ThinkServer RD630 Photography - Eight 3.5" disk bays*

*Some models in pictures below contain optional add-in ethernet adapter,
please see O-RDS for more RD630 accessories

ThinkServer™

- Up to two Intel® Xeon® E5-2600 series processors, up to 8 cores/16 threads per processor
- Up to 320GB ECC RDIMM memory (20x16GB) or 256GB ECC LV RDIMM memory (16x16GB)
- Up to eight 3.5" hot-swap disk bays
- Up to RAID 0, 1, 5, 6, 10, 50, 60 via ThinkServer RAID 700 adapter
- Up to two power supplies with redundant, hot-swap, 80 PLUS® Gold qualified
- Up to six fans (5+1 redundant), hot-swap

ThinkServer RD630 Photography - 2.5" disk bays   *****

*Some models in pictures below contain optional add-in ethernet adapter,
please see O-RDS for more RD630 accessories*

ThinkServer™

- Up to two Intel® Xeon® E5-2600 series processors, up to 8 cores/16 threads per processor
- Up to 320GB ECC RDIMM memory (20x16GB) or 256GB ECC LV RDIMM memory (16x16GB)
- Up to sixteen 2.5" hot-swap disk bays
- Up to RAID 0, 1, 5, 6, 10, 50, 60 via ThinkServer RAID 700 adapter
- Up to two power supplies with redundant, hot-swap, 80 PLUS® Gold qualified
- Up to six fans (5+1 redundant), hot-swap
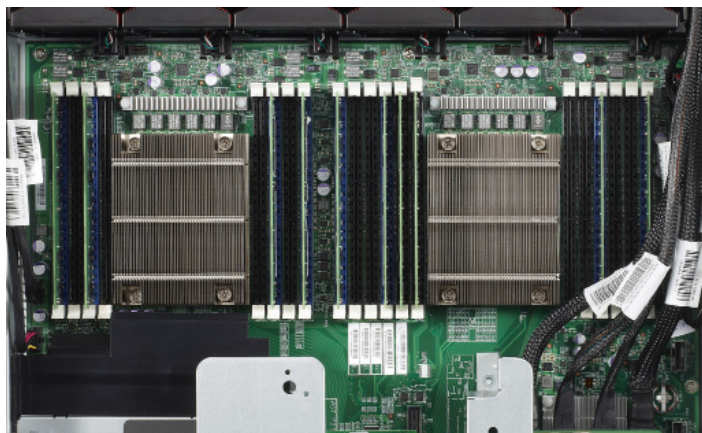
ThinkServer™

Dual processors
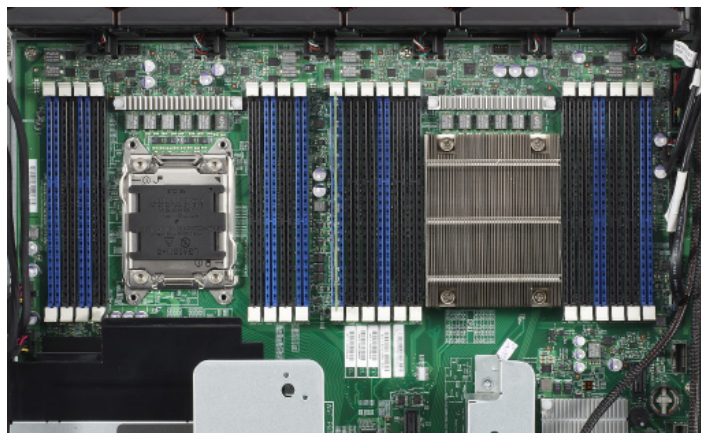
Single processor

2.5" Hot-swap disk bay

2.5" Hot-swap disk bay

2.5" Hot-swap SAS 6.0Gb/s hard drive

3.5" Hot-swap SAS 6.0Gb/s hard drive

ThinkServer RAID 700 Adapter with battery
(LSI® SAS 9260-8i with iBBU08)

ThinkServer RAID 700 Adapter with battery
(LSI SAS 9260-8i with iBBU08)

ThinkServer 800W Hot-Swap power supply
for ThinkServer RD530/RD630
(80 PLUS® Gold qualified,
redundant with two power supplies)

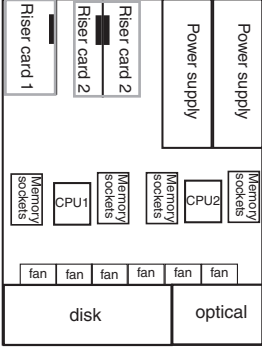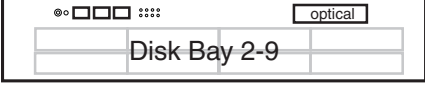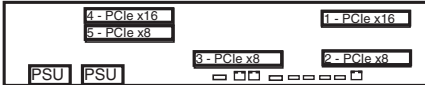Intelligent Diagnostics Module Premium

ThinkServer RD630 rear I/O ports

Type-model	Processor(s)	Memory (MHz/type)	Memory DIMMs	Pre-conf RAID	Disk controller	Disk(s)	Disk bays	Disk type	SATA optical	Intelligent Diagnostics	TPM	System mgmt	Cable mgmt	Preload OS	PSU qty
2579-A2U	1xE5-2640	1333MHz RDIMM	1x4GB	No	700	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	IPMI	No	No	1
2579-A3U	1xE5-2640	1333MHz RDIMM	1x4GB	No	700+Battery	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	1
2579-A4U	1xE5-2650	1333MHz RDIMM	1x8GB	No	700	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	IPMI	No	No	1
2579-A5U	1xE5-2650	1333MHz RDIMM	2x8GB	No	700+Battery	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2579-A6U	1xE5-2620	1333MHz RDIMM	1x4GB	No	700	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	IPMI	No	No	1
2579-A7U	1xE5-2670	1333MHz RDIMM	1x16GB	No	700+Battery	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2579-A8U	1xE5-2670	1333MHz RDIMM	1x8GB	No	700+Battery	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2

