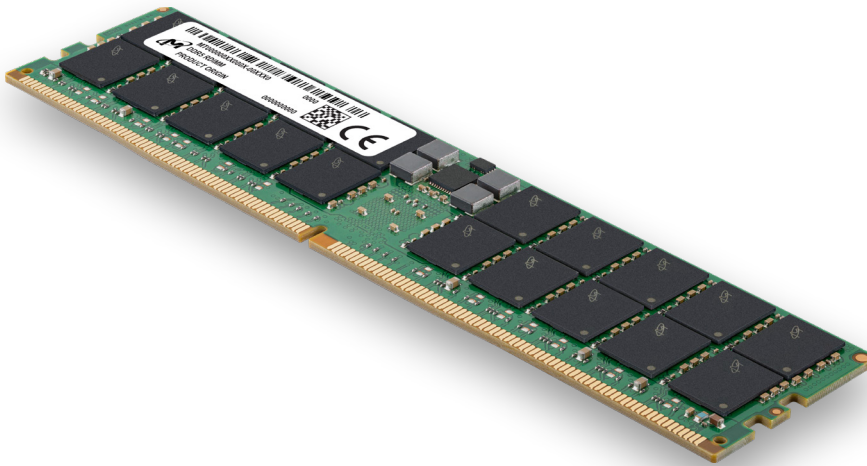# Micron DDR5 Server DRAM

Accelerate performance for next-gen workloads

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 capacity, plus enable nearly 2x the data rates[1] of DDR4.

Best For

Maximizing DDR5 server and workstation performance

Key Features

- Increase performance by up to 85% over DDR4[1]

- Initial speeds up to 4800MT/s[2]

- Optimized for the latest Intel® and AMD® server and workstation platforms

- Three-year limited warranty

- 100% component and module tested

- Operating voltage reduced from DDR4's 1.2V to 1.1V

- Manufactured by Micron

- Available in RDIMM, ECC UDIMM and ECC SODIMM[3]

Micron DDR5 Server DRAM nearly doubles the performance of DDR4

Increase server and workstation performance by 85% or more with DDR5 Server Memory[1]. 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 years[5], marking a fast transition between the two technologies.

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[6]. 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® quality – A higher level of reliability

Server memory that's built to last requires stable industry relationships and technology collaboration over multiple product cycles. With nearly 44 years of experience poured into die selection, DRAM and PCB design, module assembly, and testing from start to finish, Micron works closely with industry leaders in CPU and platform development as well as leading system and motherboard manufacturers to enable the next level of memory technology. By collaborating with JEDEC to design DDR5 specs, and by instituting a one-of-a-kind DDR5 Technology Enablement Program (TEP), Micron leads the way in enabling the ecosystem transition to DDR5. Micron is a proven industry leader with the innovative expertise to not just sell, but engineer quality memory products for your servers from start to finish. Don't settle for anything less.

Micron DDR5 Server DRAM			
	RDIMM	ECC UDIMM	ECC SODIMM
Density	16GB, 32GB, 64GB	16GB, 32GB	16GB, 32GB
Initial Speed[4]	4800MT/s	4800MT/s	4800MT/s
Component Voltage	1.1V	1.1V	1.1V
Module Voltage	12.0V	5.0V	5.0V
Pin count	288-pin	288-pin	262-pin

1. Under memory-intensive workloads, DDR5 is designed to deliver 1.87x the bandwidth as a result of double burst length, double the banks and bank groups, and significantly higher speed than DDR4, as established by JEDEC, an independent organization that develops open standards for the microelectronics industry.
2. DDR5 launch data rate of 4800MT/s transfers 1.5x (50%) more data than the maximum standard DDR4 data rate of 3200MT/s. JEDEC projected speeds of 8800MT/s are 2.75x faster than DDR4's maximum standard data rate of 3200MT/s.
3. Initial DDR5 Server DRAM shipments will not include the VLP RDIMM variation. It will come later in the year.
4. Initial shipments will be at 4800MT/s with higher speeds expected to reach 6400MT/s in the future.
5. Based on "Status of the Memory Industry 2021," Yole Développement, June 14, 2021.
6. On DDR4 server memory, power management was on the motherboard instead of the module, powering empty slots as well as those in use.