

ThinkSystem SR860

Designed with the perfect blend of price, performance and scalability



Affordable Scalability

The Lenovo ThinkSystem SR860 is designed for exceptional price/performance. It provides the speed and reliability you require today, with the scalability and versatility you'll need tomorrow.

When expansion is inevitable, data centers have to respond quickly. However, if that response is beyond your budget, system capabilities don't really matter. If you are locked into an inflexible proprietary ecosystem that makes growth painfully expensive, you could face daunting choices between progress and budget.

ThinkSystem SR860 is smartly designed to deliver affordable scalability in an industry-standard x86 platform.

Adaptable

The agile design of the ThinkSystem SR860 offers considerable configuration flexibility. It can scale from two to four powerful Intel® Xeon® Processor Scalable Family CPUs via a customer-installable mezzanine tray that enables a quick and easy "pay as you grow" upgrade for processors and memory.

The SR860 is engineered to power through a wide range of workloads, from business consolidation to database virtualization, data analytics, and scientific/technical.

Plus, the SR860 supports plenty of ultra-fast memory, storage, and adapter slots, as well as multiple NIC form factors, and even two GPUs.

Flexible For A Variety of Workloads

Many kinds of workloads can benefit from GPU-accelerated computing. The thousands of processor cores and parallel architecture make GPUs ideal for compute-intensive applications, such as machine learning, artificial intelligence, analytics, 3D modeling, and others that once required supercomputers.

However, many servers that offer GPUs are far more expensive than the SR860, while comparably priced servers typically don't offer GPUs at all.

Today's data-critical world requires additional storage that's both high-performing and flexible. The SR860 provides tremendous flexibility in storage selection, to meet these workload requirements:

- Lenovo AnyBay accommodates SAS, SATA, and NVMe storage devices in the same bays. This means you don't have to have bays dedicated to either HDDs/SSDs or U.2 NVMe drives. AnyBay lets you mix-and-match as needed.
- Four direct motherboard connections for U.2 NVMe storage provide ultra-fast read/writes and reduce costs by eliminating PCIe switch adapters and bypassing the SAS bus. (Four other NVMe drives can be used via a switch card.)

Lenovo™

Plus, storage can be tiered within the system for faster application performance, to provide the most cost-effective solution. The speed of NVMe drives makes them ideal for I/O-intensive applications that require high IOPs throughput and low latency, such as Big Data, OLTP, and HPC. NVMe can ease tight compliance windows for backup or replication, and improve VM density.

- One or two (mirrored) M.2 drives provide rapid OS boot that's faster and more secure than either USB keys or SD cards, and free up drive bays for data storage.

These are merely a few of the incorporated technologies that create the exceptional performance, scalability, and value needed for enterprise-class workloads, both today and into the future.

Reliability You Can Trust

Because your business depends on your systems, you need servers built for reliability. The ThinkSystem SR860 delivers multiple layers of reliability from the processors up, so you can have the confidence that you're running your workloads on a platform built to stay up and running.

In fact, Lenovo servers are so durable that they continue to be rated the industry's #1 most reliable[†], in addition to having the industry's highest customer satisfaction[§] rating.

- Enterprise-class CPU reliability, availability, and serviceability (RAS) features
- Predictive Failure Analysis—Identifies a failing component prior to failure, to enable scheduled parts replacement—rather than reacting *after* a failure—and minimize or avoid downtime. PFA alerts are available for all major components, including CPUs, DIMMs, adapter slots, fans, PSUs, storage devices, and voltage regulators.
- Light path diagnostics—Onboard component LEDs to instantly identify components needing replacement (based on PFA alerts), for faster serviceability and reduced downtime
- TPM 2.0—Secures and authenticates the system to prevent unauthorized intrusion

With reliability and security designed into the system, the SR860 builds on industry-standard technologies to deliver an economical, dependable platform for the most demanding users and applications.

