Lenovo ThinkSystem SR570 Server (Xeon SP Gen 1 / Gen 2)

Product Guide

Lenovo ThinkSystem SR570 is a 2-socket 1U rack server for small businesses up to large enterprises that need industry-leading reliability, management, and security, as well as the balance of performance, memory, and flexible storage configurations. The SR570 server is designed to handle a wide range of workloads, such as virtualization and cloud computing, infrastructure security, web serving, and application development.

Featuring the second generation of the Intel Xeon Processor Scalable Family (Xeon SP Gen 2), the SR570 server offers balanced performance and storage capacity. The SR570 server supports up to two processors, up to 2933 MHz memory speed, up to 1 TB of memory capacity with TruDDR4 RDIMMs or up to 2.75 TB of memory capacity with a combination of TruDDR4 RDIMMs and Intel DC persistent memory modules (DCPMMs), up to 10x 2.5-inch or 4x 3.5-inch drive bays with an extensive choice of NVMe PCIe SSDs, SAS/SATA SSDs, and SAS/SATA HDDs, and flexible I/O expansion options with a LOM slot and up to 3x PCIe slots.

The SR570 server offers basic software RAID or advanced hardware RAID protection and a wide range of networking options, including selectable LOM, ML2, and PCIe network adapters. The next-generation Lenovo XClarity Controller, which is built into the SR570 server, provides advanced service processor control, monitoring, and alerting functions.

The following figure shows the ThinkSystem SR570 server with 3.5-inch front hot-swap drives. Other drive configurations are also available.



Figure 1 Lenovo ThinkSystem SR570 with 3.5-inch hot-swap drives

Did you know?

The SR570 server features a unique AnyBay design that allows a choice of drive interface types in the same drive bay: SAS drives, SATA drives, or U.2 NVMe PCIe drives.

The SR570 server offers onboard NVMe PCIe ports that allow direct connections to the U.2 NVMe PCIe SSDs, which frees up I/O slots and helps lower NVMe solution acquisition costs.

The SR570 server is designed to meet ASHRAE A4 standards (up to 45 °C [113 °F]) in select configurations, which enable customers to lower energy costs, while still maintaining world-class reliability.

Key features

The SR570 server offers a balance of processing power, expandability, and cost for small and medium businesses up to the large enterprise. Ease of use and comprehensive systems management tools help make deployment easier. Outstanding reliability, availability, and serviceability (RAS) and high-efficiency design improve your business environment and help save operational costs.

Scalability and performance

The SR570 server offers numerous features to boost performance, improve scalability, and reduce costs:

- Improves productivity by offering superior system performance with the second generation of the Intel Xeon Processor Scalable Family with up to 24-core processors, up to 35.75 MB of last level cache (LLC), up to 2933 MHz memory speeds, and up to 10.4 GT/s Ultra Path Interconnect (UPI) links.
    - Support for up to two processors, 48 cores, and 96 threads allows to maximize the concurrent execution of multithreaded applications.
    - Intelligent and adaptive system performance with energy efficient Intel Turbo Boost 2.0 Technology allows CPU cores to run at maximum speeds during peak workloads by temporarily going beyond processor thermal design power (TDP).
    - Intel Hyper-Threading Technology boosts performance for multithreaded applications by enabling up to two simultaneous threads within each processor core.
    - Intel Virtualization Technology integrates hardware-level virtualization hooks that allow operating system vendors to better utilize the hardware for virtualization workloads.
    - Intel Speed Select Technology provides improvements in server utilization and guaranteed per-core performance service levels with more granular control over processor performance.
    - Intel Deep Learning Boost (Vector Neural Network Instruction set [VNNI]) is designed to deliver significant, more efficient Deep Learning (Inference) acceleration for high-performance Artificial Intelligence (AI) workloads.
    - Intel Advanced Vector Extensions 512 (AVX-512) enable acceleration of enterprise-class and high performance computing (HPC) workloads.
- Helps maximize system performance for data intensive applications with up to 2933 MHz memory speeds and up to 1 TB of memory capacity.
- Boosts the performance of data-intensive applications and delivers consistent service levels at scale for virtualized and cloud environments by using the innovative persistent memory technology that provides a unique combination of affordable large memory capacity and non-volatility for up to 2.75 TB of total server memory capacity, including RDIMMs and DCPMMs (DC persistent memory modules).
- Offers flexible and scalable internal storage in a 1U rack form factor with up to 10x 2.5-inch drives for performance-optimized configurations or up to 4x 3.5-inch drives for capacity-optimized configurations, providing a wide selection of SAS/SATA HDD/SSD and PCIe NVMe SSD types and capacities.
- Provides flexibility to use SAS, SATA, or NVMe PCIe drives in the same drive bays with a unique AnyBay design.
- Provides I/O scalability with the LOM slot and up to three PCI Express (PCIe) 3.0 I/O expansion slots in a 1U rack form factor.
- Reduces I/O latency and increases overall system performance with Intel Integrated I/O Technology that embeds the PCI Express 3.0 controller into the Intel Xeon Processor Scalable Family.

Availability and serviceability

The SR570 server provides many features to simplify serviceability and increase system uptime:

- Designed to run 24 hours a day, 7 days a week
- Offers protection in the event of a non-correctable memory failure with Single Device Data Correction (SDDC, also known as Chipkill, requires x4-based DIMMs), Adaptive Double Device Data Correction (ADDDC, also known as Redundant Bit Steering [RBS], requires x4-based DIMMs and Intel Xeon Gold

or Platinum processors), memory mirroring, and memory rank sparing.

- Provides easy access to upgrades and serviceable parts (such as processors, memory DIMMs, and adapter cards) with tool-less cover removal.
- Offers affordable data protection with software RAID and Simple Swap drives and advanced hardware RAID data redundancy with hot-swap drives.
- Provides availability for business-critical applications with redundant hot-swap power supplies and redundant hot-swap fans.
- Simplifies servicing and speeds up problem resolution with light path diagnostics.
- Allows preventive actions in advance of possible failure, thereby increasing server uptime and application availability with Proactive Platform Alerts (including PFA and SMART alerts) for processors, voltage regulators, memory, internal storage (SAS/SATA HDDs and SSDs, NVMe SSDs, M.2 storage), fans, power supplies, RAID controllers, and server ambient and sub-component temperatures.
- Continuously monitors system parameters, triggers alerts, and performs recovery actions in case of failure to minimize downtime with Built-in XClarity Controller (XCC).
- Provides quick access to system status, firmware, network, health, and alerts information via Virtual Operator Panel from the XClarity Mobile App running on the Android or iOS mobile device that is connected to the front USB port with XClarity Controller access.
- Speeds up troubleshooting tasks to reduce service time with diagnostics built into the XClarity Provisioning Manager.

Manageability and security

Powerful systems management features simplify local and remote management of the SR570 server and deliver enterprise-class data protection:

- Provides advanced service processor control, monitoring, and alerting functions with XClarity Controller, a next generation service processor.
- Improves Unified Extensible Firmware Interface (UEFI) system setup, configuration, updates, simplified error handling, and operating system deployment with the embedded XClarity Provisioning Manager.
- Offers XClarity Essentials software tools that can help you set up, use, and maintain the server.
- Increases uptime, reduces costs, and improves productivity through advanced server management capabilities with Lenovo XClarity Administrator that provides comprehensive hardware management.
- Provides on-the-go monitoring and management of devices in XClarity Administrator from anywhere with the Lenovo XClarity mobile app, which can help improve efficiency and reduce downtime risks.
- Centralizes infrastructure resource management with Lenovo XClarity Integrators for VMware vCenter and Microsoft System Center, extending XClarity Administrator features to virtualization management software tools and enabling users to deploy and manage infrastructure end-to-end.
- Offers advanced cryptographic functionality (such as digital signatures and remote attestation) with an integrated Trusted Platform Module (TPM) or optional Trusted Cryptographic Module (TCM) or Nationz TPM (available only in PRC).
- Keeps user data safe with Lenovo Business Vantage, a security software tool suite designed to work with the Trusted Cryptographic Module (available only in PRC).
- Offers enterprise-class data protection with advanced RAID and optional self-encrypting drives.
- Provides faster, stronger encryption with industry-standard AES NI support.
- Helps prevent certain classes of malicious buffer overflow attacks with Intel Execute Disable Bit functionality, when combined with a supporting operating system.
- Enhances security through hardware-based resistance to malicious software attacks with Intel Trusted Execution Technology, allowing an application to run in its own isolated space, protected from all other software running on a system.

Energy efficiency

The SR570 server offers the following energy-efficiency features to save energy, reduce operational costs, increase energy availability, and contribute to the green environment:

- Delivers impressive compute power per watt, featuring 80 PLUS Titanium and Platinum redundant power supplies.
- Enables customers to lower energy costs with design to meet ASHRAE A4 in select configurations.
- Reduces power drawn with Intel Intelligent Power Capability that powers individual processor elements on and off as needed.
- Helps reduce power consumption with variable speed fans.
- Helps achieve lower heat output and reduced cooling needs with Lenovo XClarity Energy Manager that provides advanced data center power notification, analysis, and policy-based management.

Components and connectors

The following figure shows the front of the SR570 server with four 3.5-inch drive bays.

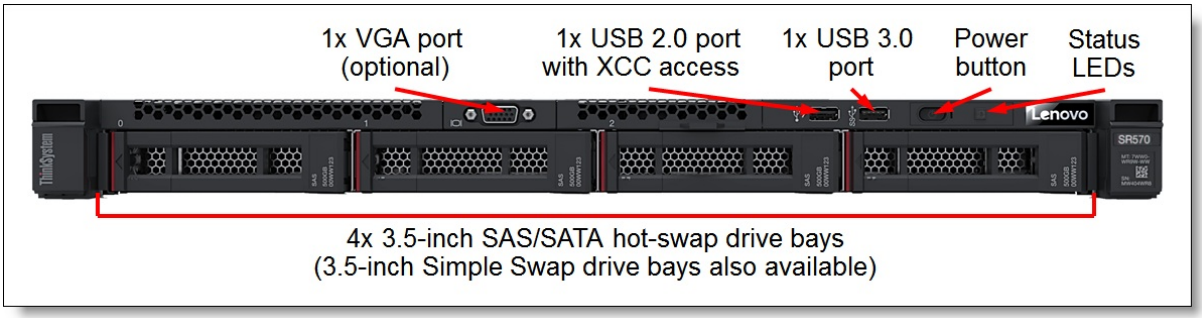


Figure 2. Front view of the SR570: 4x 3.5-inch drive bays

The following figure shows the front of the SR570 server with eight 2.5-inch drive bays.

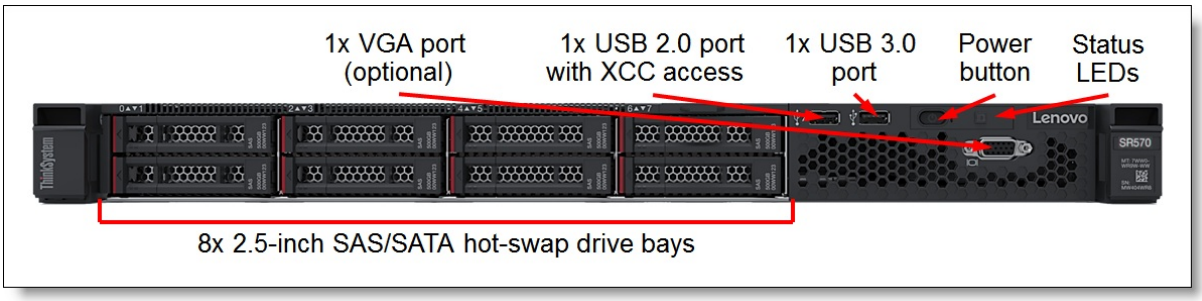


Figure 3. Front view of the SR570: 8x 2.5-inch drive bays

The following figure shows the front of the SR570 server with ten 2.5-inch drive bays.

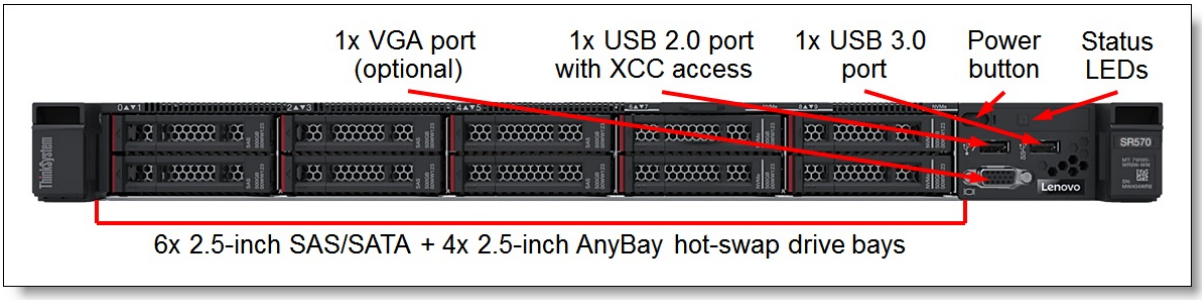


Figure 4. Front view of the SR570: 10x 2.5-inch drive bays

The front of the SR570 server includes the following components:

- 4x 3.5-inch, or 8x 2.5-inch, or 10x 2.5-inch hot-swap drive bays.
- One VGA port (optional).
- One USB 3.0 port.
- One USB 2.0 port with XClarity Controller access.
- Power button.
- Status LEDs.

The following figure shows the rear of the SR570 server with three PCIe low profile slots.

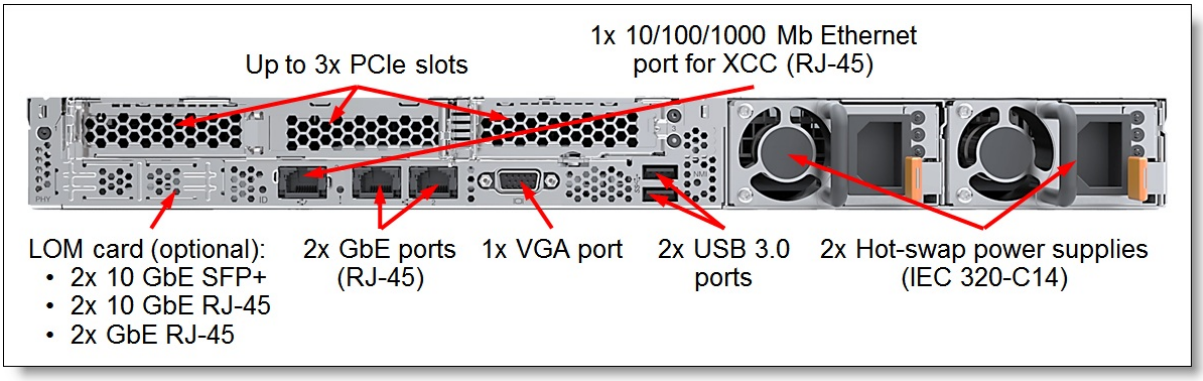


Figure 5. Rear view of the SR570

The rear of the SR570 server includes the following components:

- Up to three PCIe expansion slots (depending on the riser cards selected).
- One LOM card slot.
- Two 1 GbE onboard network ports.
- One 1 GbE port for XClarity Controller.
- One VGA port.
- Two USB 3.0 ports.
- Up to two hot-swap power supplies.

The following figure shows the locations of key components inside the SR570 server.

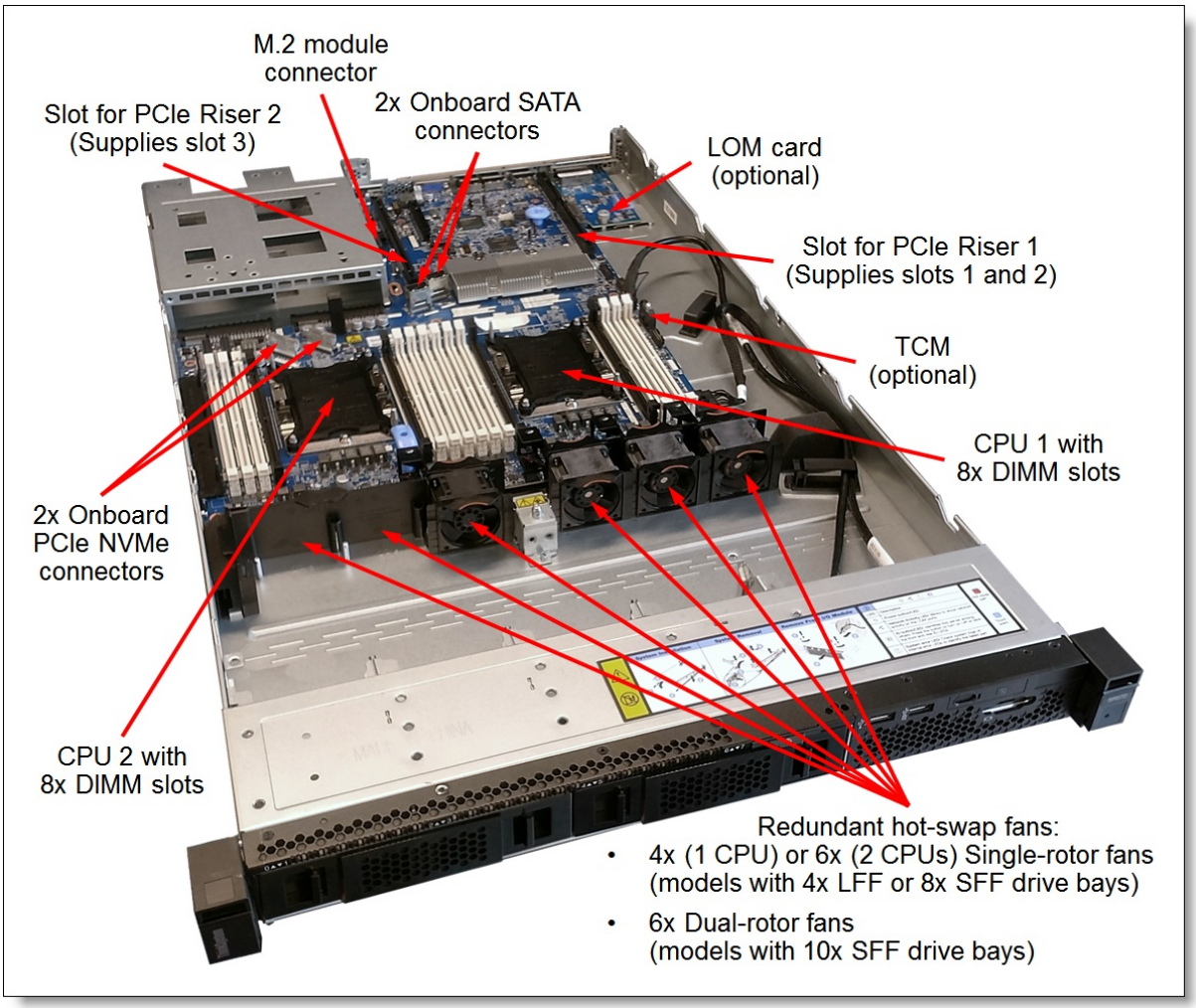


Figure 6. Internal view of the SR570

The following key components are located inside the SR570 server:

- Up to two processors.
- 16 DIMM slots (8 DIMM slots per processor).
- Drive backplanes.
- Two onboard NVMe PCIe connectors.
- One M.2 module connector.
- One LOM card connector.
- Two slots for PCIe riser cards.
- One TCM connector.
- Four (one processor) or six (two processors or models with 10x SFF drive bays) hot-swap system fans.

Standard specifications

The following table lists the system specifications for the SR570 server.

Table 1. SR570 system specifications

Attribute	Specification
Machine types	7Y02 - 1 year warranty 7Y03 - 3 year warranty
Form factor	1U rack-mount
Processor	Up to two Intel Xeon Bronze, Silver, Gold, or Platinum Gen 2 processors of up to 150 W TDP: • Up to 24 cores (2.1 GHz core speeds). • Up to 3.8 GHz core speeds (4 cores). • Two UPI links up to 10.4 GT/s each. • Up to 35.75 MB cache. • Up to 2933 MHz memory speed. 1st Gen Intel Xeon processors are also supported.
Chipset	Intel C622
Memory	Up to 16 DIMM sockets (8 DIMMs per processor; 6 memory channels per processor with one DIMM per channel for four channels and two DIMMs per channel for two channels). Support for RDIMMs or LRDIMMs. Memory types cannot be intermixed. Memory speed up to 2933 MHz depending on the processor selected.
Persistent memory	Up to 4x 128 GB, 256 GB, or 512 GB TruDDR4 2666 MHz DCPMMs in the DIMM slots. Not supported with 1st Gen Intel Xeon SP processors.

Memory capacity	• Memory DIMMs only: Up to 1 TB with up to 16x 64 GB RDIMMs (Up to 512 GB per processor).
	• Memory DIMMs and persistent memory modules:
	  ◦ App Direct Mode: Up to 2.75 TB with up to 12x 64 GB RDIMMs and up to 4x 512 GB DCPMMs (Up to 1.375 TB per processor).
	  ◦ Memory Mode: Up to 2 TB with up to 4x 512 GB DCPMMs (Up to 1 TB per processor).
	Note: Server configurations with more than 1 TB of memory capacity per socket (including DCPMMs and RDIMMs) require processors that support up to 4.5 TB (L-suffix) per socket.

Memory protection	• Processor's integrated memory controllers (for memory DIMMs): Error correction code (ECC), SDDC (for x4-based memory DIMMs), ADDDC (for x4-based memory DIMMs, requires Intel Xeon Gold or Platinum processors), memory mirroring, memory rank sparing, patrol scrubbing, and demand scrubbing. • DCPMM's onboard memory controllers: ECC, SDDC, DDDC, patrol scrubbing, and demand scrubbing. **Note:** In the configurations with DCPMMs, memory mirroring is supported only in the App Direct mode (other DCPMM modes do not support memory mirroring) and applies only to the RDIMMs (DCPMMs are not mirrored). Memory sparing is not supported in the configurations with DCPMMs.
Drive bays	• 4 LFF SATA Simple Swap drive bays • 4 LFF SAS/SATA hot-swap drive bays • 8 SFF SAS/SATA hot-swap drive bays • 10 SFF hot-swap drive bays: 6x 2.5" SAS/SATA & 4x 2.5" AnyBay

Attribute	Specification

Internal storage capacity	• 2.5-inch drives:
	  ◦ 307.2TB using 10x 30.72TB 2.5-inch SAS/SATA SSDs
	  ◦ 32TB using 4x 8TB 2.5-inch NVMe SSDs
	  ◦ 24TB using 10x 2.4TB 2.5-inch HDDs
	• 3.5-inch drives:
	  ◦ 80TB using 4x 20TB 3.5-inch HDDs
	  ◦ 61.44TB using 4x 15.36TB 3.5-inch SAS/SATA SSDs

Storage controller	• 6 Gb Onboard SATA AHCI • 6 Gb Onboard SATA RAID (Intel RSTe) • 12 Gb SAS/SATA RAID adapters with up to 8GB flash-backed cache • 12 Gb SAS/SATA HBA (non-RAID) • Onboard PCIe NVMe (non-RAID, requires two processors) • 1610-4P NVMe Switch Adapter (non-RAID, only supported with one processor)
Optical drive bays	None. Support for an external USB DVD RW Optical Disk Drive (SeeOptical drives).

