Why choose white box servers

micron™

Tests show Micron memory and storage can improve performance and energy efficiency while managing massive amounts of data

Micron solutions for white box servers

Your data is your most valuable asset. It's as unique as your business and something that no one else has. Fast access to the right data at the right time informs better business decisions. The right decisions can increase the distance between you and your competitors. The right decisions also help you and your customers thrive. It can keep business booming and customers coming back again and again.

The volume, variety and sources of your data is increasing rapidly. By the time you finish reading this your business will have generated terabytes of new data. To harness the power of that data for AI and business insights, you need bespoke servers that are as unique as your business powered by high-performance, power-efficient server memory and storage. The right type and amount of memory and storage can accelerate your data and help you grow your business to new heights. you can keep your business creating and growing.

White box server can help you overcome industry-specific data challenges

From real-time analytics to AI training and inferencing and other complex workloads, the need for servers that can process massive data streams with speed and efficiency has never been greater. White box servers provide the flexibility and scalability to meet these demands and stay competitive in data-hungry industries.

The following examples show how Micron memory and storage can overcome industry-specific data challenges

Financial services

Make data your most valuable asset

Real-time access to financial data is necessary for fraud prevention, risk management, and informed decision-making. As markets evolve and demands grow, financial organizations must often turn to white box servers that can keep up with the pace of change.

From low-latency processing for AI and real-time transactions to secure storage1 for sensitive data, Micron memory and storage gives your white box servers the performance, reliability, and scalability you need to succeed.

Healthcare

Improve experiences for patients – and healthcare

Healthcare systems are under increasing pressure to deliver better patient outcomes while managing costs and compliance. Real-time access to trusted data is essential to move from reactive care to proactive solutions. Using purpose-built servers, healthcare organizations can improve patient experience and workflow efficiency to drive innovation in the industry.

Micron memory and storage provides performance, reliability, and scalability needed to improve patient outcomes and meet compliance standards. This way, you can deliver secure, efficient, and personalized care.

Software-as-a-Service (SaaS)

Upgrade the speed, scalability, and accuracy of your SaaS platforms

Customers demand fast, stable, and scalable solutions with a smooth user experience. Upgrading servers to maintain speed, accuracy, and reliability can help retain satisfied customers and minimize churn.

Micron's memory and storage solutions are purpose-built to meet the demands of high-performance SaaS platforms. We can help you find innovative ways to power your platform and keep your customers happy, because happy customers don't cancel subscriptions or platform licenses.

High-performance Micron® 9550 NVMe SSD: Accelerate mission-critical workloads

The Micron 9550 NVMe SSD is built for speed, scalability, and power efficiency to meet the demands of high-performance workloads. With exceptional performance for high-speed data processing and real-time analytics, the 9550 NVMe SSD is purpose-built to optimize next-gen workloads and fuel innovation.

Learn more about the 9550

Key benefits

- Superior performance for faster data processing and analytics
- Energy efficient to save on power consumption, reducing operational costs and environmental impact
- Reliability for mission-critical workloads, with strong scaling and low-latency for resource-intensive applications

Finance

- Low-latency processing for high-frequency trading and real-time market insights
- Secure and efficient storage for regulatory compliance and financial data
- Accelerated analytics for risk management and fraud management

Healthcare

- Rapid access and analysis of patient data for diagnostics and treatment plans
- Real-time video analytics for advanced imaging technologies
- Secure storage solutions for electronic health records and compliance

SaaS

- High-speed data processing for AI-driven personalization and analytics
- Scalable infrastructure to support growing customer demands
- Reliable storage for consistent performance in shared environments

9550 compared to competitive high-performance offerings

Utilize direct paths between GPUs and storage

34% faster throughput[2]

76% better power efficiency[2]

81% less energy used[2]

Contribute as a third tier of "slow" memory

33% faster training workload completion[3]

60% higher SSD performance[3]

29% less energy used by training system[3]

Offload large language model (LLM) inferencing

4% higher token throughput[4]

