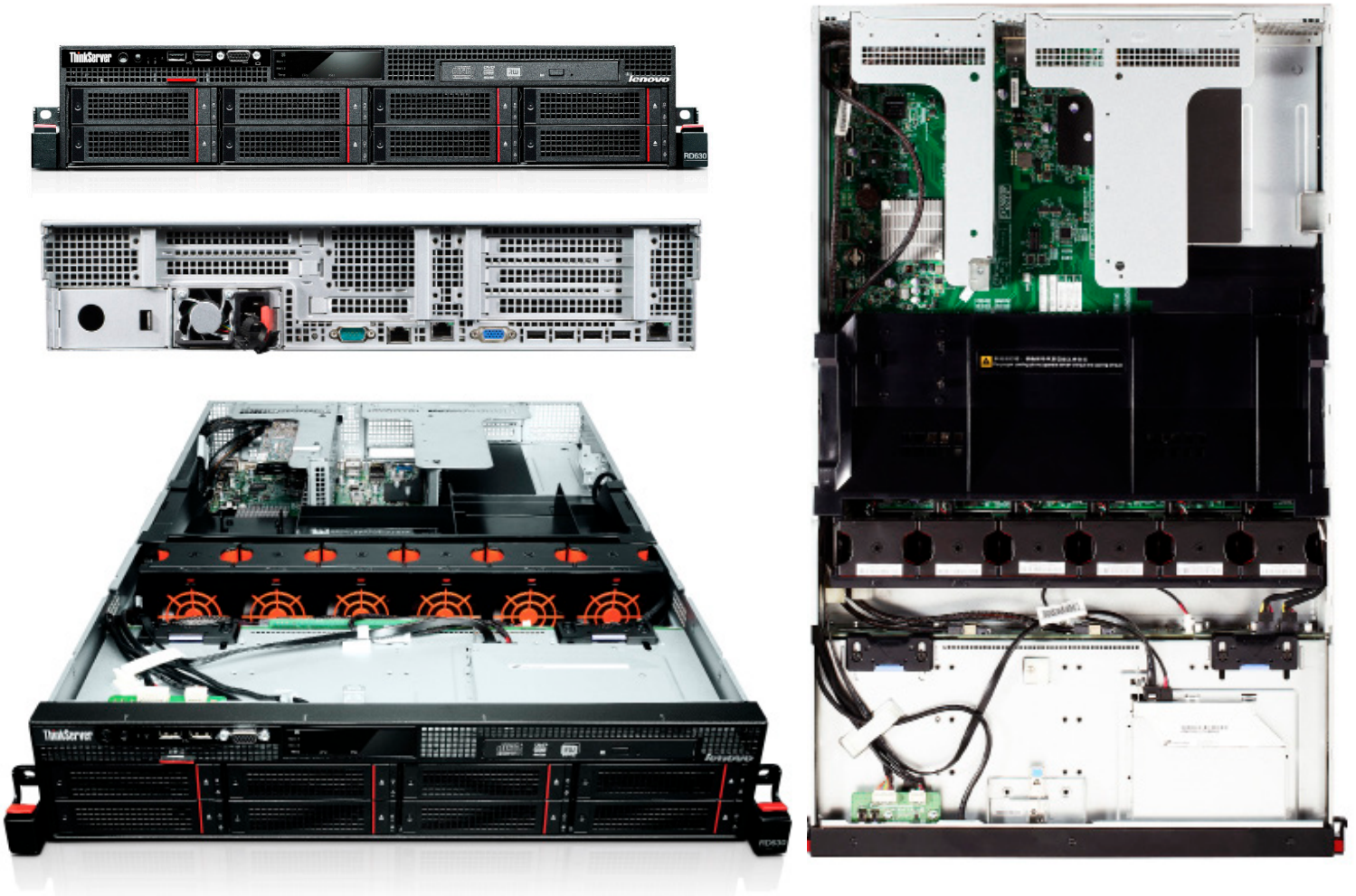# ThinkServer RD630 Photography - 3.5" Disk Bay *

* 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

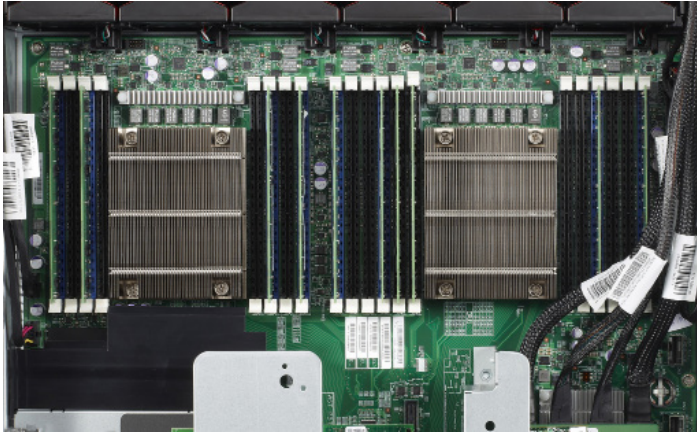**ThinkServer RD630 Photography - 2.5" Disk Bay***