Limited warranty	**3-year** parts and labor; more Lenovo Services see S-RDS sheet
Processor	Up to two processors, one or two processors standard, **Intel Xeon E5-2620 processor (6C/12T, 2.0GHz, 15MB, 7.2 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.5GHz), 4-channel DDR3 memory controller (up to 1333MHz) **Intel Xeon E5-2640 processor (6C/12T, 2.5GHz, 15MB, 7.2 GT/s QPI x2)**, Turbo Boost 2.0 (up to 3.0GHz), 4-channel DDR3 memory controller (up to 1333MHz) **Intel Xeon E5-2650 processor (8C/16T, 2.0GHz, 20MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.8GHz), 4-channel DDR3 memory controller (up to 1600MHz) **Intel Xeon E5-2670 processor (8C/16T, 2.6GHz, 20MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 3.3GHz), 4-channel DDR3 memory controller (up to 1600MHz)
Implementation	Two LGA2011 sockets
Memory	RDIMM or LV RDIMM, DDR3, ECC, 4-channel per processor, 240-pin; *RDIMM:* twenty sockets (12 sockets for CPU1, 8 sockets for CPU2), 320GB max (20x16GB) *LV RDIMM:* sixteen sockets (8 of 12 sockets available for CPU1, 8 sockets for CPU2), 256GB max (16x16GB)
Additional memory disclaimers	● *Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs* ● *Over twelve RDIMMs requires dual processors* ● *Over eight LV RDIMMs requires dual processors* ● *Mixing of RDIMM and LV RDIMM is not supported*
Graphics	Onboard Aspeed AST2300 graphics/management processor, one VGA DB-15 on front, one VGA DB-15 on rear; Maximum resolution: 1920x1200@60Hz
Disk bays Disk controller	Eight 3.5" hot-swap SATA/SAS disk bays *RAID 500*: ThinkServer RAID 500 adapter (LSI SAS 9240-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support *Upgrade for 500*: Additional upgrade key for RAID 500 adapter, add RAID 5, 50 support *RAID 700*: ThinkServer RAID 700 adapter (LSI SAS 9260-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 6, 10, 50, 60 support *Battery for 700*: Intelligent Battery Backup Unit (iBBU08) for RAID 700
RAID Support	Up to RAID 0, 1, 5, 6, 10, 50, 60 via ThinkServer RAID 700 adapter
Disk(s)	*3.5" SATA:* SATA 6.0Gb/s, 7200 rpm *3.5" SAS:* SAS 6.0Gb/s, 15000 rpm
Tape drive Optical Diskette	None DVD±RW or DVD ROM, slim None (use USB port)
Chipset	**Intel C602J Chipset**
Ethernet Riser card Front ports Rear ports	Two Gigabit Ethernet ports by Intel i350, one Gigabit Ethernet port by Intel 82574L, dedicate/share management (See Right) Riser card 1 for slot 1-2, riser card 2 for slot 3-5 Two USB 2.0, one analog VGA DB-15 connector Four USB 2.0, one serial (9-pin), two ethernet (RJ-45), one RJ-45 (dedicate/share mgmt), one analog VGA DB-15 connector
Intelligent Diagnostics Module (IDM) Systems mgmt Security chip	Supports IDM or IDM Premium on selected models *Basic:* IDM LED lights indicate failing component category *Premium:* IDM Premium LED lights indicate individual failing part Onboard Aspeed AST2300 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC); *iKVM:* add-on ThinkServer Management Module Premium for iKVM functions No onboard TPM chip; *TPM:* additional add-on card for TPM function, TCG 1.2-compliant
Prerequisites Keyboard/mouse Power supply	SATA/SAS disk, OS None (use USB port) One or two 800 watts standard, two maximum, rear access, hot-swap, 80 PLUS® Gold qualified, redundant with two power supplies
Rack kit Cable management Cooling	Includes rack kit Optional cable management arm on selected models Up to six fans (5+1 redundant), hot-swap

2U Rack top

Front

Disk Bay 2-9

Rear

Slot 4, 5 are available on dual processors models only

Mechanical

- 2U rack
- 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

Disk Bays

Bay 1   5.25",   0.5" high,   external,   for optical
Bay 2-9   3.5",   1" high,   external,   for disk

Expansion Slots

Slot 1: half-length, full-height,   PCI Express 3.0 x16
Slot 2: half-length, full-height,   PCI Express 3.0 x8
Slot 3: Low Profile,   PCI Express 3.0 x8
Slot 4-5 are available on dual processors models:
Slot 4: half-length, full-height,   PCI Express 3.0 x16 (x8 elec)
Slot 5: half-length, full-height,   PCI Express 3.0 x8

Security

- Security chip (selected models, see information on left)
- Administrator password
- User password
- Boot sequence control
- Boot without keyboard, mouse, diskette
- Serial port I/O control
- USB port disablement (all)

Software Management Tools

- ThinkServer EasyStartup
- ThinkServer EasyManage

Energy Management Technology

- Intel Power Node Manager
- Lenovo® SmartGrid Manager

ENERGY STAR Server 1.1-compliant
RoHS-compliant

For more accessories, see O-RDS sheet

ThinkServer RD630 with 3.5" Disk Bay (2577) - TopSeller

Type-model	Processor(s)	Memory (MHz/type)	Memory DIMMs	Pre-conf RAID	Disk controller	Disk(s)	Disk bays	Disk type	SATA optical	Intelligent Diagnostics	TPM	System mgmt	Cable mgmt	Preload OS	PSU qty
2577-A1U	2xE5-2620	1333MHz RDIMM	2x8GB	5	700+Battery	6x500GB 3.5" SATA	8xHS	SATA/SAS	DVD	Premium	TPM	iKVM	No	No	2

Limited warranty	**1-year** parts and labor; more Lenovo Services see S-RDS sheet	**2U Rack top**	
Processor	Up to two processors, one or two processors standard, **Intel Xeon E5-2620 processor (6C/12T, 2.0GHz, 15MB, 7.2 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.5GHz), 4-channel DDR3 memory controller (up to 1333MHz)		
Implementation	Two LGA2011 sockets		
Memory	RDIMM or LV RDIMM, DDR3, ECC, 4-channel per processor, 240-pin; *RDIMM:* twenty sockets (12 sockets for CPU1, 8 sockets for CPU2), 320GB max (20x16GB) *LV RDIMM:* sixteen sockets (8 of 12 sockets available for CPU1, 8 sockets for CPU2), 256GB max (16x16GB)		
Additional memory disclaimers	• *Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs* • *Over twelve RDIMMs requires dual processors* • *Over eight LV RDIMMs requires dual processors* • *Mixing of RDIMM and LV RDIMM is not supported*		
Graphics	Onboard Aspeed AST2300 graphics/management processor, one VGA DB-15 on front, one VGA DB-15 on rear; Maximum resolution: 1920x1200@60Hz	**Front**	
Disk bays Disk controller	Eight 3.5" hot-swap SATA/SAS disk bays *RAID 500*: ThinkServer RAID 500 adapter (LSI SAS 9240-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support *Upgrade for 500*: Additional upgrade key for RAID 500 adapter, add RAID 5, 50 support *RAID 700*: ThinkServer RAID 700 adapter (LSI SAS 9260-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 6, 10, 50, 60 support *Battery for 700*: Intelligent Battery Backup Unit (iBBU08) for RAID 700	**Rear**	
RAID Support	Up to RAID 0, 1, 5, 6, 10, 50, 60 via ThinkServer RAID 700 adapter	*Slot 4, 5 are available on dual processors models only*	
Disk(s)	*3.5" SATA:* SATA 6.0Gb/s, 7200 rpm *3.5" SAS:* SAS 6.0Gb/s, 15000 rpm		
Tape drive Optical Diskette	None DVD±RW or DVD ROM, slim None (use USB port)		
Chipset	**Intel C602J Chipset**	**Mechanical**	
Ethernet	Two Gigabit Ethernet ports by Intel i350, one Gigabit Ethernet port by Intel 82574L, dedicate/share management	• 2U rack • 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	
Riser card Front ports Rear ports	(See Right) Riser card 1 for slot 1-2, riser card 2 for slot 3-5 Two USB 2.0, one analog VGA DB-15 connector Four USB 2.0, one serial (9-pin), two ethernet (RJ-45), one RJ-45 (dedicate/share mgmt), one analog VGA DB-15 connector	**Disk Bays** Bay 1 5.25", 0.5" high, external, for optical Bay 2-9 3.5", 1" high, external, for disk	
Intelligent Diagnostics Module (IDM)	Supports IDM or IDM Premium on selected models *Basic:* IDM LED lights indicate failing component category *Premium:* IDM Premium LED lights indicate individual failing part	**Expansion Slots** Slot 1: half-length, full-height, PCI Express 3.0 x16 Slot 2: half-length, full-height, PCI Express 3.0 x8 Slot 3: Low Profile, PCI Express 3.0 x8 *Slot 4-5 are available on dual processors models:* Slot 4: half-length, full-height, PCI Express 3.0 x16 (x8 elec) Slot 5: half-length, full-height, PCI Express 3.0 x8	
Systems mgmt	Onboard Aspeed AST2300 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC); *iKVM:* add-on ThinkServer Management Module Premium for iKVM functions		
Security chip	No onboard TPM chip; *TPM:* additional add-on card for TPM function, TCG 1.2-compliant		
Prerequisites Keyboard/mouse Power supply	SATA/SAS disk, OS None (use USB port) One or two 800 watts standard, two maximum, rear access, hot-swap, 80 PLUS® Gold qualified, redundant with two power supplies	**Security** • Security chip (selected models, see information on left) • Administrator password • User password • Boot sequence control • Boot without keyboard, mouse, diskette • Serial port I/O control • USB port disablement (all)	
Rack kit Cable management Cooling	Includes rack kit Optional cable management arm on selected models Up to six fans (5+1 redundant), hot-swap		
		Software Management Tools • ThinkServer EasyStartup • ThinkServer EasyManage	
		Energy Management Technology • Intel Power Node Manager • Lenovo® SmartGrid Manager	
		ENERGY STAR Server 1.1-compliant RoHS-compliant	
		For more accessories, see O-RDS sheet	

