

# Lenovo ThinkSystem SR650 V2

High-performance scalable  
server



## For Compute-Intensive Workloads

For medium to large enterprises, and managed and cloud service providers, Lenovo ThinkSystem SR650 V2 is the optimum 2U, two-socket server—the most widely used server type worldwide. It's engineered to deliver high performance with 270W CPUs, low-latency NVMe drives, and high-power GPUs.

With Lenovo's history of reliability†, the highly flexible and configurable SR650 V2 is the ideal platform for hyperconverged infrastructure (HCI) or software-defined storage (SDS). It provides a solid foundation for:

- Transforming physical resources into services, using validated designs for hybrid cloud
- Performing analytics on streaming data, using validated designs for Big Data
- Increasing productivity of virtualized transactional systems, using validated designs for OLTP databases

## Versatile and Scalable

ThinkSystem SR650 V2 supports Intel® Optane™ DC persistent memory 200 series and up to two 3rd generation Intel® Xeon® Scalable processors with multi-socket core count density up to 40 cores per processor.

Industry-leading Lenovo AnyBay technology provides the flexibility to mix-and-match SAS/SATA HDDs/SSDs and NVMe SSDs in the same drive bays with maximum storage in SR650 V2 up to 40x 2.5" SAS/SATA HDDs. Support for 32x NVMe drives with NVMe switch adapters.

The ThinkSystem SR650 V2's 8x PCIe 4.0 slots, OCP slots and support for three 300W GPUs provide added expandability, networking scalability, and speed necessary to ensure that I/O-intensive workloads such as software defined networking, and grid computing avoid bottlenecks that reduce full enterprise efficiency.

Storage can be tiered for greater application performance to provide the most cost-effective solution. Optional mirrored M.2 drives ensure reliability and quick OS initialization. SR650 V2 also features Platinum and Titanium PSUs, as well as continuous operation at 45°C, to reduce energy costs.

## Innovative Management

The ThinkSystem SR650 V2 features Lenovo 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, enabling a data-driven, centralized view of data center operations.

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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 device.

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

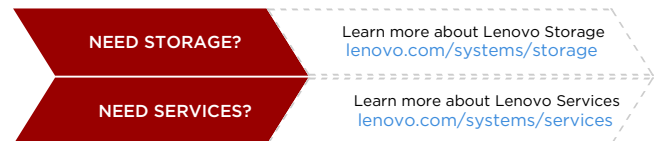
### Specifications

Form Factor/Height	2U rack server
Processors	Up to 2x 3rd generation Intel® Xeon® Scalable processors, up to 40 cores, up to 270W TDP
Drive Bays	Up to 20x 3.5-inch or 40x 2.5-inch drives; Up to 32x NVMe drives supported with NVMe switch adapters; 2x M.2 boot drives (RAID 1); 2x 7mm boot drives in rear (RAID 1)
Memory	32x DDR4 memory slots; Maximum 8TB using 32x 256GB 3DS RDIMMs; Supports up to 16x Intel® Optane™ Persistent Memory 200 Series modules (PMem)
Expansion Slots	Up to 8x PCIe 4.0 slots, 1x OCP 3.0 slot, 1x cabled HBA/RAID adapter that doesn't occupy a standard PCIe slot
GPUs	Up to 8x single-width GPUs or 3x double-width GPUs
Network Interface	LOM adapter installed in the OCP 3.0 slot; PCIe adapters
Ports	Front: 1x USB 3.1 G1, 1x USB 2.0 with XClarity Mobile support, 1x VGA (optional), 1x external diagnostics handset port Rear: 3x USB 3.1 G1, 1x VGA, 1x RJ-45 (management), 1x Serial port (optional)
HBA/RAID Support	SW RAID standard; optional HW RAID with/without cache or 8/16-port SAS HBAs
Power	Dual redundant power supplies (up to 1800W Platinum)
Systems Management	Lenovo XClarity Controller
OS Support	Microsoft, SUSE, Red Hat, VMware. Visit <a href="http://lenovopress.com/osig">lenovopress.com/osig</a> for details.
Limited Warranty	1-year and 3-year customer replaceable unit and onsite service, next business day 9x5; optional service upgrades

† [ITIC Global Reliability Study](#).

### For More Information

To learn more about the Lenovo ThinkSystem SR650 V2, contact your Lenovo representative or Business Partner or visit [www.lenovo.com/thinksystem](http://www.lenovo.com/thinksystem). For detailed specs, consult the [SR650 V2 Product Guide](#)



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