ThinkStation.



Lenovo ThinkStation S30



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ThinkStation S30 Platform Specifications - I of IV

Text in red shows that these features only apply to MT type 0568, 0569, and 0606 models, text in green shows that the features are supported on other models except MT type 0568, 0569, and 0606 models

Intel C602 Chipset Chipset MT type 0568, 0569, and 0606: Others MT types: Intel Active Management Technology 7 Intel AMT Intel Active Management Technology 8 Processor

One LGA2011 socket, supports one processor from Intel Xeon E5-2600 E5-2600 v2, E5-1600, and E5-1600 v2 family, integrated 4-channel DDR3 memory controller, supports the following:

	1		1	. ,						T.
Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Intel QPI Speed	# of QPI Links	Max TDP	Memory Speed	Intel vPro technology
Xeon E5-2603	4	4	1.8 GHz		10 MB	6.4 GT/s	2	80 W	1066MHz	vPro
Xeon E5-2609	4	4	2.4 GHz		10 MB	6.4 GT/s	2	80 W	1066MHz	vPro
Xeon E5-2620	6	12	2 GHz	2.5 GHz	15 MB	7.2 GT/s	2	95 W	1333MHz	vPro
Xeon E5-2630	6	12	2.3 GHz	2.8 GHz	15 MB	7.2 GT/s	2	95 W	1333MHz	vPro
Xeon E5-2630L	6	12	2 GHz	2.5 GHz	15 MB	7.2 GT/s	2	60 W	1333MHz	vPro
Xeon E5-2637	2	4	3 GHz	3.5 GHz	5 MB	8 GT/s	2	80 W	1600MHz	vPro
Xeon E5-2640	6	12	2.5 GHz	3 GHz	15 MB	7.2 GT/s	2	95 W	1333MHz	vPro
Xeon E5-2643	4	8	3.3 GHz	3.5 GHz	10 MB	8 GT/s	2	130 W	1600MHz	vPro
Xeon E5-2650	8	16	2 GHz	2.8 GHz	20 MB	8 GT/s	2	95 W	1600MHz	vPro
Xeon E5-2650L	8	16	1.8 GHz	2.3 GHz	20 MB	8 GT/s	2	70 W	1600MHz	vPro
Xeon E5-2660	8	16	2.2 GHz	3 GHz	20 MB	8 GT/s	2	95 W	1600MHz	vPro
Xeon E5-2665	8	16	2.4 GHz	3.1 GHz	20 MB	8 GT/s	2	115 W	1600MHz	vPro
Xeon E5-2667	6	12	2.9 GHz	3.5 GHz	15 MB	8 GT/s	2	130 W	1600MHz	vPro
Xeon E5-2670	8	16	2.6 GHz	3.3 GHz	20 MB	8 GT/s	2	115 W	1600MHz	vPro
Xeon E5-2680	8	16	2.7 GHz	3.5 GHz	20 MB	8 GT/s	2	130 W	1600MHz	vPro
Xeon E5-2690	8	16	2.9 GHz	3.8 GHz	20 MB	8 GT/s	2	135 W	1600MHz	vPro
Xeon E5-1603	4	4	2.8 GHz	5.6 GHZ	10 MB	0 01/3		130 W	1066MHz	vPro
Xeon E5-1607	4	4	3 GHz		10 MB			130 W	1066MHz	vPro
Xeon E5-1620	4	8	3.6 GHz	3.8 GHz	10 MB			130 W	1600MHz	vPro
Xeon E5-1650	6	12	3.2 GHz	3.8 GHz	12 MB			130 W	1600MHz	vPro
Xeon E5-1660	6	12	3.2 GHz	3.9 GHz	12 MB			130 W	1600MHz	vPro
	-									
Xeon E5-2603 v2	4	4	1.8 GHz	1.8 GHz	10 MB	6.4 GT/s	2	80 W	1333MHz	vPro
Xeon E5-2609 v2	4	4	2.5 GHz	2.5 GHz	10 MB	6.4 GT/s	2	80 W	1333MHz	vPro
Xeon E5-2620 v2	6	12	2.1 GHz	2.6 GHz	15 MB	7.2 GT/s	2	80 W	1600MHz	vPro
Xeon E5-2630L v2	6	12	2.4 GHz	2.8 GHz	15 MB	7.2 GT/s	2	60 W	1600MHz	vPro
Xeon E5-2630 v2	6	12	2.6 GHz	3.1 GHz	15 MB	7.2 GT/s	2	80 W	1600MHz	vPro
Xeon E5-2637 v2	4	8	3.5 GHz	3.8 GHz	15 MB	8 GT/s	2	130 W	1866MHz	vPro
Xeon E5-2640 v2	8	16	2 GHz	2.5 GHz	20 MB	7.2 GT/s	2	95 W	1600MHz	vPro
Xeon E5-2643 v2	6	12	3.5 GHz	3.8 GHz	25 MB	8 GT/s	2	130 W	1866MHz	vPro
Xeon E5-2650L v2	10	20	1.7 GHz	2.1 GHz	25 MB	7.2 GT/s	2	70 W	1600MHz	vPro
Xeon E5-2650 v2	8	16	2.6 GHz	3.4 GHz	20 MB	8 GT/s	2	95 W	1866MHz	vPro
Xeon E5-2660 v2	10	20	2.2 GHz	3 GHz	25 MB	8 GT/s	2	95 W	1866MHz	vPro
Xeon E5-2667 v2	8	16	3.3 GHz	4 GHz	25 MB	8 GT/s	2	130 W	1866MHz	vPro
Xeon E5-2670 v2	10	20	2.5 GHz	3.3 GHz	25 MB	8 GT/s	2	115 W	1866MHz	vPro
Xeon E5-2680 v2	10	20	2.8 GHz	3.6 GHz	25 MB	8 GT/s	2	115 W	1866MHz	vPro
Xeon E5-2690 v2	10	20	3 GHz	3.6 GHz	25 MB	8 GT/s	2	130 W	1866MHz	vPro
Xeon E5-2695 v2	12	24	2.4 GHz	3.2 GHz	30 MB	8 GT/s	2	115 W	1866MHz	vPro
Xeon E5-2697 v2	12	24	2.7 GHz	3.5 GHz	30 MB	8 GT/s	2	130 W	1866MHz	vPro
Xeon E5-1607 v2	4	4	3 GHz		10 MB			130 W	1600MHz	vPro
Xeon E5-1620 v2	4	8	3.7 GHz	3.9 GHz	10 MB			130 W	1866MHz	vPro
Xeon E5-1650 v2	6	12	3.5 GHz	3.9 GHz	12 MB			130 W	1866MHz	vPro
Xeon E5-1660 v2	6	12	3.7 GHz	4 GHz	15 MB			130 W	1866MHz	vPro

- Notes:
 1. ThinkStation S30 support one processor.
 2. Intel Xeon processor numbering system is an alpha numeric representation of product line, product family and version. An 'L' suffix will be used to identify a low power processor.

 More details please see http://www.intel.com/products/processor number
 3. All information is provided by Intel and may be changed at any time without notice. The information herein is provided "as-is". Intel may update this information in non-scheduled. For latest information, please see http://ark.intel.com/products/family/59138/Intel-Xeon-Processor-E5-Family/server

ThinkStation S30 Platform Specifications - II of IV

Text in red shows that these features only apply to MT type 0568, 0569, and 0606 models, text in green shows that the features are supported on other models except MT type 0568, 0569, and 0606 models

UDIMM or RDIMM, ECC, DDR3, 4-channel capable, Memory eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8) Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs
 Mixing of RDIMM and UDIMM is not supported Additional memory disclaimers Graphics adapters

and GPU computing

Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology (Quadro 5000 and Quadro K5000 SLI), NVIDIA Maximus technology, supports the following NVIDIA Quadro, NVS graphics adapters and Tesla GPU computing processors:

• •			•			
	Memory Size	CUDA Processor Cores	Display Connectors	Max. Displays	# of slots	Power
NVIDIA Quadro a	nd NVS Graphics	;	1			1
Quadro K6000	Quadro K6000 12GB 286		1 dual-link DVI-I 1 dual-link DVI-D 2 DisplayPort	4	2	225W
Quadro K5000	4GB	1536	1 dual-link DVI-I 1 dual-link DVI-D 2 DisplayPort	4	2	122W
Quadro K4000	3GB	768	1 dual-link DVI-l 2 DisplayPort	4*	1	80W
Quadro K2000	2GB	384	1 dual-link DVI-I 2 DisplayPort	4*	1	51W
Quadro K2000D	2GB	384	1 dual-link DVI-I 1 dual-link DVI-D 1 mini DisplayPort	4*	1	51W
Quadro K600	1GB	192	1 dual-link DVI-I 1 DisplayPort	2	1	41W
Quadro 410	512MB	192	1 dual-link DVI-I 1 DisplayPort	2	1	37W
Quadro 6000	6GB	448	1 dual-link DVI-I 2 DisplayPort 1 Stereo	2	2	204W
Quadro 5000	2.5GB	352	1 dual-link DVI-I 2 DisplayPort, 1 Stereo	2	2	152W
Quadro 4000	2GB	256	1 dual-link DVI-l 2 DisplayPort 1 Stereo	2	1	142W
Quadro 2000	1GB	192	1 dual-link DVI-l 2 DisplayPort	2	1	62W
Quadro 2000D	1GB	192	2 dual-link DVI-I	2	1	62W
Quadro 600	1GB	96	1 dual-link DVI-l 1 DisplayPort	2	1	40W
NVS 510	2048 MB	192	4 mini DisplayPort (with 4 mini DP to DP dongles)	4	1	35W
NVS 315	1024MB	48	DMS59 to dual single-link DVI-I or dual DisplayPort	2	1	19.5W
NVS 310	512 MB	48	2 DisplayPort	2	1	19.5W
NVS 300	512 MB	16	DMS59 to dual single- link DVI-I	2	1	17.5W
NVIDIA Tesla GPI	J Computing Prod	cessors (as part of NVIDIA M	aximus Platform)			
Tesla K20	5GB	2496				225W
Tesla C2075	6GB	448				225W

^{*} Quadro K4000, K2000, and K2000D are equipped with 3 onboard display connectors, 4 Displays require a supported DisplayPort 1.2 Multi-Stream capable hub or displays

Notes:

1. ThinkStation S30 support NVIDIA Maximus technology. Maximus technology combines the visualization and interactive design capability of NVIDIA Quadro graphics and the high performance computing power of NVIDIA Tesla GPU computing processors in a single workstation. For more information on the latest Maximus certifications for ThinkStation and how to build Maximus system,

CUDA Processor Cores cannot be compared between GPU generations due to several important architectural differences that exist between streaming multiprocessor designs.

ThinkStation S30 Platform Specifications - III of IV

Onboard drive controllers	Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support
Discrete drive controller (opt)	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s,RAID 0, 1 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support
Hard drive(s)	Supports the following: 3.5" SATA: SATA 6.0Gb/s, 7200 rpm, up to 4TB 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm, up to 1TB 3.5" SAS: SAS: SAS 6.0Gb/s, 15000 rpm, up to 600GB 2.5" SAS: SAS 6.0Gb/s, 15000 rpm, up to 300GB Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models, up to 300GB
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface
Drive Bays	Two external 5.25" bays for opticals, three internal 3.5" bays for hard drives
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	MT type 0568, 0569, and 0606: Two USB 2.0, microphone (3.5mm), headphone (3.5mm)
· .	Others MT types: Two USB 3.0, microphone (3.5mm), headphone (3.5mm)
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)
IEEE 1394 adptr	None. Optional FireWire PCle adapter on selected models,
(optional)	1394a-2000, 400Mbps, two 6-pin ports on rear
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker Speaker	Internal speaker for business audio
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black
Mouse	Optical Wheel Mouse (USB connector), black
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified
Security	Security chip: MT type 0568, 0569, and 0606: STMicroelectronics ST19WP18 for TPM function, TCG 1.2-compliant Others MT types: Side cover lock (ships with two identical keys) Padlock loop (in rear for opt padlock; padlock prohibits side cover removal) Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal) Power-on password Administrator password Boot sequence control Boot without keyboard, mouse, diskette Serial port I/O enable/disable USB 2.0 ports enable/disable individually USB 3.0 ports enable/disable concurrently Chassis intrusion switch (optional) Power block color: metal concurrently Chassis intrusion switch (optional)
Mechanical	 Raven black color; metal case 6.9"W x 18.1"D x 18.8"H (with handle) 175mm W x 460mm D x 478mm H 38.5 lb (17.5kg) max configuration 31-liter
Expansion slots	Slot 1: full-length, full-height, PCle 3.0 x16** (near CPU) Slot 2: full-length, full-height, PCle 3.0 x16 (x4 electrical) Slot 3: full-length, full-height, PCle 3.0 x16** Slot 4: full-length, full-height, 32-bit PCl 2.3 Slot 5: half-length, full-height, PCle 2.0 x4 * Adapters >75W use auxiliary power connector(s) from PSU
Serviceability	Removable handle on top front Toolless side cover removal Toolless disk and optical drive removal Toolless adapter retention Illuminated front icons Rack shelf support

ThinkStation S30 Platform Specifications - IV of IV

ISV certifications	Please visit <u>www.lenovo.com/support/ISV</u>
Environmental certifications	GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating
Warranty	1 or 3-year limited warranty, parts and labor
ThinkVantage®	Supports ThinkVantage® technologies
Preloaded operating systems	One the following, depending on model: Windows® 7 Professional 64 Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Windows 8 Pro 64-bit
Preloaded applications (only some listed)	For Windows 7 models: Rescue and Recovery® Norton® Internet Security (30 days of virus defi nitions) Adobe® Reader® Adobe Flash® Player Microsoft® Office preloaded; purchase product key to activate Corel® WinDVD® (DVD±RW model(s)) Ulead® DVD MovieFactory® (DVD±RW model(s)) For Windows 8 models: Evernote® Norton Internet Security (30 days of virus definitions) Norton Studio Skype™ Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW model(s)) Cyberlink PowerProducer (DVD±RW model(s))

ThinkStation S30 (4352) - TopSeller (June 2013)

Type- model ¹	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf	Hard drive(s) ²	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-170	E5-1607 (4C/3GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-180	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-190	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-210	E5-1603 (4C/2.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-220	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx2	SAS	No	No	2x146GB 2.5" SAS	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

- 3-year limited warranty
 With new MT type 4351/4352 and beyond, ThinkStation S30 introduces new updates to improve the functionality and usability:
 (These new features are not supported on 0568, 0569, and 0606 MT models)
 Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
 New TPM chip: STMicroelectronics ST33TPM12LPC
 Two front USB 2.0 ports upgrade to USB3.0

 TouthinkStation S30 Platform Specifications sheet

- For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications sheet

Chipset	Intel C602 Chipset	Tower
Processor	One LGA2011 socket, supports one processor from Intel Xeon E5-2600 and E5-1600 family, integrated 4-channel DDR3 memory controller	Raven black color; metal case 6.9"W x 18.1"D x 18.8"H (with handle)
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Additional memory disclaimers	 Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported 	Removable handle on top front Toolless side cover removal Toolless disk and optical drive removal Toolless adapter retention
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	Illuminated front icons Rack shelf support
Onboard drive controllers	 Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support 	Bay 1-2: 5.25", 1.6" high, external, for optical Bay 3: 3.5", 1" high, external, for media reader Bay 4-6: 3.5", 1" high, internal, for hard drive
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	Slot 1: full-length, full-height, PCIe 3.0 x16** (near CPU) Slot 2: full-length, full-height, PCIe 3.0 x16 (x4 electrical)
Discrete drive controller (opt)	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s,RAID 0, 1 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support	Slot 3: full-length, full-height, PCIe 3.0 x16** Slot 4: full-length, full-height, 32-bit PCI 2.3 Slot 5: half-length, full-height, PCIe 2.0 x4 *** Adapters > 75W use auxiliary power connector(s)
Hard drives	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: SOlid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models	SECURITY • Security chip (see information on left)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	Side cover lock (ships with two identical keys)
Media reader (opt)	Optional media card reader on selected models	Padlock loop (in rear for opt padlock; Padlock problem of padlock; Padlock problem o
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	padlock prohibits side cover removal) Security slot (in rear for optional
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	Kensington® Microsaver® cable; prohibits side cover removal)
IEEE 1394 adptr	None. Optional FireWire PCIe adapter on selected models,	Power-on password
(opt)	1394a-2000, 400Mbps, two 6-pin ports on rear	Administrator password Boot sequence control
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	Boot sequence control Boot without keyboard, mouse, diskette
Speaker	Internal speaker for business audio	Serial port I/O enable/disable
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	USB 2.0 ports enable/disable individually
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	USB 3.0 ports enable/disable concurrently Chaosis intrusion switch on colorad model(c)
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	Chassis intrusion switch on selected model(s)
Mouse	Optical Wheel Mouse (USB connector), black	Intel AMT
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	Intel Active Management Technology 8
systems	One the following, depending on model: • Windows 7 Professional 64	ISV certifications Please visit <u>www.lenovo.com/support/ISV</u>
(ÓS)	 Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Windows 8 Pro 64-bit 	Environmental certifications GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating
		Supports ThinkVantage® technologies