ThinkServer RD630 with 3.5" Disk Bay (2592)

Type-model	Processor(s)	Memory (MHz/type)	Memory DIMMs	Pre-conf RAID	Disk controller	Disk(s)	Disk bays	Disk type	SATA optical	Intelligent Diagnostics	TPM	System mgmt	Cable mgmt	Preload OS	PSU qty
2592-A1U	1xE5-2650	1333MHz RDIMM	1x8GB	No	700+Battery		8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2592-A2U	1xE5-2620	1333MHz RDIMM	1x4GB	No	700		8xHS	SATA/SAS	DVD±RW	Premium	TPM	IPMI	No	No	1
2592-A3U	1xE5-2670	1333MHz RDIMM	1x16GB	No	700+Battery		8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2592-A4U	1xE5-2650	1333MHz RDIMM	6x8GB	No	700+Battery	4x300GB 3.5" SAS	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2592-A5U	1xE5-2620	1333MHz RDIMM	3x8GB	No	700+Battery	3x500GB 3.5" SATA	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2592-A6U	2xE5-2670	1333MHz RDIMM	6x16GB	No	700+Battery	4x300GB 3.5" SAS	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2

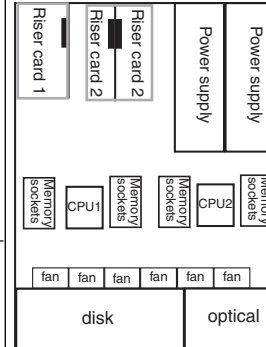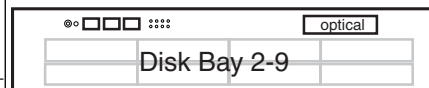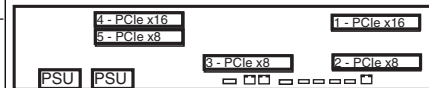|	
Limited warranty	**3-year** parts and labor; more Lenovo Services see S-RDS sheet
Processor	Up to two processors, one or two processors standard, **Intel⊡ Xeon⊡ E5-2620 processor (6C/12T, 2.0GHz, 15MB, 7.2 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.5GHz), 4-channel DDR3 memory controller (up to 1333MHz) **Intel Xeon E5-2650 processor (8C/16T, 2.0GHz, 20MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.8GHz), 4-channel DDR3 memory controller (up to 1600MHz) **Intel Xeon E5-2670 processor (8C/16T, 2.6GHz, 20MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 3.3GHz), 4-channel DDR3 memory controller (up to 1600MHz)
Implementation	Two LGA2011 sockets
Memory	RDIMM or LV RDIMM, DDR3, ECC, 4-channel per processor, 240-pin; *RDIMM:* twenty sockets (12 sockets for CPU1, 8 sockets for CPU2), 320GB max (20x16GB) *LV RDIMM:* sixteen sockets (8 of 12 sockets available for CPU1, 8 sockets for CPU2), 256GB max (16x16GB)
Additional memory disclaimers	● *Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs* ● *Over twelve RDIMMs requires dual processors* ● *Over eight LV RDIMMs requires dual processors* ● *Mixing of RDIMM and LV RDIMM is not supported*
Graphics	Onboard Aspeed AST2300 graphics/management processor, one VGA DB-15 on front, one VGA DB-15 on rear; Maximum resolution: 1920x1200@60Hz
Disk bays	Eight 3.5" hot-swap SATA/SAS disk bays
Disk controller	*RAID 500:* ThinkServer RAID 500 adapter (LSI⊡ SAS 9240-8i), PCI Express⊡ bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support *Upgrade for 500:* Additional upgrade key for RAID 500 adapter, add RAID 5, 50 support *RAID 700:* ThinkServer RAID 700 adapter (LSI SAS 9260-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 6, 10, 50, 60 support *Battery for 700:* Intelligent Battery Backup Unit (iBBU08) for RAID 700
RAID Support	Up to RAID 0, 1, 5, 6, 10, 50, 60 via ThinkServer RAID 700 adapter
Disk(s)	*3.5" SATA:* SATA 6.0Gb/s, 7200 rpm *3.5" SAS:* SAS 6.0Gb/s, 15000 rpm
Tape drive	None
Optical	DVD±RW or DVD ROM, slim
Diskette	None (use USB port)
Chipset	**Intel C602J Chipset**
Ethernet	Two Gigabit Ethernet ports by Intel i350, one Gigabit Ethernet port by Intel 82574L, dedicate/share management
Riser card	(See Right) Riser card 1 for slot 1-2, riser card 2 for slot 3-5
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
Intelligent Diagnostics Module (IDM)	Supports IDM or IDM Premium on selected models *Basic:* IDM LED lights indicate failing component category *Premium:* IDM Premium LED lights indicate individual failing part
Systems mgmt	Onboard Aspeed AST2300 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC); *iKVM:* add-on ThinkServer Management Module Premium for iKVM functions
Security chip	No onboard TPM chip; *TPM:* additional add-on card for TPM function, TCG 1.2-compliant
Prerequisites	SATA/SAS disk, OS
Keyboard/mouse	None (use USB port)
Power supply	One or two 800 watts standard, two maximum, rear access, hot-swap, 80 PLUS® Gold qualified, redundant with two power supplies
Rack kit	Includes rack kit
Cable management	Optional cable management arm on selected models
Cooling	Up to six fans (5+1 redundant), hot-swap

2U Rack top

Front

Rear

Slot 4, 5 are available on dual processors models only

Mechanical

- 2U rack
- 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

Disk Bays

Bay 1 5.25", 0.5" high, external, for optical
Bay 2-9 3.5", 1" high, external, for disk

Expansion Slots

Slot 1: half-length, full-height, PCI Express 3.0 x16
Slot 2: half-length, full-height, PCI Express 3.0 x8
Slot 3: Low Profile, PCI Express 3.0 x8
Slot 4-5 are available on dual processors models:
Slot 4: half-length, full-height, PCI Express 3.0 x16 (x8 elec)
Slot 5: half-length, full-height, PCI Express 3.0 x8

