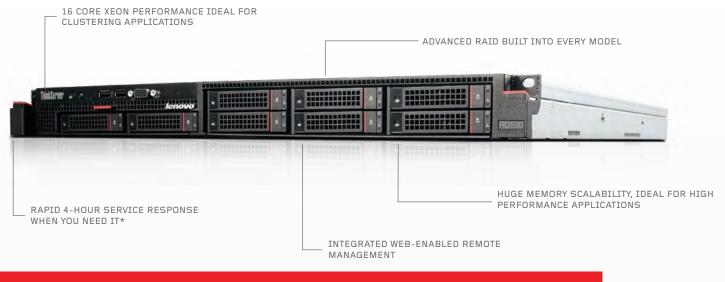
# THE LENOVO® THINKSERVER® RD530

# COMPUTE-INTENSIVE DENSITY. AMAZING VALUE.



The ThinkServer RD530 offers an powerful solution for compute-intensive deployments. Its feature-rich, nocompromises performance and legendary Think reliability make it an outstanding value that pays you back.

### WHY CHOOSE THINKSERVER RD530?

#### Where Density meets Performance

The ThinkServer RD530 provides an ideal fit for compute-intensive deployments. Its slender 1U chassis belies its power - under the hood, the RD530 features the latest generation dual socket Xeon E5-2600 computing technology that's up to 80% faster than previous generation servers. With up to 16 cores, flexible system configurations and enormous memory capacity, you enjoy lightning-fast performance in a power-efficient yet scalable 1U solution. Robust performance with the RD530 is more than its new micro-architecture - every model comes standard with advanced hardware RAID, an extensive list of standard features and highly scalable SAS, SATA and SSD storage choices. With built-in redundancy, sophisticated cooling technology and advanced spread core micro-architecture, the RD530 delivers world-class power efficiency and reliability you demand. Coupling these features with the latest Xeon performance and the legendary Think quality you trust makes RD530 a compelling choice for compute-intensive usage models.

#### Virtualization Optimized

The RD530 is ideal for virtualization – it features powerful I/O choices, robust 16-core Xeon performance and enormous memory bandwidth to successfully manage heavy node session traffic. With the latest Xeon E5-2600 technology, you'll enjoy performance to spare. Yet, RD530 is more than a workhorse performer. It offers clever, intuitive manageability tools, at-a-glance diagnostics and rock-solid durability. It's an ideal 1U dual socket solution to consider as you scale out your virtualization infrastructure to meet increasing performance demands of your distributed network.





#### Infrastructure-Readv

The ThinkServer RD530 offers no-compromises, latest generation E5-2600 Xeon 2P performance for your compute-intensive needs. It features world-class power efficiency, 80+ Gold power choices, hot swap redundant power and an innovative spread-core board design that helps to lower thermal output. And, all that adds up to a highly efficient, power-sipping 1U solution which doesn't compromise on performance. Install the RD530 in your existing datacenter racks with no worries. It features industry-standard, IPMI 2.0-compliant management interfaces and protocols to make installation and integration a snap. The RD530 provides a simple, 3-step installation and comes loaded with a lengthy list of standard features that provide an impressive value. Rest easy. The RD530 continues the world-class design heritage and legendary quality you trust from the makers of Think products. It's a winning choice for your compute-intensive deployments.

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#### **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 servers. 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.

\* 4-hour service response available in select countries; ask your Lenovo sales representitive for details



### WHAT MAKES A THINKSERVER THINK?

#### **Outstanding Efficiency and Value**

#### Highly Efficient:

ThinkServer delivers world-class power efficiency – up to 45% more efficient than previous generation servers. Innovative Smart Grid power management provides policy-based, rack-level power management to significantly lower your energy consumption. Energy Star certified choices provide trusted efficiency and value.

#### **Outstanding Value:**

ThinkServer delivers the performance and reliability you demand, nicely configured as standard. It's everything you need in a durable, highly manageable server, and nothing you don't. Standard rack features include advanced RAID, rail kits, onboard diagnostics, hot swap support and web enabled remote management. Feature rich performance, right out of the box. That's what makes a ThinkServer Think.

#### Legendary Think Reliability

#### **Business-Critical Reliability:**

Legendary Think quality resonates in our ThinkServer portfolio --outstanding thermal efficiency, remarkably quiet Acoustics and enterprise-tough design give you confident, highly reliable performance. Redundant power and advanced RAID choices offer ideal protection in demanding 24/7 deployments. Rest easy, ThinkServers are is designed for rugged use, with vibrationresistant, shock-proof drive carriers and robust chassis designs.

