

# ThinkStation

## Product Specifications Reference

**PSREF**

Version 472, May 2015

## ThinkStation® WorkStations

**lenovo** 

Visit [www.lenovo.com/psref](http://www.lenovo.com/psref) for the latest version

# Contents

<b>Cover</b> .....	<b>2</b>
<b>Summary of Changes</b> .....	<b>1</b>
<b>ThinkStation P300 Tower</b> .....	<b>3</b>
ThinkStation P300 Tower - Overview .....	3
ThinkStation P300 Tower TopSeller Models - 30AH (May 2014) .....	4
ThinkStation P300 Tower TopSeller Models - 30AH (May 2014) - II .....	5
ThinkStation P300 Tower TopSeller Models - 30AH (May 2014) - III .....	6
ThinkStation P300 Tower TopSeller Models - 30AH (May 2014) - IV .....	7
ThinkStation P300 Tower Relationship Models .....	8
<b>ThinkStation P300 SFF</b> .....	<b>9</b>
ThinkStation P300 SFF - Overview .....	9
ThinkStation P300 SFF TopSeller Models - 30AK (May 2014) .....	10
ThinkStation P300 SFF TopSeller Models - 30AK (May 2014) - II .....	11
ThinkStation P300 SFF TopSeller Models - 30AK (April 2015) .....	12
ThinkStation P300 SFF Relationship Models .....	13
ThinkStation P300 Tower and SFF Optional Configurations .....	14
<b>ThinkStation P500</b> .....	<b>15</b>
ThinkStation P500 TopSeller Model(s) - 30A7 - I .....	15
ThinkStation P500 TopSeller Model(s) - 30A7 - II .....	16
ThinkStation P500 TopSeller Model(s) - 30A7 - III .....	17
ThinkStation P500 TopSeller Model(s) - 30A7 - IV .....	18
ThinkStation P500 TopSeller Model(s) - 30A7 - V .....	19
ThinkStation P500 Relationship Model(s) .....	20
ThinkStation P500 Options .....	21
<b>ThinkStation P700</b> .....	<b>22</b>
ThinkStation P700 - TopSeller Model(s) - 30A9 - I .....	22
ThinkStation P700 - TopSeller Model(s) - 30A9 - II .....	23
ThinkStation P700 - TopSeller Model(s) - 30A9 - III .....	24
ThinkStation P700 - TopSeller Model(s) - 30A9 - IV .....	25
ThinkStation P700 Relationship Model(s) .....	26
ThinkStation P700 Options .....	27
<b>ThinkStation P900</b> .....	<b>28</b>
ThinkStation P900 - TopSeller Model(s) - 30A5 - I .....	28
ThinkStation P900 - TopSeller Model(s) - 30A5 - II .....	29
ThinkStation P900 - TopSeller Model(s) - 30A5 - III .....	30
ThinkStation P900 Relationship Model(s) .....	31
ThinkStation P900 Options .....	32
<b>ThinkStation E32</b> .....	<b>33</b>
ThinkStation E32 Tower - Overview .....	33
ThinkStation E32 SFF - Overview .....	34
ThinkStation E32 Tower (30A1) - TopSeller (August 2013) .....	35
ThinkStation E32 Tower (30A1) - TopSeller (August 2013) - II .....	36
ThinkStation E32 Tower (30A1) - TopSeller (August 2013) - III .....	37
ThinkStation E32 Tower (30A1) - TopSeller (August 2013) - IV .....	38
ThinkStation E32 Tower (30A1) - TopSeller (August 2013) - V .....	39
ThinkStation E32 Tower (30A1) - TopSeller (August 2013) - VI .....	40
ThinkStation E32 Tower (30A1) - TopSeller (August 2013) - VII .....	41
ThinkStation E32 Tower (30A1) - TopSeller (September 2013) .....	42
ThinkStation E32 Tower (30A1) - TopSeller (September 2013) - II .....	43
ThinkStation E32 Tower (30A0) - August 2013 .....	44
ThinkStation E32 Tower (30A0) - August 2013 - II .....	45
ThinkStation E32 Tower (30A0) - August 2013 - III .....	46
ThinkStation E32 Tower (30A0) - August 2013 - IV .....	47
ThinkStation E32 Tower (30A0) - September 2013 .....	48
ThinkStation E32 Tower (30A0) - October 2013 .....	49
ThinkStation E32 SFF (30A3) - TopSeller (August 2013) .....	50
ThinkStation E32 SFF (30A3) - TopSeller (August 2013) - II .....	51
ThinkStation E32 SFF (30A3) - TopSeller (August 2013) - III .....	52
ThinkStation E32 SFF (30A3) - TopSeller (August 2013) - IV .....	53
ThinkStation E32 SFF (30A3) - TopSeller (September 2013) .....	54
ThinkStation E32 SFF (30A2) - August 2013 .....	55
ThinkStation E32 SFF (30A2) - August 2013 - II .....	56
ThinkStation E32 SFF (30A2) - August 2013 - III .....	57
ThinkStation E32 SFF (30A2) - September 2013 .....	58
ThinkStation E32 SFF (30A2) - October 2013 .....	59
ThinkStation E32 Platform Specifications - I of III .....	60
ThinkStation E32 Platform Specifications - II of III .....	61
ThinkStation E32 Platform Specifications - III of III .....	62

# Contents

ThinkStation E32 Optional Configurations .....	63
<b>ThinkStation S30 .....</b>	<b>64</b>
ThinkStation S30 Platform Specifications - I of IV .....	65
ThinkStation S30 Platform Specifications - II of IV .....	66
ThinkStation S30 Platform Specifications - III of IV .....	67
ThinkStation S30 Platform Specifications - IV of IV .....	68
ThinkStation S30 (4352) - TopSeller (June 2013) .....	69
ThinkStation S30 (4352) - TopSeller (June 2013) - II .....	70
ThinkStation S30 (4352) - TopSeller (June 2013) - III .....	71
ThinkStation S30 (4352) - TopSeller (June 2013) - IV .....	72
ThinkStation S30 (4352) - TopSeller (September 2013) .....	73
ThinkStation S30 (4352) - TopSeller (September 2013) - II .....	74
ThinkStation S30 (4352) - TopSeller (September 2013) - III .....	75
ThinkStation S30 (4352) - TopSeller (September 2013) - IV .....	76
ThinkStation S30 (4352) - TopSeller (April 2014) .....	77
ThinkStation S30 (4351) - June 2013 .....	78
ThinkStation S30 (4351) - June 2013 - II .....	79
ThinkStation S30 (4351) - September 2013 .....	80
ThinkStation S30 (4351) - September 2013 - II .....	81
ThinkStation S30 (4351) - October 2013 .....	82
ThinkStation S30 (4351) - April 2014 .....	83
ThinkStation S30 Optional Configurations .....	84
<b>ThinkStation C30 .....</b>	<b>85</b>
ThinkStation C30 Platform Specifications - I of IV .....	86
ThinkStation C30 Platform Specifications - II of IV .....	87
ThinkStation C30 Platform Specifications - III of IV .....	88
ThinkStation C30 Platform Specifications - IV of IV .....	89
ThinkStation C30 (1137) - TopSeller (June 2013) .....	90
ThinkStation C30 (1137) - TopSeller (June 2013) - II .....	91
ThinkStation C30 (1137) - TopSeller (June 2013) - III .....	92
ThinkStation C30 (1137) - TopSeller (September 2013) .....	93
ThinkStation C30 (1137) - TopSeller (September 2013) - II .....	94
ThinkStation C30 (1137) - TopSeller (September 2013) - III .....	95
ThinkStation C30 (1137) - TopSeller (October 2013) .....	96
ThinkStation C30 (1137) - TopSeller (April 2014) - I .....	97
ThinkStation C30 (1137) - TopSeller (April 2014) - II .....	98
ThinkStation C30 (1136) - June 2013 .....	99
ThinkStation C30 (1136) - June 2013 - II .....	100
ThinkStation C30 (1136) - September 2013 .....	101
ThinkStation C30 (1136) - September 2013 - II .....	102
ThinkStation C30 (1136) - October 2013 .....	103
ThinkStation C30 (1136) - April 2014 .....	104
ThinkStation C30 Optional Configurations .....	105
<b>ThinkStation D30 .....</b>	<b>106</b>
ThinkStation D30 Platform Specifications - I of IV .....	107
ThinkStation D30 Platform Specifications - II of IV .....	108
ThinkStation D30 Platform Specifications - III of IV .....	109
ThinkStation D30 Platform Specifications - IV of IV .....	110
ThinkStation D30 (4354) - TopSeller (June 2013) .....	111
ThinkStation D30 (4354) - TopSeller (June 2013) - II .....	112
ThinkStation D30 (4354) - TopSeller (June 2013) - III .....	113
ThinkStation D30 (4354) - TopSeller (June 2013) - IV .....	114
ThinkStation D30 (4354) - TopSeller (September 2013) .....	115
ThinkStation D30 (4354) - TopSeller (September 2013) - II .....	116
ThinkStation D30 (4354) - TopSeller (September 2013) - III .....	117
ThinkStation D30 (4354) - TopSeller (October 2013) .....	118
ThinkStation D30 (4354) - TopSeller (October 2013) - II .....	119
ThinkStation D30 (4354) - TopSeller (April 2014) .....	120
ThinkStation D30 (4354) - TopSeller (April 2014) - II .....	121
ThinkStation D30 (4353) - June 2013 .....	122
ThinkStation D30 (4353) - June 2013 - II .....	123
ThinkStation D30 (4353) - September 2013 .....	124
ThinkStation D30 (4353) - September 2013 - II .....	125
ThinkStation D30 (4353) - October 2013 .....	126
ThinkStation D30 (4353) - April 2014 .....	127
ThinkStation D30 (4353) - April 2014 - II .....	128
ThinkStation D30 Optional Configurations .....	129
<b>Withdrawn Product Books .....</b>	<b>130</b>
<b>Legal Information and Trademarks .....</b>	<b>131</b>

# Summary of Changes

---

This section describes the changes made in this version of ThinkStation PSREF and in previous version. This edition might also include minor corrections and editorial changes which are not identified.

## May 6, 2015 - Version 472

### Additions in this update

- ▶ New ThinkStation P300 SFF models announced April 2015.
- ▶ Update ThinkStation P300 Tower specifications. Add graphics and storage supporting list.
- ▶ Update ThinkStation P300 SFF specifications. Add graphics and storage supporting list.  
Add NVIDIA Quadro K1200 graphics adapter.
- ▶ Update ThinkStation P300 Tower and SFF Optional Configurations.

## January 28, 2015 - Version 467

### Additions in this update

- ▶ New ThinkStation P500 models announced January 2015.
- ▶ New ThinkStation P700 models announced January 2015.
- ▶ New ThinkStation P900 models announced January 2015.
- ▶ New ThinkStation P700 Options sheet.
- ▶ New ThinkStation P900 Options sheet.

## January 7, 2015 - Version 466

### Changes in this update

- ▶ Update Quadro K4200/K2200/K620/K420 support on ThinkStation P300 Tower and SFF.
- ▶ Update Quadro K4200/K2200/K620/K420 option numbers on ThinkStation P300 Tower and SFF.

## November 12, 2014 - Version 463

### Changes in this update

- ▶ Update EPEAT information on ThinkStation P500, P700, and P900.
- ▶ Update Energy Star 6.0 models on ThinkStation P500, P700, and P900.

## October 29, 2014 - Version 462

### Changes in this update

- ▶ ThinkStation P500: Update ThinkStation P500 Options sheet.

## October 9, 2014 - Version 461

### Additions in this update

- ▶ New product

New ThinkStation P700 announced October 2014 (30A9-1, 30A9-2, 30A9-3, P700REL-1)  
New ThinkStation P900 announced October 2014 (30A5-1, 30A5-2, 30A5-3, P900REL-1)

### Changes in this update

- ▶ ThinkStation P500: Update onboard network, flex connector, media reader, and connectors of supporting graphics adapters specifications.

## **September 10, 2014 - Version 459**

### Additions in this update

- ▶ New product

  - New ThinkStation P500 announced September 2014 (30A7-1, 30A7-2, 30A7-3, P500REL-1)

## **May 27, 2014 - Version 454**

### Additions in this update

- ▶ New product: ThinkStation P300 Tower and SFF announced May 27, 2014. Includes the following pages:

  - ThinkStation P300 Tower - Overview
  - ThinkStation P300 Tower TopSeller Models - 30AH (May 2014)
  - ThinkStation P300 Tower TopSeller Models - 30AH (May 2014) - II
  - ThinkStation P300 Tower TopSeller Models - 30AH (May 2014) - III
  - ThinkStation P300 Tower TopSeller Models - 30AH (May 2014) - IV
  - ThinkStation P300 Tower Relationship Models
  - ThinkStation P300 SFF - Overview
  - ThinkStation P300 SFF TopSeller Models - 30AK (May 2014)
  - ThinkStation P300 SFF TopSeller Models - 30AK (May 2014) - II
  - ThinkStation P300 SFF Relationship Models
  - ThinkStation P300 Tower and SFF Optional Configurations

## **April 15, 2014 - Version 452**

### Additions in this update

- ▶ New model(s)

  - ThinkStation S30 (4352) - TopSeller (April 2014)
  - ThinkStation S30 (4351) - April 2014
  - ThinkStation C30 (1137) - TopSeller (April 2014) - I
  - ThinkStation C30 (1137) - TopSeller (April 2014) - II
  - ThinkStation C30 (1136) - April 2014
  - ThinkStation D30 (4354) - TopSeller (April 2014)
  - ThinkStation D30 (4354) - TopSeller (April 2014) - II
  - ThinkStation D30 (4353) - April 2014
  - ThinkStation D30 (4353) - April 2014 - II

## **February 25, 2014 - Version 450**

### Additions in this update

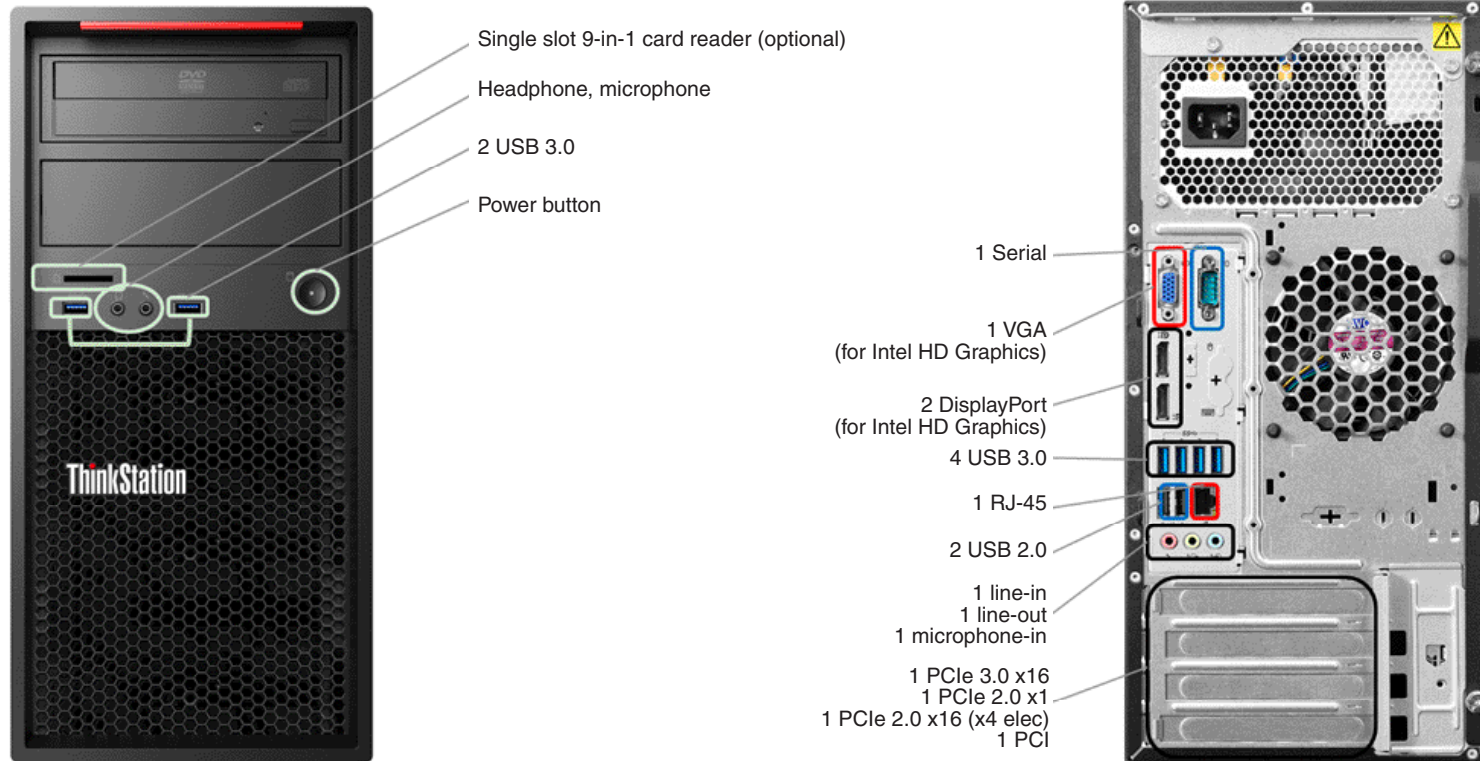
- ▶ New section

  - Summary of changes, contains changes list for the three most recent versions

- ▶ New sheet

  - ThinkStation options list for E32, S30, C30, D30
  - ThinkStation E32 Optional Configurations
  - ThinkStation S30 Optional Configurations
  - ThinkStation C30 Optional Configurations
  - ThinkStation D30 Optional Configurations

## ThinkStation P300 Tower - Overview



### Internal

- One LGA1150 socket, supports one processor from Intel Xeon E3-1200 v3, Core i7, Core i5, Core i3, Pentium, and Celeron families
- 4 DIMM sockets, supports up to 32GB ECC or non-ECC UDIMM memory
- Up to four 3.5" disk drive bays, two 3.5" disk drive bays are standard

### Mechanical

- Raven black color; metal case
- 6.89"W x 16.77"D x 14.8H
- 175mm W x 426mm D x 376mm H
- 28.66 lb (13kg) max configuration
- 25-liter

Type-model	Processor (Core/GHz/Cache/Memory speed/ optional Intel HD Graphics)	Memory	Discrete graphics adapters	Pre- conf RAID	Internal Storage	Optical	Media reader	1394 adptr	Discrete Ethernet	eSATA (front or rear)	Chassis intrusion switch	Preloaded OS	Base on-site warranty (-year)	Power supply	Global
30AH000GUS	Core i3-4350 2C/3.6GHz/4MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Open	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AH000HUS	Core i3-4350 2C/3.6GHz/4MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Quadro K600 1GB	No	1x500GB 3.5" SATA 7.2K	DVD±RW	No	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AH000JUS	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Open	No	1x500GB 3.5" SATA 7.2K	DVD±RW	No	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AH000KUS	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Quadro K600 1GB	No	1x500GB 3.5" SATA 7.2K	DVD±RW	No	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AH000RUS	Core i5-4690 4C/3.5GHz/6MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Open	No	1x1TB 3.5" SATA 7.2K	DVD±RW	No	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AH000SUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Open	No	1x1TB 3.5" SATA 7.2K	DVD±RW	No	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AH000TUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	No	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No

Components	Specification
Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9.5 supported on Xeon models
Processor	One LGA1150 socket, supports one processor from the following: <ul style="list-style-type: none"> <li>Xeon E3-12x1 v3: up to 4C/3.7GHz/1600MHz/8MB</li> <li>Xeon E3-12x6 v3: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Xeon E3-12x0 v3: up to 4C/3.6GHz/1600MHz/8MB</li> <li>Xeon E3-12x5 v3: up to 4C/3.5GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Core i7: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics 4600</li> <li>Core i5: up to 4C/3.5GHz/1600MHz/6MB/Intel HD Graphics 4600</li> <li>Core i3: up to 2C/3.7GHz/1600MHz/4MB/Intel HD Graphics 4600</li> <li>Pentium: up to 2C/3.4GHz/1600MHz/3MB/Intel HD Graphics</li> <li>Celeron: up to 2C/2.9GHz/1333MHz/2MB/Intel HD Graphics</li> </ul>
Memory DIMM slots	Four DDR3 DIMM slots, 2-channel (integrated memory controller in processor)
Memory type	1600MHz DDR3, UDIMM, ECC or non-ECC (ECC and non-ECC DIMMs cannot be mixed on the same system)
Memory capacity	Up to 32GB
Intel HD Graphics in processor	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
Discrete graphics	Two PCI Express x16 slots for graphics adapters (see Expansion section); up to two Quadro K2200 on 280 watts models, up to two Quadro K2200 or up to one Quadro K4200 on 450 watts models,
Onboard drive controller	Four onboard SATA 6.0Gb/s connectors for optical and disk drives, one SATA connector for optional eSATA, RAID 0, 1, 5, 10 support
Standard drive Bays	Two external 5.25" bays, two internal 3.5" bays (see right)
Maximum internal storage	Up to 8TB (4TB 3.5" x 2) with standard disk bay configuration, up to 16TB (4TB 3.5" x 4) with optional disk bay configuration
Onboard Ethernet	One onboard gigabit ethernet, Intel I217LM
HD Audio	Realtek ALC662 codec
TPM	Standard, TCG 1.2-compliant
Power supply	Supports one of the following: <ul style="list-style-type: none"> <li>280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified</li> <li>450 watts with variable speed fan, autosensing, 92% PSU, Climate Savers Computing Platinum, 80 PLUS Platinum qualified</li> </ul>
Expansion slots	1: half-length, full-height, PCIe 3.0 x16 (near CPU) 2: half-length, full-height, PCIe 2.0 x1 3: half-length, full-height, PCIe 2.0 x16 (x4 elec) 4: half-length, full-height, PCI 2.3
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)
Rear ports	1 VGA and 2 DisplayPort (for Intel HD Graphics models only), 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)

Components	Specification
IEEE 1394 (optional)	1 front, 1 rear, via optional 1394 adapter
Keyboard/Mouse	104-key USB keyboard/Optical Wheel Mouse (USB connector)
Mechanical	<ul style="list-style-type: none"> <li>Raven black color; metal case</li> <li>6.89"W x 16.77"D x 14.8"H</li> <li>175mm W x 426mm D x 376mm H</li> <li>28.66 lb (13kg) max configuration</li> <li>25-liter</li> </ul>
Environmental certifications	GREENGUARD certified/RoHS-compliant/EPEAT Gold rating/ENERGY STAR 6.0 qualified
ISV certifications	For the latest list of certifications, please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>

**Drive Bays for ThinkStation P300 Tower**

- 1: 5.25", for optional optical/flex module/HDD bay
- 2: 5.25", for optional optical/flex module/HDD bay
- 3: Optional 9-in-1 single slot reader
- 4: Optional MSATA SSD drive
- 5: Standard 3.5" HDD bay
- 6: Standard 3.5" HDD bay

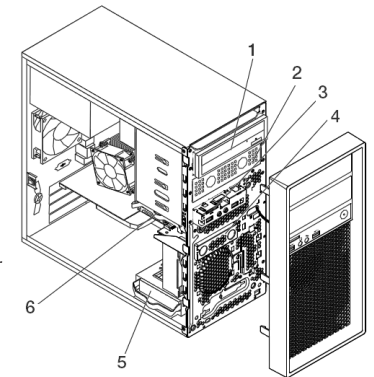
Note:

- 1. Flex module supports one or more of the following: 9.5mm optical/29-in-1 reader/front IEEE 1394/front eSATA. Up to one flex module is supported per system.
- 2. The bracket of HDD bay is optional and comes with the corresponding drives.

**Supporting NVIDIA graphics list**

Adapter	Cores	Memory	Power	Connector***
NVS 310	48	512MB	19.5W	2xDP
NVS 315	48	1024MB		2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W	4xmini DP
Quadro 410	192	512MB	36.7W	1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W	1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W	1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W	1xDVI-I DL+2xDP
Quadro K420	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W	1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W	1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W	1xDVI-I DL+2xDP

\*\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2



**Supporting storage list**

3.5" SATA HDD (7.2K 6Gbs)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SATA HDD (10K 6Gbs)	250GB/500GB/1TB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB/256GB OPAL/480GB/512GB/1TB
MSATA SSD	24GB

For supporting options list, please see [ThinkStation P300 Optional Configurations sheet](#).

Type-model	Processor (Core/GHz/Cache/Memory speed/ optional Intel HD Graphics)	Memory	Discrete graphics adapters	Pre- conf RAID	Internal Storage	Optical	Media reader	1394 adptr	Discrete Ethernet	eSATA (front or rear)	Chassis intrusion switch	Preloaded OS	Base on-site warranty (-year)	Power supply	Global
30AH000UUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	180GB SSD+1TB 3.5" SATA 7.2K	DVD±RW	No	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AH000VUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K2000 2GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	No	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AH000WUS	Xeon E3-1226 v3 4C/3.3GHz/8MB/1600MHz/Intel HD P4600	1 x 4GB 1600MHz non-ECC	Open	No	1x500GB 3.5" SATA 7.2K	DVD±RW 9.5mm	29-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AH000XUS	Xeon E3-1246 v3 4C/3.5GHz/8MB/1600MHz/Intel HD P4600	1 x 8GB 1600MHz non-ECC	Open	No	1x1TB 3.5" SATA 7.2K	DVD±RW 9.5mm	29-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AH000YUS	Xeon E3-1241 v3 4C/3.5GHz/8MB/1600MHz	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AH0010US	Core i3-4350 2C/3.6GHz/4MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Open	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	280W	No
30AH0012US	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Open	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	280W	No

Components	Specification
Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9.5 supported on Xeon models
Processor	One LGA1150 socket, supports one processor from the following: <ul style="list-style-type: none"> <li>Xeon E3-12x1 v3: up to 4C/3.7GHz/1600MHz/8MB</li> <li>Xeon E3-12x6 v3: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Xeon E3-12x0 v3: up to 4C/3.6GHz/1600MHz/8MB</li> <li>Xeon E3-12x5 v3: up to 4C/3.5GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Core i7: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics 4600</li> <li>Core i5: up to 4C/3.5GHz/1600MHz/6MB/Intel HD Graphics 4600</li> <li>Core i3: up to 2C/3.7GHz/1600MHz/4MB/Intel HD Graphics 4600</li> <li>Pentium: up to 2C/3.4GHz/1600MHz/3MB/Intel HD Graphics</li> <li>Celeron: up to 2C/2.9GHz/1333MHz/2MB/Intel HD Graphics</li> </ul>
Memory DIMM slots	Four DDR3 DIMM slots, 2-channel (integrated memory controller in processor)
Memory type	1600MHz DDR3, UDIMM, ECC or non-ECC (ECC and non-ECC DIMMs cannot be mixed on the same system)
Memory capacity	Up to 32GB
Intel HD Graphics in processor	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
Discrete graphics	Two PCI Express x16 slots for graphics adapters (see Expansion section); up to two Quadro K2200 on 280 watts models, up to two Quadro K2200 or up to one Quadro K4200 on 450 watts models,
Onboard drive controller	Four onboard SATA 6.0Gb/s connectors for optical and disk drives, one SATA connector for optional eSATA, RAID 0, 1, 5, 10 support
Standard drive Bays	Two external 5.25" bays, two internal 3.5" bays (see right)
Maximum internal storage	Up to 8TB (4TB 3.5" x 2) with standard disk bay configuration, up to 16TB (4TB 3.5" x 4) with optional disk bay configuration
Onboard Ethernet	One onboard gigabit ethernet, Intel I217LM
HD Audio	Realtek ALC662 codec
TPM	Standard, TCG 1.2-compliant
Power supply	Supports one of the following: <ul style="list-style-type: none"> <li>280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified</li> <li>450 watts with variable speed fan, autosensing, 92% PSU, Climate Savers Computing Platinum, 80 PLUS Platinum qualified</li> </ul>
Expansion slots	1: half-length, full-height, PCIe 3.0 x16 (near CPU) 2: half-length, full-height, PCIe 2.0 x1 3: half-length, full-height, PCIe 2.0 x16 (x4 elec) 4: half-length, full-height, PCI 2.3
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)
Rear ports	1 VGA and 2 DisplayPort (for Intel HD Graphics models only), 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)

Components	Specification
IEEE 1394 (optional)	1 front, 1 rear, via optional 1394 adapter
Keyboard/Mouse	104-key USB keyboard/Optical Wheel Mouse (USB connector)
Mechanical	<ul style="list-style-type: none"> <li>Raven black color; metal case</li> <li>6.89"W x 16.77"D x 14.8"H</li> <li>175mm W x 426mm D x 376mm H</li> <li>28.66 lb (13kg) max configuration</li> <li>25-liter</li> </ul>
Environmental certifications	GREENGUARD certified/RoHS-compliant/EPEAT Gold rating/ENERGY STAR 6.0 qualified
ISV certifications	For the latest list of certifications, please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>

**Drive Bays for ThinkStation P300 Tower**

- 1: 5.25", for optional optical/flex module/HDD bay
- 2: 5.25", for optional optical/flex module/HDD bay
- 3: Optional 9-in-1 single slot reader
- 4: Optional MSATA SSD drive
- 5: Standard 3.5" HDD bay
- 6: Standard 3.5" HDD bay

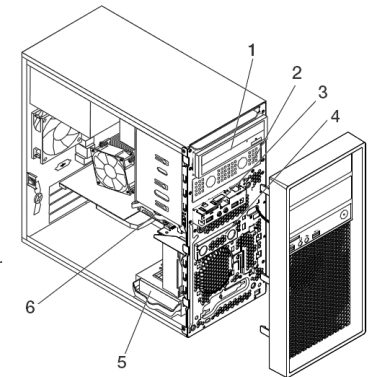
Note:

1. Flex module supports one or more of the following: 9.5mm optical/29-in-1 reader/front IEEE 1394/front eSATA. Up to one flex module is supported per system.
2. The bracket of HDD bay is optional and comes with the corresponding drives.

**Supporting NVIDIA graphics list**

Adapter	Cores	Memory	Power	Connector***
NVS 310	48	512MB	19.5W	2xDP
NVS 315	48	1024MB		2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W	4xmini DP
Quadro 410	192	512MB	36.7W	1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W	1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W	1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W	1xDVI-I DL+2xDP
Quadro K420	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W	1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W	1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W	1xDVI-I DL+2xDP

\*\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2



**Supporting storage list**

3.5" SATA HDD (7.2K 6Gbs)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SATA HDD (10K 6Gbs)	250GB/500GB/1TB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB/256GB OPAL/480GB/512GB/1TB
MSATA SSD	24GB

For supporting options list, please see [ThinkStation P300 Optional Configurations sheet](#).



# ThinkStation P300 Tower TopSeller Models - 30AH (May 2014) - III

Product Specifications Reference (PSREF)

Type-model	Processor (Core/GHz/Cache/Memory speed/ optional Intel HD Graphics)	Memory	Discrete graphics adapters	Pre- conf RAID	Internal Storage	Optical	Media reader	1394 adptr	Discrete Ethernet	eSATA (front or rear)	Chassis intrusion switch	Preloaded OS	Base on-site warranty (-year)	Power supply	Global
30AH0013US	Core i5-4690 4C/3.5GHz/6MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Open	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	280W	No
30AH0014US	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Open	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	280W	No
30AH001MUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K2000 2GB	No	1x1TB 3.5" SATA 7.2K Hybrid	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	450W	No
30AH001NUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K4000 3GB	No	1x256GB SSD OPAL	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	450W	No
30AH001PUS	Xeon E3-1241 v3 4C/3.5GHz/8MB/1600MHz	1 x 8GB 1600MHz non-ECC	Quadro K2000 2GB	No	1x1TB 3.5" SATA 7.2K Hybrid	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	450W	No
30AH001QUS	Xeon E3-1241 v3 4C/3.5GHz/8MB/1600MHz	1 x 8GB 1600MHz non-ECC	Quadro K4000 3GB	No	1x256GB SSD OPAL	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	450W	No
30AH001RUS	Xeon E3-1271 v3 4C/3.6GHz/8MB/1600MHz/None	1 x 8GB 1600MHz non-ECC	Quadro K4000 3GB	No	1x1TB 3.5" SATA 7.2K Hybrid	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	450W	No

Components	Specification
Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9.5 supported on Xeon models
Processor	One LGA1150 socket, supports one processor from the following: <ul style="list-style-type: none"> <li>Xeon E3-12x1 v3: up to 4C/3.7GHz/1600MHz/8MB</li> <li>Xeon E3-12x6 v3: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Xeon E3-12x0 v3: up to 4C/3.6GHz/1600MHz/8MB</li> <li>Xeon E3-12x5 v3: up to 4C/3.5GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Core i7: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics 4600</li> <li>Core i5: up to 4C/3.5GHz/1600MHz/6MB/Intel HD Graphics 4600</li> <li>Core i3: up to 2C/3.7GHz/1600MHz/4MB/Intel HD Graphics 4600</li> <li>Pentium: up to 2C/3.4GHz/1600MHz/3MB/Intel HD Graphics</li> <li>Celeron: up to 2C/2.9GHz/1333MHz/2MB/Intel HD Graphics</li> </ul>
Memory DIMM slots	Four DDR3 DIMM slots, 2-channel (integrated memory controller in processor)
Memory type	1600MHz DDR3, UDIMM, ECC or non-ECC (ECC and non-ECC DIMMs cannot be mixed on the same system)
Memory capacity	Up to 32GB
Intel HD Graphics in processor	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
Discrete graphics	Two PCI Express x16 slots for graphics adapters (see Expansion section); up to two Quadro K2200 on 280 watts models, up to two Quadro K2200 or up to one Quadro K4200 on 450 watts models,
Onboard drive controller	Four onboard SATA 6.0Gb/s connectors for optical and disk drives, one SATA connector for optional eSATA, RAID 0, 1, 5, 10 support
Standard drive Bays	Two external 5.25" bays, two internal 3.5" bays (see right)
Maximum internal storage	Up to 8TB (4TB 3.5" x 2) with standard disk bay configuration, up to 16TB (4TB 3.5" x 4) with optional disk bay configuration
Onboard Ethernet	One onboard gigabit ethernet, Intel I217LM
HD Audio	Realtek ALC662 codec
TPM	Standard, TCG 1.2-compliant
Power supply	Supports one of the following: <ul style="list-style-type: none"> <li>280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified</li> <li>450 watts with variable speed fan, autosensing, 92% PSU, Climate Savers Computing Platinum, 80 PLUS Platinum qualified</li> </ul>
Expansion slots	1: half-length, full-height, PCIe 3.0 x16 (near CPU) 2: half-length, full-height, PCIe 2.0 x1 3: half-length, full-height, PCIe 2.0 x16 (x4 elec) 4: half-length, full-height, PCI 2.3
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)
Rear ports	1 VGA and 2 DisplayPort (for Intel HD Graphics models only), 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)

Components	Specification
IEEE 1394 (optional)	1 front, 1 rear, via optional 1394 adapter
Keyboard/Mouse	104-key USB keyboard/Optical Wheel Mouse (USB connector)
Mechanical	<ul style="list-style-type: none"> <li>Raven black color; metal case</li> <li>6.89"W x 16.77"D x 14.8"H</li> <li>175mm W x 426mm D x 376mm H</li> <li>28.66 lb (13kg) max configuration</li> <li>25-liter</li> </ul>
Environmental certifications	GREENGUARD certified/RoHS-compliant/EPEAT Gold rating/ENERGY STAR 6.0 qualified
ISV certifications	For the latest list of certifications, please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>

### Drive Bays for ThinkStation P300 Tower

- 1: 5.25", for optional optical/flex module/HDD bay
- 2: 5.25", for optional optical/flex module/HDD bay
- 3: Optional 9-in-1 single slot reader
- 4: Optional MSATA SSD drive
- 5: Standard 3.5" HDD bay
- 6: Standard 3.5" HDD bay

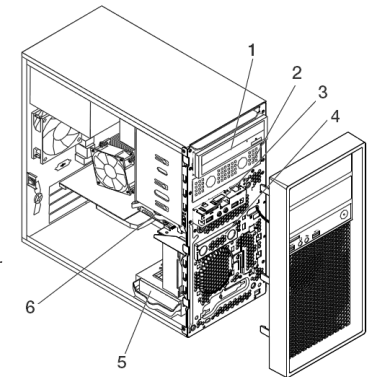
Note:

1. Flex module supports one or more of the following: 9.5mm optical/29-in-1 reader/front IEEE 1394/front eSATA. Up to one flex module is supported per system.
2. The bracket of HDD bay is optional and comes with the corresponding drives.

### Supporting NVIDIA graphics list

Adapter	Cores	Memory	Power	Connector***
NVS 310	48	512MB	19.5W	2xDP
NVS 315	48	1024MB		2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W	4xmini DP
Quadro 410	192	512MB	36.7W	1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W	1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W	1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W	1xDVI-I DL+2xDP
Quadro K420	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W	1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W	1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W	1xDVI-I DL+2xDP

\*\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2



### Supporting storage list

3.5" SATA HDD (7.2K 6Gbs)	500GB/1TB/2TB/3TB/4TB/ 1TB hybrid/2TB hybrid
2.5" SATA HDD (10K 6Gbs)	250GB/500GB/1TB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB/ 256GB OPAL/480GB/ 512GB/1TB
MSATA SSD	24GB

For supporting options list, please see [ThinkStation P300 Optional Configurations sheet](#).

# ThinkStation P300 Tower TopSeller Models - 30AH (May 2014) - IV

Product Specifications Reference (PSREF)

Type-model	Processor (Core/GHz/Cache/Memory speed/ optional Intel HD Graphics)	Memory	Discrete graphics adapters	Pre- conf RAID	Internal Storage	Optical	Media reader	1394 adptr	Discrete Ethernet	eSATA (front or rear)	Chassis intrusion switch	Preloaded OS	Base on-site warranty (-year)	Power supply	Global
30AH001SUS	Xeon E3-1281 v3 4C/3.7GHz/8MB/1600MHz	1 x 8GB 1600MHz non-ECC	Quadro K4000 3GB	No	1x256GB SSD OPAL	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	450W	No
30AH001TUS	Xeon E3-1246 v3 4C/3.5GHz/8MB/1600MHz/Intel HD P4600	1 x 8GB 1600MHz non-ECC	Open	No	1x180GB SSD	2 x DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	450W	No
30AH001UUS	Xeon E3-1276 v3 4C/3.6GHz/8MB/1600MHz/Intel HD P4600	1 x 8GB 1600MHz non-ECC	Quadro K4000 3GB	No	1x1TB 3.5" SATA 7.2K Hybrid	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	450W	No

Components	Specification
Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9.5 supported on Xeon models
Processor	One LGA1150 socket, supports one processor from the following: <ul style="list-style-type: none"> <li>Xeon E3-12x1 v3: up to 4C/3.7GHz/1600MHz/8MB</li> <li>Xeon E3-12x6 v3: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Xeon E3-12x0 v3: up to 4C/3.6GHz/1600MHz/8MB</li> <li>Xeon E3-12x5 v3: up to 4C/3.5GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Core i7: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics 4600</li> <li>Core i5: up to 4C/3.5GHz/1600MHz/6MB/Intel HD Graphics 4600</li> <li>Core i3: up to 2C/3.7GHz/1600MHz/4MB/Intel HD Graphics 4600</li> <li>Pentium: up to 2C/3.4GHz/1600MHz/3MB/Intel HD Graphics</li> <li>Celeron: up to 2C/2.9GHz/1333MHz/2MB/Intel HD Graphics</li> </ul>
Memory DIMM slots	Four DDR3 DIMM slots, 2-channel (integrated memory controller in processor)
Memory type	1600MHz DDR3, UDIMM, ECC or non-ECC (ECC and non-ECC DIMMs cannot be mixed on the same system)
Memory capacity	Up to 32GB
Intel HD Graphics in processor	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
Discrete graphics	Two PCI Express x16 slots for graphics adapters (see Expansion section); up to two Quadro K2200 on 280 watts models, up to two Quadro K2200 or up to one Quadro K4200 on 450 watts models,
Onboard drive controller	Four onboard SATA 6.0Gb/s connectors for optical and disk drives, one SATA connector for optional eSATA, RAID 0, 1, 5, 10 support
Standard drive Bays	Two external 5.25" bays, two internal 3.5" bays (see right)
Maximum internal storage	Up to 8TB (4TB 3.5" x 2) with standard disk bay configuration, up to 16TB (4TB 3.5" x 4) with optional disk bay configuration
Onboard Ethernet	One onboard gigabit ethernet, Intel I217LM
HD Audio	Realtek ALC662 codec
TPM	Standard, TCG 1.2-compliant
Power supply	Supports one of the following: <ul style="list-style-type: none"> <li>280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified</li> <li>450 watts with variable speed fan, autosensing, 92% PSU, Climate Savers Computing Platinum, 80 PLUS Platinum qualified</li> </ul>
Expansion slots	1: half-length, full-height, PCIe 3.0 x16 (near CPU) 2: half-length, full-height, PCIe 2.0 x1 3: half-length, full-height, PCIe 2.0 x16 (x4 elec) 4: half-length, full-height, PCI 2.3
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)
Rear ports	1 VGA and 2 DisplayPort (for Intel HD Graphics models only), 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)

Components	Specification
IEEE 1394 (optional)	1 front, 1 rear, via optional 1394 adapter
Keyboard/Mouse	104-key USB keyboard/Optical Wheel Mouse (USB connector)
Mechanical	<ul style="list-style-type: none"> <li>Raven black color; metal case</li> <li>6.89"W x 16.77"D x 14.8"H</li> <li>175mm W x 426mm D x 376mm H</li> <li>28.66 lb (13kg) max configuration</li> <li>25-liter</li> </ul>
Environmental certifications	GREENGUARD certified/RoHS-compliant/EPEAT Gold rating/ENERGY STAR 6.0 qualified
ISV certifications	For the latest list of certifications, please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>

### Drive Bays for ThinkStation P300 Tower

- 1: 5.25", for optional optical/flex module/HDD bay
- 2: 5.25", for optional optical/flex module/HDD bay
- 3: Optional 9-in-1 single slot reader
- 4: Optional MSATA SSD drive
- 5: Standard 3.5" HDD bay
- 6: Standard 3.5" HDD bay

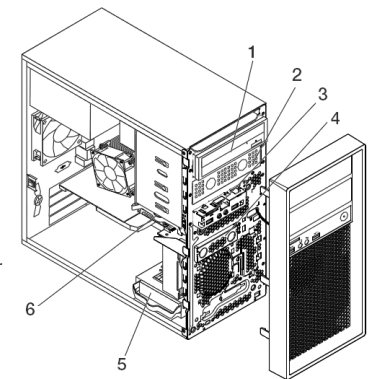
Note:

1. Flex module supports one or more of the following: 9.5mm optical/29-in-1 reader/front IEEE 1394/front eSATA. Up to one flex module is supported per system.
2. The bracket of HDD bay is optional and comes with the corresponding drives.

### Supporting NVIDIA graphics list

Adapter	Cores	Memory	Power	Connector***
NVS 310	48	512MB	19.5W	2xDP
NVS 315	48	1024MB		2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W	4xmini DP
Quadro 410	192	512MB	36.7W	1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W	1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W	1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W	1xDVI-I DL+2xDP
Quadro K420	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W	1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W	1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W	1xDVI-I DL+2xDP

\*\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2



### Supporting storage list

3.5" SATA HDD (7.2K 6Gbs)	500GB/1TB/2TB/3TB/4TB/ 1TB hybrid/2TB hybrid
2.5" SATA HDD (10K 6Gbs)	250GB/500GB/1TB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB/ 256GB OPAL/480GB/ 512GB/1TB
MSATA SSD	24GB

For supporting options list, please see [ThinkStation P300 Optional Configurations sheet](#).