Server Deployment and Management

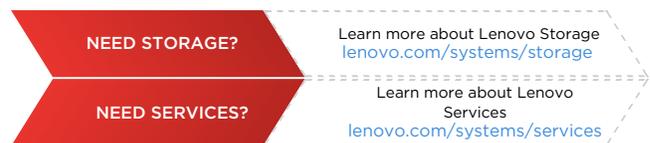
Lenovo XClarity Controller is an all-new hardware embedded management engine built into every ThinkSystem server. Designed for data centers that put a premium on precision and efficiency, it has a simple, uncluttered graphical user interface.

XClarity Controller is built for ease of interoperability, incorporating Redfish-compliant REST APIs. And it boots to the operating system in half the time of prior-generation servers, and with up to six times faster firmware updates. Lenovo XClarity Administrator is a virtualized software application designed to centrally manage ThinkSystem servers, storage, and networking. It provides discovery and inventory management, software-based configuration patterns, policy-based firmware management, and provisioning of operating systems and hypervisors to multiple systems.

It also serves as a centralized point of integration to extend your existing standardized data center processes. Running XClarity Integrators from your external IT applications, or integrating with open REST APIs, allows you to use familiar tools and consoles to deploy and manage Lenovo infrastructure.

For More Information

To learn more about the Lenovo ThinkSystem SR860 enterprise rack server, contact your Lenovo representative or Business Partner, or visit lenovo.com/systems/servers. For detailed specifications, consult the [SR860 Product Guide](#).



Specifications

Form Factor	4U
Processors	2x or 4x Intel® Xeon® processor Scalable family CPUs, up to 165W
Memory	Up to 6TB [†] in 48x slots (with 4x CPUs) using 128GB [†] DIMMs; 2666MHz TruDDR4
Expansion	Up to 11x PCIe plus 1x LOM; optional 1x ML2 slot
Drive Bays	Up to 16x 2.5-inch storage bays supporting SAS/SATA HDD and SSDs or up to 8x 2.5-inch NVMe SSDs (including 4x direct-connect U.2/NVMe); plus up to 2x mirrored M.2 boot
Internal Storage	Up to: 32TB SAS/SATA 2.5" HDDs; 121.6TB SAS/SATA 2.5" SSDs; 32TB 2.5" U.2/NVMe
Network Interface	Multiple options with 1GbE, 10GbE, 25GbE, 32GbE, 40GbE or InfiniBand PCIe adapters; one (2-/4-port) 1GbE or 10GbE LOM card
GPU Support	Up to 2x supported GPUs
Power	2x hot-swap/redundant: 750W/1100W/1600W/2000 AC 80 PLUS Platinum
Security and Availability	TPM 1.2/2.0; PFA; hot-swap/redundant drives, and PSUs; redundant fans; internal light path diagnostic LEDs; front-access diagnostics via dedicated USB port; optional diagnostic LCD panel
RAID Support	Hardware RAID (up to 16 ports) with flash cache; up to 16-port HBAs
Systems Management	XClarity Controller embedded management, XClarity Administrator centralized infrastructure delivery, XClarity Integrator plugins, and XClarity Energy Manager centralized server power management
OS Support	Microsoft, Red Hat, SUSE, VMware. Visit lenovopress.com/osig for more information.
Limited Warranty	1- and 3-year customer replaceable unit and onsite service, next business day 9x5; opt. service upgrades

[†] 3TB at GA; 128GB DIMMs available 1Q 2018. Available prior to GA via special bid. ‡ [2016-2017 Global Hardware, Server OS Reliability Report, ITIC](#); October 2016. § [2H16 Corporate IT Buying Behavior and Customer Satisfaction Study, TBR](#); December 2016.

Featured Options

2.5" 7.6TB Capacity SAS 12Gb Hot-Swap SSD 7N47A00122 High-capacity flash storage for enterprise-class servers	32GB TruDDR4 2666MHz (2Rx4 1.2V) RDIMM 7X77A01304 High-capacity TruDDR4 memory for peak server performance and reliability	Intel X710-DA2 PCIe 10Gb 2-Port SFP+ Ethernet Adapter 7ZT7A00537 Efficient 10GBase SFP+ Ethernet controller utilizing Intel's latest technology
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