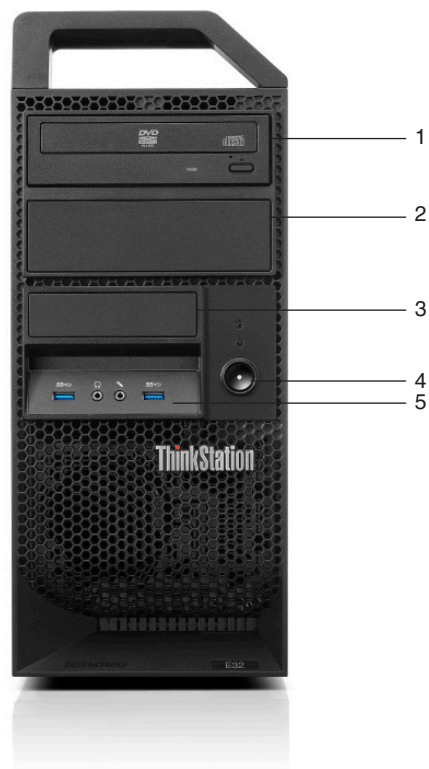
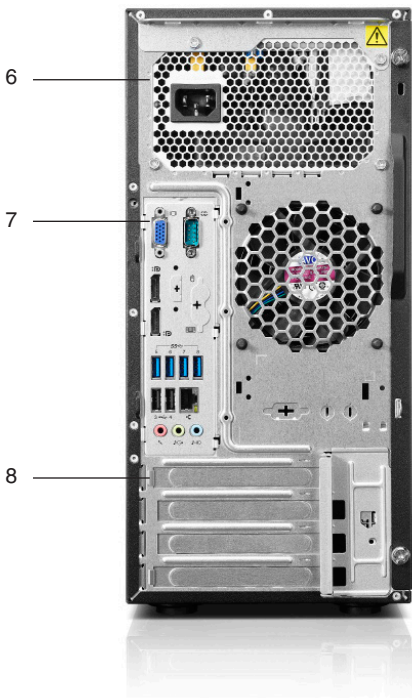


ThinkStation E32 Tower - Overview



Front view

- 1. External 5.25" Bay for optical
- 2. External 5.25" Bay for optical or optional 3.5" hard drive bay
- 3. Media card reader (optional) or optional mSATA SSD drive
- 4. Power Button
- 5. Front I/O: 2 USB 3.0 (blue)
 - 1 Headphone
 - 1 Microphone



Rear view

- 6. 280 watts Power Supply, 80 PLUS Bronze
- 7. Rear I/O: 2 USB 2.0
 - 4 USB 3.0 (blue)
 - 1 serial (9-pin)
 - 1 RJ-45 (GbE)
 - 1 line-in
 - 1 line-out
 - 1 microphone-in
 - 2 DisplayPort (for Intel HD Graphics)
 - 1 VGA (for Intel HD Graphics)
- 8. 1 PCIe 3.0 x16
 - 1 PCIe 2.0 x1
 - 1 PCIe 2.0 x16 (x4 elec)
 - 1 PCI

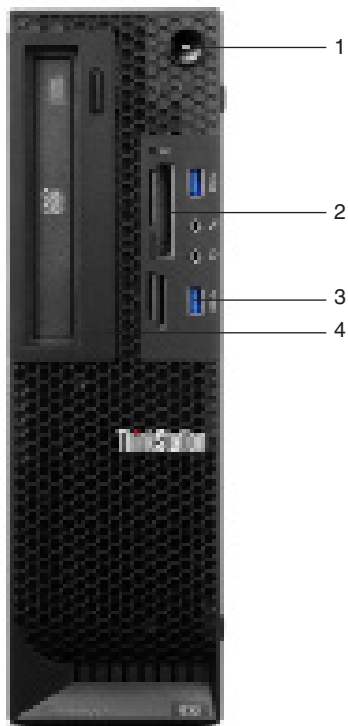
Internal

- One LGA1150 socket, supports one processor from Intel Xeon E3-1200 v3, Core i7-4000, and Core-i5 4000 families
- 4 DIMM sockets, supports up to 32GB ECC or non-ECC UDIMM memory
- Up to three 3.5" hard drive bays, two 3.5" hard drive bays are standard

Mechanical

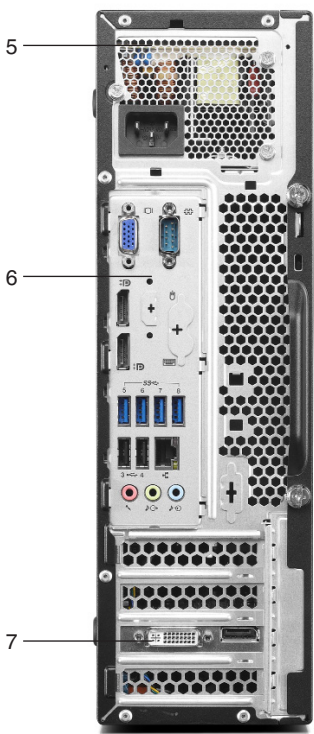
- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter

ThinkStation E32 SFF - Overview



Front view

- 1. Power Button
- 2. Media card reader (optional) or optional mSATA SSD drive
- 3. Front I/O: 2 USB 3.0 (blue)
 - 1 Headphone
 - 1 Microphone
- 4. 1 External 5.25" Bay for optical or optional slim optical + 3.5" hard drive bay or optional standalone 3.5" hard drive bay



Rear view

- 5. 240 watts Power Supply, 80 PLUS Bronze
- 6. Rear I/O: 2 USB 2.0
 - 4 USB 3.0(blue)
 - 1 serial (9-pin)
 - 1 RJ-45 (GbE)
 - 1 line-in
 - 1 line-out
 - 1 microphone-in
 - 2 DisplayPort (for Intel HD Graphics)
 - 1 VGA (for Intel HD Graphics)
- 7.* 1 PCIe 3.0 x16
 - 1 PCIe 2.0 x1
 - 1 PCIe 2.0 x16 (x4 elec)
 - 1 PCI

* Discrete graphics adapter is optional

Internal

- One LGA1150 socket, supports one processor from Intel Xeon E3-1200 v3, Core i7-4000, and Core-i5 4000 families
- 4 DIMM sockets, supports up to 32GB ECC or non-ECC UDIMM memory
- Up to two 3.5" hard drive bays and one 2.5" hard drive bay, one 3.5" hard drive bay is standard

Mechanical

- Raven black color; metal case
- 13.35"W x 15.0"D x 3.93"H
- 338mm W x 375mm D x 102mm H
- 17.20 lb (7.8kg) max configuration
- 12.9-liter

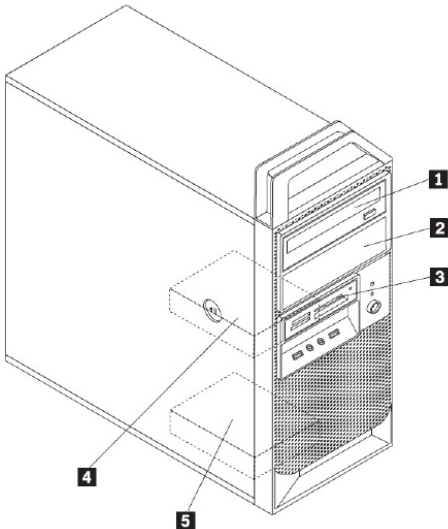
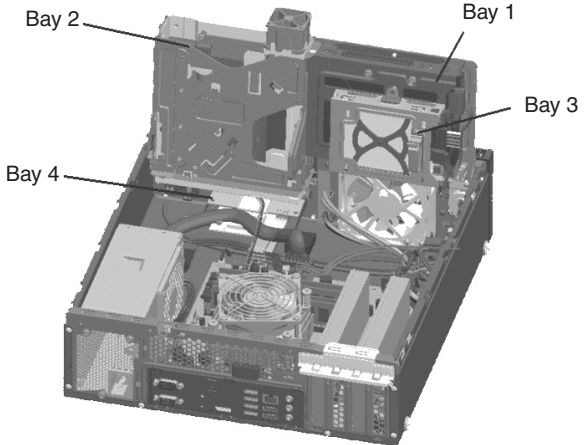
ThinkStation E32 Platform Specifications - I of III

Product Specifications Reference (PSREF)

