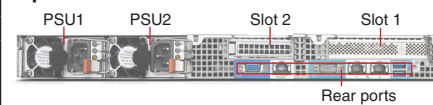


ThinkServer RD350 Platform Specifications

| Components | Specification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|--|---------------------------------------|--------------------------------|-------------------------|--------------------------------|------------------|-------------------------------|-----------------------------|-------------------------------|--------------|------------------------------|--------------------------------|------------------------------|---------------|------------------------------|--------------------------------|------------------------------|---------------------------|-------------------------------|------------------|-------------------------------|---------------|--------------------------------|---------------------------------------|--------------------------------|------------|------------------------------|------------|------------------------------|------------|-----------------------------|------------|------------------------------|------------|------------------------------|------------|------------------------------|-------------|-------------------------------|-------------|------------------------------|
| Dimensions | 1U rack. Height: 43 mm (1.7 in), width: 482 mm (19 in), depth: 781.5 mm (30.77 in) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weight | Minimum configuration: 13 kg (28.66 lb), maximum: 19.1 kg (42.11 lb) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Processor | Up to two 105W Intel Xeon E5-2600 v4 or E5-2600 v3 family processors. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tbody> <tr><td>E5-2660 v4</td><td>14C/2GHz/35MB/105W/DDR4-2400</td></tr> <tr><td>E5-2650 v4</td><td>12C/2.2GHz/30MB/105W/DDR4-2400</td></tr> <tr><td>E5-2640 v4</td><td>10C/2.4GHz/25MB/90W/DDR4-2133</td></tr> <tr><td>E5-2630 v4</td><td>10C/2.2GHz/20MB/85W/DDR4-2133</td></tr> <tr><td>E5-2623 v4</td><td>4C/2.6GHz/10MB/85W/DDR4-2133</td></tr> <tr><td>E5-2620 v4</td><td>8C/2.1GHz/20MB/85W/DDR4-2133</td></tr> <tr><td>E5-2609 v4</td><td>8C/1.7GHz/20MB/85W/DDR4-1866</td></tr> <tr><td>E5-2603 v4</td><td>6C/1.7GHz/15MB/85W/DDR4-1866</td></tr> <tr><td>E5-2650L v4</td><td>14C/1.7GHz/35MB/65W/DDR4-2400</td></tr> <tr><td>E5-2630L v4</td><td>10C/1.8GHz/25MB/55W/DDR4-2133</td></tr> <tr><td>E5-2660 v3</td><td>10C/2.6GHz/25MB/105W/DDR4-2133</td></tr> <tr><td>E5-2650 v3</td><td>10C/2.3GHz/25MB/105W/DDR4-2133</td></tr> <tr><td>E5-2640 v3</td><td>8C/2.6GHz/20MB/90W/DDR4-1866</td></tr> <tr><td>E5-2630 v3</td><td>8C/2.4GHz/20MB/85W/DDR4-1866</td></tr> <tr><td>E5-2623 v3</td><td>4C/3GHz/10MB/105W/DDR4-1866</td></tr> <tr><td>E5-2620 v3</td><td>6C/2.4GHz/15MB/85W/DDR4-1866</td></tr> <tr><td>E5-2609 v3</td><td>6C/1.9GHz/15MB/85W/DDR4-1600</td></tr> <tr><td>E5-2603 v3</td><td>6C/1.6GHz/15MB/85W/DDR4-1600</td></tr> <tr><td>E5-2650L v3</td><td>12C/1.8GHz/30MB/65W/DDR4-2133</td></tr> <tr><td>E5-2630L v3</td><td>8C/1.8GHz/20MB/55W/DDR4-1866</td></tr> </tbody> </table> | E5-2660 v4 | 14C/2GHz/35MB/105W/DDR4-2400 | E5-2650 v4 | 12C/2.2GHz/30MB/105W/DDR4-2400 | E5-2640 v4 | 10C/2.4GHz/25MB/90W/DDR4-2133 | E5-2630 v4 | 10C/2.2GHz/20MB/85W/DDR4-2133 | E5-2623 v4 | 4C/2.6GHz/10MB/85W/DDR4-2133 | E5-2620 v4 | 8C/2.1GHz/20MB/85W/DDR4-2133 | E5-2609 v4 | 8C/1.7GHz/20MB/85W/DDR4-1866 | E5-2603 v4 | 6C/1.7GHz/15MB/85W/DDR4-1866 | E5-2650L v4 | 14C/1.7GHz/35MB/65W/DDR4-2400 | E5-2630L v4 | 10C/1.8GHz/25MB/55W/DDR4-2133 | E5-2660 v3 | 10C/2.6GHz/25MB/105W/DDR4-2133 | E5-2650 v3 | 10C/2.3GHz/25MB/105W/DDR4-2133 | E5-2640 v3 | 8C/2.6GHz/20MB/90W/DDR4-1866 | E5-2630 v3 | 8C/2.4GHz/20MB/85W/DDR4-1866 | E5-2623 v3 | 4C/3GHz/10MB/105W/DDR4-1866 | E5-2620 v3 | 6C/2.4GHz/15MB/85W/DDR4-1866 | E5-2609 v3 | 6C/1.9GHz/15MB/85W/DDR4-1600 | E5-2603 v3 | 6C/1.6GHz/15MB/85W/DDR4-1600 | E5-2650L v3 | 12C/1.8GHz/30MB/65W/DDR4-2133 | E5-2630L v3 | 8C/1.8GHz/20MB/55W/DDR4-1866 |