# ThinkStation P300 Tower Relationship Models

Product Specifications Reference (PSREF)

Type-model	Processor (Core/GHz/Cache/Memory speed/ optional Intel HD Graphics)	Memory	Discrete graphics adapters	Pre- conf RAID	Internal Storage	Optical	Media reader	1394 adptr	Discrete Ethernet	eSATA (front or rear)	Chassis intrusion switch	Preloaded OS	Base on-site warranty (-year)	Power supply	Global
<b>Announced May 2014 - 30AG</b>															
30AG003GUS	Core i3-4350 2C/3.6GHz/4MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Open	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AG003HUS	Core i5-4690 4C/3.5GHz/6MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K2000 2GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AG003JUS	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AG003KUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K2000 2GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AG003LUS	Xeon E3-1241 v3 4C/3.5GHz/8MB/1600MHz	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AG003MUS	Xeon E3-1246 v3 4C/3.5GHz/8MB/1600MHz/Intel HD P4600	1 x 8GB 1600MHz non-ECC	Quadro K2000 2GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AG003NUS	Xeon E3-1246 v3 4C/3.5GHz/8MB/1600MHz/Intel HD P4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x180GB SSD	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	280W	No
30AG003PUS	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	280W	No
30AG003QUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K2000 2GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	280W	No
30AG003RUS	Xeon E3-1246 v3 4C/3.5GHz/8MB/1600MHz/Intel HD P4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	280W	No
30AG0042SS	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3 intl	280W	Global
30AG0042US	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3 intl	280W	Global
30AG0043SS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Quadro K600 1GB	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3 intl	280W	Global
30AG0043US	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Quadro K600 1GB	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3 intl	280W	Global
30AG0044SS	Xeon E3-1246 v3 4C/3.5GHz/8MB/1600MHz/Intel HD P4600	1 x 4GB 1600MHz ECC	Quadro K600 1GB	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3 intl	280W	Global
30AG0044US	Xeon E3-1246 v3 4C/3.5GHz/8MB/1600MHz/Intel HD P4600	1 x 4GB 1600MHz ECC	Quadro K600 1GB	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3 intl	280W	Global

## ThinkStation P300 SFF - Overview



### Front

- 2 USB 3.0
- 1 Headphone
- 1 Microphone
- 9-in-1 card reader or 29-in-1 card reader (optional)

### Rear *(Discrete graphics adapter is optional and available on selected models)*

- 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)
- 1 PCIe 3.0 x16  
1 PCIe 2.0 x1  
1 PCIe 2.0 x16 (x4 elec)  
1 PCI
- 240 watts Power Supply, 80 PLUS Bronze

### Internal

- One LGA1150 socket, supports one processor from Intel Xeon E3-1200 v3, Core i7, Core-i5, Core i3, Pentium, and Celeron families
- 4 DIMM sockets, supports up to 32GB ECC or non-ECC UDIMM memory
- Up to three disk drive bays (2 x 3.5" + 1 x 2.5"), one 3.5" disk drive bay is standard

### Mechanical

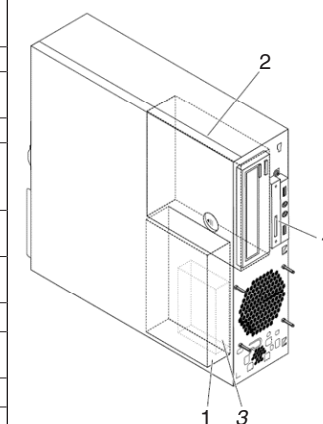
- 13.31"W x 15.53"D x 4.02"H
- 338mm W x 394.5mm D x 102mm H
- 17.2 lb (7.8kg) max configuration
- 12.9-liter

## ThinkStation P300 SFF TopSeller Models - 30AK (May 2014)

Type-model	Processor (Core/GHz/Cache/Memory speed/ optional Intel HD Graphics)	Memory	Discrete graphics adapters	Pre- conf RAID	Internal Storage	Optical	Media reader	1394 adptr	Discrete Ethernet	eSATA (front or rear)	Chassis intrusion switch	Preloaded OS	Base on-site warranty (-year)	Power supply	Global	Floor Stand
30AK000KUS	Core i3-4350 2C/3.6GHz/4MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Open	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No
30AK000LUS	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Open	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No
30AK000MUS	Core i5-4690 4C/3.5GHz/6MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Open	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No
30AK000NUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No
30AK000PUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Open	No	1x180GB SSD	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No
30AK000QUS	Xeon E3-1226 v3 4C/3.3GHz/8MB/1600MHz/Intel HD P4600	1 x 4GB 1600MHz non-ECC	Open	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No
30AK000RUS	Xeon E3-1246 v3 4C/3.5GHz/8MB/1600MHz/Intel HD P4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x180GB SSD	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No

Components	Specification
Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9.5 supported on Xeon models
Processor	One LGA1150 socket, supports one processor from the following: <ul style="list-style-type: none"> <li>Xeon E3-12x1 v3: up to 4C/3.7GHz/1600MHz/8MB</li> <li>Xeon E3-12x6 v3: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Xeon E3-12x0 v3: up to 4C/3.6GHz/1600MHz/8MB</li> <li>Xeon E3-12x5 v3: up to 4C/3.5GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Core i7: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics 4600</li> <li>Core i5: up to 4C/3.5GHz/1600MHz/6MB/Intel HD Graphics 4600</li> <li>Core i3: up to 2C/3.7GHz/1600MHz/4MB/Intel HD Graphics 4600</li> <li>Pentium: up to 2C/3.4GHz/1600MHz/3MB/Intel HD Graphics</li> <li>Celeron: up to 2C/2.9GHz/1333MHz/2MB/Intel HD Graphics</li> </ul>
Memory DIMM slots	Four DDR3 DIMM slots, 2-channel (integrated memory controller in processor)
Memory type	1600MHz DDR3, UDIMM, ECC or non-ECC (ECC and non-ECC DIMMs cannot be mixed on the same system)
Memory capacity	Up to 32GB
Intel HD Graphics in processor	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
Discrete graphics	Two PCI Express x16 slots for graphics adapters (see Expansion section), up to two Quadro K1200
Onboard drive controller	Four onboard SATA 6.0Gb/s connectors for optical and disk drives, one SATA connector for optional eSATA, RAID 0, 1 support
Standard drive Bays	One external 5.25" bays, one internal 3.5" bays (see right)
Maximum internal storage	Up to 4TB (4TB 3.5" x 1) with standard disk bay configuration, up to 9TB (4TB 3.5" x 2 + 1TB 2.5" x1) with optional disk bay configuration
Onboard Ethernet	One onboard gigabit ethernet, Intel I217LM
HD Audio	Realtek ALC662 codec
TPM	Standard, TCG 1.2-compliant
Power supply	240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified
Expansion slots	1: Low Profile, PCIe 3.0 x16 (near CPU) 2: Low Profile, PCIe 2.0 x1 3: Low Profile, PCIe 2.0 x16 (x4 elec) 4: Low Profile, PCI 2.3
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)
Rear ports	1 VGA and 2 DisplayPort (functional only on Intel HD Graphics models), 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 (optional)	1 front, 1 rear, via optional 1394 adapter

Components	Specification
Keyboard/Mouse	104-key USB keyboard/Optical Wheel Mouse (USB connector)
Mechanical	<ul style="list-style-type: none"> <li>Raven black color; metal case</li> <li>13.31"W x 15.53"D x 4.02"H</li> <li>338mm W x 394.5mm D x 102mm H</li> <li>17.2 lb (7.8kg) max configuration</li> <li>12.9-liter</li> </ul>
Environmental certifications	GREENGUARD certified/RoHS-compliant/EPEAT Gold rating/ENERGY STAR 6.0 qualified
ISV certifications	For the latest list of certifications, please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>



### Drive Bays for ThinkStation P300 SFF

- 1: Standard 3.5" HDD bay
- 2: 5.25", for optional optical/flex module/HDD bay
- 3: Optional 2.5" HDD bay
- 4: Optional 9-in-1 single slot reader or MSATA SSD drive

Note:

1. Flex module supports one or more of the following: 9.5mm optical/29-in-1 reader/front IEEE 1394/front eSATA. Up to one flex module is supported per system.
2. The bracket of HDD bay is optional and comes with the corresponding drives.
3. Bay 3 can not be available on dual discrete graphics model.

### Supporting NVIDIA graphics list

Adapter	Cores	Memory	Power	Connector***
NVS 310	48	512MB	19.5W	2xDP
NVS 315	48	1024MB		2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W	4xmini DP
Quadro 410	192	512MB	36.7W	1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K420	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W	1xDVI-I DL+1xDP
Quadro K1200	512	4GB	45W	4xminiDP

\*\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

### Supporting storage list

3.5" SATA HDD (7.2K 6Gbs)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SATA HDD (10K 6Gbs)	250GB/500GB/1TB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB/256GB OPAL/480GB/512GB/1TB
MSATA SSD	24GB

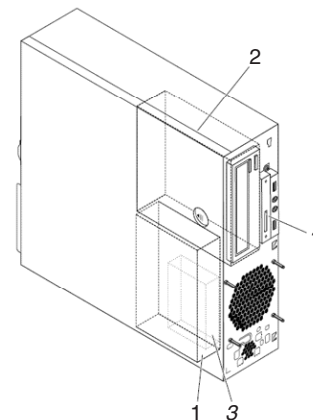
For supporting options list, please see [ThinkStation P300 Optional Configurations sheet](#).

## ThinkStation P300 SFF TopSeller Models - 30AK (May 2014) - II

Type-model	Processor (Core/GHz/Cache/Memory speed/ optional Intel HD Graphics)	Memory	Discrete graphics adapters	Pre- conf RAID	Internal Storage	Optical	Media reader	1394 adptr	Discrete Ethernet	eSATA (front or rear)	Chassis intrusion switch	Preloaded OS	Base on-site warranty (-year)	Power supply	Global	Floor Stand
30AK000SUS	Xeon E3-1241 v3 4C/3.5GHz/8MB/1600MHz/None	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No
30AK000TUS	Core i3-4350 2C/3.6GHz/4MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Open	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	240W	No	No
30AK000UUS	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Open	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	240W	No	No
30AK000VUS	Core i5-4690 4C/3.5GHz/6MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Open	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	240W	No	No
30AK000WUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Open	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	240W	No	No

Components	Specification
Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9.5 supported on Xeon models
Processor	One LGA1150 socket, supports one processor from the following: <ul style="list-style-type: none"> <li>Xeon E3-12x1 v3: up to 4C/3.7GHz/1600MHz/8MB</li> <li>Xeon E3-12x6 v3: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Xeon E3-12x0 v3: up to 4C/3.6GHz/1600MHz/8MB</li> <li>Xeon E3-12x5 v3: up to 4C/3.5GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Core i7: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics 4600</li> <li>Core i5: up to 4C/3.5GHz/1600MHz/6MB/Intel HD Graphics 4600</li> <li>Core i3: up to 2C/3.7GHz/1600MHz/4MB/Intel HD Graphics 4600</li> <li>Pentium: up to 2C/3.4GHz/1600MHz/3MB/Intel HD Graphics</li> <li>Celeron: up to 2C/2.9GHz/1333MHz/2MB/Intel HD Graphics</li> </ul>
Memory DIMM slots	Four DDR3 DIMM slots, 2-channel (integrated memory controller in processor)
Memory type	1600MHz DDR3, UDIMM, ECC or non-ECC (ECC and non-ECC DIMMs cannot be mixed on the same system)
Memory capacity	Up to 32GB
Intel HD Graphics in processor	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
Discrete graphics	Two PCI Express x16 slots for graphics adapters (see Expansion section), up to two Quadro K1200
Onboard drive controller	Four onboard SATA 6.0Gb/s connectors for optical and disk drives, one SATA connector for optional eSATA, RAID 0, 1 support
Standard drive Bays	One external 5.25" bays, one internal 3.5" bays (see right)
Maximum internal storage	Up to 4TB (4TB 3.5" x 1) with standard disk bay configuration, up to 9TB (4TB 3.5" x 2 + 1TB 2.5" x1) with optional disk bay configuration
Onboard Ethernet	One onboard gigabit ethernet, Intel I217LM
HD Audio	Realtek ALC662 codec
TPM	Standard, TCG 1.2-compliant
Power supply	240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified
Expansion slots	1: Low Profile, PCIe 3.0 x16 (near CPU) 2: Low Profile, PCIe 2.0 x1 3: Low Profile, PCIe 2.0 x16 (x4 elec) 4: Low Profile, PCI 2.3
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)
Rear ports	1 VGA and 2 DisplayPort (functional only on Intel HD Graphics models), 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 (optional)	1 front, 1 rear, via optional 1394 adapter

Components	Specification
Keyboard/Mouse	104-key USB keyboard/Optical Wheel Mouse (USB connector)
Mechanical	<ul style="list-style-type: none"> <li>Raven black color; metal case</li> <li>13.31"W x 15.53"D x 4.02"H</li> <li>338mm W x 394.5mm D x 102mm H</li> <li>17.2 lb (7.8kg) max configuration</li> <li>12.9-liter</li> </ul>
Environmental certifications	GREENGUARD certified/RoHS-compliant/EPEAT Gold rating/ENERGY STAR 6.0 qualified
ISV certifications	For the latest list of certifications, please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>



### Drive Bays for ThinkStation P300 SFF

- 1: Standard 3.5" HDD bay
- 2: 5.25", for optional optical/flex module/HDD bay
- 3: Optional 2.5" HDD bay
- 4: Optional 9-in-1 single slot reader or MSATA SSD drive

Note:

1. Flex module supports one or more of the following: 9.5mm optical/29-in-1 reader/front IEEE 1394/front eSATA. Up to one flex module is supported per system.
2. The bracket of HDD bay is optional and comes with the corresponding drives.
3. Bay 3 can not be available on dual discrete graphics model.

### Supporting NVIDIA graphics list

Adapter	Cores	Memory	Power	Connector***
NVS 310	48	512MB	19.5W	2xDP
NVS 315	48	1024MB		2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W	4xmini DP
Quadro 410	192	512MB	36.7W	1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K420	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W	1xDVI-I DL+1xDP
Quadro K1200	512	4GB	45W	4xminiDP

\*\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

### Supporting storage list

3.5" SATA HDD (7.2K 6Gbs)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SATA HDD (10K 6Gbs)	250GB/500GB/1TB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB/256GB OPAL/480GB/512GB/1TB
MSATA SSD	24GB

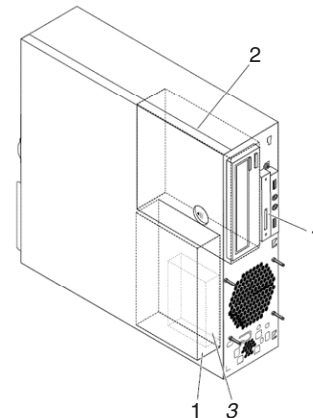
For supporting options list, please see [ThinkStation P300 Optional Configurations sheet](#).

## ThinkStation P300 SFF TopSeller Models - 30AK (April 2015)

Type-model	Processor	Memory	Discrete graphics adapters	Internal Storage	Optical	Media reader	1394	eSATA	Discrete ethernet	Chassis intrusion switch	Preloaded OS	Power	Global	Base Warranty
30AK002DUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/HD4600	1x8GB 1600MHz nECC	Quadro K1200 4GB	1x1TB 3.5" SATA6Gbs 7.2K Hybrid	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 Pro64 DG)	240W Bronze	No	3-year

Components	Specification
Chipset	Intel C226 Chipset
Intel AMT	Intel Active Management Technology 9.5 supported on Xeon models
Processor	One LGA1150 socket, supports one processor from the following: <ul style="list-style-type: none"> <li>Xeon E3-12x1 v3: up to 4C/3.7GHz/1600MHz/8MB</li> <li>Xeon E3-12x6 v3: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Xeon E3-12x0 v3: up to 4C/3.6GHz/1600MHz/8MB</li> <li>Xeon E3-12x5 v3: up to 4C/3.5GHz/1600MHz/8MB/Intel HD Graphics P4600</li> <li>Core i7: up to 4C/3.6GHz/1600MHz/8MB/Intel HD Graphics 4600</li> <li>Core i5: up to 4C/3.5GHz/1600MHz/6MB/Intel HD Graphics 4600</li> <li>Core i3: up to 2C/3.7GHz/1600MHz/4MB/Intel HD Graphics 4600</li> <li>Pentium: up to 2C/3.4GHz/1600MHz/3MB/Intel HD Graphics</li> <li>Celeron: up to 2C/2.9GHz/1333MHz/2MB/Intel HD Graphics</li> </ul>
Memory DIMM slots	Four DDR3 DIMM slots, 2-channel (integrated memory controller in processor)
Memory type	1600MHz DDR3, UDIMM, ECC or non-ECC (ECC and non-ECC DIMMs cannot be mixed on the same system)
Memory capacity	Up to 32GB
Intel HD Graphics in processor	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
Discrete graphics	Two PCI Express x16 slots for graphics adapters (see Expansion section), up to two Quadro K1200
Onboard drive controller	Four onboard SATA 6.0Gb/s connectors for optical and disk drives, one SATA connector for optional eSATA, RAID 0, 1 support
Standard drive Bays	One external 5.25" bays, one internal 3.5" bays (see right)
Maximum internal storage	Up to 4TB (4TB 3.5" x 1) with standard disk bay configuration, up to 9TB (4TB 3.5" x 2 + 1TB 2.5" x1) with optional disk bay configuration
Onboard Ethernet	One onboard gigabit ethernet, Intel I217LM
HD Audio	Realtek ALC662 codec
TPM	Standard, TCG 1.2-compliant
Power supply	240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified
Expansion slots	1: Low Profile, PCIe 3.0 x16 (near CPU) 2: Low Profile, PCIe 2.0 x1 3: Low Profile, PCIe 2.0 x16 (x4 elec) 4: Low Profile, PCI 2.3
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)
Rear ports	1 VGA and 2 DisplayPort (functional only on Intel HD Graphics models), 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 (optional)	1 front, 1 rear, via optional 1394 adapter

Components	Specification
Keyboard/Mouse	104-key USB keyboard/Optical Wheel Mouse (USB connector)
Mechanical	<ul style="list-style-type: none"> <li>Raven black color; metal case</li> <li>13.31"W x 15.53"D x 4.02"H</li> <li>338mm W x 394.5mm D x 102mm H</li> <li>17.2 lb (7.8kg) max configuration</li> <li>12.9-liter</li> </ul>
Environmental certifications	GREENGUARD certified/RoHS-compliant/EPEAT Gold rating/ENERGY STAR 6.0 qualified
ISV certifications	For the latest list of certifications, please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>



### Drive Bays for ThinkStation P300 SFF

- 1: Standard 3.5" HDD bay
- 2: 5.25", for optional optical/flex module/HDD bay
- 3: Optional 2.5" HDD bay
- 4: Optional 9-in-1 single slot reader or MSATA SSD drive

#### Note:

1. Flex module supports one or more of the following: 9.5mm optical/29-in-1 reader/front IEEE 1394/front eSATA. Up to one flex module is supported per system.
2. The bracket of HDD bay is optional and comes with the corresponding drives.
3. Bay 3 can not be available on dual discrete graphics model.

### Supporting NVIDIA graphics list

Adapter	Cores	Memory	Power	Connector***
NVS 310	48	512MB	19.5W	2xDP
NVS 315	48	1024MB		2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W	4xmini DP
Quadro 410	192	512MB	36.7W	1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K420	192	1GB	41W	1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W	1xDVI-I DL+1xDP
Quadro K1200	512	4GB	45W	4xminiDP

\*\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

### Supporting storage list

3.5" SATA HDD (7.2K 6Gbs)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SATA HDD (10K 6Gbs)	250GB/500GB/1TB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB/256GB OPAL/480GB/512GB/1TB
MSATA SSD	24GB

For supporting options list, please see [ThinkStation P300 Optional Configurations sheet](#).

# ThinkStation P300 SFF Relationship Models

Product Specifications Reference (PSREF)

Type-model	Processor (Core/GHz/Cache/Memory speed/ optional Intel HD Graphics)	Memory	Discrete graphics adapters	Pre- conf RAID	Internal Storage	Optical	Media reader	1394 adptr	Discrete Ethernet	eSATA (front or rear)	Chassis intrusion switch	Preloaded OS	Base on-site warranty (-year)	Power supply	Global	Floor Stand
<b>Announced May 2014 - 30AJ</b>																
30AJ0011US	Core i3-4350 2C/3.6GHz/4MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Open	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No
30AJ0012US	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No
30AJ0013US	Xeon E3-1246 v3 4C/3.5GHz/8MB/1600MHz/Intel HD P4600	1 x 8GB 1600MHz non-ECC	Open	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No
30AJ0014US	Xeon E3-1276 v3 4C/3.6GHz/8MB/1600MHz/Intel HD P4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No
30AJ0015US	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x180GB SSD	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3	240W	No	No
30AJ0016US	Core i3-4350 2C/3.6GHz/4MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Open	No	1x500GB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	240W	No	No
30AJ0017US	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	240W	No	No
30AJ0018US	Xeon E3-1246 v3 4C/3.5GHz/8MB/1600MHz/Intel HD P4600	1 x 8GB 1600MHz non-ECC	Open	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	240W	No	No
30AJ0019US	Xeon E3-1276 v3 4C/3.6GHz/8MB/1600MHz/Intel HD P4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	9-in-1	No	No	No	Switch	Win8.1 Pro64	3	240W	No	No
30AJ001ESS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x256GB SSD	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3 intl	240W	Global	No
30AJ001EUS	Core i7-4790 4C/3.6GHz/8MB/1600MHz/Intel HD 4600	1 x 8GB 1600MHz non-ECC	Quadro K600 1GB	No	1x256GB SSD	DVD±RW	9-in-1	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3 intl	240W	Global	No
30AJ001FSS	Xeon E3-1231 v3 4C/3.4GHz/8MB/1600MHz/None	1 x 4GB 1600MHz ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	No	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3 intl	240W	Global	No
30AJ001FUS	Xeon E3-1231 v3 4C/3.4GHz/8MB/1600MHz/None	1 x 4GB 1600MHz ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	No	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3 intl	240W	Global	No
30AJ001GSS	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	No	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3 intl	240W	Global	No
30AJ001GUS	Core i5-4590 4C/3.3GHz/6MB/1600MHz/Intel HD 4600	1 x 4GB 1600MHz non-ECC	Quadro K600 1GB	No	1x1TB 3.5" SATA 7.2K	DVD±RW	No	No	No	No	Switch	Win7 Pro64 (Win8.1 DG)	3 intl	240W	Global	No



# ThinkStation P300 Tower and SFF Optional Configurations

## Supporting Processors on ThinkStation P300 Tower and SFF

Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Speed	Cache	Memory Speed	ECC Memory Supported	Processor Graphics	Max TDP
Celeron G1840	2	2	2.8GHz		2MB	1333MHz	Yes	Intel HD	54 W
Celeron G1850	2	2	2.9GHz		2MB	1333MHz	Yes	Intel HD	54 W
Pentium G3240	2	2	3.1GHz		3MB	1333MHz	Yes	Intel HD	54 W
Pentium G3440	2	2	3.3GHz		3MB	1600MHz	Yes	Intel HD	54 W
Pentium G3450	2	2	3.4GHz		3MB	1600MHz	Yes	Intel HD	54 W
Core i3-4150	2	4	3.5GHz		3MB	1600MHz	Yes	Intel HD 4400	54 W
Core i3-4350	2	4	3.6GHz		4MB	1600MHz	Yes	Intel HD 4600	54 W
Core i3-4360	2	4	3.7GHz		4MB	1600MHz	Yes	Intel HD 4600	54 W
Core i5-4690	4	4	3.5GHz	3.9GHz	6MB	1600MHz	No	Intel HD 4600	84 W
Core i5-4590	4	4	3.3GHz	3.7GHz	6MB	1600MHz	No	Intel HD 4600	84 W
Core i5-4460	4	4	3.2GHz	3.4GHz	6MB	1600MHz	No	Intel HD 4600	84 W
Core i7-4790	4	8	3.6GHz	4GHz	8MB	1600MHz	No	Intel HD 4600	84 W
Xeon E3-1281 v3	4	8	3.7GHz	4.1GHz	8MB	1600MHz	Yes	None	82 W
Xeon E3-1271 v3	4	8	3.6GHz	4GHz	8MB	1600MHz	Yes	None	80 W
Xeon E3-1241 v3	4	8	3.5GHz	3.9GHz	8MB	1600MHz	Yes	None	80 W
Xeon E3-1231 v3	4	8	3.4GHz	3.8GHz	8MB	1600MHz	Yes	None	80 W
Xeon E3-1276 v3	4	8	3.6GHz	4GHz	8MB	1600MHz	Yes	Intel HD P4600	84 W
Xeon E3-1246 v3	4	8	3.5GHz	3.9GHz	8MB	1600MHz	Yes	Intel HD P4600	84 W
Xeon E3-1226 v3	4	4	3.3GHz	3.7GHz	8MB	1600MHz	Yes	Intel HD P4600	84 W
Core i3-4340	2	4	3.6 GHz		4MB	1600MHz	Yes	Intel HD 4600	54W
Core i3-4330	2	4	3.5 GHz		4MB	1600MHz	Yes	Intel HD 4600	54W
Core i3-4130	2	4	3.4 GHz		3MB	1600MHz	Yes	Intel HD 4400	54W
Core i5-4670	4	4	3.4 GHz	3.8GHz	6MB	1600MHz	No	Intel HD 4600	84W
Core i5-4570	4	4	3.2 GHz	3.6GHz	6MB	1600MHz	No	Intel HD 4600	84W
Core i7-4770	4	8	3.4 GHz	3.9GHz	8MB	1600MHz	No	Intel HD 4600	84W
Xeon E3-1275 v3	4	8	3.5 GHz	3.9GHz	8MB	1600MHz	Yes	Intel HD P4600	84W
Xeon E3-1245 v3	4	8	3.4 GHz	3.8GHz	8MB	1600MHz	Yes	Intel HD P4600	84W
Xeon E3-1225 v3	4	4	3.2 GHz	3.6GHz	8MB	1600MHz	Yes	Intel HD P4600	84W
Xeon E3-1280 v3	4	8	3.6 GHz	4GHz	8MB	1600MHz	Yes	None	82W
Xeon E3-1270 v3	4	8	3.5 GHz	3.9GHz	8MB	1600MHz	Yes	None	80W
Xeon E3-1240 v3	4	8	3.4 GHz	3.8GHz	8MB	1600MHz	Yes	None	80W
Xeon E3-1230 v3	4	8	3.3 GHz	3.7GHz	8MB	1600MHz	Yes	None	80W
Xeon E3-1220 v3	4	4	3.1 GHz	3.5GHz	8MB	1600MHz	Yes	None	80W

## ThinkStation P300 Tower and SFF Options

Memory – Non-ECC	EOL Date	
0A65729	4GB DDR3 1600 (PC3 12800) UDIMM Memory	2015/12/30
0A65730	8GB DDR3 1600 (PC3 12800) UDIMM Memory	2015/12/30
Memory – ECC	EOL Date	
0B47377	4GB DDR3 1600 (PC3 12800) ECC UDIMM Workstation Memory	2015/12/30
0B47378	8GB DDR3 1600 (PC3 12800) ECC UDIMM Workstation Memory	2015/12/30
Graphics – 2D	EOL Date	
0B47074	NVIDIA NVS 310 512MB Dual DisplayPort Adapter (SFF, Tower)	2014/12/30
4X60F17422	NVIDIA NVS 315 1GB Dual DVI or Dual DisplayPort Adapter (SFF, Tower)	2015/12/30
0B47077	NVIDIA NVS 510 2GB Quad Mini-DisplayPort Graphics (SFF, Tower)	2015/12/30

Graphics – 3D	EOL Date	
0B47075	NVIDIA Quadro 410 512MB Single DVI & Single DisplayPort (SFF, Tower)	2014/12/30
0B47394	NVIDIA Quadro K600 1GB Single DVI & Single DisplayPort (SFF, Tower)	2014/12/30
0B47392	NVIDIA Quadro K2000 2GB Single DVI & Dual DisplayPort (Tower)	2014/12/30
0B47393	NVIDIA Quadro K4000 3GB Single DVI & Dual DisplayPort (Tower)	2014/12/30
4X60G69029	NVIDIA Quadro K420 1GB Dual-Link DVI-I, DisplayPort (Tower)	2015/12/30
4X60G69028	NVIDIA Quadro K620 2GB Dual-Link DVI-I, DisplayPort (Tower)	2015/12/30
4X60G69027	NVIDIA Quadro K2200 4GB Dual-Link DVI-I, two DisplayPort (Tower)	2015/12/30
4X60G69026	NVIDIA Quadro K4200 4GB DVI-I, two DisplayPort (Tower)	2015/12/30
Cables	EOL Date	
45J7915	Lenovo DisplayPort to Single-Link DVI-D (Digital) Monitor Cable	2015/12/30
57Y4393	Lenovo DisplayPort to VGA Monitor Cable	2015/12/30
0A36537	Lenovo DisplayPort to DisplayPort Cable	2015/12/30
Internal Storage	EOL Date	
43R1990	Lenovo 500GB SATA HDD (7200)	2015/12/30
45J7918	Lenovo 1TB SATA HDD (7200)	2015/12/30
4XB0F18667	ThinkStation 2TB 3.5" SATA 6Gbps Hard Drive (7200)	2015/12/30
4XB0F18668	ThinkStation 3TB 3.5" SATA 6Gbps Hard Drive (7200)	2015/12/30
4XB0F18665	ThinkStation 1TB 3.5" SATA Hybrid Hard Drive (7200)	2015/12/30
4XB0F18666	ThinkStation 2TB 3.5" SATA Hybrid Hard Drive (7200)	2015/12/30
4XB0F18670	ThinkStation 128GB 2.5" SATA Solid State Drive	2015/12/30
0B47308	ThinkStation 180GB 2.5" SATA Solid State Drive	2015/12/30
4XB0G69276	ThinkStation 240GB 2.5" SATA 6Gbps FDE Solid State Drive	2015/12/30
4XB0F18671	ThinkStation 256GB 2.5" SATA Solid State Drive	2015/12/30
4XB0G69277	ThinkStation 480GB 2.5" SATA 6Gbps Solid State Drive	2015/12/30
4XB0G69275	ThinkStation 512GB 2.5" SATA 6Gbps Solid State Drive	2015/12/30
Keyboards - English	EOL Date	
73P5220	Lenovo Preferred Pro USB Keyboard - English	2015/12/30
73P2620	Lenovo Enhanced Performance USB Keyboard - English	2015/12/30
0A34032	Lenovo Ultralim Plus Wireless Keyboard & Mouse - English	2015/12/30
73P4730	Lenovo Fingerprint USB Keyboard - English	2014/12/30
4X30E50999	Lenovo USB Smartcard Keyboard - English	2015/12/30
Keyboards - Canadian French	EOL Date	
73P5231	Lenovo Preferred Pro USB Keyboard - Canadian French 058	2015/12/30
73P2631	Lenovo Enhanced Performance USB Keyboard - Canadian French 058	2015/12/30
0A34045	Lenovo Ultralim Plus Wireless Keyboard & Mouse - Canadian French 058	2015/12/30
0C52696	Lenovo Preferred Pro Fingerprint USB Keyboard - Canadian French 058	2015/12/30
Mice	EOL Date	
06P4069	Lenovo Optical Wheel Mouse (Full Size)	2015/12/30
41U3074	Lenovo Laser Mouse (Full Size)	2015/12/30
0A36188	Lenovo Laser Wireless Mouse (Mid-size)	2015/12/30
Security Options	EOL Date	
73P2582	Kensington Microsaver Cable Lock from Lenovo	2016/12/30
4XE0G97138	Kensington Combination Cable Lock from Lenovo	2016/12/30
45K1620	Kensington Twin Head Cable Lock from Lenovo	2016/12/30
57Y4303	Lenovo Security Cable Lock	2016/12/30
0A65619	ThinkPad USB 3.0 500GB Portable Secure Hard Drive	2015/12/30
0A65616	ThinkPad USB 3.0 750GB Portable Secure Hard Drive	2015/12/30
0A65621	ThinkPad USB 3.0 1TB Portable Secure Hard Drive	2015/12/30
Audio	EOL Date	
57Y4488	ThinkPad Combo in Ear Headset	2015/12/30

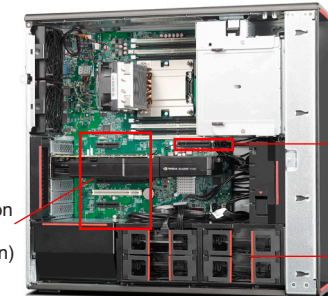
Type-model	Processor	Memory	Graphics/GPU Computing/ GRID	RAID controller	Internal disk drive	M.2/ PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunder-bolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A7000LUS	E5-1607 v3 4C/3.1GHz/10MB/140W/1866MHz	1x4GB 2133MHz RDIMM	Open	Onboard	1x500GB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14
30A7000MUS	E5-1607 v3 4C/3.1GHz/10MB/140W/1866MHz	1x4GB 2133MHz RDIMM	Quadro K620 2GB	Onboard	1x500GB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14
30A7000NUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K620 2GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14
30A7000PUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Open	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14
30A7000QUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14

Components	Specification						
Chipset	Intel C612 Platform Controller Hub (PCH)						
System mgmt	Intel Active Management Technology 9						
Processor	Up to one 145W Intel Xeon E5-2600 v3 family processor with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 2.6GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.0GHz. Up to 2133MHz memory speed. Up to 45MB cache. Or up to one 140W Intel Xeon E5-1600 v3 family processors with 8C up to 3.2GHz, 6C up to 3.5GHz, 4C up to 3.7GHz						
Coprocessor	None						
Memory DIMM slots	8 DIMM sockets, 4-channel capable. RDIMM and LRDIMM (cannot be intermixed), ECC, DDR4, 2133MHz						
Memory capacity	128GB (RDIMM)/256GB (LRDIMM)						
Graphics, GPU computing, coprocessors	Two PCIe 3.0 x16 slots, up to 2 graphics, GPU computing adapters per system <table border="1"> <thead> <tr> <th>PSU</th> <th>Maximum quantity of adapters supported per system</th> </tr> </thead> <tbody> <tr> <td>490W</td> <td>1x150W+1x75W (only supports onboard SATA controller)</td> </tr> <tr> <td>650W</td> <td>1x225W+1x75W, or 2x150W</td> </tr> </tbody> </table>	PSU	Maximum quantity of adapters supported per system	490W	1x150W+1x75W (only supports onboard SATA controller)	650W	1x225W+1x75W, or 2x150W
PSU	Maximum quantity of adapters supported per system						
490W	1x150W+1x75W (only supports onboard SATA controller)						
650W	1x225W+1x75W, or 2x150W						
RAID controller	<b>RAID 0, 1, 5, 10</b> with onboard SATA controller in chipset, SATA 6Gb/s. <b>RAID 0, 1, 5, 10</b> with optional LSI RAID flex adapter, 12Gb/s SAS and SATA. <b>RAID 0, 1, 5, 6, 10</b> with optional LSI 9364-8i PCIe adapter, 1GB memory, optional 1GB flash with super capacitor, 12Gb/s SAS and SATA						
Drive Bays	Two external 5.25" bays, four internal 3.5" bays (see right)						
Media reader	Optional 9-in-1 USB 2.0 or 29-in-1 USB 3.0 reader						
Flex connector	One flex connectors (see right), supports one of the following: <ul style="list-style-type: none"> <li>Up to one LSI RAID flex adapter for SATA/SAS RAID</li> <li>Up to one Multi-I/O flex adapters for one PCIe SSD</li> <li>Up to one M.2 flex adapters for one M.2 SSD</li> </ul>						
Network interfaces	Integrated one Gigabit Ethernet (Intel i217LM). Optional discrete Ethernet is available						
HD Audio	Realtek ALC662 codec						
TPM	TCG 1.2-compliant						
Power supply	One fixed 490 watts, autosensing, 90%, 80 PLUS Gold qualified; or one fixed 650 watts, autosensing, 92%, 80 PLUS Platinum qualified						
Front ports	Four USB 3.0 (one Diagnostic, one Always On), one combo audio/microphone jack (3.5mm)						
Rear ports	Four USB 2.0, four USB 3.0, one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in), two PS/2						
IEEE 1394	1 front, 1 rear, via 1394 adapter, selected models						
Thunderbolt	1 Thunderbolt via optional PCIe adapter. Uses slot 6.						
Mechanical	<ul style="list-style-type: none"> <li>36-liter: 175mm/6.89" W x 470mm/18.5" D x 440mm/17.32" H (with feet)</li> <li>Tool-less parts: power supply, disk drive, fans, adapter retention</li> <li>48.94 lb (22.2kg) max configuration</li> </ul>						
Base warranty	3-year limited onsite service with 9x5/NBD						

Drive Bays and Expansion slots



2 x 5.25", for half-height optical, or up to one optional flex module (Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 3.0 reader/front IEEE 1394/front eSATA), or up to two optional front HDD bays



Expansion slots 1-6 (top-down)

Flex connector  
HDD 1 HDD 3  
HDD 2 HDD 4\*

\* When LSI RAID flex adapter or 9364-8i adapter is installed, each HDD bay (HDD 1 - 4) can support 2 disk drives (1 x 3.5" drives + 2.5" SATA/SAS SSD, or 2 x 2.5" SATA/SAS SSD).

Slot 1: PCIe 3.0 x4, Half length, full height  
 Slot 2: PCIe 3.0 x16, Full length, full height  
 Slot 3: PCIe 2.0 x1, Full length, full height  
 Slot 4: PCIe 3.0 x16, Full length, full height  
 Slot 5: PCI, Full length, full height  
 Slot 6: PCIe 2.0 x4, Half length, full height

Supporting NVIDIA graphics and GPU computing list

Adapter	Cores	Memory	Power	SLI	Connector**
NVS 310	48	512MB	19.5W		2xDP
NVS 315	48	1024MB			2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W		4xmini DP
Quadro 410	192	512MB	36.7W		1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W		1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W		1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W		1xDVI-I DL+2xDP
Quadro K5000	1536	4GB	122W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K6000	2880	12GB	225W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K420	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W		1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W		1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W		1xDVI-I DL+2xDP
Quadro K5200	2304	8GB	150W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Tesla K20	2496	5GB	225W		Needs graphics
GRID K2	3072	8GB	225W		Needs graphics

\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

Supporting storage list

(SAS drive needs LSI RAID flex adapter or 9364-8i adapter)

3.5" SATA (7.2K 6Gbs HDD)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SAS (15K 12Gbs HDD)	300GB/450GB/600GB
2.5" SAS SSD (12Gbs)	200GB/400GB/800GB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB OPAL/480GB/512GB
M.2 SSD (M.2 SSD drive is located in M.2 flex adapter and does not consume HDD bay)	256 GB
PCIe 2.0 x4 adapter	410GB/1.6TB

Environment specification and certifications

Temperature	
Operating:	50 °F to 95 °F (10 °C to 35 °C)
Storage:	-10 °C to 60 °C, no package -40 °C to 60 °C, with package
Altitude	
Operating:	-50-10000ft (-15.2-3048m)
Humidity	
Operating:	10%-80%, non-condensing
Storage:	10%-90%, non-condensing

RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in **Bold Oblique**

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
 For a list of all supported options, please see [ThinkStation P500 Options sheet](#).

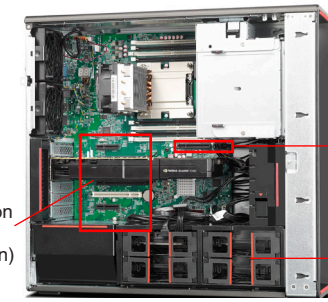
Type-model	Processor	Memory	Graphics/GPU Computing/ GRID	RAID controller	Internal disk drive	M.2/ PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunder-bolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A7000RUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14
30A7000SUS	E5-1630 v3 4C/3.7GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14
30A7000TUS	E5-1630 v3 4C/3.7GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14
30A7000UUS	E5-1650 v3 4C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x2TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14
30A7000VUS	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Open	Onboard	1x2TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14

Components	Specification
Chipset	Intel C612 Platform Controller Hub (PCH)
System mgmt	Intel Active Management Technology 9
Processor	Up to one 145W Intel Xeon E5-2600 v3 family processor with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 2.6GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.0GHz. Up to 2133MHz memory speed. Up to 45MB cache. Or up to one 140W Intel Xeon E5-1600 v3 family processors with 8C up to 3.2GHz, 6C up to 3.5GHz, 4C up to 3.7GHz
Coprocessor	None
Memory DIMM slots	8 DIMM sockets, 4-channel capable. RDIMM and LRDIMM (cannot be intermixed), ECC, DDR4, 2133MHz
Memory capacity	128GB (RDIMM)/256GB (LRDIMM)
Graphics, GPU computing, coprocessors	Two PCIe 3.0 x16 slots, up to 2 graphics, GPU computing adapters per system
	PSU Maximum quantity of adapters supported per system
	490W 1x150W+1x75W (only supports onboard SATA controller) 650W 1x225W+1x75W, or 2x150W
RAID controller	<b>RAID 0, 1, 5, 10</b> with onboard SATA controller in chipset, SATA 6Gb/s. <b>RAID 0, 1, 5, 10</b> with optional LSI RAID flex adapter, 12Gb/s SAS and SATA. <b>RAID 0, 1, 5, 6, 10</b> with optional LSI 9364-8i PCIe adapter, 1GB memory, optional 1GB flash with super capacitor, 12Gb/s SAS and SATA
Drive Bays	Two external 5.25" bays, four internal 3.5" bays (see right)
Media reader	Optional 9-in-1 USB 2.0 or 29-in-1 USB 3.0 reader
Flex connector	One flex connectors (see right), supports one of the following: <ul style="list-style-type: none"> <li>Up to one LSI RAID flex adapter for SATA/SAS RAID</li> <li>Up to one Multi-I/O flex adapters for one PCIe SSD</li> <li>Up to one M.2 flex adapters for one M.2 SSD</li> </ul>
Network interfaces	Integrated one Gigabit Ethernet (Intel i217LM). Optional discrete Ethernet is available
HD Audio	Realtek ALC662 codec
TPM	TCG 1.2-compliant
Power supply	One fixed 490 watts, autosensing, 90%, 80 PLUS Gold qualified; or one fixed 650 watts, autosensing, 92%, 80 PLUS Platinum qualified
Front ports	Four USB 3.0 (one Diagnostic, one Always On), one combo audio/microphone jack (3.5mm)
Rear ports	Four USB 2.0, four USB 3.0, one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in), two PS/2
IEEE 1394	1 front, 1 rear, via 1394 adapter, selected models
Thunderbolt	1 Thunderbolt via optional PCIe adapter. Uses slot 6.
Mechanical	<ul style="list-style-type: none"> <li>36-liter: 175mm/6.89" W x 470mm/18.5" D x 440mm/17.32" H (with feet)</li> <li>Tool-less parts: power supply, disk drive, fans, adapter retention</li> <li>48.94 lb (22.2kg) max configuration</li> </ul>
Base warranty	3-year limited onsite service with 9x5/NBD

Drive Bays and Expansion slots



2 x 5.25", for half-height optical, or up to one optional flex module (Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 3.0 reader/front IEEE 1394/front eSATA), or up to two optional front HDD bays



Expansion slots 1-6 (top-down)

Flex connector  
HDD 1 HDD 3  
HDD 2 HDD 4\*

\* When LSI RAID flex adapter or 9364-8i adapter is installed, each HDD bay (HDD 1 - 4) can support 2 disk drives (1 x 3.5" drives + 2.5" SATA/SAS SSD, or 2 x 2.5" SATA/SAS SSD).

Slot 1: PCIe 3.0 x4, Half length, full height  
Slot 2: PCIe 3.0 x16, Full length, full height  
Slot 3: PCIe 2.0 x1, Full length, full height  
Slot 4: PCIe 3.0 x16, Full length, full height  
Slot 5: PCI, Full length, full height  
Slot 6: PCIe 2.0 x4, Half length, full height

Supporting NVIDIA graphics and GPU computing list

Adapter	Cores	Memory	Power	SLI	Connector**
NVS 310	48	512MB	19.5W		2xDP
NVS 315	48	1024MB			2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W		4xmini DP
Quadro 410	192	512MB	36.7W		1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W		1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W		1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W		1xDVI-I DL+2xDP
Quadro K5000	1536	4GB	122W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K6000	2880	12GB	225W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K420	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W		1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W		1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W		1xDVI-I DL+2xDP
Quadro K5200	2304	8GB	150W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Tesla K20	2496	5GB	225W		Needs graphics
GRID K2	3072	8GB	225W		Needs graphics

\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

Supporting storage list

(SAS drive needs LSI RAID flex adapter or 9364-8i adapter)

3.5" SATA (7.2K 6Gbs HDD)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SAS (15K 12Gbs HDD)	300GB/450GB/600GB
2.5" SAS SSD (12Gbs)	200GB/400GB/800GB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB OPAL/480GB/512GB
M.2 SSD (M.2 SSD drive is located in M.2 flex adapter and does not consume HDD bay)	256 GB
PCIe 2.0 x4 adapter	410GB/1.6TB

Environment specification and certifications

Temperature	
Operating:	50 °F to 95 °F (10 °C to 35 °C)
Storage:	-10 °C to 60 °C, no package -40 °C to 60 °C, with package
Altitude	
Operating:	-50-10000ft (-15.2-3048m)
Humidity	
Operating:	10%-80%, non-condensing
Storage:	10%-90%, non-condensing

RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in **Bold Oblique**

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
For a list of all supported options, please see [ThinkStation P500 Options sheet](#).

