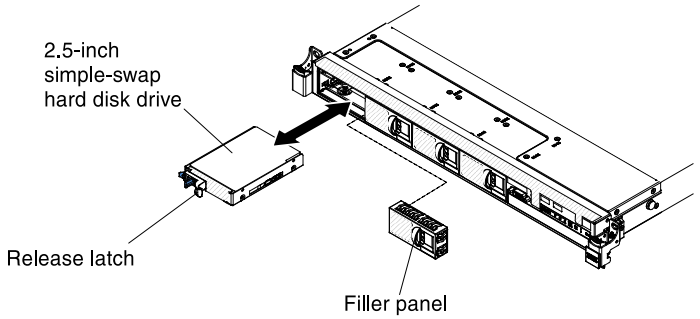


Figure 119. 2.5-inch simple-swap hard disk drive removal

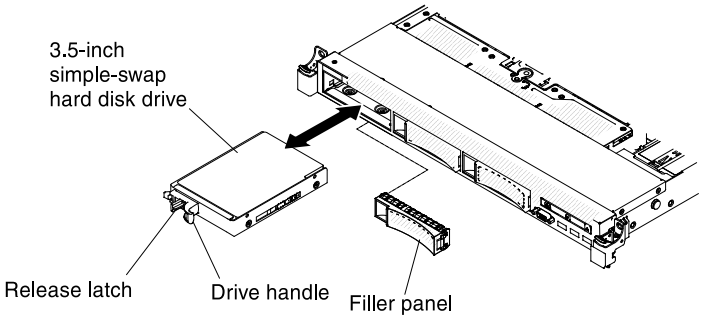


Figure 120. 3.5-inch simple-swap hard disk drive removal

Step 4. Reinstall the drive bay filler panel that you removed earlier.

Step 5. If you are instructed to return the drive assembly, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing simple-swap hard disk drives

Use this information to replace simple-swap hard disk drives.

You must turn off the server before installing simple-swap drives in the server. Before you install a simple-swap SATA hard disk drive, read the following information. For a list of supported hard disk drives, see http://www.lenovo.com/ serverproven/.

- Locate the documentation that comes with the hard disk drive and follow those instructions in addition to the instructions in this chapter.
- Make sure that you have all the cables and other equipment that are specified in the documentation that comes with the drive.
- Select the bay in which you want to install the drive.

- Check the instructions that come with the drive to determine whether you have to set any switches or jumpers on the drive. If you are installing a SATA device, be sure to set the SATA ID for that device.
- You can install up to three 3.5-inch simple-swap SATA hard disk drives in the server. Do not install hot-swap drives into a simple-swap server model, it is not supported.
- You can install one 2.5-inch simple-swap SATA hard disk drives in bay 0 in the server. Do not install hot-swap drives into a simple-swap server model, it is not supported.
- The simple-swap server models are available only in non-RAID configurations.
- The electromagnetic interference (EMI) integrity and cooling of the server are protected by having all bays and PCI and PCI Express slots covered or occupied. When you install a drive, PCI, or PCI Express adapter, save the EMC shield and filler panel from the bay or PCI or PCI Express adapter slot cover in the event that you later remove the device.

To install a simple-swap hard disk drive, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Step 3. Remove the filler panel from the empty drive bay.

Step 4. Touch the static-protective package that contains the drive to any unpainted metal surface on the server; then, remove the drive from the package and place it on a static-protective surface.

Step 5. Install the hard disk drive in the drive bay:

a. Grasp the black drive handle and slide the blue release latch to the right and align the drive assembly with the guide rails in the bay.

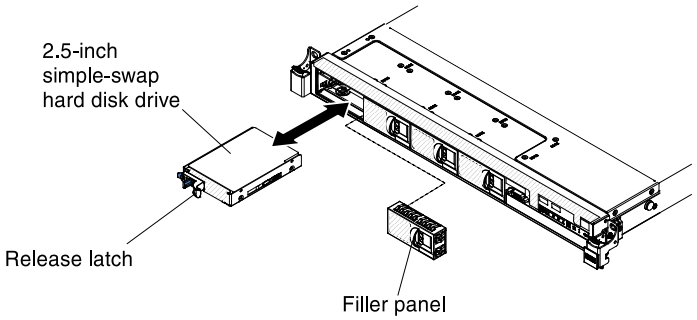


Figure 121. 2.5-inch simple-swap hard disk drive installation

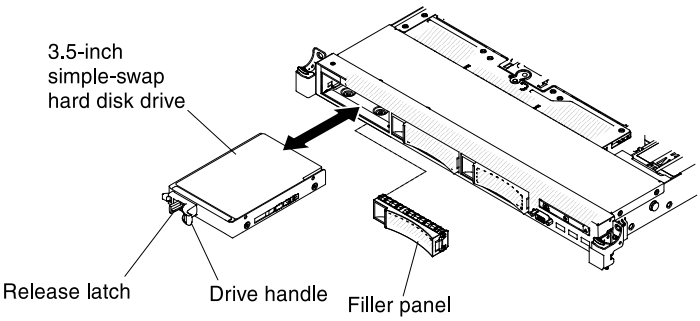


Figure 122. 3.5-inch simple-swap hard disk drive installation

b. Gently push the drive into the bay until the drive stops.

Step 6. Reinstall the drive bay filler panel that you removed earlier.

Step 7. If you are installing additional simple-swap hard disk drives, do so now.

Step 8. Turn on the peripheral devices and the server.

Drive IDs

The drive ID that is assigned to each drive is printed on the front of the server. The following illustrations show the locations of the IDs of the drives. The ID numbers and the drive bay numbers are the same.

2.5-inch simple-swap hard disk drive IDs

The simple-swap-drive ID that is assigned to each drive is printed on the front of the server.

The following illustration shows the location of the IDs of the hard disk drives. The ID numbers and the drive bay numbers are the same.

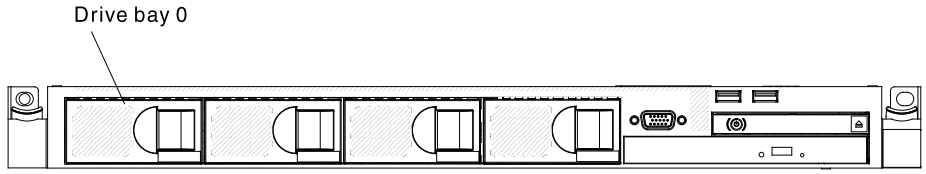


Figure 123. 2.5-inch simple-swap hard disk drive IDs

3.5-inch simple-swap hard disk drive IDs

The simple-swap-drive ID that is assigned to each drive is printed on the front of the server.

The following illustration shows the location of the IDs of the hard disk drives. The ID numbers and the drive bay numbers are the same.

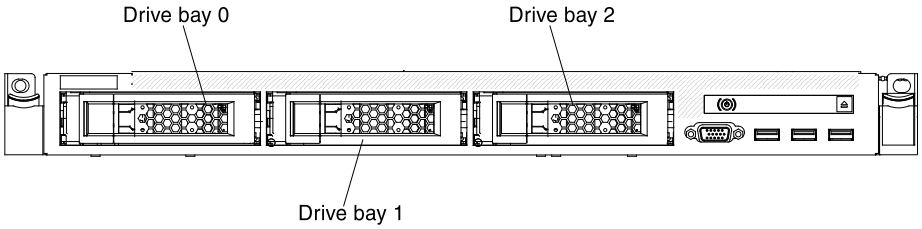


Figure 124. 3.5-inch simple-swap hard disk drive IDs

Removing a DVD drive

Use this information to remove a DVD drive.

To remove an optional DVD drive, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the server cover (see “Removing the cover” on page 191).

Step 4. Press and hold the release tab down as you push the drive from the rear to slide it out of the bay.

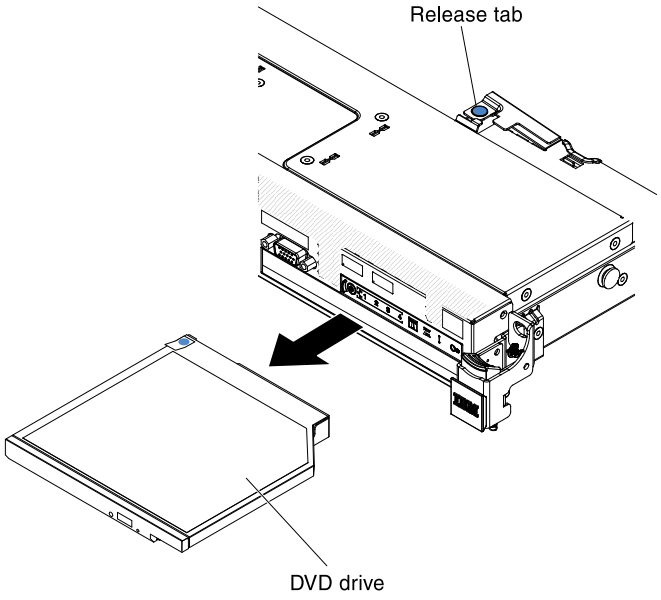


Figure 125. DVD drive removal

Step 5. Slide the drive retention clip from the side of the drive. Save the clip to use when you install the replacement drive or replace the DVD drive filler panel.

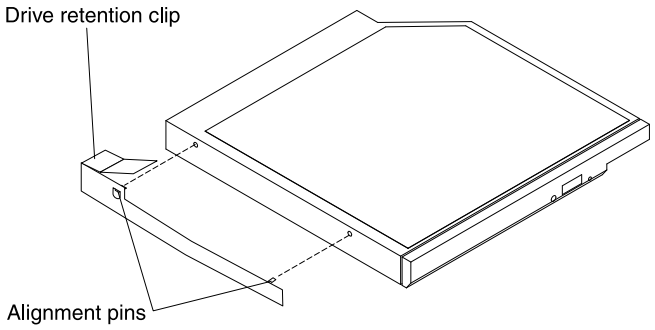


Figure 126. DVD drive retention clip removal

Step 6. Attach the drive retention clip to the side of the DVD drive filler panel that you removed.

Step 7. Slide the DVD drive filler panel into the DVD drive bay until the DVD drive filler panel clicks into place.

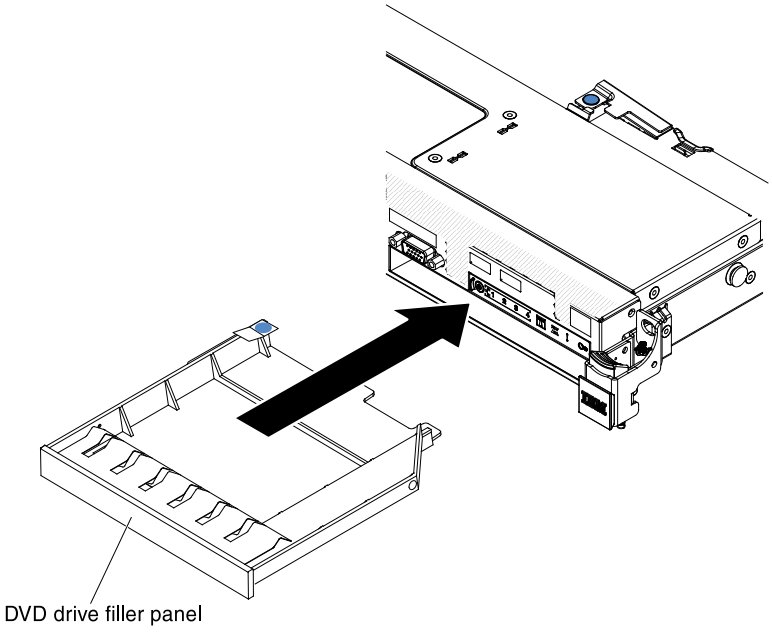


Figure 127. DVD drive filler panel installation

Step 8. If you are instructed to return the DVD drive, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a DVD drive

Use this information to replace a DVD drive.

The following notes describe the type of drives that the server supports and other information that you must consider when you install a drive. For a list of supported drives, see http://www.lenovo.com/ serverproven/.

- Locate the documentation that comes with the drive and follow those instructions in addition to the instructions in this chapter.
- Make sure that you have all the cables and other equipment that are specified in the documentation that comes with the drive.
- The server supports one ultra-slim SATA optical drive.

To install an optional DVD drive, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Note: When you disconnect the power source from the server, you lose the ability to view the LEDs because the LEDs are not lit when the power source is removed. Before you disconnect the power source, make a note of which LEDs are lit, including the LEDs that are lit on the operation information panel, on the light path diagnostics panel, and LEDs inside the server on the system board.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the DVD drive filler panel if it is installed. Locate the blue release tab on the rear of the DVD drive filler panel; then, while you press the tab, push the DVD drive filler panel out of the drive bay.

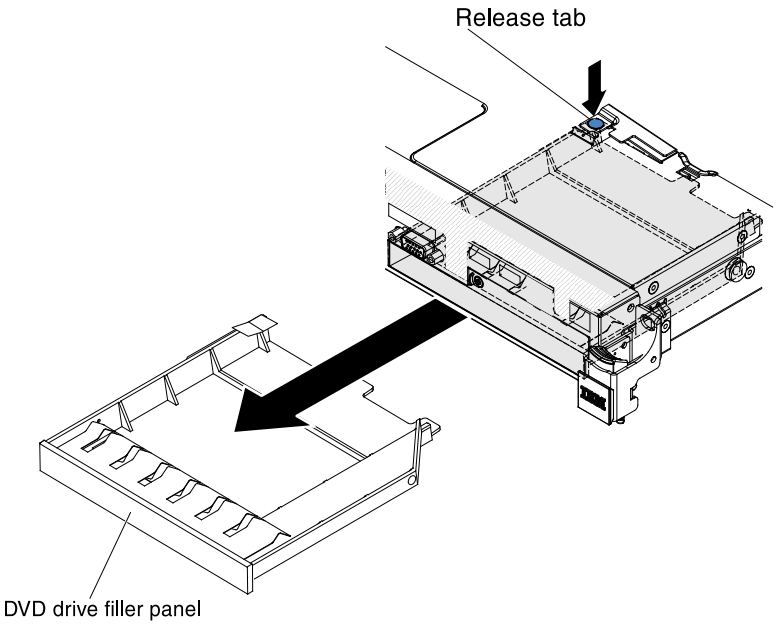


Figure 128. DVD drive filler panel removal

Step 5. Remove the retention clip from the side of the DVD drive filler panel. Save the DVD drive filler panel for future use.

Note: If you are installing an optical drive that contains a laser, observe the following safety precautions.

Statement 3

CAUTION:
When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- **Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.**
- **Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

DANGER

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following.

Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

Class 1 Laser Product
Laser Klasse 1
Laser Klass 1
Luokan 1 Laserlaite
Appareil À Laser de Classe 1

Step 6. Touch the static-protective package that contains the new optical drive to any unpainted metal surface on the server; then, remove the optical drive from the package and place it on a static-protective surface.

Step 7. Follow the instructions that come with the drive to set any jumpers or switches.

Step 8. Attach the drive retention clip that you removed from the DVD drive filler panel to the side of the new DVD drive.

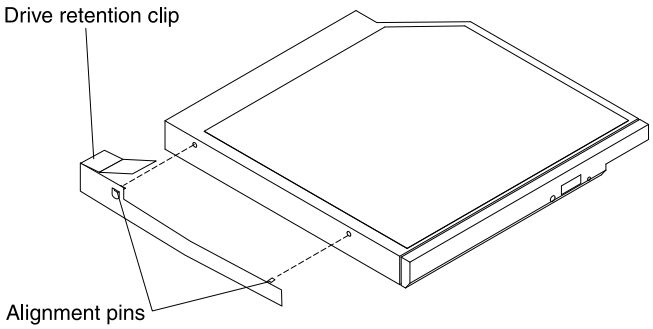


Figure 129. DVD drive retention clip installation

Step 9. Align the DVD drive in the drive bay and slide the DVD drive into the optical drive bay until the DVD drive clicks into place.

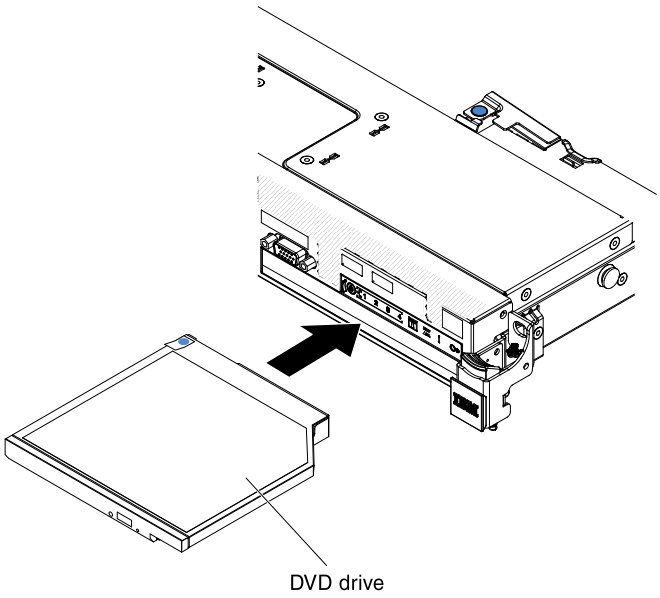


Figure 130. DVD drive installation

Step 10. Connect the DVD drive cable (see “Replacing the DVD drive cable” on page 213). The following illustration shows the cable routing for the DVD drive:

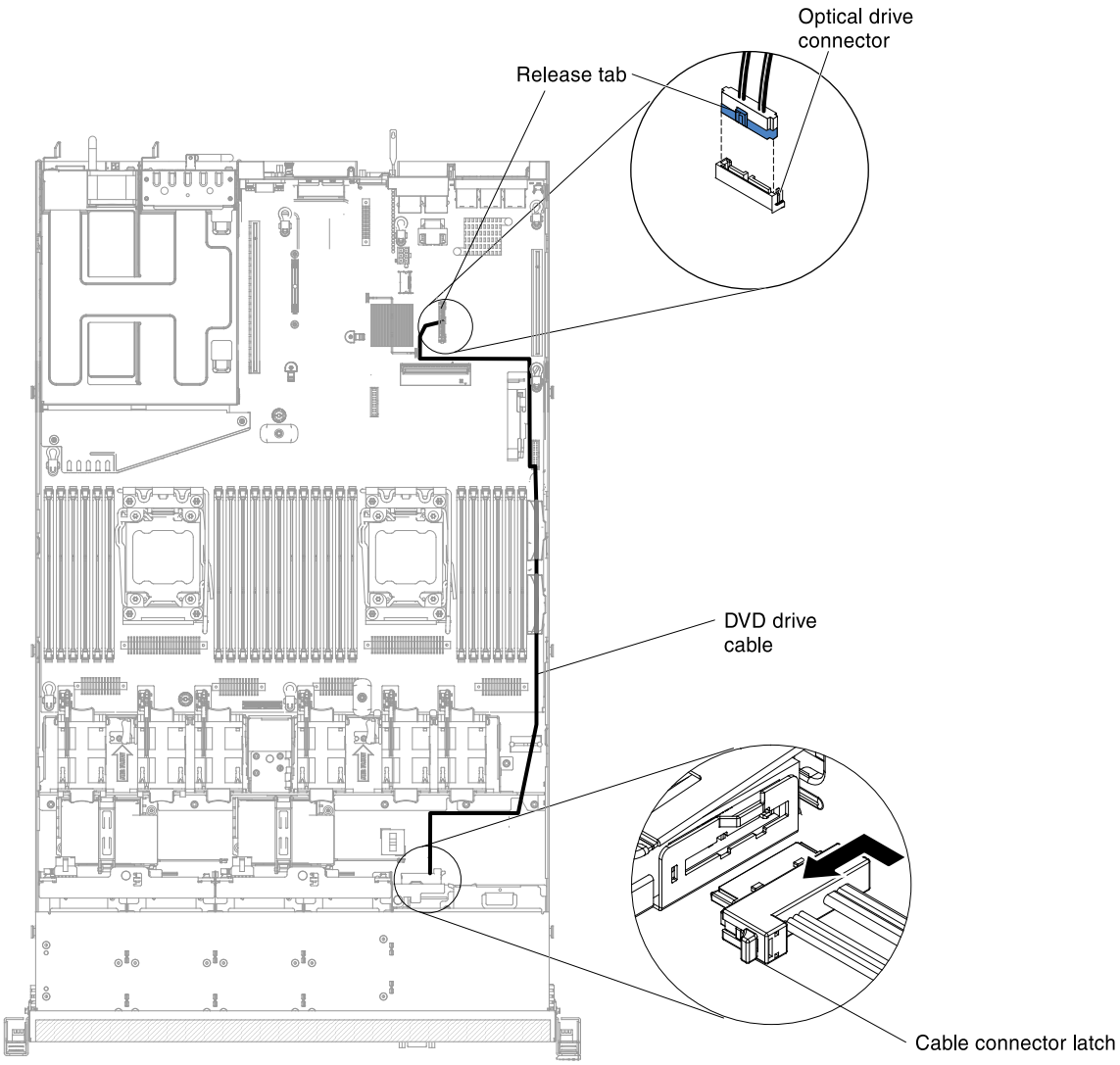


Figure 131. DVD drive cable routing

Step 11. Reconnect the power cords and any cables that you removed.

Step 12. Turn on the peripheral devices and the server.

Removing the DVD drive cable

Use this information to remove the DVD drive cable.

To remove the DVD cable, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the air baffle (see “Removing the air baffle” on page 193).

Step 5. Press and hold the connector release tab; then, remove the DVD drive cable from the connector on the system board.

Attention: You must press the connector release tab in order to disconnect the DVD drive cable from the system board. Do not disconnect the DVD drive cable by using excessive force.

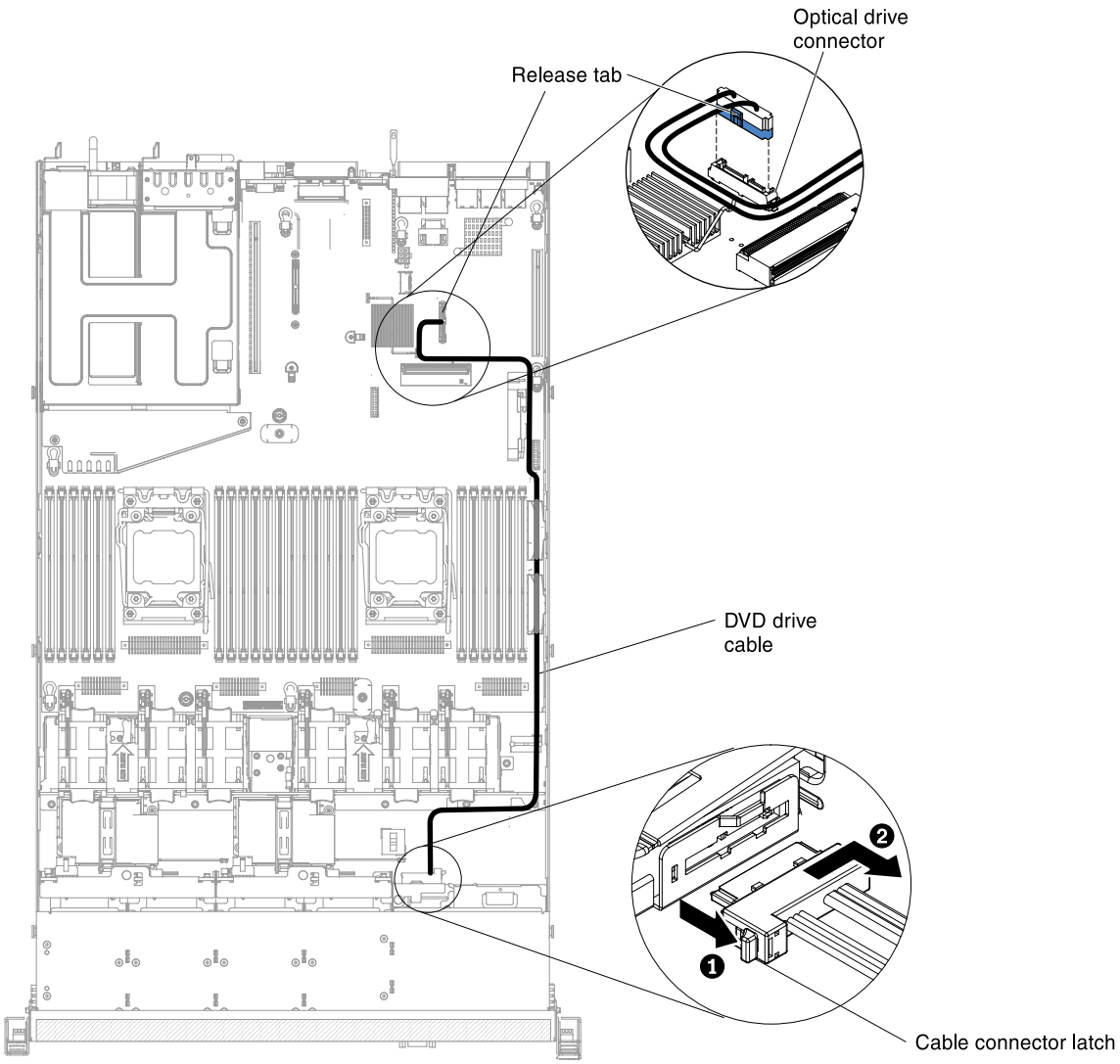


Figure 132. DVD drive cable routing

Step 6. From the rear of the DVD drive cage, press and hold the connector latch (on the left of the cable connector) and grasp the cable connector and slide it to the right; then, remove the DVD drive cable from the connector on the back of the DVD drive and set it aside.

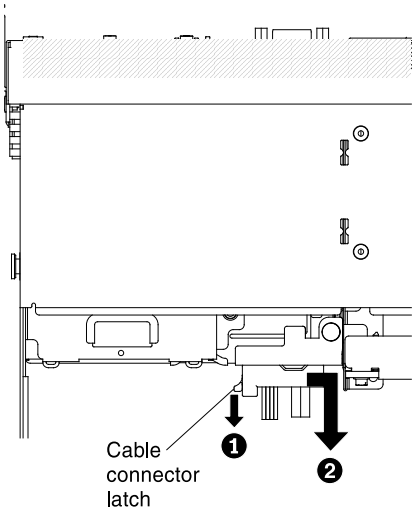


Figure 133. DVD drive cable latch

If you are instructed to return the DVD drive cable, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the DVD drive cable

Use this information to replace the DVD drive cable.

To install the DVD drive cable, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the air baffle (see “Removing the air baffle” on page 193).

Step 5. Align the cable connector with the connector on the rear of the DVD drive cage. Press the cable connector into the optical drive cage connector and slide it to the left until it is firmly seated.

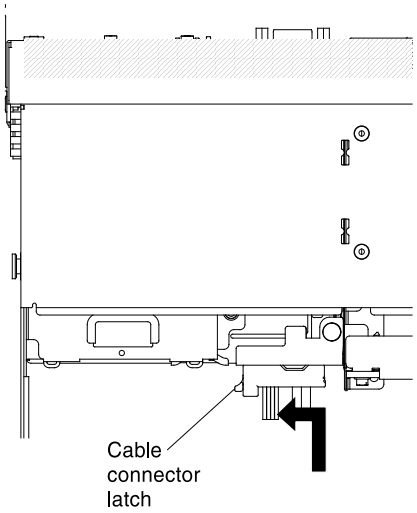


Figure 134. DVD drive cable latch

The following illustration shows cable routing for the DVD cable:

Attention: Follow the optical drive cable routing as the illustration shows. Make sure that the cable is not pinched and does not cover any connectors or obstruct any components on the system board.

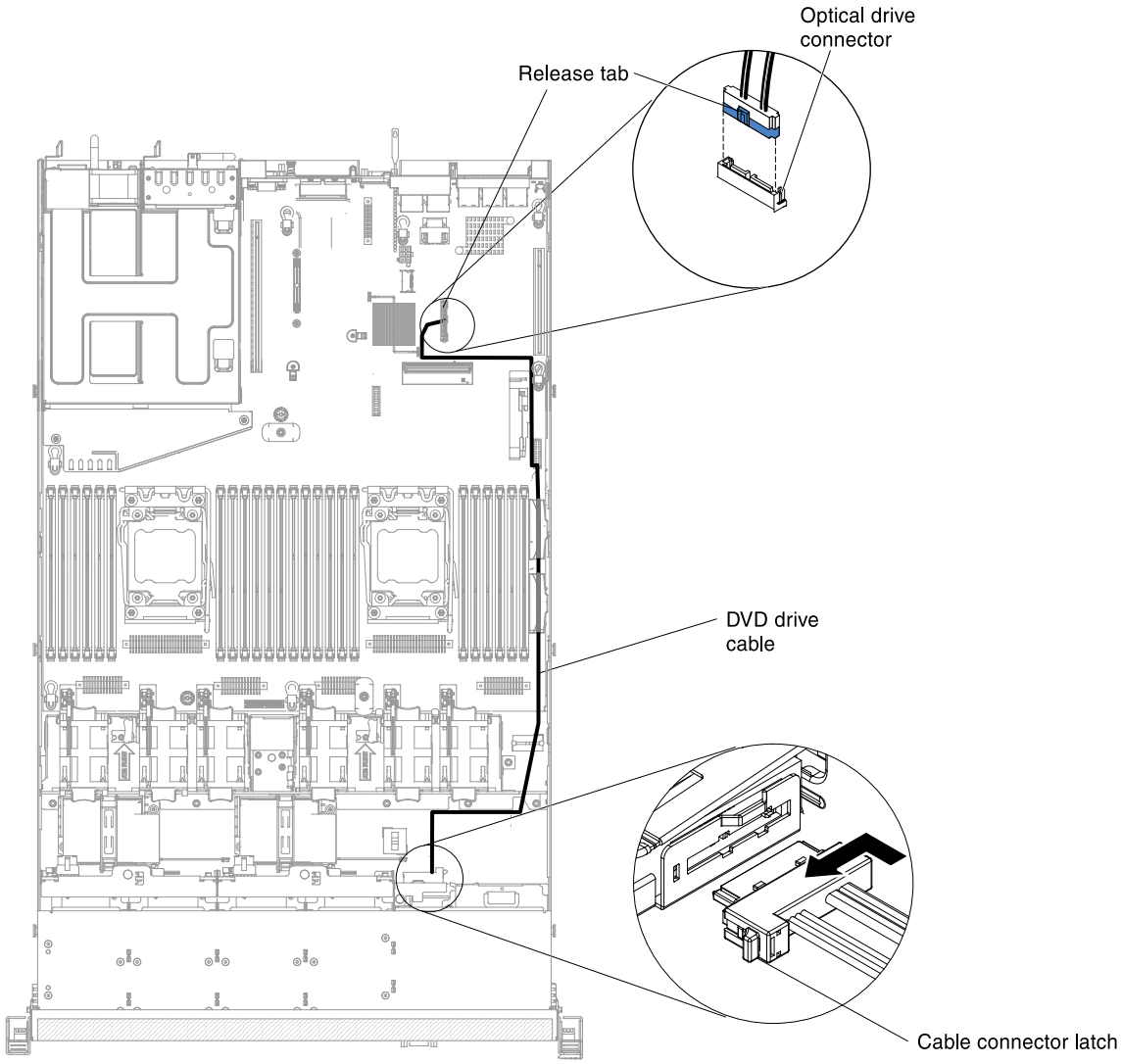


Figure 135. DVD drive cable routing

Step 6. Replace the air baffle (see “Replacing the air baffle” on page 194).

Step 7. Replace the cover (see “Replacing the cover” on page 192).

Step 8. Slide the server into the rack.

Step 9. Reconnect the power cords and any cables that you removed.

Step 10. Turn on the peripheral devices and the server.

Removing a memory module

Use this information to remove a memory module.

To remove a dual inline memory module (DIMM), complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the air baffle (see “Removing the air baffle” on page 193).

Step 5. Carefully open the retaining clips on each end of the DIMM connector and remove the DIMM.

Attention: To avoid breaking the retaining clips or damaging the DIMM connectors, open and close the clips gently.

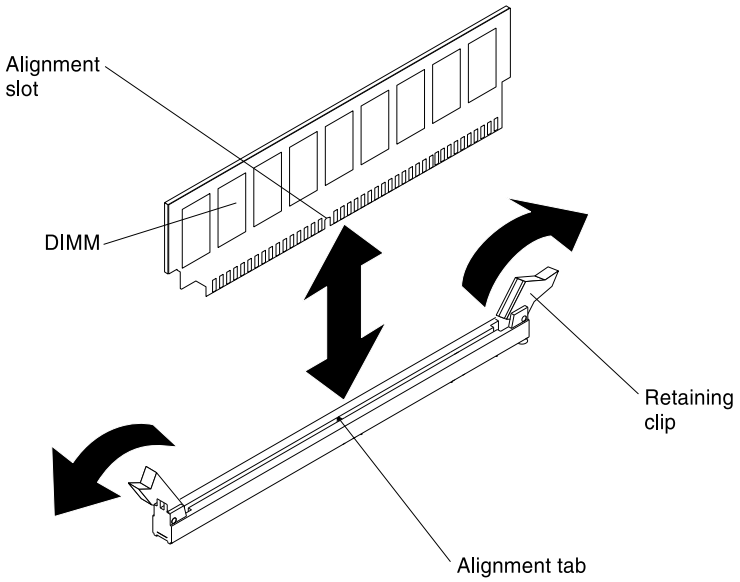


Figure 136. DIMM removal

If you are instructed to return the DIMM, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Installing a memory module

The following notes describe the types of DIMMs that the server supports and other information that you must consider when you install DIMMs.

- When you install or remove DIMMs, the server configuration information changes. When you restart the server, the system displays a message that indicates that the memory configuration has changed.
- The server supports only industry-standard double-data-rate 3 (DDR3), 1066, 1333, 1600, or 1866 MHz, PC3-8500, PC3-10600, PC3-12800, or PC3-14900 registered or unbuffered, synchronous dynamic random-access memory (SDRAM) dual inline memory modules (DIMMs) with error correcting code (ECC). See http://www.lenovo.com/ serverproven/ for a list of supported memory modules for the server.
  - The specifications of a DDR3 DIMM are on a label on the DIMM, in the following format.

    gggggeRxff PC3*v-wwwwwm-aa-bb-ccd*

    where:

    - *ggggg* is the total capacity of the DIMM (for example, 1 GB, 2 GB, or 4 GB)
    - *eR* is the number of ranks

      1R = single-rank

      2R = dual-rank

      4R = quad-rank
    - *xff* is the device organization (bit width)

x4 = x4 organization (4 DQ lines per SDRAM)

x8 = x8 organization

x16 = x16 organization

- *v* is the SDRAM and support component supply voltage (VDD)
  - Blank = 1.5 V specified
  - L = 1.35 V specified, 1.5 V operable

  Note: Values for these voltages are “specified” which means the device characteristics such as timing are supported at this voltage. Values are “operable” which means that the devices can be operated safely at this voltage. However, device characteristics such as timing may not be guaranteed. All devices must be “tolerant” of the highest DDR3 nominal voltage of 1.5 V, meaning that they may not operate at 1.5 V but may be powered at that voltage without damage to the devices.
- *wwwww* is the DIMM bandwidth, in MBps

  6400 = 6.40 GBps (DDR3-800 SDRAMs, 8-byte primary data bus)

  8500 = 8.53 GBps (DDR3-1066 SDRAMs, 8-byte primary data bus)

  10600 = 10.66 GBps (DDR3-1333 SDRAMs, 8-byte primary data bus)

  12800 = 12.80 GBps (DDR3-1600 SDRAMs, 8-byte primary data bus)

  14900 = 14.93 GBps (DDR3-1866 SDRAMs, 8-byte primary data bus)
- *m* is the DIMM type

  E = Unbuffered DIMM (UDIMM) with ECC (x72-bit module data bus)

  L = Load Reduction DIMM (LRDIMM)

  R = Registered DIMM (RDIMM)

  U = Unbuffered DIMM with no ECC (x64-bit primary data bus)
- *aa* is the CAS latency, in clocks at maximum operating frequency
- *bb* is the JEDEC SPD Revision Encoding and Additions level
- *cc* is the reference design file for the design of the DIMM
- *d* is the revision number of the reference design of the DIMM

Note: To determine the type of a DIMM, see the label on the DIMM. The information on the label is in the format xxxxx *n*Rxxx PC3v-xxxxxx-xx-xx-xxx. The numeral in the sixth numerical position indicates whether the DIMM is single-rank (*n*=1), dual-rank (*n*=2), or quad-rank (*n*=4).

- The following rules apply to DDR3 RDIMM speed as it relates to the number of RDIMMs in a channel:
  - When you install 1 RDIMM per channel, the memory runs at 1866 MHz
  - When you install 2 RDIMMs per channel, the memory runs at 1600 MHz
  - When you install 3 RDIMMs per channel, the memory runs at 1066 MHz
  - All channels in a server run at the fastest common frequency
  - Do not install registered, unbuffered, and load reduction DIMMs in the same server
- The maximum memory speed is determined by the combination of the microprocessor, DIMM speed, DIMM type, Operating Modes in UEFI settings, and the number of DIMMs installed in each channel.
- In two-DIMM-per-channel configuration, the server automatically operates with a maximum memory speed of up to 1600 MHz when the following condition is met:

  - Two 1.35 V single-rank, dual-ranl, or quad-rank UDIMMs, RDIMMs or LRDIMMs are installed in the same channel. In the Setup utility, **Memory speed** is set to **Max performance** and **LV-DIMM power** is set to **Enhance performance** mode. The 1.35 V UDIMMs, RDIMMs or LRDIMMs will function at 1.5 V.
- The server supports a maximum of 16 dual-rank UDIMMs. The server supports up to two UDIMMs per channel.
- The server supports a maximum of 24 single-rank, dual-rank, or 16 quad-rank RDIMMs. The server does not support three quad-rank RDIMMs in the same channel.
- The following table shows an example of the maximum amount of memory that you can install using ranked DIMMs:

Table 20. Maximum memory installation using ranked DIMMs

Number of DIMMs	DIMM type	DIMM size	Total memory
16	Dual-rank UDIMM	4 GB	64 GB
24	Single-rank RDIMM	2 GB	48 GB
24	Single-rank RDIMM	4 GB	96 GB
24	Dual-rank RDIMM	4 GB	96 GB
24	Dual-rank RDIMM	8 GB	192 GB
24	Dual-rank RDIMM	16 GB	384 GB
16	Quad-rank RDIMM	8 GB	128 GB
24	Quad-rank LRDIMM	32 GB	768 GB

- The UDIMM option that is available for the server is 4 GB. The server supports a minimum of 4 GB and a maximum of 64 GB of system memory using UDIMMs.
- The RDIMM options that are available for the server are 2 GB, 4 GB, 8 GB, and 16 GB. The server supports a minimum of 2 GB and a maximum of 384 GB of system memory using RDIMMs.
- The LRDIMM option that is available for the server is 32 GB. The server supports a minimum of 32 GB and a maximum of 768 GB of system memory using LRDIMMs.

  Note: The amount of usable memory is reduced depending on the system configuration. A certain amount of memory must be reserved for system resources. To view the total amount of installed memory and the amount of configured memory, run the Setup utility. For additional information, see “Configuring the server” on page 94.
- A minimum of one DIMM must be installed for each microprocessor. For example, you must install a minimum of two DIMMs if the server has two microprocessors installed. However, to improve system performance, install a minimum of four DIMMs for each microprocessor.
- DIMMs in the server must be the same type (RDIMM, UDIMM, or LRDIMM) to ensure that the server will operate correctly.
- When you install one quad-rank DIMM in a channel, install it in the DIMM connector furthest away from the microprocessor.

Notes:

1. You can install DIMMs for microprocessor 2 as soon as you install microprocessor 2; you do not have to wait until all of the DIMM slots for microprocessor 1 are filled.
2. DIMM slots 13-24 are reserved for microprocessor 2; thus, DIMM slots 13-24 are enabled when microprocessor 2 is installed.

The following illustration shows the location of the DIMM connectors on the system board.

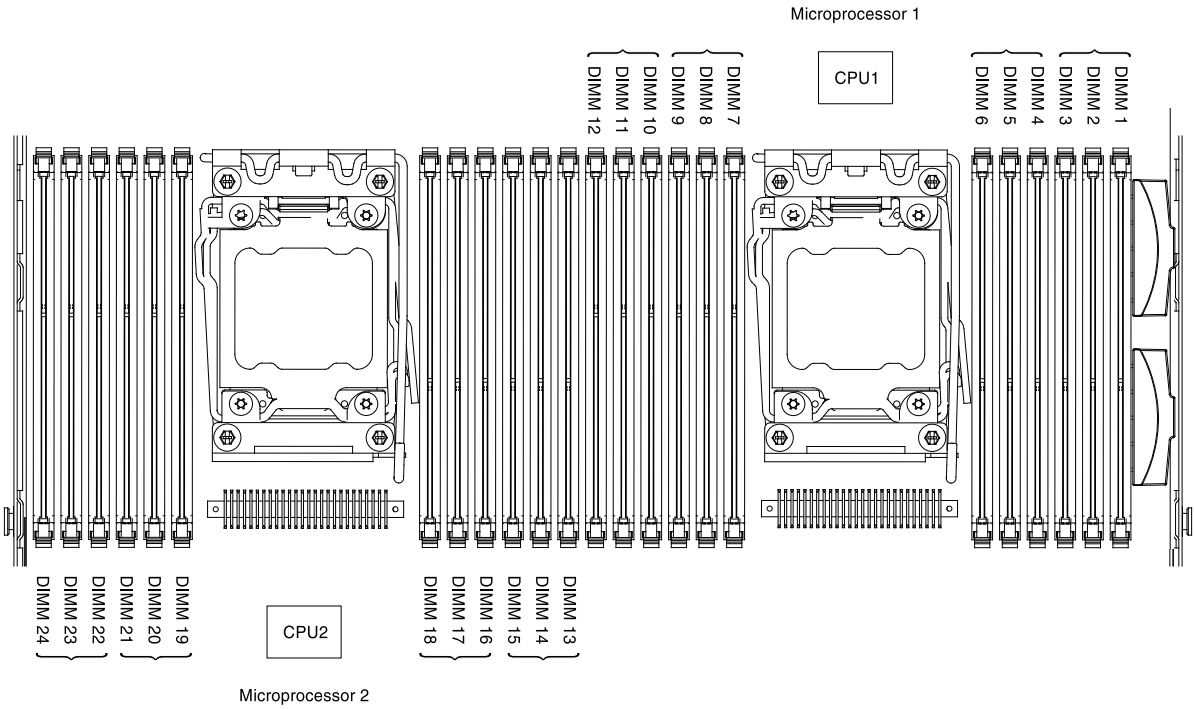


Figure 137. DIMM connectors location

DIMM installation sequence

Depending on the server model, the server may come with a minimum of one 2 GB or 4 GB DIMM installed in slot 1. When you install additional DIMMs, install them in the order shown in the following table to optimize system performance.

In general, all three channels on the memory interface for each microprocessor can be populated in any order and have no matching requirements.

Table 21. Normal mode DIMM installation sequence

Number of installed microprocessor	DIMM connector population sequence
One microprocessor installed	1, 4, 9, 12, 2, 5, 8, 11, 3, 6, 7, 10
Two microprocessors installed	1, 13, 4, 16, 9, 21, 12, 24, 2, 14, 5, 17, 8, 20, 11, 23, 3, 15, 6, 18, 7, 19, 10, 22

Memory mirrored channel

Memory mirrored channel mode replicates and stores data on two pairs of DIMMs within two channels simultaneously.

If a failure occurs, the memory controller switches from the primary pair of memory DIMMs to the backup pair of DIMMs. To enable memory mirrored channel through the Setup utility, select **System Settings → Memory**. For more information, see “Using the Setup utility” on page 97. When you use the memory mirrored channel feature, consider the following information:

- When you use memory mirrored channel, you must install a pair of DIMMs at a time. The two DIMMs in each pair must be identical in size, type, and rank (single, dual, or quad), and organization, but not in speed. The channels run at the speed of the slowest DIMM in any of the channels.

- The maximum available memory is reduced to half of the installed memory when memory mirrored channel is enabled. For example, if you install 64 GB of memory using RDIMMs, only 32 GB of addressable memory is available when you use memory mirrored channel.
- For UDIMMs, DIMM connectors 3, 6, 7, and 10 for microprocessor 1 and DIMM connectors 15, 18, 19, and 22 for microprocessor 2 are not used in memory mirrored channel mode.

The following diagram lists the DIMM connectors on each memory channel.

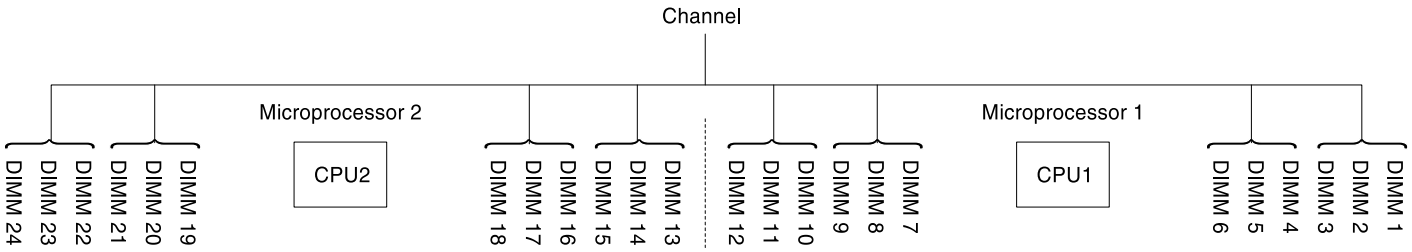


Figure 138. Connectors on each memory channel

The following table shows the installation sequence for memory mirrored channel mode:

Table 22. Memory mirrored channel mode DIMM population sequence

Number of DIMMs	Number of installed microprocessor	DIMM connector
First pair of DIMMs	1	1, 4
Second pair of DIMMs	1	9, 12
Third pair of DIMMs	1	2, 5
Fourth pair of DIMMs	1	8, 11
Fifth pair of DIMMs	1	3, 6
Sixth pair of DIMMs	1	7, 10
Seventh pair of DIMMs	2	13, 16
Eighth pair of DIMMs	2	21, 24
Ninth pair of DIMMs	2	14, 17
Tenth pair of DIMMs	2	20, 23
Eleventh pair of DIMMs	2	15, 18
Twelfth pair of DIMMs	2	19, 22
DIMM connectors 3, 6, 7, 10, 15, 18, 19, and 22 are not used in memory mirrored channel mode when UDIMMs are installed in the server.		

Memory rank sparing

The memory rank sparing feature disables the failed memory from the system configuration and activates a rank sparing DIMM to replace the failed active DIMM.

You can enable rank sparing memory in the Setup utility, select **System Settings → Memory**. For more information, see “Using the Setup utility” on page 97.

The maximum available memory is reduced when memory rank sparing mode is enabled.

The following diagram lists the DIMM connectors on each memory channel.

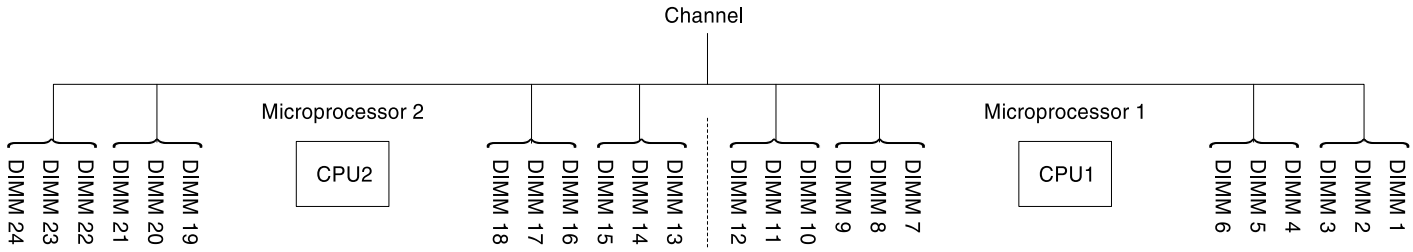


Figure 139. Connectors on each memory channel

Follow the installation sequence for rank sparing mode:

- Install at least one quad-rank DIMM in a channel.
- Install at least two single-rank or dual-rank DIMMs in a channel.

Table 23. Memory rank sparing mode DIMM population sequence

Number of DIMMs	**Number of installed microprocessor**	**DIMM connector**
First pair of DIMMs	1	1, 2
Second pair of DIMMs	1	4, 5
Third pair of DIMMs	1	8, 9
Fourth pair of DIMMs	1	11, 12
Fifth pair of DIMMs	1	7, 10
Sixth pair of DIMMs	1	3, 6
Seventh pair of DIMMs	2	13, 14
Eighth pair of DIMMs	2	16, 17
Ninth pair of DIMMs	2	20, 21
Tenth pair of DIMMs	2	23, 24
Eleventh pair of DIMMs	2	19, 22
Twelfth pair of DIMMs	2	15, 18
DIMM connectors 3, 6, 7, 10, 15, 18, 19, and 22 are not used in memory rank sparing mode when UDIMMs are installed in the server.		

Replacing a memory module

Use this information to install a memory module.

To install a memory module, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the air baffle (see “Removing the air baffle” on page 193).

Step 5. Carefully open the retaining clips on each end of the DIMM connector and remove the DIMM.

Attention: To avoid breaking the retaining clips or damaging the DIMM connectors, open and close the clips gently.

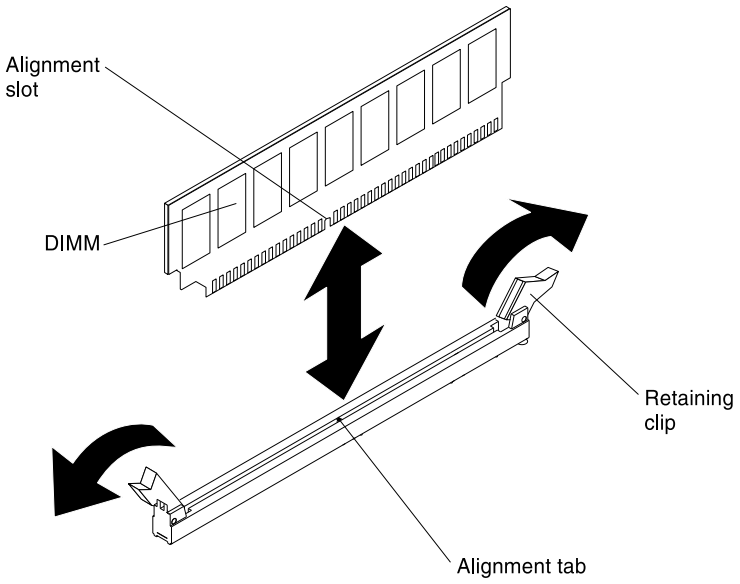


Figure 140. DIMM installation

Step 6. Touch the static-protective package that contains the DIMM to any unpainted metal surface on the outside of the server. Then, remove the DIMM from the package.

Step 7. Turn the DIMM so that the alignment slot align correctly with the alignment tab.

Step 8. Insert the DIMM into the connector by aligning the edges of the DIMM with the slots at the ends of the DIMM connector (see “System-board optional-device connectors” on page 30 for the locations of the DIMM connectors).

Step 9. Firmly press the DIMM straight down into the connector by applying pressure on both ends of the DIMM simultaneously. The retaining clips snap into the locked position when the DIMM is firmly seated in the connector.

Note: If there is a gap between the DIMM and the retaining clips, the DIMM has not been correctly inserted; open the retaining clips, remove the DIMM, and then reinsert it.

Step 10. Reconnect the power cords and any cables that you removed.

Step 11. Replace the air baffle (see “Replacing the air baffle” on page 194).

Note: Close all the retaining clips even for slots without DIMMs installed before replacing the air baffle.

Step 12. Replace the cover (see “Replacing the cover” on page 192).

Step 13. Turn on the peripheral devices and the server.

Removing a PCI riser-card assembly

Use this information to remove a PCI riser-card assembly.

Note: PCI riser-card brackets must be installed even if you do not install an adapter.

To remove a PCI riser-card assembly, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Grasp both ends or the handle of the PCI riser-card assembly and lift it out of the PCI riser-card slot on the system board.

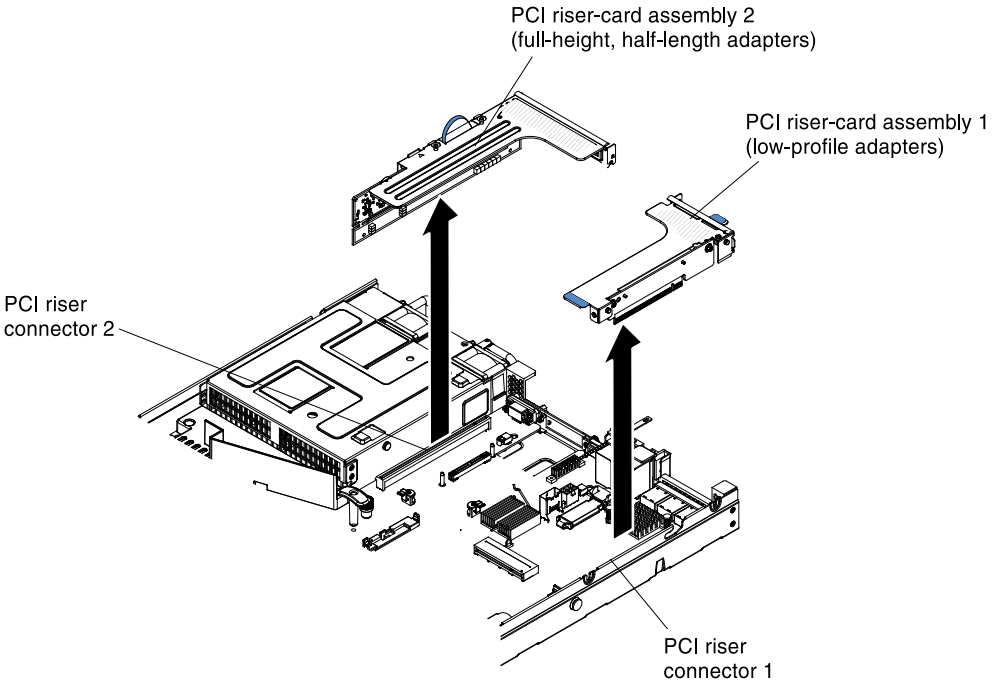


Figure 141. PCI riser-card assembly removal

Step 5. If an adapter is installed in the PCI riser-card assembly, disconnect any cables that are connected to the adapter.

Step 6. Remove the adapter, if one is present, from the PCI riser-card assembly (see “Removing an adapter” on page 227).

Step 7. Set the adapter and the PCI riser-card assembly aside.

If you are instructed to return the PCI riser-card assembly, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a PCI riser-card assembly

Use this information to replace a PCI riser-card assembly.

Note: PCI riser-card brackets must be installed even if you do not install an adapter.

To install a PCI riser-card assembly, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Check whether there are rubber stoppers come with your PCI riser-card assembly 2. If there are rubber stoppers come with your PCI riser-card assembly 2, skip to next step.

a. There are two kinds of rubber stoppers. Attach the two rubber stoppers on PCI riser-card assembly 2, along the edges of the pin holes, as shown in the following illustration.

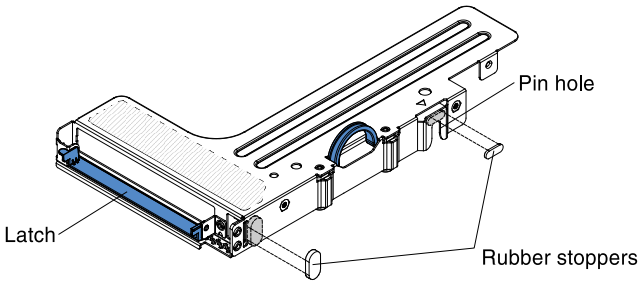


Figure 142. Rubber stoppers installation

b. Attach the bigger rubber stopper near the latch of PCI riser-card assembly 2.

c. Attach the smaller rubber stopper near the pin hole of PCI riser-card assembly 2.

Note: You can purchase the miscellaneous parts kit (FRU part number 94Y7571) to acquire three sets of rubber stoppers. Keep additional rubber stoppers for potential future use.

Step 5. Install the adapter in the new PCI riser-card assembly (see “Replacing an adapter” on page 228).

Step 6. Set any jumpers or switches on the adapter as directed by the adapter manufacturer.

Step 7. Remove the PCI filler panel, if one is present, from the rear of the server.

Step 8. Align the PCI riser-card assembly with the PCI riser connector on the system board; then, press down firmly until the PCI riser-card assembly is seated correctly in the connector on the system board.

Note: Support the server from the middle of the rear chassis when installing PCI riser-card assembly 2.

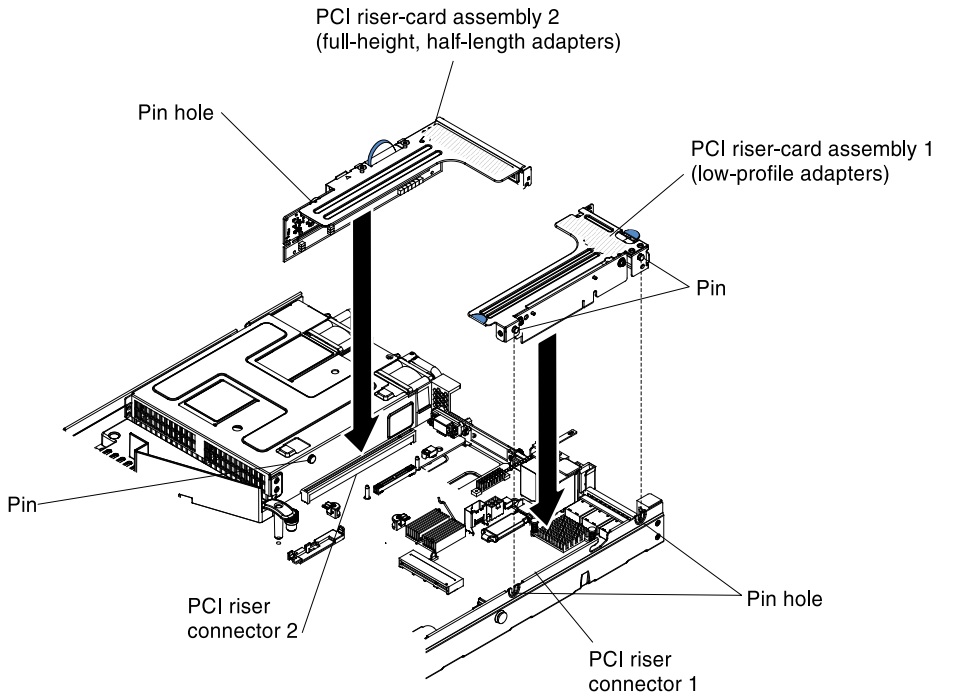


Figure 143. PCI riser-card assembly installation

Step 9. Replace the cover (see “Replacing the cover” on page 192).

Step 10. Slide the server into the rack.

Step 11. Reconnect the power cords and any cables that you removed.

Step 12. Turn on the peripheral devices and the server.

Removing the PCI riser-card bracket from the riser card

Use this information to remove the PCI riser-card bracket from the riser card.

Note: PCI riser-card brackets must be installed even if you do not install a riser card.

To remove the PCI riser-card bracket from the riser card, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the PCI riser-card assembly (see “Removing a PCI riser-card assembly” on page 222).

Step 5. Remove the screws that attach the PCI riser card to the riser-card bracket.

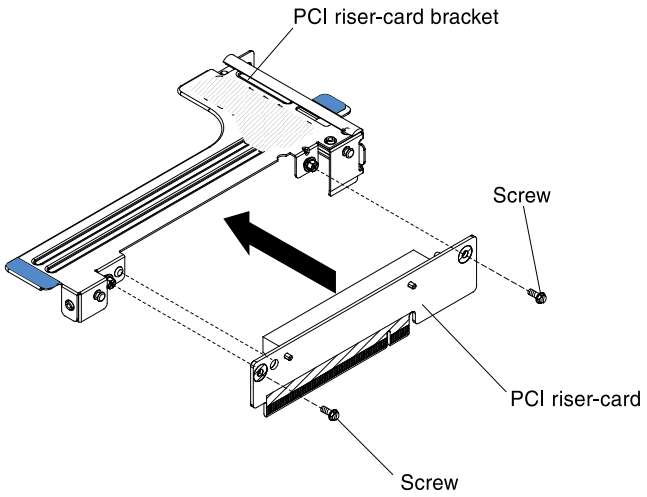


Figure 144. PCI riser-card bracket removal

If you are instructed to return the PCI riser-card bracket, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the PCI riser-card bracket to the riser card

Use this information to replace the PCI riser-card bracket to the riser card.

Note: PCI riser-card brackets must be installed even if you do not install a riser card.

To install the PCI riser-card bracket to the riser card, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Align the holes on the PCI riser card and the riser-card bracket and install the screws that attach the PCI riser card to the riser-card bracket.

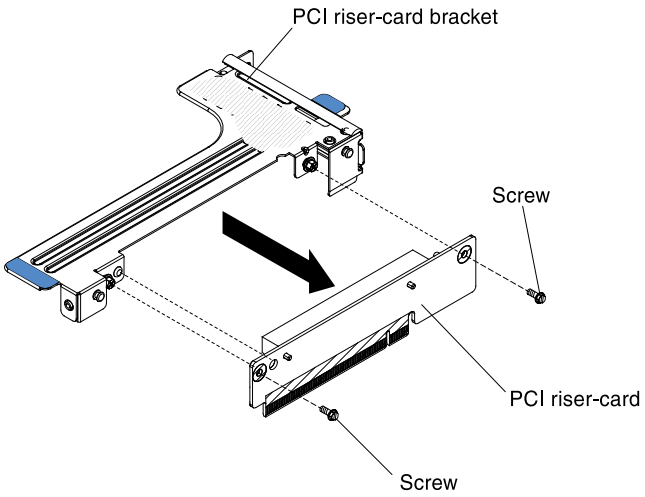


Figure 145. PCI riser-card bracket installation

Step 5. If you need to install an adapter (see “Replacing an adapter” on page 228).

Step 6. Reconnect the cables for the adapter.

Step 7. Replace the PCI riser card assembly (see “Replacing a PCI riser-card assembly” on page 223).

Step 8. Replace the cover (see “Replacing the cover” on page 192).

Step 9. Slide the server into the rack.

Step 10. Reconnect the power cords and any cables that you removed.

Step 11. Turn on the peripheral devices and the server.

Removing an adapter

Use this information to remove an adapter.

To remove an adapter, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords; then, remove the cover (see “Removing the cover” on page 191).

Step 3. Disconnect any cables from the adapter. For PCI riser-card assembly 2, push the latch to easily release the network cable, as shown in the following illustration.

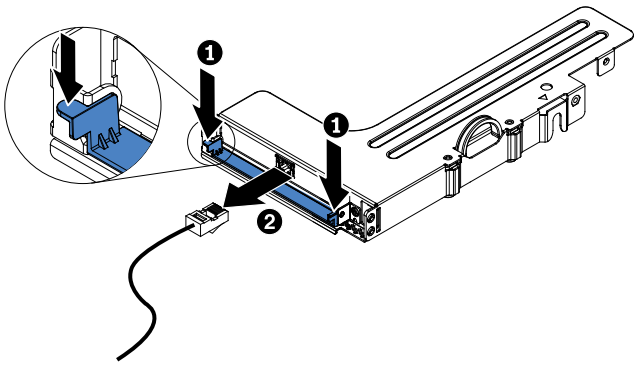


Figure 146. Cable removal

Step 4. Grasp the PCI riser-card assembly at the blue tabs and lift to remove the PCI riser-card assembly.

Step 5. Place the PCI riser-card assembly on a flat and static-protective surface.

Step 6. Carefully grasp the adapter by its top edge or upper corners, and pull the adapter from the PCI riser-card assembly.

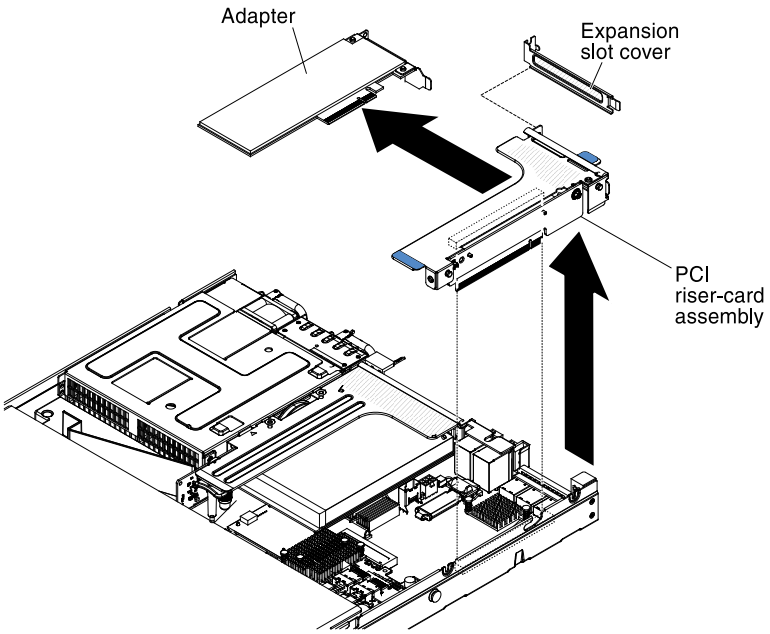


Figure 147. Adapter removal

If you are instructed to return the adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing an adapter

The following notes describe the types of adapters that the server supports and other information that you must consider when you install an adapter.

- Locate the documentation that comes with the adapter and follow those instructions in addition to the instructions in this section.

- The server provides one internal SAS/SATA RAID connector and two PCI slots on the system board. See “System-board optional-device connectors” on page 30 for the location of the internal SAS/SATA RAID connector and riser-card slots. You can replace the ServeRAID SAS/SATA adapter with an optional ServeRAID SAS/SATA adapter in the slot. For configuration information, see the ServeRAID documentation at http://www.lenovo.com/support.
- Do not set the maximum digital video adapter resolution above 1600 x 1200 at 75 Hz for an LCD monitor. This is the highest resolution that is supported for any add-on video adapter that you install in the server.
- Read the following table before installing memory modules when any NVIDIA Quadro adapters is installed.

Table 24. NVIDIA Quadro video adapter configurations

Description	Supported maximum total memory size
Quadro 600 adapter	128 GB
Quadro 2000 adapter	512 GB

- Read the following table before installing NAND flash adapters.

Table 25. Adapter configurations

Description	Option part number	PCI riser 1	PCI riser 2
Emulex dual-port 10GbE SFP+ embedded adapter	00D8540	Six fans installed required[1]	Six fans installed required[1]
365 GB High IOPS MLC mono adapter	46C9078	Six fans installed required[1]	Six fans installed required[1]
785 GB High IOPS MLC mono adapter	46C9081	Six fans installed required[1]	Six fans installed required[1]
1.2 TB high IOPS MLC mono adapter	90Y4377	Six fans installed required[1]	Six fans installed required[1]
2.4 TB high IOPS MLC duo adapter	90Y4397	Not supported	Six fans installed required[1]
Flash Adapter F825 Enterprise Value	00AE861	Six fans installed required[1]	Six fans installed required[1]
Flash Adapter F1650 Enterprise Value	00AE864	Six fans installed required[1]	Six fans installed required[1]
300GB High IOPS MLC modular adapter	90Y4361	Six fans installed required[1]	Six fans installed required[1]
600GB High IOPS MLC modular adapter	90Y4365	Six fans installed required[1]	Six fans installed required[1]
800GB High IOPS MLC modular adapter	90Y4369	Six fans installed required[1]	Six fans installed required[1]
Flash Adapter F3200 Enterprise Value	00AE867	Not supported	Six fans installed required[1]
Qlogic 8200 dual-port 10GbE SFP+ VFA	90Y4600	Six fans installed required[1]	Six fans installed required[1]
ServeRAID M5120 SAS/SATA controller	81Y4478	Six fans installed required[1]	Six fans installed required[1]
ServeRAID M5225 SAS/SATA controller	00AE938	Not supported	Four fans installed required
Solarflare SFN5162F midrange dual-port 10GbE SFP+ adapter	47C9952	Six fans installed required[1]	Six fans installed required[1]

Table 25. Adapter configurations (continued)

Description	Option part number	PCI riser 1	PCI riser 2
Solarflare SFN6122F low latency dual-port 10GbE SFP+ adapter	47C9960	Six fans installed required[1]	Six fans installed required[1]
Solarflare SFN7122F 2x10GbE SFP+ flareon ultra adapter for System x	47C9977	Six fans installed required[1]	Six fans installed required[1]
1. You can purchase Lenovo System x3550 M4 Thermal Solution Kit (option part number 00Y7117) to acquire two additional fans for your server.			

- Any high-definition video-out connector or stereo connector on any add-on video adapter is not supported
- The server does not support full-length, full-height PCI adapters or legacy 5V PCI adapters.
- When you install any PCI adapter, the power cords must be disconnected from the power source before you remove the PCI Express riser-card assembly and the PCI-X riser-card assembly. Otherwise, the active power management event signal will be disabled by the system-board logic, and the Wake on LAN feature might not work. However, after the server is powered-on locally, the active power manager active power management event signal will be enabled by the system-board logic.
- The server provides two PCI riser-card slots on the system board. The following information indicates the riser-card slots and the type of adapters that the riser cards support:
  - If you want to install a PCI Express or PCI-X adapter, you must order the PCI riser-card option.
  - PCI riser slot 1. This slot supports only low-profile adapters.
  - PCI riser slot 2. This slot supports full-height, half-length adapters.

  The following table lists the supported configurations for the PCI riser-card slots.

Table 26. PCI riser slots supported configurations

PCI riser-card slot number	Configuration 1	Configuration 2 (Two microprocessors installed)	Configuration 3
Slot 1	PCI Express 3.0 (x16) card with a PCI Express riser card with a standard bracket	PCI Express 3.0 (x16) card with a PCI Express riser card with a standard bracket	PCI Express 3.0 (x16) card with a PCI Express riser card with a standard bracket
Slot 2	PCI Express 3.0 (x8) card with a PCI Express riser card with a standard bracket	PCI Express 3.0 (x16) card with a PCI Express riser card with a standard bracket	PCI-X 64-bit/133 MHz card with a PCI-X riser card with a standard bracket

Notes:

- The instructions in this section apply to any PCI adapter (for example, video graphics adapters or network adapters).
- Do not set the maximum digital video adapter resolution above 1600 x 1200 at 75 Hz for an LCD monitor. This is the highest resolution that is supported for any add-on video adapter that you install in the server.
- Any high-definition video-out connector or stereo connector on any add-on video adapter is not supported.
- If your adapter was previously configured, backup or record its configuration information, if possible, before replacing the adapter. See the documentation for your adapter for information and instructions.
- If you are replacing a ServeRAID adapter, import your RAID configuration to the replacement adapter as a foreign configuration after you finish the replacement. See the *ServeRAID-M Software User Guide* at https://support.lenovo.com/us/en/documents/migr-5086126 for instructions.

To install an adapter, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Step 3. Remove the server cover (see “Removing the cover” on page 191).

Step 4. Follow the cabling instructions, if any come with the adapter. Route the adapter cables before you install the adapter.

Step 5. Insert the adapter into the PCI riser-card assembly, aligning the edge connector on the adapter with the connector on the PCI riser-card assembly. Press the edge of the connector *firmly* into the PCI riser-card assembly. Make sure that the adapter snaps into the PCI riser-card assembly securely.

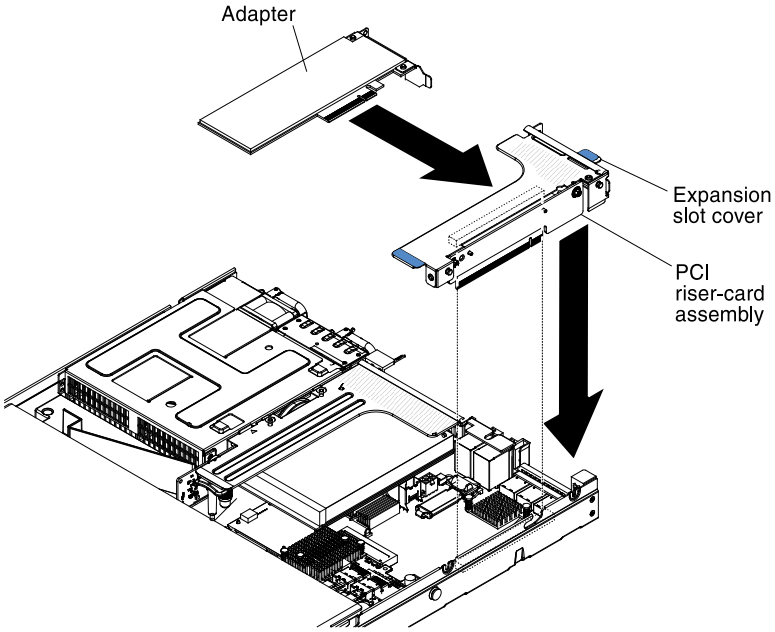


Figure 148. Adapter installation

Attention: When you install an adapter, make sure that the adapter is correctly seated in the riser-card assembly and that the riser-card assembly is securely seated in the riser-card connector on the system board before you turn on the server. An incorrectly seated adapter might cause damage to the system board, the riser-card assembly, or the adapter.