Model in italics shows that this is a Global Model
 The SSD drives in italics must be plugged into red or orange SATA connectors

ThinkStation S30 (4352) - TopSeller (June 2013) - II

Type- model ¹	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) ²	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-23G	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL*, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-24G	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-25G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-26G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x2TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-27G	E5-1660 (6C/3.3GHz/15MB/1600)	1600MHz RDIMM	4GBx3	No	No	No	2x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K5000 (4GB, 1xDVI-I DL, 1xDVI-D DL, 2xDP, 122W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

- 3-year limited warranty
 With new MT type 4351/4352 and beyond, ThinkStation S30 introduces new updates to improve the functionality and usability:
 (These new features are not supported on 0568, 0569, and 0606 MT models)
 Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
 New TPM chip: STMicroelectronics ST33TPM12LPC
 Two front USB 2.0 ports upgrade to USB3.0

 TouthinkStation S30 Platform Specifications sheet
- For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications sheet

Chipset	Intel C602 Chipset	Tower
Processor	One LGA2011 socket, supports one processor from Intel Xeon E5-2600 and E5-1600 family, integrated 4-channel DDR3 memory controller	Raven black color; metal case 6.9"W x 18.1"D x 18.8"H (with handle)
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Additional memory disclaimers	 Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported 	Removable handle on top front Toolless side cover removal Toolless disk and optical drive removal Toolless adapter retention
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	Illuminated front icons Rack shelf support
Onboard drive controllers	 Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support 	Bay 1-2: 5.25", 1.6" high, external, for optical Bay 3: 3.5", 1" high, external, for media reader Bay 4-6: 3.5", 1" high, internal, for hard drive
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	Slot 1: full-length, full-height, PCIe 3.0 x16** (near CPU) Slot 2: full-length, full-height, PCIe 3.0 x16 (x4 electrical)
Discrete drive controller (opt)	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s,RAID 0, 1 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support	Slot 3: full-length, full-height, PCIe 3.0 x16** Slot 4: full-length, full-height, 32-bit PCI 2.3 Slot 5: half-length, full-height, PCIe 2.0 x4 ** Adapters > 75W use auxiliary power connector(s)
Hard drives	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models	SECURITY • Security chip (see information on left)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	Side cover lock (ships with two identical keys) Padlack loop (in year for ant padlack)
Media reader (opt)	Optional media card reader on selected models	Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	Security slot (in rear for optional
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	Kensington® Microsaver® cable; prohibits side cover removal)
IEEE 1394 adptr (opt) Audio	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear High Definition (HD) Audio, Realtek® ALC662 codec	Power-on password Administrator password Boot sequence control
Speaker	Internal speaker for business audio	Boot without keyboard, mouse, diskette Social next I/O analyte disable.
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	Serial port I/O énable/disable USB 2.0 ports enable/disable individually
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	USB 3.0 ports enable/disable concurrently
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	Chassis intrusion switch on selected model(s)
Mouse	Optical Wheel Mouse (USB connector), black	Intel AMT
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	Intel Active Management Technology 8
Preloaded operating systems (OS)		ISV certifications Please visit <u>www.lenovo.com/support/ISV</u> Environmental certifications GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating
		Supports ThinkVantage® technologies

Model in italics shows that this is a Global Model
 The SSD drives in italics must be plugged into red or orange SATA connectors

ThinkStation S30 (4352) - TopSeller (June 2013) - III

Type- model ¹	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf	Hard drive(s) ²	Optical	Media reader	Graphics adapter(s) and GPU computing		Chassis intrusion switch	Preloaded OS
4352 29G	(1)	1600MHz	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW		1xQuadro K2000D (2GB, 1xDVI-I DL*, 1xDVI-D DL, 1xmini-DP, 51W)		Switch	Win7 Pro64 (Downgrade from Win8)
4352-29G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz RDIMM	4GBx2	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-31G	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	2x180GB 2.5" SSD	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-32G	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x240GB 2.5" SSD	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-33G	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x128GB 2.5" SSD	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

- 3-year limited warranty
 With new MT type 4351/4352 and beyond, ThinkStation S30 introduces new updates to improve the functionality and usability:
 (These new features are not supported on 0568, 0569, and 0606 MT models)

 Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
 New TPM chip: STMicroelectronics ST33TPM12LPC
 Two front USB 2.0 ports upgrade to USB3.0

 For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications

Chipset	Intel C602 Chipset	Tower
Processor	One LGA2011 socket, supports one processor from Intel Xeon E5-2600 and E5-1600 family, integrated 4-channel DDR3 memory controller	Raven black color; metal case 6.9"W x 18.1"D x 18.8"H (with handle)
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Additional memory disclaimers	 Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported 	Removable handle on top front 1 disk 5 disk 6 disk 7 toolless adapter retention
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	Illuminated front icons Rack shelf support
Onboard drive controllers	 Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support 	Bay 1-2: 5.25", 1.6" high, external, for optical Bay 3: 3.5", 1" high, external, for media reader Bay 4-6: 3.5", 1" high, internal, for hard drive
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	Slot 1: full-length, full-height, PCle 3.0 x16** (near CPU) Slot 2: full-length, full-height, PCle 3.0 x16 (x4 electrical)
Discrete drive controller (opt)	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s,RAID 0, 1 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support	Slot 3: full-length, full-height, PCIe 3.0 x16** Slot 4: full-length, full-height, 32-bit PCI 2.3 Slot 5: half-length, full-height, PCIe 2.0 x4 ** Adapters > 75W use auxiliary power connector(s)
Hard drives	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: SOlid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models	SECURITY Security chip (see information on left)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	Side cover lock (ships with two identical keys)
Media reader (opt)	Optional media card reader on selected models	Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	Security slot (in rear for optional
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	Kensington® Microsaver® cable; prohibits side cover removal)
IEEE 1394 adptr	None. Optional FireWire PCIe adapter on selected models,	Power-on password
(opt)	1394a-2000, 400Mbps, two 6-pin ports on rear	Administrator password Boot sequence control
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	Boot sequence control Boot without keyboard, mouse, diskette
Speaker	Internal speaker for business audio	Serial port I/O enable/disable
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	USB 2.0 ports enable/disable individually
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	USB 3.0 ports enable/disable concurrently
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	Chassis intrusion switch on selected model(s)
Mouse	Optical Wheel Mouse (USB connector), black	Intel AMT
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	Intel Active Management Technology 8
Preloaded operating systems	One the following, depending on model: Windows 7 Professional 64	ISV certifications Please visit <u>www.lenovo.com/support/ISV</u>
(ÓS)	Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Windows 8 Pro 64-bit	Environmental certifications GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating
		Supports ThinkVantage® technologies

² The SSD drives in italics must be plugged into red or orange SATA connectors

ThinkStation S30 (4352) - TopSeller (June 2013) - IV

Type-		Memory	Memory	Upgrade ROM for onboard drive	Discrete drive	Pre-conf	Hard		Media	Graphics adapter(s) and GPU	1394	Chassis intrusion	Preloaded
model ¹	Processor(s)	(MHz/type)	DIMMs	controller	controller	RAID	drive(s) ²	Optical	reader	computing	adptr	switch	os
4352-34G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x3TB 3.5" SATA	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-35G	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x250GB 3.5" SATA	DVD±RW	29-in-1	1xQuadro 410 (512MB, 1xDVI-I DL*, 1xDP, 37W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-36G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-37G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 2.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-38G	E5-2603 (4C/1.8GHz/10MB/1066)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

- 3-year limited warranty
 With new MT type 4351/4352 and beyond, ThinkStation S30 introduces new updates to improve the functionality and usability:
 (These new features are not supported on 0568, 0569, and 0606 MT models)
 Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
 New TPM chip: STMicroelectronics ST33TPM12LPC
 Two front USB 2.0 ports upgrade to USB3.0

 TouthinkStation S30 Platform Specifications sheet
- For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications sheet