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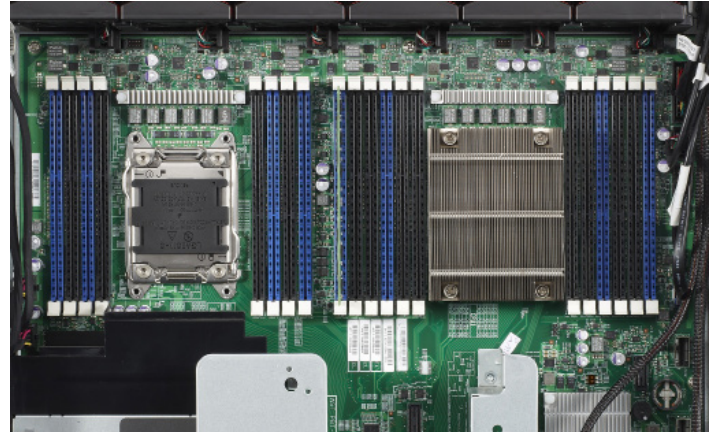*please see O-RDS for more RD630 accessories*

- 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

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™

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

ThinkServer RD630 with 3.5" Disk Bay (2579) - TopSeller

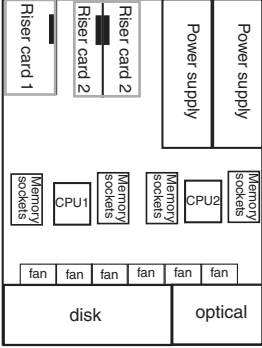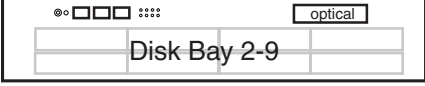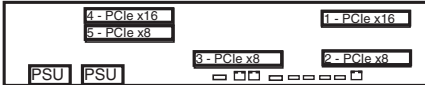| Type-model	Processor(s)	Memory (MHz/type)	Memory DIMMs	Pre-conf RAID	Disk controller	Disk(s)	Disk bays	Disk type	SATA optical	Intelligent Diagnostics	TPM	System mgmt	Cable mgmt	Preload OS	PSU qty
2579-A3G	1xE5-2640	1333MHz RDIMM	1x4GB	No	700+Battery	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	1
2579-A5G	1xE5-2650	1333MHz RDIMM	2x8GB	No	700+Battery	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2579-A7G	1xE5-2670	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
Processor	Up to two processors, one or two processors standard, **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	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

ThinkServer RD630 with 3.5" Disk Bay (2579) - TopSeller (January 2013)

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-A9G	1xE5-2609	1600MHz RDIMM	1x4GB	No	500	No	8xHS	SATA/SAS	DVD±RW	Premium	TPM	IPMI	No	No	1

Limited warranty	**3-year** parts and labor	**2U Rack top**
Processor	Up to two processors, one or two processors standard, **Intel® Xeon® E5-2609 processor (4C/4T, 2.4GHz, 10MB, 6.4 GT/s QPI x2)**, 4-channel DDR3 memory controller (up to 1066MHz)	
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**	
Ethernet	Two Gigabit Ethernet ports by Intel i350, one Gigabit Ethernet port by Intel 82574L, dedicate/share management	**Mechanical**
Riser card	(See Right) Riser card 1 for slot 1-2, riser card 2 for slot 3-5	• 2U rack
Front ports	Two USB 2.0, one analog VGA DB-15 connector	• 19"W x 28.9"D x 3.45"H (with rack handles)
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	• 482.4mm W x 734mm D x 87.6mm H (with rack handles) • 26.5 kg (58.42 lb) when fully configured
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	**Disk Bays** Bay 1 5.25", 0.5" high, external, for optical Bay 2-9 3.5", 1" high, external, for disk
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	**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:*
Security chip	No onboard TPM chip; *TPM:* additional add-on card for TPM function, TCG 1.2-compliant	Slot 4: half-length, full-height, PCI Express 3.0 x16 (x8 elec) Slot 5: half-length, full-height, PCI Express 3.0 x8
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
Rack kit Cable management Cooling	Includes rack kit Optional cable management arm on selected models Up to six fans (5+1 redundant), hot-swap	• 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

ThinkServer RD630 with 2.5" Disk Bay (2594) - 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
2594-A5G	1xE5-2640	1333MHz RDIMM	1x4GB	No	700	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2594-A6G	1xE5-2640	1333MHz RDIMM	1x8GB	No	700+Battery	None	8xHS	SATA/SAS	DVD±RW	Premium	TPM	iKVM	No	No	2
2594-A7G	1xE5-2670	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
Processor	Up to two processors, one or two processors standard, **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 E5-2670 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
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), how-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

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