

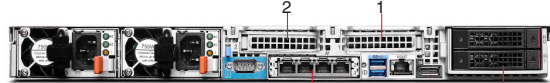
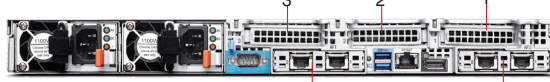
# ThinkServer RD550 Platform Specifications

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 <b>145W Intel Xeon E5-2600 v3</b> 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 C612 Platform Controller Hub (PCH)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                           |                                                    |                         |  |  |  |          |          |          |           |        |                           |                           |                           |  |        |   |   |   |  |         |  |  |  |                         |
| Memory DIMMs           | 24 DIMM sockets (12 DIMMs per processor), 8-channel capable (4-channel per processor). RDIMM and LRDIMM (cannot be intermixed), DDR4, up to 2133MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                           |                                                    |                         |  |  |  |          |          |          |           |        |                           |                           |                           |  |        |   |   |   |  |         |  |  |  |                         |
| 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.<br>RAID 0, 1, 10 with AnyRAID 510i. 6Gb/s SAS/SATA, optional key for RAID 5/50.<br>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.<br>Optional cache for 720i/720ix: 1GB read-only memory. 1GB/2GB/4GB flash with super capacitor. Flash options include CacheVault, CacheCade Pro, and FastPath<br><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.<br>Up to 2 of 12 2.5" bays can support easy-swap PCIe SSD via optional Anybay kit (consumes one PCIe slot).<br>Up to 2 2.5" rear mounted hot-swap disk bays on 3.5" models, optional.<br>Up to 2 M.2 SSD drives via optional M.2 module.<br>Supports external RDX tape drive via USB.<br><table><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><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></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 8TB (SATA/SAS). 2.5" HDD up to 1.8TB (SAS)/2TB (SATA).<br>2.5" SSD up to 1.6TB (SATA/SAS). Easy-swap PCIe SSD up to 1.6TB.<br>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.<br>UEFI. Onboard Aspeed AST2400 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC).<br>Control Panel LEDs shows the status of power, ID, network, system.<br>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.<br>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><tr><td>Disk bay configuration</td><td colspan="3">PSU requirements</td></tr><tr><td></td><td>550W</td><td>750W</td><td>1100W</td></tr><tr><td>4x3.5"</td><td>•</td><td>•</td><td>•</td></tr><tr><td>12x2.5"</td><td></td><td>•</td><td>•</td></tr></table> <p><i>Note: 750W Titanium is 200V - 240V, others are 110V - 240V.</i></p>                                                                                                                                                                                                    | 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><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></table> <p><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></p> | 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 |         |  |   |   |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                         |                                 |                                          |                 |                                            |                 |                      |                                      |                      |                        |                                   |                        |         |  |   |   |

## Expansion slots

|                                                                                                        |                                                                              |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| <b>3.5" model</b>   |                                                                              |
| 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 |
| <b>2.5" model</b>  |                                                                              |
| 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 |

| Model             | 70CX002REA                                     |
|-------------------|------------------------------------------------|
| Product           | ThinkServer RD550                              |
| Region            | EMEA                                           |
| Machine Type      | 70CX                                           |
| TopSeller         | TopSeller                                      |
| Processor         | 1xXeon E5-2620 v3 6C/2.4GHz/15MB/85W/DDR4-1866 |
| 2nd CPU           | 4XG0F28802                                     |
| Memory            | 1x16GB RDIMM DDR4-2133 ECC                     |
| RAID Controller   | AnyRAID720i+2GB Flash                          |
| Disk Bays         | 8x2.5" HS                                      |
| Storage           | 2x300GB HDD 10K 2.5" SAS6Gbs                   |
| Slots             | 2xLP HL                                        |
| Optical           | None                                           |
| Add-on NIC        | GbEx4 RJ-45 AnyFabric                          |
| TPM               | None                                           |
| System Management | TSM                                            |
| Operating System  | None                                           |
| Warranty          | 3-year                                         |
| Power Supply      | 750Wx1 Platinum                                |
| Ann Date (mm/yy)  | 07/15                                          |

