ThinkSystem ST550 Platform Specifications

Components	Specification
Form factor	Tower or 4U rack
Dimensions	Without foot stands and security door: Height: 425.5 mm (16.8 in). Width: 175.8 mm (6.92 in). Depth: 666.4 mm (26.24 in)
Weight	Maximum configuration: 81.35 lb (36.9 kg)
Processor	Up to two 125W Intel Xeon Scalable family processors, Bronze, Silver, Gold, or Platinum. Up to 20 cores at 2.0GHz, up to 3.6GHz with 4 cores. Two processors are connected with two UPI (Ultra Path Interconnect) links up to 10.4GT/s
Chipset	Intel C621 Platform Controller Hub
Memory	Up to 12 DIMM sockets. Each processor supports up to 6 DIMM sockets with 6 channels. DDR4-2666. RDIMMs and LRDIMMs are supported, but memory types cannot be intermixed
Memory capacity	With RDIMMs: Up to 384GB with 12 x 32 GB RDIMMs and two processors With LRDIMMs: Up to 768GB with 12 x 64 GB LRDIMMs and two processors
Memory protection	ECC, memory mirroring, and memory sparing

Storage controllers — Supports the following RAID/HBA adapters:

	RAID adapter	Interface	Drive type	RAID levels	JBOD	Cache	Cache protection	FastPath	Max qty
For SS bays	Onboard SATA	6Gbps SATA	SATA	0/1/10/5	Yes	None	None	No	-
For HS bays	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
	930-24i	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	4GB	Flash backup	Yes	1
	430-8i	12Gbps SAS	SATA/SAS	-	Yes	None	None	-	2
	430-16i	12Gbps SAS	SATA/SAS	-	Yes	None	None	-	1
	430-8e	12Gbps SAS	SATA/SAS	-	Yes	None	None	-	6
	930-8e	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	4GB	Flash backup	Yes	6

Note: 730-8i is available in China only. All RAID/HBA adapters should be placed in slot 1 firstly.

Components	Specification
Disk drive bays	Supports 4 or 8 front 3.5" SATA simple-swap bays. Or 4 or 8 front 3.5" SATA/SAS HS bays. Or 8 or 16 front 2.5" SATA/SAS HS bays with maximum 4 AnyBay. Optional 4 front 2.5" HS bays are supported on hot-swap models, takes place in two 5.25" bays location Optional one or two internal M.2 SSD for boot, dual M.2 SSD supports mirroring

Internal storage:

For 3.5" SS bay	3.5" HDD, SATA6Gbps, 7.2K	1TB/2TB/4TB/6TB/8TB/10TB
For 3.5" bay (3.5" disks or 2.5" disks with 3.5" tray)	3.5" HDD, SATA6Gbps, 7.2K	1TB/2TB/4TB/6TB/8TB/10TB
	3.5" HDD, SAS12Gbps, 7.2K	1TB/2TB/4TB/6TB/8TB/10TB
	2.5" HDD, SAS12Gbps, 15K	300GB/600GB
	2.5" SSD, SATA6Gbps	240GB/480GB
For 2.5" bay	2.5" HDD, SATA6Gbps, 7.2K	1TB/2TB
	2.5" HDD, SAS12Gbps, 7.2K	1TB/2TB
	2.5" HDD, SAS12Gbps, 10K	300GB/600GB/900GB/1.2TB/1.8TB
	2.5" HDD, SAS12Gbps, 15K	300GB/600GB/900GB
	2.5" SSD, SAS12Gbps	400GB/800GB/3.84TB
	2.5" SSD, SATA6Gbps	240GB/480GB
	2.5" NVMe SSD, AnyBay	1.92TB/3.84TB
	M.2 SATA SSD	32GB/128GB

Components	Specification
Optical	Two 5.25" bays for optical and tape drive. Supports DVD-ROM or DVD±RW drives, half-height. Supports LTO-6 SAS, LTO-7 SAS, and RDX USB 3.0 tape drives
Network interfaces	Integrated one dedicated management port plus two GbE ports. Optional PCIe adapters are supported. NC-SI and Wake-on-LAN are available on GbE port 1 (See right)
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. Optional chassis intrusion switch
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 Standard, optional upgrades to Advanced or Enterprise are available. Energy Manager. XClarity Administrator. Provisioning Manager. Essentials. LEDs on front panel show the status of power, ID, network, simple-swap disks, and system error
GPU support	Up to two optional NVIDIA Quadro P2000 or Quadro P6000