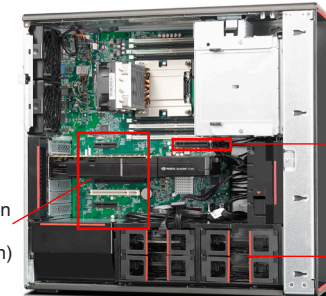
Type-model	Processor	Memory	Graphics/GPU Computing/ GRID	RAID controller	Internal disk drive	M.2/ PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunderbolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A7000WUS	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Open	Onboard	1x256GB 2.5" SATA6Gbs SSD OPAL	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14
30A7000XUS	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Open	Onboard	1x240GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14
30A7000YUS	E5-1660 v3 8C/3GHz/20MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Open	Onboard	1x2TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14
30A70010US	E5-1660 v3 8C/3GHz/20MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Open	Onboard	Open	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14
30A70011US	E5-1660 v3 8C/3GHz/20MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Open	Onboard	1x512GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14

Components	Specification
Chipset	Intel C612 Platform Controller Hub (PCH)
System mgmt	Intel Active Management Technology 9
Processor	Up to one 145W Intel Xeon E5-2600 v3 family processor with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 2.6GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.0GHz. Up to 2133MHz memory speed. Up to 45MB cache. Or up to one 140W Intel Xeon E5-1600 v3 family processors with 8C up to 3.2GHz, 6C up to 3.5GHz, 4C up to 3.7GHz
Coprocessor	None
Memory DIMM slots	8 DIMM sockets, 4-channel capable. RDIMM and LRDIMM (cannot be intermixed), ECC, DDR4, 2133MHz
Memory capacity	128GB (RDIMM)/256GB (LRDIMM)
Graphics, GPU computing, coprocessors	Two PCIe 3.0 x16 slots, up to 2 graphics, GPU computing adapters per system
	PSU Maximum quantity of adapters supported per system
	490W 1x150W+1x75W (only supports onboard SATA controller) 650W 1x225W+1x75W, or 2x150W
RAID controller	<b>RAID 0, 1, 5, 10</b> with onboard SATA controller in chipset, SATA 6Gb/s. <b>RAID 0, 1, 5, 10</b> with optional LSI RAID flex adapter, 12Gb/s SAS and SATA. <b>RAID 0, 1, 5, 6, 10</b> with optional LSI 9364-8i PCIe adapter, 1GB memory, optional 1GB flash with super capacitor, 12Gb/s SAS and SATA
Drive Bays	Two external 5.25" bays, four internal 3.5" bays (see right)
Media reader	Optional 9-in-1 USB 2.0 or 29-in-1 USB 3.0 reader
Flex connector	One flex connectors (see right), supports one of the following: <ul style="list-style-type: none"> <li>Up to one LSI RAID flex adapter for SATA/SAS RAID</li> <li>Up to one Multi-I/O flex adapters for one PCIe SSD</li> <li>Up to one M.2 flex adapters for one M.2 SSD</li> </ul>
Network interfaces	Integrated one Gigabit Ethernet (Intel i217LM). Optional discrete Ethernet is available
HD Audio	Realtek ALC662 codec
TPM	TCG 1.2-compliant
Power supply	One fixed 490 watts, autosensing, 90%, 80 PLUS Gold qualified; or one fixed 650 watts, autosensing, 92%, 80 PLUS Platinum qualified
Front ports	Four USB 3.0 (one Diagnostic, one Always On), one combo audio/microphone jack (3.5mm)
Rear ports	Four USB 2.0, four USB 3.0, one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in), two PS/2
IEEE 1394	1 front, 1 rear, via 1394 adapter, selected models
Thunderbolt	1 Thunderbolt via optional PCIe adapter. Uses slot 6.
Mechanical	<ul style="list-style-type: none"> <li>36-liter: 175mm/6.89" W x 470mm/18.5" D x 440mm/17.32" H (with feet)</li> <li>Tool-less parts: power supply, disk drive, fans, adapter retention</li> <li>48.94 lb (22.2kg) max configuration</li> </ul>
Base warranty	3-year limited onsite service with 9x5/NBD

Drive Bays and Expansion slots



2 x 5.25", for half-height optical, or up to one optional flex module (Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 3.0 reader/front IEEE 1394/front eSATA), or up to two optional front HDD bays



Expansion slots 1-6 (top-down)

Flex connector

HDD 1 HDD 3  
HDD 2 HDD 4\*

\* When LSI RAID flex adapter or 9364-8i adapter is installed, each HDD bay (HDD 1 - 4) can support 2 disk drives (1 x 3.5" drives + 2.5" SATA/SAS SSD, or 2 x 2.5" SATA/SAS SSD).

Slot 1: PCIe 3.0 x4, Half length, full height  
Slot 2: PCIe 3.0 x16, Full length, full height  
Slot 3: PCIe 2.0 x1, Full length, full height  
Slot 4: PCIe 3.0 x16, Full length, full height  
Slot 5: PCI, Full length, full height  
Slot 6: PCIe 2.0 x4, Half length, full height

Supporting NVIDIA graphics and GPU computing list

Adapter	Cores	Memory	Power	SLI	Connector**
NVS 310	48	512MB	19.5W		2xDP
NVS 315	48	1024MB			2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W		4xmini DP
Quadro 410	192	512MB	36.7W		1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W		1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W		1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W		1xDVI-I DL+2xDP
Quadro K5000	1536	4GB	122W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K6000	2880	12GB	225W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K420	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W		1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W		1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W		1xDVI-I DL+2xDP
Quadro K5200	2304	8GB	150W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Tesla K20	2496	5GB	225W		Needs graphics
GRID K2	3072	8GB	225W		Needs graphics

\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

Supporting storage list

(SAS drive needs LSI RAID flex adapter or 9364-8i adapter)

3.5" SATA (7.2K 6Gbs HDD)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SAS (15K 12Gbs HDD)	300GB/450GB/600GB
2.5" SAS SSD (12Gbs)	200GB/400GB/800GB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB OPAL/480GB/512GB
M.2 SSD (M.2 SSD drive is located in M.2 flex adapter and does not consume HDD bay)	256 GB
PCIe 2.0 x4 adapter	410GB/1.6TB

Environment specification and certifications

Temperature	
Operating:	50 °F to 95 °F (10 °C to 35 °C)
Storage:	-10 °C to 60 °C, no package -40 °C to 60 °C, with package
Altitude	
Operating:	-50-10000ft (-15.2-3048m)
Humidity	
Operating:	10%-80%, non-condensing
Storage:	10%-90%, non-condensing

RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in **Bold Oblique**

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
For a list of all supported options, please see [ThinkStation P500 Options sheet](#).

# ThinkStation P500 TopSeller Model(s) - 30A7 - IV

Product Specifications Reference (PSREF)

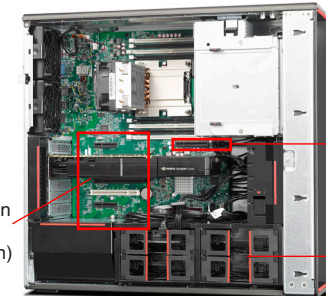
Type-model	Processor	Memory	Graphics/GPU Computing/ GRID	RAID controller	Internal disk drive	M.2 PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunderbolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A70012US	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Open	LSI Flex	1x300GB 2.5" SAS12Gbs 15K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14
30A70013US	E5-1607 v3 4C/3.1GHz/10MB/140W/1866MHz	1x4GB 2133MHz RDIMM	Quadro K620 2GB	Onboard	1x500GB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	490W Gold	No	09/14
30A70014US	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	490W Gold	No	09/14
30A70015US	E5-1630 v3 4C/3.7GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	490W Gold	No	09/14
30A70016US	E5-1630 v3 4C/3.7GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	490W Gold	No	09/14

Components	Specification
Chipset	Intel C612 Platform Controller Hub (PCH)
System mgmt	Intel Active Management Technology 9
Processor	Up to one 145W Intel Xeon E5-2600 v3 family processor with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 2.6GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.0GHz. Up to 2133MHz memory speed. Up to 45MB cache. Or up to one 140W Intel Xeon E5-1600 v3 family processors with 8C up to 3.2GHz, 6C up to 3.5GHz, 4C up to 3.7GHz
Coprocessor	None
Memory DIMM slots	8 DIMM sockets, 4-channel capable. RDIMM and LRDIMM (cannot be intermixed), ECC, DDR4, 2133MHz
Memory capacity	128GB (RDIMM)/256GB (LRDIMM)
Graphics, GPU computing, coprocessors	Two PCIe 3.0 x16 slots, up to 2 graphics, GPU computing adapters per system
	PSU Maximum quantity of adapters supported per system
	490W 1x150W+1x75W (only supports onboard SATA controller) 650W 1x225W+1x75W, or 2x150W
RAID controller	<b>RAID 0, 1, 5, 10</b> with onboard SATA controller in chipset, SATA 6Gb/s. <b>RAID 0, 1, 5, 10</b> with optional LSI RAID flex adapter, 12Gb/s SAS and SATA. <b>RAID 0, 1, 5, 6, 10</b> with optional LSI 9364-8i PCIe adapter, 1GB memory, optional 1GB flash with super capacitor, 12Gb/s SAS and SATA
Drive Bays	Two external 5.25" bays, four internal 3.5" bays (see right)
Media reader	Optional 9-in-1 USB 2.0 or 29-in-1 USB 3.0 reader
Flex connector	One flex connectors (see right), supports one of the following: <ul style="list-style-type: none"> <li>Up to one LSI RAID flex adapter for SATA/SAS RAID</li> <li>Up to one Multi-I/O flex adapters for one PCIe SSD</li> <li>Up to one M.2 flex adapters for one M.2 SSD</li> </ul>
Network interfaces	Integrated one Gigabit Ethernet (Intel i217LM). Optional discrete Ethernet is available
HD Audio	Realtek ALC662 codec
TPM	TCG 1.2-compliant
Power supply	One fixed 490 watts, autosensing, 90%, 80 PLUS Gold qualified; or one fixed 650 watts, autosensing, 92%, 80 PLUS Platinum qualified
Front ports	Four USB 3.0 (one Diagnostic, one Always On), one combo audio/microphone jack (3.5mm)
Rear ports	Four USB 2.0, four USB 3.0, one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in), two PS/2
IEEE 1394	1 front, 1 rear, via 1394 adapter, selected models
Thunderbolt	1 Thunderbolt via optional PCIe adapter. Uses slot 6.
Mechanical	<ul style="list-style-type: none"> <li>36-liter: 175mm/6.89" W x 470mm/18.5" D x 440mm/17.32" H (with feet)</li> <li>Tool-less parts: power supply, disk drive, fans, adapter retention</li> <li>48.94 lb (22.2kg) max configuration</li> </ul>
Base warranty	3-year limited onsite service with 9x5/NBD

## Drive Bays and Expansion slots



2 x 5.25", for half-height optical, or up to one optional flex module (Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 3.0 reader/front IEEE 1394/front eSATA), or up to two optional front HDD bays



Expansion slots 1-6 (top-down)

Flex connector

HDD 1 HDD 3  
HDD 2 HDD 4\*

\* When LSI RAID flex adapter or 9364-8i adapter is installed, each HDD bay (HDD 1 - 4) can support 2 disk drives (1 x 3.5" drives + 2.5" SATA/SAS SSD, or 2 x 2.5" SATA/SAS SSD).

Slot 1: PCIe 3.0 x4, Half length, full height  
Slot 2: PCIe 3.0 x16, Full length, full height  
Slot 3: PCIe 2.0 x1, Full length, full height  
Slot 4: PCIe 3.0 x16, Full length, full height  
Slot 5: PCI, Full length, full height  
Slot 6: PCIe 2.0 x4, Half length, full height

## Supporting NVIDIA graphics and GPU computing list

Adapter	Cores	Memory	Power	SLI	Connector**
NVS 310	48	512MB	19.5W		2xDP
NVS 315	48	1024MB			2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W		4xmini DP
Quadro 410	192	512MB	36.7W		1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W		1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W		1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W		1xDVI-I DL+2xDP
Quadro K5000	1536	4GB	122W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K6000	2880	12GB	225W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K420	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W		1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W		1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W		1xDVI-I DL+2xDP
Quadro K5200	2304	8GB	150W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Tesla K20	2496	5GB	225W		Needs graphics
GRID K2	3072	8GB	225W		Needs graphics

\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

## Supporting storage list

(SAS drive needs LSI RAID flex adapter or 9364-8i adapter)

3.5" SATA (7.2K 6Gbs HDD)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SAS (15K 12Gbs HDD)	300GB/450GB/600GB
2.5" SAS SSD (12Gbs)	200GB/400GB/800GB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB OPAL/480GB/512GB
M.2 SSD (M.2 SSD drive is located in M.2 flex adapter and does not consume HDD bay)	256 GB
PCIe 2.0 x4 adapter	410GB/1.6TB

## Environment specification and certifications

Temperature	
Operating:	50 °F to 95 °F (10 °C to 35 °C)
Storage:	-10 °C to 60 °C, no package -40 °C to 60 °C, with package
Altitude	
Operating:	-50-10000ft (-15.2-3048m)
Humidity	
Operating:	10%-80%, non-condensing
Storage:	10%-90%, non-condensing
RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in <b>Bold Oblique</b>	

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
For a list of all supported options, please see [ThinkStation P500 Options sheet](#).

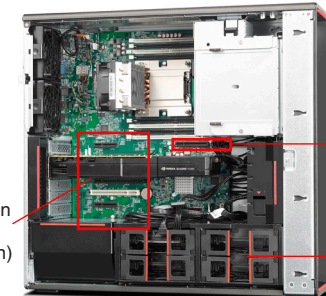
Type-model	Processor	Memory	Graphics/GPU Computing/ GRID	RAID controller	Internal disk drive	M.2/ PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunderbolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A70017US	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Open	Onboard	1x256GB 2.5" SATA6Gbs SSD OPAL	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	650W Platinum	No	09/14
30A7002WUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Open	LSI Flex	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	01/15
30A7002XUS	E5-1630 v3 4C/3.7GHz/10MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Open	LSI Flex	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	01/15
30A7002YUS	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Open	9364-8i	Open	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	01/15

Components	Specification
Chipset	Intel C612 Platform Controller Hub (PCH)
System mgmt	Intel Active Management Technology 9
Processor	Up to one 145W Intel Xeon E5-2600 v3 family processor with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 2.6GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.0GHz. Up to 2133MHz memory speed. Up to 45MB cache. Or up to one 140W Intel Xeon E5-1600 v3 family processors with 8C up to 3.2GHz, 6C up to 3.5GHz, 4C up to 3.7GHz
Coprocessor	None
Memory DIMM slots	8 DIMM sockets, 4-channel capable. RDIMM and LRDIMM (cannot be intermixed), ECC, DDR4, 2133MHz
Memory capacity	128GB (RDIMM)/256GB (LRDIMM)
Graphics, GPU computing, coprocessors	Two PCIe 3.0 x16 slots, up to 2 graphics, GPU computing adapters per system
	PSU Maximum quantity of adapters supported per system
	490W 1x150W+1x75W (only supports onboard SATA controller) 650W 1x225W+1x75W, or 2x150W
RAID controller	<b>RAID 0, 1, 5, 10</b> with onboard SATA controller in chipset, SATA 6Gb/s. <b>RAID 0, 1, 5, 10</b> with optional LSI RAID flex adapter, 12Gb/s SAS and SATA. <b>RAID 0, 1, 5, 6, 10</b> with optional LSI 9364-8i PCIe adapter, 1GB memory, optional 1GB flash with super capacitor, 12Gb/s SAS and SATA
Drive Bays	Two external 5.25" bays, four internal 3.5" bays (see right)
Media reader	Optional 9-in-1 USB 2.0 or 29-in-1 USB 3.0 reader
Flex connector	One flex connectors (see right), supports one of the following: <ul style="list-style-type: none"> <li>Up to one LSI RAID flex adapter for SATA/SAS RAID</li> <li>Up to one Multi-I/O flex adapters for one PCIe SSD</li> <li>Up to one M.2 flex adapters for one M.2 SSD</li> </ul>
Network interfaces	Integrated one Gigabit Ethernet (Intel i217LM). Optional discrete Ethernet is available
HD Audio	Realtek ALC662 codec
TPM	TCG 1.2-compliant
Power supply	One fixed 490 watts, autosensing, 90%, 80 PLUS Gold qualified; or one fixed 650 watts, autosensing, 92%, 80 PLUS Platinum qualified
Front ports	Four USB 3.0 (one Diagnostic, one Always On), one combo audio/microphone jack (3.5mm)
Rear ports	Four USB 2.0, four USB 3.0, one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in), two PS/2
IEEE 1394	1 front, 1 rear, via 1394 adapter, selected models
Thunderbolt	1 Thunderbolt via optional PCIe adapter. Uses slot 6.
Mechanical	<ul style="list-style-type: none"> <li>36-liter: 175mm/6.89" W x 470mm/18.5" D x 440mm/17.32" H (with feet)</li> <li>Tool-less parts: power supply, disk drive, fans, adapter retention</li> <li>48.94 lb (22.2kg) max configuration</li> </ul>
Base warranty	3-year limited onsite service with 9x5/NBD

Drive Bays and Expansion slots



2 x 5.25", for half-height optical, or up to one optional flex module (Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 3.0 reader/front IEEE 1394/front eSATA), or up to two optional front HDD bays



Expansion slots 1-6 (top-down)

Flex connector

HDD 1 HDD 3  
HDD 2 HDD 4\*

\* When LSI RAID flex adapter or 9364-8i adapter is installed, each HDD bay (HDD 1 - 4) can support 2 disk drives (1 x 3.5" drives + 2.5" SATA/SAS SSD, or 2 x 2.5" SATA/SAS SSD).

Slot 1: PCIe 3.0 x4, Half length, full height  
Slot 2: PCIe 3.0 x16, Full length, full height  
Slot 3: PCIe 2.0 x1, Full length, full height  
Slot 4: PCIe 3.0 x16, Full length, full height  
Slot 5: PCI, Full length, full height  
Slot 6: PCIe 2.0 x4, Half length, full height

Supporting NVIDIA graphics and GPU computing list

Adapter	Cores	Memory	Power	SLI	Connector**
NVS 310	48	512MB	19.5W		2xDP
NVS 315	48	1024MB			2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W		4xmini DP
Quadro 410	192	512MB	36.7W		1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W		1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W		1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W		1xDVI-I DL+2xDP
Quadro K5000	1536	4GB	122W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K6000	2880	12GB	225W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K420	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W		1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W		1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W		1xDVI-I DL+2xDP
Quadro K5200	2304	8GB	150W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Tesla K20	2496	5GB	225W		Needs graphics
GRID K2	3072	8GB	225W		Needs graphics

\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

Supporting storage list

(SAS drive needs LSI RAID flex adapter or 9364-8i adapter)

3.5" SATA (7.2K 6Gbs HDD)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SAS (15K 12Gbs HDD)	300GB/450GB/600GB
2.5" SAS SSD (12Gbs)	200GB/400GB/800GB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB OPAL/480GB/512GB
M.2 SSD (M.2 SSD drive is located in M.2 flex adapter and does not consume HDD bay)	256 GB
PCIe 2.0 x4 adapter	410GB/1.6TB

Environment specification and certifications

Temperature	
Operating:	50 °F to 95 °F (10 °C to 35 °C)
Storage:	-10 °C to 60 °C, no package -40 °C to 60 °C, with package
Altitude	
Operating:	-50-10000ft (-15.2-3048m)
Humidity	
Operating:	10%-80%, non-condensing
Storage:	10%-90%, non-condensing
RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in <b>Bold Oblique</b>	

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
For a list of all supported options, please see [ThinkStation P500 Options sheet](#).

# ThinkStation P500 Relationship Model(s)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Graphics/GPU Computing/ GRID	RAID controller	Internal disk drive	M.2/ PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunder-bolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
<b>30A6000PUS</b>	<b>E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz</b>	<b>2x4GB 2133MHz RDIMM</b>	<b>Quadro K2200 4GB</b>	<b>Onboard</b>	<b>2x500GB 3.5" SATA6Gbs 7.2K</b>	<b>No</b>	<b>No</b>	<b>DVD±RW</b>	<b>9-in-1</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>Win8.1 Pro64</b>	<b>650W Platinum</b>	<b>No</b>	<b>09/14</b>
<b>30A6000QUS</b>	<b>E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz</b>	<b>2x8GB 2133MHz RDIMM</b>	<b>Quadro K4200 4GB</b>	<b>Onboard</b>	<b>2x180GB 2.5" SATA6Gbs SSD</b>	<b>No</b>	<b>No</b>	<b>DVD±RW</b>	<b>9-in-1</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>Win8.1 Pro64</b>	<b>650W Platinum</b>	<b>No</b>	<b>09/14</b>
30A6003GUS	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	Yes	09/14
30A6003HUS	E5-1603 v3 4C/2.8GHz/10MB/140W/1866MHz	2x4GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	1x500GB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	Yes	09/14
30A6003JUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	Yes	09/14
30A6003KUS	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x256GB 2.5" SATA6Gbs SSD OPAL	No	No	9.5mm DVD±RW	29-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	Yes	09/14
30A6003LUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K620 2GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	Yes	09/14
30A6003MUS	E5-1607 v3 4C/3.1GHz/10MB/140W/1866MHz	1x4GB 2133MHz RDIMM	Open	Onboard	1x500GB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14
30A6003NUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Open	Onboard	1x500GB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14
30A6003PUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K620 2GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14
30A6003QUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14
30A6003RUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	490W Gold	No	09/14
30A6003SUS	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14
30A6003TUS	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Quadro K5200 8GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14
30A6003UUS	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x256GB 2.5" SATA6Gbs SSD OPAL	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14
30A6003VUS	E5-1660 v3 8C/3GHz/20MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	Open	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14
30A6003WUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K620 2GB	LSI Flex	1x300GB 2.5" SAS12Gbs 15K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	09/14
30A6003XUS	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K620 2GB	LSI Flex	1x300GB 2.5" SAS12Gbs 15K	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	650W Platinum	No	09/14
30A6003YUS	E5-1607 v3 4C/3.1GHz/10MB/140W/1866MHz	1x4GB 2133MHz RDIMM	Open	Onboard	1x500GB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	490W Gold	No	09/14
30A60040US	E5-1620 v3 4C/3.5GHz/10MB/140W/2133MHz	1x4GB 2133MHz RDIMM	Quadro K620 2GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	490W Gold	No	09/14
30A60041US	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Quadro K5200 8GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	650W Platinum	No	09/14
30A60042US	E5-1650 v3 6C/3.5GHz/15MB/140W/2133MHz	1x8GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x256GB 2.5" SATA6Gbs SSD OPAL	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	650W Platinum	No	09/14

RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in **Bold Oblique**  
 For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
 For a list of all supported options, please see [ThinkStation P500 Options sheet](#).

## ThinkStation P500 Options

### Partial list of core options supported on ThinkStation P500

Memory	
4X70G78060	4GB DDR4 2133 (PC4-17000) ECC RDIMM WorkStation Memory
4X70G78061	8GB DDR4 2133 (PC4-17000) ECC RDIMM WorkStation Memory
4X70G78062	16GB DDR4 2133 (PC4-17000) ECC RDIMM WorkStation Memory
4X70G78059	32GB DDR4 2133 (PC4-17000) ECC LRDIMM WorkStation Memory
Graphics	
0B47074	NVIDIA NVS 310 512MB Dual DisplayPort Adapter
4X60F17422	NVIDIA NVS 315 1GB Dual DVI or Dual DisplayPort Adapter
0B47077	NVIDIA NVS 510 2GB Quad Mini-DisplayPort Graphics
0B47075	NVIDIA Quadro 410 512MB Single DVI & Single DisplayPort
4X60G69029	NVIDIA Quadro K420 1GB Dual-Link DVI-I, DisplayPort
4X60G69028	NVIDIA Quadro K620 2GB Dual-Link DVI-I, DisplayPort
4X60G69027	NVIDIA Quadro K2200 4GB Dual-Link DVI-I, two DisplayPort
4X60G69026	NVIDIA Quadro K4200 4GB DVI-I, two DisplayPort
4X60G69025	NVIDIA Quadro K5200 8GB two DVI-I,two DisplayPort
4XH0H01346	ThinkStation P500/P700/P900 Front Graphics Cooling Fan Assembly
Cables	
45J7915	Lenovo DisplayPort to Single-Link DVI-D (Digital) Monitor Cable
57Y4393	Lenovo DisplayPort to VGA Monitor Cable
0A36537	Lenovo DisplayPort to DisplayPort Cable
Internal Storage	
4XH0G78728	ThinkStation Multi IO port Flex Adapter
4XH0G78729	ThinkStation M.2 SSD Flex Adapter
43R1990	Lenovo 500GB SATA HDD (7200)
45J7918	Lenovo 1TB SATA HDD (7200)
4XB0F18665	ThinkStation 1TB 3.5" SATA Hybrid Hard Drive (7200)
4XB0F18666	ThinkStation 2TB 3.5" SATA Hybrid Hard Drive (7200)
4XB0G69282	ThinkStation 450GB 2.5" SAS 12Gbps Hard Drive
4XB0F18670	ThinkStation 128GB SATA 2.5" Solid State Drive
4XB0G69276	ThinkStation 240GB SATA 2.5" 6Gbps FDE Solid State Drive
4XB0G69278	ThinkStation 256GB M.2 Solid State Drive
4XB0G69277	ThinkStation 480GB SATA 2.5" 6Gbps Solid State Drive
4XB0G69275	ThinkStation 512GB SATA 2.5" 6Gbps Solid State Drive
4XB0G69281	ThinkStation 400GB 2.5" SAS 12Gbps Solid State Drive
4XF0G94539	ThinkStation 2.5" to 3.5" Conversion Kit
Communications	
4XC0H00338	ThinkStation Intel I210-T1 Single Port Gigabit Ethernet Adapter
4XH0H00340	ThinkStation Intel Thunderbolt Add-In Card
Keyboards - English	
73P5220	Lenovo Preferred Pro USB Keyboard - English
73P2620	Lenovo Enhanced Performance USB Keyboard - English
0A34032	Lenovo Ultralim Plus Wireless Keyboard & Mouse - English
73P4730	Lenovo Fingerprint USB Keyboard - English
4X30E50999	Lenovo USB Smartcard Keyboard - English

Keyboards - Canadian French	
73P5231	Lenovo Preferred Pro USB Keyboard - Canadian French 058
73P2631	Lenovo Enhanced Performance USB Keyboard - Canadian French 058
0A34045	Lenovo Ultralim Plus Wireless Keyboard & Mouse - Canadian French 058
0C52696	Lenovo Preferred Pro Fingerprint USB Keyboard - Canadian French 058
Mice	
06P4069	Lenovo Optical Wheel Mouse (Full Size)
41U3074	Lenovo Laser Mouse (Full Size)
0A36188	Lenovo Laser Wireless Mouse (Mid-size)
Security Options	
73P2582	Kensington Microsaver Cable Lock from Lenovo
45K1620	Kensington Twin Head Cable Lock from Lenovo
57Y4303	Lenovo Security Cable Lock
0A65619	ThinkPad USB 3.0 500GB Portable Secure Hard Drive
0A65616	ThinkPad USB 3.0 750GB Portable Secure Hard Drive
0A65621	ThinkPad USB 3.0 1TB Portable Secure Hard Drive
Audio	
57Y4488	ThinkPad Combo in Ear Headset



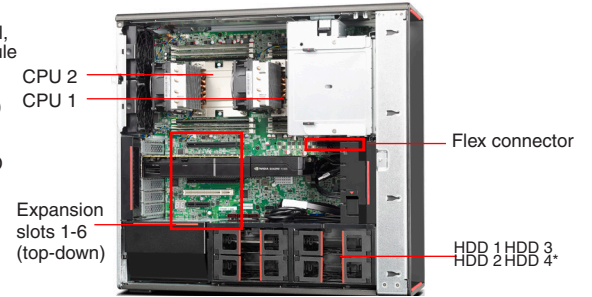
Type-model	Processor	Memory	Graphics/GPU Computing/ GRID	RAID controller	Internal disk drive	M.2/ PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunder-bolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A90010US	1xE5-2603 v3 6C/1.6GHz/15MB/85W/1600MHz	1x4GB 2133MHz RDIMM	Open	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	10/14
30A90011US	1xE5-2623 v3 4C/3GHz/10MB/105W/1866MHz	2x4GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	10/14
30A90012US	1xE5-2609 v3 6C/1.9GHz/15MB/85W/1600MHz	1x4GB 2133MHz RDIMM	Open	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	10/14
30A90013US	1xE5-2620 v3 4C/2.4GHz/15MB/85W/1866MHz	2x4GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	10/14
30A90014US	1xE5-2620 v3 6C/2.4GHz/15MB/85W/1866MHz	2x4GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	10/14

Components	Specification
Chipset	Intel C612 Platform Controller Hub (PCH)
System mgmt	Intel Active Management Technology 9
Processor	Up to two 145W Intel Xeon E5-2600 v3 family processors with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 2.6GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.0GHz. Two QPI link up to 9.6 GT/s. Or up to one 140W Intel Xeon E5-1600 v3 family processors with 8 cores up to 3.2GHz, 6 cores up to 3.5GHz, 4 cores up to 3.7GHz
Coprocessor	None
Memory DIMM slots	12 DIMM sockets (6 DIMMs per processor), 8-channel capable (4-channel per processor). Supports RDIMM and LRDIMM (cannot be intermixed), ECC, DDR4, 2133MHz.
Memory capacity	192GB (RDIMM)/384GB (LRDIMM), 2nd CPU is needed
Graphics, GPU computing, coprocessors	Up to 3 graphics, GPU computing adapters per system, 2nd CPU is needed PSU Maximum quantity of PCIe x16 adapters per system (by power) 650W/1x150W+2x75W (supports onboard SATA controller and up to 85W CPU), 850W/1x225W+2x75W, or 2x150W+1x75W
Disk drive controller	RAID 0, 1, 5, 10 with onboard SATA controller in chipset, SATA 6Gb/s. RAID 0, 1, 5, 10 with optional LSI RAID flex adapter, 12Gb/s SAS and SATA. RAID 0, 1, 5, 6, 10 with optional LSI 9364-8i PCIe adapter, 1GB memory, optional 1GB flash with super capacitor, 12Gb/s SAS and SATA
Drive Bays	Two external 5.25" bays, four internal 3.5" bays (see right)
Flex connector	One flex connectors (see right), supports one of the following: • Up to one LSI RAID flex adapter for SATA/SAS RAID • Up to one Multi-I/O flex adapters for two PCIe SSD • Up to one M.2 flex adapters for two M.2 SSD
Network interfaces	Integrated two Gigabit Ethernet ports. Optional discrete Ethernet is available
HD Audio	Realtek ALC662 codec
TPM	TCG 1.2-compliant
Power supply	One fixed 650 watts or 850 watts, autosensing, 92%, 80 PLUS Platinum qualified
Front ports	Four USB 3.0 (one Diagnostic, one Always On), one combo audio/microphone jack (3.5mm)
Rear ports	Four 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), two PS/2
IEEE 1394	Up to one 6-pin port on rear, one 6-pin port on front, 1394a-2000, 400Mbps
Thunderbolt	1 Thunderbolt via optional PCIe adapter. Uses slot 6.
Mechanical	• 36-liter: 175mm/6.89" W x 470mm/18.5" D x 440mm/17.32" H (with feet) • Tool-less parts: power supply, disk drive, fans, adapter retention • 52.25 lb (23.7kg) max configuration
Base warranty	3-year limited onsite service with 9x5/NBD

Drive Bays and Expansion slots



2 x 5.25", for half-height optical, or up to one optional flex module (Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 3.0 reader/front IEEE 1394/front eSATA), or up to two optional front HDD bays



CPU 2

CPU 1

Expansion slots 1-6 (top-down)

Flex connector

HDD 1 HDD 3  
HDD 2 HDD 4\*

Slot 1: PCIe 3.0 x16, Half length, full height, by CPU2  
Slot 2: PCIe 3.0 x16, Full length, full height, by CPU1  
Slot 3: PCIe 3.0 x8, Full length, full height, by CPU2  
Slot 4: PCIe 3.0 x16, Full length, full height, by CPU1  
Slot 5: PCI, Full length, full height, by PCH  
Slot 6: PCIe 2.0 x4, Half length, full height, by PCH

Supporting NVIDIA graphics and GPU computing list

Adapter	Cores	Memory	Power	SLI	Connector**
NVS 310	48	512MB	19.5W		2xDP
NVS 315	48	1024MB			2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W		4xmini DP
Quadro 410	192	512MB	36.7W		1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W		1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W		1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W		1xDVI-I DL+2xDP
Quadro K5000	1536	4GB	122W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K6000	2880	12GB	225W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K420	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W		1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W		1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W		1xDVI-I DL+2xDP
Quadro K5200	2304	8GB	150W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Tesla K20	2496	5GB	225W		Needs graphics
GRID K2	3072	8GB	225W		Needs graphics

\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

\* When LSI RAID flex adapter or 9364-8i adapter is installed, each HDD bay (HDD 1 - 4) can support 2 disk drives (1 x 3.5" drives + 2.5" SATA/SAS SSD, or 2 x 2.5" SATA/SAS SSD).

Supporting storage list

(SAS drive needs LSI RAID flex adapter or 9364-8i adapter)

3.5" SATA (7.2K 6Gbs HDD)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SAS (15K 12Gbs HDD)	300GB/450GB/600GB
2.5" SAS SSD (12Gbs)	200GB/400GB/800GB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB OPAL/480GB/512GB
M.2 SSD (M.2 SSD drive is located in M.2 flex adapter and does not consume HDD bay)	256 GB
PCIe 2.0 x4 adapter	410GB/1.6TB

Environment specification and certifications

Temperature	
Operating:	50 °F to 95 °F (10 °C to 35 °C)
Storage:	-10 °C to 60 °C, no package -40 °C to 60 °C, with package
Altitude	
Operating:	-50~10000ft (-15.2~3048m)
Humidity	
Operating:	10%~80%, non-condensing
Storage:	10%~90%, non-condensing

RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in **Bold Oblique**

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
For a list of all supported options, please see [ThinkStation P700 Options sheet](#).

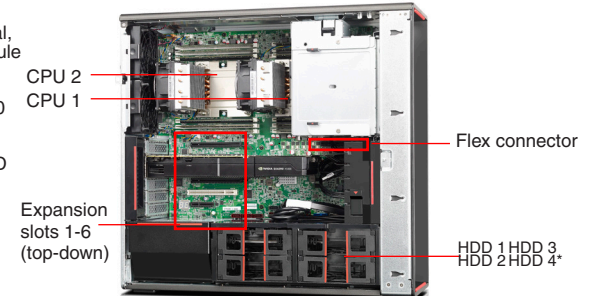
Type-model	Processor	Memory	Graphics/GPU Computing/GRID	RAID controller	Internal disk drive	M.2/PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunder-bolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A90015US	1xE5-2630 v3 8C/2.4GHz/20MB/85W/1866MHz	2x4GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x2TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	10/14
30A90016US	1xE5-2640 v3 8C/2.6GHz/20MB/90W/1866MHz	2x4GB 2133MHz RDIMM	Open	Onboard	1x2TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	10/14
30A90017US	1xE5-2620 v3 6C/2.4GHz/15MB/85W/1866MHz	2x4GB 2133MHz RDIMM	Open	LSI Flex	1x300GB 2.5" SAS12Gbs 15K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	10/14
30A90018US	1xE5-2620 v3 8C/2.4GHz/15MB/85W/1866MHz	2x4GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	10/14
30A90019US	1xE5-2637 v3 4C/3.5GHz/15MB/135W/2133MHz	2x8GB 2133MHz RDIMM	Open	Onboard	Open	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	10/14

Components	Specification
Chipset	Intel C612 Platform Controller Hub (PCH)
System mgmt	Intel Active Management Technology 9
Processor	Up to two 145W Intel Xeon E5-2600 v3 family processors with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 2.6GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.0GHz. Two QPI link up to 9.6 GT/s. Up to 2133MHz memory speed. Up to 45MB cache. Or up to one 140W Intel Xeon E5-1600 v3 family processors with 8 cores up to 3.2GHz, 6 cores up to 3.5GHz, 4 cores up to 3.7GHz
Coprocessor	None
Memory DIMM slots	12 DIMM sockets (6 DIMMs per processor), 8-channel capable (4-channel per processor). Supports RDIMM and LRDIMM (cannot be intermixed), ECC, DDR4, 2133MHz.
Memory capacity	192GB (RDIMM)/384GB (LRDIMM), 2nd CPU is needed
Graphics, GPU computing, coprocessors	Up to 3 graphics, GPU computing adapters per system, 2nd CPU is needed PSU Maximum quantity of PCIe x16 adapters per system (by power) 650W/1x150W+2x75W (supports onboard SATA controller and up to 85W CPU), 850W/1x225W+2x75W, or 2x150W+1x75W
Disk drive controller	<b>RAID 0, 1, 5, 10</b> with onboard SATA controller in chipset, SATA 6Gb/s. <b>RAID 0, 1, 5, 10</b> with optional LSI RAID flex adapter, 12Gb/s SAS and SATA. <b>RAID 0, 1, 5, 6, 10</b> with optional LSI 9364-8i PCIe adapter, 1GB memory, optional 1GB flash with super capacitor, 12Gb/s SAS and SATA
Drive Bays	Two external 5.25" bays, four internal 3.5" bays (see right)
Flex connector	One flex connectors (see right), supports one of the following: • Up to one LSI RAID flex adapter for SATA/SAS RAID • Up to one Multi-I/O flex adapters for two PCIe SSD • Up to one M.2 flex adapters for two M.2 SSD
Network interfaces	Integrated two Gigabit Ethernet ports. Optional discrete Ethernet is available
HD Audio	Realtek ALC662 codec
TPM	TCG 1.2-compliant
Power supply	One fixed 650 watts or 850 watts, autosensing, 92%, 80 PLUS Platinum qualified
Front ports	Four USB 3.0 (one Diagnostic, one Always On), one combo audio/microphone jack (3.5mm)
Rear ports	Four 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), two PS/2
IEEE 1394	Up to one 6-pin port on rear, one 6-pin port on front, 1394a-2000, 400Mbps
Thunderbolt	1 Thunderbolt via optional PCIe adapter. Uses slot 6.
Mechanical	• 36-liter: 175mm/6.89" W x 470mm/18.5" D x 440mm/17.32" H (with feet) • Tool-less parts: power supply, disk drive, fans, adapter retention • 52.25 lb (23.7kg) max configuration
Base warranty	3-year limited onsite service with 9x5/NBD

Drive Bays and Expansion slots



2 x 5.25", for half-height optical, or up to one optional flex module (Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 3.0 reader/front IEEE 1394/front eSATA), or up to two optional front HDD bays



CPU 2  
CPU 1  
Expansion slots 1-6 (top-down)

Flex connector  
HDD 1 HDD 3  
HDD 2 HDD 4\*

Slot 1: PCIe 3.0 x16, Half length, full height, by CPU2  
Slot 2: PCIe 3.0 x16, Full length, full height, by CPU1  
Slot 3: PCIe 3.0 x8, Full length, full height, by CPU2  
Slot 4: PCIe 3.0 x16, Full length, full height, by CPU1  
Slot 5: PCI, Full length, full height, by PCH  
Slot 6: PCIe 2.0 x4, Half length, full height, by PCH

Supporting NVIDIA graphics and GPU computing list

Adapter	Cores	Memory	Power	SLI	Connector**
NVS 310	48	512MB	19.5W		2xDP
NVS 315	48	1024MB			2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W		4xmini DP
Quadro 410	192	512MB	36.7W		1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W		1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W		1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W		1xDVI-I DL+2xDP
Quadro K5000	1536	4GB	122W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K6000	2880	12GB	225W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K420	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W		1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W		1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W		1xDVI-I DL+2xDP
Quadro K5200	2304	8GB	150W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Tesla K20	2496	5GB	225W		Needs graphics
GRID K2	3072	8GB	225W		Needs graphics

\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

\* When LSI RAID flex adapter or 9364-8i adapter is installed, each HDD bay (HDD 1 - 4) can support 2 disk drives (1 x 3.5" drives + 2.5" SATA/SAS SSD, or 2 x 2.5" SATA/SAS SSD).

Supporting storage list

(SAS drive needs LSI RAID flex adapter or 9364-8i adapter)

3.5" SATA (7.2K 6Gbs HDD)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SAS (15K 12Gbs HDD)	300GB/450GB/600GB
2.5" SAS SSD (12Gbs)	200GB/400GB/800GB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB OPAL/480GB/512GB
M.2 SSD (M.2 SSD drive is located in M.2 flex adapter and does not consume HDD bay)	256 GB
PCIe 2.0 x4 adapter	410GB/1.6TB

Environment specification and certifications

Temperature	
Operating:	50 °F to 95 °F (10 °C to 35 °C)
Storage:	-10 °C to 60 °C, no package -40 °C to 60 °C, with package
Altitude	
Operating:	-50~10000ft (-15.2~3048m)
Humidity	
Operating:	10%~80%, non-condensing
Storage:	10%~90%, non-condensing
RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in <b>Bold Oblique</b>	

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
For a list of all supported options, please see [ThinkStation P700 Options sheet](#).

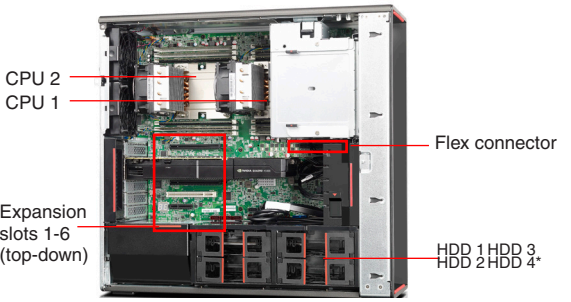
Type-model	Processor	Memory	Graphics/GPU Computing/GRID	RAID controller	Internal disk drive	M.2/PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunder-bolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A9001AUS	1xE5-2637 v3 4C/3.5GHz/15MB/135W/2133MHz	2x4GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	10/14
30A9001BUS	1xE5-2643 v3 6C/3.4GHz/20MB/135W/2133MHz	2x4GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	10/14
30A9001CUS	1xE5-2609 v3 6C/1.9GHz/15MB/85W/1600MHz	1x4GB 2133MHz RDIMM	Open	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	650W Platinum	No	10/14
30A9001DUS	1xE5-2620 v3 6C/2.4GHz/15MB/85W/1866MHz	2x4GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	650W Platinum	No	10/14
30A9001EUS	1xE5-2640 v3 8C/2.6GHz/20MB/90W/1866MHz	2x4GB 2133MHz RDIMM	Open	Onboard	Open	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	850W Platinum	No	10/14

Components	Specification
Chipset	Intel C612 Platform Controller Hub (PCH)
System mgmt	Intel Active Management Technology 9
Processor	Up to two 145W Intel Xeon E5-2600 v3 family processors with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 2.6GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.0GHz. Two QPI link up to 9.6 GT/s. Up to 2133MHz memory speed. Up to 45MB cache. Or up to one 140W Intel Xeon E5-1600 v3 family processors with 8 cores up to 3.2GHz, 6 cores up to 3.5GHz, 4 cores up to 3.7GHz
Coprocessor	None
Memory DIMM slots	12 DIMM sockets (6 DIMMs per processor), 8-channel capable (4-channel per processor). Supports RDIMM and LRDIMM (cannot be intermixed), ECC, DDR4, 2133MHz.
Memory capacity	192GB (RDIMM)/384GB (LRDIMM), 2nd CPU is needed
Graphics, GPU computing, coprocessors	Up to 3 graphics, GPU computing adapters per system, 2nd CPU is needed PSU Maximum quantity of PCIe x16 adapters per system (by power) 650W/1x150W+2x75W (supports onboard SATA controller and up to 85W CPU), 850W/1x225W+2x75W, or 2x150W+1x75W
Disk drive controller	RAID 0, 1, 5, 10 with onboard SATA controller in chipset, SATA 6Gb/s. RAID 0, 1, 5, 10 with optional LSI RAID flex adapter, 12Gb/s SAS and SATA. RAID 0, 1, 5, 6, 10 with optional LSI 9364-8i PCIe adapter, 1GB memory, optional 1GB flash with super capacitor, 12Gb/s SAS and SATA
Drive Bays	Two external 5.25" bays, four internal 3.5" bays (see right)
Flex connector	One flex connectors (see right), supports one of the following: • Up to one LSI RAID flex adapter for SATA/SAS RAID • Up to one Multi-I/O flex adapters for two PCIe SSD • Up to one M.2 flex adapters for two M.2 SSD
Network interfaces	Integrated two Gigabit Ethernet ports. Optional discrete Ethernet is available
HD Audio	Realtek ALC662 codec
TPM	TCG 1.2-compliant
Power supply	One fixed 650 watts or 850 watts, autosensing, 92%, 80 PLUS Platinum qualified
Front ports	Four USB 3.0 (one Diagnostic, one Always On), one combo audio/microphone jack (3.5mm)
Rear ports	Four 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), two PS/2
IEEE 1394	Up to one 6-pin port on rear, one 6-pin port on front, 1394a-2000, 400Mbps
Thunderbolt	1 Thunderbolt via optional PCIe adapter. Uses slot 6.
Mechanical	• 36-liter: 175mm/6.89" W x 470mm/18.5" D x 440mm/17.32" H (with feet) • Tool-less parts: power supply, disk drive, fans, adapter retention • 52.25 lb (23.7kg) max configuration
Base warranty	3-year limited onsite service with 9x5/NBD

Drive Bays and Expansion slots



2 x 5.25", for half-height optical, or up to one optional flex module (Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 3.0 reader/front IEEE 1394/front eSATA), or up to two optional front HDD bays



CPU 2  
CPU 1

Expansion slots 1-6 (top-down)

Flex connector

HDD 1 HDD 3  
HDD 2 HDD 4\*

Slot 1: PCIe 3.0 x16, Half length, full height, by CPU2  
Slot 2: PCIe 3.0 x16, Full length, full height, by CPU1  
Slot 3: PCIe 3.0 x8, Full length, full height, by CPU2  
Slot 4: PCIe 3.0 x16, Full length, full height, by CPU1  
Slot 5: PCI, Full length, full height, by PCH  
Slot 6: PCIe 2.0 x4, Half length, full height, by PCH

Adapter	Cores	Memory	Power	SLI	Connector**
NVS 310	48	512MB	19.5W		2xDP
NVS 315	48	1024MB			2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W		4xmini DP
Quadro 410	192	512MB	36.7W		1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W		1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W		1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W		1xDVI-I DL+2xDP
Quadro K5000	1536	4GB	122W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K6000	2880	12GB	225W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K420	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W		1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W		1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W		1xDVI-I DL+2xDP
Quadro K5200	2304	8GB	150W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Tesla K20	2496	5GB	225W		Needs graphics
GRID K2	3072	8GB	225W		Needs graphics

\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

\* When LSI RAID flex adapter or 9364-8i adapter is installed, each HDD bay (HDD 1 - 4) can support 2 disk drives (1 x 3.5" drives, 2.5" SATA/SAS SSD, or 2 x 2.5" SATA/SAS SSD).

