

THE LENOVO® THINKSERVER® RD540

DENSITY MEETS PERFORMANCE



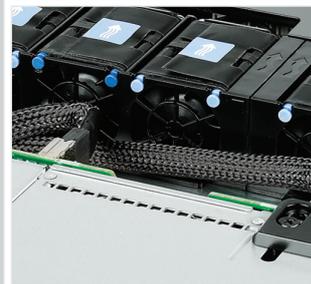
BALANCED DESIGN

27% greater performance with optimized memory and IO for demanding workloads



GREATER SCALABILITY*

25% greater storage, up to 16TB, to support your database, virtualization and email workloads



ENHANCED RELIABILITY

Features redundant fans and power. Offers new advanced RAID choices with 1GB write-back cache and FastPath technology



TRULY OPEN

Completely open. Based on open standards and protocols, RD540 fits easily in heterogeneous environments

The ThinkServer® RD540 server combines expansive networking, storage and RAID choices to handle compute-intensive deployments in collaborative apps, heavy web traffic workloads. It features Xeon® E5-2600 v2 processors, up to 24 cores and 320GB memory for data analytics and virtualization. RD540 delivers impressive compute power per watt, with an energy-efficient 1U design featuring 80 PLUS Gold redundant power supplies, low volt memory choices and innovative Lenovo® Smart Grid power management technology. Its flexible configuration choices provide great value to scale as your business needs grow, and offers a wide array of drive types and capacities. Whether you need value-focused SATA storage or lightning-fast SAS/SSD and advanced RAID for performance, ThinkServer RD540 is an outstanding choice. It's a great fit for space-constrained deployments where you need uncompromising performance.

*Compared to previous generation ThinkServer RD530



THINKSERVER® RD540

THINKSERVER® TECHNOLOGY

TRULY OPEN MANAGEMENT

ThinkServer RD540 provides easy setup, intelligent diagnostics, useful management tools and truly open and industry standard management interfaces for worry-free integration into hybrid deployments. Use your preferred SAN, storage and console and rely on the compute-intensive performance of the RD540 to run demanding apps. Or, consider Lenovo's enterprise solutions for truly end-to-end performance and scalability. Pair the ThinkServer RD540 with the LenovoEMC™ px12-450r storage and VMware Operations Management for a comprehensive solution for production environments, enterprise virtualization, backup and data protection. Leading performance, legendary Think quality, open standards and outstanding value – that's what makes a ThinkServer Think.

INNOVATIVE POWER MANAGEMENT

Enjoy impressive power savings with ThinkServer Smart Grid power management technology. Based on Intel® Power Node Manager® technology, Smart Grid scales power management to the datacenter level, simultaneously managing as many as 1,000 nodes. Use Smart Grid at any level of your datacenter hierarchy: rack, row, room, group, etc. It provides sophisticated, policy-based, dynamic power capping tools to help you best manage power to changing server workloads. It's innovation that matters, ThinkServer technology that pays you back.

SPECIFICATIONS

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|---|---|--|
| CHIPSET Intel® C602-J Chipset TPM 1.2 Encryption | PROCESSOR Up to 2 x Intel® Xeon® E5-2600 v2 processors, up to 24 cores | POWER AND COOLING 1+1 Redundant Power – 800 W (80 PLUS Gold) ENERGY STAR Server 1.1 compliant 8 system fans, supports 7+1 non-HS redundant ² |
| PCIe EXPANSION PCIe GEN3: 1 x LP x8 mechanical, x8 electrical ³ PCIe GEN3: 1 x FH/HL x16 mechanical, x16 electrical | STORAGE CONTROLLER Advanced hardware RAID is standard on every model. Choose from: <ul style="list-style-type: none"> • ThinkServer RAID 500 II Adapter (6GB SAS/SATA HW RAID 0/1/10) with optional RAID 5 Upgrade Key • ThinkServer RAID 700 II Adapter (6GB SAS/SATA HW RAID 0/1/10/5/50/6/60) with 512MB cache and optional battery backup • ThinkServer RAID 710 Adapter (6GB SAS/SATA 0/1/10/5/50/6/60) with 1GB cache and optional CacheCade technology, optional Super Capacitor Module and Fast Path data protection. | MEMORY 20 DIMM sockets – up to 320GB ¹ – LV-RDIMMs: DDR3-1600 MHz ECC, 4G, 8GB, or 16GB choices RAS: ECC, Lock step, Mirroring, Sparing CPU 1: 12 memory slots (4 channel) CPU 2: 8 memory slots (4 channel) |
| ENVIRONMENT <ul style="list-style-type: none"> • Air temperature: Operating: 10°C to 35°C (50°F to 95°F) Storage: -40°C to 70°C (-104°F to 158°F) in original shipping package • Altitude: 0 to 3048 m (0 to 10,000 ft) in an unpressurized environment • Humidity: Operating: 8% to 80% (non-condensing) Storage without package: 8% to 80% (non-condensing) Storage with package: 8% to 90% (non-condensing) • Electrical input Universal input: – Low range: Minimum: 100 VAC Maximum: 127 VAC Input frequency range: 50 to 60 Hz – High range: Minimum: 200 VAC Maximum: 240 VAC Input frequency range: 50 to 60 Hz | ETHERNET AND I/O <p>Ethernet 2 x 1GB integrated + dedicated MGMT port Optional Intel® Ethernet Server Adapter I350-T4 Optional Intel® Ethernet Server Adapter I350-T2 Optional Intel® 10G SFP+ X520-SR2 Ethernet adapter Optional Intel® 10G copper X520-DA2 Ethernet adapter Optional Intel® 10G dual-port x540-T2 Ethernet adapter</p> <p>I/O Ports Front : 2 x USB 2.0, 1 x VGA⁴ Rear : VGA, Serial, 4 x USB 2.0, Internal : 2 x USB, 1 x TPM / TCM</p> | SOFTWARE Windows Server 2012 (including Hyper-V) Windows Server 2008 (x64) (including Hyper-V) Windows Server 2008 R2 (including Hyper-V) Windows Small Business Server 2011 SLES 11 SP2 RedHat 5.9 / 6.4 VMware ESXi 5.1 U1 Citrix XenServer 6.0.2 / 6.1 |
| STORAGE 4 x 3.5" hot swap HDD – up to 16TB SATA or 12TB SAS storage 8 x 2.5" hot swap HDD – up to 8TB SATA or 7.2TB SAS storage Slim optical drive available in 3.5" configurations | MANAGEMENT Optional Remote Management / KVM IPMI 2.0 / SOL / Node Manager / DCMI Configurable TPM (supports TCG 1.2) uEFI BIOS Intelligent Diagnostics Module | DIMENSIONS (W x H x D) 436 mm x 43.6 mm x 720.6 mm (17.16" x 1.71" x 28.37") Weight (max.) 17 kg (37.5 lbs) 1U Rack mountable |

1 When installing LV RDIMM memory, a maximum of 16 DIMMs can be populated

2 Fans are not redundant when using 130 W processors or greater

3 Populated with hardware RAID adapter (choose either ThinkServer RAID 500 adapter, ThinkServer RAID 700 adapter or ThinkServer RAID 710 adapter)

4 Front VGA not available for 4 x 3.5" chassis configurations

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