From factor	ThinkStation E32 Tower	ThinkStation E32 SFF																																																																																																																																																																		
Chipset	Intel C226 Chipset																																																																																																																																																																			
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors																																																																																																																																																																			
Processor	One LGA1150 socket, supports one processor from Intel Xeon E3-1200 v3, Core i7-4000, Core-i5 4000, Core-i3 4000, and Pentium G3000 families, integrated 2-channel DDR3 memory controller, optional integrated processor graphics on selected processors. The following processors are supported: <table><tr><th>Processor Number</th><th># of Cores</th><th># of Threads</th><th>Clock Speed</th><th>Max Turbo Frequency</th><th>Cache</th><th>Memory speed</th><th>ECC Memory Supported</th><th>Processor Graphics</th></tr><tr><td>Xeon E3-1220 v3</td><td>4</td><td>4</td><td>3.1 GHz</td><td>3.5 GHz</td><td>8 MB</td><td>DDR3-1600</td><td>Yes</td><td></td></tr><tr><td>Xeon E3-1225 v3</td><td>4</td><td>4</td><td>3.2 GHz</td><td>3.6 GHz</td><td>8 MB</td><td>DDR3-1600</td><td>Yes</td><td>Intel HD Graphics P4600</td></tr><tr><td>Xeon E3-1230 v3</td><td>4</td><td>8</td><td>3.3 GHz</td><td>3.7 GHz</td><td>8 MB</td><td>DDR3-1600</td><td>Yes</td><td></td></tr><tr><td>Xeon E3-1240 v3</td><td>4</td><td>8</td><td>3.4 GHz</td><td>3.8 GHz</td><td>8 MB</td><td>DDR3-1600</td><td>Yes</td><td></td></tr><tr><td>Xeon E3-1245 v3</td><td>4</td><td>8</td><td>3.4 GHz</td><td>3.8 GHz</td><td>8 MB</td><td>DDR3-1600</td><td>Yes</td><td>Intel HD Graphics P4600</td></tr><tr><td>Xeon E3-1270 v3</td><td>4</td><td>8</td><td>3.5 GHz</td><td>3.9 GHz</td><td>8 MB</td><td>DDR3-1600</td><td>Yes</td><td></td></tr><tr><td>Xeon E3-1275 v3</td><td>4</td><td>8</td><td>3.5 GHz</td><td>3.9 GHz</td><td>8 MB</td><td>DDR3-1600</td><td>Yes</td><td>Intel HD Graphics P4600</td></tr><tr><td>Xeon E3-1280 v3</td><td>4</td><td>8</td><td>3.6 GHz</td><td>4 GHz</td><td>8 MB</td><td>DDR3-1600</td><td>Yes</td><td></td></tr><tr><td>Core i5-4670</td><td>4</td><td>4</td><td>3.4 GHz</td><td>3.8 GHz</td><td>6 MB</td><td>DDR3-1600</td><td></td><td>Intel HD Graphics 4600</td></tr><tr><td>Core i5-4570</td><td>4</td><td>4</td><td>3.2 GHz</td><td>3.6 GHz</td><td>6 MB</td><td>DDR3-1600</td><td></td><td>Intel HD Graphics 4600</td></tr><tr><td>Core i7-4770</td><td>4</td><td>8</td><td>3.4 GHz</td><td>3.9 GHz</td><td>8 MB</td><td>DDR3-1600</td><td></td><td>Intel HD Graphics 4600</td></tr><tr><td>Core i3-4340</td><td>2</td><td>4</td><td>3.6 GHz</td><td></td><td>4 MB</td><td>DDR3-1600</td><td>Yes</td><td>Intel HD Graphics 4600</td></tr><tr><td>Core i3-4330</td><td>2</td><td>4</td><td>3.5 GHz</td><td></td><td>4 MB</td><td>DDR3-1600</td><td>Yes</td><td>Intel HD Graphics 4600</td></tr><tr><td>Core i3-4130</td><td>2</td><td>4</td><td>3.4 GHz</td><td></td><td>3 MB</td><td>DDR3-1600</td><td>Yes</td><td>Intel HD Graphics 4400</td></tr><tr><td>Pentium G3430</td><td>2</td><td>2</td><td>3.3 GHz</td><td></td><td>3 MB</td><td>DDR3-1600</td><td>Yes</td><td>Intel HD Graphics</td></tr><tr><td>Pentium G3420</td><td>2</td><td>2</td><td>3.2 GHz</td><td></td><td>3 MB</td><td>DDR3-1600</td><td>Yes</td><td>Intel HD Graphics</td></tr><tr><td>Pentium G3220</td><td>2</td><td>2</td><td>3 GHz</td><td></td><td>3 MB</td><td>DDR3-1333</td><td>Yes</td><td>Intel HD Graphics</td></tr></table> Notes: All processors 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/		Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	ECC Memory Supported	Processor Graphics	Xeon E3-1220 v3	4	4	3.1 GHz	3.5 GHz	8 MB	DDR3-1600	Yes		Xeon E3-1225 v3	4	4	3.2 GHz	3.6 GHz	8 MB	DDR3-1600	Yes	Intel HD Graphics P4600	Xeon E3-1230 v3	4	8	3.3 GHz	3.7 GHz	8 MB	DDR3-1600	Yes		Xeon E3-1240 v3	4	8	3.4 GHz	3.8 GHz	8 MB	DDR3-1600	Yes		Xeon E3-1245 v3	4	8	3.4 GHz	3.8 GHz	8 MB	DDR3-1600	Yes	Intel HD Graphics P4600	Xeon E3-1270 v3	4	8	3.5 GHz	3.9 GHz	8 MB	DDR3-1600	Yes		Xeon E3-1275 v3	4	8	3.5 GHz	3.9 GHz	8 MB	DDR3-1600	Yes	Intel HD Graphics P4600	Xeon E3-1280 v3	4	8	3.6 GHz	4 GHz	8 MB	DDR3-1600	Yes		Core i5-4670	4	4	3.4 GHz	3.8 GHz	6 MB	DDR3-1600		Intel HD Graphics 4600	Core i5-4570	4	4	3.2 GHz	3.6 GHz	6 MB	DDR3-1600		Intel HD Graphics 4600	Core i7-4770	4	8	3.4 GHz	3.9 GHz	8 MB	DDR3-1600		Intel HD Graphics 4600	Core i3-4340	2	4	3.6 GHz		4 MB	DDR3-1600	Yes	Intel HD Graphics 4600	Core i3-4330	2	4	3.5 GHz		4 MB	DDR3-1600	Yes	Intel HD Graphics 4600	Core i3-4130	2	4	3.4 GHz		3 MB	DDR3-1600	Yes	Intel HD Graphics 4400	Pentium G3430	2	2	3.3 GHz		3 MB	DDR3-1600	Yes	Intel HD Graphics	Pentium G3420	2	2	3.2 GHz		3 MB	DDR3-1600	Yes	Intel HD Graphics	Pentium G3220	2	2	3 GHz		3 MB	DDR3-1333	Yes	Intel HD Graphics
Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	ECC Memory Supported	Processor Graphics																																																																																																																																																												
Xeon E3-1220 v3	4	4	3.1 GHz	3.5 GHz	8 MB	DDR3-1600	Yes																																																																																																																																																													
Xeon E3-1225 v3	4	4	3.2 GHz	3.6 GHz	8 MB	DDR3-1600	Yes	Intel HD Graphics P4600																																																																																																																																																												
Xeon E3-1230 v3	4	8	3.3 GHz	3.7 GHz	8 MB	DDR3-1600	Yes																																																																																																																																																													
Xeon E3-1240 v3	4	8	3.4 GHz	3.8 GHz	8 MB	DDR3-1600	Yes																																																																																																																																																													
Xeon E3-1245 v3	4	8	3.4 GHz	3.8 GHz	8 MB	DDR3-1600	Yes	Intel HD Graphics P4600																																																																																																																																																												
Xeon E3-1270 v3	4	8	3.5 GHz	3.9 GHz	8 MB	DDR3-1600	Yes																																																																																																																																																													
Xeon E3-1275 v3	4	8	3.5 GHz	3.9 GHz	8 MB	DDR3-1600	Yes	Intel HD Graphics P4600																																																																																																																																																												
Xeon E3-1280 v3	4	8	3.6 GHz	4 GHz	8 MB	DDR3-1600	Yes																																																																																																																																																													
Core i5-4670	4	4	3.4 GHz	3.8 GHz	6 MB	DDR3-1600		Intel HD Graphics 4600																																																																																																																																																												
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Core i7-4770	4	8	3.4 GHz	3.9 GHz	8 MB	DDR3-1600		Intel HD Graphics 4600																																																																																																																																																												
Core i3-4340	2	4	3.6 GHz		4 MB	DDR3-1600	Yes	Intel HD Graphics 4600																																																																																																																																																												
Core i3-4330	2	4	3.5 GHz		4 MB	DDR3-1600	Yes	Intel HD Graphics 4600																																																																																																																																																												
Core i3-4130	2	4	3.4 GHz		3 MB	DDR3-1600	Yes	Intel HD Graphics 4400																																																																																																																																																												
Pentium G3430	2	2	3.3 GHz		3 MB	DDR3-1600	Yes	Intel HD Graphics																																																																																																																																																												
Pentium G3420	2	2	3.2 GHz		3 MB	DDR3-1600	Yes	Intel HD Graphics																																																																																																																																																												
Pentium G3220	2	2	3 GHz		3 MB	DDR3-1333	Yes	Intel HD Graphics																																																																																																																																																												
Memory type	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable																																																																																																																																																																			
Memory DIMM sockets	Four 240-pin DIMM sockets																																																																																																																																																																			
Memory capacity	Up to 32GB ECC/non-ECC (8GBx4)																																																																																																																																																																			
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported																																																																																																																																																																			
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on Pentium, Core i3, i5, i7 and Xeon E3-12x5 v3 pocessors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)																																																																																																																																																																			
Discrete Graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (75W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 75W max) Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (40W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 40W max) Supports the following NVIDIA Quadro, NVS graphics adapters: <table><tr><th rowspan="2"></th><th rowspan="2">Memory Size</th><th rowspan="2">CUDA Processor Cores</th><th rowspan="2">Display Connectors</th><th rowspan="2">Max. Displays</th><th rowspan="2">Power</th><th colspan="2">Supported on ThinkStation</th></tr><tr><th>E32 Tower</th><th>E32 SFF</th></tr><tr><td>Quadro K2000</td><td>2GB</td><td>384</td><td>1 dual-link DVI-I 2 DisplayPort</td><td>4*</td><td>51W</td><td>•</td><td></td></tr><tr><td>Quadro K2000D</td><td>2GB</td><td>384</td><td>1 dual-link DVI-I 1 dual-link DVI-D 1 mini DisplayPort</td><td>4*</td><td>51W</td><td>•</td><td></td></tr><tr><td>Quadro K600</td><td>1GB</td><td>192</td><td>1 dual-link DVI-I 1 DisplayPort</td><td>2</td><td>41W</td><td>•</td><td>•</td></tr><tr><td>Quadro 410</td><td>512MB</td><td>192</td><td>1 dual-link DVI-I 1 DisplayPort</td><td>2</td><td>37W</td><td>•</td><td>•</td></tr><tr><td>NVS 510</td><td>2GB</td><td>192</td><td>4 mini DisplayPort (with 4 mini DP to DP dongles)</td><td>4</td><td>35W</td><td>•</td><td>•</td></tr></table>			Memory Size	CUDA Processor Cores	Display Connectors	Max. Displays	Power	Supported on ThinkStation		E32 Tower	E32 SFF	Quadro K2000	2GB	384	1 dual-link DVI-I 2 DisplayPort	4*	51W	•		Quadro K2000D	2GB	384	1 dual-link DVI-I 1 dual-link DVI-D 1 mini DisplayPort	4*	51W	•		Quadro K600	1GB	192	1 dual-link DVI-I 1 DisplayPort	2	41W	•	•	Quadro 410	512MB	192	1 dual-link DVI-I 1 DisplayPort	2	37W	•	•	NVS 510	2GB	192	4 mini DisplayPort (with 4 mini DP to DP dongles)	4	35W	•	•																																																																																																																
	Memory Size	CUDA Processor Cores							Display Connectors	Max. Displays	Power	Supported on ThinkStation																																																																																																																																																								
			E32 Tower	E32 SFF																																																																																																																																																																
Quadro K2000	2GB	384	1 dual-link DVI-I 2 DisplayPort	4*	51W	•																																																																																																																																																														
Quadro K2000D	2GB	384	1 dual-link DVI-I 1 dual-link DVI-D 1 mini DisplayPort	4*	51W	•																																																																																																																																																														
Quadro K600	1GB	192	1 dual-link DVI-I 1 DisplayPort	2	41W	•	•																																																																																																																																																													
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NVS 510	2GB	192	4 mini DisplayPort (with 4 mini DP to DP dongles)	4	35W	•	•																																																																																																																																																													
* Quadro K2000 and Quadro K2000D are equipped with 3 onboard display connectors, 4 Displays require a supported DisplayPort 1.2 Multi-Stream capable hub or displays.																																																																																																																																																																				