Supporting storage list	
(SAS drive needs LSI RAID flex adapter or 9364-8i adapter)	
3.5" SATA (7.2K 6Gbs HDD)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SAS (15K 12Gbs HDD)	300GB/450GB/600GB
2.5" SAS SSD (12Gbs)	200GB/400GB/800GB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB OPAL/480GB/512GB
M.2 SSD (M.2 SSD drive is located in M.2 flex adapter and does not consume HDD bay)	256 GB
PCIe 2.0 x4 adapter	410GB/1.6TB

Environment specification and certifications	
Temperature	
Operating:	50 °F to 95 °F (10 °C to 35 °C)
Storage:	-10 °C to 60 °C, no package -40 °C to 60 °C, with package
Altitude	
Operating:	-50~10000ft (-15.2~3048m)
Humidity	
Operating:	10%~80%, non-condensing
Storage:	10%~90%, non-condensing
RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in <b>Bold Oblique</b>	

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
For a list of all supported options, please see [ThinkStation P700 Options sheet](#).

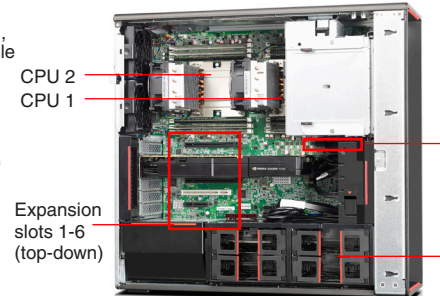
Type-model	Processor	Memory	Graphics/GPU Computing/ GRID	RAID controller	Internal disk drive	M.2/ PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunder-bolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A9001LUS	2xE5-2620 v3 6C/2.4GHz/15MB/85W/1866MHz	2x8GB 2133MHz RDIMM	Open	LSI Flex	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	01/15
30A9001MUS	2xE5-2650 v3 10C/2.3GHz/25MB/105W/2133MHz	2x8GB 2133MHz RDIMM	Open	LSI Flex	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	01/15
30A9001NUS	2xE5-2643 v3 6C/3.4GHz/20MB/135W/2133MHz	2x8GB 2133MHz RDIMM	Open	9364-8i	Open	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	01/15
30A9001PUS	2xE5-2667 v3 8C/3.2GHz/20MB/135W/2133MHz	2x8GB 2133MHz RDIMM	Open	9364-8i	Open	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	01/15

Components	Specification
Chipset	Intel C612 Platform Controller Hub (PCH)
System mgmt	Intel Active Management Technology 9
Processor	Up to two 145W Intel Xeon E5-2600 v3 family processors with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 2.6GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.0GHz. Two QPI link up to 9.6 GT/s. Up to 2133MHz memory speed. Up to 45MB cache. Or up to one 140W Intel Xeon E5-1600 v3 family processors with 8 cores up to 3.2GHz, 6 cores up to 3.5GHz, 4 cores up to 3.7GHz
Coprocessor	None
Memory DIMM slots	12 DIMM sockets (6 DIMMs per processor), 8-channel capable (4-channel per processor). Supports RDIMM and LRDIMM (cannot be intermixed), ECC, DDR4, 2133MHz.
Memory capacity	192GB (RDIMM)/384GB (LRDIMM), 2nd CPU is needed
Graphics, GPU computing, coprocessors	Up to 3 graphics, GPU computing adapters per system, 2nd CPU is needed PSU Maximum quantity of PCIe x16 adapters per system (by power) 650W/1x150W+2x75W (supports onboard SATA controller and up to 85W CPU), 850W/1x225W+2x75W, or 2x150W+1x75W
Disk drive controller	RAID 0, 1, 5, 10 with onboard SATA controller in chipset, SATA 6Gb/s. RAID 0, 1, 5, 10 with optional LSI RAID flex adapter, 12Gb/s SAS and SATA. RAID 0, 1, 5, 6, 10 with optional LSI 9364-8i PCIe adapter, 1GB memory, optional 1GB flash with super capacitor, 12Gb/s SAS and SATA
Drive Bays	Two external 5.25" bays, four internal 3.5" bays (see right)
Flex connector	One flex connectors (see right), supports one of the following: • Up to one LSI RAID flex adapter for SATA/SAS RAID • Up to one Multi-I/O flex adapters for two PCIe SSD • Up to one M.2 flex adapters for two M.2 SSD
Network interfaces	Integrated two Gigabit Ethernet ports. Optional discrete Ethernet is available
HD Audio	Realtek ALC662 codec
TPM	TCG 1.2-compliant
Power supply	One fixed 650 watts or 850 watts, autosensing, 92%, 80 PLUS Platinum qualified
Front ports	Four USB 3.0 (one Diagnostic, one Always On), one combo audio/microphone jack (3.5mm)
Rear ports	Four 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), two PS/2
IEEE 1394	Up to one 6-pin port on rear, one 6-pin port on front, 1394a-2000, 400Mbps
Thunderbolt	1 Thunderbolt via optional PCIe adapter. Uses slot 6.
Mechanical	• 36-liter: 175mm/6.89" W x 470mm/18.5" D x 440mm/17.32" H (with feet) • Tool-less parts: power supply, disk drive, fans, adapter retention • 52.25 lb (23.7kg) max configuration
Base warranty	3-year limited onsite service with 9x5/NBD

Drive Bays and Expansion slots



2 x 5.25", for half-height optical, or up to one optional flex module (Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 3.0 reader/front IEEE 1394/front eSATA), or up to two optional front HDD bays



CPU 2  
CPU 1  
Expansion slots 1-6 (top-down)

Slot 1: PCIe 3.0 x16, Half length, full height, by CPU2  
Slot 2: PCIe 3.0 x16, Full length, full height, by CPU1  
Slot 3: PCIe 3.0 x8, Full length, full height, by CPU2  
Slot 4: PCIe 3.0 x16, Full length, full height, by CPU1  
Slot 5: PCI, Full length, full height, by PCH  
Slot 6: PCIe 2.0 x4, Half length, full height, by PCH

Supporting NVIDIA graphics and GPU computing list

Adapter	Cores	Memory	Power	SLI	Connector**
NVS 310	48	512MB	19.5W		2xDP
NVS 315	48	1024MB			2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W		4xmini DP
Quadro 410	192	512MB	36.7W		1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W		1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W		1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W		1xDVI-I DL+2xDP
Quadro K5000	1536	4GB	122W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K6000	2880	12GB	225W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K420	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W		1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W		1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W		1xDVI-I DL+2xDP
Quadro K5200	2304	8GB	150W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Tesla K20	2496	5GB	225W		Needs graphics
GRID K2	3072	8GB	225W		Needs graphics

\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

\* When LSI RAID flex adapter or 9364-8i adapter is installed, each HDD bay (HDD 1 - 4) can support 2 disk drives (1 x 3.5" drives + 2.5" SATA/SAS SSD, or 2 x 2.5" SATA/SAS SSD).

Supporting storage list

(SAS drive needs LSI RAID flex adapter or 9364-8i adapter)

3.5" SATA (7.2K 6Gbs HDD)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SAS (15K 12Gbs HDD)	300GB/450GB/600GB
2.5" SAS SSD (12Gbs)	200GB/400GB/800GB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB OPAL/480GB/512GB
M.2 SSD (M.2 SSD drive is located in M.2 flex adapter and does not consume HDD bay)	256 GB
PCIe 2.0 x4 adapter	410GB/1.6TB

Environment specification and certifications

Temperature	
Operating:	50 °F to 95 °F (10 °C to 35 °C)
Storage:	-10 °C to 60 °C, no package -40 °C to 60 °C, with package
Altitude	
Operating:	-50~10000ft (-15.2~3048m)
Humidity	
Operating:	10%~80%, non-condensing
Storage:	10%~90%, non-condensing

RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in **Bold Oblique**

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
For a list of all supported options, please see [ThinkStation P700 Options sheet](#).

# ThinkStation P700 Relationship Model(s)

Type-model	Processor	Memory	Graphics/GPU Computing/ GRID	RAID controller	Internal disk drive	M.2/ PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunder-bolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A8000LUS	2xE5-2620 v3 6C/2.4GHz/15MB/85W/1866MHz	2x8GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	2x500GB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	No	No	No	No	Win8.1 Pro64	850W Platinum	No	10/14
30A8000MUS	2xE5-2623 v3 4C/3GHz/10MB/105W/1866MHz	2x8GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	2x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	No	No	No	No	Win8.1 Pro64	850W Platinum	No	10/14
30A8002UUS	2xE5-2630 v3 8C/2.4GHz/20MB/85W/1866MHz	2x4GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	Yes	10/14
30A8002VUS	1xE5-2630 v3 8C/2.4GHz/20MB/85W/1866MHz	1x4GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	Yes	10/14
30A8002WUS	2xE5-2660 v3 10C/2.6GHz/25MB/105W/2133MHz	2x8GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	Yes	10/14
30A80034US	1xE5-2609 v3 6C/1.9GHz/15MB/85W/1600MHz	1x4GB 2133MHz RDIMM	Open	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	10/14
30A80036US	1xE5-2620 v3 6C/2.4GHz/15MB/85W/1866MHz	2x4GB 2133MHz RDIMM	Quadro K620 2GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	650W Platinum	No	10/14
30A80037US	1xE5-2620 v3 6C/2.4GHz/15MB/85W/1866MHz	2x4GB 2133MHz RDIMM	Quadro K2200 4GB	LSI Flex	1x300GB 2.5" SAS12Gbs 15K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	10/14
30A80038US	1xE5-2650 v3 10C/2.3GHz/25MB/105W/2133MHz	2x4GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	10/14
30A80039US	2xE5-2637 v3 4C/3.5GHz/15MB/135W/2133MHz	8x4GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	850W Platinum	No	10/14
30A8003AUS	1xE5-2609 v3 6C/1.9GHz/15MB/85W/1600MHz	2x4GB 2133MHz RDIMM	Open	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	650W Platinum	No	10/14
30A8003BUS	1xE5-2620 v3 6C/2.4GHz/15MB/85W/1866MHz	2x4GB 2133MHz RDIMM	Quadro K620 2GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	650W Platinum	No	10/14
30A8003CUS	1xE5-2630 v3 8C/2.4GHz/20MB/85W/1866MHz	2x4GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	650W Platinum	No	10/14

RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in **Bold Oblique**

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)

For a list of all supported options, please see [ThinkStation P700 Options sheet](#).

# ThinkStation P700 Options

## Partial list of core options supported on ThinkStation P700

Memory	
4X70G78060	4GB DDR4 2133 (PC4-17000) ECC RDIMM WorkStation Memory
4X70G78061	8GB DDR4 2133 (PC4-17000) ECC RDIMM WorkStation Memory
4X70G78062	16GB DDR4 2133 (PC4-17000) ECC RDIMM WorkStation Memory
4X70G78059	32GB DDR4 2133 (PC4-17000) ECC LRDIMM WorkStation Memory
Graphics	
0B47074	NVIDIA NVS 310 512MB Dual DisplayPort Adapter
4X60F17422	NVIDIA NVS 315 1GB Dual DVI or Dual DisplayPort Adapter
0B47077	NVIDIA NVS 510 2GB Quad Mini-DisplayPort Graphics
0B47075	NVIDIA Quadro 410 512MB Single DVI & Single DisplayPort
4X60G69029	NVIDIA Quadro K420 1GB Dual-Link DVI-I, DisplayPort
4X60G69028	NVIDIA Quadro K620 2GB Dual-Link DVI-I, DisplayPort
4X60G69027	NVIDIA Quadro K2200 4GB Dual-Link DVI-I, two DisplayPort
4X60G69026	NVIDIA Quadro K4200 4GB DVI-I, two DisplayPort
4X60G69025	NVIDIA Quadro K5200 8GB two DVI-I,two DisplayPort
4XH0H01346	ThinkStation P500/P700/P900 Front Graphics Cooling Fan Assembly
Cables	
45J7915	Lenovo DisplayPort to Single-Link DVI-D (Digital) Monitor Cable
57Y4393	Lenovo DisplayPort to VGA Monitor Cable
0A36537	Lenovo DisplayPort to DisplayPort Cable
Internal Storage	
4XH0G78728	ThinkStation Multi-I/O Flex Adapter
4XH0G78729	ThinkStation M.2 SSD Flex Adapter
43R1990	Lenovo 500GB SATA HDD (7200)
45J7918	Lenovo 1TB SATA HDD (7200)
4XB0F18667	ThinkStation 2TB 3.5" SATA 6Gbps Hard Drive (7200)
4XB0F18668	ThinkStation 3TB 3.5" SATA 6Gbps Hard Drive (7200)
4XB0F18665	ThinkStation 1TB 3.5" SATA Hybrid Hard Drive (7200)
4XB0F18666	ThinkStation 2TB 3.5" SATA Hybrid Hard Drive (7200)
4XB0F18670	ThinkStation 128GB SATA 2.5" Solid State Drive
0B47308	ThinkStation 180GB 2.5" SATA Solid State Drive
4XF0G94539	ThinkStation 2.5" to 3.5" Conversion Kit
Communications	
4XC0H00338	ThinkStation Intel I210-T1 Single Port Gigabit Ethernet Adapter
4XH0H00340	ThinkStation Intel Thunderbolt Add-In Card
Keyboards - English	
73P5220	Lenovo Preferred Pro USB Keyboard - English
73P2620	Lenovo Enhanced Performance USB Keyboard - English
0A34032	Lenovo Ultralim Plus Wireless Keyboard & Mouse - English
73P4730	Lenovo Fingerprint USB Keyboard - English
4X30E50999	Lenovo USB Smartcard Keyboard - English
Keyboards - Canadian French	
73P5231	Lenovo Preferred Pro USB Keyboard - Canadian French 058
73P2631	Lenovo Enhanced Performance USB Keyboard - Canadian French 058
0A34045	Lenovo Ultralim Plus Wireless Keyboard & Mouse - Canadian French 058
0C52696	Lenovo Preferred Pro Fingerprint USB Keyboard - Canadian French 058

Mice	
06P4069	Lenovo Optical Wheel Mouse (Full Size)
41U3074	Lenovo Laser Mouse (Full Size)
0A36188	Lenovo Laser Wireless Mouse (Mid-size)
Security Options	
73P2582	Kensington Microsaver Cable Lock from Lenovo
45K1620	Kensington Twin Head Cable Lock from Lenovo
57Y4303	Lenovo Security Cable Lock
0A65619	ThinkPad USB 3.0 500GB Portable Secure Hard Drive
0A65616	ThinkPad USB 3.0 750GB Portable Secure Hard Drive
0A65621	ThinkPad USB 3.0 1TB Portable Secure Hard Drive
Audio	
57Y4488	ThinkPad Combo in Ear Headset

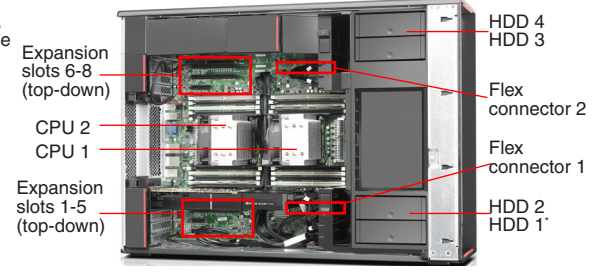
Type-model	Processor	Copro-processor	Memory	Graphics/GPU Computing/GRID	RAID controller	Internal disk drive	M.2/PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunder-bolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A50002US	2xE5-2660 v3 10C/2.6GHz/25MB/105W/2133MHz	No	4x8GB 2133MHz RDIMM	Quadro K5200 8GB	Onboard	2x512GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A5000LUS	1xE5-2603 v3 6C/1.6GHz/15MB/85W/1600MHz	No	1x4GB 2133MHz RDIMM	Quadro K620 2GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A5000MUS	1xE5-2609 v3 6C/1.9GHz/15MB/85W/1600MHz	No	1x4GB 2133MHz RDIMM	Quadro K620 2GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A5000NUS	1xE5-2609 v3 6C/1.9GHz/15MB/85W/1600MHz	No	1x4GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A5000PUS	1xE5-2620 v3 6C/2.4GHz/15MB/85W/1866MHz	No	2x4GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	1x2TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14

Components	Specification
Chipset	Intel C612 Platform Controller Hub (PCH)
System mgmt	Intel Active Management Technology 9
Processor	Up to two 160W Intel Xeon E5-2600 v3 family processors with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 3.1GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.5GHz. Two QPI link up to 9.6 GT/s. Up to 2133MHz memory speed. Up to 45MB cache. Or up to one 140W Intel Xeon E5-1600 v3 family processors with 8 cores up to 3.2GHz, 6 cores up to 3.5GHz, 4 cores up to 3.7GHz
Coprocessor	Up to one Intel Xeon Phi Coprocessor 3120A, PCIe 2.0 x16 adapter, 57 cores, 1.1GHz, 28.5MB L2 cache, 6GB memory, 300W
Memory DIMM slots	16 DIMM sockets (8 DIMMs per processor), 8-channel capable (4-channel per processor). RDIMM or LRDIMM (cannot be intermixed), ECC, DDR4, 2133MHz
Memory capacity	256GB (RDIMM)/512GB (LRDIMM), 2nd CPU is needed
Graphics and GPU computing	Four PCIe 3.0 x16 slots, two slots per processor. Up to 4 graphics, GPU computing, or coprocessors adapters per system. 2nd CPU is needed.
	Installed CPU Maximum quantity of PCIe x16 adapters per system (by power)
	1 1x300W+1x75W or 2x225W 2 2x300W+2x75W, or 1x300W+2x225W+1x75W, or 3x225W+1x150W
<i>Note: PSU needs to operate at full 1300W.</i>	
Disk drive controller	RAID 0, 1, 5, 10 with onboard SATA controller in chipset, 6Gb/s SATA. RAID 0, 1, 5, 10 with optional LSI RAID flex adapter, 12Gb/s SAS and SATA. RAID 0, 1, 5, 6, 10 with optional LSI 9364-8i PCIe adapter, 1GB memory, optional 1GB flash with super capacitor, 12Gb/s SAS and SATA
Drive Bays	Three external 5.25" bays, four internal 3.5" bays (see right)
Flex connector	Two flex connectors (see right), one per processor. Supports one of the following: • Up to one LSI RAID flex adapter for SATA/SAS RAID. • Up to two Multi-I/O adapters for four PCIe SSD (two PCIe SSD per adapter). • Up to two M.2 flex adapters for four M.2 SSD (two M.2 SSD per adapter)
Network interfaces	Integrated two-port Gigabit Ethernet (Intel i217LM and i210AT). Optional discrete Ethernet is available
HD Audio	Realtek ALC662 codec
TPM	TCG 1.2-compliant
Power supply	One fixed 1300 watts, autosensing, 92% PSU, 80 PLUS Platinum qualified <i>Note: PSU will automatically operate in 1120W (restricted) mode if the system line input is 100-110V. For other supported system line input voltages, the PSU will operate at the full 1300W.</i>
Front ports	Four USB 3.0 (one Diagnostic, one Always On), one combo audio/microphone jack (3.5mm)
Rear ports	Four USB 2.0, four USB 3.0 (blue), one serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in), two PS/2
Media reader	Optional 29-in-1 USB 3.0 or 9-in-1 USB 2.0 card reader
IEEE 1394	Up to one 6-pin port on rear, one 6-pin port on front, 1394a-2000, 400Mbps
Thunderbolt	Up to one Thunderbolt via optional PCIe adapter. Uses slot 5.
Mechanical	• 55-liter: 200mm/7.87" W x 620mm/24.4" D x 446mm/17.56" H (with feet) • Tool-less parts: power supply, disk drive, fans, adapter retention • 65.92 lb (29.9kg) max configuration
Base warranty	3-year limited onsite service with 9x5/NBD

Drive Bays and Expansion slots



3 x 5.25", for half-height optical, or up to one optional flex module (Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 3.0 reader/front IEEE 1394/front eSATA), or up to two optional front HDD bays



Expansion slots 6-8 (top-down)  
CPU 2  
CPU 1  
Expansion slots 1-5 (top-down)

HDD 4  
HDD 3  
Flex connector 2  
Flex connector 1  
HDD 2  
HDD 1\*

Slot 1: PCIe 3.0 x16, Full length, full height, by CPU1  
Slot 2: PCIe 2.0 x1, Full length, full height, by PCH\*\*  
Slot 3: PCIe 3.0 x16, Full length, full height, by CPU1  
Slot 4: PCI, Full length, full height, by PCH  
Slot 5: PCIe 2.0 x4, Half length, full height, by PCH  
Slot 6: PCIe 3.0 x16, Full length, full height, by CPU2\*\*  
Slot 7: PCIe 3.0 x16, Full length, full height, by CPU2\*\*  
Slot 8: PCIe 3.0 x4, Full length, full height, by CPU2

\* When LSI RAID flex adapter or 9364-8i adapter is installed, each HDD bay (HDD 1 - 4) can support 2 disk drives (1 x 3.5" drives + 2.5" SATA/SAS SSD, or 2 x 2.5" SATA/SAS SSD). SSD drives should be 7mm  
\*\* If flex connector 1 is used, slot 2 is limited to half length. If flex connector 2 is used, slot 6 and 7 are limited to half length.

Supporting NVIDIA graphics and GPU computing list

Adapter	Cores	Memory	Power	SLI	Connector***
NVS 310	48	512MB	19.5W		2xDP
NVS 315	48	1024MB			2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W		4xmini DP
Quadro 410	192	512MB	36.7W		1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W		1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W		1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W		1xDVI-I DL+2xDP
Quadro K5000	1536	4GB	122W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K6000	2880	12GB	225W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K420	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W		1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W		1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W		1xDVI-I DL+2xDP
Quadro K5200	2304	8GB	150W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Tesla K20	2496	5GB	225W		Needs graphics
GRID K2	3072	8GB	225W		Needs graphics

\*\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
For a list of all supported options, please see [ThinkStation P900 Options sheet](#).

Supporting storage list

(SAS drive needs LSI RAID flex adapter or 9364-8i adapter)

3.5" SATA (7.2K 6Gbs HDD)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SAS (15K 12Gbs HDD)	300GB/450GB/600GB
2.5" SAS SSD (12Gbs)	200GB/400GB/800GB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB OPAL/480GB/512GB
M.2 SSD (M.2 SSD drive is located in M.2 flex adapter and does not consume HDD bay)	256 GB
PCIe 2.0 x4 adapter	410GB/1.6TB

Environment specification and certifications

Temperature	
Operating:	50 °F to 95 °F (10 °C to 35 °C)
Storage:	-10 °C to 60 °C, no package -40 °C to 60 °C, with package
Altitude	
Operating:	-50~10000ft (-15.2~3048m)
Humidity	
Operating:	10%~80%, non-condensing
Storage:	10%~90%, non-condensing

RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in **Bold Oblique**

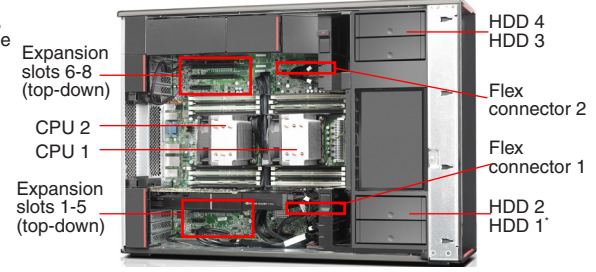
Type-model	Processor	Copro-processor	Memory	Graphics/GPU Computing/GRID	RAID controller	Internal disk drive	M.2/ PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunder-bolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A5000QUS	1xE5-2620 v3 6C/2.4GHz/15MB/85W/1866MHz	No	2x4GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A5000RUS	1xE5-2620 v3 6C/2.4GHz/15MB/85W/1866MHz	No	2x4GB 2133MHz RDIMM	Open	LSI Flex	1x300GB 2.5" SAS12Gbs 15K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A5000SUS	1xE5-2650 v3 10C/2.3GHz/25MB/105W/2133MHz	No	2x4GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x2TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A5000TUS	1xE5-2650 v3 10C/2.3GHz/25MB/105W/2133MHz	No	2x8GB 2133MHz RDIMM	Open	Onboard	Open	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A5000UUS	1xE5-2650 v3 10C/2.3GHz/25MB/105W/2133MHz	No	2x8GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14

Components	Specification
Chipset	Intel C612 Platform Controller Hub (PCH)
System mgmt	Intel Active Management Technology 9
Processor	Up to two 160W <b>Intel Xeon E5-2600 v3</b> family processors with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 3.1GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.5GHz. Two QPI link up to 9.6 GT/s. Up to 2133MHz memory speed. Up to 45MB cache. Or up to one 140W <b>Intel Xeon E5-1600 v3</b> family processors with 8 cores up to 3.2GHz, 6 cores up to 3.5GHz, 4 cores up to 3.7GHz
Coprocessor	Up to one Intel Xeon Phi Coprocessor 3120A, PCIe 2.0 x16 adapter, 57 cores, 1.1GHz, 28.5MB L2 cache, 6GB memory, 300W
Memory DIMM slots	16 DIMM sockets (8 DIMMs per processor), 8-channel capable (4-channel per processor). RDIMM or LRDIMM (cannot be intermixed), ECC, DDR4, 2133MHz
Memory capacity	<b>256GB</b> (RDIMM)/ <b>512GB</b> (LRDIMM), 2nd CPU is needed
Graphics and GPU computing	Four PCIe 3.0 x16 slots, two slots per processor. Up to 4 graphics, GPU computing, or coprocessors adapters per system. 2nd CPU is needed.
	Installed CPU Maximum quantity of PCIe x16 adapters per system (by power)
	1 1x300W+1x75W or 2x225W 2 2x300W+2x75W, or 1x300W+2x225W+1x75W, or 3x225W+1x150W
<i>Note: PSU needs to operate at full 1300W.</i>	
Disk drive controller	<b>RAID 0, 1, 5, 10</b> with onboard SATA controller in chipset, 6Gb/s SATA. <b>RAID 0, 1, 5, 10</b> with optional LSI RAID flex adapter, 12Gb/s SAS and SATA. <b>RAID 0, 1, 5, 6, 10</b> with optional LSI 9364-8i PCIe adapter, 1GB memory, optional 1GB flash with super capacitor, 12Gb/s SAS and SATA
Drive Bays	Three external 5.25" bays, four internal 3.5" bays (see right)
Flex connector	Two flex connectors (see right), one per processor. Supports one of the following: • Up to one LSI RAID flex adapter for SATA/SAS RAID. • Up to two Multi-I/O adapters for four PCIe SSD (two PCIe SSD per adapter). • Up to two M.2 flex adapters for four M.2 SSD (two M.2 SSD per adapter)
Network interfaces	Integrated two-port Gigabit Ethernet (Intel i217LM and i210AT). Optional discrete Ethernet is available
HD Audio	Realtek ALC662 codec
TPM	TCG 1.2-compliant
Power supply	One fixed 1300 watts, autosensing, 92% PSU, 80 PLUS Platinum qualified <i>Note: PSU will automatically operate in 1120W (restricted) mode if the system line input is 100-110V. For other supported system line input voltages, the PSU will operate at the full 1300W.</i>
Front ports	Four USB 3.0 (one Diagnostic, one Always On), one combo audio/microphone jack (3.5mm)
Rear ports	Four USB 2.0, four USB 3.0 (blue), one serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in), two PS/2
Media reader	Optional 29-in-1 USB 3.0 or 9-in-1 USB 2.0 card reader
IEEE 1394	Up to one 6-pin port on rear, one 6-pin port on front, 1394a-2000, 400Mbps
Thunderbolt	Up to one Thunderbolt via optional PCIe adapter. Uses slot 5.
Mechanical	• 55-liter: 200mm/7.87" W x 620mm/24.4" D x 446mm/17.56" H (with feet) • Tool-less parts: power supply, disk drive, fans, adapter retention • 65.92 lb (29.9kg) max configuration
Base warranty	3-year limited onsite service with 9x5/NBD

Drive Bays and Expansion slots



3 x 5.25", for half-height optical, or up to one optional flex module (Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 3.0 reader/front IEEE 1394/front eSATA), or up to two optional front HDD bays



Slot 1: PCIe 3.0 x16, Full length, full height, by CPU1  
 Slot 2: PCIe 2.0 x1, Full length, full height, by PCH\*\*  
 Slot 3: PCIe 3.0 x16, Full length, full height, by CPU1  
 Slot 4: PCI, Full length, full height, by PCH  
 Slot 5: PCIe 2.0 x4, Half length, full height, by PCH  
 Slot 6: PCIe 3.0 x16, Full length, full height, by CPU2\*\*  
 Slot 7: PCIe 3.0 x16, Full length, full height, by CPU2\*\*  
 Slot 8: PCIe 3.0 x4, Full length, full height, by CPU2

Supporting NVIDIA graphics and GPU computing list

Adapter	Cores	Memory	Power	SLI	Connector***
NVS 310	48	512MB	19.5W		2xDP
NVS 315	48	1024MB			2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W		4xmini DP
Quadro 410	192	512MB	36.7W		1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W		1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W		1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W		1xDVI-I DL+2xDP
Quadro K5000	1536	4GB	122W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K6000	2880	12GB	225W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K420	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W		1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W		1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W		1xDVI-I DL+2xDP
Quadro K5200	2304	8GB	150W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Tesla K20	2496	5GB	225W		Needs graphics
GRID K2	3072	8GB	225W		Needs graphics

\*\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
 For a list of all supported options, please see [ThinkStation P900 Options sheet](#).

Supporting storage list

(SAS drive needs LSI RAID flex adapter or 9364-8i adapter)

3.5" SATA (7.2K 6Gbs HDD)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SAS (15K 12Gbs HDD)	300GB/450GB/600GB
2.5" SAS SSD (12Gbs)	200GB/400GB/800GB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB OPAL/480GB/512GB
M.2 SSD (M.2 SSD drive is located in M.2 flex adapter and does not consume HDD bay)	256 GB
PCIe 2.0 x4 adapter	410GB/1.6TB

Environment specification and certifications

Temperature	
Operating:	50 °F to 95 °F (10 °C to 35 °C)
Storage:	-10 °C to 60 °C, no package -40 °C to 60 °C, with package
Altitude	
Operating:	-50~10000ft (-15.2~3048m)
Humidity	
Operating:	10%~80%, non-condensing
Storage:	10%~90%, non-condensing

RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in **Bold Oblique**



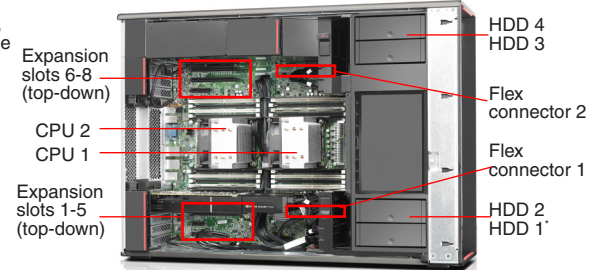
Type-model	Processor	Copro-processor	Memory	Graphics/GPU Computing/ GRID	RAID controller	Internal disk drive	M.2/ PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunder-bolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
30A5000VUS	1xE5-2623 v3 4C/3.0GHz/10MB/105W/1866MHz	No	2x4GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A5000WUS	1xE5-2637 v3 4C/3.5GHz/15MB/135W/2133MHz	No	2x4GB 2133MHz RDIMM	Open	Onboard	Open	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A5000XUS	1xE5-2643 v3 6C/3.4GHz/20MB/135W/2133MHz	No	2x8GB 2133MHz RDIMM	Open	Onboard	1x512GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A5000YUS	2xE5-2667 v3 8C/3.2GHz/20MB/135W/2133MHz	No	2x8GB 2133MHz RDIMM	Open	Onboard	1x512GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A50013US	2xE5-2650 v3 10C/2.3GHz/25MB/105W/2133MHz	No	2x8GB 2133MHz RDIMM	Quadro K620 2GB	9364-8i	Open	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	01/15

Components	Specification
Chipset	Intel C612 Platform Controller Hub (PCH)
System mgmt	Intel Active Management Technology 9
Processor	Up to two 160W <b>Intel Xeon E5-2600 v3</b> family processors with 18 cores up to 2.3GHz, 16 cores up to 2.3GHz, 14 cores up to 2.6GHz, 12 cores up to 2.6GHz, 10 cores up to 3.1GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.5GHz. Two QPI link up to 9.6 GT/s. Up to 2133MHz memory speed. Up to 45MB cache. Or up to one 140W <b>Intel Xeon E5-1600 v3</b> family processors with 8 cores up to 3.2GHz, 6 cores up to 3.5GHz, 4 cores up to 3.7GHz
Coprocessor	Up to one Intel Xeon Phi Coprocessor 3120A, PCIe 2.0 x16 adapter, 57 cores, 1.1GHz, 28.5MB L2 cache, 6GB memory, 300W
Memory DIMM slots	16 DIMM sockets (8 DIMMs per processor), 8-channel capable (4-channel per processor). RDIMM or LRDIMM (cannot be intermixed), ECC, DDR4, 2133MHz
Memory capacity	<b>256GB</b> (RDIMM)/ <b>512GB</b> (LRDIMM), 2nd CPU is needed
Graphics and GPU computing	Four PCIe 3.0 x16 slots, two slots per processor. Up to 4 graphics, GPU computing, or coprocessors adapters per system. 2nd CPU is needed.
	Installed CPU Maximum quantity of PCIe x16 adapters per system (by power)
	1 1x300W+1x75W or 2x225W 2 2x300W+2x75W, or 1x300W+2x225W+1x75W, or 3x225W+1x150W
<i>Note: PSU needs to operate at full 1300W.</i>	
Disk drive controller	<b>RAID 0, 1, 5, 10</b> with onboard SATA controller in chipset, 6Gb/s SATA. <b>RAID 0, 1, 5, 10</b> with optional LSI RAID flex adapter, 12Gb/s SAS and SATA. <b>RAID 0, 1, 5, 6, 10</b> with optional LSI 9364-8i PCIe adapter, 1GB memory, optional 1GB flash with super capacitor, 12Gb/s SAS and SATA
Drive Bays	Three external 5.25" bays, four internal 3.5" bays (see right)
Flex connector	Two flex connectors (see right), one per processor. Supports one of the following: • Up to one LSI RAID flex adapter for SATA/SAS RAID. • Up to two Multi-I/O adapters for four PCIe SSD (two PCIe SSD per adapter). • Up to two M.2 flex adapters for four M.2 SSD (two M.2 SSD per adapter)
Network interfaces	Integrated two-port Gigabit Ethernet (Intel i217LM and i210AT). Optional discrete Ethernet is available
HD Audio	Realtek ALC662 codec
TPM	TCG 1.2-compliant
Power supply	One fixed 1300 watts, autosensing, 92% PSU, 80 PLUS Platinum qualified <i>Note: PSU will automatically operate in 1120W (restricted) mode if the system line input is 100-110V. For other supported system line input voltages, the PSU will operate at the full 1300W.</i>
Front ports	Four USB 3.0 (one Diagnostic, one Always On), one combo audio/microphone jack (3.5mm)
Rear ports	Four USB 2.0, four USB 3.0 (blue), one serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in), two PS/2
Media reader	Optional 29-in-1 USB 3.0 or 9-in-1 USB 2.0 card reader
IEEE 1394	Up to one 6-pin port on rear, one 6-pin port on front, 1394a-2000, 400Mbps
Thunderbolt	Up to one Thunderbolt via optional PCIe adapter. Uses slot 5.
Mechanical	• 55-liter: 200mm/7.87" W x 620mm/24.4" D x 446mm/17.56" H (with feet) • Tool-less parts: power supply, disk drive, fans, adapter retention • 65.92 lb (29.9kg) max configuration
Base warranty	3-year limited onsite service with 9x5/NBD

Drive Bays and Expansion slots



3 x 5.25", for half-height optical, or up to one optional flex module (Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 3.0 reader/front IEEE 1394/front eSATA), or up to two optional front HDD bays



Slot 1: PCIe 3.0 x16, Full length, full height, by CPU1  
 Slot 2: PCIe 2.0 x1, Full length, full height, by PCH\*\*  
 Slot 3: PCIe 3.0 x16, Full length, full height, by CPU1  
 Slot 4: PCI, Full length, full height, by PCH  
 Slot 5: PCIe 2.0 x4, Half length, full height, by PCH  
 Slot 6: PCIe 3.0 x16, Full length, full height, by CPU2\*\*  
 Slot 7: PCIe 3.0 x16, Full length, full height, by CPU2\*\*  
 Slot 8: PCIe 3.0 x4, Full length, full height, by CPU2

Supporting NVIDIA graphics and GPU computing list

Adapter	Cores	Memory	Power	SLI	Connector***
NVS 310	48	512MB	19.5W		2xDP
NVS 315	48	1024MB			2xDVI-I SL/2xDP
NVS 510	192	2048MB	33.4W		4xmini DP
Quadro 410	192	512MB	36.7W		1xDVI-I DL+1xDP
Quadro K600	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K2000	384	2GB	51.1W		1xDVI-I DL+2xDP
Quadro K2000D	384	2GB	51.1W		1xDVI-I DL +1xDVI-D DL +1xmini DP
Quadro K4000	768	3GB	80W		1xDVI-I DL+2xDP
Quadro K5000	1536	4GB	122W		1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K6000	2880	12GB	225W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Quadro K420	192	1GB	41W		1xDVI-I DL+1xDP
Quadro K620	384	2GB	45W		1xDVI-I DL+1xDP
Quadro K2200	640	4GB	68W		1xDVI-I DL+2xDP
Quadro K4200	1344	4GB	108W		1xDVI-I DL+2xDP
Quadro K5200	2304	8GB	150W	SLI	1xDVI-I DL +1xDVI-D DL +2xDP
Tesla K20	2496	5GB	225W		Needs graphics
GRID K2	3072	8GB	225W		Needs graphics

\*\*\* DL = Dual link, SL = Single Link, DP = DisplayPort 1.2

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)  
 For a list of all supported options, please see [ThinkStation P900 Options sheet](#).

Supporting storage list

(SAS drive needs LSI RAID flex adapter or 9364-8i adapter)

3.5" SATA (7.2K 6Gbs HDD)	500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid
2.5" SAS (15K 12Gbs HDD)	300GB/450GB/600GB
2.5" SAS SSD (12Gbs)	200GB/400GB/800GB
2.5" SATA SSD (6Gbs)	128GB/180GB/240GB/256GB OPAL/480GB/512GB
M.2 SSD (M.2 SSD drive is located in M.2 flex adapter and does not consume HDD bay)	256 GB
PCIe 2.0 x4 adapter	410GB/1.6TB

Environment specification and certifications

Temperature	
Operating:	50 °F to 95 °F (10 °C to 35 °C)
Storage:	-10 °C to 60 °C, no package -40 °C to 60 °C, with package
Altitude	
Operating:	-50~10000ft (-15.2~3048m)
Humidity	
Operating:	10%~80%, non-condensing
Storage:	10%~90%, non-condensing

RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in **Bold Oblique**

# ThinkStation P900 Relationship Model(s)

Product Specifications Reference (PSREF)

Type-model	Processor	Coprocessor	Memory	Graphics/GPU Computing/GRID	RAID controller	Internal disk drive	M.2/PCIe SSD adptr	Front HDD	Optical	Media reader	1394	eSATA	Thunder-bolt	Preloaded OS	Power supply	Global	Ann Date (mm/yy)
<b>30A4000LUS</b>	<b>2xE5-2640 v3 8C/2.6GHz/20MB/90W/1866MHz</b>	No	4x8GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	2x256GB 2.5" SATA6Gbs SSD OPAL	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A4000MUS	2xE5-2637 v3 4C/3.5GHz/15MB/135W/2133MHz	No	4x8GB 2133MHz RDIMM	Quadro K420 1GB	Onboard	2x1TB 3.5" SATA6Gbs 7.2K Hybrid	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A40023US	1xE5-2609 v3 6C/1.9GHz/15MB/85W/1600MHz	No	1x4GB 2133MHz RDIMM	Quadro K620 2GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A40024US	1xE5-2620 v3 6C/2.4GHz/15MB/85W/1866MHz	No	1x4GB 2133MHz RDIMM	Quadro K2200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A40025US	1xE5-2630 v3 8C/2.4GHz/20MB/85W/1866MHz	No	1x4GB 2133MHz RDIMM	Quadro K4200 4GB	Onboard	1x1TB 3.5" SATA6Gbs 7.2K	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A40026US	1xE5-2623 v3 4C/3GHz/10MB/105W/1866MHz	No	2x4GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A40027US	1xE5-2637 v3 4C/3.5GHz/15MB/135W/2133MHz	No	2x4GB 2133MHz RDIMM	Open	Onboard	Open	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A40028US	1xE5-2643 v3 6C/3.4GHz/20MB/135W/2133MHz	No	2x8GB 2133MHz RDIMM	Open	Onboard	1x512GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A40029US	1xE5-2667 v3 8C/3.2GHz/20MB/135W/2133MHz	No	2x8GB 2133MHz RDIMM	Open	Onboard	1x512GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A4002AUS	1xE5-2650 v3 10C/2.3GHz/25MB/105W/2133MHz	No	2x8GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A4002BUS	2xE5-2687W v3 10C/3.1GHz/25MB/160W/2133MHz	No	16x8GB 2133MHz RDIMM	Quadro K5200 8GB	Onboard	1x512GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	No	10/14
30A4002CUS	1xE5-2623 v3 4C/3GHz/10MB/105W/1866MHz	No	2x4GB 2133MHz RDIMM	Open	Onboard	1x180GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	1300W Platinum	No	10/14
30A4002DUS	1xE5-2637 v3 4C/3.5GHz/15MB/135W/2133MHz	No	2x4GB 2133MHz RDIMM	Open	Onboard	Open	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	1300W Platinum	No	10/14
30A4002EUS	1xE5-2643 v3 6C/3.4GHz/20MB/135W/2133MHz	No	2x8GB 2133MHz RDIMM	Open	Onboard	1x512GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	1300W Platinum	No	10/14
30A4002FUS	1xE5-2667 v3 8C/3.2GHz/20MB/135W/2133MHz	No	2x8GB 2133MHz RDIMM	Open	Onboard	1x512GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win8.1 Pro64	1300W Platinum	No	10/14
30A4002GUS	1xE5-2637 v3 4C/3.5GHz/15MB/135W/2133MHz	No	1x8GB 2133MHz RDIMM	Quadro K620 2GB	Onboard	1x512GB 2.5" SATA6Gbs SSD	No	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	Yes	10/14
30A4002HUS	2xE5-2650 v3 10C/2.3GHz/25MB/105W/2133MHz	No	2x8GB 2133MHz RDIMM	Quadro K5200 8GB	LSI Flex	1x2TB 3.5" SATA6Gbs 7.2K	1x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	Yes	10/14
30A4002JUS	2xE5-2680 v3 12C/2.5GHz/30MB/120W/2133MHz	No	2x8GB 2133MHz RDIMM	Quadro K6000 12GB	LSI Flex	1x2TB 3.5" SATA6Gbs 7.2K	2x256GB M.2 SSD	No	DVD±RW	9-in-1	No	No	No	Win7 Pro64 (Win8.1 Pro64 DG)	1300W Platinum	Yes	10/14

RoHS-compliant/EPEAT Gold rating on all model, ENERGY STAR 6.0 qualified on models in **Bold Oblique**

For the latest list of certifications, please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)

For a list of all supported options, please see [ThinkStation P900 Options sheet](#).