19% less average SSD power used (watts)[4]

21% less SSD energy used (joules)[4]

2% less system energy used (joules)[4]

Act as a workhorse for image segmentation

5% higher GB/s SSD throughput[4]

32% less average SSD power consumption (watts)[4]

35% less energy used (joules)[4]

Mainstream Micron® 7500 NVMe SSD: Low-latency storage for mainstream industry workloads

Micron's 7500 NVMe SSD is designed to support mainstream workloads with exceptional speed, security, and consistency. Equipped with next-generation security feature5 like Micron's Secure Execution Environment, the 7500 NVMe SSD is dependable storage for a wide range of industries.

Learn more about the 7500

Key benefits

- Strong sequential and random performance
- Low latency and consistent performance for mission-critical workloads
- Advanced security features to meet regulatory requirements
- Wide compatibility for a wide range of platforms across industries

Finance

- Reliable data storage for financial record management
- Secure environments for risk assessment and regulatory compliance
- High-speed access for real-time financial modeling

Healthcare

- Efficient management of patient records and diagnostic imaging
- Secure storage for compliance with healthcare regulations
- Scalable infrastructure for AI-driven diagnostics

SaaS

- Real-time insights
- Data aggregation
- Inventory and support chain insights

7500 compared to competitive mainstream offerings

Enhance embedded database performance

Random read:

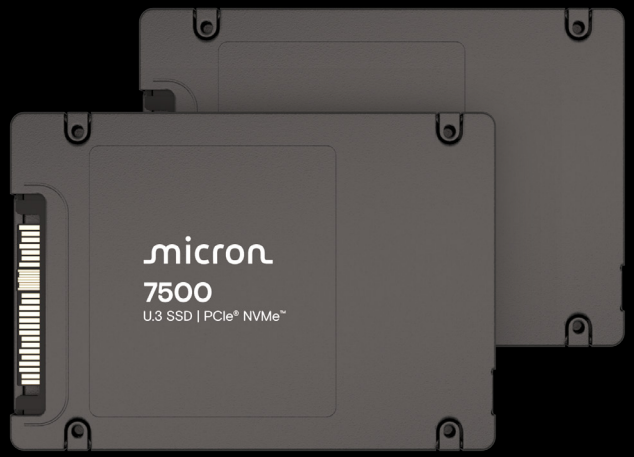
59% higher maximum performance[6]

54% better application response time[6]

Random read while writing:

2.1x higher maximum performance[6]

49% better application response time[6]



High-capacity Micron® 6550 ION NVMe SSD: Big capacity and bigger value

The Micron 6550 ION NVMe SSD provides the high capacity needed for growing AI workloads while delivering best-in-class performance and up to 20% lower SSD power consumption[7] than competitive SSDs. .

Learn more about the 6550

Key benefits

- Massive capacity to handle the largest datasets
- Exceptional sequential and random performance that is scalable for demanding environments
- Superior endurance for long-term deployments
- Better energy efficiency to improve TCO and help create scalable and sustainable data center solutions

Finance

- Storage of extensive historical and transactional financial data
- Cost-effective data archiving for compliance and audit purposes
- Secure handling of large-scale data arpeggiation and data lakes for AI training for financial insights

Healthcare

- Long-term storage of patient data and imaging archives
- Scalable storage for AI-driven healthcare research and predictive analytics
- High-capacity solutions for managing real-time diagnostic data

SaaS

- Large-scale data storage for content delivery networks (CDNs)
- AI data lakes
- Secure, durable storage for video surveillance and analytics

6550 compared to competitive high-capacity offerings

Storage that's data hungry, not power hungry

250% better performance[7]

20% lower power consumption[7]

213% better performance per watt[7]

Micron® next-gen DDR5 Server DRAM: High-speed memory for next-gen workloads

Micron's DDR5 server DRAM is engineered to deliver unparalleled performance by offering more than double bandwidth of DDR4. With integrated power management circuits (PMICs) to reduce power consumption and costs, Micron DDR5 is the ideal solution for businesses that require real-time responsiveness, scalability and reliability.

