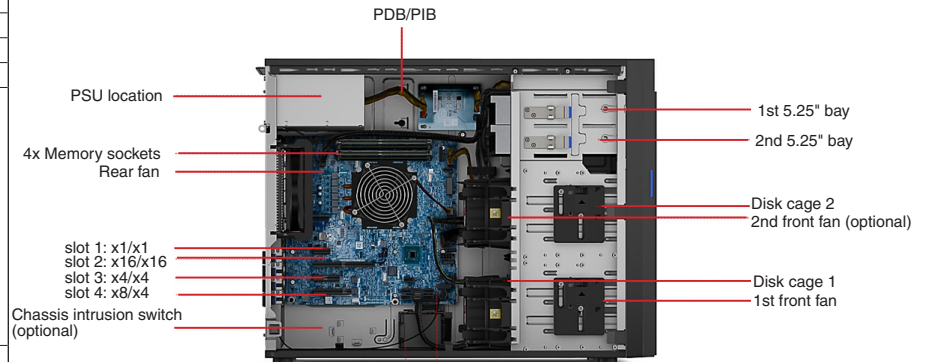


ThinkSystem ST250 Platform Specifications

Product Specifications Reference (PSREF)

Components	Specification																																																																																								
Form factor	Tower or 4U rack with optional rack mount kit																																																																																								
Dimensions	Height: 430 mm (16.93 in), width: 175 mm (6.89 in), depth: 565.7 mm (22.27 in)																																																																																								
Weight	Maximum configuration: 51.94 lb (23.56 kg)																																																																																								
Processor	Up to one Intel Xeon E family processor, up to 95W, up to 6 cores at 3.8GHz, up to 12MB cache, up to DDR4-2666 memory speed. Or up to one 8th Intel Core i3 processor, up to 91W, up to 4 cores at 4.0GHz, up to 8MB cache, up to DDR4-2400 memory speed. Or up to one Intel Pentium Gold processor, up to 54W, 2 cores at 3.9GHz, 4MB cache, DDR4-2400 memory speed																																																																																								
Chipset	Intel C246 Platform Controller Hub																																																																																								
Memory	4 DIMM sockets with 2 channels, 2 DIMMs per channel. UDIMM. DDR4-2666.																																																																																								
Memory capacity	64GB with 4x 16GB UDIMMs																																																																																								
Memory protection	ECC																																																																																								
Storage controllers	Supports the following RAID/HBA adapters: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>RAID adapter</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> </tr> </thead> <tbody> <tr> <td>Onboard SATA</td> <td>6Gbps SATA</td> <td>SATA</td> <td>0/1/10/5</td> <td>Yes</td> <td>None</td> <td>None</td> <td>No</td> </tr> <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> </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> </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> </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> </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> </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> </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> </tr> <tr> <td>430-16e</td> <td>12Gbps SAS</td> <td>SATA/SAS</td> <td>-</td> <td>Yes</td> <td>None</td> <td>None</td> <td>-</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> </tr> </tbody> </table>	RAID adapter	Interface	Drive type	RAID levels	JBOD	Cache	Cache protection	FastPath	Onboard SATA	6Gbps SATA	SATA	0/1/10/5	Yes	None	None	No	530-8i	12Gbps SAS	SATA/SAS	0/1/10/5/50	Yes	None	None	Yes	730-8i	12Gbps SAS	SATA/SAS	0/1/10/5/50	Yes	1GB	None	No	930-8i	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	2GB	Flash backup	Yes	930-16i	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	4GB	Flash backup	Yes	430-8i	12Gbps SAS	SATA/SAS	-	Yes	None	None	-	430-16i	12Gbps SAS	SATA/SAS	-	Yes	None	None	-	430-8e	12Gbps SAS	SATA/SAS	-	Yes	None	None	-	430-16e	12Gbps SAS	SATA/SAS	-	Yes	None	None	-	930-8e	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	4GB	Flash backup	Yes
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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. Or 4x 3.5" plus 8x 2.5" hybrid SATA/SAS HS bays. Optional one internal M.2 SSD for boot, consumes one onboard SATA port																																																																																								
Disk support	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td rowspan="2">For 3.5" SS bay</td> <td>3.5" HDD, SATA6Gbps, 7.2K</td> <td>1TB/2TB/4TB/6TB/8TB</td> </tr> <tr> <td>2.5" SSD, SATA6Gbps</td> <td>240GB/480GB/960GB</td> </tr> <tr> <td rowspan="4">For 3.5" HS bay (3.5" disks or 2.5" disks with 3.5" tray)</td> <td>3.5" HDD, SATA6Gbps, 7.2K</td> <td>1TB/2TB/4TB/6TB/8TB</td> </tr> <tr> <td>3.5" HDD, SAS12Gbps, 7.2K</td> <td>1TB/2TB/4TB/6TB/8TB</td> </tr> <tr> <td>2.5" HDD, SAS12Gbps, 15K</td> <td>300GB/600GB/900GB</td> </tr> <tr> <td>2.5" SSD, SATA6Gbps</td> <td>240GB/480GB/960GB</td> </tr> <tr> <td rowspan="4">For 2.5" HS bay</td> <td>2.5" HDD, SATA6Gbps, 7.2K</td> <td>1TB/2TB</td> </tr> <tr> <td>2.5" HDD, SAS12Gbps, 7.2K</td> <td>1TB/2TB</td> </tr> <tr> <td>2.5" HDD, SAS12Gbps, 10K</td> <td>300GB/300GB SED/600GB/900GB/1.2TB/1.8TB/2.4TB</td> </tr> <tr> <td>2.5" HDD, SAS12Gbps, 15K</td> <td>300GB/600GB/900GB</td> </tr> <tr> <td rowspan="2">M.2 SSD</td> <td>2.5" SSD, SATA6Gbps</td> <td>240GB/480GB/960GB</td> </tr> <tr> <td>M.2 SATA SSD</td> <td>32GB/128GB/480GB</td> </tr> </tbody> </table>	For 3.5" SS bay	3.5" HDD, SATA6Gbps, 7.2K	1TB/2TB/4TB/6TB/8TB	2.5" SSD, SATA6Gbps	240GB/480GB/960GB	For 3.5" HS bay (3.5" disks or 2.5" disks with 3.5" tray)	3.5" HDD, SATA6Gbps, 7.2K	1TB/2TB/4TB/6TB/8TB	3.5" HDD, SAS12Gbps, 7.2K	1TB/2TB/4TB/6TB/8TB	2.5" HDD, SAS12Gbps, 15K	300GB/600GB/900GB	2.5" SSD, SATA6Gbps	240GB/480GB/960GB	For 2.5" HS bay	2.5" HDD, SATA6Gbps, 7.2K	1TB/2TB	2.5" HDD, SAS12Gbps, 7.2K	1TB/2TB	2.5" HDD, SAS12Gbps, 10K	300GB/300GB SED/600GB/900GB/1.2TB/1.8TB/2.4TB	2.5" HDD, SAS12Gbps, 15K	300GB/600GB/900GB	M.2 SSD	2.5" SSD, SATA6Gbps	240GB/480GB/960GB	M.2 SATA SSD	32GB/128GB/480GB																																																												
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Optical	Two 5.25" bays for half-height optical, LTO-7 SAS or RDX USB 3.0 tape drive. Up to two optical or one tape drive																																																																																								
Network interfaces	Two onboard GbE port via integrated gigabit ethernet Broadcom BCM5720 plus one dedicated management port. Optional PCIe ethernet adapters are available																																																																																								
Security features	Power-on and admin password. Trusted Platform Module, TCG 1.2 or 2.0 compliant, Optional TCM in China only. Optional chassis intrusion switch, Kensington lock, and pad lock																																																																																								
Operating systems supported	Microsoft Windows Server 2019/2016/2012 R2. Red Hat Enterprise Linux 7.5. SUSE Linux Enterprise Server 12 SP3. VMware vSphere (ESXi) 6.7/6.5 U2																																																																																								
Systems management	XClarity Controller Standard, optional upgrades to Advanced or Enterprise are available. Energy Manager. XClarity Administrator. LEDs on front panel show the status of power, ID, network, simple-swap disks, and system error																																																																																								
GPU support	Up to one optional GPU, NVIDIA Quadro P620 or Quadro P2000																																																																																								
Base warranty	MT 7Y45: 3-year limited onsite service with 9x5/NBD MT 7Y46: 1-year limited onsite service with 9x5/NBD																																																																																								
Power supply	Supports one of the following PSU: <ul style="list-style-type: none"> One fixed power supply, 250W. 80 PLUS Platinum certified. Up to two redundant hot-swap power supplies, 550W each. 80 PLUS Platinum certified 																																																																																								

