

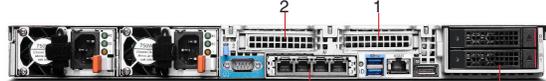
ThinkServer RD550 Platform Specifications

Product Specifications Reference (PSREF)

Components	Specification																									
Dimensions	1U rack. Height: 43 mm (1.7 in), width: 482 mm (19 in), depth: 780 mm (30.7 in)																									
Weight	Minimum configuration: 13.5 kg (29.76 lb), maximum: 21 kg (46.3 lb)																									
Processor	Up to two 145W Intel Xeon E5-2600 v3 family (code name: Haswell) processors with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 2.6GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.5GHz. Two QPI link up to 9.6 GT/s. Up to 2133MHz memory speed. Up to 45MB cache																									
Chipset	Intel C610 Series Chipset																									
Memory DIMMs	24 DIMM sockets (12 DIMMs per processor), 8-channel capable (4-channel per processor). RDIMM and LRDIMM (cannot be intermixed), DDR4, LRDIMM up to DDR4-2133, RDIMM up to DDR4-2400																									
Memory capacity	384GB (RDIMM, 16GB x 24)/768GB (LRDIMM, 32GB x 24)																									
Memory protection	ECC, memory mirroring, lockstep, and memory sparing																									
AnyRAID support	RAID 0, 1, 10 with AnyRAID 110i. 6Gb/s SATA, optional key for RAID 5. RAID 0, 1, 10 with AnyRAID 510i, 6Gb/s SAS/SATA, optional key for RAID 5/50. RAID 0, 1, 10, 5, 50, 6, 60 with AnyRAID 720i/720ix. 12Gb/s SAS/SATA. 720i needs cache for RAID 6/60 support. 720ix must have cache. Optional cache for 720i/720ix: 1GB read-only memory. 1GB/2GB/4GB flash with super capacitor. Flash options include CacheVault, CacheCade Pro, and FastPath <i>Note: At least 6 disk drives is required for RAID 50 and 60.</i>																									
Disk drive bays	Up to 4 3.5" or 12 2.5" hot-swap disk bays on front. Up to 2 of 12 2.5" bays can support easy-swap PCIe SSD via optional Anybay kit (consumes one PCIe slot). Up to 2 2.5" rear mounted hot-swap disk bays on 3.5" models, optional. Up to 2 M.2 SSD drives via optional M.2 module. Supports external RDX tape drive via USB. <table border="1"> <thead> <tr> <th>Disk bay configuration</th> <th colspan="4">AnyRAID requirements and optional drives supported</th> </tr> <tr> <th></th> <th>RAID110i</th> <th>RAID510i</th> <th>RAID720i</th> <th>RAID720ix</th> </tr> </thead> <tbody> <tr> <td>4x3.5"</td> <td>• (optional rear bay/M.2)</td> <td>• (optional rear bay/M.2)</td> <td>• (optional rear bay/M.2)</td> <td></td> </tr> <tr> <td>8x2.5"</td> <td>•</td> <td>•</td> <td>•</td> <td></td> </tr> <tr> <td>12x2.5"</td> <td></td> <td></td> <td></td> <td>• (optional Anybay/M.2)</td> </tr> </tbody> </table> <i>Note: 1. Rear disk drive and M.2 SSD can not be supported simultaneously. Only one can be selected per system. 2. On AnyRAID 110i and 8x2.5" model, 6 of 8 drives can be configured as RAID</i>	Disk bay configuration	AnyRAID requirements and optional drives supported					RAID110i	RAID510i	RAID720i	RAID720ix	4x3.5"	• (optional rear bay/M.2)	• (optional rear bay/M.2)	• (optional rear bay/M.2)		8x2.5"	•	•	•		12x2.5"				• (optional Anybay/M.2)
Disk bay configuration	AnyRAID requirements and optional drives supported																									
	RAID110i	RAID510i	RAID720i	RAID720ix																						
4x3.5"	• (optional rear bay/M.2)	• (optional rear bay/M.2)	• (optional rear bay/M.2)																							
8x2.5"	•	•	•																							
12x2.5"				• (optional Anybay/M.2)																						
Internal disk drive	3.5" HDD up to 12TB (SATA)/8TB(SAS). 2.5" HDD up to 1.8TB (SAS)/2TB (SATA). 2.5" SSD up to 1.6TB (SATA/SAS). Easy-swap PCIe SSD up to 1.92TB. PCIe SSD adapter up to 3.84TB. M.2 SSD up to 120GB. 2.5" SSD and HDD are compatible with 3.5" bay																									
SD module	Up to 2 SDHC flash cards via optional SD module, 8GB or 32GB each																									
Optical drive	Optional one 9.5mm optical drive on 3.5" model. DVD-ROM or DVD±RW																									
Network interfaces	One dedicated management port. One (3.5" model) or two (2.5" model) AnyFabric slots for customized LOM. Optional discrete network adapters via PCIe slots																									
Security features	Power-on and administrator password. Optional TPM (TCG 1.2-compliant)																									
Systems management	Supports ThinkServer System Manager (TSM), optional TSM Premium. UEFI. Onboard Aspeed AST2400 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC). Control Panel LEDs shows the status of power, ID, network, system. Supports ThinkServer management software: Diagnostics, Deployment Manager, Energy Manager, System Manager, Partner Pack for VMware vCenter and Microsoft System Center Operations Manager, Power Planner																									

