



# Lenovo ThinkSystem SR530 Server (Xeon SP Gen 1 / Gen 2) Product Guide

Lenovo ThinkSystem SR530 is an ideal 2-socket 1U rack server for small businesses up to large enterprises that need industry-leading reliability, management, and security, as well as cost-optimized performance and flexibility for future growth. Designed to handle a wide range of workloads, such as IT infrastructure, collaboration, and entry cloud, it can be the foundation of your online business.

Featuring the second generation of the Intel Xeon Processor Scalable Family (Xeon SP Gen 2), the SR530 server offers a balance of performance, capacity and value. The SR530 server supports up to two processors, up to 768 GB of 2933 MHz TruDDR4 memory, 8x 2.5-inch or 4x 3.5-inch drive bays with an extensive choice of SAS/SATA SSDs and SAS/SATA HDDs, and flexible I/O expansion options with a LOM slot and up to 3x PCIe slots.

The SR530 server offers basic software RAID or advanced hardware RAID protection and a wide range of networking options, including embedded LOM, selectable LOM, ML2, and PCIe network adapters. The next-generation Lenovo XClarity Controller, which is built into the SR530 server, provides advanced service processor control, monitoring, and alerting functions.

The following figure shows the ThinkSystem SR530 server with 3.5-inch front hot-swap drives. Other drive configurations are also available.



Figure 1. Lenovo ThinkSystem SR530 with 3.5-inch hot-swap drives

# Did you know?

The SR530 server delivers impressive compute power per watt, featuring 80 PLUS Titanium and Platinum redundant power supplies that can deliver 96% (Titanium) or 94% (Platinum) efficiency at 50% load when connected to a 200 - 240 V AC power source.

The SR530 server is designed to meet ASHRAE A4 standards (up to 45 °C) in select configurations, which enable customers to lower energy costs, while still maintaining world-class reliability.

# **Key features**

The SR530 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 and efficient design improves your business environment and helps save operational costs.

#### Scalability and performance

The SR530 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 22-core processors, up to 30.25 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, 44 cores, and 88 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 simultaneous multithreading within each processor core, up to two threads per 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 768 GB of memory capacity.
- Offers flexible and scalable internal storage in a 1U rack form factor with up to 8x 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 HDDs/SSDs.
- Provides I/O scalability with a 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 SR530 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 applications with redundant hot-swap power supplies and redundant non-hotswap fans.
- Speeds up troubleshooting tasks to reduce service time with diagnostics built into the XClarity Provisioning Manager.
- 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, 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.

#### Manageability and security

Powerful systems management features simplify local and remote management of the SR530 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 SR530 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 standards 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 SR530 server with four 3.5-inch drive bays.

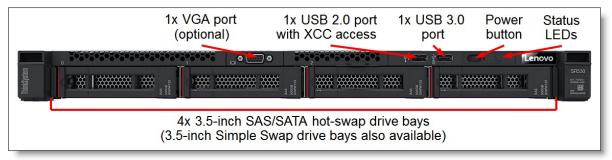


Figure 2. Front view of the SR530: 4x 3.5-inch drive bays

The following figure shows the front of the SR530 server with eight 2.5-inch drive bays.

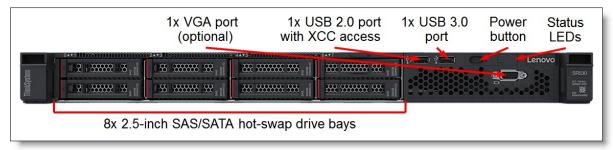


Figure 3. Front view of the SR530: 8x 2.5-inch drive bays

The front of the SR530 server includes the following components:

- Up to 8x 2.5-inch or 4x 3.5-inch hot-swap drive bays, or 4x 3.5-inch Simple 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 SR530 server with three PCIe low profile slots.

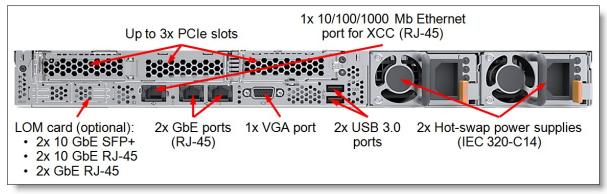


Figure 4. Rear view of the SR530

The rear of the SR530 server includes the following components:

- Up to three PCIe expansion slots (depending on the riser cards selected).
- One LOM card slot.
- 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 SR530 server.

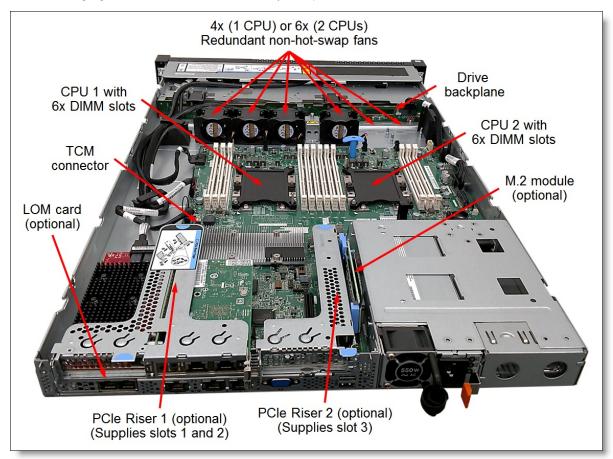


Figure 5. Internal view of the SR530

The following key components are located inside the SR530 server:

- Up to two processors.
- 12 DIMM slots (6 DIMM slots per processor).
- Drive backplanes.
- 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) non-hot-swap system fans.

# System specifications

The following table lists the system specifications for the SR530 server.

Attribute	Specification
	7X07 - 1 year warranty 7X08 - 3 year warranty
Form factor	1U rack-mount

Table 1. SR530 system specifications

Attribute	Specification
Processor	<ul> <li>Up to two Intel Xeon Gen 2 Bronze, Silver, Gold, or Platinum processors:</li> <li>Up to 22 cores (1.9 GHz core speeds)</li> <li>Up to 3.8 GHz core speeds (4 cores)</li> <li>Two UPI links up to 10.4 GT/s each</li> <li>Up to 30.25 MB cache</li> <li>Up to 2933 MHz memory speed</li> <li>1st Gen Intel Xeon processors are also supported.</li> </ul>
Chipset	Intel C622
Memory	Up to 12 DIMM sockets (6 DIMMs per processor; six memory channels per processor with one DIMM per channel). Support for RDIMMs and LRDIMMs. Memory types cannot be intermixed. Memory speed up to 2933 MHz depending on the processor selected.
Persistent memory	Not supported
Memory protection	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.
Memory capacity	Up to 768 GB with 12x 64 GB RDIMMs (Up to 384 GB per processor)
Drive bays	<ul> <li>4 LFF SATA Simple Swap drive bays</li> <li>4 LFF SAS/SATA hot-swap drive bays</li> <li>8 SFF SAS/SATA hot-swap drive bays</li> </ul>
Internal storage capacity	<ul> <li>2.5-inch drives: <ul> <li>122.88TB using 8x 15.36TB 2.5-inch SAS/SATA SSDs</li> <li>19.2TB using 8x 2.4TB 2.5-inch HDDs</li> </ul> </li> <li>3.5-inch drives: <ul> <li>80TB using 4x 20TB 3.5-inch HDDs</li> <li>30.72TB using 4x 7.68TB 3.5-inch SAS/SATA SSDs</li> </ul> </li> </ul>
Storage controller	<ul> <li>6 Gb Onboard SATA AHCI</li> <li>6 Gb Onboard SATA RAID (Intel RSTe)</li> <li>12 Gb SAS/SATA RAID adapters with up to 8GB flash-backed cache</li> <li>12 Gb SAS/SATA HBA (non-RAID)</li> </ul>
Optical drive bays	None. Support for an external USB DVD RW Optical Disk Drive (SeeOptical drives).
Network interfaces	<ul> <li>2x Integrated 1 GbE RJ-45 ports (no 10/100 Mb support)</li> <li>Onboard LOM slot for up to two additional 1/10 Gb Ethernet ports:         <ul> <li>2x 1 GbE RJ-45 ports (no 10/100 Mb support)</li> <li>2x 10 GbE RJ-45 ports (no 10/100 Mb support)</li> <li>2x 10 GbE SFP+ ports (no 10/100 Mb support)</li> <li>2x 10 GbE SFP+ ports (no 10/100 Mb support)</li> </ul> </li> <li>Optional Mezzanine LOM (ML2) slot for dual-port 10 GbE cards with SFP+ or RJ-45 connectors.</li> </ul>
	• 1x RJ-45 10/100/1000 Mb Ethernet systems management port.
I/O expansion slots	<ul> <li>Up to three slots depending on the riser cards installed. The slots are as follows:</li> <li>Slot 1: PCle 3.0 x8; low profile</li> <li>Slot 2: PCle 3.0 x16 or ML2 x8; low profile or full-height, half-length</li> <li>Slot 3: PCle 3.0 x8 or x16; low profile</li> </ul>
	PCIe x16 slot 3 requires the second processor to be installed.
GPUs	Not supported

Attribute	Specification
Ports	<ul> <li>Front: 1x USB 2.0 port with XClarity Controller access and 1x USB 3.0 port; optional 1x VGA port.</li> </ul>
	<ul> <li>Rear: 2x USB 3.0 ports and 1x VGA port; optional 1x DB-9 serial port.</li> </ul>
Cooling	Four (one processor) or six (two processors) non-hot-swap 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) and power supplies.
Systems management	XClarity Controller (XCC) Standard, Advanced, or Enterprise (Pilot 4 chip), proactive platform alerts, 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).
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 (7X07) or three-year (7X08) 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 kg (35.3 lb)

# Models

ThinkSystem SR530 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 SR530 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 SR530, 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 SR530 server.

#### Table 2. Base CTO models

Description		Machine Type/Model for HPC and Al
ThinkSystem SR530 - 3 year Warranty	7X08CTO1WW	7X08CTOLWW
ThinkSystem SR530 - 1 year Warranty	7X07CTO1WW	7X07CTOLWW

The following table lists the base chassis for CTO models of the SR530 server.

There are currently two base feature codes for both the 2.5-inch and 3.5-inch chassis. The "v2" bases include the new SR530 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 coo	Base feature codes - suitable for all configurations except those with a RAID 9350 adapter							
AV0T	ThinkSystem SR530 3.5" Chassis with 4 Bays							
AV0S	ThinkSystem SR530 2.5" Chassis with 8 Bays							
Base feature coo Air Duct Kit v2)	des - suitable for all configurations including ones with a RAID 9350 adapter (includes the SR530							
BNPS	ThinkSystem SR530 3.5" Chassis with 4 Bays v2							
BNPR	ThinkSystem SR530 2.5" Chassis with 8 Bays v2							

Withdrawn models with 1st Gen processors: For the preconfigured models with 1st Gen processors that are now withdrawn, see the following Gen 1 product guide: https://lenovopress.com/lp0639-thinksystem-sr530-server-xeon-sp-gen-1

The following tables list the available models, grouped by region.

• Models for Australia and New Zealand

- Models for South East Asian countries (ASEAN)
- Models for Brazil
- Models for EMEA region
- Models for Hong Kong, Taiwan, Korea (HTK)
- Models for India
- Models for Japan
- Models for Latin American countries (except Brazil)

Refer to the Specifications section for information about standard features of the server.