Step 6. Install the PCI riser-card assembly in the server (see “Replacing a PCI riser-card assembly” on page 223).

Step 7. Connect the cable to the newly-installed adapter.

Note: You might need to remove the blue latch from PCI riser-card assembly 2 to easily connect the cables.

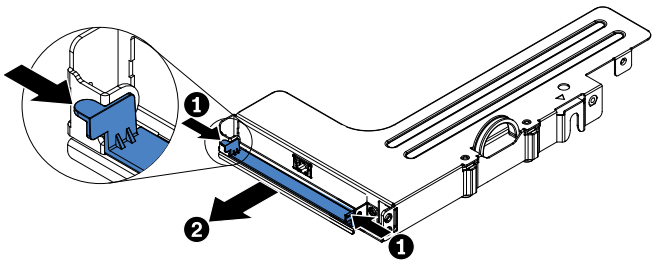


Figure 149. Latch removal

Step 8. Perform any configuration tasks that are required for the adapter.

Step 9. Reinstall the cover (see “Replacing the cover” on page 192).

Step 10. Slide the server into the rack.

Step 11. Reconnect the power cords and any cables that you removed.

Step 12. Turn on the peripheral devices and the server.

Removing a ServeRAID SAS/SATA controller

Use this information to remove a ServeRAID SAS/SATA controller.

The ServeRAID SAS/SATA controller can be installed in the dedicated connector on the system board or PCI riser-card slots (see “System-board internal connectors” on page 26 for the location of the connectors).

You can replace the ServeRAID controller with another supported ServeRAID controller. For a list of supported ServeRAID controllers, see http://www.lenovo.com/ serverproven/.

Note: For brevity, in this documentation the ServeRAID SAS/SATA controller is often referred to as the *SAS/SATA adapter* or the *ServeRAID adapter*.

To remove the SAS/SATA adapter from the system board, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove PCI riser-card assembly 1 if necessary (see “Removing a PCI riser-card assembly” on page 222).

Step 5. Locate the SAS/SATA adapter between PCI slot 1 and microprocessor 1.

Step 6. Disconnect the signal cables and power cables from the connectors on the SAS/SATA adapter and note their locations.

Step 7. Grasp the end of the SAS/SATA adapter near microprocessor 1 while you slide the brackets. Slide the retention bracket (near the chassis) toward the chassis; then, slide the other retention bracket toward the power supplies.

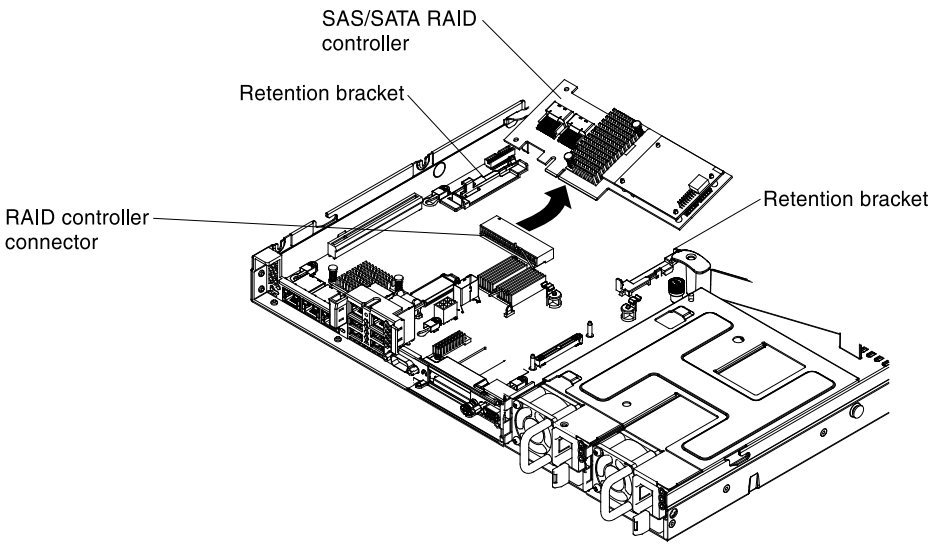


Figure 150. ServeRAID adapter removal

Note: If you have installed the optional ServeRAID adapter memory module, remove it and keep it in future use (see “Removing the ServeRAID adapter memory module” on page 238).

Step 8. Pull the SAS/SATA adapter horizontally out of the connector on the system board.

If you are instructed to return the SAS/SATA adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a ServeRAID SAS/SATA controller

Use this information to replace a ServeRAID SAS/SATA controller.

The ServeRAID SAS/SATA controller can be installed in the dedicated connector on the system board or PCI riser-card slots (see “System-board internal connectors” on page 26 for the location of the connectors). To install a SAS/SATA adapter, complete the following steps:

Depending on the server model, the server comes with a ServeRAID H1110, a ServeRAID M1115, a ServeRAID M5110, or a ServeRAID 5210 SAS/SATA adapter installed.

Note: Remove the PCI bracket that come with ServeRAID H1110, ServeRAID M1115, ServeRAID M5110 SAS/SATA, or a ServeRAID 5210 adapter before installing a SAS/SATA adapter in the dedicated connector on the system board.

Attention:

- You can not install ServeRAID H1110 when microprocessor Intel Xeon E5-2637 (FRU part number 49Y8124) is installed.
- You can not install ServeRAID M1115 or 6Gb performance optimized HBA when Quadro 2000 is installed.

You can replace the ServeRAID controller with another supported ServeRAID controller. For a list of supported ServeRAID controllers, see http://www.lenovo.com/ serverproven/.

Note: For brevity, in this documentation the ServeRAID SAS/SATA controller is often referred to as the *SAS/SATA adapter* or the *ServeRAID adapter*.

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove PCI riser-card assembly 1 if necessary (see “Removing a PCI riser-card assembly” on page 222).

Step 5. If you are installing a new or replacement SAS/SATA adapter, touch the static-protective package that contains the new SAS/SATA adapter to any unpainted metal surface on the server. Then, remove the new SAS/SATA adapter from the package.

Step 6. Align the SAS/SATA adapter so that the keys align correctly with the connector on the system board.

Step 7. Insert the SAS/SATA adapter in the dedicated connector on the system board or PCI riser-card slots.

Attention: Incomplete insertion might cause damage to the server or the adapter.

a. Insert the SAS/SATA adapter into the RAID connector on the system board until it is firmly seated. The retention brackets secure the SAS/SATA adapter in place when the adapter is firmly seated into the connector.

Note: Remove the PCI bracket that come with ServeRAID H1110, ServeRAID M1115, or ServeRAID M5110 SAS/SATA adapter before installing a SAS/SATA adapter in the dedicated connector on the system board.

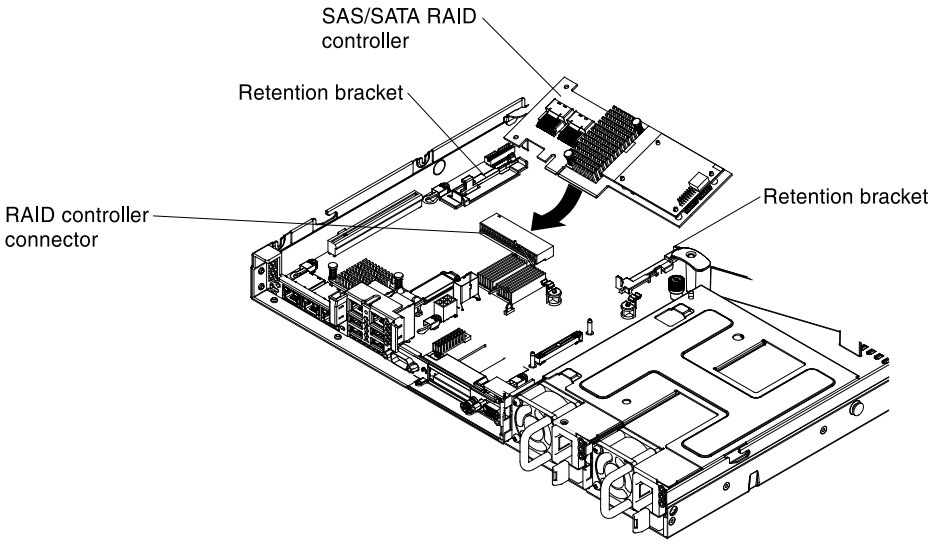


Figure 151. ServeRAID adapter installation

b. Insert the SAS/SATA adapter into the PCI riser cards (see “Replacing an adapter” on page 228).

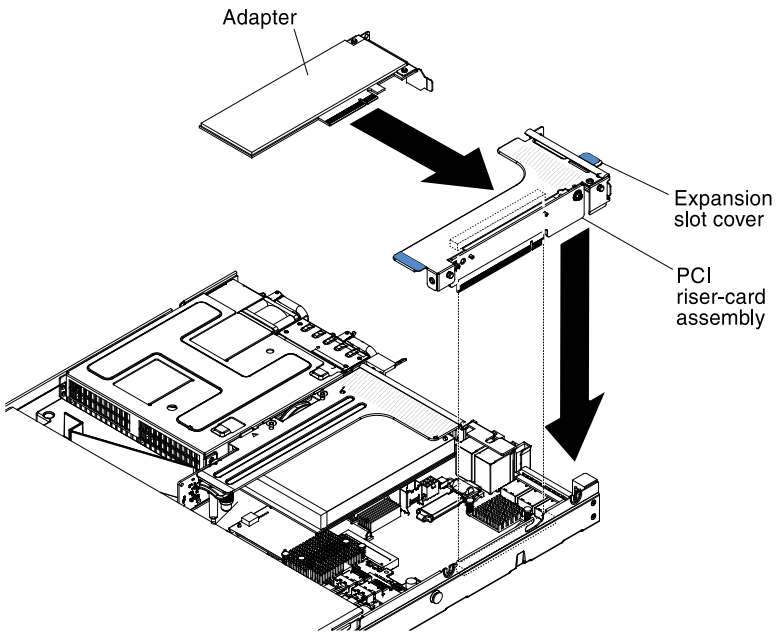


Figure 152. Adapter installation

Step 8. Route the backplane signal cables (see “Cabling backplane” on page 183).

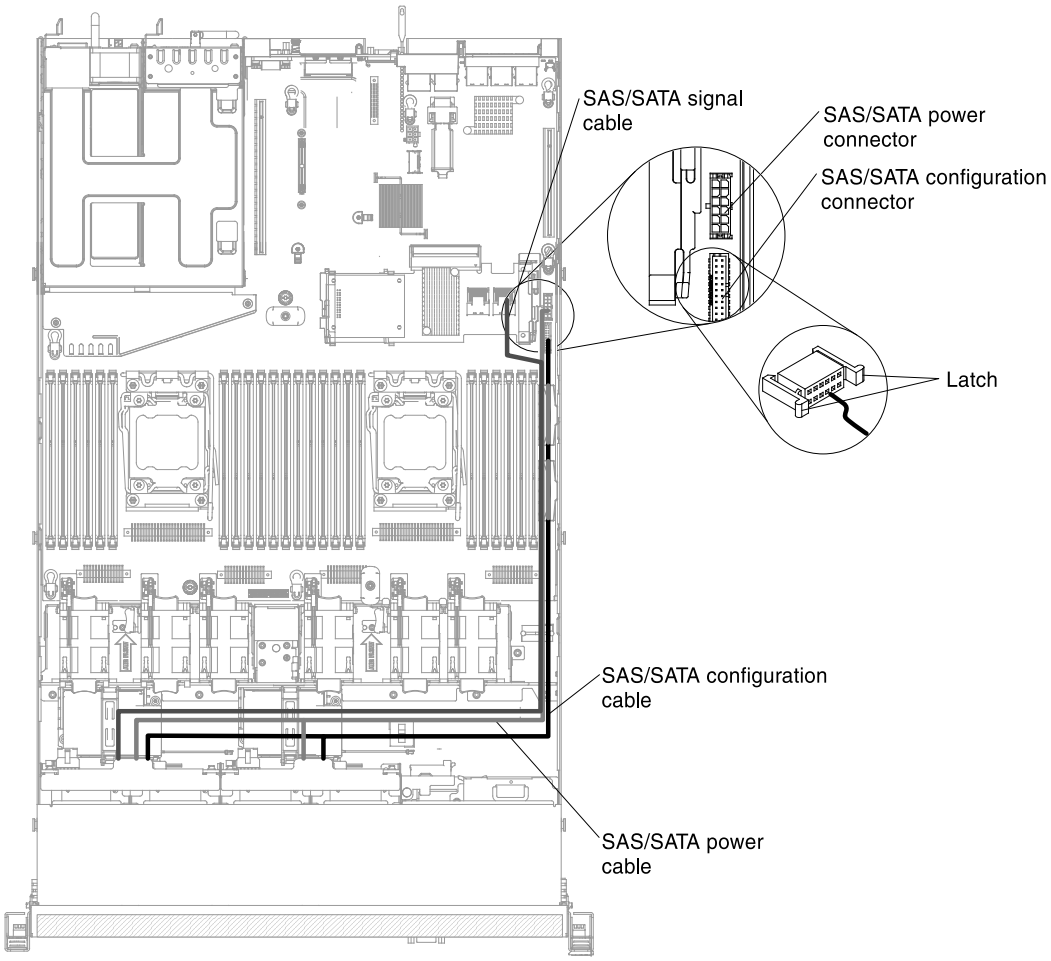


Figure 153. ServeRAID adapter cable routing

Step 9. Connect the signal cables to the SAS/SATA adapter:

a. **ServeRAID H1110 adapter**: Take the signal cable that is attached to the drive backplane for drive bays 0 through 3 and connect it to the SAS/SATA connector on the ServeRAID adapter.

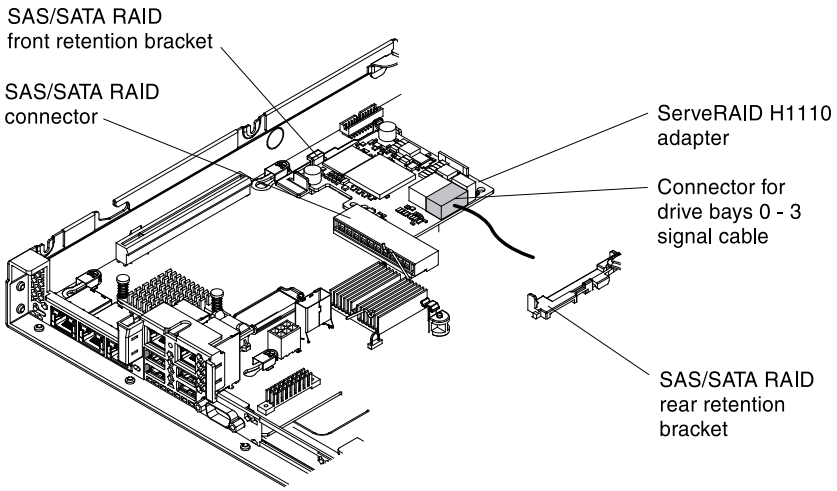


Figure 154. ServeRAID H1110 adapter cable routing

b. **ServeRAID M1115 adapter**: Take the signal cable that is attached to the drive backplane for drive bays 4 through 7 and connect it to the ServeRAID adapter connector for drive bays 4 through 7 (port 1). Connect the other signal cable that is attached to the drive backplane for drive bays 0 through 3 and connect it to the other connector (port 0) on the adapter.

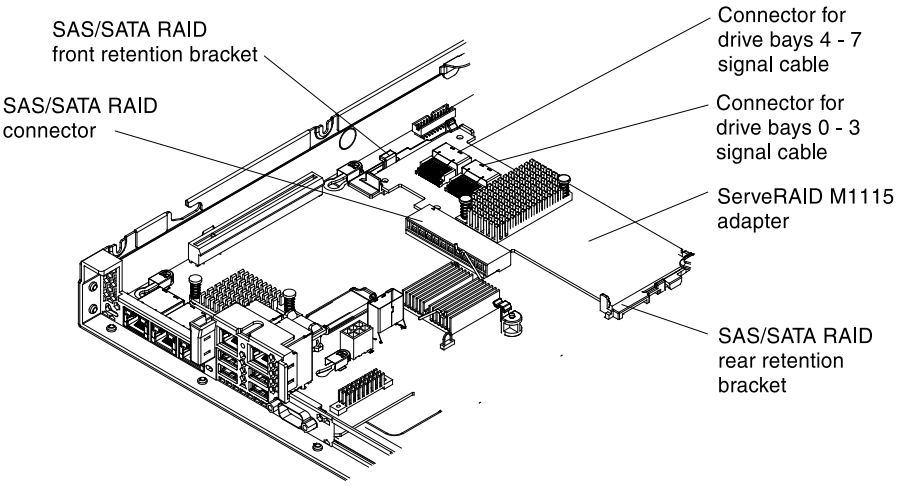


Figure 155. ServeRAID M1115 adapter cable routing

c. **ServeRAID M5110 adapter**: Take the signal cable that is attached to the drive backplane for drive bays 4 through 7 and connect it to the ServeRAID adapter connector for drive bays 4 through 7 (port 1). Connect the other signal cable that is attached to the drive backplane for drive bays 0 through 3 and connect it to the other connector (port 0) on the adapter.

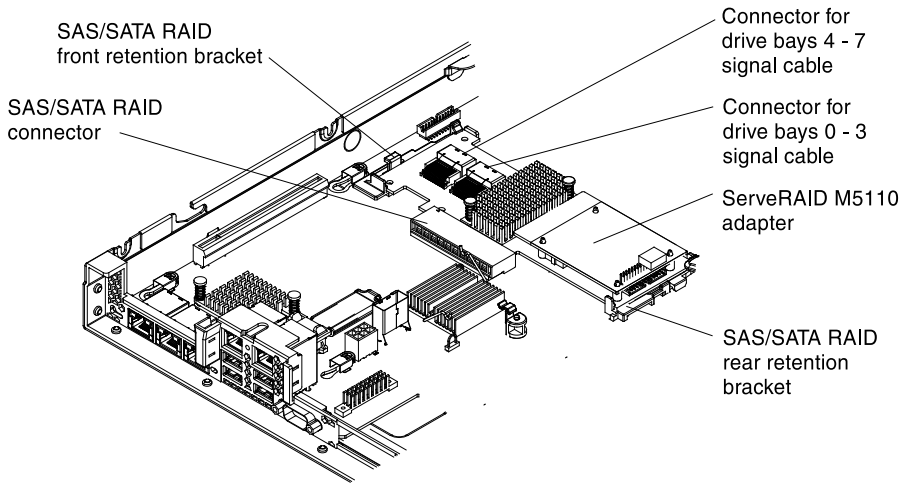


Figure 156. ServeRAID M5110 adapter cable routing

Step 10. Reconnect the power cords and any cables that you removed.

Step 11. Replace PCI riser-card assembly 1 if you have removed it earlier (see “Replacing a PCI riser-card assembly” on page 223).

Step 12. Replace the cover (see “Replacing the cover” on page 192).

Step 13. Turn on the peripheral devices and the server.

Note: When you restart the server, you are prompted to import the existing RAID configuration to the new ServeRAID adapter.

Removing the ServeRAID adapter memory module

Use this information to remove the ServeRAID adapter memory module.

To remove the ServeRAID adapter memory module, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the ServeRAID SAS/SATA controller (see “Removing a ServeRAID SAS/SATA controller” on page 232).

Step 5. Grasp the memory module and lift to remove it from the connector on the ServeRAID adapter.

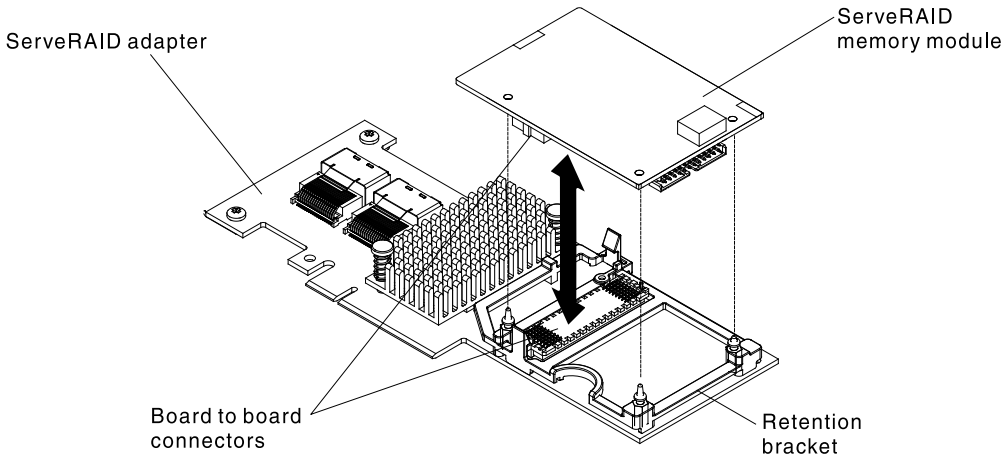


Figure 157. ServeRAID memory module removal

If you are instructed to return the memory module, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the ServeRAID adapter memory module

Use this information to replace the ServeRAID adapter memory module.

To install the ServeRAID adapter memory module, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the ServeRAID SAS/SATA controller (see “Removing a ServeRAID SAS/SATA controller” on page 232).

Step 5. Align the memory module with the connector on the ServeRAID adapter and push it into the connector until it is firmly seated.

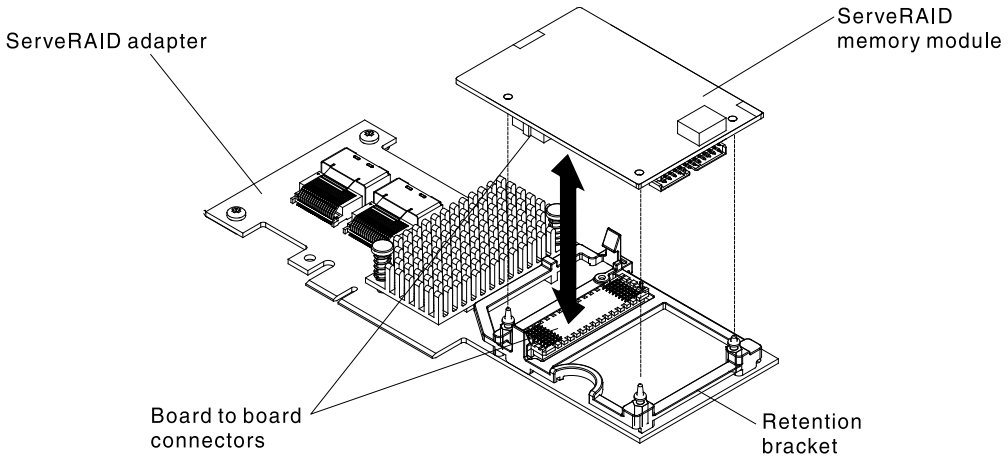


Figure 158. ServeRAID memory module installation

Step 6. Reinstall the ServeRAID SAS/SATA controller (see “Replacing a ServeRAID SAS/SATA controller” on page 233).

Step 7. Reconnect the power cords and any cables that you removed.

Step 8. Reinstall the cover (see “Replacing the cover” on page 192).

Step 9. Slide the server into the rack.

Step 10. Turn on the peripheral devices and the server.

Removing the dual-port network adapter

Use this information to remove the dual-port network adapter.

To remove the dual-port network adapter, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the PCI riser-card assembly (if installed) from PCI riser connector 2 (see “Removing a PCI riser-card assembly” on page 222).

Step 5. Loosen the two captive screws on the network adapter from the screw holes on the system board.

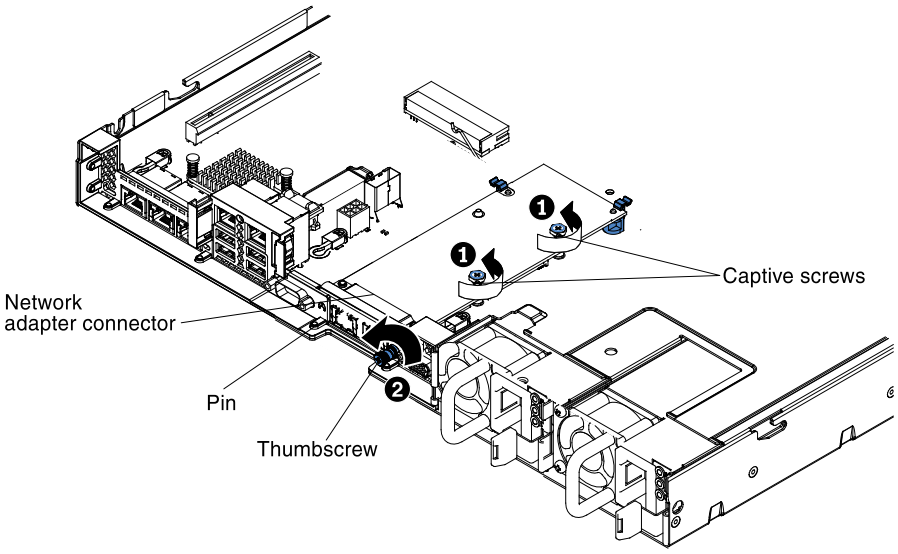


Figure 159. Screws disengagement

Step 6. Loosen the thumbscrew on the chassis.

Step 7. Grasp the network adapter and disengage it from the pin, retention brackets, and the connector on the system board; then, lift the adapter out of the port openings on the rear of the chassis and remove it from the server.

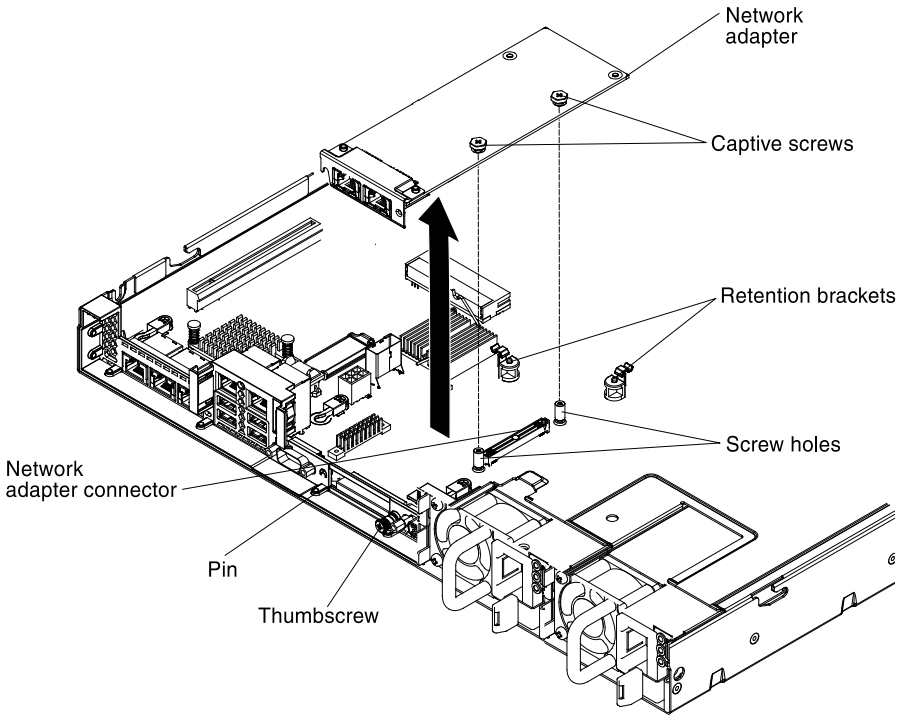


Figure 160. Dual-port network adapter removal

If you are instructed to return the adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the dual-port network adapter

You can purchase one of the following dual-port network adapters to add two additional network ports in the server.

To order a dual-port network adapter option, contact your sales representative or reseller.

Table 27. Supported dual-port network adapters on the network connector

Dual-port network adapter	Option part number	FRU part number	Remark
Mellanox ConnectX-3 dual-port QDR/FDR10 mezz card	90Y6338	90Y4956	
Qlogic dual-port 10GbE SFP+ Embedded VFA	90Y6454	90Y5099	Six fans installed required[1]
Emulex dual-port 10GbE SFP+ Embedded VFA III	90Y6456	90Y5100	
Dual-port FDR embedded adapter	00D4143	90Y6606	
Broadcom dual port 10GbE SFP+ embedded adapter for System x	44T1360	00AL195	Six fans installed required[1]

1. You can purchase Lenovo System x3550 M4 Thermal Solution Kit (option part number 00Y7117) to acquire two additional fans for your server.

The following notes describe the types of adapters that the server supports and other information that you must consider when you install an adapter:

- To configure network adapters, complete the following steps:
  1. From the Setup utility main menu (see “Using the Setup utility” on page 97), select **System Settings → Network**.
  2. From the **Network Device List**, select one network adapter.

     Note: You might need to enter each item (displaying MAC address) to see detailed information.
  3. Press Enter to configure the network adapter settings.
- To convert the NIC/iSCSI/FCoE for Emulex Dual Port 10GbE SFP+ Embedded VFA III, complete the following steps:
  1. From the Setup utility main menu (see “Using the Setup utility” on page 97), select **System Settings → Network** and press Enter.
  2. From the **Network Device List**, select Emulex network adapter.

     Note: You might need to enter each item (displaying MAC address) to see detailed information.
  3. Press Enter to configure Emulex network adapter, select **Personality** and press Enter to change the settings.
     - NIC
     - iSCSI (enabled after FoD installed)
     - FCoE (enabled after FoD installed)
- To download the latest version of drivers for iSCSI and FCoE from the website, complete the following steps:
  1. Go to http://www.ibm.com/support/ fixcentral.
  2. Click **Product support → System x → Product family → Lenovo System x3550 M4 → 7914**.
  3. From the **Operating system** menu, select your operating system, and then click **Search** to display the available drivers.
  4. Download the latest version of drivers.
     - Emulex iSCSI Device Driver for Windows 2008
     - Emulex FCoE Device Driver for Windows 2008

  Note: Changes are made periodically to the website. The actual procedure might vary slightly from what is described in this document.
- Port 0 on the Emulex Dual Port 10GbE SFP+ Embedded VFA III can be configured as shared system management.
- When the server is in standby mode, both ports on the Emulex Dual Port 10GbE SFP+ Embedded VFA III function at 100M connection speed with Wake on LAN feature.

The Emulex Dual Port 10GbE SFP+ Embedded VFA III is automatically disabled if one of the following errors occurs:

- An error log indicates a temperature warning for the Ethernet adapter.
- All power supplies are removed or the server is disconnected from the power source.

To install the dual-port network adapter, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the PCI riser-card assembly (if installed) from PCI riser connector 2 (see “Removing a PCI riser-card assembly” on page 222).

Step 5. Remove the adapter filler panel on the rear of the chassis (if it has not been removed already).

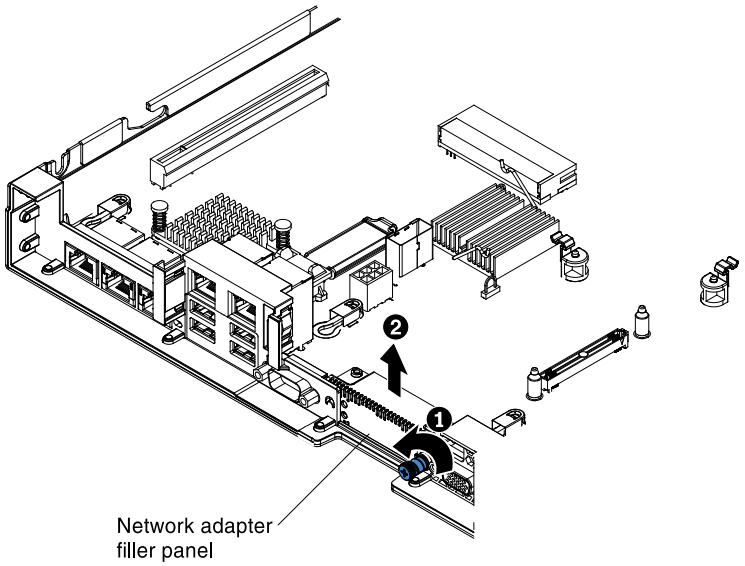


Figure 161. Adapter filler panel removal

Step 6. Touch the static-protective package that contains the new adapter to any unpainted metal surface on the server. Then, remove the adapter from the package.

Step 7. Align the adapter so that the port connectors on the adapter line up with the pin and thumbscrew on the chassis; then, align the connector of the adapter with the adapter connector on the system board.

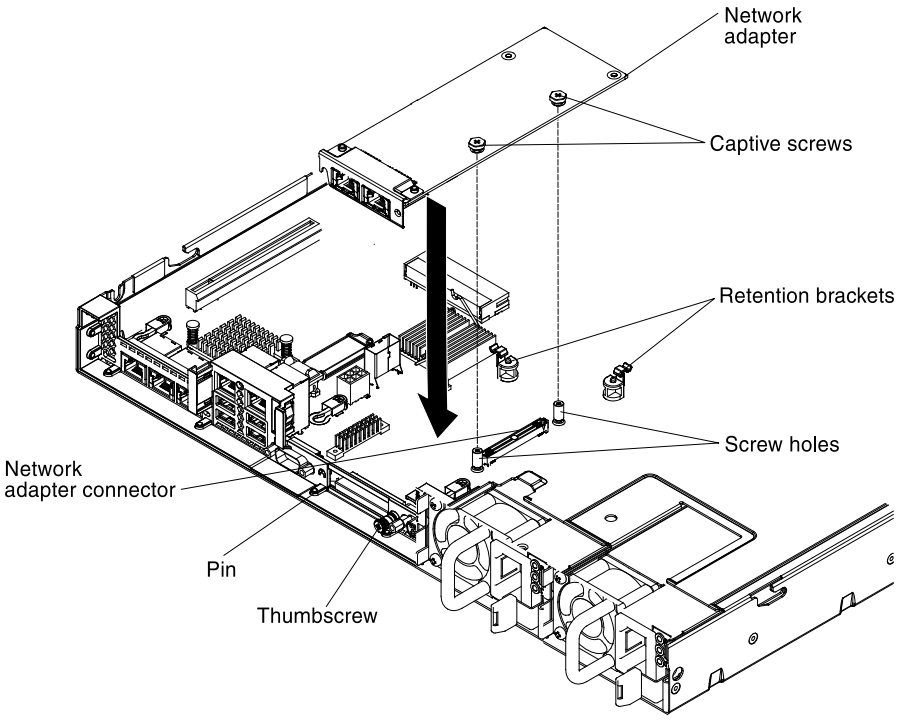


Figure 162. Network adapter installation

Step 8. Press the adapter firmly until the pin, and retention brackets engage the adapter. Make sure the adapter is securely seated on the connector on the system board.

Attention: Make sure the port connectors on the adapter are aligned properly with the chassis on the rear of the server. An incorrectly seated adapter might cause damage to the system board or the adapter.

Step 9. Fasten the thumbscrew on the rear side of the chassis.

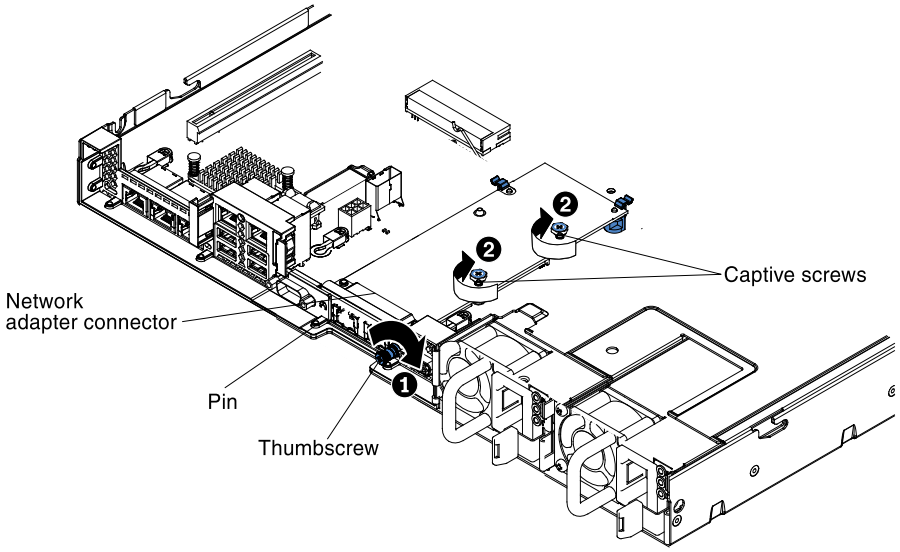


Figure 163. Screws engagement

Step 10. Fasten the two captive screws on the network adapter.

Step 11. Reinstall the PCI riser-card assembly in PCI riser connector 2 if you have removed it previously (see "Replacing a PCI riser-card assembly" on page 223).

Step 12. Replace the cover (see "Replacing the cover" on page 192).

Step 13. Slide the server into the rack.

Step 14. Reconnect the power cords and any cables that you removed.

Step 15. Turn on the peripheral devices and the server.

Removing a hot-swap fan

Use this information to remove a hot-swap fan.

Attention: To ensure proper server operation, replace a failed hot-swap fan within 30 seconds.

To remove a hot-swap-fan, complete the following steps:

Step 1. Read the safety information that begins on "Safety" on page v and "Installation guidelines" on page 31.

Step 2. Remove the cover (see "Removing the cover" on page 191).

Step 3. Press the handle while grasping the orange fan tabs on both ends of the existing fan and pulling it up out of the server.

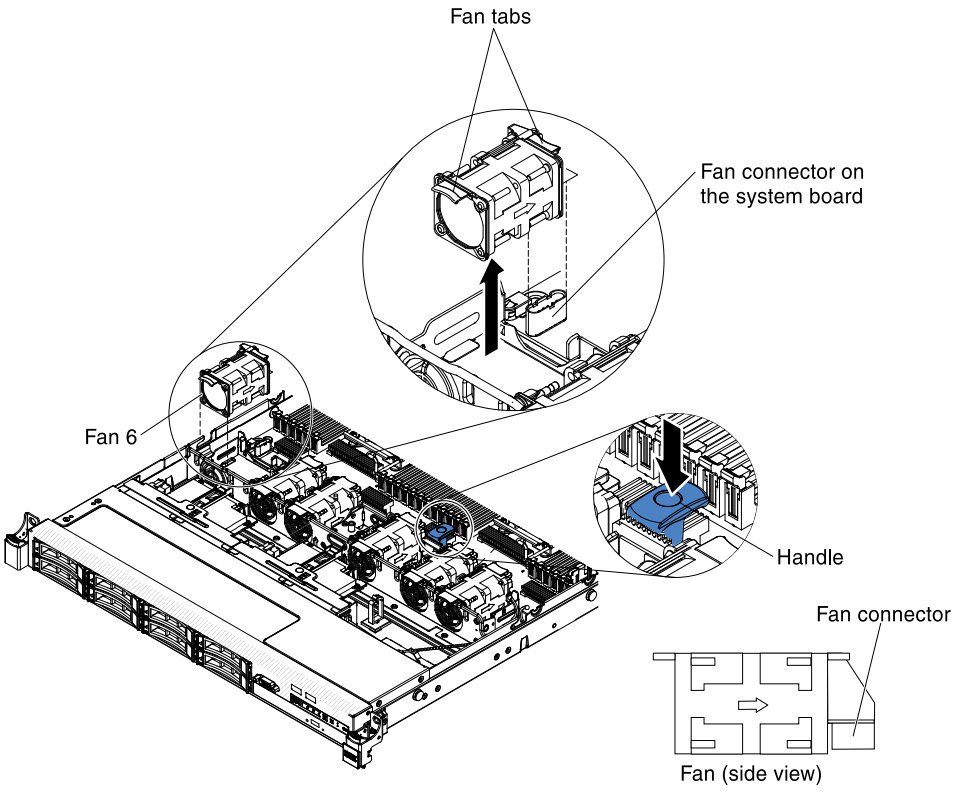


Figure 164. Fan removal

Attention: To ensure proper operation, replace a failed hot-swap fan within 30 seconds.

If you are instructed to return the fan, follow all of the packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a hot-swap fan

Use this information to replace a hot-swap fan.

The server comes standard with four dual-motor hot-swap cooling fans. When there is one microprocessor installed, install fan 1, 2, 3, and 5 for proper cooling.

Attention: To ensure proper operation, replace a failed hot-swap fan within 30 seconds.

To replace a hot-swap fan, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Remove the cover (see “Removing the cover” on page 191).

Step 3. Touch the static-protective package that contains the new fan to any unpainted metal surface on the server. Then, remove the new fan from the package.

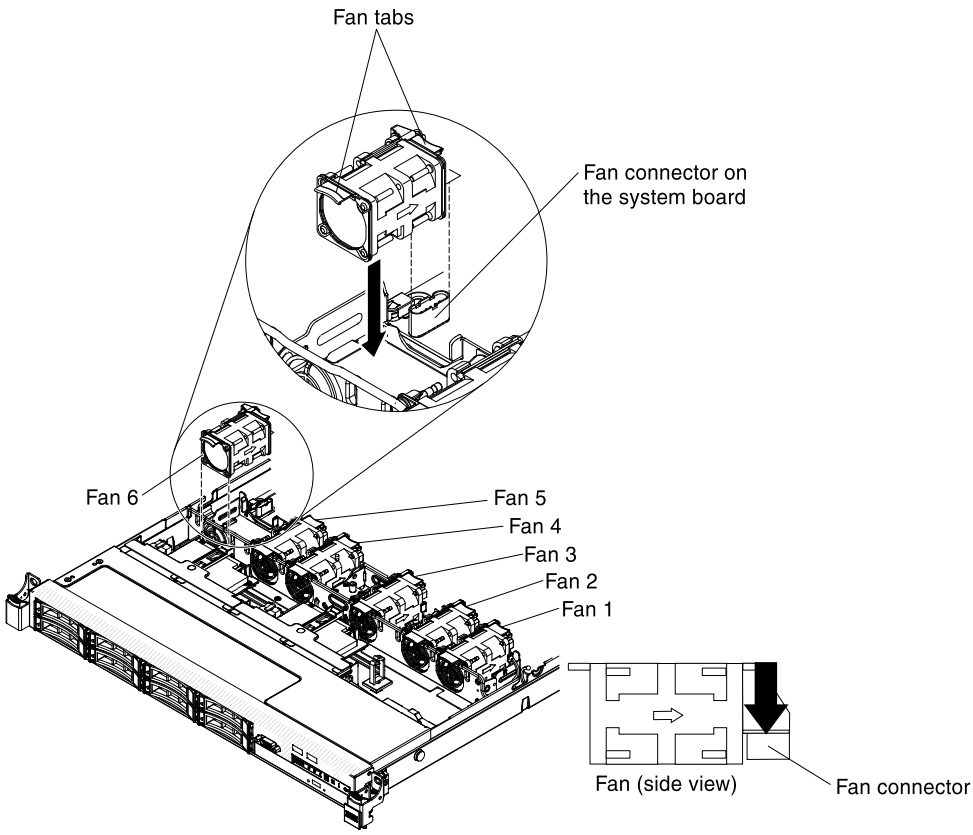


Figure 165. Fan installation

Step 4. Orient the fan over the fan slot in the fan assembly bracket so that the fan connector aligns with the connector on the system board.

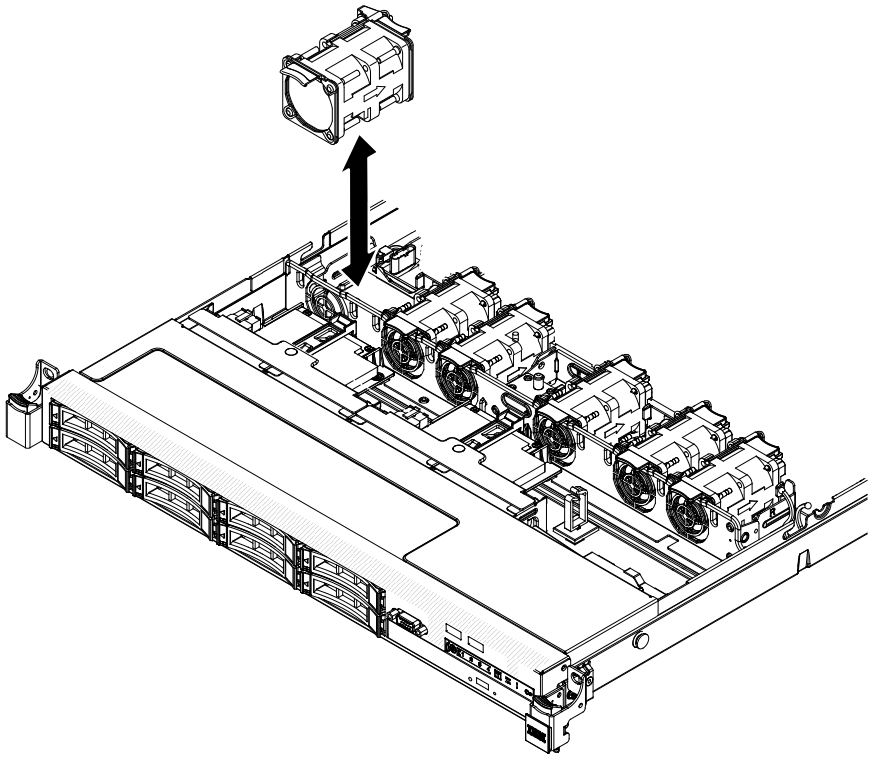


Figure 166. Fan installation

Step 5. Insert the fan into the fan slot in the fan assembly bracket and press it down until it is seated correctly in the slot and the fan connector is seated correctly in the connector on the system board.

Note: Make sure that the newly-installed fan aligns horizontally with other correctly-seated fans for proper installation.

Step 6. Replace the cover (see “Replacing the cover” on page 192).

Step 7. Slide the server into the rack.

Removing a power supply

Use this information to remove a power supply.

Removing a hot-swap ac power supply

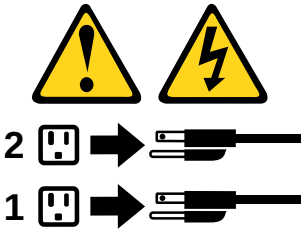
Use this information to remove a hot-swap ac power supply.

When you remove or install a hot-swap power supply, observe the following precautions.

Statement 5

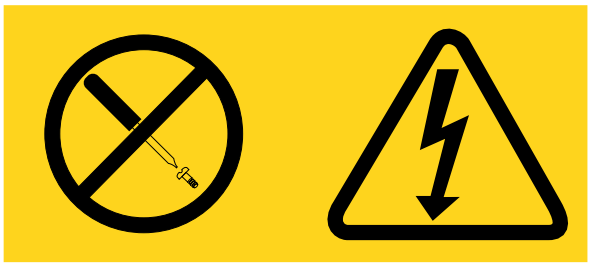
CAUTION:
The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power

cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



Statement 8

CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

To remove a hot-swap ac power supply, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. If only one power supply is installed, turn off the server and peripheral devices and disconnect all power cords.

Step 3. If the server is in a rack, at the back of the server, pull back the cable management arm to gain access to the rear of the server and the power supply.

Step 4. Press and hold the release tab to the left. Grasp the handle and pull the power supply out of the server.

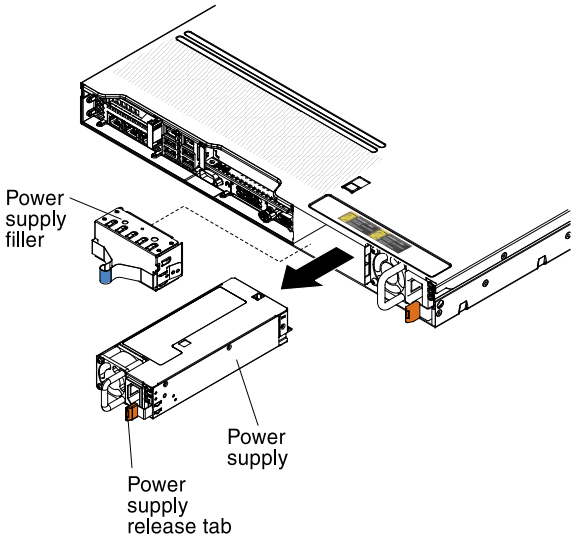


Figure 167. Power supply removal

If you are instructed to return the power supply, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Removing a hot-swap dc power supply

Use this information to remove a hot-swap dc power supply.

When you remove or install a hot-swap dc power supply, observe the following precautions.

Statement 29

CAUTION: This equipment is designed to permit the connection of the earthed conductor of the dc supply circuit to the earthing conductor at the equipment.

This equipment is designed to permit the connection of the earthed conductor of the dc supply circuit to the earthing conductor at the equipment. If this connection is made, all of the following conditions must be met:

- This equipment shall be connected directly to the dc supply system earthing electrode conductor or to a bonding jumper from an earthing terminal bar or bus to which the dc supply system earthing electrode conductor is connected.
- This equipment shall be located in the same immediate area (such as, adjacent cabinets) as any other equipment that has a connection between the earthed conductor of the same dc supply circuit and the earthing conductor, and also the point of earthing of the dc system. The dc system shall not be earthed elsewhere.
- The dc supply source shall be located within the same premises as this equipment.
- Switching or disconnecting devices shall not be in the earthed circuit conductor between the dc source and the point of connection of the earthing electrode conductor.

Statement 31

DANGER

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- **Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.**
- **Connect all power cords to a properly wired and grounded power source.**
- **Connect to properly wired power sources any equipment that will be attached to this product.**
- **When possible, use one hand only to connect or disconnect signal cables.**
- **Never turn on any equipment when there is evidence of fire, water, or structural damage.**
- **Disconnect the attached ac power cords, dc power sources, network connections, telecommunications systems, and serial cables before you open the device covers, unless you are instructed otherwise in the installation and configuration procedures.**
- **Connect and disconnect cables as described in the following table when you install, move, or open covers on this product or attached devices.**

To Connect:

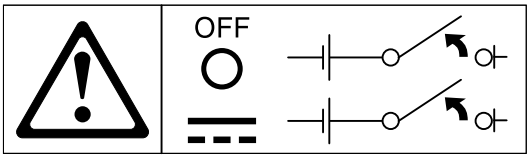
1. Turn OFF all power sources and equipment that is to be attached to this product.
2. Attach signal cables to the product.
3. Attach power cords to the product.
   - For ac systems, use appliance inlets.
   - For dc systems, ensure correct polarity of -48 V dc connections: RTN is + and -48 V dc is -. Earth ground should use a two-hole lug for safety.
4. Attach signal cables to other devices.
5. Connect power cords to their sources.
6. Turn ON all the power sources.

To Disconnect:

1. Turn OFF all power sources and equipment that is to be attached to this product.
   - For ac systems, remove all power cords from the chassis power receptacles or interrupt power at the ac power distribution unit.
   - For dc systems, disconnect dc power sources at the breaker panel or by turning off the power source. Then, remove the dc cables.
2. Remove the signal cables from the connectors.
3. Remove all cables from the devices.

Statement 33

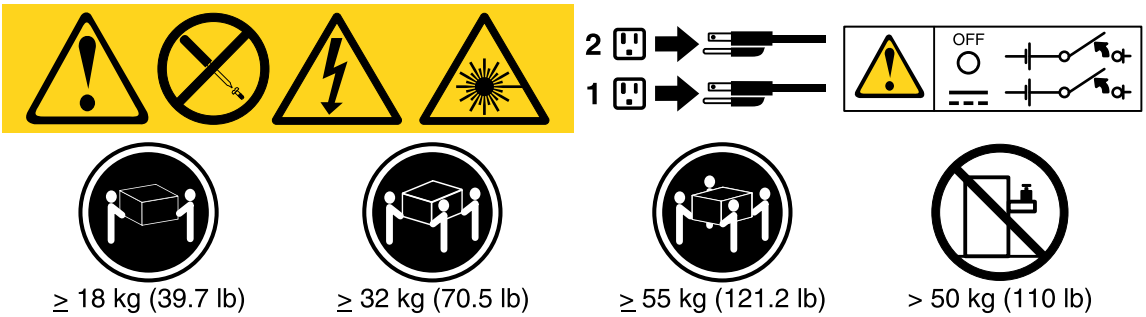
CAUTION:
This product does not provide a power-control button. Turning off blades or removing power modules and I/O modules does not turn off electrical current to the product. The product also might have more than one power cord. To remove all electrical current from the product, make sure that all power cords are disconnected from the power source.



Statement 34

CAUTION:
To reduce the risk of electric shock or energy hazards:

- **This equipment must be installed by trained service personnel in a restricted-access location, as defined by the NEC and IEC 60950-1, First Edition, The Standard for Safety of Information Technology Equipment.**
- **Connect the equipment to a properly grounded safety extra low voltage (SELV) source. A SELV source is a secondary circuit that is designed so that normal and single fault conditions do not cause the voltages to exceed a safe level (60 V direct current).**
- **Incorporate a readily available approved and rated disconnect device in the field wiring.**
- **See the specifications in the product documentation for the required circuit-breaker rating for branch circuit overcurrent protection.**
- **Use copper wire conductors only. See the specifications in the product documentation for the required wire size.**
- **See the specifications in the product documentation for the required torque values for the wiring-terminal screws.**



Important: Be sure to read the multilingual safety instructions on the CD that comes with the server before you use the product.

To remove a hot-swap dc power supply, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. If only one power supply is installed, turn off the server and peripheral devices and disconnect all power cords.

Step 3. If the server is in a rack, at the back of the server, pull back the cable management arm to gain access to the rear of the server and the power supply.

Step 4. Press and hold the release tab to the left. Grasp the handle and pull the power supply out of the server.

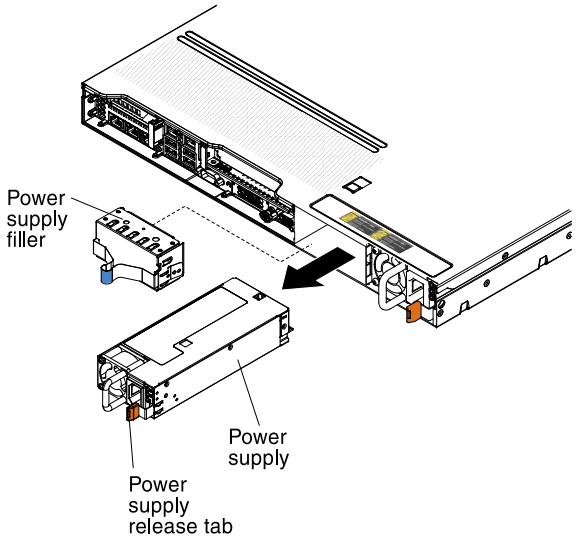


Figure 168. Power supply removal

If you are instructed to return the power supply, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a power supply

Use this information to replace a power supply.

Replacing a hot-swap ac power supply

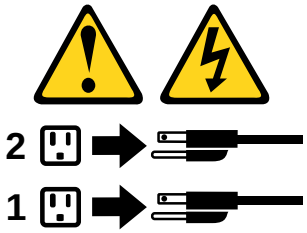
Use this information to replace a hot-swap ac power supply.

The following notes describe the type of power supply that the server supports and other information that you must consider when you install a power supply:

- Before you install an additional power supply or replace a power supply with one of a different wattage, you may use the Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www.ibm.com/systems/bladecenter/resources/powerconfig.html.
- The server comes with one hot-swap 12-volt output power supply that connects to power supply bay 1. The input voltage is 100-127 V ac or 200-240 V ac auto-sensing.
- Power supplies in the server must be with the same power rating or wattage to ensure that the server will operate correctly. For example, you cannot mix 550-watt and 750-watt power supplies in the server.
- Power supply 1 is the default/primary power supply. If power supply 1 fails, you must replace the power supply with the same wattage immediately.
- You can order an optional power supply for redundancy.
- These power supplies are designed for parallel operation. In the event of a power-supply failure, the redundant power supply continues to power the system. The server supports a maximum of two power supplies.

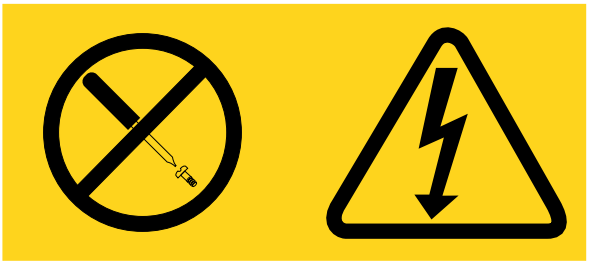
Statement 5

CAUTION:
The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



Statement 8

CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

To install a hot-swap ac power supply, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Touch the static-protective package that contains the hot-swap power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.

Step 3. If you are installing a hot-swap power supply into an empty bay, remove the power-supply filler from the power-supply bay.

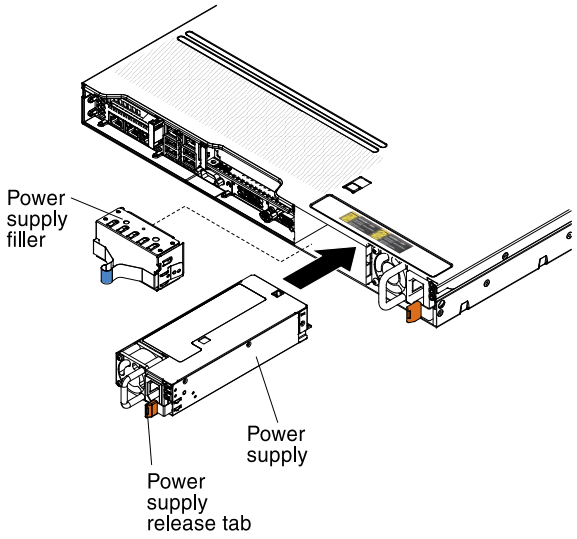


Figure 169. Power supply installation

Step 4. Grasp the handle on the rear of the power supply and slide the power supply forward into the power-supply bay until it clicks. Make sure that the power supply connects firmly into the power-supply connector.

Attention: Do not mix 550-watt and 750-watt power supplies in the server.

Step 5. Route the power cord through the handle and cable tie if any, so that it does not accidentally become unplugged.

Step 6. Connect the power cord for the new power supply to the power-cord connector on the power supply.

Step 7. Connect the other end of the power cord to a properly grounded electrical outlet.

Step 8. Make sure that the ac power LED and the dc power LED on the ac power supply are lit, indicating that the power supply is operating correctly. The two green LEDs are to the right of the power-cord connector.

Step 9. If you are replacing a power supply with one of a different wattage in the server, apply the new power information label provided over the existing power information label on the server. Power supplies in the server must be with the same power rating or wattage to ensure that the server will operate correctly.

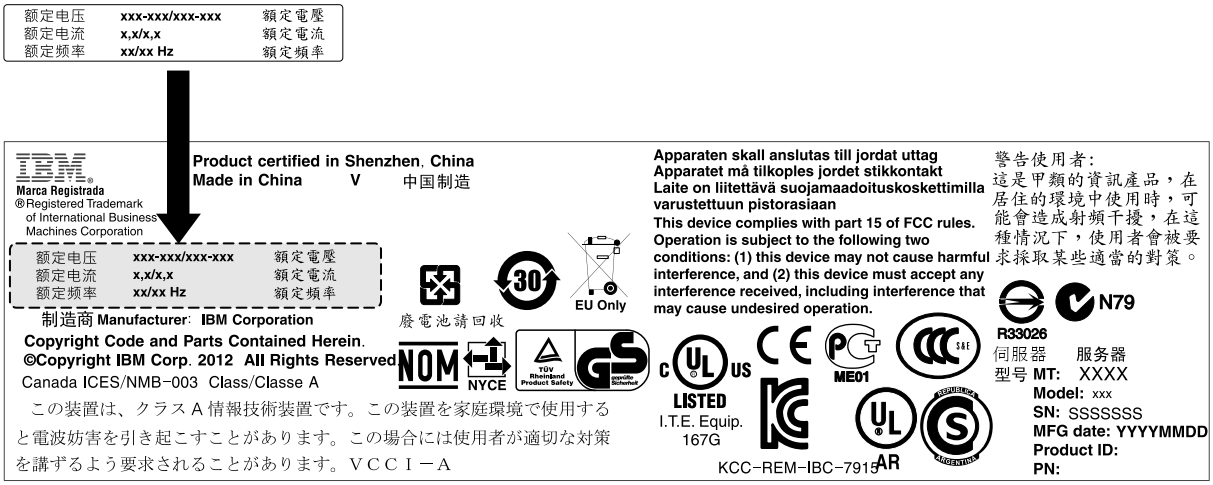


Figure 170. Power information label

Step 10. If you are adding a power supply to the server, attach the redundant power information label that comes with this option on the server cover near the power supplies.

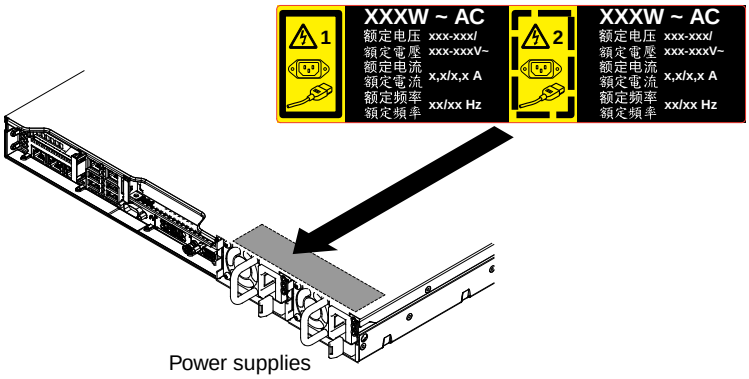


Figure 171. Redundant power information label

Installing a hot-swap dc power supply

Observe the following precautions when you install a hot-swap dc power supply.

The following notes describe the type of power supply that the server supports and other information that you must consider when you install a power supply:

- Before you install an additional power supply or replace a power supply with one of a different wattage, you may use the Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www.ibm.com/systems/bladecenter/resources/powerconfig.html.
- The server comes with one hot-swap 12-volt output power supply that connects to power supply bay 1. The input voltage is -48 V dc or -60 V dc auto-sensing.
- Before you install a dc power supply in the server, you must remove all ac power supplies. Do not use both ac and dc power supplies in the same server. Install up to two dc power supplies or up to two ac power supplies, but not a combination.

- Power supply 1 is the default/primary power supply. If power supply 1 fails, you must replace the power supply with the same wattage immediately.
- You can order an optional power supply for redundancy.
- These power supplies are designed for parallel operation. In the event of a power-supply failure, the redundant power supply continues to power the system. The server supports a maximum of two power supplies.

Regulations

- It is the customer's responsibility to supply the necessary power cable. **To reduce the risk of electric shock or energy hazards:**
  - **Use a circuit breaker that is rated at 25 amps.**
  - **Use 2.5 mm^2 (12 AWG) at 90°C copper wire.**
  - **Torque the wiring-terminal screws to 0.50 ~ 0.60 newton-meters (4.43 ~ 5.31 inch-pounds).**

  For more information, see "Statement 34" on page 259.
- If the power source requires ring terminals, you must use a crimping tool to install the ring terminals to the power cord wires. The ring terminals must be UL approved and must accommodate the wire that is described in the above-mentioned note .

Statement 29

CAUTION:
This equipment is designed to permit the connection of the earthed conductor of the dc supply circuit to the earthing conductor at the equipment.

This equipment is designed to permit the connection of the earthed conductor of the dc supply circuit to the earthing conductor at the equipment. If this connection is made, all of the following conditions must be met:

- This equipment shall be connected directly to the dc supply system earthing electrode conductor or to a bonding jumper from an earthing terminal bar or bus to which the dc supply system earthing electrode conductor is connected.
- This equipment shall be located in the same immediate area (such as, adjacent cabinets) as any other equipment that has a connection between the earthed conductor of the same dc supply circuit and the earthing conductor, and also the point of earthing of the dc system. The dc system shall not be earthed elsewhere.
- The dc supply source shall be located within the same premises as this equipment.
- Switching or disconnecting devices shall not be in the earthed circuit conductor between the dc source and the point of connection of the earthing electrode conductor.

Statement 31

DANGER

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- **Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.**
- **Connect all power cords to a properly wired and grounded power source.**
- **Connect to properly wired power sources any equipment that will be attached to this product.**
- **When possible, use one hand only to connect or disconnect signal cables.**
- **Never turn on any equipment when there is evidence of fire, water, or structural damage.**
- **Disconnect the attached ac power cords, dc power sources, network connections, telecommunications systems, and serial cables before you open the device covers, unless you are instructed otherwise in the installation and configuration procedures.**
- **Connect and disconnect cables as described in the following table when you install, move, or open covers on this product or attached devices.**

To Connect:

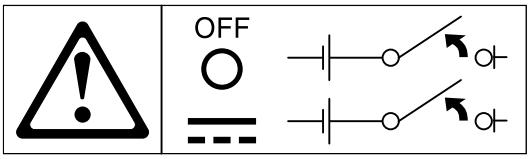
1. Turn OFF all power sources and equipment that is to be attached to this product.
2. Attach signal cables to the product.
3. Attach power cords to the product.
   - For ac systems, use appliance inlets.
   - For dc systems, ensure correct polarity of -48 V dc connections: RTN is + and -48 V dc is -. Earth ground should use a two-hole lug for safety.
4. Attach signal cables to other devices.
5. Connect power cords to their sources.
6. Turn ON all the power sources.

To Disconnect:

1. Turn OFF all power sources and equipment that is to be attached to this product.
   - For ac systems, remove all power cords from the chassis power receptacles or interrupt power at the ac power distribution unit.
   - For dc systems, disconnect dc power sources at the breaker panel or by turning off the power source. Then, remove the dc cables.
2. Remove the signal cables from the connectors.
3. Remove all cables from the devices.

Statement 33

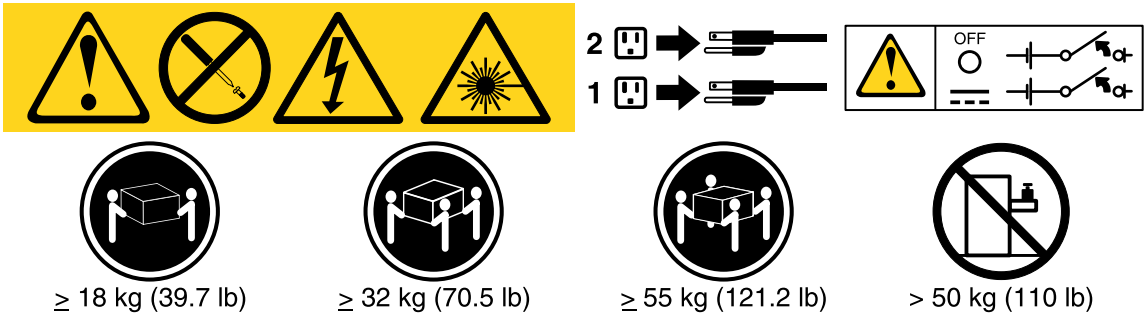
CAUTION:
This product does not provide a power-control button. Turning off blades or removing power modules and I/O modules does not turn off electrical current to the product. The product also might have more than one power cord. To remove all electrical current from the product, make sure that all power cords are disconnected from the power source.



Statement 34

CAUTION:
To reduce the risk of electric shock or energy hazards:

- **This equipment must be installed by trained service personnel in a restricted-access location, as defined by the NEC and IEC 60950-1, First Edition, The Standard for Safety of Information Technology Equipment.**
- **Connect the equipment to a properly grounded safety extra low voltage (SELV) source. A SELV source is a secondary circuit that is designed so that normal and single fault conditions do not cause the voltages to exceed a safe level (60 V direct current).**
- **Incorporate a readily available approved and rated disconnect device in the field wiring.**
- **See the specifications in the product documentation for the required circuit-breaker rating for branch circuit overcurrent protection.**
- **Use copper wire conductors only. See the specifications in the product documentation for the required wire size.**
- **See the specifications in the product documentation for the required torque values for the wiring-terminal screws.**



Important: Be sure to read the multilingual safety instructions on the CD that comes with the server before you use the product.

Replacing a hot-swap dc power supply

To install a hot-swap dc power supply, complete the following steps.

Attention: Only trained service personnel other than Lenovo service technicians are authorized to install and remove the -48 volt dc power supply, and make the connections to and disconnections from the -48 volt dc power source. Lenovo service technicians are not certified or authorized to install or remove the -48 volt power cable. The customer is responsible for ensuring that only trained service personnel install or remove the -48 volt power cable.

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Touch the static-protective package that contains the hot-swap power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.

Step 3. Turn off the circuit breaker for the dc power source to which the new power supply will be connected. Disconnect the power cord from the dc power source.

Step 4. Attach the dc power cable to the new power supply.

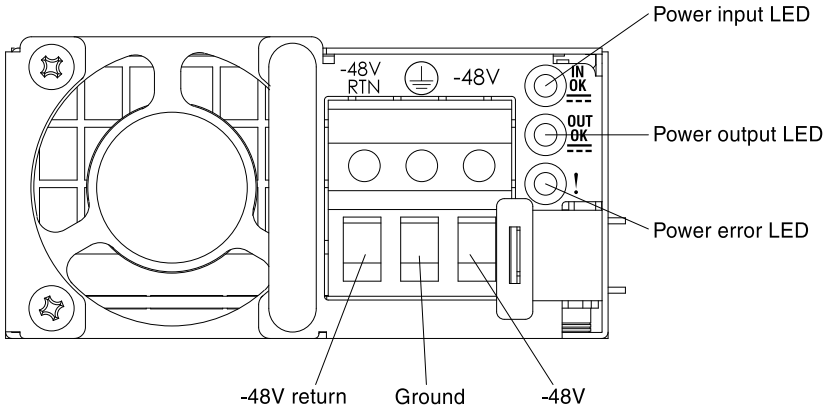


Figure 172. DC power supply rear view

Step 5. If you are installing a hot-swap power supply into an empty bay, remove the power-supply filler from the power-supply bay.

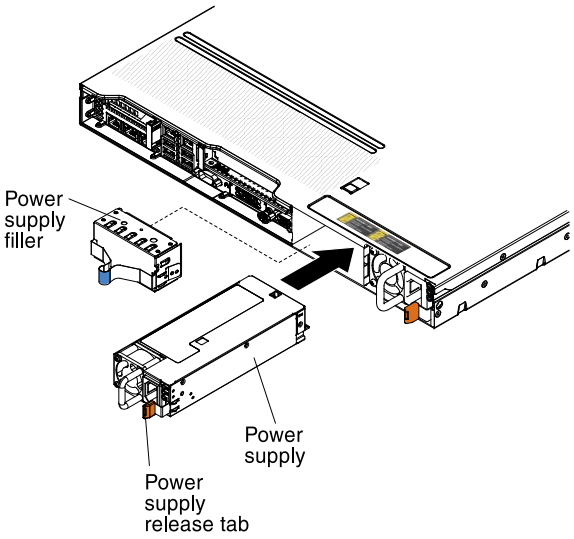


Figure 173. Power supply installation

Step 6. Grasp the handle on the rear of the power supply and slide the power supply forward into the power-supply bay until it clicks. Make sure that the power supply connects firmly into the power-supply connector.

Step 7. Route the power cord through the handle and cable tie if any, so that it does not accidentally become unplugged.

Step 8. Connect the other ends of the dc power cable to the dc power source. Cut the wires to the correct length, but do not cut them shorter than 150 mm (6 inch). If the power source requires ring terminals, you must use a crimping tool to install the ring terminals to the power cord wires. The ring terminals must be UL approved and must accommodate the wires that are described in “Regulations” on page 257. The minimum nominal thread diameter of a pillar or stud type of terminal must be 4 mm; for a screw type of terminal the diameter must be 5.0 mm.

Step 9. Turn on the circuit breaker for the dc power source to which the new power supply is connected.

Step 10. Make sure that the green power LEDs on the power supply are lit, indicating that the power supply is operating correctly.

Step 11. If you are replacing a power supply with one of a different wattage in the server, apply the new power information label provided over the existing power information label on the server. Power supplies in the server must be with the same power rating or wattage to ensure that the server will operate correctly.

