

Lenovo ThinkSystem SD630 V2

Ready to adapt when you are

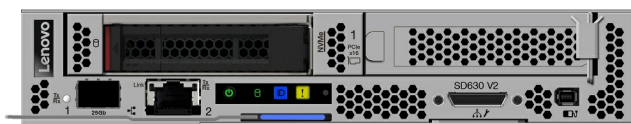


Ready For What's Next

The Lenovo ThinkSystem SD630 V2 is a single platform designed for workloads ranging from cloud, analytics to AI and high performance computing application like Computer Aided Engineering (CAE) or Electronic Design Automation (EDA). Combining the efficiency and density of blades with the value and simplicity of rack-based servers, the ThinkSystem SD630 V2 delivers a cost-efficient scale-out platform that is thermally designed to deliver maximum performance in the smallest footprint.

The system consists of a 2U Lenovo ThinkSystem DA240 Enclosure containing up to four front-access ThinkSystem SD630 V2 servers (nodes). Each node incorporates two 3rd Gen Intel® Xeon® Scalable processors.

The system provides the flexibility to meet many needs in the modern data center. For example, multiple ThinkSystem DA240 Enclosures can be easily daisy-chained together and then managed as a single unit, which reduces management cabling costs by as much as 92%, compared to 1U rack-based servers and simplifies administration.



The ThinkSystem SD630 V2 delivers the density of blades with the economics of rack systems.

Ultra-dense, Ultra-agile

Today's IT managers are always driven to do more with less. The SD630 V2 handles twice the workloads per U of traditional 1U servers. In a single 42U rack you can mount up to 76 servers with: Up to 152 processors, 5,472 cores, 152TB of memory, and 2.9PB of storage.

SD630 V2 provides 32 more cores per U than the previous generation SD530, all within industry-standard racks.

The system's no-frills design includes a 25GbE LOM and 1GbE management port to save on networking costs. The ThinkSystem DA240 Enclosure is built for fast node installation or swap-out and can be daisy-chained together and managed as a single entity, reducing cabling up to 92%, saving time and money.

Maximum Compute Capability

ThinkSystem SD630 V2 is engineered to run the higher-core Intel® Xeon® Platinum processor family to power through your most demanding HPC workloads. Additional memory and storage technology enhancements provide exceptional performance and flexibility in any environment:

33% increase in memory channels and capacity, with an 11% increase in memory speed compared to the previous generation SD530.

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Transformative Agility

By utilizing a single platform designed to excel at all types of data center workloads, including technical computing, analytics and AI, the ThinkSystem SD630 V2 is engineered for performance and enables you to run higher wattage CPUs in a dense form-factor.

This is accomplished through the revolutionary design of the ThinkSystem DA240 Enclosure. The front of the unit holds up to four nodes that are “warm-swappable” to maximize uptime. Individual nodes can be removed without powering down the remaining three nodes. Each ThinkSystem SD630 V2 node contains processors, memory, and up to two hot-swap drives.

Modular Daisy Chain Management

Besides the ThinkSystem DA240 enclosure, Lenovo also provides a modular enclosure for daisy-chain management. The modular enclosure provides lower ToR ports cost, lower cable costs, and less rack complexities.



Easily Managed

Lenovo XClarity Controller is a hardware embedded management engine common in every two-socket ThinkSystem server. XClarity Controller features an uncluttered graphical user interface, industry standard Redfish-compliant REST APIs.

The ThinkSystem DA240 enclosure contains a Scalable Management Module (SMM) that controls the fans and power as well as combines the XClarity Controller of each node into a single port. The optional dual-port SMM allows daisy chaining of enclosures reducing management cabling cost and complexity by as much as 92%, compared to 1U systems.**

Lenovo XClarity Administrator is a virtualized application that centrally manages ThinkSystem servers, storage, and networking. Via reusable patterns and policies, it ramps up and scales infrastructure provisioning and maintenance. It serves as a central integration point to extend your data center management processes to physical IT. Running XClarity Integrators in external IT applications, or integrating through REST APIs, helps you further speed services provisioning, streamline IT management, and contain costs.

Lenovo Intelligent Computing Orchestration (LiCO) is a powerful platform that manages cluster resources for HPC and AI applications. LiCO provides workflows for both AI and HPC, and supports multiple AI frameworks, including TensorFlow, Caffe, Neon, and MXNet, allowing you to leverage a single cluster for diverse workload requirements.

Lenovo servers continue to be the industry's #1 most reliable.\$

Specifications

Form Factor/Height	2U dense enclosure; 4x independent compute nodes (2U4N)
Processor	Two 3rd generation Intel® Xeon® Scalable processors CPUs, up to 270W
Memory	Up to 1TB using 16x 64GB 3200MHz TruDDR4 DIMMs per node
Storage	<ul style="list-style-type: none"> • 2x 7mm 2.5-inch or 1x 15mm 2.5-inch hot-swap drives, supporting SATA or NVMe SSDs • SW RAID; Intel VROC NVMe RAID-0 or RAID-1 • 2x M.2 SATA SSDs for boot functions
Network Interface	Two onboard Ethernet interfaces: 1x 25GbE SFP28 LOM (1Gb, 10Gb or 25Gb capable; supports NC-SI) and 1x 1GbE RJ45 (supports NC-SI)
I/O Expansion	1x PCIe Gen 4 x16 low profile slot. For special bid configurations, the internal storage bay can be converted to a second PCIe Gen 4 x16 low profile slot.
Power Supply	2x hot-swap power supplies, either 1800W, 2400W. N+1 redundancy with oversubscription
Hot-Swap Components	Power supplies, fans, SATA/NVMe storage devices; compute nodes are warm-swap
Systems Management	Lenovo XClarity Controller embedded management, XClarity Administrator centralized infrastructure delivery, XClarity Integrator plugins, and XClarity Energy Manager centralized server power
OS Support	Microsoft, Red Hat, SUSE, VMware. Visit lenovopress.com/osig for details.
Limited Warranty	3-year customer replaceable unit and onsite service, next business day 9x5, optional service upgrades

Lenovo Services and Security

Supporting the full life cycle of your investment, Lenovo Services are the perfect complement to Lenovo's world-class enterprise products: Lenovo ThinkSystem servers, storage and networking offerings.

As the trusted services provider for thousands of companies around the world, Lenovo has the expertise and experience to help with everything from solutions architecture to implementation, integration, and migration, to proactive management services.

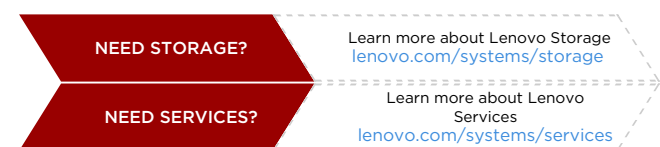
Lenovo Services guarantee you a superior service experience, and are delivered through Lenovo service professionals and the network of Lenovo Authorized Service Providers.

For More Information

To learn more about the Lenovo ThinkSystem SD630 V2, contact your Lenovo representative or Business Partner or visit: www.lenovo.com/thinksystem. For detailed specifications, consult the [SD630 V2 Product Guide](#).

About Lenovo

Lenovo (HKSE: 992) (ADR: LNVGY) is a US\$45 billion Fortune 500 company and a global technology leader in driving Intelligent Transformation. Lenovo's data center solutions (ThinkSystem, ThinkAgile) are creating the capacity and computing power that are changing business and society.



§ [ITIC Global Reliability Report](#). ** Lenovo recommends limiting the number of modular enclosures in a daisy-chain to 7 modular enclosures.

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