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.

Micron

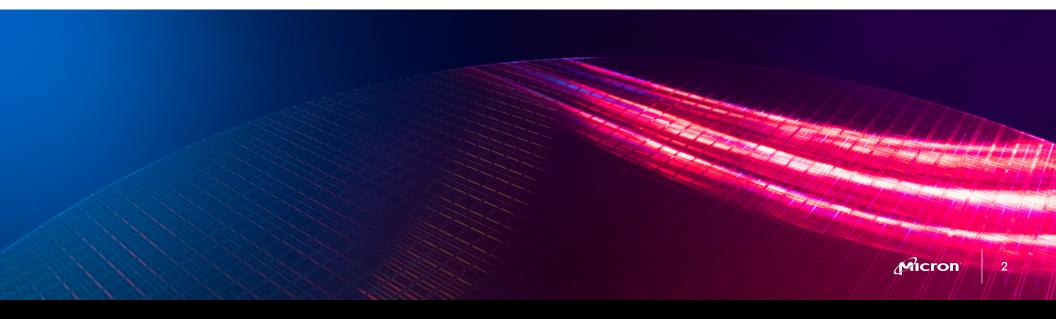
# Data center technology engineered for growth

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 nextgen 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 9400 NVMe SSDs**

For performance-critical operations, seamless workload switching and top-of-the-line caching, look no further. The 9400 NVMe delivers exceptional performance that surpasses other major competitors, up to 2.3 times mixed workload performance, and improves power efficiency up to 77%.

- 6x9s read latency leads the industry by as much as 3.2x3
- · Mixed random performance frees up workloads when demand spikes
- More workload performance with less energy used



#### Mainstream 7450 NVMe SSDs

Engineered for mainstream data center workloads, the Micron 7450 PCle® 4.0 NVMe SSD delivers exceptional latency with extensive deployment options. It consistently delivers 2ms and lower latency for 99.9999% QoS⁴ and offers next-generation security features like Micron's unique Secure Execution Environment.<sup>5</sup>

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



### High-capacity 6500 ION NVMe SSDs

Make cloud-storage challenges a thing of the past with massive capacity and purpose-built performance. The world's first 200+ layer NAND data center NVMe SSD eliminates the need to sacrifice cloud storage performance for capacity, or pay for speeds and endurance that will never be used.

- · Enables environmental sustainability within data centers
- · Consolidates more storage onto fewer servers
- 200+ layer NAND means cost-effectiveness is built in



#### 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 than the other leading SATA SSDs.<sup>6</sup>

- 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

**LEARN MORE** 





#### Sources

- 1. Comparisons are made based on other leading PCle Gen4 data center U.2/U.3 NVMe SSDs based on data center market share as noted in the www.forward-insights.com/reportslist. html and available on the open market at the time of this document's initial publication. 1GB = 1 billion bytes, formatted capacity is less.
- 2. 77% efficiency improvement is vs the Micron 9300 SSD. Efficiency is defined as performance per watt.
- 3. Performance measured using 7.68TB SSDs at queue depth (QD) = 256 with FIO (additional details on FIO are available here: https://fio.readthedocs.io/en/latest/).
- 4. 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.
- 5. 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.
- 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.