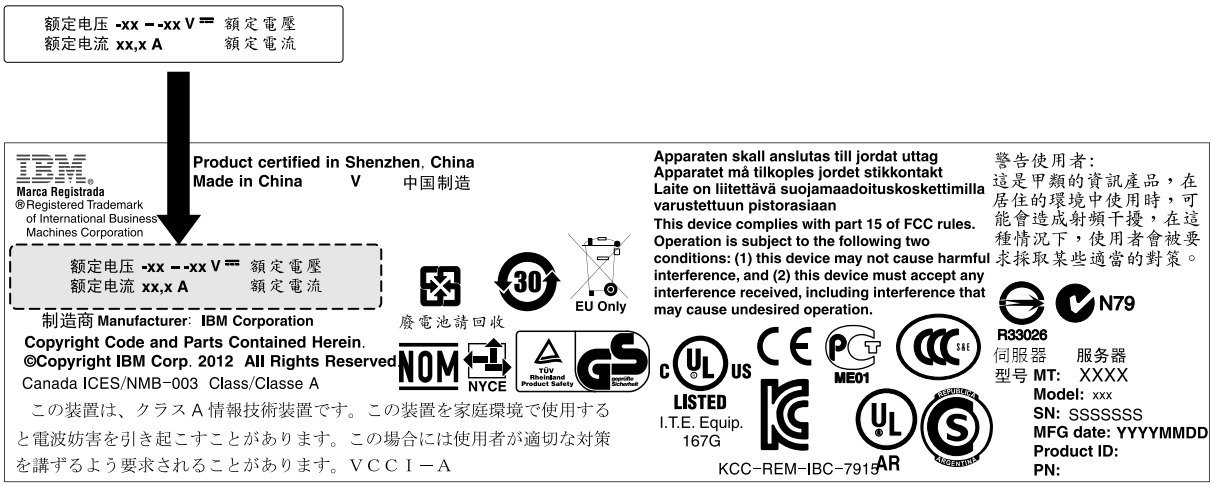


Figure 174. Power information label

Step 12. If you are adding a power supply to the server, attach the redundant power information label that comes with this option on the server cover near the power supplies.

Figure 175. Redundant power information label

Removing the hot-swap drive backplane

Use this information to remove the hot-swap drive backplane.

To remove the hot-swap hard disk drive backplane, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Pull the hard disk drives out of the server slightly to disengage them from the hard disk drive backplane (see “Removing hot-swap hard disk drives” on page 200).

Step 5. Remove the hot-swap hard disk drive backplane.If you would like to remove the 3.5-inch drive backplane.

a. Adjust the latch to the unlocked position.

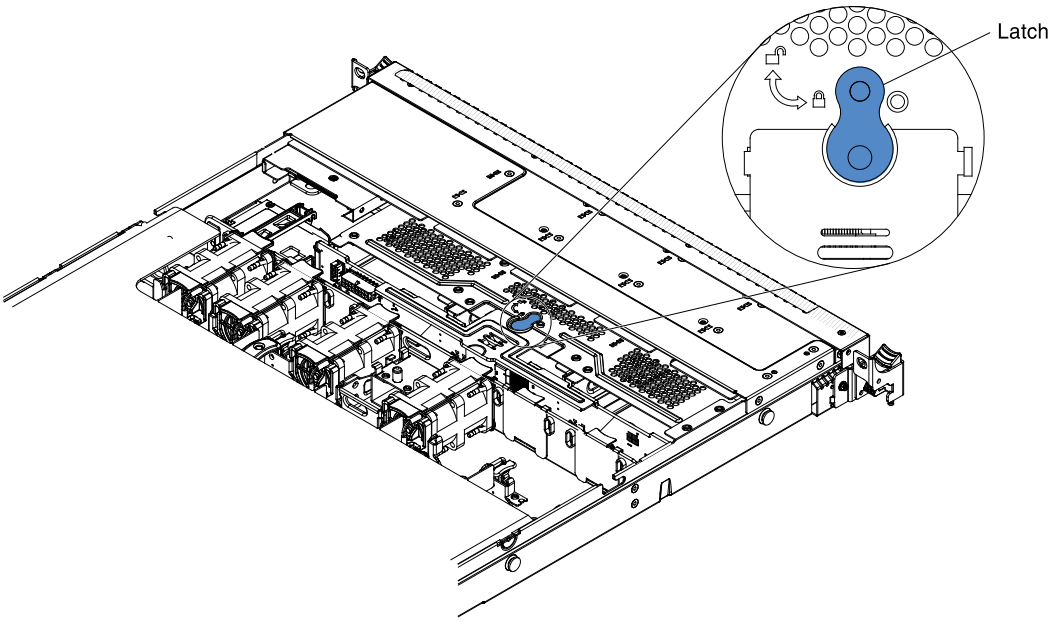


Figure 176. Latch adjustment

b. Lift the hard disk drive backplane up to remove it from the server.

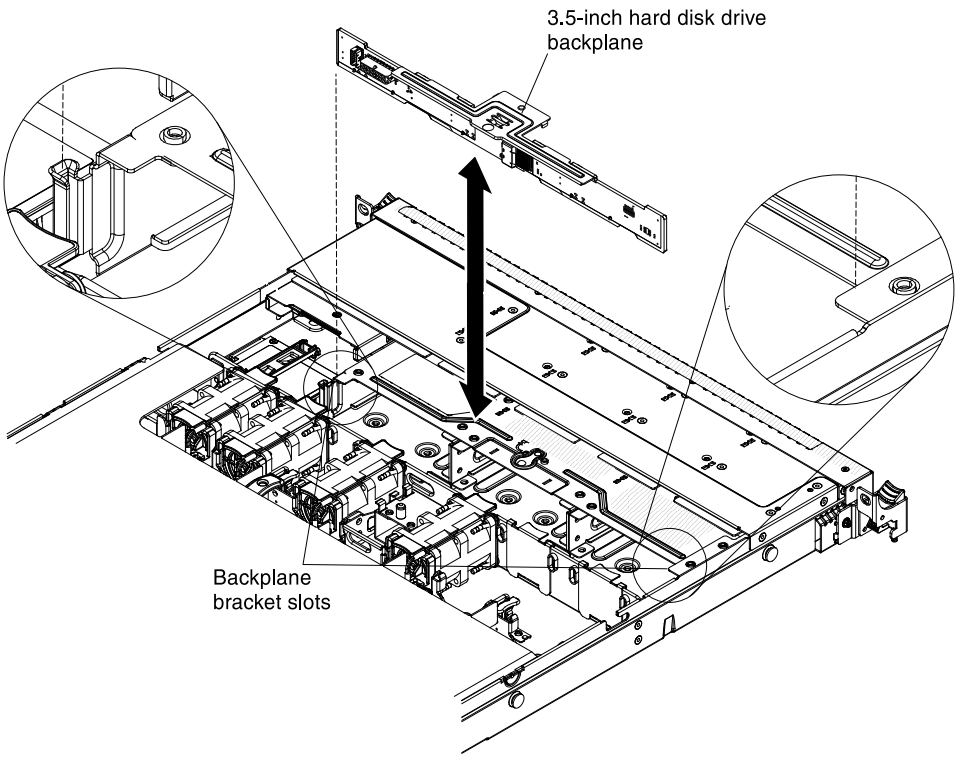


Figure 177. Backplane removal

If you would like to remove the 2.5-inch drive backplane.

a. Lift the hard disk drive backplane up to remove it from the server.

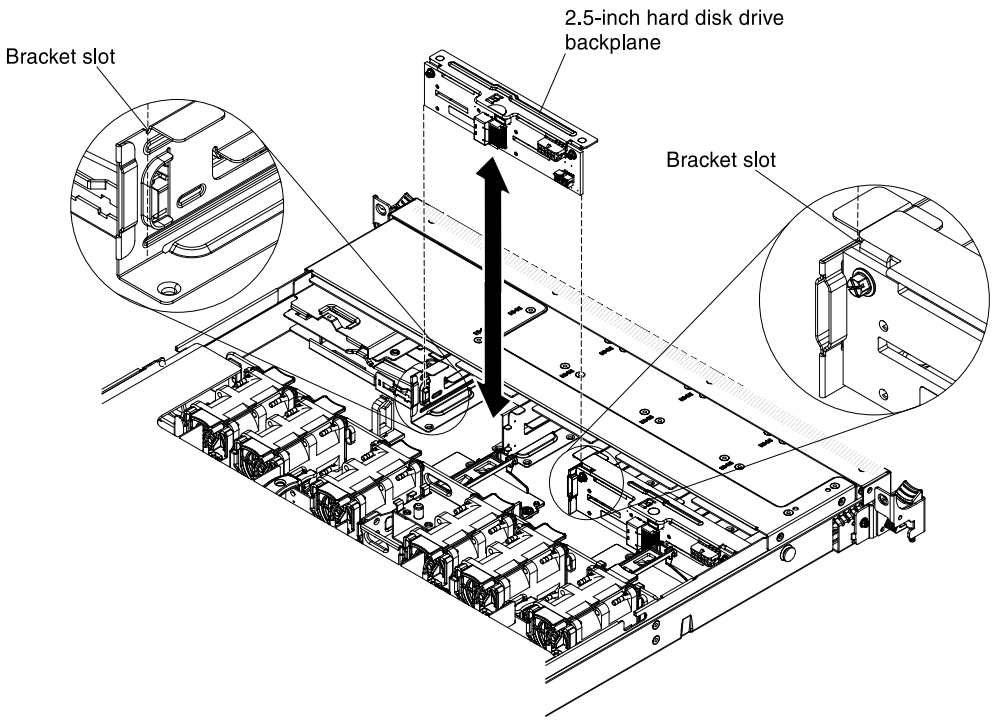


Figure 178. Backplane removal

Step 6. Disconnect all cables from the hard disk drive backplane.

If you are instructed to return the hard disk drive backplane, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the hot-swap drive backplane

Use this information to replace the hot-swap drive backplane.

To install the replacement hot-swap hard disk drive backplane, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Reconnect the cables to the hard disk drive backplane.

Step 3. Align the sides of the drive backplane with the slots on the backplane bracket.

Step 4. Install the hard disk drive backplane.

Note: You can reconnect the cables to the hard disk drive backplane before installing the backplane onto the brackets or you can connect the cables after you install the backplane, if that is easier for you.

If you would like to install the 3.5-inch drive backplane.

a. Insert the hard disk drive backplane into the slots on the backplane bracket and push the hard disk drive backplane down until the backplane is fully seated.

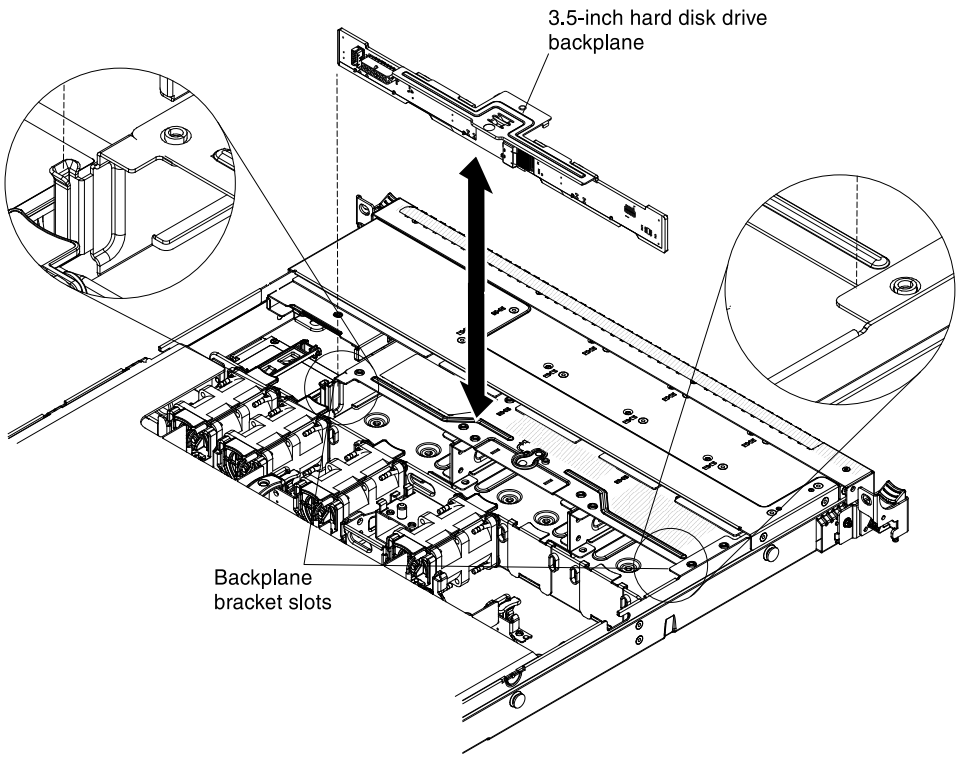


Figure 179. Backplane installation

b. Adjust the latch to the locked position.

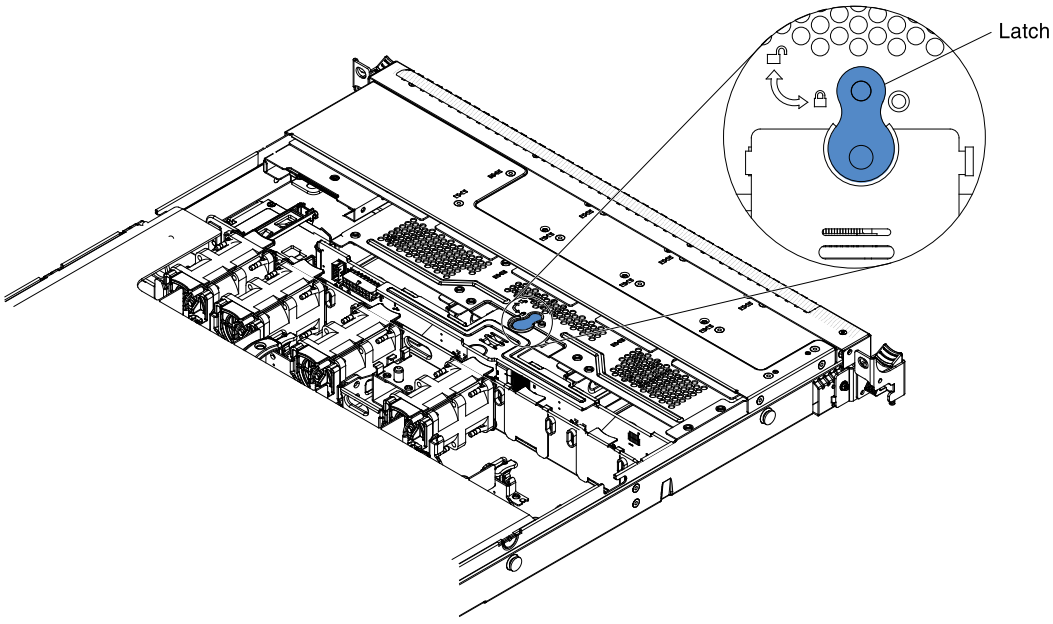


Figure 180. Latch adjustment

If you would like to install the 2.5-inch drive backplane.

a. Insert the hard disk drive backplane into the slots on the backplane bracket and push the hard disk drive backplane down until the backplane is fully seated.

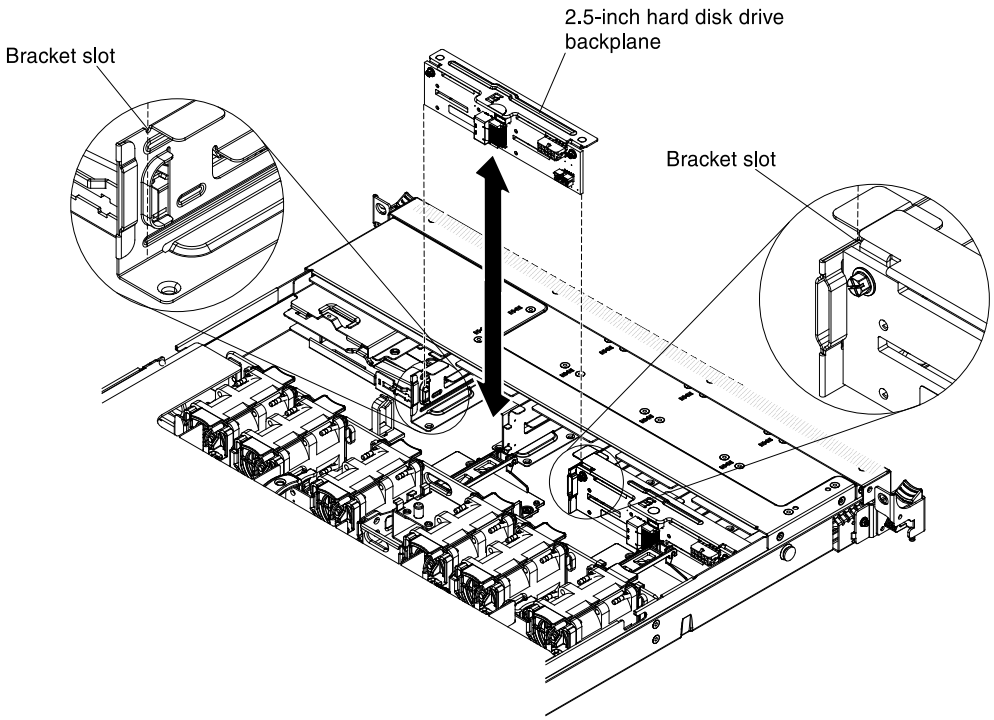


Figure 181. Backplane installation

Step 5. Connect the signal, power and configuration cables to the system board. Route the signal cable from the drive backplane along the chassis and connect it to the SAS/SATA controller connectors. Then, route the power cable and the configuration cable from the drive backplane along the chassis and connect it to the SAS/SATA power connector and SAS/SATA configuration connector. See “Cabling backplane” on page 183 for more information.

Step 6. Reinstall the hard disk drives (see “Replacing hot-swap hard disk drives” on page 201).

Step 7. Install the cover (see “Replacing the cover” on page 192).

Step 8. Slide the server into the rack.

Step 9. Reconnect the power cords and any cables that you removed.

Step 10. Turn on the peripheral devices and the server.

Removing the simple-swap drive backplate assembly

Use this information to remove the simple-swap drive backplate assembly.

To remove the simple-swap hard disk drive backplate assembly, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the filler panels from the drive bay.

Step 5. Slide the blue release tab to the right with one finger while using another finger to grasp the black drive handle and pull the hard disk drives out of the server slightly to disengage them from the hard disk drive backplate (see “Removing simple-swap hard disk drives” on page 203).

Step 6. Remove the simple-swap hard disk drive backplate assembly.If you would like to remove the 3.5-inch drive backplate assembly.

a. Adjust the latch to the unlocked position on 3.5-inch server models.

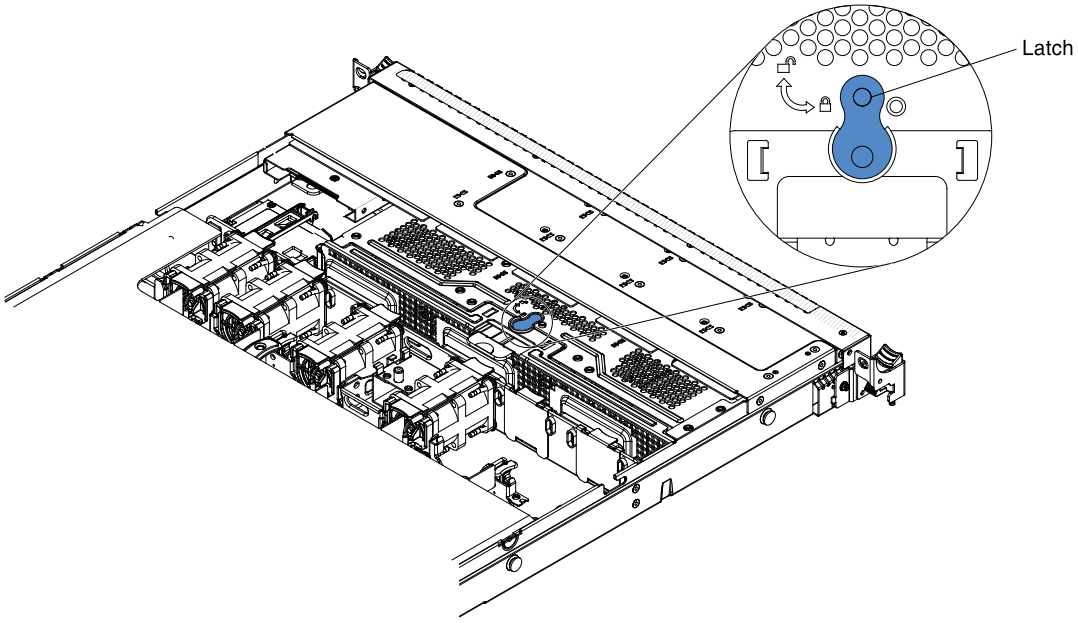


Figure 182. Latch adjustment

b. Lift the drive backplate up to disengage the backplate assembly from the backplane bracket and remove it from the server.

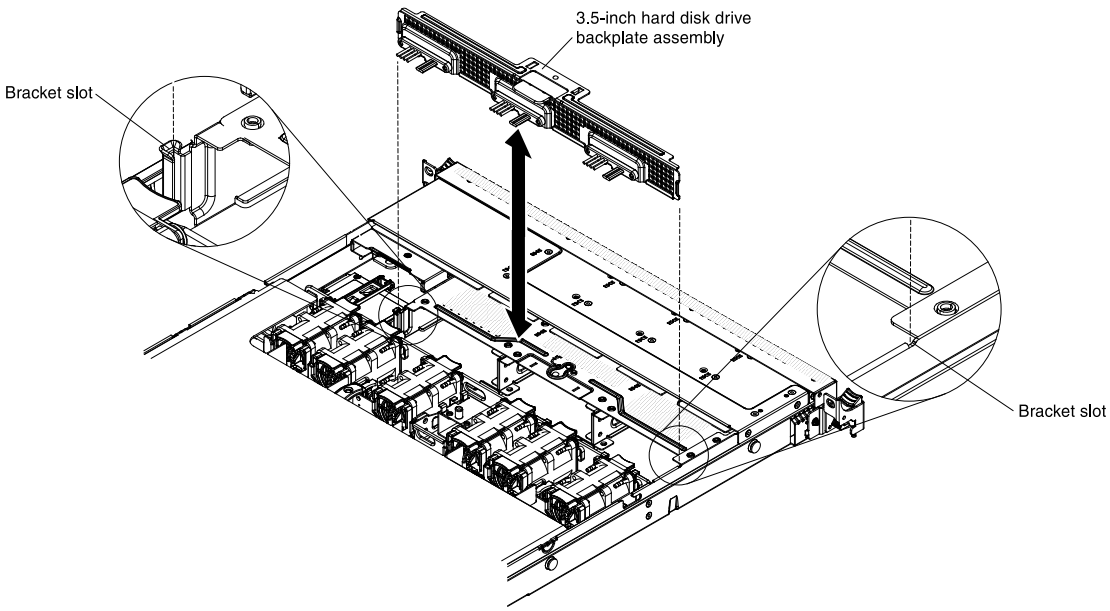


Figure 183. Backplate assembly removal

Step 7. Disconnect the power and signal cables from the system board.

If you are instructed to return the hard disk drive backplate assembly, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the simple-swap drive backplate assembly

Use this information to replace the simple-swap drive backplate assembly.

To install the replacement simple-swap hard disk drive backplate assembly, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Align the sides of the drive backplate assembly with the slots on the bracket.

Step 3. Install the hard disk drive backplate assembly.If you would like to install the 3.5-inch drive backplate assembly.

a. Insert the hard disk drive backplate into the slots on the backplate bracket and push the hard disk drive backplate assembly down until the backplate is seated firmly.

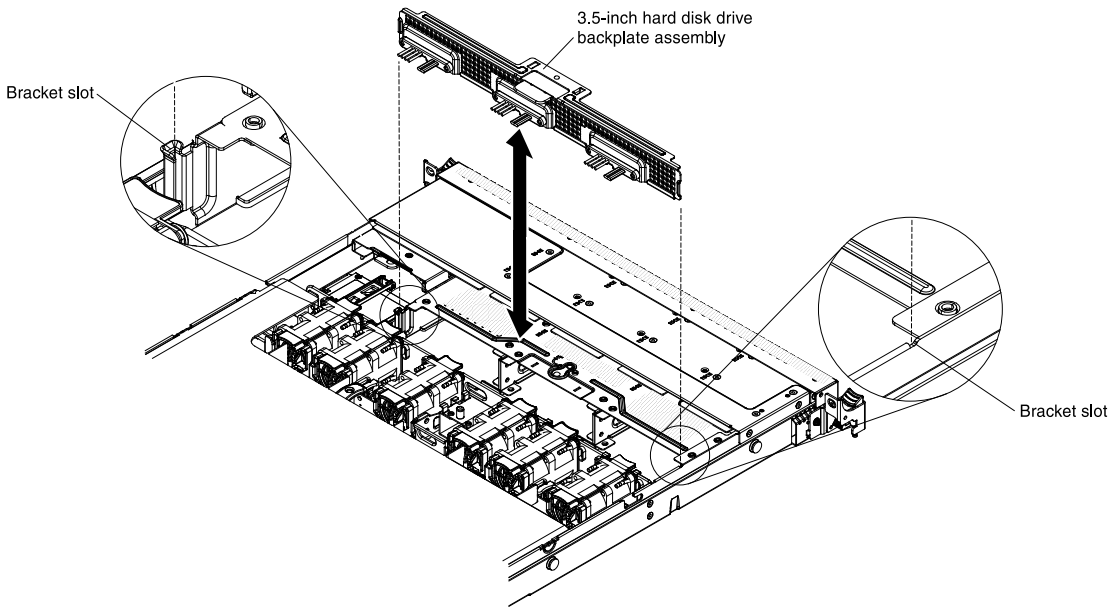


Figure 184. Backplate assembly installation

b. Adjust the latch to the locked position on 3.5-inch server models.

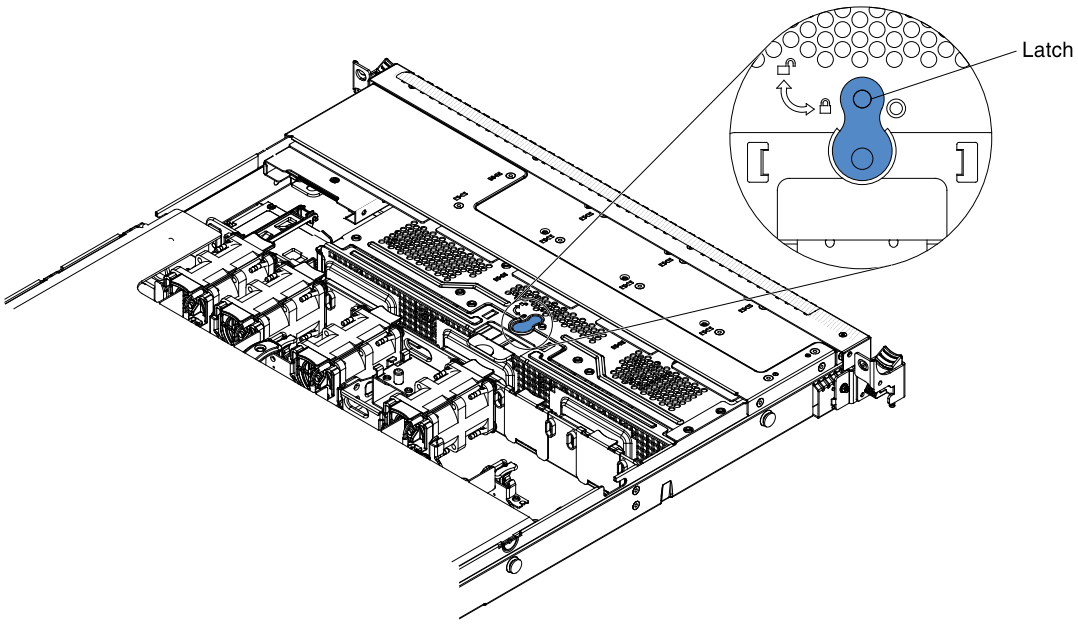


Figure 185. Latch adjustment

Step 4. Connect the signal and power cables to the system board. Route the signal cable from the drive backplane along the chassis and connect it to the **SAS/SATA signal connector**. Then, route the power cable from the drive backplate assembly along the chassis and connect it to the **simple-swap SATA power connector**. See “Cabling backplane” on page 183 for more information.

Step 5. Reinstall the hard disk drives and filler panels (see “Replacing simple-swap hard disk drives” on page 204).

Step 6. Install the cover (see “Replacing the cover” on page 192).

Step 7. Slide the server into the rack.

Step 8. Reconnect the power cords and any cables that you removed.

Step 9. Turn on the peripheral devices and the server.

Removing a USB embedded hypervisor flash device

Use this information to remove a USB embedded hypervisor flash device.

To remove a USB hypervisor flash device, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the flash device:

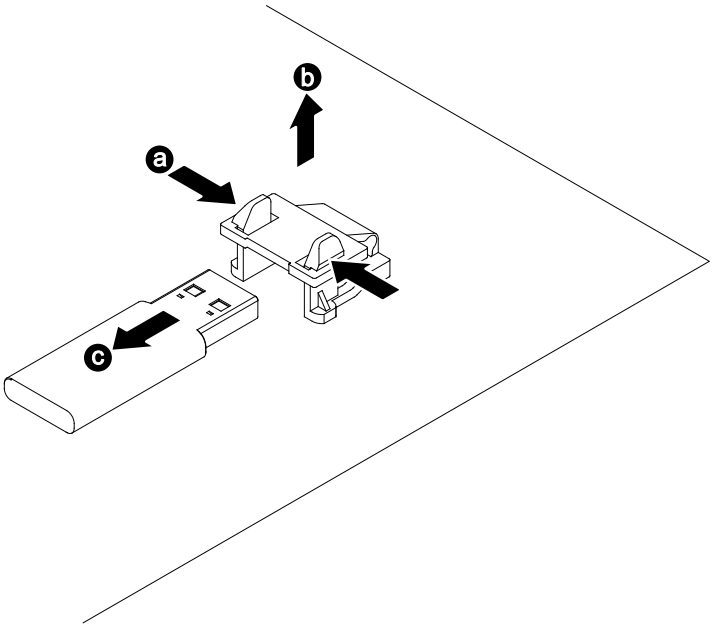


Figure 186. USB hypervisor flash device removal

a. Unlock the retention latch on the USB connector by squeezing the two retention clips toward each other.

b. Open the retention latch.

c. Grasp the flash device and pull to remove it from the connector.

If you are instructed to return the flash device, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a USB embedded hypervisor flash device

Use this information to replace a USB embedded hypervisor flash device.

To install a USB hypervisor flash device, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Install the flash device:

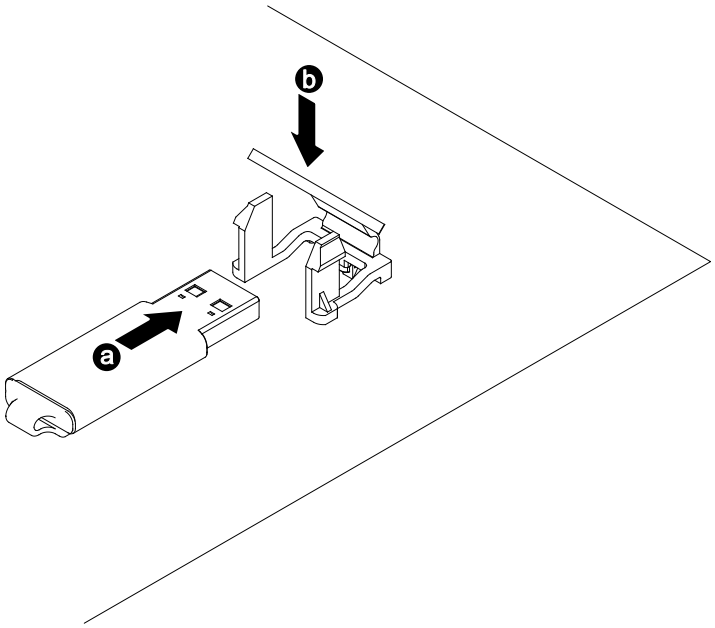


Figure 187. USB hypervisor flash device installation

a. Align the flash device with the connector on the system board and push it into the USB connector until it is firmly seated.

b. Press down on the retention latch to lock the flash device into the USB connector.

Step 5. Reconnect the power cords and any cables that you removed.

Step 6. Replace the cover (see “Replacing the cover” on page 192).

Step 7. Slide the server into the rack.

Step 8. Turn on the peripheral devices and the server.

Removing the system battery

Use this information to remove the system battery.

The following notes describe information that you must consider when replacing the battery.

- Lenovo has designed this product with your safety in mind. The lithium battery must be handled correctly to avoid possible danger. If you replace the battery, you must adhere to the following instructions.

  Note: In the U. S., call 1-800-IBM-4333 for information about battery disposal.

- If you replace the original lithium battery with a heavy-metal battery or a battery with heavy-metal components, be aware of the following environmental consideration. Batteries and accumulators that contain heavy metals must not be disposed of with normal domestic waste. They will be taken back

free of charge by the manufacturer, distributor, or representative, to be recycled or disposed of in a proper manner.

- To order replacement batteries, call 1-800-IBM-SERV within the United States, and 1-800-465-7999 or 1-800-465-6666 within Canada. Outside the U.S. and Canada, contact your sales representative or reseller.

  Note: After you replace the battery, you must reconfigure the server and reset the system date and time.

  Statement 2

  CAUTION:
  When replacing the lithium battery, use only Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

  Do not:

  - **Throw or immerse into water**
  - **Heat to more than 100°C (212°F)**
  - **Repair or disassemble**

  Dispose of the battery as required by local ordinances or regulations.

To remove the system battery, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. If necessary, lift the PCI riser-card assembly 2 out of the way (see “Removing a PCI riser-card assembly” on page 222).

Step 5. Remove the system battery:

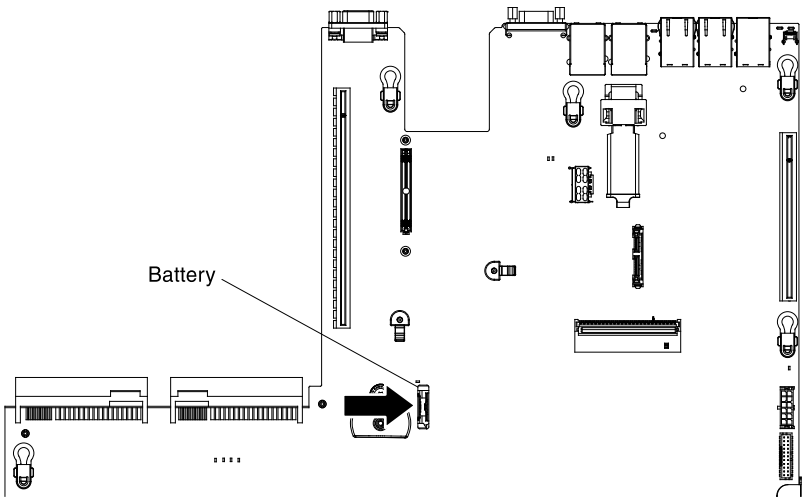


Figure 188. System battery removal

a. If there is a rubber cover on the battery holder, use your fingers to lift the battery cover from the battery connector.

b. Use one finger to tilt the battery horizontally out of its socket, pushing it away from the socket.

   Attention: Neither tilt nor push the battery by using excessive force.

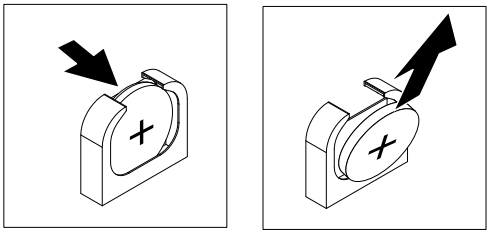


Figure 189. System battery removal

c. Use your thumb and index finger to lift the battery from the socket.

   Attention: Do not lift the battery by using excessive force. Failing to remove the battery properly may damage the socket on the system board. Any damage to the socket may require replacing the system board.

Step 6. Dispose of the battery as required by local ordinances or regulations. See the *Environmental Notices and User's Guide* on the *Documentation* CD for more information.

Replacing the system battery

Use this information to replace the system battery.

The following notes describe information that you must consider when replacing the system battery in the server.

- When replacing the system battery, you must replace it with a lithium battery of the same type from the same manufacturer.

- To order replacement batteries, call 1-800-426-7378 within the United States, and 1-800-465-7999 or 1-800-465-6666 within Canada. Outside the U.S. and Canada, contact your sales representative or reseller.
- After you replace the system-board battery, you must reconfigure the server and reset the system date and time.
- To avoid possible danger, read and follow the following safety statement.

Statement 2

CAUTION:
When replacing the lithium battery, use only Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

Do not:

- **Throw or immerse into water**
- **Heat to more than 100°C (212°F)**
- **Repair or disassemble**

Dispose of the battery as required by local ordinances or regulations.

To install the replacement system battery, complete the following steps:

Step 1. Follow any special handling and installation instructions that come with the replacement battery.

Step 2. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 3. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 4. Remove the cover (see “Removing the cover” on page 191).

Step 5. If necessary, lift the PCI riser-card assembly 2 out of the way (see “Removing a PCI riser-card assembly” on page 222).

Step 6. Insert the new battery:

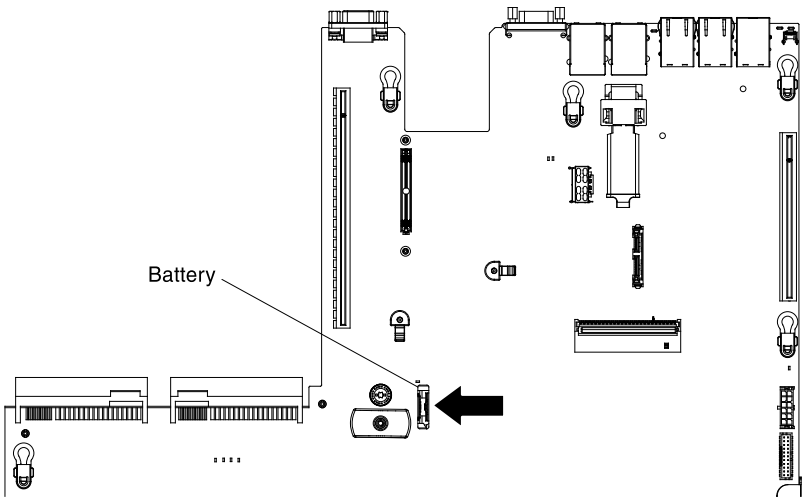


Figure 190. System battery installation

a. Tilt the battery so that you can insert it into the socket on the side opposite the battery clip.

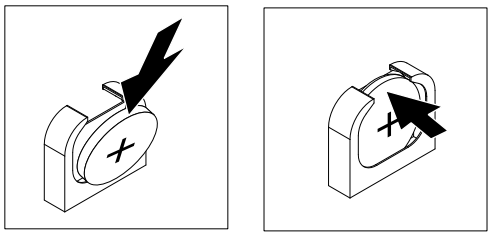


Figure 191. System battery installation

b. Press the battery down into the socket until it clicks into place. Make sure that the battery clip holds the battery securely.

c. If you removed a rubber cover from the battery holder, use your fingers to install the battery cover on top of the battery connector.

Step 7. Reinstall the PCI riser-card assembly 2 (see “Replacing a PCI riser-card assembly” on page 223), if necessary.

Step 8. Install the cover (see “Replacing the cover” on page 192).

Step 9. Slide the server into the rack.

Step 10. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

Step 11. Start the Setup utility and reset the configuration.

- Set the system date and time.
- Set the power-on password.
- Reconfigure the server.

See “Using the Setup utility” on page 97 for details.

Removing the bezel

Use this information to remove the bezel.

To remove the bezel, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the hard disk drives and filler panels from the hard disk drive bays (see “Removing hot-swap hard disk drives” on page 200 or “Removing simple-swap hard disk drives” on page 203).

Step 5. Remove the screws from the bezel.

Note: Use the T8 Torx screwdriver that comes with the new bezel to remove the bezel.

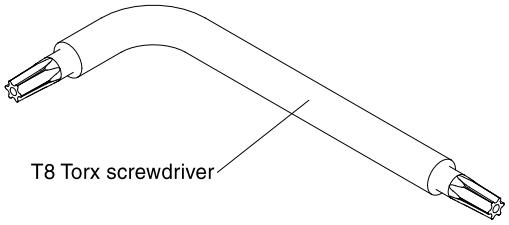


Figure 192. T8 Torx screwdriver

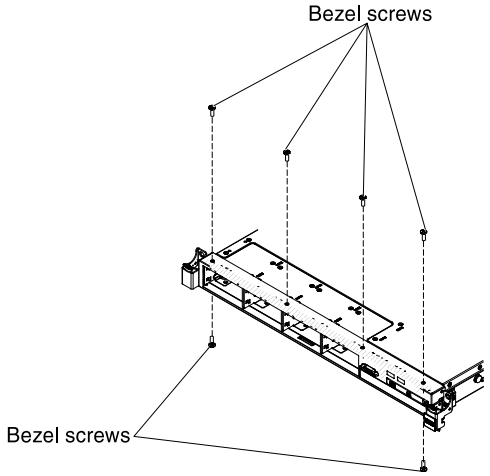


Figure 193. Bezel screws removal

Step 6. Pull the top of the bezel out slightly; then, rotate it downward until the tabs on the bottom of the bezel disengages from the chassis and set it aside.

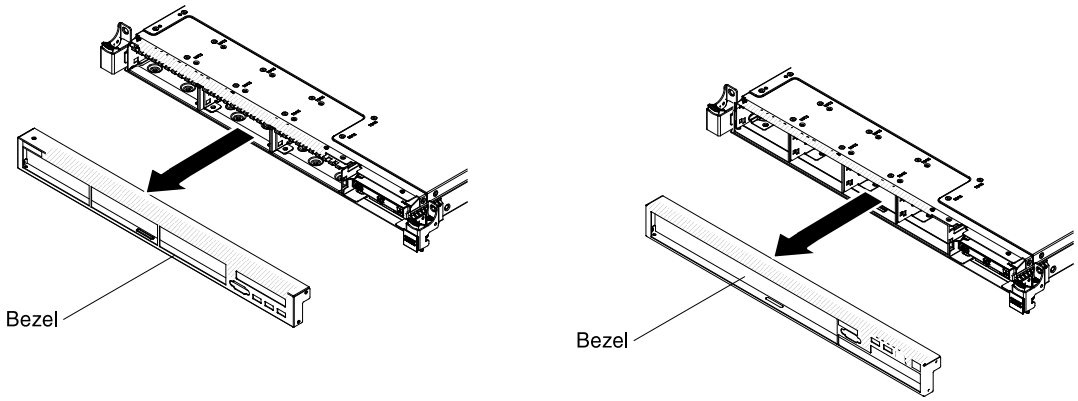


Figure 194. Bezel removal

Replacing the bezel

Use this information to replace the bezel.

To install the bezel, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Insert the tabs on the bottom of the bezel into the holes on the chassis.

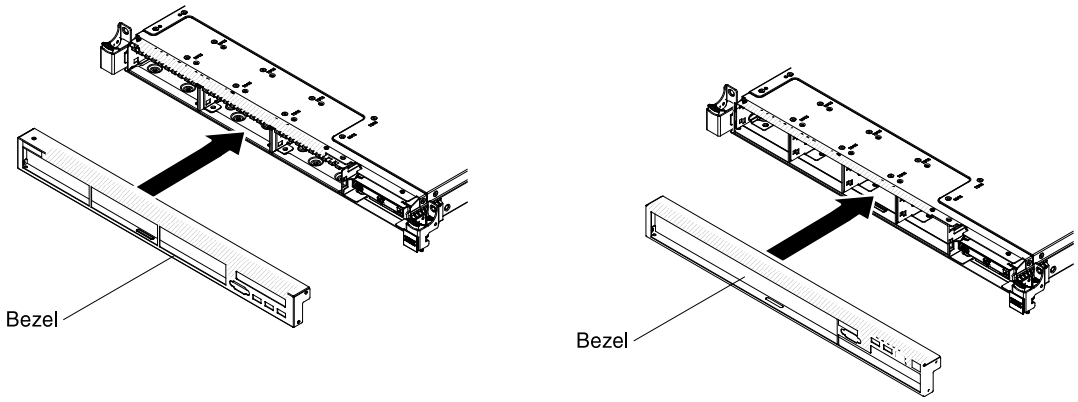


Figure 195. Bezel installation

Step 5. Rotate the bezel upward to the server and reinstall the screws.

Note: Use the T8 Torx screwdriver that comes with the new bezel to install the bezel.

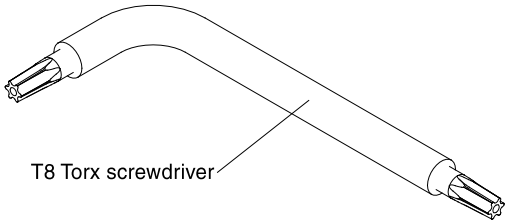


Figure 196. T8 Torx screwdriver

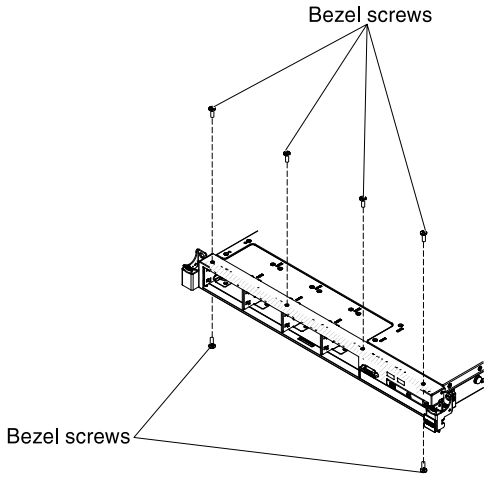


Figure 197. Bezel screws installation

Step 6. Reinstall the hard disk drives and drive bay filler panels into the drive bays (see “Replacing hot-swap hard disk drives” on page 201 or “Replacing simple-swap hard disk drives” on page 204).

Step 7. Install the cover (see “Replacing the cover” on page 192).

Step 8. Reconnect the power cords and any cables that you removed.

Step 9. Slide the server into the rack.

Step 10. Turn on the peripheral devices and the server.

Removing the front USB connector assembly

Use this information to remove the front USB connector assembly.

To remove the front USB connector assembly, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the hard disk drives and filler panels from the hard disk drive bays (see “Removing hot-swap hard disk drives” on page 200 or “Removing simple-swap hard disk drives” on page 203).

Step 4. Remove the bezel (see “Removing the bezel” on page 275).

Step 5. Remove the USB cage screw from the chassis.

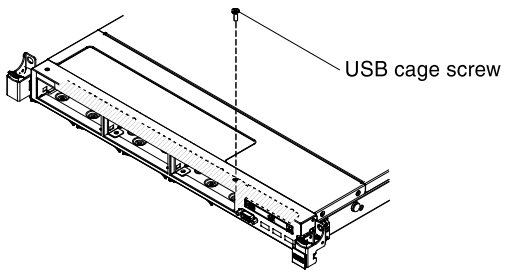


Figure 198. USB cage screw removal

Step 6. Disconnect the cables from the front USB connector.

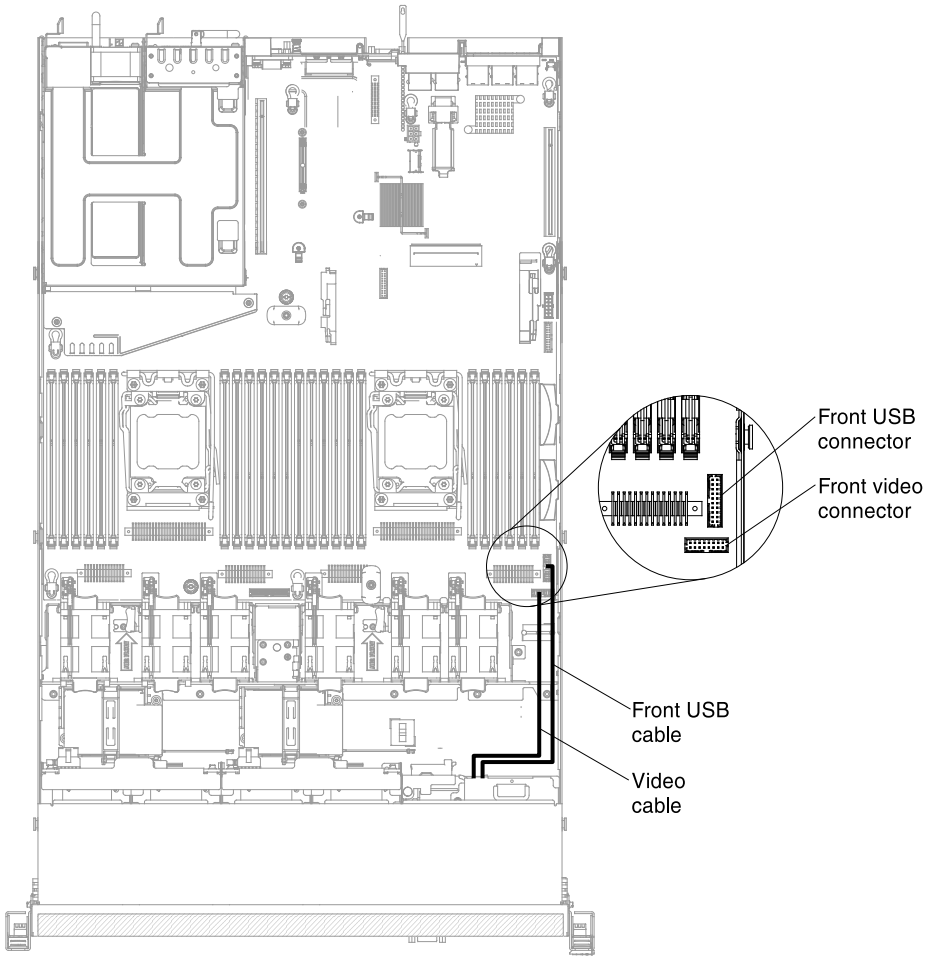


Figure 199. Front USB and video cables connection

Step 7. Pull the front USB connector assembly out slightly; then, rotate it downward until the tabs on the bottom of the front USB connector assembly disengages from the chassis and set it aside.

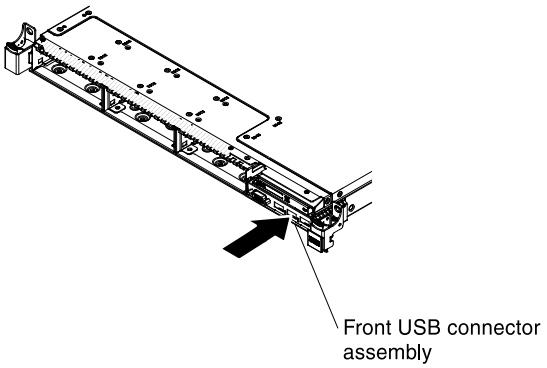


Figure 200. Front USB connector assembly removal

Replacing the front USB connector assembly

Use this information to replace the front USB connector assembly.

To install the front USB connector assembly, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Insert the tabs on the bottom of the front USB connector assembly into the holes on the chassis.

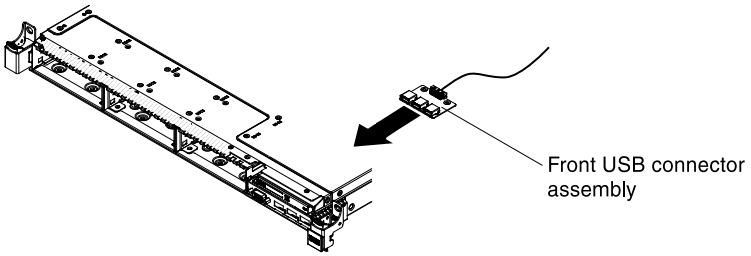


Figure 201. Front USB connector assembly installation

Step 4. Rotate the front USB connector assembly upward to the server.

Step 5. Reinstall the USB cage screw to the chassis.

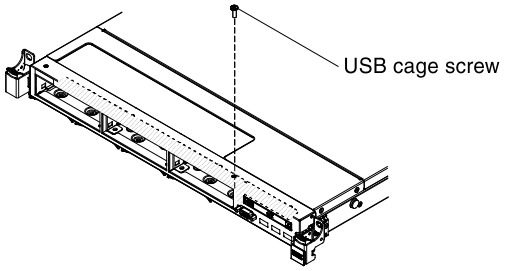


Figure 202. USB cage screw installation

Step 6. Reconnect the front USB cable to the front USB connector on the system board.

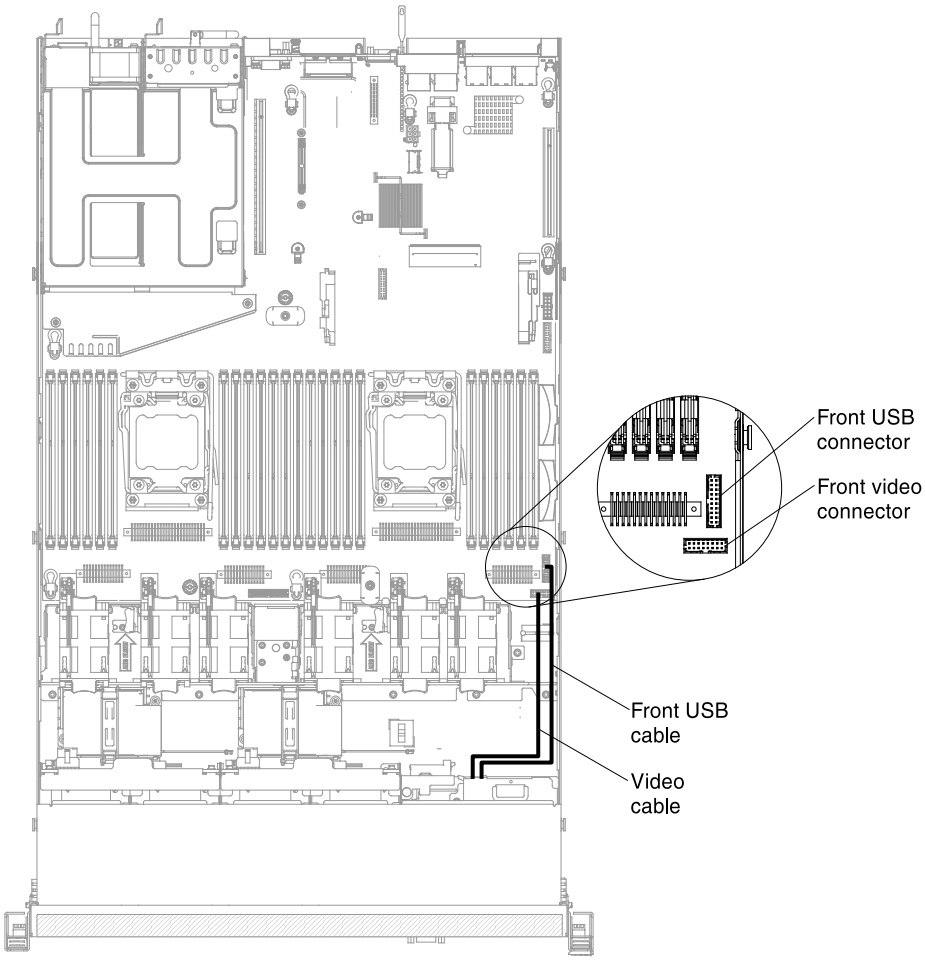


Figure 203. Front USB and video cables connection

Step 7. Reinstall the bezel (see “Replacing the bezel” on page 277).

Step 8. Reinstall the hard disk drives and drive bay filler panels into the drive bays (see “Replacing hot-swap hard disk drives” on page 201 or “Replacing simple-swap hard disk drives” on page 204).

Step 9. Install the cover (see “Replacing the cover” on page 192).

Step 10. Reconnect the power cords and any cables that you removed.

Step 11. Slide the server into the rack.

Step 12. Turn on the peripheral devices and the server.

Removing the front video connector assembly

Use this information to remove the front video connector assembly.

To remove the front video connector assembly, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Disconnect the cables from the front video connector.

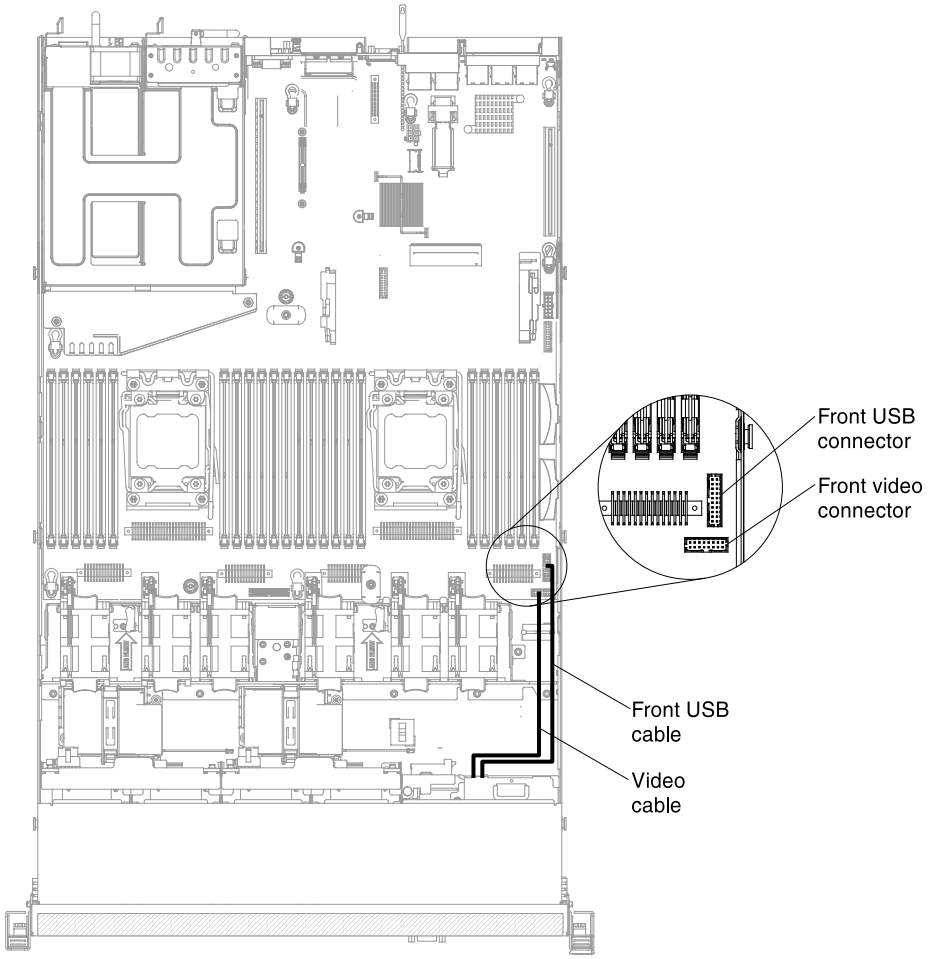


Figure 204. Front USB and video cables connection

Step 4. Remove the screws from the video connector assembly.

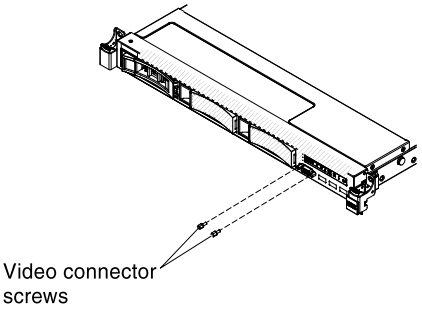


Figure 205. Video connector assembly screws removal

Step 5. Pull the front video connector assembly out slightly until it disengages from the chassis and set it aside.

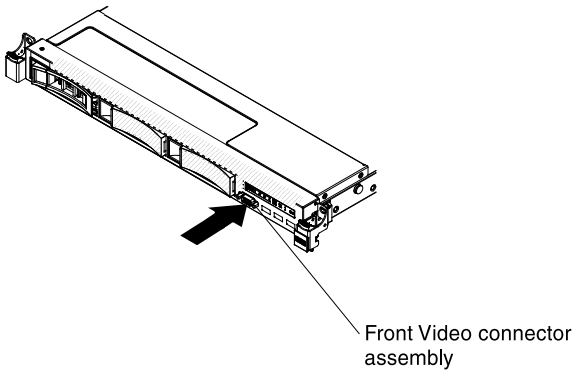


Figure 206. Front video connector assembly removal

Replacing the front video connector assembly

Use this information to replace the front video connector assembly.

To install the front video connector assembly, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Insert the front video connector assembly into the holes on the chassis.

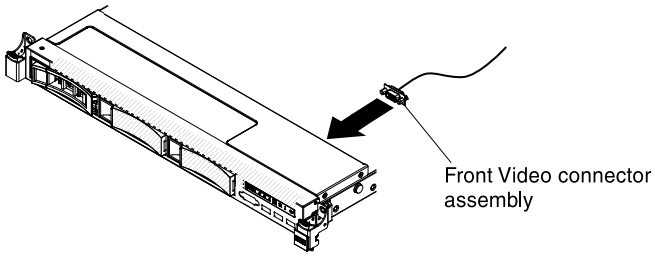


Figure 207. Front video connector assembly installation

Step 4. Reinstall the video connector assembly screws.

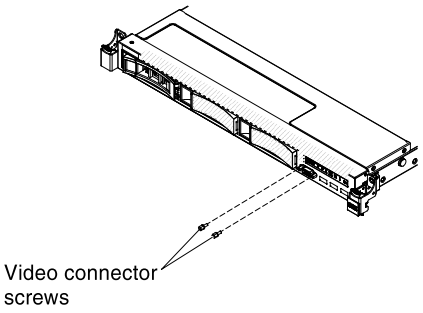


Figure 208. Video connector assembly screws installation

Step 5. Reconnect the front video cable to the front video connector on the system board.

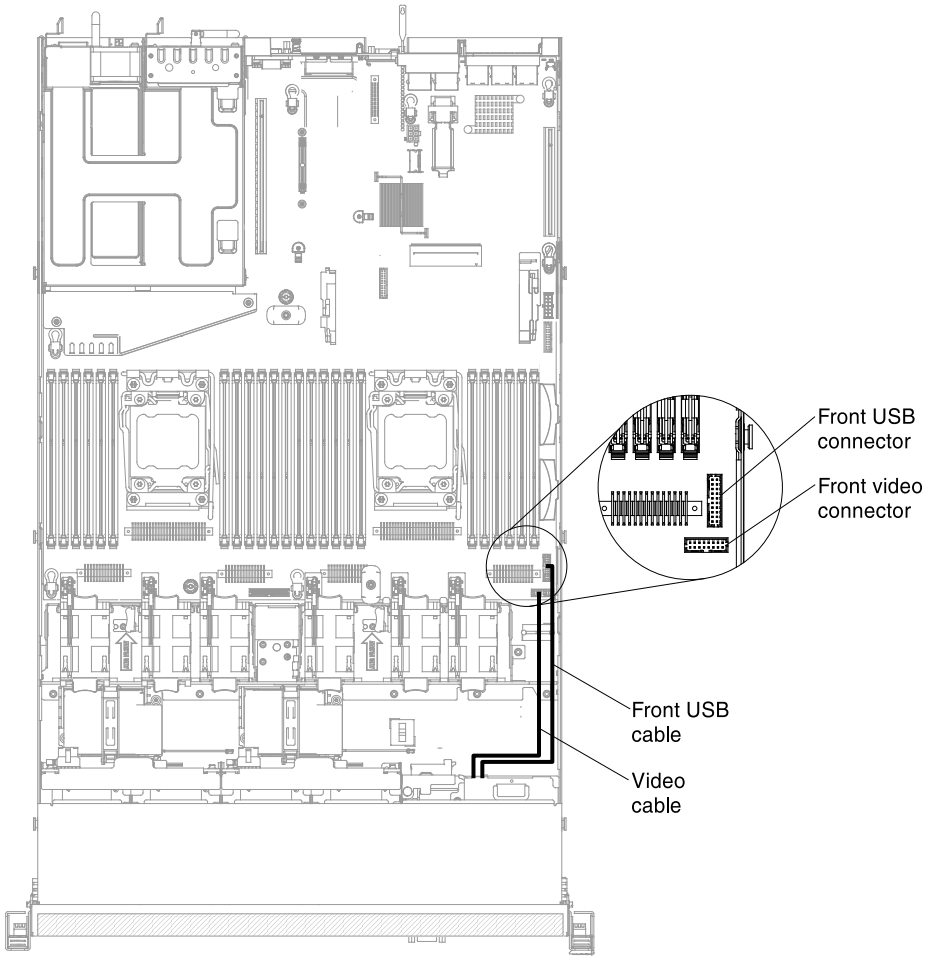


Figure 209. Front USB and video cables connection

Step 6. Install the cover (see “Replacing the cover” on page 192).

Step 7. Reconnect the power cords and any cables that you removed.

Step 8. Slide the server into the rack.

Step 9. Turn on the peripheral devices and the server.

Removing the operator information panel assembly

Use this information to remove the operator information panel assembly.

To remove the operator information panel, complete the following steps.

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Disconnect the cable from the back of the operator information panel assembly.

Step 5. Pull up the blue points slightly on the rear of the panel toward the front of the server.

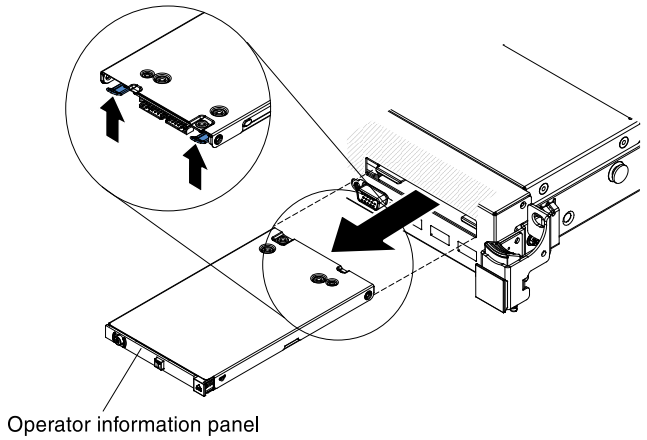


Figure 210. Operator information panel removal

Step 6. From the front of the server, carefully pull the assembly out of the server while you move it slightly from side to side.

If you are instructed to return the operator information panel assembly, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the operator information panel assembly

Use this information to replace the operator information panel assembly.

To install the operator information panel, complete the following steps.

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. From the front of the server, slide the operator information panel into the server until it clicks into place.

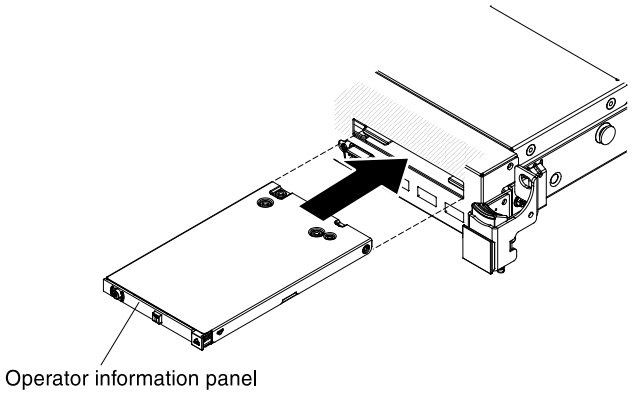


Figure 211. Operator information panel installation

Step 5. Inside the server, connect the cable to the rear of the operator information panel assembly.The following illustration shows the cable routing for the operator information panel.

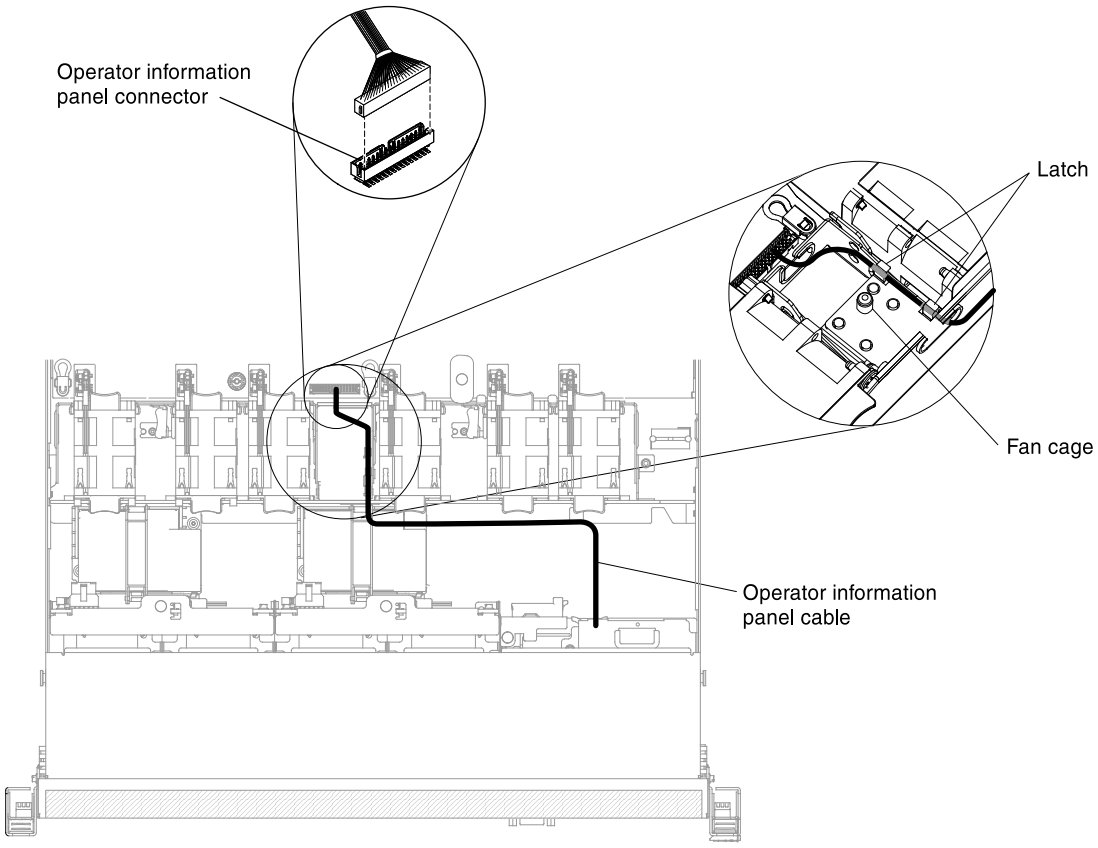


Figure 212. Operator information panel cable connection

The following notes describe additional information when you install the cable:

- To connect the operator information panel cable on the system board, press evenly on the cable. Pressing on one side of the cable might cause damage to the cable or connector.

- The operator information panel cable must pass through the chassis latch between fan 3 and fan 4 in order not to impede the fan cage.

Step 6. Replace the cover (see “Replacing the cover” on page 192).

Step 7. Slide the server into the rack.

Step 8. Reconnect the power cords and any cables that you removed.

Step 9. Turn on the peripheral devices and the server.

Removing and replacing Tier 2 CRUs

You may install a Tier 2 CRU yourself or request Lenovo to install it, at no additional charge, under the type of warranty service that is designated for your server.

The illustrations in this document might differ slightly from your hardware.

Removing a microprocessor and heat sink

Use this information to remove a microprocessor and heat sink.

- Microprocessors are to be removed only by trained technicians.

  Important: Always use the microprocessor installation tool to remove a microprocessor. Failing to use the microprocessor installation tool may damage the microprocessor sockets on the system board. Any damage to the microprocessor sockets may require replacing the system board.
- Be extremely careful, the microprocessor socket contacts are very fragile. Do not touch the microprocessor socket contacts. Contaminants on the microprocessor contacts or microprocessor socket contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.
- Do not allow the thermal grease on the microprocessor and heat sink to come in contact with anything. Contact with any surface can contaminate the thermal grease and the microprocessor socket.
- Do not use any tools or sharp objects to lift the locking levers on the microprocessor socket. Doing so might result in permanent damage to the system board.
- Each microprocessor socket must always contain either a socket cover or a microprocessor and heat sink.
- Be sure to use only the installation tools provided with the new microprocessor to remove or install the microprocessor. Do not use any other tool.
- When installing multiple microprocessors, open one microprocessor socket at a time to avoid damaging other microprocessor socket contacts.
- The microprocessor installation tool has the microprocessor installed on the tool, and may have a protective cover over the microprocessor. Do not use the tool, or remove the cover until you are instructed to do so.