Network interfaces	• 2x Integrated 1 GbE RJ-45 ports (no 10/100 Mb support)
	• Onboard LOM slot for up to 4x 1/10 Gb Ethernet ports:
	  ◦ 2x 1 GbE RJ-45 ports (no 10/100 Mb support)
	  ◦ 2x 10 GbE RJ-45 ports (no 10/100 Mb support)
	  ◦ 2x 10 GbE SFP+ ports (no 10/100 Mb support)
	• Optional Mezzanine LOM (ML2) slot for dual-port 10 GbE cards with SFP+ or RJ-45 connectors.
	• 1x RJ-45 10/100/1000 Mb Ethernet systems management port.

I/O expansion slots	Up to three slots depending on the riser cards installed. The slots are as follows: • Slot 1: PCIe 3.0 x8; low profile • Slot 2: PCIe 3.0 x16 or ML2 x8; low profile or full-height, half-length • Slot 3: PCIe 3.0 x8 or x16; low profile PCIe x16 slot 3 requires the second processor to be installed.
Ports	• Front: 1x USB 2.0 port with XClarity Controller access, 1x USB 3.0 port. Optional 1x VGA port. • Rear: 2x USB 3.0 ports and 1x VGA port. Optional 1x DB-9 serial port.
Cooling	• 4x LFF or 8x SFF drive bay models: Four (one processor) or six (two processors) hot-swap single-rotor system fans with N+1 redundancy. • 10x SFF drive bay models: Six hot-swap dual-rotor system fans with N+1 redundancy.
Power supply	Up to two redundant hot-swap 550 W or 750 W (100 - 240 V) High Efficiency Platinum or 750 W (200 - 240 V) High Efficiency Titanium AC power supplies. HVDC support (PRC only).
Video	Matrox G200 with 16 MB memory integrated into the XClarity Controller. Maximum resolution is 1920x1200 at 60 Hz with 32 bits per pixel.
Hot-swap parts	Drives (select models), power supplies, and fans.
Systems management	XClarity Controller (XCC) Standard, Advanced, or Enterprise (Pilot 4 chip), proactive platform alerts, light path diagnostics, XClarity Provisioning Manager, XClarity Essentials, XClarity Administrator, XClarity Integrators for VMware vCenter and Microsoft System Center, XClarity Energy Manager, Capacity Planner.
Security features	Power-on password, administrator's password, secure firmware updates, Trusted Platform Module (TPM) 1.2 or 2.0 (configurable UEFI setting). Optional lockable front bezel. Optional Trusted Cryptographic Module (TCM) or Nationz TPM (available only in PRC). Optional Lenovo Business Vantage security software (available only in PRC).

Attribute	Specification
Operating systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, VMware ESXi. See the Operating systems section for specifics.
Warranty	One-year (7Y02) or three-year (7Y03) customer-replaceable unit (CRU) and onsite limited warranty with 9x5 Next Business Day Parts Delivered.
Service and support	Optional service upgrades are available through Lenovo Services: 2-hour or 4-hour response time, 6-hour or 24-hour committed service repair, warranty extension up to 5 years, 1-year or 2-year post-warranty extensions, YourDrive Your Data, Enterprise Software Support, and Basic Hardware Installation Services.
Dimensions	Width: 435 mm (17.1 in.), height: 43 mm (1.7 in.), depth: 750 mm (29.5 in.). SeePhysical specifications for details.
Weight	Minimum configuration: 10.2 kg (22.5 lb), maximum: 16.0 kg (35.3 lb)

Models

ThinkSystem SR570 models can be configured by using the Lenovo Data Center Solution Configurator (DCSC).

Configure-to-order (CTO) models are used to create models with factory-integrated server customizations. For CTO models, two base CTO models are available for the SR570 as listed in the following table, CTO1WW and CTOLWW:

- The CTO1WW base CTO model is for general business and is selectable by choosing **General Purpose** mode in DCSC.
- The CTOLWW base model is intended for High Performance Computing (HPC) and Artificial Intelligence (AI) configurations and solutions, including configurations for Lenovo Scalable Infrastructure (LeSI), and is enabled using either the **HPC & AI LeSI Solutions** mode or **HPC & AI Hardware** mode in DCSC. CTOLWW configurations can also be built using System x and Cluster Solutions Configurator (x-config).

Preconfigured server models may also be available for the SR570, however these are region-specific; that is, each region may define their own server models, and not all server models are available in every region.

The following table lists the base CTO models of the ThinkSystem SR570 server.

Table 2. Base CTO models

Machine Type/Model General purpose	Machine Type/Model for HPC and AI	Description
7Y03CTO1WW	7Y03CTOLWW	ThinkSystem SR570 – 3-year Warranty
7Y02CTO1WW	7Y02CTOLWW	ThinkSystem SR570 – 1-year Warranty

The following table lists the base chassis for CTO models of the SR570 server.

There are currently two base feature codes for each of the 2.5-inch and 3.5-inch chassis. The "v2" bases include the new SR570 Air Duct Kit v2 which is required if a RAID 9350 adapter is to be configured. See the Field upgrades section for details. The non-v2 bases can be selected if any other RAID adapter or HBA is selected.

Table 3. Base chassis for CTO models

Feature code	Description
Base feature codes - suitable for all configurations except those with a RAID 9350 adapter	
AXEX	ThinkSystem SR570 2.5" Chassis with 10 Bays
AXEY	ThinkSystem SR570 2.5" Chassis with 8 Bays
AXEZ	ThinkSystem SR570 3.5" Chassis with 4 Bays
Base feature codes - suitable for all configurations including ones with a RAID 9350 adapter (includes the SR570 Air Duct Kit v2)	
BNPT	ThinkSystem SR570 2.5" Chassis with 10 Bays v2
BNPU	ThinkSystem SR570 2.5" Chassis with 8 Bays v2
BNPV	ThinkSystem SR570 3.5" Chassis with 4 Bays v2

Processors

The SR570 server supports one or two Intel Xeon Bronze, Silver, Gold, or Platinum processors of up to 150 W TDP. The following table lists the specifications of the processors for the SR570 server.

Topics in this section:

- Continued support for 1st Gen Intel Xeon Scalable processors
- UEFI operating modes

Processor support: Both 1st Gen and 2nd Gen Intel Xeon SP processors are supported. For supported 1st Gen processors, see the Continued support for 1st Gen Intel Xeon Scalable processors section.

Processor specifications table abbreviations:

- UPI: Ultra Path Interconnect
- TDP: Thermal Design Power
- HT: Hyper-Threading
- TB: Turbo Boost 2.0
- VT-x: Virtualization Technology
- VT-d: Virtualization Technology for Directed I/O
- SST-PP: Speed Select Technology - Performance Profile
- FMA: Fused-Multiply Add (AVX-512)
- DCPMM: DC Persistent Memory Module
- RAS: Reliability, Availability, and Serviceability
  - Std: Standard RAS
  - Adv: Advanced RAS

Table 4. Processor specifications

CPU model	Cores / threads	Core speed (Base / TB Max)	Cache	Max DDR4 speed	Max memory capacity per socket	UPI speed	TDP	HT	TB	VT-x	VT-d	SST-PP	FMA units	DCPMM	RAS
Intel Xeon Bronze processors															
3204	6 / 6	1.9 / 1.9 GHz	8.25 MB	2133 MHz	1 TB	9.6 GT/s	85 W	N	N	Y	Y	N	1	N	Std
3206R	8 / 8	1.9 / 1.9 GHz	11 MB	2133 MHz	1 TB	9.6 GT/s	85 W	N	N	Y	Y	N	1	N	Std
Intel Xeon Silver processors															
4208	8 / 16	2.1 / 3.2 GHz	11 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Y	Y	Y	Y	N	1	N	Std

CPU model	Cores / threads	Core speed (Base / TB Max)	Cache	Max DDR4 speed	Max memory capacity per socket	UPI speed	TDP	HT	TB	VT-x	VT-d	SST-PP	FMA units	DCPMM	RAS
4209T	8 / 16	2.2 / 3.2 GHz	11 MB	2400 MHz	1 TB	9.6 GT/s	70 W	Y	Y	Y	Y	N	1	N	Std
4210	10 / 20	2.2 / 3.2 GHz	13.75 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Y	Y	Y	Y	N	1	N	Std
4210R	10 / 20	2.4 / 3.2 GHz	13.75 MB	2400 MHz	1 TB	9.6 GT/s	100 W	Y	Y	Y	Y	N	1	N	Std
4214	12 / 24	2.2 / 3.2 GHz	16.5 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Y	Y	Y	Y	N	1	N	Std
4214R	12 / 24	2.4 / 3.5 GHz	16.5 MB	2400 MHz	1 TB	9.6 GT/s	100 W	Y	Y	Y	Y	N	1	N	Std
4214Y	12 / 24	2.2 / 3.2 GHz	16.5 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Y	Y	Y	Y	Y	1	N	Std
	10 / 20	2.3 / 3.2 GHz													
	8 / 16	2.4 / 3.2 GHz													
4215	8 / 16	2.5 / 3.5 GHz	11 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Y	Y	Y	Y	N	1	Y	Std
4215R	8 / 16	3.2 / 4.0 GHz	11 MB	2400 MHz	1 TB	9.6 GT/s	130 W	Y	Y	Y	Y	N	1	Y	Std
4216	16 / 32	2.1 / 3.2 GHz	22 MB	2400 MHz	1 TB	9.6 GT/s	100 W	Y	Y	Y	Y	N	1	N	Std
Intel Xeon Gold processors															
5215	10 / 20	2.5 / 3.4 GHz	13.75 MB	2666 MHz	1 TB	10.4 GT/s	85 W	Y	Y	Y	Y	N	1	Y	Adv
5215L	10 / 20	2.5 / 3.4 GHz	13.75 MB	2666 MHz	4.5 TB	10.4 GT/s	85 W	Y	Y	Y	Y	N	1	Y	Adv
5217	8 / 16	3.0 / 3.7 GHz	11 MB	2666 MHz	1 TB	10.4 GT/s	115 W	Y	Y	Y	Y	N	1	Y	Adv
5218	16 / 32	2.3 / 3.9 GHz	22 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	1	Y	Adv
5218B	16 / 32	2.3 / 3.9 GHz	22 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	1	Y	Adv
5218R	20 / 40	2.1 / 4.0 GHz	27.5 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	1	Y	Adv
5218T	16 / 32	2.1 / 3.8 GHz	22 MB	2666 MHz	1 TB	10.4 GT/s	105 W	Y	Y	Y	Y	N	1	Y	Adv
5220	18 / 36	2.2 / 3.9 GHz	24.75 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	1	Y	Adv
5220R	24 / 48	2.2 / 4.0 GHz	35.75 MB	2666 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	1	Y	Adv
5220S	18 / 36	2.7 / 3.9 GHz	24.75 MB	2667 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	1	Y	Adv
5220T	18 / 36	1.9 / 3.9 GHz	24.75 MB	2667 MHz	1 TB	10.4 GT/s	105 W	Y	Y	Y	Y	N	1	Y	Adv
5222	4 / 8	3.8 / 3.9 GHz	16.5 MB	2933 MHz	1 TB	10.4 GT/s	105 W	Y	Y	Y	Y	N	2	Y	Adv
6208U	16 / 32	2.9 / 3.9 GHz	22 MB	2933 MHz	1 TB	N/A	150 W	Y	Y	Y	Y	N	2	Y	Adv
6209U	20 / 40	2.1 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	N/A	125 W	Y	Y	Y	Y	N	2	Y	Adv
6210U	20 / 40	2.5 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	N/A	150 W	Y	Y	Y	Y	N	2	Y	Adv
6222V	20 / 40	1.8 / 3.6 GHz	27.5 MB	2400 MHz	1 TB	10.4 GT/s	115 W	Y	Y	Y	Y	N	2	Y	Adv
6226	12 / 24	2.7 / 3.7 GHz	19.25 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	2	Y	Adv
6226R	16 / 32	2.9 / 3.9 GHz	22 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6230	20 / 40	2.1 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	2	Y	Adv
6230N	20 / 40	2.3 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	2	Y	Adv
6230R	26 / 52	2.1 / 4.0 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6230T	20 / 40	2.1 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	2	Y	Adv
6234	8 / 16	3.3 / 4.0 GHz	24.75 MB	2933 MHz	1 TB	10.4 GT/s	130 W	Y	Y	Y	Y	N	2	Y	Adv

CPU model	Cores / threads	Core speed (Base / TB Max)	Cache	Max DDR4 speed	Max memory capacity per socket	UPI speed	TDP	HT	TB	VT-x	VT-d	SST-PP	FMA units	DCPMM	RAS
6238	22 / 44	2.1 / 3.7 GHz	30.25 MB	2933 MHz	1 TB	10.4 GT/s	140 W	Y	Y	Y	Y	N	2	Y	Adv
6238L	22 / 44	2.1 / 3.7 GHz	30.25 MB	2933 MHz	4.5 TB	10.4 GT/s	140 W	Y	Y	Y	Y	N	2	Y	Adv
6238T	22 / 44	1.9 / 3.7 GHz	30.25 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	2	Y	Adv
6240	18 / 36	2.6 / 3.9 GHz	24.75 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6240L	18 / 36	2.6 / 3.9 GHz	24.75 MB	2933 MHz	4.5 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6240Y	18 / 36	2.6 / 3.9 GHz	24.75 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	Y	2	Y	Adv
	14 / 28	2.8 / 3.9 GHz													
	8 / 16	3.1 / 3.9 GHz													
6242	16 / 32	2.8 / 3.9 GHz	22 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6244	8 / 16	3.6 / 4.4 GHz	24.75 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6248	20 / 40	2.5 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6252	24 / 48	2.1 / 3.7 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6252N	24 / 48	2.3 / 3.6 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6262V	24 / 48	1.9 / 3.6 GHz	33 MB	2400 MHz	1 TB	10.4 GT/s	135 W	Y	Y	Y	Y	N	2	Y	Adv
Intel Xeon Platinum processors															
8253	16 / 32	2.2 / 3.0 GHz	22 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	2	Y	Adv
8256	4 / 8	3.8 / 3.9 GHz	16.5 MB	2933 MHz	1 TB	10.4 GT/s	105 W	Y	Y	Y	Y	N	2	Y	Adv

Configuration notes:

- The Intel Xeon Gold 5218 and 5218B processors have similar specifications; however, they use different silicon designs and cannot be mixed in the same system.
- The processors that support SST-PP offer three distinct operating points that are defined by a core count with a base speed associated with that core count. The operating point is static, it is selected during the boot process and cannot be changed at runtime.

For the SR570 server models that come standard with one processor, the second processor can be ordered, if required (see the following table for ordering information). The second processor must be of the same model as the first processor. The second processor option includes a processor and a heatsink; two additional single-rotor system fans are not included and need to be purchased with the second processor for server models with 4x 3.5-inch or 8x 2.5-inch drive bays (see Cooling for details).

Note: The Intel Xeon Gold 6209U and 6210U processors are supported only in the uniprocessor configurations.

Table 5. Processor options

Part number	Feature code*	Description
Intel Xeon Bronze processors		
4XG7A37939	B4HU	SR530/SR570/SR630 Intel Xeon Bronze 3204 6C 85W 1.9GHz Processor w/o FAN
4XG7A37990	B7N3	SR530/SR570/SR630 Intel Xeon Bronze 3206R 8C 85W 1.9GHz Processor w/o FAN

Part number	Feature code*	Description
Intel Xeon Silver processors		
4XG7A37936	B4HT	SR530/SR570/SR630 Intel Xeon Silver 4208 8C 85W 2.1GHz Processor w/o FAN
4XG7A37945	B4P4	SR530/SR570/SR630 Intel Xeon Silver 4209T 8C 70W 2.2GHz Processor w/o FAN
4XG7A37933	B4HS	SR530/SR570/SR630 Intel Xeon Silver 4210 10C 85W 2.2GHz Processor w/o FAN
4XG7A37988	B7N5	SR530/SR570/SR630 Intel Xeon Silver 4210R 10C 100W 2.4GHz Processor w/o FAN
4XG7A37930	B4HR	SR530/SR570/SR630 Intel Xeon Silver 4214 12C 85W 2.2GHz Processor w/o FAN
4XG7A37987	B7N6	SR530/SR570/SR630 Intel Xeon Silver 4214R 12C 100W 2.4GHz Processor w/o FAN
4XG7A37942	B4NW	SR530/SR570/SR630 Intel Xeon Silver 4214Y 12/10/8C 85W 2.2GHz Processor w/o FAN
4XG7A37927	B4HQ	SR530/SR570/SR630 Intel Xeon Silver 4215 8C 85W 2.5GHz Processor w/o FAN
4XG7A63298	BAZU	SR570/SR630 Intel Xeon Silver 4215R 8C 130W 3.2GHz Processor w/o FAN
4XG7A37924	B4HP	SR530/SR570/SR630 Intel Xeon Silver 4216 16C 100W 2.1GHz Processor w/o FAN
Intel Xeon Gold processors		
4XG7A37917	B4HN	SR530/SR570/SR630 Intel Xeon Gold 5215 10C 85W 2.5GHz Processor w/o FAN
4XG7A37911	B4P9	SR530/SR570/SR630 Intel Xeon Gold 5215L 10C 85W 2.5GHz Processor w/o FAN
4XG7A37921	B4HM	SR530/SR570 Intel Xeon Gold 5217 8C 115W 3.0GHz Processor w/o FAN
4XG7A37896	B4HL	SR530/SR570/SR630 Intel Xeon Gold 5218 16C 125W 2.3GHz Processor w/o FAN
4XG7A37959	B6BS	SR530/SR570/SR630 Intel Xeon Gold 5218B 16C 125W 2.3GHz Processor w/o FAN
4XG7A63296	BAZS	SR530/SR570/SR630 Intel Xeon Gold 5218R 20C 125W 2.1GHz Processor w/o FAN
4XG7A37956	B5S0	SR530/SR570 Intel Xeon Gold 5218T 16C 105W 2.1GHz Processor w/o FAN
4XG7A37893	B4HK	SR530/SR570/SR630 Intel Xeon Gold 5220 18C 125W 2.2GHz Processor w/o FAN
4XG7A37984	B7N9	SR570/SR630 Intel Xeon Gold 5220R 24C 150W 2.2GHz Processor w/o FAN
4XG7A38018	B6CW	SR530/SR570/SR630 Intel Xeon Gold 5220S 18C 125W 2.7GHz Processor w/o FAN
4XG7A38004	B6CQ	SR530/SR570 Intel Xeon Gold 5220T 18C 105W 1.9GHz Processor w/o FAN
4XG7A37953	B5S1	SR530/SR570 Intel Xeon Gold 5222 4C 105W 3.8GHz Processor w/o FAN
None**	BAZV	Intel Xeon Gold 6208U 16C 150W 2.9GHz Processor
None**	B6CX	Intel Xeon Gold 6209U 20C 125W 2.1GHz Processor w/o FAN
None**	B5RX	Intel Xeon Gold 6210U 20C 150W 2.5GHz Processor w/o FAN
4XG7A38022	B6CV	SR530/SR570/SR630 Intel Xeon Gold 6222V 20C 115W 1.8GHz Processor w/o FAN
4XG7A38020	B6CL	SR530/SR570/SR630 Intel Xeon Gold 6226 12C 125W 2.7GHz Processor w/o FAN
4XG7A63292	BAZW	SR570/SR630 Intel Xeon Gold 6226R 16C 150W 2.9GHz Processor w/o FAN
4XG7A37890	B4HJ	SR530/SR570/SR630 Intel Xeon Gold 6230 20C 125W 2.1GHz Processor w/o FAN
4XG7A38029	B5RY	SR530/SR570 Intel Xeon Gold 6230N 20C 125W 2.3GHz Processor w/o FAN
4XG7A63290	BAZX	SR570/SR630 Intel Xeon Gold 6230R 26C 150W 2.1GHz Processor w/o FAN
4XG7A38007	B6CP	SR530/SR570 Intel Xeon Gold 6230T 20C 125W 2.1GHz Processor w/o FAN
4XG7A38000	B6CK	SR570/SR630 Intel Xeon Gold 6234 8C 130W 3.3GHz Processor w/o FAN
4XG7A38024	B6CJ	SR570/SR630 Intel Xeon Gold 6238 22C 140W 2.1GHz Processor w/o FAN
4XG7A38002	B6CR	SR570/SR630 Intel Xeon Gold 6238L 22C 140W 2.1GHz Processor w/o FAN
4XG7A37908	B4P2	SR530/SR570 Intel Xeon Gold 6238T 22C 125W 1.9GHz Processor w/o FAN
4XG7A37884	B4HH	SR570/SR630 Intel Xeon Gold 6240 18C 150W 2.6GHz Processor w/o FAN
4XG7A38014	B6CS	SR570/SR630 Intel Xeon Gold 6240L 18C 150W 2.6GHz Processor w/o FAN
4XG7A37905	B4NV	SR570 Intel Xeon Gold 6240Y 18/14/8C 150W 2.6GHz Processor w/o FAN

Part number	Feature code*	Description
4XG7A37888	B4HG	SR570 Intel Xeon Gold 6242 16C 150W 2.8GHz Processor w/o FAN
4XG7A15876	B4HF	SR570 Intel Xeon Gold 6244 8C 150W 3.6GHz Processor w/o FAN
4XG7A15893	B4HE	SR570/SR630 Intel Xeon Gold 6248 20C 150W 2.5GHz Processor w/o FAN
4XG7A15890	B4HC	SR570/SR630 Intel Xeon Gold 6252 24C 150W 2.1GHz Processor w/o FAN
None^	B6CT	Intel Xeon Gold 6252N 24C 150W 2.3GHz Processor w/o FAN
4XG7A38009	B6CU	SR570/SR630 Intel Xeon Gold 6262V 24C 135W 1.9GHz Processor w/o FAN
Intel Xeon Platinum processors		
4XG7A37899	B5RZ	SR530/SR570/SR630 Intel Xeon Platinum 8253 16C 125W 2.2GHz Processor w/o FAN
4XG7A37949	B5S2	SR530/SR570 Intel Xeon Platinum 8256 4C 105W 3.8GHz Processor w/o FAN

* For CTO configurations, the feature code represents a processor, and fans and heatsinks are derived by the configuration tool.
** Factory-installed only; no field upgrade. Supported in the uniprocessor configurations only.
^ Factory-installed only; no field upgrade.

Configuration notes:

- Configurations with Gold 6240Y processors are supported at the ambient temperature of up to 30 °C (86 °F).
- Configurations with Gold 6252N processors are supported at the ambient temperature of up to 27 °C (80.6 °F).
- The server performance might be impacted in case of a system fan failure in the configurations with Gold 6240Y or 6252N processors.

Continued support for 1st Gen Intel Xeon Scalable processors

The SR570 also continues to support the 1st Gen Intel Xeon Scalable processors (formerly codenamed "Skylake") listed in the following table.

Table 6. Long-life 1st Gen Intel Xeon Scalable processors

Part number	Feature code	Description

* Only available as a field upgrade for existing customers. Not available in CTO (configure to order) configurations.

For specifications of these processors, see the Intel Xeon Scalable Processor Reference for Lenovo ThinkSystem Servers:
https://lenovopress.com/lp1262-intel-xeon-sp-processor-reference#term=SKL

UEFI operating modes

The SR570 offers preset operating modes that affect energy consumption and performance. These modes are a collection of predefined low-level UEFI settings that simplify the task of tuning the server to suit your business and workload requirements.

