

Lenovo™ **ThinkStation.**

PSREF



Product Specifications Reference

Version 496, October 2016

EMEA

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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.

October 12, 2016 - Version 496

- ▶ Remove flash option on ThinkStation P510/P710/P910
- ▶ Add ThinkStation P310/P410/P510/P710/P910 models announced September 2016

August 3, 2016 - Version 493

- ▶ Remove ThinkStation P500/P700/P900 Windows 7 DG from Win8.1 U.S. models
- ▶ Add keyboard and mouse features on all ThinkStation

July 13, 2016 - Version 492

- ▶ Add ThinkStation P500, P700, and P900 Windows 10 downgrade to Windows 7 models
- ▶ Update Maximum configuration weight of ThinkStation P410
- ▶ Add ThinkStation P710 and P910 models announced on July 2016
- ▶ Add "Maximum drives in 3.5" bay" feature on ThinkStation P500/P510/P700/P710/P900/P910

June 22, 2016 - Version 491

- ▶ Add new product ThinkStation P410/P510
- ▶ Add NVIDIA Quadro M2000 on ThinkStation P310 Tower
- ▶ Add keyboard and mouse information on ThinkStation P710/P910
- ▶ Add internal USB information on ThinkStation P710/P910

June 2, 2016 - Version 490

- ▶ Add ThinkStation P710/P910 US models
- ▶ Update ThinkStation P710/P910 processor information

May 19, 2016 - Version 489

- ▶ Add NVIDIA Quadro M2000 on compatible product
- ▶ Update maximum weight on ThinkStation P710
- ▶ Remove 30AT000BUS

April 6, 2016 - Version 488

- ▶ Add ThinkStation P710 and P910 models for EMEA, announced on April 2016
- ▶ Update Energy star information on ThinkStation P500/P700/P710/P900/P910

April 6, 2016 - Version 487

- ▶ New ThinkStation P710 and P910, announced April 5, 2016 (specification only)

March 23, 2016 - Version 486

- ▶ Add processors specifications for P310/P500/P700/P900

February 24, 2016 - Version 485

- ▶ Add ThinkStation P310 and P700 models for US, announced on February 2016
- ▶ Add ThinkStation P700 and P900 models for EMEA, announced on February 2016

December 9, 2015 - Version 482

- ▶ New ThinkStation P310 Tower and SFF, announced November 24, 2015

November 18, 2015 - Version 481

- ▶ Combines ThinkStation PSREF United States version and Western Europe version.
- ▶ Extends the supported GEO into Europe, Middle East and Africa.
- ▶ Covers all TopSeller and Relationship models for US and all focus models for EMEA

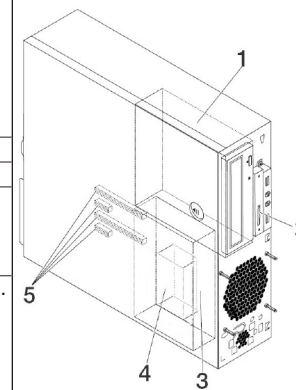


ThinkStation P310 SFF Platform Specifications

Product Specifications Reference (PSREF)