Note: Be sure to use the installation tool that comes with your microprocessor installation tool assembly. The tools are similar in function and design, however Tool A has one setting for installing one size of microprocessor, and supports the following families of microprocessors: E5-26xx, E5-46xx. Installation Tool B has two settings for installing two different sizes of microprocessors. The settings that are marked on Tool B are “L” for smaller low core microprocessors, and “H” for larger high core microprocessors. Installation Tool B supports the following families of microprocessors: E5-26xx, E5-46xx, E5-26xx v2, E5-46xx v2.

Microprocessor Installation Tools A and B are shown in the following illustration.

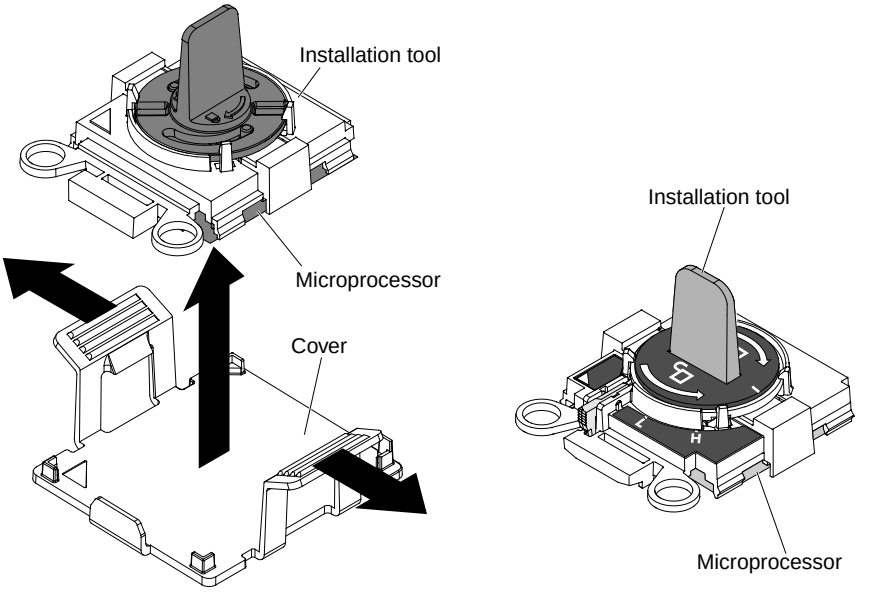


Figure 213. Microprocessor installation tools

To remove a microprocessor and heat sink, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect all power cords.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the air baffle (see “Removing the air baffle” on page 193).

Step 5. Locate the microprocessor to be removed (see “System-board internal connectors” on page 26).

Step 6. Remove the heat sink.

Attention: Do not touch the thermal material on the bottom of the heat sink. Touching the thermal material will contaminate it. If the thermal material on the microprocessor or heat sink becomes contaminated, you must wipe off the contaminated thermal material on the microprocessor or heat sink with the alcohol wipes and reapply clean thermal grease to the heat sink.

a. Open the heat sink retention module release lever to the fully open position.

b. Lift the heat sink out of the server. After removal, place the heat sink (with the thermal grease side up) on a clean, flat surface.

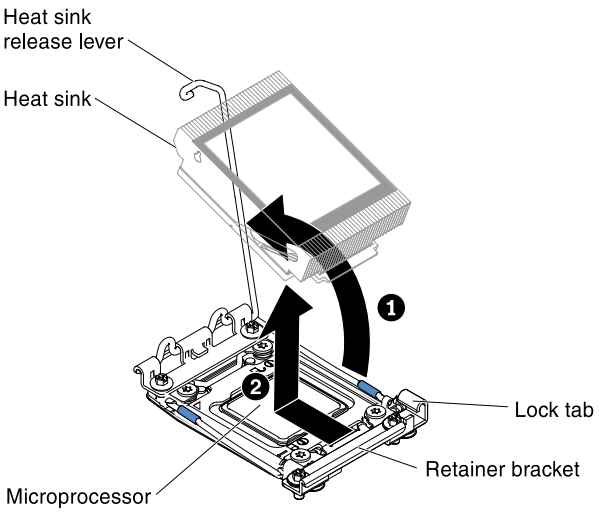


Figure 214. Heat sink removal

Step 7. Open the microprocessor socket release levers and retainer.

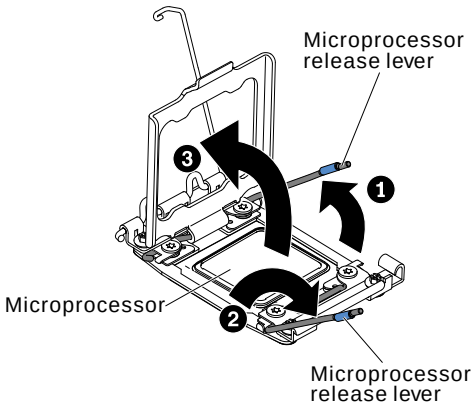


Figure 215. Microprocessor socket levers and retainer disengagement

a. Identify which release lever is labeled as the first release lever to open and open it.
b. Open the second release lever on the microprocessor socket.
c. Open the microprocessor retainer.

Attention: Do not touch the microprocessor contacts. Contaminants on the microprocessor contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.

Step 8. Remove the microprocessor from the socket.

a. Select the empty installation tool and ensure that the handle is in the open position. If the installation tool handle is not in the open position, use the following instructions for your installation tool:

- If using Installation Tool A, twist the microprocessor installation tool handle counterclockwise to the open position.

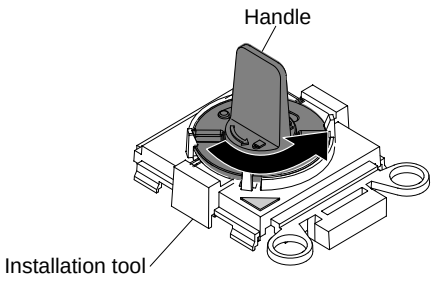


Figure 216. Installation tool handle adjustment

- If using Installation Tool B, **1** lift the interlock latch and hold it up while you **2** twist the microprocessor installation tool handle counterclockwise to the open position, and then release the interlock latch. The following illustration of the installation tool shows the location of the interlock latch and counterclockwise rotation of the handle before loading the microprocessor.

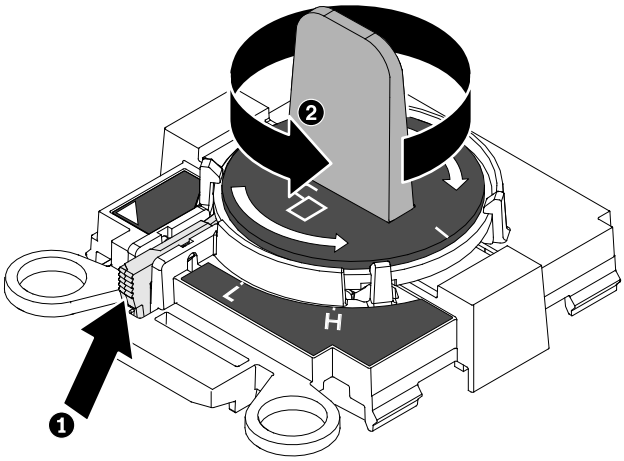


Figure 217. Installation tool handle adjustment

b. Align the installation tool with the screws, as shown in the following graphic, and lower the installation tool on the microprocessor. The installation tool rests flush on the socket only when it is aligned correctly.

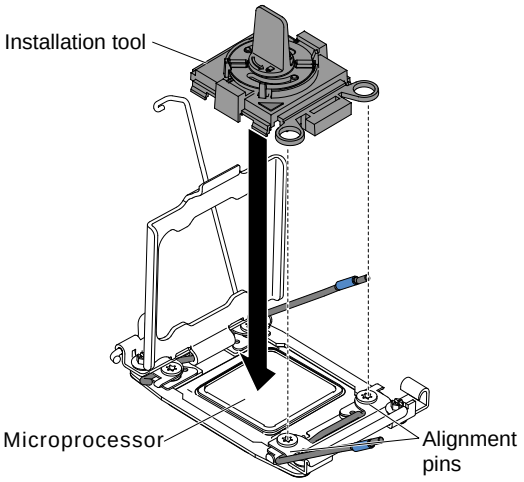


Figure 218. Installation tool alignment

c. Using the following instructions for your installation tool to remove the microprocessor.

- If using Installation Tool A, gently twist the handle clockwise to the closed position and lift the microprocessor out of the socket.
- If using Installation Tool B, gently twist the handle of the installation tool clockwise until it locks in the “H” or “L” position, depending on the size of microprocessor, and then lift the microprocessor out of the socket.

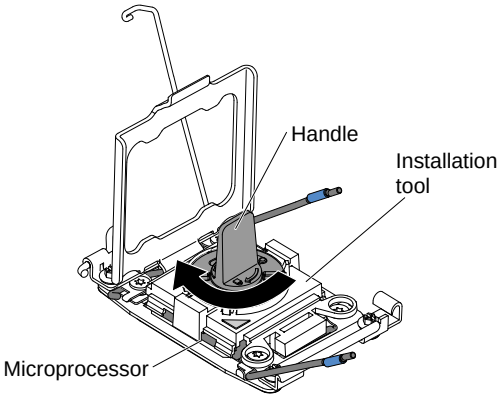


Figure 219. Installation tool handle adjustment

d. Lift the microprocessor out of the socket.

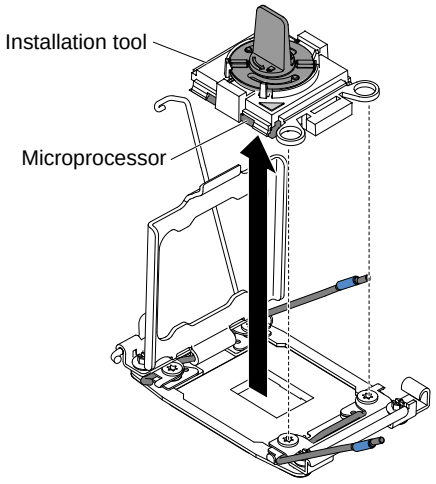


Figure 220. Installation tool removal

Step 9. Install the new microprocessor (see “Replacing a microprocessor and heat sink” on page 292).

Attention: If you are replacing a microprocessor, use the empty installation tool that comes with the new microprocessor to remove the microprocessor.

Step 10. If you do not intend to install a microprocessor on the socket, install the socket cover that you removed.

Attention: The pins on the socket are fragile. Any damage to the pins may require replacing the system board.

If you are instructed to return the microprocessor, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a microprocessor and heat sink

The following notes describe the type of microprocessor that the server supports and other information that you must consider when you install a microprocessor and heat sink.

- Microprocessors are to be installed only by trained technicians.

  Important: Always use the microprocessor installation tool to install a microprocessor. Failing to use the microprocessor installation tool may damage the microprocessor sockets on the system board. Any damage to the microprocessor sockets may require replacing the system board.
- Be extremely careful, the microprocessor socket contacts are very fragile. Do not touch the microprocessor socket contacts. Contaminants on the microprocessor contacts or microprocessor socket contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.
- Do not allow the thermal grease on the microprocessor and heat sink to come in contact with anything. Contact with any surface can contaminate the thermal grease and the microprocessor socket.
- Do not use any tools or sharp objects to lift the locking levers on the microprocessor socket. Doing so might result in permanent damage to the system board.
- Each microprocessor socket must always contain either a socket cover or a microprocessor and heat sink.
- Be sure to use only the installation tools provided with the new microprocessor to remove or install the microprocessor. Do not use any other tool.
- When installing multiple microprocessors, open one microprocessor socket at a time to avoid damaging other microprocessor socket contacts.

- The microprocessor installation tool has the microprocessor installed on the tool, and may have a protective cover over the microprocessor. Do not use the tool, or remove the cover until you are instructed to do so.

  Note: Be sure to use the installation tool that comes with your microprocessor installation tool assembly.
- The server supports up to two multi-core microprocessors. See http://www.lenovo.com/ serverproven/ for a list of supported microprocessors.
- The first microprocessor must always be installed in microprocessor socket 1 on the system board.
- When one microprocessor is installed, the air baffle must be installed to provide proper system cooling.
- Do not remove the first microprocessor from the system board when you install the second microprocessor.
- When you install the second microprocessor, you must also install additional memory, the fourth and sixth fans. See “Installing a memory module” on page 216 for details about the installation sequence.
- Do not mix microprocessors with different cores in the same server.
- To ensure proper server operation when you install an additional microprocessor, use microprocessors that have the same QuickPath Interconnect (QPI) link speed, integrated memory controller frequency, core frequency, power segment, internal cache size, and type.
- Mixing microprocessors of different stepping levels within the same server model is supported.
- When mixing microprocessors with different stepping levels within the same server model, you do not have to install the microprocessor with lowest stepping level and features in microprocessor socket 1.
- Both microprocessor voltage regulator modules are integrated on the system board.
- Read the documentation that comes with the microprocessor to determine whether you have to update the server firmware. To download the latest level of server firmware and other code updates for your server, go to http://www.ibm.com/support/ fixcentral.
- The microprocessor speeds are automatically set for this server; therefore, you do not have to set any microprocessor frequency-selection jumpers or switches.
- If the thermal-grease protective cover (for example, a plastic cap or tape liner) is removed from the heat sink, do not touch the thermal grease on the bottom of the heat sink or set down the heat sink. For more information about applying or working with thermal grease, see “Thermal grease” on page 86.

  Note: Removing the heat sink from the microprocessor destroys the even distribution of the thermal grease and requires replacing the thermal grease.
- To order an additional optional microprocessor, contact your sales representative or reseller.
- There are two types of microprocessor installation tools. The tools are similar in function and design, however Tool A has one setting for installing one size of microprocessor, and supports the following families of microprocessors: E5-26xx, E5-46xx. Installation Tool B has two settings for installing two different sizes of microprocessors. The settings that are marked on Tool B are “L” for smaller low core microprocessors, and “H” for larger high core microprocessors. Installation Tool B supports the following families of microprocessors: E5-26xx, E5-46xx, E5-26xx v2, E5-46xx v2.Microprocessor Installation Tools A and B are shown in the following illustration.

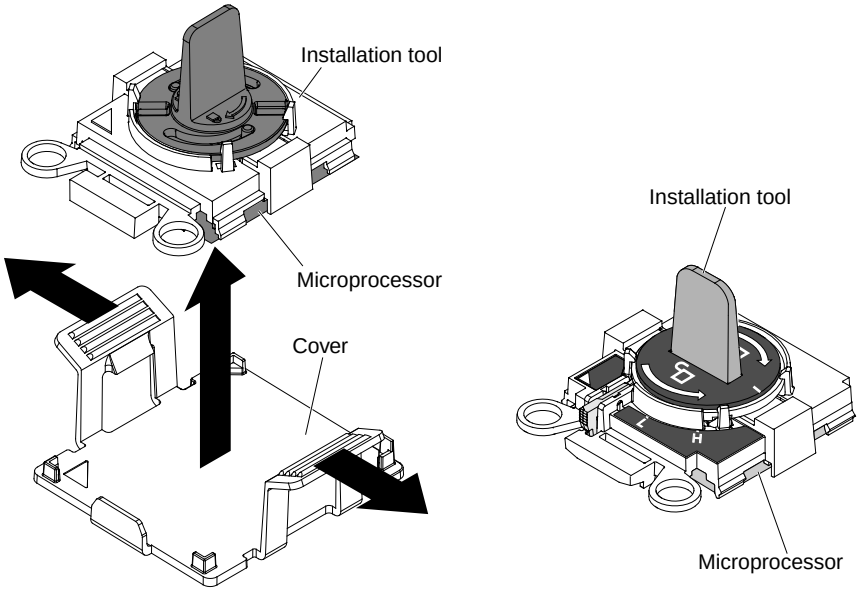


Figure 221. Microprocessor installation tools

To replace a microprocessor and heat sink, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Attention: When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see “Handling static-sensitive devices” on page 33.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the air baffle (see “Removing the air baffle” on page 193).

Step 5. Rotate the heat sink retention module release lever to the open position.

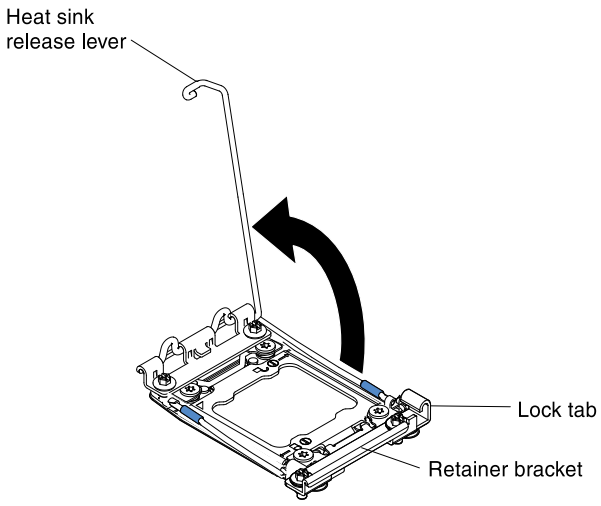


Figure 222. Heat-sink lever rotation

Step 6. Open the microprocessor socket release levers and retainer:

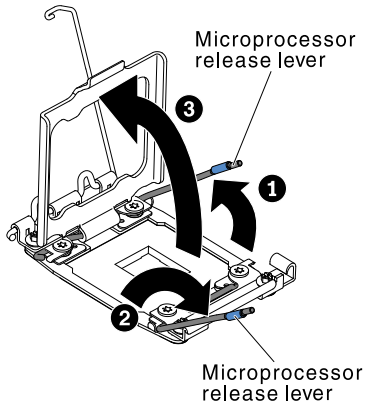


Figure 223. Microprocessor socket levers and retainer disengagement

a. Identify which release lever is labeled as the first release lever to open and open it.
b. Open the second release lever on the microprocessor socket.
c. Open the microprocessor retainer.

Attention: Do not touch the connectors on the microprocessor and the microprocessor socket.

Step 7. Install the microprocessor in the microprocessor socket:

a. Open the packaging that contains the new microprocessor installation tool assembly and carefully remove the installation tool assembly from the package.

Note: Do not touch the microprocessor contacts. Contaminants on the microprocessor contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.

b. Remove the microprocessor protective cover if one is present. The microprocessor is preinstalled on the installation tool.

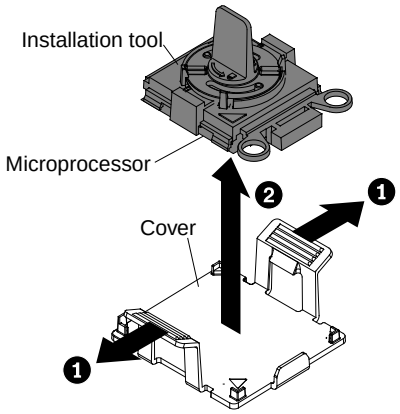


Figure 224. Installation tool cover removal

c. Align the installation tool with the microprocessor socket. The installation tool rests flush on the socket only if properly aligned.

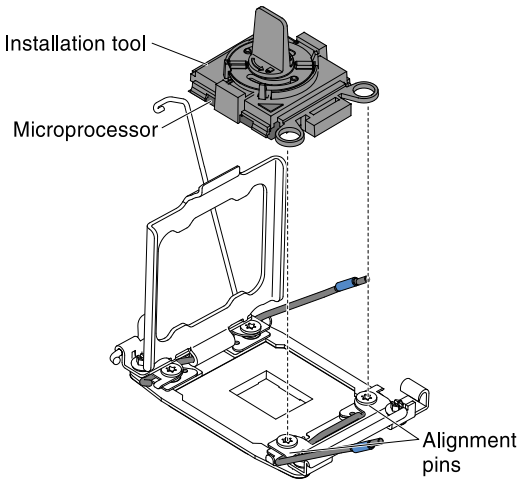


Figure 225. Installation tool alignment

d. Install the microprocessor using the following instructions for your installation tool.

- If using Installation Tool A, twist the handle on the microprocessor tool assembly counterclockwise to the open position to insert the microprocessor into the socket, and lift the installation tool out of the socket.
- If using Installation Tool B, twist the handle of the installation tool assembly counterclockwise until the microprocessor is inserted into the socket, and lift the installation tool out of the socket. The following illustration shows the tool handle in the open position.

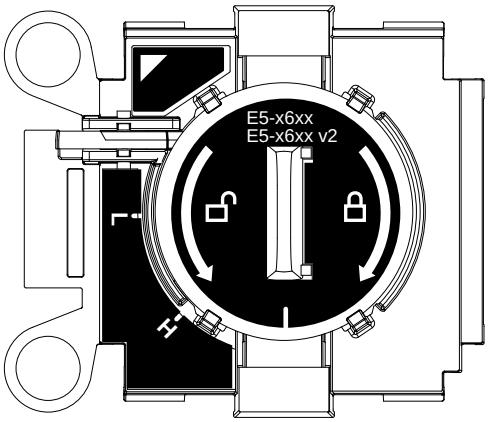


Figure 226. Installation Tool B

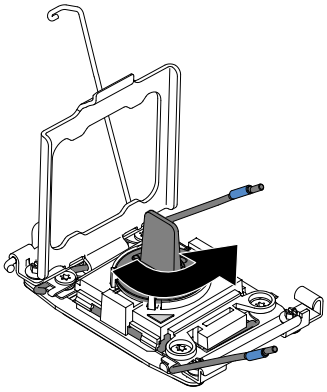


Figure 227. Installation tool handle adjustment

Attention:

- Do not press the microprocessor into the socket.
- Make sure that the microprocessor is oriented and aligned correctly in the socket before you try to close the microprocessor retainer.
- Do not touch the thermal material on the bottom of the heat sink or on top of the microprocessor. Touching the thermal material will contaminate it.

Step 8. Remove the microprocessor socket cover, tape, or label from the surface of the microprocessor socket, if one is present. Store the socket cover in a safe place.

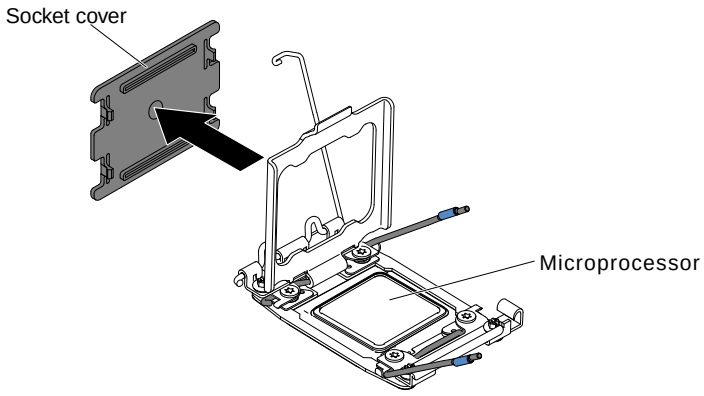


Figure 228. Socket cover removal

Attention: When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see “Handling static-sensitive devices” on page 33.

Step 9. Close the microprocessor socket release levers and retainer:

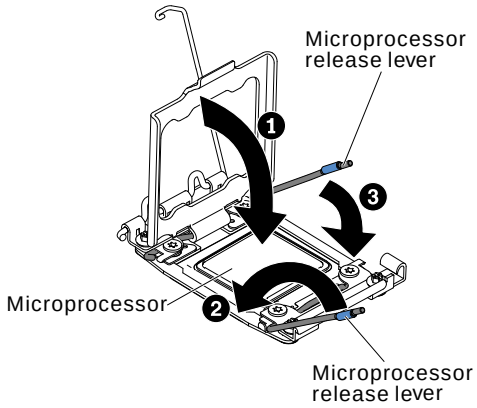


Figure 229. Microprocessor socket levers and retainer engagement

a. Close the microprocessor retainer on the microprocessor socket.
b. Identify which release lever is labeled as the first release lever to close and close it.
c. Close the second release lever on the microprocessor socket.

Attention:

- If you are installing a new heat sink, do not set down the heat sink after you remove the plastic cover.
- Do not touch the thermal grease on the bottom of the heat sink. Touching the thermal grease will contaminate it.

Step 10. Install the heat sink.

Attention:

- Do not set down the heat sink after you remove the plastic cover.

- Do not touch the thermal grease on the bottom of the heat sink after you remove the plastic cover. Touching the thermal grease will contaminate it. See “Thermal grease” on page 86 for more information.

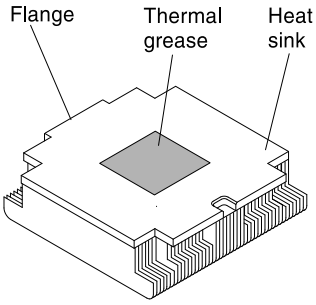


Figure 230. Thermal grease

a. Remove the plastic protective cover from the bottom of the heat sink.
b. Position the heat sink over the microprocessor. The heat sink is keyed to assist with proper alignment.

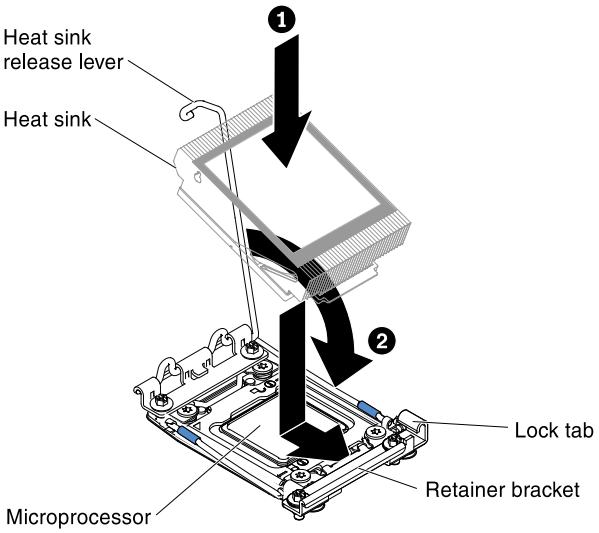


Figure 231. Heat sink installation

c. Align and place the heat sink on top of the microprocessor in the retention bracket, thermal material side down.
d. Press firmly on the heat sink.
e. Rotate the heat sink retention module release lever to the closed position and hook it underneath the lock tab.

Step 11. Reinstall the air baffle (see “Replacing the air baffle” on page 194).
Step 12. Install the cover (see “Replacing the cover” on page 192).
Step 13. Slide the server into the rack.
Step 14. Reconnect the power cords and any cables that you removed.
Step 15. Turn on the peripheral devices and the server.

Thermal grease

The thermal grease must be replaced whenever the heat sink has been removed from the top of the microprocessor and is going to be reused or when debris is found in the grease.

When you are installing the heat sink on the same microprocessor that it was removed from, make sure that the following requirements are met:

- The thermal grease on the heat sink and microprocessor is not contaminated.
- Additional thermal grease is not added to the existing thermal grease on the heat sink and microprocessor.

Notes:

- Read the safety information that begins on "Safety" on page v.
- Read the "Installation guidelines" on page 31.
- Read "Handling static-sensitive devices" on page 33.

To replace damaged or contaminated thermal grease on the microprocessor and heat sink, complete the following steps:

Step 1. Place the heat sink on a clean work surface.

Step 2. Remove the cleaning pad from its package and unfold it completely.

Step 3. Use the cleaning pad to wipe the thermal grease from the bottom of the heat sink.

Note: Make sure that all of the thermal grease is removed.

Step 4. Use a clean area of the cleaning pad to wipe the thermal grease from the microprocessor; then, dispose of the cleaning pad after all of the thermal grease is removed.

Step 5. Use the thermal-grease syringe to place 9 uniformly spaced dots of 0.02 ml each on the top of the microprocessor. The outermost dots must be within approximately 5 mm of the edge of the microprocessor; this is to ensure uniform distribution of the grease.

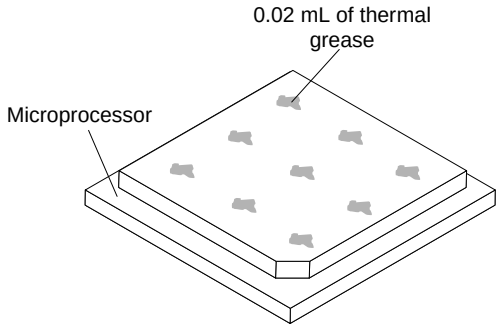


Figure 232. Thermal grease distribution

Note: If the grease is properly applied, approximately half of the grease will remain in the syringe.

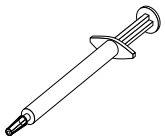


Figure 233. Syringe

Step 6. Install the heat sink onto the microprocessor.

Removing the heat-sink retention module

Use this information to remove the heat-sink retention module.

To remove a heat-sink retention module, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the air baffle (see “Removing the air baffle” on page 193).

Step 5. Remove the heat sink (see “Removing a microprocessor and heat sink” on page 287).

Attention: When you remove a microprocessor and heat sink, be sure to keep each heat sink with its microprocessor for reinstallation.

Step 6. Use a screwdriver and remove the four screws that secure the retention module to the system board; then, lift the retention module from the system board.

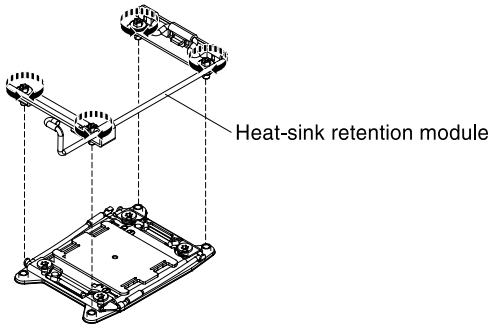


Figure 234. Heat-sink retention module removal

If you are instructed to return the heat-sink retention module, follow all the packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the heat-sink retention module

Use this information to replace the heat-sink retention module.

To install a heat-sink retention module, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v and “Installation guidelines” on page 31.

Step 2. Turn off the server and peripheral devices and disconnect the power cords and all external cables.

Step 3. Remove the cover (see “Removing the cover” on page 191).

Step 4. Remove the air baffle (see “Removing the air baffle” on page 193).

Step 5. Align the retention module with the holes on the system board.

Step 6. Use a screwdriver to reinstall the four screws.

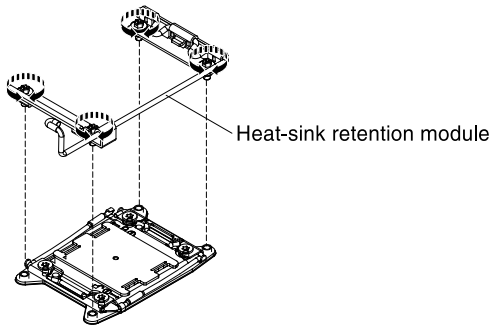


Figure 235. Heat-sink retention module installation

Step 7. Reinstall the heat sink (see “Replacing a microprocessor and heat sink” on page 292).

Attention: Make sure that you install each heat sink with its paired microprocessor.

Step 8. Reinstall the air baffle (see “Replacing the air baffle” on page 194).

Step 9. Install the cover (see “Replacing the cover” on page 192).

Step 10. Slide the server into the rack.

Step 11. Reconnect the power cords and any cables that you removed.

Step 12. Turn on the peripheral devices and the server.

Removing the system board

Use this information to remove the system board.

Notes:

1. When you replace the system board, you must either update the server with the latest firmware or restore the pre-existing firmware that the customer provides on a diskette or CD image. Make sure that you have the latest firmware or a copy of the pre-existing firmware before you proceed.
2. Before you replace the system board, make sure that you back up any features on demand (FoD) keys that were enabled. Reactivate any Features on Demand features. Instructions for automating the activation of features and installing activation keys is in the *Features on Demand User's Guide*. To download the document, go to http://www.ibm.com/systems/x/fod/, log in, and click **Help**.

To remove the system board, complete the following steps:

Step 1. Read the safety information that begins on “Safety” on page v, “Handling static-sensitive devices” on page 33, and “Installation guidelines” on page 31.

Step 2. Turn off the server and any attached devices.

Step 3. Turn off the peripheral devices and disconnect all power cords.

Note: When you replace the system board, you must either update the server with the latest firmware or restore the pre-existing firmware that the customer provides on a diskette or CD image. Make sure that you have the latest firmware or a copy of the pre-existing firmware before you proceed.

Step 4. Pull the power supplies out of the rear of the server, just enough to disengage them from the server.

Step 5. Remove the cover (see “Removing the cover” on page 191).

Step 6. Remove the air baffle (see “Removing the air baffle” on page 193).

Step 7. Remove all PCI riser-card assemblies and adapters (see “Removing a PCI riser-card assembly” on page 222 and “Removing an adapter” on page 227).

Step 8. Remove the ServeRAID SAS/SATA controller (see “Removing a ServeRAID SAS/SATA controller” on page 232).

Step 9. Remove the dual-port network adapter (see “Removing the dual-port network adapter” on page 240).

Step 10. Remove the memory modules and set them aside on a static-protective surface for reinstallation (see “Removing a memory module” on page 215).

Note: Make a note of the location of each DIMM as you remove it, so that you can later reinstall it in the same connector.

Step 11. (Trained technician only) Remove all heat sinks and microprocessors, and set them aside on a static-protective surface for reinstallation (see “Removing a microprocessor and heat sink” on page 287).

Notes:

1. Remove the socket covers from the microprocessor sockets on the new system board and place them on the microprocessor sockets of the system board you are removing.
2. Do not allow the thermal grease to come in contact with anything, and keep each heat sink paired with its microprocessor for reinstallation. Contact with any surface can compromise the thermal grease and the microprocessor socket. A mismatch between the microprocessor and its original heat sink can require the installation of a new heat sink.

Step 12. Remove the system battery (see “Removing the system battery” on page 271).

Step 13. Disconnect all cables from the system board. Make a list of each cable as you disconnect it; you can then use this as a checklist when you install the new system board (see “Internal cable routing and connectors” on page 181 for more information).

Attention: Disengage all latches, release tabs or locks on cable connectors when you disconnect all cables from the system board. Failing to release them before removing the cables will damage the cable sockets on the system board. The cable sockets on the system board are fragile. Any damage to the cable sockets may require replacing the system board.

Step 14. Remove the hot-swap fans (see “Removing a hot-swap fan” on page 245).

Step 15. Rotate the fan assembly bracket up toward the front of the server.

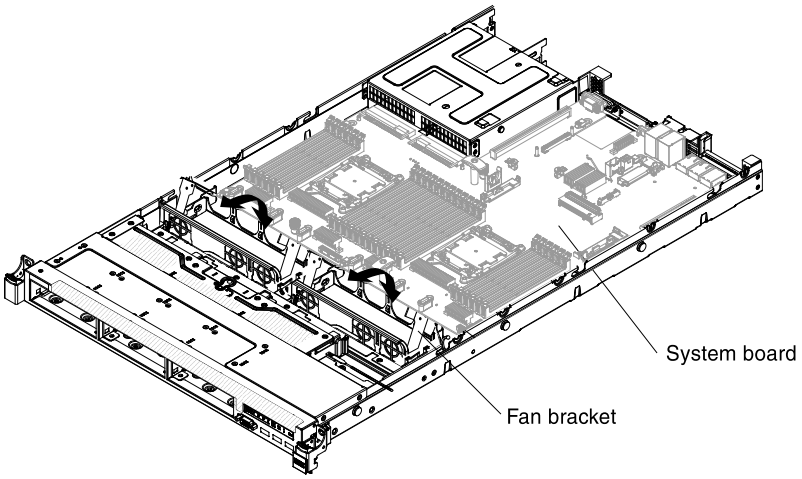


Figure 236. Fan assembly bracket rotation

Step 16. Loosen the two thumbscrews (one is near PCI slot 2 and one is between fans 4 and 5).

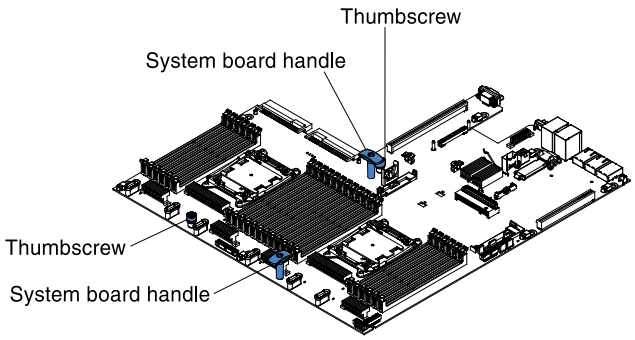


Figure 237. Thumbscrews disengagement

Step 17. Grasp the system board handles and slide the system board toward the front of the server until it stops.

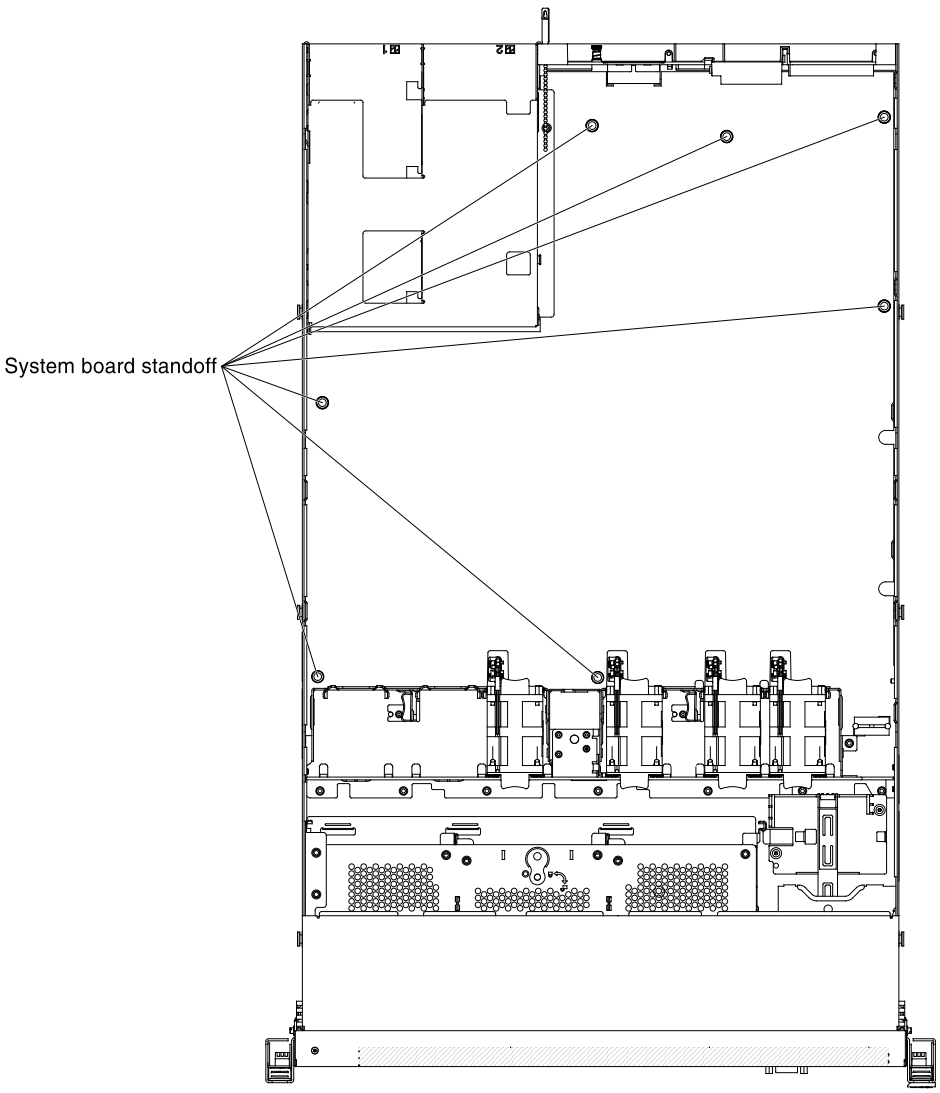


Figure 238. System-board standoffs

Note: Make sure that the system board disengage from all system-board standoffs.

Step 18. Grasp the system board handles and lift up the system board and carefully remove it from the server, being careful not to damage any surrounding components.

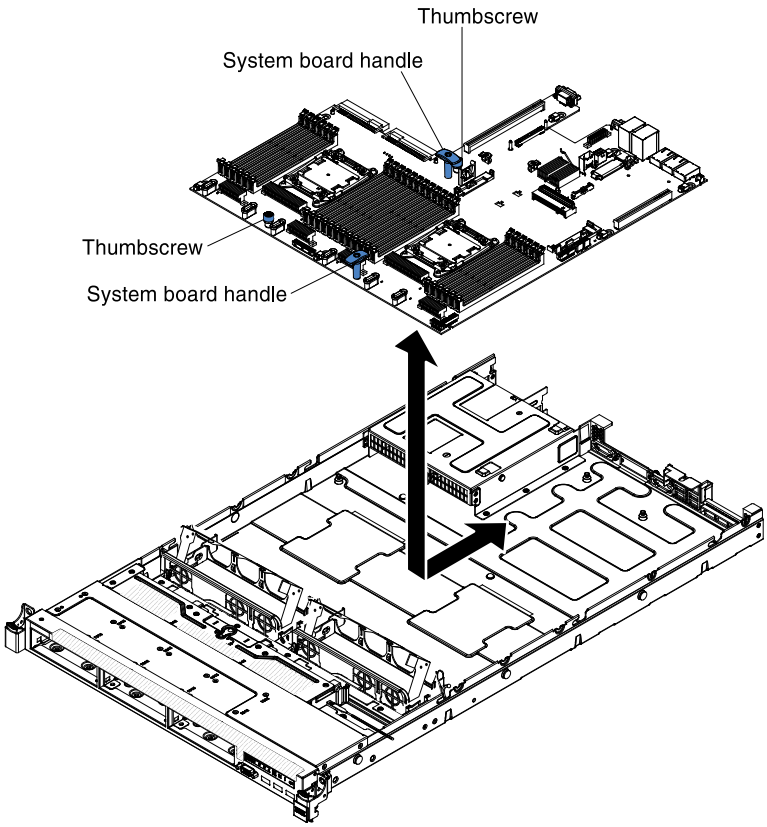


Figure 239. System board removal

Step 19. Remove the socket covers from the microprocessor sockets on the new system board and place them on the microprocessor sockets of the old system board that you are removing.

Step 20. If you are instructed to return the system board, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Attention: Make sure to place the socket covers for the microprocessor sockets on the system board before returning the system board.

Replacing the system board

Use this information to replace the system board.

Important:

1. When you reassemble the components in the server, be sure to route all cables carefully so that they are not exposed to excessive pressure.
2. When you replace the system board, you must either update the server with the latest firmware or restore the pre-existing firmware from a diskette or CD image. Make sure that you have the latest firmware or a copy of the pre-existing firmware before you proceed. See “Updating the firmware” on page 93, “Updating the Universal Unique Identifier (UUID)” on page 111, and “Updating the DMI/SMBIOS data” on page 113 for more information.
3. When you replace the system board, make sure that you remove the Integrated Management Module Advanced Upgrade and place it on the new system board. For information about the Advanced Upgrade, see “Using the remote presence and blue-screen capture features” on page 105.

4. Reactivate any Features on Demand features. Instructions for automating the activation of features and installing activation keys is in the *Features on Demand User's Guide*. To download the document, go to http://www.ibm.com/systems/x/fod/, log in, and click **Help**.
5. Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

To install the system board, complete the following steps:

Step 1. Read the safety information that begins on "Safety" on page v, "Handling static-sensitive devices" on page 33, and "Installation guidelines" on page 31.

Step 2. Grasp the system board handles to align the system board with the chassis; then, lower the system board into the chassis and slide the system board toward the rear of the server until the system board is seated firmly into the locator pins on the chassis.

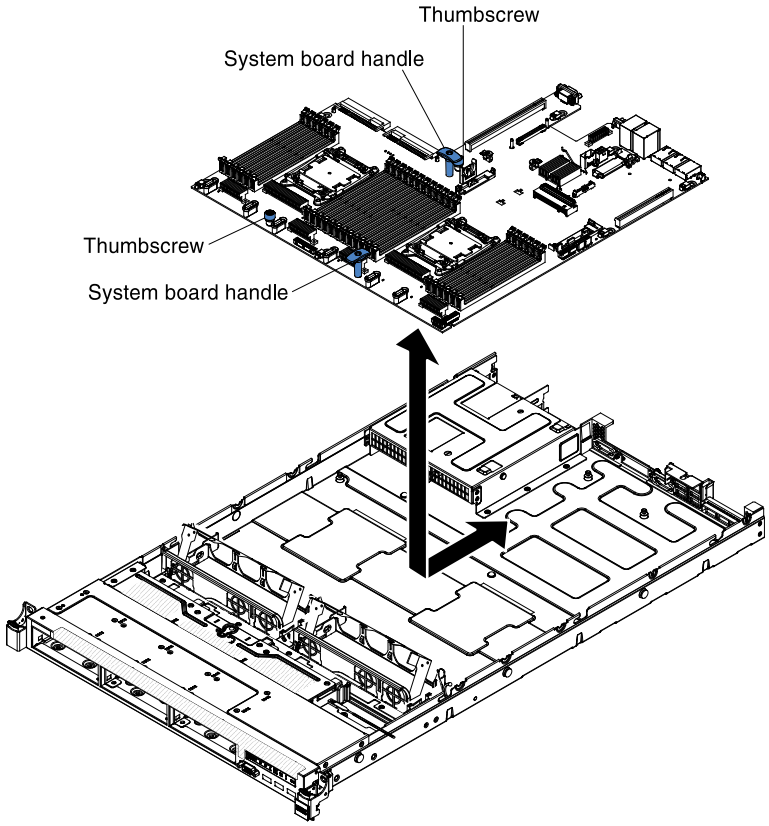


Figure 240. System board installation

Note: Make sure that all the system board standoffs engage the system board correctly.

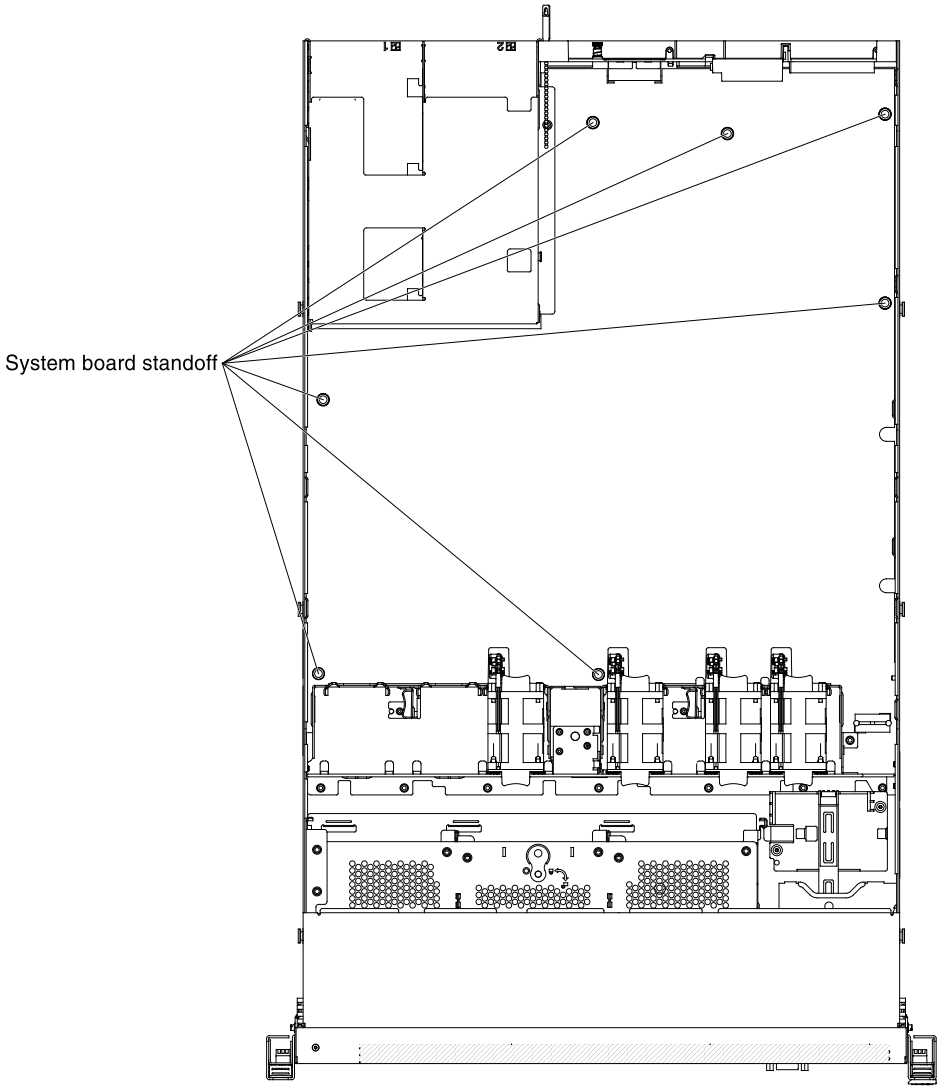


Figure 241. System-board standoffs

Step 3. Fasten the two thumbscrews (one is near PCI slot 2 and one is between fans 4 and 5).

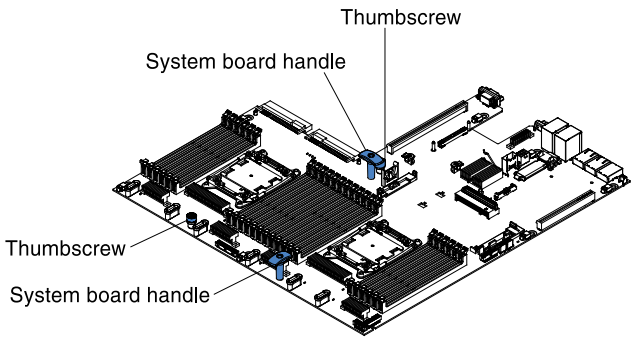


Figure 242. Thumbscrews engagement

Step 4. Rotate the fan assembly bracket down toward the rear of the server.

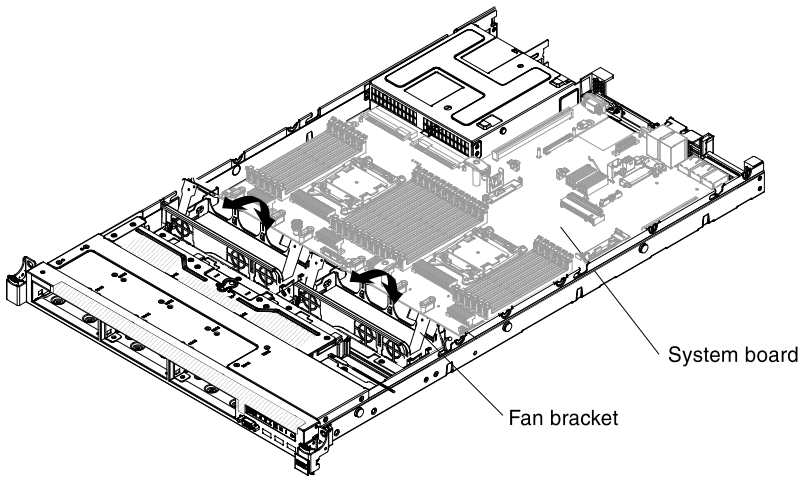


Figure 243. Fan assembly bracket rotation

Step 5. Install the hot-swap fans (see “Replacing a hot-swap fan” on page 246).

Step 6. Install the system battery (see “Replacing the system battery” on page 273).

Step 7. (Trained technician only) Install the microprocessor and heat sink (see “Replacing a microprocessor and heat sink” on page 292).

Step 8. Install the memory modules (see “Installing a memory module” on page 216).

Step 9. Install the ServeRAID SAS/SATA controller (see “Replacing a ServeRAID SAS/SATA controller” on page 233).

Step 10. Reconnect the cables to the system board.

Step 11. Install the PCI riser-card assemblies and adapters, if any were installed (see “Replacing an adapter” on page 228 and “Replacing a PCI riser-card assembly” on page 223).

Step 12. Install the air baffle (see “Replacing the air baffle” on page 194).

Step 13. Install the cover (see “Replacing the cover” on page 192).

Step 14. Push the power supplies back into the server.

Step 15. Slide the server into the rack.

Step 16. Reconnect the power cords and any cables that you removed.

Step 17. Turn on the peripheral devices and the server.

Step 18. Start the Setup utility and reset the configuration.

- Set the system date and time.
- Set the power-on password.
- Reconfigure the server.

See “Using the Setup utility” on page 97 for more details.

Step 19. Either update the server with the latest RAID firmware or restore the pre-existing firmware from a diskette or CD image.

Step 20. Update the UUID (see “Updating the Universal Unique Identifier (UUID)” on page 111).

Step 21. Update the DMI/SMBIOS (see “Updating the DMI/SMBIOS data” on page 113).

Step 22. Reactivate any Features on Demand features.

Appendix A. Integrated management module II (IMM2) error messages

When a hardware event is detected by the IMM on the server, the IMM logs that event in the system-event log in the server.

For each event code, the following fields are displayed:

Event identifier
A hexadecimal identifier that uniquely identifies an event or class of events. In this documentation, the event identifiers are prefixed with 0x and followed by eight characters.

Event description
The logged message string that appears for an event. When the event string is displayed in the system-event log, information such as a specific component is displayed. In this documentation, that additional information appears as variables, such as [arg1] or [arg2].

Explanation
Additional information to explain why the event occurred.

Severity
An indication of the level of concern for the condition. In the system-event log, severity is abbreviated to the first character. The following severities can be displayed.

Info:
The event was recorded for audit purposes, usually a user action or a change of states that is normal behavior.

Warning:
The event is not as severe as an error, but if possible, the condition should be corrected before it becomes an error. It might also be a condition that requires additional monitoring or maintenance.

Error:
The event is a failure or critical condition that impairs service or an expected function.

Alert Category
Similar events are grouped together in categories. The alert category is in the following format:

severity - device

severity is one of the following severity levels:

- **Critical:** A key component in the server is no longer functioning.
- **Warning:** The event might progress to a critical level.
- **System:** The event is the result of a system error or a configuration change.

device is the specific device in the server that caused the event to be generated.

Serviceable
Whether user action is required to correct the problem.

CIM Information
The prefix of the message ID and the sequence number that is used by the CIM message registry.

SNMP Trap ID
The SNMP trap ID that is found in the SNMP alert management information base (MIB).

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Automatically contact Service

If this field is set to **Yes**, and you have enabled Electronic Service Agent (ESA), Lenovo Support will be notified automatically if the event is generated.

While you wait for Lenovo Support to call, you can perform the recommended actions for the event.

User response

The actions that you should perform to solve the event.

Perform the steps listed in this section in the order shown until the problem is solved. After you perform all of the actions that are described in this field, if you cannot solve the problem, contact Lenovo Support.

Note: This list includes error codes and messages that might not apply to this machine type and model.

The following is the list of IMM2 error messages and suggested actions to correct the detected server problems. For more information about IMM2, see the *Integrated Management Module II User's Guide* at http://publib.boulder.ibm.com/infocenter/ systemx/documentation/topic/ com.lenovo.sysx.imm2.doc/ printable_doc.html.

IMM Events that automatically notify Support

You can configure the IBM Flex System Manager or the CMM to automatically notify Support (also known as *call home*) if certain types of errors are encountered. If you have configured this function, see the table for a list of events that automatically notify Support.

Table 28. Events that automatically notify Support

Event ID	Message String	Automatically Notify Support
40000086-00000000	Test Call Home Generated by user [arg1].	Yes
40000087-00000000	Manual Call Home by user [arg1]: [arg2].	Yes
80010202-0701ffff	Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.	Yes
80010902-0701ffff	Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.	Yes
806f0021-2201ffff	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (No Op ROM Space)	Yes
806f0021-2582ffff	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (All PCI Error)	Yes
806f0021-2c01ffff	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (Mezz Card Error)	Yes
806f0021-3001ffff	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (Internal RAID)	Yes
806f0108-0a01ffff	[PowerSupplyElementName] has Failed. (Power Supply 1)	Yes
806f0108-0a02ffff	[PowerSupplyElementName] has Failed. (Power Supply 2)	Yes
806f010c-2001ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)	Yes
806f010c-2002ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)	Yes

Table 28. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f010c-2003ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)	Yes
806f010c-2004ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)	Yes
806f010c-2005ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)	Yes
806f010c-2006ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)	Yes
806f010c-2007ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)	Yes
806f010c-2008ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)	Yes
806f010c-2009ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)	Yes
806f010c-200affff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)	Yes
806f010c-200bffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)	Yes
806f010c-200cffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)	Yes
806f010c-200dffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)	Yes
806f010c-200effff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)	Yes
806f010c-200fffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)	Yes
806f010c-2010ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)	Yes
806f010c-2011ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 17)	Yes
806f010c-2012ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 18)	Yes

Table 28. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f010c-2013ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 19)	Yes
806f010c-2014ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 20)	Yes
806f010c-2015ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 21)	Yes
806f010c-2016ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 22)	Yes
806f010c-2017ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 23)	Yes
806f010c-2018ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 24)	Yes
806f010c-2581ffff	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)	Yes
806f010d-0400ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 0)	Yes
806f010d-0401ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 1)	Yes
806f010d-0402ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 2)	Yes
806f010d-0403ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 3)	Yes
806f010d-0404ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 4)	Yes
806f010d-0405ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 5)	Yes
806f010d-0406ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 6)	Yes
806f010d-0407ffff	The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 7)	Yes
806f011b-0701ffff	The connector [PhysicalConnectorElementName] has encountered a configuration error. (Front USB)	Yes
806f0207-0301ffff	[ProcessorElementName] has Failed with FRB1/BIST condition. (CPU 1)	Yes
806f0207-0302ffff	[ProcessorElementName] has Failed with FRB1/BIST condition. (CPU 2)	Yes
806f0207-2584ffff	[ProcessorElementName] has Failed with FRB1/BIST condition. (All CPUs)	Yes

Table 28. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f020d-0400ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 0)	Yes
806f020d-0401ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 1)	Yes
806f020d-0402ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 2)	Yes
806f020d-0403ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 3)	Yes
806f020d-0404ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 4)	Yes
806f020d-0405ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 5)	Yes
806f020d-0406ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 6)	Yes
806f020d-0407ffff	Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 7)	Yes
806f050c-2001ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)	Yes
806f050c-2002ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)	Yes
806f050c-2003ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)	Yes
806f050c-2004ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)	Yes
806f050c-2005ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)	Yes
806f050c-2006ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)	Yes
806f050c-2007ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)	Yes
806f050c-2008ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)	Yes
806f050c-2009ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)	Yes
806f050c-200affff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)	Yes

Table 28. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f050c-200bffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)	Yes
806f050c-200cffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)	Yes
806f050c-200dffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)	Yes
806f050c-200effff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)	Yes
806f050c-200fffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)	Yes
806f050c-2010ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)	Yes
806f050c-2011ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 17)	Yes
806f050c-2012ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 18)	Yes
806f050c-2013ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 19)	Yes
806f050c-2014ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 20)	Yes
806f050c-2015ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 21)	Yes
806f050c-2016ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 22)	Yes
806f050c-2017ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 23)	Yes
806f050c-2018ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 24)	Yes
806f050c-2581ffff	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)	Yes
806f060d-0400ffff	Array [ComputerSystemElementName] has failed. (Drive 0)	Yes

Table 28. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f060d-0401ffff	Array [ComputerSystemElementName] has failed. (Drive 1)	Yes
806f060d-0402ffff	Array [ComputerSystemElementName] has failed. (Drive 2)	Yes
806f060d-0403ffff	Array [ComputerSystemElementName] has failed. (Drive 3)	Yes
806f060d-0404ffff	Array [ComputerSystemElementName] has failed. (Drive 4)	Yes
806f060d-0405ffff	Array [ComputerSystemElementName] has failed. (Drive 5)	Yes
806f060d-0406ffff	Array [ComputerSystemElementName] has failed. (Drive 6)	Yes
806f060d-0407ffff	Array [ComputerSystemElementName] has failed. (Drive 7)	Yes
806f0813-2581ffff	A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (DIMMs)	Yes
806f0813-2582ffff	A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (PCIs)	Yes
806f0813-2584ffff	A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (CPUs)	Yes

List of IMM events

This section lists all messages that can be sent from the IMM.

- **40000001-00000000 : Management Controller [arg1] Network Initialization Complete.**

  This message is for the use case where a Management Controller network has completed initialization.

  May also be shown as 4000000100000000 or 0x4000000100000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - IMM Network event

  SNMP Trap ID
  37

  CIM Information
  Prefix: IMM **ID:** 0001

User Response
Information only; no action is required.

- **40000002-00000000 : Certificate Authority [arg1] has detected a [arg2] Certificate Error.**

  This message is for the use case when there is an error with an SSL Server, SSL Client, or SSL Trusted CA Certificate.

  May also be shown as 4000000200000000 or 0x4000000200000000

  Severity
  Error

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - SSL certification

  SNMP Trap ID
  22

  CIM Information
  Prefix: IMM **ID:** 0002

  User Response
  Make sure that the certificate that you are importing is correct and properly generated.

- **40000003-00000000 : Ethernet Data Rate modified from [arg1] to [arg2] by user [arg3].**

  This message is for the use case where a user modifies the Ethernet Port data rate.

  May also be shown as 4000000300000000 or 0x4000000300000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0003

  User Response
  Information only; no action is required.

- **40000004-00000000 : Ethernet Duplex setting modified from [arg1] to [arg2] by user [arg3].**

  This message is for the use case where A user modifies the Ethernet Port duplex setting.

  May also be shown as 4000000400000000 or 0x4000000400000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0004

  User Response
  Information only; no action is required.

- **40000005-00000000 : Ethernet MTU setting modified from [arg1] to [arg2] by user [arg3].**

  This message is for the use case where a user modifies the Ethernet Port MTU setting.

  May also be shown as 4000000500000000 or 0x4000000500000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0005

  User Response
  Information only; no action is required.

- **40000006-00000000 : Ethernet locally administered MAC address modified from [arg1] to [arg2] by user [arg3].**

This message is for the use case where a user modifies the Ethernet Port MAC address setting.

May also be shown as 4000000600000000 or 0x4000000600000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0006

User Response
Information only; no action is required.

- **40000007-00000000 : Ethernet interface [arg1] by user [arg2].**

This message is for the use case where a user enables or disabled the ethernet interface.

May also be shown as 4000000700000000 or 0x4000000700000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0007

User Response
Information only; no action is required.

- **40000008-00000000 : Hostname set to [arg1] by user [arg2].**

This message is for the use case where user modifies the Hostname of a Management Controller.

May also be shown as 4000000800000000 or 0x4000000800000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - IMM Network event

SNMP Trap ID
37

CIM Information
Prefix: IMM **ID:** 0008

User Response
Information only; no action is required.

- **40000009-00000000 : IP address of network interface modified from [arg1] to [arg2] by user [arg3].**

  This message is for the use case where user modifies the IP address of a Management Controller.

  May also be shown as 4000000900000000 or 0x4000000900000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - IMM Network event

  SNMP Trap ID
  37

  CIM Information
  Prefix: IMM **ID:** 0009

  User Response
  Information only; no action is required.

- **4000000a-00000000 : IP subnet mask of network interface modified from [arg1] to [arg2] by user [arg3].**

  This message is for the use case where a user modifies the IP subnet mask of a Management Controller.

  May also be shown as 4000000a00000000 or 0x4000000a00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0010

User Response
Information only; no action is required.

- **4000000b-00000000 : IP address of default gateway modified from [arg1] to [arg2] by user [arg3].**

  This message is for the use case where a user modifies the default gateway IP address of a Management Controller.

  May also be shown as 4000000b00000000 or 0x4000000b00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0011

  User Response
  Information only; no action is required.

- **4000000c-00000000 : OS Watchdog response [arg1] by [arg2] .**

  This message is for the use case where an OS Watchdog has been enabled or disabled by a user.

  May also be shown as 4000000c00000000 or 0x4000000c00000000

  Severity
  Warning

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0012

User Response
Information only; no action is required.

- **4000000d-00000000 : DHCP[[arg1]] failure, no IP address assigned.**

  This message is for the use case where a DHCP server fails to assign an IP address to a Management Controller.

  May also be shown as 4000000d00000000 or 0x4000000d00000000

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0013

  User Response
  Complete the following steps until the problem is solved:

  1. Make sure that the IMM network cable is connected.
  2. Make sure that there is a DHCP server on the network that can assign an IP address to the IMM.

- **4000000e-00000000 : Remote Login Successful. Login ID: [arg1] from [arg2] at IP address [arg3].**

  This message is for the use case where a user successfully logs in to a Management Controller.

  May also be shown as 4000000e00000000 or 0x4000000e00000000

  Severity

Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Remote Login

SNMP Trap ID
30

CIM Information
Prefix: IMM **ID:** 0014

User Response
Information only; no action is required.

- **4000000f-00000000 : Attempting to [arg1] server [arg2] by user [arg3].**

  This message is for the use case where a user is using the Management Controller to perform a power function on the system.

  May also be shown as 4000000f00000000 or 0x4000000f00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0015

  User Response
  Information only; no action is required.

- **40000010-00000000 : Security: Userid: [arg1] had [arg2] login failures from WEB client at IP address [arg3].**

  This message is for the use case where a user has failed to log in to a Management Controller from a web browser.

  May also be shown as 4000001000000000 or 0x4000001000000000

  Severity

Warning

Serviceable
No

Automatically notify support
No

Alert Category
System - Remote Login

SNMP Trap ID
30

CIM Information
Prefix: IMM **ID:** 0016

User Response
Complete the following steps until the problem is solved:

1. Make sure that the correct login ID and password are being used.
2. Have the system administrator reset the login ID or password.

- **40000011-00000000 : Security: Login ID: [arg1] had [arg2] login failures from CLI at [arg3].**

  This message is for the use case where a user has failed to log in to a Management Controller from the Legacy CLI.

  May also be shown as 4000001100000000 or 0x4000001100000000

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Remote Login

  SNMP Trap ID
  30

  CIM Information
  Prefix: IMM **ID:** 0017

  User Response
  Complete the following steps until the problem is solved:

  1. Make sure that the correct login ID and password are being used.
  2. Have the system administrator reset the login ID or password.

- **40000012-00000000 : Remote access attempt failed. Invalid userid or password received. Userid is [arg1] from WEB browser at IP address [arg2].**

This message is for the use case where a remote user has failed to establish a remote control session from a Web browser session.

May also be shown as 4000001200000000 or 0x4000001200000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Remote Login

SNMP Trap ID
30

CIM Information
Prefix: IMM **ID:** 0018

User Response
Make sure that the correct login ID and password are being used.

- **40000013-00000000 : Remote access attempt failed. Invalid userid or password received. Userid is [arg1] from TELNET client at IP address [arg2].**

  This message is for the use case where a user has failed to log in to a Management Controller from a telnet session.

  May also be shown as 4000001300000000 or 0x4000001300000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Remote Login

  SNMP Trap ID
  30

  CIM Information
  Prefix: IMM **ID:** 0019

  User Response
  Make sure that the correct login ID and password are being used.

- **40000014-00000000 : The [arg1] on system [arg2] cleared by user [arg3].**

This message is for the use case where a Management Controller Event Log on a system is cleared by a user.

May also be shown as 4000001400000000 or 0x4000001400000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0020

User Response
Information only; no action is required.

- **40000015-00000000 : Management Controller [arg1] reset was initiated by user [arg2].**

This message is for the use case where a Management Controller reset is initiated by a user.

May also be shown as 4000001500000000 or 0x4000001500000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0021

User Response
Information only; no action is required.

- **40000016-00000000 : ENET[[arg1]] DHCP-HSTN=[arg2], DN=[arg3], IP@=[arg4], SN=[arg5], GW@=[arg6], DNS1@=[arg7] .**

This message is for the use case where a Management Controller IP address and configuration has been assigned by the DHCP server.

May also be shown as 4000001600000000 or 0x4000001600000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0022

User Response
Information only; no action is required.

- **40000017-00000000 : ENET[[arg1]] IP-Cfg:HstName=[arg2], IP@=[arg3] ,NetMsk=[arg4], GW@=[arg5] .**

  This message is for the use case where a Management Controller IP address and configuration has been assigned statically using user data.

  May also be shown as 4000001700000000 or 0x4000001700000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0023

  User Response
  Information only; no action is required.

- **40000018-00000000 : LAN: Ethernet[[arg1]] interface is no longer active.**

This message is for the use case where a Management Controller ethernet interface is no longer active.

May also be shown as 4000001800000000 or 0x4000001800000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0024

User Response
Information only; no action is required.

- **40000019-00000000 : LAN: Ethernet[[arg1]] interface is now active.**

This message is for the use case where a Management Controller ethernet interface is now active.

May also be shown as 4000001900000000 or 0x4000001900000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0025

User Response
Information only; no action is required.

- **4000001a-00000000 : DHCP setting changed to [arg1] by user [arg2].**

This message is for the use case where a user changes the DHCP setting.

May also be shown as 4000001a00000000 or 0x4000001a00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0026

User Response
Information only; no action is required.

- **4000001b-00000000 : Management Controller [arg1]: Configuration restored from a file by user [arg2].**

  This message is for the use case where a user restores a Management Controller configuration from a file.

  May also be shown as 4000001b00000000 or 0x4000001b00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0027

  User Response
  Information only; no action is required.

- **4000001c-00000000 : Watchdog [arg1] Screen Capture Occurred .**

  This message is for the use case where an operating system error has occurred and the screen was captured.

  May also be shown as 4000001c00000000 or 0x4000001c00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - other

SNMP Trap ID
22

CIM Information
Prefix: IMM **ID:** 0028

User Response
If there was no operating-system error, complete the following steps until the problem is solved:

1. Reconfigure the watchdog timer to a higher value.
2. Make sure that the IMM Ethernet-over-USB interface is enabled.
3. Reinstall the RNDIS or cdc_ether device driver for the operating system.
4. Disable the watchdog.

If there was an operating-system error, check the integrity of the installed operating system.

- **4000001d-00000000 : Watchdog [arg1] Failed to Capture Screen.**

This message is for the use case where an operating system error has occurred and the screen capture failed.

May also be shown as 4000001d00000000 or 0x4000001d00000000

Severity
Error

Serviceable
No

Automatically notify support
No

Alert Category
System - other

SNMP Trap ID
22

CIM Information
Prefix: IMM **ID:** 0029

User Response
Complete the following steps until the problem is solved:

1. Reconfigure the watchdog timer to a higher value.
2. Make sure that the IMM Ethernet over USB interface is enabled.
3. Reinstall the RNDIS or cdc_ether device driver for the operating system.

4. Disable the watchdog. Check the integrity of the installed operating system.
5. Update the IMM firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

- **4000001e-00000000 : Running the backup Management Controller [arg1] main application.**

  This message is for the use case where a Management Controller has resorted to running the backup main application.

  May also be shown as 4000001e00000000 or 0x4000001e00000000

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - other

  SNMP Trap ID
  22

  CIM Information
  Prefix: IMM **ID:** 0030

  User Response
  Update the IMM firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

- **4000001f-00000000 : Please ensure that the Management Controller [arg1] is flashed with the correct firmware. The Management Controller is unable to match its firmware to the server.**

  This message is for the use case where a Management Controller firmware version does not match the server.

  May also be shown as 4000001f00000000 or 0x4000001f00000000

  Severity
  Error

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - other

SNMP Trap ID
22

CIM Information
Prefix: IMM **ID:** 0031

User Response
Update the IMM firmware to a version that the server supports. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

- **40000020-00000000 : Management Controller [arg1] Reset was caused by restoring default values.**

  This message is for the use case where a Management Controller has been reset due to a user restoring the configuration to default values.

  May also be shown as 4000002000000000 or 0x4000002000000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0032

  User Response
  Information only; no action is required.

- **40000021-00000000 : Management Controller [arg1] clock has been set from NTP server [arg2].**

  This message is for the use case where a Management Controller clock has been set from the Network Time Protocol server.

  May also be shown as 4000002100000000 or 0x4000002100000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category

none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0033

User Response
Information only; no action is required.

- **40000022-00000000 : SSL data in the Management Controller [arg1] configuruation data is invalid. Clearing configuration data region and disabling SSL.**

  This message is for the use case where a Management Controller has detected invalid SSL data in the configuration data and is clearing the configuration data region and disabling the SSL.

  May also be shown as 4000002200000000 or 0x4000002200000000

  Severity
  Error

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - other

  SNMP Trap ID
  22

  CIM Information
  Prefix: IMM **ID:** 0034

  User Response
  Complete the following steps until the problem is solved:

  1. Make sure that the certificate that you are importing is correct.
  2. Try to import the certificate again.

- **40000023-00000000 : Flash of [arg1] from [arg2] succeeded for user [arg3] .**

  This message is for the use case where a user has successfully flashed the firmware component (MC Main Application, MC Boot ROM, BIOS, Diagnostics, System Power Backplane, Remote Expansion Enclosure Power Backplane, Integrated System Management Processor, or Remote Expansion Enclosure Processor) from the interface and IP address (%d.

  May also be shown as 4000002300000000 or 0x4000002300000000

  Severity
  Info

  Serviceable

No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0035

User Response
Information only; no action is required.