Components	Specification
Base warranty	MT 7X09: 1-year limited onsite service with 9x5/NBD MT 7X10: 3-year limited onsite service with 9x5/NBD
Power supply	Supports one fixed 450W 80 PLUS Gold qualified AC power supply, non-hot swap, no redundant. Or up to two redundant hot-swap 550W/750W/1100W 80 PLUS Platinum qualified AC power supplies. Or up to two redundant hot-swap 750W Titanium qualified AC power supplies. 750W Titanium is 200V - 240V, others are 100V - 240V
Video	Integrated Matrox G200 in XClarity Controller
Cooling	Up to four fans with one for redundant. Two fans for single processor, three fans for dual processor or single processor with 4 x 2.5" HS bay installed. 4th fan is N + 1 redundant or GPU installed
Front ports	One XClarity Controller USB connector, one USB 3.0
Rear ports	One VGA, two USB 3.0, four USB 2.0, two ethernet (RJ-45), one XClarity Controller network connector. Optional COM port

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:
- System rear fan required, no system fan fail
- 450W fixed power supply not installed, redundant power supplies required
- NVMe SSD not installed
- GPU not installed
- When 4 x 2.5" bay installed, only support up to 2TB SAS HDD/SSD and all SATA HDD/SSD

Components	Specification
Environmental certification	Energy Star Server 2.1 certified. More environmental information please see: www.lenovo.com/social_responsibility/us/en/environment/
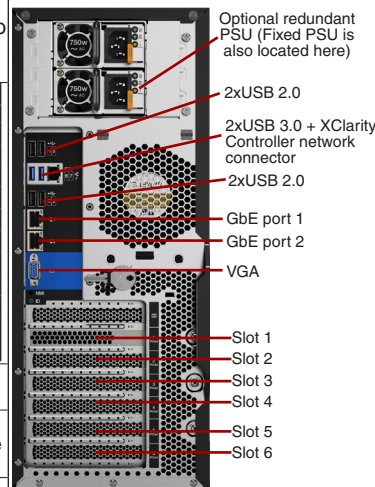
Expansion slots

Slot 1 (CPU1)	PCIe 3.0 x8, full height, half length
Slot 2 (CPU1)	PCIe 3.0 x16, full height, half length
Slot 3 (CPU1)	PCIe 3.0 x16, full height, full length, double-width
Slot 4 (CPU2)	PCIe 3.0 x16 (x8 elec), full height, full length
Slot 5 (CPU2)	PCIe 3.0 x16, full height, full length, double-width
Slot 6 (CPU1)	PCIe 3.0 x8 (x4 elec), full height, full length

Note: All expansion cards and redundant PSU are optional.

Optional redundant PSU (Fixed PSU is also located here)
2xUSB 2.0
2xUSB 3.0 + XClarity Controller network connector
2xUSB 2.0
GbE port 1
GbE port 2
VGA
Slot 1
Slot 2
Slot 3
Slot 4
Slot 5
Slot 6

System unique options

7X77A03475	ThinkSystem ST550 2.5" SATA/SAS 4-Bay Backplane Kit
7X77A03476	ThinkSystem ST550 2.5" Anybay 8-Bay Backplane Kit
7TP7A04369	ThinkSystem ST550 2.5" 8-Bay Backplane Kit
7TP7A04370	ThinkSystem ST550 3.5" SATA/SAS 4-Bay Backplane kit
7X77A03481	ThinkSystem ST550 3.5" Simple Swap Bracket Plate
7X77A03484	ThinkSystem ST550 4U Security Bezel
7X77A03485	ThinkSystem ST550 CMA kit
7X77A03488	ThinkSystem ST550 4U Tower to Rack Conversion Kit
7Z17A02577	ThinkSystem ST550 COM Port Upgrade Kit
7XH7A06781	ThinkSystem ST550 Front Mid FAN Module for 4x2.5" ODD conversion
7TP7A04371	ThinkSystem ST550 Rear FAN Module for RDN FAN