ThinkStation E32 Platform Specifications - II of III

Product Specifications Reference (PSREF)

From factor	ThinkStation E32 Tower				ThinkStation E32 SFF			
Discrete Graphics adapters	NVS 315	Memory Size	CUDA Processor Cores	Display Connectors	Max. Displays	Power	Supported on ThinkStation	
							E32 Tower	E32 SFF
							•	•
	NVS 310	512 MB	48	2 DisplayPort	2	19.5W	•	•
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1, 5 support, supports Intel Smart Response Technology				Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1 support, supports Intel Smart Response Technology			
Drive Bays	 Bay 1 Standard, 5.25", 1.6" high, external, for optical Bay 2 Standard, 5.25", 1.6" high, external, for optical or optional, 3.5", 1" high, 3rd hard drive bay Bay 3 Optional, 3.5", 1" high, supports one of the following: (1) for optional media card reader, external (2) for optional mSATA drive, internal Bay 4 Standard, 3.5", 1" high, internal, primary hard drive bay Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay <i>Notes:</i> Standard optical and hard drive bays are included in models; optional hard drive bays are available on models with the corresponding hard drives only				 Image above is for reference only. Model in this image contains optional slim optical + 3.5" 2nd hard drive bay with supplemental fan (Bay 2) and optional 2.5" 3rd hard drive bay (Bay 3) Bay 1 Standard, 3.5", 1" high, internal, primary hard drive bay Bay 2 Standard, 5.25", 1.6" high, external, for optical, also supports one of the following: (1) 5.25" slim optical (access) and 3.5" 2nd hard drive bay (internal), optional (2) 3.5" 2nd hard drive bay (internal), optional Bay 3 Optional, 2.5", 0.6" high, internal, 3rd hard drive bay Bay 4 Optional, 3.5", 0.5" high, supports one of the following: (1) for optional slim media card reader, external (2) for optional mSATA drive, internal (Bay 4 is not available on slim optical models) <i>Notes:</i> Standard optical and hard drive bays are included in models; optional optical and hard drive bays are available on models with the corresponding drives only			
Hard drive(s)	Supports the following: 3.5" SATA: SATA 6.0Gb/s, 7200 rpm, up to 3TB (250GB/500GB/1TB/2TB/3TB) 2.5" SATA: SATA 6.0Gb/s, 10000 rpm, up to 1TB (250GB/500GB/1TB) 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models, up to 480GB (128GB/180GB/240GB/256GB/480GB) mSATA: mSATA SSD, SATA 6.0Gb/s, 24GB or 128GB (24GB mSATA SSD is only for Intel Smart Response Technology enabled models)							
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface				Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high or slim, SATA interface			
Media reader (opt)	Optional 29-in-1 media card reader on selected models				Optional 29-in-1 media card reader (slim) on selected models			
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)							
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)							
Expansion slots	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max, near CPU) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75W max) Slot 4: half-length, full-height, PCI 2.3				Slot 1: Low Profile, PCIe 3.0 x16 (40w max, near CPU) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40W max) Slot 4: Low Profile, PCI 2.3			
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear				Optional Low Profile 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 I217LM							
Keyboard	Preferred Pro USB Keyboard (USB connector)							
Mouse	Optical Wheel Mouse, red wheel (USB connector)							
Power supply	280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified				240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified			

ThinkStation E32 Platform Specifications - III of III

Product Specifications Reference (PSREF)

From factor	ThinkStation E32 Tower	ThinkStation E32 SFF																																																																														
Security	• Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant • Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal) • Power-on/Administrator password • Boot sequence control • Boot without keyboard, mouse • Serial port I/O control • USB port disablement (front or all/individual) • Chassis intrusion switch available on selected models																																																																															
Mechanical	• Raven black color; metal case • 6.9"W x 17.0"D x 16.7"H (with handle) • 175mm W x 431mm D x 425mm H • 27.56 lb (12.5kg) max configuration • 25-liter	• Raven black color; metal case • 13.35"W x 15.0"D x 3.93"H • 338mm W x 375mm D x 102mm H • 17.20 lb (7.8kg) max configuration • 12.9-liter																																																																														
Serviceability	• Removable handle on top front • Toolless side cover removal • Toolless disk and optical drive removal (standard bays) • Toolless adapter retention • Illuminated front icons • Recessed power button	• Toolless top cover removal • Toolless disk and optical drive removal • Toolless adapter retention • Illuminated front icons • Recessed power button																																																																														
Environmental certifications	• GREENGUARD® certified • RoHS-compliant • EPEAT™ Gold rating • ENERGY STAR 5.2-compliant																																																																															
Warranty	1 or 3-year limited warranty, parts and labor																																																																															
ThinkVantage®	Supports ThinkVantage technologies																																																																															
Preloaded operating systems	<i>One the following, depending on model:</i> • 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)		<table><tr><th rowspan="2"></th><th colspan="2">Preloaded OS</th><th rowspan="2">Note</th></tr><tr><th>Windows 7</th><th>Windows 8</th></tr><tr><td>Intel AppUp</td><td>•</td><td>•</td><td></td></tr><tr><td>PC Device Stage</td><td>•</td><td>•</td><td></td></tr><tr><td>Evernote</td><td></td><td>•</td><td></td></tr><tr><td>Lenovo Companion</td><td></td><td>•</td><td></td></tr><tr><td>Lenovo Solution Center</td><td>•</td><td>•</td><td></td></tr><tr><td>Lenovo Support</td><td></td><td>•</td><td></td></tr><tr><td>Norton Internet Security (30 days of virus definitions)</td><td>•</td><td>•</td><td></td></tr><tr><td>Norton Studio</td><td></td><td>•</td><td></td></tr><tr><td>Skype</td><td>•</td><td>•</td><td></td></tr><tr><td>Cyberlink PowerDVD</td><td>•</td><td>•</td><td><i>On models with DVD ROM, DVD±RW and BluRay</i></td></tr><tr><td>Cyberlink PowerDVD Create</td><td>•</td><td>•</td><td><i>On models with DVD±RW</i></td></tr><tr><td>Cyberlink Power2Go</td><td>•</td><td>•</td><td><i>On models with DVD±RW</i></td></tr><tr><td>Cyberlink Power Producer</td><td>•</td><td>•</td><td><i>On models with DVD±RW</i></td></tr><tr><td>Cyberlink PowerDVD Create</td><td>•</td><td>•</td><td><i>On models with Blu-Ray</i></td></tr><tr><td>Cyberlink Power2Go</td><td>•</td><td>•</td><td><i>On models with Blu-Ray</i></td></tr><tr><td>Cyberlink Power Producer</td><td>•</td><td>•</td><td><i>On models with Blu-Ray</i></td></tr><tr><td>Microsoft Office preloaded, purchase product key to activate</td><td>•</td><td>•</td><td></td></tr><tr><td>AutoCAD LT</td><td>•</td><td>•</td><td><i>Only on models with Xeon processor</i></td></tr></table>		Preloaded OS		Note	Windows 7	Windows 8	Intel AppUp	•	•		PC Device Stage	•	•		Evernote		•		Lenovo Companion		•		Lenovo Solution Center	•	•		Lenovo Support		•		Norton Internet Security (30 days of virus definitions)	•	•		Norton Studio		•		Skype	•	•		Cyberlink PowerDVD	•	•	<i>On models with DVD ROM, DVD±RW and BluRay</i>	Cyberlink PowerDVD Create	•	•	<i>On models with DVD±RW</i>	Cyberlink Power2Go	•	•	<i>On models with DVD±RW</i>	Cyberlink Power Producer	•	•	<i>On models with DVD±RW</i>	Cyberlink PowerDVD Create	•	•	<i>On models with Blu-Ray</i>	Cyberlink Power2Go	•	•	<i>On models with Blu-Ray</i>	Cyberlink Power Producer	•	•	<i>On models with Blu-Ray</i>	Microsoft Office preloaded, purchase product key to activate	•	•		AutoCAD LT	•	•	<i>Only on models with Xeon processor</i>
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ThinkStation E32 Tower (30A1) - TopSeller (August 2013)

