Lenovo ThinkSystem SR685a V3

Built for Compute-Intensive AI



Accelerated Compute for AI and HPC

The ThinkSystem SR685a V3 with 2x 5th or 4th Generation AMD EPYC™ Processors is built for demanding AI workloads. It has the high-performance computing ideal for modeling, training, simulation, rendering, financial tech, scientific research, and more.

- Maximum GPU Performance with 8x fully connected GPUs from AMD and NVIDIA
  - The AMD Instinct™ MI300X discrete GPU is based on next-generation AMD CDNA™ 3 architecture and delivers leadership efficiency and performance for the most demanding AI and HPC workloads. It is designed with 304 high-throughput compute units, AI-specific functions that include new data-type support, and an unprecedented 192GB of HBM3 memory per GPU accelerator.
  - NVIDIA H100/H200 Tensor Core GPU platforms deliver unprecedented acceleration. They can efficiently scale up or be partitioned into seven isolated GPU instances that enable data centers to dynamically adjust to shifting workload demands.
- Two 5th or 4th Generation AMD EPYC™ Processors with 24 DDR5 DIMM slots
- Interconnects with the fastest transfer rate with AMD Infinity Fabric at 896GB/sec or NVIDIA NVLink at 900GB/sec

Choice and Flexibility

ThinkSystem SR685a V3's open architecture design enables it to be configured to meet unique workload requirements by offering the flexibility of choice.

- 8x AMD Instinct™ MI300X GPUs, supporting 192GB of memory each at 5.2TB/s, all interconnected with AMD Infinity Fabric for a total bi-directional GPU-to-GPU bandwidth of 6.4TB/s.
- 8x NVIDIA HGX™ H100 GPUs, supporting 80GB of memory each at 3.3TB/s, all interconnected with NVIDIA NVLink for a total bi-directional GPU-to-GPU bandwidth of 7.2TB/s.
- 8x NVIDIA HGX™ H200 GPUs, supporting 141GB of memory each at 4.8TB/s, all interconnected with NVIDIA NVLink for a total bi-directional GPU-to-GPU bandwidth of 7.2TB/s.

Lenovo provides the power of choice to our customers by offering multiple GPU, software, and service offerings.

Lenovo

AMD EPYC

Premium User Experience

At Lenovo, we think beyond standards to offer a premium user experience with the ThinkSystem SR685a V3 by adding resilient power supplies, thermals for next-generation GPUs, and easy systems management via Lenovo XClarity software.

Lenovo Makes "AI for All" Possible

Lenovo delivers AI to data deployed inside your data center and at the edge. We have the industry's most comprehensive AI portfolio with over 80 products designed for AI workloads.

Lenovo partners with over 50 AI Innovator partners globally to deliver turnkey Hybrid Cloud and Edge AI solutions.

Unique in the industry, Lenovo can deliver AI "from pocket to cloud" with servers, workstations, and AI-enabled devices. Whether you are a public cloud provider or building your AI model on-prem, Lenovo provides systems and solutions that scale to meet your needs. We bring AI to your data where and when you need it the most, in a truly hybrid approach: public, private, or personal.

Lenovo Professional Services

Offering a breadth of services, solutions and platforms, Lenovo's AI Professional Services help businesses of all sizes navigate the AI landscape, find the right solutions, and put AI to work for their organizations quickly, cost-effectively and at scale. Lenovo experts bring AI from concept to reality — from designing AI roadmaps to deploying platforms.

Specifications

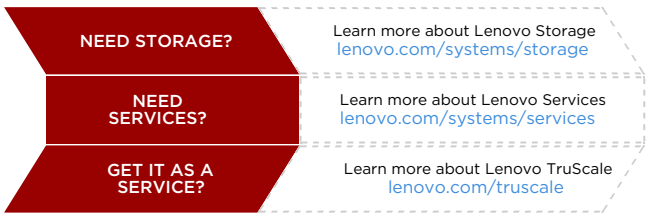
Form Factor	8U rack
Processor	2x 5th or 4th Generation AMD EPYC™ Processors, up to 400W
Memory	Up to 3TB using 24x DDR5 DIMMs at max frequency
GPU	Supports 8x high-performance GPUs: • 8x AMD Instinct™ MI300X GPUs with Infinity Fabric interconnects at 896 GB/s • 8x NVIDIA HGX™ H100/H200 GPUs with NVLink interconnects at 900 GB/s
I/O Expansion	Up to 10x PCIe Gen5 x16 FHHL adapters (8 front, 2 rear) 8x in front connected to PCIe switch for GPU connectivity 2x PCIe or 1x PCIe + 1x OCP3.0 in the rear connected to CPU for CPU connectivity
Storage	Up to 16x 2.5" hot-swap NVMe SSDs Up to 2x M.2 for boot (RAID support)
Power	Up to 8x hot-swap power supplies, allowing full N+N redundancy
Cooling	Air-cooled with N+1 hot-swap fan solution
Management	XClarity Controller2 (XCC2), which provides advanced service-processor control, monitoring, and alerting functions. The XCC2 consolidates the service processor functionality, super I/O, video controller, and remote presence capabilities into a single chip on the server system board.
OS Support	RHEL, Ubuntu

About Lenovo

Lenovo (HKSE: 992) (ADR: LNVGY) is a US$62 billion revenue global technology powerhouse, ranked #171 in the Fortune Global 500, employing 77,000 people around the world, and serving millions of customers every day in 180 markets. Focused on a bold vision to deliver smarter technology for all, Lenovo is expanding into new growth areas of infrastructure, mobile, solutions and services. This transformation is building a more inclusive, trustworthy, and sustainable digital society for everyone, everywhere.

For More Information

To learn more about the Lenovo ThinkSystem SR685a V3, contact your Lenovo representative or Business Partner or visit lenovo.com/thinksystem. For detailed specifications consult the SR685a V3 Product Guide.



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