Components	Specification															
Operating systems supported	Microsoft Windows Server 2016/2012 R2/2012/2008 R2. Windows Small Business Server 2011. Red Hat Enterprise Linux 6.5/6.6/7. SUSE Linux Enterprise Server 11. VMware vSphere (ESXi) 5.1 P5/5.5 U2/6.0															
Base warranty	3-year limited onsite service with 9x5/NBD. Some parts are Customer Replaceable Units															
Power supply	Up to two redundant hot-swap 550W/750W/1100W power supplies. 550W and 1100W are 80 PLUS Platinum qualified. 750W is 80 PLUS Platinum or Titanium qualified. <table border="1"> <thead> <tr> <th rowspan="2">Disk bay configuration</th> <th colspan="3">PSU requirements</th> </tr> <tr> <th>550W</th> <th>750W</th> <th>1100W</th> </tr> </thead> <tbody> <tr> <td>4x3.5"</td> <td>•</td> <td>•</td> <td>•</td> </tr> <tr> <td>12x2.5"</td> <td>•</td> <td>•</td> <td>•</td> </tr> </tbody> </table> <i>Note: 750W Titanium is 200V - 240V, others are 110V - 240V.</i>	Disk bay configuration	PSU requirements			550W	750W	1100W	4x3.5"	•	•	•	12x2.5"	•	•	•
Disk bay configuration	PSU requirements															
	550W	750W	1100W													
4x3.5"	•	•	•													
12x2.5"	•	•	•													
Graphics	Onboard Aspeed AST2400 with 16MB memory, one DisplayPort on front, one DisplayPort on rear. Maximum resolution: 1920x1200@60Hz															
Front ports	(Only 3.5" model) Two USB 2.0, one DisplayPort															
Rear ports	One DisplayPort, two USB 3.0, one RJ-45 (dedicate mgmt), one serial (9-pin)															
Cooling	8 (7+1, dual processors) or 6 (5+1, single processor), hot-swap															
Noise emissions	Operating: < 6.5 Bels. Idle: < 6 Bels (Maximum configuration)															
Environmental specification	<table border="1"> <tbody> <tr> <td>Temperature - operating</td> <td>41 °F to 113 °F (5 °C to 45 °C)</td> </tr> <tr> <td>Temperature - non operating (no package)</td> <td>-10 °C to 60 °C</td> </tr> <tr> <td>Temperature - non operating (with package)</td> <td>-40 °C to 60 °C</td> </tr> <tr> <td>Altitude - operating</td> <td>(Unpressurized): 0-10000ft (0-3048m)</td> </tr> <tr> <td>Humidity - operating</td> <td>8%-90%, non-condensing</td> </tr> <tr> <td>Humidity - storage (with package)</td> <td>8%-90%, non-condensing</td> </tr> </tbody> </table> <i>Note: 45 °C continuous operation configuration limitation: no 145W CPU/no 135W 4, 6, or 8 cores CPU/no GPU card/redundant PSU/no FLFH card/no PCIe SSD adapter/no 1100W PSU.</i>	Temperature - operating	41 °F to 113 °F (5 °C to 45 °C)	Temperature - non operating (no package)	-10 °C to 60 °C	Temperature - non operating (with package)	-40 °C to 60 °C	Altitude - operating	(Unpressurized): 0-10000ft (0-3048m)	Humidity - operating	8%-90%, non-condensing	Humidity - storage (with package)	8%-90%, non-condensing			
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Expansion slots

3.5" model	
	AnyFabric slot 1 (Network adapter is optional) Optional 2 x 2.5" rear bays
Slot 1 (riser card 1)	PCIe 3.0 x 16, low-profile, half length
Slot 2 (riser card 2)	PCIe 3.0 x 16, low-profile, half length, requires 2nd riser card and 2nd CPU
2.5" model	
	AnyFabric slot 1 (Network adapter is optional) AnyFabric slot 2 (Network adapter is optional)
Slot 1 (riser card 1)	PCIe 3.0 x 16 (x8 wired), low-profile, half length
Slot 2 (riser card 1)	PCIe 3.0 x 16 (x8 wired), low-profile, half length
Slot 3 (riser card 2)	PCIe 3.0 x 16, low-profile, half length, requires 2nd riser card and 2nd CPU