Chipset	Intel C602 Chipset	Tower				
'	One LGA2011 socket, supports one processor from Intel Xeon E5-2600	Raven black color; metal case				
Processor	and E5-1600 family, integrated 4-channel DDR3 memory controller	• 6.9"W x 18.1"D x 18.8"H (with handle)				
	UDIMM or RDIMM, ECC, DDR3, 4-channel capable,	10ptical • 175mm W x 460mm D x 478mm H				
Memory	eight 240-pin DIMM sockets,	2optical 38.5 lb (17.5kg) max configuration				
	64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	• 31-liter • Removable handle on top front				
Additional	Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs	Toolloop side sover removal				
memory disclaimers	Mixing of RDIMM and UDIMM is not supported	Toolless side cover removal Toolless disk and optical drive removal				
		Toolless adapter retention				
Graphics adapters	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus	Illuminated front icons				
and GPU computing	technology	Rack shelf support				
	Four SATA connectors via integrated Advanced Host Controller	-				
	Interface (AHCI) in chipset, two SATA 6.0Gb/s (red),					
Onboard drive	two SATA 3.0Gb/s (orange), RAID 0, 1 support;	Boy 1 0: E 05" 1 6" bigh sytemal for entirel				
controllers	Three SATA connectors via integrated Storage Controller Unit (SCU)	Bay 1-2: 5.25", 1.6" high, external, for optical Bay 3: 3.5", 1" high, external, for media reader				
	in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support	Bay 4-6: 3.5", 1" high, internal, for hard drive				
Upgrade ROM	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors					
for onboard drive	on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s,	Slot 1: full-length, full-height, PCIe 3.0 x16** (near CPU)				
controllers (opt)	RAID 0, 1 support	Slot 2: full-length, full-height, PCle 3.0 x16 (x4 electrical)				
Dia anata daina	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s,RAID 0, 1 support	Slot 3: full-length, full-height, PCIe 3.0 x16** Slot 4: full-length, full-height, 32-bit PCI 2.3				
Discrete drive controller (opt)	optional upgrade key for RAID 5 support	Slot 5: half-length, full-height, PCIe 2.0 x4				
Controller (opt)	LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support	** Adapters >75W use auxiliary power connector(s)				
	3.5" SATA: SATA 6.0Gb/s, 7200 rpm	from PSU				
	2.5" SATA: SATA 6.0Gb/s, 10000 rpm					
Hard drives	3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm	SECURITY				
	2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s,	Security chip (see information on left)				
Ontinal	OPAL-capable on selected models Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	Side cover lock (ships with two identical keys)				
Optical	11 2 2	Padlock loop (in rear for opt padlock;				
Media reader (opt)	Optional media card reader on selected models	padlock prohibits side cover removal)				
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	Security slot (in rear for optional				
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	Kensington® Microsaver® cable; prohibits side cover removal)				
IEEE 1394 adptr	None. Optional FireWire PCIe adapter on selected models.	Power-on password				
(opt)	1394a-2000, 400Mbps, two 6-pin ports on rear	Administrator password				
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	Boot sequence control				
Speaker	Internal speaker for business audio	Boot without keyboard, mouse, diskette Social part I/O applied disable				
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	Serial port I/O enable/disable USB 2.0 ports enable/disable individually				
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	USB 3.0 ports enable/disable concurrently				
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	Chassis intrusion switch on selected model(s)				
Mouse	Optical Wheel Mouse (USB connector), black	Intel AMT				
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal,	Intel Active Management Technology 8				
	Climate Savers® Computing Gold, 80 PLUS® Gold qualified	ISV certifications				
	One the following, depending on model:					
systems	Windows 7 Professional 64 Windows 7 Professional 64 preinstalled	Please visit <u>www.lenovo.com/support/ISV</u>				
(OS)	through downgrade rights in Windows 8 Pro 64-bit	Environmental certifications				
	Windows 8 Pro 64-bit	GREENGUARD® certified				
		RoHS-compliant EPEAT™ Gold rating				
		Supports ThinkVantage® technologies				

Model in italics shows that this is a Global Model
 The SSD drives in italics must be plugged into red or orange SATA connectors

ThinkStation S30 (4352) - TopSeller (June 2013) - V

	Type- nodel ¹	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s)²	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
43	52-39G	E5-2609 (4C/2.4GHz/10MB/1066)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL*, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
43	52-41G	E5-2643 (4C/3.3GHz/10MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No		Win7 Pro64 (Downgrade from Win8)
43	52-42G	E5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
43	52-43G	E5-2630 (6C/2.3GHz/15MB/1333)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No		Win7 Pro64 (Downgrade from Win8)
43	52-44G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

- 3-year limited warranty
 With new MT type 4351/4352 and beyond, ThinkStation S30 introduces new updates to improve the functionality and usability:
 (These new features are not supported on 0568, 0569, and 0606 MT models)
 Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
 New TPM chip: STMicroelectronics ST33TPM12LPC
 Two front USB 2.0 ports upgrade to USB3.0

 TouthinkStation S30 Platform Specifications sheet
- For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications sheet

Chipset	Intel C602 Chipset	Tower
Processor	One LGA2011 socket, supports one processor from Intel Xeon E5-2600 and E5-1600 family, integrated 4-channel DDR3 memory controller	Raven black color; metal case 6.9"W x 18.1"D x 18.8"H (with handle)
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	10ptical 20ptical 38.5 lb (17.5kg) max configuration 31-liter
Additional memory disclaimers	 Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported 	Removable handle on top front 1 disk 5 disk 6 disk 7 toolless adapter retention
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	Illuminated front icons Rack shelf support
Onboard drive controllers	 Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support 	Bay 1-2: 5.25", 1.6" high, external, for optical Bay 3: 3.5", 1" high, external, for media reader Bay 4-6: 3.5", 1" high, internal, for hard drive
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	Slot 1: full-length, full-height, PCle 3.0 x16** (near CPU) Slot 2: full-length, full-height, PCle 3.0 x16 (x4 electrical)
Discrete drive controller (opt)	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s,RAID 0, 1 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support	Slot 3: full-length, full-height, PCIe 3.0 x16** Slot 4: full-length, full-height, 32-bit PCI 2.3 Slot 5: half-length, full-height, PCIe 2.0 x4 ** Adapters > 75W use auxiliary power connector(s)
Hard drives	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models	SECURITY • Security chip (see information on left)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	Side cover lock (ships with two identical keys)
Media reader (opt)	Optional media card reader on selected models	Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	Security slot (in rear for optional
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	Kensington® Microsaver® cable; prohibits side cover removal)
IEEE 1394 adptr	None. Optional FireWire PCIe adapter on selected models,	Power-on password
(opt)	1394a-2000, 400Mbps, two 6-pin ports on rear	Administrator password Boot sequence control
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	Boot sequence control Boot without keyboard, mouse, diskette
Speaker	Internal speaker for business audio	Serial port I/O enable/disable
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	USB 2.0 ports enable/disable individually
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	USB 3.0 ports enable/disable concurrently Chassis intrusion switch an extend model(s)
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	Chassis intrusion switch on selected model(s)
Mouse	Optical Wheel Mouse (USB connector), black	Intel AMT
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	Intel Active Management Technology 8
systems	One the following, depending on model: • Windows 7 Professional 64	ISV certifications Please visit <u>www.lenovo.com/support/ISV</u>
(ÓS)	 Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Windows 8 Pro 64-bit 	Environmental certifications GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating
		Supports ThinkVantage® technologies

Model in italics shows that this is a Global Model
 The SSD drives in italics must be plugged into red or orange SATA connectors

ThinkStation S30 (4352) - TopSeller (June 2013) - VI

Type- model ¹	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s)²	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-45G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL*, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-46G	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-47G	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000D (2GB, 1xDVI-I DL, 1xDVI-D DL, 1xmini-DP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-48G	E5-1660 (6C/3.3GHz/15MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K5000 (4GB, 1xDVI-I DL, 1xDVI-D DL, 2xDP, 122W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-49G	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1TB 3.5" SATA+ 128GB 2.5" SSD	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