Security

- Security chip (selected models, see information on left)
- Administrator password
- User password
- Boot sequence control
- Boot without keyboard, mouse, diskette
- Serial port I/O control
- USB port disablement (all)

Software Management Tools

- ThinkServer EasyStartup
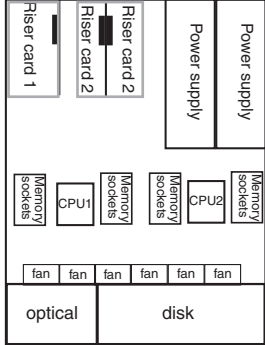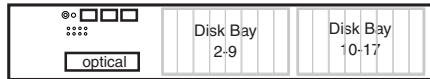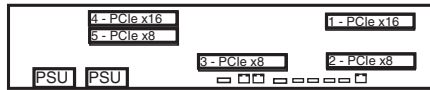- ThinkServer EasyManage

Energy Management Technology

- Intel Power Node Manager
- Lenovo® SmartGrid Manager

ENERGY STAR⊡ Server 1.1-compliant
RoHS-compliant

For more accessories, see O-RDS sheet

Type-model	Processor(s)	Memory (MHz/type)	Memory DIMMs	Pre-conf RAID	Disk controller	Disk(s)	Disk bays	Disk type	SATA optical	Intelligent Diagnostics	TPM	System mgmt	Cable mgmt	Preload OS	PSU qty
2594-A1U	1xE5-2620	1333MHz RDIMM	2x4GB	No	500	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	IPMI	No	No	1
2594-A2U	1xE5-2640	1333MHz RDIMM	2x4GB	No	700+Battery	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2594-A3U	1xE5-2660	1333MHz RDIMM	2x8GB	No	700+Battery	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2594-A4U	1xE5-2620	1333MHz RDIMM	1x4GB	No	500	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	1
2594-A5U	1xE5-2640	1333MHz RDIMM	1x4GB	No	700	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2594-A6U	1xE5-2640	1333MHz RDIMM	1x8GB	No	700+Battery	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2594-A7U	1xE5-2670	1333MHz RDIMM	1x16GB	No	700+Battery	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2594-A9U	1xE5-2620	1333MHz RDIMM	1x4GB	No	700	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	IPMI	No	No	1
2594-ADU	1xE5-2670	1333MHz RDIMM	1x8GB	No	700	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	IPMI	No	No	1
2594-AEU	1xE5-2690	1333MHz RDIMM	1x16GB	No	700+Battery	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2

Limited warranty	**3-year** parts and labor; more Lenovo Services see S-RDS sheet
Processor	Up to two processors, one or two processors standard, **Intel Xeon E5-2620 processor (6C/12T, 2.0GHz, 15MB, 7.2 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.5GHz), 4-channel DDR3 memory controller (up to 1333MHz) **Intel Xeon E5-2640 processor (6C/12T, 2.5GHz, 15MB, 7.2 GT/s QPI x2)**, Turbo Boost 2.0 (up to 3.0GHz), 4-channel DDR3 memory controller (up to 1333MHz) **Intel Xeon E5-2660 processor (8C/16T, 2.2GHz, 20MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 3.0GHz), 4-channel DDR3 memory controller (up to 1600MHz) **Intel Xeon E5-2670 processor (8C/16T, 2.6GHz, 20MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 3.3GHz), 4-channel DDR3 memory controller (up to 1600MHz) **Intel Xeon E5-2690 processor (8C/16T, 2.9GHz, 20MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 3.8GHz), 4-channel DDR3 memory controller (up to 1600MHz)
Implementation	Two LGA2011 sockets
Memory	RDIMM or LV RDIMM, DDR3, ECC, 4-channel per processor, 240-pin; *RDIMM:* twenty sockets (12 sockets for CPU1, 8 sockets for CPU2), 320GB max (20x16GB) *LV RDIMM:* sixteen sockets (8 of 12 sockets available for CPU1, 8 sockets for CPU2), 256GB max (16x16GB)
Additional memory disclaimers	• *Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs* • *Over twelve RDIMMs requires dual processors* • *Over eight LV RDIMMs requires dual processors* • *Mixing of RDIMM and LV RDIMM is not supported*
Graphics	Onboard Aspeed AST2300 graphics/management processor, one VGA DB-15 on front, one VGA DB-15 on rear; Maximum resolution: 1920x1200@60Hz
Disk bays	Eight or sixteen 2.5" hot-swap SATA/SAS disk bays (Sixteen 2.5" disk bays availability on August 2012)
Disk controller	*RAID 500*: ThinkServer RAID 500 adapter (LSI SAS 9240-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support *Upgrade for 500:* Additional upgrade key for RAID 500 adapter, add RAID 5, 50 support *RAID 700:* ThinkServer RAID 700 adapter (LSI SAS 9260-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 6, 10, 50, 60 support *Battery for 700:* Intelligent Battery Backup Unit (iBBU08) for RAID 700
RAID Support	Up to RAID 0, 1, 5, 6, 10, 50, 60 via ThinkServer RAID 700 adapter
Disk(s)	*2.5" SAS:* SAS 6.0Gb/s, 10000 rpm SSD: Solid State Drive, 2.5"
Tape drive	None
Optical	DVD±RW or DVD ROM, slim
Diskette	None (use USB port)
Chipset	**Intel C602J Chipset**
Ethernet	Two Gigabit Ethernet ports by Intel i350, one Gigabit Ethernet port by Intel 82574L, dedicate/share management
Riser card	(See Right) Riser card 1 for slot 1-2, riser card 2 for slot 3-5
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
Intelligent Diagnostics Module (IDM)	Supports IDM or IDM Premium on selected models *Basic:* IDM LED lights indicate failing component category *Premium:* IDM Premium LED lights indicate individual failing part
Systems mgmt	Onboard Aspeed AST2300 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC); *iKVM:* add-on ThinkServer Management Module Premium for iKVM functions
Security chip	No onboard TPM chip; *TPM:* additional add-on card for TPM function, TCG 1.2-compliant
Prerequisites	SATA/SAS disk, OS
Keyboard/mouse	None (use USB port)
Power supply	One or two 800 watts standard, two maximum, rear access, hot-swap, 80 PLUS® Gold qualified, redundant with two power supplies
Rack kit	Includes rack kit
Cable management	Optional cable management arm on selected models
Cooling	Up to six fans (5+1 redundant), hot-swap

2U Rack top

Front

Bay 10-17 are available on sixteen disk bays models only

Rear

Slot 4, 5 are available on dual processors models only

Mechanical
- 2U rack
- 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

Disk Bays
Bay 1 5.25", 0.5" high, external, for optical
Bay 2-9 2.5", 0.6" high, external, for disk
Bay 10-17 are available on sixteen 2.5" disk bays models:
Bay 10-17 2.5", 0.6" high, external, for disk

Expansion Slots
Slot 1: half-length, full-height, PCI Express 3.0 x16
Slot 2: half-length, full-height, PCI Express 3.0 x8
Slot 3: Low Profile, PCI Express 3.0 x8
Slot 4-5 are available on dual processors models:
Slot 4: half-length, full-height, PCI Express 3.0 x16 (x8 elec)
Slot 5: half-length, full-height, PCI Express 3.0 x8

Security
- Security chip (selected models, see information on left)
- Administrator password
- User password
- Boot sequence control
- Boot without keyboard, mouse, diskette
- Serial port I/O control
- USB port disablement (all)