The following table lists the feature codes that allow you to specify the mode you wish to preset in the factory for CTO orders.

Table 7. UEFI operating mode presets in DCSC

Feature code	Description
BFYB	Operating mode selection for: "Maximum Performance Mode"
BFYC	Operating mode selection for: "Minimal Power Mode"
BFYD	Operating mode selection for: "Efficiency Favoring Power Savings Mode"
BFYE	Operating mode selection for: "Efficiency - Favoring Performance Mode"

The preset modes for the SR570 are as follows:

- **Maximum Performance Mode** (feature BFYB): Achieves maximum performance but with higher power consumption and lower energy efficiency.
- **Minimal Power Mode** (feature BFYC): Minimize the absolute power consumption of the system.
- **Efficiency Favoring Power Savings Mode** (feature BFYD): Maximize the performance/watt efficiency with a bias towards power savings. This is the favored mode for SPECpower benchmark testing, for example.
- **Efficiency Favoring Performance Mode** (feature BFYE): Maximize the performance/watt efficiency with a bias towards performance. This is the favored mode for Energy Star certification, for example.

For details about these preset modes, and all other performance and power efficiency UEFI settings offered in the SR570, see the paper "Tuning UEFI Settings for Performance and Energy Efficiency on Intel Xeon Scalable Processor-Based ThinkSystem Servers", available from https://lenovopress.lenovo.com/lp1477.

Memory

The SR570 server supports up to 1 TB of memory capacity (up to 512 GB per processor) with up to 16 TruDDR4 memory RDIMMs when two processors are installed or up to 8 RDIMMs when one processor is installed. Each processor has six memory channels (two integrated memory controllers with three memory channels per memory controller), and there is a one DIMM per channel for four channels and two DIMMs per channel for two channels for a total of 8 DIMMs per processor.

Lenovo TruDDR4 memory uses the highest-quality components sourced from Tier 1 DRAM suppliers and only memory that meets strict requirements is selected. It is compatibility tested and tuned on every ThinkSystem server to maximize performance and reliability.

TruDDR4 memory has a unique signature programmed into the DIMM, which enables Lenovo servers to verify whether the memory installed is qualified and supported. Lenovo qualified and supported TruDDR4 memory is covered by Lenovo warranty, and service and support provided worldwide.

The following memory protection technologies are supported by the processor's integrated memory controllers:

- ECC
- SDDC (for x4-based memory DIMMs)
- ADDDC (for x4-based memory DIMMs; Gold and Platinum processors only)
- Memory mirroring
- Memory rank sparing
- Patrol scrubbing
- Demand scrubbing

The following table lists memory options available for the server. The table also indicates which processor generation is supported for each memory option.

Table 8. Memory options

Part number	Feature code	Description	Maximum quantity*	Gen 1 CPU	Gen 2 CPU
RDIMMs - 2933 MHz					
4ZC7A08706	B4H1	ThinkSystem 8GB TruDDR4 2933MHz (1Rx8 1.2V) RDIMM	8 / 16	No	Yes
4ZC7A08707	B4LY	ThinkSystem 16GB TruDDR4 2933MHz (1Rx4 1.2V) RDIMM	8 / 16	No	Yes
4ZC7A08708	B4H2	ThinkSystem 16GB TruDDR4 2933MHz (2Rx8 1.2V) RDIMM	8 / 16	No	Yes
4ZC7A08709	B4H3	ThinkSystem 32GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM	8 / 16	No	Yes
4ZC7A08710	B4H4	ThinkSystem 64GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM	8 / 16	No	Yes
RDIMMs - 2666 MHz					
7X77A01301	AUU1	ThinkSystem 8GB TruDDR4 2666 MHz (1Rx8 1.2V) RDIMM	8 / 16	Yes	No
7X77A01303	AUNC	ThinkSystem 16GB TruDDR4 2666 MHz (2Rx8 1.2V) RDIMM	8 / 16	Yes	Yes
7X77A01304	AUND	ThinkSystem 32GB TruDDR4 2666 MHz (2Rx4 1.2V) RDIMM	8 / 16	Yes	Yes

* The maximum quantity shown is with one processor / two processors.

Configuration notes:

- All DIMMs in the server operate at the same speed, which is determined as the lowest value of:
  - DIMM rated speed (2666 MHz or 2933 MHz).
  - Memory speed supported by the specific processor (2133 MHz, 2400 MHz, 2666 MHz, or 2933 MHz).
  - Memory speed for the selected quantity of DIMMs per channel:
    - One DIMM per channel (1 DPC): 2933 MHz.
    - Two DIMMs per channel (2 DPC): 2666 MHz.

  Note: Maximum memory speed can be achieved when Max performance mode is enabled in UEFI.
- Mixing RDIMMs of different ranks (single- or dual-rank), DRAM chip types (x4 or x8), speeds (2666 MHz or 2933 MHz), and capacities (8 GB, 16 GB, 32 GB, or 64 GB) is supported in the independent channel mode (the default operational mode).
- The maximum quantity of DIMMs supported is reduced by the quantity of DC Persistent Memory Modules used in the configuration.
- Server configurations with more than 1 TB of memory capacity per socket (including DCPMMs and RDIMMs) require processors that support up to 4.5 TB (L-suffix) per socket.
- For server configurations with memory protection, the following rules apply:
  - Single Device Data Correction (SDDC) works only in the independent channel mode and supports only x4-based memory DIMMs.
  - Adaptive Double Device Data Correction (ADDDC) works with x4-based memory DIMMs and requires two DIMM ranks per channel, Intel Xeon Gold or Platinum processors, and the Closed Page memory access mode.
  - If memory mirroring is used, then DIMMs must be installed in quantities of 2 or 4 per processor for mirroring across two memory channels, or in quantities of 3 or 6 per processor for mirroring across three memory channels. Mixing two- and three-channel mirroring in the server is allowed (one processor uses two-channel mirroring, and another processor uses three-channel mirroring). All DIMMs in the server must be identical in type and size.
  - If memory rank sparing is used, then a minimum of two ranks must be installed per populated channel (a least one dual-rank or quad-rank DIMM; single-rank DIMMs are not supported). With rank sparing, one rank in each populated channel is reserved as spare memory for other ranks on the same channel. All DIMMs in the server must be identical in type and size.

- SDDC, memory mirroring, and memory rank sparing modes are mutually exclusive. Only one operational memory mode can be enabled on the server.
- In the configurations with DCPMMs, memory mirroring is supported only in the App Direct mode (other DCPMM modes do not support memory mirroring) and applies only to the RDIMMs (DCPMMs are not mirrored). Memory sparing is not supported in the configurations with DCPMMs.

Persistent memory

Intel Optane DC persistent memory is an innovative technology that delivers a unique combination of affordable large memory capacity and persistence (non-volatility). The persistent memory technology can help boost the performance of data-intensive applications, such as in-memory analytics, databases, content delivery networks, and high performance computing (HPC), as well as deliver consistent service levels at scale with higher virtual machine and container density.

The SR570 server supports up to two TruDDR4 DC Persistent Memory Modules (DCPMMs) when one processor is installed and up to four DCPMMs when two processors are installed (up to one DCPMM per processor's memory channel with two DIMM slots per channel) for a total of up to 2 TB of persistent memory capacity. The DCPMMs are installed in the same memory DIMM slots on the system board that are used for installing RDIMMs.

2nd Gen processors only: Persistent Memory is only supported with 2nd Generation Intel Xeon SP processors. Not supported with 1st Generation processors.

The DCPMMs support the following modes of operation:

- Memory Mode
  Memory Mode seamlessly brings large memory capacity at affordable cost points to legacy applications. In this mode, DCPMMs provide volatile memory that behaves much like traditional RDIMMs (the data will not be saved in case of a power loss) and is transparent to the operating system and applications. DCPMMs provide memory capacity and RDIMMs provide cache memory that is managed by the processor's memory controller. The total memory capacity that is seen by the operating system is the capacity of the DCPMMs; the capacity of the RDIMMs is hidden and does not appear as a memory resource in the operating system. This mode is considered particularly suited for virtualized database deployments and big-data analytics applications.
- App Direct Mode
  App Direct Mode brings persistency to the data and structures (the data will be saved in case of a power loss). This mode requires operating system and application awareness of two types of system memory: Persistent (DCPMMs) and DRAM (RDIMMs). The total memory capacity that is seen by the operating system includes the capacity of the DCPMMs and RDIMMs. This mode is considered particularly suited for in-memory databases, in-memory analytics frameworks, and ultrafast storage applications.
- Mixed Memory Mode
  Mixed Memory Mode is a combination of Memory Mode and App Direct Mode, where a portion of the capacity of the DCPMMs is used for the Memory Mode operations, and the remaining capacity of the DCPMMs is used for the App Direct Mode operations.

The following memory protection technologies are supported by the DCPMM's onboard memory controllers:

- ECC
- SDDC
- DDDC
- Patrol scrubbing
- Demand scrubbing

The following table lists DCPMM options available for the SR570 server.

Table 9. DCPMM options

Part number	Feature code	Description	Maximum quantity*
4ZC7A15110	B4LV	ThinkSystem 128GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory	6 / 12
4ZC7A15111	B4LW	ThinkSystem 256GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory	6 / 12
4ZC7A15112	B4LX	ThinkSystem 512GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory	6 / 12

* The maximum quantity shown is with one processor / two processors.

Configuration notes:

- All DCPMMs in the server must be of the same capacity (the same part number or feature code).
- The RDIMMs are required in the configurations with DCPMMs, and all RDIMMs must be of the same type, rank, and capacity (the same part number or feature code).
- The DCPMMs cannot be mixed with the 8GB TruDDR4 2933 MHz RDIMM (4ZC7A08706).
- For Mixed Memory Mode, the volatile (Memory) portion of the total capacity of DCPMMs is configured in increments of 32 GB multiplied by the number of DCPMMs in the server, and the remaining capacity is allocated to the persistent (App Direct) portion. The ratio of the total capacity of RDIMMs to the total capacity of the volatile portion of DCPMMs should be between 1:2 and 1:16.
- Server configurations with more than 1 TB of memory capacity per socket (including DCPMMs and RDIMMs) require processors that support up to 4.5 TB (L-suffix) per socket.

For more information, including supported combinations of DIMMs and Persistent Memory, refer to the Intel Optane Persistent Memory 100 Series Product Guide:
https://lenovopress.com/lp1066-intel-optane-persistent-memory-100-series

Internal storage

The SR570 server supports the following internal drive bay configurations:

1. 4 LFF SAS/SATA Simple Swap drive bays
2. 4 LFF SAS/SATA hot-swap drive bays
3. 8 SFF SAS/SATA hot-swap drive bays
4. 10 SFF hot-swap drive bays: 6x 2.5" SAS/SATA & 4x 2.5" AnyBay

In addition, the SR570 server models can be configured with one or two internal M.2 SATA SSDs. The server also supports configurations without drive bays.

The following figure shows the internal drive bay configurations.

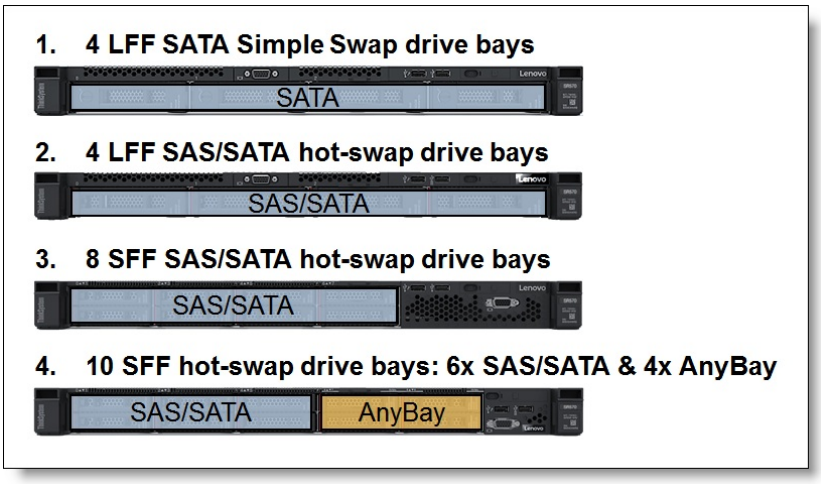


Figure 7. Internal drive bay configurations

In this section:

- Backplanes
- Supported drive bay combinations
- Field upgrades
- M.2 drives
- SED encryption key management with ISKLM

Backplanes

The following table lists the backplane choices for the server.

The following table lists the internal storage options for the SR570 server.

Table 10. Internal storage options

Part number	Feature code	Description	Maximum quantity
None**	AUW8	ThinkSystem 1U 3.5" SATA/SAS 4-Bay Backplane	1
4XH7A08762*	AUWB	ThinkSystem 1U 2.5" SATA/SAS 8-Bay Backplane	1
4XH7A80452 or 4XH7A08768*	AUW9	ThinkSystem 1U 10x2.5" (6x SAS/SATA 4x AnyBay) Backplane	1

** No field upgrade available
* For field upgrades, see the Field upgrades section

Supported drive bay combinations

The following tables list supported internal storage configurations with the SAS/SATA and AnyBay backplanes.

Table 11. Internal storage configurations

Drive bay configuration	Backplane kit type and quantity			Storage controller type and quantity*
	4x 3.5" SATA/SAS	8x 2.5" SATA/SAS	10x 2.5" AnyBay	
4x 3.5" chassis (Feature code AXEZ)				
4x 3.5-in. SATA Simple Swap	0	0	0	Onboard AHCI (non-RAID) / Intel RSTe (RAID) (4)
4x 3.5-in. SAS/SATA hot-swap (front)	1	0	0	1x RAID 8i or HBA 8i (4)
8x 2.5" chassis (Feature code AXEY)				
8x 2.5-in. SAS/SATA hot-swap (front)	0	1	0	1x RAID 8i or HBA 8i (8)
				1x RAID 16i or HBA 16i (8)
10x 2.5" chassis (Feature code AXEX)				
4x 2.5-in. AnyBay (NVMe only) hot-swap (front)	0	0	1	Onboard NVMe (4)
6x 2.5-in. SAS/SATA + 4x 2.5-in. AnyBay hot-swap (front)	0	0	1	1x RAID 16i or HBA 16i (10) + 1x NVMe (4)**
6x 2.5-in. SAS/SATA + 4x 2.5-in. AnyBay (NVMe only) hot-swap (front)	0	0	1	1x RAID 8i or HBA 8i (6) + Onboard NVMe (4)

* The number in brackets (x) specifies the quantity of drive bays connected to each of the controllers.
** The 1610-4P NVMe Switch Adapter in the configurations with one processor, or the onboard NVMe controller in the configurations with two processors.

Field upgrades

The following table lists the backplane options that can be installed as field upgrades.

Use with X40 adapters: These backplane kits in the table below include SAS/SATA cables for use with the onboard SATA controller or with RAID 930, 730, 530 adapters and 430 HBAs (collectively called X30 adapters). If you are adding or upgrading to RAID 940 adapters or 440 HBAs (collectively called X40 adapters), you will need to *also* order an X40 cable kit. See the Cable kits for 440 HBAs and RAID 940 adapters section for details.

Table 12. Backplane field upgrades

Part number	Description	Maximum quantity
4XH7A08762	ThinkSystem SR570 2.5" SATA/SAS 8-Bay Backplane Kit	1
4XH7A80452	ThinkSystem SR570/SR630 2.5" AnyBay 10-Bay Backplane Upgrade Kit v2	1
4XH7A08768	ThinkSystem SR570/SR630 2.5" AnyBay 10-Bay Backplane Upgrade Kit	1

Configuration notes:

- Models without any drive bays that are based on the 8x 2.5" chassis (feature code AXEY) support adding drive bays by using the 2.5" SATA/SAS 8-bay backplane kit (4XH7A08762).
- Models without any drive bays that are based on the 10x 2.5" chassis (feature code AXEX) support

adding drive bays by using the 2.5" 10-bay AnyBay backplane kit (4XH7A80452 or 4XH7A08768).

- U.2 NVMe PCIe SSDs in the AnyBay drive bays require either the second processor (enables the onboard NVMe controller) or the 1610-4P NVMe Switch Adapter to be installed. The 1610-4P NVMe Switch Adapter is supported only in the configurations with one processor.
- Models with 10x 2.5-inch drive bays and an 8-port SAS RAID controller or HBA support only NVMe drives in the AnyBay drive bays.
- The backplane upgrade kits include drive backplanes and required SAS cables, power cables, and drive bay fillers; storage controllers are not included.

Cable kits for 440 HBAs and RAID 940 adapters

The backplane kits listed in the preceding table include cables for use with the onboard SATA controller or with RAID 930, 730, 530 adapters and 430 HBAs (collectively called X30 adapters). If you wish to use the backplane kits with RAID 940 adapters or 440 HBAs (collectively called X40 adapters), then you will also need to order an additional X40 cable kit to use instead of the cables in the backplane kit.

Tip: When adding an X40 adapter, you will order both the backplane kit and the relevant X40 cable kit, however the SAS/SATA data cable(s) in the backplane kit will not be used.

Table 13. Cable kits for 440 HBAs and RAID 940 adapters

Backplane kits with X30 cables		**X40 cable kits also needed**	
4XH7A08762	ThinkSystem SR570 2.5" SATA/SAS 8-Bay Backplane Kit	4XH7A61096	ThinkSystem SR530/SR570/SR630 2.5" SAS/SATA 8-Bay X40 RAID Cable Kit
4XH7A08768	ThinkSystem SR570/SR630 2.5" AnyBay 10-Bay Backplane Upgrade Kit	4XH7A61101	ThinkSystem SR570/SR630 2.5" AnyBay 10-Bay X40 RAID Cable Kit

Replacement system air duct for use with RAID 9350

If one of the following RAID adapters is purchased as a field upgrade, the system air duct (air baffle) will need to be replaced with a new one to accommodate the supercap that ships with the adapter:

- ThinkSystem RAID 9350-8i 2GB Flash PCIe 12Gb Adapter, 4Y37A72483

The ordering information for the replacement air duct is listed in the following table:

Table 14. Field upgrades - air duct

Part number	**Feature code**	**Description**
4M17A61349	BNZ1	ThinkSystem SR570 Air Duct Kit v2

M.2 drives

The server supports one or two M.2 form-factor SATA drives for use as an operating system boot solution. With two M.2 drives configured, the drives are configured by default as a RAID-1 mirrored pair for redundancy.

The M.2 drives install into an M.2 adapter which in turn is installed in a dedicated slot on the system board. See the internal view of the server in the Components and connectors section for the location of the M.2 slot.

There are two M.2 adapters supported, as listed in the following table.

Table 15. M.2 components

Part number	Feature code	Description	Maximum supported
7Y37A01092	AUMU	ThinkSystem M.2 Enablement Kit (contains the Single M.2 Boot Adapter; supports 1 drive)	1
7Y37A01093	AUMV	ThinkSystem M.2 with Mirroring Enablement Kit (contains the Dual M.2 Boot Adapter, supports 1 or 2 drives)	1

Supported drives are listed in the Internal drive options section.

For details about M.2 components, see the *ThinkSystem M.2 Drives and M.2 Adapters* product guide:
https://lenovopress.com/lp0769-thinksystem-m2-drives-adapters

SED encryption key management with ISKLM

The server supports self-encrypting drives (SEDs) as listed in the Internal drive options section. To effectively manage a large deployment of these drives in Lenovo servers, IBM Security Key Lifecycle Manager (SKLM) offers a centralized key management solution. A Lenovo Feature on Demand (FoD) upgrade is used to enable this SKLM support in the management processor of the server.

The following table lists the part numbers and feature codes for the upgrades.

Table 16. FoD upgrades for SKLM support

Part number	Feature code	Description
Security Key Lifecycle Manager - FoD (United States, Canada, Asia Pacific, and Japan)		
00D9998	A5U1	SKLM for System x/ThinkSystem w/SEDs - FoD per Install with 1 year S&S
00D9999	AS6C	SKLM for System x/ThinkSystem w/SEDs - FoD per Install with 3 year S&S
Security Key Lifecycle Manager - FoD (Latin America, Europe, Middle East, and Africa)		
00FP648	A5U1	SKLM for System x/ThinkSystem w/SEDs - FoD per Install with 1 year S&S
00FP649	AS6C	SKLM for System x/ThinkSystem w/SEDs - FoD per Install with 3 year S&S

The IBM Security Key Lifecycle Manager software is available from Lenovo using the ordering information listed in the following table.

Table 17. IBM Security Key Lifecycle Manager licenses

Part number	Description
7S0A007FWW	IBM Security Key Lifecycle Manager Basic Edition Install License + SW Subscription & Support 12 Months
7S0A007HWW	IBM Security Key Lifecycle Manager For Raw Decimal Terabyte Storage Resource Value Unit License + SW Subscription & Support 12 Months
7S0A007KWW	IBM Security Key Lifecycle Manager For Raw Decimal Petabyte Storage Resource Value Unit License + SW Subscription & Support 12 Months
7S0A007MWW	IBM Security Key Lifecycle Manager For Usable Decimal Terabyte Storage Resource Value Unit License + SW Subscription & Support 12 Months
7S0A007PWW	IBM Security Key Lifecycle Manager For Usable Decimal Petabyte Storage Resource Value Unit License + SW Subscription & Support 12 Months

Controllers for internal storage

The following table lists the storage controllers and options for internal storage of the SR570 server.

Table 18. RAID controllers and HBAs for internal storage

Part number	Feature code	Description	Maximum quantity	I/O slots supported
6 Gbps SATA controllers				
None*	None*	Onboard AHCI (non-RAID) / Intel RSTe (RAID)	1	-
12 Gb SAS/SATA RAID controllers - 8-port adapters				
4Y37A72482	BJHK	ThinkSystem RAID 5350-8i PCIe 12Gb Adapter	1	1
7Y37A01082	AUNG	ThinkSystem RAID 530-8i PCIe 12Gb Adapter	1	1
4Y37A78834	BMFT	ThinkSystem RAID 540-8i PCIe Gen4 12Gb Adapter	1	1
7Y37A01083	AUNH	ThinkSystem RAID 730-8i 1GB Cache PCIe 12Gb Adapter	1	1
4Y37A09722	B4RQ	ThinkSystem RAID 730-8i 2GB Flash PCIe 12Gb Adapter	1	1
4Y37A72483†	BJHL†	ThinkSystem RAID 9350-8i 2GB Flash PCIe 12Gb Adapter	1	1
7Y37A01084	AUNJ	ThinkSystem RAID 930-8i 2GB Flash PCIe 12Gb Adapter	1	1
4Y37A09728	B8NY	ThinkSystem RAID 940-8i 4GB Flash PCIe Gen4 12Gb Adapter	1	1
12 Gb SAS/SATA RAID controllers - 16-port adapters				
4Y37A09727	B6CE	ThinkSystem RAID 530-16i PCIe 12Gb Adapter	1	1
4Y37A78835	BNAX	ThinkSystem RAID 540-16i PCIe Gen4 12Gb Adapter	1	1
7Y37A01085	AUNK	ThinkSystem RAID 930-16i 4GB Flash PCIe 12Gb Adapter	1	1
4Y37A09721	B31E	ThinkSystem RAID 930-16i 8GB Flash PCIe 12Gb Adapter	1	1
4Y37A78600	BM35	ThinkSystem RAID 940-16i 4GB Flash PCIe Gen4 12Gb Adapter	1	1
4Y37A09730	B8NZ	ThinkSystem RAID 940-16i 8GB Flash PCIe Gen4 12Gb Adapter	1	1
12 Gb SAS/SATA non-RAID HBAs				
7Y37A01088	AUNL	ThinkSystem 430-8i SAS/SATA 12Gb HBA	1	1
7Y37A01089	AUNM	ThinkSystem 430-16i SAS/SATA 12Gb HBA	1	1
4Y37A78601	BM51	ThinkSystem 440-8i SAS/SATA PCIe Gen4 12Gb HBA	1	1
4Y37A78602	BM50	ThinkSystem 440-16i SAS/SATA PCIe Gen4 12Gb HBA	1	1
NVMe PCIe interfaces (non-RAID)				
None	None	Onboard NVMe interface (4-port)	1	-
7Y37A01081	AUV2	ThinkSystem 1610-4P NVMe Switch Adapter	1	2

* The onboard SATA controller integrated into the Intel C622 Platform Controller Hub (PCH) supports non-RAID (JBOD) AHCI mode or a hardware-assist, software RAID feature (Intel Rapid Storage Technology Enterprise [RSTe]).
† Field upgrades to add this adapter also require a replacement system air duct. See the Field upgrades section for details. CTO orders that include this adapter must have base BNPS or BNPR selected. See the Models section for information.

