

# ThinkServer RS160 Platform Specifications

Product Specifications Reference (PSREF)

| Components         | Specification                                                                                                                                                                                                                                                                                                                               |                             |                                    |                   |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------|-------------------|
| Dimensions         | 1U rack. Height: 43.2 mm (1.7 in), width: 438.5 mm (17.26 in), depth: 393.7 mm (15.5 in)                                                                                                                                                                                                                                                    |                             |                                    |                   |
| Weight             | Minimum configuration: 6.2 kg (13.67 lb), maximum: 7.6 kg (16.76 lb)                                                                                                                                                                                                                                                                        |                             |                                    |                   |
| Processor          | Up to one <b>Intel Xeon E3-1200 v5, Core i3, Pentium, or Celeron</b> family processor.                                                                                                                                                                                                                                                      |                             |                                    |                   |
|                    | Xeon E3-1280 v5                                                                                                                                                                                                                                                                                                                             | 4C/3.7GHz/8MB/80W/DDR4-2133 |                                    |                   |
|                    | Xeon E3-1270 v5                                                                                                                                                                                                                                                                                                                             | 4C/3.6GHz/8MB/80W/DDR4-2133 |                                    |                   |
|                    | Xeon E3-1240 v5                                                                                                                                                                                                                                                                                                                             | 4C/3.5GHz/8MB/80W/DDR4-2133 |                                    |                   |
|                    | Xeon E3-1230 v5                                                                                                                                                                                                                                                                                                                             | 4C/3.4GHz/8MB/80W/DDR4-2133 |                                    |                   |
|                    | Xeon E3-1220 v5                                                                                                                                                                                                                                                                                                                             | 4C/3GHz/8MB/80W/DDR4-2133   |                                    |                   |
|                    | Xeon E3-1260L v5                                                                                                                                                                                                                                                                                                                            | 4C/2.9GHz/8MB/45W/DDR4-2133 |                                    |                   |
|                    | Xeon E3-1240L v5                                                                                                                                                                                                                                                                                                                            | 4C/2.1GHz/8MB/25W/DDR4-2133 |                                    |                   |
|                    | Xeon E3-1225 v5                                                                                                                                                                                                                                                                                                                             | 4C/3.3GHz/8MB/80W/DDR4-2133 |                                    |                   |
|                    | Core i3-6320                                                                                                                                                                                                                                                                                                                                | 2C/3.9GHz/4MB/51W/DDR4-2133 |                                    |                   |
|                    | Core i3-6300                                                                                                                                                                                                                                                                                                                                | 2C/3.8GHz/4MB/51W/DDR4-2133 |                                    |                   |
|                    | Core i3-6100                                                                                                                                                                                                                                                                                                                                | 2C/3.7GHz/3MB/51W/DDR4-2133 |                                    |                   |
|                    | Pentium G4520                                                                                                                                                                                                                                                                                                                               | 2C/3.6GHz/3MB/51W/DDR4-2133 |                                    |                   |
|                    | Pentium G4500                                                                                                                                                                                                                                                                                                                               | 2C/3.5GHz/3MB/51W/DDR4-2133 |                                    |                   |
|                    | Pentium G4400                                                                                                                                                                                                                                                                                                                               | 2C/3.3GHz/3MB/54W/DDR4-2133 |                                    |                   |
|                    | Celeron G3920                                                                                                                                                                                                                                                                                                                               | 2C/2.9GHz/2MB/51W/DDR4-2133 |                                    |                   |
|                    | Celeron G3900                                                                                                                                                                                                                                                                                                                               | 2C/2.8GHz/2MB/51W/DDR4-2133 |                                    |                   |
|                    | Celeron G3900T                                                                                                                                                                                                                                                                                                                              | 2C/2.6GHz/2MB/35W/DDR4-2133 |                                    |                   |
