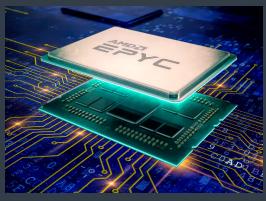


# LENOVO THINKSYSTEM AMD EPYC-BASED SERVERS: ENGINEERED FOR DATA-INTENSIVE AND EDGE WORKLOADS

Lenovo's ThinkSystem single-socket SR635 and SR655 and dual-socket SR645 and SR665 servers harness the full capabilities of the AMD EPYC<sup>™</sup> 7002 Series processor family. These systems are optimized to handle evolving, data-intensive workloads such as video security, VDI, and big data, as well as to support virtualized and edge environments. They provide more throughput, lower latency, higher core density, enhanced security, and the largest NVMe drive capacities of any AMD EPYC-based servers on the market.



## Class-Leading Workload Performance

- Accelerate AI, data analytics, and power-user VDI workloads with next-generation hardware accelerators and memory performance
- Support workloads requiring high core density and low latency
- Leverage industry leading performance with 64 #1 world records<sup>1</sup>
- Utilize PCIe 4.0 for greater NVMe drive density, more GPUs, and higher-speed interfaces such as 100G/200G Ethernet and InfiniBand

## Lower Costs and Optimized Efficiency

- Increased power efficiency and lower energy costs<sup>2</sup>
- Increased price/performance with applications like SAP ERP<sup>3</sup>
- Less time and lower costs with fast and easy expansion capabilities

# Data Protection and Security Without Compromises

- Built-in security with Secure Root-of-Trust, Secure Memory Encryption (SME) and Secure Encrypted Virtualization (SEV2)
- Hardware-based security processor enhances virtual machine (VM) security through encryption without impacting system performance
- Chassis intrusion switch deters and detects tampering

<sup>1</sup>ThinkSystem Servers with AMD EPYC processors hold 64 #1 world record benchmarks as of 5-7-2020 <sup>2</sup>ThinkSystem SR645 and SR665 hold #1 World Record for power efficiency as of 4-24-2020 <sup>3</sup>ThinkSystem SR655 holds #1 World Record performance with SAP SD 2-Tier for SAP ERP as of 5-5-2020





Server Web Page



AMD Partnership Video



<sup>1</sup><u>#1 Benchmark</u> <u>Results Article</u>





<u>SR655</u> <u>3D Tour</u>



# FAST AND EFFICIENT SERVERS SCALE EASILY TO SUPPORT DATA INTENSIVE WORKLOADS

Lenovo ThinkSystem servers with AMD EPYC processors deliver world record performance, significant processor efficiency, and enhanced application security without performance compromises. Supporting up to 32 NVMe drives, 8 GPUs, 64core CPUs, up to 45% more memory bandwidth, and PCIe Gen 4, these systems are particularly well suited for video surveillance, VDI, big data, AI, HPC, and software defined storage applications.





### SR635 RACK SERVER (1S 1U)

#### Tuned for Virtualization and Hybrid Cloud

- Hyper-fast I/O for workloads such as network analytics and virtualized environments
- Up to one 64 Core AMD EPYC 7002 series CPU
- Up to 2TB of 3200Mhz memory (16x DIMM slots)
- Up to 16x 2.5" NVMe SSDs or 4x 3.5" HDDs
- Up to 3x NVIDIA Tesla T4 GPUs (single-width)



## SR645 RACK SERVER (2S 1U)

#### Built for Compute Intensive Workloads

- Designed for high-frequency applications, general virtualization, OLTP, AI, Big Data, HPC and IoT
- Up to two 64 Core AMD EPYC 7002 series CPUs
- Up to 4TB of 3200Mhz memory (32x DIMM slots)
- Up to 12x NVMe SSDs, 10x 2.5" SSDs/HDDs, or 4x 3.5" HDDsv
- Up to 3x NVIDIA Tesla T4 GPUs (single-width)
- Integrated management with XClarity Controller





<u>3D To</u>



<u>SR635</u> Data Sheet









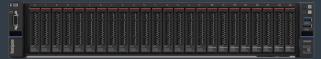
<u>SR665</u> Data Sheet



## SR655 RACK SERVER (1S 2U)

#### Ultimate Single-Socket Scalability

- Ideal for I/O and GPU-intensive workloads, from databases and analytics, to virtualized environments (e.g., VDI), video surveillance, and hybrid cloud
- Up to one 64 Core AMD EPYC 7002 series CPU
- Up to 2TB of 3200Mhz memory (16x DIMM slots)
- Up to 32x 2.5" NVMe SSDs or 20x 3.5" HDDs
- Up to 6x NVIDIA Tesla T4 GPUs (single-width) or 3x NVIDIA Tesla V100 GPUs



### SR665 RACK SERVER (2S 2U

#### Ultimate Dual-Socket Scalability

- Ideal for I/O, storage, memory, and GPU-intensive workloads, such as databases, analytics, VDI, software-defined storage and video surveillance
- Up to two 64 Core AMD EPYC 7002 series CPUs
- Up to 4TB of 3200Mhz memory (32x DIMM slots)
- Up to 32x NVMe SSDs, 40x 2.5" SSDs/HDDs, or 20x 3.5" HDDs
- Up to 8x NVIDIA Tesla T4 or Quadro P620 GPUs (single-width) or 3x Tesla V100 GPUs
- Integrated management with XClarity Controller





<u>SR645</u> Data Sheet