For a comparison of the functions of the supported storage adapters, see the ThinkSystem RAID Adapter and HBA Reference:
https://lenovopress.com/lp1288-thinksystem-raid-adapter-and-hba-reference#sr570-support=SR570

Configuration notes:

- Low profile SAS RAID controllers and HBAs for internal storage are supported in the PCIe x8 slot 1 supplied by the riser card 1.
- The onboard NVMe interface provides 4x PCIe 3.0 x4 ports for JBOD (non-RAID) connectivity to U.2 NVMe PCIe SSDs in the AnyBay drive bays, and it requires the second processor to be installed.
- The 1610-4P NVMe Switch Adapter provides 4x PCIe 3.0 x4 ports for JBOD (non-RAID) connectivity to U.2 NVMe PCIe SSDs in the AnyBay drive bays, and it is supported in the PCIe x16 slot 2 supplied by the x8/x16 riser card 1 in the configurations with one processor only.
- The onboard Intel RSTe is not supported by virtualization hypervisors, including VMware vSphere (ESXi), Linux KVM, Xen, and Microsoft Hyper-V.
- The server supports the installation of two RAID flash power modules (supercaps), mounted on the underside of the system air baffle. This means that the server supports a maximum of two RAID 730-8i 2GB, 930, 940 and 9350 adapters, including any external storage adapter.

For more information, see the list of Product Guides in the following categories:

- RAID adapters
  http://lenovopress.com/servers/options/raid#rt=product-guide
- Host bus adapters
  http://lenovopress.com/servers/options/hba#rt=product-guide

Internal drive options

The following tables list the drive options for internal storage of the server.

2.5-inch hot-swap drives:

- 2.5-inch hot-swap 12 Gb SAS HDDs
- 2.5-inch hot-swap 6 Gb SATA HDDs
- 2.5-inch hot-swap 24 Gb SAS SSDs
- 2.5-inch hot-swap 12 Gb SAS SSDs
- 2.5-inch hot-swap 6 Gb SATA SSDs
- 2.5-inch hot-swap PCIe 4.0 NVMe SSDs
- 2.5-inch hot-swap PCIe 3.0 NVMe SSDs

3.5-inch hot-swap drives:

- 3.5-inch hot-swap 12 Gb SAS HDDs
- 3.5-inch hot-swap 6 Gb SATA HDDs
- 3.5-inch hot-swap 24 Gb SAS SSDs
- 3.5-inch hot-swap 12 Gb SAS SSDs
- 3.5-inch hot-swap 6 Gb SATA SSDs

Simple-swap drives:

- 3.5-inch simple-swap 6 Gb SATA HDDs

M.2 drives:

- M.2 SATA drives

M.2 drive support: The use of M.2 drives requires an additional adapter as described in the M.2 drives subsection.

SED support: The tables include a column to indicate which drives support SED encryption. The encryption functionality can be disabled if needed. Note: Not all SED-enabled drives have "SED" in the description.

PCIe 4.0 NVMe drive support: When installed in this server, PCIe 4.0 NVMe drives will operate at PCIe 3.0 speeds.

Table 19. 2.5-inch hot-swap 12 Gb SAS HDDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap HDDs - 12 Gb SAS 15K				
7XB7A00021	AULV	ThinkSystem 2.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00022	AULW	ThinkSystem 2.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00023	AULX	ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	No	10
2.5-inch hot-swap HDDs - 12 Gb SAS 10K				
7XB7A00024	AULY	ThinkSystem 2.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00025	AULZ	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00026	AUM0	ThinkSystem 2.5" 900GB 10K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00027	AUM1	ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00028	AUM2	ThinkSystem 2.5" 1.8TB 10K SAS 12Gb Hot Swap 512e HDD	No	10
7XB7A00069	B0YS	ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD	No	10
2.5-inch hot-swap HDDs - 12 Gb NL SAS				
7XB7A00034	AUM6	ThinkSystem 2.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00035	AUM7	ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	10
2.5-inch hot-swap SED HDDs - 12 Gb SAS 10K				
7XB7A00031	AUM5	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD SED	Support	10

Table 20. 2.5-inch hot-swap 6 Gb SATA HDDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap HDDs - 6 Gb NL SATA				
7XB7A00036	AUUE	ThinkSystem 2.5" 1TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	10
7XB7A00037	AUUJ	ThinkSystem 2.5" 2TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	10

Table 21. 2.5-inch hot-swap 24 Gb SAS SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap SSDs - 24 Gb SAS - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A80340	BNW8	ThinkSystem 2.5" PM1655 800GB Mixed Use SAS 24Gb HS SSD	Support	10
4XB7A80341	BNW9	ThinkSystem 2.5" PM1655 1.6TB Mixed Use SAS 24Gb HS SSD	Support	10
4XB7A80342	BNW6	ThinkSystem 2.5" PM1655 3.2TB Mixed Use SAS 24Gb HS SSD	Support	10
4XB7A80343	BP3K	ThinkSystem 2.5" PM1655 6.4TB Mixed Use SAS 24Gb HS SSD	Support	10
2.5-inch hot-swap SSDs - 24 Gb SAS - Read Intensive/Entry/Capacity (<3 DWPD)				
4XB7A80318	BNWC	ThinkSystem 2.5" PM1653 960GB Read Intensive SAS 24Gb HS SSD	Support	10
4XB7A80319	BNWE	ThinkSystem 2.5" PM1653 1.92TB Read Intensive SAS 24Gb HS SSD	Support	10
4XB7A80320	BNWF	ThinkSystem 2.5" PM1653 3.84TB Read Intensive SAS 24Gb HS SSD	Support	10
4XB7A80321	BP3E	ThinkSystem 2.5" PM1653 7.68TB Read Intensive SAS 24Gb HS SSD	Support	10
4XB7A80322	BP3J	ThinkSystem 2.5" PM1653 15.36TB Read Intensive SAS 24Gb HS SSD	Support	10
4XB7A80323	BP3D	ThinkSystem 2.5" PM1653 30.72TB Read Intensive SAS 24Gb HS SSD	Support	10

Table 22. 2.5-inch hot-swap 12 Gb SAS SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap SSDs - 12 Gb SAS - Write Intensive/Performance (10+ DWPD)				
4XB7A83214	BR10	ThinkSystem 2.5" Nytro 3750 400GB Write Intensive SAS 12Gb HS SSD	Support	10
4XB7A83215	BR0Z	ThinkSystem 2.5" Nytro 3750 800GB Write Intensive SAS 12Gb HS SSD	Support	10
4XB7A83216	BR0Y	ThinkSystem 2.5" Nytro 3750 1.6TB Write Intensive SAS 12Gb HS SSD	Support	10
4XB7A83217	BR0X	ThinkSystem 2.5" Nytro 3750 3.2TB Write Intensive SAS 12Gb HS SSD	Support	10
4XB7A70006	BG07	ThinkSystem 2.5" Nytro 3732 400GB Performance SAS 12Gb Hot Swap SSD	No	10
4XB7A70005	BG06	ThinkSystem 2.5" Nytro 3732 800GB Performance SAS 12Gb Hot Swap SSD	No	10
4XB7A70007	BFZZ	ThinkSystem 2.5" Nytro 3732 800GB Performance SAS 12Gb Hot Swap SSD SED	Support	10
4XB7A70004	BG05	ThinkSystem 2.5" Nytro 3732 1.6TB Performance SAS 12Gb Hot Swap SSD	No	10
4XB7A70003	BG04	ThinkSystem 2.5" Nytro 3732 3.2TB Performance SAS 12Gb Hot Swap SSD	No	10
2.5-inch hot-swap SSDs - 12 Gb SAS - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A17062	B8HU	ThinkSystem 2.5" PM1645a 800GB Mainstream SAS 12Gb Hot Swap SSD	No	10
4XB7A17063	B8J4	ThinkSystem 2.5" PM1645a 1.6TB Mainstream SAS 12Gb Hot Swap SSD	No	10
4XB7A17064	B8JD	ThinkSystem 2.5" PM1645a 3.2TB Mainstream SAS 12Gb Hot Swap SSD	No	10
4XB7A17065	B8JA	ThinkSystem 2.5" PM1645a 6.4TB Mainstream SAS 12Gb Hot Swap SSD	No	10
2.5-inch hot-swap SSDs - 12 Gb SAS - Read Intensive/Entry/Capacity (<3 DWPD)				
4XB7A38175	B91A	ThinkSystem 2.5" PM1643a 960GB Entry SAS 12Gb Hot Swap SSD	No	10
4XB7A38176	B91B	ThinkSystem 2.5" PM1643a 1.92TB Entry SAS 12Gb Hot Swap SSD	No	10
4XB7A17054	B91C	ThinkSystem 2.5" PM1643a 3.84TB Entry SAS 12Gb Hot Swap SSD	No	10
4XB7A17055	B91D	ThinkSystem 2.5" PM1643a 7.68TB Entry SAS 12Gb Hot Swap SSD	No	10
4XB7A17056	BC4R	ThinkSystem 2.5" PM1643a 15.36TB Entry SAS 12Gb Hot Swap SSD	No	10

Table 23. 2.5-inch hot-swap 6 Gb SATA SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap SSDs - 6 Gb SATA - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A82289	BQ21	ThinkSystem 2.5" 5400 MAX 480GB Mixed Use SATA 6Gb HS SSD	Support	10
4XB7A82290	BQ24	ThinkSystem 2.5" 5400 MAX 960GB Mixed Use SATA 6Gb HS SSD	Support	10
4XB7A82291	BQ22	ThinkSystem 2.5" 5400 MAX 1.92TB Mixed Use SATA 6Gb HS SSD	Support	10
4XB7A82292	BQ23	ThinkSystem 2.5" 5400 MAX 3.84TB Mixed Use SATA 6Gb HS SSD	Support	10
4XB7A17125	BA7Q	ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	10
4XB7A17126	BA4T	ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	10

Part number	Feature code	Description	SED support	Max Qty
4XB7A17127	BA4U	ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	No	10
4XB7A17128	BK7L	ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	No	10
4XB7A17087	B8J1	ThinkSystem 2.5" 5300 240GB Mainstream SATA 6Gb Hot Swap SSD	No	10
4XB7A17088	B8HY	ThinkSystem 2.5" 5300 480GB Mainstream SATA 6Gb Hot Swap SSD	No	10
4XB7A17089	B8J6	ThinkSystem 2.5" 5300 960GB Mainstream SATA 6Gb Hot Swap SSD	No	10
4XB7A17090	B8JE	ThinkSystem 2.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD	No	10
4XB7A17091	B8J7	ThinkSystem 2.5" 5300 3.84TB Mainstream SATA 6Gb Hot Swap SSD	No	10
4XB7A13633	B49L	ThinkSystem 2.5" S4610 240GB Mixed Use SATA 6Gb HS SSD	No	10
4XB7A13637	B49Q	ThinkSystem 2.5" S4610 3.84TB Mixed Use SATA 6Gb HS SSD	No	10
2.5-inch hot-swap SSDs - 6 Gb SATA - Read Intensive/Entry (<3 DWPD)				
4XB7A82258	BQ1Q	ThinkSystem 2.5" 5400 PRO 240GB Read Intensive SATA 6Gb HS SSD	Support	10
4XB7A82259	BQ1P	ThinkSystem 2.5" 5400 PRO 480GB Read Intensive SATA 6Gb HS SSD	Support	10
4XB7A82260	BQ1R	ThinkSystem 2.5" 5400 PRO 960GB Read Intensive SATA 6Gb HS SSD	Support	10
4XB7A82261	BQ1X	ThinkSystem 2.5" 5400 PRO 1.92TB Read Intensive SATA 6Gb HS SSD	Support	10
4XB7A82262	BQ1S	ThinkSystem 2.5" 5400 PRO 3.84TB Read Intensive SATA 6Gb HS SSD	Support	10
4XB7A82263	BQ1T	ThinkSystem 2.5" 5400 PRO 7.68TB Read Intensive SATA 6Gb HS SSD	Support	10
4XB7A72438	BM8B	ThinkSystem 2.5" PM893 480GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A72439	BM8A	ThinkSystem 2.5" PM893 960GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A72440	BM89	ThinkSystem 2.5" PM893 1.92TB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A72441	BM88	ThinkSystem 2.5" PM893 3.84TB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A72442	BM87	ThinkSystem 2.5" PM893 7.68TB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A17072	B99D	ThinkSystem 2.5" S4520 240GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A17101	BA7G	ThinkSystem 2.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A17102	BA7H	ThinkSystem 2.5" S4520 960GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A17103	BA7J	ThinkSystem 2.5" S4520 1.92TB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A17104	BK77	ThinkSystem 2.5" S4520 3.84TB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A17105	BK78	ThinkSystem 2.5" S4520 7.68TB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A38271	BCTC	ThinkSystem 2.5" Multi Vendor 240GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A38272	BCTD	ThinkSystem 2.5" Multi Vendor 480GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A38273	BCTE	ThinkSystem 2.5" Multi Vendor 960GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A38274	BCTF	ThinkSystem 2.5" Multi Vendor 1.92TB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A38275	BCTG	ThinkSystem 2.5" Multi Vendor 3.84TB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A17075	B8HV	ThinkSystem 2.5" 5300 240GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A17076	B8JM	ThinkSystem 2.5" 5300 480GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A17077	B8HP	ThinkSystem 2.5" 5300 960GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A17078	B8J5	ThinkSystem 2.5" 5300 1.92TB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A17079	B8JP	ThinkSystem 2.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A17080	B8J2	ThinkSystem 2.5" 5300 7.68TB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A38185	B9AC	ThinkSystem 2.5" 5210 960GB Entry SATA 6Gb Hot Swap QLC SSD	No	10
4XB7A38144	B7EW	ThinkSystem 2.5" 5210 1.92TB Entry SATA 6Gb Hot Swap QLC SSD	No	10
4XB7A38145	B7EX	ThinkSystem 2.5" 5210 3.84TB Entry SATA 6Gb Hot Swap QLC SSD	No	10

Part number	Feature code	Description	SED support	Max Qty
4XB7A38146	B7EY	ThinkSystem 2.5" 5210 7.68TB Entry SATA 6Gb Hot Swap QLC SSD	No	10
4XB7A10197	B34K	ThinkSystem 2.5" PM883 960GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A10198	B34L	ThinkSystem 2.5" PM883 1.92TB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A10200	B4D2	ThinkSystem 2.5" PM883 7.68TB Entry SATA 6Gb Hot Swap SSD	No	10

Table 24. 2.5-inch hot-swap PCIe 4.0 NVMe SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch SSDs - U.2 PCIe 4.0 NVMe - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A17129	BNEG	ThinkSystem 2.5" U.2 P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A17130	BNEH	ThinkSystem 2.5" U.2 P5620 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A17133	BNEZ	ThinkSystem 2.5" U.2 P5620 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A17152	BCFV	ThinkSystem 2.5" U.2 P5600 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	No	4
2.5-inch SSDs - U.3 PCIe 4.0 NVMe - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A79639	BNF1	ThinkSystem 2.5" U.3 7450 MAX 800GB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A13967	BNEJ	ThinkSystem 2.5" U.3 7450 MAX 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A13970	BNEY	ThinkSystem 2.5" U.3 7450 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A13971	BNEL	ThinkSystem 2.5" U.3 7450 MAX 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A64175	BE03	ThinkSystem U.3 Kioxia CM6-V 800GB Mainstream NVMe PCIe 4.0 x4 Hot Swap SSD	No	4
4XB7A17112	B96Z	ThinkSystem U.3 Kioxia CM6-V 1.6TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD	No	4
4XB7A17113	B96T	ThinkSystem U.3 Kioxia CM6-V 3.2TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD	No	4
4XB7A17114	B96P	ThinkSystem U.3 Kioxia CM6-V 6.4TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD	No	4
2.5-inch SSDs - U.2 PCIe 4.0 NVMe - Read Intensive/Entry (<3 DWPD)				
4XB7A13941	BMGD	ThinkSystem 2.5" U.2 P5520 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A13942	BMGE	ThinkSystem 2.5" U.2 P5520 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A13943	BNEF	ThinkSystem 2.5" U.2 P5520 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A13631	BNEQ	ThinkSystem 2.5" U.2 P5520 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A17145	BCFT	ThinkSystem 2.5" U.2 P5500 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	4

Part number	Feature code	Description	SED support	Max Qty
2.5-inch SSDs - U.3 PCIe 4.0 NVMe - Read Intensive/Entry (<3 DWPD)				
4XB7A79646	BNF3	ThinkSystem 2.5" U.3 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A79647	BNF2	ThinkSystem 2.5" U.3 7450 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A79648	BNF5	ThinkSystem 2.5" U.3 7450 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A79649	BNF4	ThinkSystem 2.5" U.3 7450 PRO 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A83097	BQAV	ThinkSystem 2.5" U.3 7450 PRO 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	4

Note: NVMe PCIe SSDs support surprise hot removal and hot insertion, provided the operating system supports PCIe SSD hot-swap.

Table 25. 2.5-inch hot-swap PCIe 3.0 NVMe SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch SSDs - U.2 PCIe 3.0 NVMe - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A13936	B589	ThinkSystem U.2 Intel P4610 1.6TB Mainstream NVMe PCIe3.0 x4 Hot Swap SSD	No	4
4XB7A13938	B58B	ThinkSystem U.2 Intel P4610 6.4TB Mainstream NVMe PCIe3.0 x4 Hot Swap SSD	No	4
2.5-inch SSDs - U.2 PCIe 3.0 NVMe - Read Intensive/Entry (<3 DWPD)				
4XB7A10202	B58F	ThinkSystem U.2 Intel P4510 1.0TB Entry NVMe PCIe3.0 x4 Hot Swap SSD	No	4
4XB7A10205	B58H	ThinkSystem U.2 Intel P4510 4.0TB Entry NVMe PCIe3.0 x4 Hot Swap SSD	No	4
4XB7A08513	B58J	ThinkSystem U.2 Intel P4510 8.0TB Entry NVMe PCIe3.0 x4 Hot Swap SSD	No	4
4XB7A10175	B34N	ThinkSystem U.2 PM983 1.92TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	No	4
4XB7A10176	B34P	ThinkSystem U.2 PM983 3.84TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	No	4
4XB7A10177	B4D3	ThinkSystem U.2 PM983 7.68TB Entry NVMe PCIe3.0 x4 Hot Swap SSD	No	4

Note: NVMe PCIe SSDs support surprise hot removal and hot insertion, provided the operating system supports PCIe SSD hot-swap.

Table 26. 3.5-inch hot-swap 12 Gb SAS HDDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch hot-swap HDDs - 12 Gb SAS 10K				
7XB7A00063	B1JJ	ThinkSystem 3.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD	No	4
3.5-inch hot-swap HDDs - 12 Gb SAS 15K				
7XB7A00038	AUU2	ThinkSystem 3.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00039	AUU3	ThinkSystem 3.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00040	AUUC	ThinkSystem 3.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	No	4
3.5-inch hot-swap HDDs - 12 Gb NL SAS				
7XB7A00042	AUU5	ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00043	AUU6	ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00044	AUU7	ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
7XB7A00045	B0YR	ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
7XB7A00046	AUUG	ThinkSystem 3.5" 10TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
7XB7A00067	B117	ThinkSystem 3.5" 12TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
4XB7A13906	B496	ThinkSystem 3.5" 14TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
4XB7A13911	B7EZ	ThinkSystem 3.5" 16TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
4XB7A38266	BCFP	ThinkSystem 3.5" 18TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
4XB7A80353	BPKU	ThinkSystem 3.5" 20TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
3.5-inch hot-swap SED HDDs - 12 Gb NL SAS				
7XB7A00047	AUUH	ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD FIPS	Support	4

Table 27. 3.5-inch hot-swap 6 Gb SATA HDDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch hot-swap HDDs - 6 Gb NL SATA				
7XB7A00049	AUUF	ThinkSystem 3.5" 1TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	4
7XB7A00050	AUUD	ThinkSystem 3.5" 2TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	4
7XB7A00051	AUU8	ThinkSystem 3.5" 4TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	4
7XB7A00052	AUUA	ThinkSystem 3.5" 6TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4
7XB7A00053	AUU9	ThinkSystem 3.5" 8TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4
7XB7A00054	AUUB	ThinkSystem 3.5" 10TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4
7XB7A00068	B118	ThinkSystem 3.5" 12TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4
4XB7A13907	B497	ThinkSystem 3.5" 14TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4
4XB7A13914	B7F0	ThinkSystem 3.5" 16TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4
4XB7A38130	BCFH	ThinkSystem 3.5" 18TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4
4XB7A80354	BPKV	ThinkSystem 3.5" 20TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4

Table 28. 3.5-inch hot-swap 24 Gb SAS SSDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch hot-swap SSDs - 24 Gb SAS - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A80344	BNW7	ThinkSystem 3.5" PM1655 800GB Mixed Use SAS 24Gb HS SSD	Support	4
4XB7A80345	BNWA	ThinkSystem 3.5" PM1655 1.6TB Mixed Use SAS 24Gb HS SSD	Support	4
4XB7A80346	BNWB	ThinkSystem 3.5" PM1655 3.2TB Mixed Use SAS 24Gb HS SSD	Support	4
4XB7A80347	BP3G	ThinkSystem 3.5" PM1655 6.4TB Mixed Use SAS 24Gb HS SSD	Support	4
3.5-inch hot-swap SSDs - 24 Gb SAS - Read Intensive/Entry/Capacity (<3 DWPD)				
4XB7A80324	BNWD	ThinkSystem 3.5" PM1653 960GB Read Intensive SAS 24Gb HS SSD	Support	4
4XB7A80325	BNWG	ThinkSystem 3.5" PM1653 1.92TB Read Intensive SAS 24Gb HS SSD	Support	4
4XB7A80326	BNWH	ThinkSystem 3.5" PM1653 3.84TB Read Intensive SAS 24Gb HS SSD	Support	4
4XB7A80327	BP3F	ThinkSystem 3.5" PM1653 7.68TB Read Intensive SAS 24Gb HS SSD	Support	4
4XB7A80328	BP3H	ThinkSystem 3.5" PM1653 15.36TB Read Intensive SAS 24Gb HS SSD	Support	4

