

# ThinkSystem SR645

## Standout versatility in 1U



### Skillful Performance

The Lenovo ThinkSystem SR645 utilizes a combination of two AMD EPYC 7002 CPUs in a compact 1U rack server form factor that results in extreme CPU core and memory density. These features deliver the next era of solution performance for enterprise data center operations such as database, analytics and virtualization workloads. Lenovo's lauded system reliability, XClarity management capabilities, and security infrastructure layer add to the exceptional value that the ThinkSystem SR645 brings to the data center.

The modern data center demands ever-expanding capability, requiring server technology to deliver more performance that test the limits of physics. With the enterprise-class AMD EPYC™ 7002 processor, the world's first 7nm data center CPU, the ThinkSystem SR645 features up to an unprecedented 128 cores and 128 Gen4 PCIe lanes in a server to maximize server utilization and decrease network bottlenecks in HPC workloads.

### Versatile Design

The ThinkSystem SR645's versatility addresses a wide range of data management solutions. Support for multiple GPUs in 1U streamlines performance for virtual desktop infrastructure (VDI) deployments, providing the technical resources to aid in scale-out VDI instances for a growing enterprise workforce.

Unique Lenovo AnyBay technology provides optimized storage flexibility and performance, with support for up to 12x 2.5-inch SAS/SATA HDDs/SSDs. High-speed, low latency NVMe storage is ideal for caching data utilized in analytics and database deployments to gain better business insights and take control of the growing volume, variety, and velocity of data.

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## Innovative Management

The ThinkSystem SR645 features Lenovo's lauded XClarity system management suite. The XClarity management controller supports an easy-to-use application with industry standard Redfish-compliant REST APIs that provide streamlined hardware provisioning and maintenance and enable a data-driven, centralized view of data center operations.

Trust Lenovo ThinkShield to protect and defend your data center infrastructure from attacks, with a comprehensive end to end approach to security that begins with development and continues through supply chain and the full life cycle of the server. AMD EPYC processors also offer unique security features, embedded with secure boot and full memory encryption capabilities to address growing security-threats.

Finally, Lenovo's portfolio of services support the full lifecycle of your Lenovo IT assets - from planning, deployment and support to asset recovery.

## Specifications

<b>Product Name(s)</b>	ThinkSystem SR645
<b>Form Factor</b>	1U rack server
<b>Processors</b>	Up to two (2) AMD EPYC™ 7002 Generation Processors, up to 64C, 280W
<b>Memory</b>	32 DDR4 memory slots; Maximum 4TB using 128GB RDIMMs; up to 1DPC at 3200MHz, 2DPC at 3200MHz
<b>Drive Bays</b>	Up to 4x 3.5-inch or 12x 2.5-inch drives; Maximum of 10x NVMe drives with 1:1 connection
<b>Expansion Slots</b>	Up to 3x PCIe 4.0 slots, 1x OCP 3.0 adapter slot
<b>GPU</b>	Up to 3x single-width 75W GPUs
<b>Network Interface</b>	OCP 3.0 mezz adapter, PCIe adapters
<b>Power</b>	Dual redundant PSUs (up to 1800W Platinum)
<b>Ports</b>	Front: 1x USB 3.0, 1x USB 2.0, 1x VGA (optional) Rear: 3x USB 3.1, 1x Serial port (optional) 1x RJ-45 (management)
<b>Systems Management</b>	Lenovo XClarity Controller
<b>OS Support</b>	Microsoft Windows Server, SUSE Linux Enterprise Server, Red Hat Enterprise Linux, VMware ESXi
<b>Limited Warranty</b>	1- and 3-year customer replaceable unit and onsite services, next business day 9x5; optional service upgrades

For more details please see the ThinkSystem SR645 [product guide](#).

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## Why Lenovo

Lenovo is the leading provider of x86 systems for the data center. The portfolio includes rack, tower, blade, dense and converged systems, and supports enterprise class performance, reliability and security.

Lenovo also offers a full range of networking, storage, software and solutions, and comprehensive services supporting business needs throughout the IT lifecycle.

## For More Information

To learn more about the Lenovo ThinkSystem SR645, contact your Lenovo representative or Business Partner or visit [lenovo.com/thinksystem](http://lenovo.com/thinksystem). For detailed specifications consult the ThinkSystem [SR645 product guide](#).