Common to all models:

• All models indicated as having the 750W power supply are using the Platinum power supply

#### Models for Australia and New Zealand

Table /	Models f	for Australia	and Now 7	baland
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Model	Intel Xeon processor†	Memory	RAID	Drive bays and drives	LOM	Slots	Power supply	Front VGA	хсс	Rail kit
Standard mode	ls with a 1-year wa	arranty (machi	ine type	7X07)				•		
7X07A00VAU	1x Bronze 3204 6C 85W 1.9G	1x 16GB 2Rx82666	Option	Option 2.5"/8, Open bay	Open	Open	1x 550W	Yes	Std	Slide
Standard mode	els with a 3-year wa	arranty (machi	ine type	7X08)						
7X08A085AU	1x Bronze 3204 6C 85W 1.9G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A099AU	1x Bronze 3204 6C 85W 1.9G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A06YAU	1x Silver 4208 8C 85W 2.1G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A071AU	1x Silver 4208 8C 85W 2.1G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A080AU	1x Silver 4210 10C 85W 2.2G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08XAU	1x Silver 4210 10C 85W 2.2G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A09KAU	1x Silver 4210 10C 85W 2.2G	1x 16GB 2Rx82933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide CMA
7X08A09MAU	1x Silver 4210 10C 85W 2.2G	1x 32GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide CMA
7X08A09NAU	1x Silver 4210 10C 85W 2.2G	1x 16GB 2Rx82933	930-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide CMA
7X08A07DAU	1x Silver 4214 12C 85W 2.2G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08CAU	1x Silver 4214 12C 85W 2.2G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07XAU	1x Silver 4215 8C 85W 2.5G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08NAU	1x Silver 4215 8C 85W 2.5G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07EAU	1x Silver 4216 16C 100W 2.1G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07VAU	1x Silver 4216 16C 100W 2.1G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08GAU	1x Gold 5215 10C 85W 2.5G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt

Model	Intel Xeon processor†	Memory	RAID	Drive bays and drives	LOM	Slots	Power supply	Front VGA	хсс	Rail kit
7X08A08RAU	1x Gold 5215 10C 85W 2.5G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07GAU	1x Gold 5217 8C 115W 3.0G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08JAU	1x Gold 5217 8C 115W 3.0G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A076AU	1x Gold 5218 16C 125W 2.3G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08BAU	1x Gold 5218 16C 125W 2.3G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08LAU	1x Gold 5220 18C 125W 2.2G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A092AU	1x Gold 5220 18C 125W 2.2G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A06XAU	1x Gold 6230 20C 125W 2.1G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07BAU	1x Gold 6230 20C 125W 2.1G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
TopSeller mode	els with a 3-year wa	arranty (mach	ine type	7X08)						
7X08A09GAU	1x Bronze 3204 6C 85W 1.9G	1x 16GB 2Rx82933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide CMA
7X08A09HAU	1x Silver 4208 8C 85W 2.1G	1x 16GB 2Rx82933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide CMA
7X08A09LAU	1x Silver 4208 8C 85W 2.1G	1x 16GB 2Rx82933	930-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide CMA
7X08A0BCAU	1x Silver 4208 8C 85W 2.1G	1x 16GB 2Rx82933	Option	Option 2.5"/8, Open bay	Open	x8LP, x16FH	1x 750W	Yes	Ent	Slide
7X08A0BMAU	1x Silver 4208 8C 85W 2.1G	1x 16GB 2Rx82933	Option	Option 2.5"/8, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide CMA
7X08A09JAU	1x Silver 4210 10C 85W 2.2G	1x 32GB 2933	930-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide CMA
7X08A0BAAU	1x Silver 4210 10C 85W 2.2G	1x 32GB 2933	Option	Option 2.5"/8, Open bay	Open	x8LP, x16FH	1x 750W	Yes	Ent	Slide
7X08A0BNAU	1x Silver 4210 10C 85W 2.2G	1x 32GB 2933	Option	Option 2.5"/8, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide CMA
7X08A0B0AU	1x Silver 4216 16C 100W 2.1G	1x 32GB 2933	930-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16FH	1x 550W	Yes	Ent	Slide
7X08A0BBAU	1x Silver 4216 16C 100W 2.1G	1x 32GB 2933	Option	Option 2.5"/8, Open bay	Open	x8LP, x16FH	1x 750W	Yes	Ent	Slide
7X08A0BLAU	1x Silver 4216 16C 100W 2.1G	1x 32GB 2933	Option	Option 2.5"/8, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide CMA

† Processor description: Processor model, number of cores, thermal design power (TDP), core frequency

## Models for South East Asian countries (ASEAN)

Table 5. Models for South East Asian countries (A	ASEAN)
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Model	Intel Xeon processor†	Memory	RAID	Drive bays and drives	LOM	Slots	Power supply	Front VGA	хсс	Rail kit		
Standard mode	Standard models with a 3-year warranty (machine type 7X08)											
7X08A086SG	1x Bronze 3204 6C 85W 1.9G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt		

Model	Intel Xeon processor†	Memory	RAID	Drive bays and drives	LOM	Slots	Power supply	Front VGA	хсс	Rail kit
7X08A099SG	1x Bronze 3204 6C 85W 1.9G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A06ZSG	1x Silver 4208 8C 85W 2.1G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08ZSG	1x Silver 4208 8C 85W 2.1G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A081SG	1x Silver 4210 10C 85W 2.2G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08XSG	1x Silver 4210 10C 85W 2.2G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07DSG	1x Silver 4214 12C 85W 2.2G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07ZSG	1x Silver 4214 12C 85W 2.2G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A083SG	1x Silver 4215 8C 85W 2.5G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A093SG	1x Silver 4215 8C 85W 2.5G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07ESG	1x Silver 4216 16C 100W 2.1G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07VSG	1x Silver 4216 16C 100W 2.1G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A073SG	1x Gold 5215 10C 85W 2.5G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08RSG	1x Gold 5215 10C 85W 2.5G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07PSG	1x Gold 5217 8C 115W 3.0G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A097SG	1x Gold 5217 8C 115W 3.0G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07TSG	1x Gold 5218 16C 125W 2.3G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08BSG	1x Gold 5218 16C 125W 2.3G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08LSG	1x Gold 5220 18C 125W 2.2G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A09FSG	1x Gold 5220 18C 125W 2.2G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07BSG	1x Gold 6230 20C 125W 2.1G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A091SG	1x Gold 6230 20C 125W 2.1G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt

## **Models for Brazil**

Table 6. Models for Brazil

Model	Intel Xeon processor†	Memory	RAID	Drive bays and drives	LOM	Slots	Power supply	Front VGA	хсс	Rail kit
TopSeller mod	els with a 3-year war	ranty (machine	type 7X0	8)						
7X08A09YBR	1x Bronze 3204 6C 85W 1.9G	1x 16GB 1Rx42933	530-8i	4x 3.5" SAS, Open bay	2x1Gb	x8LP, x16FH	1x 550W	Yes	Std	Slide
7X08A09ZBR	1x Silver 4208 8C 85W 2.1G	1x 16GB 1Rx42933	530-8i	4x 3.5" SAS, Open bay	2x1Gb	x8LP, x16FH	1x 550W	Yes	Std	Slide
7X08A0APBR	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	730-8i 2GB	8x 2.5" SAS, Open bay	2x1Gb	x8LP, x16FH	1x 550W	Opt	Std	Slide

† Processor description: Processor model, number of cores, thermal design power (TDP), core frequency

## Models for EMEA region

Table 7. Models for EMEA region

Model	Intel Xeon processor†	Memory	RAID	Drive bays and drives	LOM	Slots	Power supply	Front VGA	хсс	Rail kit
Standard mode	ls with a 3-year wa	rranty (machi	ne type	7X08)						
7X08A0BFEA	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	Option	Option 2.5"/8, Open bay, M.2 Single	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X08A0BHEA	1x Silver 4208 8C 85W 2.1G	1x 16GB 2Rx82933	5350- 8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X08A0BQEA	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	Option	Option 2.5"/8, Open bay, M.2 Dual, 2x 128GB M.2	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X08A0BEEA	1x Silver 4210R 10C 100W 2.4G	1x 16GB 2Rx82933	5350- 8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X08A0BJEA	1x Silver 4210R 10C 100W 2.4G	1x 32GB 2933	5350- 8i	8x 2.5" SAS, 2x 240GB S4510	Open	x8LP, x16LP	2x 750W	Opt	Ent	Slide
7X08A0BKEA	1x Silver 4210R 10C 100W 2.4G	1x 32GB 2933	5350- 8i	8x 2.5" SAS, 2x 480GB MV SSD	Open	x8LP, x16LP	2x 750W	Opt	Ent	Slide
7X08A0BPEA	1x Silver 4210R 10C 100W 2.4G	1x 16GB 2Rx82933	5350- 8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide

† Processor description: Processor model, number of cores, thermal design power (TDP), core frequency

#### Models for Hong Kong, Taiwan, Korea (HTK)

Table 8. Models for Hong Kong, Taiwan, Korea (HTK)

Model	Intel Xeon processor†	Memory	RAID	Drive bays and drives	LOM	Slots	Power supply	Front VGA	хсс	Rail kit
Standard mode	els with a 3-year war	ranty (machin	e type 7>	K08)						
7X08A085CN	1x Bronze 3204 6C 85W 1.9G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A09CCN	1x Bronze 3204 6C 85W 1.9G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt

Model	Intel Xeon processor†	Memory	RAID	Drive bays and drives	LOM	Slots	Power supply	Front VGA	хсс	Rail kit
7X08100VCN	1x Silver 4208 8C 85W 2.1G	2x 16GB 2Rx82933	930-8i	8x 2.5" SAS, 2x 1.2TB 10K, 2x 240GB S4510, 1x Ext DVDRW	2x1Gb	x8LP, x16LP	2x 750W	Opt	Std	Slide
7X08A06YCN	1x Silver 4208 8C 85W 2.1G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A071CN	1x Silver 4208 8C 85W 2.1G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A0B9CN	1x Silver 4208 8C 85W 2.1G	2x 16GB 2Rx82933	930-8i	8x 2.5" SAS, 2x 1.2TB 10K, 4x 480GB PM883, 1x Ext DVDRW	2x1Gb	x8LP, x16LP, x8LP	2x 750W	Opt	Ent	Slide
7X08A080CN	1x Silver 4210 10C 85W 2.2G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A09BCN	1x Silver 4210 10C 85W 2.2G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A082CN	1x Silver 4214 12C 85W 2.2G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08CCN	1x Silver 4214 12C 85W 2.2G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07XCN	1x Silver 4215 8C 85W 2.5G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08NCN	1x Silver 4215 8C 85W 2.5G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x Opt S 750W		Std	Opt
7X08A07NCN	1x Silver 4216 16C 100W 2.1G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A09DCN	1x Silver 4216 16C 100W 2.1G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A088CN	1x Gold 5215 10C 85W 2.5G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08GCN	1x Gold 5215 10C 85W 2.5G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07GCN	1x Gold 5217 8C 115W 3.0G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08JCN	1x Gold 5217 8C 115W 3.0G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A076CN	1x Gold 5218 16C 125W 2.3G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A087CN	1x Gold 5218 16C 125W 2.3G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08MCN	1x Gold 5220 18C 125W 2.2G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A092CN	1x Gold 5220 18C 125W 2.2G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A06XCN	1x Gold 6230 20C 125W 2.1G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07KCN	1x Gold 6230 20C 125W 2.1G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt

## Models for India

Table 9. Models for India

Medel	Intel Xeon	Mamain		Drive bays		Slata	Power	Front		Rail
Model Standard mode	processor† Is with a 3-year warrar	Memory	RAID	and drives	LOM	Slots	supply	VGA	XCC	kit
7X08A07USG	1x Bronze 3204 6C	1x 8GB	530-8i	8x 2.5" SAS,	Open	x8LP,	1x	Opt	Std	Opt
7X08A0705G	85W 1.9G	2933	530-61	Open bay	Open	x8LP, x16LP	750W	Ορι	510	Ορι
7X08A08TSG	1x Bronze 3204 6C 85W 1.9G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07WSG	1x Silver 4208 8C 85W 2.1G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A084SG	1x Silver 4208 8C 85W 2.1G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A079SG	1x Silver 4210 10C 85W 2.2G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07YSG	1x Silver 4210 10C 85W 2.2G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A06VSG	1x Silver 4214 12C 85W 2.2G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07SSG	1x Silver 4214 12C 85W 2.2G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07JSG	1x Silver 4215 8C 85W 2.5G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A09ASG	1x Silver 4215 8C 85W 2.5G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x Opt 750W		Std	Opt
7X08A08PSG	1x Silver 4216 16C 100W 2.1G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x Opt 750W		Std	Opt
7X08A098SG	1x Silver 4216 16C 100W 2.1G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W			Opt
7X08A077SG	1x Gold 5215 10C 85W 2.5G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A095SG	1x Gold 5215 10C 85W 2.5G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A07RSG	1x Gold 5217 8C 115W 3.0G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08VSG	1x Gold 5217 8C 115W 3.0G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A06USG	1x Gold 5218 16C 125W 2.3G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08WSG	1x Gold 5218 16C 125W 2.3G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x Opt Sto 750W		Std	Opt
7X08A089SG	1x Gold 5220 18C 125W 2.2G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A094SG	1x Gold 5220 18C 125W 2.2G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A08KSG	1x Gold 6230 20C 125W 2.1G	1x 8GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt
7X08A09ESG	1x Gold 6230 20C 125W 2.1G	1x 8GB 2933	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Std	Opt

## Models for Japan

Table 10. Models for Japan

Model	Intel Xeon processor†	Memory	RAID	Drive bays and drives	LOM	Slots	Power supply	Front VGA	хсс	Rail kit
Standard mode	ls with a 3-year warr	anty (machine	type 7X0	8)						
7X08A0AWJP	1x Gold 5218R 20C 125W 2.1G	1x 16GB 1Rx42666	Option	Option 2.5"/8, Open bay	Open	Open	1x 550W	Opt	Adv	Slide
TopSeller mode	els with a 3-year war	anty (machine	e type 7X0	)8)						
7X08A08AJP	1x Bronze 3204 6C 85W 1.9G	1x 16GB 1Rx42666	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A08DJP	1x Bronze 3204 6C 85W 1.9G	1x 16GB 1Rx42666	730-8i 2GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A0AXJP	1x Bronze 3206R 8C 85W 1.9G	1x 16GB 1Rx42666	Option	Option 2.5"/8, Open bay	Open	Open	1x 550W	Opt	Adv	Slide
7X08A08EJP	1x Silver 4208 8C 85W 2.1G	1x 16GB 1Rx42666	730-8i 2GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A07HJP	1x Silver 4210 10C 85W 2.2G	1x 16GB 1Rx42666	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A08SJP	1x Silver 4210 10C 85W 2.2G			1x 550W	Opt	Adv	Slide			
7X08A0AYJP	1x Silver 4210R 10C 100W 2.4G	1x 16GB 1Rx42666	Option	Option 2.5"/8, Open bay	Open	Open	1x 550W	Opt	Adv	Slide
7X08A08QJP	1x Silver 4214 12C 85W 2.2G	1x 16GB 1Rx42666	730-8i 2GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A0AVJP			Option 2.5"/8, Open bay	Open	Open	1x 550W	Opt	Adv	Slide	
7X08A07QJP	1x Silver 4215 8C 85W 2.5G	1x 16GB 1Rx42666	730-8i 2GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A07LJP	1x Silver 4216 16C 100W 2.1G	1x 16GB 1Rx42666	530-8i	4x 3.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A07MJP	1x Silver 4216 16C 100W 2.1G	1x 16GB 1Rx42666	730-8i 2GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A08HJP	1x Gold 5215 10C 85W 2.5G	1x 16GB 1Rx42666	730-8i 2GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A08FJP	1x Gold 5217 8C 115W 3.0G	1x 16GB 1Rx42666	730-8i 2GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A08YJP	1x Gold 5218 16C 125W 2.3G	1x 16GB 1Rx42666	730-8i 2GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A090JP	1x Gold 5220 18C 125W 2.2G	1x 16GB 1Rx42666	730-8i 2GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A08UJP	1x Gold 5222 4C 105W 3.8G	1x 16GB 1Rx42666	730-8i 2GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide
7X08A096JP	1x Gold 6230 20C 125W 2.1G	1x 16GB 1Rx42666	730-8i 2GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 550W	Opt	Adv	Slide

## Models for Latin American countries (except Brazil)

Model	Intel Xeon processor†	Memory	RAID	Drive bays and drives	LOM	Slots	Power supply	Front VGA	хсс	Rail kit
TopSeller mod	els with a 3-year wa	arranty (machi	ne type 72	×08)						
7X08A09WLA	1x Bronze 3204 6C 85W 1.9G	1x 16GB 1Rx42933	530-8i	4x 3.5" SAS, Open bay	2x1Gb	x8LP, x16FH	1x 550W	Yes	Std	Slide
7X08A09XLA	1x Silver 4208 8C 85W 2.1G	1x 16GB 1Rx42933	530-8i	4x 3.5" SAS, Open bay	2x1Gb	x8LP, x16FH	1x 550W	Yes	Std	Slide
7X08A0AQLA	1x Silver 4208 8C 85W 2.1G	1x 16GB 2Rx82933	730-8i 2GB	8x 2.5" SAS, Open bay	2x1Gb	x8LP, x16LP	1x 750W	Yes	Std	Slide

Table 11. Models with a 3-year warranty for Latin American countries (except Brazil)

† Processor description: Processor model, number of cores, thermal design power (TDP), core frequency

## Processors

The SR530 server supports one or two Intel Xeon Bronze, Silver, Gold, or Platinum processors of up to 125 W TDP. The following table lists the specifications of the processors for the SR530 server.

**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)
- RAS: Reliability, Availability, and Serviceability
  - Std: Standard RAS
  - Adv: Advanced RAS

Table 13. Processor specifications

CPU model	Cores / threads	Core speed (Base / TB Max)	Cache	Max DDR4 speed	Max memory capacity per socket	UPI speed	TDP	нт	ТВ	VT-x	VT-d	SST-PP	FMA units	RAS
Intel Xe	on Bronz	e processors												
3204	6/6	1.9 / 1.9 GHz	8.25 MB	2133 MHz	1 TB	9.6 GT/s	85 W	Ν	Ν	Υ	Υ	Ν	1	Std
3206R	8/8	1.9 / 1.9 GHz	11 MB	2133 MHz	1 TB	9.6 GT/s	85 W	Ν	Ν	Υ	Υ	Ν	1	
Intel Xe	on Silver	processors												
4208	8 / 16	2.1 / 3.2 GHz	11 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Υ	Υ	Υ	Υ	Ν	1	Std
4209T	8 / 16	2.2 / 3.2 GHz	11 MB	2400 MHz	1 TB	9.6 GT/s	70 W	Υ	Υ	Υ	Υ	Ν	1	Std
4210	10 / 20	2.2 / 3.2 GHz	13.75 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Υ	Υ	Υ	Υ	Ν	1	Std
4210R	10 / 20	2.4 / 3.2 GHz	13.75 MB	2400 MHz	1 TB	9.6 GT/s	100 W	Υ	Υ	Υ	Υ	Ν	1	Std
4214	12 / 24	2.2 / 3.2 GHz	16.5 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Υ	Υ	Υ	Υ	Ν	1	Std
4214R	12 / 24	2.4 / 3.5 GHz	16.5 MB	2400 MHz	1 TB	9.6 GT/s	100 W	Υ	Υ	Υ	Υ	Ν	1	Std
4214Y	12 / 24	2.2 / 3.2 GHz	16.5 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Υ	Υ	Υ	Υ	Υ	1	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	RAS
	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	Υ	Υ	Υ	Ν	1	Std
4216	16 / 32	2.1 / 3.2 GHz	22 MB	2400 MHz	1 TB	9.6 GT/s	100 W	Υ	Υ	Υ	Υ	Ν	1	Std
Intel Xe	on Gold p	processors												
5215	10 / 20	2.5 / 3.4 GHz	13.75 MB	2666 MHz	1 TB	10.4 GT/s	85 W	Υ	Υ	Υ	Υ	Ν	1	Adv
5215L	10 / 20	2.5 / 3.4 GHz	13.75 MB	2666 MHz	4.5 TB	10.4 GT/s	85 W	Y	Υ	Υ	Υ	Ν	1	Adv
5217	8 / 16	3.0 / 3.7 GHz	11 MB	2666 MHz	1 TB	10.4 GT/s	115 W	Υ	Υ	Υ	Υ	Ν	1	Adv
5218	16 / 32	2.3 / 3.9 GHz	22 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Υ	Υ	Υ	Υ	Ν	1	Adv
5218B	16 / 32	2.3 / 3.9 GHz	22 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Υ	Υ	Υ	Υ	Ν	1	Adv
5218R	20 / 40	2.1 / 4.0 GHz	27.5 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Υ	Υ	Υ	Υ	Ν	1	Adv
5218T	16 / 32	2.1 / 3.8 GHz	22 MB	2667 MHz	1 TB	10.4 GT/s	105 W	Υ	Υ	Υ	Υ	Ν	1	Adv
5220	18 / 36	2.2 / 3.9 GHz	24.75 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Υ	Υ	Υ	Υ	Ν	1	Adv
5220S	18 / 36	2.7 / 3.9 GHz	24.75 MB	2667 MHz	1 TB	10.4 GT/s	125 W	Υ	Υ	Υ	Υ	Ν	1	Adv
5220T	18 / 36	1.9 / 3.9 GHz	24.75 MB	2667 MHz	1 TB	10.4 GT/s	105 W	Υ	Υ	Υ	Υ	Ν	1	Adv
5222	4/8	3.8 / 3.9 GHz	16.5 MB	2933 MHz	1 TB	10.4 GT/s	105 W	Υ	Υ	Υ	Υ	Ν	2	Adv
6209U	20 / 40	2.1 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	N/A	125 W	Υ	Υ	Υ	Υ	Ν	2	Adv
6222V	20 / 40	1.8 / 3.6 GHz	27.5 MB	2400 MHz	1 TB	10.4 GT/s	115 W	Υ	Υ	Υ	Υ	Ν	2	Adv
6226	12 / 24	2.7 / 3.7 GHz	19.25 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Υ	Υ	Υ	Υ	Ν	2	Adv
6230	20 / 40	2.1 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Υ	Υ	Υ	Υ	Ν	2	Adv
6230N	20 / 40	2.3 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Υ	Υ	Υ	Υ	Ν	2	Adv
6230T	20 / 40	2.1 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Υ	Υ	Υ	Υ	Ν	2	Adv
6238T	22 / 44	1.9 / 3.7 GHz	30.25 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Υ	Υ	Υ	Υ	Ν	2	Adv
Intel Xe	on Platin	um processors				•								
8253	16 / 32	2.2 / 3.0 GHz	22 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Υ	Υ	Υ	Υ	Ν	2	Adv
8256	4/8	3.8 / 3.9 GHz	16.5 MB	2933 MHz	1 TB	10.4 GT/s	105 W	Y	Υ	Υ	Υ	Ν	2	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 SR530 server models that come 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 system fans are not included and need to be purchased with the second processor (see Cooling for details).