Software Management Tools
- ThinkServer EasyStartup
- ThinkServer EasyManage

Energy Management Technology
- Intel Power Node Manager
- Lenovo® SmartGrid Manager

ENERGY STAR Server 1.1-compliant
RoHS-compliant

For more accessories, see O-RDS sheet

ThinkServer RD630 with 2.5" Disk Bay (2594) - TopSeller (August 2012)

Type-model	Processor(s)	Memory (MHz/type)	Memory DIMMs	Pre-conf RAID	Disk controller	Disk(s)	Disk bays	Disk type	SATA optical	Intelligent Diagnostics	TPM	System mgmt	Cable mgmt	Preload OS	PSU qty
2594-A8U	1xE5-2620	1333MHz RDIMM	1x8GB	No	700+Battery	No	16xHS	SATA/SAS	DVD±RW	Premium	TPM	IPMI	No	No	1
2594-AAU	1xE5-2640	1333MHz RDIMM	1x8GB	No	700+Battery	No	16xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	1
2594-ABU	2xE5-2650	1333MHz RDIMM	2x8GB	No	700+Battery	No	16xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2594-ACU	1xE5-2650	1333MHz RDIMM	1x8GB	No	700+Battery	No	16xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2

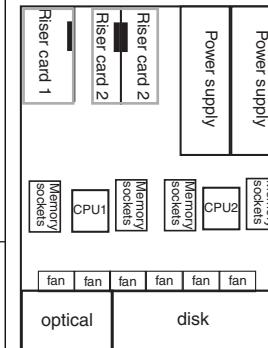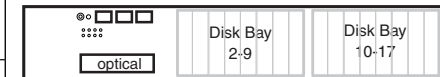|	
Limited warranty	**3-year** parts and labor; more Lenovo Services see S-RDS sheet
Processor	Up to two processors, one or two processors standard, **Intel□ Xeon□ E5-2620 processor (6C/12T, 2.0GHz, 15MB, 7.2 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.5GHz), 4-channel DDR3 memory controller (up to 1333MHz) **Intel Xeon E5-2640 processor (6C/12T, 2.5GHz, 15MB, 7.2 GT/s QPI x2)**, Turbo Boost 2.0 (up to 3.0GHz), 4-channel DDR3 memory controller (up to 1333MHz) **Intel Xeon E5-2650 processor (8C/16T, 2.0GHz, 20MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.8GHz), 4-channel DDR3 memory controller (up to 1600MHz)
Implementation	Two LGA2011 sockets
Memory	RDIMM or LV RDIMM, DDR3, ECC, 4-channel per processor, 240-pin; *RDIMM:* twenty sockets (12 sockets for CPU1, 8 sockets for CPU2), 320GB max (20x16GB) *LV RDIMM:* sixteen sockets (8 of 12 sockets available for CPU1, 8 sockets for CPU2), 256GB max (16x16GB)
Additional memory disclaimers	● *Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs* ● *Over twelve RDIMMs requires dual processors* ● *Over eight LV RDIMMs requires dual processors* ● *Mixing of RDIMM and LV RDIMM is not supported*
Graphics	Onboard Aspeed AST2300 graphics/management processor, one VGA DB-15 on front, one VGA DB-15 on rear; Maximum resolution: 1920x1200@60Hz
Disk bays	Eight or sixteen 2.5" hot-swap SATA/SAS disk bays
Disk controller	*RAID 500*: ThinkServer RAID 500 adapter (LSI□ SAS 9240-8i), PCI Express□ bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support *Upgrade for 500:* Additional upgrade key for RAID 500 adapter, add RAID 5, 50 support *RAID 700:* ThinkServer RAID 700 adapter (LSI SAS 9260-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 6, 10, 50, 60 support *Battery for 700:* Intelligent Battery Backup Unit (iBBU08) for RAID 700
RAID Support	Up to RAID 0, 1, 5, 6, 10, 50, 60 via ThinkServer RAID 700 adapter
Disk(s)	*2.5" SAS:* SAS 6.0Gb/s, 10000 rpm *SSD:* Solid State Drive, 2.5"
Tape drive	None
Optical	DVD±RW or DVD ROM, slim
Diskette	None (use USB port)
Chipset	**Intel C602J Chipset**
Ethernet	Two Gigabit Ethernet ports by Intel i350, one Gigabit Ethernet port by Intel 82574L, dedicate/share management
Riser card	(See Right) Riser card 1 for slot 1-2, riser card 2 for slot 3-5
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
Intelligent Diagnostics Module (IDM)	Supports IDM or IDM Premium on selected models *Basic:* IDM LED lights indicate failing component category *Premium:* IDM Premium LED lights indicate individual failing part
Systems mgmt	Onboard Aspeed AST2300 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC); *iKVM:* add-on ThinkServer Management Module Premium for iKVM functions
Security chip	No onboard TPM chip; *TPM:* additional add-on card for TPM function, TCG 1.2-compliant
Prerequisites	SATA/SAS disk, OS
Keyboard/mouse	None (use USB port)
Power supply	One or two 800 watts standard, two maximum, rear access, hot-swap, 80 PLUS® Gold qualified, redundant with two power supplies
Rack kit	Includes rack kit
Cable management	Optional cable management arm on selected models
Cooling	Up to six fans (5+1 redundant), hot-swap

2U Rack top

Front

Bay 10-17 are available on sixteen disk bays models only

Rear

Slot 4, 5 are available on dual processors models only

Mechanical
- 2U rack
- 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

Disk Bays
Bay 1   5.25", 0.5" high, external, for optical
Bay 2-9   2.5", 0.6" high, external, for disk
Bay 10-17 are available on sixteen 2.5" disk bays models:
Bay 10-17 2.5",   0.6" high, external, for disk

Expansion Slots
Slot 1: half-length, full-height, PCI Express 3.0 x16
Slot 2: half-length, full-height, PCI Express 3.0 x8
Slot 3: Low Profile,   PCI Express 3.0 x8
Slot 4-5 are available on dual processors models:
Slot 4: half-length, full-height, PCI Express 3.0 x16 (x8 elec)
Slot 5: half-length, full-height, PCI Express 3.0 x8

Security
- Security chip (selected models, see information on left)
- Administrator password
- User password
- Boot sequence control
- Boot without keyboard, mouse, diskette
- Serial port I/O control
- USB port disablement (all)

Software Management Tools
- ThinkServer EasyStartup
- ThinkServer EasyManage

Energy Management Technology
- Intel Power Node Manager
- Lenovo® SmartGrid Manager

ENERGY STAR□ Server 1.1-compliant
RoHS-compliant

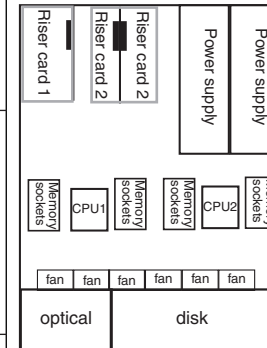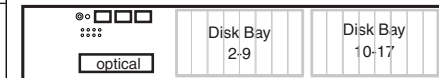For more accessories, see O-RDS sheet

