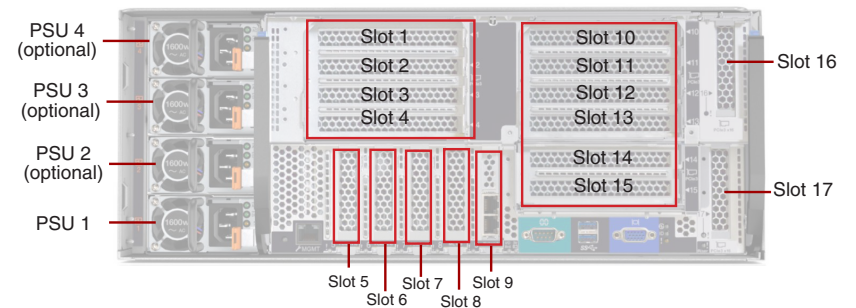


ThinkSystem SR950 Platform Specifications

Components	Specification																																																																																
Form factor	4U rack																																																																																
Dimensions	Height: 175.8 mm (6.9 in). Width: 483 mm (19.0 in) at EIA Flange. Depth: 853 mm (33.6 in)																																																																																
Weight	Maximum configuration: 129.4 lb (58.7 kg)																																																																																
Processor	Supports up to four Intel Xeon Scalable family processors, Gold or Platinum. Or up to eight Intel Xeon Scalable family processors, Platinum only. Processors and memory are located on system boards installed in compute trays: 2 processors per system board, 2 system boards per compute tray, up to 2 compute tray per system. Up to 28 cores at 2.5GHz, up to 3.6GHz with 4 cores. Up to three UPI (Ultra Path Interconnect) links at maximum 10.4GT/s each																																																																																
Chipset	Intel C624 Platform Controller Hub																																																																																
Memory	Up to 96 DIMM sockets. Each processor supports up to 12 DIMM sockets with 6 channels. DDR4-2666. RDIMMs, LRDIMMs, and 3DS RDIMMs are supported, but memory types cannot be intermixed.																																																																																
Memory capacity	Up to 3TB with 96 x 32GB RDIMMs and eight processors. Or up to 6TB with 96 x 64GB LRDIMMs and eight processors. Or up to 12TB with 96 x 128GB 3DS RDIMMs and eight -M suffix processors. -M suffix processor supports 1.5TB memory per socket, non -M suffix processor supports 768GB memory per socket																																																																																
Memory protection	ECC, memory mirroring, and memory rank sparing.																																																																																
Storage controllers	Up to two dedicated internal RAID slots for most RAID/HBA adapters. Supports the following RAID/HBA adapters:																																																																																
	<table border="1"> <thead> <tr> <th>Feature</th> <th>Interface</th> <th>Drive type</th> <th>RAID levels</th> <th>JBOD</th> <th>Cache</th> <th>Cache protection</th> <th>FastPath</th> <th>Max qty</th> </tr> </thead> <tbody> <tr> <td>530-8i</td> <td>12Gbps SAS</td> <td>SATA/SAS</td> <td>0/1/10/5/50</td> <td>Yes</td> <td>None</td> <td>None</td> <td>Yes</td> <td>2</td> </tr> <tr> <td>730-8i</td> <td>12Gbps SAS</td> <td>SATA/SAS</td> <td>0/1/10/5/50</td> <td>Yes</td> <td>1GB</td> <td>None</td> <td>No</td> <td>2</td> </tr> <tr> <td>930-8i</td> <td>12Gbps SAS</td> <td>SATA/SAS</td> <td>0/1/10/5/50/6/60</td> <td>Yes</td> <td>2GB</td> <td>Flash backup</td> <td>Yes</td> <td>2</td> </tr> <tr> <td>930-16i</td> <td>12Gbps SAS</td> <td>SATA/SAS</td> <td>0/1/10/5/50/6/60</td> <td>Yes</td> <td>4GB</td> <td>Flash backup</td> <td>Yes</td> <td>2</td> </tr> <tr> <td>430-8i</td> <td>12Gbps SAS</td> <td>SATA/SAS</td> <td>-</td> <td>Yes</td> <td>None</td> <td>None</td> <td>-</td> <td>2</td> </tr> <tr> <td>430-16i</td> <td>12Gbps SAS</td> <td>SATA/SAS</td> <td>-</td> <td>Yes</td> <td>None</td> <td>None</td> <td>-</td> <td>2</td> </tr> <tr> <td>930-8e</td> <td>12Gbps SAS</td> <td>SATA/SAS</td> <td>0/1/10/5/50/6/60</td> <td>Yes</td> <td>4GB</td> <td>Flash backup</td> <td>Yes</td> <td>4</td> </tr> <tr> <td>430-8e</td> <td>12Gbps SAS</td> <td>SATA/SAS</td> <td>-</td> <td>Yes</td> <td>None</td> <td>None</td> <td>-</td> <td>14</td> </tr> </tbody> </table> <p>Note: 730-8i is available in China only. 930-8e should be placed in slot 7 firstly. 430-8e should be placed in slot 5 firstly.</p>	Feature	Interface	Drive type	RAID levels	JBOD	Cache	Cache protection	FastPath	Max qty	530-8i	12Gbps SAS	SATA/SAS	0/1/10/5/50	Yes	None	None	Yes	2	730-8i	12Gbps SAS	SATA/SAS	0/1/10/5/50	Yes	1GB	None	No	2	930-8i	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	2GB	Flash backup	Yes	2	930-16i	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	4GB	Flash backup	Yes	2	430-8i	12Gbps SAS	SATA/SAS	-	Yes	None	None	-	2	430-16i	12Gbps SAS	SATA/SAS	-	Yes	None	None	-	2	930-8e	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	4GB	Flash backup	Yes	4	430-8e	12Gbps SAS	SATA/SAS	-	Yes	None	None	-