Learn more about the DDR5

Key benefits

- Faster processing times for real-time applications ad industry-specific AI
- More than double the bandwidth of DDR4 to meet the increasing demands of data-intensive industries
- Enhanced energy efficiency for better power management and reducing TCO
- Broad compatibility with a wide range of server platforms

Finance

- Real-time financial analytics and modeling
- Risk management and fraud detection
- High-speed processing for trading and transactions

Healthcare

- Real-time patient monitoring and diagnostics
- Secure and rapid access to electronic health records (EHR)
- AI-driven predictive analytics for better patient outcomes

SaaS

- Low-latency performance to improve customer experience
- Scalable platforms to support rapid user growth
- AI-driven personalization and insights

DDR5 compared to DDR4 server DRAM

Streamline image classification

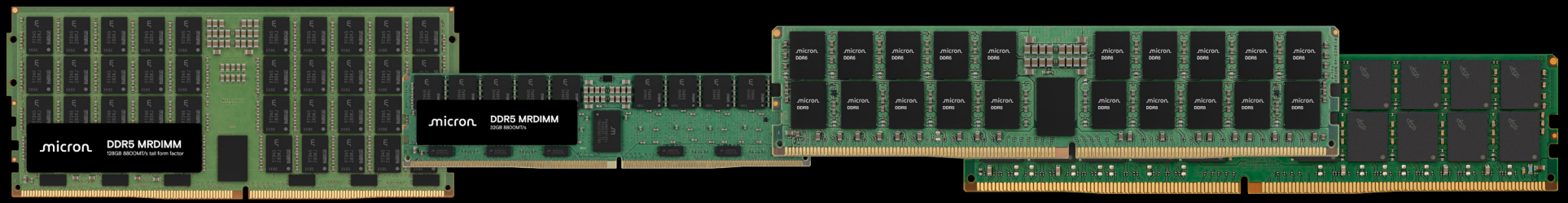
- Huge gain in classifying images
- Much higher sustained memory bandwidth

Improve recommendation throughput

- Massive gain in recommendation throughput
- Multiplied memory bandwidth for recommendations

Accelerate natural language processing

- Improved natural language processing
- Higher memory bandwidth, resulting in higher throughput



Your trusted partner for purpose-built solutions

Micron's experts can become an extension of your team to help you optimize your systems, from cloud to edge. We collaborate with businesses at test labs around the world to design purpose-built solutions tailored to your unique needs. Across your industry, Micron can give you the tools and knowledge to exceed your leadership team's expectations.

Visit micronpg.com/ServerSolutions

1. SSD hardware and software security features. More details available here: SSD Security Features Technical Brief
2. Micro 9550 NVMe SSD performance with NVIDIA Magnum IO GPUDirect Storage. View full test results: https://assets.micronbrands.com/content/dam/micron/ssd-products/9550/flyers/tech-briefs/micron_9550_gds_tech_brief.pdf
3. Micron 9550 NVMe SSD and Big Accelerator Memory (BaM). View full test results: https://assets.micronbrands.com/content/dam/micron/ssd-products/9550/flyers/tech-briefs/micron_9550_bam_tech_brief.pdf
4. AI workloads with the Micron 9550 SSD. View full test results: https://www.micron.com/about/blog/storage/ai/complete-ai-workloads-faster-using-less-power-with-the-micron-9550-ssd
5. Micron 7500 NVMe SSD RocksDB Performance. View full test results: https://assets.micronbrands.com/content/dam/micron/ssd-products/7500/flyers/tech-brief/7500_ssd_on_rocksdb_tech_brief.pdf
6. Micron SSDs: A secure foundation for your data. More details available here: https://www.micron.com/content/dam/micron/global/public/documents/products/product-flyer/micron-ssd-secure-foundation-flyer.pdf
7. 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.