- **40000024-00000000 : Flash of [arg1] from [arg2] failed for user [arg3].**

  This message is for the use case where a user has not flashed the firmware component from the interface and IP address due to a failure.

  May also be shown as 4000002400000000 or 0x4000002400000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - other

  SNMP Trap ID
  22

  CIM Information
  Prefix: IMM **ID:** 0036

  User Response
  Information only; no action is required.

- **40000025-00000000 : The [arg1] on system [arg2] is 75% full.**

  This message is for the use case where a Management Controller Event Log on a system is 75% full.

  May also be shown as 4000002500000000 or 0x4000002500000000

  Severity
  Info

  Serviceable
  No

Automatically notify support
No

Alert Category
System - Event Log 75% full

SNMP Trap ID
35

CIM Information
Prefix: IMM **ID:** 0037

User Response
Information only; no action is required.

- **40000026-00000000 : The [arg1] on system [arg2] is 100% full.**

  This message is for the use case where a Management Controller Event Log on a system is 100% full.

  May also be shown as 4000002600000000 or 0x4000002600000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Event Log 75% full

  SNMP Trap ID
  35

  CIM Information
  Prefix: IMM **ID:** 0038

  User Response
  To avoid losing older log entries, save the log as a text file and clear the log.

- **40000027-00000000 : Platform Watchdog Timer expired for [arg1].**

  This message is for the use case when an implementation has detected a Platform Watchdog Timer Expired

  May also be shown as 4000002700000000 or 0x4000002700000000

  Severity
  Error

  Serviceable
  No

  Automatically notify support
  No

Alert Category
System - OS Timeout

SNMP Trap ID
21

CIM Information
Prefix: IMM **ID:** 0039

User Response
Complete the following steps until the problem is solved:

1. Reconfigure the watchdog timer to a higher value.
2. Make sure that the IMM Ethernet-over-USB interface is enabled.
3. Reinstall the RNDIS or cdc_ether device driver for the operating system.
4. Disable the watchdog.
5. Check the integrity of the installed operating system.

- **40000028-00000000 : Management Controller Test Alert Generated by [arg1].**

This message is for the use case where a user has generated a Test Alert.

May also be shown as 4000002800000000 or 0x4000002800000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - other

SNMP Trap ID
22

CIM Information
Prefix: IMM **ID:** 0040

User Response
Information only; no action is required.

- **40000029-00000000 : Security: Userid: [arg1] had [arg2] login failures from an SSH client at IP address [arg3].**

This message is for the use case where a user has failed to log in to a Management Controller from SSH.

May also be shown as 4000002900000000 or 0x4000002900000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Remote Login

SNMP Trap ID
30

CIM Information
Prefix: IMM **ID:** 0041

User Response
Complete the following steps until the problem is solved:

1. Make sure that the correct login ID and password are being used.
2. Have the system administrator reset the login ID or password.

- **4000002a-00000000 : [arg1] firmware mismatch internal to system [arg2]. Please attempt to flash the [arg3] firmware.**

  This message is for the use case where a specific type of firmware mismatch has been detected.

  May also be shown as 4000002a00000000 or 0x4000002a00000000

  Severity
  Error

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: IMM **ID:** 0042

  User Response
  Reflash the IMM firmware to the latest version.

- **4000002b-00000000 : Domain name set to [arg1].**

  Domain name set by user

  May also be shown as 4000002b00000000 or 0x4000002b00000000

  Severity

Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0043

User Response
Information only; no action is required.

- **4000002c-00000000 : Domain Source changed to [arg1] by user [arg2].**

Domain source changed by user

May also be shown as 4000002c00000000 or 0x4000002c00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0044

User Response
Information only; no action is required.

- **4000002d-00000000 : DDNS setting changed to [arg1] by user [arg2].**

DDNS setting changed by user

May also be shown as 4000002d00000000 or 0x4000002d00000000

Severity
Info

Serviceable

No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0045

User Response
Information only; no action is required.

- **4000002e-00000000 : DDNS registration successful. The domain name is [arg1].**

  DDNS registation and values

  May also be shown as 4000002e00000000 or 0x4000002e00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0046

  User Response
  Information only; no action is required.

- **4000002f-00000000 : IPv6 enabled by user [arg1] .**

  IPv6 protocol is enabled by user

  May also be shown as 4000002f00000000 or 0x4000002f00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support

No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0047

User Response
Information only; no action is required.

- **40000030-00000000 : IPv6 disabled by user [arg1] .**

IPv6 protocol is disabled by user

May also be shown as 4000003000000000 or 0x4000003000000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0048

User Response
Information only; no action is required.

- **40000031-00000000 : IPv6 static IP configuration enabled by user [arg1].**

IPv6 static address assignment method is enabled by user

May also be shown as 4000003100000000 or 0x4000003100000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category

none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0049

User Response
Information only; no action is required.

- **40000032-00000000 : IPv6 DHCP enabled by user [arg1].**

IPv6 DHCP assignment method is enabled by user

May also be shown as 4000003200000000 or 0x4000003200000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0050

User Response
Information only; no action is required.

- **40000033-00000000 : IPv6 stateless auto-configuration enabled by user [arg1].**

IPv6 statless auto-assignment method is enabled by user

May also be shown as 4000003300000000 or 0x4000003300000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0051

User Response
Information only; no action is required.

- **40000034-00000000 : IPv6 static IP configuration disabled by user [arg1].**

IPv6 static assignment method is disabled by user

May also be shown as 4000003400000000 or 0x4000003400000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0052

User Response
Information only; no action is required.

- **40000035-00000000 : IPv6 DHCP disabled by user [arg1].**

IPv6 DHCP assignment method is disabled by user

May also be shown as 4000003500000000 or 0x4000003500000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information

Prefix: IMM **ID:** 0053

User Response
Information only; no action is required.

- **40000036-00000000 : IPv6 stateless auto-configuration disabled by user [arg1].**

  IPv6 statless auto-assignment method is disabled by user

  May also be shown as 4000003600000000 or 0x4000003600000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0054

  User Response
  Information only; no action is required.

- **40000037-00000000 : ENET[[arg1]] IPv6-LinkLocal:HstName=[arg2], IP@=[arg3] ,Pref=[arg4] .**

  IPv6 Link Local address is active

  May also be shown as 4000003700000000 or 0x4000003700000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0055

  User Response

Information only; no action is required.

- **40000038-00000000 : ENET[[arg1]] IPv6-Static:HstName=[arg2], IP@=[arg3] ,Pref=[arg4], GW@=[arg5] .**

  IPv6 Static address is active

  May also be shown as 4000003800000000 or 0x4000003800000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0056

  User Response
  Information only; no action is required.

- **40000039-00000000 : ENET[[arg1]] DHCPv6-HSTN=[arg2], DN=[arg3], IP@=[arg4], Pref=[arg5].**

  IPv6 DHCP-assigned address is active

  May also be shown as 4000003900000000 or 0x4000003900000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0057

  User Response
  Information only; no action is required.

- **4000003a-00000000 : IPv6 static address of network interface modified from [arg1] to [arg2] by user [arg3].**

  A user modifies the IPv6 static address of a Management Controller

  May also be shown as 4000003a00000000 or 0x4000003a00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0058

  User Response
  Information only; no action is required.

- **4000003b-00000000 : DHCPv6 failure, no IP address assigned.**

  S DHCP6 server fails to assign an IP address to a Management Controller.

  May also be shown as 4000003b00000000 or 0x4000003b00000000

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0059

  User Response
  Complete the following steps until the problem is solved:

  1. Make sure that the IMM network cable is connected.

2. Make sure that there is a DHCPv6 server on the network that can assign an IP address to the IMM.

- **4000003c-00000000 : Platform Watchdog Timer expired for [arg1].**

  An implementation has detected an OS Loader Watchdog Timer Expired

  May also be shown as 4000003c00000000 or 0x4000003c00000000

  Severity
  Error

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Loader timeout

  SNMP Trap ID
  26

  CIM Information
  Prefix: IMM **ID:** 0060

  User Response

  1. Reconfigure the watchdog timer to a higher value.
  2. Make sure that the IMM Ethernet over USB interface is enabled.
  3. Reinstall the RNDIS or cdc_ether device driver for the operating system.
  4. Disable the watchdog.
  5. Check the integrity of the installed operating system.

- **4000003d-00000000 : Telnet port number changed from [arg1] to [arg2] by user [arg3].**

  A user has modified the telnet port number

  May also be shown as 4000003d00000000 or 0x4000003d00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0061

User Response
Information only; no action is required.

- **4000003e-00000000 : SSH port number changed from [arg1] to [arg2] by user [arg3].**

  A user has modified the SSH port number

  May also be shown as 4000003e00000000 or 0x4000003e00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0062

User Response
Information only; no action is required.

- **4000003f-00000000 : Web-HTTP port number changed from [arg1] to [arg2] by user [arg3].**

  A user has modified the Web HTTP port number

  May also be shown as 4000003f00000000 or 0x4000003f00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0063

User Response
Information only; no action is required.

- **40000040-00000000 : Web-HTTPS port number changed from [arg1] to [arg2] by user [arg3].**

A user has modified the Web HTTPS port number

May also be shown as 4000004000000000 or 0x4000004000000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0064

User Response
Information only; no action is required.

- **40000041-00000000 : CIM/XML HTTP port number changed from [arg1] to [arg2] by user [arg3].**

A user has modified the CIM HTTP port number

May also be shown as 4000004100000000 or 0x4000004100000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0065

User Response
Information only; no action is required.

- **40000042-00000000 : CIM/XML HTTPS port number changed from [arg1] to [arg2] by user [arg3].**

  A user has modified the CIM HTTPS port number

  May also be shown as 4000004200000000 or 0x4000004200000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0066

  User Response
  Information only; no action is required.

- **40000043-00000000 : SNMP Agent port number changed from [arg1] to [arg2] by user [arg3].**

  A user has modified the SNMP Agent port number

  May also be shown as 4000004300000000 or 0x4000004300000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0067

  User Response
  Information only; no action is required.

- **40000044-00000000 : SNMP Traps port number changed from [arg1] to [arg2] by user [arg3].**

  A user has modified the SNMP Traps port number

  May also be shown as 4000004400000000 or 0x4000004400000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0068

  User Response
  Information only; no action is required.

- **40000045-00000000 : Syslog port number changed from [arg1] to [arg2] by user [arg3].**

  A user has modified the Syslog receiver port number

  May also be shown as 4000004500000000 or 0x4000004500000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0069

  User Response
  Information only; no action is required.

- **40000046-00000000 : Remote Presence port number changed from [arg1] to [arg2] by user [arg3].**

A user has modified the Remote Presence port number

May also be shown as 4000004600000000 or 0x4000004600000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0070

User Response
Information only; no action is required.

- **40000047-00000000 : LED [arg1] state changed to [arg2] by [arg3].**

  A user has modified the state of an LED

  May also be shown as 4000004700000000 or 0x4000004700000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0071

  User Response
  Information only; no action is required.

- **40000048-00000000 : Inventory data changed for device [arg1], new device data hash=[arg2], new master data hash=[arg3] .**

  Something has caused the physical inventory to change

May also be shown as 4000004800000000 or 0x4000004800000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0072

User Response
Information only; no action is required.

- **40000049-00000000 : SNMP [arg1] enabled by user [arg2] .**

A user enabled SNMPv1 or SNMPv3 or Traps

May also be shown as 4000004900000000 or 0x4000004900000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0073

User Response
Information only; no action is required.

- **4000004a-00000000 : SNMP [arg1] disabled by user [arg2] .**

A user disabled SNMPv1 or SNMPv3 or Traps

May also be shown as 4000004a00000000 or 0x4000004a00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0074

User Response
Information only; no action is required.

- **4000004b-00000000 : SNMPv1 [arg1] set by user [arg2]: Name=[arg3], AccessType=[arg4], Address=[arg5], .**

  A user changed the SNMP community string

  May also be shown as 4000004b00000000 or 0x4000004b00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0075

  User Response
  Information only; no action is required.

- **4000004c-00000000 : LDAP Server configuration set by user [arg1]: SelectionMethod=[arg2], DomainName=[arg3], Server1=[arg4], Server2=[arg5], Server3=[arg6], Server4=[arg7].**

  A user changed the LDAP server configuration

  May also be shown as 4000004c00000000 or 0x4000004c00000000

  Severity

Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0076

User Response
Information only; no action is required.

- **4000004d-00000000 : LDAP set by user [arg1]: RootDN=[arg2], UIDSearchAttribute=[arg3], BindingMethod=[arg4], EnhancedRBS=[arg5], TargetName=[arg6], GroupFilter=[arg7], GroupAttribute=[arg8], LoginAttribute=[arg9].**

  A user configured an LDAP Miscellaneous setting

  May also be shown as 4000004d00000000 or 0x4000004d00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0077

  User Response
  Information only; no action is required.

- **4000004e-00000000 : Serial Redirection set by user [arg1]: Mode=[arg2], BaudRate=[arg3], StopBits=[arg4], Parity=[arg5], SessionTerminateSequence=[arg6].**

  A user configured the Serial Port mode

  May also be shown as 4000004e00000000 or 0x4000004e00000000

  Severity

Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0078

User Response
Information only; no action is required.

- **4000004f-00000000 : Date and Time set by user [arg1]: Date=[arg2], Time-[arg3], DST Auto-adjust=[arg4], Timezone=[arg5].**

  A user configured the Date and Time settings

  May also be shown as 4000004f00000000 or 0x4000004f00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0079

  User Response
  Information only; no action is required.

- **40000050-00000000 : Server General Settings set by user [arg1]: Name=[arg2], Contact=[arg3], Location=[arg4], Room=[arg5], RackID=[arg6], Rack U-position=[arg7].**

  A user configured the Location setting

  May also be shown as 4000005000000000 or 0x4000005000000000

  Severity
  Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0080

User Response
Information only; no action is required.

- **40000051-00000000 : Server Power Off Delay set to [arg1] by user [arg2].**

A user configured the Server Power Off Delay

May also be shown as 4000005100000000 or 0x4000005100000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0081

User Response
Information only; no action is required.

- **40000052-00000000 : Server [arg1] scheduled for [arg2] at [arg3] by user [arg4].**

A user configured a Server Power action at a specific time

May also be shown as 4000005200000000 or 0x4000005200000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0082

User Response
Information only; no action is required.

- **40000053-00000000 : Server [arg1] scheduled for every [arg2] at [arg3] by user [arg4].**

A user configured a recurring Server Power Action

May also be shown as 4000005300000000 or 0x4000005300000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0083

User Response
Information only; no action is required.

- **40000054-00000000 : Server [arg1] [arg2] cleared by user [arg3].**

A user cleared a Server Power Action.

May also be shown as 4000005400000000 or 0x4000005400000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0084

User Response
Information only; no action is required.

- **40000055-00000000 : Synchronize time setting by user [arg1]: Mode=[arg2], NTPServerHost=[arg3]:[arg4],NTPUpdateFrequency=[arg5].**

  A user configured the Date and Time synchronize settings

  May also be shown as 4000005500000000 or 0x4000005500000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0085

  User Response
  Information only; no action is required.

- **40000056-00000000 : SMTP Server set by user [arg1] to [arg2]:[arg3].**

  A user configured the SMTP server

  May also be shown as 4000005600000000 or 0x4000005600000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0086

User Response
Information only; no action is required.

- **40000057-00000000 : Telnet [arg1] by user [arg2].**

  A user enables or disables Telnet services

  May also be shown as 4000005700000000 or 0x4000005700000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0087

  User Response
  Information only; no action is required.

- **40000058-00000000 : DNS servers set by user [arg1]: UseAdditionalServers=[arg2], PreferredDNStype=[arg3], IPv4Server1=[arg4], IPv4Server2=[arg5], IPv4Server3=[arg6], IPv6Server1=[arg7], IPv6Server2=[arg8], IPv6Server3=[arg9].**

  A user configures the DNS servers

  May also be shown as 4000005800000000 or 0x4000005800000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0088

User Response
Information only; no action is required.

- **40000059-00000000 : LAN over USB [arg1] by user [arg2].**

  A user configured USB-LAN

  May also be shown as 4000005900000000 or 0x4000005900000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0089

  User Response
  Information only; no action is required.

- **4000005a-00000000 : LAN over USB Port Forwarding set by user [arg1]: ExternalPort=[arg2], USB-LAN port=[arg3].**

  A user configured USB-LAN port forwarding

  May also be shown as 4000005a00000000 or 0x4000005a00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0090

User Response
Information only; no action is required.

- **4000005b-00000000 : Secure Web services (HTTPS) [arg1] by user [arg2].**

A user enables or disables Secure web services

May also be shown as 4000005b00000000 or 0x4000005b00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0091

User Response
Information only; no action is required.

- **4000005c-00000000 : Secure CIM/XML(HTTPS) [arg1] by user [arg2].**

A user enables or disables Secure CIM/XML services

May also be shown as 4000005c00000000 or 0x4000005c00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0092

User Response
Information only; no action is required.

- **4000005d-00000000 : Secure LDAP [arg1] by user [arg2].**

A user enables or disables Secure LDAP services

May also be shown as 4000005d00000000 or 0x4000005d00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0093

User Response
Information only; no action is required.

- **4000005e-00000000 : SSH [arg1] by user [arg2].**

A user enables or disables SSH services

May also be shown as 4000005e00000000 or 0x4000005e00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0094

User Response
Information only; no action is required.

- **4000005f-00000000 : Server timeouts set by user [arg1]: EnableOSWatchdog=[arg2], OSWatchdogTimout=[arg3], EnableLoaderWatchdog=[arg4], LoaderTimeout=[arg5].**

  A user configures Server Timeouts

  May also be shown as 4000005f00000000 or 0x4000005f00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0095

  User Response
  Information only; no action is required.

- **40000060-00000000 : License key for [arg1] added by user [arg2].**

  A user installs License Key

  May also be shown as 4000006000000000 or 0x4000006000000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0096

  User Response
  Information only; no action is required.

- **40000061-00000000 : License key for [arg1] removed by user [arg2].**

A user removes a License Key

May also be shown as 4000006100000000 or 0x4000006100000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0097

User Response
Information only; no action is required.

- **40000062-00000000 : Global Login General Settings set by user [arg1]: AuthenticationMethod=[arg2], LockoutPeriod=[arg3], SessionTimeout=[arg4].**

  A user changes the Global Login General Settings

  May also be shown as 4000006200000000 or 0x4000006200000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0098

  User Response
  Information only; no action is required.

- **40000063-00000000 : Global Login Account Security set by user [arg1]: PasswordRequired=[arg2], PasswordExpirationPeriod=[arg3], MinimumPasswordReuseCycle=[arg4], MinimumPasswordLength=[arg5],**

MinimumPasswordChangeInterval=[arg6], MaxmumLoginFailures=[arg7], LockoutAfterMaxFailures=[arg8], MinimumDifferentCharacters=[arg9], DefaultIDExpired=[arg10], ChangePasswordFirstAccess=[arg11].

A user changes the Global Login Account Security Settings to Legacy

May also be shown as 4000006300000000 or 0x4000006300000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0099

User Response
Information only; no action is required.

- **40000064-00000000 : User [arg1] created.**

A user account was created

May also be shown as 4000006400000000 or 0x4000006400000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0100

User Response
Information only; no action is required.

- **40000065-00000000 : User [arg1] removed.**

A user account was deleted

May also be shown as 4000006500000000 or 0x4000006500000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0101

User Response
Information only; no action is required.

- **40000066-00000000 : User [arg1] password modified.**

A user account was changed

May also be shown as 4000006600000000 or 0x4000006600000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0102

User Response
Information only; no action is required.

- **40000067-00000000 : User [arg1] role set to [arg2].**

A user account role assigned

May also be shown as 4000006700000000 or 0x4000006700000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0103

User Response
Information only; no action is required.

- **40000068-00000000 : User [arg1] custom privileges set: [arg2].**

  User account priveleges assigned

  May also be shown as 4000006800000000 or 0x4000006800000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0104

  User Response
  Information only; no action is required.

- **40000069-00000000 : User [arg1] for SNMPv3 set: AuthenticationProtocol=[arg2], PrivacyProtocol=[arg3], AccessType=[arg4], HostforTraps=[arg5].**

  User account SNMPv3 settings changed

  May also be shown as 4000006900000000 or 0x4000006900000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0105

User Response
Information only; no action is required.

- **4000006a-00000000 : SSH Client key added for user [arg1].**

  User locally defined an SSH Client key

  May also be shown as 4000006a00000000 or 0x4000006a00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0106

  User Response
  Information only; no action is required.

- **4000006b-00000000 : SSH Client key imported for user [arg1] from [arg2].**

  User imported an SSH Client key

  May also be shown as 4000006b00000000 or 0x4000006b00000000

  Severity
  Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0107

User Response
Information only; no action is required.

- **4000006c-00000000 : SSH Client key removed from user [arg1].**

  User removed an SSH Client key

  May also be shown as 4000006c00000000 or 0x4000006c00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0108

  User Response
  Information only; no action is required.

- **4000006d-00000000 : Management Controller [arg1]: Configuration saved to a file by user [arg2].**

  A user saves a Management Controller configuration to a file.

  May also be shown as 4000006d00000000 or 0x4000006d00000000

  Severity
  Info

  Serviceable
  No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0109

User Response
Information only; no action is required.

- **4000006e-00000000 : Alert Configuration Global Event Notification set by user [arg1]: RetryLimit=[arg2], RetryInterval=[arg3], EntryInterval=[arg4].**

  A user changes the Global Event Notification settings.

  May also be shown as 4000006e00000000 or 0x4000006e00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0110

  User Response
  Information only; no action is required.

- **4000006f-00000000 : Alert Recipient Number [arg1] updated: Name=[arg2], DeliveryMethod=[arg3], Address=[arg4], IncludeLog=[arg5], Enabled=[arg6], EnabledAlerts=[arg7], AllowedFilters=[arg8].**

  A user adds or updates an Alert Recipient

  May also be shown as 4000006f00000000 or 0x4000006f00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support

No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0111

User Response
Information only; no action is required.

- **40000070-00000000 : SNMP Traps enabled by user [arg1]: EnabledAlerts=[arg2], AllowedFilters=[arg3] .**

  A user enabled the SNMP Traps configuration

  May also be shown as 4000007000000000 or 0x4000007000000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0112

  User Response
  Information only; no action is required.

- **40000071-00000000 : The power cap value changed from [arg1] watts to [arg2] watts by user [arg3].**

  Power Cap values changed by user

  May also be shown as 4000007100000000 or 0x4000007100000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0113

User Response
Information only; no action is required.

- **40000072-00000000 : The minimum power cap value changed from [arg1] watts to [arg2] watts.**

Minimum Power Cap value changed

May also be shown as 4000007200000000 or 0x4000007200000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0114

User Response
Information only; no action is required.

- **40000073-00000000 : The maximum power cap value changed from [arg1] watts to [arg2] watts.**

Maximum Power Cap value changed

May also be shown as 4000007300000000 or 0x4000007300000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0115

User Response
Information only; no action is required.

- **40000074-00000000 : The soft minimum power cap value changed from [arg1] watts to [arg2] watts.**

  Soft Minimum Power Cap value changed

  May also be shown as 4000007400000000 or 0x4000007400000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0116

  User Response
  Information only; no action is required.

- **40000075-00000000 : The measured power value exceeded the power cap value.**

  Power exceeded cap

  May also be shown as 4000007500000000 or 0x4000007500000000

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Power

  SNMP Trap ID
  164

CIM Information
Prefix: IMM **ID:** 0117

User Response
Information only; no action is required.

- **40000076-00000000 : The new minimum power cap value exceeded the power cap value.**

Minimum Power Cap exceeds Power Cap

May also be shown as 4000007600000000 or 0x4000007600000000

Severity
Warning

Serviceable
No

Automatically notify support
No

Alert Category
Warning - Power

SNMP Trap ID
164

CIM Information
Prefix: IMM **ID:** 0118

User Response
Information only; no action is required.

- **40000077-00000000 : Power capping was activated by user [arg1].**

Power capping activated by user

May also be shown as 4000007700000000 or 0x4000007700000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0119

User Response
Information only; no action is required.

- **40000078-00000000 : Power capping was deactivated by user [arg1].**

  Power capping deactivated by user

  May also be shown as 4000007800000000 or 0x4000007800000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0120

  User Response
  Information only; no action is required.

- **40000079-00000000 : Static Power Savings mode has been turned on by user [arg1].**

  Static Power Savings mode turned on by user

  May also be shown as 4000007900000000 or 0x4000007900000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0121

  User Response
  Information only; no action is required.

- **4000007a-00000000 : Static Power Savings mode has been turned off by user [arg1].**

  Static Power Savings mode turned off by user

  May also be shown as 4000007a00000000 or 0x4000007a00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0122

  User Response
  Information only; no action is required.

- **4000007b-00000000 : Dynamic Power Savings mode has been turned on by user [arg1].**

  Dynamic Power Savings mode turned on by user

  May also be shown as 4000007b00000000 or 0x4000007b00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  none

  SNMP Trap ID

  CIM Information
  Prefix: IMM **ID:** 0123

  User Response
  Information only; no action is required.

- **4000007c-00000000 : Dynamic Power Savings mode has been turned off by user [arg1].**

Dynamic Power Savings mode turned off by user

May also be shown as 4000007c00000000 or 0x4000007c00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0124

User Response
Information only; no action is required.

- **4000007d-00000000 : Power cap and external throttling occurred.**

Power cap and external throttling occurred

May also be shown as 4000007d00000000 or 0x4000007d00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0125

User Response
Information only; no action is required.

- **4000007e-00000000 : External throttling occurred .**

External throttling occurred

May also be shown as 4000007e00000000 or 0x4000007e00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0126

User Response
Information only; no action is required.

- **4000007f-00000000 : Power cap throttling occurred.**

Power cap throttling occurrred

May also be shown as 4000007f00000000 or 0x4000007f00000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0127

User Response
Information only; no action is required.

- **40000080-00000000 : Remote Control session started by user [arg1] in [arg2] mode.**

Remote Control session started

May also be shown as 4000008000000000 or 0x4000008000000000

Severity

Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0128

User Response
Information only; no action is required.

- **40000081-00000000 : PXE boot requested by user [arg1].**

PXE boot requested

May also be shown as 4000008100000000 or 0x4000008100000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0129

User Response
Information only; no action is required.

- **40000082-00000000 : The measured power value has returned below the power cap value.**

Power exceeded cap recovered

May also be shown as 4000008200000000 or 0x4000008200000000

Severity
Info

Serviceable

No

Automatically notify support
No

Alert Category
Warning - Power

SNMP Trap ID
164

CIM Information
Prefix: IMM **ID:** 0130

User Response
Information only; no action is required.

- **40000083-00000000 : The new minimum power cap value has returned below the power cap value.**

  Minimum Power Cap exceeds Power Cap recovered

  May also be shown as 4000008300000000 or 0x4000008300000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Power

  SNMP Trap ID
  164

  CIM Information
  Prefix: IMM **ID:** 0131

  User Response
  Information only; no action is required.

- **40000084-00000000 : IMM firmware mismatch between nodes [arg1] and [arg2]. Please attempt to flash the IMM firmware to the same level on all nodes.**

  A mismatch of IMM firmware has been detected between nodes

  May also be shown as 4000008400000000 or 0x4000008400000000

  Severity
  Error

  Serviceable
  No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID
22

CIM Information
Prefix: IMM **ID:** 0132

User Response
Attempt to flash the IMM firmware to the same level on all nodes.

- **40000085-00000000 : FPGA firmware mismatch between nodes [arg1] and [arg2]. Please attempt to flash the FPGA firmware to the same level on all nodes.**

  A mismatch of FPGA firmware has been detected between nodes

  May also be shown as 4000008500000000 or 0x4000008500000000

  Severity
  Error

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: IMM **ID:** 0133

  User Response
  Attempt to flash the FPGA firmware to the same level on all nodes.

- **40000086-00000000 : Test Call Home Generated by user [arg1].**

  Test Call Home generated by user.

  May also be shown as 4000008600000000 or 0x4000008600000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  Yes

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0134

User Response
Information only; no action is required.

- **40000087-00000000 : Manual Call Home by user [arg1]: [arg2].**

Manual Call Home by user.

May also be shown as 4000008700000000 or 0x4000008700000000

Severity
Info

Serviceable
No

Automatically notify support
Yes

Alert Category
none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0135

User Response
IBM Support will address the problem.

- **40000088-00000000 : Management Controller [arg1]: Configuration restoration from a file by user [arg2] completed.**

This message is for the use case where a user restores a Management Controller configuration from a file and it completes.

May also be shown as 4000008800000000 or 0x4000008800000000

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category

none

SNMP Trap ID

CIM Information
Prefix: IMM **ID:** 0136

User Response
Information only; no action is required.

- **40000089-00000000 : Management Controller [arg1]: Configuration restoration from a file by user [arg2] failed to complete.**

  This message is for the use case where a user restores a Management Controller configuration from a file and the restoration fails to complete.

  May also be shown as 4000008900000000 or 0x4000008900000000

  Severity
  Error

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: IMM **ID:** 0137

  User Response

  1. Turn off the server and disconnect it from the power source. You must disconnect the server from ac power to reset the IMM.
  2. After 45 seconds, reconnect the server to the power source and turn on the server.
  3. Retry the operation.

- **4000008a-00000000 : Management Controller [arg1]: Configuration restoration from a file by user [arg2] failed to start.**

  This message is for the use case where a user restores a Management Controller configuration from a file and the restoration fails to start.

  May also be shown as 4000008a00000000 or 0x4000008a00000000

  Severity
  Error

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID
22

CIM Information
Prefix: IMM **ID:** 0138

User Response

1. Turn off the server and disconnect it from the power source. You must disconnect the server from ac power to reset the IMM.
2. After 45 seconds, reconnect the server to the power source and turn on the server.
3. Retry the operation.

- **4000008b-00000000 : One or more of the Storage Management IP addresses has changed.**

  This message is for the use case where an IP address for the Storage Management has changed

  May also be shown as 4000008b00000000 or 0x4000008b00000000

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - IMM Network event

  SNMP Trap ID
  37

  CIM Information
  Prefix: IMM **ID:** 0139

  User Response
  Information only; no action is required.

- **80010002-0701ffff : Numeric sensor [NumericSensorElementName] going low (lower non-critical) has asserted. (CMOS Battery)**

  This message is for the use case when an implementation has detected a Lower Non-critical sensor going low has asserted.

  May also be shown as 800100020701ffff or 0x800100020701ffff

Severity
Warning

Serviceable
Yes

Automatically notify support
No

Alert Category
Warning - Voltage

SNMP Trap ID
13

CIM Information
Prefix: PLAT **ID:** 0476

User Response
Replace the system battery.

- **80010202-0701ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

  May also be shown as 800102020701ffff or 0x800102020701ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Voltage

  SNMP Trap ID
  1

  CIM Information
  Prefix: PLAT **ID:** 0480

  User Response
  If the specified sensor is CMOS battery, replace the system battery. If the specified sensor is Planar 3.3V or Planar 5V, (trained technician only) replace the system board. If the specified sensor is Planar 12V, complete the following steps until the problem is solved:

  1. Check power supply n LED.
  2. Remove the failing power supply.
  3. Follow actions in "Power Problems and Solving Power Problems".
  4. (Trained technician only) Replace the system board. (n = power supply number)

- **80010204-1d01ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted. (Fan 1A/1B Tach)**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

  May also be shown as 800102041d01ffff or 0x800102041d01ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0480

  User Response

  1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
  2. Replace the failing fan. (n = fan number)

- **80010204-1d02ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted. (Fan 2A/2B Tach)**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

  May also be shown as 800102041d02ffff or 0x800102041d02ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information

Prefix: PLAT **ID:** 0480

User Response

1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
2. Replace the failing fan. (n = fan number)

- **80010204-1d03ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted. (Fan 3A/3B Tach)**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

  May also be shown as 800102041d03ffff or 0x800102041d03ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0480

  User Response

  1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
  2. Replace the failing fan. (n = fan number)

- **80010204-1d04ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted. (Fan 4A/4B Tach)**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

  May also be shown as 800102041d04ffff or 0x800102041d04ffff

  Severity
  Error

  Serviceable
  Yes

Automatically notify support
No

Alert Category
Critical - Fan Failure

SNMP Trap ID
11

CIM Information
Prefix: PLAT **ID:** 0480

User Response

1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
2. Replace the failing fan. (n = fan number)

- **80010204-1d05ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted. (Fan 5A/5B Tach)**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

  May also be shown as 800102041d05ffff or 0x800102041d05ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0480

  User Response

  1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
  2. Replace the failing fan. (n = fan number)

- **80010204-1d06ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted. (Fan 6A/6B Tach)**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has asserted.

May also be shown as 800102041d06ffff or 0x800102041d06ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Fan Failure

SNMP Trap ID
11

CIM Information
Prefix: PLAT **ID:** 0480

User Response

1. Reseat the failing fan n, which is indicated by a lit LED near the fan connector on the system board.
2. Replace the failing fan. (n = fan number)

- **80010701-0c01ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (Ambient Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

  May also be shown as 800107010c01ffff or 0x800107010c01ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0490

  User Response

  1. Reduce the temperature.

2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010701-1001ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (PCI Riser 1 Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

  May also be shown as 800107011001ffff or 0x800107011001ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0490

  User Response

  1. Reduce the temperature.
  2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010701-1002ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (PCI Riser 2 Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

  May also be shown as 800107011002ffff or 0x800107011002ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

SNMP Trap ID
12

CIM Information
Prefix: PLAT **ID:** 0490

User Response

1. Reduce the temperature.
2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010701-1401ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (CPU1 VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

  May also be shown as 800107011401ffff or 0x800107011401ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0490

  User Response

  1. Reduce the temperature.
  2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010701-1402ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (CPU2 VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

  May also be shown as 800107011402ffff or 0x800107011402ffff

  Severity

Warning

Serviceable
Yes

Automatically notify support
No

Alert Category
Warning - Temperature

SNMP Trap ID
12

CIM Information
Prefix: PLAT **ID:** 0490

User Response

1. Reduce the temperature.
2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010701-1403ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (DIMM AB VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

  May also be shown as 800107011403ffff or 0x800107011403ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0490

  User Response

  1. Reduce the temperature.
  2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010701-1404ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (DIMM CD VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

  May also be shown as 800107011404ffff or 0x800107011404ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0490

  User Response

  1. Reduce the temperature.
  2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010701-1405ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (DIMM EF VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

  May also be shown as 800107011405ffff or 0x800107011405ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0490

User Response

1. Reduce the temperature.
2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010701-1406ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (DIMM GH VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

  May also be shown as 800107011406ffff or 0x800107011406ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0490

  User Response

  1. Reduce the temperature.
  2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010701-2c01ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (Mezz Card Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

  May also be shown as 800107012c01ffff or 0x800107012c01ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support

No

Alert Category
Warning - Temperature

SNMP Trap ID
12

CIM Information
Prefix: PLAT **ID:** 0490

User Response

1. Reduce the temperature.
2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010701-2d01ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted. (PCH Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has asserted.

  May also be shown as 800107012d01ffff or 0x800107012d01ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0490

  User Response

  1. Reduce the temperature.
  2. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010901-0c01ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (Ambient Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109010c01ffff or 0x800109010c01ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0494

User Response

1. Reduce the ambient temperature.
2. Ensure the air baffle is installed correctly.
3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010901-1001ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (PCI Riser 1 Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

  May also be shown as 800109011001ffff or 0x800109011001ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0494

  User Response

1. Reduce the ambient temperature.
2. Ensure the air baffle is installed correctly.
3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010901-1002ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (PCI Riser 2 Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

  May also be shown as 800109011002ffff or 0x800109011002ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0494

  User Response

  1. Reduce the ambient temperature.
  2. Ensure the air baffle is installed correctly.
  3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010901-1401ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (CPU1 VR Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

  May also be shown as 800109011401ffff or 0x800109011401ffff

  Severity
  Error

  Serviceable
  Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0494

User Response

1. Reduce the ambient temperature.
2. Ensure the air baffle is installed correctly.
3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010901-1402ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (CPU2 VR Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

  May also be shown as 800109011402ffff or 0x800109011402ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0494

  User Response

  1. Reduce the ambient temperature.
  2. Ensure the air baffle is installed correctly.
  3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010901-1403ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (DIMM AB VR Temp)**

This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

May also be shown as 800109011403ffff or 0x800109011403ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0494

User Response

1. Reduce the ambient temperature.
2. Ensure the air baffle is installed correctly.
3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010901-1404ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (DIMM CD VR Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

  May also be shown as 800109011404ffff or 0x800109011404ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0494

User Response

1. Reduce the ambient temperature.
2. Ensure the air baffle is installed correctly.
3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010901-1405ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (DIMM EF VR Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

  May also be shown as 800109011405ffff or 0x800109011405ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0494

  User Response

  1. Reduce the ambient temperature.
  2. Ensure the air baffle is installed correctly.
  3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010901-1406ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (DIMM GH VR Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

  May also be shown as 800109011406ffff or 0x800109011406ffff

  Severity
  Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0494

User Response

1. Reduce the ambient temperature.
2. Ensure the air baffle is installed correctly.
3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010901-2c01ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (Mezz Card Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

  May also be shown as 800109012c01ffff or 0x800109012c01ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0494

  User Response

  1. Reduce the ambient temperature.
  2. Ensure the air baffle is installed correctly.
  3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010901-2d01ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted. (PCH Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

  May also be shown as 800109012d01ffff or 0x800109012d01ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0494

  User Response

  1. Reduce the ambient temperature.
  2. Ensure the air baffle is installed correctly.
  3. Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010902-0701ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has asserted.

  May also be shown as 800109020701ffff or 0x800109020701ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Voltage

  SNMP Trap ID
  1

CIM Information
Prefix: PLAT **ID:** 0494

User Response
If the specified sensor is Planar 3.3V or Planar 5V, (Trained technician only) replace the system board.
If the specified sensor is Planar 12V, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Remove the failing power supply.
3. (Trained technician only) Replace the system board. (n = power supply number)

- **80010b01-0c01ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (Ambient Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

  May also be shown as 80010b010c01ffff or 0x80010b010c01ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0498

  User Response
  Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010b01-1001ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (PCI Riser 1 Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

  May also be shown as 80010b011001ffff or 0x80010b011001ffff

  Severity
  Error

  Serviceable
  Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0498

User Response
Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010b01-1002ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (PCI Riser 2 Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

  May also be shown as 80010b011002ffff or 0x80010b011002ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0498

  User Response
  Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010b01-1401ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (CPU1 VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

  May also be shown as 80010b011401ffff or 0x80010b011401ffff

  Severity
  Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0498

User Response
Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010b01-1402ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (CPU2 VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

  May also be shown as 80010b011402ffff or 0x80010b011402ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0498

  User Response
  Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010b01-1403ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (DIMM AB VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

  May also be shown as 80010b011403ffff or 0x80010b011403ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0498

User Response
Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010b01-1404ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (DIMM CD VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

  May also be shown as 80010b011404ffff or 0x80010b011404ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0498

  User Response
  Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010b01-1405ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (DIMM EF VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b011405ffff or 0x80010b011405ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0498

User Response
Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010b01-1406ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (DIMM GH VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

  May also be shown as 80010b011406ffff or 0x80010b011406ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0498

  User Response
  Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010b01-2c01ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (Mezz Card Temp)**

This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

May also be shown as 80010b012c01ffff or 0x80010b012c01ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0498

User Response
Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80010b01-2d01ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted. (PCH Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has asserted.

  May also be shown as 80010b012d01ffff or 0x80010b012d01ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0498

  User Response
  Check the server airflow. Make sure that nothing is blocking the air from coming into or preventing the air from exiting the server.

- **80030006-2101ffff : Sensor [SensorElementName] has deasserted. (Sig Verify Fail)**

  This message is for the use case when an implementation has detected a Sensor has deasserted.

  May also be shown as 800300062101ffff or 0x800300062101ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0509

  User Response
  No action; information only.

- **80030012-2301ffff : Sensor [SensorElementName] has deasserted. (OS RealTime Mod)**

  This message is for the use case when an implementation has detected a Sensor has deasserted.

  May also be shown as 800300122301ffff or 0x800300122301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0509

  User Response
  No action; information only.

- **80030108-1301ffff : Sensor [SensorElementName] has asserted. (PS Heavy Load)**

This message is for the use case when an implementation has detected a Sensor has asserted.

May also be shown as 800301081301ffff or 0x800301081301ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0508

User Response

1. Replace the power supply with higher rated power.
2. Reduce the total power consumption by removing newly added or unused option like drives or adapters.

- **80070101-0c01ffff : Sensor [SensorElementName] has transitioned from normal to non-critical state. (Ambient Status)**

  This message is for the use case when an implementation has detected a Sensor transitioned to non-critical from normal.

  May also be shown as 800701010c01ffff or 0x800701010c01ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0520

  User Response

1. Check the microprocessor installed is Intel E5-2690.
2. Reduce the ambient temperature under 27 Celsius degree.

- **8007010f-2201ffff : Sensor [SensorElementName] has transitioned from normal to non-critical state. (GPT Status)**

  This message is for the use case when an implementation has detected a Sensor transitioned to non-critical from normal.

  May also be shown as 8007010f2201ffff or 0x8007010f2201ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Other

  SNMP Trap ID
  60

  CIM Information
  Prefix: PLAT **ID:** 0520

  User Response

  1. Check the IBM support site for service bulletins or firmware updates that apply to this GPT error.
  2. Set the UEFI setting DISK GPT Recovery to Automatic.
  3. Replace the corrupt disk.

- **8007010f-2582ffff : Sensor [SensorElementName] has transitioned from normal to non-critical state. (I/O Resources)**

  This message is for the use case when an implementation has detected a Sensor transitioned to non-critical from normal.

  May also be shown as 8007010f2582ffff or 0x8007010f2582ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category

Warning - Other

SNMP Trap ID
60

CIM Information
Prefix: PLAT **ID:** 0520

User Response
Complete the following step to solve PCI I/O resource errors:

1. Go to F1 Setup-> System Settings-> Device and I/O ports-> PCI 64 bit Resource and choose enable.

- **80070114-2201ffff : Sensor [SensorElementName] has transitioned from normal to non-critical state. (TPM Phy Pres Set)**

  This message is for the use case when an implementation has detected a Sensor transitioned to non-critical from normal.

  May also be shown as 800701142201ffff or 0x800701142201ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Other

  SNMP Trap ID
  60

  CIM Information
  Prefix: PLAT **ID:** 0520

  User Response

  1. Complete the administrative tasks that require the TPM physical presence switch to be in the ON position.
  2. Restore the physical presence switch to the OFF position.
  3. Reboot the system.
  4. (Trained technician only) If the error continues, replace the planar.

- **80070201-0301ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU 1 OverTemp)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 800702010301ffff or 0x800702010301ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0522

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Check the ambient temperature. You must be operating within the specifications (see Features and specifications for more information).
3. Make sure that the heat sink for microprocessor n is installed correctly.
4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

- **80070201-0302ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU 2 OverTemp)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 800702010302ffff or 0x800702010302ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0522

  User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Check the ambient temperature. You must be operating within the specifications (see Features and specifications for more information).
3. Make sure that the heat sink for microprocessor n is installed correctly.
4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

- **80070202-0701ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (SysBrd Vol Fault)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 800702020701ffff or 0x800702020701ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Voltage

  SNMP Trap ID
  1

  CIM Information
  Prefix: PLAT **ID:** 0522

  User Response

  1. Check the system-event log.
  2. Check for an error LED on the system board.
  3. Replace any failing device.
  4. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  5. (Trained technician only) Replace the system board.

- **80070204-0a01ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (PS 1 Fan Fault)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 800702040a01ffff or 0x800702040a01ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Fan Failure

SNMP Trap ID
11

CIM Information
Prefix: PLAT **ID:** 0522

User Response

1. Make sure that there are no obstructions, such as bundled cables, to the airflow from the power-supply fan.
2. Replace power supply n. (n = power supply number)

- **80070204-0a02ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (PS 2 Fan Fault)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 800702040a02ffff or 0x800702040a02ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0522

  User Response

  1. Make sure that there are no obstructions, such as bundled cables, to the airflow from the power-supply fan.
  2. Replace power supply n. (n = power supply number)

- **80070208-0a01ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (PS 1 Therm Fault)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 800702080a01ffff or 0x800702080a01ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Power

  SNMP Trap ID
  4

  CIM Information
  Prefix: PLAT **ID:** 0522

  User Response

  1. Make sure that there are no obstructions, such as bundled cables, to the airflow from the power-supply fan.
  2. Use the IBM Power Configurator utility to ensure current system power consumption is under limitation. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
  3. Replace power supply n. (n = power supply number)

- **80070208-0a02ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (PS 2 Therm Fault)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 800702080a02ffff or 0x800702080a02ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Power

SNMP Trap ID
4

CIM Information
Prefix: PLAT **ID:** 0522

User Response

1. Make sure that there are no obstructions, such as bundled cables, to the airflow from the power-supply fan.
2. Use the IBM Power Configurator utility to ensure current system power consumption is under limitation. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
3. Replace power supply n. (n = power supply number)

- **8007020f-2201ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (TXT ACM Module)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 8007020f2201ffff or 0x8007020f2201ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0522

  User Response

  1. If enabling TXT is not required, disable TXT from the Setup Utility.
  2. If enabling TXT is required, verify that the TPM is enabled and activated from the Setup Utility.
  3. If the problem remains, contact your service representative.

- **8007020f-2582ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (I/O Resources)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 8007020f2582ffff or 0x8007020f2582ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0522

User Response
Complete the following step to solve PCI I/O resource errors:

1. Go to F1 Setup-> System Settings-> Device and I/O ports-> PCI 64 bit Resource and choose enable.

- **80070214-2201ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (TPM Lock)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 800702142201ffff or 0x800702142201ffff

  Severity
  Error

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0522

  User Response

  1. Update the server firmware (see Recovering the server firmware).
  2. If the problem persists, (trained technician only) replace the system board (see Removing the system board and Installing the system board).

- **80070219-0701ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (SysBrd Fault)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 800702190701ffff or 0x800702190701ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0522

  User Response

  1. Check for an error LED on the system board.
  2. Check the system-event log.
  3. Check for the system firmware version and update to the latest version. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  4. Unplug and restore AC power cord, then, perform step 1 and 2 again.
  5. If problems still occurred, (trained technician only) replace the system board.

- **8007021b-0301ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU 1 QPILinkErr)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 8007021b0301ffff or 0x8007021b0301ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0522

User Response

1. Check for a server firmware update.
2. Make sure that the installed microprocessors are compatible.
3. Make sure the microprocessor 2 expansion board is installed correctly (see Installing the microprocessor 2 expansion board).
4. (Trained technician only) Replace microprocessor 2.
5. (Trained technician only) Replace microprocessor 2 expansion board.

- **8007021b-0302ffff : Sensor [SensorElementName] has transitioned to critical from a less severe state. (CPU 2 QPILinkErr)**

  This message is for the use case when an implementation has detected a Sensor transitioned to critical from less severe.

  May also be shown as 8007021b0302ffff or 0x8007021b0302ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0522

  User Response

  1. Check for a server firmware update.
  2. Make sure that the installed microprocessors are compatible.
  3. Make sure the microprocessor 2 expansion board is installed correctly (see Installing the microprocessor 2 expansion board).
  4. (Trained technician only) Replace microprocessor 2.
  5. (Trained technician only) Replace microprocessor 2 expansion board.

- **80070301-0301ffff : Sensor [SensorElementName] has transitioned to non-recoverable from a less severe state. (CPU 1 OverTemp)**

  This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable from less severe.

  May also be shown as 800703010301ffff or 0x800703010301ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0524

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
  2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
  3. Make sure that the heat sink for microprocessor n.
  4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

- **80070301-0302ffff : Sensor [SensorElementName] has transitioned to non-recoverable from a less severe state. (CPU 2 OverTemp)**

  This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable from less severe.

  May also be shown as 800703010302ffff or 0x800703010302ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category

Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0524

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffle is in place and correctly installed, and that the server cover is installed and completely closed.
2. Check the ambient temperature. You must be operating within the specifications (see Server Features and specifications for more information).
3. Make sure that the heat sink for microprocessor n.
4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

- **80070603-0701ffff : Sensor [SensorElementName] has transitioned to non-recoverable. (Pwr Rail 1-6 Fault)**

  This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable.

  May also be shown as 800706030701ffff or 0x800706030701ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Power

  SNMP Trap ID
  4

  CIM Information
  Prefix: PLAT **ID:** 0530

  User Response
  If the specified sensor is one of Pwr Rail 1-6 Fault, please follow actions in "Power Problems and Solving Power Problems".

- **80070608-0a01ffff : Sensor [SensorElementName] has transitioned to non-recoverable.**

  This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable.

  May also be shown as 800706080a01ffff or 0x800706080a01ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Power

SNMP Trap ID
4

CIM Information
Prefix: PLAT **ID:** 0530

User Response
If the specified sensor is PS n 12V OC Fault, complete the following steps until the problem is solved:

1. Use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
2. Follow actions in "Power Problems and Solving Power Problems".

If the specified sensor is PS n 12V OV Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Remove the failing power supply.
3. (Trained technician only) Replace the system board. (n = power supply number)

If the specified sensor is PS n 12V UV Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Remove the failing power supply.
3. Follow actions in "Power Problems and Solving Power Problems".
4. (Trained technician only) Replace the system board. (n = power supply number)

If the specified sensor is PS n 12Vaux Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Replace power supply n. (n = power supply number)

- **80070608-0a02ffff : Sensor [SensorElementName] has transitioned to non-recoverable.**

This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable.

May also be shown as 800706080a02ffff or 0x800706080a02ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Power

SNMP Trap ID
4

CIM Information
Prefix: PLAT **ID:** 0530

User Response
If the specified sensor is PS n 12V OC Fault, complete the following steps until the problem is solved:

1. Use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
2. Follow actions in "Power Problems and Solving Power Problems".

If the specified sensor is PS n 12V OV Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Remove the failing power supply.
3. (Trained technician only) Replace the system board. (n = power supply number)

If the specified sensor is PS n 12V UV Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Remove the failing power supply.
3. Follow actions in "Power Problems and Solving Power Problems".
4. (Trained technician only) Replace the system board. (n = power supply number)

If the specified sensor is PS n 12Vaux Fault, complete the following steps until the problem is solved:

1. Check power supply n LED.
2. Replace power supply n. (n = power supply number)

- **80070614-2201ffff : Sensor [SensorElementName] has transitioned to non-recoverable. (TPM Phy Pres Set)**

  This message is for the use case when an implementation has detected a Sensor transitioned to non-recoverable.

  May also be shown as 800706142201ffff or 0x800706142201ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID

50

CIM Information
Prefix: PLAT **ID:** 0530

User Response

1. Update the server firmware (see Recovering the server firmware).
2. If the problem persists, (trained technician only) replace the system board (see Removing the system board and Installing the system board).

- **8008010f-2101ffff : Device [LogicalDeviceElementName] has been added. (Phy Presence Jmp)**

  This message is for the use case when an implementation has detected a Device was inserted.

  May also be shown as 8008010f2101ffff or 0x8008010f2101ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0536

  User Response
  No action; information only.

- **80080128-2101ffff : Device [LogicalDeviceElementName] has been added. (Low Security Jmp)**

  This message is for the use case when an implementation has detected a Device was inserted.

  May also be shown as 800801282101ffff or 0x800801282101ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0536

User Response
No action; information only.

- **800b0008-1301ffff : Redundancy [RedundancySetElementName] has been restored. (Power Unit)**

  This message is for the use case when an implementation has detected Redundancy was Restored.

  May also be shown as 800b00081301ffff or 0x800b00081301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Redundant Power Supply

  SNMP Trap ID
  10

  CIM Information
  Prefix: PLAT **ID:** 0561

  User Response
  No action; information only.

- **800b0108-1301ffff : Redundancy Lost for [RedundancySetElementName] has asserted. (Power Unit)**

  This message is for the use case when Redundancy Lost has asserted.

  May also be shown as 800b01081301ffff or 0x800b01081301ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Redundant Power Supply

  SNMP Trap ID
  9

CIM Information
Prefix: PLAT **ID:** 0802

User Response

1. Check the LEDs for both power supplies.
2. Follow the actions in Power-supply LEDs.

- **800b010a-1e81ffff : Redundancy Lost for [RedundancySetElementName] has asserted. (Fan Zone 1)**

  This message is for the use case when Redundancy Lost has asserted.

  May also be shown as 800b010a1e81ffff or 0x800b010a1e81ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0802

  User Response

  1. Make sure that the connectors on fan n are not damaged.
  2. Make sure that the fan n connectors on the system board are not damaged.
  3. Make sure that the fans are correctly installed.
  4. Reseat the fans.
  5. Replace the fans. (n = fan number)

- **800b010a-1e82ffff : Redundancy Lost for [RedundancySetElementName] has asserted. (Fan Zone 2)**

  This message is for the use case when Redundancy Lost has asserted.

  May also be shown as 800b010a1e82ffff or 0x800b010a1e82ffff

  Severity
  Error

  Serviceable

Yes

Automatically notify support
No

Alert Category
Critical - Fan Failure

SNMP Trap ID
11

CIM Information
Prefix: PLAT **ID:** 0802

User Response

1. Make sure that the connectors on fan n are not damaged.
2. Make sure that the fan n connectors on the system board are not damaged.
3. Make sure that the fans are correctly installed.
4. Reseat the fans.
5. Replace the fans. (n = fan number)

- **800b010c-2581ffff : Redundancy Lost for [RedundancySetElementName] has asserted. (Backup Memory)**

  This message is for the use case when Redundancy Lost has asserted.

  May also be shown as 800b010c2581ffff or 0x800b010c2581ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0802

  User Response

  1. Check the system-event log for DIMM failure events (uncorrectable or PFA) and correct the failures.
  2. Re-enable mirroring in the Setup utility.

- **800b0309-1301ffff : Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has asserted. (Power Resource)**

  This message is for the use case when a Redundancy Set has transitioned from Redundancy Degraded or Fully Redundant to Non-redundant:Sufficient.

  May also be shown as 800b03091301ffff or 0x800b03091301ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Redundant Power Supply

  SNMP Trap ID
  10

  CIM Information
  Prefix: PLAT **ID:** 0806

  User Response

  1. Non-redundant sufficient: Power load will be handled by remaining power supply, though the system may throttle to avoid a power supply over-current condition.
  2. Replace the power supply with higher rated power.

- **800b030c-2581ffff : Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has asserted. (Backup Memory)**

  This message is for the use case when a Redundancy Set has transitioned from Redundancy Degraded or Fully Redundant to Non-redundant:Sufficient.

  May also be shown as 800b030c2581ffff or 0x800b030c2581ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0806

User Response

1. Check the system-event log for DIMM failure events (uncorrectable or PFA) and correct the failures.
2. Re-enable mirroring in the Setup utility.

- **800b0509-1301ffff : Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Power Resource)**

  This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

  May also be shown as 800b05091301ffff or 0x800b05091301ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Redundant Power Supply

  SNMP Trap ID
  9

  CIM Information
  Prefix: PLAT **ID:** 0810

  User Response

  1. Power load may be handled by remaining power supply. The system will attempt to throttle to avoid a power supply over-current condition. But a system shutdown may happen anyway if the power load is too great.
  2. Reduce the total power consumption by removing newly added or unused options like drives or adaptors.
  3. Use the IBM Power Configurator utility to determine current system power consumption. For more information and to download the utility, go to http://www-03.ibm.com/systems/bladecenter/resources/powerconfig.html.
  4. Replace the power supply with higher rated power.

- **800b050a-1e81ffff : Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Fan Zone 1)**

  This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

  May also be shown as 800b050a1e81ffff or 0x800b050a1e81ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Fan Failure

SNMP Trap ID
11

CIM Information
Prefix: PLAT **ID:** 0810

User Response

1. Make sure that the connectors on fan n are not damaged.
2. Make sure that the fan n connectors on the system board are not damaged.
3. Make sure that the fans are correctly installed.
4. Reseat the fans.
5. Replace the fans. (n = fan number)

- **800b050a-1e82ffff : Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Fan Zone 2)**

  This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

  May also be shown as 800b050a1e82ffff or 0x800b050a1e82ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0810

  User Response

  1. Make sure that the connectors on fan n are not damaged.
  2. Make sure that the fan n connectors on the system board are not damaged.

3. Make sure that the fans are correctly installed.
4. Reseat the fans.
5. Replace the fans. (n = fan number)

- **800b050c-2581ffff : Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted. (Backup Memory)**

  This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources.

  May also be shown as 800b050c2581ffff or 0x800b050c2581ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0810

  User Response

  1. Check the system-event log for DIMM failure events (uncorrectable or PFA) and correct the failures.
  2. Re-enable mirroring in the Setup utility.

- **806f0007-0301ffff : [ProcessorElementName] has Failed with IERR. (CPU 1)**

  This message is for the use case when an implementation has detected a Processor Failed - IERR Condition.

  May also be shown as 806f00070301ffff or 0x806f00070301ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category

Critical - CPU

SNMP Trap ID
40

CIM Information
Prefix: PLAT **ID:** 0042

User Response

1. Make sure that the latest level of firmware and device drivers are installed for all adapters and standard devices, such as Ethernet, SCSI, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
2. Update the firmware (UEFI and IMM) to the latest level (Updating the firmware).
3. Run the DSA program.
4. Reseat the adapter.
5. Replace the adapter.
6. (Trained technician only) Replace microprocessor n.
7. (Trained technician only) Replace the system board. (n = microprocessor number)

- **806f0007-0302ffff : [ProcessorElementName] has Failed with IERR. (CPU 2)**

  This message is for the use case when an implementation has detected a Processor Failed - IERR Condition.

  May also be shown as 806f00070302ffff or 0x806f00070302ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0042

  User Response

  1. Make sure that the latest level of firmware and device drivers are installed for all adapters and standard devices, such as Ethernet, SCSI, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  2. Update the firmware (UEFI and IMM) to the latest level (Updating the firmware).

3. Run the DSA program.
4. Reseat the adapter.
5. Replace the adapter.
6. (Trained technician only) Replace microprocessor n.
7. (Trained technician only) Replace the system board. (n = microprocessor number)

- **806f0008-0a01ffff : [PowerSupplyElementName] has been added to container [PhysicalPackageElementName]. (Power Supply 1)**

  This message is for the use case when an implementation has detected a Power Supply has been added.

  May also be shown as 806f00080a01ffff or 0x806f00080a01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0084

  User Response
  No action; information only.

- **806f0008-0a02ffff : [PowerSupplyElementName] has been added to container [PhysicalPackageElementName]. (Power Supply 2)**

  This message is for the use case when an implementation has detected a Power Supply has been added.

  May also be shown as 806f00080a02ffff or 0x806f00080a02ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0084

User Response
No action; information only.

- **806f0009-1301ffff : [PowerSupplyElementName] has been turned off. (Host Power)**

  This message is for the use case when an implementation has detected a Power Unit that has been Disabled.

  May also be shown as 806f00091301ffff or 0x806f00091301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Power Off

  SNMP Trap ID
  23

  CIM Information
  Prefix: PLAT **ID:** 0106

  User Response
  No action; information only.

- **806f000d-0400ffff : The Drive [StorageVolumeElementName] has been added. (Drive 0)**

  This message is for the use case when an implementation has detected a Drive has been Added.

  May also be shown as 806f000d0400ffff or 0x806f000d0400ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

CIM Information
Prefix: PLAT **ID:** 0162

User Response
No action; information only.

- **806f000d-0401ffff : The Drive [StorageVolumeElementName] has been added. (Drive 1)**

  This message is for the use case when an implementation has detected a Drive has been Added.

  May also be shown as 806f000d0401ffff or 0x806f000d0401ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0162

  User Response
  No action; information only.

- **806f000d-0402ffff : The Drive [StorageVolumeElementName] has been added. (Drive 2)**

  This message is for the use case when an implementation has detected a Drive has been Added.

  May also be shown as 806f000d0402ffff or 0x806f000d0402ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0162

User Response
No action; information only.

- **806f000d-0403ffff : The Drive [StorageVolumeElementName] has been added. (Drive 3)**

  This message is for the use case when an implementation has detected a Drive has been Added.

  May also be shown as 806f000d0403ffff or 0x806f000d0403ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0162

  User Response
  No action; information only.

- **806f000d-0404ffff : The Drive [StorageVolumeElementName] has been added. (Drive 4)**

  This message is for the use case when an implementation has detected a Drive has been Added.

  May also be shown as 806f000d0404ffff or 0x806f000d0404ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0162

  User Response
  No action; information only.

- **806f000d-0405ffff : The Drive [StorageVolumeElementName] has been added. (Drive 5)**

  This message is for the use case when an implementation has detected a Drive has been Added.

  May also be shown as 806f000d0405ffff or 0x806f000d0405ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0162

  User Response
  No action; information only.

- **806f000d-0406ffff : The Drive [StorageVolumeElementName] has been added. (Drive 6)**

  This message is for the use case when an implementation has detected a Drive has been Added.

  May also be shown as 806f000d0406ffff or 0x806f000d0406ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0162

  User Response
  No action; information only.

- **806f000d-0407ffff : The Drive [StorageVolumeElementName] has been added. (Drive 7)**

This message is for the use case when an implementation has detected a Drive has been Added.

May also be shown as 806f000d0407ffff or 0x806f000d0407ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0162

User Response
No action; information only.

- **806f000f-220101ff : The System [ComputerSystemElementName] has detected no memory in the system. (ABR Status)**

  This message is for the use case when an implementation has detected that memory was detected in the system.

  May also be shown as 806f000f220101ff or 0x806f000f220101ff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0794

  User Response

  1. Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
  2. Recover the server firmware from the backup page: a. Restart the server. b. At the prompt, press F3 to recover the firmware.

3. Update the server firmware on the primary page. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove components one at a time, restarting the server each time, to see if the problem goes away.
5. If the problem remains, (trained technician only) replace the system board.

Firmware Error : Sys Boot Status :

- **806f000f-220102ff : Subsystem [MemoryElementName] has insufficient memory for operation. (ABR Status)**

  This message is for the use case when an implementation has detected that the usable Memory is insufficient for operation.

  May also be shown as 806f000f220102ff or 0x806f000f220102ff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0132

  User Response

  1. Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
  2. Update the server firmware on the primary page. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  3. (Trained technician only) Replace the system board.

  Firmware Error : Sys Boot Status :

- **806f000f-220103ff : The System [ComputerSystemElementName] encountered firmware error - unrecoverable boot device failure. (ABR Status)**

  This message is for the use case when an implementation has detected that System Firmware Error Unrecoverable boot device failure has occurred.

  May also be shown as 806f000f220103ff or 0x806f000f220103ff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0770

User Response
This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error : Sys Boot Status :

- **806f000f-220104ff : The System [ComputerSystemElementName]has encountered a motherboard failure. (ABR Status)**

  This message is for the use case when an implementation has detected that a fatal motherboard failure in the system.

  May also be shown as 806f000f220104ff or 0x806f000f220104ff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0795

  User Response
  This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Info Center for the appropriate user response. Firmware Error : Sys Boot Status :

- **806f000f-220107ff : The System [ComputerSystemElementName] encountered firmware error - unrecoverable keyboard failure. (ABR Status)**

This message is for the use case when an implementation has detected that System Firmware Error Unrecoverable Keyboard failure has occurred.

May also be shown as 806f000f220107ff or 0x806f000f220107ff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0764

User Response
This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error : Sys Boot Status :

- **806f000f-22010aff : The System [ComputerSystemElementName] encountered firmware error - no video device detected. (ABR Status)**

  This message is for the use case when an implementation has detected that System Firmware Error No video device detected has occurred.

  May also be shown as 806f000f22010aff or 0x806f000f22010aff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0766

  User Response

This is a UEFI detected event. The UEFI(POST) error for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error : Sys Boot Status :

- **806f000f-22010bff : Firmware BIOS (ROM) corruption was detected on system [ComputerSystemElementName] during POST. (ABR Status)**

  Firmware BIOS (ROM) corruption was detected on the system during POST.

  May also be shown as 806f000f22010bff or 0x806f000f22010bff

  Severity
  Info

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0850

  User Response

  1. Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
  2. Recover the server firmware from the backup page: a. Restart the server. b. At the prompt, press F3 to recover the firmware.
  3. Update the server firmware to the latest level (see Updating the firmware). Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  4. Remove components one at a time, restarting the server each time, to see if the problem goes away.
  5. If the problem remains, (trained service technician) replace the system board.

  Firmware Error : Sys Boot Status :

- **806f000f-22010cff : CPU voltage mismatch detected on [ProcessorElementName]. (ABR Status)**

  This message is for the use case when an implementation has detected a CPU voltage mismatch with the socket voltage.

  May also be shown as 806f000f22010cff or 0x806f000f22010cff

  Severity
  Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - CPU

SNMP Trap ID
40

CIM Information
Prefix: PLAT **ID:** 0050

User Response
This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Info Center for the appropriate user response. Firmware Error : Sys Boot Status :

- **806f000f-2201ffff : The System [ComputerSystemElementName] encountered a POST Error. (ABR Status)**

  This message is for the use case when an implementation has detected a Post Error.

  May also be shown as 806f000f2201ffff or 0x806f000f2201ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0184

  User Response
  This is a UEFI detected event. The UEFI(POST) error code for this event can be found in the logged IMM message text. Please refer to the UEFI(POST) error code in the "UEFI(POST) error code" section of the Information Center for the appropriate user response. Firmware Error : Sys Boot Status :

- **806f0013-1701ffff : A diagnostic interrupt has occurred on system [ComputerSystemElementName]. (NMI State)**

  This message is for the use case when an implementation has detected a Front Panel NMI / Diagnostic Interrupt.

  May also be shown as 806f00131701ffff or 0x806f00131701ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0222

User Response
If the NMI button has not been pressed, complete the following steps:

1. Make sure that the NMI button is not pressed.
2. Replace the operator information panel cable.
3. Replace the operator information panel.

- **806f0021-2201ffff : Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (No Op ROM Space)**

  This message is for the use case when an implementation has detected a Fault in a slot.

  May also be shown as 806f00212201ffff or 0x806f00212201ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0330

  User Response

  1. Check the PCI LED.
  2. Reseat the affected adapters and riser card.

3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove both adapters.
5. Replace the riser card.
6. (Trained service technicians only) Replace the system board.

- **806f0021-2582ffff : Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (All PCI Error)**

  This message is for the use case when an implementation has detected a Fault in a slot.

  May also be shown as 806f00212582ffff or 0x806f00212582ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0330

  User Response

  1. Check the PCI LED.
  2. Reseat the affected adapters and riser card.
  3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  4. Remove both adapters.
  5. Replace the riser card.
  6. (Trained service technicians only) Replace the system board. One of PCI Error :

- **806f0021-2c01ffff : Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (Mezz Card Error)**

  This message is for the use case when an implementation has detected a Fault in a slot.

  May also be shown as 806f00212c01ffff or 0x806f00212c01ffff

Severity
Error

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0330

User Response

1. Check the PCI LED.
2. Reseat the affected adapters and riser card.
3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove both adapters.
5. Replace the riser card.
6. (Trained service technicians only) Replace the system board.

- **806f0021-3001ffff : Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName]. (Internal RAID)**

  This message is for the use case when an implementation has detected a Fault in a slot.

  May also be shown as 806f00213001ffff or 0x806f00213001ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0330

User Response

1. Check the PCI LED.
2. Reseat the affected adapters and riser card.
3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove both adapters.
5. Replace the riser card.
6. (Trained service technicians only) Replace the system board.

PCI 1 : PCI 2 :

- **806f0023-2101ffff : Watchdog Timer expired for [WatchdogElementName]. (IPMI Watchdog)**

  This message is for the use case when an implementation has detected a Watchdog Timer Expired.

  May also be shown as 806f00232101ffff or 0x806f00232101ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0368

  User Response
  No action; information only.

- **806f0028-2101ffff : Sensor [SensorElementName] is unavailable or degraded on management system [ComputerSystemElementName]. (TPM Cmd Failures)**

  This message is for the use case when an implementation has detected a Sensor is Unavailable or degraded.

  May also be shown as 806f00282101ffff or 0x806f00282101ffff

  Severity
  Warning

  Serviceable

Yes

Automatically notify support
No

Alert Category
Warning - Other

SNMP Trap ID
60

CIM Information
Prefix: PLAT **ID:** 0398

User Response

1. Turn off the server and disconnect the power cords. Reconnect the power cords and restart the server.
2. If the problem remains, (trained technician only) replace the system board.

- **806f0107-0301ffff : An Over-Temperature Condition has been detected on [ProcessorElementName]. (CPU 1)**

  This message is for the use case when an implementation has detected an Over-Temperature Condition Detected for Processor.

  May also be shown as 806f01070301ffff or 0x806f01070301ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0036

  User Response

  1. Make sure that the fans are operating. There are no obstructions to the airflow (front and rear of the server), the air baffles are in place and correctly installed, and the server cover is installed and completely closed.
  2. Make sure that the heat sink for microprocessor n is installed correctly.
  3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

- **806f0107-0302ffff : An Over-Temperature Condition has been detected on [ProcessorElementName]. (CPU 2)**

  This message is for the use case when an implementation has detected an Over-Temperature Condition Detected for Processor.

  May also be shown as 806f01070302ffff or 0x806f01070302ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0036

  User Response

  1. Make sure that the fans are operating. There are no obstructions to the airflow (front and rear of the server), the air baffles are in place and correctly installed, and the server cover is installed and completely closed.
  2. Make sure that the heat sink for microprocessor n is installed correctly.
  3. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

- **806f0108-0a01ffff : [PowerSupplyElementName] has Failed. (Power Supply 1)**

  This message is for the use case when an implementation has detected a Power Supply has failed.

  May also be shown as 806f01080a01ffff or 0x806f01080a01ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Power

  SNMP Trap ID
  4

  CIM Information

Prefix: PLAT **ID:** 0086

User Response

1. Reseat power supply n.
2. If the power-on LED is not lit and the power-supply error LED is lit, replace power supply n.
3. If both the power-on LED and the power-supply error LED are not lit, see Power problems for more information. (n = power supply number)

- **806f0108-0a02ffff : [PowerSupplyElementName] has Failed. (Power Supply 2)**

  This message is for the use case when an implementation has detected a Power Supply has failed.

  May also be shown as 806f01080a02ffff or 0x806f01080a02ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Power

  SNMP Trap ID
  4

  CIM Information
  Prefix: PLAT **ID:** 0086

  User Response

  1. Reseat power supply n.
  2. If the power-on LED is not lit and the power-supply error LED is lit, replace power supply n.
  3. If both the power-on LED and the power-supply error LED are not lit, see Power problems for more information. (n = power supply number)

- **806f0109-1301ffff : [PowerSupplyElementName] has been Power Cycled. (Host Power)**

  This message is for the use case when an implementation has detected a Power Unit that has been power cycled.

  May also be shown as 806f01091301ffff or 0x806f01091301ffff

  Severity
  Info

  Serviceable
  No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0108

User Response
No action; information only.

- **806f010c-2001ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2001ffff or 0x806f010c2001ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.

8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2002ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2002ffff or 0x806f010c2002ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.
  8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
  9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2003ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2003ffff or 0x806f010c2003ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.
  8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
  9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2004ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2004ffff or 0x806f010c2004ffff

  Severity

Error

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0138

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the problem follows the DIMM, replace the failing DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2005ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2005ffff or 0x806f010c2005ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0138

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the problem follows the DIMM, replace the failing DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2006ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2006ffff or 0x806f010c2006ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.

2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the problem follows the DIMM, replace the failing DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2007ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2007ffff or 0x806f010c2007ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.

5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2008ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2008ffff or 0x806f010c2008ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.

8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2009ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2009ffff or 0x806f010c2009ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.
  8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
  9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-200affff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c200affff or 0x806f010c200affff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.
  8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
  9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-200bffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c200bffff or 0x806f010c200bffff

  Severity

Error

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0138

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the problem follows the DIMM, replace the failing DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-200cffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c200cffff or 0x806f010c200cffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0138

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the problem follows the DIMM, replace the failing DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-200dffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c200dffff or 0x806f010c200dffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.

2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the problem follows the DIMM, replace the failing DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-200effff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c200effff or 0x806f010c200effff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.

5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-200fffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c200fffff or 0x806f010c200fffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.

8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2010ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2010ffff or 0x806f010c2010ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.
  8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
  9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2011ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 17)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2011ffff or 0x806f010c2011ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.
  8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
  9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2012ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 18)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2012ffff or 0x806f010c2012ffff

  Severity

Error

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0138

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the problem follows the DIMM, replace the failing DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2013ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 19)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2013ffff or 0x806f010c2013ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0138

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the problem follows the DIMM, replace the failing DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2014ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 20)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2014ffff or 0x806f010c2014ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.

2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the problem follows the DIMM, replace the failing DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2015ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 21)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2015ffff or 0x806f010c2015ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.

5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2016ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 22)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2016ffff or 0x806f010c2016ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.

8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2017ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 23)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2017ffff or 0x806f010c2017ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.
  8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
  9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2018ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 24)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2018ffff or 0x806f010c2018ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0138

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the problem follows the DIMM, replace the failing DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.
  8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
  9. (Trained Service technician only) Replace the affected microprocessor.

- **806f010c-2581ffff : Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error.

