

Lenovo ThinkSystem SR630 Server (Xeon SP Gen 1 / Gen 2)

Product Guide

Lenovo ThinkSystem SR630 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 maximizing performance and flexibility for future growth. The SR630 server is designed to handle a wide range of workloads, such as databases, virtualization and cloud computing, virtual desktop infrastructure (VDI), infrastructure security, systems management, enterprise applications, collaboration/email, streaming media, web, and HPC.

Featuring the second generation of the Intel Xeon Processor Scalable Family (Xeon SP Gen 2), the SR630 server offers scalable performance and storage capacity. The SR630 server supports up to two processors, up to 3 TB of memory capacity with TruDDR4 DIMMs or up to 7.5 TB of memory capacity with a combination of TruDDR4 DIMMs and Intel DC persistent memory modules (DCPMMs), up to 12x 2.5-inch or 4x 3.5-inch drive bays with an extensive choice of NVMe PCIe SSDs, SAS/SATA SSDs, and SAS/SATA HDDs, and flexible I/O expansion options with a LOM slot, a dedicated storage controller slot, and up to 3x PCIe slots.

The following figure shows the Lenovo ThinkSystem SR630 with 2.5-inch hot-swap drives.



Figure 1 Lenovo ThinkSystem SR630 with 2.5-inch drive bays

Did you know?

The SR630 server features a unique AnyBay design that allows a choice of drive interface types in the same drive bay: SAS drives, SATA drives, or U.2 NVMe PCIe drives.

The SR630 server offers onboard NVMe PCIe ports that allow direct connections to the U.2 NVMe PCIe SSDs, which frees up I/O slots and helps lower NVMe solution acquisition costs.

The SR630 server delivers outstanding memory performance with Performance+ 2933 MHz DIMMs, which is achieved by supporting two-DIMMs-per-channel configurations at speeds up to 10% faster than the Intel specification defines, while still maintaining world-class reliability.

Key features

Combining performance and flexibility, the SR630 server is a great choice for small and medium businesses up to the large enterprise. It can provide outstanding uptime to keep business-critical applications and cloud deployments running safely. Ease of use and comprehensive systems management tools help make deployment easier. Outstanding reliability, availability, and serviceability (RAS) and high-efficiency design improve your business environment and help save operational costs.

Scalability and performance

The SR630 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 28-core processors, up to 38.5 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, 56 cores, and 112 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 3 TB of memory capacity with 3DS RDIMMs.
- Boosts the performance of data-intensive applications and delivers consistent service levels at scale for virtualized and cloud environments by using the innovative persistent memory technology that provides a unique combination of affordable large memory capacity and non-volatility for up to 7.5 TB of total server memory capacity, including 3DS RDIMMs and DCPMMs (DC persistent memory modules).
- Offers flexible and scalable internal storage in a 1U rack form factor with up to 12x 2.5-inch drives for performance-optimized configurations or up to 4x 3.5-inch drives for capacity-optimized configurations, providing a wide selection of SAS/SATA HDD/SSD and PCIe NVMe SSD types and capacities.
- Provides flexibility to use SAS, SATA, or NVMe PCIe drives in the same drive bays with a unique AnyBay design.
- Provides I/O scalability with the LOM slot, PCIe 3.0 slot for an internal storage controller, 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 SR630 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 data protection and greater system uptime with hot-swap drives supporting basic or advanced RAID redundancy.
- Provides availability for business-critical applications with redundant hot-swap power supplies and redundant hot-swap fans.
- Simplifies servicing, speeds up problem resolution, and helps improve system availability with light path diagnostics.
- Allows preventive actions in advance of possible failure, thereby increasing server uptime and application availability with Proactive Platform Alerts (including PFA and SMART alerts) for processors, voltage regulators, memory, internal storage (SAS/SATA HDDs and SSDs, NVMe SSDs, M.2 storage, flash storage adapters), fans, power supplies, RAID controllers, and server ambient and sub-component temperatures.
- Continuously monitors system parameters, triggers alerts, and performs recovery actions in case of failure to minimize downtime with Built-in XClarity Controller (XCC).
- Provides quick access to system status, firmware, network, health, and alerts information via Virtual Operator Panel from the XClarity Mobile App running on the Android or iOS mobile device that is connected to the front USB port with XClarity Controller access.
- Speeds up troubleshooting tasks to reduce service time with diagnostics built into the XClarity Provisioning Manager.

Manageability and security

Powerful systems management features simplify local and remote management of the SR630 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 SR630 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 SR630 server with four 3.5-inch drive bays.

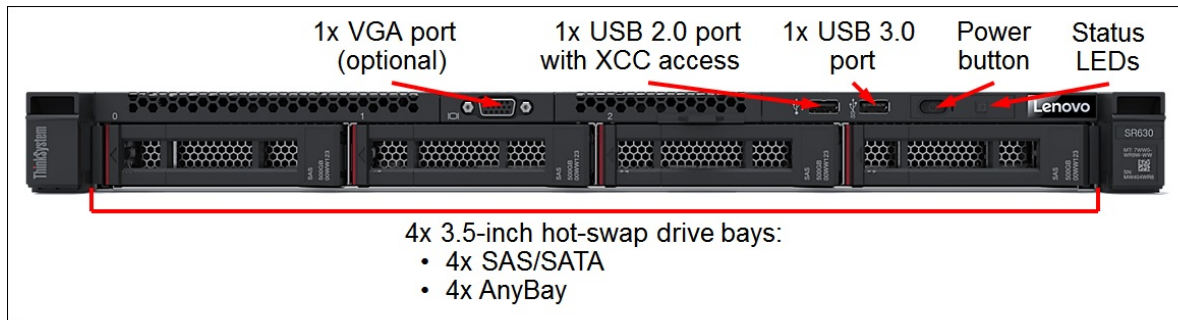


Figure 2. Front view of the SR630: 4x 3.5-inch drive bays

The following figure shows the front of the SR630 server with eight 2.5-inch drive bays.

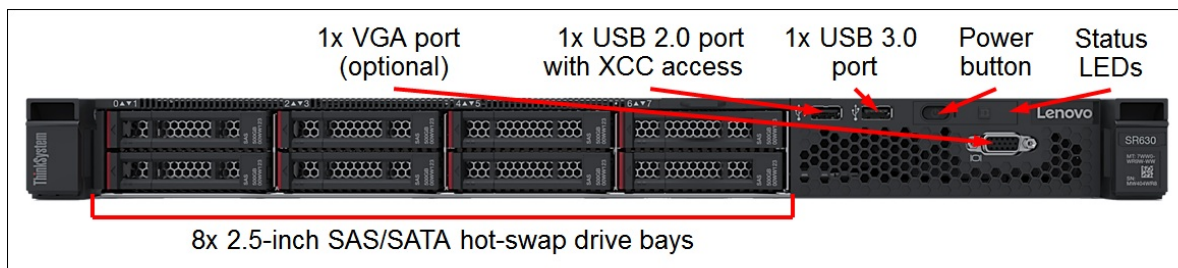


Figure 3. Front view of the SR630: 8x 2.5-inch drive bays

The following figure shows the front of the SR630 server with ten 2.5-inch drive bays.

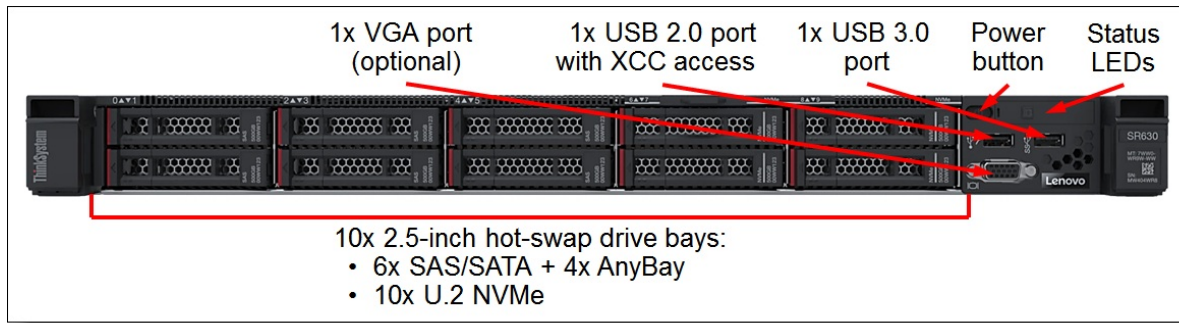


Figure 4. Front view of the SR630: 10x 2.5-inch drive bays

The front of the SR630 server includes the following components:

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

The following figure shows the rear of the SR630 server with three PCIe low profile slots.

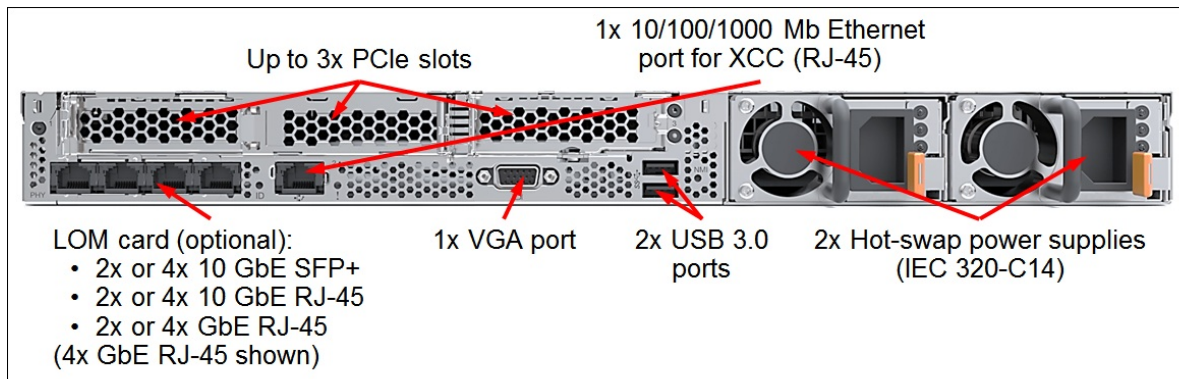


Figure 5. Rear view of the SR630

The rear of the SR630 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 SR630 server.

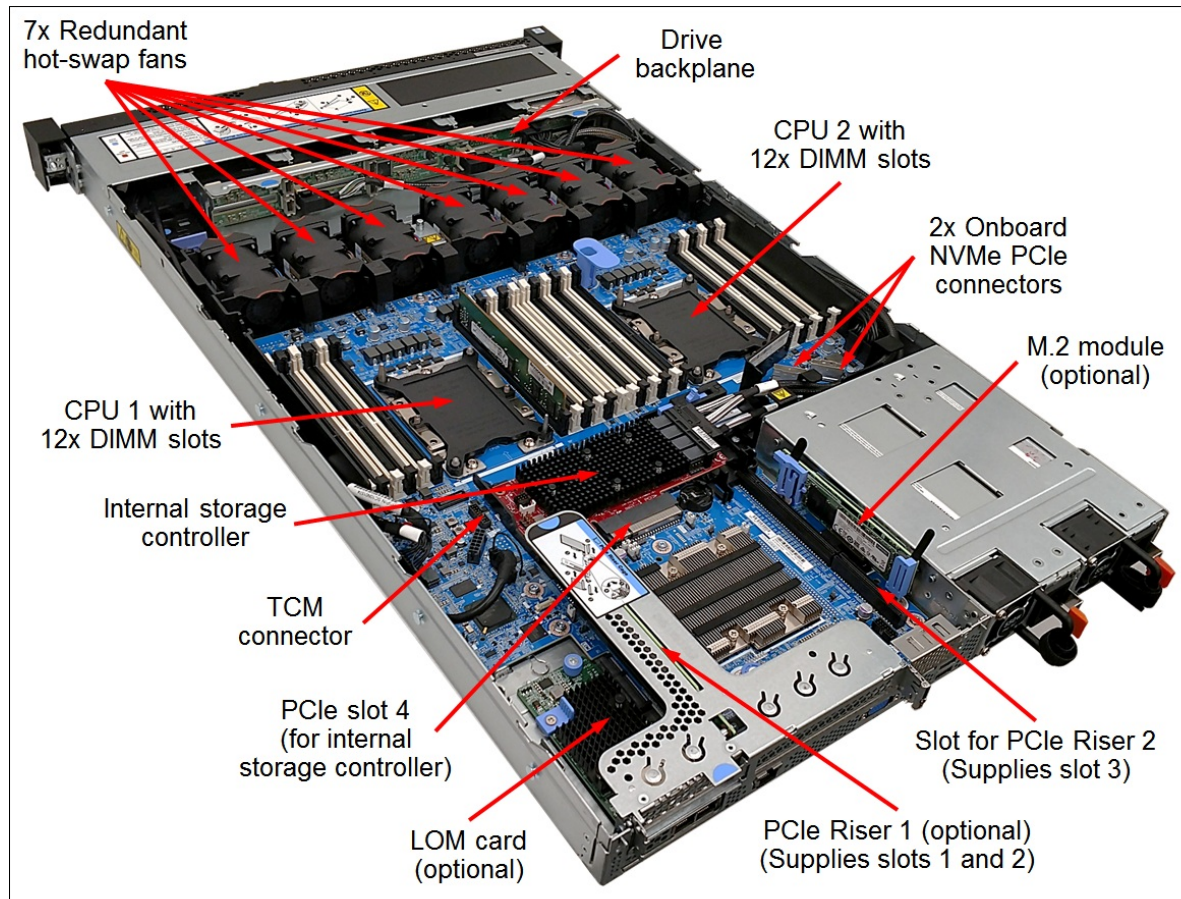


Figure 6. Internal view of the SR630

The following key components are located inside the SR630 server:

- Up to two processors.
- 24 DIMM slots (12 DIMM slots per processor).
- Drive backplanes.
- Two onboard NVMe PCIe connectors.
- One M.2 module connector.
- One LOM card connector.
- One onboard PCIe slot 4.
- Two slots for PCIe riser cards.
- One TCM connector.
- Five (one processor) or seven (two processors) hot-swap system fans.

Standard specifications

The following table lists the system specifications for the SR630 server.

Table 1. SR630 system specifications

Attribute	Specification
Machine types	7X01 - 1 year warranty 7X02 - 3 year warranty
Form factor	1U rack-mount

Attribute	Specification
Processor	Up to two 2nd Gen Intel Xeon Bronze, Silver, Gold, or Platinum processors: <ul style="list-style-type: none"> ● Up to 28 cores (2.7 GHz core speeds). ● Up to 3.8 GHz core speeds (4 cores). ● UPI links up to 10.4 GT/s (2 UPI links used). ● Up to 38.5 MB cache. ● Up to 2933 MHz memory speed. 1st Gen Intel Xeon processors are also supported.
Chipset	Intel C624
Memory	Up to 24 DIMM sockets (12 DIMMs per processor; six memory channels per processor with two DIMMs per channel). Support for RDIMMs, LRDIMMs (1st Gen processors only), or 3DS RDIMMs. Memory speed up to 2933 MHz depending on the processor selected. Memory types cannot be intermixed.
Persistent memory	Up to 12x TruDDR4 2666 MHz DCPMMs in the DIMM slots. Not supported with 1st Gen Intel Xeon SP processors.
Memory capacity	<ul style="list-style-type: none"> ● Memory DIMMs only: Up to 3 TB with up to 24x 128 GB 3DS RDIMMs (Up to 1.5 TB per processor). ● Memory DIMMs and persistent memory modules: <ul style="list-style-type: none"> ○ App Direct Mode: Up to 7.5 TB with up to 12x 128 GB 3DS RDIMMs and up to 12x 512 GB DCPMMs (Up to 3.75 TB per processor). ○ Memory Mode: Up to 6 TB with up to 12x 512 GB DCPMMs (Up to 3 TB per processor). <p>Note: Server configurations with more than 1 TB of memory capacity per socket (including DCPMMs and RDIMMs or 3DS RDIMMs) require processors that support up to 4.5 TB (L-suffix) per socket.</p>
Memory protection	<ul style="list-style-type: none"> ● Processor's integrated memory controllers: Error correction code (ECC), SDDC (for x4-based memory DIMMs), ADDDC (for x4-based memory DIMMs, requires Intel Xeon Gold or Platinum processors), memory mirroring, memory rank sparing, patrol scrubbing, and demand scrubbing. ● DCPMM's onboard memory controllers: ECC, SDDC, DDDC, patrol scrubbing, and demand scrubbing. <p>Note: In the configurations with DCPMMs, memory mirroring is supported only in the App Direct mode (other DCPMM modes do not support memory mirroring) and applies only to the RDIMMs or 3DS RDIMMs (DCPMMs are not mirrored). Memory sparing is not supported in the configurations with DCPMMs.</p>
Drive bays	<ul style="list-style-type: none"> ● Up to 6 SAS/SATA hot-swap drive bays: 4x 3.5" (front) + 2x 2.5" (rear) ● 4 LFF AnyBay hot-swap drive bays: 4x 3.5" (front) ● Up to 10 SFF SAS/SATA hot-swap drive bays: 8x 2.5" (front) + 2x 2.5" (rear) ● Up to 12 SFF hot-swap drive bays: 6x 2.5" SAS/SATA & 4x 2.5" AnyBay (front) + 2x 2.5" SAS/SATA (rear) ● 10 SFF U.2 NVMe PCIe SSD hot-swap drive bays

Attribute	Specification
Internal storage capacity	<ul style="list-style-type: none"> ● 2.5-inch drives: <ul style="list-style-type: none"> ○ 368.64TB using 12x 30.72TB 2.5-inch SAS/SATA SSDs ○ 153.6TB using 10x 15.36TB 2.5-inch NVMe SSDs ○ 28.8TB using 12x 2.4TB 2.5-inch HDDs ● 3.5-inch drives: <ul style="list-style-type: none"> ○ 80TB using 4x 20TB 3.5-inch HDDs ○ 61.44TB using 4x 15.36TB 3.5-inch SAS/SATA SSDs ○ 30.72TB using 4x 7.68TB 3.5-inch NVMe SSDs
Storage controller	<ul style="list-style-type: none"> ● 12 Gb SAS/SATA RAID adapters with up to 8GB flash-backed cache ● 12 Gb SAS/SATA HBA (non-RAID) ● Onboard PCIe NVMe (with Intel VROC NVMe RAID support for Intel SSDs and optionally non-Intel SSDs) ● NVMe Switch Adapters (with Intel VROC NVMe RAID support for Intel SSDs and optionally non-Intel SSDs)
Optical drive bays	None. Support for an external USB DVD RW Optical Disk Drive (See Optical drives).
Network interfaces	<ul style="list-style-type: none"> ● Onboard LOM slot for up to 4x 1/10 Gb Ethernet ports: <ul style="list-style-type: none"> ○ 2x or 4x 1 GbE RJ-45 ports (no 10/100 Mb support) ○ 2x or 4x 10 GbE RJ-45 ports (no 10/100 Mb support) ○ 2x or 4x 10 GbE SFP+ ports (no 10/100 Mb support) ● Optional Mezzanine LOM (ML2) slot for dual-port 10 GbE cards with SFP+ or RJ-45 connectors or single- or dual-port 25 GbE cards with SFP28 connectors. ● 1x RJ-45 10/100/1000 Mb Ethernet systems management port.
I/O expansion slots	<p>Up to four slots. Slot 4 is the fixed slot on the system planar, and the remaining slots depend on the riser cards installed. The slots are as follows:</p> <ul style="list-style-type: none"> ● Slot 1: PCIe 3.0 x8, ML2 x8, or ML2 x16; low profile ● Slot 2: PCIe 3.0 x16 or x8; low profile or full-height, half-length ● Slot 3: PCIe 3.0 x16; low profile ● Slot 4: PCIe 3.0 x8 (dedicated to an internal storage controller) <p>Slot 3 requires the second processor to be installed.</p>
Ports	<ul style="list-style-type: none"> ● Front: 1x USB 2.0 port with XClarity Controller access and 1x USB 3.0 port; optional 1x VGA port. ● Rear: 2x USB 3.0 ports and 1x VGA port. Optional 1x DB-9 serial port.
Cooling	Five (one processor) or seven (two processors) hot-swap dual-rotor system fans with N+1 redundancy.
Power supply	Up to two redundant hot-swap 550 W, 750 W, or 1100 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 G200e 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, power supplies, and fans.
Systems management	XClarity Controller (XCC) Standard, Advanced, or Enterprise (Pilot 4 chip), proactive platform alerts, light path diagnostics, XClarity Provisioning Manager, XClarity Essentials, XClarity Administrator, XClarity Integrators for VMware vCenter and Microsoft System Center, XClarity Energy Manager, Capacity Planner.
Security features	Power-on password, administrator's password, secure firmware updates, Trusted Platform Module (TPM) 1.2 or 2.0 (configurable UEFI setting). Optional lockable front bezel. Optional Trusted Cryptographic Module (TCM) or Nationz TPM (available only in PRC). Optional Lenovo Business Vantage security software (available only in PRC).

