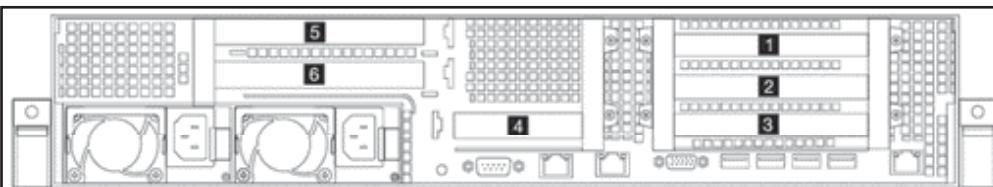


## ThinkServer RD440 Platform Systems Specifications - I of II

Components	Specifications				
Mechanical	<ul style="list-style-type: none"> <li>2U rack with rail kit</li> <li>19" W x 28.9" D x 3.45" H (with rack handles)</li> <li>482.4mm W x 734mm D x 87.6mm H (with rack handles)</li> <li>28 kg (61.73 lb) when fully configured</li> </ul>				
Chipset	<b>Intel C606 Chipset</b>				
Processors	Two LGA1356 sockets, supports up to two processors from Intel <b>Xeon E5-2400</b> or <b>Xeon E5-2400 v2</b> families, up to 8 cores (E5-2400 series)/10 cores (E5-2400 v2 series), one QPI links up to 8.0GT/s, up to 20MB (E5-2400 series)/25MB (E5-2400 v2 series) cache, integrated 3-channel DDR3 memory controller up to 1600MHz				
Memory type	1600MHz, LV RDIMM*, DDR3, 3-channel per processor, 240-pin <small>*By default, the voltage of LV RDIMM is 1.5V and can be changed to 1.35V in BIOS setting</small>				
Memory DIMMs	Twelve DIMM sockets, six DIMM sockets per processor				
Memory capacity	Up to 192GB DDR3 LV RDIMM (16GB x 12)				
Memory protection	ECC, memory mirroring, memory sparing				
Disk bays configurations	Supports one of the following configurations: <ul style="list-style-type: none"> <li>8 x 3.5" disk bays + 1 x slim optical bay</li> <li>12 x 3.5" disk bays</li> <li>8 x 2.5" disk bays + 1 x slim optical bay</li> <li>16 x 2.5" disk bays + 1 x slim optical bay</li> </ul>				
RAID support	RAID adapter	RAID support	Cache	Transfer rates	Optional upgrades
	RAID 300** (onboard)	0, 1, 10		6Gb/s	optional upgrade key, add RAID 5 support
	RAID 500 (LSI 9240-8i)	0, 1, 10		6Gb/s	optional upgrade key, add RAID 5, 50 support
	RAID 700 (LSI 9260-8i)	0, 1, 10, 5, 50, 6, 60	512MB	6Gb/s	optional intelligent Battery Backup Unit (iBBU08)
	RAID 710 (LSI 9270CV-8i)	0, 1, 10, 5, 50, 6, 60	1GB	6Gb/s	<ul style="list-style-type: none"> <li>optional CacheVault (CV) flash cache with super capacitor</li> <li>optional CacheCade Pro 2.0</li> <li>optional FastPath key</li> </ul>
<small>** RAID 300 is supported on 8 x 3.5" and 8 x 2.5" models only</small>					
Optical drive (optional)	8 x 3.5"/8 x 2.5"/16 x 2.5" models: one slim optical bay, supports one optional slim optical 12 x 3.5" models: none optical bay, optional external USB optical is needed				
Onboard network	Two Gigabit Ethernet ports by Intel i350, one Gigabit Ethernet port by Intel 82574L, dedicate/share management				
Front ports	One analog VGA DB-15 connector (for 8 x 3.5", 8 x 2.5", and 16 x 2.5" models), two USB 2.0				
Rear ports	Four USB 2.0, one serial (9-pin), two ethernet (RJ-45), one RJ-45 (dedicate/share mgmt), one analog VGA DB-15 connector				
Expansion Slots	 <p>Up to six PCI-Express slots via two riser cards, riser card 1 for slot 1-3, riser card 2 for slot 4-6  Slot 1: half-length, full-height, PCIe 3.0 x16 (x8 elec)  Slot 2: half-length, full-height, PCIe 3.0 x8  Slot 3: half-length, full-height, PCIe 2.0 x8 (x4)  Slot 4: Low Profile, PCIe 3.0 x8 (x4 elec)  Slot 5-6 are available on dual processors models:  Slot 5: half-length, full-height, PCIe 3.0 x16 (x8 elec)  Slot 6: half-length, full-height, PCIe 3.0 x8</p>				
Graphics	Onboard Aspeed AST2300 graphics/management processor, one VGA DB-15 on front, one VGA DB-15 on rear; <small>Maximum resolution: 1920x1200@60Hz</small>				

## ThinkServer RD440 Platform Systems Specifications - II of II

Components	Specifications																																		
Intelligent Diagnostics Module (optional)	Supports optional Intelligent Diagnostics Module (IDM) basic or IDM Premium on selected 8 x 3.5"/8 x 2.5"/16 x 2.5" models, IDM basic LED lights indicate failing component category, IDM Premium LED lights indicate individual failing part																																		
Systems management (iKVM is optional)	<ul style="list-style-type: none"> <li>Onboard Aspeed AST2300 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC); optional ThinkServer Management Module Premium for iKVM functions</li> <li>Front control panel LEDs shows the status of power, ID, network, system</li> <li>Lenovo SmartGrid Manager</li> <li>ThinkServer EasyStartup/EasyManage/EasyUpdate</li> </ul>																																		
Security features (TPM is optional)	Power-on password/administrator password/Trusted Platform Module (TCG 1.2-compliant)																																		
Cooling fans	5 fans, hot-swap, 4 + 1 redundant																																		
Cable mgmt (opt)	Optional cable management arm on selected models																																		
Power supply	One or two 800 watts standard, two maximum, rear access, hot-swap, 80 PLUS Gold qualified, redundant with two power supplies																																		
Hot-swap parts	Disk drives, power supplies, and cooling fans																																		
Safety, environment, and certifications	Environmental certifications	<ul style="list-style-type: none"> <li><b>Energy Star Server 2.0</b> qualified</li> <li>RoHS-compliant</li> </ul>																																	
	EMC	FCC Class A, CSA, CE																																	
	240VA	Supports																																	
	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	Supported Altitude (unpressurized): 0-10000ft (0-3048m)																																	
	Humidity - operating	8%~80%, non-condensing																																	
	Humidity - non operating (no package)	8%~80%, non-condensing																																	
	Humidity - non operating (with package)	8%~90%, non-condensing																																	
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