	Feature	
	code*	Description
Intel Xeon Bror	1	
4XG7A37939		SR530/SR570/SR630 Intel Xeon Bronze 3204 6C 85W 1.9GHz Processor w/o FAN
	B7N3	SR530/SR570/SR630 Intel Xeon Bronze 3206R 8C 85W 1.9GHz Processor w/o FAN
Intel Xeon Silve		sors
4XG7A37936		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
4XG7A37924	B4HP	SR530/SR570/SR630 Intel Xeon Silver 4216 16C 100W 2.1GHz Processor w/o FAN
Intel Xeon Gold	d processo	ors
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
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**	B6CX	Intel Xeon Gold 6209U 20C 125W 2.1GHz Processor
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
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
4XG7A38007	B6CP	SR530/SR570 Intel Xeon Gold 6230T 20C 125W 2.1GHz Processor w/o FAN
4XG7A37908	B4P2	SR530/SR570 Intel Xeon Gold 6238T 22C 125W 1.9GHz Processor w/o FAN
Intel Xeon Plat	inum proc	essors
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

Table 14. Processor options

\* 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.

#### Continued support for 1st Gen Intel Xeon Scalable processors

The SR530 also continues to support the 1st Gen Intel Xeon Scalable processors (formerly codenamed "Skylake") listed in the following table.

	Feature	
Part number	code	Description
4XG7A07206	AWEH	ThinkSystem SR530 Intel Xeon Bronze 3106 8C 85W 1.7GHz Processor Option Kit
4XG7A07204	AWET	ThinkSystem SR530 Intel Xeon Silver 4109T 8C 70W 2.0GHz Processor Option Kit
4XG7A07203	AWEE	ThinkSystem SR530 Intel Xeon Silver 4110 8C 85W 2.1GHz Processor Option Kit
4XG7A09059	AWES	ThinkSystem SR530 Intel Xeon Silver 4114T 10C 85W 2.2GHz Processor Option Kit
4XG7A07200	AWER	ThinkSystem SR530 Intel Xeon Silver 4116 12C 85W 2.1GHz Processor Option Kit
4XG7A09058	AWEA	ThinkSystem SR530 Intel Xeon Silver 4116T 12C 85W 2.1GHz Processor Option Kit
4XG7A07189	No CTO*	ThinkSystem SR530 Intel Xeon Gold 5115 10C 85W 2.4GHz Processor Option Kit
4XG7A07188	AWEP	ThinkSystem SR530 Intel Xeon Gold 5118 12C 105W 2.3GHz Processor Option Kit
4XG7A09057	AWEQ	ThinkSystem SR530 Intel Xeon Gold 5119T 14C 85W 1.9GHz Processor Option Kit
4XG7A07186	AWE8	ThinkSystem SR530 Intel Xeon Gold 5120T 14C 105W 2.2GHz Processor Option Kit
4XG7A07180	AWEL	ThinkSystem SR530 Intel Xeon Gold 6126 12C 125W 2.6GHz Processor Option Kit
4XG7A07185	AWE5	ThinkSystem SR530 Intel Xeon Gold 6126T 12C 125W 2.6GHz Processor Option Kit
4XG7A07184	AWEN	ThinkSystem SR530 Intel Xeon Gold 6130 16C 125W 2.1GHz Processor Option Kit
4XG7A07183	AWE4	ThinkSystem SR530 Intel Xeon Gold 6130T 16C 125W 2.1GHz Processor Option Kit
4XG7A07182	AWDZ	ThinkSystem SR530 Intel Xeon Gold 6138 20C 125W 2.0GHz Processor Option Kit
4XG7A09056	AWEM	ThinkSystem SR530 Intel Xeon Gold 6138T 20C 125W 2.0GHz Processor Option Kit
4XG7A07181	No CTO*	ThinkSystem SR530 Intel Xeon Platinum 8153 16C 125W 2.0GHz Processor Option Kit

Table 15. Long-life 1st Gen Intel Xeon Scalable processors

\* 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

#### Memory

The SR530 server supports up to 6 TruDDR4 memory RDIMMs when one processor is installed and up to 12 RDIMMs when two processors are installed for a total of up to 768 GB of memory capacity (up to 384 TB per processor). Each processor has six memory channels, and there is a one DIMM per channel.

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 SR530 server. The table also indicates which processor generation is supported for each memory option.

Part number	Feature code	Description	Maximum quantity*	Gen 1 CPU	Gen 2 CPU	
RDIMMs - 293	3 MHz					
4ZC7A08706	B4H1	ThinkSystem 8GB TruDDR4 2933MHz (1Rx8 1.2V) RDIMM	6 / 12	No	Yes	
4ZC7A08707	B4LY	ThinkSystem 16GB TruDDR4 2933MHz (1Rx4 1.2V) RDIMM	6 / 12	No	Yes	
4ZC7A08708	B4H2	ThinkSystem 16GB TruDDR4 2933MHz (2Rx8 1.2V) RDIMM	6 / 12	No	Yes	
4ZC7A08709	B4H3	ThinkSystem 32GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM	6 / 12 No Ye			
4ZC7A08710	B4H4	ThinkSystem 64GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM	6/12 No Ye		Yes	
RDIMMs - 266	6 MHz					
7X77A01301	AUU1	ThinkSystem 8GB TruDDR4 2666 MHz (1Rx8 1.2V) RDIMM	6 / 12	Yes	No	
7X77A01302	AUNB	ThinkSystem 16GB TruDDR4 2666 MHz (1Rx4 1.2V) RDIMM	6 / 12	Yes	Yes	
7X77A01303	AUNC	ThinkSystem 16GB TruDDR4 2666 MHz (2Rx8 1.2V) RDIMM	6 / 12	Yes	Yes	
7X77A01304	AUND	ThinkSystem 32GB TruDDR4 2666 MHz (2Rx4 1.2V) RDIMM	6 / 12	Yes	Yes	
LRDIMMs - 26	666 MHz		•			
7X77A01305	AUNE	ThinkSystem 64GB TruDDR4 2666 MHz (4Rx4 1.2V) LRDIMM	6 / 12	Yes	No	

Table 16. Memory options

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

#### **Configuration notes:**

- All RDIMMs in the server operate at the same speed, which is determined as the lowest value of:
  - RDIMM rated speed (2666 MHz or 2933 MHz).
  - Memory speed supported by the specific processor (2133 MHz, 2400 MHz, 2666 MHz, or 2933 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).
- 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.

# Internal storage

The SR530 server supports the following internal drive bay configurations:

- 1. 4 LFF SATA Simple Swap drive bays
- 2. 4 LFF SAS/SATA hot-swap drive bays
- 3. 8 SFF SAS/SATA hot-swap drive bays

In addition, the SR530 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.

1. 4 LFF SATA Simple Swap drive bays
2. 4 LFF SAS/SATA hot-swap drive bays
SAS/SATA
3. 8 SFF SAS/SATA hot-swap drive bays
SAS/SATA

Figure 6. 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.

Part number	Feature code	Description	Maximum quantity
None*	BMU9	ThinkSystem 1U 3.5" SATA 4-Bay Simple Swap Backplane v2	1
None*	AV0Y	ThinkSystem 1U 3.5" SATA 4-Bay Simple Swap Backplane	1
None*	AUW8	ThinkSystem 3.5" SATA/SAS 4-Bay Backplane	1

Table 17. Internal storage options

Part number	Feature code	Description	Maximum quantity
4XH7A80455	AUWB	ThinkSystem SR530/SR630 2.5" SATA/SAS 8-Bay Backplane Kit v2	
7XH7A05896	AUWB	ThinkSystem SR530/SR630 2.5" SATA/SAS 8-Bay Backplane Kit	1

\* CTO only; not available as a field upgrade

#### Supported drive bay combinations

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

Table 18. Internal storage configurations

	Backplane kit type and quantity		
Drive bay configuration	4x 3.5" SATA/SAS	8x 2.5" SATA/SAS	Storage controller type and quantity*
4x 3.5" chassis (Feature code AV0T)			
4x 3.5-in. SATA Simple Swap	0	0	Onboard AHCI (non-RAID) / Intel RSTe (RAID) (4)
4x 3.5-in. SAS/SATA hot-swap	1	0	1x RAID 8i or HBA 8i (4)
8x 2.5" chassis (Feature code AV0S)			
8x 2.5-in. SAS/SATA hot-swap	0	1	1x RAID 8i or HBA 8i (8)
			1x RAID 16i or HBA 16i (8)

\* The number in brackets (x) specifies the quantity of drive bays connected to each of the controllers.

## Field upgrades

Models without any drive bays are based on the 8x 2.5" chassis (feature code AV0S). Such models can be upgraded in the field to have 8x 2.5" SAS/SATA hot-swap drive bays.

The options are listed in the following table. The backplane kit contains the necessary cables when connected to an X30 adapter (930, 730 or 530 RAID adapter, or 430 HBA). However if you are connecting the backplane to an X40 adapter (940 RAID or 440 HBA), you will *also* require an additional X40 RAID Cable Kit which includes the replacement cables needed for these adapters.

Table 19. Field upgrades - backplanes

Part number	Description
4XH7A80455	ThinkSystem SR530/SR630 2.5" SATA/SAS 8-Bay Backplane Kit v2
7XH7A05896	ThinkSystem SR530/SR630 2.5" SATA/SAS 8-Bay Backplane Kit
4XH7A61096	ThinkSystem SR530/SR570/SR630 2.5" SAS/SATA 8-Bay X40 RAID Cable Kit (contains replacement SAS cable for use with X40 adapter)

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:

Part number	Feature code	Description
4M17A61350	BNZ2	ThinkSystem SR530 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.

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.

Part number	Feature code	Description			
Security Key Life	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 Life	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			

Table 22. FoD upgrades for SKLM support

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

Table 23. 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 SR530 server.

Part number	Feature code	Description	Maximum quantity	I/O slots supported
6 Gbps SATA	controllers			
Onboard*	Onboard*	Onboard AHCI (non-RAID) / Intel RSTe (RAID)	1	-
12 Gb SAS/SA	TA RAID co	ontrollers		
7Y37A01082	AUNG	ThinkSystem RAID 530-8i PCIe 12Gb Adapter	1	1
4Y37A78834	BMFT	ThinkSystem RAID 540-8i PCIe Gen4 12Gb Adapter	1	1
4Y37A72482	BJHK	ThinkSystem RAID 5350-8i PCIe 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
7Y37A01084	AUNJ	ThinkSystem RAID 930-8i 2GB Flash PCIe 12Gb Adapter	1	1
4Y37A72483†	BJHL†	ThinkSystem RAID 9350-8i 2GB Flash PCIe 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
4Y37A09728	B8NY	ThinkSystem RAID 940-8i 4GB Flash PCIe Gen4 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/SA	TA non-RA	ID HBAs		
7Y37A01088	AUNL	ThinkSystem 430-8i SAS/SATA 12Gb HBA	1	1
4Y37A78601	BM51	ThinkSystem 440-8i SAS/SATA PCIe Gen4 12Gb HBA	1	1

Table 24.	RAID	controllers	and HBAs	for	internal	storage
						0.0.0.90

\* 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#sr530-support=SR530

#### **Configuration note:**

- 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 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 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

## 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 12 Gb SAS SSDs
- 2.5-inch hot-swap 6 Gb SATA 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 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.