Attribute	Specification
Operating systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, VMware ESXi. See the Operating systems section for specifics.
Warranty	One-year (Machine Type 7X01) or three-year (Machine Type 7X02) 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 (select areas), 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.). See Physical specifications for details.
Weight	Minimum configuration: 11.9 kg (26.2 lb), maximum: 18.8 kg (41.4 lb)

Models

ThinkSystem SR630 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 SR630 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 SR630, 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 SR630 server.

Table 2. Base CTO models

Machine Type/Model General purpose	Machine Type/Model for HPC and AI	Description
7X02CTO1WW	7X02CTOLWW	ThinkSystem SR630 – 3-year Warranty
7X01CTO1WW	7X01CTOLWW	ThinkSystem SR630 – 1-year Warranty

For CTO orders, the following table lists the base chassis feature codes for the server.

There are currently two base feature codes for each of the 2.5-inch and 3.5-inch chassis. The "v2" bases include the new SR570 Air Duct Kit v2 which is required if a RAID 9350 adapter is to be configured. See the [RAID flash power module \(supercap\) support](#) section for details. The non-v2 bases can be selected if any other RAID adapter or HBA is selected.

Table 3. Base chassis for CTO models

Feature code	Description
Base feature codes - suitable for all configurations except those with a RAID 9350 adapter	
AUW0	ThinkSystem SR630 2.5" Chassis with 8 Bays
AUW1	ThinkSystem SR630 2.5" Chassis with 10 Bays
AUW2	ThinkSystem SR630 3.5" Chassis with 4 Bays
Base feature codes - suitable for all configurations including ones with a RAID 9350 adapter (includes the SR630 Air Duct Kit v2)	
BNPP	ThinkSystem SR630 2.5" Chassis with 8 Bays v2
BNPN	ThinkSystem SR630 2.5" Chassis with 10 Bays v2
BNPQ	ThinkSystem SR630 3.5" Chassis with 4 Bays v2

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

- [Models for Brazil](#)
- [Models for EMEA region](#)
- [Models for USA and Canada](#)

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 Brazil

Table 6. Models for Brazil

Model	Intel Xeon Scalable processor†	Memory	RAID	Front drive bays and drives	LOM	Rear Slots	Power supply	Front VGA	XCC	Rail kit
TopSeller models with a 3-year warranty (machine type 7X02)										
7X02A0GSBR	1x Bronze 3204 6C 85W 1.9G	1x 32GB 2933	730-8i 2GB	4x 3.5" SAS, 2x 4TB SATA HDD	4x1Gb	x8LP, x16LP	2x 750W	Yes	Std	Slide
7X02A0G3BR	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	730-8i 2GB	4x 3.5" SAS, Open bay	4x1Gb	x8LP, x16LP	2x 750W	Yes	Std	Slide
7X02A0G7BR	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	730-8i 2GB	4x 3.5" SAS, 1x 2TB SATA HDD	4x1Gb	x8LP, x16LP	2x 750W	Yes	Std	Slide
7X02A0GTBR	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	730-8i 2GB	4x 3.5" SAS, 2x 4TB SATA HDD	4x1Gb	x8LP, x16LP	2x 750W	Yes	Std	Slide
7X02A0GUBR	1x Silver 4210R 10C 100W 2.4G	1x 32GB 2933	730-8i 2GB	4x 3.5" SAS, 2x 4TB SATA HDD	4x1Gb	x8LP, x16LP	2x 750W	Yes	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 Scalable processor†	Memory	RAID	Front drive bays and drives	LOM	Rear Slots	Power supply	Front VGA	XCC	Rail kit
SAP HANA Business One models with a 3-year warranty (machine type 7X02)										
7X02A0HLEA	2x Silver 4210R 10C 100W 2.4G	12x 16GB 1Rx4 2933	940-8i 4GB	8x 2.5" SAS, 3x 960GB S4620	4x1Gb	x8LP, x16LP, x16LP	2x 750W	Yes	Ent	Slide CMA
Standard models with a 3-year warranty (machine type 7X02)										
7X02A0GXEA	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	940-8i 4GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0HFEA	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0HQEA	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0HTEA	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W TT	Opt	Ent	Slide
7X02A0JCEA	1x Silver 4208 8C 85W 2.1G	1x 64GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W TT	Opt	Ent	Slide
7X02A0JREA	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	930-8i	8x 2.5" SAS, Open bay	Open	Open	1x 750W TT	Opt	Ent	Slide
7X02A0JVEA	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	Option	Option 2.5"/8, Open bay, M.2 Dual	Open	Open	1x 750W TT	Opt	Ent	Slide
7X02A0JXEA	1x Silver 4208 8C 85W 2.1G	1x 32GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	Open	1x 750W TT	Opt	Ent	Slide
7X02A0K0EA	1x Silver 4208 8C 85W 2.1G	1x 16GB 2Rx8 2933	530-8i	8x 2.5" SAS, Open bay	Open	Open	1x 750W TT	Opt	Ent	Slide
7X02A0GQEA	1x Silver 4210R 10C 100W 2.4G	1x 32GB 2933	930-8i	8x 2.5" SAS, 2x 480GB 5400 PRO	Open	Open	2x 750W	Opt	Ent	Slide
7X02A0GWEA	1x Silver 4210R 10C 100W 2.4G	1x 32GB 2933	940-8i 4GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0HEEA	1x Silver 4210R 10C 100W 2.4G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0HPEA	1x Silver 4210R 10C 100W 2.4G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0HUEA	1x Silver 4210R 10C 100W 2.4G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W TT	Opt	Ent	Slide
7X02A0JDEA	1x Silver 4210R 10C 100W 2.4G	1x 64GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W TT	Opt	Ent	Slide
7X02A0JSEA	1x Silver 4210R 10C 100W 2.4G	1x 32GB 2933	930-8i	8x 2.5" SAS, Open bay	Open	Open	1x 750W TT	Opt	Ent	Slide
7X02A0JYEA	1x Silver 4210R 10C 100W 2.4G	1x 32GB 2933	530-8i	8x 2.5" SAS, Open bay	Open	Open	1x 750W TT	Opt	Ent	Slide
7X02A0JZEA	1x Silver 4210R 10C 100W 2.4G	1x 16GB 2Rx8 2933	530-8i	8x 2.5" SAS, Open bay	Open	Open	1x 750W TT	Opt	Ent	Slide

Model	Intel Xeon Scalable processor†	Memory	RAID	Front drive bays and drives	LOM	Rear Slots	Power supply	Front VGA	XCC	Rail kit
7X02A0H7EA	1x Silver 4214R 12C 100W 2.4G	1x 32GB 2933	940-8i 4GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0HCEA	1x Silver 4214R 12C 100W 2.4G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0HWEA	1x Silver 4214R 12C 100W 2.4G	1x 32GB 2933	940-8i 4GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W TT	Opt	Ent	Slide
7X02A0JTEA	1x Silver 4214R 12C 100W 2.4G	1x 32GB 2933	930-8i	8x 2.5" SAS, Open bay	Open	Open	1x 750W TT	Opt	Ent	Slide
7X02A0H6EA	1x Silver 42158C 85W 2.5G	1x 32GB 2933	940-8i 4GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0HBEA	1x Silver 42158C 85W 2.5G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0JFEA	1x Silver 42158C 85W 2.5G	1x 64GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W TT	Opt	Ent	Slide
7X02A0H4EA	1x Silver 4215R 8C 130W 3.2G	1x 32GB 2933	940-8i 4GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0HAEA	1x Silver 4215R 8C 130W 3.2G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0HVEA	1x Silver 4215R 8C 130W 3.2G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W TT	Opt	Ent	Slide
7X02A0JGEA	1x Silver 4215R 8C 130W 3.2G	1x 64GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W TT	Opt	Ent	Slide
7X02A0JWEA	1x Silver 4215R 8C 130W 3.2G	1x 32GB 2933	930-8i	8x 2.5" SAS, Open bay	Open	Open	1x 750W TT	Opt	Ent	Slide
7X02A0H2EA	1x Silver 4216 16C 100W 2.1G	1x 32GB 2933	940-8i 4GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0H5EA	1x Silver 4216 16C 100W 2.1G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0HXEA	1x Silver 4216 16C 100W 2.1G	1x 32GB 2933	940-8i 4GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W TT	Opt	Ent	Slide
7X02A0HYEA	1x Silver 4216 16C 100W 2.1G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W TT	Opt	Ent	Slide
7X02A0JUEA	1x Silver 4216 16C 100W 2.1G	1x 32GB 2933	930-8i	8x 2.5" SAS, Open bay	Open	Open	1x 750W TT	Opt	Ent	Slide
7X02A0H0EA	1x Gold 5218R 20C 125W 2.1G	1x 32GB 2933	940-8i 4GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0H3EA	1x Gold 5218R 20C 125W 2.1G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0GZEA	1x Gold 6226R 16C 150W 2.9G	1x 32GB 2933	940-8i 4GB	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0H1EA	1x Gold 6226R 16C 150W 2.9G	1x 32GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W	Opt	Ent	Slide
7X02A0JEEA	1x Gold 6226R 16C 150W 2.9G	1x 64GB 2933	9350-8i	8x 2.5" SAS, Open bay	Open	x8LP, x16LP	1x 750W TT	Opt	Ent	Slide

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

Models for USA and Canada

Table 12. Models for USA and Canada

Model	Intel Xeon Scalable processor†	Memory	RAID	Front drive bays and drives	LOM	Rear Slots	Power supply	Front VGA	XCC	Rail kit
Standard models with a 3-year warranty (machine type 7X02)										
7X02A0FANA	1x Silver 4208 8C 85W 2.1G	1x 16GB 2Rx8 2933	530-8i	4x 3.5" SAS, Open bay	Open	Open	1x 750W	Yes	Ent	Slide

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

Processors

The SR630 server supports one or two Intel Xeon Bronze, Silver, Gold, or Platinum processors. The following table lists the specifications of the processors for the SR630 server.

Topics in this section:

- [Continued support for 1st Gen Intel Xeon Scalable processors](#)
- [UEFI operating modes](#)

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

Abbreviations used in the table:

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

Table 13. Processor specifications

CPU model	Cores / threads	Core speed (Base / TB Max)	Cache	Max DDR4 speed	Max memory capacity per socket	UPI speed	TDP	HT	TB	VT-x	VT-d	SST-PP	FMA units	DCPMM	RAS
Intel Xeon Bronze processors															
3204	6 / 6	1.9 / 1.9 GHz	8.25 MB	2133 MHz	1 TB	9.6 GT/s	85 W	N	N	Y	Y	N	1	N	Std
3206R	8 / 8	1.9 / 1.9 GHz	11 MB	2133 MHz	1 TB	9.6 GT/s	85 W	N	N	Y	Y	N	1	N	Std
Intel Xeon Silver processors															
4208	8 / 16	2.1 / 3.2 GHz	11 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Y	Y	Y	Y	N	1	N	Std
4209T	8 / 16	2.2 / 3.2 GHz	11 MB	2400 MHz	1 TB	9.6 GT/s	70 W	Y	Y	Y	Y	N	1	N	Std
4210	10 / 20	2.2 / 3.2 GHz	13.75 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Y	Y	Y	Y	N	1	N	Std
4210R	10 / 20	2.4 / 3.2 GHz	13.75 MB	2400 MHz	1 TB	9.6 GT/s	100 W	Y	Y	Y	Y	N	1	N	Std
4210T	10 / 20	2.3 / 3.2 GHz	13.75 MB	2400 MHz	1 TB	9.6 GT/s	95 W	Y	Y	Y	Y	N	1	N	Std
4214	12 / 24	2.2 / 3.2 GHz	16.5 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Y	Y	Y	Y	N	1	N	Std
4214R	12 / 24	2.4 / 3.5 GHz	16.5 MB	2400 MHz	1 TB	9.6 GT/s	100 W	Y	Y	Y	Y	N	1	N	Std
4214Y	12 / 24	2.2 / 3.2 GHz	16.5 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Y	Y	Y	Y	Y	1	N	Std
	10 / 20	2.3 / 3.2 GHz													
	8 / 16	2.4 / 3.2 GHz													
4215	8 / 16	2.5 / 3.5 GHz	11 MB	2400 MHz	1 TB	9.6 GT/s	85 W	Y	Y	Y	Y	N	1	Y	Std
4215R	8 / 16	3.2 / 4.0 GHz	11 MB	2400 MHz	1 TB	9.6 GT/s	130 W	Y	Y	Y	Y	N	1	Y	Std
4216	16 / 32	2.1 / 3.2 GHz	22 MB	2400 MHz	1 TB	9.6 GT/s	100 W	Y	Y	Y	Y	N	1	N	Std

CPU model	Cores / threads	Core speed (Base / TB Max)	Cache	Max DDR4 speed	Max memory capacity per socket	UPI speed	TDP	HT	TB	VT-x	VT-d	SST-PP	FMA units	DCPMM	RAS
Intel Xeon Gold processors															
5215	10 / 20	2.5 / 3.4 GHz	13.75 MB	2666 MHz	1 TB	10.4 GT/s	85 W	Y	Y	Y	Y	N	1	Y	Adv
5215L	10 / 20	2.5 / 3.4 GHz	13.75 MB	2666 MHz	4.5 TB	10.4 GT/s	85 W	Y	Y	Y	Y	N	1	Y	Adv
5217	8 / 16	3.0 / 3.7 GHz	11 MB	2666 MHz	1 TB	10.4 GT/s	115 W	Y	Y	Y	Y	N	1	Y	Adv
5218	16 / 32	2.3 / 3.9 GHz	22 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	1	Y	Adv
5218B	16 / 32	2.3 / 3.9 GHz	22 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	1	Y	Adv
5218R	20 / 40	2.1 / 4.0 GHz	27.5 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	1	Y	Adv
5218N	16 / 32	2.3 / 3.7 GHz	22 MB	2666 MHz	1 TB	10.4 GT/s	110 W	Y	Y	Y	Y	N	1	Y	Adv
5218T	16 / 32	2.1 / 3.8 GHz	22 MB	2666 MHz	1 TB	10.4 GT/s	105 W	Y	Y	Y	Y	N	1	Y	Adv
5220	18 / 36	2.2 / 3.9 GHz	24.75 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	1	Y	Adv
5220R	24 / 48	2.2 / 4.0 GHz	35.75 MB	2666 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	1	Y	Adv
5220S	18 / 36	2.7 / 3.9 GHz	24.75 MB	2666 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	1	Y	Adv
5220T	18 / 36	1.9 / 3.9 GHz	24.75 MB	2666 MHz	1 TB	10.4 GT/s	105 W	Y	Y	Y	Y	N	1	Y	Adv
5222	4 / 8	3.8 / 3.9 GHz	16.5 MB	2933 MHz	1 TB	10.4 GT/s	105 W	Y	Y	Y	Y	N	2	Y	Adv
6208U	16 / 32	2.9 / 3.9 GHz	22 MB	2933 MHz	1 TB	No UPI	150 W	Y	Y	Y	Y	N	2	Y	Adv
6222V	20 / 40	1.8 / 3.6 GHz	27.5 MB	2400 MHz	1 TB	10.4 GT/s	115 W	Y	Y	Y	Y	N	2	Y	Adv
6226	12 / 24	2.7 / 3.7 GHz	19.25 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	2	Y	Adv
6226R	16 / 32	2.9 / 3.9 GHz	22 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6230	20 / 40	2.1 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	2	Y	Adv
6230N	20 / 40	2.3 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	2	Y	Adv
6230R	26 / 52	2.1 / 4.0 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6230T	20 / 40	2.1 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	2	Y	Adv
6234	8 / 16	3.3 / 4.0 GHz	24.75 MB	2933 MHz	1 TB	10.4 GT/s	130 W	Y	Y	Y	Y	N	2	Y	Adv
6238	22 / 44	2.1 / 3.7 GHz	30.25 MB	2933 MHz	1 TB	10.4 GT/s	140 W	Y	Y	Y	Y	N	2	Y	Adv
6238L	22 / 44	2.1 / 3.7 GHz	30.25 MB	2933 MHz	4.5 TB	10.4 GT/s	140 W	Y	Y	Y	Y	N	2	Y	Adv
6238R	28 / 56	2.2 / 4.0 GHz	38.5 MB	2933 MHz	1 TB	10.4 GT/s	165 W	Y	Y	Y	Y	N	2	Y	Adv
6238T	22 / 44	1.9 / 3.7 GHz	30.25 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	2	Y	Adv
6240	18 / 36	2.6 / 3.9 GHz	24.75 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6240L	18 / 36	2.6 / 3.9 GHz	24.75 MB	2933 MHz	4.5 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6240R	24 / 48	2.4 / 4.0 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	165 W	Y	Y	Y	Y	N	2	Y	Adv
6240Y	18 / 36	2.6 / 3.9 GHz	24.75 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	Y	2	Y	Adv
	14 / 28	2.8 / 3.9 GHz													
	8 / 16	3.1 / 3.9 GHz													

CPU model	Cores / threads	Core speed (Base / TB Max)	Cache	Max DDR4 speed	Max memory capacity per socket	UPI speed	TDP	HT	TB	VT-x	VT-d	SST-PP	FMA units	DCPMM	RAS
6242	16 / 32	2.8 / 3.9 GHz	22 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6242R	20 / 40	3.1 / 4.1 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	205 W	Y	Y	Y	Y	N	2	Y	Adv
6244	8 / 16	3.6 / 4.4 GHz	24.75 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6246	12 / 24	3.3 / 4.2 GHz	24.75 MB	2933 MHz	1 TB	10.4 GT/s	165 W	Y	Y	Y	Y	N	2	Y	Adv
6246R	16 / 32	3.4 / 4.1 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	205 W	Y	Y	Y	Y	N	2	Y	Adv
6248	20 / 40	2.5 / 3.9 GHz	27.5 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6248R	24 / 48	3.0 / 4.0 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	205 W	Y	Y	Y	Y	N	2	Y	Adv
6252	24 / 48	2.1 / 3.7 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6252N	24 / 48	2.3 / 3.6 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	150 W	Y	Y	Y	Y	N	2	Y	Adv
6254	18 / 36	3.1 / 4.0 GHz	24.75 MB	2933 MHz	1 TB	10.4 GT/s	200 W	Y	Y	Y	Y	N	2	Y	Adv
6258R	28 / 56	2.7 / 4.0 GHz	38.5 MB	2933 MHz	1 TB	10.4 GT/s	205 W	Y	Y	Y	Y	N	2	Y	Adv
6262V	24 / 48	1.9 / 3.6 GHz	33 MB	2400 MHz	1 TB	10.4 GT/s	135 W	Y	Y	Y	Y	N	2	Y	Adv
Intel Xeon Platinum processors															
8253	16 / 32	2.2 / 3.0 GHz	22 MB	2933 MHz	1 TB	10.4 GT/s	125 W	Y	Y	Y	Y	N	2	Y	Adv
8256	4 / 8	3.8 / 3.9 GHz	16.5 MB	2933 MHz	1 TB	10.4 GT/s	105 W	Y	Y	Y	Y	N	2	Y	Adv
8260	24 / 48	2.4 / 3.9 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	165 W	Y	Y	Y	Y	N	2	Y	Adv
8260L	24 / 48	2.4 / 3.9 GHz	35.75 MB	2933 MHz	4.5 TB	10.4 GT/s	165 W	Y	Y	Y	Y	N	2	Y	Adv
8260Y	24 / 48	2.4 / 3.9 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	165 W	Y	Y	Y	Y	Y	2	Y	Adv
	20 / 40	2.5 / 3.9 GHz													
	16 / 32	2.7 / 3.9 GHz													
8268	24 / 48	2.9 / 3.9 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	205 W	Y	Y	Y	Y	N	2	Y	Adv
8270	26 / 52	2.7 / 4.0 GHz	35.75 MB	2933 MHz	1 TB	10.4 GT/s	205 W	Y	Y	Y	Y	N	2	Y	Adv
8276	28 / 56	2.2 / 4.0 GHz	38.5 MB	2933 MHz	1 TB	10.4 GT/s	165 W	Y	Y	Y	Y	N	2	Y	Adv
8276L	28 / 56	2.2 / 4.0 GHz	38.5 MB	2933 MHz	4.5 TB	10.4 GT/s	165 W	Y	Y	Y	Y	N	2	Y	Adv
8280	28 / 56	2.7 / 4.0 GHz	38.5 MB	2933 MHz	1 TB	10.4 GT/s	205 W	Y	Y	Y	Y	N	2	Y	Adv
8280L	28 / 56	2.7 / 4.0 GHz	38.5 MB	2933 MHz	4.5 TB	10.4 GT/s	205 W	Y	Y	Y	Y	N	2	Y	Adv

Configuration notes:

- The Intel Xeon Gold 5218 and 5218B processors have similar specifications; however, they use different silicon designs and cannot be mixed in the same system.
- Processors with a U suffix are only supported in single-processor configurations. This limits the PCIe slots that can be used.
- 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 SR630 server models that come standard with one processor, the second processor can be ordered, if required (see the following table for ordering information). The second processor must be of the same model as the first processor. The second processor option includes a processor and a heatsink; two additional system fans are not included and need to be purchased with the second processor (see [Cooling](#) for details).