Feature	Interface	Drive type	RAID levels	JBOD	Cache	Cache protection	FastPath	Max qty																																																																									
530-8i	12Gbps SAS	SATA/SAS	0/1/10/5/50	Yes	None	None	Yes	2																																																																									
730-8i	12Gbps SAS	SATA/SAS	0/1/10/5/50	Yes	1GB	None	No	2																																																																									
930-8i	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	2GB	Flash backup	Yes	2																																																																									
930-16i	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	4GB	Flash backup	Yes	2																																																																									
430-8i	12Gbps SAS	SATA/SAS	-	Yes	None	None	-	2																																																																									
430-16i	12Gbps SAS	SATA/SAS	-	Yes	None	None	-	2																																																																									
930-8e	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	4GB	Flash backup	Yes	4																																																																									
430-8e	12Gbps SAS	SATA/SAS	-	Yes	None	None	-	14																																																																									
Disk drive bays	Up to 12 disk bays with maximum 6 AnyBay, or up to 24 disk bays with maximum 12 AnyBay. Optional one or two internal M.2 SSD for boot, dual M.2 SSD supports mirroring																																																																																
Internal storage	2.5" NVMe SSD, AnyBay	800GB/960GB/1.6TB/1.92TB/3.84TB																																																																															
	2.5" HDD, SAS12Gbps, 7,2K	1TB/2TB																																																																															
	2.5" HDD, SAS12Gbps, 15K	300GB/600GB/900GB																																																																															
	2.5" HDD, SAS12Gbps, 10K	300GB/600GB/900GB/1.2TB/1.8TB																																																																															
	2.5" HDD, SAS12Gbps, 10K, SED	300GB/600GB																																																																															
	2.5" SSD, SATA6Gbps	240GB/480GB																																																																															
	2.5" SSD, SAS12Gbps	400GB/800GB/3.84TB/7.68TB																																																																															
	NVMe SSD, PCIe x4 HHHL adapter	1.6TB/1.92TB/3.2TB/3.84TB																																																																															
M.2 SATA SSD	32GB/128GB																																																																																
Network interfaces	One dedicated management port. One LOM slot for customized LOM with up to four RJ-45 or SFP+ ports, up to 10GbE. Wake-on-LAN and NC-SI are available on Port 0 of LOM. Optional ML2 or PCIe adapters are supported. One standard ML2 slot, one optional ML2 slot via optional riser card																																																																																
Security features	Power-on and admin password. Trusted Platform Module, TCG 1.2 compliant, upgrade to 2.0 via UEFI setting. Optional TCM, China only																																																																																
Operating systems supported	Microsoft Windows Server 2016/2012 R2. Red Hat Enterprise Linux 7.3/6.9. SUSE Linux Enterprise Server 12 SP2/11 SP4. VMware vSphere (ESXi) 6.5/6.0 U3																																																																																
Systems management	XClarity Controller Enterprise. XClarity Administrator. XClarity Energy Manager. XClarity Provisioning Manager. XClarity Essentials. Lenovo Capacity Planner. Light Path Diagnostics with LCD diagnostic pull-out panel																																																																																
GPU support	None																																																																																
Base warranty	MT 7X11: 1-year limited onsite service with 9x5/NBD MT 7X12: 3-year limited onsite service with 9x5/NBD MT 7X13: 3-year limited onsite service with 9x5/NBD, SAP HANA optimized																																																																																
Power supply	Supports one, two or four hot-swap 1100W/1600W 80 PLUS Platinum qualified AC power supplies. Redundant with two or four power supplies (N+N, N = 1 or 2). 1600W Platinum is 200V - 240V, 1100W is 100V - 240V and de-rated to 1050W for operation from 110V input																																																																																

