ThinkSystem SR850 Platform Specifications

Product Specifications Reference (PSREF)

Components	Specification	Components	Specification
Form factor	2U rack	Video	Integrated Matrox G200 in XClarity Controller
Dimensions	Height: 86.5 mm (3.4 in). Width: 482 mm (19.0 in) with rack latches. Depth: 763.7	Cooling	Six hot-swap fans, N + 1 redundancy
	mm (30.1 in) without security bezel Maximum configuration: 59.52 lb (27 kg)	Front ports	One XClarity Controller USB connector, one USB 2.0 or USB 3.0 (model dependent), one optional VGA
loight	Supports up to two 165W Intel Xeon Scalable family processors, Gold or Platinum.	Rear ports	One VGA, two USB 3.0, one serial, one XClarity Controller network connector
	2 processor sockets on system board, 2 processor sockets on optional processor		Supports ASHRAE A4 with limitations.
Processor	and memory expansion tray. Up to 28 cores at 2.1GHz, up to 3.6GHz with 4 cores. Four processors are connected in ring topology with two 10.4GT/s UPI (Ultra Path Interconnect)		A4: 5°C to 45°C (41°F to 113°F) Temperature - operating A3: 5°C to 40°C (41°F to 104°F) A2: 10°C to 35°C (50°F to 95°F)
Chipset	Intel C624 Platform Controller Hub	1	Temperature - non operating (no package) -10°C to 60°C (14°F to 140°F)
Memory	Up to 48 DIMM sockets. 24 DIMM sockets on system main board, 24 DIMM sockets on optional processor and memory expansion tray. Each processor supports up to 12 DIMM sockets with 6 channels. DDR4-2666. RDIMMs, LRDIMMs, 3DS RDIMMs are supported, but memory types cannot be intermixed. 3DS RDIMM is planned to available later	Environmental specification	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%. A3:8%~85%. A2:20%~80% Models should meet the following requirements to support A3 and A4: NVMe drives not installed • NVMe drives not installed • DCle files
Memory capacity	Up to 1.5TB with 48 x 32GB RDIMMs and four processors. Or up to 3TB with 48 x 64GB LRDIMMs and four processors. Or up to 6TB with 48 x 128GB 3DS RDIMMs and four -M suffix processors. Or up to 3TB with 24 x 128GB 3DS RDIMMs and four non -M suffix processorsM suffix processor supports 1.5TB memory per socket, non -M suffix processor supports 768GB memory per socket	certification	PCle flash adapter not installed M.2 SSD not installed Energy Star Server 2.1 certified. More environmental information please see: www.lenovo.com/social_responsibility/us/en/environment/ Slot 4 Slot 5 Slot 6: M.2 slot Slot 8 (internal) Slot 7 Slot 8
Memory protection	ECC, memory mirroring, and memory sparing		(internal) Slot 7 Slot 10
Storage controllers	Supports the following RAID/HBA adapters: Feature Interface Drive type RAID levels JBOD Cache Cache FastPath Max qtv 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 1 430-16i 12Gbps SAS SATA/SAS - Yes None None - 2 430-16i 12Gbps SAS SATA/SAS - Yes None None - 2 430-84 12Gbps SAS SATA/SAS - Yes None None - 1 430-86 12Gbps SAS SATA/SAS -<	Slot 1 Slot 1	PSU2 (optional) PSU1 VGA Serial 2xUSB 3.0 Slot 9 Slot 11 XClarity Controller network connector
Disk drive bays	Note: 730-8i is available in China only Supports 8 front 2.5" SATA/SAS HS bays with maximum 4 AnyBay, or 16 front 2.5" SATA/SAS HS bays with maximum 8 AnyBay Optional one or two internal M.2 SSD for boot, dual M.2 SSD supports mirroring	Note: All riser cards, expansion cards, and LOM adapters are optional. Slots are labelled as 1, 2, 3, 4, 5, 7, 8, 9, 10, 11. Slot 6 is internal M.2 slot for optional M.2 enablement kit Expansion slots Slot 1 (onboard) PCle 3.0 x16, low profile, requires 2nd CPU Slot 1 (onboard) PCle 3.0 x26, low profile, requires 2nd CPU	
Internal storage	2.5" HDD, SAS12Gbps, 7.2K 1TB/2TB 2.5" HDD, SAS12Gbps, 10K 300GB/300GB SED/600GB/600GB SED/900GB/1.2TB/1.8TB 2.5" HDD, SAS12Gbps, 15K 300GB/600GB/900GB 2.5" SD, SAS12Gbps 400CB/800CB/3.4TB/7.68TB 2.5" SSD, SAS12Gbps 240GB/480GB 2.5" SNVMe SSD, AnyBay 800GB/900GB/1.6TB/1.92TB/3.84TB NVMe SSD, PCle 3.0 x4, HHHL adapter 1.6TB/1.92TB/3.2TB/3.84TB M.2 SATA SSD for boot 32GB/128GB	Slot 2 (onboard) Slot 3-5 (riser ca Slot 7 (onboard) Slot 8 (onboard)	 Supports one of the following for riser card: Option 1: PCIe 3.0 x8/x8/x8 (slot 3-5). Full height, half length. Option 2: PCIe 3.0 x8/x8/x8 ML2 (slot 3-5). Full height, half length Option 4: PCIe 3.0 x8/x16 ML2 (slot 3 and 5). Full height, half length Slot 3 - 5 requires 2nd CPU LOM, low profile
Optical	No internal optical bay. Optional USB DVD±RW optical drive	Slot 9 (onboard)	
Network interfaces	riser card with ML2 slot.	Slot 10 (onboard Slot 11 (onboard	d) PCIe 3.0 x8, low profile
Security features	Power-on and admin password. Trusted Platform Module, TCG 1.2 compliant, upgrade to 2.0 via UEFI setting. Optional TCM in China only. Optional lockable security bezel	7C57A03999	ThinkSystem SR850/SR860 Processor and Memory Expansion Tray ThinkSystem SR850/SR860 2.5" Anybay 8-Bay BP Kit ThinkSystem SR850/SR860 2.5" SATA/SAS 8-Bay BP Kit
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	7X97A03954 7C57A03950	ThinkSystem SR850 Front VGA Connector Upgrade Kit ThinkSystem SR850/SR860 x8/x8/x8 PCIe FH Riser Kit
Systems management	XClarity Controller Advanced, optional upgrades to Enterprise is available. Energy Manager. XClarity Administrator. Lenovo Capacity Planner. Light Path Diagnostics with optional LCD diagnostic pull-out panel		ThinkSystem SR850/SR860 x8/x8/x8ML2 PCIe FH Riser Kit ThinkSystem SR850/SR860 x8/x16ML2 PCIe FH Riser Kit
GPU support	None		
Base warranty	MT 7X18: 1-year limited onsite service with 9x5/NBD MT 7X19: 3-year limited onsite service with 9x5/NBD		
	Up to two redundant hot-swap 750W/1100W/1600W 80 PLUS Platinum qualified AC power supplies. 1600W Platinum are 200V - 240V, others are 100V - 240V		