Table 14. Processor options

Part number	Feature code*	Description
Intel Xeon Bronze processors		
4XG7A37939	B4HU	SR530/SR570/SR630 Intel Xeon Bronze 3204 6C 85W 1.9GHz Processor w/o FAN
4XG7A37990	B7N3	SR530/SR570/SR630 Intel Xeon Bronze 3206R 8C 85W 1.9GHz Processor w/o FAN
Intel Xeon Silver processors		
4XG7A37936	B4HT	SR530/SR570/SR630 Intel Xeon Silver 4208 8C 85W 2.1GHz Processor w/o FAN
4XG7A37945	B4P4	SR530/SR570/SR630 Intel Xeon Silver 4209T 8C 70W 2.2GHz Processor w/o FAN
4XG7A37933	B4HS	SR530/SR570/SR630 Intel Xeon Silver 4210 10C 85W 2.2GHz Processor w/o FAN
4XG7A37988	B7N5	SR530/SR570/SR630 Intel Xeon Silver 4210R 10C 100W 2.4GHz Processor w/o FAN
4XG7A63300	BAZT	SR630 Intel Xeon Silver 4210T 10C 95W 2.3GHz Processor w/o FAN
4XG7A37930	B4HR	SR530/SR570/SR630 Intel Xeon Silver 4214 12C 85W 2.2GHz Processor w/o FAN
4XG7A37987	B7N6	SR530/SR570/SR630 Intel Xeon Silver 4214R 12C 100W 2.4GHz Processor w/o FAN
4XG7A37942	B4NW	SR530/SR570/SR630 Intel Xeon Silver 4214Y 12/10/8C 85W 2.2GHz Processor w/o FAN
4XG7A37927	B4HQ	SR530/SR570/SR630 Intel Xeon Silver 4215 8C 85W 2.5GHz Processor w/o FAN
4XG7A63298	BAZU	SR570/SR630 Intel Xeon Silver 4215R 8C 130W 3.2GHz Processor w/o FAN
4XG7A37924	B4HP	SR530/SR570/SR630 Intel Xeon Silver 4216 16C 100W 2.1GHz Processor w/o FAN
Intel Xeon Gold processors		
4XG7A37917	B4HN	SR530/SR570/SR630 Intel Xeon Gold 5215 10C 85W 2.5GHz Processor w/o FAN
4XG7A37911	B4P9	SR530/SR570/SR630 Intel Xeon Gold 5215L 10C 85W 2.5GHz Processor w/o FAN
4XG7A37920	B4HM	SR630 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	SR630 Intel Xeon Gold 5218N 16C 110W 2.3GHz Processor Option Kit w/o FAN
4XG7A37966	B4P3	SR630 Intel Xeon Gold 5218T 16C 105W 2.1GHz Processor w/o FAN
4XG7A37893	B4HK	SR530/SR570/SR630 Intel Xeon Gold 5220 18C 125W 2.2GHz Processor w/o FAN
4XG7A37984	B7N9	SR570/SR630 Intel Xeon Gold 5220R 24C 150W 2.2GHz Processor w/o FAN
4XG7A38018	B6CW	SR530/SR570/SR630 Intel Xeon Gold 5220S 18C 125W 2.7GHz Processor w/o FAN
4XG7A15809	B6CQ	SR630 Intel Xeon Gold 5220T 18C 105W 1.9GHz Processor w/o Fan
4XG7A37952	B5S1	SR630 Intel Xeon Gold 5222 4C 105W 3.8GHz Processor w/o FAN
None**	BAZV	Intel Xeon Gold 6208U 16C 150W 2.9GHz 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
4XG7A63292	BAZW	SR570/SR630 Intel Xeon Gold 6226R 16C 150W 2.9GHz Processor w/o FAN
4XG7A37890	B4HJ	SR530/SR570/SR630 Intel Xeon Gold 6230 20C 125W 2.1GHz Processor w/o FAN
4XG7A15720	B5RY	SR630 Intel Xeon Gold 6230N 20C 125W 2.3GHz Processor Option Kit w/o FAN

Part number	Feature code*	Description
4XG7A63290	BAZX	SR570/SR630 Intel Xeon Gold 6230R 26C 150W 2.1GHz Processor w/o FAN
4XG7A15808	B6CP	SR630 Intel Xeon Gold 6230T 20C 125W 2.1GHz Processor w/o Fan
4XG7A38000	B6CK	SR570/SR630 Intel Xeon Gold 6234 8C 130W 3.3GHz Processor w/o FAN
4XG7A38024	B6CJ	SR570/SR630 Intel Xeon Gold 6238 22C 140W 2.1GHz Processor w/o FAN
4XG7A38002	B6CR	SR570/SR630 Intel Xeon Gold 6238L 22C 140W 2.1GHz Processor w/o FAN
4XG7A63288	BAZL	SR630 Intel Xeon Gold 6238R 28C 165W 2.2GHz Processor w/o FAN
4XG7A37907	B4P2	SR630 Intel Xeon Gold 6238T 22C 125W 1.9GHz Processor w/o FAN
4XG7A37884	B4HH	SR570/SR630 Intel Xeon Gold 6240 18C 150W 2.6GHz Processor w/o FAN
4XG7A38014	B6CS	SR570/SR630 Intel Xeon Gold 6240L 18C 150W 2.6GHz Processor w/o FAN
4XG7A63286	BAZM	SR630 Intel Xeon Gold 6240R 24C 165W 2.4GHz Processor w/o FAN
4XG7A37904	B4NV	SR630 Intel Xeon Gold 6240Y 18/14/8C 150W 2.6GHz Processor w/o FAN
4XG7A37887	B4HG	SR630 Intel Xeon Gold 6242 16C 150W 2.8GHz Processor w/o FAN
4XG7A63284	BAZN	SR630 Intel Xeon Gold 6242R 20C 205W 3.1GHz Processor w/o FAN
4XG7A15875	B4HF	SR630 Intel Xeon Gold 6244 8C 150W 3.6GHz Processor w/o FAN
4XG7A37965	B6PD	SR630 Intel Xeon Gold 6246 12C 165W 3.3GHz Processor w/o FAN
4XG7A63282	BAZP	SR630 Intel Xeon Gold 6246R 16C 205W 3.4GHz Processor w/o FAN
4XG7A15893	B4HE	SR570/SR630 Intel Xeon Gold 6248 20C 150W 2.5GHz Processor w/o FAN
4XG7A63280	BAZQ	SR630 Intel Xeon Gold 6248R 24C 205W 3.0GHz Processor w/o FAN
4XG7A15890	B4HC	SR570/SR630 Intel Xeon Gold 6252 24C 150W 2.1GHz Processor w/o FAN
4XG7A15812	B6CT	SR630 Intel Xeon Gold 6252N 24C 150W 2.3GHz Processor w/o FAN
4XG7A15873	B4HD	SR630 Intel Xeon Gold 6254 18C 200W 3.1GHz Processor w/o FAN
4XG7A63278	BAZR	SR630 Intel Xeon Gold 6258R 28C 205W 2.7GHz Processor w/o FAN
4XG7A38009	B6CU	SR570/SR630 Intel Xeon Gold 6262V 24C 135W 1.9GHz Processor w/o FAN
Intel Xeon Platinum processors		
4XG7A37899	B5RZ	SR530/SR570/SR630 Intel Xeon Platinum 8253 16C 125W 2.2GHz Processor w/o FAN
4XG7A37948	B5S2	SR630 Intel Xeon Platinum 8256 4C 105W 3.8GHz Processor w/o FAN
4XG7A15888	B4HB	SR630 Intel Xeon Platinum 8260 24C 165W 2.4GHz Processor w/o FAN
4XG7A15884	B4P7	SR630 Intel Xeon Platinum 8260L 24C 165W 2.4GHz Processor w/o FAN
4XG7A37902	B4NU	SR630 Intel Xeon Platinum 8260Y 24/20/16C 165W 2.4GHz Processor w/o FAN
4XG7A15871	B4HA	SR630 Intel Xeon Platinum 8268 24C 205W 2.9GHz Processor w/o FAN
4XG7A15869	B4H9	SR630 Intel Xeon Platinum 8270 26C 205W 2.7GHz Processor w/o FAN
4XG7A15882	B4H8	SR630 Intel Xeon Platinum 8276 28C 165W 2.2GHz Processor w/o FAN
4XG7A15878	B4P6	SR630 Intel Xeon Platinum 8276L 28C 165W 2.2GHz Processor w/o FAN
4XG7A15867	B4H7	SR630 Intel Xeon Platinum 8280 28C 205W 2.7GHz Processor w/o FAN
4XG7A15863	B4P5	SR630 Intel Xeon Platinum 8280L 28C 205W 2.7GHz Processor w/o FAN

* For CTO configurations, the feature code represents a processor, and fans and heatsinks are derived by the configuration tool.

** Factory-installed only; no field upgrade. Supported in the single-processor configurations only.

Configuration note: If processors with 200 W or 205 W TDP are used, or if Gold 6240Y, 6244, 6246, or 6252N processors are used, the following conditions must be met:

- No rear HDD kit installed
- No U.2 NVMe 10-bay backplane installed
- No PCIe flash adapters installed
- No GPUs installed
- No persistent memory modules installed
- A maximum of one supercapacitor module installed
- ASHRAE A2 (35°C [95 °F]) only
- The server performance might be impacted in case of a fan failure
- No backplanes installed, or 2.5" 10-bay AnyBay backplane with up to 4 drives installed (For Gold 6240Y, 6242R, 6246R, 6248R, 6254, and 6258R processors only)

Continued support for 1st Gen Intel Xeon Scalable processors

The SR630 also continues to support the 1st Gen Intel Xeon Scalable processors (formerly codenamed "Skylake") listed in the following table.

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

Part number	Feature code	Description
4XG7A09411	No CTO*	ThinkSystem SR630 Intel Xeon Platinum 8180M 28C 205W 2.5GHz Processor Option Kit

* 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>

Configuration note for 1st Gen processors: For Gold 6144, 6146, and 6154 processors and Platinum 8168, 8180, and 8180M processors, the following conditions must be met:

- No rear HDD kit installed
- No U.2 NVMe 10-bay backplane installed
- No PCIe flash adapters installed
- No GPUs installed
- A maximum of one supercap module installed
- ASHRAE A2 (35°C, 95 °F) only
- The server performance might be impacted in case of a fan failure
- For Gold 6154 processor only: No backplanes installed, or 2.5" 10-bay AnyBay backplane with up to 4 drives installed

UEFI operating modes

The SR630 offers preset operating modes that affect energy consumption and performance. These modes are a collection of predefined low-level UEFI settings that simplify the task of tuning the server to suit your business and workload requirements.

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

Table 16. UEFI operating mode presets in DCSC

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

The preset modes for the SR630 are as follows:

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

For details about these preset modes, and all other performance and power efficiency UEFI settings offered in the SR630, see the paper "Tuning UEFI Settings for Performance and Energy Efficiency on Intel Xeon Scalable Processor-Based ThinkSystem Servers", available from <https://lenovopress.lenovo.com/lp1477>.

Memory

The SR630 server supports up to 12 TruDDR4 memory when one processor is installed and up to 24 DIMMs when two processors are installed. Each processor has six memory channels (two integrated memory controllers with three memory channels per memory controller), and there are two DIMMs per channel.

With 2nd Gen Xeon SP processors, the server supports memory up to 2933 MHz. With 1st Gen Xeon SP processors, the server supports memory up to 2666 MHz.

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 maximum memory capacities are supported by the server with 2nd Gen Xeon SP processors (up to 2933 MHz):

- RDIMMs: 1.5 TB (768 GB per processor)
- 3DS RDIMMs: 3 TB (1.5 TB per processor)

The following maximum memory capacities supported by the server with 1st Gen Xeon SP processors (up to 2666 MHz):

- RDIMMs: 768 GB (384 GB per processor)
- LRDIMMs: 1.5 TB (768 GB per processor)
- 3DS RDIMMs: 3 TB (1.5 GB per processor)

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 are supported by the server. The table also indicates which processor generation is supported for each memory option.

Table 17. Memory options

Part number	Feature code	Description	Maximum quantity*	Gen 1 CPU	Gen 2 CPU
RDIMMs - 2933 MHz Performance+					
4X77A12184	B5N6	ThinkSystem 16GB TruDDR4 Performance+ 2933MHz (2Rx8 1.2V) RDIMM	12 / 24	No	Yes
4X77A12185	B5N7	ThinkSystem 32GB TruDDR4 Performance+ 2933MHz (2Rx4 1.2V) RDIMM	12 / 24	No	Yes
4X77A12186	B5N8	ThinkSystem 64GB TruDDR4 Performance+ 2933MHz (2Rx4 1.2V) RDIMM	12 / 24	No	Yes
RDIMMs - 2933 MHz					
4ZC7A08706	B4H1	ThinkSystem 8GB TruDDR4 2933MHz (1Rx8 1.2V) RDIMM	12 / 24	No	Yes
4ZC7A08707	B4LY	ThinkSystem 16GB TruDDR4 2933MHz (1Rx4 1.2V) RDIMM	12 / 24	No	Yes
4ZC7A08708	B4H2	ThinkSystem 16GB TruDDR4 2933MHz (2Rx8 1.2V) RDIMM	12 / 24	No	Yes
4ZC7A08709	B4H3	ThinkSystem 32GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM	12 / 24	No	Yes
4ZC7A08710	B4H4	ThinkSystem 64GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM	12 / 24	No	Yes
3DS RDIMMs - 2933 MHz Performance+					
4X77A12187	B5N9	ThinkSystem 128GB TruDDR4 Performance+ 2933MHz (4Rx4 1.2V) 3DS RDIMM	12 / 24	No	Yes
3DS RDIMMs - 2933 MHz					
4ZC7A15113	B587	ThinkSystem 128GB TruDDR4 2933MHz (4Rx4 1.2V) 3DS RDIMM	12 / 24	No	Yes
RDIMMs - 2666 MHz					
7X77A01301	AUU1	ThinkSystem 8GB TruDDR4 2666 MHz (1Rx8 1.2V) RDIMM	12 / 24	Yes	No
7X77A01303	AUNC	ThinkSystem 16GB TruDDR4 2666 MHz (2Rx8 1.2V) RDIMM	12 / 24	Yes	Yes
7X77A01304	AUND	ThinkSystem 32GB TruDDR4 2666 MHz (2Rx4 1.2V) RDIMM	12 / 24	Yes	Yes

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

Configuration notes:

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

Note: Maximum memory speed can be achieved when Max performance mode is enabled in UEFI.

- Mixing different types of memory (RDIMMs, LRDIMMs, 3DS RDIMMs) is not supported.
- All Performance+ DIMMs in the server must be of the same type, rank, and capacity (the same part number or feature code) to operate at 2933 MHz in the configurations with two DIMMs per channel. Performance+ DIMMs cannot be mixed with other DIMMs.
- 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) (excluding Performance+ RDIMMs).
- Mixing 3DS RDIMMs of different speeds (2666 MHz or 2933 MHz) and capacities (64 GB or 128 GB) is supported in the independent channel mode (excluding Performance+ 3DS RDIMMs).
- The 128 GB Performance+ 2933 MHz 3DS RDIMMs (feature code B5N9) running at 2933 MHz with two DIMMs per channel are supported at the ambient temperature of up to 30 °C (86 °F).
- The maximum quantity of DIMMs supported is reduced by the quantity of DC Persistent Memory Modules used in the configuration.
- Server configurations with more than 1 TB of memory capacity per socket (including DCPMMs and RDIMMs or 3DS RDIMMs) require processors that support up to 4.5 TB (L-suffix) per socket.
- For server configurations with memory protection, the following rules apply:
 - Single Device Data Correction (SDDC) works only in the independent channel mode and supports only x4-based memory DIMMs.
 - Adaptive Double Device Data Correction (ADDDC) works with x4-based memory DIMMs and requires two DIMM ranks per channel, Intel Xeon Gold or Platinum processors, and the Closed Page memory access mode.
 - If memory mirroring is used, then DIMMs must be installed in quantities of 2, 4, or 8 per processor for mirroring across two memory channels, or in quantities of 3, 6, 9, or 12 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, or two single-rank DIMMs). In rank sparing mode, one rank in each populated channel is reserved as spare memory for other ranks on the same channel. All DIMMs in the server must be identical in type and size.
 - SDDC, memory mirroring, and memory rank sparing modes are mutually exclusive. Only one operational memory mode can be enabled on the server.
 - In the configurations with DCPMMs, memory mirroring is supported only in the App Direct mode (other DCPMM modes do not support memory mirroring) and applies only to the RDIMMs or 3DS RDIMMs (DCPMMs are not mirrored). Memory sparing is not supported in the configurations with DCPMMs.

Persistent memory

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

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

The SR630 server supports up to six TruDDR4 DC Persistent Memory Modules (DCPMMs) when one processor is installed and up to 12 DCPMMs when two processors are installed (up to one DCPMM per processor's memory channel) for a total of up to 6 TB of persistent memory capacity. The DCPMMs are installed in the same memory DIMM slots on the system board that are used for installing RDIMMs or 3DS RDIMMs.