- For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications sheet

Chipset	Intel C602 Chipset	Tower
Processor	One LGA2011 socket, supports one processor from Intel Xeon E5-2600	Raven black color; metal case
	and E5-1600 family, integrated 4-channel DDR3 memory controller UDIMM or RDIMM, ECC, DDR3, 4-channel capable,	6.9"W x 18.1"D x 18.8"H (with handle) 175mm W x 460mm D x 478mm H
Memory	eight 240-pin DIMM sockets,	2optical • 38.5 lb (17.5kg) max configuration
	64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	• 31-liter
Additional	Actual memory operating speed depends on processor memory Actual memory operating speed depends on processor memory Actual memory operating speed depends on processor memory	Removable handle on top front Toolless side cover removal
memory disclaimers	controller speed, installed memory speed, and quantity of memory DIMMs • Mixing of RDIMM and UDIMM is not supported	Toolless side cover removal Toolless disk and optical drive removal
	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing	Toolless adapter retention
Graphics adapters and GPU computing	I A A A A A A A A A A A A A A A A A A A	Illuminated front icons Rack shelf support
	Four SATA connectors via integrated Advanced Host Controller	
Onboard drive	Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support;	
controllers	Three SATA connectors via integrated Storage Controller Unit (SCU)	Bay 1-2: 5.25", 1.6" high, external, for optical Bay 3: 3.5", 1" high, external, for media reader
	in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support	Bay 4-6: 3.5", 1" high, internal, for hard drive
Upgrade ROM	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors	
for onboard drive controllers (opt)	on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	Slot 1: full-length, full-height, PCIe 3.0 x16** (near CPU) Slot 2: full-length, full-height, PCIe 3.0 x16 (x4 electrical)
CONTROLLO (OPT)	, 11	Slot 3: full-length, full-height, PCle 3.0 x16**
Discrete drive	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s,RAID 0, 1 support	Slot 4: full-length, full-height, 32-bit PCI 2.3
controller (opt)	optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support	Slot 5: half-length, full-height, PCle 2.0 x4 ** Adapters >75W use auxiliary power connector(s)
	3.5" SATA: SATA 6.0Gb/s, 7200 rpm	from PSU
	2.5" SATA: SATA 6.0Gb/s, 10000 rpm	
Hard drives	3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm	SECURITY
	2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models	Security chip (see information on left)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	Side cover lock (ships with two identical keys)
Media reader (opt)	Optional media card reader on selected models	Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	Security slot (in rear for optional
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45),	Kensington® Microsaver® cable;
	three analog audio ports (line-in, line-out, mic-in)	prohibits side cover removal) • Power-on password
IEEE 1394 adptr (opt)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear	Administrator password
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	Boot sequence control
Speaker	Internal speaker for business audio	Boot without keyboard, mouse, diskette Social next I/O analyte discale.
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	Serial port I/O enable/disable USB 2.0 ports enable/disable individually
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	USB 3.0 ports enable/disable concurrently
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	Chassis intrusion switch on selected model(s)
Mouse	Optical Wheel Mouse (USB connector), black	Intel AMT
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	Intel Active Management Technology 8
Preloaded operating	One the following, depending on model:	ISV certifications
systems	Windows 7 Professional 64	Please visit <u>www.lenovo.com/support/ISV</u>
(ÓS)	Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit	Environmental certifications
	Windows 8 Pro 64-bit	GREENGUARD® certified
		RoHS-compliant EPEAT™ Gold rating
		Supports ThinkVantage® technologies

¹ Model in italics shows that this is a Global Model 2 The SSD drives in italics must be plugged into red or orange SATA connectors

ThinkStation S30 (4352) - TopSeller (June 2013) - VII

Type- model ¹	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s)²	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-51G		1600MHz UDIMM	4GBx2	No	No	No	1TB 3.5" SATA+ 128GB 2.5" SSD	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL*, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-82G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx3	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro 2000 (1GB, 1xDVI-I DL, 2xDP, 62W)	No	Switch	Win7 Pro64
4352-83G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx3	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64
4352-84G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx3	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-85G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx5	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

- 3-year limited warranty
 With new MT type 4351/4352 and beyond, ThinkStation S30 introduces new updates to improve the functionality and usability:
 (These new features are not supported on 0568, 0569, and 0606 MT models)
 Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
 New TPM chip: STMicroelectronics ST33TPM12LPC
 Two front USB 2.0 ports upgrade to USB3.0

 TouthinkStation S30 Platform Specifications sheet
- For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications sheet

Chipset	Intel C602 Chipset	Tower
-	One LGA2011 socket, supports one processor from Intel Xeon E5-2600	Raven black color; metal case
Processor	and E5-1600 family, integrated 4-channel DDR3 memory controller	• 6.9"W x 18.1"D x 18.8"H (with handle)
	UDIMM or RDIMM, ECC, DDR3, 4-channel capable,	175mm W x 460mm D x 478mm H
Memory	eight 240-pin DIMM sockets,	2optical 38.5 lb (17.5kg) max configuration
A 1 100	64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	• 31-liter • Removable handle on top front
Additional memory	Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs	Toollogs side cover removal
disclaimers	Mixing of RDIMM and UDIMM is not supported	4 disk 5 disk Toolless disk and optical drive removal
	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing	Toolless adapter retention
Graphics adapters	The second secon	Illuminated front icons Pack shelf support
and GPU computing	technology	Rack shelf support
	Four SATA connectors via integrated Advanced Host Controller	
Onboard drive	Interface (AHCI) in chipset, two SATA 6.0Gb/s (red).	
controllers	two SATA 3.0Gb/s (orange), RAID 0, 1 support;	Bay 1-2: 5.25", 1.6" high, external, for optical
Controllers	Three SATA connectors via integrated Storage Controller Unit (SCU)	Bay 3: 3.5", 1" high, external, for media reader
	in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support	Bay 4-6: 3.5", 1" high, internal, for hard drive
Upgrade ROM	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors	01.14 (11.1 11.1 11.1 11.1 11.1 11.1 11.
for onboard drive controllers (opt)	on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	Slot 1: full-length, full-height, PCIe 3.0 x16** (near CPU) Slot 2: full-length, full-height, PCIe 3.0 x16 (x4 electrical)
controllers (opt)	7 11	Slot 3: full-length, full-height, PCIe 3.0 x16**
Discrete drive	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s,RAID 0, 1 support	Slot 4: full-length, full-height, 32-bit PCI 2.3
controller (opt)	optional upgrade key for RAID 5 support	Slot 5: half-length, full-height, PCIe 2.0 x4
(-1-7	LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support	** Adapters >75W use auxiliary power connector(s)
	3.5" SATA: SATA 6.0Gb/s, 7200 rpm	from PSU
Ula nali aliabi sa a	2.5" SATA: SATA 6.0Gb/s, 10000 rpm	
Hard drives	3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s,	SECURITY
	OPAL-capable on selected models	Security chip (see information on left)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	Side cover lock (ships with two identical keys)
Media reader (opt)	Optional media card reader on selected models	Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	Security slot (in rear for optional
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45),	Kensington® Microsaver® cable;
•	three analog audio ports (line-in, line-out, mic-in)	prohibits side cover removal)
IEEE 1394 adptr	None. Optional FireWire PCle adapter on selected models,	Power-on password Administrator password
(opt)	1394a-2000, 400Mbps, two 6-pin ports on rear	Boot sequence control
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	Boot without keyboard, mouse, diskette
Speaker Onboard Ethernet	Internal speaker for business audio	Serial port I/O enable/disable
Security chip	One onboard gigabit ethernet, Intel 82579 STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	USB 2.0 ports enable/disable individually USB 3.0 ports enable/disable enable/representing
	, ,	USB 3.0 ports enable/disable concurrently Chassis intrusion switch on selected model(s)
Keyboard Mouse	Preferred Pro USB Keyboard (USB connector), 104-key, black Optical Wheel Mouse (USB connector), black	
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal,	Intel AMT
1 Ower supply	Climate Savers® Computing Gold, 80 PLUS® Gold qualified	Intel Active Management Technology 8
Preloaded operating	One the following, depending on model:	ISV certifications
systems	Windows 7 Professional 64	Please visit <u>www.lenovo.com/support/ISV</u>
(ÓS)	Windows 7 Professional 64 preinstalled	Environmental certifications
	through downgrade rights in Windows 8 Pro 64-bit Windows 8 Pro 64-bit	GREENGUARD® certified
	• WIIIUUWS O FIU 04-DIL	RoHS-compliant
		EPEAT™ Gold rating
		Supports ThinkVantage® technologies

Model in italics shows that this is a Global Model
 The SSD drives in italics must be plugged into red or orange SATA connectors

ThinkStation S30 (4352) - TopSeller (June 2013) - VIII

Type- model ¹	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s)²	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-86G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx5	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL*, 2xDP, 51W)	No	Switch	Win7 Pro64
4352-87G	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx5	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro 2000 (1GB, 1xDVI-I DL, 2xDP, 62W)	No	Switch	Win7 Pro64

- 3-year limited warranty
 With new MT type 4351/4352 and beyond, ThinkStation S30 introduces new updates to improve the functionality and usability: (These new features are not supported on 0568, 0569, and 0606 MT models)

 Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7

 New TPM chip: STMicroelectronics ST33TPM12LPC

 Two front USB 2.0 ports upgrade to USB3.0
- For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications sheet

