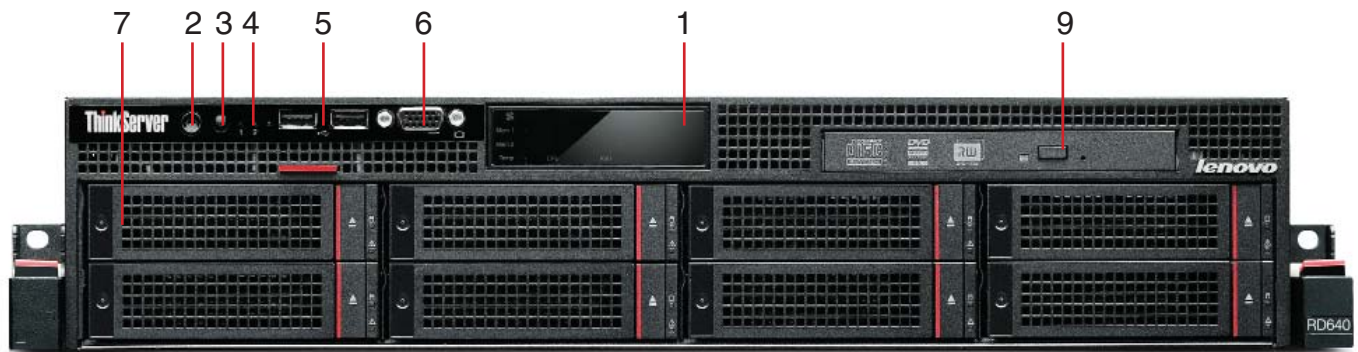


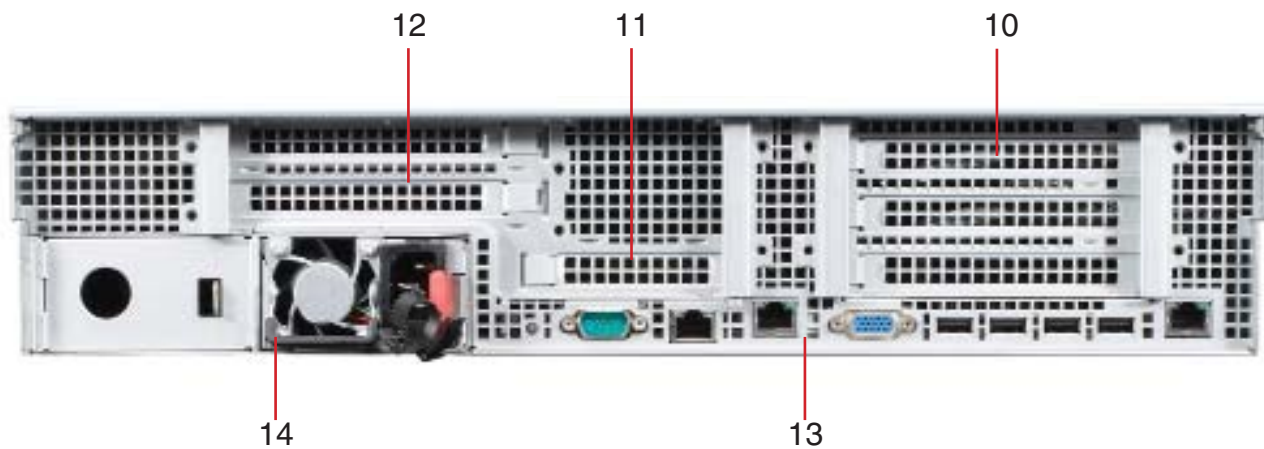
ThinkServer RD640 Overview - Front and Rear



ThinkServer RD640 with 8x2.5"/16x2.5" Disk Drive Bays



ThinkServer RD640 with 8x3.5" Disk Drive Bays



Front View

Rear View

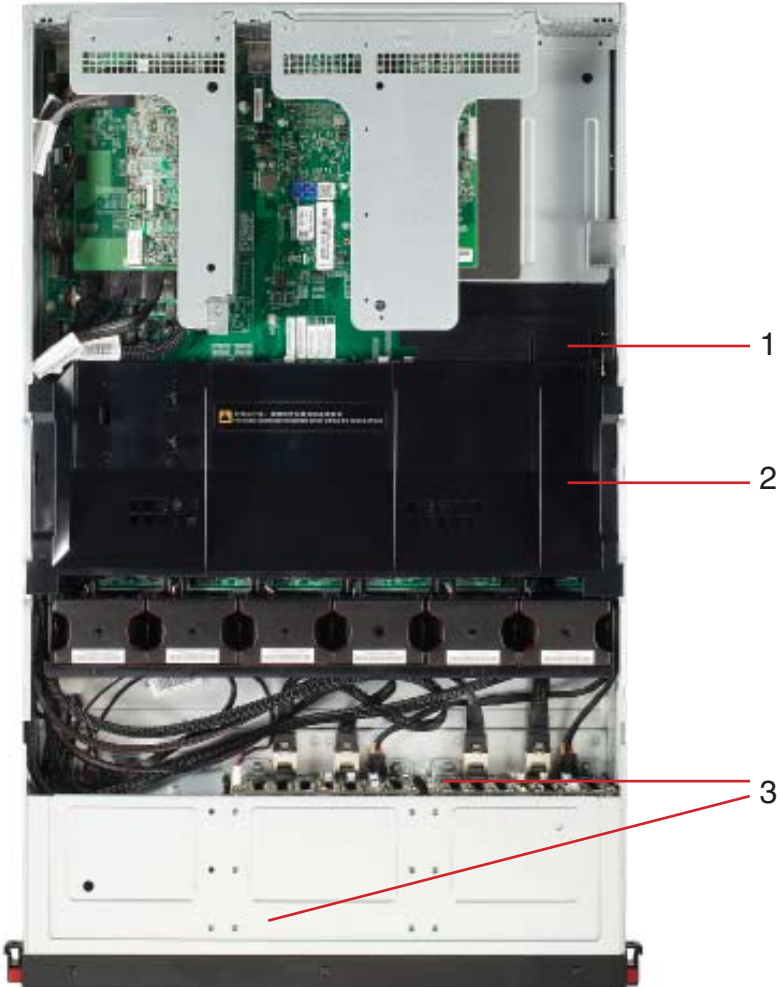
1. Intelligent Diagnostics Premium Module (optional)
2. Power Button with LED
3. ID button with LED
4. 2 Network interface status LEDs
5. 2 USB 2.0
6. 1 VGA
7. Hot-swap disk drive bays
8. Hot-swap disk drive bays for 16x2.5" hard drive bays model
9. Optical (optional)