Components	Specification	
Video	Integrated Matrox G200 in XClarity Controller	
Cooling	Up to 12 hot-swap fans. N +1 redundancy. 6 fans per compute tray, 3 fans per storage tray	
Front ports	One XClarity Controller USB connector, one USB 2.0, one VGA	
Rear ports	One VGA, two USB 3.0, one serial, one XClarity Controller network connector	
Environmental specification	Supports ASHRAE A4 with limitations.	
	Temperature - operating	A4: 5°C to 45°C (41°F to 113°F) A3: 5°C to 40°C (41°F to 104°F) A2: 10°C to 35°C (50°F to 95°F)
	Temperature - non operating (no package)	-10°C to 60°C (14°F to 140°F)
	Temperature - non operating (with package)	-40°C to 70°C (-40°F to 158°F)
	Altitude - operating	(Unpressurized): 0-10000ft (0-3048m)
	Humidity - operating, non-condensing	A4: 8%-90%. A3:8%-85%. A2:20%-80%
Humidity - storage (with package), non-condensing	8%-90%	
Models should meet the following requirements to support A3 and A4: • 2.5" NVMe SSD and PCIe NVMe flash adapter not installed (NVMe devices are supported up to 35°C) • Processors with TDP more than or equal to 150-watt not installed		
Environmental certification	Energy Star Server 2.1 certified. More environmental information please see: www.lenovo.com/social_responsibility/us/en/environment/	



Note: All riser cards, expansion cards, and LOM adapters are optional.

Expansion slots

Supports five standard expansion slots (slot 5 - 9) and up to 12 optional expansion slots (slot 1 - 4, 10 - 15, 16 - 17) via 3 riser cards. The slots are as follows:

Slot 1-4 (riser card 1)	Supports one of the following for riser card 1: Option 1: PCIe 3.0 x8/x8/x8/x8 (slot 1-4). Full height, half length Option 2: PCIe 3.0 x16/x16 (slot 3 and 4). Full height, half length Option 3: PCIe 3.0 x16/x16/x16/x16 (slot 1-4). Full height, half length
Slot 5 (on main I/O tray)	PCIe 3.0 x16, low profile
Slot 6 (on main I/O tray)	PCIe 3.0 x16, low profile
Slot 7 (on main I/O tray)	PCIe 3.0 x8, low profile
Slot 8 (on main I/O tray)	PCIe 3.0 x16 ML2, low profile
Slot 9 (on main I/O tray)	LOM slot, low profile
Slot 10-15 (riser card 2)	Supports one of the following for riser card 2: Option 1: PCIe 3.0 x8/x8/x8/x8 (slot 10-13). Full height, half length Option 2: PCIe 3.0 x16/x16 (slot 12 and 13). Full height, half length Option 3: PCIe 3.0 x16/x16/x16/x16 ML2 (slot 10-15). Full height, half length
Slot 16-17 (riser card 3)	PCIe 3.0 x8, low profile

For riser cards configuration of each model, please see model configuration table.