Chipset	Intel C602 Chipset	Tower
Processor	One LGA2011 socket, supports one processor from Intel Xeon E5-2600 and E5-1600 family, integrated 4-channel DDR3 memory controller	Raven black color; metal case 6.9"W x 18.1"D x 18.8"H (with handle)
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	10ptical 20ptical 38.5 lb (17.5kg) max configuration 31-liter
Additional memory disclaimers	Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported	Removable handle on top front 4 disk 5 disk 6 disk 7 Toolless adapter retention
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	Illuminated front icons Rack shelf support
Onboard drive controllers	 Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support 	Bay 1-2: 5.25", 1.6" high, external, for optical Bay 3: 3.5", 1" high, external, for media reader Bay 4-6: 3.5", 1" high, internal, for hard drive
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	Slot 1: full-length, full-height, PCIe 3.0 x16** (near CPU) Slot 2: full-length, full-height, PCIe 3.0 x16 (x4 electrical)
Discrete drive controller (opt)	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s,RAID 0, 1 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support	Slot 3: full-length, full-height, PCle 3.0 x16** Slot 4: full-length, full-height, 32-bit PCl 2.3 Slot 5: half-length, full-height, PCle 2.0 x4 ** Adapters > 75W use auxiliary power connector(s)
Hard drives	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models	SECURITY • Security chip (see information on left)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	Side cover lock (ships with two identical keys)
Media reader (opt)	Optional media card reader on selected models	Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	Security slot (in rear for optional
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	Kensington® Microsaver® cable; prohibits side cover removal)
IEEE 1394 adptr	None. Optional FireWire PCIe adapter on selected models,	Power-on password
(opt)	1394a-2000, 400Mbps, two 6-pin ports on rear	Administrator password Boot sequence control
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	Boot sequence control Boot without keyboard, mouse, diskette
Speaker	Internal speaker for business audio	Serial port I/O enable/disable
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	USB 2.0 ports enable/disable individually
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	USB 3.0 ports enable/disable concurrently
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	Chassis intrusion switch on selected model(s)
Mouse	Optical Wheel Mouse (USB connector), black	Intel AMT
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	Intel Active Management Technology 8
Preloaded operating	One the following, depending on model:	ISV certifications
systems	Windows 7 Professional 64	Please visit <u>www.lenovo.com/support/ISV</u>
(ÔS)	 Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Windows 8 Pro 64-bit 	Environmental certifications GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating
		Supports ThinkVantage® technologies

Model in italics shows that this is a Global Model
 The SSD drives in italics must be plugged into red or orange SATA connectors

ThinkStation S30 (4352) - TopSeller (September 2013)

Туре-	Processor(s)	Memory	Memory	Upgrade ROM for onboard drive	Pre-conf			29-in-1 Media	Graphics adapter(s) and GPU	1394	Chassis intrusion	Preloaded
model*	- Xeon E5 Family	(MHz/type)	DIMMs	controller	RAID	Hard drive(s)**	Optical	reader	computing***	adptr	switch	os
4352-A1G	E5-1607 v2 (4C/3GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-A3G	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-A5G	E5-1603 (4C/2.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-A6G	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-A7G	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-A8G	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-A9G	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-B1G	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x240GB 2.5" SSD	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

Model in italics shows that this is a Global Model

- · 3-year limited warranty
- For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications sheet

Chipset	Intel C602 Chipset	Γ
Intel AMT	Intel Active Management Technology 8 supported	1
Processor	One LGA2011 socket, integrated 4-channel DDR3 memory controller	1
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	
Additional memory disclaimers	Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported	
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	
Onboard drive controllers	Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support	
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	
Discrete drive controller (opt)	None	
Hard drives	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models	_
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	1
Media reader (opt)	Optional media card reader on selected models	
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	
IEEE 1394 adptr (opt) Audio	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	1
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	1
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	1_
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)	1
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal,	1
	Climate Savers® Computing Gold, 80 PLUS® Gold qualified	

Tower



- Raven black color; metal case
- 6.9"W x 18.1"D x 18.8"H (with handle)
 175mm W x 460mm D x 478mm H
- 38.5 lb (17.5kg) max configuration
- 31-liter
- · Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal
- Toolless adapter retention
- Illuminated front icons
- · Rack shelf support

Bay 1-2: 5.25", 1.6" high, external, Bay 3: 3.5", 1" high, external, Bay 4-6: 3.5", 1" high, internal, for optical for media reader for hard drive

Slot 1: full-length, full-height, PCIe 3.0 x16** (near CPU) Slot 2: full-length, full-height, PCle 3.0 x16 (x4 electrical) Slot 3: full-length, full-height, PCle 3.0 x16**

Slot 4: full-length, full-height, 32-bit PCI 2.3

Slot 5: half-length, full-height, PCIe 2.0 x4 Adapters >75W use auxiliary power connector(s) from PSU

SECURITY

- Security chip (see information on left)
- Side cover lock (ships with two identical keys)
- Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)
- Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)
- Power-on password
- Administrator password
- Boot sequence control
- Boot without keyboard, mouse, diskette
- Serial port I/O énable/disable
- USB 2.0 ports enable/disable individually
- USB 3.0 ports enable/disable concurrently
- Chassis intrusion switch on selected model(s)

ISV certifications

Please visit <u>www.lenovo.com/support/ISV</u>

Environmental certifications

REENGUARD® certified oHS-compliant PEAT™ Gold rating

ThinkStation S30 (4352) - TopSeller (September 2013) - II

Type- model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s) ^{···}	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-B2G	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	4GBx2	SAS	No	1x146GB 2.5" SAS	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-B3G	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	4GBx2	No	No	1TB 3.5" SATA + 128GB 2.5" SSD	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-B4G	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x240GB 2.5" SSD	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-B5G	E5-1660 v2 (6C/3.7GHz/15MB/1866)	1600MHz UDIMM	4GBx2	No	No	1x3TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-B6G	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz RDIMM	4GBx2	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-B7G	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz RDIMM	4GBx2	SAS	No	1x146GB 2.5" SAS	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-G1G	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx2	No	No	1x1TB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-G2G	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz RDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

Model in italics shows that this is a Global Model

- · 3-year limited warranty
- For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications sheet

Chipset	Intel C602 Chipset	Tower
Intel AMT	Intel Active Management Technology 8 supported	
Processor	One LGA2011 socket, integrated 4-channel DDR3 memory controller	1 optic
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets,	2optic
•	64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	3 med
Additional memory disclaimers	 Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported 	4 disk 5 disk 6 disk
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	
Onboard drive controllers	 Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support 	Bay 1-2: Bay 3: Bay 4-6:
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	Slot 1: fu Slot 2: fu Slot 3: fu
Discrete drive controller (opt)	None	Slot 4: fu Slot 5: h
Hard drives	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models	** Adapte from Ps Security Side co Padlock
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	padlock
Media reader (opt)	Optional media card reader on selected models	Security Kensing
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	prohibit
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	Power- Adminis
IEEE 1394 adptr (opt)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear	Boot se Boot wi
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	Serial pUSB 2.
Speaker	Internal speaker for business audio	• USB 3.
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	Chassi
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)	Please vi
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	FIEASE VI
		GREENG RoHS-cor EPEAT™



- Raven black color; metal case
- 6.9"W x 18.1"D x 18.8"H (with handle)
 175mm W x 460mm D x 478mm H
- 38.5 lb (17.5kg) max configuration
- 31-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal
- Toolless adapter retention
- Illuminated front icons
- · Rack shelf support

5.25", 1.6" high, external, for optical 3.5", 3.5", 1" high, 1" high, external, for media reader internal, for hard drive

Ill-length, full-height, PCIe 3.0 x16** (near CPU) ill-length, full-height, PCle 3.0 x16 (x4 electrical) ill-length, full-height, PCle 3.0 x16**

Ill-length, full-height, 32-bit PCI 2.3

alf-length, full-height, PCIe 2.0 x4

rs >75W use auxiliary power connector(s)

SECURITY

- y chip (see information on left)
- ver lock (ships with two identical keys)
- loop (in rear for opt padlock; prohibits side cover removal)
- slot (in rear for optional gton® Microsaver® cable; s side cover removal)
- on password
- strator password
- quence control
- thout keyboard, mouse, diskette
- ort I/O enable/disable
- ports enable/disable individually D ports enable/disable concurrently
- s intrusion switch on selected model(s)

ISV certifications

sit <u>www.lenovo.com/support/ISV</u>

Environmental certifications

UARD® certified npliant Gold rating

ThinkStation S30 (4352) - TopSeller (March 2014)

Type- model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)"	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-M9G	E5-1620 v2 4C/3.7GHz/10MB/1866	1600MHz UDIMM	2GBx2	No	No	1x1TB 3.5" SATA	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8)
	E5-1650 v2 6C/3.5GHz/12MB/1866)	1600MHz UDIMM	2GBx2	No	No	1x1TB 3.5" SATA	DVD±RW	No	Open	No		Win7 Pro64 (Downgrade from Win8)