Product Specifications Reference (PSREF)

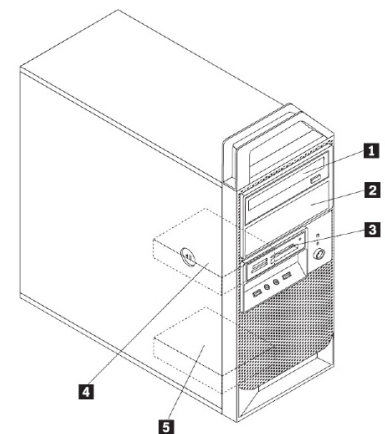
Type-model*	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A10002++	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1000E++	Xeon E3-1225v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600		No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1000F++	Xeon E3-1245v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx2	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1000G++	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	2GBx2	Intel HD 4600		No	1x2TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1000H++	Xeon E3-1230v3 (4C/3.3GHz/8MB/1600MHz)	1600MHz Non-ECC	2GBx2			No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1000J++	Xeon E3-1225v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	2GBx2	Intel HD P4600		No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1000K++	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)

* Model in *italics* shows that this is a Global Model ** DL = Dual Link, SL = Single Link
Country Code "++": The models are available for all WE countries, except UK, EAST and MEA

• For detailed ThinkStation E32 Tower platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported - Intel Core i5/i7 processors support non-ECC memory only
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (75W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 75W max)
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1, 5 support, supports Intel Smart Response Technology
Storage	Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	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 I217LM
Security	- Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant - Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) - Power-on/Administrator password - Boot sequence control - Boot without keyboard, mouse - Serial port I/O control - USB port disablement (front or all/individual) - Chassis intrusion switch available on selected models
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)
Power supply	280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV
Limited warranty†	3-year parts and labor

Drives Bays



- Bay 1 Standard, 5.25", 1.6" high, external, for optical
 Bay 2 Standard, 5.25", 1.6" high, external, for optical or: optional, 3.5", 1" high, 3rd hard drive bay
 Bay 3 Optional, 3.5", 1" high, supports one of the following:
 (1) for optional media card reader, external
 (2) for optional mSATA drive, internal
 Bay 4 Standard, 3.5", 1" high, internal, primary hard drive bay
 Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay

Notes:

Standard optical and hard drive bays are included in models; optional hard drive bays are available on models with the corresponding hard drives only

Expansion Slots

- 1: half-length, full-height, PCIe 3.0 x16 (75w max, near CPU)
 2: half-length, full-height, PCIe 2.0 x1
 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75W max)
 4: half-length, full-height, PCI 2.3

Mechanical

- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal (standard bays)
- Toolless adapter retention
- Illuminated front icons
- Recessed power button

See footnotes for important warranty information
 Model(s) announced August 20, 2013

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 (30A1-1E) September 2013

ThinkStation E32 Tower (30A1) - TopSeller (August 2013) - II

Product Specifications Reference (PSREF)

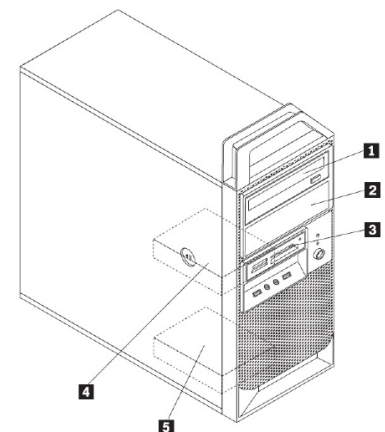
Type-model*	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A1000L++	Xeon E3-1245v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600		No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1000M++	Xeon E3-1220v3 (4C/3.1GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1000N++	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1000P++	Xeon E3-1220v3 (4C/3.1GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1		1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A10024++	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	2GBx2	Intel HD 4600		No	1x2TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A10025++	Xeon E3-1245v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600		No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A10026++	Xeon E3-1220v3 (4C/3.1GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)

* Model in *italics* shows that this is a Global Model ** DL = Dual Link, SL = Single Link Country Code "+": The models are available for all WE countries, except UK, EAST and MEA

• For detailed ThinkStation E32 Tower platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported - Intel Core i5/i7 processors support non-ECC memory only
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (75W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 75W max)
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1, 5 support, supports Intel Smart Response Technology
Storage	Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	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 I217LM
Security	- Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant - Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) - Power-on/Administrator password - Boot sequence control - Boot without keyboard, mouse - Serial port I/O control - USB port disablement (front or all/individual) - Chassis intrusion switch available on selected models
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)
Power supply	280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV
Limited warranty¹	3-year parts and labor

Drives Bays



- Bay 1 Standard, 5.25", 1.6" high, external, for optical
- Bay 2 Standard, 5.25", 1.6" high, external, for optical or: optional, 3.5", 1" high, 3rd hard drive bay
- Bay 3 Optional, 3.5", 1" high, supports one of the following:
(1) for optional media card reader, external
(2) for optional mSATA drive, internal
- Bay 4 Standard, 3.5", 1" high, internal, primary hard drive bay
- Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay

Notes:

Standard optical and hard drive bays are included in models; optional hard drive bays are available on models with the corresponding hard drives only

Expansion Slots

- 1: half-length, full-height, PCIe 3.0 x16 (75w max, near CPU)
2: half-length, full-height, PCIe 2.0 x1
3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75W max)
4: half-length, full-height, PCI 2.3

Mechanical

- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal (standard bays)
- Toolless adapter retention
- Illuminated front icons
- Recessed power button

See footnotes for important warranty information
Model(s) announced August 20, 2013

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(30A1-2E) September 2013

ThinkStation E32 Tower (30A1) - TopSeller (August 2013) - III

Product Specifications Reference (PSREF)

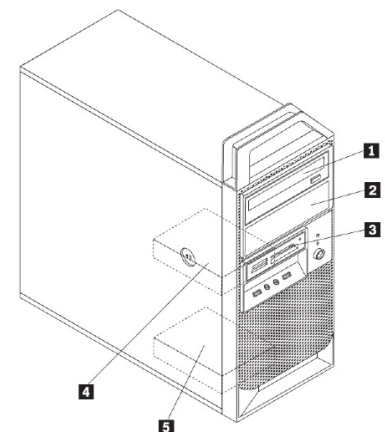
Type-model*	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A10028++	Xeon E3-1230v3 (4C/3.3GHz/8MB/1600MHz)	1600MHz Non-ECC	2GBx2			No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002A++	Xeon E3-1220v3 (4C/3.1GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1		1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002B++	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002C++	Xeon E3-1245v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx2	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002D++	Xeon E3-1225v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600		No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002E++	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)

* Model in *italics* shows that this is a Global Model ** DL = Dual Link, SL = Single Link Country Code "++": The models are available for all WE countries, except UK, EAST and MEA

• For detailed ThinkStation E32 Tower platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported - Intel Core i5/i7 processors support non-ECC memory only
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (75W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 75W max)
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1, 5 support, supports Intel Smart Response Technology
Storage	Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	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 I217LM
Security	- Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant - Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) - Power-on/Administrator password - Boot sequence control - Boot without keyboard, mouse - Serial port I/O control - USB port disablement (front or all/individual) - Chassis intrusion switch available on selected models
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)
Power supply	280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV
Limited warranty¹	3-year parts and labor

Drives Bays



- Bay 1 Standard, 5.25", 1.6" high, external, for optical
Bay 2 Standard, 5.25", 1.6" high, external, for optical or: optional, 3.5", 1" high, 3rd hard drive bay
Bay 3 Optional, 3.5", 1" high, supports one of the following:
(1) for optional media card reader, external
(2) for optional mSATA drive, internal
Bay 4 Standard, 3.5", 1" high, internal, primary hard drive bay
Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay

Notes:

Standard optical and hard drive bays are included in models; optional hard drive bays are available on models with the corresponding hard drives only

Expansion Slots

- 1: half-length, full-height, PCIe 3.0 x16 (75w max, near CPU)
2: half-length, full-height, PCIe 2.0 x1
3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75W max)
4: half-length, full-height, PCI 2.3

Mechanical

- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal (standard bays)
- Toolless adapter retention
- Illuminated front icons
- Recessed power button

See footnotes for important warranty information
Model(s) announced August 20, 2013

© Lenovo
(30A1-3E) September 2013

ThinkStation E32 Tower (30A1) - TopSeller (October 2013)

Product Specifications Reference (PSREF)