| Chipset            | Intel C232 Platform Controller Hub (PCH)                                                                                                                                                                                                                                                                                                    |                             |                                    |                   |
| Memory DIMMs       | 4 DIMM sockets with 2 channels, 2 DIMMs per channel. <b>UDIMM</b> . DDR4-2133                                                                                                                                                                                                                                                               |                             |                                    |                   |
| Memory capacity    | 64GB (16GB x 4)                                                                                                                                                                                                                                                                                                                             |                             |                                    |                   |
| Memory protection  | ECC                                                                                                                                                                                                                                                                                                                                         |                             |                                    |                   |
| RAID controller    | RAID controller                                                                                                                                                                                                                                                                                                                             | Drive type                  | RAID support                       | Compatible models |
|                    | Onboard RAID12i                                                                                                                                                                                                                                                                                                                             | 6Gbs SATA                   | 0/1/5/10                           | 2x3.5", 4x2.5"    |
|                    | RAID520i PCIe                                                                                                                                                                                                                                                                                                                               | 12Gbs SAS/SATA              | 0/1/10,<br>5 with optional key     | 2x3.5", 4x2.5"    |
|                    | RAID720i PCIe                                                                                                                                                                                                                                                                                                                               | 12Gbs SAS/SATA              | 0/1/10/5,<br>6 with optional cache | 2x3.5", 4x2.5"    |
|                    | Optional cache for RAID720i: 1GB memory. 1GB, 2GB, or 4GB flash with super capacitor.                                                                                                                                                                                                                                                       |                             |                                    |                   |
| Disk drive bays    | Supports two 3.5" or four 2.5" disk drive bays. Non-hot swap. Cables are connected to onboard SATA connectors or PCIe RAID controller. Also supports one M.2 SATA SSD                                                                                                                                                                       |                             |                                    |                   |
| Supporting storage | 3.5" HDD, 7.2K SATA6Gbs                                                                                                                                                                                                                                                                                                                     | 1TB/2TB/4TB/6TB/8TB         |                                    |                   |
|                    | 3.5" HDD, 7.2K SAS12Gbs                                                                                                                                                                                                                                                                                                                     | 1TB/2TB/4TB/6TB/8TB         |                                    |                   |
|                    | 2.5" HDD, 7.2K SATA6Gbs                                                                                                                                                                                                                                                                                                                     | 1TB/2TB                     |                                    |                   |
|                    | 2.5" HDD, 10K SAS12Gbs                                                                                                                                                                                                                                                                                                                      | 300GB/600GB/900GB/1.2TB     |                                    |                   |
|                    | 2.5" SSD, SATA6Gbs                                                                                                                                                                                                                                                                                                                          | 120GB/240GB/480GB/960GB     |                                    |                   |
|                    | M.2 SATA SSD                                                                                                                                                                                                                                                                                                                                | 32GB/128GB                  |                                    |                   |
| Optical drive      | Optional one 9.5mm optical. DVD-ROM or DVD±RW                                                                                                                                                                                                                                                                                               |                             |                                    |                   |
| Network interfaces | One dedicated management port, two Gigabit Ethernet ports. Supports optional discrete network adapters via riser card                                                                                                                                                                                                                       |                             |                                    |                   |
| Security features  | Power-on and administrator password. Optional TPM, TCG 1.2 or 2.0 compliant. 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, disk drives, network, system. Supports the following management software: EasyStartup, Power Planner. On November 2016, EasyUpdate, Lenovo ThinkServer Diagnostics Standalone, ToolsCenter Suite CLI inventory module on ThinkServer, and Lenovo xClarity Administrator will be available |                             |                                    |                   |
| Operating systems  | Microsoft Windows Server 2016 (Standard and Essentials)/2012 R2/2012. Windows 10 Pro. Red Hat Enterprise Linux 6.7/6.8/7.2. SUSE Linux Enterprise Server 11/12. VMware vSphere (ESXi) 6.0Ub/U2                                                                                                                                              |                             |                                    |                   |
| Base warranty      | 1 or 3-year limited onsite service with 9x5/NBD                                                                                                                                                                                                                                                                                             |                             |                                    |                   |