Type-model	Processor(s)	Memory (MHz/type)	Memory DIMMs	Pre-conf RAID	Disk controller	Disk(s)	Disk bays	Disk type	SATA optical	Intelligent Diagnostics	TPM	System mgmt	Cable mgmt	Preload OS	PSU qty
2593-A1U	2xE5-2620	1333MHz RDIMM	2x8GB		700+Battery	5x600GB 2.5" SAS	8xHS	SATA/SAS	DVD	Premium	TPM	iKVM	No	No	2
2593-A2U	2xE5-2620	1333MHz RDIMM	2x8GB	5	700+Battery	6x600GB 2.5" SAS	8xHS	SATA/SAS	DVD	Premium	TPM	iKVM	No	No	2

Limited warranty	**1-year** parts and labor; more Lenovo Services see S-RDS sheet	
Processor	Up to two processors, one or two processors standard, **Intel□ Xeon□ E5-2620 processor (6C/12T, 2.0GHz, 15MB, 7.2 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.5GHz), 4-channel DDR3 memory controller (up to 1333MHz)	
Implementation	Two LGA2011 sockets	
Memory	RDIMM or LV RDIMM, DDR3, ECC, 4-channel per processor, 240-pin; *RDIMM:* twenty sockets (12 sockets for CPU1, 8 sockets for CPU2), 320GB max (20x16GB) *LV RDIMM:* sixteen sockets (8 of 12 sockets available for CPU1, 8 sockets for CPU2), 256GB max (16x16GB)	
Additional memory disclaimers	● *Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs* ● *Over twelve RDIMMs requires dual processors* ● *Over eight LV RDIMMs requires dual processors* ● *Mixing of RDIMM and LV RDIMM is not supported*	
Graphics	Onboard Aspeed AST2300 graphics/management processor, one VGA DB-15 on front, one VGA DB-15 on rear; Maximum resolution: 1920x1200@60Hz	
Disk bays	Eight or sixteen 2.5" hot-swap SATA/SAS disk bays (Sixteen 2.5" disk bays availability on August 2012)	
Disk controller	*RAID 500*: ThinkServer RAID 500 adapter (LSI□ SAS 9240-8i), PCI Express□ bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support *Upgrade for 500:* Additional upgrade key for RAID 500 adapter, add RAID 5, 50 support *RAID 700:* ThinkServer RAID 700 adapter (LSI SAS 9260-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 6, 10, 50, 60 support *Battery for 700:* Intelligent Battery Backup Unit (iBBU08) for RAID 700	
RAID Support	Up to RAID 0, 1, 5, 6, 10, 50, 60 via ThinkServer RAID 700 adapter	
Disk(s)	*2.5" SAS:* SAS 6.0Gb/s, 10000 rpm SSD: Solid State Drive, 2.5"	
Tape drive	None	
Optical	DVD±RW or DVD ROM, slim	
Diskette	None (use USB port)	
Chipset	**Intel C602J Chipset**	
Ethernet	Two Gigabit Ethernet ports by Intel i350, one Gigabit Ethernet port by Intel 82574L, dedicate/share management	
Riser card	(See Right) Riser card 1 for slot 1-2, riser card 2 for slot 3-5	
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	
Intelligent Diagnostics Module (IDM)	Supports IDM or IDM Premium on selected models *Basic:* IDM LED lights indicate failing component category *Premium:* IDM Premium LED lights indicate individual failing part	
Systems mgmt	Onboard Aspeed AST2300 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC); *iKVM:* add-on ThinkServer Management Module Premium for iKVM functions	
Security chip	No onboard TPM chip; *TPM:* additional add-on card for TPM function, TCG 1.2-compliant	
Prerequisites	SATA/SAS disk, OS	
Keyboard/mouse	None (use USB port)	
Power supply	One or two 800 watts standard, two maximum, rear access, hot-swap, 80 PLUS® Gold qualified, redundant with two power supplies	
Rack kit	Includes rack kit	
Cable management	Optional cable management arm on selected models	
Cooling	Up to six fans (5+1 redundant), hot-swap	

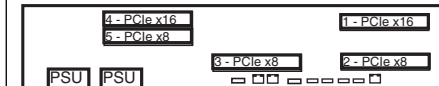**2U Rack top**

Front

Bay 10-17 are available on sixteen disk bays models only

Rear

Slot 4, 5 are available on dual processors models only

Mechanical
- 2U rack
- 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

Disk Bays
Bay 1 5.25", 0.5" high, external, for optical
Bay 2-9 2.5", 0.6" high, external, for disk
Bay 10-17 are available on sixteen 2.5" disk bays models:
Bay 10-17 2.5", 0.6" high, external, for disk

Expansion Slots
Slot 1: half-length, full-height, PCI Express 3.0 x16
Slot 2: half-length, full-height, PCI Express 3.0 x8
Slot 3: Low Profile, PCI Express 3.0 x8
Slot 4-5 are available on dual processors models:
Slot 4: half-length, full-height, PCI Express 3.0 x16 (x8 elec)
Slot 5: half-length, full-height, PCI Express 3.0 x8

Security
- Security chip (selected models, see information on left)
- Administrator password
- User password
- Boot sequence control
- Boot without keyboard, mouse, diskette
- Serial port I/O control
- USB port disablement (all)

Software Management Tools
- ThinkServer EasyStartup
- ThinkServer EasyManage

Energy Management Technology
- Intel Power Node Manager
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ENERGY STAR□ Server 1.1-compliant
RoHS-compliant

For more accessories, see O-RDS sheet

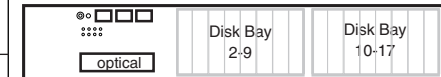| Type-model	Processor(s)	Memory (MHz/type)	Memory DIMMs	Pre-conf RAID	Disk controller	Disk(s)	Disk bays	Disk type	SATA optical	Intelligent Diagnostics	TPM	System mgmt	Cable mgmt	Preload OS	PSU qty
2595-A1U	1xE5-2620	1333MHz RDIMM 1x8GB		No	700		8xHS	SATA/SAS	DVD±RW	Basic	TPM	IPMI	No	No	1
2595-A2U	1xE5-2650	1333MHz RDIMM 1x16GB		No	700+Battery		8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2595-A5U	1xE5-2650	1333MHz RDIMM 6x8GB		No	700+Battery 4x300GB 2.5" SAS		8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2595-A6U	1xE5-2620	1333MHz RDIMM 3x8GB		No	700+Battery 4x300GB 2.5" SAS		8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2595-A7U	2xE5-2670	1333MHz RDIMM 6x16GB		No	700+Battery 4x300GB 2.5" SAS		8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2