Components	Specification
Video	Integrated Matrox G200 in XClarity Controller
Cooling	One fixed rear fan, one fixed front fan, CPU fan, PSU fan. One optional front fan for 2nd disk drive cage
Front ports	One XClarity Controller USB connector, one USB 3.1 Gen 1
Rear ports	2x USB 3.1 Gen 2. 2x USB 3.1 Gen 1. 2x RJ-45. 1x XClarity Controller network connector. 1x COM. 1x VGA
Environmental specification	Supports ASHRAE A2
Environmental certification	Energy Star Server 2.1 certified



Expansion slots

Supports three PCIe 3.0 slots as following:

Slot 1	PCIe 3.0 x1, full height, half length, links to PCH
Slot 2	PCIe 3.0 x16, full height, half length, links to CPU
Slot 3	PCIe 3.0 x4, full height, half length, links to PCH
Slot 4	PCIe 3.0 x8 (negotiable link width x4), full height, half length, links to PCH

Partial options for ThinkSystem ST250

ThinkSystem 8GB TruDDR4 (1Rx8, 1.2V) 2666 MHz UDIMM	4ZC7A08696
ThinkSystem 16GB TruDDR4 (2Rx8, 1.2V) 2666 MHz UDIMM	4ZC7A08699
ThinkSystem 3.5" 1TB 7.2K SATA 6Gb Hot Swap 512n HDD	7XB7A00049
ThinkSystem 3.5" 8TB 7.2K SATA 6Gb Hot Swap 512e HDD	7XB7A00053
900GB 15K 12Gbps SAS 2.5" G4HS 512e HDD	7XB7A00023
300GB 10K 12Gbps SAS 2.5" G4HS HDD	7XB7A00024
600GB 10K 12Gbps SAS 2.5" G4HS HDD	7XB7A00025
900GB 10K 12Gbps SAS 2.5" G4HS HDD	7XB7A00026
1.2TB 10K 12Gbps SAS 2.5" G4HS HDD	7XB7A00027
1.8TB 10K 12Gbps SAS 2.5" G4HS 512e HDD	7XB7A00028
2.4TB 10K SAS 12Gb HS 512e HDD	7XB7A00069
300GB 10K 12Gbps SAS 2.5" G4HS SED	7XB7A00030
1TB 7.2K 12Gbps NL SAS 2.5" G4HS HDD	7XB7A00034
2TB 7.2K 12Gbps NL SAS 2.5" G4HS HDD	7XB7A00035
M.2 CV3 128GB SATA SSD	7N47A00130
ThinkSystem ST50/ST250 Rack Mount Kit	4M17A12785