| | E5-2660 v4 | 14C/2GHz/35MB/105W/DDR4-2400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2650 v4 | 12C/2.2GHz/30MB/105W/DDR4-2400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2640 v4 | 10C/2.4GHz/25MB/90W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2630 v4 | 10C/2.2GHz/20MB/85W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2623 v4 | 4C/2.6GHz/10MB/85W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2620 v4 | 8C/2.1GHz/20MB/85W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2609 v4 | 8C/1.7GHz/20MB/85W/DDR4-1866 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2603 v4 | 6C/1.7GHz/15MB/85W/DDR4-1866 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2650L v4 | 14C/1.7GHz/35MB/65W/DDR4-2400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2630L v4 | 10C/1.8GHz/25MB/55W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2660 v3 | 10C/2.6GHz/25MB/105W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2650 v3 | 10C/2.3GHz/25MB/105W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2640 v3 | 8C/2.6GHz/20MB/90W/DDR4-1866 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2630 v3 | 8C/2.4GHz/20MB/85W/DDR4-1866 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2623 v3 | 4C/3GHz/10MB/105W/DDR4-1866 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2620 v3 | 6C/2.4GHz/15MB/85W/DDR4-1866 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2609 v3 | 6C/1.9GHz/15MB/85W/DDR4-1600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | E5-2603 v3 | 6C/1.6GHz/15MB/85W/DDR4-1600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E5-2650L v3 | 12C/1.8GHz/30MB/65W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E5-2630L v3 | 8C/1.8GHz/20MB/55W/DDR4-1866 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chipset | Intel C610 Series Chipset | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory DIMMs | 16 DIMM sockets. 4 channels per processor, 2 DIMMs per channel. RDIMM or LRDIMM (cannot be intermixed), DDR4-2133 or DDR4-2400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory capacity | 512GB (RDIMM, 32GB x 16)/1024GB (LRDIMM, 64GB x 16), 2nd CPU is needed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory protection | ECC, memory mirroring, lockstep, and memory sparing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RAID controller | <table border="1"> <thead> <tr> <th>RAID controller</th> <th>Drive type</th> <th>RAID support</th> <th>Compatible models</th> </tr> </thead> <tbody> <tr> <td>Onboard RAID110i</td> <td>6Gbs SATA</td> <td>0/1/10, 5 with optional key</td> <td>4x3.5" HS/ES, 8x2.5" HS</td> </tr> <tr> <td>RAID500 PCIe</td> <td>6Gbs SAS/SATA</td> <td>0/1/10, 5/50 with optional key</td> <td>4x3.5" HS, 8x2.5" HS</td> </tr> <tr> <td>RAID520i PCIe</td> <td>12Gbs SAS/SATA</td> <td>0/1/10, 5/50 with optional key</td> <td>4x3.5" HS/ES, 8x2.5" HS</td> </tr> <tr> <td>RAID710 PCIe (1GB memory)</td> <td>6Gbs SAS/SATA</td> <td>0/1/10/5/50/6/60</td> <td>4x3.5" HS, 8x2.5" HS</td> </tr> <tr> <td>RAID720i PCIe</td> <td>12Gbs SAS/SATA</td> <td>0/1/10/5/50, 6/60 with optional cache</td> <td>4x3.5" HS/ES, 8x2.5" HS</td> </tr> </tbody> </table> | RAID controller | Drive type | RAID support | Compatible models | Onboard RAID110i | 6Gbs SATA | 0/1/10, 5 with optional key | 4x3.5" HS/ES, 8x2.5" HS | RAID500 PCIe | 6Gbs SAS/SATA | 0/1/10, 5/50 with optional key | 4x3.5" HS, 8x2.5" HS | RAID520i PCIe | 12Gbs SAS/SATA | 0/1/10, 5/50 with optional key | 4x3.5" HS/ES, 8x2.5" HS | RAID710 PCIe (1GB memory) | 6Gbs SAS/SATA | 0/1/10/5/50/6/60 | 4x3.5" HS, 8x2.5" HS | RAID720i PCIe | 12Gbs SAS/SATA | 0/1/10/5/50, 6/60 with optional cache | 4x3.5" HS/ES, 8x2.5" HS | | | | | | | | | | | | | | | | |
| | RAID controller | Drive type | RAID support | Compatible models | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Onboard RAID110i | 6Gbs SATA | 0/1/10, 5 with optional key | 4x3.5" HS/ES, 8x2.5" HS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | RAID500 PCIe | 6Gbs SAS/SATA | 0/1/10, 5/50 with optional key | 4x3.5" HS, 8x2.5" HS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | RAID520i PCIe | 12Gbs SAS/SATA | 0/1/10, 5/50 with optional key | 4x3.5" HS/ES, 8x2.5" HS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | RAID710 PCIe (1GB memory) | 6Gbs SAS/SATA | 0/1/10/5/50/6/60 | 4x3.5" HS, 8x2.5" HS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RAID720i PCIe | 12Gbs SAS/SATA | 0/1/10/5/50, 6/60 with optional cache | 4x3.5" HS/ES, 8x2.5" HS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Optional cache for RAID 710: CacheVault flash cache with super capacitor, CacheCade Pro, or FastPath. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Optional cache for RAID 720/AnyRAID 720i and 720ix: 1GB read-only memory or 1GB/2GB/4GB flash with super capacitor. Flash options include CacheVault, CacheCade Pro, and FastPath. 720ix must have cache. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <i>Note: RAID 50 and 60 are available on 8 x 2.5" models only.</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disk drive bays | Up to 4x3.5" hot-swap, 4x3.5" easy-swap, or 8x2.5" hot-swap disk bays on front. Supports external RDX tape drive via USB. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum internal storage | 3.5" model: up to 32TB with 7.2K SATA or SAS HDD, up to 7.2TB with 10K SAS HDD, up to 2.4TB with 15K SAS HDD, or up to 6.4TB with SATA SSD. 3.5" ES model: up to 12TB with 7.2K SATA, up to 24TB with 7.2K SAS. 2.5" model: up to 16TB with 7.2K SATA HDD, up to 14.4TB with 10K SAS HDD, up to 4.8TB with 15K SAS HDD, or up to 12.8TB with SATA or SAS SSD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SD module | Up to 2 SDHC flash cards via optional SD module, 8GB or 32GB each | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Optical drive | Optional one 9.5mm optical, DVD-ROM or DVD±RW. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Network interfaces | One dedicated management port, two Gigabit Ethernet ports (RJ-45). Supports optional discrete network adapters via PCIe slots | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Security features | Power-on and administrator password. Optional TPM (TCG 1.2-compliant) Supports ThinkServer System Manager (TSM), optional TSM Premium. UEFI. Onboard Aspeed AST2400 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Systems management | 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 | 1 or 3-year limited onsite service with 9x5/NBD | | | | | | | | | | | | | | |
| Power supply | Up to two redundant hot-swap 450W/550W/750W power supplies. 450 W is 80 PLUS Gold qualified. 550W is 80 PLUS Platinum qualified. 750W is 80 PLUS Platinum or Titanium qualified. 750W Titanium is 200V - 240V, others are 110V - 240V. | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th rowspan="2">Disk bay configuration</th> <th colspan="3">PSU requirements</th> </tr> <tr> <th>450W</th> <th>550W</th> <th>750W</th> </tr> </thead> <tbody> <tr> <td>4x3.5"</td> <td>•</td> <td>•</td> <td>•</td> </tr> <tr> <td>8x2.5"</td> <td>•</td> <td>•</td> <td>•</td> </tr> </tbody> </table> | Disk bay configuration | PSU requirements | | | 450W | 550W | 750W | 4x3.5" | • | • | • | 8x2.5" | • | • |
| Disk bay configuration | PSU requirements | | | | | | | | | | | | | | |
| | 450W | 550W | 750W | | | | | | | | | | | | |
| 4x3.5" | • | • | • | | | | | | | | | | | | |
| 8x2.5" | • | • | • | | | | | | | | | | | | |
| Graphics | Onboard Aspeed AST2400 with 16MB memory, one DisplayPort on front, one VGA on rear. | | | | | | | | | | | | | | |
| Front ports | Two USB 2.0. One DisplayPort (one VGA on E5-2600 v4 models instead) | | | | | | | | | | | | | | |
| Rear ports | One VGA, two USB 3.0, one RJ-45 (dedicated mgmt), two ethernet, one serial (9-pin) | | | | | | | | | | | | | | |
| Cooling | 6 (5+1, dual processors) or 4 (3+1, single processor) fans, non-hot swap | | | | | | | | | | | | | | |
| Noise emissions | Operating: < 6.5 Bels. Idle: < 5.4 Bels (Maximum configuration) | | | | | | | | | | | | | | |
| Environmental specification | Temperature - operating | 50 °F to 95 °F (10 °C to 35 °C) | | | | | | | | | | | | | |
| | Temperature - non operating (no package) | -10 °C to 60 °C | | | | | | | | | | | | | |
| | Temperature - non operating (with package) | -40 °C to 70 °C | | | | | | | | | | | | | |
| | Altitude - operating | (Unpressurized): 0-10000ft (0-3048m) | | | | | | | | | | | | | |
| | Humidity - operating | 8%-90%, non-condensing | | | | | | | | | | | | | |
| | Humidity - storage (with package) | 8%-90%, non-condensing | | | | | | | | | | | | | |

