Lenovo ThinkSystem ST650 V2

Enterprise capacity and performance in a 2P/4U tower

Enterprise Enabled, ROBO Ready

The Lenovo ThinkSystem ST650 V2 is a scalable 4U tower server that features two powerful third-generation Intel® Xeon® Scalable processors. It delivers outstanding performance and memory capacity for large database and virtual machine deployments, with support for PCIe Gen4 networking reducing data bottlenecks throughout the IT environment.

The ST650 V2 provides the performance and reliability you expect from the data center, but is optimized for office environments, with physical security and whisper-quiet operation.

Its compact footprint combined with outstanding configuration flexibility makes it ideal for office locations and use for everything from web serving and IT infrastructure to next-generation workloads such as AI and analytics at the edge.

Flexible and future-ready

ST650 V2 introduces the next generation of IT adaptability to address an ever-widening range of workload requirements for the modern enterprise. Support for up to 16 NVMe drives (32x 2.5-inch SSD/HDD drives total) enable rapid data ingest capabilities to address the explosion of internet of things (IoT) devices and sensors feeding data growth. NVMe drives provide ultra-fast storage and can be used in combination with a 4TB memory landscape to tier critical data for greater application performance.

The growth of data on the edge is also addressed with multi-GPU support, allowing for larger unstructured datasets to be managed, analyzed, and acted upon closer to the source of the data. The ST650 V2 can support up to 8 single-width GPUs or 4 double-width GPUs. Hardware accelerator support is crucial for the rise of applications that require parallel processing capabilities such as artificial intelligence and machine learning that bring actionable insights to environments of all sizes, from the SMB to the large enterprise.

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Secure by design

Protecting your business is of utmost importance for Lenovo, and this continues with ThinkSystem ST650 V2. Lenovo ThinkShield is a comprehensive end-to-end approach to security from development to supply chain and the full life cycle of the device. Physical and software security technologies extend to the lockable security bezel, chassis intrusion switch, and TPM 2.0, which are ideal for remote locations.

Integrated IT Management

Lenovo XClarity Controller is the management hardware engine inside every ThinkSystem server, and XClarity Administrator centralizes management of your ThinkSystem and ThinkAgile infrastructure.

With Redfish APIs and XClarity integrators, you can easily integrate the Lenovo infrastructure into higher-level IT applications. Lenovo servers continue to be the industry's #1 most reliable*.
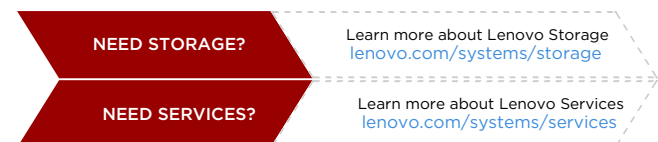
Specifications

Form Factor/Height	4U rackable tower
Processors	Up to 2x 3rd generation Intel® Xeon® Scalable processors, up to 250W
Drive Bays	Up to 32x 2.5″ bays (including 16 NVMe bays) or 16x 3.5″ bays (including 8 NVMe bays)
Memory	Up to 4TB in 32x DIMM slots using 128GB DIMMs; 3200MHz TruDDR4; Up to 16x Intel® Optane™ DC persistent memory 200 Series module (PMem), installed in combination with system memory DIMMs
Expansion Slots	Up to 8x PCIe 4.0 slots plus 1x PCIe 3.1 slot (with 2x processors)
Network Interface	2x 10GBASE-T ports; 1x 1GbE dedicated management port
Ports	Front: 1x USB 3.1 G1, 1x USB 2.0 with XClarity Mobile support Rear: 4x USB 3.1 G1, 1x VGA, 1x RJ-45 (management), 1x external diagnostics handset port, 1x serial port
HBA/RAID Support	SW RAID standard; optional HW RAID up to 32 ports, or SAS HBAs up to 16 ports
Power	Dual redundant AC power supplies (750W, 1100W, 1800W, 2400W) Platinum and Titanium. Energy Star 3.0 compliant.
Systems Management	Lenovo XClarity Controller embedded management, XClarity Administrator centralized infrastructure delivery, XClarity Integrator plugins, XClarity Energy Manager centralized server power management
OSes Supported	Microsoft, SUSE, Red Hat, VMware. Visit lenovopress.com/osig for details.
Security	Lenovo ThinkShield, lockable security bezel, chassis intrusion switch, TPM 1.2/2.0
Reliability	Predictive Failure Analysis, hot-swap/redundant drives, fans and power supplies
Limited Warranty	1-year and 3-year customer replaceable unit and onsite service, next business day 9x5; optional service upgrades

For More Information

To learn more about the Lenovo ThinkSystem ST650 V2, contact your Lenovo representative or Business Partner or visit lenovo.com/thinksystem. For detailed specifications consult ST650 V2 Product Guide.

* ITIC Global Reliability Report.

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