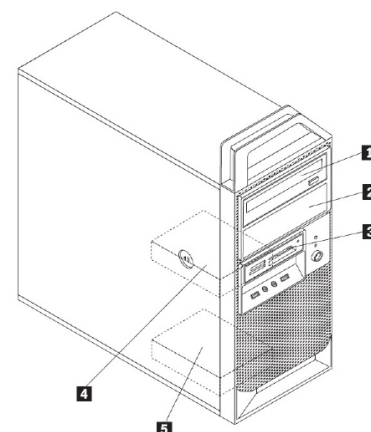
Type-model ¹	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters ²	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	Chassis intrusion switch	Preloaded OS	Base warranty (-year) ³
30A1004D++	Xeon E3-1245 v3 4C/3.4 GHz/ 8 MB/1600MHz	1600MHz Non-ECC	4GBx1	Intel HD P4600	No	No	1x1TB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3
30A1002A++	Xeon E3-1220 v3 4C/3.1 GHz/ 8 MB/1600MHz	1600MHz Non-ECC	4GBx1	No	1xQuadro 410 512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x1TB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3
30A10026++	Xeon E3-1220 v3 4C/3.1 GHz/ 8 MB/1600MHz	1600MHz Non-ECC	4GBx1	No	1xQuadro K600 1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3
30A10028++	Xeon E3-1230 v3 4C/3.3 GHz/ 8 MB/1600MHz	1600MHz Non-ECC	2GBx2	No	No	No	1x500GB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3
30A10045++	Core i3-4330 2C/3.5 GHz/ 4 MB/1600MHz	1600MHz Non-ECC	4GBx1	Intel HD 4600	No	No	1x500GB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3

¹Model in *italics* shows that this is a Global Model ²DL = Dual Link, SL = Single Link ³WS= International Warranty Service⁹
Country Code "+-": The models are available for all WE countries, except UK, EAST and MEA

- For detailed ThinkStation E32 Tower platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)
Additional memory disclaimers	• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs • Mixing of ECC and non-ECC is not supported • Intel Core i5/i7 processors support non-ECC memory only
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: • One PCI Express 3.0 x16 slot (75W max, near CPU) • One PCI Express 2.0 x16 slot (x4 electrical, 75W max)
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1, 5 support, supports Intel Smart Response Technology
Storage	Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	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 I217LM
Security	• Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant • Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) • Power-on/Administrator password • Boot sequence control • Boot without keyboard, mouse • Serial port I/O control • USB port disablement (front or all/individual) • Chassis intrusion switch available on selected models
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)
Power supply	280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV
Limited warranty ¹	3-year parts and labor

Drives Bays



- Bay 1 Standard, 5.25", 1.6" high, external, for optical
Bay 2 Standard, 5.25", 1.6" high, external, for optical or: optional, 3.5", 1" high, 3rd hard drive bay
Bay 3 Optional, 3.5", 1" high, supports one of the following:
(1) for optional media card reader, external
(2) for optional mSATA drive, internal
Bay 4 Standard, 3.5", 1" high, internal, primary hard drive bay
Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay

Notes:

Standard optical and hard drive bays are included in models; optional hard drive bays are available on models with the corresponding hard drives only

Expansion Slots

- 1: half-length, full-height, PCIe 3.0 x16 (75w max, near CPU)
2: half-length, full-height, PCIe 2.0 x1
3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75W max)
4: half-length, full-height, PCI 2.3

Mechanical

- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal (standard bays)
- Toolless adapter retention
- Illuminated front icons
- Recessed power button

ThinkStation E32 Tower (30A1) - TopSeller (October 2013) - II

Product Specifications Reference (PSREF)

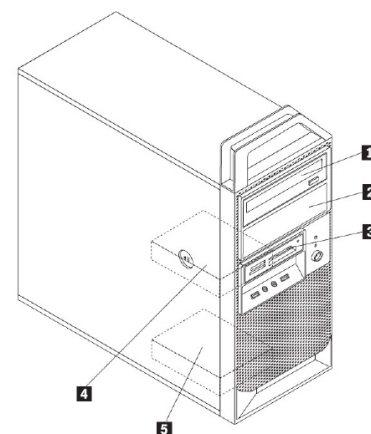
Type-model ¹	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters ²	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	Chassis intrusion switch	Preloaded OS	Base warranty (-year) ^{***}
30A1002E++	Core i5-4670 4C/3.4 GHz/ 6 MB/1600MHz	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x1TB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3
30A1002B++	Core i5-4570 4C/3.2 GHz/ 6 MB/1600MHz	1600MHz Non-ECC	4GBx1	Intel HD 4600	No	No	1x1TB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3
30A1004C++	Xeon E3-1225 v3 4C/3.2 GHz/ 8 MB/1600MHz	1600MHz Non-ECC	4GBx1	Intel HD P4600	No	No	1x1TB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3
30A1002C++	Xeon E3-1245 v3 4C/3.4 GHz/ 8 MB/1600MHz	1600MHz Non-ECC	4GBx2	Intel HD P4600	1xQuadro K600 1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3

¹Model in *italics* shows that this is a Global Model ²DL = Dual Link, SL = Single Link ^{***}IWS= International Warranty Service[®]
Country Code "++": The models are available for all WE countries, except UK, EAST and MEA

• For detailed ThinkStation E32 Tower platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported - Intel Core i5/i7 processors support non-ECC memory only
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (75W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 75W max)
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1, 5 support, supports Intel Smart Response Technology
Storage	Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	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 I217LM
Security	- Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant - Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) - Power-on/Administrator password - Boot sequence control - Boot without keyboard, mouse - Serial port I/O control - USB port disablement (front or all/individual) - Chassis intrusion switch available on selected models
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)
Power supply	280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV
Limited warranty ¹	3-year parts and labor

Drives Bays



- Bay 1 Standard, 5.25", 1.6" high, external, for optical
Bay 2 Standard, 5.25", 1.6" high, external, for optical or: optional, 3.5", 1" high, 3rd hard drive bay
Bay 3 Optional, 3.5", 1" high, supports one of the following:
(1) for optional media card reader, external
(2) for optional mSATA drive, internal
Bay 4 Standard, 3.5", 1" high, internal, primary hard drive bay
Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay

Notes:

Standard optical and hard drive bays are included in models; optional hard drive bays are available on models with the corresponding hard drives only

Expansion Slots

- 1: half-length, full-height, PCIe 3.0 x16 (75w max, near CPU)
2: half-length, full-height, PCIe 2.0 x1
3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75W max)
4: half-length, full-height, PCI 2.3

Mechanical

- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal (standard bays)
- Toolless adapter retention
- Illuminated front icons
- Recessed power button

ThinkStation E32 Tower (30A1) - TopSeller (March 4, 2014)

Product Specifications Reference (PSREF)

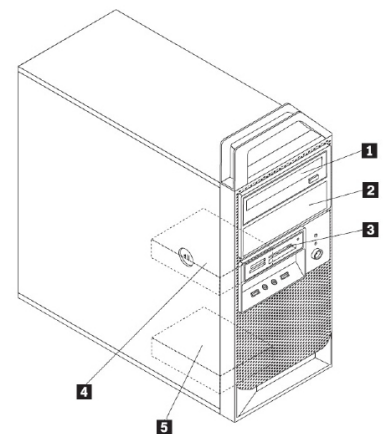
Type-model ¹	Processor	Memory (MHz/opt ECC)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters ²	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A10063++	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz	4GBx1	Intel HD 4600	Open	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
30A10064++	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz	4GBx1	Intel HD 4600	Open	No	1x1TB Hybrid 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
30A10065++	Xeon E3-1225 v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz	4GBx1	Intel HD P4600	Open	No	1x1TB Hybrid 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
30A10066++	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz	4GBx2	Intel HD P4600	Open	No	1x2TB Hybrid 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
30A10067++	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz	4GBx1	Intel HD 4600	Open	No	1x500GB Hybrid 2.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
30A10068++	Xeon E3-1275 v3 (4C/3.5GHz/8MB/1600MHz)	1600MHz ECC	8GBx1	Intel HD P4600	Open	No	1x2TB Hybrid 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
30A10069++	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz	4GBx1	Intel HD 4600	Open	No	1x2TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8.1)

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Country Code "+": The models are available for all WE countries, except UK, EAST and MEA

• For detailed ThinkStation E32 Tower platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported - Intel Core i5/i7 processors support non-ECC memory only
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (75W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 75W max)
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1, 5 support, supports Intel Smart Response Technology
Storage	Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	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 I217LM
Security	- Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant - Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) - Power-on/Administrator password - Boot sequence control - Boot without keyboard, mouse - Serial port I/O control - USB port disablement (front or all/individual) - Chassis intrusion switch available on selected models
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)
Power supply	280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV
Limited warranty ¹	3-year parts and labor

Drives Bays



- Bay 1 Standard, 5.25", 1.6" high, external, for optical
Bay 2 Standard, 5.25", 1.6" high, external, for optical or: optional, 3.5", 1" high, 3rd hard drive bay
Bay 3 Optional, 3.5", 1" high, supports one of the following:
(1) for optional media card reader, external
(2) for optional mSATA drive, internal
Bay 4 Standard, 3.5", 1" high, internal, primary hard drive bay
Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay

Notes:

Standard optical and hard drive bays are included in models; optional hard drive bays are available on models with the corresponding hard drives only

Expansion Slots

- 1: half-length, full-height, PCIe 3.0 x16 (75w max, near CPU)
2: half-length, full-height, PCIe 2.0 x1
3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75W max)
4: half-length, full-height, PCI 2.3