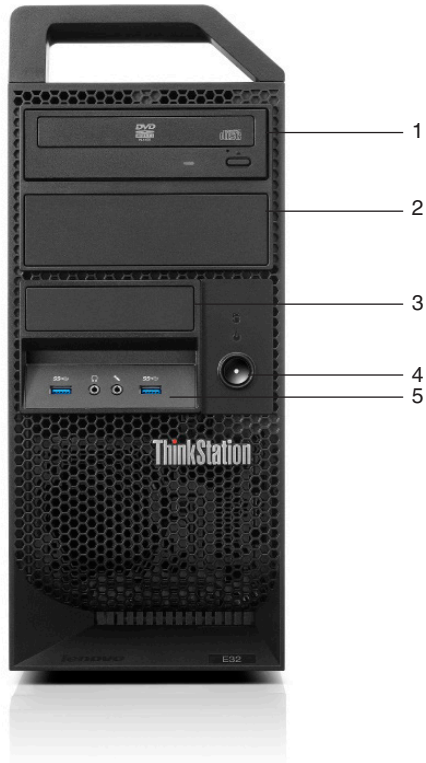
## ThinkStation P900 Options

### Partial list of core options supported on ThinkStation P900

Memory	
4X70G78060	4GB DDR4 2133 (PC4-17000) ECC RDIMM WorkStation Memory
4X70G78061	8GB DDR4 2133 (PC4-17000) ECC RDIMM WorkStation Memory
4X70G78062	16GB DDR4 2133 (PC4-17000) ECC RDIMM WorkStation Memory
4X70G78059	32GB DDR4 2133 (PC4-17000) ECC LRDIMM WorkStation Memory
Graphics	
0B47074	NVIDIA NVS 310 512MB Dual DisplayPort Adapter
4X60F17422	NVIDIA NVS 315 1GB Dual DVI or Dual DisplayPort Adapter
0B47077	NVIDIA NVS 510 2GB Quad Mini-DisplayPort Graphics
0B47075	NVIDIA Quadro 410 512MB Single DVI & Single DisplayPort
4X60G69029	NVIDIA Quadro K420 1GB Dual-Link DVI-I, DisplayPort
4X60G69028	NVIDIA Quadro K620 2GB Dual-Link DVI-I, DisplayPort
4X60G69027	NVIDIA Quadro K2200 4GB Dual-Link DVI-I, two DisplayPort
4X60G69026	NVIDIA Quadro K4200 4GB DVI-I, two DisplayPort
4X60G69025	NVIDIA Quadro K5200 8GB two DVI-I,two DisplayPort
4XH0H01346	ThinkStation P500/P700/P900 Front Graphics Cooling Fan Assembly
Cables	
45J7915	Lenovo DisplayPort to Single-Link DVI-D (Digital) Monitor Cable
57Y4393	Lenovo DisplayPort to VGA Monitor Cable
0A36537	Lenovo DisplayPort to DisplayPort Cable
Internal Storage	
4XH0G78728	ThinkStation Multi-I/O Flex Adapter
4XH0G78729	ThinkStation M.2 SSD Flex Adapter
43R1990	Lenovo 500GB SATA HDD (7200)
45J7918	Lenovo 1TB SATA HDD (7200)
4XB0F18667	ThinkStation 2TB 3.5" SATA 6Gbps Hard Drive (7200)
4XB0F18668	ThinkStation 3TB 3.5" SATA 6Gbps Hard Drive (7200)
4XB0F18665	ThinkStation 1TB 3.5" SATA Hybrid Hard Drive (7200)
4XB0F18666	ThinkStation 2TB 3.5" SATA Hybrid Hard Drive (7200)
4XB0F18670	ThinkStation 128GB SATA 2.5" Solid State Drive
0B47308	ThinkStation 180GB 2.5" SATA Solid State Drive
4XF0G94539	ThinkStation 2.5" to 3.5" Conversion Kit
Communications	
4XC0H00338	ThinkStation Intel I210-T1 Single Port Gigabit Ethernet Adapter
4XH0H00340	ThinkStation Intel Thunderbolt Add-In Card
Keyboards - English	
73P5220	Lenovo Preferred Pro USB Keyboard - English
73P2620	Lenovo Enhanced Performance USB Keyboard - English
0A34032	Lenovo Ultralim Plus Wireless Keyboard & Mouse - English
73P4730	Lenovo Fingerprint USB Keyboard - English
4X30E50999	Lenovo USB Smartcard Keyboard - English
Keyboards - Canadian French	
73P5231	Lenovo Preferred Pro USB Keyboard - Canadian French 058
73P2631	Lenovo Enhanced Performance USB Keyboard - Canadian French 058
0A34045	Lenovo Ultralim Plus Wireless Keyboard & Mouse - Canadian French 058
0C52696	Lenovo Preferred Pro Fingerprint USB Keyboard - Canadian French 058

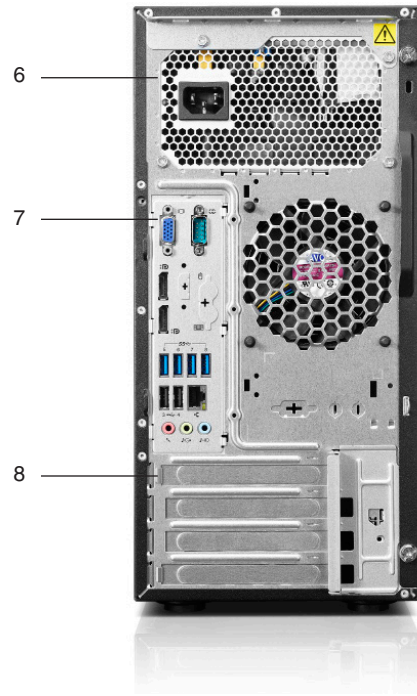
Mice	
06P4069	Lenovo Optical Wheel Mouse (Full Size)
41U3074	Lenovo Laser Mouse (Full Size)
0A36188	Lenovo Laser Wireless Mouse (Mid-size)
Security Options	
73P2582	Kensington Microsaver Cable Lock from Lenovo
45K1620	Kensington Twin Head Cable Lock from Lenovo
57Y4303	Lenovo Security Cable Lock
0A65619	ThinkPad USB 3.0 500GB Portable Secure Hard Drive
0A65616	ThinkPad USB 3.0 750GB Portable Secure Hard Drive
0A65621	ThinkPad USB 3.0 1TB Portable Secure Hard Drive
Audio	
57Y4488	ThinkPad Combo in Ear Headset

## 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

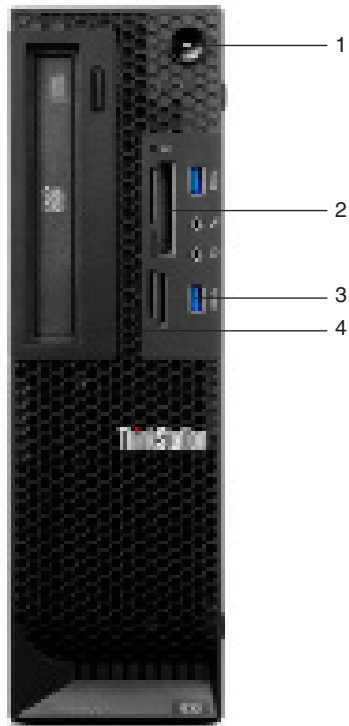
### Internal

- 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

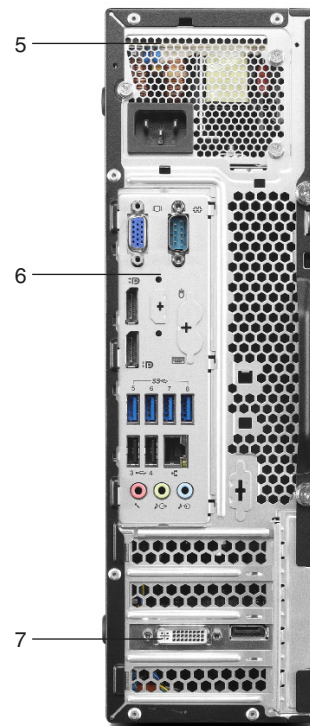
- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter

## 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

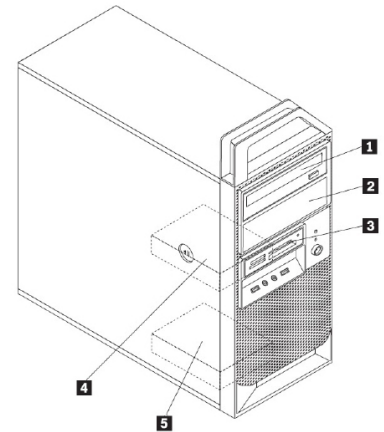
Type-model	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A10007US	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A10008US	Xeon E3-1230 v3 (4C/3.3GHz/8MB/1600MHz)	1600MHz ECC	4GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A10009US	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz ECC	4GBx2	Intel HD P4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002JUS	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)
30A1002KUS	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002LUS	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002MUS	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	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

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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 (August 2013) - II

Product Specifications Reference (PSREF)

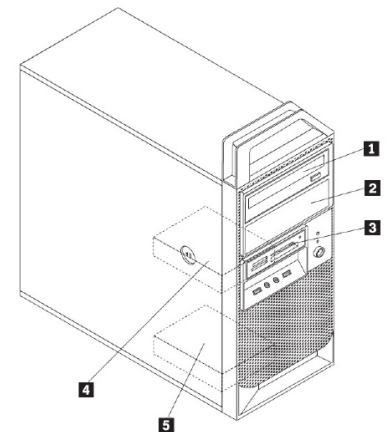
Type-model	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A1002NUS	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002PUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002QUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002RUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	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)
30A1002SUS	Xeon E3-1225 v3 (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)
30A1002TUS	Xeon E3-1225 v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	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)
30A1002UUS	Xeon E3-1240 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		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

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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  
 (30A1-2) August 2013

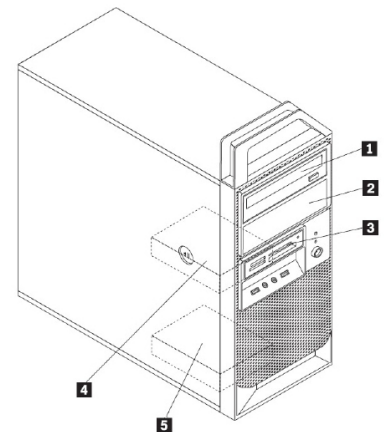
Type-model	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A1002VUS	Xeon E3-1240 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002XUS	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600		No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002YUS	Xeon E3-1275 v3 (4C/3.5GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x256GB SATA SSD	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A10030US	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A10031US	Xeon E3-1240 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x128GB SATA SSD	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A10032US	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A10033US	Xeon E3-1280 v3 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	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

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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



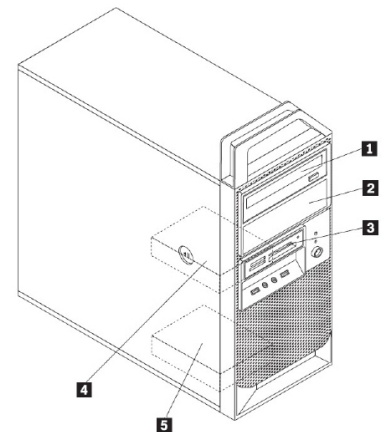
Type-model	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A10034US	Xeon E3-1280 v3 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A10035US	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600		No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A10036US	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	128GB SATA SSD+1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1003BUS	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	Win8 Pro64
30A1003CUS	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003DUS	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003EUS	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64

\* Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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 (August 2013) - V

Product Specifications Reference (PSREF)

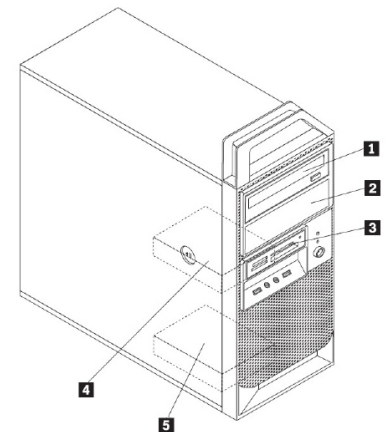
Type-model	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A1003FUS	Core i5-4670 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003GUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003HUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003JUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003KUS	Xeon E3-1225 v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600		No	1x500GB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003LUS	Xeon E3-1225 v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003MUS	Xeon E3-1240 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64

\* Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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  
(30A1-5) August 2013

# ThinkStation E32 Tower (30A1) - TopSeller (August 2013) - VI

Product Specifications Reference (PSREF)

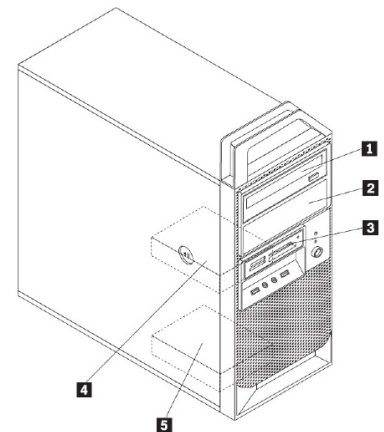
Type-model	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A1003NUS	Xeon E3-1240 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003QUS	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600		No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003RUS	Xeon E3-1275 v3 (4C/3.5GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x256GB SATA SSD	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003SUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003TUS	Xeon E3-1240 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x128GB SATA SSD	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003UUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003VUS	Xeon E3-1280 v3 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64

\* Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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  
(30A1-6) August 2013

# ThinkStation E32 Tower (30A1) - TopSeller (August 2013) - VII

Product Specifications Reference (PSREF)

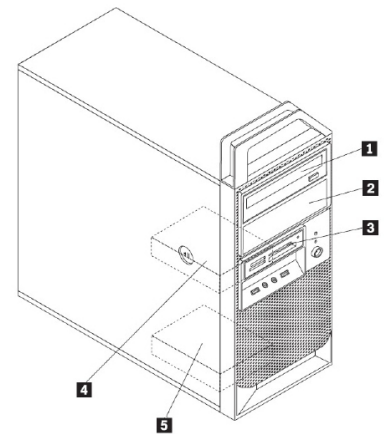
Type-model	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A1003WUS	Xeon E3-1280 v3 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003XUS	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600		No	1x1TB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003YUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	128GB SATA SSD+1TB 3.5 SATA	DVD±RW	Media	No	Switch	Win8 Pro64

\* Model in *italics* shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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

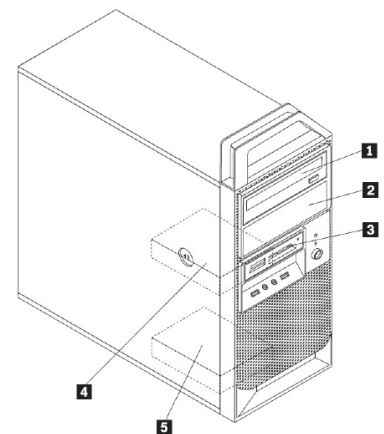
Type-model <sup>1</sup>	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters <sup>**</sup>	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A1000RUS	Core i3-4130 (2C/3.4GHz/3MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4400		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64
30A1000SUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	No	Win7 Pro64 (Downgrade from Win8)
30A1002FUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002GUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002HUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A1002WUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x128GB SATA SSD	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A10037US	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model      <sup>\*\*</sup> DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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

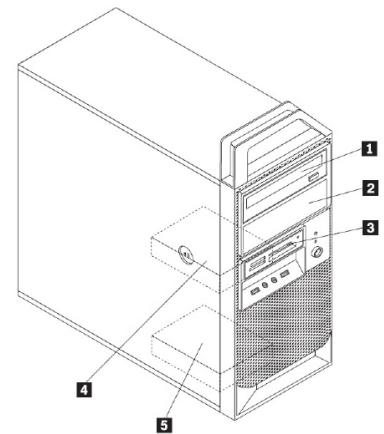
Type-model <sup>1</sup>	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters <sup>**</sup>	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A10038US	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A10039US	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003AUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A1003PUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x128GB SATA SSD	DVD±RW	Media	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model      <sup>\*\*</sup> DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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**

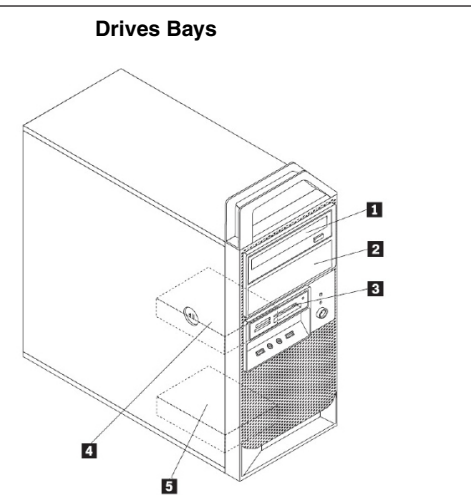
- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal (standard bays)
- Toolless adapter retention
-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

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
30A0002TUS	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A0002UUS	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A0002VUS	Core i5-4570 (4C/3.2GHz/6MB/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)
30A0002WUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A0002XUS	Xeon E3-1225 v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A0002YUS	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A0003OUS	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	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

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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

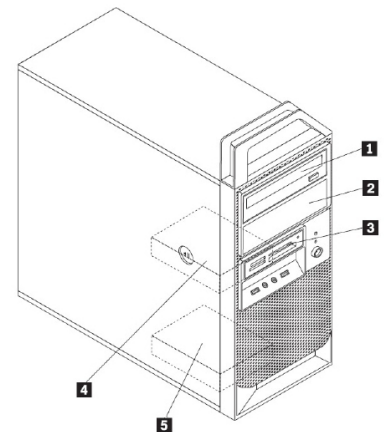
Type-model	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A00031US	Xeon E3-1275 v3 (4C/3.5GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A00032US	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A00033US	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A00034US	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A00035US	Xeon E3-1280 v3 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A00039US	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A0003AUS	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64

\* Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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

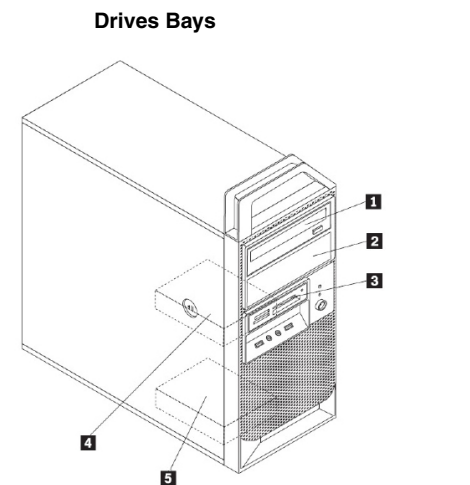


Type-model	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A0003BUS	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A0003CUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A0003DUS	Xeon E3-1225 v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A0003EUS	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A0003FUS	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A0003GUS	Xeon E3-1275 v3 (4C/3.5GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A0003HUS	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win8 Pro64

\* Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	3-year parts and labor



- 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**

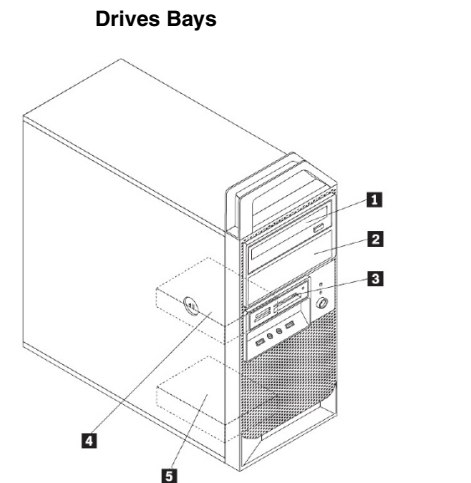
- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal (standard bays)
- Toolless adapter retention
-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

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
30A0003JUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win8 Pro64
30A0003KUS	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win8 Pro64
30A0003LUS	Xeon E3-1280 v3 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64

\* Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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

Type-model <sup>1</sup>	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters <sup>**</sup>	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A0002QUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A0002RUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A0002SUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A00036US	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A00037US	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A00038US	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model      <sup>\*\*</sup> DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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

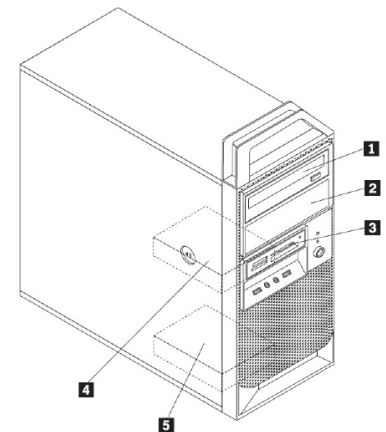
Type-model <sup>1</sup>	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters <sup>2</sup>	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	Chassis intrusion switch	Preloaded OS	Base warranty (-year) <sup>3</sup>	Ann date (mm/dd/yy)
30A0005RSS	Core i5-4570 4C/3.2 GHz/6 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
30A0005QSS	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
30A0005QUS	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
30A0005SUS	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
30A0005RUS	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
30A0005SSS	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

<sup>1</sup>Model in italics shows that this is a Global Model    <sup>2</sup>DL = Dual Link, SL = Single Link    <sup>3</sup>IWS= International Warranty Service<sup>®</sup>

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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 or 15, 2013

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

Product Specifications Reference (PSREF)

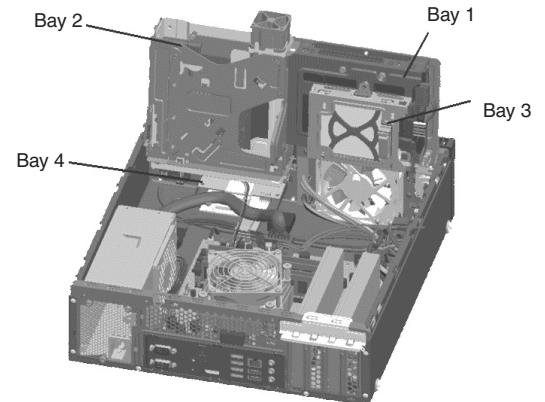
Type-model <sup>1</sup>	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A30004US	Xeon E3-1230 v3 (4C/3.3GHz/8MB/1600MHz)	1600MHz ECC	4GBx1		1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A30005US	Xeon E3-1240 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz ECC	4GBx2		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A30006US	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)
30A3001FUS	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)
30A3001LUS	Xeon E3-1225 v3 (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)
30A3001RUS	Core i5-4670 (4C/3.4GHz/6MB/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)
30A3001SUS	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600		No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)

<sup>1</sup> Model in italics shows that this is a Global Model    \*\* DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (40W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 40W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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

#### 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

© Lenovo  
(30A3-1) August 2013

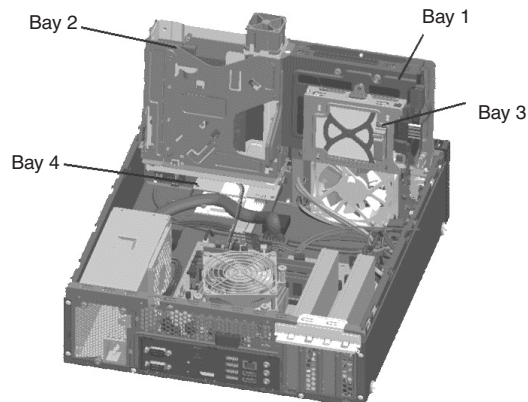
Type-model <sup>1</sup>	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A3001TUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3001UUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	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)
30A3001VUS	Xeon E3-1225 v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600	1xNVS 310 (512MB, 2xDisplayPort, 19.5W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3001WUS	Xeon E3-1240 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3001XUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3001YUS	Xeon E3-1280 v3 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A30020US	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)

<sup>1</sup> Model in italics shows that this is a Global Model    \*\* DL = Dual Link, SL = Single Link

• 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (40W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 40W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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

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

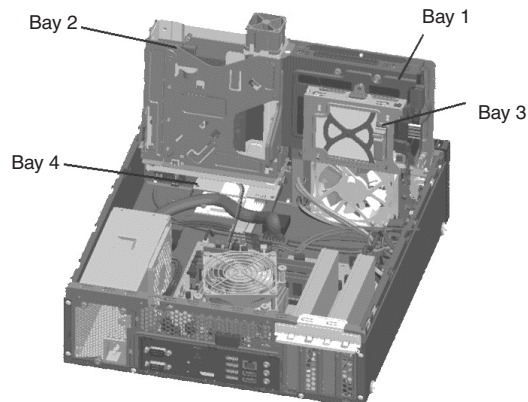
Type-model <sup>1</sup>	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters <sup>2</sup>	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A30025US	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A30026US	Core i5-4670 (4C/3.4GHz/6MB/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	Win8 Pro64
30A30027US	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600		No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A30028US	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A30029US	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A3002AUS	Xeon E3-1225 v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A3002BUS	Xeon E3-1225 v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600	1xNVS 310 (512MB, 2xDisplayPort,19.5W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model    <sup>2</sup> DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (40W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 40W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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**

- 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

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

Product Specifications Reference (PSREF)

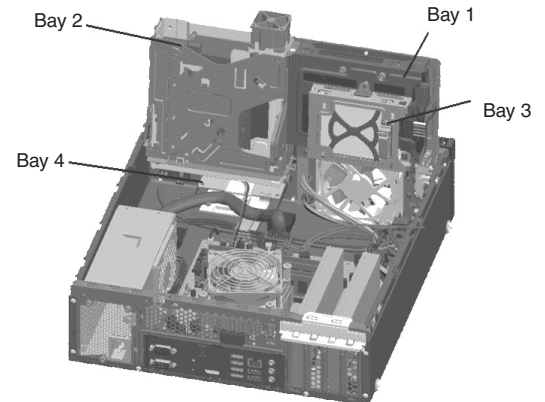
Type-model	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A3002CUS	Xeon E3-1240 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A3002DUS	Core i7-4770 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win8 Pro64
30A3002EUS	Xeon E3-1280 v3 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A3002FUS	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	Media	No	Switch	Win8 Pro64

\* Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (40W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 40W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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

- 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

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

© Lenovo  
(30A3-4) August 2013

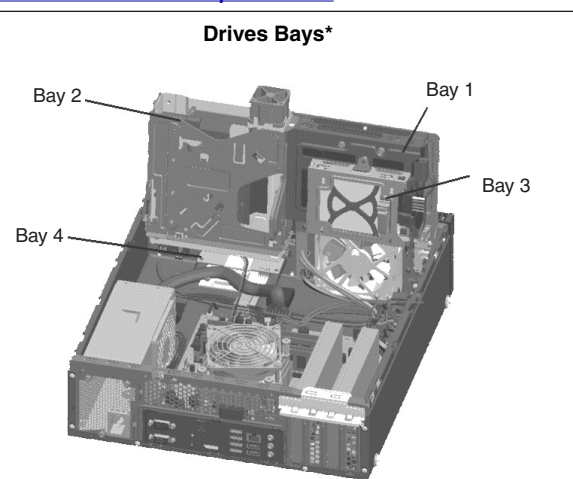


Type-model*	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A3001MUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3001NUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3001PUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A3001QUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	8GBx1	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)
30A30021US	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A30022US	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A30023US	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x500GB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64
30A30024US	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	Media	No	Switch	Win8 Pro64

\* Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

• 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (40W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 40W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty†	3-year parts and labor



\* 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

Type-model <sup>1</sup>	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
30A2001WUS	Core i5-4570 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A2001XUS	Xeon E3-1225 v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A2001YUS	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A20020US	Xeon E3-1275 v3 (4C/3.5GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A20021US	Core i5-4670 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A20022US	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A20023US	Xeon E3-1280 v3 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x256GB SATA SSD	DVD±RW	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

<sup>1</sup> Model in italics shows that this is a Global Model      \*\* DL = Dual Link, SL = Single Link

• 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 <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (40W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 40W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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

Type-model <sup>1</sup>	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
30A20024US	Xeon E3-1280 v3 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A20027US	Core i5-4570 (4C/3.2GHz/6MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win8 Pro64
30A20028US	Xeon E3-1225 v3 (4C/3.2GHz/8MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win8 Pro64
30A20029US	Xeon E3-1245 v3 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win8 Pro64
30A2002AUS	Xeon E3-1275 v3 (4C/3.5GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD P4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win8 Pro64
30A2002BUS	Core i5-4670 (4C/3.4GHz/6MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win8 Pro64
30A2002CUS	Core i7-4770 (4C/3.4GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1	Intel HD 4600	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x180GB SATA SSD	DVD±RW	No	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model      \*\* DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (40W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 40W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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

Type-model <sup>1</sup>	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters <sup>**</sup>	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A2002DUS	Xeon E3-1280 v3 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x256GB SATA SSD	DVD±RW	No	No	Switch	Win8 Pro64
30A2002EUS	Xeon E3-1280 v3 (4C/3.6GHz/8MB/1600MHz)	1600MHz Non-ECC	8GBx1		1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	1x1TB 3.5" SATA	DVD±RW	No	No	Switch	Win8 Pro64

<sup>1</sup> Model in *italics* shows that this is a Global Model    <sup>\*\*</sup> DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (40W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 40W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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

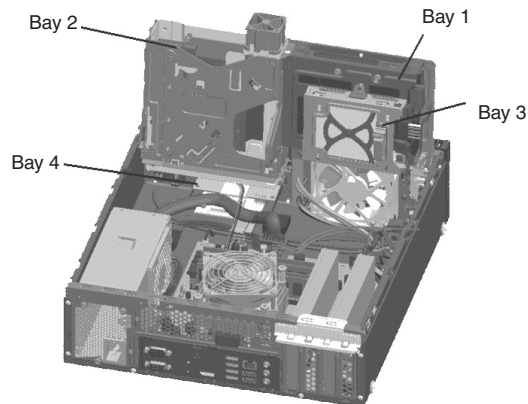
Type-model <sup>1</sup>	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters**	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	1394 adptr	Chassis intrusion switch	Preloaded OS
30A2001UUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A2001VUS	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
30A20025US	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600		No	1x500GB 3.5" SATA	DVD±RW	No	No	Switch	Win8 Pro64
30A20026US	Core i3-4330 (2C/3.5GHz/4MB/1600MHz)	1600MHz Non-ECC	4GBx1	Intel HD 4600	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	1x500GB 3.5" SATA	DVD±RW	No	No	Switch	Win8 Pro64

\* Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

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

Chipset	<b>Intel C226 Chipset</b>
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors
Processor	One <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (40W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 40W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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**

- 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

Type-model <sup>1</sup>	Processor	Memory (MHz/type)	Memory DIMMs	Intel HD Graphics	Discrete graphics adapters <sup>2</sup>	Pre-conf RAID	Storage	Optical	29-in-1 Media reader	Chassis intrusion switch	Preloaded OS	Base warranty (-year) <sup>3</sup>	Ann date (mm/dd/yy)
30A2001TUS	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)	10/8/13
30A2002QUS	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
30A2002PSS	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
30A2002QSS	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
30A2002PUS	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)	10/8/13

<sup>1</sup>Model in italics shows that this is a Global Model <sup>2</sup>DL = Dual Link, SL = Single Link <sup>3</sup>IWS= International Warranty Service<sup>9</sup>

• 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 <b>LGA1150</b> 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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul>
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 <b>Rear ports</b> section)
Discrete graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (40W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 40W max)</li> </ul>
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	<ul style="list-style-type: none"> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>
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 <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Limited warranty <sup>1</sup>	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 October 8 or 15, 2013

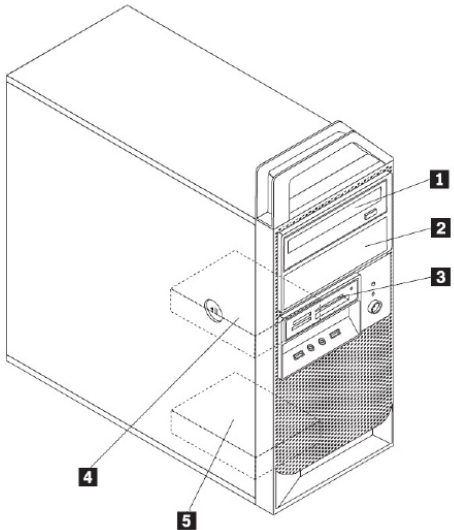
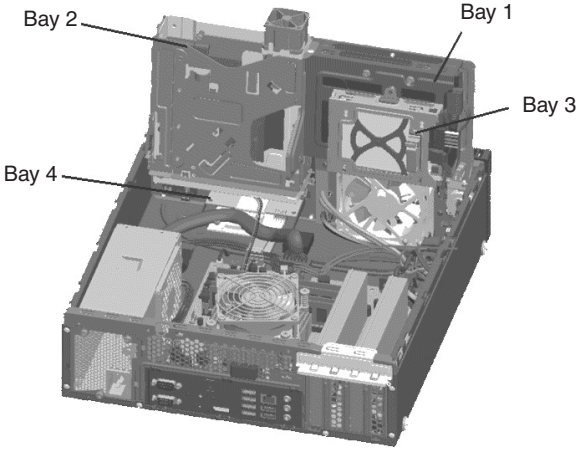
# ThinkStation E32 Platform Specifications - I of III

Product Specifications Reference (PSREF)

From factor	ThinkStation E32 Tower	ThinkStation E32 SFF																																																																																																																																																																		
Chipset	<b>Intel C226 Chipset</b>																																																																																																																																																																			
Intel AMT	Intel Active Management Technology 9 supported on models with Intel Xeon processors																																																																																																																																																																			
Processor	<p>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.</p> <p>The following processors are supported:</p> <table border="1"> <thead> <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> </thead> <tbody> <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> </tbody> </table> <p><i>Notes:</i>                      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 <a href="http://ark.intel.com/">http://ark.intel.com/</a></p>		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																																																																																																																																																												
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																																																																																																																																																												
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	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> </ul>																																																																																																																																																																			
Intel HD Graphics in processor (optional)	Integrated Intel HD Graphics on Pentium, Core i3, i5, i7 and Xeon E3-12x5 v3 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 <b>Rear ports</b> section)																																																																																																																																																																			
Discrete Graphics adapters	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (75W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 75W max)</li> </ul>	Two PCI Express x16 slots for discrete graphics adapters: <ul style="list-style-type: none"> <li>One PCI Express 3.0 x16 slot (40W max, near CPU)</li> <li>One PCI Express 2.0 x16 slot (x4 electrical, 40W max)</li> </ul>																																																																																																																																																																		
	Supports the following NVIDIA Quadro, NVS graphics adapters:																																																																																																																																																																			
	<table border="1"> <thead> <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> </thead> <tbody> <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> </tbody> </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	•	•																																																																																																																																																													
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	•	•																																																																																																																																																													
	* 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		Memory Size	CUDA Processor Cores	Display Connectors	Max. Displays	Power	Supported on ThinkStation	
							E32 Tower	E32 SFF
	NVS 315	1024MB	48	DMS59 to dual single-link DVI-I or dual DisplayPort	2	19.5W	•	•
	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								
	<p>Bay 1 Standard, 5.25", 1.6" high, external, for optical</p> <p>Bay 2 Standard, 5.25", 1.6" high, external, for optical or optional, 3.5", 1" high, 3rd hard drive bay</p> <p>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</p> <p>Bay 4 Standard, 3.5", 1" high, internal, primary hard drive bay</p> <p>Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay</p> <p><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</p>				<p>Bay 1 Standard, 3.5", 1" high, internal, primary hard drive bay</p> <p>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</p> <p>Bay 3 Optional, 2.5", 0.6" high, internal, 3rd hard drive bay</p> <p>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)</p> <p><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</p>			
Hard drive(s)	<p>Supports the following:</p> <p>3.5" SATA: SATA 6.0Gb/s, 7200 rpm, up to 3TB (250GB/500GB/1TB/2TB/3TB)</p> <p>2.5" SATA: SATA 6.0Gb/s, 10000 rpm, up to 1TB (250GB/500GB/1TB)</p> <p>2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models, up to 480GB (128GB/180GB/240GB/256GB/480GB)</p> <p>mSATA: mSATA SSD, SATA 6.0Gb/s, 24GB or 128GB (24GB mSATA SSD is only for Intel Smart Response Technology enabled models)</p>							
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	<ul style="list-style-type: none"> <li>• Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse</li> <li>• Serial port I/O control</li> <li>• USB port disablement (front or all/individual)</li> <li>• Chassis intrusion switch available on selected models</li> </ul>			
Mechanical	<ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 6.9"W x 17.0"D x 16.7"H (with handle)</li> <li>• 175mm W x 431mm D x 425mm H</li> <li>• 27.56 lb (12.5kg) max configuration</li> <li>• 25-liter</li> </ul>	<ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 13.35"W x 15.0"D x 3.93"H</li> <li>• 338mm W x 375mm D x 102mm H</li> <li>• 17.20 lb (7.8kg) max configuration</li> <li>• 12.9-liter</li> </ul>		
Serviceability	<ul style="list-style-type: none"> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal (standard bays)</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Recessed power button</li> </ul>	<ul style="list-style-type: none"> <li>• Toolless top cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Recessed power button</li> </ul>		
Environmental certifications	<ul style="list-style-type: none"> <li>• GREENGUARD® certified</li> <li>• RoHS-compliant</li> <li>• EPEAT™ Gold rating</li> <li>• ENERGY STAR 5.2-compliant</li> </ul>			
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> <ul style="list-style-type: none"> <li>• Windows 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>			
Preloaded applications (only some listed)	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>	
ISV certifications	For the latest list of certifications, please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>			

## ThinkStation E32 Optional Configurations

Partial list of core options supported on ThinkStation E32 Tower and SFF

Memory		ThinkStation E32 Tower	ThinkStation E32 SFF
2GB DDR3 1600 (PC3 12800) UDIMM Memory	0A65728	Yes	Yes
4GB DDR3 1600 (PC3 12800) UDIMM Memory	0A65729	Yes	Yes
2GB DDR3 1333 (PC3 10600) ECC UDIMM Memory	43R2033	Yes	Yes
4GB DDR3 1333 (PC3 10600) ECC UDIMM Memory	57Y4138	Yes	Yes
8GB DDR3 1333 (PC3 10600) ECC UDIMM Memory	0A65718	Yes	Yes
2GB DDR3 1600 (PC3 12800) ECC UDIMM Workstation Memory	0B47376	Yes	Yes
4GB DDR3 1600 (PC3 12800) ECC UDIMM Workstation Memory	0B47377	Yes	Yes
8GB DDR3 1600 (PC3 12800) ECC UDIMM Workstation Memory	0B47378	Yes	Yes
Disk Drive			
Lenovo 250GB 7200 rpm Serial ATA Hard Drive	41N3015	Yes	Yes
Lenovo 500GB 7200 rpm Serial ATA Hard Drive	43R1990	Yes	Yes
Lenovo 1TB 7200 rpm Serial ATA Hard Drive	45J7918	Yes	Yes
ThinkStation 180GB Solid State Drive	0B47308	Yes	Yes
ThinkStation 128GB SATA 2.5" SSD	4XB0F18670	Yes	Yes
ThinkStation 256GB SATA 2.5" SSD	4XB0F18671	Yes	Yes
ThinkStation 256GB SATA 2.5" SSD - OPAL	4XB0F22432	Yes	Yes
Graphics			
NVIDIA NVS 310 512MB Dual DisplayPort Adapter (SFF, Tower)	0B47074	Yes	Yes
NVIDIA NVS 510 2GB Quad Mini-DisplayPort Graphics (SFF, Tower)	0B47077	Yes	Yes
NVIDIA Quadro 410 512MB Single DVI & Single DisplayPort (SFF, Tower)	0B47075	Yes	Yes
NVIDIA Quadro K600 1GB Single DVI & Single DisplayPort (Tower Only)	0B47394	Yes	
NVIDIA Quadro K2000 2GB Single DVI & Dual DisplayPort (Tower Only)	0B47392	Yes	

For more information on accessories:

[www.lenovo.com/accessories](http://www.lenovo.com/accessories)

Purchase Lenovo accessories

[www.lenovo.com/support/accessories](http://www.lenovo.com/support/accessories)

Product specifications on Lenovo Support

[www.lenovo.com/accessoriesguide](http://www.lenovo.com/accessoriesguide)

Option Compatibility Matrix (OCM) and accessory brochures

[www.lenovoquickpick.com](http://www.lenovoquickpick.com)

An Options Compatibility Configurator for Lenovo systems



Lenovo ThinkStation S30



Lenovo ThinkStation S30



Lenovo ThinkStation S30



Lenovo ThinkStation S30



Lenovo ThinkStation S30



Lenovo ThinkStation S30

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

Chipset	<b>Intel C602 Chipset</b>
---------	---------------------------

Intel AMT	<i>MT type 0568, 0569, and 0606:</i> <b>Intel Active Management Technology 7</b> <i>Others MT types:</i> <b>Intel Active Management Technology 8</b>
-----------	---

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

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

**Notes:**

1. ThinkStation S30 support one processor.
2. Intel Xeon processor numbering system is an alpha numeric representation of product line, product family and version. An 'L' suffix will be used to identify a low power processor.  
More details please see [http://www.intel.com/products/processor\\_number](http://www.intel.com/products/processor_number)
3. All information is provided by Intel and may be changed at any time without notice. The information herein is provided "as-is". Intel may update this information in non-scheduled. For latest information, please see <http://ark.intel.com/products/family/59138/Intel-Xeon-Processor-E5-Family/server>

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

Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 4-channel capable, eight 240-pin DIMM sockets, 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)					
Additional memory disclaimers	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of RDIMM and UDIMM is not supported</li> </ul>					
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology (Quadro 5000 and Quadro K5000 SLI), NVIDIA Maximus technology, supports the following NVIDIA Quadro, NVS graphics adapters and Tesla GPU computing processors:					
	Memory Size	CUDA Processor Cores	Display Connectors	Max. Displays	# of slots	Power
NVIDIA Quadro and NVS Graphics						
Quadro K6000	12GB	2880	1 dual-link DVI-I 1 dual-link DVI-D 2 DisplayPort	4	2	225W
Quadro K5000	4GB	1536	1 dual-link DVI-I 1 dual-link DVI-D 2 DisplayPort	4	2	122W
Quadro K4000	3GB	768	1 dual-link DVI-I 2 DisplayPort	4*	1	80W
Quadro K2000	2GB	384	1 dual-link DVI-I 2 DisplayPort	4*	1	51W
Quadro K2000D	2GB	384	1 dual-link DVI-I 1 dual-link DVI-D 1 mini DisplayPort	4*	1	51W
Quadro K600	1GB	192	1 dual-link DVI-I 1 DisplayPort	2	1	41W
Quadro 410	512MB	192	1 dual-link DVI-I 1 DisplayPort	2	1	37W
Quadro 6000	6GB	448	1 dual-link DVI-I 2 DisplayPort 1 Stereo	2	2	204W
Quadro 5000	2.5GB	352	1 dual-link DVI-I 2 DisplayPort, 1 Stereo	2	2	152W
Quadro 4000	2GB	256	1 dual-link DVI-I 2 DisplayPort 1 Stereo	2	1	142W
Quadro 2000	1GB	192	1 dual-link DVI-I 2 DisplayPort	2	1	62W
Quadro 2000D	1GB	192	2 dual-link DVI-I	2	1	62W
Quadro 600	1GB	96	1 dual-link DVI-I 1 DisplayPort	2	1	40W
NVS 510	2048 MB	192	4 mini DisplayPort (with 4 mini DP to DP dongles)	4	1	35W
NVS 315	1024MB	48	DMS59 to dual single-link DVI-I or dual DisplayPort	2	1	19.5W
NVS 310	512 MB	48	2 DisplayPort	2	1	19.5W
NVS 300	512 MB	16	DMS59 to dual single- link DVI-I	2	1	17.5W
NVIDIA Tesla GPU Computing Processors (as part of NVIDIA Maximus Platform)						
Tesla K20	5GB	2496				225W
Tesla C2075	6GB	448				225W

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

Notes:

- ThinkStation S30 support NVIDIA Maximus technology. Maximus technology combines the visualization and interactive design capability of NVIDIA Quadro graphics and the high performance computing power of NVIDIA Tesla GPU computing processors in a single workstation. For more information on the latest Maximus certifications for ThinkStation and how to build Maximus system, please see [www.nvidia.com/object/maximus.html](http://www.nvidia.com/object/maximus.html)
- CUDA Processor Cores cannot be compared between GPU generations due to several important architectural differences that exist between streaming multiprocessor designs.

