White box servers for healthcare

Industry forecast

Nearly half of U.S. healthcare organizations plan to expand their virtual care initiatives[1] by 2025. These expansions will strain data centers, especially with the performance and energy demands of new technologies like AI.

Healthcare administrators can solve these challenges by configuring white box servers to meet the unique needs of healthcare data, which needs to be kept secure yet easily accessible. High-performance technology is required for AI, pharmaceutical research, real-time medical imaging analysis, and other innovations that can improve the outcomes of patients all over the world.

White box servers can be purpose-built for challenges in the healthcare industry so you can get the most from your IT investments. Optimizing configurations can enable timely, reliable data, modernize legacy systems, keep patient data secure, and expand your virtual capabilities.

Server Solutions

Challenge

50.8% of U.S. healthcare organizations planned to increase their spending on GenAI[1] by 2025. Scaling AI efficiently requires high-performance, energy-efficient components.

Solution

Launch AI with high-performance Micron® 9550 NVMe™ SSDs

The Micron 9550 excels in extreme AI workloads by accelerating results while reducing energy consumption

Learn more about the 9550 NVMe SSD

9550 vs competitive offerings

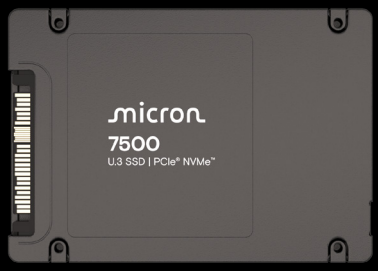
4% higher token throughput[2]

19% less average SSD power used (watts)[2]

21% less SSD energy used (joules)[2]

Challenge

145% increase in data tagging for healthcare organizations over the past year[3] shows a trend toward increasing server capabilities. Mainstream healthcare applications require fast, secure storage to keep up with data demands.



Solution

Reduce latency with Micron® 7500 NVMe™ SSDs

The Micron 7500 can improve the response times for a wide range of mainstream applications

Learn more about the 7500 NCMe SSD

7500 vs competitive offerings

Random read:

59% higher maximum performance[4]

54% better application response time[4]

Random read while writing:

2.1x higher maximum performance[4]

49% better application response time[4]

Challenge

IDC estimates that Healthcare produces approximately 3,845 exabytes of data annually and with forecasted growth of 33% CAGR during 2024-2028[1]

Solution

Reduce power consumption with high-capacity Micron® 6550 ION NVMe™ SSDs

The Micron 6550 offers massive capacity (>60TB) while delivering exceptional power efficiency to reduce total cost of ownership (TCO) and make your servers more sustainable as you scale your business

Learn more about the 6550 NVMe SSD

6550 vs competitive offerings

250% better performance[5]

20% lower power consumption[5]

213% better performance per watt[5]

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Challenge

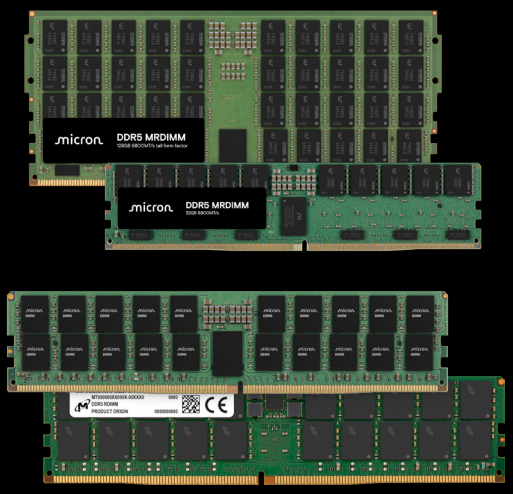
>7x projected growth in the market size for AI[6] in the drug discovery market from 2023 to 2032. Servers must be equipped with fast, reliable configurations to meet the resource-intensive needs of AI.

Solution

Discover insights more efficiently with next-gen Micron® DDR5 Server DRAM

17% lower latency for AI inference as compared to the previous generation[7]

Learn more about the DDR5 Server DRAM



Find your fit

Challenge

30% of the world's data volume[8] is generated by the healthcare industry. Managing this data securely while preparing for next-gen AI technologies presents a significant challenge.

Solution

Collaborate with Micron to find your ideal memory and storage solutions

Micron's experts can become an extension of your team to help you gather timely insights from your data, from cloud to edge. We collaborate with organizations at test labs around the world to design purpose-built solutions tailored to your unique needs. Across the health and life science industries, Micron can give you the tools and knowledge to make superior, data-driven decisions.

Get started at micronpg.com/healthcare

1. Source: IDC Analyst Brief, sponsored by Micron, Datacenter Modernization Is Essential for Driving Healthcare Innovation, doc #US53201025, February 2025
2. Complete AI workloads faster using less power with the Micron 9550 SSD | Micron Technology, Inc.
3. Data Trends 2024: Healthcare and Life Sciences | Snowflake
4. Technical Brief – Micron 7500 NVMe SSD RocksDB Performance | Micron Technology, Inc.
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.Generational Growth: AI, data centers and the coming US power demand surge | Goldman Sachs
6. Projected global artificial intelligence (AI) in drug discovery market from 2023 to 2032 | Statista
7. Based on JEDEC specifications
8. The healthcare data explosion | Capital Markets

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