Table 25. 2.5-inch hot-swap 12 Gb SAS HDDs

	Feature		SED	Maximum
Part number	code	Description	support	Quantity
2.5-inch hot-s	swap HDD	es - 12 Gb SAS 10K		
7XB7A00025	AULZ	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD	No	8
7XB7A00026	AUM0	ThinkSystem 2.5" 900GB 10K SAS 12Gb Hot Swap 512n HDD	No	8
7XB7A00027	AUM1	ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD	No	8
7XB7A00028	AUM2	ThinkSystem 2.5" 1.8TB 10K SAS 12Gb Hot Swap 512e HDD	No	8
7XB7A00069	B0YS	ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD	No	8
2.5-inch hot-s	swap HDD	es - 12 Gb SAS 15K		
7XB7A00021	AULV	ThinkSystem 2.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	No	8
7XB7A00022	AULW	ThinkSystem 2.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	No	8
7XB7A00023	AULX	ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	No	8
2.5-inch hot-s	swap HDD	s - 12 Gb NL SAS		
7XB7A00034	AUM6	ThinkSystem 2.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	8
7XB7A00035	AUM7	ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	8
2.5-inch hot-s	swap SED	HDDs - 12 Gb SAS 10K		
7XB7A00031	AUM5	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD SED	Support	8

#### Table 26. 2.5-inch hot-swap 6 Gb SATA HDDs

Part number	Feature code	Description	-	Maximum Quantity		
2.5-inch hot-s	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	8		
7XB7A00037	AUUJ	ThinkSystem 2.5" 2TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	8		

Deuterunken	Feature	Description	SED	Maximum
Part number	coae	Description	support	Quantity
2.5-inch hot-s	swap SSD	s - 12 Gb SAS - Mixed Use/Mainstream (3-5 DWPD)		
4XB7A17062	B8HU	ThinkSystem 2.5" PM1645a 800GB Mainstream SAS 12Gb Hot Swap SSD	No	8
4XB7A17063	B8J4	ThinkSystem 2.5" PM1645a 1.6TB Mainstream SAS 12Gb Hot Swap SSD	No	8
4XB7A17064	B8JD	ThinkSystem 2.5" PM1645a 3.2TB Mainstream SAS 12Gb Hot Swap SSD	No	8
4XB7A17065	B8JA	ThinkSystem 2.5" PM1645a 6.4TB Mainstream SAS 12Gb Hot Swap SSD	No	8
2.5-inch hot-s	swap SSD	s - 12 Gb SAS - Read Intensive/Entry/Capacity (<3 DWPD)		
4XB7A38175	B91A	ThinkSystem 2.5" PM1643a 960GB Entry SAS 12Gb Hot Swap SSD	No	8
4XB7A38176	B91B	ThinkSystem 2.5" PM1643a 1.92TB Entry SAS 12Gb Hot Swap SSD	No	8
4XB7A17054	B91C	ThinkSystem 2.5" PM1643a 3.84TB Entry SAS 12Gb Hot Swap SSD	No	8
4XB7A17055	B91D	ThinkSystem 2.5" PM1643a 7.68TB Entry SAS 12Gb Hot Swap SSD	No	8
4XB7A17056	BC4R	ThinkSystem 2.5" PM1643a 15.36TB Entry SAS 12Gb Hot Swap SSD	No	8

Table 27. 2.5-inch hot-swap 12 Gb SAS SSDs

## Table 28. 2.5-inch hot-swap 6 Gb SATA SSDs

Part number	Feature code	Description	SED support	Maximum Quantity
2.5-inch hot-s	swap SSD	s - 6 Gb SATA - Mixed Use/Mainstream (3-5 DWPD)		
4XB7A17125	BA7Q	ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	8
4XB7A17126	BA4T	ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	8
4XB7A17127	BA4U	ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	No	8
4XB7A17128	BK7L	ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	No	8
4XB7A17087	B8J1	ThinkSystem 2.5" 5300 240GB Mainstream SATA 6Gb Hot Swap SSD	No	8
4XB7A17088	B8HY	ThinkSystem 2.5" 5300 480GB Mainstream SATA 6Gb Hot Swap SSD	No	8
4XB7A17089	B8J6	ThinkSystem 2.5" 5300 960GB Mainstream SATA 6Gb Hot Swap SSD	No	8
4XB7A17090	B8JE	ThinkSystem 2.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD	No	8
4XB7A17091	B8J7	ThinkSystem 2.5" 5300 3.84TB Mainstream SATA 6Gb Hot Swap SSD	No	8
4XB7A13633	B49L	ThinkSystem 2.5" S4610 240GB Mixed Use SATA 6Gb HS SSD	No	8
4XB7A13634	B49M	ThinkSystem 2.5" S4610 480GB Mixed Use SATA 6Gb HS SSD	No	8
4XB7A13635	B49N	ThinkSystem 2.5" S4610 960GB Mixed Use SATA 6Gb HS SSD	No	8

Part number	Feature code	Description	SED support	Maximum Quantity
4XB7A13636	B49P	ThinkSystem 2.5" S4610 1.92TB Mixed Use SATA 6Gb HS SSD	No	8
4XB7A13637	B49Q	ThinkSystem 2.5" S4610 3.84TB Mixed Use SATA 6Gb HS SSD	No	8
2.5-inch hot-	swap SSD	s - 6 Gb SATA - Read Intensive/Entry (<3 DWPD)		
4XB7A72438	BM8B	ThinkSystem 2.5" PM893 480GB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A72439	BM8A	ThinkSystem 2.5" PM893 960GB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A72440	BM89	ThinkSystem 2.5" PM893 1.92TB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A72441	BM88	ThinkSystem 2.5" PM893 3.84TB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A72442	BM87	ThinkSystem 2.5" PM893 7.68TB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A17072	B99D	ThinkSystem 2.5" S4520 240GB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A17101	BA7G	ThinkSystem 2.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A17102	BA7H	ThinkSystem 2.5" S4520 960GB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A17103	BA7J	ThinkSystem 2.5" S4520 1.92TB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A17104	BK77	ThinkSystem 2.5" S4520 3.84TB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A17105	BK78	ThinkSystem 2.5" S4520 7.68TB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A38271	BCTC	ThinkSystem 2.5" Multi Vendor 240GB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A38272	BCTD	ThinkSystem 2.5" Multi Vendor 480GB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A38273	BCTE	ThinkSystem 2.5" Multi Vendor 960GB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A38274	BCTF	ThinkSystem 2.5" Multi Vendor 1.92TB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A38275	BCTG	ThinkSystem 2.5" Multi Vendor 3.84TB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A17075	B8HV	ThinkSystem 2.5" 5300 240GB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A17076	B8JM	ThinkSystem 2.5" 5300 480GB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A17077	B8HP	ThinkSystem 2.5" 5300 960GB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A17078	B8J5	ThinkSystem 2.5" 5300 1.92TB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A17079	B8JP	ThinkSystem 2.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A17080	B8J2	ThinkSystem 2.5" 5300 7.68TB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A38185	B9AC	ThinkSystem 2.5" 5210 960GB Entry SATA 6Gb Hot Swap QLC SSD	No	8
4XB7A38144	B7EW	ThinkSystem 2.5" 5210 1.92TB Entry SATA 6Gb Hot Swap QLC SSD	No	8

Part number	Feature code	Description	SED support	Maximum Quantity
4XB7A38145	B7EX	ThinkSystem 2.5" 5210 3.84TB Entry SATA 6Gb Hot Swap QLC SSD	No	8
4XB7A38146	B7EY	ThinkSystem 2.5" 5210 7.68TB Entry SATA 6Gb Hot Swap QLC SSD	No	8
4XB7A10247	B498	ThinkSystem 2.5" S4510 240GB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A10248	B499	ThinkSystem 2.5" S4510 480GB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A10249	B49A	ThinkSystem 2.5" S4510 960GB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A13622	B49B	ThinkSystem 2.5" S4510 1.92TB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A13623	B49C	ThinkSystem 2.5" S4510 3.84TB Read Intensive SATA 6Gb HS SSD	No	8
4XB7A10195	B34H	ThinkSystem 2.5" PM883 240GB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A10196	B34J	ThinkSystem 2.5" PM883 480GB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A10197	B34K	ThinkSystem 2.5" PM883 960GB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A10198	B34L	ThinkSystem 2.5" PM883 1.92TB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A10199	B34M	ThinkSystem 2.5" PM883 3.84TB Entry SATA 6Gb Hot Swap SSD	No	8
4XB7A10200	B4D2	ThinkSystem 2.5" PM883 7.68TB Entry SATA 6Gb Hot Swap SSD	No	8

# Table 29. 3.5-inch hot-swap 12 Gb SAS HDDs

Part number	Feature code	Description	SED support	Maximum Quantity
		255579858 9s - 12 Gb SAS 10K		<b>,</b>
3.5-inch hot-s	swap HDD	9s - 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-s	swap HDD	s - 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-s	swap SED	HDDs - 12 Gb NL SAS	•	•
7XB7A00047	AUUH	ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD FIPS	Support	4

	Feature		SED	Maximum
Part number	code	Description	support	Quantity
3.5-inch hot-s	swap HDD	es - 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 30. 3.5-inch hot-swap 6 Gb SATA HDDs

## Table 31. 3.5-inch hot-swap 12 Gb SAS SSDs

Part number	Feature code	Description	SED support	Maximum Quantity
3.5-inch hot-s	swap SSD	s - 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-s	swap SSD	s - 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 32. 3.5-inch hot-swap 6 Gb SATA SSDs

Part number	Feature code	Description	SED support	Maximum Quantity	
3.5-inch hot-s	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	

Part number	Feature code	Description	SED support	Maximum Quantity
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
4XB7A13640	B49S	ThinkSystem 3.5" S4610 480GB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A13641	B49T	ThinkSystem 3.5" S4610 960GB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A13642	B49U	ThinkSystem 3.5" S4610 1.92TB 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-s	swap SSD	s - 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	ВСТК	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

Part number	Feature code	Description	SED support	Maximum Quantity
4XB7A13625	B49D	ThinkSystem 3.5" S4510 240GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A13626	B49E	ThinkSystem 3.5" S4510 480GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A13627	B49F	ThinkSystem 3.5" S4510 960GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A13628	B49G	ThinkSystem 3.5" S4510 1.92TB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A13629	B49H	ThinkSystem 3.5" S4510 3.84TB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17176	B6TM	ThinkSystem 3.5" PM883 240GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17177	B6TN	ThinkSystem 3.5" PM883 480GB 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
4XB7A17180	B6JZ	ThinkSystem 3.5" PM883 3.84TB Entry SATA 6Gb Hot Swap SSD	No	4

# Table 33. 3.5-inch simple-swap 6 Gb SATA HDDs

Part number	Feature code	Description	SED support	Maximum Quantity
3.5-inch simp				
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 35. M.2 SATA drives

Part number	Feature code	Description	SED support	Maximum Quantity
M.2 SSDs - 6	Gb SATA	- Read Intensive/Entry (<3 DWPD)		
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 36. External optical driv	<ol><li>External optical driv</li></ol>	ve
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Part numbe	r Feature code	Description
7XA7A0592	6 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 SR530 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
- 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

#### **Configuration notes:**

- PCle 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.

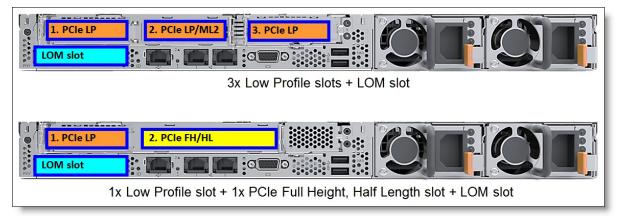


Figure 7. Slot locations

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.

		Slots available for use	
Riser Card 1	Riser Card 2	Processor 1	Processor 2
None	None	LOM	-
None	PCle x8	LOM, 3	-

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

The following table lists available PCIe riser card options.