| Components | Specification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|--|---|----------------------|--|--------------|---------------------------------------|----|-----|-------|------|---------|----|-----|-------|-----------------|---------|-----|-----|-------|-----------|-------------|-----|-----|-----|-----------------|-------------|-----|-----|-----|-----------------|--------------|-----|-----|-----|----------|
| Chipset | Intel C236 Chipset | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel AMT | Intel Active Management Technology 11 supported on Xeon models | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Processor | One LGA1151 socket, supports one the following processors: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Xeon E3-1280 v5 | 4C/3.7GHz/8MB/80W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Xeon E3-1275 v5 | 4C/3.6GHz/8MB/80W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Xeon E3-1270 v5 | 4C/3.6GHz/8MB/80W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Xeon E3-1245 v5 | 4C/3.5GHz/8MB/80W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Xeon E3-1240 v5 | 4C/3.5GHz/8MB/80W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Xeon E3-1230 v5 | 4C/3.4GHz/8MB/80W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Xeon E3-1225 v5 | 4C/3.3GHz/8MB/80W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Xeon E3-1220 v5 | 4C/3GHz/8MB/80W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Core i7-6700 | 4C/3.4GHz/8MB/65W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Core i5-6600 | 4C/3.3GHz/6MB/65W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Core i5-6500 | 4C/3.2GHz/6MB/65W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Core i5-6400 | 4C/2.7GHz/6MB/65W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Core i3-6320 | 2C/3.9GHz/4MB/51W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Core i3-6300 | 2C/3.8GHz/4MB/51W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Core i3-6100 | 2C/3.7GHz/3MB/51W/DDR4-2133 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory DIMM slots | 4 DIMM slots, 2-channel (integrated memory controller in processor) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory type/capacity | Up to 64GB ECC/non-ECC (4 x 16GB), DDR4-2133, UDIMM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intel HD Graphics in processor | Integrated Intel HD P530 in Xeon E3-12x5 v5 processors; or Intel HD 530 in Core i7, i5, or i3 processors. Works along with discrete graphics to support multi-display, enables three display connectors (2 DP, 1 VGA) on rear. Max Resolution: 4096 x 2304 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Discrete graphics | Two PCI Express 3.0 x16 slots for graphics adapters. Up to two Quadro K1200. Supports the following NVIDIA graphics adapters: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Adapter</th> <th>Cores</th> <th>Memory</th> <th>Power</th> <th>Connector</th> </tr> </thead> <tbody> <tr> <td>NVS 310</td> <td>48</td> <td>1GB</td> <td>19.5W</td> <td>2xDP</td> </tr> <tr> <td>NVS 315</td> <td>48</td> <td>1GB</td> <td>19.5W</td> <td>2xDVI-I SL/2xDP</td> </tr> <tr> <td>NVS 510</td> <td>192</td> <td>2GB</td> <td>33.4W</td> <td>4xmini DP</td> </tr> <tr> <td>Quadro K420</td> <td>192</td> <td>2GB</td> <td>41W</td> <td>1xDVI-I DL+1xDP</td> </tr> <tr> <td>Quadro K620</td> <td>384</td> <td>2GB</td> <td>45W</td> <td>1xDVI-I DL+1xDP</td> </tr> <tr> <td>Quadro K1200</td> <td>512</td> <td>4GB</td> <td>45W</td> <td>4xminiDP</td> </tr> </tbody> </table> | Adapter | Cores | Memory | Power | Connector | NVS 310 | 48 | 1GB | 19.5W | 2xDP | NVS 315 | 48 | 1GB | 19.5W | 2xDVI-I SL/2xDP | NVS 510 | 192 | 2GB | 33.4W | 4xmini DP | Quadro K420 | 192 | 2GB | 41W | 1xDVI-I DL+1xDP | Quadro K620 | 384 | 2GB | 45W | 1xDVI-I DL+1xDP | Quadro K1200 | 512 | 4GB | 45W | 4xminiDP |
| | Adapter | Cores | Memory | Power | Connector | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NVS 310 | 48 | 1GB | 19.5W | 2xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NVS 315 | 48 | 1GB | 19.5W | 2xDVI-I SL/2xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NVS 510 | 192 | 2GB | 33.4W | 4xmini DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K420 | 192 | 2GB | 41W | 1xDVI-I DL+1xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quadro K620 | 384 | 2GB | 45W | 1xDVI-I DL+1xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quadro K1200 | 512 | 4GB | 45W | 4xminiDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Onboard drive controller | Five onboard SATA 6.0Gb/s connectors for optical and disk drives plus one SATA connector for optional eSATA. RAID 0, 1, 5* support * RAID 5 supports three 2.5" SSD drives only. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drive Bays | One external 5.25" bay, one internal 3.5" bay (see right). Up to one 9.5mm optical + 2 x 3.5" disk drive bays + 1 x 2.5" disk drive bay + one M.2 NVMe SSD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supporting disk drives | <table border="1"> <tbody> <tr> <td>3.5" SATA HDD (7.2K 6Gbs)</td> <td>500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid</td> </tr> <tr> <td>2.5" SATA SSD (6Gbs)</td> <td>128GB/180GB*/240GB*/256GB*/480GB*/512GB/1TB*</td> </tr> <tr> <td>M.2 NVMe SSD</td> <td>256GB*/512GB, via PCIe 3.0 x4 adapter</td> </tr> </tbody> </table> | 3.5" SATA HDD (7.2K 6Gbs) | 500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid | 2.5" SATA SSD (6Gbs) | 128GB/180GB*/240GB*/256GB*/480GB*/512GB/1TB* | M.2 NVMe SSD | 256GB*/512GB, via PCIe 3.0 x4 adapter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3.5" SATA HDD (7.2K 6Gbs) | 500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2.5" SATA SSD (6Gbs) | 128GB/180GB*/240GB*/256GB*/480GB*/512GB/1TB* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| M.2 NVMe SSD | 256GB*/512GB, via PCIe 3.0 x4 adapter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ** Includes OPAL options | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max internal storage | 9TB (2 x 4TB 3.5" HDDs + 1 x 1TB 2.5" SSD) plus one 512GB M.2 NVMe SSD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Media reader | 9-in-1 card reader. Optional 29-in-1 card reader on selected models | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | 210 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Onboard Ethernet | One onboard gigabit ethernet, Intel I219LM, supports Wake-on-LAN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HD Audio | Realtek ALC662 codec | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TPM | Standard, TCG 1.2-compliant | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Additional ports | Supports the following optional ports: • Two IEEE 1394 (one on rear and one on front flex module) via PCIe adapter, up to one adapter per system. Supports one of the following per system: • Two rear USB 3.0 per PCIe adapter. • One front eSATA (on flex module), or one rear eSATA via cable and PCIe slot bracket, up to one eSATA port per system. • One additional serial port via cable. • One parallel port via cable | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Components | Specification |
|------------------|---|
| Mechanical | <ul style="list-style-type: none"> Raven black color; metal case 4.02"W x 15.53"D x 13.31"H 102mm W x 394.5mm D x 338mm H 17.2 lb (7.9kg) max configuration 12.9-liter |
| | Environmental certifications |
| Limited warranty | 1 or 3-year limited onsite service with 9x5/NBD. Some parts are Customer Replaceable Units. |