  May also be shown as 806f010c2581ffff or 0x806f010c2581ffff

  Severity

Error

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0138

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the problem follows the DIMM, replace the failing DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.
8. Manually re-enable all affected DIMMs if the server firmware version is older than UEFI v1.10. If the server firmware version is UEFI v1.10 or newer, disconnect and reconnect the server to the power source and restart the server.
9. (Trained Service technician only) Replace the affected microprocessor. One of the DIMMs :

- **806f010d-0400ffff : The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 0)**

  This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

  May also be shown as 806f010d0400ffff or 0x806f010d0400ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0164

User Response

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

- **806f010d-0401ffff : The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 1)**

  This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

  May also be shown as 806f010d0401ffff or 0x806f010d0401ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0164

  User Response

  1. Run the hard disk drive diagnostic test on drive n.
  2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
  3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

- **806f010d-0402ffff : The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 2)**

  This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

May also be shown as 806f010d0402ffff or 0x806f010d0402ffff

Severity
Error

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0164

User Response

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

- **806f010d-0403ffff : The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 3)**

  This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

  May also be shown as 806f010d0403ffff or 0x806f010d0403ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0164

  User Response

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

- **806f010d-0404ffff : The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 4)**

  This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

  May also be shown as 806f010d0404ffff or 0x806f010d0404ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0164

  User Response

  1. Run the hard disk drive diagnostic test on drive n.
  2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
  3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

- **806f010d-0405ffff : The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 5)**

  This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

  May also be shown as 806f010d0405ffff or 0x806f010d0405ffff

  Severity
  Error

  Serviceable

Yes

Automatically notify support
Yes

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0164

User Response

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

- **806f010d-0406ffff : The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 6)**

  This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

  May also be shown as 806f010d0406ffff or 0x806f010d0406ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0164

  User Response

  1. Run the hard disk drive diagnostic test on drive n.
  2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
  3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

- **806f010d-0407ffff : The Drive [StorageVolumeElementName] has been disabled due to a detected fault. (Drive 7)**

  This message is for the use case when an implementation has detected a Drive was Disabled due to fault.

  May also be shown as 806f010d0407ffff or 0x806f010d0407ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0164

  User Response

  1. Run the hard disk drive diagnostic test on drive n.
  2. Reseat the following components: a. Hard disk drive (wait 1 minute or more before reinstalling the drive) b. Cable from the system board to the backplane
  3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive b. Cable from the system board to the backplane c. Hard disk drive backplane (n = hard disk drive number)

- **806f010f-2201ffff : The System [ComputerSystemElementName] encountered a firmware hang. (Firmware Error)**

  This message is for the use case when an implementation has detected a System Firmware Hang.

  May also be shown as 806f010f2201ffff or 0x806f010f2201ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Boot failure

  SNMP Trap ID
  25

CIM Information
Prefix: PLAT **ID:** 0186

User Response

1. Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
2. Update the server firmware on the primary page. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
3. (Trained technician only) Replace the system board.

- **806f0113-0301ffff : A bus timeout has occurred on system [ComputerSystemElementName]. (CPU 1 PECI)**

  This message is for the use case when an implementation has detected a Bus Timeout.

  May also be shown as 806f01130301ffff or 0x806f01130301ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0224

  User Response

  1. Reseat the microprocessor, and then restart the server.
  2. Replace microprocessor n. (n = microprocessor number)

- **806f0113-0302ffff : A bus timeout has occurred on system [ComputerSystemElementName]. (CPU 2 PECI)**

  This message is for the use case when an implementation has detected a Bus Timeout.

  May also be shown as 806f01130302ffff or 0x806f01130302ffff

  Severity
  Error

  Serviceable

Yes

Automatically notify support
No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0224

User Response

1. Reseat the microprocessor, and then restart the server.
2. Replace microprocessor n. (n = microprocessor number)

- **806f011b-0701ffff : The connector [PhysicalConnectorElementName] has encountered a configuration error. (Front USB)**

  This message is for the use case when an implementation has detected an Interconnect Configuration Error.

  May also be shown as 806f011b0701ffff or 0x806f011b0701ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0266

  User Response
  If the specified sensor is front USB connector, reset the front USB cable on the system board. If the specified sensor is front video connector, reset the front video cable in the system board. If the specified sensor is PwrPaddle cable, complete the following steps until problem is solved:

  1. Reseat the power paddle cable on the system board.
  2. Replace the power paddle cable.
  3. (Trained technician only) Replace the supercap n. (n = supercap number)
  4. (Trained technician only) Replace the system board. Front Video :

- **806f0123-2101ffff : Reboot of system [ComputerSystemElementName] initiated by [WatchdogElementName]. (IPMI Watchdog)**

  This message is for the use case when an implementation has detected a Reboot by a Watchdog occurred.

  May also be shown as 806f01232101ffff or 0x806f01232101ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0370

  User Response
  No action; information only.

- **806f0125-0c01ffff : [ManagedElementName] detected as absent. (Front Panel)**

  This message is for the use case when an implementation has detected a Managed Element is Absent.

  May also be shown as 806f01250c01ffff or 0x806f01250c01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0392

  User Response
  No action; information only.

- **806f0125-1001ffff : [ManagedElementName] detected as absent. (PCI Riser 1)**

This message is for the use case when an implementation has detected a Managed Element is Absent.

May also be shown as 806f01251001ffff or 0x806f01251001ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0392

User Response
No action; information only.

- **806f0125-1002ffff : [ManagedElementName] detected as absent. (PCI Riser 2)**

  This message is for the use case when an implementation has detected a Managed Element is Absent.

  May also be shown as 806f01251002ffff or 0x806f01251002ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0392

  User Response
  No action; information only.

- **806f0125-2c01ffff : [ManagedElementName] detected as absent. (Mezz Card)**

  This message is for the use case when an implementation has detected a Managed Element is Absent.

  May also be shown as 806f01252c01ffff or 0x806f01252c01ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0392

User Response
No action; information only.

- **806f0207-0301ffff : [ProcessorElementName] has Failed with FRB1/BIST condition. (CPU 1)**

  This message is for the use case when an implementation has detected a Processor Failed - FRB1/BIST condition.

  May also be shown as 806f02070301ffff or 0x806f02070301ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0044

  User Response

  1. Make sure that the latest levels of firmware and device drivers are installed for all adapters and standard devices, such as Ethernet, SCSI, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  2. Update the firmware (UEFI and IMM) to the latest level (Updating the firmware).
  3. Run the DSA program.
  4. Reseat the adapter.

5. Replace the adapter.
6. (Trained technician only) Replace microprocessor n.
7. (Trained technician only) Replace the system board. (n = microprocessor number)

- **806f0207-0302ffff : [ProcessorElementName] has Failed with FRB1/BIST condition. (CPU 2)**

  This message is for the use case when an implementation has detected a Processor Failed - FRB1/BIST condition.

  May also be shown as 806f02070302ffff or 0x806f02070302ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0044

  User Response

  1. Make sure that the latest levels of firmware and device drivers are installed for all adapters and standard devices, such as Ethernet, SCSI, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  2. Update the firmware (UEFI and IMM) to the latest level (Updating the firmware).
  3. Run the DSA program.
  4. Reseat the adapter.
  5. Replace the adapter.
  6. (Trained technician only) Replace microprocessor n.
  7. (Trained technician only) Replace the system board. (n = microprocessor number)

- **806f0207-2584ffff : [ProcessorElementName] has Failed with FRB1/BIST condition. (All CPUs)**

  This message is for the use case when an implementation has detected a Processor Failed - FRB1/BIST condition.

  May also be shown as 806f02072584ffff or 0x806f02072584ffff

  Severity

Error

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Critical - CPU

SNMP Trap ID
40

CIM Information
Prefix: PLAT **ID:** 0044

User Response

1. Make sure that the latest levels of firmware and device drivers are installed for all adapters and standard devices, such as Ethernet, SCSI, and SAS. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
2. Update the firmware (UEFI and IMM) to the latest level (Updating the firmware).
3. Run the DSA program.
4. Reseat the adapter.
5. Replace the adapter.
6. (Trained technician only) Replace microprocessor n.
7. (Trained technician only) Replace the system board. (n = microprocessor number) One of the CPUs :

- **806f020d-0400ffff : Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 0)**

  This message is for the use case when an implementation has detected an Array Failure is Predicted.

  May also be shown as 806f020d0400ffff or 0x806f020d0400ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0168

User Response

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

- **806f020d-0401ffff : Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 1)**

  This message is for the use case when an implementation has detected an Array Failure is Predicted.

  May also be shown as 806f020d0401ffff or 0x806f020d0401ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0168

  User Response

  1. Run the hard disk drive diagnostic test on drive n.
  2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
  3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

- **806f020d-0402ffff : Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 2)**

  This message is for the use case when an implementation has detected an Array Failure is Predicted.

  May also be shown as 806f020d0402ffff or 0x806f020d0402ffff

  Severity

Warning

Serviceable
Yes

Automatically notify support
Yes

Alert Category
System - Predicted Failure

SNMP Trap ID
27

CIM Information
Prefix: PLAT **ID:** 0168

User Response

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

- **806f020d-0403ffff : Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 3)**

  This message is for the use case when an implementation has detected an Array Failure is Predicted.

  May also be shown as 806f020d0403ffff or 0x806f020d0403ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0168

  User Response

  1. Run the hard disk drive diagnostic test on drive n.
  2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.

3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

- **806f020d-0404ffff : Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 4)**

  This message is for the use case when an implementation has detected an Array Failure is Predicted.

  May also be shown as 806f020d0404ffff or 0x806f020d0404ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0168

  User Response

  1. Run the hard disk drive diagnostic test on drive n.
  2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
  3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

- **806f020d-0405ffff : Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 5)**

  This message is for the use case when an implementation has detected an Array Failure is Predicted.

  May also be shown as 806f020d0405ffff or 0x806f020d0405ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

Alert Category
System - Predicted Failure

SNMP Trap ID
27

CIM Information
Prefix: PLAT **ID:** 0168

User Response

1. Run the hard disk drive diagnostic test on drive n.
2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

- **806f020d-0406ffff : Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 6)**

  This message is for the use case when an implementation has detected an Array Failure is Predicted.

  May also be shown as 806f020d0406ffff or 0x806f020d0406ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0168

  User Response

  1. Run the hard disk drive diagnostic test on drive n.
  2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
  3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

- **806f020d-0407ffff : Failure Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 7)**

  This message is for the use case when an implementation has detected an Array Failure is Predicted.

  May also be shown as 806f020d0407ffff or 0x806f020d0407ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0168

  User Response

  1. Run the hard disk drive diagnostic test on drive n.
  2. Reseat the following components: a. Hard disk drive b. Cable from the system board to the backplane.
  3. Replace the following components one at a time, in the order shown, restarting the server each time: a. Hard disk drive. b. Cable from the system board to the backplane. c. Hard disk drive backplane. (n = hard disk drive number)

- **806f0223-2101ffff : Powering off system [ComputerSystemElementName] initiated by [WatchdogElementName]. (IPMI Watchdog)**

  This message is for the use case when an implementation has detected a Poweroff by Watchdog has occurred.

  May also be shown as 806f02232101ffff or 0x806f02232101ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0372

User Response
No action; information only.

- **806f0308-0a01ffff : [PowerSupplyElementName] has lost input. (Power Supply 1)**

  This message is for the use case when an implementation has detected a Power Supply that has input that has been lost.

  May also be shown as 806f03080a01ffff or 0x806f03080a01ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0100

User Response

1. Reconnect the power cords.
2. Check power supply n LED.
3. See Power-supply LEDs for more information. (n = power supply number)

- **806f0308-0a02ffff : [PowerSupplyElementName] has lost input. (Power Supply 2)**

  This message is for the use case when an implementation has detected a Power Supply that has input that has been lost.

  May also be shown as 806f03080a02ffff or 0x806f03080a02ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category

System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0100

User Response

1. Reconnect the power cords.
2. Check power supply n LED.
3. See Power-supply LEDs for more information. (n = power supply number)

- **806f030c-2001ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2001ffff or 0x806f030c2001ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
  4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
  5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.

7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2002ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2002ffff or 0x806f030c2002ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
  4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
  5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2003ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2003ffff or 0x806f030c2003ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
  4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
  5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2004ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2004ffff or 0x806f030c2004ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0136

User Response
Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2005ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2005ffff or 0x806f030c2005ffff

  Severity
  Error

  Serviceable
  Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0136

User Response
Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2006ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)**

This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2006ffff or 0x806f030c2006ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0136

User Response
Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2007ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2007ffff or 0x806f030c2007ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

  1. Refer to TIP H212293 for minimum code level.

2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2008ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2008ffff or 0x806f030c2008ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
  4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.

5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2009ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2009ffff or 0x806f030c2009ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.
  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
  4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
  5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.

7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-200affff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c200affff or 0x806f030c200affff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
  4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
  5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-200bffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c200bffff or 0x806f030c200bffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
  4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
  5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-200cffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c200cffff or 0x806f030c200cffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0136

User Response
Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-200dffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c200dffff or 0x806f030c200dffff

  Severity
  Error

  Serviceable
  Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0136

User Response
Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-200effff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)**

This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c200effff or 0x806f030c200effff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0136

User Response
Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-200fffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)**

This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c200fffff or 0x806f030c200fffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0136

User Response
Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Refer to TIP H212293 for minimum code level.

2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2010ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2010ffff or 0x806f030c2010ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.
  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
  4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.

5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2011ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 17)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2011ffff or 0x806f030c2011ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.
  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
  4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
  5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.

7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2012ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 18)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2012ffff or 0x806f030c2012ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
  4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
  5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2013ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 19)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2013ffff or 0x806f030c2013ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
  4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
  5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2014ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 20)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2014ffff or 0x806f030c2014ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0136

User Response
Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2015ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 21)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2015ffff or 0x806f030c2015ffff

  Severity
  Error

  Serviceable
  Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0136

User Response
Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2016ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 22)**

This message is for the use case when an implementation has detected a Memory Scrub failure.

May also be shown as 806f030c2016ffff or 0x806f030c2016ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0136

User Response
Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2017ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 23)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2017ffff or 0x806f030c2017ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

  1. Refer to TIP H212293 for minimum code level.

2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.
5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f030c-2018ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 24)**

  This message is for the use case when an implementation has detected a Memory Scrub failure.

  May also be shown as 806f030c2018ffff or 0x806f030c2018ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0136

  User Response
  Note: Each time you install or remove a DIMM, you must disconnect the server from the power source; then, wait 10 seconds before restarting the server.

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Make sure that the DIMMs are firmly seated and no foreign material is found in the DIMM connector. Then, retry with the same DIMM.
  4. If the problem is related to a DIMM, replace the failing DIMM indicated by the error LEDs.

5. If the problem occurs on the same DIMM connector, swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
6. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
7. (Trained service technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
8. (Trained service technician only) If the problem is related to microprocessor socket pins, replace the system board.

- **806f0313-1701ffff : A software NMI has occurred on system [ComputerSystemElementName]. (NMI State)**

  This message is for the use case when an implementation has detected a Software NMI.

  May also be shown as 806f03131701ffff or 0x806f03131701ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0228

  User Response

  1. Check the device driver.
  2. Reinstall the device driver.
  3. Update all device drivers to the latest level.
  4. Update the firmware (UEFI and IMM).

- **806f0323-2101ffff : Power cycle of system [ComputerSystemElementName] initiated by watchdog [WatchdogElementName]. (IPMI Watchdog)**

  This message is for the use case when an implementation has detected a Power Cycle by Watchdog occurred.

  May also be shown as 806f03232101ffff or 0x806f03232101ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0374

User Response
No action; information only.

- **806f040c-2001ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 1)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2001ffff or 0x806f040c2001ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2002ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 2)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2002ffff or 0x806f040c2002ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2003ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 3)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2003ffff or 0x806f040c2003ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0131

User Response

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2004ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 4)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2004ffff or 0x806f040c2004ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2005ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 5)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2005ffff or 0x806f040c2005ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0131

User Response

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2006ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 6)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2006ffff or 0x806f040c2006ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.

2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2007ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 7)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2007ffff or 0x806f040c2007ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2008ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 8)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2008ffff or 0x806f040c2008ffff

  Severity
  Info

  Serviceable
  No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0131

User Response

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2009ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 9)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2009ffff or 0x806f040c2009ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-200affff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 10)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c200affff or 0x806f040c200affff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-200bffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 11)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c200bffff or 0x806f040c200bffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0131

User Response

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-200cffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 12)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c200cffff or 0x806f040c200cffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-200dffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 13)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c200dffff or 0x806f040c200dffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0131

User Response

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-200effff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 14)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c200effff or 0x806f040c200effff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.

2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-200fffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 15)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c200fffff or 0x806f040c200fffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2010ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 16)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2010ffff or 0x806f040c2010ffff

  Severity
  Info

  Serviceable
  No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0131

User Response

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2011ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 17)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2011ffff or 0x806f040c2011ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2012ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 18)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2012ffff or 0x806f040c2012ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2013ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 19)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2013ffff or 0x806f040c2013ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0131

User Response

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2014ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 20)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2014ffff or 0x806f040c2014ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2015ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 21)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2015ffff or 0x806f040c2015ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0131

User Response

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2016ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 22)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2016ffff or 0x806f040c2016ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.

2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2017ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 23)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2017ffff or 0x806f040c2017ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2018ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (DIMM 24)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2018ffff or 0x806f040c2018ffff

  Severity
  Info

  Serviceable
  No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0131

User Response

1. Make sure the DIMM is installed correctly.
2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).

- **806f040c-2581ffff : [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName]. (All DIMMS)**

  This message is for the use case when an implementation has detected that Memory has been Disabled.

  May also be shown as 806f040c2581ffff or 0x806f040c2581ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0131

  User Response

  1. Make sure the DIMM is installed correctly.
  2. If the DIMM was disabled because of a memory fault (memory uncorrectable error or memory logging limit reached), follow the suggested actions for that error event and restart the server.
  3. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory event. If no memory fault is recorded in the logs and no DIMM connector error LED is lit, you can re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU). One of the DIMMs :

- **806f0413-2582ffff : A PCI PERR has occurred on system [ComputerSystemElementName]. (PCIs)**

  This message is for the use case when an implementation has detected a PCI PERR.

  May also be shown as 806f04132582ffff or 0x806f04132582ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0232

  User Response

  1. Check the PCI LED.
  2. Reseat the affected adapters and riser cards.
  3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  4. Remove both adapters.
  5. Replace the PCIe adapters.
  6. Replace the riser card.

- **806f0507-0301ffff : [ProcessorElementName] has a Configuration Mismatch. (CPU 1)**

  This message is for the use case when an implementation has detected a Processor Configuration Mismatch has occurred.

  May also be shown as 806f05070301ffff or 0x806f05070301ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category

Critical - CPU

SNMP Trap ID
40

CIM Information
Prefix: PLAT **ID:** 0062

User Response

1. Check the CPU LED. See more information about the CPU LED in Light path diagnostics.
2. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
3. Make sure that the installed microprocessors are compatible with each other.
4. (Trained technician only) Reseat microprocessor n.
5. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

- **806f0507-0302ffff : [ProcessorElementName] has a Configuration Mismatch. (CPU 2)**

  This message is for the use case when an implementation has detected a Processor Configuration Mismatch has occurred.

  May also be shown as 806f05070302ffff or 0x806f05070302ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0062

  User Response

  1. Check the CPU LED. See more information about the CPU LED in Light path diagnostics.
  2. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  3. Make sure that the installed microprocessors are compatible with each other.
  4. (Trained technician only) Reseat microprocessor n.
  5. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

- **806f0507-2584ffff : [ProcessorElementName] has a Configuration Mismatch. (All CPUs)**

  This message is for the use case when an implementation has detected a Processor Configuration Mismatch has occurred.

  May also be shown as 806f05072584ffff or 0x806f05072584ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0062

  User Response

  1. Check the CPU LED. See more information about the CPU LED in Light path diagnostics.
  2. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  3. Make sure that the installed microprocessors are compatible with each other.
  4. (Trained technician only) Reseat microprocessor n.
  5. (Trained technician only) Replace microprocessor n. (n = microprocessor number) One of the CPUs :

- **806f050c-2001ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2001ffff or 0x806f050c2001ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

Alert Category
Warning - Memory

SNMP Trap ID
43

CIM Information
Prefix: PLAT **ID:** 0144

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2002ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2002ffff or 0x806f050c2002ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.

2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2003ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2003ffff or 0x806f050c2003ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the error still occurs on the same DIMM, replace the affected DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.

7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2004ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2004ffff or 0x806f050c2004ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the error still occurs on the same DIMM, replace the affected DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2005ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2005ffff or 0x806f050c2005ffff

Severity
Warning

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Warning - Memory

SNMP Trap ID
43

CIM Information
Prefix: PLAT **ID:** 0144

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2006ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2006ffff or 0x806f050c2006ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

CIM Information
Prefix: PLAT **ID:** 0144

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2007ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2007ffff or 0x806f050c2007ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the error still occurs on the same DIMM, replace the affected DIMM.

5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2008ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2008ffff or 0x806f050c2008ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the error still occurs on the same DIMM, replace the affected DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2009ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)**

This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2009ffff or 0x806f050c2009ffff

Severity
Warning

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Warning - Memory

SNMP Trap ID
43

CIM Information
Prefix: PLAT **ID:** 0144

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-200affff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c200affff or 0x806f050c200affff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support

Yes

Alert Category
Warning - Memory

SNMP Trap ID
43

CIM Information
Prefix: PLAT **ID:** 0144

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-200bffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c200bffff or 0x806f050c200bffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.

2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-200cffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c200cffff or 0x806f050c200cffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the error still occurs on the same DIMM, replace the affected DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.

7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-200dffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c200dffff or 0x806f050c200dffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the error still occurs on the same DIMM, replace the affected DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-200effff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c200effff or 0x806f050c200effff

Severity
Warning

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Warning - Memory

SNMP Trap ID
43

CIM Information
Prefix: PLAT **ID:** 0144

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-200fffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c200fffff or 0x806f050c200fffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

CIM Information
Prefix: PLAT **ID:** 0144

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2010ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2010ffff or 0x806f050c2010ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the error still occurs on the same DIMM, replace the affected DIMM.

5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2011ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 17)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2011ffff or 0x806f050c2011ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the error still occurs on the same DIMM, replace the affected DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2012ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 18)**

This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2012ffff or 0x806f050c2012ffff

Severity
Warning

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Warning - Memory

SNMP Trap ID
43

CIM Information
Prefix: PLAT **ID:** 0144

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2013ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 19)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2013ffff or 0x806f050c2013ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support

Yes

Alert Category
Warning - Memory

SNMP Trap ID
43

CIM Information
Prefix: PLAT **ID:** 0144

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2014ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 20)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2014ffff or 0x806f050c2014ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.

2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2015ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 21)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2015ffff or 0x806f050c2015ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the error still occurs on the same DIMM, replace the affected DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.

7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2016ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 22)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2016ffff or 0x806f050c2016ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the error still occurs on the same DIMM, replace the affected DIMM.
  5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
  6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
  7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2017ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 23)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2017ffff or 0x806f050c2017ffff

Severity
Warning

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Warning - Memory

SNMP Trap ID
43

CIM Information
Prefix: PLAT **ID:** 0144

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2018ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 24)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2018ffff or 0x806f050c2018ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

CIM Information
Prefix: PLAT **ID:** 0144

User Response

1. Refer to TIP H212293 for minimum code level.
2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
4. If the error still occurs on the same DIMM, replace the affected DIMM.
5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor.

- **806f050c-2581ffff : Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Reached.

  May also be shown as 806f050c2581ffff or 0x806f050c2581ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0144

  User Response

  1. Refer to TIP H212293 for minimum code level.
  2. Check the IBM support website for an applicable retain tip or firmware update that applies to this memory error.
  3. Swap the affected DIMMs (as indicated by the error LEDs on the system board or the event logs) to a different memory channel or microprocessor.
  4. If the error still occurs on the same DIMM, replace the affected DIMM.

5. (Trained technician only) If the problem occurs on the same DIMM connector, check the DIMM connector. If the connector contains any foreign material or is damaged, replace the system board.
6. (Trained technician only) Remove the affected microprocessor and check the microprocessor socket pins for any damaged pins. If a damage is found, replace the system board.
7. (Trained technician only) Replace the affected microprocessor. One of the DIMMs :

- **806f050d-0400ffff : Array [ComputerSystemElementName] is in critical condition. (Drive 0)**

  This message is for the use case when an implementation has detected that an Array is Critical.

  May also be shown as 806f050d0400ffff or 0x806f050d0400ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0174

  User Response

  1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
  2. Make sure that the SAS cable is connected correctly.
  3. Replace the SAS cable.
  4. Check backplane cable connection.
  5. Replace the RAID adapter.
  6. Replace the hard disk drive that is indicated by a lit status LED.

- **806f050d-0401ffff : Array [ComputerSystemElementName] is in critical condition. (Drive 1)**

  This message is for the use case when an implementation has detected that an Array is Critical.

  May also be shown as 806f050d0401ffff or 0x806f050d0401ffff

  Severity
  Error

  Serviceable
  Yes

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0174

User Response

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

- **806f050d-0402ffff : Array [ComputerSystemElementName] is in critical condition. (Drive 2)**

This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0402ffff or 0x806f050d0402ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0174

User Response

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

- **806f050d-0403ffff : Array [ComputerSystemElementName] is in critical condition. (Drive 3)**

  This message is for the use case when an implementation has detected that an Array is Critical.

  May also be shown as 806f050d0403ffff or 0x806f050d0403ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0174

  User Response

  1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
  2. Make sure that the SAS cable is connected correctly.
  3. Replace the SAS cable.
  4. Check backplane cable connection.
  5. Replace the RAID adapter.
  6. Replace the hard disk drive that is indicated by a lit status LED.

- **806f050d-0404ffff : Array [ComputerSystemElementName] is in critical condition. (Drive 4)**

  This message is for the use case when an implementation has detected that an Array is Critical.

  May also be shown as 806f050d0404ffff or 0x806f050d0404ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

CIM Information
Prefix: PLAT **ID:** 0174

User Response

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

- **806f050d-0405ffff : Array [ComputerSystemElementName] is in critical condition. (Drive 5)**

This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0405ffff or 0x806f050d0405ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0174

User Response

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

- **806f050d-0406ffff : Array [ComputerSystemElementName] is in critical condition. (Drive 6)**

This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0406ffff or 0x806f050d0406ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0174

User Response

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

- **806f050d-0407ffff : Array [ComputerSystemElementName] is in critical condition. (Drive 7)**

This message is for the use case when an implementation has detected that an Array is Critical.

May also be shown as 806f050d0407ffff or 0x806f050d0407ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0174

User Response

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.

2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Check backplane cable connection.
5. Replace the RAID adapter.
6. Replace the hard disk drive that is indicated by a lit status LED.

- **806f0513-2582ffff : A PCI SERR has occurred on system [ComputerSystemElementName]. (PCIs)**

  This message is for the use case when an implementation has detected a PCI SERR.

  May also be shown as 806f05132582ffff or 0x806f05132582ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0234

  User Response

  1. Check the PCI LED.
  2. Reseat the affected adapters and riser card.
  3. Update the server firmware (UEFI and IMM) and adapter firmware. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  4. Make sure that the adapter is supported. For a list of supported optional devices, see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/.
  5. Remove both adapters.
  6. Replace the PCIe adapters.
  7. Replace the riser card.

- **806f052b-2101ffff : Invalid or Unsupported firmware or software was detected on system [ComputerSystemElementName]. (IMM2 FW Failover)**

  This message is for the use case when an implementation has detected an Invalid/Unsupported Firmware/Software Version.

  May also be shown as 806f052b2101ffff or 0x806f052b2101ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0446

User Response

1. Make sure the server meets the minimum configuration to start (see Power-supply LEDs).
2. Recover the server firmware from the backup page by restarting the server.
3. Update the server firmware to the latest level (see Updating the firmware). Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
4. Remove components one at a time, restarting the server each time, to see if the problem goes away.
5. If the problem remains, (trained service technician) replace the system board.

- **806f0607-0301ffff : An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted. (CPU 1)**

  This message is for the use case when an SM BIOS Uncorrectable CPU complex error has asserted.

  May also be shown as 806f06070301ffff or 0x806f06070301ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0816

User Response

1. Make sure that the installed microprocessors are compatible with each other (see Installing a microprocessor and heat sink for information about microprocessor requirements).
2. Update the server firmware to the latest level (see Updating the firmware).
3. (Trained technician only) Replace the incompatible microprocessor.

- **806f0607-0302ffff : An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted. (CPU 2)**

  This message is for the use case when an SM BIOS Uncorrectable CPU complex error has asserted.

  May also be shown as 806f06070302ffff or 0x806f06070302ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0816

  User Response

  1. Make sure that the installed microprocessors are compatible with each other (see Installing a microprocessor and heat sink for information about microprocessor requirements).
  2. Update the server firmware to the latest level (see Updating the firmware).
  3. (Trained technician only) Replace the incompatible microprocessor.

- **806f0607-2584ffff : An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted. (All CPUs)**

  This message is for the use case when an SM BIOS Uncorrectable CPU complex error has asserted.

  May also be shown as 806f06072584ffff or 0x806f06072584ffff

  Severity
  Error

  Serviceable
  Yes

Automatically notify support
No

Alert Category
Critical - CPU

SNMP Trap ID
40

CIM Information
Prefix: PLAT **ID:** 0816

User Response

1. Make sure that the installed microprocessors are compatible with each other (see Installing a microprocessor and heat sink for information about microprocessor requirements).
2. Update the server firmware to the latest level (see Updating the firmware).
3. (Trained technician only) Replace the incompatible microprocessor. One of the CPUs :

- **806f0608-1301ffff : [PowerSupplyElementName] has a Configuration Mismatch. (PS Configuration)**

  This message is for the use case when an implementation has detected a Power Supply with a Configuration Error.

  May also be shown as 806f06081301ffff or 0x806f06081301ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Power

  SNMP Trap ID
  4

  CIM Information
  Prefix: PLAT **ID:** 0104

  User Response

  1. Make sure that the power supplies installed are with the same rating or wattage.
  2. Reinstall the power supplies with the same rating or wattage.

- **806f060d-0400ffff : Array [ComputerSystemElementName] has failed. (Drive 0)**

  This message is for the use case when an implementation has detected that an Array Failed.

  May also be shown as 806f060d0400ffff or 0x806f060d0400ffff

Severity
Error

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0176

User Response

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

- **806f060d-0401ffff : Array [ComputerSystemElementName] has failed. (Drive 1)**

  This message is for the use case when an implementation has detected that an Array Failed.

  May also be shown as 806f060d0401ffff or 0x806f060d0401ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0176

  User Response

  1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
  2. Make sure that the SAS cable is connected correctly.

3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

- **806f060d-0402ffff : Array [ComputerSystemElementName] has failed. (Drive 2)**

  This message is for the use case when an implementation has detected that an Array Failed.

  May also be shown as 806f060d0402ffff or 0x806f060d0402ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0176

  User Response

  1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
  2. Make sure that the SAS cable is connected correctly.
  3. Replace the SAS cable.
  4. Replace the RAID adapter.
  5. Replace the hard disk drive that is indicated by a lit status LED.

- **806f060d-0403ffff : Array [ComputerSystemElementName] has failed. (Drive 3)**

  This message is for the use case when an implementation has detected that an Array Failed.

  May also be shown as 806f060d0403ffff or 0x806f060d0403ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category

Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0176

User Response

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

- **806f060d-0404ffff : Array [ComputerSystemElementName] has failed. (Drive 4)**

  This message is for the use case when an implementation has detected that an Array Failed.

  May also be shown as 806f060d0404ffff or 0x806f060d0404ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0176

  User Response

  1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
  2. Make sure that the SAS cable is connected correctly.
  3. Replace the SAS cable.
  4. Replace the RAID adapter.
  5. Replace the hard disk drive that is indicated by a lit status LED.

- **806f060d-0405ffff : Array [ComputerSystemElementName] has failed. (Drive 5)**

  This message is for the use case when an implementation has detected that an Array Failed.

  May also be shown as 806f060d0405ffff or 0x806f060d0405ffff

Severity
Error

Serviceable
Yes

Automatically notify support
Yes

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0176

User Response

1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
2. Make sure that the SAS cable is connected correctly.
3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

- **806f060d-0406ffff : Array [ComputerSystemElementName] has failed. (Drive 6)**

  This message is for the use case when an implementation has detected that an Array Failed.

  May also be shown as 806f060d0406ffff or 0x806f060d0406ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0176

  User Response

  1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
  2. Make sure that the SAS cable is connected correctly.

3. Replace the SAS cable.
4. Replace the RAID adapter.
5. Replace the hard disk drive that is indicated by a lit status LED.

- **806f060d-0407ffff : Array [ComputerSystemElementName] has failed. (Drive 7)**

  This message is for the use case when an implementation has detected that an Array Failed.

  May also be shown as 806f060d0407ffff or 0x806f060d0407ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0176

  User Response

  1. Make sure that the RAID adapter firmware and hard disk drive firmware are at the latest level.
  2. Make sure that the SAS cable is connected correctly.
  3. Replace the SAS cable.
  4. Replace the RAID adapter.
  5. Replace the hard disk drive that is indicated by a lit status LED.

- **806f070c-2001ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2001ffff or 0x806f070c2001ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0126

User Response
Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2002ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2002ffff or 0x806f070c2002ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2003ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2003ffff or 0x806f070c2003ffff

  Severity
  Error

  Serviceable
  Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0126

User Response
Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2004ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2004ffff or 0x806f070c2004ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2005ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2005ffff or 0x806f070c2005ffff

  Severity
  Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0126

User Response
Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2006ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2006ffff or 0x806f070c2006ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2007ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2007ffff or 0x806f070c2007ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0126

User Response
Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2008ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2008ffff or 0x806f070c2008ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2009ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c2009ffff or 0x806f070c2009ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0126

User Response
Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-200affff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c200affff or 0x806f070c200affff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-200bffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)**

This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

May also be shown as 806f070c200bffff or 0x806f070c200bffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0126

User Response
Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-200cffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c200cffff or 0x806f070c200cffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-200dffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c200dffff or 0x806f070c200dffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-200effff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c200effff or 0x806f070c200effff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response

Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-200fffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c200fffff or 0x806f070c200fffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2010ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2010ffff or 0x806f070c2010ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

CIM Information
Prefix: PLAT **ID:** 0126

User Response
Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2011ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 17)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2011ffff or 0x806f070c2011ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2012ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 18)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2012ffff or 0x806f070c2012ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0126

User Response
Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2013ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 19)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2013ffff or 0x806f070c2013ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2014ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 20)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2014ffff or 0x806f070c2014ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0126

User Response
Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2015ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 21)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2015ffff or 0x806f070c2015ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2016ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 22)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2016ffff or 0x806f070c2016ffff

  Severity
  Error

  Serviceable
  Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0126

User Response
Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2017ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 23)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2017ffff or 0x806f070c2017ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2018ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 24)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2018ffff or 0x806f070c2018ffff

  Severity
  Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0126

User Response
Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology.

- **806f070c-2581ffff : Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has been corrected.

  May also be shown as 806f070c2581ffff or 0x806f070c2581ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0126

  User Response
  Make sure that DIMMs are installed in the correct sequence and have the same size, type, speed, and technology. One of the DIMMs :

- **806f070d-0400ffff : Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 0)**

  This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

  May also be shown as 806f070d0400ffff or 0x806f070d0400ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0178

User Response
No action; information only.

- **806f070d-0401ffff : Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 1)**

  This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

  May also be shown as 806f070d0401ffff or 0x806f070d0401ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0178

  User Response
  No action; information only.

- **806f070d-0402ffff : Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 2)**

  This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

  May also be shown as 806f070d0402ffff or 0x806f070d0402ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0178

User Response
No action; information only.

- **806f070d-0403ffff : Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 3)**

  This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

  May also be shown as 806f070d0403ffff or 0x806f070d0403ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0178

  User Response
  No action; information only.

- **806f070d-0404ffff : Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 4)**

  This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

  May also be shown as 806f070d0404ffff or 0x806f070d0404ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0178

User Response
No action; information only.

- **806f070d-0405ffff : Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 5)**

  This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

  May also be shown as 806f070d0405ffff or 0x806f070d0405ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0178

  User Response
  No action; information only.

- **806f070d-0406ffff : Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 6)**

  This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

  May also be shown as 806f070d0406ffff or 0x806f070d0406ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0178

User Response
No action; information only.

- **806f070d-0407ffff : Rebuild in progress for Array in system [ComputerSystemElementName]. (Drive 7)**

  This message is for the use case when an implementation has detected that an Array Rebuild is in Progress.

  May also be shown as 806f070d0407ffff or 0x806f070d0407ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0178

  User Response
  No action; information only.

- **806f072b-2201ffff : A successful software or firmware change was detected on system [ComputerSystemElementName]. (Bkup Auto Update)**

  This message is for the use case when an implementation has detected a Successful Software or Firmware Change.

  May also be shown as 806f072b2201ffff or 0x806f072b2201ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0450

User Response
No action; information only. ROM Recovery :

- **806f0807-0301ffff : [ProcessorElementName] has been Disabled. (CPU 1)**

  This message is for the use case when an implementation has detected a Processor has been Disabled.

  May also be shown as 806f08070301ffff or 0x806f08070301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0061

  User Response
  No action; information only.

- **806f0807-0302ffff : [ProcessorElementName] has been Disabled. (CPU 2)**

  This message is for the use case when an implementation has detected a Processor has been Disabled.

  May also be shown as 806f08070302ffff or 0x806f08070302ffff

  Severity
  Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0061

User Response
No action; information only.

- **806f0807-2584ffff : [ProcessorElementName] has been Disabled. (All CPUs)**

  This message is for the use case when an implementation has detected a Processor has been Disabled.

  May also be shown as 806f08072584ffff or 0x806f08072584ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0061

  User Response
  No action; information only. One of the CPUs :

- **806f0813-2581ffff : A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (DIMMs)**

  This message is for the use case when an implementation has detected a Bus Uncorrectable Error.

  May also be shown as 806f08132581ffff or 0x806f08132581ffff

  Severity
  Error

  Serviceable
  Yes

Automatically notify support
Yes

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0240

User Response

1. Check the system-event log.
2. Check the DIMM error LEDs.
3. Remove the failing DIMM from the system board.
4. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
5. Make sure that the installed DIMMs are supported and configured correctly.
6. (Trained technician only) Replace the system board.

- **806f0813-2582ffff : A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (PCIs)**

  This message is for the use case when an implementation has detected a Bus Uncorrectable Error.

  May also be shown as 806f08132582ffff or 0x806f08132582ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0240

  User Response

  1. Check the system-event log.
  2. Check the PCI LED.
  3. Remove the adapter from the indicated PCI slot.

4. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
5. (Trained technician only) Replace the system board.

- **806f0813-2584ffff : A Uncorrectable Bus Error has occurred on system [ComputerSystemElementName]. (CPUs)**

  This message is for the use case when an implementation has detected a Bus Uncorrectable Error.

  May also be shown as 806f08132584ffff or 0x806f08132584ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  Yes

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0240

  User Response

  1. Check the system-event log.
  2. (Trained technician only) Remove the failing microprocessor from the system board (see Removing a microprocessor and heat sink).
  3. Check for a server firmware update. Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
  4. Make sure that the two microprocessors are matching.
  5. (Trained technician only) Replace the system board.

- **806f0823-2101ffff : Watchdog Timer interrupt occurred for [WatchdogElementName]. (IPMI Watchdog)**

  This message is for the use case when an implementation has detected a Watchdog Timer interrupt occurred.

  May also be shown as 806f08232101ffff or 0x806f08232101ffff

  Severity
  Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0376

User Response
No action; information only.

- **806f090c-2001ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 1)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2001ffff or 0x806f090c2001ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-2002ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 2)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2002ffff or 0x806f090c2002ffff

Severity
Warning

Serviceable
Yes

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID
22

CIM Information
Prefix: PLAT **ID:** 0142

User Response

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

- **806f090c-2003ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 3)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2003ffff or 0x806f090c2003ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-2004ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 4)**

This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c2004ffff or 0x806f090c2004ffff

Severity
Warning

Serviceable
Yes

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID
22

CIM Information
Prefix: PLAT **ID:** 0142

User Response

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

- **806f090c-2005ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 5)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2005ffff or 0x806f090c2005ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-2006ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 6)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2006ffff or 0x806f090c2006ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-2007ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 7)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2007ffff or 0x806f090c2007ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

- **806f090c-2008ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 8)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2008ffff or 0x806f090c2008ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-2009ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 9)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2009ffff or 0x806f090c2009ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

22

CIM Information
Prefix: PLAT **ID:** 0142

User Response

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

- **806f090c-200affff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 10)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c200affff or 0x806f090c200affff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-200bffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 11)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c200bffff or 0x806f090c200bffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support

No

Alert Category
System - Other

SNMP Trap ID
22

CIM Information
Prefix: PLAT **ID:** 0142

User Response

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

- **806f090c-200cffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 12)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c200cffff or 0x806f090c200cffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-200dffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 13)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c200dffff or 0x806f090c200dffff

  Severity

Warning

Serviceable
Yes

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID
22

CIM Information
Prefix: PLAT **ID:** 0142

User Response

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

- **806f090c-200effff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 14)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c200effff or 0x806f090c200effff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-200fffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 15)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

May also be shown as 806f090c200fffff or 0x806f090c200fffff

Severity
Warning

Serviceable
Yes

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID
22

CIM Information
Prefix: PLAT **ID:** 0142

User Response

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

- **806f090c-2010ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 16)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2010ffff or 0x806f090c2010ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-2011ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 17)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2011ffff or 0x806f090c2011ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-2012ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 18)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2012ffff or 0x806f090c2012ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

- **806f090c-2013ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 19)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2013ffff or 0x806f090c2013ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-2014ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 20)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2014ffff or 0x806f090c2014ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

22

CIM Information
Prefix: PLAT **ID:** 0142

User Response

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

- **806f090c-2015ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 21)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2015ffff or 0x806f090c2015ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-2016ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 22)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2016ffff or 0x806f090c2016ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support

No

Alert Category
System - Other

SNMP Trap ID
22

CIM Information
Prefix: PLAT **ID:** 0142

User Response

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

- **806f090c-2017ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 23)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2017ffff or 0x806f090c2017ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID
  22

  CIM Information
  Prefix: PLAT **ID:** 0142

  User Response

  1. Reseat the DIMM, and then restart the server.
  2. Replace DIMM n. (n = DIMM number)

- **806f090c-2018ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled. (DIMM 24)**

  This message is for the use case when an implementation has detected Memory has been Throttled.

  May also be shown as 806f090c2018ffff or 0x806f090c2018ffff

  Severity

Warning

Serviceable
Yes

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID
22

CIM Information
Prefix: PLAT **ID:** 0142

User Response

1. Reseat the DIMM, and then restart the server.
2. Replace DIMM n. (n = DIMM number)

- **806f0a07-0301ffff : [ProcessorElementName] is operating in a Degraded State. (CPU 1)**

  This message is for the use case when an implementation has detected a Processor is running in the Degraded state.

  May also be shown as 806f0a070301ffff or 0x806f0a070301ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - CPU

  SNMP Trap ID
  42

  CIM Information
  Prefix: PLAT **ID:** 0038

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
  2. Check the ambient temperature. You must be operating within the specifications.
  3. Make sure that the heat sink for microprocessor n is installed correctly.
  4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

- **806f0a07-0302ffff : [ProcessorElementName] is operating in a Degraded State. (CPU 2)**

  This message is for the use case when an implementation has detected a Processor is running in the Degraded state.

  May also be shown as 806f0a070302ffff or 0x806f0a070302ffff

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Warning - CPU

  SNMP Trap ID
  42

  CIM Information
  Prefix: PLAT **ID:** 0038

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow (front and rear of the server), that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
  2. Check the ambient temperature. You must be operating within the specifications.
  3. Make sure that the heat sink for microprocessor n is installed correctly.
  4. (Trained technician only) Replace microprocessor n. (n = microprocessor number)

- **806f0a0c-2001ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2001ffff or 0x806f0a0c2001ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0146

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2002ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2002ffff or 0x806f0a0c2002ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
  2. Make sure that ambient temperature is within the specifications.
  3. If a fan has failed, complete the action for a fan failure.
  4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2003ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)**

This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2003ffff or 0x806f0a0c2003ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0146

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2004ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2004ffff or 0x806f0a0c2004ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

CIM Information
Prefix: PLAT **ID:** 0146

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2005ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2005ffff or 0x806f0a0c2005ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
  2. Make sure that ambient temperature is within the specifications.
  3. If a fan has failed, complete the action for a fan failure.
  4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2006ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2006ffff or 0x806f0a0c2006ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0146

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2007ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2007ffff or 0x806f0a0c2007ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2008ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2008ffff or 0x806f0a0c2008ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
  2. Make sure that ambient temperature is within the specifications.
  3. If a fan has failed, complete the action for a fan failure.
  4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2009ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2009ffff or 0x806f0a0c2009ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0146

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-200affff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c200affff or 0x806f0a0c200affff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

  User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-200bffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c200bffff or 0x806f0a0c200bffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
  2. Make sure that ambient temperature is within the specifications.
  3. If a fan has failed, complete the action for a fan failure.
  4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-200cffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c200cffff or 0x806f0a0c200cffff

  Severity

Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0146

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-200dffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c200dffff or 0x806f0a0c200dffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.

2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-200effff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c200effff or 0x806f0a0c200effff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
  2. Make sure that ambient temperature is within the specifications.
  3. If a fan has failed, complete the action for a fan failure.
  4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-200fffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c200fffff or 0x806f0a0c200fffff

  Severity
  Error

  Serviceable

Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0146

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2010ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2010ffff or 0x806f0a0c2010ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
  2. Make sure that ambient temperature is within the specifications.
  3. If a fan has failed, complete the action for a fan failure.

4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2011ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 17)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2011ffff or 0x806f0a0c2011ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
  2. Make sure that ambient temperature is within the specifications.
  3. If a fan has failed, complete the action for a fan failure.
  4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2012ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 18)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2012ffff or 0x806f0a0c2012ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0146

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2013ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 19)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2013ffff or 0x806f0a0c2013ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
  2. Make sure that ambient temperature is within the specifications.
  3. If a fan has failed, complete the action for a fan failure.
  4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2014ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 20)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2014ffff or 0x806f0a0c2014ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
  2. Make sure that ambient temperature is within the specifications.
  3. If a fan has failed, complete the action for a fan failure.
  4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2015ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 21)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2015ffff or 0x806f0a0c2015ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0146

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2016ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 22)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2016ffff or 0x806f0a0c2016ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0146

  User Response

  1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
  2. Make sure that ambient temperature is within the specifications.
  3. If a fan has failed, complete the action for a fan failure.
  4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2017ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 23)**

This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

May also be shown as 806f0a0c2017ffff or 0x806f0a0c2017ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0146

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a0c-2018ffff : An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 24)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Detected.

  May also be shown as 806f0a0c2018ffff or 0x806f0a0c2018ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

CIM Information
Prefix: PLAT **ID:** 0146

User Response

1. Make sure that the fans are operating, that there are no obstructions to the airflow, that the air baffles are in place and correctly installed, and that the server cover is installed and completely closed.
2. Make sure that ambient temperature is within the specifications.
3. If a fan has failed, complete the action for a fan failure.
4. Replace DIMM n. (n = DIMM number)

- **806f0a13-0301ffff : A Fatal Bus Error has occurred on system [ComputerSystemElementName]. (CPU 1 PECI)**

  This message is for the use case when an implementation has detected a Bus Fatal Error.

  May also be shown as 806f0a130301ffff or 0x806f0a130301ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0244

  User Response

  1. Reseat the microprocessor, and then restart the server.
  2. Replace microprocessor n. (n = microprocessor number)

- **806f0a13-0302ffff : A Fatal Bus Error has occurred on system [ComputerSystemElementName]. (CPU 2 PECI)**

  This message is for the use case when an implementation has detected a Bus Fatal Error.

  May also be shown as 806f0a130302ffff or 0x806f0a130302ffff

  Severity
  Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0244

User Response

1. Reseat the microprocessor, and then restart the server.
2. Replace microprocessor n. (n = microprocessor number)

- **81010002-0701ffff : Numeric sensor [NumericSensorElementName] going low (lower non-critical) has deasserted. (CMOS Battery)**

  This message is for the use case when an implementation has detected a Lower Non-critical sensor going low has deasserted.

  May also be shown as 810100020701ffff or 0x810100020701ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Voltage

  SNMP Trap ID
  13

  CIM Information
  Prefix: PLAT **ID:** 0477

  User Response
  No action; information only.

- **81010202-0701ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted. (CMOS Battery)**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

  May also be shown as 810102020701ffff or 0x810102020701ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Voltage

SNMP Trap ID
1

CIM Information
Prefix: PLAT **ID:** 0481

User Response
No action; information only. SysBrd 12V : SysBrd 3.3V : SysBrd 5V :

- **81010204-1d01ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted. (Fan 1A Tach)**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

  May also be shown as 810102041d01ffff or 0x810102041d01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0481

  User Response
  No action; information only. Fan 1B Tach :

- **81010204-1d02ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted. (Fan 2A Tach)**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102041d02ffff or 0x810102041d02ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Fan Failure

SNMP Trap ID
11

CIM Information
Prefix: PLAT **ID:** 0481

User Response
No action; information only. Fan 2B Tach :

- **81010204-1d03ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted. (Fan 3A Tach)**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

  May also be shown as 810102041d03ffff or 0x810102041d03ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0481

  User Response
  No action; information only. Fan 3B Tach :

- **81010204-1d04ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted. (Fan 4A Tach)**

This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

May also be shown as 810102041d04ffff or 0x810102041d04ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Fan Failure

SNMP Trap ID
11

CIM Information
Prefix: PLAT **ID:** 0481

User Response
No action; information only. Fan 4B Tach :

- **81010204-1d05ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted. (Fan 5A Tach)**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

  May also be shown as 810102041d05ffff or 0x810102041d05ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0481

  User Response
  No action; information only. Fan 5B Tach :

- **81010204-1d06ffff : Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted. (Fan 6A Tach)**

  This message is for the use case when an implementation has detected a Lower Critical sensor going low has deasserted.

  May also be shown as 810102041d06ffff or 0x810102041d06ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0481

  User Response
  No action; information only. Fan 6B Tach :

- **81010701-0c01ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (Ambient Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

  May also be shown as 810107010c01ffff or 0x810107010c01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0491

  User Response
  No action; information only.

- **81010701-1001ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (PCI Riser 1 Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

  May also be shown as 810107011001ffff or 0x810107011001ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0491

  User Response
  No action; information only.

- **81010701-1002ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (PCI Riser 2 Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

  May also be shown as 810107011002ffff or 0x810107011002ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0491

  User Response
  No action; information only.

- **81010701-1401ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (CPU1 VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

  May also be shown as 810107011401ffff or 0x810107011401ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0491

  User Response
  No action; information only.

- **81010701-1402ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (CPU2 VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

  May also be shown as 810107011402ffff or 0x810107011402ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0491

  User Response
  No action; information only.

- **81010701-1403ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (DIMM AB VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

  May also be shown as 810107011403ffff or 0x810107011403ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0491

  User Response
  No action; information only.

- **81010701-1404ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (DIMM CD VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

  May also be shown as 810107011404ffff or 0x810107011404ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0491

  User Response
  No action; information only.

- **81010701-1405ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (DIMM EF VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

  May also be shown as 810107011405ffff or 0x810107011405ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0491

  User Response
  No action; information only.

- **81010701-1406ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (DIMM GH VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

  May also be shown as 810107011406ffff or 0x810107011406ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0491

  User Response
  No action; information only.

- **81010701-2c01ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (Mezz Card Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

  May also be shown as 810107012c01ffff or 0x810107012c01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0491

  User Response
  No action; information only.

- **81010701-2d01ffff : Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted. (PCH Temp)**

  This message is for the use case when an implementation has detected an Upper Non-critical sensor going high has deasserted.

  May also be shown as 810107012d01ffff or 0x810107012d01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Temperature

  SNMP Trap ID
  12

  CIM Information
  Prefix: PLAT **ID:** 0491

  User Response
  No action; information only.

- **81010901-0c01ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (Ambient Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

  May also be shown as 810109010c01ffff or 0x810109010c01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0495

  User Response
  No action; information only.

- **81010901-1001ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (PCI Riser 1 Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

  May also be shown as 810109011001ffff or 0x810109011001ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0495

  User Response
  No action; information only.

- **81010901-1002ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (PCI Riser 2 Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

  May also be shown as 810109011002ffff or 0x810109011002ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0495

  User Response
  No action; information only.

- **81010901-1401ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (CPU1 VR Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

  May also be shown as 810109011401ffff or 0x810109011401ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0495

  User Response
  No action; information only.

- **81010901-1402ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (CPU2 VR Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

  May also be shown as 810109011402ffff or 0x810109011402ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0495

  User Response
  No action; information only.

- **81010901-1403ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (DIMM AB VR Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

  May also be shown as 810109011403ffff or 0x810109011403ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0495

  User Response
  No action; information only.

- **81010901-1404ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (DIMM CD VR Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

  May also be shown as 810109011404ffff or 0x810109011404ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0495

  User Response
  No action; information only.

- **81010901-1405ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (DIMM EF VR Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

  May also be shown as 810109011405ffff or 0x810109011405ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0495

  User Response
  No action; information only.

- **81010901-1406ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (DIMM GH VR Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

  May also be shown as 810109011406ffff or 0x810109011406ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0495

  User Response
  No action; information only.

- **81010901-2c01ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (Mezz Card Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

  May also be shown as 810109012c01ffff or 0x810109012c01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0495

  User Response
  No action; information only.

- **81010901-2d01ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (PCH Temp)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

  May also be shown as 810109012d01ffff or 0x810109012d01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0495

  User Response
  No action; information only.

- **81010902-0701ffff : Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted. (SysBrd 12V)**

  This message is for the use case when an implementation has detected an Upper Critical sensor going high has deasserted.

  May also be shown as 810109020701ffff or 0x810109020701ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Voltage

  SNMP Trap ID
  1

  CIM Information
  Prefix: PLAT **ID:** 0495

  User Response
  No action; information only. SysBrd 3.3V : SysBrd 5V :

- **81010b01-0c01ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (Ambient Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

  May also be shown as 81010b010c01ffff or 0x81010b010c01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0499

  User Response
  No action; information only.

- **81010b01-1001ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (PCI Riser 1 Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

  May also be shown as 81010b011001ffff or 0x81010b011001ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0499

  User Response
  No action; information only.

- **81010b01-1002ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (PCI Riser 2 Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

  May also be shown as 81010b011002ffff or 0x81010b011002ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0499

  User Response
  No action; information only.

- **81010b01-1401ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (CPU1 VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

  May also be shown as 81010b011401ffff or 0x81010b011401ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0499

  User Response
  No action; information only.

- **81010b01-1402ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (CPU2 VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

  May also be shown as 81010b011402ffff or 0x81010b011402ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0499

  User Response
  No action; information only.

- **81010b01-1403ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (DIMM AB VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

  May also be shown as 81010b011403ffff or 0x81010b011403ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0499

  User Response
  No action; information only.

- **81010b01-1404ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (DIMM CD VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

  May also be shown as 81010b011404ffff or 0x81010b011404ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0499

  User Response
  No action; information only.

- **81010b01-1405ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (DIMM EF VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

  May also be shown as 81010b011405ffff or 0x81010b011405ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0499

  User Response
  No action; information only.

- **81010b01-1406ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (DIMM GH VR Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

  May also be shown as 81010b011406ffff or 0x81010b011406ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0499

  User Response
  No action; information only.

- **81010b01-2c01ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (Mezz Card Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

  May also be shown as 81010b012c01ffff or 0x81010b012c01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0499

  User Response
  No action; information only.

- **81010b01-2d01ffff : Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted. (PCH Temp)**

  This message is for the use case when an implementation has detected an Upper Non-recoverable sensor going high has deasserted.

  May also be shown as 81010b012d01ffff or 0x81010b012d01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0499

  User Response
  No action; information only.

- **81030006-2101ffff : Sensor [SensorElementName] has asserted. (Sig Verify Fail)**

  This message is for the use case when an implementation has detected a Sensor has asserted.

  May also be shown as 810300062101ffff or 0x810300062101ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0508

  User Response
  No action; information only.

- **81030012-2301ffff : Sensor [SensorElementName] has asserted. (OS RealTime Mod)**

  This message is for the use case when an implementation has detected a Sensor has asserted.

  May also be shown as 810300122301ffff or 0x810300122301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0508

  User Response
  No action; information only.

- **81030108-1301ffff : Sensor [SensorElementName] has deasserted. (PS Heavy Load)**

  This message is for the use case when an implementation has detected a Sensor has deasserted.

  May also be shown as 810301081301ffff or 0x810301081301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0509

  User Response
  No action; information only.

- **81070101-0c01ffff : Sensor [SensorElementName] has deasserted the transition from normal to non-critical state. (Ambient Status)**

This message is for the use case when an implementation has detected that a Sensor has deasserted a transition to non-critical from normal.

May also be shown as 810701010c01ffff or 0x810701010c01ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Warning - Temperature

SNMP Trap ID
12

CIM Information
Prefix: PLAT **ID:** 0521

User Response
No action; information only.

- **8107010f-2201ffff : Sensor [SensorElementName] has deasserted the transition from normal to non-critical state. (GPT Status)**

  This message is for the use case when an implementation has detected that a Sensor has deasserted a transition to non-critical from normal.

  May also be shown as 8107010f2201ffff or 0x8107010f2201ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Other

  SNMP Trap ID
  60

  CIM Information
  Prefix: PLAT **ID:** 0521

  User Response
  No action; information only.

- **8107010f-2582ffff : Sensor [SensorElementName] has deasserted the transition from normal to non-critical state. (I/O Resources)**

  This message is for the use case when an implementation has detected that a Sensor has deasserted a transition to non-critical from normal.

  May also be shown as 8107010f2582ffff or 0x8107010f2582ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Other

  SNMP Trap ID
  60

  CIM Information
  Prefix: PLAT **ID:** 0521

  User Response
  No action; information only.

- **81070201-0301ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU 1 OverTemp)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 810702010301ffff or 0x810702010301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **81070201-0302ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU 2 OverTemp)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 810702010302ffff or 0x810702010302ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **81070202-0701ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (SysBrd Vol Fault)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 810702020701ffff or 0x810702020701ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Voltage

  SNMP Trap ID
  1

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **81070204-0a01ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (PS 1 Fan Fault)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 810702040a01ffff or 0x810702040a01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **81070204-0a02ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (PS 2 Fan Fault)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 810702040a02ffff or 0x810702040a02ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **81070208-0a01ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (PS 1 Therm Fault)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 810702080a01ffff or 0x810702080a01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Power

  SNMP Trap ID
  4

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **81070208-0a02ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (PS 2 Therm Fault)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 810702080a02ffff or 0x810702080a02ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Power

  SNMP Trap ID
  4

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **8107020f-2201ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (TXT ACM Module)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 8107020f2201ffff or 0x8107020f2201ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **8107020f-2582ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (I/O Resources)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 8107020f2582ffff or 0x8107020f2582ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **81070214-2201ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (TPM Lock)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 810702142201ffff or 0x810702142201ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **81070219-0701ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (SysBrd Fault)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 810702190701ffff or 0x810702190701ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **8107021b-0301ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU 1 QPILinkErr)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 8107021b0301ffff or 0x8107021b0301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **8107021b-0302ffff : Sensor [SensorElementName] has transitioned to a less severe state from critical. (CPU 2 QPILinkErr)**

  This message is for the use case when an implementation has detected a Sensor transition to less severe from critical.

  May also be shown as 8107021b0302ffff or 0x8107021b0302ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0523

  User Response
  No action; information only.

- **81070301-0301ffff : Sensor [SensorElementName] has deasserted the transition to non-recoverable from a less severe state. (CPU 1 OverTemp)**

  This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable from less severe has deasserted.

  May also be shown as 810703010301ffff or 0x810703010301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0525

  User Response
  No action; information only.

- **81070301-0302ffff : Sensor [SensorElementName] has deasserted the transition to non-recoverable from a less severe state. (CPU 2 OverTemp)**

  This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable from less severe has deasserted.

  May also be shown as 810703010302ffff or 0x810703010302ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0525

  User Response
  No action; information only.

- **81070603-0701ffff : Sensor [SensorElementName] has deasserted the transition to non-recoverable. (Pwr Rail 1 Fault)**

  This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable has deasserted.

  May also be shown as 810706030701ffff or 0x810706030701ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Power

  SNMP Trap ID
  4

  CIM Information
  Prefix: PLAT **ID:** 0531

  User Response
  No action; information only. Pwr Rail 2 Fault : Pwr Rail 3 Fault : Pwr Rail 4 Fault : Pwr Rail 5 Fault : Pwr Rail 6 Fault :

- **81070608-0a01ffff : Sensor [SensorElementName] has deasserted the transition to non-recoverable. (PS1 12V OC Fault)**

  This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable has deasserted.

  May also be shown as 810706080a01ffff or 0x810706080a01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Power

  SNMP Trap ID
  4

  CIM Information
  Prefix: PLAT **ID:** 0531

  User Response

No action; information only. PS1 12V OV Fault : PS1 12V UV Fault : PS1 12Vaux Fault :

- **81070608-0a02ffff : Sensor [SensorElementName] has deasserted the transition to non-recoverable. (PS2 12V OC Fault)**

  This message is for the use case when an implementation has detected that the Sensor transition to non-recoverable has deasserted.

  May also be shown as 810706080a02ffff or 0x810706080a02ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Power

  SNMP Trap ID
  4

  CIM Information
  Prefix: PLAT **ID:** 0531

  User Response
  No action; information only. PS2 12V OV Fault : PS2 12V UV Fault : PS2 12Vaux Fault :

- **810b010a-1e81ffff : Redundancy Lost for [RedundancySetElementName] has deasserted. (Fan Zone 1)**

  This message is for the use case when Redundacy Lost has deasserted.

  May also be shown as 810b010a1e81ffff or 0x810b010a1e81ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0803

  User Response

No action; information only.

- **810b010a-1e82ffff : Redundancy Lost for [RedundancySetElementName] has deasserted. (Fan Zone 2)**

  This message is for the use case when Redundacy Lost has deasserted.

  May also be shown as 810b010a1e82ffff or 0x810b010a1e82ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0803

  User Response
  No action; information only.

- **810b010c-2581ffff : Redundancy Lost for [RedundancySetElementName] has deasserted. (Backup Memory)**

  This message is for the use case when Redundacy Lost has deasserted.

  May also be shown as 810b010c2581ffff or 0x810b010c2581ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0803

  User Response
  No action; information only.

- **810b0309-1301ffff : Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has deasserted. (Power Resource)**

  This message is for the use case when a Redundancy Set has transitioned from Non-redundant:Sufficient Resources.

  May also be shown as 810b03091301ffff or 0x810b03091301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Redundant Power Supply

  SNMP Trap ID
  10

  CIM Information
  Prefix: PLAT **ID:** 0807

  User Response
  No action; information only.

- **810b030c-2581ffff : Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has deasserted. (Backup Memory)**

  This message is for the use case when a Redundancy Set has transitioned from Non-redundant:Sufficient Resources.

  May also be shown as 810b030c2581ffff or 0x810b030c2581ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0807

  User Response
  No action; information only.

- **810b0509-1301ffff : Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted. (Power Resource)**

  This message is for the use case when a Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

  May also be shown as 810b05091301ffff or 0x810b05091301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Redundant Power Supply

  SNMP Trap ID
  9

  CIM Information
  Prefix: PLAT **ID:** 0811

  User Response
  No action; information only.

- **810b050a-1e81ffff : Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted. (Fan Zone 1)**

  This message is for the use case when a Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

  May also be shown as 810b050a1e81ffff or 0x810b050a1e81ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0811

  User Response
  No action; information only.

- **810b050a-1e82ffff : Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted. (Fan Zone 2)**

  This message is for the use case when a Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

  May also be shown as 810b050a1e82ffff or 0x810b050a1e82ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Fan Failure

  SNMP Trap ID
  11

  CIM Information
  Prefix: PLAT **ID:** 0811

  User Response
  No action; information only.

- **810b050c-2581ffff : Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted. (Backup Memory)**

  This message is for the use case when a Redundancy Set has transitioned from Non-redundant:Insufficient Resources.

  May also be shown as 810b050c2581ffff or 0x810b050c2581ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0811

  User Response
  No action; information only.

- **816f0007-0301ffff : [ProcessorElementName] has Recovered from IERR. (CPU 1)**

  This message is for the use case when an implementation has detected a Processor Recovered - IERR Condition.

  May also be shown as 816f00070301ffff or 0x816f00070301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0043

  User Response
  No action; information only.

- **816f0007-0302ffff : [ProcessorElementName] has Recovered from IERR. (CPU 2)**

  This message is for the use case when an implementation has detected a Processor Recovered - IERR Condition.

  May also be shown as 816f00070302ffff or 0x816f00070302ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0043

  User Response
  No action; information only.

- **816f0008-0a01ffff : [PowerSupplyElementName] has been removed from container [PhysicalPackageElementName]. (Power Supply 1)**

  This message is for the use case when an implementation has detected a Power Supply has been removed.

  May also be shown as 816f00080a01ffff or 0x816f00080a01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0085

  User Response
  No action; information only.

- **816f0008-0a02ffff : [PowerSupplyElementName] has been removed from container [PhysicalPackageElementName]. (Power Supply 2)**

  This message is for the use case when an implementation has detected a Power Supply has been removed.

  May also be shown as 816f00080a02ffff or 0x816f00080a02ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0085

  User Response
  No action; information only.

- **816f0009-1301ffff : [PowerSupplyElementName] has been turned on. (Host Power)**

  This message is for the use case when an implementation has detected a Power Unit that has been Enabled.

  May also be shown as 816f00091301ffff or 0x816f00091301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Power On

  SNMP Trap ID
  24

  CIM Information
  Prefix: PLAT **ID:** 0107

  User Response
  No action; information only.

- **816f000d-0400ffff : The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 0)**

  This message is for the use case when an implementation has detected a Drive has been Removed.

  May also be shown as 816f000d0400ffff or 0x816f000d0400ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0163

  User Response

  1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.

2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

- **816f000d-0401ffff : The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 1)**

  This message is for the use case when an implementation has detected a Drive has been Removed.

  May also be shown as 816f000d0401ffff or 0x816f000d0401ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0163

  User Response

  1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
  2. Replace the hard disk drive.
  3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
  4. Check the SAS cable.

- **816f000d-0402ffff : The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 2)**

  This message is for the use case when an implementation has detected a Drive has been Removed.

  May also be shown as 816f000d0402ffff or 0x816f000d0402ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0163

User Response

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

- **816f000d-0403ffff : The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 3)**

  This message is for the use case when an implementation has detected a Drive has been Removed.

  May also be shown as 816f000d0403ffff or 0x816f000d0403ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0163

  User Response

  1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
  2. Replace the hard disk drive.
  3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
  4. Check the SAS cable.

- **816f000d-0404ffff : The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 4)**

This message is for the use case when an implementation has detected a Drive has been Removed.

May also be shown as 816f000d0404ffff or 0x816f000d0404ffff

Severity
Error

Serviceable
Yes

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0163

User Response

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

- **816f000d-0405ffff : The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 5)**

  This message is for the use case when an implementation has detected a Drive has been Removed.

  May also be shown as 816f000d0405ffff or 0x816f000d0405ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0163

  User Response

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

- **816f000d-0406ffff : The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 6)**

  This message is for the use case when an implementation has detected a Drive has been Removed.

  May also be shown as 816f000d0406ffff or 0x816f000d0406ffff

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0163

  User Response

  1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
  2. Replace the hard disk drive.
  3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
  4. Check the SAS cable.

- **816f000d-0407ffff : The Drive [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName]. (Drive 7)**

  This message is for the use case when an implementation has detected a Drive has been Removed.

  May also be shown as 816f000d0407ffff or 0x816f000d0407ffff

  Severity
  Error

  Serviceable

Yes

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0163

User Response

1. Reseat hard disk drive n.(n = hard disk drive number). Wait 1 minute or more before reinstalling the drive.
2. Replace the hard disk drive.
3. Make sure that the disk firmware and RAID controller firmware are at the latest level.
4. Check the SAS cable.

- **816f000f-2201ffff : The System [ComputerSystemElementName] has detected a POST Error deassertion. (ABR Status)**

  This message is for the use case when an implementation has detected that Post Error has deasserted.

  May also be shown as 816f000f2201ffff or 0x816f000f2201ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0185

  User Response
  No action; information only. Firmware Error : Sys Boot Status :

- **816f0013-1701ffff : System [ComputerSystemElementName] has recovered from a diagnostic interrupt. (NMI State)**

  This message is for the use case when an implementation has detected a recovery from a Front Panel NMI / Diagnostic Interrupt

May also be shown as 816f00131701ffff or 0x816f00131701ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0223

User Response
No action; information only.

- **816f0021-2201ffff : Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (No Op ROM Space)**

  This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

  May also be shown as 816f00212201ffff or 0x816f00212201ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0331

  User Response
  No action; information only.

- **816f0021-2582ffff : Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (All PCI Error)**

This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

May also be shown as 816f00212582ffff or 0x816f00212582ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0331

User Response
No action; information only. One of PCI Error :

- **816f0021-2c01ffff : Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (Mezz Card Error)**

  This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

  May also be shown as 816f00212c01ffff or 0x816f00212c01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0331

  User Response
  No action; information only.

- **816f0021-3001ffff : Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName]. (Internal RAID)**

  This message is for the use case when an implementation has detected a Fault condition in a slot has been removed.

  May also be shown as 816f00213001ffff or 0x816f00213001ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0331

  User Response
  No action; information only. PCI 1 : PCI 2 :

- **816f0028-2101ffff : Sensor [SensorElementName] has returned to normal on management system [ComputerSystemElementName]. (TPM Cmd Failures)**

  This message is for the use case when an implementation has detected a Sensor returned from degraded/unavailable/failure.

  May also be shown as 816f00282101ffff or 0x816f00282101ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Other

  SNMP Trap ID
  60

  CIM Information
  Prefix: PLAT **ID:** 0399

  User Response
  No action; information only.

- **816f0107-0301ffff : An Over-Temperature Condition has been removed on [ProcessorElementName]. (CPU 1)**

  This message is for the use case when an implementation has detected a Over-Temperature Condition has been Removed for Processor.

  May also be shown as 816f01070301ffff or 0x816f01070301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0037

  User Response
  No action; information only.

- **816f0107-0302ffff : An Over-Temperature Condition has been removed on [ProcessorElementName]. (CPU 2)**

  This message is for the use case when an implementation has detected a Over-Temperature Condition has been Removed for Processor.

  May also be shown as 816f01070302ffff or 0x816f01070302ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0037

  User Response
  No action; information only.

- **816f0108-0a01ffff : [PowerSupplyElementName] has returned to OK status. (Power Supply 1)**

  This message is for the use case when an implementation has detected a Power Supply return to normal operational status.

  May also be shown as 816f01080a01ffff or 0x816f01080a01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Power

  SNMP Trap ID
  4

  CIM Information
  Prefix: PLAT **ID:** 0087

  User Response
  No action; information only.

- **816f0108-0a02ffff : [PowerSupplyElementName] has returned to OK status. (Power Supply 2)**

  This message is for the use case when an implementation has detected a Power Supply return to normal operational status.

  May also be shown as 816f01080a02ffff or 0x816f01080a02ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Power

  SNMP Trap ID
  4

  CIM Information
  Prefix: PLAT **ID:** 0087

  User Response
  No action; information only.

- **816f010c-2001ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2001ffff or 0x816f010c2001ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2002ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2002ffff or 0x816f010c2002ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2003ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2003ffff or 0x816f010c2003ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2004ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2004ffff or 0x816f010c2004ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2005ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2005ffff or 0x816f010c2005ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2006ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2006ffff or 0x816f010c2006ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2007ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2007ffff or 0x816f010c2007ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2008ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2008ffff or 0x816f010c2008ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2009ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2009ffff or 0x816f010c2009ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-200affff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c200affff or 0x816f010c200affff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-200bffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c200bffff or 0x816f010c200bffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-200cffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c200cffff or 0x816f010c200cffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-200dffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c200dffff or 0x816f010c200dffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-200effff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c200effff or 0x816f010c200effff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-200fffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c200fffff or 0x816f010c200fffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2010ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2010ffff or 0x816f010c2010ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2011ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 17)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2011ffff or 0x816f010c2011ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2012ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 18)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2012ffff or 0x816f010c2012ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2013ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 19)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2013ffff or 0x816f010c2013ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2014ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 20)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2014ffff or 0x816f010c2014ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2015ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 21)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2015ffff or 0x816f010c2015ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2016ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 22)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2016ffff or 0x816f010c2016ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2017ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 23)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2017ffff or 0x816f010c2017ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2018ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 24)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2018ffff or 0x816f010c2018ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only.

- **816f010c-2581ffff : Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)**

  This message is for the use case when an implementation has detected a Memory uncorrectable error recovery.

  May also be shown as 816f010c2581ffff or 0x816f010c2581ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0139

  User Response
  No action; information only. One of the DIMMs :

- **816f010d-0400ffff : The Drive [StorageVolumeElementName] has been enabled. (Drive 0)**

  This message is for the use case when an implementation has detected a Drive was Enabled.

  May also be shown as 816f010d0400ffff or 0x816f010d0400ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0167

  User Response
  No action; information only.

- **816f010d-0401ffff : The Drive [StorageVolumeElementName] has been enabled. (Drive 1)**

  This message is for the use case when an implementation has detected a Drive was Enabled.

  May also be shown as 816f010d0401ffff or 0x816f010d0401ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0167

  User Response
  No action; information only.

- **816f010d-0402ffff : The Drive [StorageVolumeElementName] has been enabled. (Drive 2)**

  This message is for the use case when an implementation has detected a Drive was Enabled.