Table 29. 3.5-inch hot-swap 12 Gb SAS SSDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch hot-swap SSDs - 12 Gb SAS - Write Intensive/Performance (10+ DWPD)				
4XB7A83218	BR0W	ThinkSystem 3.5" Nytro 3750 400GB Write Intensive SAS 12Gb HS SSD	Support	4
4XB7A83219	BR0V	ThinkSystem 3.5" Nytro 3750 800GB Write Intensive SAS 12Gb HS SSD	Support	4
4XB7A83220	BR0U	ThinkSystem 3.5" Nytro 3750 1.6TB Write Intensive SAS 12Gb HS SSD	Support	4
4XB7A83221	BR0T	ThinkSystem 3.5" Nytro 3750 3.2TB Write Intensive SAS 12Gb HS SSD	Support	4
4XB7A70011	BG03	ThinkSystem 3.5" Nytro 3732 400GB Performance SAS 12Gb Hot Swap SSD	No	4
4XB7A70010	BG02	ThinkSystem 3.5" Nytro 3732 800GB Performance SAS 12Gb Hot Swap SSD	No	4
4XB7A70009	BG01	ThinkSystem 3.5" Nytro 3732 1.6TB Performance SAS 12Gb Hot Swap SSD	No	4
4XB7A70008	BG00	ThinkSystem 3.5" Nytro 3732 3.2TB Performance SAS 12Gb Hot Swap SSD	No	4
3.5-inch hot-swap SSDs - 12 Gb SAS - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A17066	B8HT	ThinkSystem 3.5" PM1645a 800GB Mainstream SAS 12Gb Hot Swap SSD	No	4
4XB7A17043	B8JN	ThinkSystem 3.5" PM1645a 1.6TB Mainstream SAS 12Gb Hot Swap SSD	No	4
4XB7A17067	B8JK	ThinkSystem 3.5" PM1645a 3.2TB Mainstream SAS 12Gb Hot Swap SSD	No	4
4XB7A17068	B8JG	ThinkSystem 3.5" PM1645a 6.4TB Mainstream SAS 12Gb Hot Swap SSD	No	4
3.5-inch hot-swap SSDs - 12 Gb SAS - Read Intensive/Entry/Capacity (<3 DWPD)				
4XB7A17058	B91E	ThinkSystem 3.5" PM1643a 3.84TB Entry SAS 12Gb Hot Swap SSD	No	4
4XB7A17059	BEVK	ThinkSystem 3.5" PM1643a 7.68TB Entry SAS 12Gb Hot Swap SSD	No	4

Table 30. 3.5-inch hot-swap 6 Gb SATA SSDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch hot-swap SSDs - 6 Gb SATA - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A17137	BA4W	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A17138	BA4X	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A17139	BA4Y	ThinkSystem 3.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A17140	BK7P	ThinkSystem 3.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A17096	B8JL	ThinkSystem 3.5" 5300 240GB Mainstream SATA 6Gb Hot Swap SSD	No	4
4XB7A17097	B8JF	ThinkSystem 3.5" 5300 480GB Mainstream SATA 6Gb Hot Swap SSD	No	4
4XB7A17098	B8J0	ThinkSystem 3.5" 5300 960GB Mainstream SATA 6Gb Hot Swap SSD	No	4
4XB7A17099	B8HR	ThinkSystem 3.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD	No	4
4XB7A17100	B8HX	ThinkSystem 3.5" 5300 3.84TB Mainstream SATA 6Gb Hot Swap SSD	No	4
4XB7A13639	B49R	ThinkSystem 3.5" S4610 240GB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A13643	B49V	ThinkSystem 3.5" S4610 3.84TB Mixed Use SATA 6Gb HS SSD	No	4
3.5-inch hot-swap SSDs - 6 Gb SATA - Read Intensive/Entry (<3 DWPD)				
4XB7A17118	BA7K	ThinkSystem 3.5" S4520 240GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17119	BA7L	ThinkSystem 3.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17120	BA7M	ThinkSystem 3.5" S4520 960GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17121	BA7N	ThinkSystem 3.5" S4520 1.92TB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17122	BK7F	ThinkSystem 3.5" S4520 3.84TB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17123	BK7G	ThinkSystem 3.5" S4520 7.68TB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A38276	BCTH	ThinkSystem 3.5" Multi Vendor 240GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A38277	BCTJ	ThinkSystem 3.5" Multi Vendor 480GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A38278	BCTK	ThinkSystem 3.5" Multi Vendor 960GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A38279	BCTL	ThinkSystem 3.5" Multi Vendor 1.92TB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A38281	BCTM	ThinkSystem 3.5" Multi Vendor 3.84TB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17081	B8JB	ThinkSystem 3.5" 5300 240GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17082	B8J9	ThinkSystem 3.5" 5300 480GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17083	B8JC	ThinkSystem 3.5" 5300 960GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17084	B8HZ	ThinkSystem 3.5" 5300 1.92TB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17085	B8HQ	ThinkSystem 3.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17086	B8J3	ThinkSystem 3.5" 5300 7.68TB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17178	B6TP	ThinkSystem 3.5" PM883 960GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17179	B6JY	ThinkSystem 3.5" PM883 1.92TB Entry SATA 6Gb Hot Swap SSD	No	4

Table 31. 3.5-inch simple-swap 6 Gb SATA HDDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch simple-swap HDDs - 6 Gb NL SATA				
7XB7A00055	AUZS	ThinkSystem 1TB 7.2K 6Gbps SATA 3.5" Simple Swap 512n HDD	No	4
7XB7A00056	AUZT	ThinkSystem 2TB 7.2K 6Gbps SATA 3.5" Simple Swap 512n HDD	No	4
7XB7A00057	AUZU	ThinkSystem 4TB 7.2K 6Gbps SATA 3.5" Simple Swap 512n HDD	No	4
7XB7A00058	AXC7	ThinkSystem 6TB 7.2K 6Gbps SATA 3.5" Simple Swap 512e HDD	No	4
7XB7A00059	AXC6	ThinkSystem 8TB 7.2K 6Gbps SATA 3.5" Simple Swap 512e HDD	No	4
7XB7A00060	AXC8	ThinkSystem 3.5" 10TB 7.2K SATA 6Gb Simple Swap 512e HDD	No	4

Table 33. M.2 SATA drives

Part number	Feature code	Description	SED support	Max Qty
M.2 SSDs - 6 Gb SATA - Read Intensive/Entry (<3 DWPD)				
4XB7A82286	BQ1Z	ThinkSystem M.2 5400 PRO 240GB Read Intensive SATA 6Gb NHS SSD	Support	2
4XB7A82287	BQ1Y	ThinkSystem M.2 5400 PRO 480GB Read Intensive SATA 6Gb NHS SSD	Support	2
7N47A00129	AUUL	ThinkSystem M.2 32GB SATA 6Gbps Non-Hot Swap SSD	No	2
7N47A00130	AUUV	ThinkSystem M.2 128GB SATA 6Gbps Non-Hot Swap SSD	No	2
4XB7A17071	B8HS	ThinkSystem M.2 5300 240GB SATA 6Gbps Non-Hot Swap SSD	No	2
4XB7A17073	B919	ThinkSystem M.2 5300 480GB SATA 6Gbps Non-Hot Swap SSD	No	2

Optical drives

The server supports the external USB optical drive listed in the following table.

Table 34. External optical drive

Part number	Feature code	Description
7XA7A05926	AVV8	ThinkSystem External USB DVD RW Optical Disk Drive

The drive is based on the Lenovo Slim DVD Burner DB65 drive and supports the following formats: DVD-RAM, DVD-RW, DVD+RW, DVD+R, DVD-R, DVD-ROM, DVD-R DL, CD-RW, CD-R, CD-ROM.

I/O expansion

The SR570 server supports one LOM card slot and up to three PCIe slots with different riser cards installed into two riser sockets on the system planar (one riser socket supports installation of one riser card).

The slot form factors are as follows:

- LOM card slot
- Slot 1: PCIe 3.0 x8; low profile (x16 physical connector)
- Slot 2: PCIe 3.0 x16 or ML2 x8; low profile or full-height, half-length
- Slot 3: PCIe 3.0 x8 or x16; low profile (x16 physical connector)

Configuration notes:

- PCIe x16 slot 3 requires the second processor to be installed.
- The COM Port Upgrade Kit is installed in place of one of the PCIe slots 1, 2, or 3.

The locations of the PCIe slots are shown in the following figure.

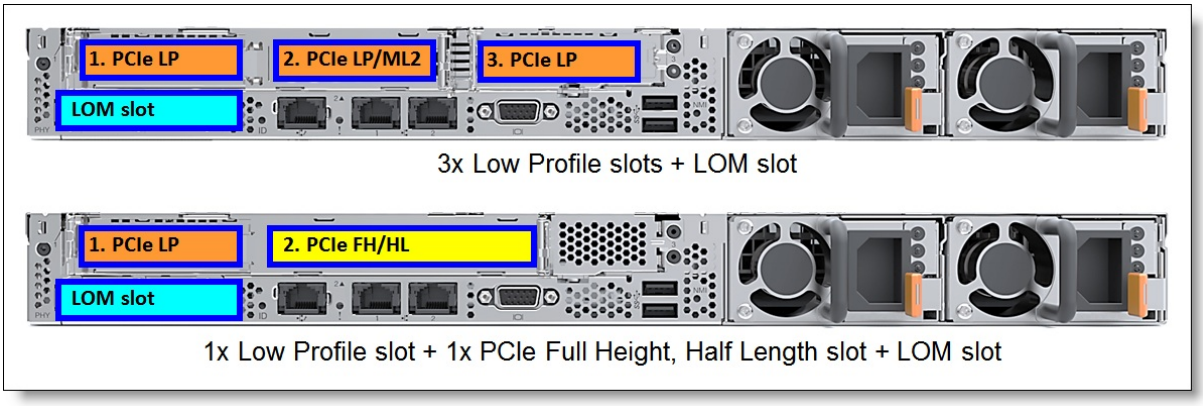


Figure 8. Slot locations

Riser 1 supplies slots 1 and 2, and Riser 2 supplies slot 3. The slots that are available for use depend on the number of riser cards that are installed and whether the second processor is installed, as shown in the following table.

Table 35. Slots available for use

Riser Card 1	Riser Card 2	Slots available for use	
		Processor 1	Processor 2
None	None	LOM	-
None	PCIe x8	LOM, 3	-
None	PCIe x16	LOM	3
PCIe x8/x16 or PCIe x8/x8ML2	None	LOM, 1, 2	-
PCIe x8/x16 or PCIe x8/x8ML2	PCIe x8	LOM, 1, 2, 3	-
PCIe x8/x16 or PCIe x8/x8ML2	PCIe x16	LOM, 1, 2	3

The following table lists available PCIe riser card options.

Table 36. PCIe riser cards and miscellaneous options

Part number	Feature code	Description	Maximum quantity
x8 Riser Card 1 options (Riser card 1 supplies slots 1 and 2)			
7XH7A02682	AUWC	ThinkSystem SR530/SR570/SR630 x8/x16 PCIe LP+LP Riser 1 Kit (x16/x16 physical connectors)	1
7XH7A05893	None*	ThinkSystem SR530/SR570/SR630 x8/x16 PCIe LP+FH Riser 1 Kit (x16/x16 physical connectors)	1
7XH7A05892	AV0X	ThinkSystem SR530/SR570 x8/x8ML2 PCIe LP+LP Riser 1 Kit (x16/x8 physical connectors)	1
Riser Card 2 option (Riser card 2 supplies slot 3)			
7XH7A02685	AUWA	ThinkSystem SR530/SR570/SR630 x16 PCIe LP Riser 2 Kit (x16 physical connector)	1
7XH7A05891	AV0W	ThinkSystem SR530/SR570 x8 PCIe LP Riser 2 Kit (x16 physical connector)	1
Serial port upgrade kit			
4Z17A80446	BMNJ	ThinkSystem COM Port Upgrade Kit v2	1
7Z17A02577	AUSL	ThinkSystem COM Port Upgrade Kit	1

* The LP+FH Riser 1 can be factory-installed by selecting the feature codes AUWC (LP+LP Riser 1) and AUWS (LP+FH Bracket).

The COM Port Upgrade Kit, (4Z17A80446 or 7Z17A02577), is used for mounting the external serial port on the rear of the SR570. This option includes the bracket and the cable. The COM Port option is mounted in place of one of the PCIe slots 1, 2, or 3.

Network adapters

The SR570 server has two onboard 1 GbE ports (no 10/100 Mb support) and up to two additional onboard 1/10 GbE network ports (no 10/100 Mb support) with optional LOM cards. Onboard ports and LOM cards use the Intel Ethernet Connection X722 1/10 GbE technology integrated into the Intel C622 Platform Controller Hub (PCH). The server also supports ML2 adapters that are installed in the custom ML2 slot provided by an ML2 riser card. The LOM cards support direct connectivity to the XClarity Controller via the Network Controller Sideband Interface (NSCI) for out-of-band systems management.

Note: ML2 network adapters do not support NSCI when used in the SR570 server.

The integrated Intel Ethernet Connection X722 has the following features:

- Two 1 Gb Ethernet ports (no 10/100 Mb Ethernet support)
- Two 1/10 Gb Ethernet capable ports (no 10/100 Mb Ethernet support)
- NIC Teaming (load balancing and failover)
- Data Center Bridging
- iWARP (RDMA over IP)
- VMDq and SR-IOV virtualization (10 Gb speeds only, 4 PFs, 128 VFs per device)
- IEEE 802.1q Virtual Local Area Networks (VLANs)
- NVGRE, VXLAN, IPinGRE, and MACinUDP network virtualization
- IEEE 802.1Qbg Edge Virtual Bridging
- TCP, IP, and UDP checksum offload
- Large Send Offload (LSO) and Generic Send Offload (GSO)
- Receive Side Scaling (RSS) for TCP and UDP traffic
- Jumbo frames up to 9.5 Kbytes

The following table lists the network adapters that are supported with the SR570 server.

Table 37. Network adapters

Part number	Feature code	Description	Max qty	I/O slots supported
LOM cards - 1 Gb Ethernet				
7ZT7A00544	AUKG	ThinkSystem 1Gb 2-port RJ45 LOM	1	LOM slot
LOM cards - 10 Gb Ethernet				
7ZT7A00548	AUKL	ThinkSystem 10Gb 2-port Base-T LOM	1	LOM slot
7ZT7A00546	AUKJ	ThinkSystem 10Gb 2-port SFP+ LOM	1*	LOM slot
ML2 adapters - 10 Gb Ethernet				
7ZT7A00497	AUKQ	Broadcom NX-E ML2 10Gb 2-Port Base-T Ethernet Adapter	1	2 (ML2)
01CV770	AU7Z	Emulex VFA5.2 ML2 2x10 GbE SFP+ Adapter and FCoE/iSCSI SW	1*	2 (ML2)
00JY940	ATRH	Intel X710-DA2 ML2 2x10GbE SFP+ Adapter	1*	2 (ML2)
PCIe Low Profile adapters - 1 Gb Ethernet				
7ZT7A00482	AUZX	Broadcom 5720 1GbE RJ45 2-Port PCIe Ethernet Adapter	3	1, 2, 3
7ZT7A00484	AUZV	Broadcom 5719 1GbE RJ45 4-Port PCIe Ethernet Adapter	3	1, 2, 3
7ZT7A00534	AUZY	ThinkSystem I350-T2 PCIe 1Gb 2-Port RJ45 Ethernet Adapter	3	1, 2, 3
7ZT7A00535	AUZW	ThinkSystem I350-T4 PCIe 1Gb 4-Port RJ45 Ethernet Adapter	3	1, 2, 3
PCIe Low Profile adapters - 10 Gb Ethernet				
7ZT7A00496	AUKP	Broadcom 57416 10GBASE-T 2-Port PCIe Ethernet Adapter	3	1, 2, 3
00AG570	AT7S	Emulex VFA5.2 2x10 GbE SFP+ PCIe Adapter	3*	1, 2, 3
00AG580	AT7T	Emulex VFA5.2 2x10 GbE SFP+ Adapter and FCoE/iSCSI SW	3*	1, 2, 3
00MM860	ATPX	Intel X550-T2 Dual Port 10GBase-T Adapter	3	1, 2, 3

Part number	Feature code	Description	Max qty	I/O slots supported
7ZT7A00537	AUKX	Intel X710-DA2 PCIe 10Gb 2-Port SFP+ Ethernet Adapter	3*	1, 2, 3
4XC7A79699	BMXB	ThinkSystem Intel X710-T4L 10GBase-T 4-Port PCIe Ethernet Adapter	3	1, 2, 3
4XC7A08225	B31G	QLogic QL41134 PCIe 10Gb 4-Port Base-T Ethernet Adapter	3	1, 2, 3
PCIe Full Height adapters - 10 Gb Ethernet				
7ZT7A00493	AUKN	Emulex OCe14104B-NX PCIe 10Gb 4-Port SFP+ Ethernet Adapter	1*	2
PCIe Low Profile adapters - 25 Gb Ethernet				
4XC7A08238	B5T0	Broadcom 57414 10/25GbE SFP28 2-port PCIe Ethernet Adapter	3*	1, 2, 3

* The adapter comes without transceivers or cables; for ordering transceivers or cables. See the adapter product guide for details.

Configuration notes:

- ML2 network adapters are supported in the ML2 x8 slot 2 supplied by the x8/x8ML2 Riser Card 1 (7XH7A05892).
- PCIe full-height network adapters are supported in the full-height PCIe x16 slot 2 supplied by the PCIe x8/x16 LP+FH Riser Card 1 (7XH7A05893).
- PCIe Low Profile network adapters are supported in the low profile and full-height PCIe x8 and x16 slots supplied by the riser cards 1 and 2. The PCIe x16 slot 3 requires the second processor to be installed.
- Supported transceivers or DAC cables should be purchased for the 10 GbE SFP+ adapters, and UTP Category 6 or Category 5e cables should be purchased for the 10 GbE (Cat6) or 1 GbE (Cat5e or Cat6) RJ-45 adapters. The maximum number of transceivers or cables that are supported per adapter equals the quantity of the adapter ports, and all adapter ports must have the same type of the transceiver or cable selected.

For more information, see the list of Product Guides in the Ethernet adapters category:
http://lenovopress.com/servers/options/ethernet#rt=product-guide

SAS adapters for external storage

The following table lists SAS RAID controllers and HBAs for external storage attachments that are supported by the SR570 server.

Table 38. SAS RAID adapters and HBAs for external storage

Part number	Feature code	Description	Maximum quantity	I/O slots supported
12 Gbps SAS RAID adapters				
7Y37A01087	AUNQ	ThinkSystem RAID 930-8e 4GB Flash PCIe 12Gb Adapter	2	1, 2, 3
4Y37A78836	BNWJ	ThinkSystem RAID 940-8e 4GB Flash PCIe Gen4 12Gb Adapter	2	1, 2, 3
12 Gbps SAS HBAs				
7Y37A01090	AUNR	ThinkSystem 430-8e SAS/SATA 12Gb HBA	3	1, 2, 3
7Y37A01091	AUNN	ThinkSystem 430-16e SAS/SATA 12Gb HBA	3	1, 2, 3
4Y37A09724	B8P7	ThinkSystem 440-16e SAS/SATA PCIe Gen4 12Gb HBA	3	1, 2, 3
4Y37A78837	BNWK	ThinkSystem 440-8e SAS/SATA PCIe Gen4 12Gb HBA	3	1, 2, 3

For a comparison of the functions of the supported storage adapters, see the ThinkSystem RAID Adapter and HBA Reference:
https://lenovopress.com/lp1288#sr570-support=SR570&internal-or-external-ports=External

Configuration notes:

- Low profile SAS RAID controllers and HBAs for external storage are supported in the low profile and full-high PCIe x8 and x16 slots supplied by the riser cards 1 and 2. The PCIe x16 slot 3 requires the second processor to be installed.
- The server supports the installation of two RAID flash power modules (supercaps), mounted on the underside of the system air baffle. This means that the server supports a maximum of two RAID 730-8i 2GB, 930, 940 and 9350 adapters, including any internal storage adapter.

Mixing storage adapter families: The following HBA/RAID adapter combinations are supported:

- X30 external adapters with other X30 adapters (internal or external)
- X40 external adapters with other X40 adapters (internal or external)
- X40 external adapters with X350 internal adapters

The following HBA/RAID adapter combinations are *not* supported:

- X30 adapters (internal or external) with X40 adapters (internal or external)
- X30 adapters (internal or external) with X350 internal adapters

For more information, see the list of Product Guides in the following categories:

- RAID adapters
  http://lenovopress.com/servers/options/raid#rt=product-guide
- Host bus adapters
  http://lenovopress.com/servers/options/hba#rt=product-guide

Fibre Channel host bus adapters

The following table lists Fibre Channel HBAs supported by the SR570 server.

Table 39. Fibre Channel HBAs

Part number	Feature code	Description	Maximum quantity	I/O slots supported
16 Gb Fibre Channel - PCIe				
01CV830	ATZU	Emulex 16Gb Gen6 FC Single-port HBA	3	1, 2, 3
01CV840	ATZV	Emulex 16Gb Gen6 FC Dual-port HBA	3	1, 2, 3
01CV750	ATZB	QLogic 16Gb Enhanced Gen5 FC Single-port HBA	3	1, 2, 3
01CV760	ATZC	QLogic 16Gb Enhanced Gen5 FC Dual-port HBA	3	1, 2, 3
8 Gb Fibre Channel - PCIe (available only in PRC and Asia Pacific)				
4XC7A08221	B0X0	Emulex LPe12002-M8-L PCIe 8Gb 2-Port SFP+ FC HBA	3	1, 2, 3

Configuration note: FC HBAs are supported in the low profile and full-high PCIe x8 and x16 slots supplied by the riser cards 1 and 2. The PCIe x16 slot 3 requires the second processor to be installed.

For more information, see the list of Product Guides in the Host bus adapters category:
http://lenovopress.com/servers/options/hba#rt=product-guide

Flash storage adapters

The SR570 server supports the flash storage adapters listed in the following table.

Table 40. Flash storage adapters

Part number	Feature code	Description	Maximum quantity	I/O slots supported
Mainstream Flash Adapters - PM1735				
4XB7A14075	B8JH	ThinkSystem HHHL PM1735 1.6TB Mainstream NVMe PCIe4.0 x8 Flash Adapter	3	1, 2, 3
4XB7A14076	B8HW	ThinkSystem HHHL PM1735 3.2TB Mainstream NVMe PCIe4.0 x8 Flash Adapter	3	1, 2, 3
4XB7A14077	B96M	ThinkSystem HHHL PM1735 6.4TB Mainstream NVMe PCIe4.0 x8 Flash Adapter	3	1, 2, 3
Mainstream Flash Adapters - CM5-V				
4XB7A38240	BCGL	CM5-V 6.4TB Mainstream NVMe PCIe 3.0 x4 Flash Adapter	3	1, 2, 3

Configuration notes:

- Flash storage adapters are supported in the low profile and full-height PCIe x8 and x16 slots supplied by the riser cards 1 and 2. The PCIe x16 slot 3 requires the second processor to be installed.
- The Flash storage adapters are supported only in the environments with the air temperature of up to 35 °C (95 °F).

For more information, see the list of Product Guides in the Flash storage adapters category:
http://lenovopress.com/servers/options/ssdadapter#rt=product-guide

Cooling

The SR570 server supports up to six hot-swap system fans that provide N+1 cooling redundancy.