^{*} Model in italics shows that this is a Global Model ** The SSD drives in italics must be plugged into red or orange SATA connectors *** DL = Dual Link, SL = Single Link

- · 3-year limited warranty
- For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications sheet

Chipset	Intel C602 Chipset
Intel AMT	Intel Active Management Technology 8 supported
Processor	One LGA2011 socket, integrated 4-channel DDR3 memory controller
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)
Additional memory disclaimers	Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology
Onboard drive controllers	Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support
Discrete drive controller (opt)	None
	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface
Media reader (opt)	Optional media card reader on selected models
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45) three analog audio ports (line-in, line-out, mic-in)
IEEE 1394 adptr (opt)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker Speaker	Internal speaker for business audio
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified

er



- Raven black color; metal case
- 6.9"W x 18.1"D x 18.8"H (with handle)
 175mm W x 460mm D x 478mm H
- 38.5 lb (17.5kg) max configuration
- 31-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal
- Toolless adapter retention
- Illuminated front icons
- · Rack shelf support

1-2: 5.25", 1.6" high, external, for optical 3: 3.5", 4-6: 3.5", 1" high, 1" high, external, for media reader internal, for hard drive

1: full-length, full-height, PCIe 3.0 x16** (near CPU)

2: full-length, full-height, PCle 3.0 x16 (x4 electrical) 3: full-length, full-height, PCle 3.0 x16** 4: full-length, full-height, 32-bit PCI 2.3

5: half-length, full-height, PCle 2.0 x4 dapters >75W use auxiliary power connector(s)

om PSU

SECURITY

- curity chip (see information on left)
- e cover lock (ships with two identical keys)
- llock loop (in rear for opt padlock; llock prohibits side cover removal)
- curity slot (in rear for optional sington® Microsaver® cable; hibits side cover removal)
- ver-on password
- ninistrator password
- ot sequence control
- ot without keyboard, mouse, diskette
- ial port I/O enable/disable
- B 2.0 ports enable/disable individually B 3.0 ports enable/disable concurrently
- assis intrusion switch on selected model(s)

ISV certifications

se visit <u>www.lenovo.com/support/ISV</u>

Environmental certifications

NGUARD® certified -compliant T™ Gold rating

ThinkStation S30 (4352) - TopSeller (April 2014)

Type- model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)"	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-L4G	Xeon E5-1607 v2 4C/3GHz/10MB/1600MHz	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	Open	No		Win7 Pro64 (Downgrade from Win8.1)
	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1600MHz UDIMM	4GBx2	No	No	1x1TB 3.5" SATA	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4352-L6G	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1600MHz RDIMM	4GBx2	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 2GB/1xDVI-I DL/ 2xDP/51W	No		Win7 Pro64 (Downgrade from Win8.1)
4352-L7G	Xeon E5-1650 v2 6C/3.5GHz/12MB/1866MHz	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1600MHz UDIMM	2GBx2	No	No	1x1TB 3.5" SATA	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-N1G	Xeon E5-1650 v2 6C/3.5GHz/12MB/1866MHz	1600MHz UDIMM	2GBx2	No	No	1x1TB 3.5" SATA	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8)

- 3-year limited warranty
- For ThinkStation S30 Platform Specifications, please see <u>ThinkStation S30 Platform Specifications</u> sheet

Chipset	Intel C602 Chipset	Tower
Intel AMT	Intel Active Management Technology 8 supported	Raven black color; metal case
Processor	One LGA2011 socket, integrated 4-channel DDR3 memory controller	• 6.9"W x 18.1"D x 18.8"H (with handle)
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	1optical 2optical 3media 3media Removable handle on top front
Additional memory disclaimers	Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported	Toolless side cover removal Toolless disk and optical drive removal Toolless dapter retention
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	Illuminated front icons Rack shelf support
Onboard drive controllers	Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support	Bay 1-2: 5.25", 1.6" high, external, for optical Bay 3: 3.5", 1" high, external, for media reader Bay 4-6: 3.5", 1" high, internal, for hard drive
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	Slot 1: full-length, full-height, PCIe 3.0 x16** (near CPU) Slot 2: full-length, full-height, PCIe 3.0 x16 (x4 electrical) Slot 3: full-length, full-height, PCIe 3.0 x16**
Discrete drive controller (opt)	None	Slot 4: full-length, full-height, 32-bit PCI 2.3 Slot 5: half-length, full-height, PCIe 2.0 x4
Hard drives	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models	** Adapters > 75W use auxiliary power connector(s) from PSU SECURITY • Security chip (see information on left) • Side cover lock (ships with two identical keys) • Padlock loop (in rear for opt padlock;
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	padlock prohibits side cover removal) Security slot (in rear for optional
Media reader (opt)	Optional media card reader on selected models	Kensington® Microsaver® cable;
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	prohibits side cover removal)
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	Administrator password
IEEE 1394 adptr (opt)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear	Boot sequence control Boot without keyboard, mouse, diskette
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	Serial port I/O enable/disable USB 2.0 ports enable/disable individually
Speaker	Internal speaker for business audio	USB 3.0 ports enable/disable concurrently
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	Chassis intrusion switch on selected model(s)
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	Environmental certifications
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)	
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating
ISV certifications	Please visit <u>www.lenovo.com/support/ISV</u>	Supports ThinkVantage® technologies

ThinkStation S30 (4351) - June 2013

Type- model ¹	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf	Hard drive(s) ²	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4351-160	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx2	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K4000 (3GB, 1xDVI-I DL*, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-190	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-240	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64
4351-290	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-310	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64

- 3-year limited warranty
 With new MT type 4351/4352 and beyond, ThinkStation S30 introduces new updates to improve the functionality and usability:
 (These new features are not supported on 0568, 0569, and 0606 MT models)
 Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
 New TPM chip: STMicroelectronics ST33TPM12LPC
 Two front USB 2.0 ports upgrade to USB3.0

 TouthinkStation S30 Platform Specifications sheet
- For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications sheet

Chipset	Intel C602 Chipset	Tower
'	One LGA2011 socket, supports one processor from Intel Xeon E5-2600	1
Processor	and E5-1600 family, integrated 4-channel DDR3 memory controller	Raven black color; metal case 6.9"W x 18.1"D x 18.8"H (with handle)
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	10ptical 20ptical 3 media 3 media 3 1-liter 175mm W x 460mm D x 478mm H 38.5 lb (17.5kg) max configuration 31-liter
Additional memory disclaimers	Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported	Removable handle on top front Toolless side cover removal Toolless disk and optical drive removal Toolless adapter retention
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	Illuminated front icons Rack shelf support
Onboard drive controllers	 Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support 	Bay 1-2: 5.25", 1.6" high, external, for optical Bay 3: 3.5", 1" high, external, for media reader Bay 4-6: 3.5", 1" high, internal, for hard drive
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	Slot 1: full-length, full-height, PCIe 3.0 x16** (near CPU) Slot 2: full-length, full-height, PCIe 3.0 x16 (x4 electrical)
Discrete drive controller (opt)	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s,RAID 0, 1 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support	Slot 3: full-length, full-height, PCIe 3.0 x16** Slot 4: full-length, full-height, 32-bit PCI 2.3 Slot 5: half-length, full-height, PCIe 2.0 x4 ** Adapters > 75W use auxiliary power connector(s)
Hard drives	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models	SECURITY • Security chip (see information on left)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	Side cover lock (ships with two identical keys)
Media reader (opt)	Optional media card reader on selected models	Padlock loop (in rear for opt padlock;
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	padlock prohibits side cover removal) • Security slot (in rear for optional
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	Kensington [®] Microsaver [®] cable; prohibits side cover removal)
IEEE 1394 adptr	None. Optional FireWire PCIe adapter on selected models,	Power-on password
(opt)	1394a-2000, 400Mbps, two 6-pin ports on rear	Administrator password Pact aggreea control
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	Boot sequence control Boot without keyboard, mouse, diskette
Speaker	Internal speaker for business audio	Serial port I/O enable/disable
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	USB 2.0 ports enable/disable individually
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	USB 3.0 ports enable/disable concurrently
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	Chassis intrusion switch on selected model(s)
Mouse	Optical Wheel Mouse (USB connector), black	Intel AMT
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	Intel Active Management Technology 8
Preloaded operating	One the following, depending on model:	ISV certifications
systems	Windows 7 Professional 64	Please visit <u>www.lenovo.com/support/ISV</u>
(OS)	Windows 7 Professional 64 preinstalled	Environmental certifications
	through downgrade rights in Windows 8 Pro 64-bit • Windows 8 Pro 64-bit	GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating
		Supports ThinkVantage® technologies