  May also be shown as 816f010d0402ffff or 0x816f010d0402ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0167

  User Response
  No action; information only.

- **816f010d-0403ffff : The Drive [StorageVolumeElementName] has been enabled. (Drive 3)**

  This message is for the use case when an implementation has detected a Drive was Enabled.

May also be shown as 816f010d0403ffff or 0x816f010d0403ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0167

User Response
No action; information only.

- **816f010d-0404ffff : The Drive [StorageVolumeElementName] has been enabled. (Drive 4)**

  This message is for the use case when an implementation has detected a Drive was Enabled.

  May also be shown as 816f010d0404ffff or 0x816f010d0404ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0167

  User Response
  No action; information only.

- **816f010d-0405ffff : The Drive [StorageVolumeElementName] has been enabled. (Drive 5)**

  This message is for the use case when an implementation has detected a Drive was Enabled.

  May also be shown as 816f010d0405ffff or 0x816f010d0405ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0167

User Response
No action; information only.

- **816f010d-0406ffff : The Drive [StorageVolumeElementName] has been enabled. (Drive 6)**

  This message is for the use case when an implementation has detected a Drive was Enabled.

  May also be shown as 816f010d0406ffff or 0x816f010d0406ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0167

  User Response
  No action; information only.

- **816f010d-0407ffff : The Drive [StorageVolumeElementName] has been enabled. (Drive 7)**

  This message is for the use case when an implementation has detected a Drive was Enabled.

  May also be shown as 816f010d0407ffff or 0x816f010d0407ffff

  Severity
  Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0167

User Response
No action; information only.

- **816f010f-2201ffff : The System [ComputerSystemElementName] has recovered from a firmware hang. (Firmware Error)**

  This message is for the use case when an implementation has recovered from a System Firmware Hang.

  May also be shown as 816f010f2201ffff or 0x816f010f2201ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0187

  User Response
  No action; information only.

- **816f0113-0301ffff : System [ComputerSystemElementName] has recovered from a bus timeout. (CPU 1 PECI)**

  This message is for the use case when an implemenation has detected that a system has recovered from a Bus Timeout.

  May also be shown as 816f01130301ffff or 0x816f01130301ffff

  Severity
  Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0225

User Response

1. (Trained technician only) Replace microprocessor n (see Removing a microprocessor and heat sink and Replacing a microprocessor and heat sink).
2. If the problem persists and there is no other CPU with the same error indication, replace the system board.
3. (Trained technician only) Replace the system board (see Removing the system board and Replacing the system board). (n = microprocessor number)

- **816f0113-0302ffff : System [ComputerSystemElementName] has recovered from a bus timeout. (CPU 2 PECI)**

  This message is for the use case when an implemenation has detected that a system has recovered from a Bus Timeout.

  May also be shown as 816f01130302ffff or 0x816f01130302ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0225

  User Response

  1. (Trained technician only) Replace microprocessor n (see Removing a microprocessor and heat sink and Replacing a microprocessor and heat sink).
  2. If the problem persists and there is no other CPU with the same error indication, replace the system board.

3. (Trained technician only) Replace the system board (see Removing the system board and Replacing the system board). (n = microprocessor number)

- **816f011b-0701ffff : The connector [PhysicalConnectorElementName] configuration error has been repaired. (Front USB)**

  This message is for the use case when an implementation has detected an Interconnect Configuration was Repaired.

  May also be shown as 816f011b0701ffff or 0x816f011b0701ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0267

  User Response
  No action; information only. Front Video :

- **816f0125-0c01ffff : [ManagedElementName] detected as present. (Front Panel)**

  This message is for the use case when an implementation has detected a Managed Element is now Present.

  May also be shown as 816f01250c01ffff or 0x816f01250c01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0390

User Response
No action; information only.

- **816f0125-1001ffff : [ManagedElementName] detected as present. (PCI Riser 1)**

  This message is for the use case when an implementation has detected a Managed Element is now Present.

  May also be shown as 816f01251001ffff or 0x816f01251001ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0390

  User Response
  No action; information only.

- **816f0125-1002ffff : [ManagedElementName] detected as present. (PCI Riser 2)**

  This message is for the use case when an implementation has detected a Managed Element is now Present.

  May also be shown as 816f01251002ffff or 0x816f01251002ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0390

  User Response

No action; information only.

- **816f0125-2c01ffff : [ManagedElementName] detected as present. (Mezz Card)**

  This message is for the use case when an implementation has detected a Managed Element is now Present.

  May also be shown as 816f01252c01ffff or 0x816f01252c01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0390

  User Response
  No action; information only.

- **816f0207-0301ffff : [ProcessorElementName] has Recovered from FRB1/BIST condition. (CPU 1)**

  This message is for the use case when an implementation has detected a Processor Recovered - FRB1/BIST condition.

  May also be shown as 816f02070301ffff or 0x816f02070301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0045

  User Response
  No action; information only.

- **816f0207-0302ffff : [ProcessorElementName] has Recovered from FRB1/BIST condition. (CPU 2)**

  This message is for the use case when an implementation has detected a Processor Recovered - FRB1/BIST condition.

  May also be shown as 816f02070302ffff or 0x816f02070302ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0045

  User Response
  No action; information only.

- **816f0207-2584ffff : [ProcessorElementName] has Recovered from FRB1/BIST condition. (All CPUs)**

  This message is for the use case when an implementation has detected a Processor Recovered - FRB1/BIST condition.

  May also be shown as 816f02072584ffff or 0x816f02072584ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0045

  User Response
  No action; information only. One of the CPUs :

- **816f020d-0400ffff : Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 0)**

  This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

  May also be shown as 816f020d0400ffff or 0x816f020d0400ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0169

  User Response
  No action; information only.

- **816f020d-0401ffff : Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 1)**

  This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

  May also be shown as 816f020d0401ffff or 0x816f020d0401ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0169

  User Response
  No action; information only.

- **816f020d-0402ffff : Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 2)**

  This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

  May also be shown as 816f020d0402ffff or 0x816f020d0402ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0169

  User Response
  No action; information only.

- **816f020d-0403ffff : Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 3)**

  This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

  May also be shown as 816f020d0403ffff or 0x816f020d0403ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0169

  User Response
  No action; information only.

- **816f020d-0404ffff : Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 4)**

  This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

  May also be shown as 816f020d0404ffff or 0x816f020d0404ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0169

  User Response
  No action; information only.

- **816f020d-0405ffff : Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 5)**

  This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

  May also be shown as 816f020d0405ffff or 0x816f020d0405ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0169

  User Response
  No action; information only.

- **816f020d-0406ffff : Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 6)**

  This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

  May also be shown as 816f020d0406ffff or 0x816f020d0406ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0169

  User Response
  No action; information only.

- **816f020d-0407ffff : Failure no longer Predicted on drive [StorageVolumeElementName] for array [ComputerSystemElementName]. (Drive 7)**

  This message is for the use case when an implementation has detected an Array Failure is no longer Predicted.

  May also be shown as 816f020d0407ffff or 0x816f020d0407ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Predicted Failure

  SNMP Trap ID
  27

  CIM Information
  Prefix: PLAT **ID:** 0169

  User Response
  No action; information only.

- **816f0308-0a01ffff : [PowerSupplyElementName] has returned to a Normal Input State. (Power Supply 1)**

  This message is for the use case when an implementation has detected a Power Supply that has input that has returned to normal.

  May also be shown as 816f03080a01ffff or 0x816f03080a01ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0099

  User Response
  No action; information only.

- **816f0308-0a02ffff : [PowerSupplyElementName] has returned to a Normal Input State. (Power Supply 2)**

  This message is for the use case when an implementation has detected a Power Supply that has input that has returned to normal.

  May also be shown as 816f03080a02ffff or 0x816f03080a02ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0099

  User Response
  No action; information only.

- **816f030c-2001ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 1)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2001ffff or 0x816f030c2001ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2002ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 2)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2002ffff or 0x816f030c2002ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2003ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 3)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2003ffff or 0x816f030c2003ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2004ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 4)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2004ffff or 0x816f030c2004ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2005ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 5)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2005ffff or 0x816f030c2005ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2006ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 6)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2006ffff or 0x816f030c2006ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2007ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 7)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2007ffff or 0x816f030c2007ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2008ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 8)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2008ffff or 0x816f030c2008ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2009ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 9)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2009ffff or 0x816f030c2009ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-200affff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 10)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c200affff or 0x816f030c200affff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-200bffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 11)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c200bffff or 0x816f030c200bffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-200cffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 12)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c200cffff or 0x816f030c200cffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-200dffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 13)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c200dffff or 0x816f030c200dffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-200effff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 14)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c200effff or 0x816f030c200effff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-200fffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 15)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c200fffff or 0x816f030c200fffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2010ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 16)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2010ffff or 0x816f030c2010ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2011ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 17)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2011ffff or 0x816f030c2011ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2012ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 18)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2012ffff or 0x816f030c2012ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2013ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 19)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2013ffff or 0x816f030c2013ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2014ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 20)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2014ffff or 0x816f030c2014ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2015ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 21)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2015ffff or 0x816f030c2015ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2016ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 22)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2016ffff or 0x816f030c2016ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2017ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 23)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2017ffff or 0x816f030c2017ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f030c-2018ffff : Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has recovered. (DIMM 24)**

  This message is for the use case when an implementation has detected a Memory Scrub failure recovery.

  May also be shown as 816f030c2018ffff or 0x816f030c2018ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0137

  User Response
  No action; information only.

- **816f0313-1701ffff : System [ComputerSystemElementName] has recovered from an NMI. (NMI State)**

  This message is for the use case when an implementation has detected a Software NMI has been Recovered from.

  May also be shown as 816f03131701ffff or 0x816f03131701ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0230

  User Response
  No action; information only.

- **816f040c-2001ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 1)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2001ffff or 0x816f040c2001ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2002ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 2)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2002ffff or 0x816f040c2002ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2003ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 3)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2003ffff or 0x816f040c2003ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2004ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 4)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2004ffff or 0x816f040c2004ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2005ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 5)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2005ffff or 0x816f040c2005ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2006ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 6)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2006ffff or 0x816f040c2006ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2007ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 7)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2007ffff or 0x816f040c2007ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2008ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 8)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2008ffff or 0x816f040c2008ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2009ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 9)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2009ffff or 0x816f040c2009ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-200affff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 10)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c200affff or 0x816f040c200affff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-200bffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 11)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c200bffff or 0x816f040c200bffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-200cffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 12)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c200cffff or 0x816f040c200cffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-200dffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 13)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c200dffff or 0x816f040c200dffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-200effff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 14)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c200effff or 0x816f040c200effff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-200fffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 15)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c200fffff or 0x816f040c200fffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2010ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 16)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2010ffff or 0x816f040c2010ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2011ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 17)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2011ffff or 0x816f040c2011ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2012ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 18)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2012ffff or 0x816f040c2012ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2013ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 19)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2013ffff or 0x816f040c2013ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2014ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 20)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2014ffff or 0x816f040c2014ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2015ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 21)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2015ffff or 0x816f040c2015ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2016ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 22)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2016ffff or 0x816f040c2016ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2017ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 23)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2017ffff or 0x816f040c2017ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2018ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (DIMM 24)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2018ffff or 0x816f040c2018ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only.

- **816f040c-2581ffff : [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName]. (All DIMMS)**

  This message is for the use case when an implementation has detected that Memory has been Enabled.

  May also be shown as 816f040c2581ffff or 0x816f040c2581ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0130

  User Response
  No action; information only. One of the DIMMs :

- **816f0413-2582ffff : A PCI PERR recovery has occurred on system [ComputerSystemElementName]. (PCIs)**

  This message is for the use case when an implementation has detected a PCI PERR recovered.

  May also be shown as 816f04132582ffff or 0x816f04132582ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0233

  User Response
  No action; information only.

- **816f0507-0301ffff : [ProcessorElementName] has Recovered from a Configuration Mismatch. (CPU 1)**

  This message is for the use case when an implementation has Recovered from a Processor Configuration Mismatch.

  May also be shown as 816f05070301ffff or 0x816f05070301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0063

  User Response
  No action; information only.

- **816f0507-0302ffff : [ProcessorElementName] has Recovered from a Configuration Mismatch. (CPU 2)**

  This message is for the use case when an implementation has Recovered from a Processor Configuration Mismatch.

  May also be shown as 816f05070302ffff or 0x816f05070302ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0063

  User Response
  No action; information only.

- **816f0507-2584ffff : [ProcessorElementName] has Recovered from a Configuration Mismatch. (All CPUs)**

  This message is for the use case when an implementation has Recovered from a Processor Configuration Mismatch.

  May also be shown as 816f05072584ffff or 0x816f05072584ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0063

  User Response
  No action; information only. One of the CPUs :

- **816f050c-2001ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2001ffff or 0x816f050c2001ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2002ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2002ffff or 0x816f050c2002ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2003ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2003ffff or 0x816f050c2003ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2004ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2004ffff or 0x816f050c2004ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2005ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2005ffff or 0x816f050c2005ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2006ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2006ffff or 0x816f050c2006ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2007ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2007ffff or 0x816f050c2007ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2008ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2008ffff or 0x816f050c2008ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2009ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2009ffff or 0x816f050c2009ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-200affff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c200affff or 0x816f050c200affff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-200bffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c200bffff or 0x816f050c200bffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-200cffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c200cffff or 0x816f050c200cffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-200dffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c200dffff or 0x816f050c200dffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-200effff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c200effff or 0x816f050c200effff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-200fffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c200fffff or 0x816f050c200fffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2010ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2010ffff or 0x816f050c2010ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2011ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 17)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2011ffff or 0x816f050c2011ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2012ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 18)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2012ffff or 0x816f050c2012ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2013ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 19)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2013ffff or 0x816f050c2013ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2014ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 20)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2014ffff or 0x816f050c2014ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2015ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 21)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2015ffff or 0x816f050c2015ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2016ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 22)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2016ffff or 0x816f050c2016ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2017ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 23)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2017ffff or 0x816f050c2017ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2018ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 24)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2018ffff or 0x816f050c2018ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only.

- **816f050c-2581ffff : Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (All DIMMS)**

  This message is for the use case when an implementation has detected that the Memory Logging Limit has been Removed.

  May also be shown as 816f050c2581ffff or 0x816f050c2581ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - Memory

  SNMP Trap ID
  43

  CIM Information
  Prefix: PLAT **ID:** 0145

  User Response
  No action; information only. One of the DIMMs :

- **816f050d-0400ffff : Critical Array [ComputerSystemElementName] has deasserted. (Drive 0)**

  This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

  May also be shown as 816f050d0400ffff or 0x816f050d0400ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0175

  User Response
  No action; information only.

- **816f050d-0401ffff : Critical Array [ComputerSystemElementName] has deasserted. (Drive 1)**

  This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

  May also be shown as 816f050d0401ffff or 0x816f050d0401ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0175

  User Response
  No action; information only.

- **816f050d-0402ffff : Critical Array [ComputerSystemElementName] has deasserted. (Drive 2)**

  This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

  May also be shown as 816f050d0402ffff or 0x816f050d0402ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0175

  User Response
  No action; information only.

- **816f050d-0403ffff : Critical Array [ComputerSystemElementName] has deasserted. (Drive 3)**

  This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

  May also be shown as 816f050d0403ffff or 0x816f050d0403ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0175

  User Response
  No action; information only.

- **816f050d-0404ffff : Critical Array [ComputerSystemElementName] has deasserted. (Drive 4)**

  This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

  May also be shown as 816f050d0404ffff or 0x816f050d0404ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0175

  User Response
  No action; information only.

- **816f050d-0405ffff : Critical Array [ComputerSystemElementName] has deasserted. (Drive 5)**

This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0405ffff or 0x816f050d0405ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0175

User Response
No action; information only.

- **816f050d-0406ffff : Critical Array [ComputerSystemElementName] has deasserted. (Drive 6)**

  This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

  May also be shown as 816f050d0406ffff or 0x816f050d0406ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0175

  User Response
  No action; information only.

- **816f050d-0407ffff : Critical Array [ComputerSystemElementName] has deasserted. (Drive 7)**

This message is for the use case when an implementation has detected that an Critiacal Array has deasserted.

May also be shown as 816f050d0407ffff or 0x816f050d0407ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0175

User Response
No action; information only.

- **816f0607-0301ffff : An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has deasserted. (CPU 1)**

  This message is for the use case when an SM BIOS Uncorrectable CPU complex error has deasserted.

  May also be shown as 816f06070301ffff or 0x816f06070301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0817

  User Response
  No action; information only.

- **816f0607-0302ffff : An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has deasserted. (CPU 2)**

This message is for the use case when an SM BIOS Uncorrectable CPU complex error has deasserted.

May also be shown as 816f06070302ffff or 0x816f06070302ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - CPU

SNMP Trap ID
40

CIM Information
Prefix: PLAT **ID:** 0817

User Response
No action; information only.

- **816f0607-2584ffff : An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has deasserted. (All CPUs)**

  This message is for the use case when an SM BIOS Uncorrectable CPU complex error has deasserted.

  May also be shown as 816f06072584ffff or 0x816f06072584ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - CPU

  SNMP Trap ID
  40

  CIM Information
  Prefix: PLAT **ID:** 0817

  User Response
  No action; information only. One of the CPUs :

- **816f0608-1301ffff : [PowerSupplyElementName] Configuration is OK. (PS Configuration)**

  This message is for the use case when an implementation when a Power Supply configuration is OK.

May also be shown as 816f06081301ffff or 0x816f06081301ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Power

SNMP Trap ID
4

CIM Information
Prefix: PLAT **ID:** 0105

User Response
No action; information only.

- **816f060d-0400ffff : Array in system [ComputerSystemElementName] has been restored. (Drive 0)**

  This message is for the use case when an implementation has detected that a Failed Array has been Restored.

  May also be shown as 816f060d0400ffff or 0x816f060d0400ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0177

  User Response
  No action; information only.

- **816f060d-0401ffff : Array in system [ComputerSystemElementName] has been restored. (Drive 1)**

  This message is for the use case when an implementation has detected that a Failed Array has been Restored.

  May also be shown as 816f060d0401ffff or 0x816f060d0401ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0177

User Response
No action; information only.

- **816f060d-0402ffff : Array in system [ComputerSystemElementName] has been restored. (Drive 2)**

  This message is for the use case when an implementation has detected that a Failed Array has been Restored.

  May also be shown as 816f060d0402ffff or 0x816f060d0402ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0177

  User Response
  No action; information only.

- **816f060d-0403ffff : Array in system [ComputerSystemElementName] has been restored. (Drive 3)**

  This message is for the use case when an implementation has detected that a Failed Array has been Restored.

  May also be shown as 816f060d0403ffff or 0x816f060d0403ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0177

User Response
No action; information only.

- **816f060d-0404ffff : Array in system [ComputerSystemElementName] has been restored. (Drive 4)**

  This message is for the use case when an implementation has detected that a Failed Array has been Restored.

  May also be shown as 816f060d0404ffff or 0x816f060d0404ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0177

  User Response
  No action; information only.

- **816f060d-0405ffff : Array in system [ComputerSystemElementName] has been restored. (Drive 5)**

  This message is for the use case when an implementation has detected that a Failed Array has been Restored.

  May also be shown as 816f060d0405ffff or 0x816f060d0405ffff

  Severity

Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0177

User Response
No action; information only.

- **816f060d-0406ffff : Array in system [ComputerSystemElementName] has been restored. (Drive 6)**

  This message is for the use case when an implementation has detected that a Failed Array has been Restored.

  May also be shown as 816f060d0406ffff or 0x816f060d0406ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Hard Disk drive

  SNMP Trap ID
  5

  CIM Information
  Prefix: PLAT **ID:** 0177

  User Response
  No action; information only.

- **816f060d-0407ffff : Array in system [ComputerSystemElementName] has been restored. (Drive 7)**

  This message is for the use case when an implementation has detected that a Failed Array has been Restored.

  May also be shown as 816f060d0407ffff or 0x816f060d0407ffff

  Severity
  Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Hard Disk drive

SNMP Trap ID
5

CIM Information
Prefix: PLAT **ID:** 0177

User Response
No action; information only.

- **816f070c-2001ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 1)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2001ffff or 0x816f070c2001ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only.

- **816f070c-2002ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 2)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2002ffff or 0x816f070c2002ffff

  Severity

Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0127

User Response
No action; information only.

- **816f070c-2003ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 3)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2003ffff or 0x816f070c2003ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only.

- **816f070c-2004ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 4)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2004ffff or 0x816f070c2004ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0127

User Response
No action; information only.

- **816f070c-2005ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 5)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2005ffff or 0x816f070c2005ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only.

- **816f070c-2006ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 6)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2006ffff or 0x816f070c2006ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0127

User Response
No action; information only.

- **816f070c-2007ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 7)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2007ffff or 0x816f070c2007ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only.

- **816f070c-2008ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 8)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2008ffff or 0x816f070c2008ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0127

User Response
No action; information only.

- **816f070c-2009ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 9)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2009ffff or 0x816f070c2009ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only.

- **816f070c-200affff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 10)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c200affff or 0x816f070c200affff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0127

User Response
No action; information only.

- **816f070c-200bffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 11)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c200bffff or 0x816f070c200bffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only.

- **816f070c-200cffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 12)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c200cffff or 0x816f070c200cffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0127

User Response
No action; information only.

- **816f070c-200dffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 13)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c200dffff or 0x816f070c200dffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only.

- **816f070c-200effff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 14)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c200effff or 0x816f070c200effff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0127

User Response
No action; information only.

- **816f070c-200fffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 15)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c200fffff or 0x816f070c200fffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only.

- **816f070c-2010ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 16)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2010ffff or 0x816f070c2010ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0127

User Response
No action; information only.

- **816f070c-2011ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 17)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2011ffff or 0x816f070c2011ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only.

- **816f070c-2012ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 18)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2012ffff or 0x816f070c2012ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0127

User Response
No action; information only.

- **816f070c-2013ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 19)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2013ffff or 0x816f070c2013ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only.

- **816f070c-2014ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 20)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2014ffff or 0x816f070c2014ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0127

User Response
No action; information only.

- **816f070c-2015ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 21)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2015ffff or 0x816f070c2015ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only.

- **816f070c-2016ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 22)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2016ffff or 0x816f070c2016ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0127

User Response
No action; information only.

- **816f070c-2017ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 23)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2017ffff or 0x816f070c2017ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only.

- **816f070c-2018ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (DIMM 24)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2018ffff or 0x816f070c2018ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Memory

SNMP Trap ID
41

CIM Information
Prefix: PLAT **ID:** 0127

User Response
No action; information only.

- **816f070c-2581ffff : Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName]has deasserted. (All DIMMS)**

  This message is for the use case when an implementation has detected a Memory DIMM configuration error has deasserted.

  May also be shown as 816f070c2581ffff or 0x816f070c2581ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Memory

  SNMP Trap ID
  41

  CIM Information
  Prefix: PLAT **ID:** 0127

  User Response
  No action; information only. One of the DIMMs :

- **816f070d-0400ffff : Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 0)**

  This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

  May also be shown as 816f070d0400ffff or 0x816f070d0400ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0179

User Response
No action; information only.

- **816f070d-0401ffff : Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 1)**

  This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

  May also be shown as 816f070d0401ffff or 0x816f070d0401ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0179

  User Response
  No action; information only.

- **816f070d-0402ffff : Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 2)**

  This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

  May also be shown as 816f070d0402ffff or 0x816f070d0402ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0179

User Response
No action; information only.

- **816f070d-0403ffff : Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 3)**

  This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

  May also be shown as 816f070d0403ffff or 0x816f070d0403ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0179

  User Response
  No action; information only.

- **816f070d-0404ffff : Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 4)**

  This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

  May also be shown as 816f070d0404ffff or 0x816f070d0404ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0179

User Response
No action; information only.

- **816f070d-0405ffff : Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 5)**

  This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

  May also be shown as 816f070d0405ffff or 0x816f070d0405ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0179

  User Response
  No action; information only.

- **816f070d-0406ffff : Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 6)**

  This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

  May also be shown as 816f070d0406ffff or 0x816f070d0406ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0179

User Response
No action; information only.

- **816f070d-0407ffff : Rebuild completed for Array in system [ComputerSystemElementName]. (Drive 7)**

  This message is for the use case when an implementation has detected that an Array Rebuild has Completed.

  May also be shown as 816f070d0407ffff or 0x816f070d0407ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0179

  User Response
  No action; information only.

- **816f0807-0301ffff : [ProcessorElementName] has been Enabled. (CPU 1)**

  This message is for the use case when an implementation has detected a Processor has been Enabled.

  May also be shown as 816f08070301ffff or 0x816f08070301ffff

  Severity

Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0060

User Response
No action; information only.

- **816f0807-0302ffff : [ProcessorElementName] has been Enabled. (CPU 2)**

  This message is for the use case when an implementation has detected a Processor has been Enabled.

  May also be shown as 816f08070302ffff or 0x816f08070302ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0060

  User Response
  No action; information only.

- **816f0807-2584ffff : [ProcessorElementName] has been Enabled. (All CPUs)**

  This message is for the use case when an implementation has detected a Processor has been Enabled.

  May also be shown as 816f08072584ffff or 0x816f08072584ffff

  Severity
  Info

  Serviceable

No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0060

User Response
No action; information only. One of the CPUs :

- **816f0813-2581ffff : System [ComputerSystemElementName]has recovered from an Uncorrectable Bus Error. (DIMMs)**

  This message is for the use case when an implementation has detected a that a system has recovered from a Bus Uncorrectable Error.

  May also be shown as 816f08132581ffff or 0x816f08132581ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0241

  User Response
  No action; information only.

- **816f0813-2582ffff : System [ComputerSystemElementName]has recovered from an Uncorrectable Bus Error. (PCIs)**

  This message is for the use case when an implementation has detected a that a system has recovered from a Bus Uncorrectable Error.

  May also be shown as 816f08132582ffff or 0x816f08132582ffff

  Severity
  Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0241

User Response
No action; information only.

- **816f0813-2584ffff : System [ComputerSystemElementName]has recovered from an Uncorrectable Bus Error. (CPUs)**

  This message is for the use case when an implementation has detected a that a system has recovered from a Bus Uncorrectable Error.

  May also be shown as 816f08132584ffff or 0x816f08132584ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Other

  SNMP Trap ID
  50

  CIM Information
  Prefix: PLAT **ID:** 0241

  User Response
  No action; information only.

- **816f090c-2001ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 1)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2001ffff or 0x816f090c2001ffff

  Severity
  Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0143

User Response
No action; information only.

- **816f090c-2002ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 2)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2002ffff or 0x816f090c2002ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

  User Response
  No action; information only.

- **816f090c-2003ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 3)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2003ffff or 0x816f090c2003ffff

  Severity
  Info

  Serviceable

No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0143

User Response
No action; information only.

- **816f090c-2004ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 4)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2004ffff or 0x816f090c2004ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

  User Response
  No action; information only.

- **816f090c-2005ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 5)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2005ffff or 0x816f090c2005ffff

  Severity
  Info

  Serviceable
  No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0143

User Response
No action; information only.

- **816f090c-2006ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 6)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2006ffff or 0x816f090c2006ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

  User Response
  No action; information only.

- **816f090c-2007ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 7)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2007ffff or 0x816f090c2007ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support

No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0143

User Response
No action; information only.

- **816f090c-2008ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 8)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2008ffff or 0x816f090c2008ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

  User Response
  No action; information only.

- **816f090c-2009ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 9)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2009ffff or 0x816f090c2009ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0143

User Response
No action; information only.

- **816f090c-200affff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 10)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c200affff or 0x816f090c200affff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

  User Response
  No action; information only.

- **816f090c-200bffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 11)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c200bffff or 0x816f090c200bffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category

System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0143

User Response
No action; information only.

- **816f090c-200cffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 12)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c200cffff or 0x816f090c200cffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

  User Response
  No action; information only.

- **816f090c-200dffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 13)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c200dffff or 0x816f090c200dffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0143

User Response
No action; information only.

- **816f090c-200effff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 14)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c200effff or 0x816f090c200effff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0143

User Response
No action; information only.

- **816f090c-200fffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 15)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c200fffff or 0x816f090c200fffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
System - Other

SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0143

User Response
No action; information only.

- **816f090c-2010ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 16)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2010ffff or 0x816f090c2010ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

  User Response
  No action; information only.

- **816f090c-2011ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 17)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2011ffff or 0x816f090c2011ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

CIM Information
Prefix: PLAT **ID:** 0143

User Response
No action; information only.

- **816f090c-2012ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 18)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2012ffff or 0x816f090c2012ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

  User Response
  No action; information only.

- **816f090c-2013ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 19)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2013ffff or 0x816f090c2013ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information

Prefix: PLAT **ID:** 0143

User Response
No action; information only.

- **816f090c-2014ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 20)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2014ffff or 0x816f090c2014ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

  User Response
  No action; information only.

- **816f090c-2015ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 21)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2015ffff or 0x816f090c2015ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

User Response
No action; information only.

- **816f090c-2016ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 22)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2016ffff or 0x816f090c2016ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

  User Response
  No action; information only.

- **816f090c-2017ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 23)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2017ffff or 0x816f090c2017ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

  User Response

No action; information only.

- **816f090c-2018ffff : [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled. (DIMM 24)**

  This message is for the use case when an implementation has detected Memory is no longer Throttled.

  May also be shown as 816f090c2018ffff or 0x816f090c2018ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  System - Other

  SNMP Trap ID

  CIM Information
  Prefix: PLAT **ID:** 0143

  User Response
  No action; information only.

- **816f0a07-0301ffff : The Processor [ProcessorElementName] is no longer operating in a Degraded State. (CPU 1)**

  This message is for the use case when an implementation has detected a Processor is no longer running in the Degraded state.

  May also be shown as 816f0a070301ffff or 0x816f0a070301ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - CPU

  SNMP Trap ID
  42

  CIM Information
  Prefix: PLAT **ID:** 0039

  User Response

No action; information only.

- **816f0a07-0302ffff : The Processor [ProcessorElementName] is no longer operating in a Degraded State. (CPU 2)**

  This message is for the use case when an implementation has detected a Processor is no longer running in the Degraded state.

  May also be shown as 816f0a070302ffff or 0x816f0a070302ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Warning - CPU

  SNMP Trap ID
  42

  CIM Information
  Prefix: PLAT **ID:** 0039

  User Response
  No action; information only.

- **816f0a0c-2001ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 1)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2001ffff or 0x816f0a0c2001ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

User Response
No action; information only.

- **816f0a0c-2002ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 2)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2002ffff or 0x816f0a0c2002ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

  User Response
  No action; information only.

- **816f0a0c-2003ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 3)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2003ffff or 0x816f0a0c2003ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information

Prefix: PLAT **ID:** 0147

User Response
No action; information only.

- **816f0a0c-2004ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 4)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2004ffff or 0x816f0a0c2004ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

  User Response
  No action; information only.

- **816f0a0c-2005ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 5)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2005ffff or 0x816f0a0c2005ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

CIM Information
Prefix: PLAT **ID:** 0147

User Response
No action; information only.

- **816f0a0c-2006ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 6)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2006ffff or 0x816f0a0c2006ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

  User Response
  No action; information only.

- **816f0a0c-2007ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 7)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2007ffff or 0x816f0a0c2007ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID

0

CIM Information
Prefix: PLAT **ID:** 0147

User Response
No action; information only.

- **816f0a0c-2008ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 8)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2008ffff or 0x816f0a0c2008ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

  User Response
  No action; information only.

- **816f0a0c-2009ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 9)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2009ffff or 0x816f0a0c2009ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0147

User Response
No action; information only.

- **816f0a0c-200affff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 10)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c200affff or 0x816f0a0c200affff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

  User Response
  No action; information only.

- **816f0a0c-200bffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 11)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c200bffff or 0x816f0a0c200bffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category

Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0147

User Response
No action; information only.

- **816f0a0c-200cffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 12)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c200cffff or 0x816f0a0c200cffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

  User Response
  No action; information only.

- **816f0a0c-200dffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 13)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c200dffff or 0x816f0a0c200dffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0147

User Response
No action; information only.

- **816f0a0c-200effff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 14)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c200effff or 0x816f0a0c200effff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

  User Response
  No action; information only.

- **816f0a0c-200fffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 15)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c200fffff or 0x816f0a0c200fffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support

No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0147

User Response
No action; information only.

- **816f0a0c-2010ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 16)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2010ffff or 0x816f0a0c2010ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

  User Response
  No action; information only.

- **816f0a0c-2011ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 17)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2011ffff or 0x816f0a0c2011ffff

  Severity
  Info

  Serviceable
  No

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0147

User Response
No action; information only.

- **816f0a0c-2012ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 18)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2012ffff or 0x816f0a0c2012ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

  User Response
  No action; information only.

- **816f0a0c-2013ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 19)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2013ffff or 0x816f0a0c2013ffff

  Severity
  Info

  Serviceable

No

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0147

User Response
No action; information only.

- **816f0a0c-2014ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 20)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2014ffff or 0x816f0a0c2014ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

  User Response
  No action; information only.

- **816f0a0c-2015ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 21)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2015ffff or 0x816f0a0c2015ffff

  Severity
  Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0147

User Response
No action; information only.

- **816f0a0c-2016ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 22)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2016ffff or 0x816f0a0c2016ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

  User Response
  No action; information only.

- **816f0a0c-2017ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 23)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2017ffff or 0x816f0a0c2017ffff

  Severity

Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Temperature

SNMP Trap ID
0

CIM Information
Prefix: PLAT **ID:** 0147

User Response
No action; information only.

- **816f0a0c-2018ffff : An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName]. (DIMM 24)**

  This message is for the use case when an implementation has detected an Over Temperature Condition for Memory that has been Removed.

  May also be shown as 816f0a0c2018ffff or 0x816f0a0c2018ffff

  Severity
  Info

  Serviceable
  No

  Automatically notify support
  No

  Alert Category
  Critical - Temperature

  SNMP Trap ID
  0

  CIM Information
  Prefix: PLAT **ID:** 0147

  User Response
  No action; information only.

- **816f0a13-0301ffff : System [ComputerSystemElementName] has recovered from a Fatal Bus Error. (CPU 1 PECI)**

  This message is for the use case when an implementation has detected that a system has recovered from a Bus Fatal Error.

  May also be shown as 816f0a130301ffff or 0x816f0a130301ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0245

User Response

1. (Trained technician only) Replace microprocessor n (see Removing a microprocessor and heat sink and Replacing a microprocessor and heat sink).
2. If the problem persists and there is no other CPU with the same error indication, replace the system board.
3. (Trained technician only) Replace the system board (see Removing the system board and Replacing the system board). (n = microprocessor number)

- **816f0a13-0302ffff : System [ComputerSystemElementName] has recovered from a Fatal Bus Error. (CPU 2 PECI)**

This message is for the use case when an implementation has detected that a system has recovered from a Bus Fatal Error.

May also be shown as 816f0a130302ffff or 0x816f0a130302ffff

Severity
Info

Serviceable
No

Automatically notify support
No

Alert Category
Critical - Other

SNMP Trap ID
50

CIM Information
Prefix: PLAT **ID:** 0245

User Response

1. (Trained technician only) Replace microprocessor n (see Removing a microprocessor and heat sink and Replacing a microprocessor and heat sink).

2. If the problem persists and there is no other CPU with the same error indication, replace the system board.
3. (Trained technician only) Replace the system board (see Removing the system board and Replacing the system board). (n = microprocessor number)

Appendix B. UEFI/POST diagnostic codes

UEFI/POST diagnostic error codes can be generated when the server starts or while the server is running. UEFI/POST codes are logged in the IMM event log in the server.

For each event code, the following fields are displayed:

Event identifier
An identifier that uniquely identifies an event.

Event description
The logged message string that appears for an event.

Explanation
Additional information to explain why the event occurred.

Severity
An indication of the level of concern for the condition. The severity is abbreviated in the event log to the first character. The following severities can be displayed.

Table 29. Event severity levels

Severity	Description
Informational	An informational message is something that was recorded for audit purposes, usually a user action or a change of states that is normal behavior.
Warning	A warning is not as severe as an error, but if possible, the condition should be corrected before it becomes an error. It might also be a condition that requires additional monitoring or maintenance.
Error	An error typically indicates a failure or critical condition that impairs service or an expected function.

User response
The actions that you should take to resolve the event.

Perform the steps in the order shown until the problem is solved. After you perform all of the actions that are described in this field, if you cannot solve the problem, contact Lenovo Support.

The following is the list of the UEFI/POST error codes and suggested actions to correct the detected problems.

List of UEFI events

This section lists all messages that can be sent from UEFI.

- **I.11002 [I.11002] A processor mismatch has been detected between one or more processors in the system.**

  Explanation: One or More Mismatched Processors Detected

  Severity
  Error

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User Response

Complete the following steps:

1. This message could occur with messages about other Processor configuration problems. Resolve those messages first.
2. If the problem persists, ensure that matching processors are installed (i.e., matching option part numbers, etc)
3. Verify that the Processor's are installed in the correct sockets according to the service information for this product. If not, correct that problem.
4. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
5. (Trained Service technician only) Replace mismatching processor. Inspect Processor socket and replace the system board first if socket is damaged.

- **I.18005 [I.18005] A discrepancy has been detected in the number of cores reported by one or more processor packages within the system.**

  Explanation: Processors have mismatched number of cores

  Severity

  Error

  User Response

  Complete the following steps:

  1. If this is a newly installed option, ensure that matching Processors are installed in the correct Processor sockets according to the service information for this product.
  2. Check IBM support site for an applicable service bulletin that applies to this Processor error.
  3. (Trained Service technician only) Replace Processor. Inspect Processor socket and replace the system board first if socket is damaged.

- **I.18006 [I.18006] A mismatch between the maximum allowed QPI link speed has been detected for one or more processor packages.**

  Explanation: Processors have mismatched QPI Speed

  Severity

  Error

  User Response

  Complete the following steps:

  1. If this is a newly installed option, ensure that matching Processor CPUs are installed in the correct ProcessorCPU sockets according to the service information for this product
  2. Check IBM support site for an applicable retain tipservice bulletin or firmware update that applies to this Processor error.
  3. (Trained Service technician only) Replace Processor. Inspect Processor socket and replace the system board first if socket is damaged.

- **I.18007 [I.18007] A power segment mismatch has been detected for one or more processor packages.**

Explanation: Processors have mismatched Power Segments

Severity
Error

User Response
Complete the following steps:

1. Processors installed do not have the same power requirements
2. Ensure that all Processors have matching power requirements (such as 65, 95, or 130 Watts)
3. If power requirements match, check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
4. (Trained Service technician only) Replace Processor. Inspect Processor socket and replace the system board first if socket is damaged

- **I.18008 [I.18008] Currently, there is no additional information for this event.**

Explanation: Processors have mismatched Internal DDR3 Frequency

Severity
Error

User Response
Complete the following steps:

1. Verify that matching DIMMs are installed in the correct population sequence, according to the service information for this product. {Add link to Memory chart.} Correct any configuration issues found.
2. (Trained Service technician only) Replace associated Processor. Inspect Processor socket and replace the system board first if socket is damaged

- **I.18009 [I.18009] A core speed mismatch has been detected for one or more processor packages.**

Explanation: Processors have mismatched Core Speed

Severity
Error

User Response
Complete the following steps:

1. Verify that matching processors are installed in the correct processor sockets according to the service information for this product. Correct any mismatch issues found.
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace Processor. Inspect Processor socket and replace the system board first if socket is damaged.

- **I.1800A [I.1800A] A mismatch has been detected between the speed at which a QPI link has trained between two or more processor packages.**

Explanation: Processors have mismatched Bus Speed

Severity
Error

User Response
Complete the following steps:

1. Verify that the Processor is a valid option that is listed as a Server Proven device for this system. If not, remove the Processor and install a Server Proven one.
2. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product. Correct any mismatch found.
3. Check IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
4. (Trained Service technician only) Replace the Processor. Inspect Processor socket and replace the system board first if socket is damaged

- **I.1800B [I.1800B] A cache size mismatch has been detected for one or more processor packages.**

Explanation: Processors have one or more cache levels with mismatched size

Severity
Error

User Response
Complete the following steps:

1. Verify that matching processors are installed in the correct processor sockets according to the service information for this product. Correct any mismatch found.
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace the system board.

- **I.1800C [I.1800C] A cache type mismatch has been detected for one or more processor packages.**

Explanation: Processors have one or more cache levels with mismatched type

Severity
Error

User Response
Complete the following steps:

1. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product.
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace the system board.

- **I.1800D [I.1800D] A cache associativity mismatch has been detected for one or more processor packages.**

Explanation: Processors have one or more cache levels with mismatched associativity

Severity

Error

User Response

Complete the following steps:

1. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product.
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace the system board.

- **I.1800E [I.1800E] A processor model mismatch has been detected for one or more processor packages.**

  Explanation: Processors have mismatched Model Number

  Severity

  Error

  User Response

  Complete the following steps:

  1. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product.
  2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
  3. (Trained Service technician only) Replace the system board.

- **I.1800F [I.1800F] A processor family mismatch has been detected for one or more processor packages.**

  Explanation: Processors have mismatched Family

  Severity

  Error

  User Response

  Complete the following steps:

  1. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product
  2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
  3. (Trained Service technician only) Replace the system board.

- **I.18010 [I.18010] A processor stepping mismatch has been detected for one or more processor packages.**

  Explanation: Processors of the same model have mismatched Stepping ID

  Severity

  Error

  User Response

Complete the following steps:

1. Verify that matching Processors are installed in the correct Processor sockets according to the service information for this product.
2. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. (Trained Service technician only) Replace the system board.

- **I.2018002 [I.2018002] The device found at Bus % Device % Function % could not be configured due to resource constraints. The Vendor ID for the device is % and the Device ID is %.**

  Explanation: OUT_OF_RESOURCES (PCI Option ROM)

  Severity
  Info

  User Response
  Complete the following steps:

  1. If this PCIe device and/or any attached cables were recently installed, moved, serviced or upgraded, reseat adapter and any attached cables.
  2. Check IBM support site for any applicable service bulletin or UEFI or adapter firmware update that applies to this error. NOTE: It may be necessary to disable unused option ROMs from UEFI F1 setup or ASU or using adapter manufacturer utilities so that adapter firmware can be updated.
  3. Move card to a different slot. If slot not available or error re-occurs, replace adapter.
  4. (Trained Service technician only) If adapter was moved to a different slot and error did not re-occur, verify that this is not a system limitation and then replace the system board. Also, if this is not the initial installation and the error persists after adapter replacement, replace system board.

- **I.2018003 [I.2018003] A bad option ROM checksum was detected for the device found at Bus % Device % Function %. The Vendor ID for the device is % and the Device ID is %.**

  Explanation: ROM CHECKSUM ERROR

  Severity
  Error

  User Response
  Complete the following steps:

  1. If this PCIe device and/or any attached cables were recently installed, moved, serviced or upgraded, reseat adapter and any attached cables.
  2. Move adapter to a different system slot, if available.
  3. Check IBM support site for any applicable service bulletin or UEFI or adapter firmware update that applies to this error. NOTE: It may be necessary to configure slot to Gen1 or to use special utility software so that adapter firmware can be upgraded. Gen1/Gen2 settings can be configured via F1 Setup -> System Settings -> Devices and I/O Ports -> PCIe Gen1/Gen2/Gen3 Speed Selection, or the ASU Utility.
  4. Replace adapter.

- **I.3048005 [I.3048005] UEFI has booted from the backup flash bank.**

  Explanation: Booting Backup UEFI Image

  Severity
  Info

  User Response
  Complete the following steps:

  1. Refer to service information for this product section on UEFI Recovery to return system to primary bank.

- **I.3808004 [I.3808004] The IMM System Event log (SEL) is full.**

  Explanation: IPMI System Event Log is Full

  Severity
  Info

  User Response
  Complete the following steps:

  1. Use IMM Web Interface to clear event log.
  2. If IMM communication is unavailable, use F1 Setup to access System Event Logs Menu and Choose Clear IMM System Event Log and Restart Server.

- **I.3818001 [I.3818001] The firmware image capsule signature for the currently booted flash bank is invalid.**

  Explanation: Current Bank CRTM Capsule Update Signature Invalid

  Severity
  Info

  User Response
  Complete the following steps:

  1. Reboot system. Will come up on backup UEFI image. Reflash the primary UEFI image.
  2. If error does not persist no additional recovery action is required.
  3. If error persists, or boot is unsuccessful, (Trained service technician only) Replace the system board.

- **I.3818002 [I.3818002] The firmware image capsule signature for the non-booted flash bank is invalid.**

  Explanation: Opposite Bank CRTM Capsule Update Signature Invalid

  Severity
  Info

  User Response
  Complete the following steps:

  1. Reflash backup UEFI image.
  2. If error does not persist no additional recovery action is required.

3. If error persists, or boot is unsuccessful, (Trained service technician only) Replace the system board.

- **I.3818003 [I.3818003] The CRTM flash driver could not lock the secure flash region.**

  Explanation: CRTM Could not lock secure flash region

  Severity
  Info

  User Response
  Complete the following steps:

  1. If system failed to boot successfully, DC cycle system.
  2. If system boots to F1 setup, flash UEFI image and reset bank to primary (if required). If system boots without error, recovery is complete and no additional action is required.
  3. If system fails to boot, or if flash attempt fails, (Trained service technician only) Replace the system board.

- **I.58015 [I.58015] Memory spare copy initiated.**

  Explanation: Spare Copy Started

  Severity
  Info

  User Response
  Complete the following steps:

  1. No user required for this event. This is for informational purposes only.

- **I.580A4 [I.580A4] Memory population change detected.**

  Explanation: DIMM Population Change Detected

  Severity
  Info

  User Response
  Complete the following steps:

  1. Check system event log for uncorrected DIMM failures and replace those DIMMs.

- **I.580A5 [I.580A5] Mirror Fail-over complete. DIMM number % has failed over to to the mirrored copy.**

  Explanation: DIMM Mirror Fail-over Detected

  Severity
  Info

  User Response
  Complete the following steps:

  1. Check the system-event log for uncorrected DIMM failures and replace those DIMMs.

- **I.580A6 [I.580A6] Memory spare copy has completed successfully.**

  Explanation: Spare Copy Complete

  Severity
  Info

  User Response
  Complete the following steps:
  1. Check system log for related DIMM failures and replace those DIMMs.

- **S.1100B [S.1100B] CATERR(IERR) has asserted on processor %.**

  Explanation: Processor CATERR(IERR) has asserted

  Severity
  Error

  User Response
  Complete the following steps:
  1. Check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
  2. (Trained Service technician only) Replace the Processor.

- **S.1100C [S.1100C] An uncorrectable error has been detected on processor %.**

  Explanation: Uncorrectable processor error detected

  Severity
  Error

  User Response
  Complete the following steps:
  1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
  2. Reboot system. If problem persists escalate to the next level of supprt.

- **S.2011001 [S.2011001] An Uncorrected PCIe Error has Occurred at Bus % Device % Function %. The Vendor ID for the device is % and the Device ID is %.**

  Explanation: PCI SERR Detected

  Severity
  Error

  User Response
  Complete the following steps:
  1. If this node and/or any attached cables were recently installed, moved, serviced or upgraded, a. Reseat Adapter and any attached cables. b. Reload Device Driver c. If device is not recognized, reconfiguring slot to Gen1 or Gen2 may be required. Gen1/Gen2 settings can be configured

via F1 Setup -> System Settings -> Devices and I/O Ports -> PCIe Gen1/Gen2/Gen3 Speed Selection, or the ASU Utility.

2. Check IBM support site for an applicable device driver, firmware update, revision of service information for this product or other information that applies to this error. Load new device driver and any required firmware updates.
3. If problem persists, then remove Adapter Card. If system reboots successfully without the adapter, replace that card.
4. (Trained Service technician only) Replace the processor.

- **S.2018001 [S.2018001] An Uncorrected PCIe Error has Occurred at Bus % Device % Function %. The Vendor ID for the device is % and the Device ID is %.**

  Explanation: PCIe Uncorrected Error Detected

  Severity
  Error

  User Response
  Complete the following steps:

  1. If this node and/or any attached cables were recently installed, moved, serviced or upgraded, a. Reseat Adapter and any attached cables. b. Reload Device Driver c. If device is not recognized, reconfiguring slot to Gen1 or Gen2 may be required. Gen1/Gen2 settings can be configured via F1 Setup -> System Settings -> Devices and I/O Ports -> PCIe Gen1/Gen2/Gen3 Speed Selection, or the ASU Utility.
  2. Check IBM support site for an applicable device driver, firmware update, version of service information for this product or other information that applies to this error. Load new device driver and any required firmware updates.
  3. If problem persists, then remove Adapter Card. If system reboots successfully without the adapter, replace that card.
  4. Trained Service technician only) Replace the processor.

- **S.3020007 [S.3020007] A firmware fault has been detected in the UEFI image.**

  Explanation: Internal UEFI Firmware Fault Detected, System halted

  Severity
  Error

  User Response
  Complete the following steps:

  1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
  2. Reflash UEFI image.
  3. (Trained service technician only) Replace the system board.

- **S.3028002 [S.3028002] Boot permission timeout detected.**

  Explanation: Boot Permission Negotiation Timeout

Severity
Error

User Response
Complete the following steps:

1. Check CMM/IMM logs for communication errors and resolve.
2. Reseat system
3. If problem persists escalate to the next level of support

- **S.3030007 [S.3030007] A firmware fault has been detected in the UEFI image.**

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity
Error

User Response
Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Reflash UEFI image.
3. (Trained service technician only) Replace the system board.

- **S.3040007 [S.3040007] A firmware fault has been detected in the UEFI image.**

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity
Error

User Response
Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Reflash UEFI image.
3. (Trained service technician only) Replace the system board.

- **S.3050007 [S.3050007] A firmware fault has been detected in the UEFI image.**

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity
Error

User Response
Complete the following steps:

1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Reflash UEFI image.
3. (Trained service technician only) Replace the system board.

- **S.3058004 [S.3058004] A Three Strike boot failure has occurred. The system has booted with default UEFI settings.**

  Explanation: POST failure has occurred! System booted with default settings.

  Severity
  Error

  User Response
  Complete the following steps:

  1. This event resets UEFI to the default settings for the next boot. If successful, user is forced into F1 setup. Original UEFI settings are still present.
  2. If User did not intentionally trigger the reboots, check logs for probable cause.
  3. Undo recent system changes (settings or devices added). If not recent system changes, remove all options then remove CMOS battery for 30 seconds to clear CMOS contents. Verify that the system boots. Then, re-install options one at a time to locate the problem.
  4. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
  5. Reflash UEFI firmware.
  6. Remove and re-install CMOS battery for 30 seconds to clear CMOS contents
  7. (Trained service technician only) Replace the system board.

- **S.3060007 [S.3060007] A firmware fault has been detected in the UEFI image.**

  Explanation: Internal UEFI Firmware Fault Detected, System halted

  Severity
  Error

  User Response
  Complete the following steps:

  1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
  2. Reflash UEFI image.
  3. (Trained service technician only) Replace the system board.

- **S.3070007 [S.3070007] A firmware fault has been detected in the UEFI image.**

  Explanation: Internal UEFI Firmware Fault Detected, System halted

  Severity
  Error

  User Response
  Complete the following steps:

  1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
  2. Reflash UEFI image.
  3. (Trained service technician only) Replace the system board.

- **S.3108007 [S.3108007] The default system settings have been restored.**

  Explanation: System Configuration Restored to Defaults

  Severity
  Error

  User Response
  Complete the following steps:

  1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.

- **S.3818004 [S.3818004] The CRTM flash driver could not successfully flash the staging area. A failure occurred.**

  Explanation: CRTM Update Failed

  Severity
  Error

  User Response
  Complete the following steps:

  1. Continue booting sytem. If system does not reset, manually reset the system.
  2. If the error is not reported on the subsequent boot, no additional recovery action is required.
  3. If the error persists, continue booting system and reflash UEFI image.
  4. (Trained service technician only) Replace the system board.

- **S.3818007 [S.3818007] The firmware image capsules for both flash banks could not be verified.**

  Explanation: CRTM image capsule could not be verified

  Severity
  Error

  User Response
  Complete the following steps:

  1. If system failed to boot successfully, DC cycle system.
  2. If system boots to F1 steup, flash UEFI image and reset bank to primary (if required). If system boots without error, recovery is complete and no additional action is required.
  3. If system fails to boot, or if flash attempt fails, (Trained service technician only) Replace the system board.

- **S.51003 [S.51003] An uncorrectable memory error was detected in DIMM slot % on rank %.**

  Explanation: [S.51003] An uncorrectable memory error was detected on processor % channel %. The failing DIMM within the channel could not be determined.[S.51003] An uncorrectable memory error has been detected during POST.Fatal Memory Error Occurred

  Severity
  Error

User Response

Complete the following steps:

1. If the node has recently been installed, moved, serviced, or upgraded, verify that the DIMM is properly seated and visually verify that there is no foreign material in any DIMM connector on that memory channel. If either of these conditions is found, correct and retry with the same DIMM. (Note: Event Log may contain a recent 00580A4 event denoting detected change in DIMM population that could be related to this problem.)
2. If no problem is observed on the DIMM connectors or the problem persists, replace the DIMM identified by LightPath and/or event log entry.
3. If problem re-occurs on the same DIMM connector, replace the other DIMMs on the same memory channel.
4. Check IBM support site for an applicable service bulletin or firmware update that applies to this memory error.
5. (Trained Service technician only) If problem re-occurs on the same DIMM connector, inspect connector for damage. If found, replace system board.
6. (Trained Service technician only) Replace affected Processor.
7. (Trained Service technician only) Replace system board.

- **S.51006 [S.51006] A memory mismatch has been detected. Please verify that the memory configuration is valid.**

  Explanation: One or More Mismatched DIMMs Detected

  Severity

  Error

  User Response

  Complete the following steps:

  1. Could follow an uncorrectable memory error or failed memory test. Check log and service that event first. DIMMs disabled by other errors or actions could cause this event.
  2. Verify that the DIMMs are installed in the correct population sequence, according to the service information for this product.
  3. Disable memory mirroring and sparing. If this action eliminates the mismatch, check IBM Support site for information related to this problem.
  4. Reflash UEFI firmware.
  5. Replace DIMM
  6. (Trained Service technician only) Replace Processor.

- **S.51009 [S.51009] No system memory has been detected.**

  Explanation: No Memory Detected

  Severity

  Error

  User Response

  Complete the following steps:

  1. Make sure that one or more DIMMs are installed in the server.

2. If no memory fault is recorded in the logs and no DIMM connector error LEDs are lit, verify that all DIMM connectors are enabled using the Setup utility or the Advanced Settings Utility (ASU).
3. Re-Install all DIMMs verifying the correct population sequence, according to the service information for this product.
4. (Trained service technician only) Replace the processor.
5. (Trained service technician only) Replace the system board.

- **S.58008 [S.58008] A DIMM has failed the POST memory test.**

  Explanation: DIMM Failed Memory Test

  Severity
  Error

  User Response
  Complete the following steps:

  1. You must AC-cycle the system to re-enable affected DIMM connector or re-enable manually using F1 setup
  2. If the node has been recently installed, serviced, moved, or upgraded, check to ensure that DIMMs are firmly seated and that no foreign material can be seen in the DIMM connector. If either condition is observed, correct and retry with the same DIMM. (Note: Event Log may contain a recent 00580A4 event denoting detected change in DIMM population that could be related to this problem.)
  3. If problem persists, replace the DIMM identified by LightPath and/or event log entry.
  4. If problem re-occurs on the same DIMM connector, swap the other DIMMs on the same memory channel across channels one at a time to a different memory channel or Processor. (check service information for this product/Install guide for population requirements for sparing/paring modes). If problem follows a moved DIMM to a different memory channel, replace that DIMM.
  5. Check IBM support site for an applicable service bulletin or firmware update that applies to this memory error.
  6. (Trained service technician only) If problem stays with the original DIMM connector, re-inspect DIMM connector for foreign material and remove, if found. If connector is damaged, replace system board.
  7. (Trained service technician only) Remove affected Processor and inspect Processor socket pins for damaged or mis-aligned pins. If damage is found, or this is an upgrade Processor, replace system board. If there are multiple Processor's, swap Processor's to move affected Procesor to another Processor socket and retry. If problem follows the affected Processor (or there is only one Processor), replace the affected Processor.
  8. (Trained Service technician only) Replace the system board.

- **S.68005 [S.68005] An error has been detected by the the IIO core logic on Bus %. The Global Fatal Error Status register contains %. The Global Non-Fatal Error Status register contains %. Please check error logs for the presence of additional downstream device error data.**

  Explanation: Critical IOH-PCI Error

  Severity
  Error

  User Response

Complete the following steps:

1. Check log for a separate error for an associated PCIe device and service that error.
2. Check IBM support site for an applicable service bulletin or firmware update for the system or adapter that applies to this error.
3. (Trained Service technician only) Replace the system board.

- **S.680B8 [S.680B8] Internal QPI Link Failure Detected.**

  Explanation: Internal QPI Link Failure Detected

  Severity
  Error

  User Response
  Complete the following steps:

  1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
  2. Inspect processor socket for foreign debris or damage. If debris is found remove debris.
  3. If error recurs, or socket damage is found, replace the system board (Trained Service technician only) .
  4. (Trained Service Technician Only) Replace the processor.

- **S.680B9 [S.680B9] External QPI Link Failure Detected.**

  Explanation: External QPI Link Failure Detected

  Severity
  Error

  User Response
  Complete the following steps:

  1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
  2. Inspect processor socket for foreign debris or damage. If debris is found remove debris.
  3. If error recurs, or socket damage is found, replace the system board (Trained Service technician only) .

- **W.11004 [W.11004] A processor within the system has failed the BIST.**

  Explanation: Processor Self Test Failure Detected

  Severity
  Error

  User Response
  Complete the following steps:

  1. If the Processor or firmware was just updated, check IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.

2. (Trained service technician only) If there are multiple Processor's, swap Processor's to move affected Processor to another Processor socket and retry. If problem follows the affected Processor, or this is a single Processor system, replace the Processor. Inspect Processor socket on each Processor removal and replace system board first if damaged or mis-aligned pins are found.
3. (Trained Service technician only) Replace the system board.

- **W.3048006 [W.3048006] UEFI has booted from the backup flash bank due to an Automatic Boot Recovery (ABR) event.**

  Explanation: Automated Boot Recovery, Booting Backup UEFI Image

  Severity
  Warning

  User Response
  Complete the following steps:
  1. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
  2. Reflash Primary UEFI image. Refer to UEFI Recovery section of service information for this product.
  3. (Trained service technician only) Replace the system board.

- **W.305000A [W.305000A] An invalid date and time have been detected.**

  Explanation: RTC Date and Time Incorrect

  Severity
  Warning

  User Response
  Complete the following steps:
  1. Check IMM/chassis event log. This event should immediately precede 0068002 error. Service that event or any other battery related errors.
  2. Use F1 Setup to reset date and time. If problem returns after a system reset, replace CMOS battery.
  3. If problem persists then check IBM support site for an applicable service bulletin or firmware update that applies to this error.
  4. Trained Service technician only) Replace the system board.

- **W.3058009 [W.3058009] DRIVER HEALTH PROTOCOL: Missing Configuraiton. Requires Change Settings From F1.**

  Explanation: DRIVER HEALTH PROTOCOL: Missing Configuration. Requires Change Settings From F1

  Severity
  Warning

  User Response
  Complete the following steps:

1. Go to System Settings > Settings > Driver Health Status List and find a driver/controller reporting Configuration Required status.
2. Search for the driver menu from System Settings and change settings appropriately.
3. Save settings and restart system.

- **W.305800A [W.305800A] DRIVER HEALTH PROTOCOL: Reports 'Failed' Status Controller.**

  Explanation: DRIVER HEALTH PROTOCOL: Reports 'Failed' Status Controller

  Severity
  Warning

  User Response
  Complete the following steps:
  1. Reboot the system.
  2. If problem persists, switch to backup UEFI or reflash current UEFI image.
  3. (Trained Service Technician Only) Replace system board.

- **W.305800B [W.305800B] DRIVER HEALTH PROTOCOL: Reports 'Reboot' Required Controller.**

  Explanation: DRIVER HEALTH PROTOCOL: Reports 'Reboot' Required Controller

  Severity
  Warning

  User Response
  Complete the following steps:
  1. No action required – system will reboot at the end of POST.
  2. If problem persists, switch to backup UEFI or reflash current UEFI image.
  3. (Trained Service Technician Only) Replace system board.

- **W.305800C [W.305800C] DRIVER HEALTH PROTOCOL: Reports 'System Shutdown' Required Controller.**

  Explanation: DRIVER HEALTH PROTOCOL: Reports 'System Shutdown' Required Controller

  Severity
  Warning

  User Response
  Complete the following steps:
  1. Reboot the system.
  2. If problem persists, switch to backup UEFI or reflash current UEFI image.
  3. (Trained Service Technician Only) Replace system board.

- **W.305800D [W.305800D] DRIVER HEALTH PROTOCOL: Disconnect Controller Failed. Requires 'Reboot'.**

Explanation: DRIVER HEALTH PROTOCOL: Disconnect Controller Failed. Requires 'Reboot'

Severity
Warning

User Response
Complete the following steps:

1. Reboot the system to reconnect the controller.
2. If problem persists, switch to backup UEFI or reflash current UEFI image.
3. (Trained Service Technician Only) Replace system board.

- **W.305800E [W.305800E] DRIVER HEALTH PROTOCOL: Reports Invalid Health Status Driver.**

Explanation: DRIVER HEALTH PROTOCOL: Reports Invalid Health Status Driver

Severity
Warning

User Response
Complete the following steps:

1. Reboot the system.
2. If problem persists, switch to backup UEFI or reflash current UEFI image.
3. (Trained Service Technician Only) Replace system board.

- **W.3108002 [W.305800E] DRIVER HEALTH PROTOCOL: Reports Invalid Health Status Driver.**

Explanation: GPT (GUID Partition Table) corruption

Severity
Warning

User Response
Complete the following steps:

1. F1 Setup -> System Settings -> Recovery -> Disk GPT Recovery, set to "Automatic"; Save Settings, then restart system.
2. Boot to F1 setup, system will automatically try to recover the GPT during the POST, restart the system.
3. If problem persists, re-format the LUN or disk and re-install the OS.

- **W.3808000 [W.3808000] An IMM communication failure has occurred.**

Explanation: IMM Communication Failure

Severity
Warning

User Response
Complete the following steps:

1. Reset the IMM from the CMM.
2. Use CMM to remove AUX power from the node. This will reboot the entire node.

3. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
4. Reflash UEFI Firmware.
5. (Trained service technician only) Replace the system board.

- **W.3808002 [W.3808002] An error occurred while saving UEFI settings to the IMM.**

  Explanation: Error Updating System Configuration to IMM

  Severity
  Warning

  User Response
  Complete the following steps:
  1. Use F1 Setup, Verify Settings and Save Settings to recover settings.
  2. Reset the IMM from the CMM.
  3. Use CMM to remove AUX power from the node. This will reboot the entire node.
  4. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
  5. Reflash IMM Firmware.
  6. Remove and re-install CMOS battery for 30 seconds to clear CMOS contents.
  7. Trained Service technician only) Replace the system board.

- **W.3808003 .[W.3808003] Unable to retrieve the system configuration from the IMM.**

  Explanation: Error Retrieving System Configuration from IMM

  Severity
  Warning

  User Response
  Complete the following steps:
  1. Use F1 Setup, Verify Settings and Save Settings to recover settings.
  2. Reset the IMM from the CMM.
  3. Use CMM to remove AUX power from the node. This will reboot the entire node.
  4. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
  5. Reflash IMM Firmware.
  6. Remove and re-install CMOS battery for 30 seconds to clear CMOS contents.
  7. Trained Service technician only) Replace the system board.

- **W.3818005 [W.3818005] The CRTM flash driver could not successfully flash the staging area. The update was aborted**

  Explanation: CRTM Update Aborted

  Severity

Warning

User Response
Complete the following steps:

1. Continue booting system. If system does not reset, manually reset the system.
2. If the error is not reported on the subsequent boot, no additional recovery action is required.
3. If the event persists, continue booting system and reflash UEFI image.
4. (Trained service technician only) Replace the system board.

- **W.3938002 [W.3938002] A boot configuration error has been detected.**

Explanation: Boot Configuration Error

Severity
Warning

User Response
Complete the following steps:

1. F1 Setup -> Save Settings
2. Retry OOB config update

- **W.50001 [W.50001] A DIMM has been disabled due to an error detected during POST.**

Explanation: DIMM Disabled

Severity
Info

User Response
Complete the following steps:

1. If the DIMM was disabled because of a memory fault, follow the procedure for that event.
2. If no memory fault is recorded in the logs and no DIMM connector error LEDs are lit, re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).
3. If problem persists, Power cycle the node from management console.
4. Reset IMM to default settings.
5. Reset UEFI to default settings.
6. Reflash IMM and UEFI firmware.
7. (Trained Service technician only) Replace system board.

- **W.58001 [W.58001] The PFA Threshold limit (correctable error logging limit) has been exceeded on DIMM number % at address %. MC5 Status contains % and MC5 Misc contains %.**

Explanation: DIMM PFA Threshold Exceeded

Severity
Error

User Response
Complete the following steps:

1. If the node has recently been installed, moved, serviced, or upgraded, verify that the DIMM is properly seated and visually verify that there is no foreign material in any DIMM connector on that memory channel. If either of these conditions is found, correct and retry with the same DIMM. (Note: Event Log may contain a recent 00580A4 event denoting detected change in DIMM population that could be related to this problem.)
2. Check IBM support site for an applicable firmware update that applies to this memory error. The release notes will list the known problems the update addresses.
3. If the previous steps do not resolve the problem, at the next maintenance opportunity, replace the affected DIMM (as indicated by LightPath and/or failure log entry).
4. If PFA re-occurs on the same DIMM connector, swap the other DIMMs on the same memory channel one at a time to a different memory channel or Processor. (check service information for this product/Install guide for population requirements for sparing/paring modes). If PFA follows a moved DIMM to any DIMM connector on the different memory channel, replace the moved DIMM.
5. Check IBM support site for an applicable Service Bulletins (Service bulletins) that applies to this memory error. (Link to IBM support service bulletins)
6. (Trained service technician only) If problem continues to re-occur on the same DIMM connector, inspect DIMM connector for foreign material and remove, if found. If connector is damaged, replace system board.
7. (Trained service technician only) Remove affected Processor and inspect Processor socket pins for damaged or mis-aligned pins. If damage is found or Processor is an upgrade part, replace system board.
8. (Trained Service technician only) Replace affected processor.
9. (Trained Service technician only) Replace system board.

- **W.58007 [W.58007] Invalid memory configuration (Unsupported DIMM Population) detected. Please verify memory configuration is valid.**

  Explanation: Unsupported DIMM Population

  Severity
  Error

  User Response
  Complete the following steps:

  1. Could follow an uncorrectable memory error or failed memory test. Check log and service that event first. DIMMs disabled by other errors or actions could cause this event.
  2. Ensure that the DIMM connectors are populated according to the guidelines in the service information for this product.

- **W.580A1 [W.580A1] Invalid memory configuration for Mirror Mode. Please correct memory configuration.**

  Explanation: Unsupported DIMM Population for Mirror Mode

  Severity
  Error

  User Response
  Complete the following steps:

  1. If a DIMM connector error LED is lit, resolve the failure.

2. Make sure that the DIMM connectors are correctly populated for mirroring mode, according to the service information for this product.

- **W.580A2 [W.580A2] Invalid memory configuration for Sparing Mode. Please correct memory configuration.**

  Explanation: Unsupported DIMM Population for Spare Mode

  Severity
  Error

  User Response
  Complete the following steps:

  1. Make sure that the DIMM connectors are correctly populated for sparing mode, according to the service information for this product.

- **W.68002 [W.68002] A CMOS battery error has been detected**

  Explanation: CMOS Battery Fault

  Severity
  Error

  User Response
  Complete the following steps:

  1. If the system was recently Installed, Moved, or Serviced, makesure the batter is properly seated.
  2. Check IBM support site for an applicable service bulletin or firmware update that applies to this error.
  3. Replace CMOS Battery
  4. (Trained Service technician only) Replace the system board.

Appendix C. DSA diagnostic test results

After running the DSA diagnostic tests, use this information to resolve any issues that were found.

DSA Broadcom network test results

The following messages can result when you run the Broadcom network test.

Test results for the DSA Broadcom network test

The following messages can result when you run the DSA Broadcom network test.

- **405-000-000 : BRCM:TestControlRegisters Test Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **405-001-000 : BRCM:TestMIIRegisters Test Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

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- **405-002-000 : BRCM:TestEEPROM Test Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **405-003-000 : BRCM:TestInternalMemory Test Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **405-004-000 : BRCM:TestInterrupt Test Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-005-000 : BRCM:TestLoopbackMAC Test Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **405-006-000 : BRCM:TestLoopbackPhysical Test Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **405-007-000 : BRCM:TestLEDs Test Passed**

  The test passed.

  Recoverable
  No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-800-000 : BRCM:TestControlRegisters Test Aborted**

The control registers test was canceled.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-801-000 : BRCM:TestMIIRegisters Test Aborted**

The MII register test was canceled.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-802-000 : BRCM:TestEEPROM Test Aborted**

  The EEPROM test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **405-803-000 : BRCM:TestInternalMemory Test Aborted**

  The internal memory test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **405-804-000 : BRCM:TestInterrupt Test Aborted**

  The interrupt test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-805-000 : BRCM:TestLoopbackMAC Test Aborted**

  Loopback testing at the MAC layer was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **405-806-000 : BRCM:TestLoopbackPhysical Test Aborted**

  Loopback testing at the physical layer was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **405-807-000 : BRCM:TestLEDs Test Aborted**

  Verification of status LEDs was canceled.

  Recoverable
  No

Severity
Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-900-000 : BRCM:TestControlRegisters Test Failed**

A failure was detected while testing internal MAC registers

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-901-000 : BRCM:TestMIIRegisters Test Failed**

A failure was detected while testing internal PHY registers.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-902-000 : BRCM:TestEEPROM Test Failed**

A failure was detected while testing non-volatile RAM.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-903-000 : BRCM:TestInternalMemory Test Failed**

A failure was detected while testing internal memory.

Recoverable
No

Severity

Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-904-000 : BRCM:TestInterrupt Test Failed**

A failure was detected while testing interrupts.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-905-000 : BRCM:TestLoopbackMAC Test Failed**

BRCM:TestLoopbackMAC Test Failed.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-906-000 : BRCM:TestLoopbackPhysical Test Failed**

A failure was detected during the loopback test at the physical layer.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **405-907-000 : BRCM:TestLEDs Test Failed**

  A failure was detected while verifying operation of the status LEDs.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
  2. Rerun the test.
  3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

DSA Brocade test results

The following messages can result when you run the Brocade test.

Test results for the DSA Brocade test

The following messages can result when you run the DSA Brocade test.

- **218-000-000 : Brocade:MemoryTest Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **218-001-000 : Brocade:ExternalLoopbackTest Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **218-002-000 : Brocade:SerdesLoopbackTest Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **218-003-000 : Brocade:PCILoopbackTest Passed**

  The test passed.

  Recoverable
  No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **218-004-000 : Brocade:ExternalEthLoopbackTest Passed**

The test passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **218-005-000 : Brocade:SerdesEthLoopbackTest Passed**

The test passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **218-006-000 : Brocade:InternalLoopbackTest Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **218-800-000 : Brocade:MemoryTest Aborted**

  The test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **218-801-000 : Brocade:ExternalLoopbackTest Aborted**

  The test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **218-802-000 : Brocade:SerdesLoopbackTest Aborted**

  The test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **218-803-000 : Brocade:PCILoopbackTest Aborted**

  The test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **218-804-000 : Brocade:ExternalEthLoopbackTest Aborted**

  The test was canceled.

  Recoverable
  No

Severity
Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **218-805-000 : Brocade:SerdesEthLoopbackTest Aborted**

The test was canceled.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **218-806-000 : Brocade:InternalLoopbackTest Aborted**

The test was canceled.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **218-900-000 : Brocade:MemoryTest Failed**

  A failure was detected while testing the adapter memory.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Rerun the test.
  2. Verify whether the firmware is at proper level.
  3. Rerun the test.
  4. If the problem remains, contact your IBM technical-support representative.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **218-901-000 : Brocade:ExternalLoopbackTest Failed**

  A failure was detected during the Loopback test.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Check cable connections.
  2. Rerun the test.
  3. Verify whether the firmware is at proper level.
  4. Rerun the test.
  5. If the problem remains, contact your IBM technical-support representative.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **218-902-000 : Brocade:SerdesLoopbackTest Failed**

  A failure was detected during the Loopback test.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Rerun the test.
  2. Verify whether the firmware is at proper level.
  3. Rerun the test.
  4. If the problem remains, contact your IBM technical-support representative.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **218-903-000 : Brocade:PCILoopbackTest Failed**

  A failure was detected during the Loopback test.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Rerun the test.
  2. Verify whether the firmware is at proper level.
  3. Rerun the test.
  4. If the problem remains, contact your IBM technical-support representative.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **218-904-000 : Brocade:ExternalEthLoopbackTest Failed**

  A failure was detected during the Loopback test.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Check or replace SFP/cable.
  2. Rerun the test.
  3. Verify whether the firmware is at proper level.
  4. Rerun the test.
  5. If the problem remains, contact your IBM technical-support representative.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **218-905-000 : Brocade:SerdesEthLoopbackTest Failed**

  A failure was detected during the Loopback test.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Rerun the test.