The DCPMMs support the following modes of operation:

- **Memory Mode**
Memory Mode seamlessly brings large memory capacity at affordable cost points to legacy applications. In this mode, DCPMMs provide volatile memory that behaves much like traditional RDIMMs or 3DS RDIMMs (the data will not be saved in case of a power loss) and is transparent to the operating system and applications. DCPMMs provide memory capacity and RDIMMs or 3DS RDIMMs provide cache memory that is managed by the processor's memory controller. The total memory capacity that is seen by the operating system is the capacity of the DCPMMs; the capacity of the RDIMMs or 3DS RDIMMs is hidden and does not appear as a memory resource in the operating system. This mode is considered particularly suited for virtualized database deployments and big-data analytics applications.
- **App Direct Mode**
App Direct Mode brings persistency to the data and structures (the data will be saved in case of a power loss). This mode requires operating system and application awareness of two types of system memory: Persistent (DCPMMs) and DRAM (RDIMMs or 3DS RDIMMs). The total memory capacity that is seen by the operating system includes the capacity of the DCPMMs and RDIMMs or 3DS RDIMMs. This mode is considered particularly suited for in-memory databases, in-memory analytics frameworks, and ultrafast storage applications.
- **Mixed Memory Mode**
Mixed Memory Mode is a combination of Memory Mode and App Direct Mode, where a portion of the capacity of the DCPMMs is used for the Memory Mode operations, and the remaining capacity of the DCPMMs is used for the App Direct Mode operations.

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

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

The following table lists DCPMM options available for the SR630 server.

Table 18. DCPMM options

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

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

Configuration notes:

- All DCPMMs in the server must be of the same capacity (the same part number or feature code).
- The RDIMMs or 3DS RDIMMs are required in the configurations with DCPMMs, and all RDIMMs or 3DS RDIMMs must be of the same type, rank, and capacity (the same part number or feature code).
- The DCPMMs cannot be mixed with the 8GB TruDDR4 2933 MHz RDIMM (4ZC7A08706).
- For Mixed Memory Mode, the volatile (Memory) portion of the total capacity of DCPMMs is configured in increments of 32 GB multiplied by the number of DCPMMs in the server, and the remaining capacity is allocated to the persistent (App Direct) portion. The ratio of the total capacity of RDIMMs or 3DS RDIMMs to the total capacity of the volatile portion of DCPMMs should be between 1:2 and 1:16.
- Server configurations with more than 1 TB of memory capacity per socket (including DCPMMs and RDIMMs or 3DS RDIMMs) require processors that support up to 4.5 TB (L-suffix) per socket.
- The DCPMMs are *not* supported in the following configurations:
 - Processors of 200 W or 205 W TDP, or Gold 6240Y, 6244, 6246, or 6252N processors installed
 - GPU adapters installed
 - Mellanox InnoVA-2 adapters installed

For more information, including supported combinations of DIMMs and Persistent Memory, refer to the Intel Optane Persistent Memory 100 Series Product Guide:

<https://lenovopress.com/lp1066-intel-optane-persistent-memory-100-series>

Internal storage

Topics in this section:

- [Configurations](#)
- [Backplanes](#)
- [Supported drive bay combinations](#)
- [Field upgrades](#)
- [RAID flash power module \(supercap\) support](#)
- [M.2 drives](#)
- [SED encryption key management with ISKLM](#)

Configurations

The SR630 server supports the following internal drive bay configurations:

1. Up to 6 SAS/SATA hot-swap drive bays: 4x 3.5" (front) + 2x 2.5" (rear)
2. 4 LFF AnyBay hot-swap drive bays: 4x 3.5" (front)
3. Up to 10 SFF SAS/SATA hot-swap drive bays: 8x 2.5" (front) + 2x 2.5" (rear)

4. Up to 12 SFF hot-swap drive bays:
6x 2.5" SAS/SATA & 4x 2.5" AnyBay (front) + 2x 2.5" SAS/SATA (rear)
5. 10 SFF U.2 NVMe PCIe SSD hot-swap drive bays

In addition, the SR630 server models can be configured with one or two internal M.2 SATA SSDs. The server also supports configurations without drive bays.

The following figure shows the internal drive bay configurations.

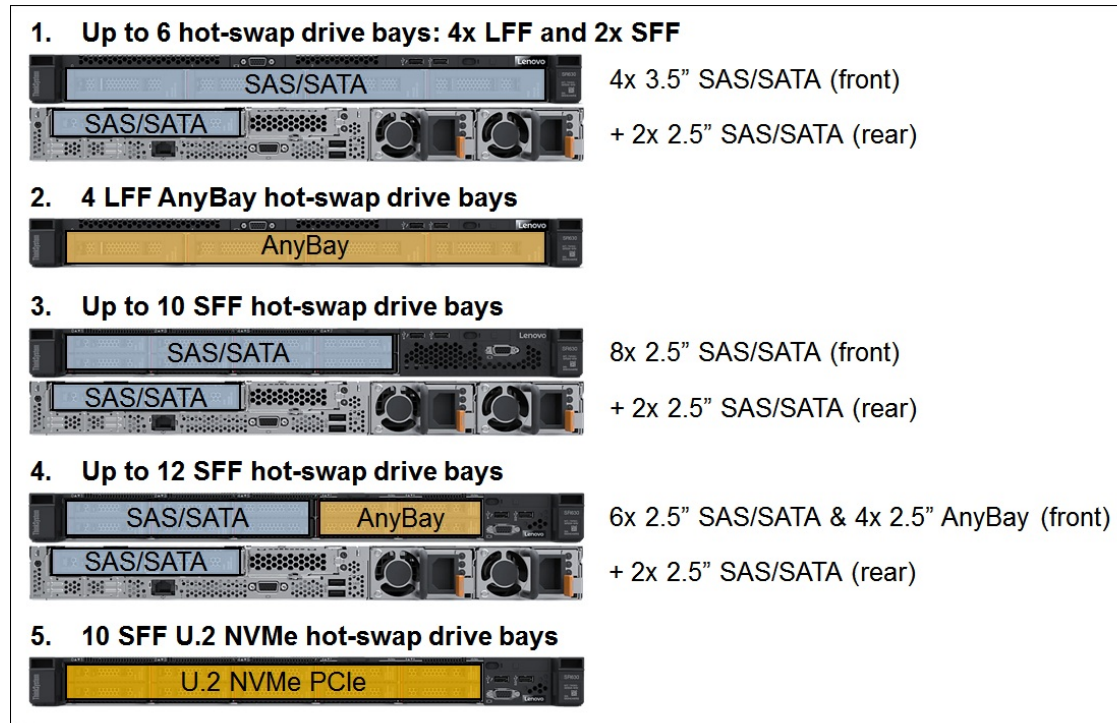


Figure 7. Internal drive bay configurations

Backplanes

The following table lists the internal storage options for the server for configure-to-order builds.

Field upgrades: For field upgrades to add drive backplanes, see the [Field upgrades](#) section

Table 19. Internal storage options

Feature code	Description	Drive bays	Maximum quantity
3.5-inch front backplanes			
AUW8	ThinkSystem 3.5" SATA/SAS 4-Bay Backplane	4x SAS/SATA	1
B0WJ	ThinkSystem SR630 3.5" Anybay 4-Bay Backplane	4x NVMe/SAS/SATA	1
2.5-inch front backplanes			
AUWB	ThinkSystem SR530/SR630/SR570 2.5" SATA/SAS 8-Bay Backplane	8x SAS/SATA	1
AUW9	ThinkSystem 1U 10x2.5" (6x SAS/SATA 4x AnyBay) Backplane	6x SAS/SATA drives + 4x NVMe/SAS/SATA	1

Feature code	Description	Drive bays	Maximum quantity
BMNM	ThinkSystem SR630 2.5" U.2 10-Bay Backplane Kit v2	10x NVMe	1
AVKF	ThinkSystem SR630 2.5" U.2 10-Bay Backplane Kit	10x NVMe	1
BQBC	ThinkSystem SR630 2.5" U.2 8-Bay Backplane Kit v2	8x NVMe	1
BQBB	ThinkSystem SR630 2.5" U.2 8-Bay Backplane Kit	8x NVMe	1
Rear backplanes			
BMXG	ThinkSystem SR630 Rear HDD/SSD Kit v2	2x SAS/SATA	1
AUWJ	ThinkSystem SR630 Rear HDD Kit	2x SAS/SATA	1

Configuration notes:

- Lenovo AnyBay allows a choice of drive interface types in the same drive bay: SAS drives, SATA drives, or U.2 NVMe PCIe drives.
- U.2 NVMe PCIe SSDs in the AnyBay drive bays require either the second processor (enables the onboard NVMe controller) or the 1610-4P NVMe Switch Adapter to be installed. The 1610-4P NVMe Switch Adapter connected to the AnyBay drive bays is supported only in the configurations with one processor.
- Models with 10x 2.5-inch drive bays (6x SAS/SATA + 4x AnyBay) and an 8-port SAS RAID controller or HBA support only NVMe drives in the AnyBay drive bays.

Supported drive bay combinations

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

Table 20. Internal storage configurations: 3.5-inch front drive bays

Drive bay configuration	Backplane kit type and quantity			Storage controller type and quantity*
	4x 3.5" SATA/SAS	4x 3.5" AnyBay	2x 2.5" Rear HDD	
4x 3.5" chassis (Feature code AUW2)				
4x 3.5-in. SAS/SATA hot-swap (front)	1	0	0	1x RAID 8i or HBA 8i (4)
4x 3.5-in. SAS/SATA hot-swap (front) + 2x 2.5-in. SAS/SATA hot-swap (rear)	1	0	1	1x RAID 8i or HBA 8i (6)
4x 3.5-in. AnyBay hot-swap (front)	0	1	0	1x RAID 8i or HBA 8i (4) + NVMe (4)**

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

** The 1610-4P NVMe Switch Adapter in the configurations with one processor, or the onboard NVMe controller in the configurations with two processors.

Table 21. Internal storage configurations: 2.5-inch front drive bays

Drive bay configuration	Backplane kit type and quantity					Storage controller type and quantity*
	8x 2.5" SATA/SAS	10x 2.5" AnyBay	8x U.2 NVMe	10x U.2 NVMe	2x 2.5" Rear HDD	
8x 2.5" chassis (Feature code AUW0)						
8x 2.5-in. SAS/SATA hot-swap (front)	1	0	0	0	0	1x RAID 8i or HBA 8i (8) 1x RAID 16i (8)
8x 2.5-in. SAS/SATA hot-swap (front) + 2x 2.5-in. SAS/SATA hot-swap (rear)	1	0	0	0	1	1x RAID 16i or HBA 16i (10)
10x 2.5" chassis (Feature code AUW1)						
4x 2.5-in. AnyBay (NVMe only) hot-swap (front)	0	1	0	0	0	Onboard NVMe (4)**
6x 2.5-in. SAS/SATA + 4x 2.5-in. AnyBay hot-swap (front)	0	1	0	0	0	1x RAID 16i or HBA 16i (10) + Onboard NVMe (4)**
6x 2.5-in. SAS/SATA + 4x 2.5-in. AnyBay (NVMe only) hot-swap (front)	0	1	0	0	0	1x RAID 8i or HBA 8i (6) + Onboard NVMe (4)**
						1x RAID 8i or HBA 8i (6) + 1x 1610-4P NVMe (4)^
						1x RAID 16i or HBA 16i (6) + 1x 1610-4P NVMe (4)^
6x 2.5-in. SAS/SATA + 4x 2.5-in. AnyBay hot-swap (front) + 2x 2.5-in. SAS/SATA hot-swap (rear)	0	1	0	0	1	1x RAID 16i or HBA 16i (12) + Onboard NVMe (4)**
10x 2.5-in. U.2 NVMe (8x NVMe drives only) hot-swap (front)	0	0	1	0	0	Onboard NVMe (4)** + 1x 1610-4P/810-4P (4)
						Onboard NVMe (4)** + 2x 810-4P (2+2)
						1x 1611-8P (8)
10x 2.5-in. U.2 NVMe hot-swap (front)	0	0	0	1	0	Onboard NVMe (4)** + 1x 1610-4P (4) + 1x 810-4P (2)
						Onboard NVMe (4)** + 2x 1610-4P (4+2)
						Onboard NVMe (4)** + 1x 1611-8P (6)

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

** The onboard NVMe controller requires the second processors to be installed.

^ The 1610-4P NVMe Switch Adapter connected to the AnyBay drive bays is supported only in the configurations with one processor. CTO only, not available as a field upgrade.

Field upgrades

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

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

Use with the 1611-8P adapter: AnyBay and NVMe backplane kits in the table below include NVMe cables for use with 1610-4P or 810-4P NVMe adapters. If you are adding or upgrading to the 1611-8P NVMe adapter, you will need to *also* order 1611-8P Cable Kit. See the [Cable kit for the 1611-8P adapter](#) section for details.

Table 22. Drive bay field upgrades

Part number	Description	Maximum quantity
Front drive bay backplanes - field upgrade kits		
4XH7A80455	ThinkSystem SR530/SR630 2.5" SATA/SAS 8-Bay Backplane Kit v2	1
7XH7A05896	ThinkSystem SR530/SR630 2.5" SATA/SAS 8-Bay Backplane Kit	1
4XH7A80452	ThinkSystem SR570/SR630 2.5" AnyBay 10-Bay Backplane Upgrade Kit v2	1
4XH7A08768	ThinkSystem SR570/SR630 2.5" AnyBay 10-Bay Backplane Upgrade Kit	1
4XH7A80451	ThinkSystem SR630 2.5" U.2 10-Bay Backplane Kit v2	1
4XH7A08766	ThinkSystem SR630 2.5" U.2 10-Bay Backplane Kit	1
Rear drive bays - field upgrade kits		
4XH7A80454	ThinkSystem SR630 Rear HDD/SSD Kit v2	1
7XH7A06252	ThinkSystem SR630 Rear HDD/SSD Kit	1

Configuration notes:

- The backplane upgrade kits include drive backplanes and required signal cables, power cables, and drive bay fillers; storage controllers are not included.
- Models without any drive bays that are based on the 8x 2.5" chassis (feature code AUW0) support adding drive bays by using the 2.5" 8-drive backplane kit (7XH7A05896 or 4XH7A80455).
- Models without any drive bays that are based on the 10x 2.5" chassis (feature code AUW1) support adding drive bays by using the 2.5" 10-bay AnyBay backplane kit (4XH7A08768 or 4XH7A80452) or 2.5" U.2 10-bay backplane kit (4XH7A08766 or 4XH7A80451).
- Models with 10x 2.5-inch drive bays (6x SAS/SATA + 4x AnyBay) can be upgraded to all NVMe configuration by using the 2.5" U.2 10-Bay Backplane Kit (4XH7A08766 or 4XH7A80451). The kit includes a backplane, cables, and drive fillers. NVMe Switch Adapters are *not* included in the kit; two NVMe Switch Adapters are required for the 10x 2.5" U.2 NVMe configuration.
- The 2.5" Rear HDD Kit is installed in place of the PCIe Riser Card 1; PCIe slots 1 and 2 are not present.
- The 2.5" Rear HDD Kit is supported only with the processors of up to 125 W TDP.
- U.2 NVMe PCIe SSDs in the AnyBay drive bays require either the second processor (enables the onboard NVMe controller) or the 1610-4P NVMe Switch Adapter to be installed. The 1610-4P NVMe Switch Adapter connected to the AnyBay drive bays is supported only in the configurations with one processor.
- Models with 10x 2.5-inch drive bays (6x SAS/SATA + 4x AnyBay) and an 8-port SAS RAID controller or HBA support only NVMe drives in the AnyBay drive bays.

Cable kits for 440 HBAs and RAID 940 adapters

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

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

Table 23. Cable kits for 440 HBAs and RAID 940 adapters

Backplane kits with X30 cables		X40 cable kits also needed	
4XH7A80455	ThinkSystem SR530/SR630 2.5" SATA/SAS 8-Bay Backplane Kit v2	4XH7A61096	ThinkSystem SR530/SR570/SR630 2.5" SAS/SATA 8-Bay X40 RAID Cable Kit
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
4XH7A80452	ThinkSystem SR570/SR630 2.5" AnyBay 10-Bay Backplane Upgrade Kit v2	4XH7A61101	ThinkSystem SR570/SR630 2.5" AnyBay 10-Bay X40 RAID Cable Kit
4XH7A08768	ThinkSystem SR570/SR630 2.5" AnyBay 10-Bay Backplane Upgrade Kit	4XH7A61101	ThinkSystem SR570/SR630 2.5" AnyBay 10-Bay X40 RAID Cable Kit
4XH7A80451	ThinkSystem SR630 2.5" U.2 10-Bay Backplane Kit v2	None	Not needed - NVMe only
4XH7A08766	ThinkSystem SR630 2.5" U.2 10-Bay Backplane Kit	None	Not needed - NVMe only
4XH7A80454	ThinkSystem SR630 Rear HDD/SSD Kit v2	4XH7A61110	ThinkSystem SR590/SR630/SR650 SAS/SATA 2-Bay Rear BP X40 RAID Cable Kit
7XH7A06252	ThinkSystem SR630 Rear HDD/SSD Kit	4XH7A61110	ThinkSystem SR590/SR630/SR650 SAS/SATA 2-Bay Rear BP X40 RAID Cable Kit

Cable kit for the 1611-8P adapter

The backplane kit part numbers listed in the [Drive bay field upgrades table](#) that include NVMe connections (that is, NVMe backplanes and AnyBay backplanes) only include cables for use with 1610-4P or 810-4P NVMe adapters. If you wish to use these backplane kits with the 1611-8P NVMe adapter, then you will *also* need to order an additional cable kit to use instead of the cables in the backplane kit.

Tip: When adding an 1611-8P adapter, you will order both the backplane kit and the 1611-8P cable kit, however the NVMe data cables in the backplane kit will not be used.

Table 24. Cable kit for 1611-8P adapter

Part number	Description
4X97A83643	ThinkSystem SR630 1611-8P NVMe Switch Adapter Cable Kit

RAID flash power module (supercap) support

ThinkSystem RAID 930, 940, 9350 and 730-8i 2GB adapters all include a RAID flash power module (supercap). If you plan to install one of these adapters as a field upgrade, then may also need to order a Supercap Holder kit or a replacement server air baffle to mount the power module. For CTO orders, the components in the installation kit are automatically derived when you select the RAID adapter.

The server supports one or two RAID adapters (internal or external) with supercaps, however there are three possible locations for the supercaps to be mounted. The locations of the supercaps depends on the front drive bays (2.5-inch or 3.5-inch) and the size of the processor heatsinks (which in turn determines if the air baffle is installed). Details are summarized in the following table. Location references are shown in the figure below.

Note: Some configurations do not support a supercap-attached RAID adapter as shown in the table.

Table 25. Supercap support

Front drive configuration	Processor heatsinks	Number of adapters & supercaps	Location of supercaps
2.5-inch	Standard	2	<ol style="list-style-type: none"> 1. Front of server behind operator panel ❸ (if present) 2. Mounted on air baffle ❶ 3. Mounted on air baffle ❷ (if no holder installed in ❸)
	High Performance (no air baffle installed)	1	<ol style="list-style-type: none"> 1. Front of server behind operator panel ❸
3.5-inch	Standard	2	<ol style="list-style-type: none"> 1. Mounted on air baffle ❶ 2. Mounted on air baffle ❷
	High Performance (no air baffle installed)	0	Not supported

The locations where supercaps are installed is shown in the following figure.