Table 38. PCIe riser cards and miscellaneous options	Table 38.	PCIe riser	cards and	miscellaneo	us options
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Part number	Feature code	Description	Maximum quantity			
x8 Riser Card	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	1			
7XH7A05893	None*	ThinkSystem SR530/SR570/SR630 x8/x16 PCIe LP+FH Riser 1 Kit	1			
7XH7A05892	AV0X	ThinkSystem SR530/SR570 x8/x8ML2 PCIe LP+LP Riser 1 Kit	1			
Riser Card 2 c	Riser Card 2 option (Riser card 2 supplies slot 3)					
7XH7A02685	AUWA	ThinkSystem SR530/SR570/SR630 x16 PCIe LP Riser 2 Kit	1			
7XH7A05891	AV0W	ThinkSystem SR530/SR570 x8 PCIe LP Riser 2 Kit	1			
Serial port upo	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 SR530. 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 SR530 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 SR530 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 SR530 server.

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 - 1	0 Gb Ethe	ernet		•		
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 E	thernet		•		
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 Pro	file adapte	ers - 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		
7ZT7A00533	AUZZ	ThinkSystem I350-F1 PCIe 1Gb 1-Port SFP 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 Pro	file adapte	ers - 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		
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 Heig	ght adapte	rs - 10 Gb Ethernet				
7ZT7A00493	AUKN	Emulex OCe14104B-NX PCIe 10Gb 4-Port SFP+ Ethernet Adapter	1*	2		
PCIe Low Pro	file adapte	ers - 25 Gb Ethernet				
4XC7A08238	B5T0	Broadcom 57414 10/25GbE SFP28 2-port PCIe Ethernet Adapter	3*	1, 2, 3		
PCIe Low Pro	file adapte	ers - Omni-Path				
00WE027	AU0B	Intel OPA 100 Series Single-port PCIe 3.0 x16 HFA	1 / 2#*	2, 3		

Table 39. Network adapters

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

\* The adapter comes without transceivers or cables; for ordering transceivers or cables, see the adapter product guide

### **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).
- Omni-Path adapters are supported in the low profile or full-height PCIe x16 slots supplied by the riser cards 1 and 2.
- PCIe Low Profile network adapters (except Omni-Path 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.
- Some adapters require supported transceivers or DAC cables to be purchased for the adapter. 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 SR530 server.

Part number	Feature code	Description	Maximum quantity	I/O slots supported
12 Gbps SAS	RAID adap	ters		
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	2	1, 2, 3
7Y37A01091	AUNN	ThinkSystem 430-16e SAS/SATA 12Gb HBA	2	1, 2, 3
4Y37A09724	B8P7	ThinkSystem 440-16e SAS/SATA PCIe Gen4 12Gb HBA	3	1, 2, 3

Table 40. SAS RAID adapters and HBAs for external storage

#### 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.

**RAID 930-8e adapter**: The RAID 930-8e is not supported installed with any X40 internal (8i or 16i or 32i) RAID adapters.

For a comparison of the functions of the supported external storage adapters, see the ThinkSystem RAID Adapter and HBA Reference:

https://lenovopress.com/lp1288#sr530-support=SR530&internal-or-external-ports=External

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 SR530 server.

Feature Maximum I/O slots Part number code Description quantity supported 16 Gb Fibre Channel - PCIe 3 01CV830 ATZU Emulex 16Gb Gen6 FC Single-port HBA 1, 2, 3 01CV840 Emulex 16Gb Gen6 FC Dual-port HBA 3 ATZV 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

Table 41. Fibre Channel HBAs

**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

# Cooling

The SR530 server supports up to six non-hot-swap system fans that provide N+1 cooling redundancy. Models with one processor include four system fans, and models with two processors include six system fans.

The installation of a 2nd processor requires an extra cooling fan 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 SR530 Fan Option Kit (4F17A12354).

Table 42. Cooling options

Part	Feature	Description	Maximum
number	code		quantity
4F17A12354	AV0N	ThinkSystem SR530 Fan Option Kit (for 2nd Gen processors only) Includes 2 system fans	1

## Power supplies and cables

The SR530 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 43. Power supplies

Part number	Feature code	Description	Maximum quantity
7N67A00882	AVV6	ThinkSystem 550W (230V/115V) Platinum Hot-Swap Power Supply	2
7N67A00883	AVV7	ThinkSystem 750W (230/115V) Platinum Hot-Swap Power Supply	2
7N67A00884	AVV5	ThinkSystem 750W (230V) Titanium Hot-Swap Power Supply	2

#### **Configuration notes:**

- 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/Invo-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.

Part number	Feature code	Description
Rack cables - C	C13 to C14	
00Y3043	A4VP	1.0m, 10A/100-250V, C13 to C14 Jumper Cord
4L67A08367	B0N5	1.0m, 13A/100-250V, C13 to C14 Jumper Cord
39Y7937	6201	1.5m, 10A/100-250V, C13 to C14 Jumper Cord
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 C14 Jumper Cord
4L67A08370	6400	2.8m, 13A/100-250V, C13 to C14 Jumper Cord
39Y7932	6263	4.3m, 10A/100-250V, C13 to C14 Jumper Cord
4L67A08371	6583	4.3m, 13A/100-250V, C13 to C14 Jumper Cord
Line cords		
39Y7930	6222	2.8m, 10A/250V, C13 to IRAM 2073 (Argentina) Line Cord
81Y2384	6492	4.3m, 10A/250V, C13 to IRAM 2073 (Argentina) Line Cord
39Y7924	6211	2.8m, 10A/250V, C13 to AS/NZS 3112 (Australia/NZ) Line Cord
81Y2383	6574	4.3m, 10A/250V, C13 to AS/NZS 3112 (Australia/NZ) Line Cord

Table 44. Power cords

Part number	Feature code	Description			
69Y1988	6532	2.8m, 10A/250V, C13 to NBR 14136 (Brazil) Line Cord			
81Y2387	6404	4.3m, 10A/250V, C13 to NBR 14136 (Brazil) Line Cord			
39Y7928	6210	2.8m, 10A/220V, C13 to GB 2099.1 (China) Line Cord			
81Y2378	6580	.3m, 10A/250V, C13 to GB 2099.1 (China) Line Cord			
39Y7918	6213	2.8m, 10A/250V, C13 to DK2-5a (Denmark) Line Cord			
81Y2382	6575	3m, 10A/250V, C13 to DK2-5a (Denmark) Line Cord			
39Y7917	6212	2.8m, 10A/250V, C13 to CEE 7/7 (Europe) Line Cord			
81Y2376	6572	4.3m, 10A/250V, C13 to CEE 7/7 (Europe) Line Cord			
39Y7927	6269	2.8m, 10A/250V, C13 to IS 6538 (India) Line Cord			
81Y2386	6567	4.3m, 10A/250V, 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/250V, C13 to SI 32 (Israel) Line Cord			
39Y7921	6217	2.8m, 10A/250V, C13 to CEI 23-16 (Italy) Line Cord			
81Y2380	6493	4.3m, 10A/250V, C13 to CEI 23-16 (Italy) Line Cord			
4L67A08362	6495	4.3m, 12A/200V, C13 to JIS C-8303 (Japan) Line Cord			
39Y7922	6214	2.8m, 10A/250V, C13 to SABS 164-1 (South Africa) Line Cord			
81Y2379	6576	4.3m, 10A/250V, C13 to SANS 164-1 (South Africa) Line Cord			
39Y7926	6335	4.3m, 12A/100V, C13 to JIS C-8303 (Japan) Line Cord			
39Y7925	6219	2.8m, 12A/220V, C13 to KSC 8305 (S. Korea) Line Cord			
81Y2385	6494	4.3m, 12A/250V, 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/250V, C13 to SEV 1011-S24507 (Swiss) Line Cord			
23R7158	6386	2.8m, 10A/125V, C13 to CNS 10917 (Taiwan) Line Cord			
81Y2375	6317	2.8m, 10A/250V, C13 to CNS 10917 (Taiwan) Line Cord			
81Y2374	6402	2.8m, 13A/125V, C13 to CNS 10917 (Taiwan) Line Cord			
4L67A08363	AX8B	4.3m, 10A/125V, C13 to CNS 10917 (Taiwan) Line Cord			
81Y2389	6531	4.3m, 10A/250V, C13 to CNS 10917 (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/250V, C13 to BS 1363/A (UK) Line Cord			
90Y3016	6313	2.8M, 10A/125V, C13 to NEMA 5-15P (US) Line Cord			
46M2592	A1RF	2.8m, 10A/250V, C13 to NEMA 6-15P (US) Line Cord			
00WH545	6401	2.8M, 13A/125V, 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/125V, C13 to NEMA 5-15P (US) Line Cord			

# Systems management

The SR530 supports the following systems management tools:

- Lenovo XClarity ControllerLenovo XClarity Provisioning Manager

- Lenovo XClarity Essentials
- Lenovo XClarity Administrator
- Lenovo XClarity Integrators
- Lenovo XClarity Energy Manager
- Lenovo Capacity Planner

### Lenovo XClarity Controller

The SR530 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 SR530 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 45. 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 46. 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.

### Lenovo XClarity Provisioning Manager

Lenovo XClarity Provisioning Manager is a UEFI-embedded GUI application that combines the functions of configuring system setup settings, configuring RAID, and updating applications and firmware. It also enables you to install the supported operating systems and associated device drivers, run diagnostics, and collect service data.

Lenovo XClarity Provisioning Manager has the following features:

- Automatic hardware detection
- Collecting and viewing system inventory information
- Configuring UEFI system setup settings
- Updating the system firmware
- Configuring RAID by using the RAID Setup Wizard or Advanced mode
- Installing an operating system and device drivers automatically or manually
- Running diagnostics and collecting service data

### **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 XClarity Essentials OneCLI OneCLI is a collection of server management tools that utilize 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 setting, and update system firmware and drivers.
- Lenovo XClarity 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 XClarity 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 is a centralized systems management solution that helps administrators deliver infrastructure faster. This solution integrates easily with Lenovo x86 servers, RackSwitch switches, and DS Series storage, providing automated agent-less discovery, monitoring, firmware updates, configuration management, and bare metal deployment of operating systems and hypervisors across multiple servers.

Lenovo XClarity Administrator is an optional software component for the SR530 server which can be downloaded and used at no charge to discover and monitor the SR530 and manage firmware upgrades for them.

If software support is required for Lenovo XClarity Administrator, or Lenovo XClarity Administrator premium features (such as configuration management and operating system deployment) are required, or both, 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 geo-specific Lenovo XClarity software license options.

Description	Part number (NA, AP, Japan)*	Part number (EMEA, LA)**	Quantity
Lenovo XClarity Pro, per Managed Endpoint w/1 Yr SW S&S	00MT201	00MT207	1
Lenovo XClarity Pro, per Managed Endpoint w/3 Yr SW S&S	00MT202	00MT208	1
Lenovo XClarity Pro, per Managed Endpoint w/5 Yr SW S&S	00MT203	00MT209	1

\* NA = North America; AP = Asia Pacific

\*\* EMEA = Europe, Middle East, Africa; LA = Latin America

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

- Auto-discovery and monitoring of Lenovo x86 servers, RackSwitch switches, Flex System chassis, and DS Series storage 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 offers at no charge (if software support is required, a Lenovo XClarity Pro software subscription license should be ordered) two software plug-in modules, Lenovo XClarity Integrators, to manage physical infrastructure from leading external virtualization management software tools from Microsoft and VMware:

- Lenovo XClarity Integrator for Microsoft System Center
- Lenovo XClarity Integrator for VMware vCenter

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 XClarity Integrators, refer to the Lenovo Systems Management web page: https://www.lenovo.com/us/en/data-center/software/management/

### Lenovo XClarity Energy Manager

Lenovo XClarity Energy Manager provides a stand-alone, web-based agent-less power management console that provides real time data and enables you to observe, plan and manage power and cooling for Lenovo servers. Using built-in intelligence, it identifies server power consumption trends and ideal power settings and performs cooling analysis so that you can define and optimize power-saving policies.