#### **Enterprise-Grade Manageability:**

Management made easy – ThinkServer offers powerful Easy Manage tools for quick monitoring. Common feature set, BIOS and tools across models provides intuitive, easy maintenance.

#### Open Standards and Easy Serviceability Open Standards:

ThinkServers fit anywhere. With industry standard protocols and IPMI 2.0 compliant interfaces you enjoy worry free, easy integration into your existing server networks. Don't be locked into proprietary server choices – ThinkServers work with the tools you use and rely on. Keep your existing management console and storage preferences.

#### Easy Serviceability:

Extensive shared parts between platforms make it simple to service components and make upgrades. Servicing your racks is easy, with simple 3-step rack installation. And, expert help is available fast when you need it – ThinkServer offers rapid 4-hour service response.

NEW SPREAD-CORE MICRO-MARCHITECTURE DELIVERS IMPRESSIVE COOLING EFFICIENCY CLEVER HARD DRIVE TRAY DESIGNS, OFFER OUTSTANDING VIBRATION AND SHOCK RESISTANCE



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OS SUPPORT		CPU
Microsoft Windows Server 2012 (Essentials Windows Server 2008 x86 Edition (Stand Windows Server 2008 x64 Edition (Stand Windows Server 2008 R2 x64 Edition (St Windows Server 2008 R2 SP1 x64 Editio Windows Small Business Server 2011(Stand Novel SUSE Linux Enterprise Server (11.1, RedHat Enterprise Linux Server (5.7 / 6.1) VMWare vSphere (5.0 / 5.1) and VMWare Editors Microsoft Hyper-v Server 2008 R2 with SP2	ard / Enterprise / Datacenter) ard / Enterprise / Datacenter) andard / Enterprise / Datacenter) n (Standard / Enterprise / Datacenter) dard / Premium Add On) / 11.2) SXi	Dual socket. Intel Xeon E5-2600 series, up to 130W choices
STORAGE	CHIPSET	POWER
4x 3.5" HDD – up to 12TB internal SATA storage or 2.4TB internal SAS storage 8x 2.5" HS HDD – up to 8TB internal SAS storage	Intel C602	1+1 Redundant Power – 550W (80Plus Gold), Energy Star Server 1.1 compliant
MEMORY	STORAGE CONTROLLER	I/O CONNECTORS
20 DIMM sockets - up to 320GB <sup>1</sup> - RDIMM and LV RDIMM DDR3-1333 Memory DIMM - 2G/4G/8G/16G RDIMM - 2G/4G/8G/16G LV RDIMM RAS: ECC, Lock step, Mirroring, Sparing CPU 1: 12 memory slots (4 channel) CPU 2: 8 memory slots (4 channel)	ThinkServer RAID 500 Adapter: Hardware SAS/SATA supports RAID 0,1,10 Optional ThinkServer RAID 500 RAID 5 upgrade key ThinkServer RAID 700 Adapter: Hardware SAS/SATA supports RAID 0/1/5/10/6/50/60 has 512MB cache Optional ThinkServer RAID 700 battery The following RAID components are available configure to order: Optional ThinkServer RAID 710 Adapter Hardware SAS/SATA RAID supports RAID 0/1/5/10/6/50/60 has 1GB cache Optional ThinkServer RAID Super Capacitor Module Optional ThinkServer RAID FastPath Software Key Optional ThinkServer RAID CacheCade Pro 2.0 Key	Dual ports 10/100/1000 Intel i350 PHYs One dedicated/shared management LAN (Intel 82574) Front: 2x USB2.0, 1x VGA Rear: VGA, COM, 4x USB2.0, Internal: 2x USB(2x5), 2x USB(typeA), 1x TPM/TCM
NETWORKING EXPANSION	COOLING	DIAGNOSTICS
<ul> <li>The following networking components are available configure to order. See Options page for complete details.</li> <li>* Optional single port, dual port and quad port fibre channel HBA card choices by Emulex and QLogic.</li> <li>* Optional 10Ggbps ethernet server adapter choices from Intel.</li> </ul>	7 + 1 redundant fans	Intelligent Diagnostics Panel
MANAGEABILITY/RAS/SERVICE	I/O EXPANSION SLOTS	DIMENSIONS/WEIGHTS/CHASSIS
Optional Remote Management / KVM IPMI 2.0 / SOL TPM (Supports TCG 1.2) uEFI	PCIe GEN3: 1 x LP x8 mechanical, x8 electrical* PCIe GEN3: 1 x FH/HL x16 mechanical, x16 electrical	436mm (W) x 43.6mm (H) x 720.6mm (D) Max 17kg 1U Rack mountable

