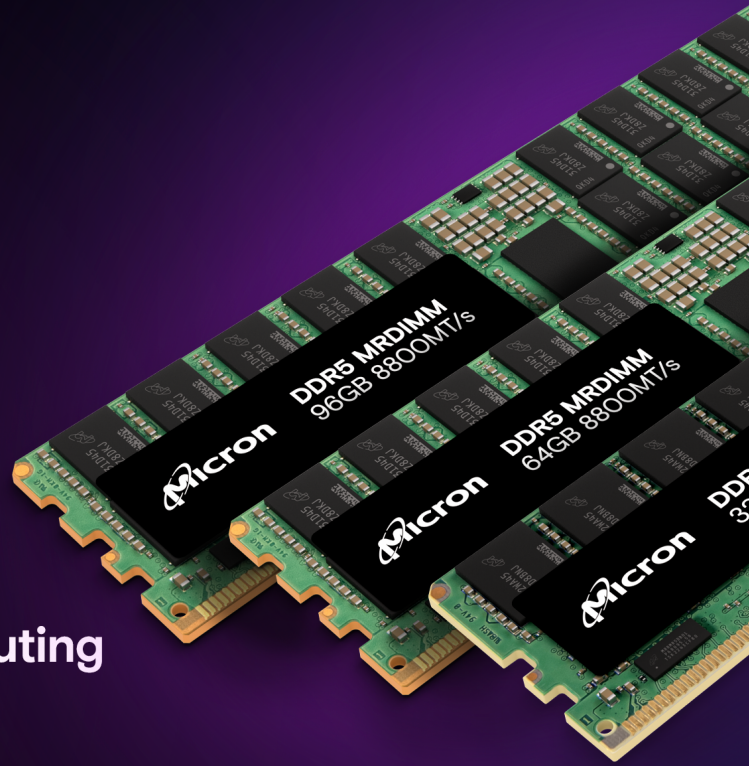




# 8800MT/s Server MRDIMM DDR5

For AI, deep learning, and other high-performance computing

Relieve the bandwidth-per-core crunch to pull peak computing performance



## More than a generational jump

### Micron DDR5 Server DRAM nearly triples the performance of DDR4

Increase server and workstation performance by 2.75x with Micron DDR5 MRDIMM Server Memory<sup>2</sup>. DDR5 technology relieves the bandwidth-per-core memory crunch to pull peak computing performance and runs more virtual machines, increasing the responsiveness of virtualized applications. DDR5 will overtake DDR4 global memory shipments in 2024<sup>4</sup>, marking a fast transition between the two technologies.

### Introducing the new MRDIMM form factor with 8,800MT/s speeds

Micron multiplexed-rank DIMM (MRDIMM) is Micron's new product line of high-performance, high-density DDR5 modules designed for Intel's latest Xeon processors. Engineered to meet the rigorous demands of modern data centers, MRDIMMs deliver faster data rates, lower latencies, and cost-effective high density for applications including high-performance computing (HPC), artificial intelligence (AI) inference, data analytics, and virtual multi-tenancy in cloud and data center environments.

### Best for



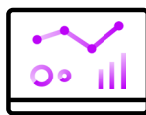
Artificial intelligence



Cloud computing



Predictive analytics



Intensive simulations

### Key features

- MRDIMM operating speeds up to 8,800MT/s<sup>6</sup>
- Initial capacities range from 32 to 256GB<sup>7</sup>
- Optimized for the latest Intel platforms
- 100% component and module tested to mission-critical server standards
- 3-year limited warranty<sup>3</sup>
- Available in a wide selection of module configurations<sup>8</sup>

## Reduce your power draw and speed up system performance

Despite more power being drawn from the server using MRDIMMs when under a load, the higher performance of this new module form factor increases the efficiency of that power usage. Meaning the same work can be completed in less time.<sup>1</sup>

## Get more out of DDR5 servers with Micron Server Memory

Micron builds DDR5 server memory with power management integrated circuits (PMICs) on the module, which means you are not paying for power management for the entire system<sup>5</sup>. This can initially mean a lower overall cost to power DDR5 servers versus DDR4 when some system memory slots are left open. Micron Server Memory is high quality and is typically less expensive than OEM server memory.