Mechanical

- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal (standard bays)
- Toolless adapter retention
- Illuminated front icons
- Recessed power button

See footnotes for important warranty information
Model(s) announced March 4, 2014

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(30A1-6E) March 2014

ThinkStation E32 Tower (30A1) - TopSeller (March 25, 2014)

Product Specifications Reference (PSREF)

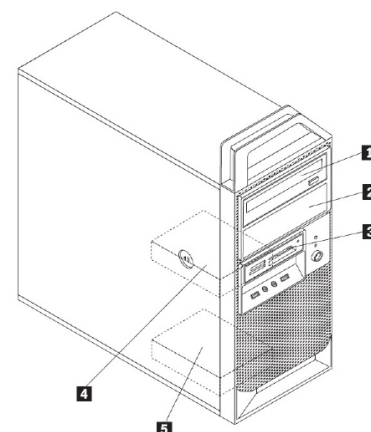
Type-model ¹	Processor	Memory (MHz/opt ECC)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters ²	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A1006B++	Xeon E3-1230 v3 (4C/3.3GHz/8MB/1600MHz)	1600MHz ECC	2GBx2	No	Quadro K600 (1GB, 1xDVI-I, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1006C++	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz ECC	2GBx2	Intel HD P4600	Open	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1006D++	Xeon E3-1275 v3 (4C/3.5GHz/8MB/1600MHz)	1600MHz ECC	2GBx2	Intel HD P4600	Open	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)

¹Model in *italics* shows that this is a Global Model ²DL = Dual Link, SL = Single Link ³***IWS= International Warranty Service[®]
Country Code "++": The models are available for all WE countries, except UK, EAST and MEA

• For detailed ThinkStation E32 Tower platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

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Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported - Intel Core i5/i7 processors support non-ECC memory only
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Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (75W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 75W max)
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1, 5 support, supports Intel Smart Response Technology
Storage	Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)
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Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	Internal speaker for business audio
Onboard Ethernet	One onboard gigabit ethernet, Intel I217LM
Security	- Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant - Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) - Power-on/Administrator password - Boot sequence control - Boot without keyboard, mouse - Serial port I/O control - USB port disablement (front or all/individual) - Chassis intrusion switch available on selected models
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)
Power supply	280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified
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Drives Bays



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 Bay 3 Optional, 3.5", 1" high, supports one of the following:
 (1) for optional media card reader, external
 (2) for optional mSATA drive, internal
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 Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay

Notes:

Standard optical and hard drive bays are included in models; optional hard drive bays are available on models with the corresponding hard drives only

Expansion Slots

- 1: half-length, full-height, PCIe 3.0 x16 (75w max, near CPU)
 2: half-length, full-height, PCIe 2.0 x1
 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75W max)
 4: half-length, full-height, PCI 2.3

Mechanical

- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal (standard bays)
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- Illuminated front icons
- Recessed power button

See footnotes for important warranty information
 Model(s) announced March 25, 2014

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 (30A1-7E) March 2014

ThinkStation E32 Tower (30A0) - August 2013

Product Specifications Reference (PSREF)

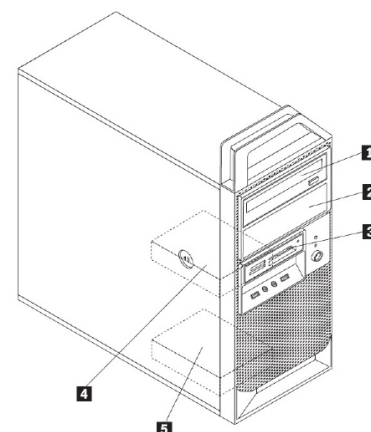
Type-model*	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A0000B++	XeonE3-1230v3 (4C/3.3GHz/8MB/1600MHz)	1600MHz Non-ECC	2GBx2		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A0000C++	XeonE3-1245v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600		No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

* Model in *italics* shows that this is a Global Model ** DL = Dual Link, SL = Single Link Country Code "++": The models are available for all WE countries, except UK, EAST and MEA

- For detailed ThinkStation E32 Tower platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)
Additional memory disclaimers	• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs • Mixing of ECC and non-ECC is not supported • Intel Core i5/i7 processors support non-ECC memory only
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: • One PCI Express 3.0 x16 slot (75W max, near CPU) • One PCI Express 2.0 x16 slot (x4 electrical, 75W max)
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1, 5 support, supports Intel Smart Response Technology
Storage	Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	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 I217LM
Security	• Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant • Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) • Power-on/Administrator password • Boot sequence control • Boot without keyboard, mouse • Serial port I/O control • USB port disablement (front or all/individual) • Chassis intrusion switch available on selected models
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)
Power supply	280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV
Limited warranty¹	3-year parts and labor

Drives Bays



- Bay 1 Standard, 5.25", 1.6" high, external, for optical
- Bay 2 Standard, 5.25", 1.6" high, external, for optical or: optional, 3.5", 1" high, 3rd hard drive bay
- Bay 3 Optional, 3.5", 1" high, supports one of the following:
(1) for optional media card reader, external
(2) for optional mSATA drive, internal
- Bay 4 Standard, 3.5", 1" high, internal, primary hard drive bay
- Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay

Notes:

Standard optical and hard drive bays are included in models; optional hard drive bays are available on models with the corresponding hard drives only

Expansion Slots

- 1: half-length, full-height, PCIe 3.0 x16 (75w max, near CPU)
- 2: half-length, full-height, PCIe 2.0 x1
- 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75W max)
- 4: half-length, full-height, PCI 2.3

Mechanical

- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal (standard bays)
- Toolless adapter retention
- Illuminated front icons
- Recessed power button

See footnotes for important warranty information
Model(s) announced August 20, 2013

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(30A0-1E) September 2013

ThinkStation E32 Tower (30A0) - October 2013

Product Specifications Reference (PSREF)

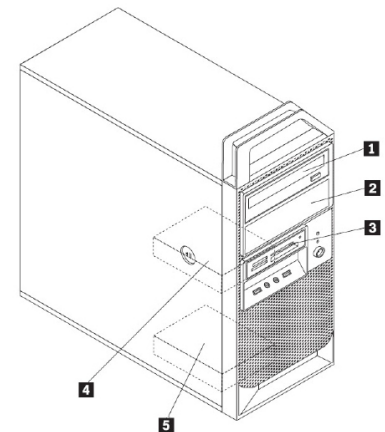
Type-model ¹	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters ²	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	Chassis intrusion switch	Preloaded OS	Base warranty (-year) ³	Ann date (mm/dd/yy)
30A0005R++	Core i5-4570 4C/3.2 GHz/ 6 MB/1600MHz	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 Downgrade from Win8)	3(IWS)	10/15/13
30A0005Q++	Xeon E3-1245 v3 4C/3.4 GHz/ 8 MB/1600MHz	1600MHz ECC	4GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 Downgrade from Win8)	3(IWS)	10/8/13
30A0005S++	Core i7-4770 4C/3.4 GHz/ 8 MB/1600MHz	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 Downgrade from Win8)	3(IWS)	10/8/13
30A0005T++	Xeon E3-1245 v3 4C/3.4 GHz/ 8 MB/1600MHz	1600MHz Non-ECC	4GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	No	Media	Switch	Win7 Pro64 Downgrade from Win8)	3(IWS)	10/22/13

¹Model in *italics* shows that this is a Global Model ²DL = Dual Link, SL = Single Link ³IWS= International Warranty Service[®]
Country Code "+": The models are available for all WE countries, except UK, EAST and MEA

• For detailed ThinkStation E32 Tower platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported - Intel Core i5/i7 processors support non-ECC memory only
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (75W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 75W max)
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1, 5 support, supports Intel Smart Response Technology
Storage	Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	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 I217LM
Security	- Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant - Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) - Power-on/Administrator password - Boot sequence control - Boot without keyboard, mouse - Serial port I/O control - USB port disablement (front or all/individual) - Chassis intrusion switch available on selected models
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)
Power supply	280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV
Limited warranty ¹	3-year parts and labor

Drives Bays



- Bay 1 Standard, 5.25", 1.6" high, external, for optical
Bay 2 Standard, 5.25", 1.6" high, external, for optical or: optional, 3.5", 1" high, 3rd hard drive bay
Bay 3 Optional, 3.5", 1" high, supports one of the following:
(1) for optional media card reader, external
(2) for optional mSATA drive, internal
Bay 4 Standard, 3.5", 1" high, internal, primary hard drive bay
Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay

Notes:

Standard optical and hard drive bays are included in models; optional hard drive bays are available on models with the corresponding hard drives only

Expansion Slots

- 1: half-length, full-height, PCIe 3.0 x16 (75w max, near CPU)
2: half-length, full-height, PCIe 2.0 x1
3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75W max)
4: half-length, full-height, PCI 2.3

Mechanical

- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal (standard bays)
- Toolless adapter retention
- Illuminated front icons
- Recessed power button

See footnotes for important warranty information
Model(s) announced October 8, 15, or 22, 2013

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(30A0-2E) November 2013

ThinkStation E32 SFF (30A3) - TopSeller (August 2013)

Product Specifications Reference (PSREF)