- Models with 4x 3.5-inch or 8x 2.5-inch drive bays use single-rotor fans:
  - Models with one processor include four system fans
  - Models with two processors include six system fans
- Models with 10x 2.5-inch drive bays include six dual-rotor fans standard, regardless of the number of processors installed

In the case of a system fan failure, performance might be impacted if any of the following processors are installed:

- 2nd Gen processors: Xeon 6240Y or 6252N processors
- 1st Gen processors: Xeon 8164 processors with 4x 3.5-inch or 8x 2.5-inch drive bays

The installation of a 2nd processor in models with 4x 3.5-inch or 8x 2.5-inch drive bays requires two extra system fans be installed. For CTO orders, fans are derived by the configurator. For field upgrades, 1st Gen Xeon processor option part numbers include this fan however 2nd Gen Xeon processor options do not included the fan and it must be ordered separately using the SR570 Fan Option Kit (4F17A12352).

Table 41. Cooling options

Part number	Feature code	Description	Maximum quantity
4F17A12352	AXET	ThinkSystem SR570 Fan Option Kit (for 2nd Gen processors only; only needed with 4x 3.5-inch or 8x 2.5-inch drive bays) Includes 2 single-rotor system fans	1

Power supplies and cables

The SR570 server supports up to two redundant power supplies and is capable of N+N redundancy depending on the configuration. A second power supply can be added to the models that come with one power supply.

The following table lists the power supply options.

Table 42. Power supplies

Part number	Feature code	Description	Maximum quantity
7N67A00882	AXEQ	ThinkSystem 550W (230V/115V) Platinum Hot-Swap Power Supply	2
7N67A00883	AXER	ThinkSystem 750W (230/115V) Platinum Hot-Swap Power Supply	2
7N67A00884	AXES	ThinkSystem 750W (230V) Titanium Hot-Swap Power Supply	2
4P57A82020	BR1Y	ThinkSystem V1 750W (230Vac) Titanium Hot Swap Power Supply	2

General power supply rules are as follows:

- Minimum of 1 and maximum of 2 power supplies per system.
- If 2 are installed, power supplies must be identical.
- Power supplies support AC (Worldwide) and HVDC (PRC only) power sources.

Important: The Standalone Solution Configuration Tool (SSCT) and Lenovo Data Center Solution Configurator (DCSC) power supply selection rules allow a subset of possible configurations due to power restrictions. Configurations that cannot be built in SSCT or DCSC due to power restrictions may still be supported. To verify support and ensure that the right power supply is chosen for optimal performance, you should always validate your server configuration using the latest version of the Lenovo Capacity Planner: http://datacentersupport.lenovo.com/us/en/solutions/lnvo-lcp

Power cords

Line cords and rack power cables with C13 connectors can be ordered as listed in the following table.

110V customers: If you plan to use the 1100W power supply with a 110V power source, select a power cable that is rated above 10A. Power cables that are rated at 10A or below are not supported with 110V power.

Table 43. Power cords

Part number	Feature code	Description
Rack cables - C13 to C14		
SL67B08593	BPHZ	0.5m, 10A/100-250V, C13 to C14 Jumper Cord
00Y3043	A4VP	1.0m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable
4L67A08367	B0N5	1.0m, 13A/100-250V, C13 to C14 Jumper Cord
39Y7937	6201	1.5m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable
4L67A08368	B0N6	1.5m, 13A/100-250V, C13 to C14 Jumper Cord
4L67A08365	B0N4	2.0m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable
4L67A08369	6570	2.0m, 13A/100-250V, C13 to C14 Jumper Cord
4L67A08366	6311	2.8m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable
4L67A08370	6400	2.8m, 13A/100-250V, C13 to C14 Jumper Cord
39Y7932	6263	4.3m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable

Part number	Feature code	Description
4L67A08371	6583	4.3m, 13A/100-250V, C13 to C14 Rack Power Cable
Rack cables - C13 to C14 (Y-cable)		
00Y3046	A4VQ	1.345m, 2X C13 to C14 Jumper Cord, Rack Power Cable
00Y3047	A4VR	2.054m, 2X C13 to C14 Jumper Cord, Rack Power Cable
Rack cables - C13 to C20		
39Y7938	6204	2.8m, 10A/100-250V, C13 to IEC 320-C20 Rack Power Cable
Rack cables - C13 to C20 (Y-cable)		
47C2491	A3SW	1.2m, 16A/100-250V, 2 Short C13s to Short C20 Rack Power Cable
47C2492	A3SX	2.5m, 16A/100-250V, 2 Long C13s to Short C20 Rack Power Cable
47C2493	A3SY	2.8m, 16A/100-250V, 2 Short C13s to Long C20 Rack Power Cable
47C2494	A3SZ	4.1m, 16A/100-250V, 2 Long C13s to Long C20 Rack Power Cable
Line cords		
39Y7930	6222	2.8m, 10A/250V, C13 to IRAM 2073 (Argentina) Line Cord
81Y2384	6492	4.3m 10A/220V, C13 to IRAM 2073 (Argentina) Line Cord
39Y7924	6211	2.8m, 10A/250V, C13 to AS/NZ 3112 (Australia/NZ) Line Cord
81Y2383	6574	4.3m, 10A/230V, C13 to AS/NZS 3112 (Aus/NZ) Line Cord
69Y1988	6532	2.8m, 10A/250V, C13 to NBR 14136 (Brazil) Line Cord
81Y2387	6404	4.3m, 10A/250V, C13 - 2P+Gnd (Brazil) Line Cord
39Y7928	6210	2.8m, 220-240V, C13 to GB 2099.1 (China) Line Cord
81Y2378	6580	4.3m, 10A/220V, C13 to GB 2099.1 (China) Line Cord
39Y7918	6213	2.8m, 10A/250V, C13 to DK2-5a (Denmark) Line Cord
81Y2382	6575	4.3m, 10A/230V, C13 to DK2-5a (Denmark) Line Cord
39Y7917	6212	2.8m, 10A/230V, C13 to CEE7-VII (Europe) Line Cord
81Y2376	6572	4.3m, 10A/230V, C13 to CEE7-VII (Europe) Line Cord
39Y7927	6269	2.8m, 10A/250V, C13(2P+Gnd) (India) Line Cord
81Y2386	6567	4.3m, 10A/240V, C13 to IS 6538 (India) Line Cord
39Y7920	6218	2.8m, 10A/250V, C13 to SI 32 (Israel) Line Cord
81Y2381	6579	4.3m, 10A/230V, C13 to SI 32 (Israel) Line Cord
39Y7921	6217	2.8m, 220-240V, C13 to CEI 23-16 (Italy/Chile) Line Cord
81Y2380	6493	4.3m, 10A/230V, C13 to CEI 23-16 (Italy/Chile) Line Cord
46M2593	A1RE	2.8m, 12A/125V, C13 to JIS C-8303 (Japan) Line Cord
4L67A08362	6495	4.3m, 12A/200V, C13 to JIS C-8303 (Japan) Line Cord
39Y7926	6335	4.3m, 12A/100V, C13 to JIS C-8303 (Japan) Line Cord
39Y7922	6214	2.8m, 10A/250V, C13 to SABS 164 (S Africa) Line Cord
81Y2379	6576	4.3m, 10A/230V, C13 to SABS 164 (South Africa) Line Cord
39Y7925	6219	2.8m, 220-240V, C13 to KETI (S Korea) Line Cord
81Y2385	6494	4.3m, 12A/220V, C13 to KSC 8305 (S. Korea) Line Cord
39Y7919	6216	2.8m, 10A/250V, C13 to SEV 1011-S24507 (Swiss) Line Cord
81Y2390	6578	4.3m, 10A/230V, C13 to SEV 1011-S24507 (Sws) Line Cord
23R7158	6386	2.8m, 10A/125V, C13 to CNS 10917-3 (Taiwan) Line Cord
81Y2375	6317	2.8m, 10A/240V, C13 to CNS 10917-3 (Taiwan) Line Cord
81Y2374	6402	2.8m, 13A/125V, C13 to CNS 60799 (Taiwan) Line Cord

Part number	Feature code	Description
4L67A08363	AX8B	4.3m, 10A 125V, C13 to CNS 10917 (Taiwan) Line Cord
81Y2389	6531	4.3m, 10A/250V, C13 to 76 CNS 10917-3 (Taiwan) Line Cord
81Y2388	6530	4.3m, 13A/125V, C13 to CNS 10917 (Taiwan) Line Cord
39Y7923	6215	2.8m, 10A/250V, C13 to BS 1363/A (UK) Line Cord
81Y2377	6577	4.3m, 10A/230V, C13 to BS 1363/A (UK) Line Cord
90Y3016	6313	2.8m, 10A/120V, C13 to NEMA 5-15P (US) Line Cord
46M2592	A1RF	2.8m, 10A/250V, C13 to NEMA 6-15P Line Cord
00WH545	6401	2.8m, 13A/120V, C13 to NEMA 5-15P (US) Line Cord
4L67A08359	6370	4.3m, 10A/125V, C13 to NEMA 5-15P (US) Line Cord
4L67A08361	6373	4.3m, 10A/250V, C13 to NEMA 6-15P (US) Line Cord
4L67A08360	AX8A	4.3m, 13A/120V, C13 to NEMA 5-15P (US) Line Cord

Systems management

The SR570 supports the following systems management tools:

- Lenovo XClarity Controller
- Light path diagnostics
- Lenovo XClarity Provisioning Manager
- Lenovo XClarity Essentials
- Lenovo XClarity Administrator
- Lenovo XClarity Integrators
- Lenovo XClarity Energy Manager
- Lenovo Capacity Planner

Lenovo XClarity Controller

The SR570 server contains Lenovo XClarity Controller (XCC), which provides advanced service-processor control, monitoring, and alerting functions. XClarity Controller offers three functional levels: Standard, Advanced, and Enterprise.

By default, the SR570 server includes XClarity Controller Standard features, and it can be upgraded to Advanced or Enterprise functionality by using the Features on Demand (FoD) upgrades.

XClarity Controller Standard offers the following capabilities:

- Gathering and viewing system information and inventory
- Monitoring system status and health
- Alerting and notifications
- Event logging
- Configuring network connectivity
- Configuring security
- Updating system firmware
- Configuring server settings and devices
- Real-time power usage monitoring
- Remotely controlling server power (Power on, Power off, Restart)
- Managing FoD activation keys
- Redirecting serial console via IPMI
- Capturing the video display contents when an operating system hang condition is detected

XClarity Controller Advanced Upgrade adds the following functionality to the Standard features:

- Remotely viewing video with the following graphics resolutions:
  - Up to 1600x1200 with up to 23 bits per pixel; or
  - Up to 1920x1200 with up to 15 bits per pixel
- Remotely accessing the server using the keyboard and mouse from a remote client
- Remotely deploying an operating system
- Syslog alerting
- Redirecting serial console via SSH
- Displaying graphics for real-time and historical power usage data and temperature

XClarity Controller Enterprise Upgrade adds the following functionality to the Advanced features:

- Capping power usage
- Mapping the ISO and image files located on the local client as virtual drives for use by the server
- Mounting the remote ISO and image files via HTTPS, SFTP, CIFS, and NFS
- Collaborating across up to six users of the virtual console
- Controlling quality and bandwidth usage

The XClarity Controller provides remote server management through industry-standard interfaces:

- Intelligent Platform Management Interface (IPMI) Version 2.0
- Simple Network Management Protocol (SNMP) Version 3
- Common Information Model (CIM)
- Data Center Manageability Interface (DCMI) Version 1.5
- Redfish REpresentational State Transfer (REST) API
- Web browser with HTML5 support
- Command-line interface
- Virtual Operator Panel with XClarity Mobile App via the front USB port with XClarity Controller access

Virtual Operator Panel provides quick access to system status, firmware, network, health, and alerts information. With proper authentication, it also allows to configure systems management and network settings and to control system power (Power on, Power off, Restart). The Virtual Operator Panel can be accessed from the XClarity Mobile App running on the Android or iOS mobile device that is connected to the front USB port with XClarity Controller access (See Components and connectors).

Note: Depending on the system settings, the front USB port can be assigned to XClarity Controller for management functions, or to the system as a regular USB 2.0 port, or switched between two functions by using the system ID button.

IPMI via the Ethernet port (IPMI over LAN) is supported, however it is disabled by default. For CTO orders you can specify whether you want to the feature enabled or disabled in the factory, using the feature codes listed in the following table.

Table 44. IPMI-over-LAN settings

Part number	Feature code	Description
CTO only	B7XZ	Disable IPMI-over-LAN (default)
CTO only	B7Y0	Enable IPMI-over-LAN

The following table lists the XClarity Controller FoD upgrades.

Table 45. XClarity Controller FoD upgrades

Description	Part number	Feature code	Maximum quantity
ThinkSystem XClarity Controller Standard to Advanced Upgrade	4L47A09132	AVUT	1
ThinkSystem XClarity Controller Standard to Enterprise Upgrade	None*	AUPW	1
ThinkSystem XClarity Controller Advanced to Enterprise Upgrade	4L47A09133	None**	1

* Factory-installed only.
** Field-upgrade only.

Configuration notes:

- For factory-installed upgrades, either Standard to Advanced Upgrade (feature AVUT) or Standard to Enterprise Upgrade (feature AUPW) can be selected, but not both.
- For field upgrades, the Advanced to Enterprise Upgrade (4L47A09133) requires the Standard to Advanced Upgrade to be activated on the server previously with either the factory-installed feature AVUT or field upgrade 4L47A09132.

Light path diagnostics

All SR570 server models include basic light path diagnostics, which provides the system error LED on the Operator information panel on the front of the server and the LEDs near the monitored components (for example, the DIMM error LEDs on the system board).

Lenovo XClarity Provisioning Manager

Lenovo XClarity Provisioning Manager (LXPM) is a UEFI-based application embedded in ThinkSystem servers and accessible via the F1 key during system boot.

LXPM provides the following functions:

- Graphical UEFI Setup
- System inventory information and VPD update
- System firmware updates (UEFI and XCC)
- RAID setup wizard
- OS installation wizard (including unattended OS installation)
- Diagnostics functions

Lenovo XClarity Essentials

Lenovo offers the following XClarity Essentials software tools that can help you set up, use, and maintain the server at no additional cost:

- Lenovo Essentials OneCLI

  OneCLI is a collection of server management tools that uses a command line interface program to manage firmware, hardware, and operating systems. It provides functions to collect full system health information (including health status), configure system settings, and update system firmware and drivers.

- Lenovo Essentials UpdateXpress

  The UpdateXpress tool is a standalone GUI application for firmware and device driver updates that enables you to maintain your server firmware and device drivers up-to-date and help you avoid unnecessary server outages. The tool acquires and deploys individual updates and UpdateXpress System Packs (UXSPs) which are integration-tested bundles.

- Lenovo Essentials Bootable Media Creator

  The Bootable Media Creator (BOMC) tool is used to create bootable media for offline firmware update.

For more information and downloads, visit the Lenovo XClarity Essentials web page:
http://support.lenovo.com/us/en/documents/LNVO-center

Lenovo XClarity Administrator

Lenovo XClarity Administrator is a centralized resource management solution designed to reduce complexity, speed response, and enhance the availability of Lenovo systems and solutions. It provides agent-free hardware management for ThinkSystem servers, in addition to ThinkServer, System x, and Flex System servers. The administration dashboard is based on HTML 5 and allows fast location of resources so tasks can be run quickly.

Because Lenovo XClarity Administrator does not require any agent software to be installed on the managed endpoints, there are no CPU cycles spent on agent execution, and no memory is used, which means that up to 1GB of RAM and 1 - 2% CPU usage is saved, compared to a typical managed system where an agent is required.

Lenovo XClarity Administrator is an optional software component for the SR570. The software can be downloaded and used at no charge to discover and monitor the SR570 and to manage firmware upgrades.

If software support is required for Lenovo XClarity Administrator, or premium features such as configuration management and operating system deployment are required, Lenovo XClarity Pro software subscription should be ordered. Lenovo XClarity Pro is licensed on a per managed system basis, that is, each managed Lenovo system requires a license.

The following table lists the Lenovo XClarity software license options.

Table 46. Lenovo XClarity Pro ordering information

Part number	Feature code	Description
00MT201	1339	Lenovo XClarity Pro, per Managed Endpoint w/1 Yr SW S&S
00MT202	1340	Lenovo XClarity Pro, per Managed Endpoint w/3 Yr SW S&S
00MT203	1341	Lenovo XClarity Pro, per Managed Endpoint w/5 Yr SW S&S
7S0X000HWW	SAYV	Lenovo XClarity Pro, per Managed Endpoint w/6 Yr SW S&S
7S0X000JWW	SAYW	Lenovo XClarity Pro, per Managed Endpoint w/7 Yr SW S&S

Lenovo XClarity Administrator offers the following standard features that are available at no charge:

- Auto-discovery and monitoring of Lenovo systems
- Firmware updates and compliance enforcement
- External alerts and notifications via SNMP traps, syslog remote logging, and e-mail
- Secure connections to managed endpoints
- NIST 800-131A or FIPS 140-2 compliant cryptographic standards between the management solution and managed endpoints
- Integration into existing higher-level management systems such as cloud automation and orchestration tools through REST APIs, providing extensive external visibility and control over hardware resources
- An intuitive, easy-to-use GUI
- Scripting with Windows PowerShell, providing command-line visibility and control over hardware resources

Lenovo XClarity Administrator offers the following premium features that require an optional Pro license:

- Pattern-based configuration management that allows to define configurations once and apply repeatedly without errors when deploying new servers or redeploying existing servers without disrupting the fabric
- Bare-metal deployment of operating systems and hypervisors to streamline infrastructure provisioning

For more information, refer to the Lenovo XClarity Administrator Product Guide:
http://lenovopress.com/tips1200

Lenovo XClarity Integrators

Lenovo also offers software plug-in modules, Lenovo XClarity Integrators, to manage physical infrastructure from leading external virtualization management software tools including those from Microsoft and VMware.

These integrators are offered at no charge, however if software support is required, a Lenovo XClarity Pro software subscription license should be ordered.

Lenovo XClarity Integrators offer the following additional features:

- Ability to discover, manage, and monitor Lenovo server hardware from VMware vCenter or Microsoft System Center
- Deployment of firmware updates and configuration patterns to Lenovo x86 rack servers and Flex System from the virtualization management tool
- Non-disruptive server maintenance in clustered environments that reduces workload downtime by dynamically migrating workloads from affected hosts during rolling server updates or reboots
- Greater service level uptime and assurance in clustered environments during unplanned hardware events by dynamically triggering workload migration from impacted hosts when impending hardware failures are predicted

For more information about all the available Lenovo XClarity Integrators, see the Lenovo XClarity Administrator Product Guide: https://lenovopress.com/tips1200-lenovo-xclarity-administrator

Lenovo XClarity Energy Manager

Lenovo XClarity Energy Manager (LXEM) is a power and temperature management solution for data centers. It is an agent-free, web-based console that enables you to monitor and manage power consumption and temperature in your data center through the management console. It enables server density and data center capacity to be increased through the use of power capping.

LXEM is a licensed product. A single-node LXEM license is included with the XClarity Controller Enterprise upgrade as described in the Remote Management section. If your server does not have the XCC Enterprise upgrade, Energy Manager licenses can be ordered as shown in the following table.

Table 47. Lenovo XClarity Energy Manager

Part number	Description
4L40E51621	Lenovo XClarity Energy Manager Node License (1 license needed per server)

For more information about XClarity Energy Manager, see the following resources:

- Lenovo Support page:
  https://datacentersupport.lenovo.com/us/en/solutions/lnvo-lxem
- Lenovo Information Center:
  https://sysmgt.lenovofiles.com/help/topic/LXEM/lxem_overview.html?cp=4

Lenovo Capacity Planner

Lenovo Capacity Planner is a power consumption evaluation tool that enhances data center planning by enabling IT administrators and pre-sales professionals to understand various power characteristics of racks, servers, and other devices. Capacity Planner can dynamically calculate the power consumption, current, British Thermal Unit (BTU), and volt-ampere (VA) rating at the rack level, improving the planning efficiency for large scale deployments.

For more information, refer to the Capacity Planner web page:
http://datacentersupport.lenovo.com/us/en/solutions/lnvo-lcp

Security

The SR570 server offers the following security features:

- Power-on password
- Administrator's password
- Secure firmware updates
- Onboard Trusted Platform Module (TPM) version 1.2 or 2.0 (configurable UEFI system setting)
- Trusted Cryptographic Module (TCM) (optional; available in PRC only)
- Nationz Trusted Platform Module v2.0 (optional; available in PRC only)
- Lockable front bezel (optional)
- Self-encrypting drives (SEDs) with support for enterprise key managers - see the SED encryption key management section
- Lenovo Business Vantage security software (optional; available in PRC only)

The server is NIST SP 800-147B compliant.

The following table lists the security options that are available for the SR570 server.

Table 48. Security options

Part number	Feature code	Description	Maximum quantity
Lockable front bezel			
7Z17A02581	AUWR	ThinkSystem 1U Security Bezel	1
Trusted Cryptographic Module (PRC only)			
None*	AVKE	ThinkSystem Trusted Cryptographic Module	1
Trusted Platform Module (PRC only)			
None*	B22N	ThinkSystem Nationz Trusted Platform Module v2.0	1

* Factory-installed only; no field upgrade.

Lenovo Business Vantage is a security software tool suite (available only in PRC) designed to work with the TCM for enhanced security, to keep user data safe, and to erase confidential data completely from a drive.

Lenovo Business Vantage provides the following features:

- Encrypts files to ensure data safety by using the TCM.
- Erases confidential data from a hard disk.
- Prohibits unauthorized access to the USB port of devices.
- Encrypts files to ensure data security on a USB storage device.

Intel Transparent Supply Chain

Add a layer of protection in your data center and have peace of mind that the server hardware you bring into it is safe authentic and with documented, testable, and provable origin.

Lenovo has one of the world's best supply chains, as ranked by Gartner Group, backed by extensive and mature supply chain security programs that exceed industry norms and US Government standards. Now we are the first Tier 1 manufacturer to offer Intel® Transparent Supply Chain in partnership with Intel, offering you an unprecedented degree of supply chain transparency and assurance.

To enable Intel Transparent Supply Chain for the Intel-based servers in your order, add the following feature code in the DCSC configurator, under the Security tab.

Table 49. Intel Transparent Supply Chain ordering information

Feature code	Description
BB0P	Intel Transparent Supply Chain

For more information on this offering, see the paper *Introduction to Intel Transparent Supply Chain on Lenovo ThinkSystem Servers*, available from https://lenovopress.com/lp1434-introduction-to-intel-transparent-supply-chain-on-thinksystem-servers.

Rack installation

The following table lists the rack installation options that are available for the SR570 server.