Model in italics shows that this is a Global Model
 The SSD drives in italics must be plugged into red or orange SATA connectors

ThinkStation S30 (4351) - September 2013

Type- model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s) ^{··}	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4351-980	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

^{*} Model in italics shows that this is a Global Model ** The SSD drives in italics must be plugged into red or orange SATA connectors *** DL = Dual Link, SL = Single Link

- · 3-year limited warranty
- For ThinkStation S30 Platform Specifications, please see <u>ThinkStation S30 Platform Specifications</u> sheet

Chipset	Intel C602 Chipset	Tower
Intel AMT	Intel Active Management Technology 8 supported	
Processor	One LGA2011 socket, integrated 4-channel DDR3 memory controller	1 optical
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	2optical
Additional memory disclaimers	Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported	4 disk 5 disk 6 disk
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	
Onboard drive controllers	 Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support 	Bay 1-2: 5.2: Bay 3: 3.5 Bay 4-6: 3.5
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	Slot 1: full-len Slot 2: full-len Slot 3: full-len
Discrete drive controller (opt)	None	Slot 3: full-len Slot 4: full-len Slot 5: half-ler
Hard drives	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models	** Adapters > 75 l from PSU Security chip Side cover lo Padlock loop
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	padlock proh
Media reader (opt)	Optional media card reader on selected models	 Security slot Kensington®
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	prohibits side
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	Power-on paAdministrato
IEEE 1394 adptr (opt)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear	Boot sequenBoot withoutSerial port I/0
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	• USB 2.0 por
Speaker	Internal speaker for business audio	• USB 3.0 por
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	Chassis intru
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)	Please visit w
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	1 loade view M
	Cimiate Savers Computing Gold, 60 PLOS Gold qualified	GREENGUARI RoHS-compliar EPEAT™ Gold
		1



- Raven black color; metal case
- 6.9"W x 18.1"D x 18.8"H (with handle)
 175mm W x 460mm D x 478mm H
- 38.5 lb (17.5kg) max configuration
- 31-liter
- · Removable handle on top front
- Toolless side cover removal
- · Toolless disk and optical drive removal
- Toolless adapter retention
- · Illuminated front icons
- · Rack shelf support

1.6" high, external, for optical 1" high, 1" high, external, for media reader internal, for hard drive

ngth, full-height, PCIe 3.0 x16** (near CPU) ngth, full-height, PCle 3.0 x16 (x4 electrical) ngth, full-height, PCle 3.0 x16**

ngth, full-height, 32-bit PCI 2.3

ength, full-height, PCle 2.0 x4 5W use auxiliary power connector(s)

SECURITY

- p (see information on left)
- ock (ships with two identical keys)
- p (in rear for opt padlock; hibits side cover removal)
- t (in rear for optional Microsaver cable; de cover removal)
- assword
- or password
- nce control
- t keyboard, mouse, diskette
- /O enable/disable
- rts enable/disable individually
- rts enable/disable concurrently

rusion switch on selected model(s)

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Environmental certifications

ISV certifications

RD® certified ant d rating

ThinkStation S30 (4351) - October 2013

Type- model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)"	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4351-D1G	E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-D2G	E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-D6G	E5-1650 v2 6C/3.5GHz/12MB/1866MHz	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

- · 3-vear limited warranty
- For ThinkStation S30 Platform Specifications, please see ThinkStation S30 Platform Specifications sheet

Chipset	Intel C602 Chipset	຺຺
Intel AMT	Intel Active Management Technology 8 supported	
Processor	One LGA2011 socket, integrated 4-channel DDR3 memory controller	
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	
Additional memory disclaimers	Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported	
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	
Onboard drive controllers	Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support	
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	
Discrete drive controller (opt)	None	
Hard drives	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SAS/2.5" SAS: SAS 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models	•
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	1
Media reader (opt)	Optional media card reader on selected models	•
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	1
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	
IEEE 1394 adptr (opt)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	١,
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	-
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)	
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	_
		F

ower



- Raven black color; metal case
- 6.9"W x 18.1"D x 18.8"H (with handle)
 175mm W x 460mm D x 478mm H
- 38.5 lb (17.5kg) max configuration
- 31-liter
- · Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal
- Toolless adapter retention
- Illuminated front icons
- · Rack shelf support

ay 1-2: 5.25", 1.6" high, external, for optical ay 3: 3.5", ay 4-6: 3.5", 1" high, external, for media reader 1" hiğh, internal, for hard drive

lot 1: full-length, full-height, PCIe 3.0 x16** (near CPU)

lot 2: full-length, full-height, PCle 3.0 x16 (x4 electrical) lot 3: full-length, full-height, PCle 3.0 x16** lot 4: full-length, full-height, 32-bit PCI 2.3

lot 5: half-length, full-height, PCIe 2.0 x4

Adapters >75W use auxiliary power connector(s) from PSU

SECURITY

- Security chip (see information on left)
- Side cover lock (ships with two identical keys)
- Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)
- Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)
- Power-on password
- Administrator password
- Boot sequence control
- Boot without keyboard, mouse, diskette
- Serial port I/O enable/disable
- JSB 2.0 ports enable/disable individually JSB 3.0 ports enable/disable concurrently
- Chassis intrusion switch on selected model(s)

ISV certifications

ease visit <u>www.lenovo.com/support/ISV</u>

Environmental certifications

EENGUARD® certified HS-compliant EAT™ Gold rating

ThinkStation S30 (4351) - April 2014

Type- model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)"	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4351-J6G	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1600MHz UDIMM	4GBx2	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K600 1GB/1xDVI-I DL/ 1xDP/41W	No	Switch	Win7 Pro64
	Xeon E5-1603 4C/2.8GHz/10MB/1066MHz	1600MHz UDIMM	4GBx2	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 2GB/1xDVI-I DL/ 2xDP/51W	No	Switch	Win7 Pro64
4351-L6G	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1600MHz UDIMM	8GBx2	No	No	180GB 2.5" SSD +500GB 3.5" SATA	DVD±RW	Media	Open	No	Switch	Win7 Pro64

^{*} Model in italics shows that this is a Global Model ** The SSD drives in italics must be plugged into red or orange SATA connectors *** DL = Dual Link, SL = Single Link

- · 3-year limited warranty
- For ThinkStation S30 Platform Specifications, please see <u>ThinkStation S30 Platform Specifications</u> sheet

Chipset	Intel C602 Chipset	Tower
Intel AMT	Intel Active Management Technology 8 supported	Raven black color; metal case
Processor	One LGA2011 socket, integrated 4-channel DDR3 memory controller	• 6.9"W x 18.1"D x 18.8"H (with handle)
Memory	UDIMM or RDIMM, ECC, DDR3, 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Additional memory disclaimers	Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs Mixing of RDIMM and UDIMM is not supported	Toolless side cover removal Toolless disk and optical drive removal Toolless dapter retention
Graphics adapters and GPU computing	technology	Illuminated front icons Rack shelf support
Onboard drive controllers	 Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support; Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support 	Bay 1-2: 5.25", 1.6" high, external, for optical Bay 3: 3.5", 1" high, external, for media reader Bay 4-6: 3.5", 1" high, internal, for hard drive
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	Slot 1: full-length, full-height, PCIe 3.0 x16** (near CPU) Slot 2: full-length, full-height, PCIe 3.0 x16 (x4 electrical) Slot 3: full-length, full-height, PCIe 3.0 x16**
Discrete drive controller (opt)	Optional LSI SAS 9240-8i, PCI Express bus, SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support, available on model 4351-L6G	Slot 4: full-length, full-height, 32-bit PCI 2.3 Slot 5: half-length, full-height, PCIe 2.0 x4
	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA: SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models	** Adapters > 75W use auxiliary power connector(s) from PSU SECURITY • Security chip (see information on left) • Side cover lock (ships with two identical keys) • Padlock loop (in rear for opt padlock;
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	padlock prohibits side cover removal) Security slot (in rear for optional
Media reader (opt)	Optional media card reader on selected models	Kensington® Microsaver® cable;
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	prohibits side cover removal)
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	Power-on password Administrator password
IEEE 1394 adptr (opt)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear	Boot sequence control Boot without keyboard, mouse, diskette Secular to the Control of the Control
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	Serial port I/O enable/disable USB 2.0 ports enable/disable individually
Speaker	Internal speaker for business audio	USB 3.0 ports enable/disable concurrently
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	Chassis intrusion switch on selected model(s)
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	Environmental certifications
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)	GREENGUARD® certified
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	ROHS-compliant BPEAT™ Gold rating
ISV certifications	Please visit <u>www.lenovo.com/support/ISV</u>	Supports ThinkVantage® technologies