# ThinkStation S30 Platform Specifications - III of IV

Product Specifications Reference (PSREF)

Onboard drive controllers	<ul style="list-style-type: none"> <li>Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1 support</li> <li>Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support
Discrete drive controller (opt)	<p><i>One the following, depending on model:</i></p> <p>LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1 support  optional upgrade key for RAID 5 support</p> <p>LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support</p>
Hard drive(s)	<p><i>Supports the following:</i></p> <p>3.5" SATA: SATA 6.0Gb/s, 7200 rpm, up to 4TB  3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash  2.5" SATA: SATA 6.0Gb/s, 10000 rpm, up to 1TB  3.5" SAS: SAS 6.0Gb/s, 15000 rpm, up to 600GB  2.5" SAS: SAS 6.0Gb/s, 15000 rpm, up to 300GB  2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models, up to 300GB</p>
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface
Drive Bays	Two external 5.25" bays for opticals, three internal 3.5" bays for hard drives
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	<p>MT type 0568, 0569, and 0606: <b>Two USB 2.0</b>, microphone (3.5mm), headphone (3.5mm)</p> <p>Others MT types: <b>Two USB 3.0</b>, microphone (3.5mm), headphone (3.5mm)</p>
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	Internal speaker for business audio
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black
Mouse	Optical Wheel Mouse (USB connector), black
Power supply	610 watts with 120mm bottom-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified
Security	<ul style="list-style-type: none"> <li>Security chip: <ul style="list-style-type: none"> <li>MT type 0568, 0569, and 0606: <b>STMicroelectronics ST19WP18</b> for TPM function, TCG 1.2-compliant</li> <li>Others MT types: <b>STMicroelectronics ST33TPM12LPC</b> for TPM function, TCG 1.2-compliant</li> </ul> </li> <li>Side cover lock (ships with two identical keys)</li> <li>Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>Power-on password</li> <li>Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse, diskette</li> <li>Serial port I/O enable/disable</li> <li>USB 2.0 ports enable/disable individually</li> <li>USB 3.0 ports enable/disable concurrently</li> <li>Chassis intrusion switch (optional)</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>Raven black color; metal case</li> <li>6.9"W x 18.1"D x 18.8"H (with handle)</li> <li>175mm W x 460mm D x 478mm H</li> <li>38.5 lb (17.5kg) max configuration</li> <li>31-liter</li> </ul>
Expansion slots	<p>Slot 1: full-length, full-height, PCIe 3.0 x16** (near CPU)</p> <p>Slot 2: full-length, full-height, PCIe 3.0 x16 (x4 electrical)</p> <p>Slot 3: full-length, full-height, PCIe 3.0 x16**</p> <p>Slot 4: full-length, full-height, 32-bit PCI 2.3</p> <p>Slot 5: half-length, full-height, PCIe 2.0 x4</p> <p>* Adapters &gt;75W use auxiliary power connector(s) from PSU</p>
Serviceability	<ul style="list-style-type: none"> <li>Removable handle on top front</li> <li>Toolless side cover removal</li> <li>Toolless disk and optical drive removal</li> <li>Toolless adapter retention</li> <li>Illuminated front icons</li> <li>Rack shelf support</li> </ul>

ISV certifications	Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Environmental certifications	GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating
Warranty	1 or 3-year limited warranty, parts and labor
ThinkVantage®	Supports ThinkVantage® technologies
Preloaded operating systems	<i>One the following, depending on model:</i> <ul style="list-style-type: none"> <li>• Windows® 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>
Preloaded applications (only some listed)	<i>For Windows 7 models:</i> <ul style="list-style-type: none"> <li>• Rescue and Recovery®</li> <li>• Norton® Internet Security (30 days of virus definitions)</li> <li>• Adobe® Reader®</li> <li>• Adobe Flash® Player</li> <li>• Microsoft® Office preloaded; purchase product key to activate</li> <li>• Corel® WinDVD® (DVD±RW model(s))</li> <li>• Ulead® DVD MovieFactory® (DVD±RW model(s))</li> </ul> <i>For Windows 8 models:</i> <ul style="list-style-type: none"> <li>• Evernote®</li> <li>• Norton Internet Security (30 days of virus definitions)</li> <li>• Norton Studio</li> <li>• Skype™</li> <li>• Microsoft Office 2013 preloaded; purchase product key to activate</li> <li>• Cyberlink Power2Go (DVD±RW model(s))</li> <li>• Cyberlink PowerProducer (DVD±RW model(s))</li> </ul>

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

Product Specifications Reference (PSREF)

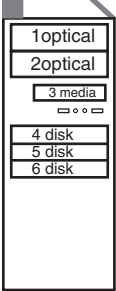
Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-55U	E5-1603 (4C/2.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-57U	E5-1603 (4C/2.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	1xQuadro 410 (512MB, 1xDVI-I DL*, 1xDP, 37W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-58U	E5-1603 (4C/2.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-59U	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-62U	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

<sup>1</sup> Model in italics shows that this is a Global Model

<sup>2</sup> The SSD drives in italics must be plugged into red or orange SATA connectors

\* DL = Dual Link, SL = Single Link

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

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

See footnotes for important warranty information  
Model(s) announced June 18, 2013

© Lenovo  
(FOR1-4) June 2013



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

Product Specifications Reference (PSREF)

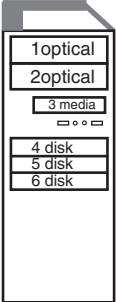
Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-63U	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K4000 (3GB, 1xDVI-I DL*, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-64U	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-67U	E5-1603 (4C/2.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	Switch	Win8 Pro64
4352-68U	E5-1603 (4C/2.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	No	No	Switch	Win8 Pro64
4352-69U	E5-1603 (4C/2.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model

<sup>2</sup> The SSD drives in italics must be plugged into red or orange SATA connectors

\* DL = Dual Link, SL = Single Link

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

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

See footnotes for important warranty information  
 Model(s) announced June 18, 2013

© Lenovo  
 (FOR2-4) June 2013

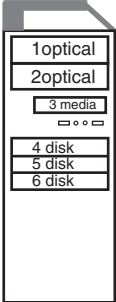


Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-94U	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x180GB 2.5" SSD	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-95U	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x180GB 2.5" SSD	DVD±RW	29-in-1	No	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model

<sup>2</sup> The SSD drives in italics must be plugged into red or orange SATA connectors

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

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

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

Product Specifications Reference (PSREF)

Type-model <sup>1</sup>	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-G3U	E5-1607 v2 (4C/3GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-G4U	E5-1607 v2 (4C/3GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-G5U	E5-1607 v2 (4C/3GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-G6U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-G7U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-G8U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-G9U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

<sup>1</sup> Model in italics shows that this is a Global Model    <sup>2</sup> The SSD drives in italics must be plugged into red or orange SATA connectors    <sup>3</sup> DL = Dual Link, SL = Single Link

- **3-year limited warranty**
- For ThinkStation S30 Platform Specifications, please see [ThinkStation S30 Platform Specifications sheet](#)

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

See footnotes for important warranty information  
Model(s) announced September 10, 2013

© Lenovo  
(4352-5) September 2013

Type-model <sup>1</sup>	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-H1U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-H2U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-H3U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-H4U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-H5U	E5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-H6U	E5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4352-H7U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

<sup>1</sup> Model in italics shows that this is a Global Model    <sup>2</sup> The SSD drives in italics must be plugged into red or orange SATA connectors    <sup>3</sup> DL = Dual Link, SL = Single Link

- 3-year limited warranty
- For ThinkStation S30 Platform Specifications, please see [ThinkStation S30 Platform Specifications sheet](#)

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

See footnotes for important warranty information  
 Model(s) announced September 10, 2013

Type-model <sup>1</sup>	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-H8U	E5-1607 v2 (4C/3GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win8 Pro64
4352-H9U	E5-1607 v2 (4C/3GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	Switch	Win8 Pro64
4352-J1U	E5-1607 v2 (4C/3GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64
4352-J2U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64
4352-J3U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win8 Pro64
4352-J4U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64
4352-J5U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model    \*\* The SSD drives in italics must be plugged into red or orange SATA connectors    \*\*\* DL = Dual Link, SL = Single Link

- 3-year limited warranty
- For ThinkStation S30 Platform Specifications, please see [ThinkStation S30 Platform Specifications sheet](#)

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

	<p><b>Tower</b></p> <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 6.9"W x 18.1"D x 18.8"H (with handle)</li> <li>• 175mm W x 460mm D x 478mm H</li> <li>• 38.5 lb (17.5kg) max configuration</li> <li>• 31-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support</li> </ul> <p>Bay 1-2: 5.25", 1.6" high, external, for optical                      Bay 3: 3.5", 1" high, external, for media reader                      Bay 4-6: 3.5", 1" high, internal, for hard drive</p> <p>Slot 1: full-length, full-height, PCIe 3.0 x16** (near CPU)                      Slot 2: full-length, full-height, PCIe 3.0 x16 (x4 electrical)                      Slot 3: full-length, full-height, PCIe 3.0 x16**                      Slot 4: full-length, full-height, 32-bit PCI 2.3                      Slot 5: half-length, full-height, PCIe 2.0 x4</p> <p>** Adapters &gt;75W use auxiliary power connector(s) from PSU</p>
	<p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>
	<p><b>ISV certifications</b></p> <p>Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p>
	<p><b>Environmental certifications</b></p> <p>GREENGUARD® certified                      RoHS-compliant                      EPEAT™ Gold rating</p>
	<p>Supports ThinkVantage® technologies</p>

See footnotes for important warranty information  
 Model(s) announced September 10, 2013

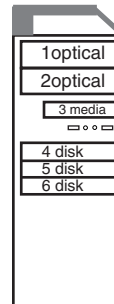
Type-model <sup>1</sup>	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adp <sup>tr</sup>	Chassis intrusion switch	Preloaded OS
4352-J6U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64
4352-J7U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win8 Pro64
4352-J8U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win8 Pro64
4352-J9U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win8 Pro64
4352-K1U	E5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win8 Pro64
4352-K2U	E5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win8 Pro64
4352-K3U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	Media	No	No	Switch	Win8 Pro64
4352-K4U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1333MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 2GB/1xDVI-I DL/ 2xDP/51W	No	Switch	Win7 Pro64 (Downgrade from Win8)

<sup>1</sup> Model in italics shows that this is a Global Model    \*\* The SSD drives in italics must be plugged into red or orange SATA connectors    \*\*\* DL = Dual Link, SL = Single Link

- 3-year limited warranty
- For ThinkStation S30 Platform Specifications, please see [ThinkStation S30 Platform Specifications sheet](#)

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

**Tower**



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

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

Slot 1: full-length, full-height, PCIe 3.0 x16\*\* (near CPU)  
 Slot 2: full-length, full-height, PCIe 3.0 x16 (x4 electrical)  
 Slot 3: full-length, full-height, PCIe 3.0 x16\*\*  
 Slot 4: full-length, full-height, 32-bit PCI 2.3  
 Slot 5: half-length, full-height, PCIe 2.0 x4

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

**SECURITY**

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

**ISV certifications**

Please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)

**Environmental certifications**

GREENGUARD® certified  
 RoHS-compliant  
 EPEAT™ Gold rating

Supports ThinkVantage® technologies

Type-model <sup>1</sup>	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4352-L8U	Xeon E5-1607 v2 4C/3GHz/10MB/1600MHz	1866MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4352-L9U	Xeon E5-1607 v2 4C/3GHz/10MB/1600MHz	1866MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro K600 1GB/1xDVI-I DL/ 1xDP/41W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4352-M1U	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4352-M2U	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 2GB/1xDVI-I DL/ 2xDP/51W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4352-M3U	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	Media	1xQuadro K4000 3GB/1xDVI-I DL/ 2xDP/80W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4352-M4U	Xeon E5-1650 v2 6C/3.5GHz/12MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA(Hybrid)	DVD±RW	Media	1xQuadro K4000 3GB/1xDVI-I DL/ 2xDP/80W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4352-M5U	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1866MHz UDIMM	4GBx1	No	No	1x256GB 2.5" SSD(OPAL)	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4352-M6U	Xeon E5-1650 v2 6C/3.5GHz/12MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA(Hybrid)	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4352-M7U	Xeon E5-1650 v2 6C/3.5GHz/12MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD(OPAL)	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4352-M8U	Xeon E5-1650 v2 6C/3.5GHz/12MB/1866MHz	1866MHz UDIMM	8GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)

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

- 3-year limited warranty
- For ThinkStation S30 Platform Specifications, please see [ThinkStation S30 Platform Specifications sheet](#)

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

See footnotes for important warranty information  
 Model(s) announced April 1, 2014



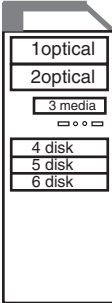
Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4351-17U	E5-1603 (4C/2.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	1xQuadro 410 (512MB, 1xDVI-I DL*, 1xDP, 37W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-18U	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-19U	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-21U	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-22U	E5-1603 (4C/2.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	1xQuadro 410 (512MB, 1xDVI-I DL, 1xDP, 37W)	No	Switch	Win8 Pro64

<sup>1</sup> Model in *italics* shows that this is a Global Model

<sup>2</sup> The SSD drives in *italics* must be plugged into red or orange SATA connectors

\* DL = Dual Link, SL = Single Link

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

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

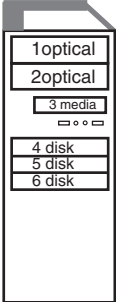
See footnotes for important warranty information  
 Model(s) announced June 18, 2013

Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4351-23U	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL*, 1xDP, 41W)	No	Switch	Win8 Pro64
4351-24U	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64
4351-25U	E5-1650 (6C/3.2GHz/12MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64
4351-29U	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-31U	E5-1620 (4C/3.6GHz/10MB/1600)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64

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

\* DL = Dual Link, SL = Single Link

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

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

See footnotes for important warranty information  
 Model(s) announced June 18, 2013

Type-model <sup>†</sup>	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adp <sup>tr</sup>	Chassis intrusion switch	Preloaded OS
4351-C8U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-C9U	E5-1607 v2 (4C/3GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-D1U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-D2U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-D3U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-D4U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	SAS	No	1x300GB 3.5 SAS	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-D5U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K5000 (4GB, 1xDVI-I DL, 1xDVI-D DL, 2xDP, 122W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4351-D6U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

<sup>†</sup> Model in italics shows that this is a Global Model    <sup>\*\*</sup> The SSD drives in italics must be plugged into red or orange SATA connectors    <sup>\*\*\*</sup> DL = Dual Link, SL = Single Link

- **3-year limited warranty**
- For ThinkStation S30 Platform Specifications, please see [ThinkStation S30 Platform Specifications sheet](#)

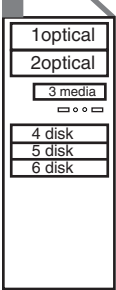
Chipset	<b>Intel C602 Chipset</b>		<b>Tower</b>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 6.9"W x 18.1"D x 18.8"H (with handle)</li> <li>• 175mm W x 460mm D x 478mm H</li> <li>• 38.5 lb (17.5kg) max configuration</li> <li>• 31-liter</li> <li>• Removable handle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

See footnotes for important warranty information  
Model(s) announced September 10, 2013

Type-model <sup>†</sup>	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4351-D7U	E5-1607 v2 (4C/3GHz/10MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win8 Pro64
4351-D8U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64
4351-D9U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64
4351-E1U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64
4351-E2U	E5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	4GBx1	SAS	No	1x300GB 3.5 SAS	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64
4351-E3U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K5000 (4GB, 1xDVI-I DL, 1xDVI-D DL, 2xDP, 122W)	No	Switch	Win8 Pro64
4351-E4U	E5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64

<sup>†</sup> Model in italics shows that this is a Global Model    <sup>\*\*</sup> The SSD drives in italics must be plugged into red or orange SATA connectors    <sup>\*\*\*</sup> DL = Dual Link, SL = Single Link

- 3-year limited warranty
- For ThinkStation S30 Platform Specifications, please see [ThinkStation S30 Platform Specifications sheet](#)

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

See footnotes for important warranty information  
 Model(s) announced September 10, 2013

Type-model <sup>†</sup>	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
<i>4351-98U</i>	E5-1650 v2 6C/3.5GHz/12MB/1866MHz	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

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

- 3-year limited warranty
- For ThinkStation S30 Platform Specifications, please see [ThinkStation S30 Platform Specifications sheet](#)

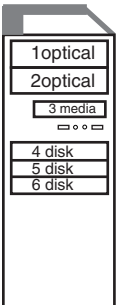
Chipset	<b>Intel C602 Chipset</b>		<p><b>Tower</b></p> <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 6.9"W x 18.1"D x 18.8"H (with handle)</li> <li>• 175mm W x 460mm D x 478mm H</li> <li>• 38.5 lb (17.5kg) max configuration</li> <li>• 31-liter</li> <li>• Removable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

Type-model <sup>1</sup>	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
<i>4351-J6U</i>	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1600MHz UDIMM	4GBx2	No	No	1x1TB 3.5" SATA	DVD±RW	Media	1xQuadro K600 1GB/1xDVI-I DL/ 1xDP/41W	No	Switch	Win7 Pro64
<i>4351-J7U</i>	Xeon E5-1603 4C/2.8GHz/10MB/1066MHz	1600MHz UDIMM	4GBx2	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro K2000 2GB/1xDVI-I DL/ 2xDP/51W	No	Switch	Win7 Pro64
4351-L3U	Xeon E5-1607 v2 4C/3GHz/10MB/1600MHz	1866MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4351-L4U	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1866MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4351-L7U	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K600 1GB/1xDVI-I DL/ 1xDP/41W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4351-L8U	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K2000 2GB/1xDVI-I DL/ 2xDP/51W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4351-L9U	Xeon E5-1650 v2 6C/3.5GHz/12MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K4000 3GB/1xDVI-I DL/ 2xDP/80W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4351-M1U	Xeon E5-1620 v2 4C/3.7GHz/10MB/1866MHz	1866MHz UDIMM	4GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	No	1xQuadro K600 1GB/1xDVI-I DL/ 1xDP/41W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4351-M2U	Xeon E5-1650 v2 6C/3.5GHz/12MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	No	1xQuadro K5000 4GB/1xDVI-I DL/ 1xDVI-D DL/ 2xDP/122W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4351-M3U	Xeon E5-1650 v2 6C/3.5GHz/12MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD(OPAL)	DVD±RW	No	1xQuadro K4000 3GB/1xDVI-I DL/ 2xDP/80W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)

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

• 3-year limited warranty

• For ThinkStation S30 Platform Specifications, please see [ThinkStation S30 Platform Specifications sheet](#)

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

See footnotes for important warranty information  
Model(s) announced April 1, 2014

## ThinkStation S30 Optional Configurations

### Partial list of core options supported on ThinkStation S30

<b>Memory</b>	
2GB DDR3 1333 (PC3 10600) ECC UDIMM Memory	43R2033
4GB DDR3 1333 (PC3 10600) ECC UDIMM Memory	57Y4138
8GB DDR3 1333 (PC3 10600) ECC UDIMM Memory	0A65718
4GB DDR3 1600 (PC3 12800) RDIMM Memory Workstation Memory	0A65732
8GB DDR3 1600 (PC3 12800) RDIMM Memory Workstation Memory	0A65733
<b>Disk Drive</b>	
Lenovo 500GB SATA HDD (7200)	43R1990
Lenovo 1TB SATA HDD (7200)	45J7918
ThinkStation 1TB 3.5" SATA Hybrid Hard Drive (7200)	4XB0F18665
ThinkStation 2TB 3.5" SATA Hybrid Hard Drive (7200)	4XB0F18666
ThinkStation 300GB 3.5" SAS Hard Drive (15K)	4XB0F18672
ThinkStation 450GB 3.5" SAS Hard Drive (15K)	43N3424
ThinkStation 600GB 3.5" SAS Hard Drive (15K)	4XB0F18673
ThinkStation 128GB SATA 2.5" Solid State Drive	4XB0F18670
ThinkStation 180GB Solid State Drive	0B47308
ThinkStation 256GB SATA 2.5" Solid State Drive	4XB0F18671
ThinkStation 256GB SATA 2.5" Solid State Drive - OPAL	4XB0F22432
<b>Graphics</b>	
NVIDIA NVS 300 512MB Dual DVI or Dual VGA Adapter	0B47390
NVIDIA NVS 310 512MB Dual DisplayPort Adapter	0B47074
NVIDIA NVS 510 2GB Quad Mini-DisplayPort Graphics Adapter	0B47077
NVIDIA Quadro 410 512MB Single DVI & Single DisplayPort Adapter	0B47075
NVIDIA Quadro K600 1GB Single DVI & Single DisplayPort Adapter	0B47394
NVIDIA Quadro K2000 2GB Single DVI & Dual DisplayPort Adapter	0B47392
NVIDIA Quadro K4000 3GB Single DVI & Dual DisplayPort Adapter	0B47393
NVIDIA Quadro K5000 4GB Dual DisplayPort & Dual DVI Graphics Adapter	0B47081

For more information on accessories:

[www.lenovo.com/accessories](http://www.lenovo.com/accessories)

Purchase Lenovo accessories

[www.lenovo.com/support/accessories](http://www.lenovo.com/support/accessories)

Product specifications on Lenovo Support

[www.lenovo.com/accessoriesguide](http://www.lenovo.com/accessoriesguide)

Option Compatibility Matrix (OCM) and accessory brochures

[www.lenovoquickpick.com](http://www.lenovoquickpick.com)

An Options Compatibility Configurator for Lenovo systems

# ThinkStation



Lenovo ThinkStation C30



Lenovo ThinkStation C30



Lenovo ThinkStation C30



Lenovo ThinkStation C30



Lenovo ThinkStation C30



Lenovo ThinkStation C30



Text in red shows that these features only apply to MT type 1095 and 1097 models, text in green shows that the features are supported on other models except MT type 1095 and 1097 models

Chipset	<b>Intel C602 Chipset</b>										
Intel AMT	MT type 1095 and 1097: <b>Intel Active Management Technology 7</b> Others MT types: <b>Intel Active Management Technology 8</b>										
Processor	Two LGA2011 sockets, supports up to two processors from <b>Intel Xeon E5-2600 and Intel Xeon E5-2600 v2</b> family, or up to one processor from <b>Intel Xeon E5-1600 v2</b> family, integrated 4-channel DDR3 memory controller per processor. Supports the following:										
	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Intel QPI Speed	# of QPI Links	Max TDP	Memory Speed	Intel vPro technology
	Xeon E5-2603	4	4	1.8 GHz		10 MB	6.4 GT/s	2	80 W	1066MHz	vPro
	Xeon E5-2609	4	4	2.4 GHz		10 MB	6.4 GT/s	2	80 W	1066MHz	vPro
	Xeon E5-2620	6	12	2 GHz	2.5 GHz	15 MB	7.2 GT/s	2	95 W	1333MHz	vPro
	Xeon E5-2630	6	12	2.3 GHz	2.8 GHz	15 MB	7.2 GT/s	2	95 W	1333MHz	vPro
	Xeon E5-2630L	6	12	2 GHz	2.5 GHz	15 MB	7.2 GT/s	2	60 W	1333MHz	vPro
	Xeon E5-2637	2	4	3 GHz	3.5 GHz	5 MB	8 GT/s	2	80 W	1600MHz	vPro
	Xeon E5-2640	6	12	2.5 GHz	3 GHz	15 MB	7.2 GT/s	2	95 W	1333MHz	vPro
	Xeon E5-2643	4	8	3.3 GHz	3.5 GHz	10 MB	8 GT/s	2	130 W	1600MHz	vPro
	Xeon E5-2650	8	16	2 GHz	2.8 GHz	20 MB	8 GT/s	2	95 W	1600MHz	vPro
	Xeon E5-2650L	8	16	1.8 GHz	2.3 GHz	20 MB	8 GT/s	2	70 W	1600MHz	vPro
	Xeon E5-2660	8	16	2.2 GHz	3 GHz	20 MB	8 GT/s	2	95 W	1600MHz	vPro
	Xeon E5-2665	8	16	2.4 GHz	3.1 GHz	20 MB	8 GT/s	2	115 W	1600MHz	vPro
	Xeon E5-2667	6	12	2.9 GHz	3.5 GHz	15 MB	8 GT/s	2	130 W	1600MHz	vPro
	Xeon E5-2670	8	16	2.6 GHz	3.3 GHz	20 MB	8 GT/s	2	115 W	1600MHz	vPro
	Xeon E5-2680	8	16	2.7 GHz	3.5 GHz	20 MB	8 GT/s	2	130 W	1600MHz	vPro
	Xeon E5-2690	8	16	2.9 GHz	3.8 GHz	20 MB	8 GT/s	2	135 W	1600MHz	vPro
	Xeon E5-1603	4	4	2.8 GHz		10 MB			130 W	1066MHz	vPro
	Xeon E5-2603 v2	4	4	1.8 GHz	1.8 GHz	10 MB	6.4 GT/s	2	80 W	1333MHz	vPro
	Xeon E5-2609 v2	4	4	2.5 GHz	2.5 GHz	10 MB	6.4 GT/s	2	80 W	1333MHz	vPro
	Xeon E5-2620 v2	6	12	2.1 GHz	2.6 GHz	15 MB	7.2 GT/s	2	80 W	1600MHz	vPro
	Xeon E5-2630L v2	6	12	2.4 GHz	2.8 GHz	15 MB	7.2 GT/s	2	60 W	1600MHz	vPro
	Xeon E5-2630 v2	6	12	2.6 GHz	3.1 GHz	15 MB	7.2 GT/s	2	80 W	1600MHz	vPro
	Xeon E5-2637 v2	4	8	3.5 GHz	3.8 GHz	15 MB	8 GT/s	2	130 W	1866MHz	vPro
	Xeon E5-2640 v2	8	16	2 GHz	2.5 GHz	20 MB	7.2 GT/s	2	95 W	1600MHz	vPro
	Xeon E5-2643 v2	6	12	3.5 GHz	3.8 GHz	25 MB	8 GT/s	2	130 W	1866MHz	vPro
	Xeon E5-2650L v2	10	20	1.7 GHz	2.1 GHz	25 MB	7.2 GT/s	2	70 W	1600MHz	vPro
	Xeon E5-2650 v2	8	16	2.6 GHz	3.4 GHz	20 MB	8 GT/s	2	95 W	1866MHz	vPro
	Xeon E5-2660 v2	10	20	2.2 GHz	3 GHz	25 MB	8 GT/s	2	95 W	1866MHz	vPro
	Xeon E5-2667 v2	8	16	3.3 GHz	4 GHz	25 MB	8 GT/s	2	130 W	1866MHz	vPro
	Xeon E5-2670 v2	10	20	2.5 GHz	3.3 GHz	25 MB	8 GT/s	2	115 W	1866MHz	vPro
	Xeon E5-2680 v2	10	20	2.8 GHz	3.6 GHz	25 MB	8 GT/s	2	115 W	1866MHz	vPro
	Xeon E5-2690 v2	10	20	3 GHz	3.6 GHz	25 MB	8 GT/s	2	130 W	1866MHz	vPro
	Xeon E5-2695 v2	12	24	2.4 GHz	3.2 GHz	30 MB	8 GT/s	2	115 W	1866MHz	vPro
	Xeon E5-2697 v2	12	24	2.7 GHz	3.5 GHz	30 MB	8 GT/s	2	130 W	1866MHz	vPro
	Xeon E5-1607 v2	4	4	3 GHz		10 MB			130 W	1600MHz	vPro
	Xeon E5-1620 v2	4	8	3.7 GHz	3.9 GHz	10 MB			130 W	1866MHz	vPro
	Xeon E5-1650 v2	6	12	3.5 GHz	3.9 GHz	12 MB			130 W	1866MHz	vPro
	Xeon E5-1660 v2	6	12	3.7 GHz	4 GHz	15 MB			130 W	1866MHz	vPro

Notes:

1. ThinkStation C30 support two processors. When ordering two processors, they must be the same
2. When using Intel Xeon E5-1600 and E5-1600 v2 series processors, max CPU configuration is 1
3. Intel Xeon processor numbering system is an alpha numeric representation of product line, product family and version. An 'L' suffix will be used to identify a low power processor.  
More details please see [http://www.intel.com/products/processor\\_number](http://www.intel.com/products/processor_number)
4. All information is provided by Intel and may be changed at any time without notice. The information herein is provided "as-is". Intel may update this information in non-scheduled. For latest information, please see <http://ark.intel.com/products/family/59138/Intel-Xeon-Processor-E5-Family/server>

*Text in red shows that these features only apply to MT type 1095 and 1097 models, text in green shows that the features are supported on other models except MT type 1095 and 1097 models*

Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets (four DIMM sockets per processor), 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)					
Additional memory disclaimers	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Over four DIMMs requires dual processors</li> <li>Mixing of RDIMM and UDIMM is not supported</li> <li>Maximum memory capacity is also limited by operating system</li> <li>When using processor from Xeon E5-1600 and E5-1600 v2 series, only four DIMM sockets for CPU1 are available and max memory capacity is 32GB (UDIMM, 8GBx4)/128GB (RDIMM, 32GBx4)</li> </ul>					
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology, supports the following NVIDIA Quadro, NVS graphics adapters and Tesla GPU computing processors:					
	Memory Size	CUDA Processor Cores	Display Connectors	Max. Displays	# of slots	Power
NVIDIA Quadro and NVS Graphics						
Quadro K6000	12GB	2880	1 dual-link DVI-I 1 dual-link DVI-D 2 DisplayPort	4	2	225W
Quadro K5000	4GB	1536	1 dual-link DVI-I 1 dual-link DVI-D 2 DisplayPort	4	2	122W
Quadro K4000	3GB	768	1 dual-link DVI-I 2 DisplayPort	4*	1	80W
Quadro K2000	2GB	384	1 dual-link DVI-I 2 DisplayPort	4*	1	51W
Quadro K2000D	2GB	384	1 dual-link DVI-I 1 dual-link DVI-D 1 mini DisplayPort	4*	1	51W
Quadro K600	1GB	192	1 dual-link DVI-I 1 DisplayPort	2	1	41W
Quadro 410	512MB	192	1 dual-link DVI-I 1 DisplayPort	2	1	37W
Quadro 6000	6GB	448	1 dual-link DVI-I 2 DisplayPort 1 Stereo	2	2	204W
Quadro 5000	2.5GB	352	1 dual-link DVI-I 2 DisplayPort, 1 Stereo	2	2	152W
Quadro 4000	2GB	256	1 dual-link DVI-I 2 DisplayPort 1 Stereo	2	1	142W
Quadro 2000	1GB	192	1 dual-link DVI-I 2 DisplayPort	2	1	62W
Quadro 2000D	1GB	192	2 dual-link DVI-I	2	1	62W
Quadro 600	1GB	96	1 dual-link DVI-I 1 DisplayPort	2	1	40W
NVS 510	2048 MB	192	4 mini DisplayPort (with 4 mini DP to DP dongles)	4	1	35W
NVS 315	1024MB	48	DMS59 to dual single-link DVI-I or dual DisplayPort	2	1	19.5W
NVS 310	512 MB	48	2 DisplayPort	2	1	19.5W
NVS 300	512 MB	16	DMS59 to dual single- link DVI-I	2	1	17.5W
NVIDIA Tesla GPU Computing Processors (as part of NVIDIA Maximus Platform)						
Tesla K20	5GB	2496				225W
Tesla C2075	6GB	448				225W
* Quadro K4000, K2000, and K2000D are equipped with 3 onboard display connectors, 4 Displays require a supported DisplayPort 1.2 Multi-Stream capable hub or displays						
Notes: 1. ThinkStation supports NVIDIA SLI Technology with selected NVIDIA Quadro graphics adapters, additional SLI cable is needed. For the latest Quadro SLI certified list on ThinkStation, please see <a href="http://www.nvidia.com/object/quadro_sli_compatible_systems.html">www.nvidia.com/object/quadro_sli_compatible_systems.html</a> 2. ThinkStation C30 support NVIDIA Maximus technology. Maximus technology combines the visualization and interactive design capability of NVIDIA Quadro graphics and the high performance computing power of NVIDIA Tesla GPU computing processors in a single workstation. For more information on the latest Maximus certifications for ThinkStation and how to build Maximus system, please see <a href="http://www.nvidia.com/object/maximus.html">www.nvidia.com/object/maximus.html</a> 3. CUDA Processor Cores cannot be compared between GPU generations due to several important architectural differences that exist between streaming multiprocessor designs.						

Onboard drive controllers	<ul style="list-style-type: none"> <li>Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support
Discrete drive controller (opt)	<p><i>One the following, depending on model:</i></p> <p>LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1 support                      optional upgrade key for RAID 5 support</p> <p>LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support</p>
Hard drive(s)	<p><i>Supports the following:</i></p> <p>3.5" SATA: SATA 6.0Gb/s, 7200 rpm, up to 4TB                      3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash                      2.5" SATA: SATA 6.0Gb/s, 10000 rpm, up to 1TB                      3.5" SAS: SAS 6.0Gb/s, 15000 rpm, up to 600GB                      2.5" SAS: SAS 6.0Gb/s, 15000 rpm, up to 300GB                      2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models, up to 300GB                      mSATA: mSATA Solid State Drive (SSD), SATA 6.0Gb/s, up to 128GB</p>
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface
Drive Bays	One external 5.25" bays for opticals, three internal 3.5" bays for hard drives
Media reader (opt)	None (use USB port)
Front ports	<p><i>MT type 1095 and 1097:</i> Two USB 2.0, microphone (3.5mm), headphone (3.5mm)</p> <p><i>Others MT types:</i> Two USB 3.0, microphone (3.5mm), headphone (3.5mm)</p>
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	Internal speaker for business audio
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black
Mouse	Optical Wheel Mouse (USB connector), black
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified
Security	<ul style="list-style-type: none"> <li>Security chip:                             <ul style="list-style-type: none"> <li><i>MT type 1095 and 1097:</i> Nuvoton NPCT421L for TPM function, TCG 1.2-compliant</li> <li><i>Others MT types:</i> STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant</li> </ul> </li> <li>Side cover lock (ships with two identical keys)</li> <li>Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>Power-on password</li> <li>Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse, diskette</li> <li>Serial port I/O enable/disable</li> <li>USB 2.0 ports enable/disable individually</li> <li>USB 3.0 ports enable/disable concurrently</li> <li>Chassis intrusion switch (optional)</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>Rack-mountable to 3U</li> <li>Raven black color; metal case</li> <li>5.1"W x 17.5"D x 16.8"H</li> <li>130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>40.7 lb (18.5kg) max configuration</li> <li>24-liter</li> </ul>
Expansion slots	<p>Slot 1: half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec)</p> <p>Slot 2: full-length, full-height, PCIe 3.0 x16*</p> <p>Slot 3: full-length, full-height, 32-bit PCI 2.3</p> <p>Slot 4: full-length, full-height, PCIe 3.0 x16*</p> <p>Slot 5: full-length, full-height, PCIe 2.0 x4</p> <p>Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>* Adapters &gt;75W use auxiliary power connector(s) from PSU</p>
Serviceability	<ul style="list-style-type: none"> <li>Toolless side cover removal</li> <li>Toolless disk and optical drive removal</li> <li>Toolless adapter retention</li> <li>Illuminated front icons</li> <li>Rack shelf support or optional rail kit</li> </ul>

ISV certifications	Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Environmental certifications	GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating
Warranty	1 or 3-year limited warranty, parts and labor
ThinkVantage®	Supports ThinkVantage® technologies
Preloaded operating systems	<p><i>One the following, depending on model:</i></p> <ul style="list-style-type: none"> <li>• Windows® 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>
Preloaded applications (only some listed)	<p><i>For Windows 7 models:</i></p> <ul style="list-style-type: none"> <li>• Rescue and Recovery®</li> <li>• Norton® Internet Security (30 days of virus definitions)</li> <li>• Adobe® Reader®</li> <li>• Adobe Flash® Player</li> <li>• Microsoft® Office preloaded; purchase product key to activate</li> <li>• Corel® WinDVD® (DVD±RW model(s))</li> <li>• Ulead® DVD MovieFactory® (DVD±RW model(s))</li> </ul> <p><i>For Windows 8 models:</i></p> <ul style="list-style-type: none"> <li>• Evernote®</li> <li>• Norton Internet Security (30 days of virus definitions)</li> <li>• Norton Studio</li> <li>• Skype™</li> <li>• Microsoft Office 2013 preloaded; purchase product key to activate</li> <li>• Cyberlink Power2Go (DVD±RW model(s))</li> <li>• Cyberlink PowerProducer (DVD±RW model(s))</li> </ul>

# ThinkStation C30 (1137) - TopSeller (June 2013)

Product Specifications Reference (PSREF)

Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
1137-47U	1xE5-2603 (4C/1.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	No	1xQuadro K600 (1GB, 1xDVI-I DL*, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-48U	1xE5-2609 (4C/2.4GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-49U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-51U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-52U	1xE5-2650 (8C/2GHz/20MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

<sup>1</sup> Model in italics shows that this is a Global Model

<sup>2</sup> The SSD drives in italics must be plugged into SATA AHCI connectors (red/orange)

\* DL = Dual Link, SL = Single Link

- **3-year limited warranty**
- **With new MT type 1136/1137 and beyond, ThinkStation C30 introduces new updates to improve the functionality and usability:** (These new features are not supported on 1095 and 1097MT models)
  - Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
  - New TPM chip: STMicroelectronics ST33TPM12LPC
  - Two front USB 2.0 ports upgrade to USB3.0
- **For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)**

Chipset	<b>Intel C602 Chipset</b>	<b>Tower</b> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>	
Processor	Two LGA2011 sockets, supports up to two processors from <b>Intel Xeon E5-2600</b> family, 4-channel DDR3 memory controller per processor		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	Bay 1 5.25", 1.6" high, external, for optical Bay 2-4 3.5", 1" high, internal, for hard drive  Slot 1: half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec) Slot 2: full-length, full-height, PCIe 3.0 x16* Slot 3: full-length, full-height, 32-bit PCI 2.3 Slot 4: full-length, full-height, PCIe 3.0 x16* Slot 5: full-length, full-height, PCIe 2.0 x4 Slot 6: half-length, full-height, 32-bit PCI 2.3	<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• <i>Chassis intrusion switch on selected model(s)</i></li> </ul>
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	<b>Intel AMT</b> Intel Active Management Technology 8 supported	<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>		
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating  Supports ThinkVantage® technologies	
Discrete drive controller (opt)	<i>One the following, depending on model:</i> LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support		
Hard drives	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models mSATA: mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader	None (use USB port)		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579		
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black		
Mouse	Optical Wheel Mouse (USB connector), black		
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
Preloaded operating systems (OS)	<i>One the following, depending on model:</i> <ul style="list-style-type: none"> <li>• Windows 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>		

See footnotes for important warranty information  
 Model(s) announced June 18, 2013

© Lenovo  
 (ALI1-3) June 2013

# ThinkStation C30 (1137) - TopSeller (June 2013) - II

Product Specifications Reference (PSREF)


Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
1137-53U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-54U	1xE5-2603 (4C/1.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	No	1xQuadro K600 (1GB, 1xDVI-I DL*, 1xDP, 41W)	No	Switch	Win8 Pro64
1137-55U	1xE5-2609 (4C/2.4GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64
1137-56U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64
1137-57U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model

<sup>2</sup> The SSD drives in italics must be plugged into SATA AHCI connectors (red/orange)

\* DL = Dual Link, SL = Single Link

- **3-year limited warranty**
- **With new MT type 1136/1137 and beyond, ThinkStation C30 introduces new updates to improve the functionality and usability:**  
(These new features are not supported on 1095 and 1097MT models)
  - Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
  - New TPM chip: STMicroelectronics ST33TPM12LPC
  - Two front USB 2.0 ports upgrade to USB3.0
- **For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)**

Chipset	<b>Intel C602 Chipset</b>	<b>Power</b>	<ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>	
Processor	Two LGA2011 sockets, supports up to two processors from <b>Intel Xeon E5-2600</b> family, 4-channel DDR3 memory controller per processor			
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	<b>Security</b>	<ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• <i>Chassis intrusion switch on selected model(s)</i></li> </ul>	<p><b>Intel AMT</b></p> <p>Intel Active Management Technology 8 supported</p>
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> </ul>			
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	<b>ISV certifications</b>	<p>Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p>	<b>Environmental certifications</b>
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>			
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	<b>Supports ThinkVantage® technologies</b>		
Discrete drive controller (opt)	<p><i>One the following, depending on model:</i></p> <p>LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1 support optional upgrade key for RAID 5 support</p> <p>LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support</p>			
Hard drives	<p>3.5" SATA: SATA 6.0Gb/s, 7200 rpm</p> <p>2.5" SATA: SATA 6.0Gb/s, 10000 rpm</p> <p>3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm</p> <p>2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models</p> <p>mSATA: mSATA SSD, SATA 6.0Gb/s</p>			
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface			
Media reader	None (use USB port)			
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)			
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)			
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579			
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black			
Mouse	Optical Wheel Mouse (USB connector), black			
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified			
Preloaded operating systems (OS)	<p><i>One the following, depending on model:</i></p> <ul style="list-style-type: none"> <li>• Windows 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>			

See footnotes for important warranty information  
Model(s) announced June 18, 2013

© Lenovo  
(ALI2-3) June 2013

# ThinkStation C30 (1137) - TopSeller (June 2013) - III

Product Specifications Reference (PSREF)

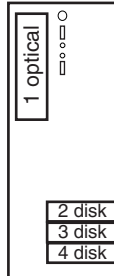
Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
1137-58U	1xE5-2650 (8C/2GHz/20MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	No	No	No	Switch	Win8 Pro64
1137-59U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	No	No	No	Switch	Win8 Pro64
1137-81U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x180GB 2.5" SSD	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-82U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x180GB 2.5" SSD	DVD±RW	No	No	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model

<sup>2</sup> The SSD drives in italics must be plugged into SATA AHCI connectors (red/orange)

- **3-year limited warranty**
- **With new MT type 1136/1137 and beyond, ThinkStation C30 introduces new updates to improve the functionality and usability:**
  - (These new features are not supported on 1095 and 1097MT models)
    - Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
    - New TPM chip: STMicroelectronics ST33TPM12LPC
    - Two front USB 2.0 ports upgrade to USB3.0
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>	<p><b>Power</b></p> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> <p>Bay 1 5.25", 1.6" high, external, for optical            Bay 2-4 3.5", 1" high, internal, for hard drive</p> <p>Slot 1: half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec)            Slot 2: full-length, full-height, PCIe 3.0 x16*            Slot 3: full-length, full-height, 32-bit PCI 2.3            Slot 4: full-length, full-height, PCIe 3.0 x16*            Slot 5: full-length, full-height, PCIe 2.0 x4            Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>* Adapters &gt;75W use auxiliary power connector(s) from PSU</p> <p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul> <p><b>Intel AMT</b></p> <p>Intel Active Management Technology 8 supported</p> <p><b>ISV certifications</b></p> <p>Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p> <p><b>Environmental certifications</b></p> <p>GREENGUARD® certified            RoHS-compliant            EPEAT™ Gold rating</p> <p>Supports ThinkVantage® technologies</p>
Processor	Two LGA2011 sockets, supports up to two processors from <b>Intel Xeon E5-2600</b> family, 4-channel DDR3 memory controller per processor	
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> </ul>	
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>	
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	
Discrete drive controller (opt)	<p>One the following, depending on model:</p> <p>LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1 support            optional upgrade key for RAID 5 support</p> <p>LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support</p>	
Hard drives	<p>3.5" SATA: SATA 6.0Gb/s, 7200 rpm</p> <p>2.5" SATA: SATA 6.0Gb/s, 10000 rpm</p> <p>3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm</p> <p>2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models</p> <p>mSATA: mSATA SSD, SATA 6.0Gb/s</p>	
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	
Media reader	None (use USB port)	
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	
Mouse	Optical Wheel Mouse (USB connector), black	
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified	
Preloaded operating systems (OS)	<p>One the following, depending on model:</p> <ul style="list-style-type: none"> <li>• Windows 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>	



See footnotes for important warranty information  
 Model(s) announced June 18, 2013

© Lenovo  
 (ALI3-3) June 2013

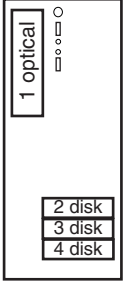
# ThinkStation C30 (1137) - TopSeller (September 2013)

Product Specifications Reference (PSREF)

Type-model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
1137-D5U	1xE5-2603 v2 (4C/1.8GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xNVS 315 (1GB, DMS59 to DVI-I SL, 19.5W)	No	Switch	Win8 Pro64
1137-D6U	1xE5-2603 v2 (4C/1.8GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64
1137-D7U	1xE5-2609 v2 (4C/2.5GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	No	No	No	Switch	Win8 Pro64
1137-D8U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	No	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64
1137-D9U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	No	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64
1137-E1U	1xE5-2630 v2 (6C/2.6GHz/15MB/1600)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	No	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64
1137-E2U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	No	No	No	Switch	Win8 Pro64

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

- 3-year limited warranty
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		<b>Tower</b> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> 
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only four DIMM sockets for CPU1 are available and max memory capacity is 32GB (UDIMM, 8GBx4)/128GB (RDIMM, 32GBx4)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>		
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support		
Discrete drive controller (opt)	None		
Hard drive(s)	<b>3.5" SATA:</b> SATA 6.0Gb/s, 7200 rpm <b>3.5" Hybrid:</b> SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash <b>2.5" SATA:</b> SATA 6.0Gb/s, 10000 rpm <b>3.5" SAS/2.5" SAS:</b> SAS 6.0Gb/s, 15000 rpm <b>2.5" SSD:</b> Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models <b>mSATA:</b> mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader	None (use USB port)		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579		
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
	<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>		
	<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>		
	<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies		

See footnotes for important warranty information  
 Model(s) announced September 10, 2013

© Lenovo  
 (1137-4) September 2013



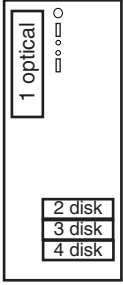
# ThinkStation C30 (1137) - TopSeller (September 2013) - II

Product Specifications Reference (PSREF)

Type-model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
1137-E3U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	8GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	No	No	No	Switch	Win8 Pro64
1137-E4U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	No	No	No	Switch	Win8 Pro64
1137-E5U	1xE5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	No	No	No	Switch	Win8 Pro64
1137-E6U	1xE5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	No	No	No	Switch	Win8 Pro64
1137-E7U	1xE5-2603 v2 (4C/1.8GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xNVS 315 (1GB, DMS59 to DVI-I SL, 19.5W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-E8U	1xE5-2603 v2 (4C/1.8GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-E9U	1xE5-2609 v2 (4C/2.5GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-F1U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	No	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

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

- 3-year limited warranty
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		<b>Tower</b> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> 
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only four DIMM sockets for CPU1 are available and max memory capacity is 32GB (UDIMM, 8GBx4)/128GB (RDIMM, 32GBx4)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>		
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support		
Discrete drive controller (opt)	None		
Hard drive(s)	<b>3.5" SATA:</b> SATA 6.0Gb/s, 7200 rpm <b>3.5" Hybrid:</b> SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash <b>2.5" SATA:</b> SATA 6.0Gb/s, 10000 rpm <b>3.5" SAS/2.5" SAS:</b> SAS 6.0Gb/s, 15000 rpm <b>2.5" SSD:</b> Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on some models <b>mSATA:</b> mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader	None (use USB port)		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579		
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
	<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>		
	<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>		
	<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies		

See footnotes for important warranty information  
 Model(s) announced September 10, 2013

© Lenovo  
 (1137-5) September 2013

# ThinkStation C30 (1137) - TopSeller (September 2013) - III

Product Specifications Reference (PSREF)

Type-model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
1137-F2U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	No	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-F3U	1xE5-2630 v2 (6C/2.6GHz/15MB/1600)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	No	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-F4U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-F5U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	8GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-F6U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-F7U	1xE5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-F8U	1xE5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