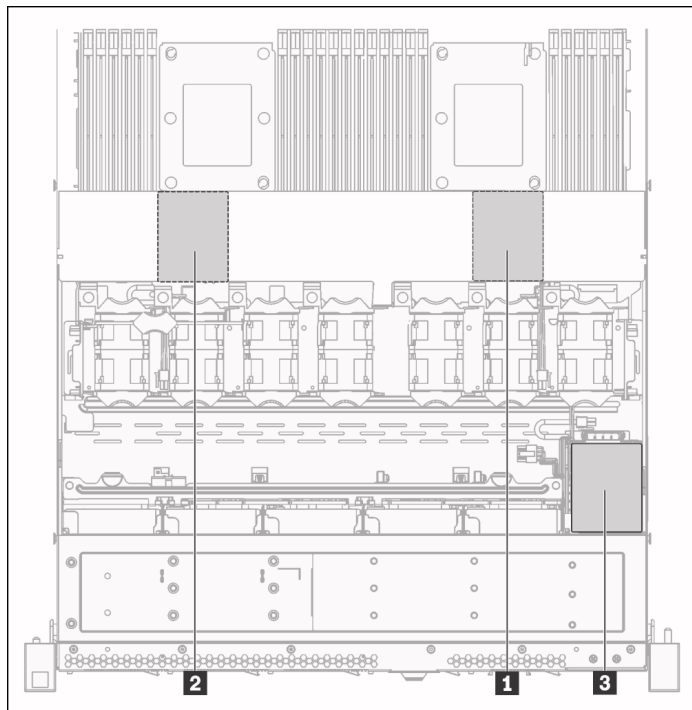


Figure 8. Location of the supercaps in the SR630

If the server does not include a supercap holder in position ❸, order the holder using part number 4M17A61348.

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. The original air duct won't physically accommodate the supercap of these adapters.

- ThinkSystem RAID 9350-8i 2GB Flash PCIe 12Gb Adapter, 4Y37A72483
- ThinkSystem RAID 9350-16i 4GB Flash PCIe 12Gb Adapter, 4Y37A72485

Tip: If your server was built before December 2021 or was configured with base feature codes AUW0, AUW1 or AUW2, then you have original air duct, part SM27A03474, and you will need to order a replacement air duct. If you server was configured with newer "v2" base feature codes BNPN, BNPQ or BNPP, then you have the newer air duct, part SM27A99423 and no air duct replacement is necessary.

Ordering information for the Supercap Holder Kit and the replacement air duct are listed in the following table.

Table 26. Supercap installation field upgrades

Part number	Feature code	Description	Maximum supported
4M17A61304	AURN	ThinkSystem V3 1U Supercap Holder Kit (For use in position ③ at the front of the server)	1
4M17A61348	BNZ0	ThinkSystem SR630 Air Duct Kit v2 (Enables ① and ② for use with the 9350-8i or 9350-16i adapters)	1

M.2 drives

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

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

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

Table 27. M.2 components

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

Supported drives are listed in the [Internal drive options](#) section.

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

SED encryption key management with ISKLM

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

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

Table 28. FoD upgrades for SKLM support

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

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

Table 29. 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 SR630 server.

Onboard SATA: The SR630 does not offer onboard SATA functionality.

Table 30. RAID controllers and HBAs for internal storage

Part number	Feature code	Description	Maximum quantity	I/O slots supported
12 Gb SAS/SATA RAID controllers - 8-port adapters				
7Y37A01082	AUNG	ThinkSystem RAID 530-8i PCIe 12Gb Adapter	1	4, 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	4, 1

Part number	Feature code	Description	Maximum quantity	I/O slots supported
4Y37A09722	B4RQ	ThinkSystem RAID 730-8i 2GB Flash PCIe 12Gb Adapter	1	4, 1
7Y37A01084	AUNJ	ThinkSystem RAID 930-8i 2GB Flash PCIe 12Gb Adapter	1	4, 1
4Y37A72483†	BJHL†	ThinkSystem RAID 9350-8i 2GB Flash PCIe 12Gb Adapter	1	1
4Y37A09728	B8NY	ThinkSystem RAID 940-8i 4GB Flash PCIe Gen4 12Gb Adapter	1	1
12 Gb SAS/SATA RAID controllers - 16-port adapters				
4Y37A09727	B6CE	ThinkSystem RAID 530-16i PCIe 12Gb Adapter	1	4, 1
4Y37A78835	BNAX	ThinkSystem RAID 540-16i PCIe Gen4 12Gb Adapter	1	1
7Y37A01085	AUNK	ThinkSystem RAID 930-16i 4GB Flash PCIe 12Gb Adapter	1	4, 1
4Y37A72485†	BJHN†	ThinkSystem RAID 9350-16i 4GB Flash PCIe 12Gb Adapter	1	1
4Y37A09721	B31E	ThinkSystem RAID 930-16i 8GB Flash PCIe 12Gb Adapter	1	4, 1
4Y37A78600	BM35	ThinkSystem RAID 940-16i 4GB Flash PCIe Gen4 12Gb Adapter	1	1
4Y37A09730	B8NZ	ThinkSystem RAID 940-16i 8GB Flash PCIe Gen4 12Gb Adapter	1	1
12 Gb SAS/SATA non-RAID HBAs				
7Y37A01088	AUNL	ThinkSystem 430-8i SAS/SATA 12Gb HBA	1	4, 1
4Y37A72480	BJHH	ThinkSystem 4350-8i SAS/SATA 12Gb HBA	1	1
7Y37A01089	AUNM	ThinkSystem 430-16i SAS/SATA 12Gb HBA	1	4, 1
4Y37A72481	BJHJ	ThinkSystem 4350-16i SAS/SATA 12Gb HBA	1	1
4Y37A78601	BM51	ThinkSystem 440-8i SAS/SATA PCIe Gen4 12Gb HBA	1	1
4Y37A78602	BM50	ThinkSystem 440-16i SAS/SATA PCIe Gen4 12Gb HBA	1	1
NVMe PCIe interfaces				
None	B9X7	Intel VROC (VMD NVMe RAID) Intel SSD Only (Standard)	1	Not applicable
4L47A39164	B96G	Intel VROC (VMD NVMe RAID) Premium (license upgrade - to enable RAID support for non-Intel NVMe SSDs)	1	Not applicable
4Y37A09737	B8P5	ThinkSystem 1611-8P PCIe Gen4 Switch Adapter	1	2*
7Y37A01081	AUV2	ThinkSystem 1610-4P NVMe Switch Adapter	2	2, 3*
4Y37A09719	B22D	ThinkSystem 810-4P NVMe Switch Adapter	2	4, 1

* Requires a PCIe x16 riser card.

† Field upgrades to add this adapter may also require a replacement system air duct. See the [RAID flash power module \(supercap\) support](#) 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#sr630-support=SR630>

Configuration notes:

- Low profile SAS RAID controllers and HBAs for internal storage are supported in the dedicated PCIe x8 slot 4 on the system board. If a full-height GPU adapter is installed, the internal slot for a storage controller cannot be used; the storage controller should be installed in the PCIe slot 1.
- The 1610-4P and 1611-8P NVMe Switch Adapters require PCIe x16 slots.

- The 810-4P NVMe Switch Adapters are supported in the dedicated PCIe x8 slot 4 on the system board and a low-profile PCIe x8 slot supplied by the PCIe Riser Card 1.
- The total quantity of the NVMe Switch Adapters in the server must not exceed 2.
- Configurations using onboard NVMe and NVMe switch adapters support RAID using Intel VROC NVMe RAID as described in the [Intel VROC onboard RAID](#) section.
- The onboard NVMe interface provides 4x PCIe 3.0 x4 ports for connectivity to U.2 NVMe PCIe SSDs in the AnyBay drive bays, and it requires the second processor to be installed.
- In the configurations with one processor, the 1610-4P NVMe Switch Adapter provides 4x PCIe 3.0 x4 ports for connectivity to U.2 NVMe PCIe SSDs in the AnyBay drive bays, and it is supported in the PCIe x16 slot 2 supplied by the x8/x16 Riser Card 1.
- In the configurations without GPU installed, the total quantity of the RAID 730-8i 2GB, RAID 930-8i, RAID 930-16i, and RAID 930-8e controllers in the server must not exceed 2 (up to 2 supercapacitors can be mounted in the server).
- In the configurations with GPU installed, the total quantity of the RAID 730-8i 2GB, RAID 930-8i, RAID 930-16i, and RAID 930-8e controllers in the server must not exceed 1 (the storage controller can be installed only in the PCIe slot 1; the PCIe slots 3 and 4 cannot be used if the GPU adapter is installed).
- In the configurations with the RAID 730-8i 2GB controller, the RAID 930-8e controller cannot be used.
- For 10x U.2 NVMe configurations, the onboard NVMe interface and two NVMe Switch Adapters provide connectivity with PCIe 3.0 x4 links to each of the U.2 NVMe PCIe SSDs. The 1610-4P NVMe Switch Adapter has a PCIe 3.0 x16 host interface, and the 810-4P NVMe Switch Adapter has a PCIe 3.0 x8 host interface.
- **E810 Ethernet and X350 RAID/HBAs:** The use of both an Intel E810 network adapter and an X350 HBA/RAID adapter (9350, 5350 and 4350) is currently not supported in ThinkSystem servers. For details see [Support Tip HT513226](#). Planned support for this combination of adapters is 4Q/2023 (SI 23-2).

Intel VROC onboard RAID

Intel VROC (Virtual RAID on CPU) is a feature of the Intel processor that enables RAID support.

On the SR630, Intel VROC provides RAID functions for the onboard NVMe controller (Intel VROC NVMe RAID).

VROC NVMe RAID offers RAID support for any NVMe drives directly connected to the ports on the server's system board or via adapters such as NVMe retimers or NVMe switch adapters. On the SR630, it implements RAID levels 0, 1, 10, 5. RAID 1 is limited to 2 drives per array, and RAID 10 is limited to 4 drives per array. Hot-spare functionality is also supported.

Performance tip: For best performance with VROC NVMe RAID, the drives in an array should all be connected to the same processor. Spanning processors is possible however performance will be unpredictable and should be evaluated based on your workload.

The SR630 supports the VROC NVMe RAID offerings listed in the following table. The VROC Intel SSD Only offering only supports RAID on Intel branded NVMe SSDs; non-Intel branded NVMe SSDs cannot be configured in a RAID array.

Tip: These feature codes and part numbers are only for VROC RAID using NVMe drives, not SATA drives

Table 31. VROC subsection

Part number	Feature code	Description	Intel SSDs	Non-Intel SSDs	RAID 0	RAID 1	RAID 10	RAID 5
CTO only	B9X7	Intel VROC (VMD NVMe RAID) Intel SSD Only	Yes	No	Yes	Yes	Yes	Yes
4L47A39164	B96G	Intel VROC (VMD NVMe RAID) Premium	Yes	Yes	Yes	Yes	Yes	Yes

The part number(s) listed in the table enables field upgrades. These are fulfilled as a Feature on Demand (FoD) license and is activated via the XCC management processor user interface.

Virtualization support: Virtualization support for Intel VROC is as follows:

- **VROC (VMD) NVMe RAID :** VROC (VMD) NVMe RAID is supported by ESXi, KVM, Xen, and Hyper-V. ESXi support is limited to RAID 1 only; other RAID levels are not supported. Windows and Linux OSes support VROC RAID NVMe, both for host boot functions and for guest OS function, and RAID-0, 1, 5, and 10 are supported.

Internal drive options

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

2.5-inch hot-swap drives:

- [2.5-inch hot-swap 12 Gb SAS HDDs](#)
- [2.5-inch hot-swap 6 Gb SATA HDDs](#)
- [2.5-inch hot-swap 24 Gb SAS SSDs](#)
- [2.5-inch hot-swap 12 Gb SAS SSDs](#)
- [2.5-inch hot-swap 6 Gb SATA SSDs](#)
- [2.5-inch hot-swap PCIe 4.0 NVMe SSDs](#)
- [2.5-inch hot-swap PCIe 3.0 NVMe SSDs](#)

3.5-inch hot-swap drives:

- [3.5-inch hot-swap 12 Gb SAS HDDs](#)
- [3.5-inch hot-swap 6 Gb SATA HDDs](#)
- [3.5-inch hot-swap 24 Gb SAS SSDs](#)
- [3.5-inch hot-swap 12 Gb SAS SSDs](#)
- [3.5-inch hot-swap 6 Gb SATA SSDs](#)
- [3.5-inch hot-swap PCIe 4.0 NVMe SSDs](#)
- [3.5-inch hot-swap PCIe 3.0 NVMe SSDs](#)

M.2 drives:

- [M.2 SATA drives](#)

M.2 drive support: The use of M.2 drives requires an additional adapter as described in the [M.2 drives](#) subsection.

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

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

Table 32. 2.5-inch hot-swap 12 Gb SAS HDDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap HDDs - 12 Gb SAS 15K				
7XB7A00021	AULV	ThinkSystem 2.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	No	12
7XB7A00022	AULW	ThinkSystem 2.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	No	12
7XB7A00023	AULX	ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	No	12
2.5-inch hot-swap HDDs - 12 Gb SAS 10K				
7XB7A00024	AULY	ThinkSystem 2.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD	No	12
7XB7A00025	AULZ	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD	No	12
7XB7A00026	AUM0	ThinkSystem 2.5" 900GB 10K SAS 12Gb Hot Swap 512n HDD	No	12
7XB7A00027	AUM1	ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD	No	12
7XB7A00028	AUM2	ThinkSystem 2.5" 1.8TB 10K SAS 12Gb Hot Swap 512e HDD	No	12
7XB7A00069	B0YS	ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD	No	12
2.5-inch hot-swap HDDs - 12 Gb NL SAS				
7XB7A00034	AUM6	ThinkSystem 2.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	12
7XB7A00035	AUM7	ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	12
2.5-inch hot-swap SED HDDs - 12 Gb SAS 10K				
7XB7A00031	AUM5	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD SED	Support	12
7XB7A00033	B0YX	ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD SED	Support	12
7XB7A00070	B0YV	ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD FIPS	Support	12
2.5-inch hot-swap SED HDDs - 12 Gb NL SAS				
7XB7A00064	B0YM	ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	Support	12

Table 33. 2.5-inch hot-swap 6 Gb SATA HDDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap HDDs - 6 Gb NL SATA				
7XB7A00036	AUUE	ThinkSystem 2.5" 1TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	12
7XB7A00037	AUJJ	ThinkSystem 2.5" 2TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	12

Table 34. 2.5-inch hot-swap 24 Gb SAS SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap SSDs - 24 Gb SAS - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A80340	BNW8	ThinkSystem 2.5" PM1655 800GB Mixed Use SAS 24Gb HS SSD	Support	12
4XB7A80341	BNW9	ThinkSystem 2.5" PM1655 1.6TB Mixed Use SAS 24Gb HS SSD	Support	12
4XB7A80342	BNW6	ThinkSystem 2.5" PM1655 3.2TB Mixed Use SAS 24Gb HS SSD	Support	12
4XB7A80343	BP3K	ThinkSystem 2.5" PM1655 6.4TB Mixed Use SAS 24Gb HS SSD	Support	12
2.5-inch hot-swap SSDs - 24 Gb SAS - Read Intensive/Entry/Capacity (<3 DWPD)				
4XB7A80318	BNWC	ThinkSystem 2.5" PM1653 960GB Read Intensive SAS 24Gb HS SSD	Support	12
4XB7A80319	BNWE	ThinkSystem 2.5" PM1653 1.92TB Read Intensive SAS 24Gb HS SSD	Support	12
4XB7A80320	BNWF	ThinkSystem 2.5" PM1653 3.84TB Read Intensive SAS 24Gb HS SSD	Support	12
4XB7A80321	BP3E	ThinkSystem 2.5" PM1653 7.68TB Read Intensive SAS 24Gb HS SSD	Support	12
4XB7A80322	BP3J	ThinkSystem 2.5" PM1653 15.36TB Read Intensive SAS 24Gb HS SSD	Support	12
4XB7A80323	BP3D	ThinkSystem 2.5" PM1653 30.72TB Read Intensive SAS 24Gb HS SSD	Support	12

Table 35. 2.5-inch hot-swap 12 Gb SAS SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap SSDs - 12 Gb SAS - Write Intensive/Performance (10+ DWPD)				
4XB7A83214	BR10	ThinkSystem 2.5" Nytro 3750 400GB Write Intensive SAS 12Gb HS SSD	Support	12
4XB7A83215	BR0Z	ThinkSystem 2.5" Nytro 3750 800GB Write Intensive SAS 12Gb HS SSD	Support	12
4XB7A83216	BR0Y	ThinkSystem 2.5" Nytro 3750 1.6TB Write Intensive SAS 12Gb HS SSD	Support	12
4XB7A83217	BR0X	ThinkSystem 2.5" Nytro 3750 3.2TB Write Intensive SAS 12Gb HS SSD	Support	12
4XB7A70003	BG04	ThinkSystem 2.5" Nytro 3732 3.2TB Performance SAS 12Gb Hot Swap SSD	No	12
2.5-inch hot-swap SSDs - 12 Gb SAS - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A17064	B8JD	ThinkSystem 2.5" PM1645a 3.2TB Mainstream SAS 12Gb Hot Swap SSD	No	12
4XB7A17065	B8JA	ThinkSystem 2.5" PM1645a 6.4TB Mainstream SAS 12Gb Hot Swap SSD	No	12
2.5-inch hot-swap SSDs - 12 Gb SAS - Read Intensive/Entry/Capacity (<3 DWPD)				
4XB7A17055	B91D	ThinkSystem 2.5" PM1643a 7.68TB Entry SAS 12Gb Hot Swap SSD	No	12
4XB7A17056	BC4R	ThinkSystem 2.5" PM1643a 15.36TB Entry SAS 12Gb Hot Swap SSD	No	12

Table 36. 2.5-inch hot-swap 6 Gb SATA SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap SSDs - 6 Gb SATA - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A82289	BQ21	ThinkSystem 2.5" 5400 MAX 480GB Mixed Use SATA 6Gb HS SSD	Support	12
4XB7A82290	BQ24	ThinkSystem 2.5" 5400 MAX 960GB Mixed Use SATA 6Gb HS SSD	Support	12