Table 50. Rack installation options

Part number	Feature code	Description	Maximum quantity
4-post rail kits			

Part number	Feature code	Description	Maximum quantity
7M27A05702	AXCA	ThinkSystem Tool-less Slide Rail	1
7M27A05701	AXCB	ThinkSystem Tool-less Slide Rail Kit with 1U CMA	1
4M17A07274	AXFN	ThinkSystem Screw-in Slide Rail	1
4M17A07281	B0TE	ThinkSystem Screw-in Slide Rail Kit with 1U CMA	1
4M17A07273	BK7W	ThinkSystem Toolless Friction Rail v2	1
Cable management arm (CMA) upgrade			
7M27A05699	B136	ThinkSystem 1U CMA Upgrade Kit for Tool-less Slide Rail	1*
4M17A07276	AXFP	ThinkSystem 1U CMA Upgrade Kit for Screw-in Slide Rail	1**
Front VGA port			
None***	BMNW	Front VGA Connector Upgrade Kit for 1U v2 (for 3.5" models)	1
None***	AUWU	ThinkSystem SR530/SR/570/SR630 Front VGA Connector (for 3.5" models)	1
4Z17A80447	BMNW	ThinkSystem SR530/SR570/SR630 Front VGA Connector Upgrade Kit v2 (for 2.5" models)	1
7Z17A02579	AUWW	ThinkSystem SR530/SR570/SR630 Front VGA Connector Upgrade Kit (for 2.5" models)	1

* The CMA Upgrade Kit for Tool-less Slide Rail is supported with the Tool-less Slide Rail (7M27A05702) only.
** The CMA Upgrade Kit for Screw-in Slide Rail is supported with the Screw-in Slide Rail (4M17A07274) only.
*** Factory-installed only; no field upgrade.

The following table summarizes the rail kit features and specifications.

Table 51. Rail kit features and specifications summary

Feature	Tool-less Slide Rail		Screw-in Slide Rail		Tool-less Friction Rail
	Without CMA	With CMA	Without CMA	With CMA	
Part number	7M27A05702	7M27A05701	4M17A07274	4M17A07281	4M17A07273
CMA	7M27A05699	Included	4M17A07276	Included	No support
Rail length	730 mm (28.74 in.)	807 mm (31.8 in.)	836.8 mm (32.9 in.)	836.8 mm (32.9 in.)	728.1 mm (28.7 in.)
Rail type	Full-out slide (ball bearing)		Full-out slide (ball bearing)		Half-out slide (friction)
Tool-less installation	Yes		No		Yes
In-rack server maintenance	Yes		Yes		No
1U PDU support	Yes		Yes		Yes
0U PDU support	Limited*		Limited*		Limited**
Rack type	IBM and Lenovo 4-post, IEC standard-compliant		IBM and Lenovo 4-post, IEC standard-compliant		IBM and Lenovo 4-post, IEC standard-compliant
Mounting holes	Square or round		Square, round, or threaded		Square or round
Mounting flange thickness	2 mm (0.08 in.) – 3.3 mm (0.13 in.)		2 mm (0.08 in.) – 3.3 mm (0.13 in.)		2 mm (0.08 in.) – 3.3 mm (0.13 in.)
Distance between front and rear mounting flanges^	609.6 mm (24 in.) – 863.6 mm (34 in.)		609.6 mm (24 in.) – 812.8 mm (32 in.)		609.6 mm (24 in.) – 863.6 mm (34 in.)

* If a 0U PDU is used, the rack cabinet must be at least 1100 mm (43.31 in.) deep if no CMA is used, or at least 1200 mm (47.24 in.) deep if a CMA is used.
** If a 0U PDU used, the rack must be at least 1000 mm (39.37 in.) deep.
^ Measured when mounted on the rack, from the front surface of the front mounting flange to the rear most point of the rail.

Operating system support

The server with 2nd Gen processors supports the following operating systems:

- Microsoft Windows Server 2016
- Microsoft Windows Server 2019
- Microsoft Windows Server 2022
- Red Hat Enterprise Linux 7.6
- Red Hat Enterprise Linux 7.7
- Red Hat Enterprise Linux 7.8
- Red Hat Enterprise Linux 7.9
- Red Hat Enterprise Linux 8.0
- Red Hat Enterprise Linux 8.1
- Red Hat Enterprise Linux 8.2
- Red Hat Enterprise Linux 8.3
- Red Hat Enterprise Linux 8.4
- Red Hat Enterprise Linux 8.5
- Red Hat Enterprise Linux 8.6
- Red Hat Enterprise Linux 8.7
- Red Hat Enterprise Linux 8.8
- Red Hat Enterprise Linux 9.0
- Red Hat Enterprise Linux 9.1
- Red Hat Enterprise Linux 9.2
- SUSE Linux Enterprise Server 12 SP4
- SUSE Linux Enterprise Server 12 SP5
- SUSE Linux Enterprise Server 12 Xen SP4
- SUSE Linux Enterprise Server 12 Xen SP5
- SUSE Linux Enterprise Server 15
- SUSE Linux Enterprise Server 15 SP1
- SUSE Linux Enterprise Server 15 SP2
- SUSE Linux Enterprise Server 15 SP3
- SUSE Linux Enterprise Server 15 SP4
- SUSE Linux Enterprise Server 15 SP5
- SUSE Linux Enterprise Server 15 Xen
- SUSE Linux Enterprise Server 15 Xen SP1
- SUSE Linux Enterprise Server 15 Xen SP2
- SUSE Linux Enterprise Server 15 Xen SP3
- SUSE Linux Enterprise Server 15 Xen SP4
- SUSE Linux Enterprise Server 15 Xen SP5
- Ubuntu 22.04 LTS 64-bit
- VMware ESXi 6.5 U2
- VMware ESXi 6.5 U3
- VMware ESXi 6.7 U1
- VMware ESXi 6.7 U2
- VMware ESXi 6.7 U3
- VMware ESXi 7.0
- VMware ESXi 7.0 U1
- VMware ESXi 7.0 U2
- VMware ESXi 7.0 U3
- VMware ESXi 8.0
- VMware ESXi 8.0 U1
- VMware ESXi 8.0 U2

The server with 1st Gen processors supports the following operating systems:

- Microsoft Windows Server 2012 R2
- Microsoft Windows Server 2016
- Microsoft Windows Server 2019

- Microsoft Windows Server 2022
- Microsoft Windows Server, version 1709
- Red Hat Enterprise Linux 6.10 x64
- Red Hat Enterprise Linux 6.9 x64
- Red Hat Enterprise Linux 7.4
- Red Hat Enterprise Linux 7.5
- Red Hat Enterprise Linux 7.6
- Red Hat Enterprise Linux 7.7
- Red Hat Enterprise Linux 7.8
- Red Hat Enterprise Linux 7.9
- Red Hat Enterprise Linux 8.0
- Red Hat Enterprise Linux 8.1
- Red Hat Enterprise Linux 8.2
- Red Hat Enterprise Linux 8.3
- Red Hat Enterprise Linux 8.4
- Red Hat Enterprise Linux 8.5
- Red Hat Enterprise Linux 8.6
- Red Hat Enterprise Linux 8.7
- Red Hat Enterprise Linux 8.8
- Red Hat Enterprise Linux 9.0
- Red Hat Enterprise Linux 9.1
- Red Hat Enterprise Linux 9.2
- SUSE Linux Enterprise Server 11 Xen x64 SP4
- SUSE Linux Enterprise Server 11 x64 SP4
- SUSE Linux Enterprise Server 12 SP3
- SUSE Linux Enterprise Server 12 SP4
- SUSE Linux Enterprise Server 12 SP5
- SUSE Linux Enterprise Server 12 Xen SP3
- SUSE Linux Enterprise Server 12 Xen SP4
- SUSE Linux Enterprise Server 12 Xen SP5
- SUSE Linux Enterprise Server 15
- SUSE Linux Enterprise Server 15 SP1
- SUSE Linux Enterprise Server 15 SP2
- SUSE Linux Enterprise Server 15 SP3
- SUSE Linux Enterprise Server 15 SP4
- SUSE Linux Enterprise Server 15 SP5
- SUSE Linux Enterprise Server 15 Xen
- SUSE Linux Enterprise Server 15 Xen SP1
- SUSE Linux Enterprise Server 15 Xen SP2
- SUSE Linux Enterprise Server 15 Xen SP3
- SUSE Linux Enterprise Server 15 Xen SP4
- SUSE Linux Enterprise Server 15 Xen SP5
- Ubuntu 22.04 LTS 64-bit
- VMware ESXi 6.0 U3
- VMware ESXi 6.5 U1
- VMware ESXi 6.5 U2
- VMware ESXi 6.5 U3
- VMware ESXi 6.7
- VMware ESXi 6.7 U1
- VMware ESXi 6.7 U2
- VMware ESXi 6.7 U3
- VMware ESXi 7.0
- VMware ESXi 7.0 U1
- VMware ESXi 7.0 U2
- VMware ESXi 7.0 U3
- VMware ESXi 8.0
- VMware ESXi 8.0 U1

- VMware ESXi 8.0 U2

For a complete list of supported, certified and tested operating systems, plus additional details and links to relevant web sites, see the Operating System Interoperability Guide:
https://lenovopress.com/osig#servers=sr570-7y02-7y03-sp-gen-2

For configure-to-order configurations, the server can be preloaded with VMware ESXi installed on M.2 cards. Ordering information is listed in the following table.

Table 52. VMware ESXi preload

Part number	Feature code	Description
CTO only	B3VW	VMware ESXi 6.5 U2 (Factory Installed)
CTO only	B6U0	VMware ESXi 6.5 U3 (factory installed)
CTO only	B3VX	VMware ESXi 6.7 (Factory Installed)
CTO only	B4XA	VMware ESXi 6.7 U1 (Factory Installed)
CTO only	B6U1	VMware ESXi 6.7 U2 (factory installed)
CTO only	B88T	VMware ESXi 6.7 U3 (factory installed)
CTO only	BBZG	VMware ESXi 7.0 (Factory Installed)
CTO only	BE5E	VMware ESXi 7.0 U1 (Factory Installed)
CTO only	BHSR	VMware ESXi 7.0 U2 (Factory Installed)
CTO only	BMEY	VMware ESXi 7.0 U3 (Factory Installed)
CTO only	BMT5	VMware ESXi 8.0 (Factory Installed)
CTO only	BQ8S	VMware ESXi 8.0 U1 (Factory Installed)

Physical and electrical specifications

The SR570 has the following overall physical dimensions, excluding components that extend outside the standard chassis, such as EIA flanges, front security bezel (if any), and power supply handles:

- Width: 435 mm (17.1 inches)
- Height: 43 mm (1.7 inches)
- Depth: 750 mm (29.5 inches)

The following table lists the detailed dimensions. See the figure below for the definition of each dimension.

Table 53. Detailed dimensions

Dimension	Description
482 mm	X_a = Width, to the outsides of the front EIA flanges
435 mm	X_b = Width, to the rack rail mating surfaces
435 mm	X_c = Width, to the outer most chassis body feature
43 mm	Y_a = Height, from the bottom of chassis to the top of the chassis
715 mm	Z_a = Depth, from the rack flange mating surface to the rearmost I/O port surface
716 mm	Z_b = Depth, from the rack flange mating surface to the rearmost feature of the chassis body
744 mm	Z_c = Depth, from the rack flange mating surface to the rearmost feature such as power supply handle
35 mm	Z_d = Depth, from the forwardmost feature on front of EIA flange to the rack flange mating surface
47 mm	Z_e = Depth, from the front of security bezel (if applicable) or forwardmost feature to the rack flange mating surface

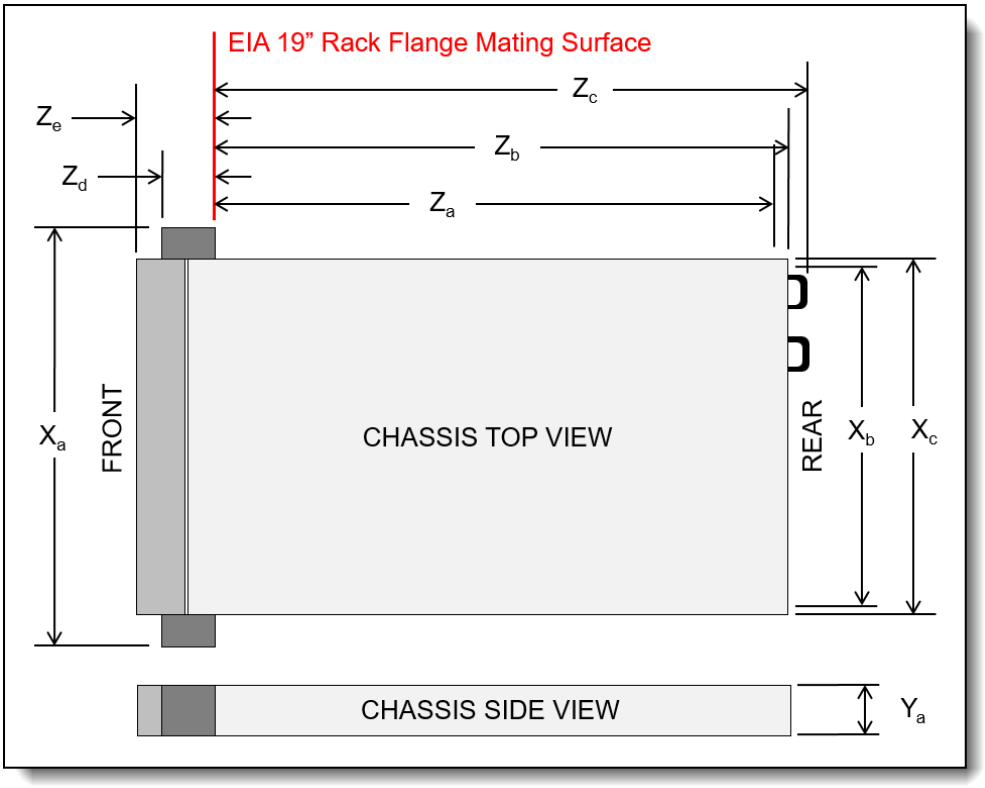


Figure 9. Server dimensions

The shipping dimensions (cardboard packaging) of the SR570 are as follows:

- Width: 587 mm (23.1 inches)
- Height: 225 mm (8.9 inches)
- Depth: 998 mm (39.3 inches)

The SR570 server has the following weight:

- Minimum configuration: 10.2 kg (22.5 lb)
- Maximum configuration: 16.0 kg (35.3 lb)

Electrical specifications for AC power supplies:

- 100 - 127 (nominal) V AC; 50 Hz / 60 Hz
- 200 - 240 (nominal) V AC; 50 Hz / 60 Hz
- 180 - 300 V DC (HVDC; supported in PRC only)

Power load and inlet current

The following table lists the maximum system power load, rated inlet current, and system heat output based on the power supply and source voltage.

Table 54. Rated system power, inlet current, and system heat output

Power supply	Source voltage	Maximum power load per system (two power supplies)	Rated current per inlet	System heat output
550 W Platinum	100 - 127 V AC	722 W	6.2 A	2463 BTU/hour
	200 - 240 V AC	704 W	3 A	2402 BTU/hour
	180 - 300 V DC	702 W	2.5 A	2395 BTU/hour
750 W Platinum	100 - 127 V AC	984 W	8.4 A	3357 BTU/hour
	200 - 240 V AC	958 W	4.1 A	3269 BTU/hour
	180 - 300 V DC	958 W	3.5 A	3269 BTU/hour
750 W Titanium	200 - 240 V AC	949 W	4.1 A	3238 BTU/hour
	180 - 300 V DC	948 W	3.5 A	3235 BTU/hour

Operating environment

The SR570 server complies with ASHRAE class A2 specifications. The server performance might be impacted when the operating temperature is outside the ASHRAE A2 specifications. Depending on the hardware configuration, some server models comply with ASHRAE class A3 and class A4 specifications, provided the following hardware configuration requirements are met at the same time:

- Two power supplies installed
- Persistent memory modules not installed
- NVMe PCIe flash adapters not installed
- NVMe drives not installed
- No system fan failure

Temperature and humidity

The SR570 server is supported in the following environment:

- Air temperature:
  - Operating:
    - ASHRAE Class A4: 5 °C - 45 °C (41 °F - 113 °F); for altitudes above 900 m (2,953 ft), decrease the maximum ambient temperature by 1 °C for every 125-m (410-ft) increase in altitude
    - ASHRAE Class A3: 5 °C - 40 °C (41 °F - 104 °F); for altitudes above 900 m (2,953 ft), decrease the maximum ambient temperature by 1 °C for every 175-m (574-ft) increase in altitude
    - ASHRAE Class A2: 10 °C - 35 °C (50 °F - 95 °F); for altitudes above 900 m (2,953 ft), decrease the maximum ambient temperature by 1 °C for every 300-m (984-ft) increase in altitude
  - Non-operating: 5 °C - 45 °C (41 °F - 113 °F)
  - Storage: -40 °C - +60 °C (-40 °F - 140 °F)
- Maximum altitude: 3,050 m (10,000 ft)
- Humidity:
  - Operating:
    - ASHRAE Class A4: 8% - 90% (non-condensing); maximum dew point: 24 °C (75 °F)
    - ASHRAE Class A3: 8% - 85% (non-condensing); maximum dew point: 24 °C (75 °F)
    - ASHRAE Class A2: 8% - 80% (non-condensing); maximum dew point: 21 °C (70 °F)
  - Storage: 8% - 90% (non-condensing)

Acoustical noise emissions

The server has the following acoustic noise emissions declaration:

- Minimum configuration:
  - Operating: 5.4 bels
  - Idle: 5.4 bels
- Maximum configuration:
  - Operating: 5.6 bels
  - Idle: 5.6 bels

Shock and vibration

The server has the following vibration and shock limits:

- Vibration:
  - Operating: 0.21 G rms at 5 Hz to 500 Hz for 15 minutes across 3 axes
  - Non-operating: 1.04 G rms at 2 Hz to 200 Hz for 15 minutes across 6 surfaces
- Shock:
  - Operating: 15 G for 3 milliseconds in each direction (positive and negative X, Y, and Z axes)

- Non-operating:
  - 12 kg - 22 kg: 50 G for 152 in./sec velocity change across 6 surfaces
  - 23 kg - 31 kg: 35 G for 152 in./sec velocity change across 6 surfaces

Particulate contamination

Airborne particulates (including metal flakes or particles) and reactive gases acting alone or in combination with other environmental factors such as humidity or temperature might damage the system that might cause the system to malfunction or stop working altogether.

The following specifications indicate the limits of particulates that the system can tolerate:

- Reactive gases:
  - The reactivity rate of copper coupons shall be less than 200 Angstroms per month (Å/month)
  - The reactivity rate of silver coupons shall be less than 200 Å/month
- Airborne particulates:
  - The room air should be continuously filtered with MERV 8 filters.
  - Air entering a data center should be filtered with MERV 11 or preferably MERV 13 filters.
  - The deliquescent relative humidity of the particulate contamination should be more than 60% RH
  - Data centers must be free of zinc whiskers

For additional information, see the Specifications section of the Setup Guide for the server, available from the Lenovo Documents site, https://pubs.lenovo.com/

Warranty and support

The SR570 server has a one-year (7Y02) or three-year (Machine Type 7Y03) customer-replaceable unit (CRU) and onsite limited (for field-replaceable units [FRUs] only) warranty with standard call center support during normal business hours and 9x5 Next Business Day Parts Delivered.

Lenovo’s additional support services provide a sophisticated, unified support structure for a customer's data center, with an experience consistently ranked number one in customer satisfaction worldwide.

The following Lenovo support services are available:

- **Premier Support** provides a Lenovo-owned customer experience and delivers direct access to technicians skilled in hardware, software, and advanced troubleshooting, in addition to the following capabilities:
  - Direct technician-to-technician access through a dedicated phone line.
  - 24x7x365 remote support.
  - Single point of contact service.
  - End to end case management.
  - 3rd Party collaborative software support.
  - Online case tools and live chat support.
  - On-demand remote system analysis.
- **Warranty Upgrades (Preconfigured Support)** are available to meet the on-site response time targets that match the criticality of customer's systems:
  - 3, 4, or 5 years of service coverage.
  - 1-year or 2-year post-warranty extensions.
  - **Foundation Service:** 9x5 service coverage with next business day onsite response, with optional YourDrive YourData.
  - **Essential Service:** 24x7 service coverage with 4-hour onsite response or 24-hour committed repair (available only in select regions), bundled with YourDrive YourData.
  - **Advanced Service:** 24x7 service coverage with 2-hour onsite response or 6-hour committed repair (available only in select regions), bundled with YourDrive YourData.

- **Managed Services**
  Lenovo Managed Services provide continuous 24x7 remote monitoring (plus 24x7 call center availability) and proactive management of a customer's data center using state of the art tools, systems, and practices by a team of highly skilled and experienced Lenovo services professionals.

  Quarterly reviews check error logs, verify firmware and operating system device driver levels, and software as needed. Lenovo will also maintain records of latest patches, critical updates, and firmware levels, to ensure customer's systems are providing business value through optimized performance.

- **Technical Account Management (TAM)**
  A Lenovo Technical Account Manager helps customers optimize operations of their data centers based on a deep understanding of customer's business. Customers gain direct access to a Lenovo TAM, who serves as their single point of contact to expedite service requests, provide status updates, and furnish reports to track incidents over time. Also, a TAM helps proactively make service recommendations and manage service relationship with Lenovo to make certain that customer's needs are met.

- **Enterprise Software Support**
  Lenovo Enterprise Software Support is an additional support service that provides customers with software support on Microsoft, Red Hat, SUSE, and VMWare applications and systems. Around the clock availability for critical problems plus unlimited calls and incidents helps customers address challenges fast, without incremental costs. Support staff can answer troubleshooting and diagnostic questions, address product compatibility and interoperability issues, isolate causes of problems, report defects to software vendors, and more.

- **YourDrive YourData**
  Lenovo’s YourDrive YourData service is a multi-drive retention offering that ensures that customer's data is always under their control, regardless of the number of drives that are installed in their Lenovo server. In the unlikely event of a drive failure, customers retain possession of their drive while Lenovo replaces the failed drive part. Customer's data stays safely on customer premises, in their hands. The YourDrive YourData service can be purchased in convenient bundles with Foundation, Essential, or Advanced Service upgrades and extensions.

- **Health Check**
  Having a trusted partner who can perform regular and detailed health checks is central to maintaining efficiency and ensuring that customer systems and business are always running at their best. Health Check supports Lenovo-branded server, storage, and networking devices, as well as select Lenovo-supported products from other vendors that are sold by Lenovo or a Lenovo-Authorized Reseller.

Some regions might have different warranty terms and conditions than the standard warranty. This is due to local business practices or laws in the specific region. Local service teams can assist in explaining region-specific terms when needed. Examples of region-specific warranty terms are second or longer business day parts delivery or parts-only base warranty.

If warranty terms and conditions include onsite labor for repair or replacement of parts, Lenovo will dispatch a service technician to the customer site to perform the replacement. Onsite labor under base warranty is limited to labor for replacement of parts that have been determined to be field-replaceable units (FRUs). Parts that are determined to be customer-replaceable units (CRUs) do not include onsite labor under base warranty.

If warranty terms include parts-only base warranty, Lenovo is responsible for delivering only replacement parts that are under base warranty (including FRUs) that will be sent to a requested location for self-service. Parts-only service does not include a service technician being dispatched onsite. Parts must be changed at customer’s own cost and labor and defective parts must be returned following the instructions supplied with the spare parts.