Drive Bays and PCIe Slots

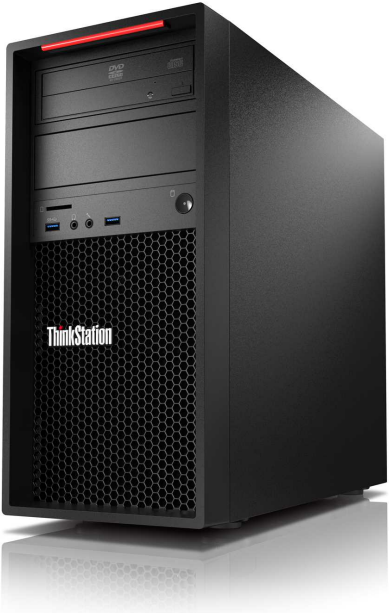
| | |
|-----------|---|
| Bay 1 | 5.25", supports one of the following: HH optical/flex module***/9.5mm optical+3.5" HDD bay/ 3.5" HDD bay/Front Access Storage Enclosure *** Flex module supports one or more of the following: 9.5mm optical/ 29-in-1 reader/front IEEE 1394/front eSATA. Up to one flex module is supported per system. |
| Bay 2 | Optional 9-in-1 single slot reader |
| Bay 3 | Standard 3.5" HDD bay |
| Bay 4 | Optional 2.5" HDD bay (under Bay 3) |
| 5 - Slots | Four PCIe slots (top-down): Slot 1: Low Profile, PCIe 3.0 x16 (near CPU) Slot 2: Low Profile, PCIe 3.0 x1 Slot 3: Low Profile, PCIe 3.0 x16 (x4 elec) Slot 4: Low Profile, PCIe 3.0 x1 |

For the list of ISV certifications, please visit www.thinkworkstations.com/isv-certifications/
For a list of all supported options, please visit https://download.lenovo.com/pccbbs/options_iso/ocm_july_2016.xlsx sheet

