SUPERMICRO | AMD

WINNING WITH AGENTIC AI:
THE STORAGE IMPERATIVE

Introducing future-ready infrastructure for unstoppable agentic AI

AGENTIC AI IS THE NEXT WAVE IN ARTIFICIAL INTELLIGENCE.

Reasoning agents that think, problem-solve, and plan are transforming how businesses scale intelligence. But with advanced thinking comes massive data, and today's data center infrastructure is being pushed to its limits.

Explore how future-ready storage infrastructure can keep up with the new era of agentic AI.

THE CHALLENGES OF AGENTIC AI WORKLOADS

Agentic AI systems are built to reason, act, and adapt, all in real time. This level of autonomy requires:

Persistent Memory
AI agents need "hot" data to stay context-aware and learn over time.

Scalable Designs
Massive datasets need to be constantly accessed for faster decisions.

Power Efficiency
High-speed storage access can drive up cooling and energy costs.

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HOW FUTURE-READY INFRASTRUCTURE CAN HELP

AMD has joined Supermicro, Sandisk, and DDN to build resilient storage that powers agentic AI systems at scale. The pre-validated solutions combine:

Rack-scale storage systems optimized for agentic AI

High-performance flash storage

Next generation multicore CPUs

Software-defined storage management

The result is scalable, cost-efficient, and production-ready infrastructure, especially made for the future of agentic AI workloads. Let's meet the "fab 4" in AI storage.

AMD: AN END-TO-END PLATFORM FOR AI INNOVATION

Agentic AI systems need to access data fast, use it well, and update data in real time. AMD provides the full-stack AI solution to prevent bottlenecks.

- **AMD EPYC™ CPUs:** Orchestrate multi-task workloads and manage storage I/O

- **AMD Instinct™ MI355X GPUs:** Supercharge AI with direct data paths from storage to GPU memory

- **AMD Pensando™/DPUs:** Reduce latency with GPU-to-GPU and CPU-GPU data movement

- **AMD ROCm™ software:** Support open source AI development, accelerating innovation

SANDISK: FLASH STORAGE FOR AI RESPONSIVENESS

The complex reasoning of agentic AI requires the speed and efficiency of flash-based storage. Sandisk enterprise SSDs are a critical enabler for agentic AI.

- Deliver the high IOPS performance for GPU-supported inferencing

- Create flash-based data lakes for faster access to massive datasets

DDN: STORAGE MANAGEMENT FOR FASTER AI PIPELINES

DDN Infinia software-defined storage seamlessly handles the multiple protocols, media types, and data sizes in agentic AI pipelines, with high performance and low latency.

- **100x faster object storage** than AWS to maximize your infrastructure utilization[1]

- **22x faster application performance** than AWS object store in agentic AI workflow[2]

- 100,000+ GPU cluster uses DDN Infinia storage for **real-world scalability**[3]

SUPERMICRO: RACK-SCALE SOLUTIONS FOR AGENTIC AI GROWTH

Powered by AMD EPYC™ 9005 CPUs, Supermicro Petascale servers with DDN Infinia and Sandisk enterprise SSDs are built to accelerate storage performance, while saving energy in the data center.

- **60PB rack-scale solution:** Streamline deployment with high-density GPU configurations

- **Up to 20% TCO savings:** Speed deployment with pre-validated systems, optimized for agentic AI[4]

START BUILDING FOR WHAT'S NEXT

Discover how future-ready storage infrastructure meets your evolving AI needs.

[LEARN MORE]

For more information:

[1] https://www.ddn.com/blog/the-future-of-ai-has-arrived-with-ddn-infinia-2-0/
[2] https://coderlegion.com/3288/ddn-infinia-delivers-sub-millisecond-latency-20x-faster-than-aws-transforms-development
[3] https://www.ddn.com/press-releases/ddn-unveils-infinia-2.0/
[4] https://www.youtube.com/watch?v=1wamAI8mCF0