Part number	Feature code	Description	SED support	Max Qty
4XB7A82291	BQ22	ThinkSystem 2.5" 5400 MAX 1.92TB Mixed Use SATA 6Gb HS SSD	Support	12
4XB7A82292	BQ23	ThinkSystem 2.5" 5400 MAX 3.84TB Mixed Use SATA 6Gb HS SSD	Support	12
4XB7A17125	BA7Q	ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	12
4XB7A17126	BA4T	ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	12
4XB7A17127	BA4U	ThinkSystem 2.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	No	12
4XB7A17128	BK7L	ThinkSystem 2.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	No	12
4XB7A17090	B8JE	ThinkSystem 2.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD	No	12
4XB7A13637	B49Q	ThinkSystem 2.5" S4610 3.84TB Mixed Use SATA 6Gb HS SSD	No	12
2.5-inch hot-swap SSDs - 6 Gb SATA - Read Intensive/Entry (<3 DWPD)				
4XB7A82258	BQ1Q	ThinkSystem 2.5" 5400 PRO 240GB Read Intensive SATA 6Gb HS SSD	Support	12
4XB7A82259	BQ1P	ThinkSystem 2.5" 5400 PRO 480GB Read Intensive SATA 6Gb HS SSD	Support	12
4XB7A82260	BQ1R	ThinkSystem 2.5" 5400 PRO 960GB Read Intensive SATA 6Gb HS SSD	Support	12
4XB7A82261	BQ1X	ThinkSystem 2.5" 5400 PRO 1.92TB Read Intensive SATA 6Gb HS SSD	Support	12
4XB7A82262	BQ1S	ThinkSystem 2.5" 5400 PRO 3.84TB Read Intensive SATA 6Gb HS SSD	Support	12
4XB7A82263	BQ1T	ThinkSystem 2.5" 5400 PRO 7.68TB Read Intensive SATA 6Gb HS SSD	Support	12
4XB7A72438	BM8B	ThinkSystem 2.5" PM893 480GB Read Intensive SATA 6Gb HS SSD	No	12
4XB7A72439	BM8A	ThinkSystem 2.5" PM893 960GB Read Intensive SATA 6Gb HS SSD	No	12
4XB7A72440	BM89	ThinkSystem 2.5" PM893 1.92TB Read Intensive SATA 6Gb HS SSD	No	12
4XB7A72441	BM88	ThinkSystem 2.5" PM893 3.84TB Read Intensive SATA 6Gb HS SSD	No	12
4XB7A72442	BM87	ThinkSystem 2.5" PM893 7.68TB Read Intensive SATA 6Gb HS SSD	No	12
4XB7A17072	B99D	ThinkSystem 2.5" S4520 240GB Read Intensive SATA 6Gb HS SSD	No	12
4XB7A17101	BA7G	ThinkSystem 2.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	12
4XB7A17102	BA7H	ThinkSystem 2.5" S4520 960GB Read Intensive SATA 6Gb HS SSD	No	12
4XB7A17103	BA7J	ThinkSystem 2.5" S4520 1.92TB Read Intensive SATA 6Gb HS SSD	No	12
4XB7A17104	BK77	ThinkSystem 2.5" S4520 3.84TB Read Intensive SATA 6Gb HS SSD	No	12
4XB7A17105	BK78	ThinkSystem 2.5" S4520 7.68TB Read Intensive SATA 6Gb HS SSD	No	12
4XB7A38273	BCTE	ThinkSystem 2.5" Multi Vendor 960GB Entry SATA 6Gb Hot Swap SSD	No	12
4XB7A38274	BCTF	ThinkSystem 2.5" Multi Vendor 1.92TB Entry SATA 6Gb Hot Swap SSD	No	12
4XB7A38275	BCTG	ThinkSystem 2.5" Multi Vendor 3.84TB Entry SATA 6Gb Hot Swap SSD	No	12
4XB7A17079	B8JP	ThinkSystem 2.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD	No	12
4XB7A17080	B8J2	ThinkSystem 2.5" 5300 7.68TB Entry SATA 6Gb Hot Swap SSD	No	12
4XB7A38144	B7EW	ThinkSystem 2.5" 5210 1.92TB Entry SATA 6Gb Hot Swap QLC SSD	No	12
4XB7A38145	B7EX	ThinkSystem 2.5" 5210 3.84TB Entry SATA 6Gb Hot Swap QLC SSD	No	12
4XB7A38146	B7EY	ThinkSystem 2.5" 5210 7.68TB Entry SATA 6Gb Hot Swap QLC SSD	No	12
4XB7A10196	B34J	ThinkSystem 2.5" PM883 480GB Entry SATA 6Gb Hot Swap SSD	No	12

Table 37. 2.5-inch hot-swap PCIe 4.0 NVMe SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch SSDs - U.2 PCIe 4.0 NVMe - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A17129	BNEG	ThinkSystem 2.5" U.2 P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A17130	BNEH	ThinkSystem 2.5" U.2 P5620 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A17133	BNEZ	ThinkSystem 2.5" U.2 P5620 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	10
2.5-inch SSDs - U.3 PCIe 4.0 NVMe - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A79639	BNF1	ThinkSystem 2.5" U.3 7450 MAX 800GB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A13967	BNEJ	ThinkSystem 2.5" U.3 7450 MAX 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A13970	BNEY	ThinkSystem 2.5" U.3 7450 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A13971	BNEL	ThinkSystem 2.5" U.3 7450 MAX 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A17112	B96Z	ThinkSystem U.3 Kioxia CM6-V 1.6TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD	No	10
2.5-inch SSDs - U.2 PCIe 4.0 NVMe - Read Intensive/Entry (<3 DWPD)				
4XB7A13941	BMGD	ThinkSystem 2.5" U.2 P5520 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A13942	BMGE	ThinkSystem 2.5" U.2 P5520 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A13943	BNEF	ThinkSystem 2.5" U.2 P5520 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A13631	BNEQ	ThinkSystem 2.5" U.2 P5520 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A17145	BCFT	ThinkSystem 2.5" U.2 P5500 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	10
4XB7A17147	BCFU	ThinkSystem 2.5" U.2 P5500 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	10
4XB7A38197	BC4Z	ThinkSystem U.2 PM1733 3.84TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD	No	10
4XB7A38257	BE2A	ThinkSystem U.2 PM1733 3.84TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD SED	Support	10
4XB7A38283	BE2E	ThinkSystem U.2 PM1733 7.68TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD	No	10
4XB7A38258	BE2B	ThinkSystem U.2 PM1733 7.68TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD SED	Support	10
4XB7A38284	BE2F	ThinkSystem U.2 PM1733 15.36TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD	No	10
2.5-inch SSDs - U.3 PCIe 4.0 NVMe - Read Intensive/Entry (<3 DWPD)				
4XB7A81951	BPKX	ThinkSystem 2.5" U.3 PM1733a 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10

Part number	Feature code	Description	SED support	Max Qty
4XB7A81952	BPKY	ThinkSystem 2.5" U.3 PM1733a 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A81953	BPKZ	ThinkSystem 2.5" U.3 PM1733a 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A81954	BPL0	ThinkSystem 2.5" U.3 PM1733a 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A79646	BNF3	ThinkSystem 2.5" U.3 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A79647	BNF2	ThinkSystem 2.5" U.3 7450 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A79648	BNF5	ThinkSystem 2.5" U.3 7450 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A79649	BNF4	ThinkSystem 2.5" U.3 7450 PRO 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10
4XB7A83097	BQAV	ThinkSystem 2.5" U.3 7450 PRO 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	10

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

Table 38. 2.5-inch hot-swap PCIe 3.0 NVMe SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch SSDs - U.2 PCIe 3.0 NVMe - Read Intensive/Entry (<3 DWPD)				
4XB7A10205	B58H	ThinkSystem U.2 Intel P4510 4.0TB Entry NVMe PCIe3.0 x4 Hot Swap SSD	No	10
4XB7A10176	B34P	ThinkSystem U.2 PM983 3.84TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	No	10

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

Table 39. 3.5-inch hot-swap 12 Gb SAS HDDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch hot-swap HDDs - 12 Gb SAS 10K				
7XB7A00063	B1JJ	ThinkSystem 3.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD	No	4
3.5-inch hot-swap HDDs - 12 Gb SAS 15K				
7XB7A00038	AUU2	ThinkSystem 3.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00039	AUU3	ThinkSystem 3.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00040	AUUC	ThinkSystem 3.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	No	4
3.5-inch hot-swap HDDs - 12 Gb NL SAS				
7XB7A00042	AUU5	ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00043	AUU6	ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00044	AUU7	ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
7XB7A00045	B0YR	ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
7XB7A00046	AUUG	ThinkSystem 3.5" 10TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
7XB7A00067	B117	ThinkSystem 3.5" 12TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
4XB7A13906	B496	ThinkSystem 3.5" 14TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
4XB7A13911	B7EZ	ThinkSystem 3.5" 16TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
4XB7A38266	BCFP	ThinkSystem 3.5" 18TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
4XB7A80353	BPKU	ThinkSystem 3.5" 20TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
3.5-inch hot-swap SED HDDs - 12 Gb NL SAS				
7XB7A00065	B0YN	ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	Support	4
7XB7A00047	AUUH	ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD FIPS	Support	4
7XB7A00048	B0YP	ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	Support	4
7XB7A00066	B0YQ	ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	Support	4

Table 40. 3.5-inch hot-swap 6 Gb SATA HDDs

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

Table 41. 3.5-inch hot-swap 24 Gb SAS SSDs

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

Table 42. 3.5-inch hot-swap 12 Gb SAS SSDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch hot-swap SSDs - 12 Gb SAS - Write Intensive/Performance (10+ DWPD)				
4XB7A70008	BG00	ThinkSystem 3.5" Nytro 3732 3.2TB Performance SAS 12Gb Hot Swap SSD	No	4
4XB7A17068	B8JG	ThinkSystem 3.5" PM1645a 6.4TB Mainstream SAS 12Gb Hot Swap SSD	No	4
4XB7A17059	BEVK	ThinkSystem 3.5" PM1643a 7.68TB Entry SAS 12Gb Hot Swap SSD	No	4

Table 43. 3.5-inch hot-swap 6 Gb SATA SSDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch hot-swap SSDs - 6 Gb SATA - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A17137	BA4W	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A17138	BA4X	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A17139	BA4Y	ThinkSystem 3.5" S4620 1.92TB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A17140	BK7P	ThinkSystem 3.5" S4620 3.84TB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A17099	B8HR	ThinkSystem 3.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD	No	4
4XB7A13643	B49V	ThinkSystem 3.5" S4610 3.84TB Mixed Use SATA 6Gb HS SSD	No	4
3.5-inch hot-swap SSDs - 6 Gb SATA - Read Intensive/Entry (<3 DWPD)				
4XB7A17118	BA7K	ThinkSystem 3.5" S4520 240GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17119	BA7L	ThinkSystem 3.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17120	BA7M	ThinkSystem 3.5" S4520 960GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17121	BA7N	ThinkSystem 3.5" S4520 1.92TB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17122	BK7F	ThinkSystem 3.5" S4520 3.84TB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17123	BK7G	ThinkSystem 3.5" S4520 7.68TB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A38278	BCTK	ThinkSystem 3.5" Multi Vendor 960GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A38279	BCTL	ThinkSystem 3.5" Multi Vendor 1.92TB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A38281	BCTM	ThinkSystem 3.5" Multi Vendor 3.84TB Entry SATA 6Gb Hot Swap SSD	No	4
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
4XB7A17177	B6TN	ThinkSystem 3.5" PM883 480GB Entry SATA 6Gb Hot Swap SSD	No	4

Table 44. 3.5-inch hot-swap PCIe 4.0 NVMe SSDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch SSDs - U.2 PCIe 4.0 NVMe - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A17141	BNEK	ThinkSystem 3.5" U.2 P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A17143	BNEM	ThinkSystem 3.5" U.2 P5620 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	4
4XB7A17144	BNEN	ThinkSystem 3.5" U.2 P5620 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	Support	4
3.5-inch SSDs - U.3 PCIe 4.0 NVMe - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A17115	B96V	ThinkSystem 3.5" Kioxia CM6-V 1.6TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD	No	4

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

Table 45. 3.5-inch hot-swap PCIe 3.0 NVMe SSDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch SSDs - U.2 PCIe 3.0 NVMe - Read Intensive/Entry (<3 DWPD)				
4XB7A10179	B34R	ThinkSystem 3.5" PM983 3.84TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	No	4

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

Table 46. M.2 SATA drives

Part number	Feature code	Description	SED support	Max Qty
M.2 SSDs - 6 Gb SATA - Read Intensive/Entry (<3 DWPD)				
4XB7A90105	BXMK	ThinkSystem M.2 ER2 240GB Read Intensive SATA 6Gb NHS SSD (China only)	Support	2
4XB7A90106	BXMJ	ThinkSystem M.2 ER2 480GB Read Intensive SATA 6Gb NHS SSD (China only)	Support	2
4XB7A82286	BQ1Z	ThinkSystem M.2 5400 PRO 240GB Read Intensive SATA 6Gb NHS SSD	Support	2
4XB7A82287	BQ1Y	ThinkSystem M.2 5400 PRO 480GB Read Intensive SATA 6Gb NHS SSD	Support	2
7N47A00129	AUUL	ThinkSystem M.2 32GB SATA 6Gbps Non-Hot Swap SSD	No	2
7N47A00130	AUUV	ThinkSystem M.2 128GB SATA 6Gbps Non-Hot Swap SSD	No	2
4XB7A17073	B919	ThinkSystem M.2 5300 480GB SATA 6Gbps Non-Hot Swap SSD	No	2

USB memory key

For general portable storage needs, the server also supports the USB memory key option that is listed in the following table.

Table 47. USB memory key

Part number	Feature	Description
4X77A08621	B8NV	ThinkSystem 32GB USB Flash Drive

Optical drives

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

Table 48. External optical drive

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

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

I/O expansion

The SR630 server supports one LOM card slot and up to four PCIe slots: one slot on the system planar that is dedicated to an internal storage controller 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, ML2 x8, or ML2 x16; low profile
- Slot 2: PCIe 3.0 x16 or x8; low profile or full-height, half-length
- Slot 3: PCIe 3.0 x16; low profile
- Slot 4: PCIe 3.0 x8 (dedicated to an internal storage controller)

Configuration notes:

- Slot 3 requires the second processor to be installed.
- Slots 1 and 2 are not present if the Rear HDD Kit is 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.

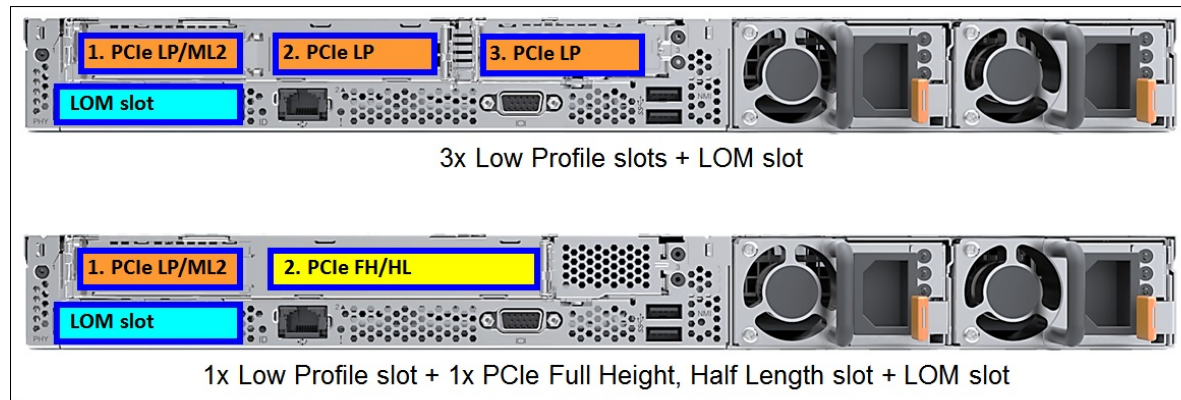


Figure 9. Slot locations

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

Table 49. Slots available for use

Riser Card 1	Riser Card 2	Slots available for use	
		Processor 1	Processor 2
None	None	LOM, 4	-
None	PCIe x16	LOM, 4	3
PCIe x8/x16, PCIe x8ML2/x16, or PCIe x16ML2/x8	None	LOM, 1, 2, 4	-
PCIe x8/x16, PCIe x8ML2/x16, or PCIe x16ML2/x8	PCIe x16	LOM, 1, 2, 4	3

The following table lists available PCIe riser card options.

Table 50. PCIe riser cards and miscellaneous options

Part number	Feature code	Description	Maximum quantity
x8 Riser Card 1 options (Riser card 1 supplies slots 1 and 2)			
7XH7A02682	AUWC	ThinkSystem SR530/SR570/SR630 x8/x16 PCIe LP+LP Riser 1 Kit	1
7XH7A05893	None*	ThinkSystem SR530/SR570/SR630 x8/x16 PCIe LP+FH Riser 1 Kit	1
7XH7A02683	AUWE	ThinkSystem SR630 x8ML2/x16 PCIe LP+LP Riser 1 Kit	1
7XH7A05894	None*	ThinkSystem SR630 x8ML2/x16 PCIe LP+FH Riser 1 Kit	1
7XH7A02684	AUWD	ThinkSystem SR630 x16ML2/x8 PCIe LP+LP Riser 1 Kit	1
7XH7A05895	None*	ThinkSystem SR630 x16ML2/x8 PCIe LP+FH Riser 1 Kit	1
Riser Card 2 option (Riser card 2 supplies slot 3)			
7XH7A02685	AUWA	ThinkSystem SR530/SR570/SR630 x16 PCIe LP Riser 2 Kit	1
Serial port upgrade kit			
4Z17A80446	BMNJ	ThinkSystem COM Port Upgrade Kit v2	
7Z17A02577	AUSL	ThinkSystem COM Port Upgrade Kit	1

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

The COM Port Upgrade Kit, part number 7Z17A02577, is used for mounting the external serial port on the rear of the SR630. 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 SR630 server supports up to four onboard network ports with optional LOM cards that use the Intel Ethernet Connection X722 1/10 GbE technology integrated into the Intel C624 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 and ML2 network adapters support direct connectivity to the XClarity Controller via the Network Controller Sideband Interface (NSCI) for out-of-band systems management.

The integrated Intel Ethernet Connection X722 has the following features:

- Four 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 SR630 server.

Table 51. Network adapters

Part number	Feature code	Description	Max qty#	I/O slots supported
LOM cards - Gigabit Ethernet				

Part number	Feature code	Description	Max qty#	I/O slots supported
7ZT7A00544	AUKG	ThinkSystem 1Gb 2-port RJ45 LOM	1	LOM slot
7ZT7A00545	AUKH	ThinkSystem 1Gb 4-port RJ45 LOM	1	LOM slot
LOM cards - 10 Gb Ethernet				
7ZT7A00548	AUKL	ThinkSystem 10Gb 2-port Base-T LOM	1	LOM slot
7ZT7A00546	AUKJ	ThinkSystem 10Gb 2-port SFP+ LOM	1*	LOM slot
7ZT7A00549	AUKM	ThinkSystem 10Gb 4-port Base-T LOM	1	LOM slot
7ZT7A00547	AUKK	ThinkSystem 10Gb 4-port SFP+ LOM	1*	LOM slot
ML2 adapters - Gigabit Ethernet				
7ZT7A00536	AUKW	ThinkSystem Intel I350-T4 ML2 1Gb 4-Port RJ45 Ethernet Adapter	1	1 (ML2)
ML2 adapters - 10 Gb Ethernet				
7ZT7A00497	AUKQ	Broadcom NX-E ML2 10Gb 2-Port Base-T Ethernet Adapter	1	1 (ML2)
01CV770	AU7Z	Emulex VFA5.2 ML2 2x10 GbE SFP+ Adapter and FCoE/iSCSI SW	1*	1 (ML2)
00JY940	ATRH	Intel X710-DA2 ML2 2x10GbE SFP+ Adapter	1*	1 (ML2)
ML2 adapters - 25 Gb Ethernet				
00MN990	ATZR	Mellanox ConnectX-4 Lx 10/25GbE SFP28 1-port ML2 Ethernet Adapter	1*	1 (ML2)
7ZT7A00507	AUKU	Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-port ML2 Ethernet Adapter	1*	1 (ML2)
ML2 adapters - FDR InfiniBand				
7ZT7A00501	AUKR	Mellanox ConnectX-3 Pro ML2 FDR 2-Port QSFP VPI Adapter	1*	1 (ML2)
PCIe Low Profile adapters - 1 Gb Ethernet				
7ZT7A00482	AUZX	Broadcom 5720 1GbE RJ45 2-Port PCIe Ethernet Adapter	2 / 3	2, 3, 1
7ZT7A00484	AUZV	Broadcom 5719 1GbE RJ45 4-Port PCIe Ethernet Adapter	2 / 3	2, 3, 1
7ZT7A00534	AUZY	ThinkSystem I350-T2 PCIe 1Gb 2-Port RJ45 Ethernet Adapter	2 / 3	2, 3, 1
7ZT7A00535	AUZW	ThinkSystem I350-T4 PCIe 1Gb 4-Port RJ45 Ethernet Adapter	2 / 3	2, 3, 1
PCIe Low Profile adapters - 10 Gb Ethernet				
7ZT7A00496	AUKP	Broadcom 57416 10GBASE-T 2-Port PCIe Ethernet Adapter	2 / 3	2, 3, 1
00AG570	AT7S	Emulex VFA5.2 2x10 GbE SFP+ PCIe Adapter	2 / 3*	2, 3, 1
00AG580	AT7T	Emulex VFA5.2 2x10 GbE SFP+ Adapter and FCoE/iSCSI SW	2 / 3*	2, 3, 1
00MM860	ATPX	Intel X550-T2 Dual Port 10GBase-T Adapter	2 / 3	2, 3, 1
7ZT7A00537	AUKX	Intel X710-DA2 PCIe 10Gb 2-Port SFP+ Ethernet Adapter	2 / 3*	2, 3, 1
4XC7A79699	BMXB	ThinkSystem Intel X710-T4L 10GBase-T 4-Port PCIe Ethernet Adapter	2 / 3	2, 3, 1
4XC7A08225	B31G	QLogic QL41134 PCIe 10Gb 4-Port Base-T Ethernet Adapter	2 / 3	2, 3, 1
PCIe Full Height adapters - 10 Gb Ethernet				
7ZT7A00493	AUKN	Emulex OCe14104B-NX PCIe 10Gb 4-Port SFP+ Ethernet Adapter	1 / 1*	2
PCIe Low Profile adapters - 25 Gb Ethernet				
4XC7A08238	B5T0	Broadcom 57414 10/25GbE SFP28 2-port PCIe Ethernet Adapter	2 / 3*	2, 3, 1
4XC7A08316	BD49	Broadcom 57454 10/25GbE SFP28 4-port PCIe Ethernet Adapter V2	1 / 1	2§
4XC7A08295	BCD6	Intel E810-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	2 / 3*	2, 3, 1
7XC7A05523	B0WY	Intel XXV710-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	2 / 3*	2, 3, 1