ThinkStation P310 SFF - TopSeller - 30AV

Product Specifications Reference (PSREF)

| Model | Region | Processor | Graphics | Memory | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|---|--------------------------------------|-------------------------------|-------------------------------------|-----------|--------------|--------------|--------------|-------------------|--------------------------------|----------|--------|------------------|
| 30AV000L++ | EMEA | Xeon E3-1225 v5 4C/3.3GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x4GB UDIMM DDR4-2133 Non-ECC | 1x500GB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 210W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AV000M++ | EMEA | Xeon E3-1230 v5 4C/3.4GHz/8MB/80W/DDR4-2133 | NVIDIA Quadro K420 2GB | 1x8GB UDIMM DDR4-2133 ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 210W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AV000N++ | EMEA | Core i5-6500 4C/3.2GHz/6MB/65W/DDR4-2133 | Intel HD 530 | 1x4GB UDIMM DDR4-2133 Non-ECC | 1x500GB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 210W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AV000P++ | EMEA | Core i5-6500 4C/3.2GHz/6MB/65W/DDR4-2133 | Intel HD 530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 210W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AV000Q++ | EMEA | Core i5-6600 4C/3.3GHz/6MB/65W/DDR4-2133 | Intel HD 530+NVIDIA Quadro K1200 4GB | 1x4GB UDIMM DDR4-2133 Non-ECC | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 210W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AV000R++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 1x4GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 210W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AV000S++ | EMEA | Xeon E3-1245 v5 4C/3.5GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 210W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AV001M++ | EMEA | Core i5-6500 4C/3.2GHz/6MB/65W/DDR4-2133 | Intel HD 530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 210W 85% | 1xSerial | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AV001N++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 210W 85% | 1xSerial | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AV001P++ | EMEA | Xeon E3-1225 v5 4C/3.3GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 ECC | 1x500GB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 210W 85% | 1xSerial | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AV001Q++ | EMEA | Core i5-6500 4C/3.2GHz/6MB/65W/DDR4-2133 | Intel HD 530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x500GB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 210W 85% | 1xSerial | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AV001R++ | EMEA | Xeon E3-1230 v5 4C/3.4GHz/8MB/80W/DDR4-2133 | NVIDIA Quadro K420 2GB | 1x8GB UDIMM DDR4-2133 ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 210W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AV001S++ | EMEA | Xeon E3-1245 v5 4C/3.5GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 210W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |

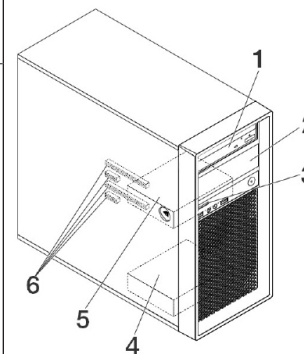


ThinkStation P310 Tower Platform Specifications

Product Specifications Reference (PSREF)