Lenovo XClarity Energy Manager offers the following capabilities:

- Monitors room, row, rack, and device levels in the data center
- Reports vital server information, such as power, temperature and resource utilization
- · Monitors inlet temperature to locate hot spots, reducing the risk of data or device damage
- Provides finely-grained controls to limit platform power in compliance with IT policy
- · Generates alerts when a user-defined threshold is reached

Lenovo XClarity Energy Manager is an optional software component for the SR530 server that is licensed on a per managed node basis, that is, each managed server requires a license. The 1-node Energy Manager license is included in the XClarity Controller Enterprise upgrade.

To manage systems without XClarity Controller Enterprise licenses, a node license pack should be purchased. The following table lists the geo-specific Lenovo XClarity Energy Manager software license options.

#### Table 48. Lenovo XClarity Energy Manager software options

	Part number (NA, AP, Japan)*	Part number (EMEA, LA)**	Quantity
Lenovo XClarity Energy Manager, 1 Node w/ 1 Yr S&S	01DA225	01DA228	1

\* NA = North America; AP = Asia Pacific.

\*\* EMEA = Europe, Middle East, Africa; LA = Latin America.

For more information, refer to the Lenovo XClarity Energy Manager web page: http://datacentersupport.lenovo.com/us/en/solutions/Invo-lxem

## 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/Invo-lcp

## Security

The SR530 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 SR530 server.

#### Table 49. Security options

Part number	Feature code	Description	Maximum quantity	
Lockable from	_ockable front bezel			
7Z17A02581	AUWR	ThinkSystem 1U Security Bezel	1	
Trusted Crypt	Trusted Cryptographic Module (PRC only)			
None*	AVKE	ThinkSystem Trusted Cryptographic Module	1	
Trusted Platfo	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 or Nationz TPM 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 or Nationz TPM.
- 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.

For more information, refer to the Lenovo Business Vantage web page: http://support.lenovo.com.cn/lenovo/wsi/es/es.html

## 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.

Feature code	Description
BB0P	Intel Transparent Supply Chain

Table 50. Intel Transparent Supply Chain ordering information

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 SR530 server.

Part number	Feature code	Description	Maximum quantity
4-post rail kits			quantity
•			1.
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 manage	ement arm (	(CMA) upgrade	
7M27A05699	None^	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	Front VGA Connector Upgrade Kit for 1U (for 3.5" models)	1
4Z17A80447	BMNW	ThinkSystem SR530/SR570/SR630 Front VGA Connector Upgrade Kit v2	1
7Z17A02579	AUWW	ThinkSystem SR530/SR570/SR630 Front VGA Connector Upgrade Kit (for 2.5" models)	1

Table 51. Rack installation options

^ Field upgrade only.

\* 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.

	Tool-less Slide Rail		Screw-in Slide Rail			
Feature	Without CMA	With CMA	Without CMA	With CMA	Tool-less Friction Rail	
Part number	7M27A05702	7M27A05701	4M17A07274	4M17A07281	4M17A07273	
СМА	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 (b	ball bearing)	Full-out slide (b	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.)	

Table 52. Rail kit features and specifications summary

\* 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 (47.2<sup>2</sup> 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 9.0
- 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 Xen
- SUSE Linux Enterprise Server 15 Xen SP1
- SUSE Linux Enterprise Server 15 Xen SP2
- SUSE Linux Enterprise Server 15 Xen SP3
- 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

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
- Microsoft Windows Server, version 1803
- Red Hat Enterprise Linux 6.10 x64
- Red Hat Enterprise Linux 6.9 x64
- Red Hat Enterprise Linux 7.3
- 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 9.0
- SUSE Linux Enterprise Server 11 Xen x64 SP4
- SUSE Linux Enterprise Server 11 x64 SP4
- SUSE Linux Enterprise Server 12 SP2
- SUSE Linux Enterprise Server 12 SP3
- SUSE Linux Enterprise Server 12 SP4
- SUSE Linux Enterprise Server 12 SP5
- SUSE Linux Enterprise Server 12 Xen SP2
- 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 12
- SUSE Linux Enterprise Server 15 SP1
- SUSE Linux Enterprise Server 15 SP2
- SUSE Linux Enterprise Server 15 SP3
- SUSE Linux Enterprise Server 15 Sr 5
   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
- VMware ESXi 6.0 U3
- VMware ESXi 6.5
- 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

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=sr530-7x07-7x08-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.

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)

Table 53. VMware ESXi preload

## **Physical and electrical specifications**

The SR530 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 54.	Detailed	dimensions
-----------	----------	------------

Dimension	Description
482 mm	X <sub>a</sub> = Width, to the outsides of the front EIA flanges
435 mm	X <sub>b</sub> = Width, to the rack rail mating surfaces
435 mm	X <sub>c</sub> = Width, to the outer most chassis body feature
43 mm	Y <sub>a</sub> = 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

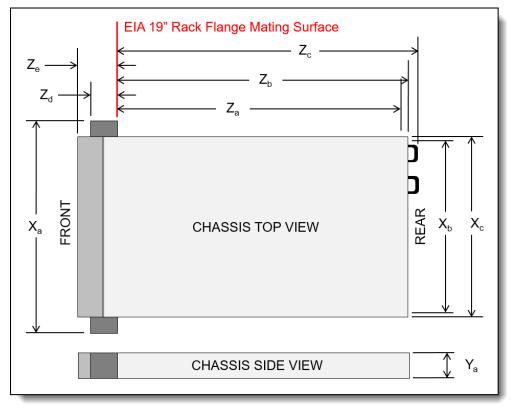


Figure 8. Server dimensions

The shipping dimensions (cardboard packaging) of the SR530 are as follows:

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

The SR530 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.

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

Table 55. Rated system power, inlet current, and system heat output

## **Operating environment**

The SR530 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. To comply with ASHRAE class A3 and class A4 specifications, the server models must meet the following hardware configuration requirements at the same time:

- Two power supplies must be installed
- No system fan failure

### Temperature and humidity

The SR530 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)

#### Acoustic noise emissions

The server has the following acoustic noise emissions declaration:

- Minimum configuration:
  - Operating: 5.0 bels
  - Idle: 4.5 bels
- Maximum configuration:
  - Operating: 5.5 bels
  - Idle: 5.2 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 ThinkSystem Information Center, https://thinksystem.lenovofiles.com/help/index.jsp

## Warranty and support

The SR530 server has a one-year (7X07) or three-year (Machine Type 7X08) warranty.

The standard warranty terms are customer-replaceable unit (CRU) and onsite (for field-replaceable units FRUs only) 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 your data center, with an experience consistently ranked number one in customer satisfaction worldwide. Available offerings include:

#### • Premier Support

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:

- Direct technician-to-technician access through a dedicated phone line
- 24x7x365 remote support
- Single point of contact service
- End to end case management
- Third-party collaborative software support
- Online case tools and live chat support
- On-demand remote system analysis

### • Warranty Upgrade (Preconfigured Support)

Services are available to meet the on-site response time targets that match the criticality of your 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. YourDrive YourData is an optional extra (see below).
- **Essential Service:** 24x7 service coverage with 4-hour onsite response or 24-hour committed repair (available only in select markets). Bundled with YourDrive YourData.
- Advanced Service: 24x7 service coverage with 2-hour onsite response or 6-hour committed repair (available only in select markets). Bundled with YourDrive YourData.

#### Managed Services

Lenovo Managed Services provides continuous 24x7 remote monitoring (plus 24x7 call center availability) and proactive management of your 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 & OS device driver levels, and software as needed. We'll also maintain records of latest patches, critical updates, and firmware levels, to ensure you systems are providing business value through optimized performance.

#### • Technical Account Management (TAM)

A Lenovo Technical Account Manager helps you optimize the operation of your data center based on a deep understanding of your business. You gain direct access to your Lenovo TAM, who serves as your single point of contact to expedite service requests, provide status updates, and furnish reports to track incidents over time. In addition, your TAM will help proactively make service recommendations and manage your service relationship with Lenovo to make certain your needs are met.

#### • Enterprise Server Software Support

Enterprise Software Support is an additional support service providing 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 comparability and interoperability issues, isolate causes of problems, report defects to software vendors, and more.

#### • YourDrive YourData

Lenovo's YourDrive YourData is a multi-drive retention offering that ensures your data is always under your control, regardless of the number of drives that are installed in your Lenovo server. In the unlikely event of a drive failure, you retain possession of your drive while Lenovo replaces the failed drive part. Your data stays safely on your premises, in your hands. The YourDrive YourData service can be purchased in convenient bundles and is optional with Foundation Service. It is bundled with Essential Service and Advanced Service.

#### • Health Check

Having a trusted partner who can perform regular and detailed health checks is central to maintaining efficiency and ensuring that your 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.

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 Service offerings are region-specific. Not all preconfigured support and upgrade options are available in every region. For information about Lenovo service upgrade offerings that are available in your region, refer to the following resources:

- Service part numbers in Lenovo Data Center Solution Configurator (DCSC): http://dcsc.lenovo.com/#/services
- Lenovo Services Availability Locator http://lenovolocator.com/

For service definitions, region-specific details, and service limitations, please 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 your success. Our goal is to reduce your capital outlays, mitigate your IT risks, and accelerate your time to productivity.

**Note**: Some service options may not be available in all countries. For more information, go to https://www.lenovo.com/services. For information about Lenovo service upgrade offerings that are available in your region, contact your local Lenovo sales representative or business partner.

Here's a more in-depth look at what we can do for you:

#### • 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 your customers. For more information, see the ARS page, https://lenovopress.com/lp1266-reduce-e-waste-and-grow-your-bottom-line-with-lenovo-ars.

#### • Assessment Services

An Assessment helps solve your IT challenges through an onsite, multi-day session with a Lenovo technology expert. We perform 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 like yours, no matter how large or small, get a better return on your IT investment and overcome challenges in the ever-changing technology landscape.

#### • Design Services

Professional Services consultants perform infrastructure design and implementation planning to support your 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 your server, storage, or networking hardware. Working at a time convenient for you (business hours or off shift), the technician will unpack and inspect the systems on your 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 your team to focus on other priorities.

#### Deployment Services

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

#### Integration, Migration, and Expansion Services

Move existing physical & virtual workloads easily, or determine technical requirements to support increased workloads while maximizing performance. Includes tuning, validation, and documenting ongoing run processes. Leverage migration assessment planning documents to perform necessary migrations.

# **Regulatory compliance**

The ThinkSystem SR530 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 server supports attachment to external drive enclosures using a RAID controller with external ports or a SAS host bus adapter. Adapters supported by the server are listed in the SAS adapters for external storage section.

**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 56. External drive enclosures

	Part number		
Description	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 highperformance 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.

Part number	Description		
External RDX US	External RDX USB drives		
4T27A10725	ThinkSystem RDX External USB 3.0 Dock		
External SAS tap	be 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 tap	be 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 ba	ckup libraries		
6741A1F	IBM TS4300 3U Tape Library-Base Unit		
6741A3F	IBM TS4300 3U Tape Library-Expansion Unit		
Full High 8 Gb F	ibre 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 F	ibre 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		

Table 57. External backup options

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 supported rack cabinets.