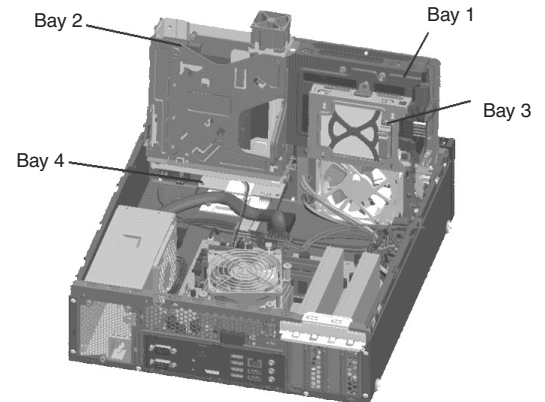
Type-model*	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A30007++	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3000D++	Xeon E3-1230v3 (4C/3.3GHz/8MB/1600MHz)	1600MHz Non-ECC	2GBx2		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3000E++	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3000F++	Xeon E3-1225v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3000G++	Xeon E3-1230v3 (4C/3.3GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1		1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3000H++	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3001F++	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)

* Model in *italics* shows that this is a Global Model ** DL = Dual Link, SL = Single Link
Country Code "++": The models are available for all WE countries, except UK, EAST and MEA

• For detailed ThinkStation E32 SFF platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported - Intel Core i5/i7 processors support non-ECC memory only
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (40W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 40W max)
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1 support, supports Intel Smart Response Technology
Storage	Up to two 3.5" SATA (SATA 6.0Gb/s, 7200rpm) drives, or up to three 2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high or slim, SATA interface
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	Optional Low Profile 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 i217LM
Security	- Security chip: STMicro ST33ZP24AR28VPSP, TCG 1.2-compliant - Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) - Power-on/Administrator password - Boot sequence control - Boot without keyboard, mouse - Serial port I/O control - USB port disablement (front or all/individual) - Chassis intrusion switch available on selected models
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)
Power supply	240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV
Limited warranty¹	3-year parts and labor

Drives Bays*



* Image above is for reference only. Model in this image contains optional slim optical + 3.5" 2nd hard drive bay with supplemental fan (Bay 2) and optional 2.5" 3rd hard drive bay (Bay 3)

- Bay 1 Standard, 3.5", 1" high, internal, primary hard drive bay
Bay 2 Standard, 5.25", 1.6" high, external, for optical, also supports one of the following:
(1) 5.25" slim optical (access) and 3.5" 2nd hard drive bay (internal), optional
(2) 3.5" 2nd hard drive bay (internal), optional
Bay 3 Optional, 2.5", 0.6" high, internal, 3rd hard drive bay
Bay 4 Optional, 3.5", 0.5" high, supports one of the following:
(1) for optional slim media card reader, external
(2) for optional mSATA drive, internal
(Bay 4 is not available on slim optical models)

Notes:

Standard optical and hard drive bays are included in models; optional optical and hard drive bays are available on models with the corresponding drives only

Expansion Slots

- Low Profile, PCIe 3.0 x16 (40w max, near CPU)
- Low Profile, PCIe 2.0 x1
- Low Profile, PCIe 2.0 x16 (x4 elec, 40W max)
- Low Profile, PCI 2.3

Mechanical

- Raven black color; metal case
- 13.35"W x 15.0"D x 3.93"H
- 338mm W x 375mm D x 102mm H
- 17.20 lb (7.8kg) max configuration
- 12.9-liter
- Toolless top cover removal
- Toolless disk and optical drive removal
- Toolless adapter retention
- Illuminated front icons
- Recessed power button

See footnotes for important warranty information
Model(s) announced August 20, 2013

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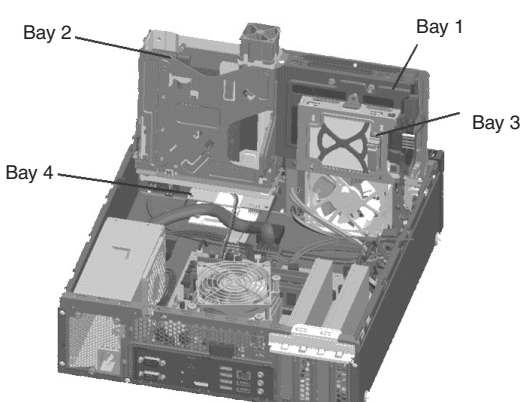
ThinkStation E32 SFF (30A3) - TopSeller (August 2013) - II

Product Specifications Reference (PSREF)

Type-model*	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A3001H++	Xeon E3-1230v3 (4C/3.3GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1		1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3001K++	Xeon E3-1230v3 (4C/3.3GHz/8MB/1600MHz)	1600MHz Non-ECC	2GBx2		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3001L++	Xeon E3-1225v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)

* Model in *italics* shows that this is a Global Model ** DL = Dual Link, SL = Single Link
Country Code "+": The models are available for all WE countries, except UK, EAST and MEA

• For detailed ThinkStation E32 SFF platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset	Drives Bays*  * Image above is for reference only. Model in this image contains optional slim optical + 3.5" 2nd hard drive bay with supplemental fan (Bay 2) and optional 2.5" 3rd hard drive bay (Bay 3) Bay 1 Standard, 3.5", 1" high, internal, primary hard drive bay Bay 2 Standard, 5.25", 1.6" high, external, for optical, also supports one of the following: (1) 5.25" slim optical (access) and 3.5" 2nd hard drive bay (internal), optional (2) 3.5" 2nd hard drive bay (internal), optional Bay 3 Optional, 2.5", 0.6" high, internal, 3rd hard drive bay Bay 4 Optional, 3.5", 0.5" high, supports one of the following: (1) for optional slim media card reader, external (2) for optional mSATA drive, internal (Bay 4 is not available on slim optical models) Notes: Standard optical and hard drive bays are included in models; optional optical and hard drive bays are available on models with the corresponding drives only Expansion Slots 1: Low Profile, PCIe 3.0 x16 (40w max, near CPU) 2: Low Profile, PCIe 2.0 x1 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40W max) 4: Low Profile, PCI 2.3 Mechanical • Raven black color; metal case • 13.35"W x 15.0"D x 3.93"H • 338mm W x 375mm D x 102mm H • 17.20 lb (7.8kg) max configuration • 12.9-liter • Toolless top cover removal • Toolless disk and optical drive removal • Toolless adapter retention • Illuminated front icons • Recessed power button
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors	
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors	
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable	
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)	
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported - Intel Core i5/i7 processors support non-ECC memory only	
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)	
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (40W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 40W max)	
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1 support, supports Intel Smart Response Technology	
Storage	Up to two 3.5" SATA (SATA 6.0Gb/s, 7200rpm) drives, or up to three 2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)	
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high or slim, SATA interface	
Media reader (opt)	Optional 29-in-1 media card reader on selected models	
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)	
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	Optional Low Profile 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 I217LM	
Security	- Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant - Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) - Power-on/Administrator password - Boot sequence control - Boot without keyboard, mouse - Serial port I/O control - USB port disablement (front or all/individual) - Chassis intrusion switch available on selected models	
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)	
Power supply	240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified	
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified	
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV	
Limited warranty¹	3-year parts and labor	

See footnotes for important warranty information
Model(s) announced August 20, 2013

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(30A3-2E) September 2013

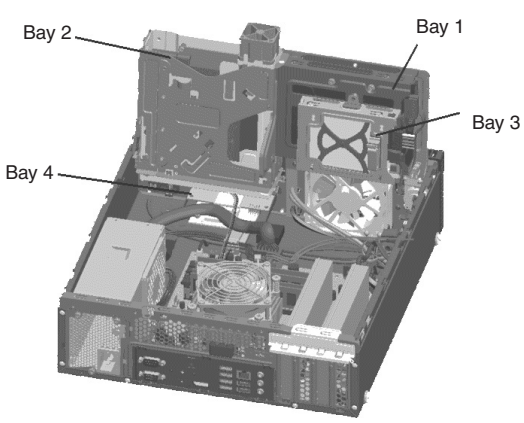
ThinkStation E32 SFF (30A3) - TopSeller (October 2013)

Product Specifications Reference (PSREF)

Type-model ¹	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters ²	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	Chassis intrusion switch	Preloaded OS	Base warranty (-year) ³
30A3001M++	Core i3-4330 2C/3.5 GHz/ 4 MB/1600MHz	1600MHz Non-ECC	4GBx1	Intel HD 4600	No	No	1x500GB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3
30A3002S++	Xeon E3-1225 v3 4C/3.2 GHz/ 8 MB/1600MHz	1600MHz Non-ECC	4GBx1	Intel HD P4600	No	No	1x500GB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3
30A3001H++	Xeon E3-1230 v3 4C/3.3 GHz/ 8 MB/1600MHz	1600MHz Non-ECC	4GBx1	No	1xQuadro 410 512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x1TB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3

¹Model in *italics* shows that this is a Global Model ²DL = Dual Link, SL = Single Link ³***IWS= International Warranty Service⁴
Country Code "++": The models are available for all WE countries, except UK, EAST and MEA

