

# Solve your data center challenges

In a digital landscape where data creation increases daily, the ability to quickly create and access data — and transform it into valuable insight — is crucial for thriving businesses. Building a fast and reliable data center does more than just ensure success in the present; it's a vital investment in the growth of your business.



# Data center technology engineered for growth

When you need your data center to provide a true competitive advantage, Micron delivers. With an industry-leading data center portfolio backed by 45 years of innovation and execution, Micron has a full range of memory and storage solutions to fit your unique business needs.

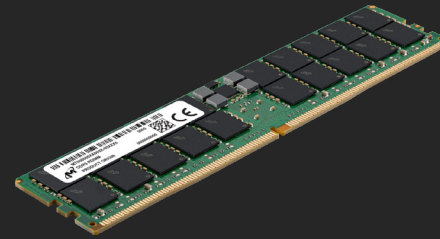
Micron solutions are engineered with industry concerns in mind. We did the troubleshooting for you: Our server memory and storage works to provide a solid bedrock for increasing workload complexity and torrents of data. For the demands of critical workloads (like AI), this foundation is not just ideal but necessary. From server DRAM to data center SSDs, Micron's portfolio delivers tomorrow's innovations today, so you can keep your business creating and growing.

## Micron data center solutions:

- Purpose-built workload solutions for every business
- Experienced tech support at your fingertips
- Solid foundations to tame increasing workload complexity
- A portfolio designed by industry professionals

# Future-proof DRAM solutions

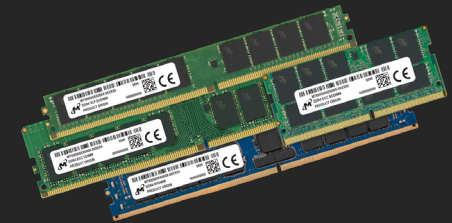
Bring the best balance of speed, bandwidth and value to your infrastructure. Micron's Server DRAM solutions are rigorously tested for a wide range of applications, so you know they'll hold up no matter your operation. Whether you're extending the value of legacy server platforms or accelerating critical workloads on next-gen platforms, Micron® Server DRAM delivers versatility with the optimal mix of performance and cost effectiveness.



## DDR5 Server DRAM highlights

Access more memory at higher speeds with Micron DDR5 Server DRAM. It delivers up to 2x the bandwidth of DDR4, and 5x the performance for deep learning. DDR5 performance is required to feed the continued growth of CPU cores in the data center for AI, HPC and enterprise workloads. DDR5 is the best fit for businesses with intensive AI workloads.

- Reverses the trend of decreased bandwidth per core
- Maximizes performance for compute intensive applications
- Protects your data with on-die ECC



## DDR4 Server DRAM highlights

Maximize IT Infrastructure – not budgets – with proven Micron® DDR4 Server DRAM. Increasing installed memory capacity with Micron Server DRAM is one of the easiest and most affordable ways to make your deployments faster and more efficient.

- Speed up applications
- Optimize existing systems to extend equipment life
- Higher density components for doubly dense modules
- Increase installed memory capacities



# Find Your SSD

Made for the big demands of challenging data center workloads, Micron SSDs deliver high performance with high reliability. Micron designs data center SSDs for the long haul, with superior data protection and optimal endurance, addressing the growing demands of data center workloads and the stringent requirements of industrial applications.



## High-performance 9550 NVMe SSDs

The Micron 9550 SSD is a breakthrough, high-performance storage device that offers strong performance, latency, and power efficiency for the most demanding data center workloads. It delivers superior PCIe® Gen5 performance, flexibility and security — for AI and beyond.

- Optimized for AI and other high-performance applications
- Significantly reduces power consumption<sup>1</sup>  
Micron-designed controller ASIC, 8th-generation NAND, and DRAM



## Mainstream 7500 NVMe SSDs

The Micron 7500 SSD enhances mainstream capabilities with 232-layer NAND, strong performance and superior power efficiency. It provides 6x9s QoS, with low and consistent sub-1 millisecond latency<sup>2</sup> to ensure rapid, reliable responsiveness for demanding data center workloads.

- 7,000 MB/s sequential performance for rapid data transfer
- 1.1M IOPS random performance to accelerate database operations and mixed workloads
- Powerful performance for workloads such as AI, databases, content delivery, real-time analytics, social media platforms, cloud computing and virtualization



## Mainstream 7450 NVMe SSDs

Engineered for mainstream data center workloads, the Micron 7450 PCIe® 4.0 NVMe SSD delivers exceptional latency with extensive deployment options. It consistently delivers 2ms and lower latency for 99.9999% QoS<sup>3</sup> and offers next-generation security features<sup>4</sup> like Micron's unique Secure Execution Environment.

- Storage for both cloud-scale and enterprise data
- 176-layer NAND for fast booting
- Broad range of Gen4 SSD form factors to enable major platform functions



## High-capacity 6550 ION NVMe SSDs

When building high-density AI data lakes, architects need to match capacity with high performance. The Micron® 6550 delivers the superior performance that speeds AI workloads, delivering up to 250% better performance than competing SSDs while consuming up to 20% less power.<sup>5</sup>

- Massive 60TB capacity in a E3.S/E1.L/U.2 form factors
- Up to 14GB/s and 2 million IOPS<sup>5</sup>
- Up to 213% better performance per watt<sup>5</sup>



## Mainstream 5400 SATA SSDs

Micron's proven data center architecture helps you get more from your SATA platforms with SSDs that have 50% better reliability (mean time to failure rating) and up to 50% greater endurance<sup>6</sup> than the other leading SATA SSDs.

- Best-in-class mixed-use write speed performance
- Can extend the life of existing servers
- Performance can saturate typical network bandwidth, even at 240 GB

# Find your ideal data center solution

Our business is here to keep your business moving and growing. With data center solutions engineered to solve problems and address industry challenges, we deliver the most effective products with the best value in their class. To find the right data center solution for you, reach out via our website. We're here to build the future of your business, starting today.

[microncpg.com/datacenter](https://microncpg.com/datacenter)

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## Sources

1. Based on Micron engineering test results in AI training offload, measured SSD-to-GPU direct data transfer rate with a 1TB dataset, and standard AI performance benchmarks.
2. Micron internal testing results show sub-1ms latency in 6x9s QoS with 4K 100% random read up to and including QD128, based on Micron internal testing.
3. Up to queue depth = 64 for 4KB, 100% random, 90% read workload and up to queue depth = 32 for 4KB, 100% random, 70% read workload.
4. An isolated security processing engine within the SSD controller. No hardware, software or system can provide absolute security under all conditions. Micron assumes no liability for lost, stolen or corrupted data arising from the use of any Micron products, including those products that incorporate any of the mentioned security features.
5. The Micron 6550 ION offers a capacity of up to 61.44TB. Comparisons are made with other 61.44TB NVMe SSDs from Samsung, Solidigm, and Western Digital. These comparisons use publicly available competitor information from public sources at the time of the 6550 ION announcement, with the 6550 ION and Western Digital using a maximum power of 20W and Solidigm and Samsung at 25W, resulting in up to 20% less maximum power consumption for the 6550 ION.
6. Based on public data sheet specifications. The Micron 5400 SSD has a mean time to failure (MTTF) rating of 3 million device hours, compared to a typical 2 million hour MTTF rating for data center SATA SSDs, based on public information available at the time of this document's publication. The Micron 5400 MAX SSD has up to 5 drive write per day (DWPD) endurance rating compared to up to 3 DWPD rating for other data center SATA SSDs. The Micron 5400 PRO SSD has up to 1.5 DWPD compared to up to 1 DWPD for other data center SATA SSDs.