10. PCI Express slots 1-3
11. PCI Express slots 4
12. PCI Express slots 5-6 (for dual processors model)
13. Rear ports:
 - 4 USB 2.0
 - 1 serial
 - 2 ethernet
 - 1 RJ-45 (dedicate/share mgmt)
 - 1 VGA
14. Hot-swap power supplies

ThinkServer RD640 Overview - Internal

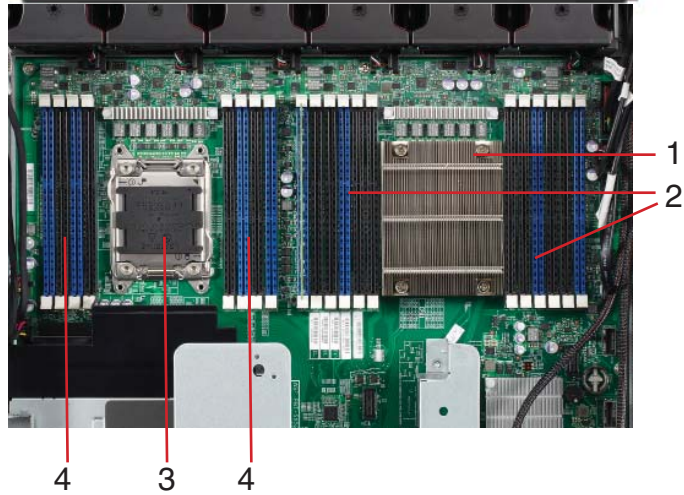
Internal View

- 1. Hot-swap cooling fans
- 2. Processors and memory DIMM sockets (under cooling shroud, see below)
- 3. PCI Express slots

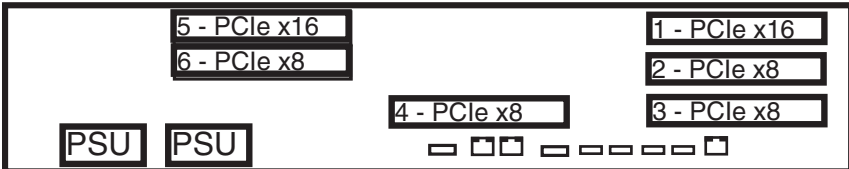


Processors and Memory DIMM Sockets (under cooling shroud)

- 1. CPU 1
- 2. 12 Memory DIMM sockets for CPU 1
- 3. CPU 2 (optional)
- 4. 8 Memory DIMM sockets for CPU 2 (for dual processors model)



ThinkServer RD640 Platform Specifications

Components	Specifications		
Chipset	Intel C602J Chipset		
Mechanical	<ul style="list-style-type: none"> • 2U rack with rail kit • 19"W x 28.9"D x 3.45"H (with rack handles) • 482.4mm W x 734mm D x 87.6mm H (with rack handles) • 26.5 kg (58.42 lb) when fully configured 		
Front ports	Two USB 2.0, one analog VGA DB-15 connector		
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, PCI Express 3.0 x16 (x8 elec) Slot 2: half-length, full-height, PCI Express 3.0 x8 Slot 3: half-length, full-height, PCI Express 3.0 x8 Slot 4: Low Profile, PCI Express 3.0 x8 Slot 5-6 are available on dual processors models: Slot 5: half-length, full-height, PCI Express 3.0 x16 (x8 elec) Slot 6: half-length, full-height, PCI Express 3.0 x8</p>		
Graphics	Onboard Aspeed AST2300 graphics/management processor, one VGA DB-15 on front, one VGA DB-15 on rear; Maximum resolution: 1920x1200@60Hz		
Hot-swap parts	Disk drives, power supplies, and cooling fans		
Safety, environment, and certifications	Environmental certifications	<ul style="list-style-type: none"> • Energy Star Server 1.1 qualified • RoHS-compliant 	
	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	
	Acoustic noise (idle/working mode)	Category	Normal Configuration
		CPU	1
		HDD	2x 900GB 2.5" SAS 6Gb/s
		Memory	1x 8GB 1600MHz LVRDIMM
		PCIe adapters	I350 X520-DA2 Emulex LPe16002
		PSU	1x 800W
		RAID	RAID 700 adapter
		Sound Pressure (operating)	44.1 dB(A)
		Sound Pressure (idle)	44.4 dB(A)
			Best Configuration
			2
			16x 900GB 2.5" SAS 6Gb/s
			20x 8GB 1600MHz LVRDIMM
			I350 X520-DA2 Emulex LPe16002
			2x 800W
			RAID 700 adapter
			42.91 dB(A)
			43.8 dB(A)