Limited warranty	**3-year** parts and labor; more Lenovo Services see S-RDS sheet
Processor	Up to two processors, one or two processors standard, **Intel□ Xeon□ E5-2620 processor (6C/12T, 2.0GHz, 15MB, 7.2 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.5GHz), 4-channel DDR3 memory controller (up to 1333MHz) **Intel Xeon E5-2650 processor (8C/16T, 2.0GHz, 20MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.8GHz), 4-channel DDR3 memory controller (up to 1600MHz) **Intel Xeon E5-2670 processor (8C/16T, 2.6GHz, 20MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 3.3GHz), 4-channel DDR3 memory controller (up to 1600MHz)
Implementation	Two LGA2011 sockets
Memory	RDIMM or LV RDIMM, DDR3, ECC, 4-channel per processor, 240-pin; *RDIMM:* twenty sockets (12 sockets for CPU1, 8 sockets for CPU2), 320GB max (20x16GB) *LV RDIMM:* sixteen sockets (8 of 12 sockets available for CPU1, 8 sockets for CPU2), 256GB max (16x16GB)
Additional memory disclaimers	● *Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs* ● *Over twelve RDIMMs requires dual processors* ● *Over eight LV RDIMMs requires dual processors* ● *Mixing of RDIMM and LV RDIMM is not supported*
Graphics	Onboard Aspeed AST2300 graphics/management processor, one VGA DB-15 on front, one VGA DB-15 on rear; Maximum resolution: 1920x1200@60Hz
Disk bays	Eight or sixteen 2.5" hot-swap SATA/SAS disk bays (Sixteen 2.5" disk bays availability on August 2012)
Disk controller	*RAID 500:* ThinkServer RAID 500 adapter (LSI□ SAS 9240-8i), PCI Express□ bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support *Upgrade for 500:* Additional upgrade key for RAID 500 adapter, add RAID 5, 50 support *RAID 700:* ThinkServer RAID 700 adapter (LSI SAS 9260-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 6, 10, 50, 60 support *Battery for 700:* Intelligent Battery Backup Unit (iBBU08) for RAID 700
RAID Support	Up to RAID 0, 1, 5, 6, 10, 50, 60 via ThinkServer RAID 700 adapter
Disk(s)	*2.5" SAS:* SAS 6.0Gb/s, 10000 rpm SSD: Solid State Drive, 2.5"
Tape drive	None
Optical	DVD±RW or DVD ROM, slim
Diskette	None (use USB port)
Chipset	**Intel C602J Chipset**
Ethernet	Two Gigabit Ethernet ports by Intel i350, one Gigabit Ethernet port by Intel 82574L, dedicate/share management
Riser card	(See Right) Riser card 1 for slot 1-2, riser card 2 for slot 3-5
Front ports	Two USB 2.0, one analog VGA DB-15 connector
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Intelligent Diagnostics Module (IDM)	Supports IDM or IDM Premium on selected models *Basic:* IDM LED lights indicate failing component category *Premium:* IDM Premium LED lights indicate individual failing part
Systems mgmt	Onboard Aspeed AST2300 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC); *iKVM:* add-on ThinkServer Management Module Premium for iKVM functions
Security chip	No onboard TPM chip; *TPM:* additional add-on card for TPM function, TCG 1.2-compliant
Prerequisites	SATA/SAS disk, OS
Keyboard/mouse	None (use USB port)
Power supply	One or two 800 watts standard, two maximum, rear access, hot-swap, 80 PLUS® Gold qualified, redundant with two power supplies
Rack kit	Includes rack kit
Cable management	Optional cable management arm on selected models
Cooling	Up to six fans (5+1 redundant), hot-swap

2U Rack top

Front

Bay 10-17 are available on sixteen disk bays models only

Rear

Slot 4, 5 are available on dual processors models only

Mechanical
- 2U rack
- 19"W x 28.9"D x 3.45"H (with rack handles)
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Bay 10-17 2.5", 0.6" high, external, for disk

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Slot 3: Low Profile, PCI Express 3.0 x8
Slot 4-5 are available on dual processors models:
Slot 4: half-length, full-height, PCI Express 3.0 x16 (x8 elec)
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Security
- Security chip (selected models, see information on left)
- Administrator password
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- Boot sequence control
- Boot without keyboard, mouse, diskette
- Serial port I/O control
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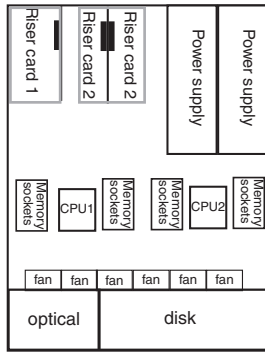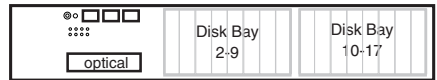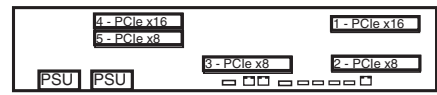- Lenovo® SmartGrid Manager

ENERGY STAR□ Server 1.1-compliant
RoHS-compliant

For more accessories, see O-RDS sheet

Type-model	Processor(s)	Memory (MHz/type)	Memory DIMMs	Pre-conf RAID	Disk controller	Disk(s)	Disk bays	Disk type	SATA optical	Intelligent Diagnostics	TPM	System mgmt	Cable mgmt	Preload OS	PSU qty
2595-A3U	1xE5-2650	1333MHz RDIMM	1x8GB	No	700+Battery	No	16xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2595-A4U	1xE5-2620	1333MHz RDIMM	1x8GB	No	700+Battery	No	16xHS	SATA/SAS	DVD±RW	Premium	TPM	IPMI	No	No	2

Limited warranty	**3-year** parts and labor; more Lenovo Services see S-RDS sheet
Processor	Up to two processors, one or two processors standard, **Intel□ Xeon□ E5-2620 processor (6C/12T, 2.0GHz, 15MB, 7.2 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.5GHz), 4-channel DDR3 memory controller (up to 1333MHz) **Intel Xeon E5-2650 processor (8C/16T, 2.0GHz, 20MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 2.8GHz), 4-channel DDR3 memory controller (up to 1600MHz)
Implementation	Two LGA2011 sockets
Memory	RDIMM or LV RDIMM, DDR3, ECC, 4-channel per processor, 240-pin; *RDIMM:* twenty sockets (12 sockets for CPU1, 8 sockets for CPU2), 320GB max (20x16GB) *LV RDIMM:* sixteen sockets (8 of 12 sockets available for CPU1, 8 sockets for CPU2), 256GB max (16x16GB)
Additional memory disclaimers	● *Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs* ● *Over twelve RDIMMs requires dual processors* ● *Over eight LV RDIMMs requires dual processors* ● *Mixing of RDIMM and LV RDIMM is not supported*
Graphics	Onboard Aspeed AST2300 graphics/management processor, one VGA DB-15 on front, one VGA DB-15 on rear; Maximum resolution: 1920x1200@60Hz
Disk bays	Eight or sixteen 2.5" hot-swap SATA/SAS disk bays
Disk controller	*RAID 500*: ThinkServer RAID 500 adapter (LSI□ SAS 9240-8i), PCI Express□ bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support *Upgrade for 500*: Additional upgrade key for RAID 500 adapter, add RAID 5, 50 support *RAID 700*: ThinkServer RAID 700 adapter (LSI SAS 9260-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 6, 10, 50, 60 support *Battery for 700*: Intelligent Battery Backup Unit (iBBU08) for RAID 700
RAID Support	Up to RAID 0, 1, 5, 6, 10, 50, 60 via ThinkServer RAID 700 adapter
Disk(s)	*2.5" SAS:* SAS 6.0Gb/s, 10000 rpm *SSD:* Solid State Drive, 2.5"
Tape drive	None
Optical	DVD±RW or DVD ROM, slim
Diskette	None (use USB port)
Chipset	**Intel C602J Chipset**
Ethernet	Two Gigabit Ethernet ports by Intel i350, one Gigabit Ethernet port by Intel 82574L, dedicate/share management
Riser card	(See Right) Riser card 1 for slot 1-2, riser card 2 for slot 3-5
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
Intelligent Diagnostics Module (IDM)	Supports IDM or IDM Premium on selected models *Basic:* IDM LED lights indicate failing component category *Premium:* IDM Premium LED lights indicate individual failing part
Systems mgmt	Onboard Aspeed AST2300 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC); *iKVM:* add-on ThinkServer Management Module Premium for iKVM functions
Security chip	No onboard TPM chip; *TPM:* additional add-on card for TPM function, TCG 1.2-compliant
Prerequisites	SATA/SAS disk, OS
Keyboard/mouse	None (use USB port)
Power supply	One or two 800 watts standard, two maximum, rear access, hot-swap, 80 PLUS® Gold qualified, redundant with two power supplies
Rack kit	Includes rack kit
Cable management	Optional cable management arm on selected models
Cooling	Up to six fans (5+1 redundant), hot-swap