• For detailed ThinkStation E32 SFF platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset	 Drives Bays* Bay 1 Standard, 3.5", 1" high, internal, primary hard drive bay Bay 2 Standard, 5.25", 1.6" high, external, for optical, also supports one of the following: (1) 5.25" slim optical (access) and 3.5" 2nd hard drive bay (internal), optional (2) 3.5" 2nd hard drive bay (internal), optional Bay 3 Optional, 2.5", 0.6" high, internal, 3rd hard drive bay Bay 4 Optional, 3.5", 0.5" high, supports one of the following: (1) for optional slim media card reader, external (2) for optional mSATA drive, internal (Bay 4 is not available on slim optical models) Notes: Standard optical and hard drive bays are included in models; optional optical and hard drive bays are available on models with the corresponding drives only Expansion Slots 1: Low Profile, PCIe 3.0 x16 (40w max, near CPU) 2: Low Profile, PCIe 2.0 x1 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40W max) 4: Low Profile, PCI 2.3 Mechanical - Raven black color; metal case 13.35"W x 15.0"D x 3.93"H 338mm W x 375mm D x 102mm H 17.20 lb (7.8kg) max configuration 12.9-liter - Toolless top cover removal - Toolless disk and optical drive removal - Toolless adapter retention - Illuminated front icons - Recessed power button
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors	
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors	
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable	
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)	
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported - Intel Core i5/i7 processors support non-ECC memory only	
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)	
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (40W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 40W max)	
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1 support, supports Intel Smart Response Technology	
Storage	Up to two 3.5" SATA (SATA 6.0Gb/s, 7200rpm) drives, or up to three 2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)	
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high or slim, SATA interface	
Media reader (opt)	Optional 29-in-1 media card reader on selected models	
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)	
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	Optional Low Profile 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 I217LM	
Security	- Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant - Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) - Power-on/Administrator password - Boot sequence control - Boot without keyboard, mouse - Serial port I/O control - USB port disablement (front or all/individual) - Chassis intrusion switch available on selected models	
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)	
Power supply	240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified	
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified	
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV	
Limited warranty ¹	3-year parts and labor	

See footnotes for important warranty information
Model(s) announced October 22, 2013

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(30A3-3E) November 2013

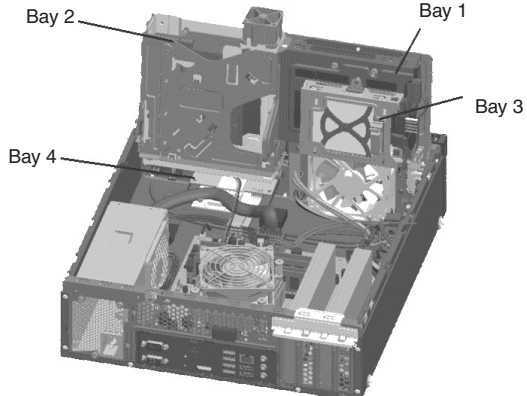
ThinkStation E32 SFF (30A2) - August 2013

Product Specifications Reference (PSREF)

Type-model*	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A2000A++	Xeon E3-1230v3 (4C/3.3GHz/8MB/1600MHz)	1600MHz ECC	4GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)

* Model in *italics* shows that this is a Global Model ** DL = Dual Link, SL = Single Link Country Code "+": The models are available for all WE countries, except UK, EAST and MEA

• For detailed ThinkStation E32 SFF platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset	 Drives Bays* Bay 1 Standard, 3.5", 1" high, internal, primary hard drive bay Bay 2 Standard, 5.25", 1.6" high, external, for optical, also supports one of the following: (1) 5.25" slim optical (access) and 3.5" 2nd hard drive bay (internal), optional (2) 3.5" 2nd hard drive bay (internal), optional Bay 3 Optional, 2.5", 0.6" high, internal, 3rd hard drive bay Bay 4 Optional, 3.5", 0.5" high, supports one of the following: (1) for optional slim media card reader, external (2) for optional mSATA drive, internal (Bay 4 is not available on slim optical models) Notes: Standard optical and hard drive bays are included in models; optional optical and hard drive bays are available on models with the corresponding drives only Expansion Slots 1: Low Profile, PCIe 3.0 x16 (40w max, near CPU) 2: Low Profile, PCIe 2.0 x1 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40W max) 4: Low Profile, PCI 2.3 Mechanical - Raven black color; metal case 13.35"W x 15.0"D x 3.93"H 338mm W x 375mm D x 102mm H 17.20 lb (7.8kg) max configuration 12.9-liter - Toolless top cover removal - Toolless disk and optical drive removal - Toolless adapter retention - Illuminated front icons - Recessed power button
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors	
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors	
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable	
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)	
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported - Intel Core i5/i7 processors support non-ECC memory only	
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)	
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (40W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 40W max)	
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1 support, supports Intel Smart Response Technology	
Storage	Up to two 3.5" SATA (SATA 6.0Gb/s, 7200rpm) drives, or up to three 2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)	
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high or slim, SATA interface	
Media reader (opt)	Optional 29-in-1 media card reader on selected models	
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)	
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	Optional Low Profile 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 I217LM	
Security	- Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant - Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) - Power-on/Administrator password - Boot sequence control - Boot without keyboard, mouse - Serial port I/O control - USB port disablement (front or all/individual) - Chassis intrusion switch available on selected models	
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)	
Power supply	240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified	
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified	
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV	
Limited warranty¹	3-year parts and labor	

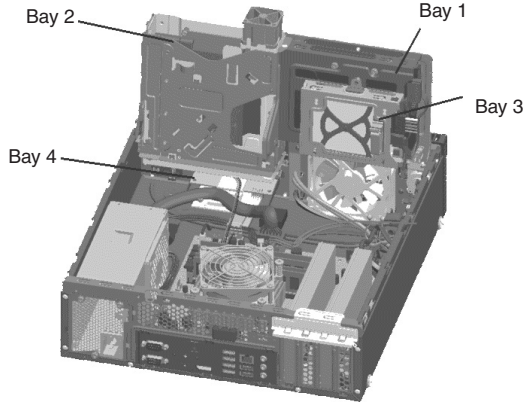
See footnotes for important warranty information
Model(s) announced August 20, 2013

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Type-model ¹	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters ²	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	Chassis intrusion switch	Preloaded OS	Base warranty (-year) ³	Ann date (mm/dd/yy)
30A2002P++	Core i7-4770 4C/3.4 GHz/ 8 MB/1600MHz	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	No	Switch	Win7 Pro64 (Downgrade from Win8)	3(IWS)	10/15/13
30A2002Q++	Core i5-4570 4C/3.2 GHz/ 6 MB/1600MHz	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	Switch	Win7 Pro64 (Downgrade from Win8)	3(IWS)	10/8/13
30A2001T++	Xeon E3-1230 v3 4C/3.3 GHz/ 8 MB/1600MHz	1600MHz ECC	4GBx1	No	1xQuadro K600 1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	Switch	Win7 Pro64 (Downgrade from Win8)	3(IWS)	10/22/13

¹Model in italics shows that this is a Global Model ²DL = Dual Link, SL = Single Link ³IWS= International Warranty Service
Country Code "++": The models are available for all WE countries, except UK, EAST and MEA

• For detailed ThinkStation E32 SFF platform specifications, please see [ThinkStation E32 Platform Specifications sheet](#)

Chipset	Intel C226 Chipset	
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors	
Processor	One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors	
Memory	1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable	
Memory DIMM sockets	Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)	
Additional memory disclaimers	- Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs - Mixing of ECC and non-ECC is not supported - Intel Core i5/i7 processors support non-ECC memory only	
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see Rear ports section)	
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: - One PCI Express 3.0 x16 slot (40W max, near CPU) - One PCI Express 2.0 x16 slot (x4 electrical, 40W max)	
Onboard drive controllers	Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1 support, supports Intel Smart Response Technology	
Storage	Up to two 3.5" SATA (SATA 6.0Gb/s, 7200rpm) drives, or up to three 2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)	
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high or slim, SATA interface	
Media reader (opt)	Optional 29-in-1 media card reader on selected models	
Front ports	Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)	
Rear ports	One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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)	Optional Low Profile 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 I217LM	
Security	- Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant - Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) - Power-on/Administrator password - Boot sequence control - Boot without keyboard, mouse - Serial port I/O control - USB port disablement (front or all/individual) - Chassis intrusion switch available on selected models	
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)	
Power supply	240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified	
Environmental certifications	GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/ENERGY STAR 5.2 qualified	
ISV certifications	For the latest list of certifications, please visit www.lenovo.com/support/ISV	
Limited warranty ¹	3-year parts and labor	

Drives Bays*

* Image above is for reference only. Model in this image contains optional slim optical + 3.5" 2nd hard drive bay with supplemental fan (Bay 2) and optional 2.5" 3rd hard drive bay (Bay 3)

- Bay 1 Standard, 3.5", 1" high, internal, primary hard drive bay
Bay 2 Standard, 5.25", 1.6" high, external, for optical, also supports one of the following:
(1) 5.25" slim optical (access) and 3.5" 2nd hard drive bay (internal), optional
(2) 3.5" 2nd hard drive bay (internal), optional
Bay 3 Optional, 2.5", 0.6" high, internal, 3rd hard drive bay
Bay 4 Optional, 3.5", 0.5" high, supports one of the following:
(1) for optional slim media card reader, external
(2) for optional mSATA drive, internal
(Bay 4 is not available on slim optical models)

Notes:

Standard optical and hard drive bays are included in models; optional optical and hard drive bays are available on models with the corresponding drives only

Expansion Slots

- Low Profile, PCIe 3.0 x16 (40w max, near CPU)
- Low Profile, PCIe 2.0 x1
- Low Profile, PCIe 2.0 x16 (x4 elec, 40W max)
- Low Profile, PCI 2.3

Mechanical

- Raven black color; metal case
- 13.35"W x 15.0"D x 3.93"H
- 338mm W x 375mm D x 102mm H
- 17.20 lb (7.8kg) max configuration
- 12.9-liter
- Toolless top cover removal
- Toolless disk and optical drive removal
- Toolless adapter retention
- Illuminated front icons
- Recessed power button