2. Verify whether the firmware is at proper level.
3. Rerun the test.
4. If the problem remains, contact your IBM technical-support representative.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **218-906-000 : Brocade:InternalLoopbackTest Failed**

  A failure was detected during the Loopback test.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Rerun the test.
  2. Verify whether the firmware is at proper level.
  3. Rerun the test.
  4. If the problem remains, contact your IBM technical-support representative.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

DSA checkpoint panel test results

The following messages can result when you run the checkpoint panel test.

Test results for the DSA checkpoint panel test

The following messages can result when you run the DSA checkpoint panel test.

- **180-000-000 : Check-point Panel Test Passed**

  Check-point Panel Test Passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **180-801-000 : Check-point Panel Test Aborted**

Check-point Panel Test Aborted. BMC is unable to verify that the operator information panel cable is connected.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Inspect and reseat operator information panel cable at both ends.
2. Verify that the Baseboard Management Controller (BMC) is working.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **180-901-000 : Check-point Panel Test Failed**

Check-point Panel Test Failed. Operator reported incorrect display.

Recoverable
No

Severity

Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check the operator information panel cabling for loose or broken connections at both ends or damage to the cable.
2. Replace the information panel cable if damage is present.
3. Run the test again.
4. Replace the operator information panel assembly.
5. Run the test again.
6. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

DSA CPU stress test results

The following messages can result when you run the CPU stress test.

Test results for the DSA CPU stress test

The following messages can result when you run the DSA CPU stress test.

- **089-000-000 : CPU Stress Test Passed**

  CPU Stress Test Passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA

- Latest level of BMC/IMM

- **089-801-000 : CPU Stress Test Aborted**

  CPU Stress Test Aborted. Internal Program Error.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Turn off and restart the system.
  2. Make sure that the DSA Diagnostic code is at the latest level.
  3. Run the test again.
  4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component. The latest level firmware for this component can be found in reference to this system type at the IBM Support website.
  5. Run the test again.
  6. If the system has stopped responding, turn off and restart the system and then run the test again.
  7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **089-802-000 : CPU Stress Test Aborted**

  CPU Stress Test Aborted. System resource unavailability error.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response

Complete the following steps:

1. Turn off and restart the system.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Run the test again.
4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
5. Run the test again.
6. If the system has stopped responding, turn off and restart the system and then run the test again.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **089-803-000 : CPU Stress Test Aborted**

CPU Stress Test Aborted. Memory size is insufficient to run the test. At least 1GB is required.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **089-804-000 : CPU Stress Test Aborted**

CPU Stress Test Aborted. User pressed Ctrl-C.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **089-901-000 : CPU Stress Test Failed**

  CPU Stress Test Failed.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. If the system has stopped responding, turn off and restart the system and then run the test again.
  2. Make sure that the DSA Diagnostic code is at the latest level.
  3. Run the test again.
  4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
  5. Run the test again.
  6. If the system has stopped responding, turn off and restart the system and then run the test again.
  7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

DSA Emulex adapter test results

The following messages can result when you run the Emulex adapter test.

Test results for the DSA Emulex adapter test

The following messages can result when you run the DSA Emulex adapter test.

- **516-000-000 : ELXUCNA: NIC MAC LoopBackTest Passed**

The test passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **516-001-000 : ELXUCNA: NIC PHY LoopBackTest Passed**

The test passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **516-002-000 : ELXUCNA: ELXUCNA: NIC LED(Beacon)Test Passed**

The test passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **516-800-000 : ELXUCNA: NIC MAC LoopBackTest Aborted**

  Loopback testing at the MAC layer was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **516-801-000 : ELXUCNA: NIC PHY LoopBackTest Aborted**

  Loopback testing at the physical layer was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **516-802-000 : ELXUCNA: ELXUCNA: NIC LED(Beacon)Test Aborted**

  Verification of status LEDs was canceled.

  Recoverable
  No

  Severity
  Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **516-900-000 : ELXUCNA: NIC MAC LoopBackTest Failed**

A failure was detected during the loopback test at the MAC layer.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **516-901-000 : ELXUCNA: NIC PHY LoopBackTest Failed**

A failure was detected during the loopback test at the physical layer.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response

Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **516-902-000 : ELXUCNA: ELXUCNA: NIC LED(Beacon)Test Failed**

A failure was detected while verifying operation of the status LEDs.

Recoverable

No

Severity

Error

Serviceable

Yes

Automatically notify support

No

User Response

Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

DSA EXA port ping test results

The following messages can result when you run the EXA port ping test.

Test results for the DSA EXA port ping test

The following messages can result when you run the DSA EXA port ping test.

- **401-000-000 : EXA Port Ping Test Passed**

  EXA Port Ping Test Passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **401-801-000 : EXA Port Ping Test Aborted**

  EXA Port Ping Test Aborted. Unable to get device base address.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Remove power cables, wait for 45 seconds, reconnect and rerun the test.
  2. Make sure that the scalability cable connections are as per specification.
  3. Make sure that DSA and BIOS/uEFI are at the latest level.
  4. If the problem remains, contact your technical-service representative.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **401-802-000 : EXA Port Ping Test Aborted**

  EXA Port Ping Test Aborted. Port connections may not be correct.

  Recoverable

No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Remove power cables, wait for 45 seconds, reconnect and rerun the test.
2. Make sure that the scalability cable connections are as per specification.
3. Make sure that DSA and BIOS/uEFI are at the latest level.
4. If the problem remains, contact your technical-service representative.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **401-901-001 : EXA Port Ping Test Failed**

EXA Port Ping Test Failed.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Remove power cables, wait for 45 seconds, reconnect and rerun the test.
2. Make sure that the scalability cable connections are as per specification.
3. Check scalability cables for loose connections.
4. Replace the scalability cable(s) for specified port(s).
5. If the problem remains, contact your technical-service representative.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

DSA hard drive test results

The following messages can result when you run the hard drive test.

Test results for the DSA hard drive test

The following messages can result when you run the DSA hard drive test.

- **217-000-000 : HDD Test Passed**

  HDD Stress Test Passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **217-800-000 : HDD Test Aborted**

  HDD Test Aborted. The test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Check cable connections.
  2. Rerun the test.
  3. Verify that Hard drive supports self test and self test logging.
  4. If the problem remains, contact your technical-support representative.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **217-900-000 : HDD Test Failed**

  HDD Test Failed. The hard drive self-test detected a failure.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Check cable connections.
  2. Rerun the test.
  3. Verify the firmware is at the latest level.
  4. Rerun the test.
  5. If the problem remains, contact your technical-support representative.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

DSA Intel network test results

The following messages can result when you run the Intel network test.

Test results for the DSA Intel network test

The following messages can result when you run the DSA Intel network test.

- **406-000-000 : IANet:Registers Test Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **406-001-000 : IANet:EEPROM Test Passed**

The test passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **406-002-000 : IANet:FIFO Test Passed**

The test passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **406-003-000 : IANet:Interrupts Test Passed**

The test passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **406-004-000 : IANet:Loopback Test Passed**

The test passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **406-800-000 : IANet:Registers Test Aborted**

Registers test was canceled.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **406-801-000 : IANet:EEPROM Test Aborted**

  EEPROM test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **406-802-000 : IANet:FIFO Test Aborted**

  FIFO test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **406-803-000 : IANet:Interrupts Test Aborted**

  Interrupt test was canceled.

  Recoverable
  No

  Severity
  Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **406-804-000 : IANet:Loopback Test Aborted**

Loopback test was canceled.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **406-900-000 : IANet:Registers Test Failed**

A failure was detected during the Registers test.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **406-901-000 : IANet:EEPROM Test Failed**

  A failure was detected during the EEPROM test.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
  2. Rerun the test.
  3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **406-902-000 : IANet:FIFO Test Failed**

  A failure was detected during the FIFO test.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.

2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **406-903-000 : IANet:Interrupts Test Failed**

  A failure was detected during the Interrupt test.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
  2. Rerun the test.
  3. Check interrupt assignments in the PCI Hardware section of the DSA Diagnostic Log. If the ethernet device is sharing interrupts, if possible modify the interrupt assignments using F1 Setup to assign a unique interrupt to the device.
  4. Rerun the test.
  5. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **406-904-000 : IANet:Loopback Test Failed**

  A failure was detected during the Loopback test.

  Recoverable
  No

  Severity
  Error

  Serviceable

Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check the Ethernet cable for damage and ensure correct cable type and attachment.
2. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
3. Rerun the test.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

DSA LSI hard drive test results

The following messages can result when you run the LSI hard drive test.

Test results for the DSA LSI hard drive test

The following messages can result when you run the DSA LSI hard drive test.

- **407-000-000 : LSIESG:DiskDefaultDiagnostic Test Passed**

  The test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **407-800-000 : LSIESG:DiskDefaultDiagnostic Test Aborted**

The test was canceled.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **407-900-000 : LSIESG:DiskDefaultDiagnostic Test Failed**

The hard drive self-test detected a failure.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check cable connections.
2. Rerun the test.
3. Verify whether the firmware is at the latest level.
4. Rerun the test.
5. If the problem remains, contact your IBM technical-support representative.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

DSA Mellanox adapter test results

The following messages can result when you run the Mellanox adapter test.

Test results for the DSA Mellanox adapter test

The following messages can result when you run the DSA Mellanox adapter test.

- **408-000-000 : MLNX:MLNX_DiagnosticTestEthernetPort Test Passed**

  Port Test Passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **408-001-000 : MLNX:MLNX_DiagnosticTestIBPort Test Passed**

  Port Test Passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **408-800-000 : MLNX:MLNX_DiagnosticTestEthernetPort Test Aborted**

  Port Test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable

No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **408-801-000 : MLNX:MLNX_DiagnosticTestIBPort Test Aborted**

Port Test was canceled.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **408-900-000 : MLNX:MLNX_DiagnosticTestEthernetPort Test Failed**

Port Test Failed.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Make sure that the physical link of the port under test in the active state.
2. If these condition was met but the test keeps failing the port's adapter might be faulty.
3. Try replacing the adapter and repeating the test.

Related links

- IBM Support website

- Latest level of DSA
- Latest level of BMC/IMM

- **408-901-000 : MLNX:MLNX_DiagnosticTestIBPort Test Failed**

  Port Test Failed.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Make sure that the physical link of the port under test in the active state and a subnet manager running on the fabric to which the port is attached.
  2. If these condition was met but the test keeps failing the port's adapter might be faulty.
  3. Try replacing the adapter and repeating the test.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

DSA memory isolation test results

The following messages can result when you run the memory isolation test.

Test results for the DSA memory isolation test

The following messages can result when you run the DSA memory isolation test.

- **201-000-000 : Standalone Memory Test Passed**

  Quick/Full Memory Test All CPUs Passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-000-001 : Standalone Memory Test Passed**

Quick/Full Memory Test CPU 1 Passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-000-002 : Standalone Memory Test Passed**

Quick/Full Memory Test CPU 2 Passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-000-003 : Standalone Memory Test Passed**

Quick/Full Memory Test CPU 3 Passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-000-004 : Standalone Memory Test Passed**

Quick/Full Memory Test CPU 4 Passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-811-000 : Standalone Memory Test Aborted**

Unable to Locate SMBIOS key "_SM_".

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.

2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-811-001 : Standalone Memory Test Aborted**

Unable to Locate SMBIOS key "_SM_".

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-811-002 : Standalone Memory Test Aborted**

Unable to Locate SMBIOS key "_SM_".

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-811-003 : Standalone Memory Test Aborted**

Unable to Locate SMBIOS key "_SM_".

Recoverable

No

Severity

Warning

Serviceable

No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-812-000 : Standalone Memory Test Aborted**

Memory test is not supported for this system.

Recoverable

No

Severity

Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-812-001 : Standalone Memory Test Aborted**

Memory test is not supported for this system.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-812-002 : Standalone Memory Test Aborted**

Memory test is not supported for this system.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-812-003 : Standalone Memory Test Aborted**

Memory test is not supported for this system.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-813-000 : Standalone Memory Test Aborted**

  Chipset Error: Can not turn OFF ECC error reporting in CPU.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-813-001 : Standalone Memory Test Aborted**

  Chipset Error: Can not turn OFF ECC error reporting in CPU.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-813-002 : Standalone Memory Test Aborted**

  Chipset Error: Can not turn OFF ECC error reporting in CPU.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-813-003 : Standalone Memory Test Aborted**

  Chipset Error: Can not turn OFF ECC error reporting in CPU.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-814-000 : Standalone Memory Test Aborted**

Chipset Error: Can not disable Scubbing feature for CPU.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-814-001 : Standalone Memory Test Aborted**

Chipset Error: Can not disable Scubbing feature for CPU.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-814-002 : Standalone Memory Test Aborted**

Chipset Error: Can not disable Scubbing feature for CPU.

Recoverable

No

Severity

Warning

Serviceable

No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-814-003 : Standalone Memory Test Aborted**

Chipset Error: Can not disable Scubbing feature for CPU.

Recoverable

No

Severity

Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-815-000 : Standalone Memory Test Aborted**

Program Error with Quick Memory Menu Option Selection.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-815-001 : Standalone Memory Test Aborted**

Program Error with Quick Memory Menu Option Selection.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-815-002 : Standalone Memory Test Aborted**

Program Error with Quick Memory Menu Option Selection.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-815-003 : Standalone Memory Test Aborted**

  Program Error with Quick Memory Menu Option Selection.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-816-000 : Standalone Memory Test Aborted**

  Program Error with Full Memory Menu Option Selection.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-816-001 : Standalone Memory Test Aborted**

  Program Error with Full Memory Menu Option Selection.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-816-002 : Standalone Memory Test Aborted**

  Program Error with Full Memory Menu Option Selection.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-816-003 : Standalone Memory Test Aborted**

  Program Error with Full Memory Menu Option Selection.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:
  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-818-000 : Standalone Memory Test Aborted**

  Unable to Locate SMBIOS key "_SM_".

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-818-001 : Standalone Memory Test Aborted**

Unable to Locate SMBIOS key "_SM_".

Recoverable

No

Severity

Warning

Serviceable

No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-818-002 : Standalone Memory Test Aborted**

Unable to Locate SMBIOS key "_SM_".

Recoverable

No

Severity

Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-818-003 : Standalone Memory Test Aborted**

Unable to Locate SMBIOS key "_SM_".

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-819-000 : Standalone Memory Test Aborted**

The start-end address ranges in the restricted area of the memory.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-819-001 : Standalone Memory Test Aborted**

The start-end address ranges in the restricted area of the memory.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-819-002 : Standalone Memory Test Aborted**

  The start-end address ranges in the restricted area of the memory.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-819-003 : Standalone Memory Test Aborted**

  The start-end address ranges in the restricted area of the memory.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-820-000 : Standalone Memory Test Aborted**

  Memory Upper limit is less than 16 Mbytes.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-820-001 : Standalone Memory Test Aborted**

  Memory Upper limit is less than 16 Mbytes.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-820-002 : Standalone Memory Test Aborted**

Memory Upper limit is less than 16 Mbytes.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-820-003 : Standalone Memory Test Aborted**

Memory Upper limit is less than 16 Mbytes.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-821-000 : Standalone Memory Test Aborted**

Variable range MTRR registers are larger than fixed range MTRR registers.

Recoverable

No

Severity

Warning

Serviceable

No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-821-001 : Standalone Memory Test Aborted**

Variable range MTRR registers are larger than fixed range MTRR registers.

Recoverable

No

Severity

Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-821-002 : Standalone Memory Test Aborted**

Variable range MTRR registers are larger than fixed range MTRR registers.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-821-003 : Standalone Memory Test Aborted**

Variable range MTRR registers are larger than fixed range MTRR registers.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-822-000 : Standalone Memory Test Aborted**

Invalid MTRR service request.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-822-001 : Standalone Memory Test Aborted**

  Invalid MTRR service request.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-822-002 : Standalone Memory Test Aborted**

  Invalid MTRR service request.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-822-003 : Standalone Memory Test Aborted**

  Invalid MTRR service request.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-824-000 : Standalone Memory Test Aborted**

  Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-824-001 : Standalone Memory Test Aborted**

  Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-824-002 : Standalone Memory Test Aborted**

  Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-824-003 : Standalone Memory Test Aborted**

Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

Recoverable

No

Severity

Warning

Serviceable

No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-826-000 : Standalone Memory Test Aborted**

BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Recoverable

No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-826-001 : Standalone Memory Test Aborted**

BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-826-002 : Standalone Memory Test Aborted**

BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-826-003 : Standalone Memory Test Aborted**

BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA

– Latest level of BMC/IMM

- **201-827-000 : Standalone Memory Test Aborted**

  BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  – IBM Support website
  – Latest level of DSA
  – Latest level of BMC/IMM

- **201-827-001 : Standalone Memory Test Aborted**

  BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-827-002 : Standalone Memory Test Aborted**

  BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-827-003 : Standalone Memory Test Aborted**

  BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-844-000 : Standalone Memory Test Aborted**

Chipset Error: Problem in masking MSR machine check control MASK registers.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-844-001 : Standalone Memory Test Aborted**

Chipset Error: Problem in masking MSR machine check control MASK registers.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-844-002 : Standalone Memory Test Aborted**

Chipset Error: Problem in masking MSR machine check control MASK registers.

Recoverable

No

Severity

Warning

Serviceable

No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-844-003 : Standalone Memory Test Aborted**

Chipset Error: Problem in masking MSR machine check control MASK registers.

Recoverable

No

Severity

Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-845-000 : Standalone Memory Test Aborted**

Chipset Error: Problem clearing MSR machine check control registers.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-845-001 : Standalone Memory Test Aborted**

Chipset Error: Problem clearing MSR machine check control registers.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-845-002 : Standalone Memory Test Aborted**

Chipset Error: Problem clearing MSR machine check control registers.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-845-003 : Standalone Memory Test Aborted**

  Chipset Error: Problem clearing MSR machine check control registers.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-859-000 : Standalone Memory Test Aborted**

  INVALID XSECSRAT type.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-859-001 : Standalone Memory Test Aborted**

  INVALID XSECSRAT type.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-859-002 : Standalone Memory Test Aborted**

  INVALID XSECSRAT type.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-859-003 : Standalone Memory Test Aborted**

  INVALID XSECSRAT type.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:
  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-860-000 : Standalone Memory Test Aborted**

  No OEM0 type 1 found.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-860-001 : Standalone Memory Test Aborted**

No OEM0 type 1 found.

Recoverable

No

Severity

Warning

Serviceable

No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-860-002 : Standalone Memory Test Aborted**

No OEM0 type 1 found.

Recoverable

No

Severity

Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-860-003 : Standalone Memory Test Aborted**

No OEM0 type 1 found.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-861-000 : Standalone Memory Test Aborted**

No SRAT type 1 found.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-861-001 : Standalone Memory Test Aborted**

No SRAT type 1 found.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-861-002 : Standalone Memory Test Aborted**

  No SRAT type 1 found.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-861-003 : Standalone Memory Test Aborted**

  No SRAT type 1 found.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-862-000 : Standalone Memory Test Aborted**

  No OEM1 structure found.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-862-001 : Standalone Memory Test Aborted**

  No OEM1 structure found.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-862-002 : Standalone Memory Test Aborted**

No OEM1 structure found.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-862-003 : Standalone Memory Test Aborted**

No OEM1 structure found.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-863-000 : Standalone Memory Test Aborted**

No IBMERROR key in OEM1 structure.

Recoverable

No

Severity

Warning

Serviceable

No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-863-001 : Standalone Memory Test Aborted**

No IBMERROR key in OEM1 structure.

Recoverable

No

Severity

Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-863-002 : Standalone Memory Test Aborted**

No IBMERROR key in OEM1 structure.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-863-003 : Standalone Memory Test Aborted**

No IBMERROR key in OEM1 structure.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-864-000 : Standalone Memory Test Aborted**

No GAS located in OEM1.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-864-001 : Standalone Memory Test Aborted**

  No GAS located in OEM1.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-864-002 : Standalone Memory Test Aborted**

  No GAS located in OEM1.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-864-003 : Standalone Memory Test Aborted**

  No GAS located in OEM1.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-865-000 : Standalone Memory Test Aborted**

  No XSECSRAT key in OEM0 structure.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-865-001 : Standalone Memory Test Aborted**

No XSECSRAT key in OEM0 structure.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-865-002 : Standalone Memory Test Aborted**

No XSECSRAT key in OEM0 structure.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-865-003 : Standalone Memory Test Aborted**

No XSECSRAT key in OEM0 structure.

Recoverable

No

Severity

Warning

Serviceable

No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-866-000 : Standalone Memory Test Aborted**

EFI-SAL Invalid parameter from GetMemoryMap function.

Recoverable

No

Severity

Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-866-001 : Standalone Memory Test Aborted**

EFI-SAL Invalid parameter from GetMemoryMap function.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-866-002 : Standalone Memory Test Aborted**

EFI-SAL Invalid parameter from GetMemoryMap function.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-866-003 : Standalone Memory Test Aborted**

EFI-SAL Invalid parameter from GetMemoryMap function.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-867-000 : Standalone Memory Test Aborted**

  EFI/SAL: Buffer not allocated.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-867-001 : Standalone Memory Test Aborted**

  EFI/SAL: Buffer not allocated.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-867-002 : Standalone Memory Test Aborted**

  EFI/SAL: Buffer not allocated.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-867-003 : Standalone Memory Test Aborted**

  EFI/SAL: Buffer not allocated.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-868-000 : Standalone Memory Test Aborted**

  EFI/SAL: Buffer allocated in GetMemoryMap too small.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:
  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-868-001 : Standalone Memory Test Aborted**

  EFI/SAL: Buffer allocated in GetMemoryMap too small.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-868-002 : Standalone Memory Test Aborted**

EFI/SAL: Buffer allocated in GetMemoryMap too small.

Recoverable

No

Severity

Warning

Serviceable

No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-868-003 : Standalone Memory Test Aborted**

EFI/SAL: Buffer allocated in GetMemoryMap too small.

Recoverable

No

Severity

Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-869-000 : Standalone Memory Test Aborted**

EFI/SAL Invalid parameter from GetMemoryMap function.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-869-001 : Standalone Memory Test Aborted**

EFI/SAL Invalid parameter from GetMemoryMap function.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-869-002 : Standalone Memory Test Aborted**

EFI/SAL Invalid parameter from GetMemoryMap function.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-869-003 : Standalone Memory Test Aborted**

  EFI/SAL Invalid parameter from GetMemoryMap function.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-870-000 : Standalone Memory Test Aborted**

  CPU Doamin in ACPI not valid.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-870-001 : Standalone Memory Test Aborted**

  CPU Doamin in ACPI not valid.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-870-002 : Standalone Memory Test Aborted**

  CPU Doamin in ACPI not valid.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-870-003 : Standalone Memory Test Aborted**

CPU Doamin in ACPI not valid.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-871-000 : Standalone Memory Test Aborted**

Data Mis-compare encountered.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-871-001 : Standalone Memory Test Aborted**

Data Mis-compare encountered.

Recoverable

No

Severity

Warning

Serviceable

No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-871-002 : Standalone Memory Test Aborted**

Data Mis-compare encountered.

Recoverable

No

Severity

Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-871-003 : Standalone Memory Test Aborted**

Data Mis-compare encountered.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-877-000 : Standalone Memory Test Aborted**

BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-877-001 : Standalone Memory Test Aborted**

BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-877-002 : Standalone Memory Test Aborted**

  BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-877-003 : Standalone Memory Test Aborted**

  BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-878-000 : Standalone Memory Test Aborted**

  Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-878-001 : Standalone Memory Test Aborted**

  Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.

3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-878-002 : Standalone Memory Test Aborted**

  Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:
  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-878-003 : Standalone Memory Test Aborted**

  Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-885-000 : Standalone Memory Test Aborted**

Processor does not support MTRR register manipulation. Can not write to memory without cache.

Recoverable

No

Severity

Warning

Serviceable

No

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-885-001 : Standalone Memory Test Aborted**

Processor does not support MTRR register manipulation. Can not write to memory without cache.

Recoverable

No

Severity

Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-885-002 : Standalone Memory Test Aborted**

Processor does not support MTRR register manipulation. Can not write to memory without cache.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-885-003 : Standalone Memory Test Aborted**

Processor does not support MTRR register manipulation. Can not write to memory without cache.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-886-000 : Standalone Memory Test Aborted**

Memory Upper limit is less than 16 Mbytes.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

User Response
Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-886-001 : Standalone Memory Test Aborted**

  Memory Upper limit is less than 16 Mbytes.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-886-002 : Standalone Memory Test Aborted**

  Memory Upper limit is less than 16 Mbytes.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-886-003 : Standalone Memory Test Aborted**

  Memory Upper limit is less than 16 Mbytes.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-899-000 : Standalone Memory Test Aborted**

  Memory Diagnostics Test Aborted by user.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-899-001 : Standalone Memory Test Aborted**

  Memory Diagnostics Test Aborted by user.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-899-002 : Standalone Memory Test Aborted**

  Memory Diagnostics Test Aborted by user.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-899-003 : Standalone Memory Test Aborted**

  Memory Diagnostics Test Aborted by user.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-901-000 : Standalone Memory Test Failed**

  Memory Diagnostics Test Failed.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.
  5. Replace any DIMMS(s) mentioned in error, one by one.
  6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
  7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **201-901-001 : Standalone Memory Test Failed**

  Memory Diagnostics Test Failed.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.
5. Replace any DIMMS(s) mentioned in error, one by one.
6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-901-002 : Standalone Memory Test Failed**

Memory Diagnostics Test Failed.

Recoverable

No

Severity

Error

Serviceable

Yes

Automatically notify support

No

User Response

Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.
5. Replace any DIMMS(s) mentioned in error, one by one.
6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **201-901-003 : Standalone Memory Test Failed**

  Memory Diagnostics Test Failed.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Perform the actions mentioned one at a time and try the test after each action.
  2. If the problem remains, contact your technical-service representative.
  3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
  4. Make sure that DSA and BIOS/uEFI are at the latest level.
  5. Replace any DIMMS(s) mentioned in error, one by one.
  6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
  7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

DSA memory stress test results

The following messages can result when you run the memory stress test.

Test results for the DSA memory stress test

The following messages can result when you run the DSA memory stress test.

- **202-000-000 : MemStr Test Passed**

  Test Passed.

  Recoverable
  No

  Severity
  Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **202-801-000 : MemStr Test Aborted**

Internal program error.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Turn off and restart the system.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Run the test again.
4. If the system has stopped responding, turn off and restart the system.
5. Check the system firmware level and upgrade if necessary.
6. Run the memory diagnostic to identify the specific failing DIMM.
7. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **202-802-000 : MemStr Test Aborted**

Memory size is insufficient to run the test. At least 1 GB is required.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **202-803-000 : MemStr Test Aborted**

User pressed Ctrl-C.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **202-901-000 : MemStr Test Failed**

Test Failed.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Execute the standard DSA memory diagnostics to validate all memory.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Turn off the system and disconnect it from power.
4. Reseat the memory cards and DIMMs.
5. Reconnect the system to power and turn the system on.

6. Run the test again.
7. Execute the standard DSA memory diagnostics to validate all memory.
8. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **202-902-000 : MemStr Test Failed**

  Memory size is insufficient to run the test.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Ensure that all memory is enabled by checking the "Available System Memory" in the "Resource Utilization" section of the DSA Diagnostic Event log.
  2. If necessary, access the Configuration/Setup Utility program by pressing F1 during system boot and enable all memory.
  3. Make sure that the DSA Diagnostic code is at the latest level.
  4. Run the test again.
  5. Execute the standard DSA memory diagnostics to validate all memory.
  6. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

DSA Nvidia GPU test results

The following messages can result when you run the Nvidia GPU test.

Test results for the DSA Nvidia GPU test

The following messages can result when you run the DSA Nvidia GPU test.

- **409-000-000 : NVIDIA User Diagnostic Test Passed**

  NVIDIA User Diagnostic test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **409-003-000 : Nvidia::DiagnosticServiceProvider::Bandwidth Test Passed**

  Nvidia GPU Bandwidth test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **409-004-000 : Nvidia::DiagnosticServiceProvider::Query Test Passed**

  Nvidia GPU Query test passed.

  Recoverable
  No

  Severity
  Event

  Serviceable

No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **409-005-000 : Nvidia::DiagnosticServiceProvider::Matrix Test Passed**

Nvidia GPU Matrix test passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **409-006-000 : Nvidia::DiagnosticServiceProvider::Binomial Test Passed**

Nvidia GPU Binomial test passed.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **409-800-000 : NVIDIA User Diagnostic Test Aborted**

NVIDIA User Diagnostic test was canceled.

Recoverable
No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **409-803-000 : Nvidia::DiagnosticServiceProvider::Bandwidth Test Aborted**

Nvidia GPU Bandwidth test was canceled.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **409-804-000 : Nvidia::DiagnosticServiceProvider::Query Test Aborted**

Nvidia GPU Query test was canceled.

Recoverable
No

Severity
Warning

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA

- Latest level of BMC/IMM

- **409-805-000 : Nvidia::DiagnosticServiceProvider::Matrix Test Aborted**

  Nvidia GPU Matrix test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **409-806-000 : Nvidia::DiagnosticServiceProvider::Binomial Test Aborted**

  Nvidia GPU Binomial test was canceled.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **409-900-000 : NVIDIA User Diagnostic Test Failed**

  NVIDIA User Diagnostic Test Failed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **409-903-000 : Nvidia::DiagnosticServiceProvider::Bandwidth Test Failed**

Nvidia GPU Bandwidth Test Failed.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **409-904-000 : Nvidia::DiagnosticServiceProvider::Query Test Failed**

Nvidia GPU Query Test Failed.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **409-905-000 : Nvidia::DiagnosticServiceProvider::Matrix Test Failed**

Nvidia GPU Matrix Test Failed.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **409-906-000 : Nvidia::DiagnosticServiceProvider::Binomial Test Failed**

  Nvidia GPU Binomial Test Failed.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
  2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
  3. Run nvidia-smi -q In some cases this will report a poorly connected power cable.
  4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
  5. If the problem remains, contact your IBM technical-support representative.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

DSA optical drive test results

The following messages can result when you run the optical drive test.

Test results for the DSA optical drive test

The following messages can result when you run the DSA optical drive test.

- **215-000-000 : Optical Drive Test Passed**

  Optical Drive Test Passed.

  Recoverable

No

Severity
Event

Serviceable
No

Automatically notify support
No

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **215-801-000 : Optical Drive Test Aborted**

Optical Drive Test Aborted. Unable to communicate with driver.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Make sure that the DSA Diagnostic code is at the latest level.
2. Run the test again.
3. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
4. Run the test again.
5. Check system firmware level and upgrade if necessary.The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
6. Run the test again.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **215-802-000 : Optical Drive Test Aborted**

Optical Drive Test Aborted. A read error was encountered.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **215-803-000 : Optical Drive Test Failed**

Optical Drive Test Failed. Disk may be in use by the operating system.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Wait for the system activity to cease
2. Run the test again
3. Turn off and restart the system.
4. Run the test again.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **215-804-000 : Optical Drive Test Aborted**

  Optical Drive Test Aborted. The media tray is open.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Close the media tray and wait for 15 seconds for the media to be recognized. Run the test again.
  2. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
  3. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
  4. Run the test again.
  5. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **215-901-000 : Optical Drive Test Aborted**

  Optical Drive Test Aborted. Drive media is not detected.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
  2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
  3. Run the test again.

4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **215-902-000 : Optical Drive Test Failed**

Optical Drive Test Failed. Read miscompare.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **215-903-000 : Optical Drive Test Aborted**

Optical Drive Test Aborted. Could not access the device.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response

Complete the following steps:

1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
3. Run the test again.
4. Check system firmware level and upgrade if necessary.The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
5. Run the test again.
6. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

DSA system management test results

The following messages can result when you run the system management test.

Test results for the DSA system management test

The following messages can result when you run the DSA system management test.

- **166-000-001 : IMM I2C Test Passed**

  IMM I2C Test Passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **166-801-001 : IMM I2C Test Aborted**

IMM returned incorrect response length.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-802-001 : IMM I2C Test Aborted**

Test cannot be completed for unknown reason.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-803-001 : IMM I2C Test Aborted**

Node Busy. Try later.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-804-001 : IMM I2C Test Aborted**

Invalid Command.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-805-001 : IMM I2C Test Aborted**

Invalid Command for given LUN.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-806-001 : IMM I2C Test Aborted**

Timeout while processing command.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-807-001 : IMM I2C Test Aborted**

Out of space.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-808-001 : IMM I2C Test Aborted**

Reservation Canceled or Invalid Reservation ID.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-809-001 : IMM I2C Test Aborted**

Request data truncated.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-810-001 : IMM I2C Test Aborted**

Request data length invalid.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-811-001 : IMM I2C Test Aborted**

Request data field length limit exceeded.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response

Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-812-001 : IMM I2C Test Aborted**

Parameter out of range.

Recoverable

No

Severity

Warning

Serviceable

Yes

Automatically notify support

No

User Response

Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-813-001 : IMM I2C Test Aborted**

Cannot return number of requested data bytes.

Recoverable

No

Severity

Warning

Serviceable

Yes

Automatically notify support

No

User Response

Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-814-001 : IMM I2C Test Aborted**

Requested Sensor, data, or record not present.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-815-001 : IMM I2C Test Aborted**

Invalid data field in Request.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-816-001 : IMM I2C Test Aborted**

  Command illegal for specified sensor or record type.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Perform the actions mentioned one at a time and try the test after each action:

  1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
  2. Make sure that DSA and BMC/IMM are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **166-817-001 : IMM I2C Test Aborted**

  Command response could not be provided.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Perform the actions mentioned one at a time and try the test after each action:

  1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
  2. Make sure that DSA and BMC/IMM are at the latest level.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-818-001 : IMM I2C Test Aborted**

  Cannot execute duplicated request.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Perform the actions mentioned one at a time and try the test after each action:

  1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
  2. Make sure that DSA and BMC/IMM are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **166-819-001 : IMM I2C Test Aborted**

  Command response could not be provided. SDR Repository in?update mode.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Perform the actions mentioned one at a time and try the test after each action:

  1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
  2. Make sure that DSA and BMC/IMM are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA

- Latest level of BMC/IMM

- **166-820-001 : IMM I2C Test Aborted**

  Command response could not be provided. Device in firmware update mode.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Perform the actions mentioned one at a time and try the test after each action:

  1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
  2. Make sure that DSA and BMC/IMM are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **166-821-001 : IMM I2C Test Aborted**

  Command response could not be provided. BMC initialization in progress.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Perform the actions mentioned one at a time and try the test after each action:

  1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
  2. Make sure that DSA and BMC/IMM are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **166-822-001 : IMM I2C Test Aborted**

  Destination unavailable.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Perform the actions mentioned one at a time and try the test after each action:

  1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
  2. Make sure that DSA and BMC/IMM are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **166-823-001 : IMM I2C Test Aborted**

  Cannot execute command. Insufficient privilege level.

  Recoverable
  No

  Severity
  Warning

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Perform the actions mentioned one at a time and try the test after each action:

  1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
  2. Make sure that DSA and BMC/IMM are at the latest level.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **166-824-001 : IMM I2C Test Aborted**

Cannot execute command.

Recoverable
No

Severity
Warning

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-901-001 : IMM I2C Test Failed**

IMM Indicates failure in H8S 2117 bus (BUS 0).

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-904-001 : IMM I2C Test Failed**

  IMM Indicates failure in PCA9543 bus (BUS 3).

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Perform the actions mentioned one at a time and try the test after each action:

  1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
  2. Make sure that DSA and BMC/IMM are at the latest level.
  3. Run the test again.
  4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **166-905-001 : IMM I2C Test Failed**

  IMM Indicates failure in MAX7319 device bus (BUS 4).

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Perform the actions mentioned one at a time and try the test after each action:

  1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
  2. Make sure that DSA and BMC/IMM are at the latest level.
  3. Run the test again.
  4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **166-907-001 : IMM I2C Test Failed**

  IMM Indicates failure in LM75 device bus (BUS 6).

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Perform the actions mentioned one at a time and try the test after each action:

  1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
  2. Make sure that DSA and BMC/IMM are at the latest level.
  3. Run the test again.
  4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **166-908-001 : IMM I2C Test Failed**

  IMM Indicates failure in PCA9567 bus (BUS 7).

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Perform the actions mentioned one at a time and try the test after each action:

  1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
  2. Make sure that DSA and BMC/IMM are at the latest level.
  3. Run the test again.

4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

DSA tape drive test results

The following messages can result when you run the tape drive test.

Test results for the DSA tape drive test

The following messages can result when you run the DSA tape drive test.

- **264-000-000 : Tape Test Passed**

  Tape Test Passed.

  Recoverable
  No

  Severity
  Event

  Serviceable
  No

  Automatically notify support
  No

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **264-901-000 : Tape Test Failed**

  An error was found in the tape alert log.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

User Response

Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.
2. Run the test again.
3. Clear the error log.
4. Run the test again.
5. Make sure that the drive firmware is at the latest level.
6. Rerun the test after upgrading to the latest firmware level.
7. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **264-902-000 : Tape Test Failed**

Tape Test Failed. Media is not detected.

Recoverable

No

Severity

Error

Serviceable

Yes

Automatically notify support

No

User Response

Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.
2. Run the test again.
3. Make sure that the drive firmware is at the latest level.
4. Rerun the test after upgrading to the latest firmware level.
5. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **264-903-000 : Tape Test Failed**

Tape Test Failed. Media is not detected.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.
2. Run the test again.
3. Make sure that the drive firmware is at the latest level.
4. Rerun the test after upgrading to the latest firmware level.
5. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **264-904-000 : Tape Test Failed**

Tape Test Failed. Drive hardware error.

Recoverable
No

Severity
Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Check the tape drive cabling for loose or broken connections or damage to the cable. Replace the cable if damage is present.
2. Clean the tape drive using the appropriate cleaning media and install new media.
3. Run the test again.
4. Make sure that the drive firmware is at the latest level.
5. Rerun the test after upgrading to the latest firmware level.
6. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **264-905-000 : Tape Test Failed**

  Tape Test Failed. Software error: invalid request.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

  User Response
  Complete the following steps:

  1. If the system has stopped responding, turn off and restart the system.
  2. Check the system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
  3. Run the test again.
  4. If the system has stopped responding, turn off and restart the system.
  5. Make sure that the drive firmware is at the latest level.
  6. Run the test again.
  7. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

  Related links

  - IBM Support website
  - Latest level of DSA
  - Latest level of BMC/IMM

- **264-906-000 : Tape Test Failed**

  Tape Test Failed. Unrecognized error.

  Recoverable
  No

  Severity
  Error

  Serviceable
  Yes

  Automatically notify support
  No

User Response

Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.
2. Run the test again.
3. Make sure that the drive firmware is at the latest level.
4. Rerun the test after upgrading to the latest firmware level.
5. Make sure that the DSA Diagnostic code is at the latest level.
6. Run the test again.
7. Check the system firmware level and upgrade if necessary.
8. Run the test again.
9. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **264-907-000 : Tape Test Failed**

An error was found in the block address somewhere.

Recoverable

No

Severity

Error

Serviceable

Yes

Automatically notify support

No

User Response

Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

- **264-908-000 : Tape Test Failed**

An error was found in getting tape capacity.

Recoverable

No

Severity

Error

Serviceable
Yes

Automatically notify support
No

User Response
Complete the following steps:

1. Make sure that medium is present.
2. Clean the tape drive using the appropriate cleaning media and install new media.

Related links

- IBM Support website
- Latest level of DSA
- Latest level of BMC/IMM

Appendix D. Getting help and technical assistance

If you need help, service, or technical assistance or just want more information about Lenovo products, you will find a wide variety of sources available from Lenovo to assist you.

Use this information to obtain additional information about Lenovo and Lenovo products, and determine what to do if you experience a problem with your Lenovo system or optional device.

Note: This section includes references to IBM web sites and information about obtaining service. IBM is Lenovo's preferred service provider for the System x, Flex System, and NeXtScale System products.

Before you call

Before you call, make sure that you have taken these steps to try to solve the problem yourself.

If you believe that you require warranty service for your Lenovo product, the service technicians will be able to assist you more efficiently if you prepare before you call.

- Check all cables to make sure that they are connected.
- Check the power switches to make sure that the system and any optional devices are turned on.
- Check for updated software, firmware, and operating-system device drivers for your Lenovo product. The Lenovo Warranty terms and conditions state that you, the owner of the Lenovo product, are responsible for maintaining and updating all software and firmware for the product (unless it is covered by an additional maintenance contract). Your service technician will request that you upgrade your software and firmware if the problem has a documented solution within a software upgrade.
- If you have installed new hardware or software in your environment, check http://www.lenovo.com/serverproven/ to make sure that the hardware and software is supported by your product.
- Go to http://www.lenovo.com/support to check for information to help you solve the problem.
- Gather the following information to provide to the service technician. This data will help the service technician quickly provide a solution to your problem and ensure that you receive the level of service for which you might have contracted.
  - Hardware and Software Maintenance agreement contract numbers, if applicable
  - Machine type number (Lenovo 4-digit machine identifier)
  - Model number
  - Serial number
  - Current system UEFI and firmware levels
  - Other pertinent information such as error messages and logs
- Go to http://www.ibm.com/support/ entry/portal/Open_service_request to submit an Electronic Service Request. Submitting an Electronic Service Request will start the process of determining a solution to your problem by making the pertinent information available to the service technicians. The IBM service technicians can start working on your solution as soon as you have completed and submitted an Electronic Service Request.

You can solve many problems without outside assistance by following the troubleshooting procedures that Lenovo provides in the online help or in the Lenovo product documentation. The Lenovo product documentation also describes the diagnostic tests that you can perform. The documentation for most systems, operating systems, and programs contains troubleshooting procedures and explanations of error messages and error codes. If you suspect a software problem, see the documentation for the operating system or program.

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Using the documentation

Information about your Lenovo system and preinstalled software, if any, or optional device is available in the product documentation. That documentation can include printed documents, online documents, readme files, and help files.

See the troubleshooting information in your system documentation for instructions for using the diagnostic programs. The troubleshooting information or the diagnostic programs might tell you that you need additional or updated device drivers or other software. Lenovo maintains pages on the World Wide Web where you can get the latest technical information and download device drivers and updates. To access these pages, go to http://www.lenovo.com/support.

Getting help and information from the World Wide Web

Up-to-date information about Lenovo products and support is available on the World Wide Web.

On the World Wide Web, up-to-date information about Lenovo systems, optional devices, services, and support is available at http://www.lenovo.com/support. The most current version of the product documentation is available in the following product-specific Information Centers:

- **Flex System products:**

  http://pic.dhe.ibm.com/infocenter/ flexsys/information/index.jsp
- **System x products:**

  http://shop.lenovo.com/us/ en/systems/
- **NeXtScale System products:**

  http://pic.dhe.ibm.com/infocenter/ nxtscale/documentation/index.jsp

How to send DSA data

You can use the Enhanced Customer Data Repository to send diagnostic data to IBM.

Before you send diagnostic data to IBM, read the terms of use at http://www.ibm.com/de/support/ecurep/terms.html.

You can use any of the following methods to send diagnostic data:

- **Standard upload**:

  http://www.ibm.com/de/support/ ecurep/send_http.html
- **Standard upload with the system serial number**:

  http://www.ecurep.ibm.com/app/ upload_hw
- **Secure upload**:

  http://www.ibm.com/de/support/ ecurep/send_http.html#secure
- **Secure upload with the system serial number**:

  https://www.ecurep.ibm.com/ app/upload_hw

Creating a personalized support web page

You can create a personalized support web page by identifying Lenovo products that are of interest to you.

To create a personalized support web page, go to http://www.ibm.com/support/ mynotifications. From this personalized page, you can subscribe to weekly email notifications about new technical documents, search for information and downloads, and access various administrative services.

Software service and support

Through IBM Support Line, you can get telephone assistance, for a fee, with usage, configuration, and software problems with your Lenovo products.

For more information about Support Line and other IBM services, see http://www.ibm.com/services or see http://www.ibm.com/planetwide for support telephone numbers. In the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

Hardware service and support

IBM is Lenovo's preferred service provider for the System x, Flex System and NeXtScale System products.

You can receive hardware service through your Lenovo reseller or from IBM. To locate a reseller authorized by Lenovo to provide warranty service, go to http://www.ibm.com/partnerworld and click **Business Partner Locator**. For IBM support telephone numbers, see http://www.ibm.com/planetwide. In the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

In the U.S. and Canada, hardware service and support is available 24 hours a day, 7 days a week. In the U.K., these services are available Monday through Friday, from 9 a.m. to 6 p.m.

Taiwan product service

Use this information to contact IBM Taiwan product service.

台灣 IBM 產品服務聯絡方式：
台灣國際商業機器股份有限公司
台北市松仁路 7 號 3 樓
電話：0800-016-888

IBM Taiwan product service contact information:

IBM Taiwan Corporation
3F, No 7, Song Ren Rd.
Taipei, Taiwan
Telephone: 0800-016-888

Appendix E. Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area.

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Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk.

Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

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Important notes

Processor speed indicates the internal clock speed of the microprocessor; other factors also affect application performance.

CD or DVD drive speed is the variable read rate. Actual speeds vary and are often less than the possible maximum.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1 024 bytes, MB stands for 1 048 576 bytes, and GB stands for 1 073 741 824 bytes.

When referring to hard disk drive capacity or communications volume, MB stands for 1 000 000 bytes, and GB stands for 1 000 000 000 bytes. Total user-accessible capacity can vary depending on operating environments.

Maximum internal hard disk drive capacities assume the replacement of any standard hard disk drives and population of all hard-disk-drive bays with the largest currently supported drives that are available from Lenovo.

Maximum memory might require replacement of the standard memory with an optional memory module.

Each solid-state memory cell has an intrinsic, finite number of write cycles that the cell can incur. Therefore, a solid-state device has a maximum number of write cycles that it can be subjected to, expressed as `total bytes written` (TBW). A device that has exceeded this limit might fail to respond to system-generated commands or might be incapable of being written to. Lenovo is not responsible for replacement of a device that has exceeded its maximum guaranteed number of program/erase cycles, as documented in the Official Published Specifications for the device.

Lenovo makes no representations or warranties with respect to non-Lenovo products. Support (if any) for the non-Lenovo products is provided by the third party, not Lenovo.

Some software might differ from its retail version (if available) and might not include user manuals or all program functionality.

Recycling information

Lenovo encourages owners of information technology (IT) equipment to responsibly recycle their equipment when it is no longer needed. Lenovo offers a variety of programs and services to assist equipment owners in recycling their IT products. For information on recycling Lenovo products, go to:http://www.lenovo.com/recycling.

Particulate contamination

Attention: Airborne particulates (including metal flakes or particles) and reactive gases acting alone or in combination with other environmental factors such as humidity or temperature might pose a risk to the device that is described in this document.

Risks that are posed by the presence of excessive particulate levels or concentrations of harmful gases include damage that might cause the device to malfunction or cease functioning altogether. This specification sets forth limits for particulates and gases that are intended to avoid such damage. The limits must not be viewed or used as definitive limits, because numerous other factors, such as temperature or moisture content of the air, can influence the impact of particulates or environmental corrosives and gaseous contaminant transfer. In the absence of specific limits that are set forth in this document, you must implement practices that maintain particulate and gas levels that are consistent with the protection of human health and safety. If Lenovo determines that the levels of particulates or gases in your environment have caused damage to the device, Lenovo may condition provision of repair or replacement of devices or parts on implementation of appropriate remedial measures to mitigate such environmental contamination. Implementation of such remedial measures is a customer responsibility.

Table 30. Limits for particulates and gases

Contaminant	Limits
Particulate	• The room air must be continuously filtered with 40% atmospheric dust spot efficiency (MERV 9) according to ASHRAE Standard 52.2[1]. • Air that enters a data center must be filtered to 99.97% efficiency or greater, using high-efficiency particulate air (HEPA) filters that meet MIL-STD-282. • The deliquescent relative humidity of the particulate contamination must be more than 60%[2]. • The room must be free of conductive contamination such as zinc whiskers.
Gaseous	• Copper: Class G1 as per ANSI/ISA 71.04-1985[3] • Silver: Corrosion rate of less than 300 Å in 30 days

[1] ASHRAE 52.2-2008 - *Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size*. Atlanta: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

[2] The deliquescent relative humidity of particulate contamination is the relative humidity at which the dust absorbs enough water to become wet and promote ionic conduction.

[3] ANSI/ISA-71.04-1985. *Environmental conditions for process measurement and control systems: Airborne contaminants*. Instrument Society of America, Research Triangle Park, North Carolina, U.S.A.

Telecommunication regulatory statement

This product may not be certified in your country for connection by any means whatsoever to interfaces of public telecommunications networks. Further certification may be required by law prior to making any such connection. Contact a Lenovo representative or reseller for any questions.

Electronic emission notices

When you attach a monitor to the equipment, you must use the designated monitor cable and any interference suppression devices that are supplied with the monitor.

Federal Communications Commission (FCC) statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment

generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Lenovo is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that might cause undesired operation.

Industry Canada Class A emission compliance statement

This Class A digital apparatus complies with Canadian ICES-003.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Australia and New Zealand Class A statement

Attention: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

European Union EMC Directive conformance statement

This product is in conformity with the protection requirements of EU Council Directive 2014/30/EU on the approximation of the laws of the Member States relating to electromagnetic compatibility. Lenovo cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the installation of option cards from other manufacturers.

This product has been tested and found to comply with the limits for Class A equipment according to European Standards harmonized in the Directives in compliance. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

Lenovo, Einsteinova 21, 851 01 Bratislava, Slovakia

CE

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Germany Class A statement

Deutschsprachiger EU Hinweis: Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit

Deutschsprachiger EU Hinweis:Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie 2014/30/EU (früher 2004/108/EC) zur Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der Klasse A der Norm gemäß Richtlinie.

Um dieses sicherzustellen, sind die Geräte wie in den Handbüchern beschrieben zu installieren und zu betreiben. Des Weiteren dürfen auch nur von der Lenovo empfohlene Kabel angeschlossen werden. Lenovo übernimmt keine Verantwortung für die Einhaltung der Schutzanforderungen, wenn das Produkt ohne Zustimmung der Lenovo verändert bzw. wenn Erweiterungskomponenten von Fremdherstellern ohne Empfehlung der Lenovo gesteckt/eingebaut werden.

Deutschland:

Einhaltung des Gesetzes über die elektromagnetische Verträglichkeit von Betriebsmittein Dieses Produkt entspricht dem „Gesetz über die elektromagnetische Verträglichkeit von Betriebsmitteln“ EMVG (früher „Gesetz über die elektromagnetische Verträglichkeit von Geräten“). Dies ist die Umsetzung der EU-Richtlinie 2014/30/EU (früher 2004/108/EC) in der Bundesrepublik Deutschland.

Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Betriebsmitteln, EMVG vom 20. Juli 2007 (früher Gesetz über die elektromagnetische Verträglichkeit von Geräten), bzw. der EMV EU Richtlinie 2014/30/EU (früher 2004/108/EC), für Geräte der Klasse A.

Dieses Gerät ist berechtigt, in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen. Verantwortlich für die Konformitätserklärung nach Paragraf 5 des EMVG ist die Lenovo (Deutschland) GmbH, Meitnerstr. 9, D-70563 Stuttgart.

Informationen in Hinsicht EMVG Paragraf 4 Abs. (1) 4:**Das Gerät erfüllt die Schutzanforderungen nach EN 55024 und EN 55022 Klasse A.**

Nach der EN 55022: „Dies ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funkstörungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen durchzuführen und dafür aufzukommen.“

Nach dem EMVG: „Geräte dürfen an Orten, für die sie nicht ausreichend entstört sind, nur mit besonderer Genehmigung des Bundesministers für Post und Telekommunikation oder des Bundesamtes für Post und Telekommunikation betrieben werden. Die Genehmigung wird erteilt, wenn keine elektromagnetischen Störungen zu erwarten sind.“ (Auszug aus dem EMVG, Paragraph 3, Abs. 4). Dieses Genehmigungsverfahren ist nach Paragraph 9 EMVG in Verbindung mit der entsprechenden Kostenverordnung (Amtsblatt 14/93) kostenpflichtig.

Anmerkung: Um die Einhaltung des EMVG sicherzustellen sind die Geräte, wie in den Handbüchern angegeben, zu installieren und zu betreiben.

Japan VCCI Class A statement

この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI–A

This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI). If this equipment is used in a domestic environment, radio interference may occur, in which case the user may be required to take corrective actions.

Japanese statement for ac power consumption for JEITA harmonics guideline

定格入力電力表示

（社）電子情報技術参照委員会 家電・汎用品高調波抑制対策ガイドライン
実行計画書に基づく定格入力電力値： W

お手持ちのユニットの定格入力電力値（W）はユニットの電源装置に貼付されている電源仕様ラベルを
ご参照下さい

Japanese statement of compliance for products less than or equal to 20A per phase for JEITA harmonics guideline

日本の定格電流が 20A/相 以下の機器に対する高調波電流規制
高調波電流規格 JIS C 61000-3-2 適合品

Korea Communications Commission (KCC) statement

이 기기는 업무용(A급)으로 전자파적합기기로
서 판매자 또는 사용자는 이 점을 주의하시기
바라며, 가정외의 지역에서 사용하는 것을 목
적으로 합니다.

This is electromagnetic wave compatibility equipment for business (Type A). Sellers and users need to pay attention to it. This is for any areas other than home.

Russia Electromagnetic Interference (EMI) Class A statement

ВНИМАНИЕ! Настоящее изделие относится к классу А.
В жилых помещениях оно может создавать радиопомехи, для
снижения которых необходимы дополнительные меры

People's Republic of China Class A electronic emission statement

声　　明
此为 A 级产品。在生活环境中，
该产品可能会造成无线电干扰。
在这种情况下，可能需要用户对其
干扰采取切实可行的措施。

Taiwan Class A compliance statement

警告使用者:
這是甲類的資訊產品，在
居住的環境中使用時，可
能會造成射頻干擾，在這
種情況下，使用者會被要
求採取某些適當的對策。

Taiwan BSMI RoHS declaration

Taiwan BSMI RoHS declaration

單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛Lead (Pb)	汞Mercury (Hg)	鎘Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr^{+6})	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
機架	○	○	○	○	○	○
外部蓋板	○	○	○	○	○	○
機械組合件	○	○	○	○	○	○
空氣傳動設備	–	○	○	○	○	○
冷卻組合件	–	○	○	○	○	○
內存模塊	–	○	○	○	○	○
處理器模塊	–	○	○	○	○	○
鍵盤	–	○	○	○	○	○
調製解調器	–	○	○	○	○	○
監視器	–	○	○	○	○	○
滑鼠	–	○	○	○	○	○
電纜組合件	–	○	○	○	○	○
電源	–	○	○	○	○	○
儲備設備	–	○	○	○	○	○
電池匣組合件	–	○	○	○	○	○
電池	–	○	○	○	○	○
有mech的電路卡	–	○	○	○	○	○
無mech的電路卡	–	○	○	○	○	○
激光器	–	○	○	○	○	○

備考1.〝超出0.1 wt %〞及〝超出0.01 wt %〞係指限用物質之百分比含量超出百分比含量基準值。

Note1: “exceeding 0.1wt%” and“exceeding 0.01 wt%” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.

備考2.〝○〞係指該項限用物質之百分比含量未超出百分比含量基準值。

Note2: “○” indicates that thepercentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考3.〝-〞係指該項限用物質為排除項目。

Note3 : The “-“ indicates thatthe restricted substance corresponds to the exemption.

Index

2.5-inch hot-swap hard disk drive
  IDs 36, 203
2.5-inch simple-swap hard disk drive
  IDs 37, 206
3.5-inch hot-swap hard disk drive
  IDs 36, 203
3.5-inch simple-swap hard disk drive
  IDs 37, 206
4 Pac HDD option, installing 87

A

ABR, automatic boot recovery 164
AC power-supply
  LEDs 131
AC power-supply LEDs 131
acoustical noise emissions 6
Active Energy Manager plug-in 9
active memory 9
adapter
  installing 52
  removing 227
  replacing 228
adapter, installation 52
adapter, supported 52
administrator
  password 103
Advanced Settings Utility program
  overview 109
air baffle
  removing 35, 193
  replacing 90, 194
ASM event log 136
assertion event, system-event log 135
assistance, getting 975
attention notices 5
Australia Class A statement 982
automatic boot recovery (ABR) 164
availability, server 12

B

backplane 183
backup firmware
  starting 104
battery holder, RAID adapter
  removing 198
  replacing 199
battery, RAID adapter
  installing 61
  removing 195
  replacing 196
battery, system
  removing 271
  replacing 273
before you install a legacy operating system 96
bezel
  removing 276
  replacing 277
blue-screen capture feature
  overview 105
blue-screen feature 105
Boot Manager 103
Boot Manager program 94
button, presence detection 16
buttons
  system board 27

C

cable
  connecting 91
cabling 181, 183, 186–187
  backplane 183
  DVD drive 188
  front
    USB connector 190
    video connector 190
  operator information panel 189
  RAID adapter
    battery 186
  SAS/SATA ServeRAID Controller 181
  SPECpower 187
call home feature
  Electronic Service Agent 140
call home tools 140
Canada Class A electronic emission statement 982
caution statements 5
checkout procedure 120
  performing 120
China Class A electronic emission statement 984
Class A electronic emission notice 982
collecting data 117
completing
  options installation 89
components
  server 24, 167
configuration
  information 93
  instructions 93
  Nx-boot failure 165
  ServerGuide Setup and Installation CD 93
  Setup utility 93
configuration programs 94
configuring
  RAID arrays 109
  with ServerGuide 96
configuring hardware 94
configuring your server 93
connecting

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cable 91
connector
USB 14
video
front 14
connectors
external 27
internal 26
options on the system board 31
contamination, particulate and gaseous 981
controller
Ethernet 108
controls and LEDs
light path diagnostics panel 17
operator information panel 16
controls, LEDs, and power 14
cooling 9
cover
removing 34, 191
replacing 91, 192
creating a personalized support web page 977
custom support web page 977

D

danger statements 5
data collection 117
dc power supply
installing
precautions 70, 256
replacing
precautions 70, 256
DC power-supply
LEDs 132
DC power-supply LEDs 132
deassertion event, system-event log 135
device drivers 104
devices, static-sensitive
handling 33
diagnostic
on-board programs, starting 139
tools, overview 121
diagnostic codes and messages
POST/UEFI 793
diagnostics
program overview 137
diagnostics program
DSA Preboot 9
dimension 6
DIMM
installing 45, 51, 216
memory
two-DIMM-per-channel (2DPC) 45, 216
removing 215
two-DIMM-per-channel (2DPC)
requirement 45, 216
DIMM installation sequence 48, 219
memory mirrored channel 49, 219
rank sparing 50, 220
display problems 147
documentation 4
CD 3
Documentation Browser 4
updates 1
using 976
documentation, updated
finding 4
drive
IDs 36, 203, 206
installing 35
DSA
edition 138
program, overview 137
test log, viewing 140
text message format 139
DSA log 135–136
DSA Portable 121, 138
DSA Preboot 121, 138
DSA, sending data 24, 976
dual-port network adapter
installing 63
removing 240
replacing 241
DVD
drive activity LED 14
eject button 14
DVD drive
cabling 188
installing 39
problems 141
removing 206
replacing 208
DVD drive cable
installing 43
removing 211
replacing 213
Dynamic System Analysis (DSA) Preboot diagnostics program 9

E

electrical equipment, servicing vii
electronic emission Class A notice 982
Electronic Service Agent 140
embedded hypervisor
using 107
enabling
Features on Demand
Ethernet software 108
RAID software 108
Enterprise X-Architecture technology 9
error codes and messages
IMM2 311
error messages 140
error symptoms
DVD drive 141
general 141
hard disk drive 142
hypervisor flash device 143
intermittent 144
keyboard 144

memory 145
microprocessor 146
monitor 147
mouse 144
network connection 149
optional devices 150
power 150
serial port 155
ServerGuide 156
software 157
USB port 157
USB-device 144
video 147, 158
errors
format, DSA code 139
Ethernet 9
controller 159
Ethernet activity
LED 16
Ethernet controller configuration 94
Ethernet support 9
European Union EMC Directive conformance statement 982
event log 135
viewing 136
event log, POST 135
event log, system 135
event logs
clearing 137
event logs, methods for viewing 136
external connectors 27

F

fans 9
FCC Class A notice 982
features 6
ServerGuide 96
Features on Demand 9
finding
updated documentation 4
firmware
updates 1
firmware updates 1
firmware, server, recovering 162
firmware, updating 93
flash power module holder, RAID adapter
removing 198
replacing 199
flash power module, RAID adapter
installing 61
removing 195
replacing 196
front
view 14
front view
connectors 14
LED location 14

G

gaseous contamination 981
general
problems 141
Germany Class A statement 982
grease, thermal 86, 300
guidelines
options installation 31
servicing electrical equipment vii
system reliability 32
trained service technicians vi

H

handling static-sensitive devices 33
hard disk drive
activity LED 14
problems 142
status LED 14
hardware
requirements 3
hardware service and support telephone numbers 977
hardware, configuring 94
heat sink
installing 78
removing 287
replacing 292
heat-sink retention module
removing 301
replacing 301
help
from the World Wide Web 976
from World Wide Web 976
sending diagnostic data 24, 976
sources of 975
hot-swap ac power supply
installing 67
removing 248
replacing 253
hot-swap dc power supply
installing 73
replacing 259
hot-swap drive backplane
removing 261
replacing 264
hot-swap fan
installing 75
removing 245
replacing 246
hot-swap hard disk drive
installing 37
replacing 201
hot-swap hard disk drives
removing 201
hypervisor flash device
problems 143

I

IDs

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2.5-inch hot-swap hard disk drive 36, 203
2.5-inch simple-swap hard disk drive 37, 206
3.5-inch hot-swap hard disk drive 36, 203
3.5-inch simple-swap hard disk drive 37, 206
drive 36, 203, 206
IMM heartbeat
LED 134
IMM host name 106
IMM web interface 107
IMM2 94
error messages 311
important notices 5, 980
in-band
automated boot recovery method 164
manual recovery method 162
information center 976
inspecting for unsafe conditions vi
installation
guidelines 31
installation guidelines 31
installation, options
completing 89
installing
adapter 52
dc power supply
precautions 70, 256
DIMM 45, 51, 216
drive 35
dual-port network adapter 63
DVD drive 39
DVD drive cable 43
heat sink 78
hot-swap ac power supply 67
hot-swap dc power supply 73
hot-swap fan 75
hot-swap hard disk drive 37
memory module 45, 216
microprocessor 78
operator information panel 88
optional devices 23
power supply 67
RAID adapter battery 61
RAID adapter flash power module 61
RAID controller 55
SAS/SATA 4 Pac HDD option 87
SAS/SATA controller 55
ServeRAID adapter 55
ServeRAID adapter memory module 60
simple-swap hard disk drives 38
USB hypervisor flash device 77
instructions
Business Partners 23
integrated management module
overview 9
using 104
integrated management module II
error messages 311
event log 135–136
programs 94
intermittent
problems 144
internal connectors 26
introduction 1
IP address for the IMM 106
IPMI event log 135–136
IPMItool 136

J

Japan Class A electronic emission statement 983
Japanese statement for ac power consumption for JEITA harmonics guideline 984
Japanese statement of compliance for products less than or equal to 20A per phase for JEITA harmonics guideline 984
jumper
UEFI boot recovery 162
jumpers
system board 27

K

Korea Class A electronic emission statement 984

L

LED
DVD drive activity 14
Ethernet activity 16
hard disk drive activity 14
hard disk drive status 14
IMM heartbeat 134
power-on 16
RTMM heartbeat 134
system information 16
system locator 16
system-error 16
LEDs
AC power-supply 131
DC power-supply 132
PCI riser-card 134
power-supply 131
system board 30
legacy operating system
requirement 96
Lenovo XClarity Administrator
updating 109
License Agreement for Machine Code 4
Licenses and Attributions Documents 4
light path diagnostics 9, 123
LEDs 126
panel 123
light path diagnostics panel
controls and LEDs 17
location 14
local area network (LAN) 9
log on 107

M

management, system 9

memory 9
memory mirrored channel
  description 49, 219
  DIMM population sequence 49, 219
memory module
  installing 45, 216
  removing 215
  replacing 221
memory rank sparing
  description 50, 220
memory support 9
menu choices
  Setup utility 98
messages, diagnostic
  POST/UEFI 793
method 164
methods, viewing event logs 136
microprocessor 9
  installing 78
  problems 146
  removing 287
  replacing 292
mirrored channel mode 49, 219
model name
  location 161

N

New Zealand Class A statement 982
NMI button 18
NOS installation
  with ServerGuide 97
  without ServerGuide 97
notes 5
notes, important 980
notices 979
  electronic emission 982
  FCC, Class A 982
notices and statements 5
Nx-boot failure 165

O

obtaining 106
online documentation 1
online publications 4
operating-system event log 135–136
operator information panel
  cabling 189
  controls and LEDs 16
  installing 88
  removing 285
  replacing 285
operator information panel release latch 14
optional device problems 150
optional devices
  installing 23
optional devices connectors
  system board 31
out-of-band 164

P

particulate contamination 981
parts listing 167
parts, structural 177
password 101
  administrator 101
  power-on 101
password, power-on
  switch on system board 102
PCI
  riser card 225
  riser-card assembly 222–223
  riser-card bracket 226
PCI riser slots
  installation configurations 228
  supported configurations 228
PCI riser-card
  LEDs location 134
PCI riser-card assembly
  removing 222
  replacing 223
PCI riser-card bracket
  removing 225
  replacing 226
People's Republic of China Class A electronic emission statement 984
POST 137
  event log 136
POST event log 135
POST/UEFI
  diagnostic codes 793
power
  power-control button 16
power cords 178
power features
  server 21
power problems 150, 158
power supply
  installing 67
  removing 248
  replacing 253
power-on LED 16, 21
power-supply
  LEDs 131
power-supply LEDs 131
presence detection button 16
problems
  DVD drive 141
  Ethernet controller 159
  general 141
  hard disk drive 142
  hypervisor flash device 143
  IMM2 311
  intermittent 144
  keyboard 144
  memory 145
  microprocessor 146
  monitor 147
  mouse 144
  network connection 149

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optional devices 150
power 150, 158
serial port 155
ServerGuide 156
software 157
undetermined 160
USB port 157
video 147, 158
procedure, checkout 120
product service, Taiwan 977
publications
online 1
product data 1

R

rack release latches 14
RAID adapter
battery 186
installing 61
removing 195
replacing 196
battery holder
removing 198
replacing 199
flash power module 186
installing 61
removing 195, 198
replacing 196
flash power module holder
replacing 199
RAID arrays
configuring 109
RAID controller
installing 55
removing 232
replacing 233
rank sparing
DIMM population sequence 50, 220
rank sparing mode 50, 220
RAS features, server 12
rear
view 18
rear view
connectors 18
LED location 18
recovering the server firmware 162
redundant
cooling 9
Ethernet connection 9
NIC 9
Redundant
Ethernet capabilities 12
hot-swap power supplies 12
reliability, server 12
remind button 17, 123
remote presence feature
using 105
removing
adapter 227
air baffle 35, 193
battery, system 271
bezel 276
components 181
cover 34, 191
DIMM 215
dual-port network adapter 240
DVD drive 206
DVD drive cable 211
heat sink 287
heat-sink retention module 301
hot-swap ac power supply 248
hot-swap dc power supply 250
hot-swap drive backplane 261
hot-swap fan 245
hot-swap hard disk drive 201
memory module 215
microprocessor 287
operator information panel 285
PCI riser-card assembly 222
PCI riser-card bracket 225
power supply 248
RAID adapter battery 195
RAID adapter battery holder 198
RAID adapter flash power module 195
RAID adapter flash power module holder 198
RAID controller 232
SAS/SATA controller 232
ServeRAID adapter 232
ServeRAID adapter memory module 238
simple-swap drive backplate assembly 266
simple-swap hard disk drives 203
system board 302
USB connector assembly, front 278
USB hypervisor flash device 270
video connector assembly, front 281
replaceable server components 167
replacing
adapter 228
air baffle 90, 194
battery, system 273
bezel 277
components 181
cover 91, 192
dc power supply
precautions 70, 256
dual-port network adapter 241
DVD drive 208
DVD drive cable 213
heat sink 292
heat-sink retention module 301
hot-swap ac power supply 253
hot-swap dc power supply 259
hot-swap drive backplane 264
hot-swap fan 246
hot-swap hard disk drive 201
memory module 221
microprocessor 292
operator information panel 285
PCI riser-card assembly 223

PCI riser-card bracket 226
power supply 253
RAID adapter battery 196
RAID adapter battery holder 199
RAID adapter flash power module 196
RAID adapter flash power module holder 199
RAID controller 233
SAS/SATA controller 233
server components 191
ServeRAID adapter 233
ServeRAID adapter memory module 239
simple-swap drive backplate assembly 268
simple-swap hard disk drives 204
structural parts 191
system board 306
Tier 1 CRUs 200
Tier 2 CRUs 287
USB connector assembly, front 280
USB hypervisor flash device 271
video connector assembly, front 283
reset button 17, 123
returning
component 181
device 181
RTMM heartbeat
LED 134
Russia Class A electronic emission statement 984

S

safety v
Safety Information 5
safety statements v, viii
SAS/SATA 4 Pac HDD option
installing 87
SAS/SATA controller
installing 55
removing 232
replacing 233
SAS/SATA ServeRAID Controller 181
sending diagnostic data 24, 976
serial number 1
location 161
serial port problems 155
server
offerings 9
power features 21
turning off 21
turning on 21
server , backup firmware
starting 104
server components 24, 167
server configuration
updating 92
server controls, LEDs, and power 14
server firmware, recovering 162
server shutdown 21
ServeRAID adapter
installing 55
removing 232
replacing 233
ServeRAID adapter memory module
installing 60
removing 238
replacing 239
ServeRAID support 9
ServerGuide 9
features 96
NOS installation 97
setup 96
Setup and Installation CD 93
using 96
ServerGuide CD 1
service and support
before you call 975
hardware 977
software 977
service bulletins 120
serviceability, server 12
servicing electrical equipment vii
Setup utility 93–94
menu choices 98
starting 97
using 97
shutting down the server 21
simple-swap drive backplate assembly
removing 266
replacing 268
simple-swap hard disk drives
installing 38
removing 203
replacing 204
size 6
SMP 9
software
requirements 3
software problems 157
software service and support telephone numbers 977
specifications 6
SPECpower 187
starting
backup firmware 104
Setup utility 97
statements and notices 5
static-sensitive devices
handling 33
structural parts 177
support web page, custom 977
switches
system board 27
symmetric multiprocessing 9
system
error LED front 16
locator LED, front 16
System
information LED 16
system board
buttons 27
external connectors 27
internal connectors 26

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jumpers 27
LEDs 30
power-on password switch 102
removing 302
replacing 306
switches 27
system board optional devices connectors 31
system event log 136
system pulse LEDs 134
system reliability guidelines 32
system-event log 135
system-event log, assertion event 135
system-event log, deassertion event 135
Systems Director 9
systems management tool 13
updating 110
systems management 9
systems management tool
Systems Director 13

T

Taiwan BSMI RoHS declaration 986
Taiwan Class A electronic emission statement 985
Taiwan product service 977
telecommunication regulatory statement 981
telephone numbers 977
test log, viewing 140
thermal grease 86, 300
tools, call home 140
tools, diagnostic 121
trademarks 980
trained service technicians, guidelines vi
troubleshooting 117
symptom 140
turning off the server 21
turning on the server 21

U

UEFI
boot recovery jumper 162
undetermined problems 160
undocumented problems 119
United States FCC Class A notice 982
Universal Serial Bus (USB) problems 157
unsafe conditions, inspecting for vi
UpdateXpress 93, 104
updating
DMI/SMBIOS data 113
firmware 93
Lenovo XClarity Administrator 109
server configuration 92
Systems Director 110
Universal Unique Identifier (UUID) 111
USB
connector 14
USB connector assembly, front
removing 278
replacing 280
USB hypervisor flash device
installing 77
removing 270
replacing 271
using
embedded hypervisor 107
integrated management module 104
Setup utility 97
the remote presence feature 105
Utility program
Advanced Settings 109
utility, Setup 94
starting 97
using 97

V

video connector
front 14
video connector assembly, front
removing 281
replacing 283
viewing event log 136
VMware Hypervisor support 94

W

Wake on LAN feature 21
weight 6
what the server offers 9
working inside the server
power on 33

X

X-Architecture technology 9