Part number	Description
7D2B0001WW / 7D2N0001WW	12U 1200mm Deep Micro Datacenter Rack
7D2C0001WW / 7D2P0001WW	18U 1200mm Deep Micro Datacenter Rack
93072RX	25U Standard Rack (1000mm)
93072PX	25U Static S2 Standard Rack (1000mm)
7D6DA007WW	ThinkSystem 42U Onyx Primary Heavy Duty Rack Cabinet (1200mm)
7D6DA008WW	ThinkSystem 42U Pearl Primary Heavy Duty Rack Cabinet (1200mm)
93604PX	42U 1200mm Deep Dynamic Rack
93614PX	42U 1200mm Deep Static Rack
93634PX	42U 1100mm Dynamic Rack
93634EX	42U 1100mm Dynamic Expansion Rack
93074RX	42U Standard Rack (1000mm)
7D6EA009WW	ThinkSystem 48U Onyx Primary Heavy Duty Rack Cabinet (1200mm)
7D6EA00AWW	ThinkSystem 48U Pearl Primary Heavy Duty Rack Cabinet (1200mm)

Table 58. Rack cabinets

For specifications about these racks, see the Lenovo Rack Cabinet Reference, available from: https://lenovopress.com/lp1287-lenovo-rack-cabinet-reference

For more information, see the list of Product Guides in the Rack cabinets category: https://lenovopress.com/servers/options/racks

## KVM switches and consoles

The following table lists the supported KVM consoles.

#### Table 59. KVM console

Part number	Description	
4XF7A73009	ThinkSystem 18.5" LCD Console (with English keyboard)	

The following table lists the available KVM switches and the options that are supported with them.

Table 61. KVM switches and options

Part number	Description	
KVM Console switches		
1754D1T	ThinkSystem Digital 2x1x16 KVM Switch (DVI video output port)	
1754A1T	ThinkSystem Analog 1x8 KVM Switch (DVI video output port)	
1754D2X	Global 4x2x32 Console Manager (GCM32)	
1754D1X	Global 2x2x16 Console Manager (GCM16)	
1754A2X	Local 2x16 Console Manager (LCM16)	
1754A1X	Local 1x8 Console Manager (LCM8)	
Cables for Think	System Digital and Analog KVM Console switches	
4X97A11108	ThinkSystem VGA to DVI Conversion Cable	
4X97A11109	ThinkSystem Single-USB Conversion Cable for Digital KVM	
4X97A11107	ThinkSystem Dual-USB Conversion Cable for Digital KVM	
4X97A11106	ThinkSystem USB Conversion Cable for Analog KVM	
Cables for GCM and LCM Console switches		
46M5383	Virtual Media Conversion Option Gen2 (VCO2)	
46M5382	Serial Conversion Option (SCO)	

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

# Power distribution units

The following table lists the power distribution units (PDUs) that are offered by Lenovo.

Part number	Feature code	Description	ANZ	ASEAN	Brazil	EET	MEA	RUCIS	WE	нтк	INDIA	JAPAN	LA	AN	PRC
0U Basic PDL	Js														
00YJ776	ATZY	0U 36 C13/6 C19 24A 1 Phase PDU	Ν	Υ	Υ	Ν	Ν	Ν	Ν	Ν	Ν	Υ	Y	Υ	Ν
00YJ779	ATZX	0U 21 C13/12 C19 48A 3 Phase PDU	Ν	Ν	Υ	Ν	Ν	Ν	Υ	Ν	Ν	Υ	Υ	Υ	Ν
00YJ777	ATZZ	0U 36 C13/6 C19 32A 1 Phase PDU	Υ	Υ	Ν	Υ	Υ	Υ	Υ	Υ	Υ	Ν	Ν	Υ	Υ
00YJ778	AU00	0U 21 C13/12 C19 32A 3 Phase PDU	Υ	Υ	Ν	Υ	Υ	Υ	Υ	Υ	Υ	Ν	Ν	Υ	Υ
0U Switched	and Moni	tored PDUs													
00YJ783	AU04	0U 12 C13/12 C19 Switched and Monitored 48A 3 Phase PDU	Ν	Ν	Y	Ν	Ν	Ν	Y	Ν	Ν	Y	Y	Y	Ν
00YJ781	AU03	0U 20 C13/4 C19 Switched and Monitored 24A 1 Phase PDU	Ν	Ν	Y	Ν	Y	Ν	Y	Ν	N	Y	Y	Y	Ν
00YJ782	AU02	0U 18 C13/6 C19 Switched and Monitored 32A 3 Phase PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	Ν	Y	Ν	Y
00YJ780	AU01	0U 20 C13/4 C19 Switched and Monitored 32A 1 Phase PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	Ν	Y	Ν	Y
1U Switched	and Moni	tored PDUs													
4PU7A81117	BNDV	1U 18 C19/C13 switched and monitored 48A 3P WYE PDU - ETL	Ν	Ν	N	N	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Y	Ν
4PU7A77467	BLC4	1U 18 C19/C13 Switched and Monitored 80A 3P Delta PDU	Ν	Ν	Ν	N	Ν	Ν	Ν	Ν	Ν	Y	Ν	Y	Ν
1U Ultra Dens	sity Enter	prise PDUs (9x IEC 320 C13 + 3x IEC 320 C1	9 οι	Itle	s)										
71763NU	6051	Ultra Density Enterprise C19/C13 PDU 60A/208V/3PH	Ν	Ν	Y	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	Y	Ν
71762NX	6091	Ultra Density Enterprise C19/C13 PDU Module	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1U C13 Enter	prise PDl	Js (12x IEC 320 C13 outlets)													
39M2816	6030	DPI C13 Enterprise PDU Plus Module (WW)	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ
39Y8941	6010	DPI C13 Enterprise PDU Module (WW)	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
1U C19 Enter	prise PDl	Js (6x IEC 320 C19 outlets)													
39Y8948	6060	DPI C19 Enterprise PDU Module (WW)	Υ	Υ	Y	Y	Υ	Y	Υ	Υ	Υ	Υ	Y	Υ	Υ
39Y8923	6061	DPI Three-phase 60A/208V C19 Enterprise PDU (US)	N	Ν	Y	N	Ν	Ν	Y	Ν	N	Ν	Y	Y	Ν
1U Front-end	PDUs (3)	(IEC 320 C19 outlets)													
39Y8938	6002	DPI Single-phase 30A/120V Front-end PDU (US)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
39Y8939	6003	DPI Single-phase 30A/208V Front-end PDU (US)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
39Y8934	6005	DPI Single-phase 32A/230V Front-end PDU (International)	Υ	Y	Y	Y	Y	Y	Y	Y	Y	Y	Υ	Y	Y

Part number	Feature code	Description	ANZ	ASEAN	Brazil	EET	MEA	RUCIS	WE	НТК	INDIA	JAPAN	LA	NA	PRC
39Y8940	6004	DPI Single-phase 60A/208V Front-end PDU (US)	Y	N	Y	Y	Y	Y	Y	Ν	Ν	Y	Y	Y	N
39Y8935	6006	DPI Single-phase 63A/230V Front-end PDU (International)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1U NEMA PDUs (6x NEMA 5-15R outlets)															
39Y8905	5900	DPI 100-127V NEMA PDU	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y
Line cords for 1U PDUs that ship without a line cord															
40K9611	6504	4.3m, 32A/380-415V, EPDU/IEC 309 3P+N+G 3ph wye (non-US) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9612	6502	4.3m, 32A/230V, EPDU to IEC 309 P+N+G (non-US) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9613	6503	4.3m, 63A/230V, EPDU to IEC 309 P+N+G (non-US) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9614	6500	4.3m, 30A/208V, EPDU to NEMA L6-30P (US) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9615	6501	4.3m, 60A/208V, EPDU to IEC 309 2P+G (US) Line Cord	Ν	N	Y	N	N	Ν	Y	Ν	Ν	Y	Y	Y	N
40K9617	6505	4.3m, 32A/230V, Souriau UTG Female to AS/NZ 3112 (Aus/NZ) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9618	6506	4.3m, 32A/250V, Souriau UTG Female to KSC 8305 (S. Korea) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

For more information, see the Lenovo Press documents in the PDU category: https://lenovopress.com/servers/options/pdu

# Uninterruptible power supply units

The following table lists the uninterruptible power supply (UPS) units that are offered by Lenovo.

Part number	Description					
55941AX	RT1.5kVA 2U Rack or Tower UPS (100-125VAC)					
55941KX	RT1.5kVA 2U Rack or Tower UPS (200-240VAC)					
55942AX	RT2.2kVA 2U Rack or Tower UPS (100-125VAC)					
55942KX	RT2.2kVA 2U Rack or Tower UPS (200-240VAC)					
55943AX	RT3kVA 2U Rack or Tower UPS (100-125VAC)					
55943KX	RT3kVA 2U Rack or Tower UPS (200-240VAC)					
55945KX	RT5kVA 3U Rack or Tower UPS (200-240VAC)					
55946KX	RT6kVA 3U Rack or Tower UPS (200-240VAC)					
55948KX	RT8kVA 6U Rack or Tower UPS (200-240VAC)					
55949KX	RT11kVA 6U Rack or Tower UPS (200-240VAC)					
55948PX	RT8kVA 6U 3:1 Phase Rack or Tower UPS (380-415VAC)					
55949PX	RT11kVA 6U 3:1 Phase Rack or Tower UPS (380-415VAC)					
55943KT†	ThinkSystem RT3kVA 2U Standard UPS (200-230VAC) (2x C13 10A, 2x GB 10A, 1x C19 16A outlets)					
55943LT†	43LT†ThinkSystem RT3kVA 2U Long Backup UPS (200-230VAC) (2x C13 10A, 2x GB 10A, 1x C19 16A outlets)					
55946KT†	ThinkSystem RT6kVA 5U UPS (200-230VAC) (2x C13 10A outlets, 1x Terminal Block output)					
5594XKT†	ThinkSystem RT10kVA 5U UPS (200-230VAC) (2x C13 10A outlets, 1x Terminal Block output)					

Table 63. Uninterruptible power supply units

† Only available in China and countries in the Asia Pacific region.

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

# **Lenovo Financial Services**

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https://www.lenovo.com/us/en/landingpage/lenovo-financial-services/

# **Related publications and links**

For more information, see these resources:

- ThinkSystem SR530 product page https://www.lenovo.com/us/en/data-center/servers/racks/ThinkSystem-SR530/p/77XX7SRSR53
- Datasheet for the ThinkSystem SR530: https://lenovopress.com/ds0002-lenovo-thinksystem-sr530
- 3D Interactive Tour of the ThinkSystem SR530: https://lenovopress.com/lp0670-3d-tour-thinksystem-sr530
- Walkthrough Video for the ThinkSystem SR530: https://lenovopress.com/lp0744-thinksystem-sr530-server-video-walkthrough
- User Manuals for the ThinkSystem SR530: https://thinksystem.lenovofiles.com/help/topic/7X07/introduction.html?cp=4\_2
  - Quick Start Guide
  - Setup Guide
  - Rack Installation Guides
  - Maintenance Manual
  - Messages and Codes Reference
  - UEFI Manual
- Lenovo Data Center Support Downloads ThinkSystem SR530: http://datacentersupport.lenovo.com/products/servers/thinksystem/sr530/7x07/downloads http://datacentersupport.lenovo.com/products/servers/thinksystem/sr530/7x08/downloads
- Lenovo Hardware Installation & Removal Videos on the ThinkSystem SR530:
  - YouTube: https://www.youtube.com/playlist?list=PLYV5R7hVcs-AQrHuDWK6L3KtHWc6maY\_O
  - Youku: https://list.youku.com/albumlist/show/id\_50437162
- 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 SR530 Server

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