1 when installing LV RDIMM memory, a maximum of 16 DIMMs can be populated. 2 Fans are not redundant when using 130W processors or greater \* Populated with hardware RAID adapter (choose either ThinkServer RAID 500 adapter or ThinkServer RAID 700 adapter)



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## **OPTIONS AND ACCESSORIES**

#### HARD DRIVES

(OA89418)

 ThinkServer 2.5" 100GB MLC SATA Solid State Drive (0A89420)



- ThinkServer 2.5" 400GB MLC SATA Solid State Drive (DA89419)
- ThinkServer 2.5" 500GB 7.2K 6Gbps SATA HDD (0C19495)
- ThinkServer 2.5" 1TB 7.2K 6Gbps SATA HDD (0C19496)
- ThinkServer 3.5" 500GB 7.2K 6Gbps SATA Hot Swap HDD (0A89473)
- ThinkServer 3.5" 1TB 7.2K 6Gbps SATA Hot Swap HDD (0A89474)
- ThinkServer 3.5" 2TB 7.2K 6Gbps SATA Hot Swap HDD (0A89475)
- ThinkServer 3.5" 3TB 7.2K 6Gbps SATA Hot Swap HDD (0A89477)
- ThinkServer 2.5" 146GB 15K SAS 6Gbps Hot Swap HDD (0C19493)
- ThinkServer 2.5" 300GB 15K SAS 6Gbps Hot Swap HDD (0C19494)
- ThinkServer 3.5" 300GB 15K SAS 6Gbps Hot Swap HDD (67Y2616)
- ThinkServer 3.5" 450GB 15K SAS 6Gbps Hot Swap HDD (67Y2617)
- ThinkServer 3.5" 600GB 15K SAS 6Gbps Hot Swap HDD (67Y2618)
- ThinkServer 2.5" 300GB 10K SAS 6Gbps Hot Swap HDD (67Y2619)
- ThinkServer 2.5" 450GB 10K SAS 6Gbps Hot Swap HDD (67Y2620)
- ThinkServer 2.5" 600GB 10K SAS 6Gbps Hot Swap HDD (67Y2621)
- ThinkServer 2.5" 900GB 10K SAS 6Gbps Hot Swap HDD (0A89409)

#### MEMORY

- ThinkServer 4GB DDR3-1333MHz (1Rx4) RDIMM (0A89411)
- ThinkServer 8GB DDR3-1333MHz (2Rx4) RDIMM (0A89412)
- ThinkServer 16GB DDR3-1333MHz (2Rx4) RDIMM (0A89413)
- ThinkServer 4GB DDR3L 1333MHz (1Rx4) RDIMM (0A89415)
- ThinkServer 8GB DDR3L 1333MHz (2Rx4) RDIMM (0A89416)
- ThinkServer 16GB DDR3L 1333MHz (2Rx4) RDIMM (0A89417)
- ThinkServer 2GB DDR3-1333Mhz (1RX8) ECC UDIMM (67Y2606)
- ThinkServer 4GB DDR3-1333Mhz (2RX8) ECC UDIMM (67Y2607)

#### RAID OPTIONS

- ThinkServer RAID 500 Adapter II (0A89464)
- ThinkServer RAID 500 Upgrade Key for Advanced RAID (0A89407)
- ThinkServer RAID 700 Adapter II (0A89463)
- ThinkServer RAID 700 Battery (67Y2647)



\* select HBA and ethernet adapter options will be available in 1Q 2013. Ask your Lenovo sales representative for availability

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WW/WW/DS/04-12/27030



Lenovo 10Gbps Ethernet X520-SR2 Server Adapter by Intel (0C19487) Lenovo 10Gbps Ethernet X520-DA2 Server Adapter by Intel (0C19486) Lenovo 10Gbps Ethernet X540-T2 Server Adapter by Intel (0C19497) Lenovo 10Gbps Ethernet Fiber Module by Intel (0C19488)

ThinkServer LPe1250 Single Port 8Gb Fibre Channel HBA by Emulex (0C19476) ThinkServer LPe12002 Dual Port 8Gb Fibre Channel HBA by Emulex (0C19478)

#### MANAGEMENT AND POWER

**HBA AND ETHERNET ADAPTERS\*** 

by Intel (0A89423)

by Intel (0A89424)

by Intel (0A89425)

Lenovo Gigabit ET Dual Port Server Adapter

Lenovo Ethernet I340 Quad Port Server Adapter

Lenovo 10Gbps Ethernet X520-T2 Server Adapter

- ThinkServer 550W Hot Swap Redundant Power Supply (0A89427)
- ThinkServer Management Controller Premium (67Y2624)





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