

DDR5

DDR5: More than a generational jump

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

Speed up next-generation application performance with Micron® DDR5 server DRAM: more than a generational jump in memory innovation. Reverse the trend of decreased bandwidth per core, feed rapidly growing processor core counts with memory bandwidth and density, plus enable nearly 2x the data rates¹ of DDR4.

Best for



Maximizing
DDR5 server



Workstation
performance

Key features

- Increase performance by up to 85% over DDR4¹
- Introducing speeds of 5,600MT/s
- New higher RDIMM density of 96GB
- Optimized for the latest Intel® and AMD® server and workstation platforms
- 3-year limited warranty²
- 100% component and module tested
- Operating voltage reduced from DDR4's 1.2V to 1.1V
- Manufactured by Micron®
- 4,800MT/s available in RDIMM, ECC UDIMM and ECC SODIMM
- 5,600MT/s available in RDIMM

Micron DDR5 Server DRAM nearly doubles the performance of DDR4

Increase server and workstation performance by 85% or more with DDR5 Server Memory¹. 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 is expected to overtake DDR4 global memory shipments during the next few years³, marking a fast transition between the two technologies.

Boost your server maximum capacity by 50%

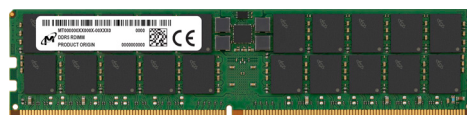
Reach new module densities of 96GB on DDR5 RDIMMs to further boost the maximum capacity of your high-performance servers by 50% more than before. This provides additional computational space without having to purchase additional servers.

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 system⁴. This can initially mean a lower overall cost to power DDR5 servers versus DDR4 when some system 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 the 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.



Micron DDR5 server DRAM

	RDIMM	ECC UDIMM	ECC SODIMM
Density	16GB, 24GB, 32GB, 48GB, 64GB, 96GB	16GB, 32GB	16GB, 32GB
Initial speed	4800MT/s, 5600MT/s	4800MT/s	4800MT/s
Component voltage	1.1V	1.1V	1.1V
Module voltage	12.0V	5.0V	5.0V

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1. Under memory-intensive workloads, DDR5 is designed to deliver 1.87x the bandwidth of DDR4 as a result of double the burst length, double the banks and bank groups, and significantly higher speed, as established by JEDEC, an independent organization that develops open standards for the microelectronics industry.

2. Warranty valid for 3 years from the original date of purchase.

3. Based on "Status of the Memory Industry 2021," Yole Développement, June 14, 2021.

4. On DDR4 server memory, power management was on the motherboard instead of the module, powering empty slots as well as those in use.