Part number	Feature code	Description	Max qty#	I/O slots supported
01GR250	AUAJ	Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	2 / 3*	2, 3, 1
4XC7A62574	BEAP	Mellanox ConnectX-5 EN 10/25GbE SFP28 2-port PCIe Ethernet Adapter	2 / 3*	2, 3, 1
4XC7A62580	BE4U	Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	2 / 3*	2, 3, 1
4XC7A16683	B5XZ	Mellanox Innova-2 ConnectX-5 FPGA 25GbE 2-port Adapter	1 / 2*	2, 3†
4XC7A62581	BHE2	Solarflare X2522-Plus 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	2 / 3*	2, 3, 1
PCIe Low Profile adapters - 40 Gb Ethernet				
00MM950	ATRN	Mellanox ConnectX-4 Lx 1x40GbE QSFP+ Adapter	2 / 3*	2, 3, 1
4XC7A08229	B31C	Mellanox ConnectX-5 Ex 25/40GbE 2-port Low-Latency Adapter	1 / 2*^	2, 3†
PCIe Low Profiles adapters - FDR InfiniBand				
7XC7A05524	B0WX	Mellanox ConnectX-4 PCIe FDR 1-Port QSFP VPI Adapter	2 / 3*	2, 3, 1
7ZT7A00500	AUVG	Mellanox ConnectX-4 PCIe FDR 2-Port QSFP VPI Adapter	2 / 3*	2, 3, 1
PCIe x16 Low Profile adapters - 100 Gb Ethernet / EDR InfiniBand				
00MM960	ATRP	Mellanox ConnectX-4 2x100GbE/EDR IB QSFP28 VPI Adapter	1 / 2*	2, 3†
4XC7A08248	B8PP	Mellanox ConnectX-6 Dx 100GbE QSFP56 2-port PCIe Ethernet Adapter	1 / 2*	2, 3†
4XC7A76757	BLC2	ThinkSystem Xilinx Alveo U50 Data Center Accelerator Adapter	1 / 2*	2, 3†
PCIe x16 Low Profile adapters - HDR InfiniBand				
4C57A15326	B4RC	Mellanox ConnectX-6 HDR/200GbE QSFP56 1-port PCIe 4 VPI Adapter	1 / 1*	2‡
4C57A14179	B4RB	Mellanox HDR/200GbE 2x PCIe Aux Kit	1 / 1*	3‡
4C57A14177	B4R9	Mellanox ConnectX-6 HDR100/100GbE QSFP56 1-port PCIe VPI Adapter	1 / 2*	2, 3†
4C57A14178	B4RA	Mellanox ConnectX-6 HDR100/100GbE QSFP56 2-port PCIe VPI Adapter	1 / 2*	2, 3†
PCIe Low Profile adapters - Omni-Path				
00WE023	AU0A	Intel OPA 100 Series Single-port PCIe 3.0 x8 HFA	1 / 3*	2, 3, 1
00WE027	AU0B	Intel OPA 100 Series Single-port PCIe 3.0 x16 HFA	1 / 2*	2, 3†

The maximum quantity shown is with one processor / two processors (this does not apply to LOM cards and ML2 adapters).

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

† The adapter is supported in the PCIe x16 slots supplied by the riser cards 1 and 2.

^ The 25 GbE connectivity requires the optional Mellanox QSA 100G to 25G Cable Adapter (4G17A10853) (one per port); the supported cables include 25 GbE passive DAC and active optical cables (25 GbE transceivers not supported)

‡ The ConnectX-6 HDR adapter is supported only in the configurations with two processors, and it requires the HDR/200GbE 2x PCIe Aux Kit.

§ In the SR630, this adapter requires a full-height bracket and must be installed in a full-height slot. The use of a low-profile bracket and slot is not supported.

For more information, see the list of Product Guides in the Ethernet Adapters category:

<http://lenovopress.com/servers/options/ethernet#rt=product-guide>

Configuration notes:

- ML2 network adapters are supported in the ML2 x8 slot 1 supplied by the x8ML2/x16 Riser Card 1 (7XH7A02683 or 7XH7A05894).
- PCIe full-height network adapters are supported in the full-height PCIe x8 or x16 slot 2 supplied by the riser card 1.
- PCIe x16 Low Profile network adapters and Omni-Path adapters are supported in the full-height and low profile PCIe x16 slots supplied by the riser cards 1 and 2.
- PCIe Low Profile network adapters (except PCIe x16 adapters and Omni-Path adapters) are supported in the full-height and low profile PCIe x8 and x16 slots supplied by the riser cards 1 and 2.
- Supported transceivers or DAC cables should be purchased for the SFP+, SFP28, QSFP+, and QSFP28 adapters, and UTP Category 6 or Category 5e cables should be purchased for the 10 GbE (Cat6) or 1 GbE (Cat5e or Cat6) RJ-45 adapters. The maximum number of transceivers or cables that are supported per adapter equals the quantity of the adapter ports, and all adapter ports must have the same type of the transceiver or cable selected.
- **E810 Ethernet and X350 RAID/HBAs:** The use of both an Intel E810 network adapter and an X350 HBA/RAID adapter (9350, 5350 and 4350) is currently not supported in ThinkSystem servers. For details see [Support Tip HT513226](#). Planned support for this combination of adapters is 4Q/2023 (SI 23-2).

SAS adapters for external storage

The following table lists SAS RAID controllers and HBAs for external storage attachments that are supported by the SR630 server.

Table 52. SAS RAID adapters and HBAs for external storage

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

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

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

<https://lenovopress.com/lp1288#sr630-support=SR630&internal-or-external-ports=External>

Configuration notes:

- Low profile SAS RAID controllers and HBAs for external storage are supported in the low profile and full-high PCIe x8 and x16 slots supplied by the riser cards 1 and 2.
- In the configurations without GPU installed, the total quantity of the RAID 730-8i 2GB, RAID 930-8i, RAID 930-16i, and RAID 930-8e controllers in the server must not exceed 2 (up to 2 supercapacitors can be mounted in the server).
- In the configurations with GPU installed, the total quantity of the RAID 730-8i 2GB, RAID 930-8i,

RAID 930-16i, and RAID 930-8e controllers in the server must not exceed 1 (the storage controller can be installed only in the PCIe slot 1; the PCIe slots 3 and 4 cannot be used if the GPU adapter is installed).

- The RAID 930-8e controller cannot be used in the configurations with the RAID 730-8i 2GB controller.

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

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

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

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

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

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

Fibre Channel host bus adapters

The following table lists Fibre Channel HBAs supported by the SR630 server.

Table 53. Fibre Channel HBAs

Part number	Feature code	Description	Maximum quantity*	I/O slots supported
64 Gb Fibre Channel - PCIe				
4XC7A77485	BLC1	Emulex LPe36002 64Gb 2-port PCIe Fibre Channel Adapter	2 / 3	2, 3, 1
32 Gb Fibre Channel - PCIe				
4XC7A76525	BJ3H	ThinkSystem Emulex LPe35002 32Gb 2-port PCIe Fibre Channel Adapter V2	2 / 3	2, 3, 1
4XC7A76498	BJ3G	ThinkSystem Emulex LPe35000 32Gb 1-port PCIe Fibre Channel Adapter v2	2 / 3	2, 3, 1
4XC7A08250	B5SX	Emulex LPe35000 32Gb 1-port PCIe Fibre Channel Adapter	2 / 3	2, 3, 1
4XC7A08251	B5SY	Emulex LPe35002 32Gb 2-port PCIe Fibre Channel Adapter	2 / 3	2, 3, 1
7ZT7A00519	AUNV	Emulex LPe32002-M2-L PCIe 32Gb 2-Port SFP+ FC HBA	2 / 3	2, 3, 1
7ZT7A00516	AUNS	QLogic QLE2740 PCIe 32Gb 1-Port SFP+ FC HBA	2 / 3	2, 3, 1
7ZT7A00518	AUNU	QLogic QLE2742 PCIe 32Gb 2-Port SFP+ FC HBA	2 / 3	2, 3, 1
16 Gb Fibre Channel - PCIe				
01CV830	ATZU	Emulex 16Gb Gen6 FC Single-port HBA	2 / 3	2, 3, 1
01CV840	ATZV	Emulex 16Gb Gen6 FC Dual-port HBA	2 / 3	2, 3, 1
01CV750	ATZB	QLogic 16Gb Enhanced Gen5 FC Single-port HBA	2 / 3	2, 3, 1
01CV760	ATZC	QLogic 16Gb Enhanced Gen5 FC Dual-port HBA	2 / 3	2, 3, 1
8 Gb Fibre Channel - PCIe (available only in AP and PRC)				
4XC7A08221	B0X0	Emulex LPe12002-M8-L PCIe 8Gb 2-Port SFP+ FC HBA	2 / 3	2, 3, 1

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

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.

For more information, see the list of Product Guides in the Host bus adapters category:

<http://lenovopress.com/servers/options/hba#rt=product-guide>

Flash storage adapters

The SR630 server supports the flash storage adapters listed in the following table.

Table 54. Flash storage adapters

Part number	Feature code	Description	Maximum quantity*	I/O slots supported
Mainstream Flash Adapters - CM5-V				
4XB7A38240	BCGL	CM5-V 6.4TB Mainstream NVMe PCIe 3.0 x4 Flash Adapter	2 / 3	2, 3, 1

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

Configuration notes:

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

For more information, see the list of Product Guides in the Flash storage adapters category:

<http://lenovopress.com/servers/options/ssdadapter#rt=product-guide>

GPU adapters

The SR630 server supports graphics processing units (GPUs) listed in the following table.

Table 55. GPU adapters

Part number	Feature code	Description	Maximum quantity*	I/O slots supported
Low profile PCIe 3.0 x16 single-wide GPU adapters				
4X67A14926	B4YB	ThinkSystem NVIDIA Tesla T4 16GB PCIe Passive GPU	1 / 2	3, 1
4X67A81547	BP05	ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU	1 / 2	3, 1
CTO only	BQZT	ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU w/o CEC	1 / 2	3, 1
GPU upgrade kits				
4XH7A08765	None**	ThinkSystem SR630 GPU Upgrade Kit	1	-

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

** Field upgrade only.

Configuration notes:

- Some NVIDIA A Series GPUs are available as two feature codes, one with a CEC chip and one without a CEC chip (ones without the CEC chip have "w/o CEC" in the name). The CEC is a secondary Hardware Root of Trust (RoT) module that provides an additional layer of security, which can be used by customers who have high regulatory requirements or high security standards. NVIDIA uses a multi-layered security model and hence the protection offered by the primary Root of Trust embedded in the GPU is expected to be sufficient for most customers. The CEC defeatured products still offer Secure Boot, Secure Firmware Update, Firmware Rollback Protection, and In-Band Firmware Update Disable. Specifically, without the CEC chip, the GPU does not support Key Revocation or Firmware Attestation. CEC and non-CEC GPUs of the same type of GPU can be mixed in field upgrades.

- The full-height GPU adapters require the PCIe x16 FH riser card for the PCIe slot 2, and the PCIe slot 3 cannot be used. The low profile GPU adapters are supported in the PCIe x8 and x16 low-profile slots supplied by the riser cards 1 and 2.
- The full-height GPU adapters require the GPU Upgrade Kit (4XH7A08765).
- If the full-height GPU adapter is installed, the internal slot for a storage controller cannot be used.
- The GPU adapters are *not* supported in the following configurations:
 - Rear HDD kit installed.
 - 10x U.2 PCIe NVMe drive bays installed.
 - DCPMMs installed.
- Configurations with any one GPU adapter or two P620 GPU adapters are supported only with the 750 W or 1100 W power supplies. Configurations with two P4 or three P620 GPU adapters are supported only with the 1100 W power supplies.
- The P2000 or P2200 GPU adapters are supported with the processors of up to 140 W TDP. The GPU adapters other than P2000 or P2200 are supported with the processors of up to 165 W TDP (excluding Gold 6240Y, 6244, 6246, and 6252N processors).
- The RTX4000 GPU adapter is supported with the processors of up to 165 W TDP in the configurations with 8x 2.5-inch drive bays, or with the processors of up to 150 W TDP in the configurations with 4x 3.5-inch SAS/SATA or AnyBay, or 6x 2.5-inch SAS/SATA & 4x 2.5-inch AnyBay drive bays.
- The GPU adapters are supported only in the ASHRAE A2 environments (up to 35 °C [95 °F]) with the following exceptions:
 - Two P4 or T4 or A2 GPU adapters are supported at the ambient temperature of up to 30 °C [86 °F]), and the server performance might be impacted in case of a system fan failure.
 - Three P620 adapters are supported at the ambient temperature of up to 30 °C [86 °F]).

Cooling

The SR630 server supports up to seven hot-swap system fans that provide N+1 cooling redundancy. SR630 server models with one processor include five system fans, and server models with two processors include seven system fans. The fans are dual-rotor counter-rotating units, which means that the fans have two separate propellers, one in front of the other, and that the propellers rotate in opposite directions.

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

- 2nd Gen processors with 200 W or 205 W TDP, or Xeon 6240Y, 6244, 6246, or 6252N processors
- 1st Gen processors Xeon 6144, 6146, 6154, 8168, 8180, and 8180M

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 processor option part numbers include this fan however 2nd Gen processor options do not include the fan and it must be ordered separately using SR630 Fan Option Kit listed in the following table.

Table 56. Cooling options

Part number	Feature code	Description	Maximum quantity
4F17A12350	AUW7	ThinkSystem SR630 Fan Option Kit (2nd Gen processors only)	1

Power supplies

The SR630 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 57. Power supplies

Part number	Feature code	Description	Maximum quantity
7N67A00882	AVW8	ThinkSystem 550W (230V/115V) Platinum Hot-Swap Power Supply	2
7N67A00883	AVWA	ThinkSystem 750W (230/115V) Platinum Hot-Swap Power Supply	2
7N67A00884	AVW9	ThinkSystem 750W (230V) Titanium Hot-Swap Power Supply	2
4P57A82020	BR1Y	ThinkSystem V1 750W (230Vac) Titanium Hot Swap Power Supply	2
7N67A00885	AVWB	ThinkSystem 1100W (230V/115V) Platinum Hot-Swap Power Supply	2

Power supply options do not include a line cord. For server configurations, the inclusion of a power cord is model dependent. Configure-to-order models can be configured without power cords if desired.

Configuration notes:

- Minimum of 1 and maximum of 2 power supplies per system.
- If 2 are installed, power supplies must be identical.
- AC power supplies support AC (Worldwide) and HVDC (PRC only) power sources
- AC power supplies have a C14 connector. The -48V DC power supply has a Positronic PLB3W3M1000/AA connector.

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.

Table 58. Power cords

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

Part number	Feature code	Description
4L67A08369	6570	2.0m, 13A/100-250V, C13 to C14 Jumper Cord
4L67A08366	6311	2.8m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable
4L67A08370	6400	2.8m, 13A/100-250V, C13 to C14 Jumper Cord
39Y7932	6263	4.3m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable
4L67A08371	6583	4.3m, 13A/100-250V, C13 to C14 Rack Power Cable
Rack cables - C13 to C14 (Y-cable)		
00Y3046	A4VQ	1.345m, 2X C13 to C14 Jumper Cord, Rack Power Cable
00Y3047	A4VR	2.054m, 2X C13 to C14 Jumper Cord, Rack Power Cable
Rack cables - C13 to C20		
39Y7938	6204	2.8m, 10A/100-250V, C13 to IEC 320-C20 Rack Power Cable
Rack cables - C13 to C20 (Y-cable)		
47C2491	A3SW	1.2m, 16A/100-250V, 2 Short C13s to Short C20 Rack Power Cable
47C2492	A3SX	2.5m, 16A/100-250V, 2 Long C13s to Short C20 Rack Power Cable
47C2493	A3SY	2.8m, 16A/100-250V, 2 Short C13s to Long C20 Rack Power Cable
47C2494	A3SZ	4.1m, 16A/100-250V, 2 Long C13s to Long C20 Rack Power Cable
Line cords		
39Y7930	6222	2.8m, 10A/250V, C13 to IRAM 2073 (Argentina) Line Cord
81Y2384	6492	4.3m 10A/220V, C13 to IRAM 2073 (Argentina) Line Cord
39Y7924	6211	2.8m, 10A/250V, C13 to AS/NZ 3112 (Australia/NZ) Line Cord
81Y2383	6574	4.3m, 10A/230V, C13 to AS/NZS 3112 (Aus/NZ) Line Cord
69Y1988	6532	2.8m, 10A/250V, C13 to NBR 14136 (Brazil) Line Cord
81Y2387	6404	4.3m, 10A/250V, C13 - 2P+Gnd (Brazil) Line Cord
39Y7928	6210	2.8m, 220-240V, C13 to GB 2099.1 (China) Line Cord
81Y2378	6580	4.3m, 10A/220V, C13 to GB 2099.1 (China) Line Cord
39Y7918	6213	2.8m, 10A/250V, C13 to DK2-5a (Denmark) Line Cord
81Y2382	6575	4.3m, 10A/230V, C13 to DK2-5a (Denmark) Line Cord
39Y7917	6212	2.8m, 10A/230V, C13 to CEE7-VII (Europe) Line Cord
81Y2376	6572	4.3m, 10A/230V, C13 to CEE7-VII (Europe) Line Cord
39Y7927	6269	2.8m, 10A/250V, C13(2P+Gnd) (India) Line Cord
81Y2386	6567	4.3m, 10A/240V, C13 to IS 6538 (India) Line Cord
39Y7920	6218	2.8m, 10A/250V, C13 to SI 32 (Israel) Line Cord
81Y2381	6579	4.3m, 10A/230V, C13 to SI 32 (Israel) Line Cord
39Y7921	6217	2.8m, 220-240V, C13 to CEI 23-16 (Italy/Chile) Line Cord
81Y2380	6493	4.3m, 10A/230V, C13 to CEI 23-16 (Italy/Chile) Line Cord
46M2593	A1RE	2.8m, 12A/125V, C13 to JIS C-8303 (Japan) Line Cord
4L67A08362	6495	4.3m, 12A/200V, C13 to JIS C-8303 (Japan) Line Cord
39Y7926	6335	4.3m, 12A/100V, C13 to JIS C-8303 (Japan) Line Cord
39Y7922	6214	2.8m, 10A/250V, C13 to SABS 164 (S Africa) Line Cord
81Y2379	6576	4.3m, 10A/230V, C13 to SABS 164 (South Africa) Line Cord
39Y7925	6219	2.8m, 220-240V, C13 to KETI (S Korea) Line Cord
81Y2385	6494	4.3m, 12A/220V, C13 to KSC 8305 (S. Korea) Line Cord

Part number	Feature code	Description
39Y7919	6216	2.8m, 10A/250V, C13 to SEV 1011-S24507 (Swiss) Line Cord
81Y2390	6578	4.3m, 10A/230V, C13 to SEV 1011-S24507 (Sws) Line Cord
23R7158	6386	2.8m, 10A/125V, C13 to CNS 10917-3 (Taiwan) Line Cord
81Y2375	6317	2.8m, 10A/240V, C13 to CNS 10917-3 (Taiwan) Line Cord
81Y2374	6402	2.8m, 13A/125V, C13 to CNS 60799 (Taiwan) Line Cord
4L67A08363	AX8B	4.3m, 10A 125V, C13 to CNS 10917 (Taiwan) Line Cord
81Y2389	6531	4.3m, 10A/250V, C13 to 76 CNS 10917-3 (Taiwan) Line Cord
81Y2388	6530	4.3m, 13A/125V, C13 to CNS 10917 (Taiwan) Line Cord
39Y7923	6215	2.8m, 10A/250V, C13 to BS 1363/A (UK) Line Cord
81Y2377	6577	4.3m, 10A/230V, C13 to BS 1363/A (UK) Line Cord
90Y3016	6313	2.8m, 10A/120V, C13 to NEMA 5-15P (US) Line Cord
46M2592	A1RF	2.8m, 10A/250V, C13 to NEMA 6-15P Line Cord
00WH545	6401	2.8m, 13A/120V, C13 to NEMA 5-15P (US) Line Cord
4L67A08359	6370	4.3m, 10A/125V, C13 to NEMA 5-15P (US) Line Cord
4L67A08361	6373	4.3m, 10A/250V, C13 to NEMA 6-15P (US) Line Cord
4L67A08360	AX8A	4.3m, 13A/120V, C13 to NEMA 5-15P (US) Line Cord

Systems management

The SR630 supports the following systems management tools:

- [Lenovo XClarity Controller](#)
- [Light path diagnostics](#)
- [Lenovo XClarity Essentials](#)
- [Lenovo XClarity Essentials](#)
- [Lenovo XClarity Administrator](#)
- [Lenovo XClarity Integrators](#)
- [Lenovo XClarity Energy Manager](#)
- [Lenovo Capacity Planner](#)

Lenovo XClarity Controller

The SR630 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 SR630 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.