Expansion slots



Up to two PCIe 3.0 x 16 slots:

| | |
|-----------------------------------|--|
| Slot 1 | PCIe 3.0 x16, half length, full height, by CPU1 |
| Slot 2 for dual processors model | PCIe 3.0 x16, low-profile, half length, requires 2nd riser card and 2nd CPU |
| Slot 2 for single processor model | PCIe 3.0 x16 (x8 electrical), low-profile, half length, by CPU1, requires 2nd riser card |

For a list of all supported options, please see https://download.lenovo.com/pccbbs/options_iso/ocm_september_2016_thinkserver.xlsx sheet

| Model | 70QK0009EA |
|-------------------|---|
| Product | ThinkServer RD350 |
| Region | EMEA |
| Machine Type | 70QK |
| TopSeller | TopSeller |
| Processor | 1xE5-2603 v4 6C/1.7GHz/15MB/85W/DDR4-1866 |
| 2nd CPU | 4XG0G89089 |
| Memory | 1x8GB RDIMM DDR4-2400 ECC |
| RAID Controller | RAID 110i |
| Disk Bays | 4x3.5" HS |
| Storage | Open |
| Slots | 1xFHHL |
| Optical | 9.5mm DVD±RW |
| Add-on NIC | None |
| TPM | None |
| System Management | TSM |
| Operating System | None |
| Warranty | 3-year |
| Power Supply | 450Wx1 Gold |
| Ann Date (mm/yy) | 04/16 |