| Components | Specification | | | | |
|--------------------------------|---|--|--------|-------|-----------------|
| Chipset | Intel C236 Chipset | | | | |
| Intel AMT | Intel Active Management Technology 11 supported on Xeon models | | | | |
| Processor | One LGA1151 socket, supports one the following processors: | | | | |
| | Xeon E3-1280 v5 | 4C/3.7GHz/8MB/80W/DDR4-2133 | | | |
| | Xeon E3-1275 v5 | 4C/3.6GHz/8MB/80W/DDR4-2133 | | | |
| | Xeon E3-1270 v5 | 4C/3.6GHz/8MB/80W/DDR4-2133 | | | |
| | Xeon E3-1245 v5 | 4C/3.5GHz/8MB/80W/DDR4-2133 | | | |
| | Xeon E3-1240 v5 | 4C/3.5GHz/8MB/80W/DDR4-2133 | | | |
| | Xeon E3-1230 v5 | 4C/3.4GHz/8MB/80W/DDR4-2133 | | | |
| | Xeon E3-1225 v5 | 4C/3.3GHz/8MB/80W/DDR4-2133 | | | |
| | Xeon E3-1220 v5 | 4C/3GHz/8MB/80W/DDR4-2133 | | | |
| | Core i7-6700 | 4C/3.4GHz/8MB/65W/DDR4-2133 | | | |
| | Core i5-6600 | 4C/3.3GHz/6MB/65W/DDR4-2133 | | | |
| | Core i5-6500 | 4C/3.2GHz/6MB/65W/DDR4-2133 | | | |
| | Core i5-6400 | 4C/2.7GHz/6MB/65W/DDR4-2133 | | | |
| | Core i3-6320 | 2C/3.9GHz/4MB/51W/DDR4-2133 | | | |
| Core i3-6300 | 2C/3.8GHz/4MB/51W/DDR4-2133 | | | | |
| Core i3-6100 | 2C/3.7GHz/3MB/51W/DDR4-2133 | | | | |
| Memory DIMM slots | 4 DIMM slots, 2-channel (integrated memory controller in processor) | | | | |
| Memory type/capacity | Up to 64GB ECC/non-ECC (4 x 16GB), DDR4-2133, UDIMM | | | | |
| Intel HD Graphics in processor | Integrated Intel HD P530 in Xeon E3-12x5 v5 processors; or Intel HD 530 in Core i7, i5, or i3 processors. Works along with discrete graphics to support multi-display, enables three display connectors (2 DP, 1 VGA) on rear. Max resolution: 4096 x 2304 | | | | |
| Discrete graphics | Two PCI Express 3.0 x16 slots for graphics adapters. Up to two Quadro K1200 on 250 watts models. Or up to two Quadro K2200, or up to one Quadro M4000 on 400 watts models. Supports the following NVIDIA graphics adapters: | | | | |
| | Adapter | Cores | Memory | Power | Connector |
| | NVS 310 | 48 | 1GB | 19.5W | 2xDP |
| | NVS 315 | 48 | 1GB | 19.5W | 2xDVI-I SL/2xDP |
| | NVS 510 | 192 | 2GB | 33.4W | 4xmini DP |
| | Quadro K420 | 192 | 2GB | 41W | 1xDVI-I DL+1xDP |
| | Quadro K620 | 384 | 2GB | 45W | 1xDVI-I DL+1xDP |
| | Quadro K1200 | 512 | 4GB | 45W | 4xminiDP |
| | Quadro K2200 | 640 | 4GB | 68W | 1xDVI-I DL+2xDP |
| | Quadro M2000 | 768 | 4GB | 75W | 4xDP |
| Quadro M4000 | 1664 | 8GB | 120W | 4xDP | |
| Onboard drive controller | Five onboard SATA 6.0Gb/s connectors for optical and disk drives plus one SATA connector for optional eSATA. RAID 0, 1, 5, 10 support | | | | |
| Drive Bays | Two external 5.25" bays, two internal 3.5" bays (see right). Up to one 9.5mm optical plus 4 x 3.5" disk drive bays plus one M.2 NVMe SSD | | | | |
| Supporting disk drives | 3.5" SATA HDD (7.2K 6Gbs) | 500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid | | | |
| | 2.5" SATA SSD (6Gbs) | 128GB/180GB*/240GB*/256GB*/480GB*/512GB/1TB* | | | |
| | M.2 NVMe SSD | 256GB*/512GB, via PCIe 3.0 x4 adapter | | | |
| | * Includes OPAL options | | | | |
| Max internal storage | 16TB (4 x 4TB 3.5" HDDs) plus 512GB M.2 NVMe SSD | | | | |
| Media reader | 9-in-1 card reader. Optional 29-in-1 card reader on selected models | | | | |
| Power supply | Supports one of the following: <ul style="list-style-type: none"> 250 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified 400 watts with variable speed fan, autosensing, 92% PSU, Climate Savers Computing Platinum, 80 PLUS Platinum qualified | | | | |
| Onboard Ethernet | One onboard gigabit ethernet, Intel I219LM, supports Wake-on-LAN | | | | |
| HD Audio | Realtek ALC662 codec | | | | |
| TPM | Standard, TCG 1.2-compliant | | | | |
| 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 |
|------------------------------|---|
| Additional ports | Supports the following optional ports: <ul style="list-style-type: none"> Two IEEE 1394 (one on rear and one on front flex module) via PCIe adapter, up to one adapter per system. Supports one of the following per system: <ul style="list-style-type: none"> Two rear USB 3.0 per PCIe adapter. One rear Thunderbolt via PCIe adapter. One front eSATA (on flex module), or one rear eSATA via cable and PCIe slot bracket, up to one eSATA port per system. One additional serial port via cable. One parallel port via cable |
| | Mechanical |
| Environmental certifications | GREENGUARD certified/RoHS-compliant/EPEAT Gold rating/ENERGY STAR 6.1 qualified |
| Limited warranty | 3-year limited onsite service with 9x5/NBD. Some parts are Customer Replaceable Units. |