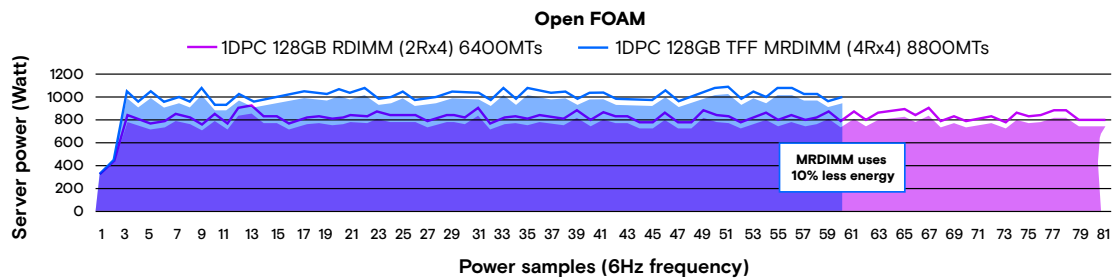
## High-performance memory for a new era of data centers

Micron DDR5 Server Memory delivers higher bandwidths along with improved reliability, availability, and scaling, when compared to DDR4. It's 100% component and module tested to mission-critical server standards and optimized for next-generation Intel® and AMD® DDR5 server and workstation platforms. As one of three major memory manufacturers, Micron tests and validates our DDR5 server memory to work with all major DDR5 server platforms.

## 128GB MRDIMM vs. 128GB RDIMM

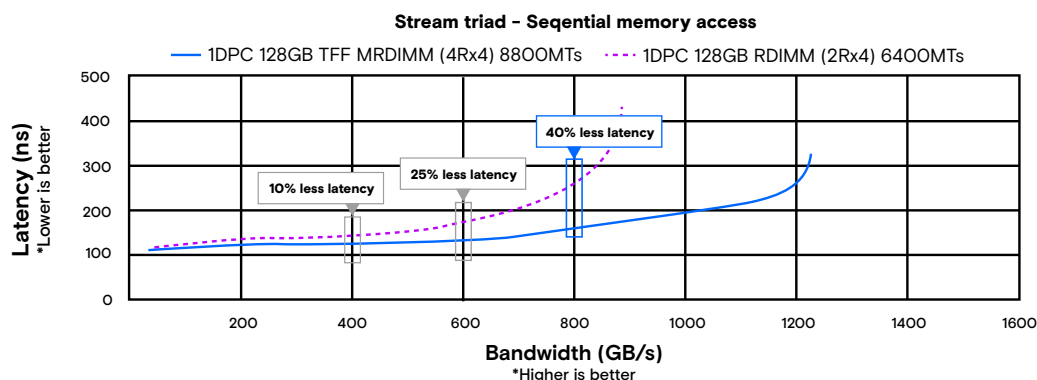
### Task energy comparison for HPC - OpenFOAM

- OpenFOAM CFD simulation runs up to 34% faster with MRDIMM
- Despite higher total server power, MRDIMM uses up to 10% less energy per task (completes the task faster)



### Loaded latency - Stream triad

- MRDIMM also improves memory latency!
- Latency and bandwidth are measured under varying levels of memory load
  - 128GB MRDIMM TFF 8800 MT/s latency is better than 128GB RDIMM 6400 MT/s @1TB/s:
  - If an application uses 800GB/s then MRDIMM can provide 40% lower latency



Micron® DDR5 server and workstation memory delivers more than a generational jump in speed and bandwidth, enabling the fastest high-performance systems for the new era of data centers.

Learn more at <https://www.microncp.com/serverDDR5>

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1. OpenFOAM CFD simulations run up to 34% faster which results in 10% less energy per task.
2. DDR5 MRDIMM data rate of 8,800MT/s are 2.75x faster than DDR4's maximum JEDEC data rate of 3,200MT/s.
3. Warranty valid for three years from the original date of purchase.
4. Based on shipments from Micron in 2024.
5. On DDR4 server memory, power management was on the motherboard instead of the module, powering empty slots as well as those in use.
6. 8,800MT/s speeds are currently limited to MRDIMMs and 6,400MT/s speeds are initially available in 16Gb-based RDIMMs. Other form factors and 24Gb-based RDIMMs will be added over time.
7. The 128GB and 256GB densities are initially only available in a tall form factor (TFF) MRDIMM profile. These TFF densities are slated for launch in spring, 2025.