| Components                  | Specification                                                                       |                                      |
|-----------------------------|-------------------------------------------------------------------------------------|--------------------------------------|
| Power supply                | One fixed 300 watts power supply, Non-hot swap. 80 PLUS Gold qualified              |                                      |
| Graphics                    | Onboard Aspeed AST2400                                                              |                                      |
| Front ports                 | Two USB 2.0                                                                         |                                      |
| Rear ports                  | One VGA, four USB 3.0, one RJ-45 (dedicated mgmt), two ethernet, one serial (9-pin) |                                      |
| Cooling                     | 3 fans for processor, PCIe slot, and disk drives                                    |                                      |
| Noise emissions             | Operating: < 5.9 Bels. Idle: < 5.2 Bels (Maximum configuration)                     |                                      |
| Environmental specification | Temperature - operating                                                             | 50 °F to 95 °F (10 °C to 35 °C)      |
|                             | Temperature - non operating (with package)                                          | -40 °C to 60 °C                      |
|                             | Altitude - operating                                                                | (Unpressurized): 0-10000ft (0-3048m) |
|                             | Humidity - operating                                                                | 8%~80%, non-condensing               |
|                             | Humidity - storage (with package)                                                   | 10%~90%, non-condensing              |

## Expansion slots and disk bays

Supports one PCIe slot via optional riser card, PCIe 3.0 x16, half length, half height

## Core options for ThinkServer RS160 (partial)

|                                                                                |            |
|--------------------------------------------------------------------------------|------------|
| ThinkServer 8GB 2RX8 PC4-2133-E CL15 DDR4-2133 ECC-UDIMM                       | 4X70G88316 |
| ThinkServer 16GB 2RX8 PC4-2133-E CL15 DDR4-2133 ECC-UDIMM                      | 4X70G88317 |
| ThinkServer 3.5" 8TB 7.2K Enterprise SATA 6Gbps 512e Hard Drive for RS-Series  | 4XB0K12297 |
| ThinkServer 2.5" 1.2TB 10K Enterprise SAS 12Gbps Hard Drive for RS-Series      | 4XB0K12306 |
| ThinkServer 2.5" 2TB 7.2K Enterprise SATA 6Gbps Hard Drive for RS-Series       | 4XB0K12302 |
| ThinkServer 2.5" 480GB S3510 Enterprise Entry SATA 6Gbps SSD for RS-Series     | 4XB0K12321 |
| ThinkServer M.2 32GB Value Read-Optimized SATA 6Gbps Solid State Drive         | 4XB0K12310 |
| ThinkServer RAID 520i RAID 5 Upgrade                                           | 4XC0G88841 |
| ThinkServer RS160 Slim SATA DVD-RW Optical Disk Drive                          | 4XA0G88613 |
| Lenovo ThinkServer Gen 5 Trusted Platform Module v1.2 (Worldwide except China) | 4XF0G45868 |

| Model            | 70TE0008EA                                |
|------------------|-------------------------------------------|
| Product          | ThinkServer RS160                         |
| Region           | EMEA                                      |
| Machine Type     | 70TE                                      |
| TopSeller        | TopSeller                                 |
| Processor        | Xeon E3-1220 v5 4C/3GHz/8MB/80W/DDR4-2133 |
| Memory           | 1x8GB UDIMM DDR4-2133 ECC                 |
| RAID Controller  | RAID 121i                                 |
| Disk Bays        | 4x2.5" NHS                                |
| Storage          | Open                                      |
| Optical          | None                                      |
| Add-on NIC       | None                                      |
| Slots            | 1xHHHL                                    |
| TPM              | None                                      |
| Operating System | None                                      |
| Warranty         | 3-year                                    |
| Power Supply     | 300W 85% Fixed                            |
| Ann Date (mm/yy) | 09/16                                     |