Lenovo support services are region-specific. Not all support services are available in every region. For information about Lenovo support services that are available in a specific region, refer to the following resources:

- Service part numbers in Data Center Solution Configurator (DCSC):

http://dcsc.lenovo.com/#/services

- Lenovo Services Availability Locator
  https://lenovolocator.com/

For service definitions, region-specific details, and service limitations, refer to the following documents:

- Lenovo Statement of Limited Warranty for Infrastructure Solutions Group (ISG) Servers and System Storage
  http://pcsupport.lenovo.com/us/en/solutions/ht503310
- Lenovo Data Center Services Agreement
  http://support.lenovo.com/us/en/solutions/ht116628

Services

Lenovo Services is a dedicated partner to customer success. Lenovo's goal for customers is to reduce capital outlays, mitigate IT risks, and accelerate time to productivity.

Here is a more in-depth look at what Lenovo can do for their customers:

- **Asset Recovery Services**
  Asset Recovery Services (ARS) helps customers recover the maximum value from their end-of-life equipment in a cost-effective and secure way. On top of simplifying the transition from old to new equipment, ARS mitigates environmental and data security risks associated with data center equipment disposal. Lenovo ARS is a cash-back solution for equipment based on its remaining market value, yielding maximum value from aging assets and lowering total cost of ownership for customers. For more information, see the ARS page, http://lenovopress.com/lp1266.

- **Assessment Services**
  An assessment helps solve customer IT challenges through an onsite, multi-day session with a Lenovo technology expert. Lenovo performs a tools-based assessment which provides a comprehensive and thorough review of a company's environment and technology systems. In addition to the technology-based functional requirements, the consultant also discusses and records the non-functional business requirements, challenges, and constraints. Assessments help organizations, no matter how large or small, get a better return on their IT investment and overcome challenges in the ever-changing technology landscape.

- **Design Services**
  Professional Services consultants perform infrastructure design and implementation planning to support customer's strategy. The high-level architectures provided by the assessment service are turned into low level designs and wiring diagrams, which are reviewed and approved prior to implementation. The implementation plan will demonstrate an outcome-based proposal to provide business capabilities through infrastructure with a risk-mitigated project plan.

- **Basic Hardware Installation**
  Lenovo experts can seamlessly manage the physical installation of customer's server, storage, or networking hardware. Working at a time convenient for the customer (business hours or off shift), the technician will unpack and inspect the systems on customer site, install options, mount in a rack cabinet, connect to power and network, check and update firmware to the latest levels, verify operation, and dispose of the packaging, allowing customers to focus on other priorities.

- **Deployment Services**
  When investing in new IT infrastructures, customers need to ensure that their business will see quick time to value with little to no disruption. Lenovo deployments are designed by development and engineering teams who know Lenovo products and solutions better than anyone else, and Lenovo technicians own the process from delivery to completion. Lenovo will conduct remote preparation and planning, configure and integrate systems, validate systems, verify and update appliance firmware, train on administrative tasks, and provide post-deployment documentation. Customer’s IT teams leverage Lenovo skills to enable IT staff to transform with higher level roles and tasks.

- **Integration, Migration, and Expansion Services**
  Integration, Migration, and Expansion Services allow to move existing physical and virtual workloads easily, or to determine technical requirements to support increased workloads while maximizing performance. These services include tuning, validation, and documenting ongoing run processes, and they leverage migration assessment planning documents to perform necessary migrations.

Some service options may not be available in every region. For more information about Lenovo service offerings that are available in a specific region, contact a local Lenovo sales representative or business partner.

Regulatory compliance

The ThinkSystem SR570 server conforms to the following regulations:

- United States: FCC Part 15, Class A; UL 60950-1
- Canada: ICES-003/NMB-03, Class A; CAN/CSA-C22.2 60950-1
- Mexico: NOM-19
- Argentina: IEC60950-1
- European Union: CE Mark (EN55022 Class A, IEC/EN60950-1, EN55024, EN61000-3-2, EN61000-3-3)
- Germany: TUV-GS (IEC/EN 60950-1, EK1-ITB2000)
- Russia, Kazakhstan, Belarus: EAC (TR CU 004/2011, TR CU 020/2011)
- China: CCC GB4943.1, GB9254 Class A, GB17625.1
- India: BIS
- Japan: VCCI, Class A
- Taiwan: BSMI CNS13438, Class A; CNS14336-1
- Korea: KN22, Class A; KN24
- Australia/New Zealand: AS/NZS CISPR 22 Class A
- Reduction of Hazardous Substances (ROHS)
- Energy Star 3.0 (excluding configurations with Bronze 3204, Gold 5222, or Platinum 8256 processors)

Note: For more information on the Energy Star 3.0 certification, refer to the *Energy Star 3.0 Certifications for ThinkSystem Servers* publication:
http://lenovopress.com/lp1230

External drive enclosures

The following table lists the 12 Gbps SAS external drive enclosures that are offered by Lenovo that can be used with the SR570 for storage expansion.

Note: Information provided in this section is for ordering reference purposes only. For the operating system and adapter support details, refer to the interoperability matrix for a particular storage enclosure that can be found on the Lenovo Data Center Support web site:
http://datacentersupport.lenovo.com

Table 55. External drive enclosures

Description	Part number		
	Worldwide	Japan	PRC
Lenovo Storage D1212 LFF Disk Expansion with Dual SAS IO Modules	4587A11	4587A1J	4587A1C
Lenovo Storage D1224 SFF Disk Expansion with Dual SAS IO Modules	4587A31	4587A3J	4587A3C
Lenovo Storage D3284 4TB x 84 HD Expansion Enclosure	641311F		
Lenovo Storage D3284 6TB x 84 HD Expansion Enclosure	641312F		
Lenovo Storage D3284 8TB x 84 HD Expansion Enclosure	641313F		
Lenovo Storage D3284 10TB x 84 HD Expansion Enclosure	641314F		

For details about supported drives, adapters, and cables, see the following Lenovo Press Product Guides:

- Lenovo Storage D1212 and D1224
  http://lenovopress.com/lp0512
- Lenovo Storage D3284
  http://lenovopress.com/lp0513

External storage systems

Lenovo offers the ThinkSystem DE Series and ThinkSystem DM Series external storage systems for high-performance storage. See the DE Series and DM Series product guides for specific controller models, expansion enclosures and configuration options:

- ThinkSystem DE Series Storage
  https://lenovopress.com/storage/thinksystem/de-series#rt=product-guide
- ThinkSystem DM Series Storage
  https://lenovopress.com/storage/thinksystem/dm-series#rt=product-guide

External backup units

The following table lists the external backup options that are offered by Lenovo.

Table 56. External backup options

Part number	Description
External RDX USB drives	
4T27A10725	ThinkSystem RDX External USB 3.0 Dock
External SAS tape backup drives	
6160S7E	IBM TS2270 Tape Drive Model H7S
6160S8E	IBM TS2280 Tape Drive Model H8S
6160S9E	IBM TS2290 Tape Drive Model H9S
External SAS tape backup autoloaders	
6171S7R	IBM TS2900 Tape Autoloader w/LTO7 HH SAS
6171S8R	IBM TS2900 Tape Autoloader w/LTO8 HH SAS
6171S9R	IBM TS2900 Tape Autoloader w/LTO9 HH SAS
External tape backup libraries	
6741A1F	IBM TS4300 3U Tape Library-Base Unit
6741A3F	IBM TS4300 3U Tape Library-Expansion Unit
Full High 8 Gb Fibre Channel for TS4300	
01KP938	LTO 7 FH Fibre Channel Drive
01KP954	LTO 8 FH Fibre Channel Drive
02JH837	LTO 9 FH Fibre Channel Drive
Half High 8 Gb Fibre Channel for TS4300	
01KP936	LTO 7 HH Fibre Channel Drive
01KP952	LTO 8 HH Fibre Channel Drive
02JH835	LTO 9 HH Fibre Channel Drive
Half High 6 Gb SAS for TS4300	
01KP937	LTO 7 HH SAS Drive
01KP953	LTO 8 HH SAS Drive
02JH836	LTO 9 HH SAS Drive

For more information, see the list of Product Guides in the Backup units category:
https://lenovopress.com/servers/options/backup

Fibre Channel SAN switches

Lenovo offers the ThinkSystem DB Series of Fibre Channel SAN switches for high-performance storage expansion. See the DB Series product guides for models and configuration options:

- ThinkSystem DB Series SAN Switches:
  https://lenovopress.com/storage/switches/rack#rt=product-guide

Rack cabinets

The following table lists the rack cabinets that are currently offered by Lenovo that can be used for mounting the ThinkSystem SR570 servers and other IT infrastructure building blocks.

Table 57. Rack cabinets

Description	Part number
12U 1200mm Deep Micro Datacenter Rack (no sidewall compartments), 1YR Warranty	7D2B0001WW
12U 1200mm Deep Micro Datacenter Rack (no sidewall compartments), 3YR Warranty	7D2N0001WW
18U 1200mm Deep Micro Datacenter Rack (no sidewall compartments), 1YR Warranty	7D2C0001WW
18U 1200mm Deep Micro Datacenter Rack (no sidewall compartments), 3YR Warranty	7D2P0001WW
25U S2 Standard Rack (1000 mm deep; 2 sidewall compartments)	93072RX
25U Static S2 Standard Rack (1000 mm deep; 2 sidewall compartments)	93072PX
42U S2 Standard Rack (1000 mm deep; 6 sidewall compartments)	93074RX
42U 1100mm Enterprise V2 Dynamic Rack (6 sidewall compartments)	93634PX
42U 1100mm Enterprise V2 Dynamic Expansion Rack (6 sidewall compartments)	93634EX
42U 1200mm Deep Dynamic Rack (6 sidewall compartments)	93604PX
42U 1200mm Deep Static Rack (6 sidewall compartments)	93614PX
42U Enterprise Rack (1105 mm deep; 4 sidewall compartments)	93084PX
42U Enterprise Expansion Rack (1105 mm deep; 4 sidewall compartments)	93084EX

For more information, see the list of Product Guides in the Rack cabinets category:
http://lenovopress.com/servers/options/racks#rt=product-guide

KVM switches and consoles

The following table lists the KVM switches and consoles that are offered by Lenovo that can be used for providing console access to the ThinkSystem SR570 servers.

Table 58. KVM switch and console options

Description	Part number
Consoles	
1U 18.5" Standard Console (without keyboard)	17238BX
Console keyboards	
ThinkSystem Keyboard w/ Int. Pointing Device USB - Arabic 253 RoHS v2	7ZB7A05469
ThinkSystem Keyboard w/ Int. Pointing Device USB - Belg/UK 120 RoHS v2	7ZB7A05468
ThinkSystem Keyboard w/ Int. Pointing Device USB - Czech 489 RoHS v2	7ZB7A05206
ThinkSystem Keyboard w/ Int. Pointing Device USB - Danish 159 RoHS v2	7ZB7A05207
ThinkSystem Keyboard w/ Int. Pointing Device USB - Dutch 143 RoHS v2	7ZB7A05208
ThinkSystem Keyboard w/ Int. Pointing Device USB - Fr/Canada 445 RoHS v2	7ZB7A05210

Description	Part number
ThinkSystem Keyboard w/ Int. Pointing Device USB - French 189 RoHS v2	7ZB7A05209
ThinkSystem Keyboard w/ Int. Pointing Device USB - German 129 RoHS v2	7ZB7A05211
ThinkSystem Keyboard w/ Int. Pointing Device USB - Greek 219 RoHS v2	7ZB7A05212
ThinkSystem Keyboard w/ Int. Pointing Device USB - Hebrew 212 RoHS v2	7ZB7A05213
ThinkSystem Keyboard w/ Int. Pointing Device USB - Hungarian 208 RoHS v2	7ZB7A05214
ThinkSystem Keyboard w/ Int. Pointing Device USB - Italian 141 RoHS v2	7ZB7A05215
ThinkSystem Keyboard w/ Int. Pointing Device USB - Japanese 194 RoHS v2	7ZB7A05216
ThinkSystem Keyboard w/ Int. Pointing Device USB - Korean 413 RoHS v2	7ZB7A05217
ThinkSystem Keyboard w/ Int. Pointing Device USB - LA Span 171 RoHS v2	7ZB7A05218
ThinkSystem Keyboard w/ Int. Pointing Device USB - Norwegian 155 RoHS v2	7ZB7A05219
ThinkSystem Keyboard w/ Int. Pointing Device USB - Polish 214 RoHS v2	7ZB7A05220
ThinkSystem Keyboard w/ Int. Pointing Device USB - Portugese 163 RoHS v2	7ZB7A05221
ThinkSystem Keyboard w/ Int. Pointing Device USB - Russian 441 RoHS v2	7ZB7A05222
ThinkSystem Keyboard w/ Int. Pointing Device USB - Slovak 245 RoHS v2	7ZB7A05223
ThinkSystem Keyboard w/ Int. Pointing Device USB - Slovenian 234 RoHS v2	7ZB7A05231
ThinkSystem Keyboard w/ Int. Pointing Device USB - Spanish 172 RoHS v2	7ZB7A05224
ThinkSystem Keyboard w/ Int. Pointing Device USB - Swed/Finn 153 RoHS v2	7ZB7A05225
ThinkSystem Keyboard w/ Int. Pointing Device USB - Swiss F/G 150 RoHS v2	7ZB7A05226
ThinkSystem Keyboard w/ Int. Pointing Device USB - Thai 191 RoHS v2	7ZB7A05227
ThinkSystem Keyboard w/ Int. Pointing Device USB - Trad Chinese/US 467 RoHS v2	7ZB7A05467
ThinkSystem Keyboard w/ Int. Pointing Device USB - Turkish 179 RoHS v2	7ZB7A05228
ThinkSystem Keyboard w/ Int. Pointing Device USB - UK Eng 166 RoHS v2	7ZB7A05229
ThinkSystem Keyboard w/ Int. Pointing Device USB - US Eng 103P RoHS v2	7ZB7A05470
ThinkSystem Keyboard w/ Int. Pointing Device USB - US Euro 103P RoHS v2	7ZB7A05230
Console switches and cables - ThinkSystem Digital KVM	
ThinkSystem Digital 2x1x16 KVM Switch (DVI video output port)	1754D1T
ThinkSystem VGA to DVI Conversion Cable	4X97A11108
ThinkSystem Single-USB Conversion Cable for Digital KVM	4X97A11109
ThinkSystem Dual-USB Conversion Cable for Digital KVM	4X97A11107
Console switches and cables - ThinkSystem Analog KVM	
ThinkSystem Analog 1x8 KVM Switch (DVI video output port)	1754A1T
ThinkSystem VGA to DVI Conversion Cable	4X97A11108
ThinkSystem USB Conversion Cable for Analog KVM	4X97A11106
Console switches and cables - Global Console Managers	
Global 2x2x16 Console Manager (GCM16) (VGA video output port)	1754D1X
Global 4x2x32 Console Manager (GCM32) (VGA video output port)	1754D2X
Virtual Media Conversion Option Gen2 (VCO2)	46M5383
Serial Conversion Option (SCO)	46M5382
Console switches and cables - Local Console Managers	
Local 1x8 Console Manager (LCM8) (VGA video output port)	1754A1X
Local 2x16 Console Manager (LCM16) (VGA video output port)	1754A2X
Virtual Media Conversion Option Gen2 (VCO2)	46M5383

For more information, see the list of Product Guides in the KVM Switches and Consoles category:
http://lenovopress.com/servers/options/kvm#rt=product-guide

Power distribution units

The following table lists the power distribution units (PDUs) that are currently offered by Lenovo that can be used for distributing electrical power to the ThinkSystem SR570 servers and other IT infrastructure building blocks mounted in a rack cabinet.

Table 59. Power distribution units

Description	Part number
0U Basic PDUs	
0U 36 C13/6 C19 24A/200-240V 1 Phase PDU with NEMA L6-30P line cord	00YJ776
0U 36 C13/6 C19 32A/200-240V 1 Phase PDU with IEC60309 332P6 line cord	00YJ777
0U 21 C13/12 C19 32A/200-240V/346-415V 3 Phase PDU with IEC60309 532P6 line cord	00YJ778
0U 21 C13/12 C19 48A/200-240V 3 Phase PDU with IEC60309 460P9 line cord	00YJ779
Switched and Monitored PDUs	
0U 20 C13/4 C19 Switched and Monitored 24A/200-240V/1Ph PDU w/ NEMA L6-30P line cord	00YJ781
0U 20 C13/4 C19 Switched and Monitored 32A/200-240V/1Ph PDU w/ IEC60309 332P6 line cord	00YJ780
0U 18 C13/6 C19 Switched / Monitored 32A/200-240V/346-415V/3Ph PDU w/ IEC60309 532P6 cord	00YJ782
0U 12 C13/12 C19 Switched and Monitored 48A/200-240V/3Ph PDU w/ IEC60309 460P9 line cord	00YJ783
1U 9 C19/3 C13 Switched and Monitored DPI PDU (without line cord)	46M4002
1U 9 C19/3 C13 Switched and Monitored 60A 3Ph PDU with IEC 309 3P+Gnd cord	46M4003
1U 12 C13 Switched and Monitored DPI PDU (without line cord)	46M4004
1U 12 C13 Switched and Monitored 60A 3 Phase PDU with IEC 309 3P+Gnd line cord	46M4005
Ultra Density Enterprise PDUs (9x IEC 320 C13 + 3x IEC 320 C19 outlets)	
Ultra Density Enterprise C19/C13 PDU Module (without line cord)	71762NX
Ultra Density Enterprise C19/C13 PDU 60A/208V/3ph with IEC 309 3P+Gnd line cord	71763NU
C13 Enterprise PDUs (12x IEC 320 C13 outlets)	
DPI C13 Enterprise PDU+ (without line cord)	39M2816
DPI Single Phase C13 Enterprise PDU (without line cord)	39Y8941
C19 Enterprise PDUs (6x IEC 320 C19 outlets)	
DPI Single Phase C19 Enterprise PDU (without line cord)	39Y8948
DPI 60A 3 Phase C19 Enterprise PDU with IEC 309 3P+G (208 V) fixed line cord	39Y8923
Front-end PDUs (3x IEC 320 C19 outlets)	
DPI 30amp/125V Front-end PDU with NEMA L5-30P line cord	39Y8938
DPI 30amp/250V Front-end PDU with NEMA L6-30P line cord	39Y8939
DPI 32amp/250V Front-end PDU with IEC 309 2P+Gnd line cord	39Y8934
DPI 60amp/250V Front-end PDU with IEC 309 2P+Gnd line cord	39Y8940
DPI 63amp/250V Front-end PDU with IEC 309 2P+Gnd line cord	39Y8935
Universal PDUs (7x IEC 320 C13 outlets)	
DPI Universal 7 C13 PDU (with 2 m IEC 320-C19 to C20 rack power cord)	00YE443
NEMA PDUs (6x NEMA 5-15R outlets)	
DPI 100-127V PDU with fixed NEMA L5-15P line cord	39Y8905

Description	Part number
Line cords for PDUs that ship without a line cord	
DPI 30a Line Cord (NEMA L6-30P)	40K9614
DPI 32a Line Cord (IEC 309 P+N+G)	40K9612
DPI 32a Line Cord (IEC 309 3P+N+G)	40K9611
DPI 60a Cord (IEC 309 2P+G)	40K9615
DPI 63a Cord (IEC 309 P+N+G)	40K9613
DPI Australian/NZ 3112 Line Cord (32A)	40K9617
DPI Korean 8305 Line Cord (30A)	40K9618

For more information, see the list of Product Guides in the Power infrastructure category:
http://lenovopress.com/servers/options/pdu#rt=product-guide

Uninterruptible power supply units

The following table lists the uninterruptible power supply (UPS) units that are currently offered by Lenovo that can be used for providing electrical power protection to the ThinkSystem SR570 servers and other IT infrastructure building blocks.

Table 60. Uninterruptible power supply units

Description	Part number
Worldwide models	
RT1.5kVA 2U Rack or Tower UPS (100-125VAC) (8x NEMA 5-15R 12A outlets)	55941AX
RT1.5kVA 2U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A outlets)	55941KX
RT2.2kVA 2U Rack or Tower UPS (100-125VAC) (8x NEMA 5-20R 16A outlets)	55942AX
RT2.2kVA 2U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A, 1x IEC 320 C19 16A outlets)	55942KX
RT3kVA 2U Rack or Tower UPS (100-125VAC) (6x NEMA 5-20R 16A, 1x NEMA L5-30R 24A outlets)	55943AX
RT3kVA 2U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A, 1x IEC 320 C19 16A outlets)	55943KX
RT5kVA 3U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A, 2x IEC 320 C19 16A outlets)	55945KX
RT6kVA 3U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A, 2x IEC 320 C19 16A outlets)	55946KX
RT8kVA 6U Rack or Tower UPS (200-240VAC) (4x IEC 320-C19 16A outlets)	55948KX
RT11kVA 6U Rack or Tower UPS (200-240VAC) (4x IEC 320-C19 16A outlets)	55949KX
RT8kVA 6U 3:1 Phase Rack or Tower UPS (380-415VAC) (4x IEC 320-C19 16A outlets)	55948PX
RT11kVA 6U 3:1 Phase Rack or Tower UPS (380-415VAC) (4x IEC 320-C19 16A outlets)	55949PX
ASEAN, HTK, INDIA, and PRC models	
ThinkSystem RT3kVA 2U Standard UPS (200-230VAC) (2x C13 10A, 2x GB 10A, 1x C19 16A outlets)	55943KT
ThinkSystem RT3kVA 2U Long Backup UPS (200-230VAC) (2x C13 10A, 2x GB 10A, 1x C19 16A outlets)	55943LT
ThinkSystem RT6kVA 5U UPS (200-230VAC) (2x C13 10A outlets, 1x Terminal Block output)	55946KT
ThinkSystem RT10kVA 5U UPS (200-230VAC) (2x C13 10A outlets, 1x Terminal Block output)	5594XKT

For more information, see the list of Product Guides in the Uninterruptible Power Supply Units category:
http://lenovopress.com/servers/options/ups#rt=product-guide

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Related publications and links

For more information, see these resources:

- ThinkSystem SR570 product page
  https://www.lenovo.com/us/en/data-center/servers/racks/ThinkSystem-SR570/p/77XX7SRSR57
- Datasheet for the ThinkSystem SR570:
  https://lenovopress.com/ds0015-lenovo-thinksystem-sr570
- 3D Interactive Tour of the ThinkSystem SR570:
  https://lenovopress.com/lp0812-3d-tour-thinksystem-sr570-server
- Walkthrough Video for the ThinkSystem SR570:
  https://lenovopress.com/lp0822-thinksystem-sr570-video-walkthrough
- User Manuals for the ThinkSystem SR570:
  https://thinksystem.lenovofiles.com/help/topic/7Y02/introduction.html?cp=4_4
  - Quick Start Guide
  - Setup Guide
  - Rack Installation Guides
  - Maintenance Manual
  - Messages and Codes Reference
  - UEFI Manual
- Lenovo Data Center Support Downloads - ThinkSystem SR570:
  http://datacentersupport.lenovo.com/products/servers/thinksystem/sr570/7y02/downloads
  http://datacentersupport.lenovo.com/products/servers/thinksystem/sr570/7y03/downloads
- Lenovo Hardware Installation & Removal Videos on the ThinkSystem SR570:
  - YouTube: https://www.youtube.com/playlist?list=PLYV5R7hVcs-CjaaAyvBOOZ749SC-2SK2C
  - Youku: https://list.youku.com/albumlist/show/id_51276391
- Lenovo Data Center Solution Configurator (DCSC):
  http://dcsc.lenovo.com

Related product families

Product families related to this document are the following:

- 2-Socket Rack Servers
- ThinkSystem SR570 Server

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