

# ThinkSystem SR590

## Balanced 2U rack server performance and memory to tackle cloud and Big Data

### Powerful and Balanced

Designed for rack environments that require peak two-socket performance and sizeable memory capacity, the Lenovo ThinkSystem SR590 can tackle cloud and Big Data environments for medium and large enterprises. The SR590 is a balanced, midrange rack server that also works well for small-scale virtualization, collaboration and productivity applications, as well as caching and logging.

Two Intel® Xeon® Scalable Family processors increase agility and manage data-rich, high-demand workloads with up to a 1.5x memory bandwidth increase over the previous generation. Combined with up to 1TB of memory capacity, this enables applications to run faster and more efficiently and boosts business performance at a lower cost and higher overall value.

### Flexible and Expandable

The SR590 supports up to 16 hot-swap 2.5" or 14 hot-swap or simple-swap 3.5" drive bays. Up to four of the 2.5" or 3.5" bays can be AnyBay, capable of supporting not only SAS/ SATA drives, but also direct-connect NVMe drives (which bypass the SAS bus) for the ultimate in storage performance. In addition, the SR590 supports SAS and SATA HDDs and SSDs with up to 12Gb SAS throughput, as well as up to two M.2 drives for faster, more secure OS boot.



The SR590 provides storage flexibility, NIC expansion in multiple form factors, including LOM, ML2, and PCIe, and replaceable I/O riser cards for varied adapter slot configurations.

### Reliable and Secure

Lenovo servers have been the most reliable in the industry for several years. They were ranked #1 yet again in the latest ITIC survey of x86 server reliability\*. The SR590 is no exception, including many features that contribute to the reliability and security of the server and your all-important data.

These features result in an ideal server for proxy caching, cloud, CRM, security, virtualization, media streaming, Big Data, databases, database-driven Web serving, mail serving, and many other workloads.

### 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.

Lenovo™

## Specifications

<b>Form Factor</b>	2U
<b>Processors</b>	Up to 2x Intel® Xeon® Platinum 150W, up to 26 cores per CPU
<b>Memory</b>	Up to 1TB of 2666MHz TruDDR4 memory in 16 slots
<b>Expansion Slots</b>	Up to 6x PCIe 3.0 on replaceable riser cards for multiple I/O configurations
<b>Drive Bays</b>	Up to 16x 2.5" or 14x 3.5" hot-swap or up to 8x 3.5" simple-swap; optional 4x AnyBay bays
<b>Internal Storage</b>	Up to: 168TB (3.5" SAS/SATA HDD); 53.8TB (3.5" SSD); 38.4TB (2.5" SAS/SATA); 122.9TB (2.5" SSD); 16TB (direct-connect 2.5" NVMe); up to 2x M.2 boot drives
<b>Network Interface</b>	2 GbE ports standard; LOM interface standard; optional ML2
<b>NIC ports</b>	2x GbE standard; 1x GbE dedicated management standard; optional up to 2x 1GbE, 2x 10GBase-T, or 2x 10GBase SFP+
<b>Power Supply</b>	Up to 2x hot-swap/redundant 550W/750W Platinum, 750W Titanium
<b>High-Availability</b>	Hot-swap HDDs/SSDs/NVMe, hot-swap PSUs and fans, light path diagnostics, PFA for all major components, ASHRAE A4 support (with limits), optional XClarity Pro with Call Home feature.
<b>Security Features</b>	Locking bezel; locking top cover; TPM 2.1 standard; optional TCM
<b>RAID Support</b>	Hardware RAID 0, 1, 5 standard on hot-swap models (optional hardware RAID 0, 1, 5, 50, 6, 60 for 2.5" models); Software RAID 0, 1, 5 on simple-swap 3.5" models (optional hardware RAID 0, 1, 5)
<b>Management</b>	XClarity Administrator; XClarity Controller (embedded hardware); optional XClarity Pro
<b>OS Support</b>	Microsoft, SUSE, Red Hat, VMware. Visit <a href="http://lenovopress.com/osig">lenovopress.com/osig</a> for details.
<b>Limited Warranty</b>	1- and 3-year customer replaceable unit and onsite service, next business day 9x5, optional service upgrades

\* 2016-2017 Global Hardware, Server OS Reliability Report, ITIC; October 2016

## Featured Options

<p><b>16GB TruDDR4 2666MHz (2Rx8 1.2V) RDIMM Memory</b></p> <p>7X77A01303</p> <p>Improve server performance, reliability with high- capacity memory</p>	<p><b>U.2 1.92TB Entry NVMe PCIe 3.0 Hot-Swap SSD</b></p> <p>7N47A00984</p> <p>High-performance, low-latency drive optimized for mixed workloads</p>	<p><b>10Gb 2-port SFP+ LOM</b></p> <p>7ZT7A00546</p> <p>Low-cost Intel LoM available for 1Gb, 10Gb, SFP+, and RJ45 connectivity</p>
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## For More Information

To learn more about the Lenovo ThinkSystem SR590, contact your Lenovo representative or Business Partner or visit [www.lenovo.com/thinksystem](http://www.lenovo.com/thinksystem). For detailed specifications, consult the [SR590 Product Guide](#).

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