2U Rack top

Front

Bay 10-17 are available on sixteen disk bays models only

Rear

Slot 4, 5 are available on dual processors models only

Mechanical
- 2U rack
- 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

Disk Bays
Bay 1 5.25", 0.5" high, external, for optical
Bay 2-9 2.5", 0.6" high, external, for disk
Bay 10-17 are available on sixteen 2.5" disk bays models:
Bay 10-17 2.5", 0.6" high, external, for disk

Expansion Slots
Slot 1: half-length, full-height, PCI Express 3.0 x16
Slot 2: half-length, full-height, PCI Express 3.0 x8
Slot 3: Low Profile, PCI Express 3.0 x8
Slot 4-5 are available on dual processors models:
Slot 4: half-length, full-height, PCI Express 3.0 x16 (x8 elec)
Slot 5: half-length, full-height, PCI Express 3.0 x8

Security
- Security chip (selected models, see information on left)
- Administrator password
- User password
- Boot sequence control
- Boot without keyboard, mouse, diskette
- Serial port I/O control
- USB port disablement (all)

Software Management Tools
- ThinkServer EasyStartup
- ThinkServer EasyManage

Energy Management Technology
- Intel Power Node Manager
- Lenovo® SmartGrid Manager

ENERGY STAR□ Server 1.1-compliant
RoHS-compliant

For more accessories, see O-RDS sheet

ThinkServer RD630 with 2.5" Disk Bay (2595) - Vectorwise Appliance

Product Specifications Reference (PSREF)

Type-model	Processor(s)	Memory (MHz/type)	Memory DIMMs	Pre-conf RAID	Disk controller	Disk(s)	Disk bays	SATA optical	Intelligent Diagnostics	TPM	System mgmt	Cable mgmt	Preload OS	PSU qty
2595-A8U	1xE5-2643	1333MHz RDIMM	8x8GB	10	700+Battery	4x300GB 2.5" SAS	8xHS	DVD±RW	Premium	TPM	iKVM	No	Win2008E R2	2
2595-A9U	2xE5-2667	1333MHz RDIMM	16x8GB	6	700+Battery	8x300GB 2.5" SAS	8xHS	DVD±RW	Premium	TPM	iKVM	No	Win2008E R2	2
2595-AAU	2xE5-2667	1333MHz RDIMM	16x8GB	6	700+Battery	8x300GB 2.5" SAS	8xHS	DVD±RW	Premium	TPM	iKVM	No	RHEL 6.0	2

- *These models are ThinkServer solutions for Vectorwise Data Mart Appliance for more information please see www.actian.com/products/vectorwise/vectorwise-datamart-appliance*

Limited warranty	**3-year** parts and labor; more Lenovo Services see S-RDS sheet
Processor	Up to two processors, one or two processors standard, **Intel Xeon E5-2643 processor (4C/8T, 3.3GHz, 10MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 3.5GHz), 4-channel DDR3 memory controller (up to 1600MHz) **Intel Xeon E5-2667 processor (6C/12T, 2.9GHz, 15MB, 8.0 GT/s QPI x2)**, Turbo Boost 2.0 (up to 3.5GHz), 4-channel DDR3 memory controller (up to 1600MHz)
Implementation	Two LGA2011 sockets
Memory	RDIMM or LV RDIMM, DDR3, ECC, 4-channel per processor, 240-pin; *RDIMM:* twenty sockets (12 sockets for CPU1, 8 sockets for CPU2), 320GB max (20x16GB) *LV RDIMM:* sixteen sockets (8 of 12 sockets available for CPU1, 8 sockets for CPU2), 256GB max (16x16GB)
Additional memory disclaimers	• *Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs* • *Over twelve RDIMMs requires dual processors* • *Over eight LV RDIMMs requires dual processors* • *Mixing of RDIMM and LV RDIMM is not supported*
Graphics	Onboard Aspeed AST2300 graphics/management processor, one VGA DB-15 on front, one VGA DB-15 on rear; Maximum resolution: 1920x1200@60Hz
Disk bays	Eight or sixteen 2.5" hot-swap SATA/SAS disk bays
Disk controller	*RAID 500*: ThinkServer RAID 500 adapter (LSI SAS 9240-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support *Upgrade for 500:* Additional upgrade key for RAID 500 adapter, add RAID 5, 50 support *RAID 700:* ThinkServer RAID 700 adapter (LSI SAS 9260-8i), PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 6, 10, 50, 60 support *Battery for 700:* Intelligent Battery Backup Unit (iBBU08) for RAID 700
RAID Support	Up to RAID 0, 1, 5, 6, 10, 50, 60 via ThinkServer RAID 700 adapter
Disk(s)	*2.5" SAS:* SAS 6.0Gb/s, 10000 rpm *SSD:* Solid State Drive, 2.5"
Tape drive	None
Optical	DVD±RW or DVD ROM, slim
Diskette	None (use USB port)
Chipset	**Intel C602J Chipset**
Ethernet	Two Gigabit Ethernet ports by Intel i350, one Gigabit Ethernet port by Intel 82574L, dedicate/share management
Riser card	(See Right) Riser card 1 for slot 1-2, riser card 2 for slot 3-5
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
Intelligent Diagnostics Module (IDM)	Supports IDM or IDM Premium on selected models *Basic:* IDM LED lights indicate failing component category *Premium:* IDM Premium LED lights indicate individual failing part
Systems mgmt	Onboard Aspeed AST2300 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC); *iKVM:* add-on ThinkServer Management Module Premium for iKVM functions
Security chip	No onboard TPM chip; *TPM:* additional add-on card for TPM function, TCG 1.2-compliant
Prerequisites	SATA/SAS disk, OS
Keyboard/mouse	None (use USB port)
Power supply	One or two 800 watts standard, two maximum, rear access, hot-swap, 80 PLUS® Gold qualified, redundant with two power supplies
Rack kit	Includes rack kit
Cable management	Optional cable management arm on selected models
Cooling	Up to six fans (5+1 redundant), hot-swap

2U Rack top

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Bay 10-17 are available on sixteen disk bays models only

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Slot 4: half-length, full-height, PCI Express 3.0 x16 (x8 elec)
Slot 5: half-length, full-height, PCI Express 3.0 x8

Security
- Security chip (selected models, see information on left)
- Administrator password
- User password
- Boot sequence control
- Boot without keyboard, mouse, diskette
- Serial port I/O control
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- ThinkServer EasyStartup
- ThinkServer EasyManage

Energy Management Technology
- Intel Power Node Manager
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ENERGY STAR Server 1.1-compliant
RoHS-compliant

For more accessories, see O-RDS sheet

Preloaded Operating System
A8U: Genuine Windows Server 2008 R2 Enterprise, Vectorwise 100GB limitation per unit
A9U: Genuine Windows Server 2008 R2 Enterprise, Vectorwise 1TB limitation per unit
AAU: Red Hat Enterprise Linux 6.0, Vectorwise 1TB limitation per unit