Drive maximum business value from your AI and HPC workloads

Organizations require performant, scalable, reliable, and secure AI and high performance computing (HPC) solutions to drive actionable insights and enhance their competitiveness in the marketplace.

The explosion of data growth, coupled with the need for faster insights, is putting pressure on IT leaders to keep pace with the rapidly growing compute resources required to fuel innovation. Their organizations need a comprehensive hardware and software ecosystem with support for industry standard AI and HPC frameworks to help them drive the most value from their AI and HPC workloads.

The Lenovo ThinkSystem® SR685a V3 server, supporting up to 8 AMD Instinct™ GPUs, is **built for demanding AI modeling, training, and rendering for financial tech services, energy, scientific research, CSPs offering GPU-as-a-service, and more.**

Lenovo ThinkSystem servers powered by AMD Instinct GPUs — a powerhouse duo transforming AI and HPC capabilities/innovations

Lenovo and AMD deliver a comprehensive solution ready for AI models and HPC frameworks and applications to simplify deployment and scaling. **This combination is designed to help enable organizations to accelerate time to discovery, extract deeper insights, and potentially lower the total cost of ownership (TCO).**

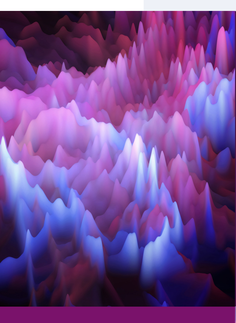
Ideal for training, fine tuning and inferencing large AI models and HPC workloads, AMD Instinct GPUs are powered by AMD Compute DNA (CDNA) architecture, offering performance with high memory capacity and bandwidth, scalability, and energy efficiency. **AMD Instinct MI300 Series GPUs are designed to hold today's large AI models in fewer GPUs, allowing for lower overall cost.**

Reliable[1] and secure[2] Lenovo ThinkSystem servers powered by AMD EPYC™ processors and AMD Instinct GPUs **deliver exceptional performance and efficiency for AI and HPC applications.**

Advanced sparsity support **enhances real-time analytics, speeds up inferencing and training, tackles sophisticated tasks more efficiently, and scales complex neural networks effortlessly.**

Engineered to fuel innovation

	AI/HPC for enterprises and scientific research	AI/HPC for Cloud Service Providers
Lenovo ThinkSystem SR685a V3	Reliable, high-performance compute for demanding AI and HPC applications.	High-density compute to maximize efficiency and customer workload performance.
AMD Instinct GPUs	Advanced AI and HPC acceleration for faster insights and discoveries.	Multi-tenant AI and HPC performance for diverse customer demands.
8-GPU Acceleration and Performance	Parallel processing power to drive complex AI models and simulations.	Scalable parallel processing for high-speed AI inferencing at cloud scale.
Lenovo XClarity System Management	Streamlined operations with centralized, automated infrastructure management.	Simplified cloud operations with centralized infrastructure automation.
AMD Infinity Fabric™	High-speed connectivity for seamless data transfer and workload scalability.	Low-latency interconnect for seamless workload scaling across cloud environments.



Engineered for AI workloads

Lenovo ThinkSystem servers powered by AMD Instinct GPUs are engineered for maximum compute for AI workloads, from inferencing to training massive models, machine learning (ML), collaboration, database, design and emerging AI-enabled workloads.

There is also broad support for industry AI and ML frameworks and models, including:

- **TensorFlow**
- **PyTorch**
- **Llama**
- **Mistral**
- **Mixtral**
- **Bloom**
- **Falcon**

Purpose-built to help enable new discoveries

Lenovo ThinkSystem servers powered by AMD Instinct GPUs deliver outstanding compute and memory to drive new discoveries for HPC modeling and simulation workloads and help researchers accelerate progress.

They are designed to address a diverse range of HPC use cases across healthcare, pharmaceutical, social sciences, manufacturing, university research, financial services, and more. This also includes support for industry HPC frameworks and applications, with deployment-ready content available on AMD Infinity Hub.

Advanced workloads require advanced infrastructure. Are you ready to accelerate discovery and innovation?

AI and HPC workloads require high-performance, scalable, and secure infrastructure. Lenovo ThinkSystem servers powered by AMD EPYC processors and AMD Instinct GPUs deliver on all fronts to help organizations process complex data efficiently, scale seamlessly, and stay competitive in a rapidly evolving market.

Learn more

Sources

1. Information Technology Intelligence Consulting, "ITIC 2024 Global Server Hardware, Server OS Reliability Report," September 2023
2. Information Technology Intelligence Consulting, "ITIC 2023 Global Server Hardware, Server OS Reliability Report," September 2023

Smarter technology for all