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

- 3-year limited warranty
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only four DIMM sockets for CPU1 are available and max memory capacity is 32GB (UDIMM, 8GBx4)/128GB (RDIMM, 32GBx4)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>		
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support		
Discrete drive controller (opt)	None		
Hard drive(s)	<b>3.5" SATA:</b> SATA 6.0Gb/s, 7200 rpm <b>3.5" Hybrid:</b> SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash <b>2.5" SATA:</b> SATA 6.0Gb/s, 10000 rpm <b>3.5" SAS/2.5" SAS:</b> SAS 6.0Gb/s, 15000 rpm <b>2.5" SSD:</b> Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models <b>mSATA:</b> mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader	None (use USB port)		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579		
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
<b>Tower</b> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> Bay 1 5.25", 1.6" high, external, for optical Bay 2-4 3.5", 1" high, internal, for hard drive Slot 1: half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec) Slot 2: full-length, full-height, PCIe 3.0 x16* Slot 3: full-length, full-height, 32-bit PCI 2.3 Slot 4: full-length, full-height, PCIe 3.0 x16* Slot 5: full-length, full-height, PCIe 2.0 x4 Slot 6: half-length, full-height, 32-bit PCI 2.3 * Adapters >75W use auxiliary power connector(s) from PSU			1 optical 2 disk 3 disk 4 disk
<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>			
<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>			
<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies			

See footnotes for important warranty information  
 Model(s) announced September 10, 2013

© Lenovo  
 (1137-6) September 2013

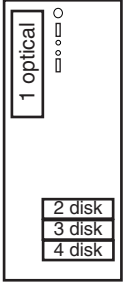
# ThinkStation C30 (1137) - TopSeller (October 2013)

Product Specifications Reference (PSREF)

Type-model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
1137-F9U	1xE5-2650 v2 8C/2.6GHz/20MB/1866MHz	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
1137-G1U	1xE5-2650 v2 8C/2.6GHz/20MB/1866MHz	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	No	No	No	Switch	Win8 Pro64
1137-G2U	1xE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	No	No	No	Switch	Win8 Pro64
1137-G3U	1xE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

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

- 3-year limited warranty
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only four DIMM sockets for CPU1 are available and max memory capacity is 32GB (UDIMM, 8GBx4)/128GB (RDIMM, 32GBx4)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>		
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support		
Discrete drive controller (opt)	None		
Hard drive(s)	3.5" SATA:	SATA 6.0Gb/s, 7200 rpm	
	3.5" Hybrid:	SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash	
	2.5" SATA:	SATA 6.0Gb/s, 10000 rpm	
	3.5" SAS/2.5" SAS:	SAS 6.0Gb/s, 15000 rpm	
	2.5" SSD:	Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models	
	mSATA:	mSATA SSD, SATA 6.0Gb/s	
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader	None (use USB port)		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579		
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
	<b>Tower</b>		
	<ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>		
	Bay 1	5.25", 1.6" high, external, for optical	
	Bay 2-4	3.5", 1" high, internal, for hard drive	
	Slot 1:	half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec)	
	Slot 2:	full-length, full-height, PCIe 3.0 x16*	
	Slot 3:	full-length, full-height, 32-bit PCI 2.3	
	Slot 4:	full-length, full-height, PCIe 3.0 x16*	
	Slot 5:	full-length, full-height, PCIe 2.0 x4	
	Slot 6:	half-length, full-height, 32-bit PCI 2.3	
	* Adapters >75W use auxiliary power connector(s) from PSU		
	<b>SECURITY</b>		
	<ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>		
	<b>ISV certifications</b>		
	Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>		
	<b>Environmental certifications</b>		
	GREENGUARD® certified		
	RoHS-compliant		
	EPEAT™ Gold rating		
	Supports ThinkVantage® technologies		

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

© Lenovo  
(1137-7) November 2013

# ThinkStation C30 (1137) - TopSeller (April 2014) - I

Product Specifications Reference (PSREF)

Type-model <sup>1</sup>	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing <sup>3</sup>	1394 adptr	Chassis intrusion switch	Preloaded OS
1137-H2U	1xXeonE5-2603 v2 4C/1.8GHz/10MB/1333MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1137-H3U	1xXeonE5-2609 v2 4C/2.5GHz/10MB/1333MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1137-H4U	1xXeonE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1137-H5U	1xXeonE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	No	1xQuadro K4000 3GB/1xDVI-I DL/ 2xDP/80W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1137-H6U	1xXeonE5-2630 v2 6C/2.6GHz/15MB/1600MHz	1866MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA(Hybrid)	DVD±RW	No	1xQuadro K4000 3GB/1xDVI-I DL/ 2xDP/80W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1137-H7U	1xXeonE5-2650 v2 8C/2.6GHz/20MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA(Hybrid)	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1137-H8U	1xXeonE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1866MHz UDIMM	8GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)

<sup>1</sup> Model in *italics* shows that this is a Global Model    <sup>2</sup> The SSD drives in *italics* must be plugged into red or orange SATA connectors    <sup>3</sup> DL = Dual Link, SL = Single Link

- 3-year limited warranty
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">1 optical</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">2 disk</div> <div style="border: 1px solid black; padding: 2px;">3 disk</div> <div style="border: 1px solid black; padding: 2px;">4 disk</div> </div> </div>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only four DIMM sockets for CPU1 are available and max memory capacity is 32GB (UDIMM, 8GBx4)/128GB (RDIMM, 32GBx4)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>		
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support		
Discrete drive controller (opt)	None		
Hard drive(s)	<b>3.5" SATA:</b> SATA 6.0Gb/s, 7200 rpm <b>3.5" Hybrid:</b> SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash <b>2.5" SATA:</b> SATA 6.0Gb/s, 10000 rpm <b>3.5" SAS/2.5" SAS:</b> SAS 6.0Gb/s, 15000 rpm <b>2.5" SSD:</b> Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models <b>mSATA:</b> mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader	None (use USB port)		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579		
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
	<b>Tower</b> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> Bay 1 5.25", 1.6" high, external, for optical Bay 2-4 3.5", 1" high, internal, for hard drive Slot 1: half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec) Slot 2: full-length, full-height, PCIe 3.0 x16* Slot 3: full-length, full-height, 32-bit PCI 2.3 Slot 4: full-length, full-height, PCIe 3.0 x16* Slot 5: full-length, full-height, PCIe 2.0 x4 Slot 6: half-length, full-height, 32-bit PCI 2.3 * Adapters >75W use auxiliary power connector(s) from PSU		
	<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>		
	<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>		
	<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies		

See footnotes for important warranty information  
 Model(s) announced April 1, 2014

© Lenovo  
 (1137-8) April 2014

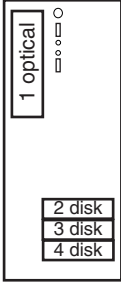
# ThinkStation C30 (1137) - TopSeller (April 2014) - II

Product Specifications Reference (PSREF)

Type-model <sup>1</sup>	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
1137-H9U	1xXeonE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1866MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD(OPAL)	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1137-J1U	1xXeonE5-2650 v2 8C/2.6GHz/20MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD(OPAL)	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1137-J2U	2xXeonE5-2667 v2 8C/3.3GHz/25MB/1866MHz	1866MHz RDIMM	8GBx4	No	No	1x256GB 2.5" SSD(OPAL)	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)

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

- 3-year limited warranty
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only four DIMM sockets for CPU1 are available and max memory capacity is 32GB (UDIMM, 8GBx4)/128GB (RDIMM, 32GBx4)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>		
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support		
Discrete drive controller (opt)	None		
Hard drive(s)	<b>3.5" SATA:</b> SATA 6.0Gb/s, 7200 rpm <b>3.5" Hybrid:</b> SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash <b>2.5" SATA:</b> SATA 6.0Gb/s, 10000 rpm <b>3.5" SAS/2.5" SAS:</b> SAS 6.0Gb/s, 15000 rpm <b>2.5" SSD:</b> Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models <b>mSATA:</b> mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader	None (use USB port)		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579		
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
	<b>Tower</b> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> Bay 1 5.25", 1.6" high, external, for optical Bay 2-4 3.5", 1" high, internal, for hard drive Slot 1: half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec) Slot 2: full-length, full-height, PCIe 3.0 x16* Slot 3: full-length, full-height, 32-bit PCI 2.3 Slot 4: full-length, full-height, PCIe 3.0 x16* Slot 5: full-length, full-height, PCIe 2.0 x4 Slot 6: half-length, full-height, 32-bit PCI 2.3 * Adapters >75W use auxiliary power connector(s) from PSU		
	<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>		
	<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>		
	<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies		

See footnotes for important warranty information  
 Model(s) announced April 1, 2014

© Lenovo  
 (1137-9) April 2014

Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
1136-19U	1xE5-2609 (4C/2.4GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	No	1xQuadro K600 (1GB, 1xDVI-I DL*, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
<i>1136-21U</i>	1xE5-2620 (6C/2.4GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1136-22U	1xE5-2630 (6C/2.3GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
<i>1136-23U</i>	1xE5-2620 (6C/2.4GHz/15MB/1333)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	No	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1136-24U	1xE5-2609 (4C/2.4GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	No	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model

<sup>2</sup> The SSD drives in italics must be plugged into SATA AHCI connectors (red/orange)

\* DL = Dual Link, SL = Single Link

- **3-year limited warranty**
- **With new MT type 1136/1137 and beyond, ThinkStation C30 introduces new updates to improve the functionality and usability:** (These new features are not supported on 1095 and 1097MT models)
  - Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
  - New TPM chip: STMicroelectronics ST33TPM12LPC
  - Two front USB 2.0 ports upgrade to USB3.0
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>	<b>Processor</b> Two LGA2011 sockets, supports up to two processors from <b>Intel Xeon E5-2600</b> family, 4-channel DDR3 memory controller per processor	<b>Memory</b> <b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	<b>Additional memory disclaimers</b> <ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> </ul>	<b>Graphics</b> Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	<b>Onboard drive controllers</b> <ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>	<b>Upgrade ROM for onboard drive controllers (opt)</b> Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	<b>Discrete drive controller (opt)</b> <i>One the following, depending on model:</i> LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support	<b>Hard drives</b> 3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models mSATA: mSATA SSD, SATA 6.0Gb/s	<b>Optical</b> Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	<b>Media reader</b> None (use USB port)	<b>Front ports</b> Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	<b>Rear ports</b> Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	<b>IEEE 1394 adptr (optional)</b> None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear	<b>Audio</b> High Definition (HD) Audio, Realtek® ALC662 codec	<b>Speaker</b> Internal speaker for business audio	<b>Onboard Ethernet</b> One onboard gigabit ethernet, Intel 82579	<b>Security chip</b> STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	<b>Keyboard</b> Preferred Pro USB Keyboard (USB connector), 104-key, black	<b>Mouse</b> Optical Wheel Mouse (USB connector), black	<b>Power supply</b> 800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified	<b>Preloaded operating systems (OS)</b> <i>One the following, depending on model:</i> <ul style="list-style-type: none"> <li>• Windows 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>	<b>Tower</b> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>	
<b>Bay 1</b> 5.25", 1.6" high, external, for optical <b>Bay 2-4</b> 3.5", 1" high, internal, for hard drive <b>Slot 1:</b> half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec) <b>Slot 2:</b> full-length, full-height, PCIe 3.0 x16* <b>Slot 3:</b> full-length, full-height, 32-bit PCI 2.3 <b>Slot 4:</b> full-length, full-height, PCIe 3.0 x16* <b>Slot 5:</b> full-length, full-height, PCIe 2.0 x4 <b>Slot 6:</b> half-length, full-height, 32-bit PCI 2.3	* Adapters >75W use auxiliary power connector(s) from PSU																							
<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>																								
<b>Intel AMT</b> Intel Active Management Technology 8 supported																								
<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>																								
<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies																								

See footnotes for important warranty information  
Model(s) announced June 18, 2013

Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
<i>1136-25U</i>	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K2000 (2GB, 1xDVI-I DL*, 2xDP, 51W)	No	Switch	Win8 Pro64
1136-26U	1xE5-2630 (6C/2.3GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64
<i>1136-27U</i>	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	No	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64

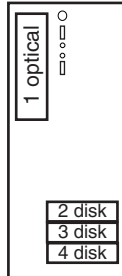
<sup>1</sup> Model in italics shows that this is a Global Model

<sup>2</sup> The SSD drives in italics must be plugged into SATA AHCI connectors (red/orange)

\* DL = Dual Link, SL = Single Link

- **3-year limited warranty**
- **With new MT type 1136/1137 and beyond, ThinkStation C30 introduces new updates to improve the functionality and usability:**
  - (These new features are not supported on 1095 and 1097MT models)
    - Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
    - New TPM chip: STMicroelectronics ST33TPM12LPC
    - Two front USB 2.0 ports upgrade to USB3.0
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

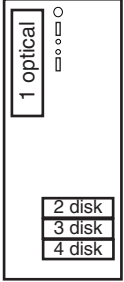
Chipset	<b>Intel C602 Chipset</b>	<p><b>Power</b></p> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> <p>Bay 1 5.25", 1.6" high, external, for optical            Bay 2-4 3.5", 1" high, internal, for hard drive</p> <p>Slot 1: half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec)            Slot 2: full-length, full-height, PCIe 3.0 x16*            Slot 3: full-length, full-height, 32-bit PCI 2.3            Slot 4: full-length, full-height, PCIe 3.0 x16*            Slot 5: full-length, full-height, PCIe 2.0 x4            Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>* Adapters &gt;75W use auxiliary power connector(s) from PSU</p> <p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul> <p><b>Intel AMT</b></p> <p>Intel Active Management Technology 8 supported</p> <p><b>ISV certifications</b></p> <p>Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p> <p><b>Environmental certifications</b></p> <p>GREENGUARD® certified            RoHS-compliant            EPEAT™ Gold rating</p> <p>Supports ThinkVantage® technologies</p>
Processor	Two LGA2011 sockets, supports up to two processors from <b>Intel Xeon E5-2600</b> family, 4-channel DDR3 memory controller per processor	
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> </ul>	
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>	
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	
Discrete drive controller (opt)	<p>One the following, depending on model:</p> <p>LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1 support            optional upgrade key for RAID 5 support</p> <p>LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support</p>	
Hard drives	<p>3.5" SATA: SATA 6.0Gb/s, 7200 rpm            2.5" SATA: SATA 6.0Gb/s, 10000 rpm            3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm            2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models            mSATA: mSATA SSD, SATA 6.0Gb/s</p>	
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	
Media reader	None (use USB port)	
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579	
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	
Mouse	Optical Wheel Mouse (USB connector), black	
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified	
Preloaded operating systems (OS)	<p>One the following, depending on model:</p> <ul style="list-style-type: none"> <li>• Windows 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>	



Type-model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
1136-A7U	1xE5-2609 v2 (4C/2.5GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1136-A8U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	No	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1136-A9U	1xE5-2630 v2 (6C/2.6GHz/15MB/1600)	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	No	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1136-B1U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	4GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	No	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1136-B2U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
1136-B3U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	No	1xQuadro K5000 (4GB, 1xDVI-I DL, 1xDVI-D DL, 2xDP, 122W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
1136-B4U	1xE5-2609 v2 (4C/2.5GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64

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

- 3-year limited warranty
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

Chipset	Intel C602 Chipset	<b>Tower</b> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>	
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported	Bay 1 5.25", 1.6" high, external, for optical Bay 2-4 3.5", 1" high, internal, for hard drive	
Memory	UDIMM or RDIMM, ECC, DDR3, 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)	Slot 1: half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec) Slot 2: full-length, full-height, PCIe 3.0 x16* Slot 3: full-length, full-height, 32-bit PCI 2.3 Slot 4: full-length, full-height, PCIe 3.0 x16* Slot 5: full-length, full-height, PCIe 2.0 x4 Slot 6: half-length, full-height, 32-bit PCI 2.3	
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only four DIMM sockets for CPU1 are available and max memory capacity is 32GB (UDIMM, 8GBx4)/128GB (RDIMM, 32GBx4)</li> </ul>	<ul style="list-style-type: none"> <li>• * Adapters &gt;75W use auxiliary power connector(s) from PSU</li> </ul>	
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>	
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>	<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>	
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support	<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating	
Discrete drive controller (opt)	None	Supports ThinkVantage® technologies	
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader	None (use USB port)		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579		
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified		



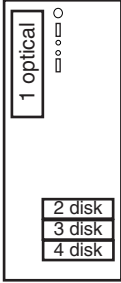
# ThinkStation C30 (1136) - September 2013 - II

Product Specifications Reference (PSREF)

Type-model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
1136-B5U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	No	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64
1136-B6U	1xE5-2630 v2 (6C/2.6GHz/15MB/1600)	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	No	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64
1136-B7U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	4GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	No	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64
1136-B8U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	No	No	No	Switch	Win8 Pro64
1136-B9U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	No	1xQuadro K5000 (4GB, 1xDVI-I DL, 1xDVI-D DL, 2xDP, 122W)	No	Switch	Win8 Pro64

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

- 3-year limited warranty
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		<b>Tower</b> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>	
Intel AMT	Intel Active Management Technology 8 supported			
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported			
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)			
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only four DIMM sockets for CPU1 are available and max memory capacity is 32GB (UDIMM, 8GBx4)/128GB (RDIMM, 32GBx4)</li> </ul>			
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology			
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>			
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support			
Discrete drive controller (opt)	None			
Hard drive(s)	<b>3.5" SATA:</b> SATA 6.0Gb/s, 7200 rpm <b>3.5" Hybrid:</b> SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash <b>2.5" SATA:</b> SATA 6.0Gb/s, 10000 rpm <b>3.5" SAS/2.5" SAS:</b> SAS 6.0Gb/s, 15000 rpm <b>2.5" SSD:</b> Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models <b>mSATA:</b> mSATA SSD, SATA 6.0Gb/s			
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface			
Media reader	None (use USB port)			
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)			
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)			
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec			
Speaker	Internal speaker for business audio			
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579			
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant			
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)			
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified			
	<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>			
	<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>			
	<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies			

See footnotes for important warranty information  
 Model(s) announced September 10, 2013

© Lenovo  
 (1136-4) September 2013

Type-model <sup>1</sup>	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
<i>1136-C5U</i>	1xE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1600MHz UDIMM	4GBx1	No	No	1x2TB 3.5" SATA	DVD±RW	No	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

<sup>1</sup> Model in italics shows that this is a Global Model    <sup>\*\*</sup> The SSD drives in italics must be plugged into red or orange SATA connectors    <sup>\*\*\*</sup> DL = Dual Link, SL = Single Link

- 3-year limited warranty
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">1 optical</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">2 disk</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">3 disk</div> <div style="border: 1px solid black; padding: 2px;">4 disk</div> </div>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only four DIMM sockets for CPU1 are available and max memory capacity is 32GB (UDIMM, 8GBx4)/128GB (RDIMM, 32GBx4)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>		
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support		
Discrete drive controller (opt)	None		
Hard drive(s)	<b>3.5" SATA:</b> SATA 6.0Gb/s, 7200 rpm <b>3.5" Hybrid:</b> SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash <b>2.5" SATA:</b> SATA 6.0Gb/s, 10000 rpm <b>3.5" SAS/2.5" SAS:</b> SAS 6.0Gb/s, 15000 rpm <b>2.5" SSD:</b> Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models <b>mSATA:</b> mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader	None (use USB port)		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579		
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
	<b>Tower</b> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> Bay 1 5.25", 1.6" high, external, for optical Bay 2-4 3.5", 1" high, internal, for hard drive Slot 1: half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec) Slot 2: full-length, full-height, PCIe 3.0 x16* Slot 3: full-length, full-height, 32-bit PCI 2.3 Slot 4: full-length, full-height, PCIe 3.0 x16* Slot 5: full-length, full-height, PCIe 2.0 x4 Slot 6: half-length, full-height, 32-bit PCI 2.3 * Adapters >75W use auxiliary power connector(s) from PSU		
	<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>		
	<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>		
	<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies		

Type-model	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
<i>1136-D4U</i>	2xE5-2667 v2 8C/3.3GHz/25MB/1866MHz	1866MHz UDIMM	4GBx4	No	No	1x500GB 3.5" SATA	DVD	No	1xNVS 510 2GB/4xminiDP/35W	No	Switch	Win7 Pro64
<i>1136-D5U</i>	2xE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1600MHz UDIMM	4GBx4	No	No	1x2TB 3.5" SATA	DVD±RW	No	1xNVS 310 512MB/2xDP/19.5W	No	Switch	Win7 Pro64
1136-E8U	1xE5-2609 v2 4C/2.5GHz/10MB/1333MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA	DVD±RW	No	1xQuadro K600 1GB/1xDVI-I DL/ 1xDP/41W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1136-E9U	1xE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	No	1xQuadro K2000 2GB/1xDVI-I DL/ 2xDP/51W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1136-F1U	1xE5-2630 v2 6C/2.6GHz/15MB/1600MHz	1866MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	No	1xQuadro K4000 3GB/1xDVI-I DL/ 2xDP/80W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1136-F2U	1xE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1866MHz UDIMM	4GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	No	1xQuadro K2000 2GB/1xDVI-I DL/ 2xDP/51W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1136-F3U	1xE5-2650 v2 8C/2.6GHz/20MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD(OPAL)	DVD±RW	No	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
1136-F4U	1xE5-2650 v2 8C/2.6GHz/20MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA(Hybrid)	DVD±RW	No	1xQuadro K5000 4GB/1xDVI-I DL/ 1xDVI-D DL/ 2xDP/122W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)

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

- 3-year limited warranty
- For ThinkStation C30 platform specifications, please see [ThinkStation C30 Platform Specifications sheet](#)

Chipset	Intel C602 Chipset	<p><b>Tower</b></p> <ul style="list-style-type: none"> <li>• Rack-mountable to 3U</li> <li>• Raven black color; metal case</li> <li>• 5.1"W x 17.5"D x 16.8"H</li> <li>• 130mm W x 444mm D x 427mm H (without rubber feet)</li> <li>• 40.7 lb (18.5kg) max configuration</li> <li>• 24-liter</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> <p>Bay 1 5.25", 1.6" high, external, for optical Bay 2-4 3.5", 1" high, internal, for hard drive</p> <p>Slot 1: half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec) Slot 2: full-length, full-height, PCIe 3.0 x16* Slot 3: full-length, full-height, 32-bit PCI 2.3 Slot 4: full-length, full-height, PCIe 3.0 x16* Slot 5: full-length, full-height, PCIe 2.0 x4 Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>* Adapters &gt;75W use auxiliary power connector(s) from PSU</p> <p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul> <p><b>ISV certifications</b></p> <p>Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p> <p><b>Environmental certifications</b></p> <p>GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating</p> <p>Supports ThinkVantage® technologies</p>	
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	UDIMM or RDIMM, ECC, DDR3, 8-channel capable (4-channel per processor), eight 240-pin DIMM sockets 64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over four DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only four DIMM sockets for CPU1 are available and max memory capacity is 32GB (UDIMM, 8GBx4)/128GB (RDIMM, 32GBx4)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support</li> <li>• Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support</li> </ul>		
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support		
Discrete drive controller (opt)	None		
Hard drive(s)	<p>3.5" SATA: SATA 6.0Gb/s, 7200 rpm</p> <p>3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash</p> <p>2.5" SATA: SATA 6.0Gb/s, 10000 rpm</p> <p>3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm</p> <p>2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA SSD, SATA 6.0Gb/s</p>		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader	None (use USB port)		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579		
Security chip	STMicroelectronics ST33TPM12LPC, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified		

See footnotes for important warranty information  
Model(s) announced April 1, 2014

## ThinkStation C30 Optional Configurations

### Partial list of core options supported on ThinkStation C30

<b>Processor (2nd processor and heat sink options)</b>	
ThinkStation C30, D30 Processor Heat Sink	0A65721
ThinkStation CPU Xeon E5-2660	4XG0E76794
ThinkStation CPU Xeon E5-2650	4XG0E76795
ThinkStation CPU Xeon E5-2640	4XG0E76796
ThinkStation CPU Xeon E5-2630	4XG0E76797
ThinkStation CPU Xeon E5-2620	4XG0E76798
ThinkStation CPU Xeon E5-2609	4XG0E76799
ThinkStation CPU Xeon E5-2603	4XG0E76800
<b>Memory</b>	
2GB DDR3 1333 (PC3 10600) ECC UDIMM Memory	43R2033
4GB DDR3 1333 (PC3 10600) ECC UDIMM Memory	57Y4138
8GB DDR3 1333 (PC3 10600) ECC UDIMM Memory	0A65718
4GB DDR3 1600 (PC3 12800) RDIMM Memory Workstation Memory	0A65732
8GB DDR3 1600 (PC3 12800) RDIMM Memory Workstation Memory	0A65733
<b>Disk Drive</b>	
Lenovo 500GB SATA HDD (7200)	43R1990
Lenovo 1TB SATA HDD (7200)	45J7918
ThinkStation 1TB 3.5" SATA Hybrid Hard Drive (7200)	4XB0F18665
ThinkStation 2TB 3.5" SATA Hybrid Hard Drive (7200)	4XB0F18666
ThinkStation 300GB 3.5" SAS Hard Drive (15K)	4XB0F18672
ThinkStation 450GB 3.5" SAS Hard Drive (15K)	43N3424
ThinkStation 600GB 3.5" SAS Hard Drive (15K)	4XB0F18673
ThinkStation 128GB SATA 2.5" Solid State Drive	4XB0F18670
ThinkStation 180GB Solid State Drive	0B47308
ThinkStation 256GB SATA 2.5" Solid State Drive	4XB0F18671
ThinkStation 256GB SATA 2.5" Solid State Drive - OPAL	4XB0F22432
<b>Graphics</b>	
NVIDIA NVS 300 512MB Dual DVI or Dual VGA Adapter	0B47390
NVIDIA NVS 310 512MB Dual DisplayPort Adapter	0B47074
NVIDIA NVS 510 2GB Quad Mini-DisplayPort Graphics Adapter	0B47077
NVIDIA Quadro 410 512MB Single DVI & Single DisplayPort Adapter	0B47075
NVIDIA Quadro K600 1GB Single DVI & Single DisplayPort Adapter	0B47394
NVIDIA Quadro K2000 2GB Single DVI & Dual DisplayPort Adapter	0B47392
NVIDIA Quadro K4000 3GB Single DVI & Dual DisplayPort Adapter	0B47393
NVIDIA Quadro K5000 4GB Dual DisplayPort & Dual DVI Graphics Adapter	0B47081
<b>Others</b>	
ThinkStation C-Series, D-Series Rail Kit	57Y4482

For more information on accessories:

[www.lenovo.com/accessories](http://www.lenovo.com/accessories)

Purchase Lenovo accessories

[www.lenovo.com/support/accessories](http://www.lenovo.com/support/accessories)

Product specifications on Lenovo Support

[www.lenovo.com/accessoriesguide](http://www.lenovo.com/accessoriesguide)

Option Compatibility Matrix (OCM) and accessory brochures

[www.lenovoquickpick.com](http://www.lenovoquickpick.com)

An Options Compatibility Configurator for Lenovo systems

# ThinkStation



Lenovo ThinkStation D30



Lenovo ThinkStation D30



Lenovo ThinkStation D30



Lenovo ThinkStation D30



Lenovo ThinkStation D30



Lenovo ThinkStation D30

Text in red shows that these features only apply to MT type 4223 and 4229 models, text in green shows that the features are supported on other models except MT type 4223 and 4229 models

Chipset	<b>Intel C602 Chipset</b>										
Intel AMT	MT type 4223 and 4229: <b>Intel Active Management Technology 7</b> Others MT types: <b>Intel Active Management Technology 8</b>										
Processor	Two LGA2011 sockets, supports up to two processors from <b>Intel Xeon E5-2600 and Intel Xeon E5-2600 v2</b> family, or up to one processor from <b>Intel Xeon E5-1600 v2</b> family, integrated 4-channel DDR3 memory controller per processor. Supports the following:										
	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Intel QPI Speed	# of QPI Links	Max TDP	Memory Speed	Intel vPro technology
	Xeon E5-2603	4	4	1.8 GHz		10 MB	6.4 GT/s	2	80 W	1066MHz	vPro
	Xeon E5-2609	4	4	2.4 GHz		10 MB	6.4 GT/s	2	80 W	1066MHz	vPro
	Xeon E5-2620	6	12	2 GHz	2.5 GHz	15 MB	7.2 GT/s	2	95 W	1333MHz	vPro
	Xeon E5-2630	6	12	2.3 GHz	2.8 GHz	15 MB	7.2 GT/s	2	95 W	1333MHz	vPro
	Xeon E5-2630L	6	12	2 GHz	2.5 GHz	15 MB	7.2 GT/s	2	60 W	1333MHz	vPro
	Xeon E5-2637	2	4	3 GHz	3.5 GHz	5 MB	8 GT/s	2	80 W	1600MHz	vPro
	Xeon E5-2640	6	12	2.5 GHz	3 GHz	15 MB	7.2 GT/s	2	95 W	1333MHz	vPro
	Xeon E5-2643	4	8	3.3 GHz	3.5 GHz	10 MB	8 GT/s	2	130 W	1600MHz	vPro
	Xeon E5-2650	8	16	2 GHz	2.8 GHz	20 MB	8 GT/s	2	95 W	1600MHz	vPro
	Xeon E5-2650L	8	16	1.8 GHz	2.3 GHz	20 MB	8 GT/s	2	70 W	1600MHz	vPro
	Xeon E5-2660	8	16	2.2 GHz	3 GHz	20 MB	8 GT/s	2	95 W	1600MHz	vPro
	Xeon E5-2665	8	16	2.4 GHz	3.1 GHz	20 MB	8 GT/s	2	115 W	1600MHz	vPro
	Xeon E5-2667	6	12	2.9 GHz	3.5 GHz	15 MB	8 GT/s	2	130 W	1600MHz	vPro
	Xeon E5-2670	8	16	2.6 GHz	3.3 GHz	20 MB	8 GT/s	2	115 W	1600MHz	vPro
	Xeon E5-2680	8	16	2.7 GHz	3.5 GHz	20 MB	8 GT/s	2	130 W	1600MHz	vPro
	Xeon E5-2690	8	16	2.9 GHz	3.8 GHz	20 MB	8 GT/s	2	135 W	1600MHz	vPro
	Xeon E5-1603	4	4	2.8 GHz		10 MB			130 W	1066MHz	vPro
	Xeon E5-2603 v2	4	4	1.8 GHz	1.8 GHz	10 MB	6.4 GT/s	2	80 W	1333MHz	vPro
	Xeon E5-2609 v2	4	4	2.5 GHz	2.5 GHz	10 MB	6.4 GT/s	2	80 W	1333MHz	vPro
	Xeon E5-2620 v2	6	12	2.1 GHz	2.6 GHz	15 MB	7.2 GT/s	2	80 W	1600MHz	vPro
	Xeon E5-2630L v2	6	12	2.4 GHz	2.8 GHz	15 MB	7.2 GT/s	2	60 W	1600MHz	vPro
	Xeon E5-2630 v2	6	12	2.6 GHz	3.1 GHz	15 MB	7.2 GT/s	2	80 W	1600MHz	vPro
	Xeon E5-2637 v2	4	8	3.5 GHz	3.8 GHz	15 MB	8 GT/s	2	130 W	1866MHz	vPro
	Xeon E5-2640 v2	8	16	2 GHz	2.5 GHz	20 MB	7.2 GT/s	2	95 W	1600MHz	vPro
	Xeon E5-2643 v2	6	12	3.5 GHz	3.8 GHz	25 MB	8 GT/s	2	130 W	1866MHz	vPro
	Xeon E5-2650L v2	10	20	1.7 GHz	2.1 GHz	25 MB	7.2 GT/s	2	70 W	1600MHz	vPro
	Xeon E5-2650 v2	8	16	2.6 GHz	3.4 GHz	20 MB	8 GT/s	2	95 W	1866MHz	vPro
	Xeon E5-2660 v2	10	20	2.2 GHz	3 GHz	25 MB	8 GT/s	2	95 W	1866MHz	vPro
	Xeon E5-2667 v2	8	16	3.3 GHz	4 GHz	25 MB	8 GT/s	2	130 W	1866MHz	vPro
	Xeon E5-2670 v2	10	20	2.5 GHz	3.3 GHz	25 MB	8 GT/s	2	115 W	1866MHz	vPro
	Xeon E5-2680 v2	10	20	2.8 GHz	3.6 GHz	25 MB	8 GT/s	2	115 W	1866MHz	vPro
	Xeon E5-2687W v2	8	16	3.4 GHz	4 GHz	25 MB	8 GT/s	2	150 W	1866MHz	Yes
	Xeon E5-2690 v2	10	20	3 GHz	3.6 GHz	25 MB	8 GT/s	2	130 W	1866MHz	vPro
	Xeon E5-2695 v2	12	24	2.4 GHz	3.2 GHz	30 MB	8 GT/s	2	115 W	1866MHz	vPro
	Xeon E5-2697 v2	12	24	2.7 GHz	3.5 GHz	30 MB	8 GT/s	2	130 W	1866MHz	vPro
	Xeon E5-1607 v2	4	4	3 GHz		10 MB			130 W	1600MHz	vPro
	Xeon E5-1620 v2	4	8	3.7 GHz	3.9 GHz	10 MB			130 W	1866MHz	vPro
	Xeon E5-1650 v2	6	12	3.5 GHz	3.9 GHz	12 MB			130 W	1866MHz	vPro
	Xeon E5-1660 v2	6	12	3.7 GHz	4 GHz	15 MB			130 W	1866MHz	vPro
	Notes: 1. ThinkStation D30 support two processors. When ordering two processors, they must be the same 2. When using Intel Xeon E5-1600 and E5-1600 v2 series processors, max CPU configuration is 1 3. Intel Xeon processor numbering system is an alpha numeric representation of product line, product family and version. An 'L' suffix will be used to identify a low power processor. More details please see <a href="http://www.intel.com/products/processor_number">http://www.intel.com/products/processor_number</a> 4. All information is provided by Intel and may be changed at any time without notice. The information herein is provided "as-is". Intel may update this information in non-scheduled. For latest information, please see <a href="http://ark.intel.com/products/family/59138/Intel-Xeon-Processor-E5-Family/server">http://ark.intel.com/products/family/59138/Intel-Xeon-Processor-E5-Family/server</a>										

# ThinkStation D30 Platform Specifications - II of IV

*Text in red shows that these features only apply to MT type 4223 and 4229 models, text in green shows that the features are supported on other models except MT type 4223 and 4229 models*

Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , sixteen 240-pin DIMM sockets (eight DIMM sockets per processor), 8-channel capable (4-channel per processor), 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)					
Additional memory disclaimers	<ul style="list-style-type: none"> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Over eight DIMMs requires dual processors</li> <li>Mixing of RDIMM and UDIMM is not supported</li> <li>Maximum memory capacity is also limited by operating system</li> <li>When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>					
Graphics adapters and GPU computing	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology, supports the following NVIDIA Quadro, NVS graphics adapters and Tesla GPU computing processors					
	Memory Size	CUDA Processor Cores	Display Connectors	Max. Displays	# of slots	Power
NVIDIA Quadro and NVS Graphics						
Quadro K6000	12GB	2880	1 dual-link DVI-I 1 dual-link DVI-D 2 DisplayPort	4	2	225W
Quadro K5000	4GB	1536	1 dual-link DVI-I 1 dual-link DVI-D 2 DisplayPort	4	2	122W
Quadro K4000	3GB	768	1 dual-link DVI-I 2 DisplayPort	4*	1	80W
Quadro K2000	2GB	384	1 dual-link DVI-I 2 DisplayPort	4*	1	51W
Quadro K2000D	2GB	384	1 dual-link DVI-I 1 dual-link DVI-D 1 mini DisplayPort	4*	1	51W
Quadro K600	1GB	192	1 dual-link DVI-I 1 DisplayPort	2	1	41W
Quadro 410	512MB	192	1 dual-link DVI-I 1 DisplayPort	2	1	37W
Quadro 6000	6GB	448	1 dual-link DVI-I 2 DisplayPort 1 Stereo	2	2	204W
Quadro 5000	2.5GB	352	1 dual-link DVI-I 2 DisplayPort, 1 Stereo	2	2	152W
Quadro 4000	2GB	256	1 dual-link DVI-I 2 DisplayPort 1 Stereo	2	1	142W
Quadro 2000	1GB	192	1 dual-link DVI-I 2 DisplayPort	2	1	62W
Quadro 2000D	1GB	192	2 dual-link DVI-I	2	1	62W
Quadro 600	1GB	96	1 dual-link DVI-I 1 DisplayPort	2	1	40W
NVS 510	2048 MB	192	4 mini DisplayPort (with 4 mini DP to DP dongles)	4	1	35W
NVS 315	1024MB	48	DMS59 to dual single-link DVI-I or dual DisplayPort	2	1	19.5W
NVS 310	512 MB	48	2 DisplayPort	2	1	19.5W
NVS 300	512 MB	16	DMS59 to dual single- link DVI-I	2	1	17.5W
NVIDIA Tesla GPU Computing Processors (as part of NVIDIA Maximus Platform)						
Tesla K20	5GB	2496				225W
Tesla C2075	6GB	448				225W

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

**Notes:**

- ThinkStation supports NVIDIA SLI Technology with selected NVIDIA Quadro graphics adapters, additional SLI cable is needed. For the latest Quadro SLI certified list on ThinkStation, please see [www.nvidia.com/object/quadro\\_sli\\_compatible\\_systems.html](http://www.nvidia.com/object/quadro_sli_compatible_systems.html)
- ThinkStation D30 support NVIDIA Maximus technology. Maximus technology combines the visualization and interactive design capability of NVIDIA Quadro graphics and the high performance computing power of NVIDIA Tesla GPU computing processors in a single workstation. For more information on the latest Maximus certifications for ThinkStation and how to build Maximus system, please see [www.nvidia.com/object/maximus.html](http://www.nvidia.com/object/maximus.html)
- CUDA Processor Cores cannot be compared between GPU generations due to several important architectural differences that exist between streaming multiprocessor designs.

Onboard drive controllers	<ul style="list-style-type: none"> <li>Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>Four SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>
Upgrade ROM for onboard drive controllers (optional)	<p>One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to:</p> <ul style="list-style-type: none"> <li>five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>
Discrete drive controller (optional)	<p>One the following, depending on model:</p> <p>LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support optional upgrade key for RAID 5 support</p> <p>LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 10 support</p>
Hard drive(s)	<p>Supports the following:</p> <p>3.5" SATA: SATA 6.0Gb/s, 7200 rpm, up to 4TB 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm, up to 1TB 3.5" SAS: SAS 6.0Gb/s, 15000 rpm, up to 600GB 2.5" SAS: SAS 6.0Gb/s, 15000 rpm, up to 300GB 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models, up to 300GB mSATA: mSATA Solid State Drive (SSD), SATA 6.0Gb/s, up to 128GB</p>
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface
Drive Bays	Three external 5.25" bays for opticals, five internal 3.5" bays for drives
Media reader (opt)	Optional 29-in-1 media card reader on selected models
Front ports	<p>MT type 4223 and 4229: <b>Two USB 2.0</b>, microphone (3.5mm), headphone (3.5mm)</p> <p>Others MT types: <b>Two USB 3.0</b>, microphone (3.5mm), headphone (3.5mm)</p>
Rear ports	Eight USB 2.0, two USB 3.0 (blue ports), one serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)
IEEE 1394 adptr (opt)	Optional FireWire PCIe adapter, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	Internal speaker for business audio
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black
Mouse	Optical Wheel Mouse (USB connector), black
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified
Security	<ul style="list-style-type: none"> <li>Security chip: <ul style="list-style-type: none"> <li>MT type 4223 and 4229: <b>Nuvoton NPCT421L</b> for TPM function, TCG 1.2-compliant</li> <li>Others MT types: <b>STMicroelectronics ST33TPM12LPC</b> for TPM function, TCG 1.2-compliant</li> </ul> </li> <li>Side cover lock (ships with two identical keys)</li> <li>Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>Power-on password</li> <li>Administrator password</li> <li>Boot sequence control</li> <li>Boot without keyboard, mouse, diskette</li> <li>Serial port I/O enable/disable</li> <li>USB 2.0 ports enable/disable individually</li> <li>USB 3.0 ports enable/disable concurrently</li> <li>Chassis intrusion switch (optional)</li> </ul>
Mechanical	<ul style="list-style-type: none"> <li>Raven black color; metal case</li> <li>8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>210mm W x 602mm D x 485mm H</li> <li>60.6 lb (27.5kg) max confi guration</li> <li>55-liter</li> </ul>
Expansion slots	<p>Slot 1: half-length, full-height, PCIe 3.0 x16 (x4 elec, near CPU)</p> <p>Slot 2: full-length, full-height, PCIe 3.0 x16* (for graphics adapter)</p> <p>Slot 3: full-length, full-height, 32-bit PCI 2.3</p> <p>Slot 4: full-length, full-height, PCIe 3.0 x16* (for graphics adapter)</p> <p>Slot 5: full-length, full-height, PCIe 2.0 x4</p> <p>Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>* Adapters &gt;75W use auxiliary power connector(s) from PSU</p>



Serviceability	<ul style="list-style-type: none"> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>
ISV certifications	Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
Environmental certifications	<p>GREENGUARD® certified                  RoHS-compliant                  EPEAT™ Gold rating</p>
Warranty	1 or 3-year limited warranty, parts and labor
ThinkVantage®	Supports ThinkVantage® technologies
Preloaded operating systems	<p><i>One the following, depending on model:</i></p> <ul style="list-style-type: none"> <li>• Windows® 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>
Preloaded applications (only some listed)	<p><i>For Windows 7 models:</i></p> <ul style="list-style-type: none"> <li>• Rescue and Recovery®</li> <li>• Norton® Internet Security (30 days of virus definitions)</li> <li>• Adobe® Reader®</li> <li>• Adobe Flash® Player</li> <li>• Microsoft® Office preloaded; purchase product key to activate</li> <li>• Corel® WinDVD® (DVD±RW model(s))</li> <li>• Ulead® DVD MovieFactory® (DVD±RW model(s))</li> </ul> <p><i>For Windows 8 models:</i></p> <ul style="list-style-type: none"> <li>• Evernote®</li> <li>• Norton Internet Security (30 days of virus definitions)</li> <li>• Norton Studio</li> <li>• Skype™</li> <li>• Microsoft Office 2013 preloaded; purchase product key to activate</li> <li>• Cyberlink Power2Go (DVD±RW model(s))</li> <li>• Cyberlink PowerProducer (DVD±RW model(s))</li> </ul>

# ThinkStation D30 (4354) - TopSeller (June 2013)

Product Specifications Reference (PSREF)

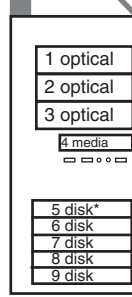
Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4354-38U	1xE5-2603 (4C/1.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL*, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-39U	1xE5-2609 (4C/2.4GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-41U	1xE5-2609 (4C/2.4GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-42U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-43U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

<sup>1</sup> Model in italics shows that this is a Global Model

<sup>2</sup> The SSD drives in italics must be plugged into red or orange SATA connectors

\* DL = Dual Link, SL = Single Link

- **3-year limited warranty**
- **With new MT type 4353/4354 and beyond, ThinkStation D30 introduces new updates to improve the functionality and usability:**
  - (These new features are not supported on 4223 and 4229 MT models)
    - Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
    - New TPM chip: STMicroelectronics ST33TPM12LPC
    - Two front USB 2.0 ports upgrade to USB3.0
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	Intel C602 Chipset	<b>Tower</b>  • Raven black color; metal case • 8.3"W x 23.7"D x 19.1"H (with handle) • 210mm W x 602mm D x 485mm H • 60.6 lb (27.5kg) max configuration • 55-liter • Removable handle on top front • Toolless side cover removal • Toolless disk and optical drive removal • Toolless adapter retention • Illuminated front icons • Rack shelf support or optional rail kit  Bay 1-3: 5.25", 1.6" high, external, for optical Bay 4: 3.5", 1" high, external, for media reader Bay 5-9: 3.5", 1" high, internal, for hard drive*  * Bay 5 is available on models with the SATA or SAS Hard Disk Drive enablement module installed.  Slot 1: half-length, full-height, PCIe 3.0 x16 (x4 elec, near CPU) Slot 2: full-length, full-height, PCIe 3.0 x16** Slot 3: full-length, full-height, 32-bit PCI 2.3 Slot 4: full-length, full-height, PCIe 3.0 x16** Slot 5: full-length, full-height, PCIe 2.0 x4 Slot 6: half-length, full-height, 32-bit PCI 2.3  ** Adapters >75W use auxiliary power connector(s) from PSU  <b>SECURITY</b> • Security chip (see information on left) • Side cover lock (ships with two identical keys) • Padlock loop (in rear for opt padlock; padlock prohibits side cover removal) • Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal) • Power-on/Administrator password • Boot sequence control • Boot without keyboard, mouse, diskette • Serial port I/O enable/disable • USB 2.0 ports enable/disable individually • USB 3.0 ports enable/disable concurrently • Chassis intrusion switch on selected model(s)  <b>Intel AMT</b> Intel Active Management Technology 8 supported  <b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>  <b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating  Supports ThinkVantage® technologies
Processor	Two LGA2011 sockets, supports up to two processors from Intel Xeon E5-2600 family, integrated 4-channel DDR3 memory controller per processor	
Memory	UDIMM or RDIMM, ECC, DDR3, 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)	
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> </ul>	
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>	
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>	
Discrete drive controller (optional)	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 10 support	
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA SSD, SATA 6.0Gb/s	
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	
Media reader (opt)	Optional media card reader on selected models	
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574	
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	
Mouse	Optical Wheel Mouse (USB connector), black	
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	
Preloaded operating systems (OS)	One the following, depending on model: <ul style="list-style-type: none"> <li>• Windows 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>	

See footnotes for important warranty information  
 Model(s) announced June 18, 2013

© Lenovo  
 (HOL1-3) June 2013

# ThinkStation D30 (4354) - TopSeller (June 2013) - II

Product Specifications Reference (PSREF)

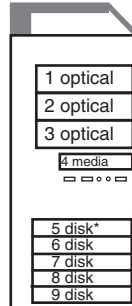
Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4354-44U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-45U	1xE5-2650 (8C/2GHz/20MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-46U	1xE5-2603 (4C/1.8GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL*, 1xDP, 41W)	No	Switch	Win8 Pro64
4354-47U	1xE5-2609 (4C/2.4GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model

<sup>2</sup> The SSD drives in italics must be plugged into red or orange SATA connectors

\* DL = Dual Link, SL = Single Link

- **3-year limited warranty**
- **With new MT type 4353/4354 and beyond, ThinkStation D30 introduces new updates to improve the functionality and usability:**
  - (These new features are not supported on 4223 and 4229 MT models)
    - Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
    - New TPM chip: STMicroelectronics ST33TPM12LPC
    - Two front USB 2.0 ports upgrade to USB3.0
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		<b>Tower</b>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>
Processor	Two LGA2011 sockets, supports up to two processors from <b>Intel Xeon E5-2600</b> family, integrated 4-channel DDR3 memory controller per processor		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (optional)	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 10 support		
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black		
Mouse	Optical Wheel Mouse (USB connector), black		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
Preloaded operating systems (OS)	One the following, depending on model: <ul style="list-style-type: none"> <li>• Windows 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>		

Bay 1-3: 5.25", 1.6" high, external, for optical  
 Bay 4: 3.5", 1" high, external, for media reader  
 Bay 5-9: 3.5", 1" high, internal, for hard drive\*

\* Bay 5 is available on models with the SATA or SAS Hard Disk Drive enablement module installed.