The following table lists the XClarity Controller FoD upgrades.

Table 59. XClarity Controller FoD upgrades

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

* Factory-installed only.

** Field-upgrade only.

Configuration notes:

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

Light path diagnostics

All SR630 server models include basic light path diagnostics, which provides the system LEDs on the front of the server (see [Components and connectors](#)) and the LEDs near the monitored components (for example, the DIMM error LEDs on the system board).

Lenovo XClarity Essentials

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

- **Lenovo Essentials OneCLI**
OneCLI is a collection of server management tools that uses a command line interface program to manage firmware, hardware, and operating systems. It provides functions to collect full system health information (including health status), configure system settings, and update system firmware and drivers.
- **Lenovo Essentials UpdateXpress**
The UpdateXpress tool is a standalone GUI application for firmware and device driver updates that enables you to maintain your server firmware and device drivers up-to-date and help you avoid unnecessary server outages. The tool acquires and deploys individual updates and UpdateXpress System Packs (UXSPs) which are integration-tested bundles.
- **Lenovo Essentials Bootable Media Creator**
The Bootable Media Creator (BOMC) tool is used to create bootable media for offline firmware update.

For more information and downloads, visit the Lenovo XClarity Essentials web page:

<http://support.lenovo.com/us/en/documents/LNVO-center>

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<http://support.lenovo.com/us/en/documents/LNVO-center>

Lenovo XClarity Administrator

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

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

Lenovo XClarity Administrator is an optional software component for the SR630. The software can be downloaded and used at no charge to discover and monitor the SR630 and to manage firmware upgrades.

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

The following table lists the Lenovo XClarity software license options.

Table 60. Lenovo XClarity Pro ordering information

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

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

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

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

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

For more information, refer to the Lenovo XClarity Administrator Product Guide:

<http://lenovopress.com/tips1200>

Lenovo XClarity Integrators

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

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

Lenovo XClarity Integrators offer the following additional features:

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

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

Lenovo XClarity Energy Manager

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

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

Table 61. Lenovo XClarity Energy Manager

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

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

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

Lenovo Capacity Planner

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

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

Security

The SR630 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; PRC only)
- Nationz Trusted Platform Module v2.0 (optional; 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; PRC only)

The server is NIST SP 800-147B compliant.

The following table lists the security options that are available for the SR630 server.

Table 62. Security options

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

* Factory-installed only; no field upgrade.

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

Lenovo Business Vantage provides the following features:

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

Intel Transparent Supply Chain

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

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

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

Table 63. Intel Transparent Supply Chain ordering information

Feature code	Description
BB0P	Intel Transparent Supply Chain

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

Rack installation

The following table lists the rack installation options that are available for the SR630 server.

Table 64. Rack installation options

Part number	Feature code	Description	Maximum quantity
4-post rail kits			
7M27A05702	AXCA	ThinkSystem Tool-less Slide Rail	1
7M27A05701	AXCB	ThinkSystem Tool-less Slide Rail Kit with 1U CMA	1
4M17A07274	AXFN	ThinkSystem Screw-in Slide Rail	1
4M17A07281	B0TE	ThinkSystem Screw-in Slide Rail Kit with 1U CMA	1
4M17A07273	BK7W	ThinkSystem Toolless Friction Rail v2	1
Cable management arm (CMA) upgrade			
7M27A05699	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			
CTO only	BMNW	Front VGA Connector Upgrade Kit for 1U v2 (for 3.5" models)	
CTO only	AUWU	ThinkSystem SR530/SR630 Front VGA Connector (for 3.5" models)	1
4Z17A80447	BMNV	ThinkSystem SR530/SR570/SR630 Front VGA Connector Upgrade Kit v2 (for 2.5" models)	
7Z17A02579	AUWW	ThinkSystem SR530/SR570/SR630 Front VGA Connector Upgrade Kit (for 2.5" models)	1

^ 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.

The following table summarizes the rail kit features and specifications.

Table 65. Rail kit features and specifications summary

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

* If a 0U PDU is used, the rack cabinet must be at least 1100 mm (43.31 in.) deep if no CMA is used, or at least 1200 mm (47.24 in.) deep if a CMA is used.

** If a 0U PDU used, the rack must be at least 1000 mm (39.37 in.) deep.

^ Measured when mounted on the rack, from the front surface of the front mounting flange to the rear most point of the rail.

Operating system support

The SR630 server with 2nd Gen Intel Xeon SP processors supports the following operating systems:

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

The SR630 server with 1st Gen Intel Xeon SP 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 8.7
- Red Hat Enterprise Linux 8.8
- Red Hat Enterprise Linux 9.0
- Red Hat Enterprise Linux 9.1
- Red Hat Enterprise Linux 9.2
- SUSE Linux Enterprise Server 11 Xen x64 SP4
- SUSE Linux Enterprise Server 11 x64 SP4
- SUSE Linux Enterprise Server 12 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 15
- SUSE Linux Enterprise Server 15 SP1
- SUSE Linux Enterprise Server 15 SP2
- SUSE Linux Enterprise Server 15 SP3
- SUSE Linux Enterprise Server 15 SP4
- SUSE Linux Enterprise Server 15 SP5
- SUSE Linux Enterprise Server 15 Xen
- SUSE Linux Enterprise Server 15 Xen SP1
- SUSE Linux Enterprise Server 15 Xen SP2
- SUSE Linux Enterprise Server 15 Xen SP3
- SUSE Linux Enterprise Server 15 Xen SP4
- SUSE Linux Enterprise Server 15 Xen SP5
- Ubuntu 22.04 LTS 64-bit
- VMware ESXi 6.0 U3
- VMware ESXi 6.5
- VMware ESXi 6.5 U1
- VMware ESXi 6.5 U2
- VMware ESXi 6.5 U3

- VMware ESXi 6.7
- VMware ESXi 6.7 U1
- VMware ESXi 6.7 U2
- VMware ESXi 6.7 U3
- VMware ESXi 7.0
- VMware ESXi 7.0 U1
- VMware ESXi 7.0 U2
- VMware ESXi 7.0 U3
- VMware ESXi 8.0
- VMware ESXi 8.0 U1
- VMware ESXi 8.0 U2

For a complete list of supported, certified and tested operating systems, plus additional details and links to relevant web sites, see the Operating System Interoperability Guide:

<https://lenovopress.com/osig#servers=sr630-7x01-7x02-sp-gen-2>

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

Table 66. VMware ESXi preload

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

Physical and electrical specifications

The SR630 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 67. Detailed dimensions

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

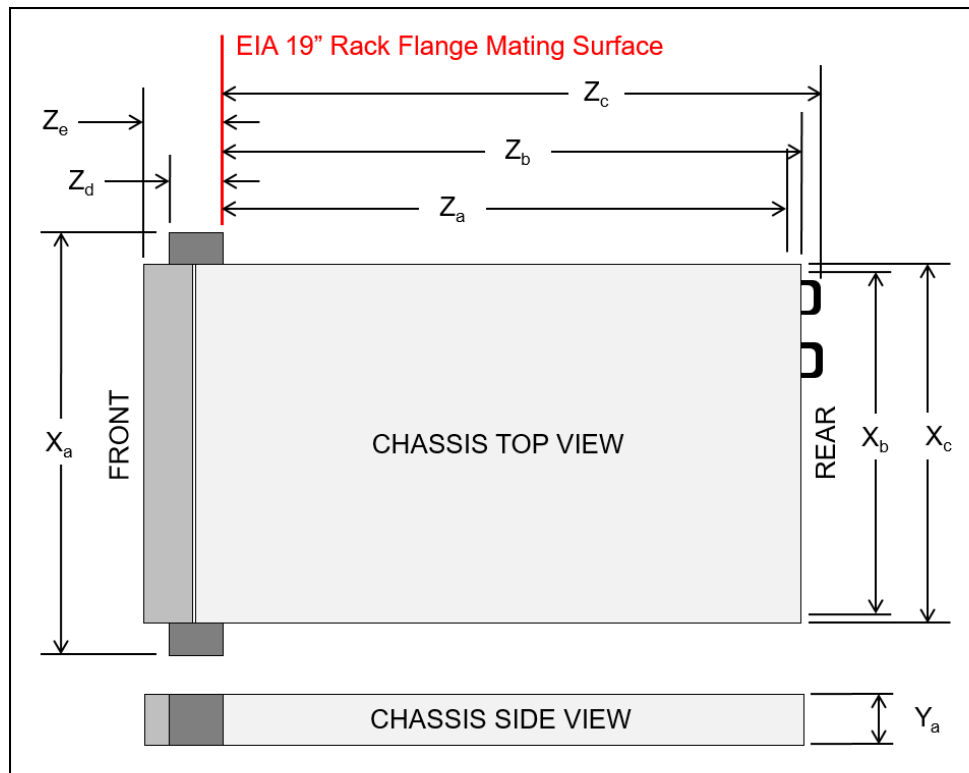


Figure 10. Server dimensions

The shipping dimensions (cardboard packaging) of the SR630 are as follows:

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

The server has the following weight:

- Minimum configuration: 11.9 kg (26.2 lb)
- Maximum configuration: 18.8 kg (41.4 lb)

Electrical specifications for AC power supplies:

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

Power load and inlet current

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

Table 68. Rated system power, inlet current, and system heat output

Power supply	Source voltage	Maximum power load per system (two power supplies)	Rated current per inlet	System heat output
550 W Platinum	100 - 127 V AC	722 W	6.2 A	2463 BTU/hour
	200 - 240 V AC	704 W	3 A	2402 BTU/hour
	180 - 300 V DC	702 W	2.5 A	2395 BTU/hour
750 W Platinum	100 - 127 V AC	984 W	8.4 A	3357 BTU/hour
	200 - 240 V AC	958 W	4.1 A	3269 BTU/hour
	180 - 300 V DC	958 W	3.5 A	3269 BTU/hour
750 W Titanium	200 - 240 V AC	949 W	4.1 A	3238 BTU/hour
	180 - 300 V DC	948 W	3.5 A	3235 BTU/hour
1100 W Platinum	100 - 127 V AC	1382 W	12 A	4715 BTU/hour
	200 - 240 V AC	1408 W	6 A	4804 BTU/hour
	180 - 300 V DC	1408 W	5.1 A	4804 BTU/hour

Operating environment

The SR630 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 installed
- Persistent memory modules not installed
- NVMe drives not installed
- NVMe PCIe flash adapters not installed
- Graphic processing units (GPUs) not installed
- Processors with TDP more than or equal to 150 W not installed
- For 8x 2.5" and 10x 2.5" chassis only: A maximum of one supercapacitor module installed

Temperature and humidity

The SR630 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

Warranty and support

The SR630 server has a one-year (7X01) or three-year (Machine Type 7X02) 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://lenovocator.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 markets or regions. 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 SR630 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 69. External drive enclosures

Model	Description
4587HC1	Lenovo Storage D1212 Disk Expansion Enclosure (2U enclosure wth 12x LFF drive bays)
4587HC2	Lenovo Storage D1224 Disk Expansion Enclosure (2U enclosure wth 24x SFF drive bays)
6413HC1	Lenovo Storage D3284 High Density Expansion Enclosure (5U enclosure wth 84x LFF drive bays)
7DAHCTO1WW	Lenovo ThinkSystem D4390 Direct Attached Storage (4U enclosure wth 90x LFF drive bays)

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

- Lenovo Storage D1212 and D1224
<http://lenovopress.lenovo.com/lp0512>
- Lenovo Storage D3284
<http://lenovopress.lenovo.com/lp0513>
- Lenovo ThinkSystem D4390
<https://lenovopress.lenovo.com/lp1681>

External storage systems

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

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

External backup units

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

Table 70. External backup options

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

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

Fibre Channel SAN switches

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

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

Rack cabinets

The following table lists the supported rack cabinets.

Table 71. 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)

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 72. KVM console

Part number	Description
4XF7A84188	ThinkSystem 18.5" LCD Console (with US English keyboard)

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

Table 74. KVM switches and options

Part number	Description
KVM Console switches	
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 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.

Table 75. Power distribution units

Part number	Feature code	Description	ANZ	ASEAN	Brazil	EET	MEA	RUCIS	WE	HTK	INDIA	JAPAN	LA	NA	PRC
0U Basic PDUs															
00YJ776	ATZY	0U 36 C13/6 C19 24A 1 Phase PDU	N	Y	Y	N	N	N	N	N	N	Y	Y	Y	N
00YJ777	ATZZ	0U 36 C13/6 C19 32A 1 Phase PDU	Y	Y	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y
0U Switched and Monitored PDUs															
00YJ783	AU04	0U 12 C13/12 C19 Switched and Monitored 48A 3 Phase PDU	N	N	Y	N	N	N	Y	N	N	Y	Y	Y	N
00YJ781	AU03	0U 20 C13/4 C19 Switched and Monitored 24A 1 Phase PDU	N	N	Y	N	Y	N	Y	N	N	Y	Y	Y	N
1U Switched and Monitored PDUs															
4PU7A81117	BNDV	1U 18 C19/C13 switched and monitored 48A 3P WYE PDU - ETL	N	N	N	N	N	N	N	N	N	N	N	Y	N
4PU7A77467	BLC4	1U 18 C19/C13 Switched and Monitored 80A 3P Delta PDU	N	N	N	N	N	N	N	N	N	Y	N	Y	N
4PU7A77469	BLC6	1U 12 C19/C13 switched and monitored 60A 3P Delta PDU	N	N	N	N	N	N	N	N	N	N	N	Y	N
4PU7A77468	BLC5	1U 12 C19/C13 switched and monitored 32A 3P WYE PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A81118	BNDW	1U 18 C19/C13 switched and monitored 48A 3P WYE PDU - CE	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y
1U Ultra Density Enterprise PDUs (9x IEC 320 C13 + 3x IEC 320 C19 outlets)															
71763NU	6051	Ultra Density Enterprise C19/C13 PDU 60A/208V/3PH	N	N	Y	N	N	N	N	N	N	Y	Y	Y	N
71762NX	6091	Ultra Density Enterprise C19/C13 PDU Module	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Part number	Feature code	Description	ANZ	ASEAN	Brazil	EET	MEA	RUCIS	WE	HTK	INDIA	JAPAN	LA	NA	PRC
1U C13 Enterprise PDUs (12x IEC 320 C13 outlets)															
39Y8941	6010	DPI C13 Enterprise PDU Module (WW)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1U Front-end PDUs (3x 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)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
39Y8940	6004	DPI Single-phase 60A/208V Front-end PDU (US)	Y	N	Y	Y	Y	Y	Y	N	N	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	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	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	N	N	Y	N	N	N	Y	N	N	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.

Table 76. Uninterruptible power supply units

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†	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)

† Only available in China and the Asia Pacific market.

For more information, see the list of Product Guides in the UPS category:

<https://lenovopress.com/servers/options/ups>

Lenovo Financial Services

Lenovo Financial Services reinforces Lenovo's commitment to deliver pioneering products and services that are recognized for their quality, excellence, and trustworthiness. Lenovo Financial Services offers financing solutions and services that complement your technology solution anywhere in the world.

We are dedicated to delivering a positive finance experience for customers like you who want to maximize your purchase power by obtaining the technology you need today, protect against technology obsolescence, and preserve your capital for other uses.

We work with businesses, non-profit organizations, governments and educational institutions to finance their entire technology solution. We focus on making it easy to do business with us. Our highly experienced team of finance professionals operates in a work culture that emphasizes the importance of providing outstanding customer service. Our systems, processes and flexible policies support our goal of providing customers with a positive experience.

We finance your entire solution. Unlike others, we allow you to bundle everything you need from hardware and software to service contracts, installation costs, training fees, and sales tax. If you decide weeks or months later to add to your solution, we can consolidate everything into a single invoice.

Our Premier Client services provide large accounts with special handling services to ensure these complex transactions are serviced properly. As a premier client, you have a dedicated finance specialist who manages your account through its life, from first invoice through asset return or purchase. This specialist develops an in-depth understanding of your invoice and payment requirements. For you, this dedication provides a high-quality, easy, and positive financing experience.

For your region-specific offers, please ask your Lenovo sales representative or your technology provider about the use of Lenovo Financial Services. For more information, see the following Lenovo website:

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

Related publications and links

For more information, see these resources:

- ThinkSystem SR630 product page
<https://www.lenovo.com/us/en/data-center/servers/racks/ThinkSystem-SR630/p/77XX7SR63>
- Datasheet for the ThinkSystem SR630:
<https://lenovopress.com/ds0031-lenovo-thinksystem-sr630>
- 3D Interactive Tour of the ThinkSystem SR630:
<https://lenovopress.com/lp0672-3d-tour-thinksystem-sr630>
- Walkthrough Video for the ThinkSystem SR630:
<https://lenovopress.com/lp0699-thinksystem-sr630-server-video-walkthrough>
- User Manuals for the ThinkSystem SR630:
https://thinksystem.lenovofiles.com/help/topic/7X01/introduction.html?cp=4_6
 - Quick Start Guide
 - Setup Guide
 - Rack Installation Guides
 - Maintenance Manual
 - Messages and Codes Reference
 - UEFI Manual
- Lenovo Data Center Support Downloads - ThinkSystem SR630:
<http://datacentersupport.lenovo.com/products/servers/thinksystem/sr630/7x01/downloads>
<http://datacentersupport.lenovo.com/products/servers/thinksystem/sr630/7x02/downloads>
- Lenovo Hardware Installation & Removal Videos on the ThinkSystem SR630:
 - YouTube: https://www.youtube.com/playlist?list=PLYV5R7hVcs-C_GGjNudxYy8-c69INMcmE
 - Youku: https://list.youku.com/albumlist/show/id_50462008
- 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 SR630 Server](#)

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