Slot 1: half-length, full-height, PCIe 3.0 x16 (x4 elec, near CPU)  
 Slot 2: full-length, full-height, PCIe 3.0 x16\*\*  
 Slot 3: full-length, full-height, 32-bit PCI 2.3  
 Slot 4: full-length, full-height, PCIe 3.0 x16\*\*  
 Slot 5: full-length, full-height, PCIe 2.0 x4  
 Slot 6: half-length, full-height, 32-bit PCI 2.3

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

### SECURITY

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

### Intel AMT

Intel Active Management Technology 8 supported

### ISV certifications

Please visit [www.lenovo.com/support/ISV](http://www.lenovo.com/support/ISV)

### Environmental certifications

GREENGUARD® certified  
 RoHS-compliant  
 EPEAT™ Gold rating

Supports ThinkVantage® technologies

See footnotes for important warranty information  
 Model(s) announced June 18, 2013

# ThinkStation D30 (4354) - TopSeller (June 2013) - III

Product Specifications Reference (PSREF)

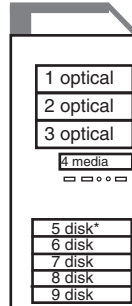
Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4354-48U	1xE5-2609 (4C/2.4GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL*, 2xDP, 51W)	No	Switch	Win8 Pro64
4354-49U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64
4354-51U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64
4354-52U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	29-in-1	No	No	Switch	Win8 Pro64

<sup>1</sup> Model in *italics* shows that this is a Global Model

<sup>2</sup> The SSD drives in *italics* must be plugged into red or orange SATA connectors

\* DL = Dual Link, SL = Single Link

- **3-year limited warranty**
- **With new MT type 4353/4354 and beyond, ThinkStation D30 introduces new updates to improve the functionality and usability:**
  - (These new features are not supported on 4223 and 4229 MT models)
    - Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
    - New TPM chip: STMicroelectronics ST33TPM12LPC
    - Two front USB 2.0 ports upgrade to USB3.0
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		<b>Tower</b>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>
Processor	Two LGA2011 sockets, supports up to two processors from <b>Intel Xeon E5-2600</b> family, integrated 4-channel DDR3 memory controller per processor		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (optional)	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 10 support		
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black		
Mouse	Optical Wheel Mouse (USB connector), black		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
Preloaded operating systems (OS)	One the following, depending on model: <ul style="list-style-type: none"> <li>• Windows 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>		

See footnotes for important warranty information  
Model(s) announced June 18, 2013

© Lenovo  
(HOL3-3) June 2013

Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4354-53U	1xE5-2650 (8C/2GHz/20MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	No	No	Switch	Win8 Pro64
4354-73U	1xE5-2650 (8C/2GHz/20MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x180GB 2.5" SSD	DVD±RW	29-in-1	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-74U	1xE5-2650 (8C/2GHz/20MB/1600)	1600MHz UDIMM	4GBx1	No	No	No	1x180GB 2.5" SSD	DVD±RW	29-in-1	No	No	Switch	Win8 Pro64

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

- **3-year limited warranty**
- **With new MT type 4353/4354 and beyond, ThinkStation D30 introduces new updates to improve the functionality and usability:** (These new features are not supported on 4223 and 4229 MT models)
  - Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
  - New TPM chip: STMicroelectronics ST33TPM12LPC
  - Two front USB 2.0 ports upgrade to USB3.0
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>	<p><b>Tower</b></p> <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> <p>Bay 1-3: 5.25", 1.6" high, external, for optical                      Bay 4: 3.5", 1" high, external, for media reader                      Bay 5-9: 3.5", 1" high, internal, for hard drive*</p> <p>* Bay 5 is available on models with the SATA or SAS Hard Disk Drive enablement module installed.</p> <p>Slot 1: half-length, full-height, PCIe 3.0 x16 (x4 elec, near CPU)                      Slot 2: full-length, full-height, PCIe 3.0 x16**                      Slot 3: full-length, full-height, 32-bit PCI 2.3                      Slot 4: full-length, full-height, PCIe 3.0 x16**                      Slot 5: full-length, full-height, PCIe 2.0 x4                      Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>** Adapters &gt;75W use auxiliary power connector(s) from PSU</p> <p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul> <p><b>Intel AMT</b></p> <p>Intel Active Management Technology 8 supported</p> <p><b>ISV certifications</b></p> <p>Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p> <p><b>Environmental certifications</b></p> <p>GREENGUARD® certified                      RoHS-compliant                      EPEAT™ Gold rating</p> <p>Supports ThinkVantage® technologies</p>
Processor	Two LGA2011 sockets, supports up to two processors from <b>Intel Xeon E5-2600</b> family, integrated 4-channel DDR3 memory controller per processor	
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)	
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> </ul>	
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>	
Upgrade ROM for onboard drive controllers (optional)	<p>One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to:</p> <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>	
Discrete drive controller (optional)	<p>One the following, depending on model:</p> <p>LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support optional upgrade key for RAID 5 support</p> <p>LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 10 support</p>	
Hard drive(s)	<p>3.5" SATA: SATA 6.0Gb/s, 7200 rpm</p> <p>2.5" SATA: SATA 6.0Gb/s, 10000 rpm</p> <p>3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm</p> <p>2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s</p> <p>mSATA: OPAL-capable on some models mSATA SSD, SATA 6.0Gb/s</p>	
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	
Media reader (opt)	Optional 29-in-1 media card reader on selected models	
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574	
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	
Mouse	Optical Wheel Mouse (USB connector), black	
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified	
Preloaded operating systems (OS)	<p>One the following, depending on model:</p> <ul style="list-style-type: none"> <li>• Windows 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>	

See footnotes for important warranty information  
 Model(s) announced June 18, 2013

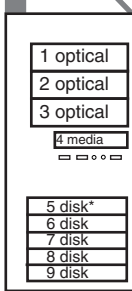
# ThinkStation D30 (4354) - TopSeller (September 2013)

Product Specifications Reference (PSREF)

Type-model*	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4354-C6U	1xE5-2603 v2 (4C/1.8GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-C7U	1xE5-2609 v2 (4C/2.5GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-C8U	1xE5-2609 v2 (4C/2.5GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-C9U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-D1U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-D2U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	8GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-D3U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz RDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)

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

- 3-year limited warranty
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		<b>Tower</b>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (opt)	None		
Hard drive(s)	3.5" SATA:	SATA 6.0Gb/s, 7200 rpm	
	3.5" Hybrid:	SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash	
	2.5" SATA:	SATA 6.0Gb/s, 10000 rpm	
	3.5" SAS/2.5" SAS:	SAS 6.0Gb/s, 15000 rpm	
	2.5" SSD:	Solid State Drive (SSD), SATA 6.0Gb/s	
	mSATA:	OPAL-capable on some models mSATA SSD, SATA 6.0Gb/s	
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>			
<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>			
<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies			

See footnotes for important warranty information  
Model(s) announced September 10, 2013

© Lenovo  
(4354-5) September 2013

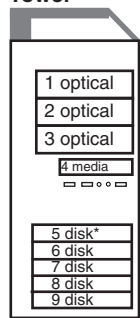
# ThinkStation D30 (4354) - TopSeller (September 2013) - II

Product Specifications Reference (PSREF)

Type-model*	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adpтр	Chassis intrusion switch	Preloaded OS
4354-D4U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz RDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-D5U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz RDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-D6U	1xE5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-D7U	1xE5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-D8U	1xE5-2603 v2 (4C/1.8GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64
4354-D9U	1xE5-2609 v2 (4C/2.5GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64
4354-E1U	1xE5-2609 v2 (4C/2.5GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64

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

- 3-year limited warranty
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	Intel C602 Chipset		<b>Tower</b>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	UDIMM or RDIMM, ECC, DDR3, 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx8)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (opt)	None		
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adpтр (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified		
			<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>
			<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>
			<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies

See footnotes for important warranty information  
Model(s) announced September 10, 2013

© Lenovo  
(4354-6) September 2013

Type-model*	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptry	Chassis intrusion switch	Preloaded OS
4354-E2U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64
4354-E3U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64
4354-E4U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	8GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	Media	No	No	Switch	Win8 Pro64
4354-E5U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz RDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64
4354-E6U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz RDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win8 Pro64
4354-E7U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz RDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win8 Pro64
4354-E8U	1xE5-1620 v2 (4C/3.7GHz/10MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win8 Pro64
4354-E9U	1xE5-1650 v2 (6C/3.5GHz/12MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win8 Pro64

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

- 3-year limited warranty
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	Intel C602 Chipset		<p><b>Tower</b></p> <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> <p>Bay 1-3: 5.25", 1.6" high, external, for optical                      Bay 4: 3.5", 1" high, external, for media reader                      Bay 5-9: 3.5", 1" high, internal, for hard drive*</p> <p>Slot 1: half-length, full-height, PCIe 3.0 x16 (x4 elec, near CPU)                      Slot 2: full-length, full-height, PCIe 3.0 x16**                      Slot 3: full-length, full-height, 32-bit PCI 2.3                      Slot 4: full-length, full-height, PCIe 3.0 x16**                      Slot 5: full-length, full-height, PCIe 2.0 x4                      Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>** Adapters &gt;75W use auxiliary power connector(s) from PSU</p>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	UDIMM or RDIMM, ECC, DDR3, 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (opt)	None		
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptry (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified		
<p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>			
<p><b>ISV certifications</b></p> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>			
<p><b>Environmental certifications</b></p> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies			

See footnotes for important warranty information  
 Model(s) announced September 10, 2013

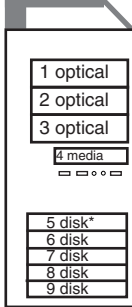


# ThinkStation D30 (4354) - TopSeller (October 2013)

Type-model*	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4354-F1U	2xE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1600MHz RDIMM	8GBx2	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-F2U	2xE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1600MHz RDIMM	8GBx2	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win8 Pro64
4354-F3U	2xE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1600MHz RDIMM	8GBx2	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win8 Pro64
4354-F4U	2xE5-2620 v2 6C/2.1GHz/15MB/1600MHz	1600MHz RDIMM	8GBx2	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-F5U	2xE5-2650 v2 8C/2.6GHz/20MB/1866MHz	1600MHz RDIMM	8GBx2	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-F6U	2xE5-2650 v2 8C/2.6GHz/20MB/1866MHz	1600MHz RDIMM	8GBx2	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win8 Pro64
4354-F7U	2xE5-2650 v2 8C/2.6GHz/20MB/1866MHz	1600MHz RDIMM	8GBx2	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win8 Pro64
4354-F8U	2xE5-2650 v2 8C/2.6GHz/20MB/1866MHz	1600MHz RDIMM	8GBx2	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

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

- 3-year limited warranty
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	Intel C602 Chipset		<b>Tower</b>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	UDIMM or RDIMM, ECC, DDR3, 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (opt)	None		
Hard drive(s)	3.5" SATA:	SATA 6.0Gb/s, 7200 rpm	
	3.5" Hybrid:	SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash	
	2.5" SATA:	SATA 6.0Gb/s, 10000 rpm	
	3.5" SAS/2.5" SAS:	SAS 6.0Gb/s, 15000 rpm	
	2.5" SSD:	Solid State Drive (SSD), SATA 6.0Gb/s	
	mSATA:	OPAL-capable on some models mSATA SSD, SATA 6.0Gb/s	
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified		
	<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>		
	<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>		
	<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies		

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

# ThinkStation D30 (4354) - TopSeller (October 2013) - II

Product Specifications Reference (PSREF)

Type-model*	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4354-F9U	2xE5-2637 v2 4C/3.5GHz/15MB/1866MHz	1600MHz RDIMM	8GBx2	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-G1U	2xE5-2637 v2 4C/3.5GHz/15MB/1866MHz	1600MHz RDIMM	8GBx2	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win8 Pro64
4354-G2U	2xE5-2643 v2 6C/3.5GHz/25MB/1866MHz	1600MHz RDIMM	8GBx2	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4354-G3U	2xE5-2643 v2 6C/3.5GHz/25MB/1866MHz	1600MHz RDIMM	8GBx2	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win8 Pro64

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

- 3-year limited warranty
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		<b>Tower</b>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (opt)	None		
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>			
<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>			
<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies			

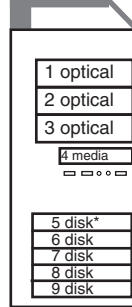
See footnotes for important warranty information  
Model(s) announced October 15, 2013

© Lenovo  
(4354-9) November 2013

Type-model*	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4354-H1U	1xXeon E5-2603 v2 4C/1.8GHz/10MB/1333MHz	1866MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4354-H2U	1xXeon E5-2609 v2 4C/2.5GHz/10MB/1333MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	Media	1xQuadro K600 1GB/1xDVI-I DL/1xDP/41W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4354-H3U	1xXeon E5-2609 v2 4C/2.5GHz/10MB/1333MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4354-H4U	1xXeon E5-2620 v2 6C/2.1GHz/15MB/1600MHz	1866MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA(Hybrid)	DVD±RW	Media	1xQuadro K2000 2GB/1xDVI-I DL/2xDP/51W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4354-H5U	1xXeon E5-2620 v2 6C/2.1GHz/15MB/1600MHz	1866MHz UDIMM	8GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4354-H6U	1xXeon E5-2620 v2 6C/2.1GHz/15MB/1600MHz	1866MHz UDIMM	8GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4354-H7U	1xXeon E5-2650 v2 8C/2.6GHz/20MB/1866MHz	1866MHz RDIMM	8GBx1	No	No	1x2TB 3.5" SATA(Hybrid)	DVD±RW	Media	1xQuadro K4000 3GB/1xDVI-I DL/2xDP/80W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)

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

- 3-year limited warranty
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

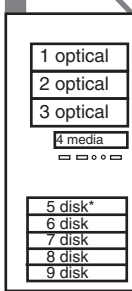
Chipset	Intel C602 Chipset		<b>Tower</b>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	UDIMM or RDIMM, ECC, DDR3, 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (opt)	None		
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified		
<b>SECURITY</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>			
<b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>			
<b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies			

See footnotes for important warranty information  
 Model(s) announced April 1, 2014

Type-model*	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4354-H8U	1xXeon E5-2650 v2 8C/2.6GHz/20MB/1866MHz	1866MHz RDIMM	8GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4354-H9U	1xXeon E5-2650 v2 8C/2.6GHz/20MB/1866MHz	1866MHz RDIMM	8GBx1	No	No	1x256GB 2.5" SSD(OPAL)	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4354-J1U	2xXeon E5-2690 v2 10C/3GHz/25MB/1866MHz	1866MHz RDIMM	8GBx8	No	No	1x256GB 2.5" SSD(OPAL)	DVD±RW	Media	1xQuadro K5000 4GB/1xDVI-I DL/ 1xDVI-D DL/ 2xDP/122W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)

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

- 3-year limited warranty
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

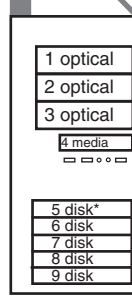
Chipset	<b>Intel C602 Chipset</b>		<p><b>Tower</b></p>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> <p>Bay 1-3: 5.25", 1.6" high, external, for optical Bay 4: 3.5", 1" high, external, for media reader Bay 5-9: 3.5", 1" high, internal, for hard drive*</p> <p>Slot 1: half-length, full-height, PCIe 3.0 x16 (x4 elec, near CPU) Slot 2: full-length, full-height, PCIe 3.0 x16** Slot 3: full-length, full-height, 32-bit PCI 2.3 Slot 4: full-length, full-height, PCIe 3.0 x16** Slot 5: full-length, full-height, PCIe 2.0 x4 Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>** Adapters &gt;75W use auxiliary power connector(s) from PSU</p>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	<p>One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to:</p> <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (opt)	None		
Hard drive(s)	<p>3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s</p>		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
<p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>			
<p><b>ISV certifications</b></p> <p>Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p>			
<p><b>Environmental certifications</b></p> <p>GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating</p> <p>Supports ThinkVantage® technologies</p>			

See footnotes for important warranty information  
Model(s) announced April 1, 2014

Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4353-23U	1xE5-2609 (4C/2.4GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL*, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4353-24U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4353-25U	1xE5-2630 (6C/2.3GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4353-26U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4353-27U	1xE5-2609 (4C/2.4GHz/10MB/1066)	1600MHz UDIMM	4GBx1	No	No	No	1x500GB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64

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

- **3-year limited warranty**
- **With new MT type 4353/4354 and beyond, ThinkStation D30 introduces new updates to improve the functionality and usability:**  
 (These new features are not supported on 4223 and 4229 MT models)
  - Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
  - New TPM chip: STMicroelectronics ST33TPM12LPC
  - Two front USB 2.0 ports upgrade to USB3.0
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	Intel C602 Chipset	<b>Tower</b>  • Raven black color; metal case • 8.3"W x 23.7"D x 19.1"H (with handle) • 210mm W x 602mm D x 485mm H • 60.6 lb (27.5kg) max configuration • 55-liter • Removable handle on top front • Toolless side cover removal • Toolless disk and optical drive removal • Toolless adapter retention • Illuminated front icons • Rack shelf support or optional rail kit  Bay 1-3: 5.25", 1.6" high, external, for optical Bay 4: 3.5", 1" high, external, for media reader Bay 5-9: 3.5", 1" high, internal, for hard drive*  * Bay 5 is available on models with the SATA or SAS Hard Disk Drive enablement module installed.  Slot 1: half-length, full-height, PCIe 3.0 x16 (x4 elec, near CPU) Slot 2: full-length, full-height, PCIe 3.0 x16** Slot 3: full-length, full-height, 32-bit PCI 2.3 Slot 4: full-length, full-height, PCIe 3.0 x16** Slot 5: full-length, full-height, PCIe 2.0 x4 Slot 6: half-length, full-height, 32-bit PCI 2.3  ** Adapters >75W use auxiliary power connector(s) from PSU  <b>SECURITY</b> • Security chip (see information on left) • Side cover lock (ships with two identical keys) • Padlock loop (in rear for opt padlock; padlock prohibits side cover removal) • Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal) • Power-on/Administrator password • Boot sequence control • Boot without keyboard, mouse, diskette • Serial port I/O enable/disable • USB 2.0 ports enable/disable individually • USB 3.0 ports enable/disable concurrently • Chassis intrusion switch on selected model(s)  <b>Intel AMT</b> Intel Active Management Technology 8 supported  <b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>  <b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating  Supports ThinkVantage® technologies
Processor	Two LGA2011 sockets, supports up to two processors from Intel Xeon E5-2600 family, integrated 4-channel DDR3 memory controller per processor	
Memory	UDIMM or RDIMM, ECC, DDR3, 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)	
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> </ul>	
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology	
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>	
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>	
Discrete drive controller (optional)	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 10 support	
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA SSD, SATA 6.0Gb/s	
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface	
Media reader (opt)	Optional 29-in-1 media card reader on selected models	
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)	
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)	
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574	
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black	
Mouse	Optical Wheel Mouse (USB connector), black	
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified	
Preloaded operating systems (OS)	One the following, depending on model: <ul style="list-style-type: none"> <li>• Windows 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>	

See footnotes for important warranty information  
 Model(s) announced June 18, 2013

Type-model <sup>1</sup>	Processor(s)	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Discrete drive controller	Pre-conf RAID	Hard drive(s) <sup>2</sup>	Optical	Media reader	Graphics adapter(s) and GPU computing	1394 adptr	Chassis intrusion switch	Preloaded OS
4353-28U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL*, 2xDP, 51W)	No	Switch	Win8 Pro64
4353-29U	1xE5-2630 (6C/2.3GHz/15MB/1333)	1600MHz UDIMM	4GBx1	No	No	No	1x1TB 3.5" SATA	DVD±RW	29-in-1	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64
4353-31U	1xE5-2620 (6C/2GHz/15MB/1333)	1600MHz UDIMM	4GBx1	SAS	No	No	1x300GB 3.5" SAS	DVD±RW	29-in-1	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64

<sup>1</sup> Model in italics shows that this is a Global Model

<sup>2</sup> The SSD drives in italics must be plugged into red or orange SATA connectors

\* DL = Dual Link, SL = Single Link

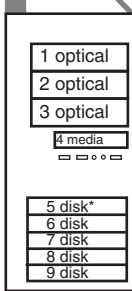
- **3-year limited warranty**
- **With new MT type 4353/4354 and beyond, ThinkStation D30 introduces new updates to improve the functionality and usability:**  
*(These new features are not supported on 4223 and 4229 MT models)*
  - Intel AMT: upgrades to Intel AMT 8 from Intel AMT 7
  - New TPM chip: STMicroelectronics ST33TPM12LPC
  - Two front USB 2.0 ports upgrade to USB3.0
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		<p><b>Tower</b></p> <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> <p>Bay 1-3: 5.25", 1.6" high, external, for optical                      Bay 4: 3.5", 1" high, external, for media reader                      Bay 5-9: 3.5", 1" high, internal, for hard drive*</p> <p>* Bay 5 is available on models with the SATA or SAS Hard Disk Drive enablement module installed.</p> <p>Slot 1: half-length, full-height, PCIe 3.0 x16 (x4 elec, near CPU)                      Slot 2: full-length, full-height, PCIe 3.0 x16**                      Slot 3: full-length, full-height, 32-bit PCI 2.3                      Slot 4: full-length, full-height, PCIe 3.0 x16**                      Slot 5: full-length, full-height, PCIe 2.0 x4                      Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>** Adapters &gt;75W use auxiliary power connector(s) from PSU</p> <p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul> <p><b>Intel AMT</b></p> <p>Intel Active Management Technology 8 supported</p> <p><b>ISV certifications</b></p> <p>Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p> <p><b>Environmental certifications</b></p> <p>GREENGUARD® certified                      RoHS-compliant                      EPEAT™ Gold rating</p> <p>Supports ThinkVantage® technologies</p>
Processor	Two LGA2011 sockets, supports up to two processors from <b>Intel Xeon E5-2600</b> family, integrated 4-channel DDR3 memory controller per processor		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (optional)	One the following, depending on model: LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 10 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5, 10 support		
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional 29-in-1 media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black		
Mouse	Optical Wheel Mouse (USB connector), black		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
Preloaded operating systems (OS)	One the following, depending on model: <ul style="list-style-type: none"> <li>• Windows 7 Professional 64</li> <li>• Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</li> <li>• Windows 8 Pro 64-bit</li> </ul>		

Type-model*	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4353-C1U	1xE5-2609 v2 (4C/2.5GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4353-C2U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4353-C3U	1xE5-2630 v2 (6C/2.6GHz/15MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4353-C4U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	8GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win7 Pro64 (Downgrade from Win8)
4353-C5U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4353-C6U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)
4353-C7U	1xE5-2680 v2 (10C/2.8GHz/25MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

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

- 3-year limited warranty
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

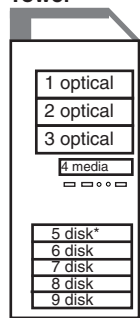
Chipset	Intel C602 Chipset		<p><b>Tower</b></p>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> <p>Bay 1-3: 5.25", 1.6" high, external, for optical                      Bay 4: 3.5", 1" high, external, for media reader                      Bay 5-9: 3.5", 1" high, internal, for hard drive**</p> <p>Slot 1: half-length, full-height, PCIe 3.0 x16 (x4 elec, near CPU)                      Slot 2: full-length, full-height, PCIe 3.0 x16**                      Slot 3: full-length, full-height, 32-bit PCI 2.3                      Slot 4: full-length, full-height, PCIe 3.0 x16**                      Slot 5: full-length, full-height, PCIe 2.0 x4                      Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>** Adapters &gt;75W use auxiliary power connector(s) from PSU</p>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	UDIMM or RDIMM, ECC, DDR3, 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (opt)	None		
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified		
<p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul> <p><b>ISV certifications</b>                      Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p> <p><b>Environmental certifications</b>                      GREENGUARD® certified                      RoHS-compliant                      EPEAT™ Gold rating</p> <p>Supports ThinkVantage® technologies</p>			

See footnotes for important warranty information  
 Model(s) announced September 10, 2013

Type-model*	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4353-C8U	1xE5-2609 v2 (4C/2.5GHz/10MB/1333)	1600MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro K600 (1GB, 1xDVI-I DL, 1xDP, 41W)	No	Switch	Win8 Pro64
4353-C9U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64
4353-D1U	1xE5-2630 v2 (6C/2.6GHz/15MB/1600)	1600MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA Hybrid	DVD±RW	Media	1xQuadro K4000 (3GB, 1xDVI-I DL, 2xDP, 80W)	No	Switch	Win8 Pro64
4353-D2U	1xE5-2620 v2 (6C/2.1GHz/15MB/1600)	1600MHz UDIMM	8GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	Media	1xQuadro K2000 (2GB, 1xDVI-I DL, 2xDP, 51W)	No	Switch	Win8 Pro64
4353-D3U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA Hybrid	DVD±RW	Media	No	No	Switch	Win8 Pro64
4353-D4U	1xE5-2650 v2 (8C/2.6GHz/20MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win8 Pro64
4353-D5U	1xE5-2680 v2 (10C/2.8GHz/25MB/1866)	1600MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD - OPAL	DVD±RW	Media	No	No	Switch	Win8 Pro64

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

- 3-year limited warranty
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	Intel C602 Chipset		<p><b>Tower</b></p>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	UDIMM or RDIMM, ECC, DDR3, 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	<p>One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to:</p> <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (opt)	None		
Hard drive(s)	<p>3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s</p>		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, Climate Savers® Computing Gold, 80 PLUS® Gold qualified		
<p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>			
<p><b>ISV certifications</b></p> <p>Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p>			
<p><b>Environmental certifications</b></p> <p>GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating</p> <p>Supports ThinkVantage® technologies</p>			

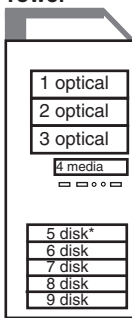
See footnotes for important warranty information  
Model(s) announced September 10, 2013



Type-model*	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4353-E3U	1xE5-2640 v2 8C/2GHz/20MB/1600MHz	1600MHz RDIMM	4GBx2	No	No	1x2TB 3.5" SATA	DVD±RW	Media	No	No	Switch	Win7 Pro64 (Downgrade from Win8)

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

- 3-year limited warranty
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

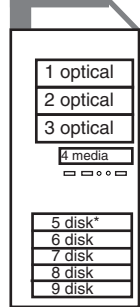
Chipset	<b>Intel C602 Chipset</b>		<p><b>Tower</b></p>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> <p>Bay 1-3: 5.25", 1.6" high, external, for optical                      Bay 4: 3.5", 1" high, external, for media reader                      Bay 5-9: 3.5", 1" high, internal, for hard drive*</p> <p>Slot 1: half-length, full-height, PCIe 3.0 x16 (x4 elec, near CPU)                      Slot 2: full-length, full-height, PCIe 3.0 x16**                      Slot 3: full-length, full-height, 32-bit PCI 2.3                      Slot 4: full-length, full-height, PCIe 3.0 x16**                      Slot 5: full-length, full-height, PCIe 2.0 x4                      Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>** Adapters &gt;75W use auxiliary power connector(s) from PSU</p> <p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul> <p><b>ISV certifications</b></p> <p>Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p> <p><b>Environmental certifications</b></p> <p>GREENGUARD® certified                      RoHS-compliant                      EPEAT™ Gold rating</p> <p>Supports ThinkVantage® technologies</p>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (opt)	None		
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		

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

Type-model*	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
<i>4353-G4U</i>	2xXeon E5-2670 v2 10C/2.5GHz/25MB/1866MHz	1866MHz UDIMM	4GBx4	SAS	No	1TB 3.5" SATA +300GB 2.5" SAS	DVD±RW	Media	1xQuadro K2000 2GB/1xDVI-I DL/ 2xDP/51W	No	Switch	Win7 Pro64
<i>4353-G5U</i>	2xXeon E5-2643 v2 6C/3.5GHz/25MB/1866MHz	1866MHz UDIMM	4GBx4	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro K4000 3GB/1xDVI-I DL/ 2xDP/80W	No	Switch	Win7 Pro64
4353-J8U	1xXeon E5-2609 v2 4C/2.5GHz/10MB/1333MHz	1866MHz UDIMM	4GBx1	No	No	1x500GB 3.5" SATA	DVD±RW	Media	1xQuadro K600 1GB/1xDVI-I DL/ 1xDP/41W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4353-J9U	1xXeon E5-2620 v2 6C/2.1GHz/15MB/1600MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	Media	1xQuadro K2000 2GB/1xDVI-I DL/ 2xDP/51W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4353-K1U	1xXeon E5-2630 v2 6C/2.6GHz/15MB/1600MHz	1866MHz UDIMM	4GBx1	No	No	1x1TB 3.5" SATA(Hybrid)	DVD±RW	Media	1xQuadro K4000 3GB/1xDVI-I DL/ 2xDP/80W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4353-K2U	1xXeon E5-2620 v2 6C/2.1GHz/15MB/1600MHz	1866MHz UDIMM	8GBx1	SAS	No	1x300GB 3.5" SAS	DVD±RW	Media	1xQuadro K2000 2GB/1xDVI-I DL/ 2xDP/51W	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4353-K3U	1xXeon E5-2650 v2 8C/2.6GHz/20MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x2TB 3.5" SATA(Hybrid)	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)

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

- 3-year limited warranty
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

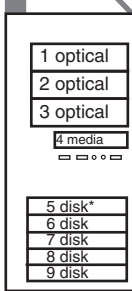
Chipset	<b>Intel C602 Chipset</b>		<p><b>Tower</b></p>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> <p>Bay 1-3: 5.25", 1.6" high, external, for optical                      Bay 4: 3.5", 1" high, external, for media reader                      Bay 5-9: 3.5", 1" high, internal, for hard drive*</p> <p>Slot 1: half-length, full-height, PCIe 3.0 x16 (x4 elec, near CPU)                      Slot 2: full-length, full-height, PCIe 3.0 x16**                      Slot 3: full-length, full-height, 32-bit PCI 2.3                      Slot 4: full-length, full-height, PCIe 3.0 x16**                      Slot 5: full-length, full-height, PCIe 2.0 x4                      Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>** Adapters &gt;75W use auxiliary power connector(s) from PSU</p> <p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul> <p><b>ISV certifications</b></p> <p>Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p> <p><b>Environmental certifications</b></p> <p>GREENGUARD® certified                      RoHS-compliant                      EPEAT™ Gold rating</p> <p>Supports ThinkVantage® technologies</p>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to: <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (opt)	None		
Hard drive(s)	3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		

See footnotes for important warranty information  
 Model(s) announced April 1, 2014

Type-model*	Processor(s) - Xeon E5 Family	Memory (MHz/type)	Memory DIMMs	Upgrade ROM for onboard drive controller	Pre-conf RAID	Hard drive(s)**	Optical	29-in-1 Media reader	Graphics adapter(s) and GPU computing***	1394 adptr	Chassis intrusion switch	Preloaded OS
4353-K4U	1xXeon E5-2650 v2 8C/2.6GHz/20MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD(OPAL)	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)
4353-K5U	1xXeon E5-2680 v2 10C/2.8GHz/25MB/1866MHz	1866MHz UDIMM	8GBx1	No	No	1x256GB 2.5" SSD(OPAL)	DVD±RW	Media	Open	No	Switch	Win7 Pro64 (Downgrade from Win8.1)

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

- 3-year limited warranty
- For ThinkStation D30 platform specifications, please see [ThinkStation D30 Platform Specifications sheet](#)

Chipset	<b>Intel C602 Chipset</b>		<p><b>Tower</b></p>  <ul style="list-style-type: none"> <li>• Raven black color; metal case</li> <li>• 8.3"W x 23.7"D x 19.1"H (with handle)</li> <li>• 210mm W x 602mm D x 485mm H</li> <li>• 60.6 lb (27.5kg) max configuration</li> <li>• 55-liter</li> <li>• Removable handle on top front</li> <li>• Toolless side cover removal</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> <li>• Illuminated front icons</li> <li>• Rack shelf support or optional rail kit</li> </ul> <p>Bay 1-3: 5.25", 1.6" high, external, for optical Bay 4: 3.5", 1" high, external, for media reader Bay 5-9: 3.5", 1" high, internal, for hard drive*</p> <p>Slot 1: half-length, full-height, PCIe 3.0 x16 (x4 elec, near CPU) Slot 2: full-length, full-height, PCIe 3.0 x16** Slot 3: full-length, full-height, 32-bit PCI 2.3 Slot 4: full-length, full-height, PCIe 3.0 x16** Slot 5: full-length, full-height, PCIe 2.0 x4 Slot 6: half-length, full-height, 32-bit PCI 2.3</p> <p>** Adapters &gt;75W use auxiliary power connector(s) from PSU</p>
Intel AMT	Intel Active Management Technology 8 supported		
Processor	Two LGA2011 sockets, integrated 4-channel DDR3 memory controller per processor, only one E5-1600 or E5-1600 v2 processor are supported		
Memory	<b>UDIMM or RDIMM, ECC, DDR3</b> , 8-channel capable (4-channel per processor), sixteen 240-pin DIMM sockets, 128GB max (UDIMM, 8GBx16)/512GB max (RDIMM, 32GBx16)		
Additional memory disclaimers	<ul style="list-style-type: none"> <li>• Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>• Over eight DIMMs requires dual processors</li> <li>• Mixing of RDIMM and UDIMM is not supported</li> <li>• Maximum memory capacity is also limited by operating system</li> <li>• When using processor from Xeon E5-1600 and E5-1600 v2 series, only eight DIMM sockets for CPU1 are available and max memory capacity is 64GB (UDIMM, 8GBx8)/256GB (RDIMM, 32GBx8)</li> </ul>		
Graphics	Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors, supports NVIDIA SLI technology, NVIDIA Maximus technology		
Onboard drive controllers	<ul style="list-style-type: none"> <li>• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) controller in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5, 10 support</li> <li>• Four SATA connectors via integrated Storage Controller Unit (SCU) controller in chipset, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> </ul>		
Upgrade ROM for onboard drive controllers (optional)	<p>One of the following upgrade ROM is supported, the option upgrades the four SATA connectors on SCU controller to:</p> <ul style="list-style-type: none"> <li>• five SATA connectors with optional SATA HDD Enablement Module, SATA 3.0Gb/s, RAID 0, 1, 5, 10 support</li> <li>• five SATA/SAS connectors with optional SAS HDD Enablement Module, SATA 3.0Gb/s, SAS 3.0 Gb/s, RAID 0, 1, 10 support</li> </ul>		
Discrete drive controller (opt)	None		
Hard drive(s)	<p>3.5" SATA: SATA 6.0Gb/s, 7200 rpm 3.5" Hybrid: SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash 2.5" SATA: SATA 6.0Gb/s, 10000 rpm 3.5" SAS/2.5" SAS: SAS 6.0Gb/s, 15000 rpm 2.5" SSD: Solid State Drive (SSD), SATA 6.0Gb/s OPAL-capable on some models mSATA: mSATA SSD, SATA 6.0Gb/s</p>		
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface		
Media reader (opt)	Optional media card reader on selected models		
Front ports	Two USB 3.0, microphone (3.5mm), headphone (3.5mm)		
Rear ports	Eight USB 2.0, two USB 3.0 (blue), serial (9-pin), two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)		
IEEE 1394 adptr (optional)	Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, one 6-pin port on rear, one 6-pin port on front		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Onboard Ethernet	Dual onboard gigabit ethernet, Intel 82579 and 82574		
Security chip	STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant		
Keyboard/Mouse	104-key keyboard (USB)/Optical Wheel Mouse (USB)		
Power supply	1120 watts with 120mm bottom-mounted variable speed fan, universal, <b>Climate Savers® Computing Gold, 80 PLUS® Gold</b> qualified		
			<p><b>SECURITY</b></p> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Side cover lock (ships with two identical keys)</li> <li>• Padlock loop (in rear for opt padlock; padlock prohibits side cover removal)</li> <li>• Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal)</li> <li>• Power-on/Administrator password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard, mouse, diskette</li> <li>• Serial port I/O enable/disable</li> <li>• USB 2.0 ports enable/disable individually</li> <li>• USB 3.0 ports enable/disable concurrently</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul> <p><b>ISV certifications</b> Please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></p> <p><b>Environmental certifications</b> GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating Supports ThinkVantage® technologies</p>

## ThinkStation D30 Optional Configurations

### Partial list of core options supported on ThinkStation D30

<b>Processor (2nd processor and heat sink options)</b>	
ThinkStation C30, D30 Processor Heat Sink	0A65721
ThinkStation CPU Xeon E5-2660	4XG0E76794
ThinkStation CPU Xeon E5-2650	4XG0E76795
ThinkStation CPU Xeon E5-2640	4XG0E76796
ThinkStation CPU Xeon E5-2630	4XG0E76797
ThinkStation CPU Xeon E5-2620	4XG0E76798
ThinkStation CPU Xeon E5-2609	4XG0E76799
ThinkStation CPU Xeon E5-2603	4XG0E76800
<b>Memory</b>	
2GB DDR3 1333 (PC3 10600) ECC UDIMM Memory	43R2033
4GB DDR3 1333 (PC3 10600) ECC UDIMM Memory	57Y4138
8GB DDR3 1333 (PC3 10600) ECC UDIMM Memory	0A65718
4GB DDR3 1600 (PC3 12800) RDIMM Memory Workstation Memory	0A65732
8GB DDR3 1600 (PC3 12800) RDIMM Memory Workstation Memory	0A65733
<b>Disk Drive</b>	
Lenovo 500GB SATA HDD (7200)	43R1990
Lenovo 1TB SATA HDD (7200)	45J7918
ThinkStation 1TB 3.5" SATA Hybrid Hard Drive (7200)	4XB0F18665
ThinkStation 2TB 3.5" SATA Hybrid Hard Drive (7200)	4XB0F18666
ThinkStation 300GB 3.5" SAS Hard Drive (15K)	4XB0F18672
ThinkStation 450GB 3.5" SAS Hard Drive (15K)	43N3424
ThinkStation 600GB 3.5" SAS Hard Drive (15K)	4XB0F18673
ThinkStation 128GB SATA 2.5" Solid State Drive	4XB0F18670
ThinkStation 180GB Solid State Drive	0B47308
ThinkStation 256GB SATA 2.5" Solid State Drive	4XB0F18671
ThinkStation 256GB SATA 2.5" Solid State Drive - OPAL	4XB0F22432
<b>Graphics</b>	
NVIDIA NVS 300 512MB Dual DVI or Dual VGA Adapter	0B47390
NVIDIA NVS 310 512MB Dual DisplayPort Adapter	0B47074
NVIDIA NVS 510 2GB Quad Mini-DisplayPort Graphics Adapter	0B47077
NVIDIA Quadro 410 512MB Single DVI & Single DisplayPort Adapter	0B47075
NVIDIA Quadro K600 1GB Single DVI & Single DisplayPort Adapter	0B47394
NVIDIA Quadro K2000 2GB Single DVI & Dual DisplayPort Adapter	0B47392
NVIDIA Quadro K4000 3GB Single DVI & Dual DisplayPort Adapter	0B47393
NVIDIA Quadro K5000 4GB Dual DisplayPort & Dual DVI Graphics Adapter	0B47081
<b>Others</b>	
ThinkStation C-Series, D-Series Rail Kit	57Y4482

For more information on accessories:

[www.lenovo.com/accessories](http://www.lenovo.com/accessories)

Purchase Lenovo accessories

[www.lenovo.com/support/accessories](http://www.lenovo.com/support/accessories)

Product specifications on Lenovo Support

[www.lenovo.com/accessoriesguide](http://www.lenovo.com/accessoriesguide)

Option Compatibility Matrix (OCM) and accessory brochures

[www.lenovoquickpick.com](http://www.lenovoquickpick.com)

An Options Compatibility Configurator for Lenovo systems

### Disclaimer

Lenovo provides the information in the Product Specifications Reference (PSREF) withdrawn product books on an "AS-IS" basis. Because the actual products have been withdrawn from marketing, the information in these withdrawn product books is no longer maintained or updated. The referenced footnote numbering may not correspond with the listed footnotes.

PSREF books for the withdrawn systems:

[http://www.lenovo.com/psref/psrefs\\_withdrawn.html](http://www.lenovo.com/psref/psrefs_withdrawn.html)



**Availability:** All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

**Warranty:** For a copy of applicable product warranties, write to: Warranty Support Dept., EMEA Services, Lenovo, Eisteinova 21, 851 01 Bratislava, Slovakia. Lenovo makes no representation or warranty regarding third party products or services.

<sup>1</sup> **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.

<sup>2</sup> **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less.

<sup>3</sup> **Systems with limited onsite service** are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. Support unrelated to a warranty issue may be subject to additional charges. Support phone list available at [www-307.ibm.com/pc/support/site.wss/document.do?Indocid=MIGR-70552](http://www-307.ibm.com/pc/support/site.wss/document.do?Indocid=MIGR-70552)

<sup>4</sup> **SATA/SAS:** The system configuration supports the installation of SATA, SAS, or mixing of SATA and SAS. But mixing of SATA and SAS disks into one RAID array will not be supported.

<sup>5</sup> **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. License agreements may apply.

<sup>6</sup> **Multi-Burner Plus** is a DVD±RW device that reads and writes to DVD-RAM, DVD-R, DVD-RW, DVD+R, and DVD+RW. It also reads and writes to CD-R and CD-RW media. Super Multi-Burner DL also writes to DVD+R double layer media.

<sup>7</sup> **Lenovo Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. See Lenovo Warranty Services terms and conditions for complete details and restrictions.

<sup>8</sup> **RAID:** Supported RAID levels for a system will vary from the stated capabilities of the RAID controller due to dependencies on the number and capacity of physical disks in the system and on customer requirements for performance, fault tolerance, or data redundancy.

RAID levels and requirements:

- **RAID 0 (striping)** provides increased performance by writing data across multiple drives.
- **RAID 1 (mirroring)** provides fault tolerance by writing the data on two drives.
- **RAID 5 (striping with parity)** uses distributed parity data to provide fault tolerance more efficiently than RAID 1. Requires three or more drives.
- **RAID 10 (or RAID 1+0)** combines RAID 1 and RAID 0 to create a stripe of mirrors that is fault tolerant while offering increased performance. Requires four drives.

<sup>9</sup> **International Warranty Service** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

<sup>14</sup> **Response times may vary.** May exclude some holidays. Telephone support may be subject to additional charges.

<sup>20</sup> **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to [lenovo.com/pc/support](http://lenovo.com/pc/support) and enter your machine type and model number for more information.

This publication was developed for products and services offered in the United States. Lenovo may not offer the products, services or features discussed in this document in other countries. Lenovo may withdraw an offering at any time. Information is subject to change without notice. Consult your local representative for information on offerings available in your area.

Lenovo reserves the right to change specifications and other product information at any time without prior notice. Lenovo is not responsible for photographic or typographical errors. LENOVO PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions; therefore this disclaimer may not apply to you.

**Trademarks:** Lenovo, the Lenovo logo, New World, New Thinking., Access Connections, Rescue and Recovery, ThinkCentre, ThinkPad, ThinkServer, ThinkStation, ThinkVantage, and ThinkVision are trademarks of Lenovo. Microsoft, Windows, and Vista are registered trademarks of Microsoft Corporation. Intel, the Intel logo, Intel Inside logo, Intel Core and Core Inside are trademarks of Intel Corporation in the US and other countries. Other company, product, or service names may be trademarks or service marks of others.

Visit [www.lenovo.com/safecomputing](http://www.lenovo.com/safecomputing) periodically for the latest information on safe and effective computing.

Visit [www.lenovo.com/thinkstation/europe](http://www.lenovo.com/thinkstation/europe) for the latest version of Product Specifications Reference.

© Lenovo  
All rights reserved.

Lenovo  
1009 Think Place  
Morrisville, NC 27560  
U.S.A.