Drive Bays and PCIe Slots

| | |
|-----------------|---|
| Bay 1 and Bay 2 | 5.25", support one of the following: HH optical/flex module**/9.5mm optical+3.5" HDD bay/ 3.5" HDD bay/Front Access Storage Enclosure ** 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. |
| Bay 3 | Optional 9-in-1 single slot reader |
| Bay 4 | Standard 3.5" HDD bay |
| Bay 5 | Standard 3.5" HDD bay |
| 6 -Slots | Four PCIe slots (top-down): Slot 1: Half length, full height, PCIe 3.0 x16 (near CPU) Slot 2: Half length, full height, PCIe 3.0 x1 Slot 3: Half length, full height, PCIe 3.0 x16 (x4 elec) Slot 4: Half length, full height, PCIe 3.0 x1 |

For the list of ISV certifications, please visit www.thinkworkstations.com/isv-certifications/
For a list of all supported options, please visit https://download.lenovo.com/pccbbs/options_iso/ocm_july_2016.xlsx sheet

| Model | Region | Processor | Graphics | Memory | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|---|--------------------------------------|-------------------------------|-------------------------------------|-----------|--------------|--------------|--------------|-------------------|--------------------------------|----------|--------|------------------|
| 30AT000F++ | EMEA | Xeon E3-1245 v5 4C/3.5GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT000G++ | EMEA | Xeon E3-1245 v5 4C/3.5GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT000J++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530+NVidia Quadro K620 2GB | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT000M++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT0021++ | EMEA | Xeon E3-1230 v5 4C/3.4GHz/8MB/80W/DDR4-2133 | NVIDIA Quadro K2200 4GB | 1x8GB UDIMM DDR4-2133 ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT0022++ | EMEA | Xeon E3-1245 v5 4C/3.5GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT0023++ | EMEA | Xeon E3-1275 v5 4C/3.6GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT0024++ | EMEA | Xeon E3-1225 v5 4C/3.3GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT0025++ | EMEA | Xeon E3-1225 v5 4C/3.3GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT0026++ | EMEA | Xeon E3-1245 v5 4C/3.5GHz/8MB/80W/DDR4-2133 | Intel HD P530+NVidia Quadro K620 2GB | 2x4GB UDIMM DDR4-2133 Non-ECC | 1x500GB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT0027++ | EMEA | Xeon E3-1225 v5 4C/3.3GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x4GB UDIMM DDR4-2133 Non-ECC | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT0028++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530+NVidia Quadro M4000 8GB | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT0029++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT002B++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 1x4GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT002D++ | EMEA | Core i5-6400 4C/2.7GHz/6MB/65W/DDR4-2133 | Intel HD 530 | 1x4GB UDIMM DDR4-2133 Non-ECC | 1x500GB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT002E++ | EMEA | Core i5-6500 4C/3.2GHz/6MB/65W/DDR4-2133 | Intel HD 530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT002F++ | EMEA | Core i5-6600 4C/3.3GHz/6MB/65W/DDR4-2133 | Intel HD 530+NVidia Quadro K620 2GB | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |

| Model | Region | Processor | Graphics | Memory | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|---|--------------------------------------|-------------------------------|---|-----------|--------------|--------------|--------------|-------------------|--------------------------------|----------|--------|------------------|
| 30AT002G++ | EMEA | Core i5-6500 4C/3.2GHz/6MB/65W/DDR4-2133 | Intel HD 530 | 1x4GB UDIMM DDR4-2133 Non-ECC | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT002Q++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 2x4GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 11/15 |
| 30AT004P++ | EMEA | Xeon E3-1230 v5 4C/3.4GHz/8MB/80W/DDR4-2133 | NVIDIA Quadro K1200 4GB | 2x8GB UDIMM DDR4-2133 ECC | 1x256GB SSD 2.5" SATA6Gbs Opal+1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 06/16 |
| 30AT004S++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT004U++ | EMEA | Core i5-6500 4C/3.2GHz/6MB/65W/DDR4-2133 | Intel HD 530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT004V++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT004W++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT004X++ | EMEA | Xeon E3-1225 v5 4C/3.3GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 ECC | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT004Y++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530+NVIDIA Quadro M4000 8GB | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT0050++ | EMEA | Xeon E3-1245 v5 4C/3.5GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT0051++ | EMEA | Xeon E3-1275 v5 4C/3.6GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT0052++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT0053++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT0054++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT0055++ | EMEA | Xeon E3-1245 v5 4C/3.5GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT0056++ | EMEA | Xeon E3-1270 v5 4C/3.6GHz/8MB/80W/DDR4-2133 | Open | 2x8GB UDIMM DDR4-2133 ECC | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT0057++ | EMEA | Xeon E3-1270 v5 4C/3.6GHz/8MB/80W/DDR4-2133 | Open | 1x8GB UDIMM DDR4-2133 ECC | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |

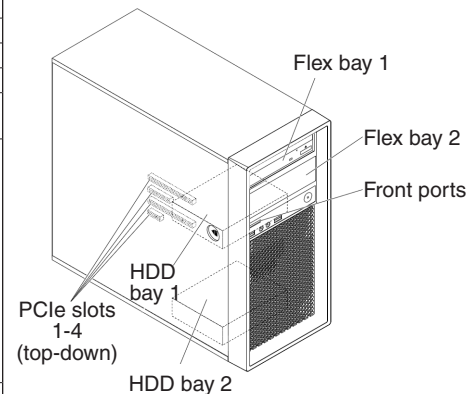
| Model | Region | Processor | Graphics | Memory | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|---|---------------------------------------|-------------------------------|---|-----------|--------------|--------------|--------------|-------------------|--------------------------------|----------|--------|------------------|
| 30AT0058++ | EMEA | Core i5-6600 4C/3.3GHz/6MB/65W/DDR4-2133 | Intel HD 530+NVIDIA Quadro K620 2GB | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT0059++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530+NVIDIA Quadro M2000 4GB | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT005A++ | EMEA | Xeon E3-1230 v5 4C/3.4GHz/8MB/80W/DDR4-2133 | NVIDIA Quadro K1200 4GB | 2x8GB UDIMM DDR4-2133 ECC | 1x256GB SSD 2.5" SATA6Gbs Opal+1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT005B++ | EMEA | Xeon E3-1245 v5 4C/3.5GHz/8MB/80W/DDR4-2133 | Intel HD P530+NVIDIA Quadro M2000 4GB | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30AT005U++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530+NVIDIA Quadro M2000 4GB | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30AT005V++ | EMEA | Xeon E3-1245 v5 4C/3.5GHz/8MB/80W/DDR4-2133 | Intel HD P530+NVIDIA Quadro M2000 4GB | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30AT005W++ | EMEA | Xeon E3-1225 v5 4C/3.3GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 1x8GB UDIMM DDR4-2133 ECC | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30AT005X++ | EMEA | Core i5-6500 4C/3.2GHz/6MB/65W/DDR4-2133 | Intel HD 530 | 1x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30AT005Y++ | EMEA | Core i5-6600 4C/3.3GHz/6MB/65W/DDR4-2133 | Intel HD 530+NVIDIA Quadro K620 2GB | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30AT0060++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530+NVIDIA Quadro K620 2GB | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 09/16 |
| 30AT0061++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 09/16 |
| 30AT0062++ | EMEA | Xeon E3-1245 v5 4C/3.5GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 2x8GB UDIMM DDR4-2133 ECC | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 09/16 |
| 30AT0063++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530 | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30AT0064++ | EMEA | Xeon E3-1275 v5 4C/3.6GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 2x8GB UDIMM DDR4-2133 ECC | 1x512GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 09/16 |
| 30AT0065++ | EMEA | Core i7-6700 4C/3.4GHz/8MB/65W/DDR4-2133 | Intel HD 530+NVIDIA Quadro K620 2GB | 2x8GB UDIMM DDR4-2133 Non-ECC | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 250W 85% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30AT0066++ | EMEA | Xeon E3-1245 v5 4C/3.5GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 2x8GB UDIMM DDR4-2133 ECC | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30AT0067++ | EMEA | Xeon E3-1275 v5 4C/3.6GHz/8MB/80W/DDR4-2133 | Intel HD P530 | 2x8GB UDIMM DDR4-2133 ECC | 1x512GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 400W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |

ThinkStation P410 Platform Specifications

Product Specifications Reference (PSREF)

| Components | Specification | | | | | |
|---------------------------------------|--|---|--------|-------|---------------|-----------------|
| Chipset | Intel C612 Platform Controller Hub (PCH) | | | | | |
| System mgmt | Intel Active Management Technology 9 | | | | | |
| Processor | Up to one 140W Intel Xeon E5-1600 v4 family processors. Some Intel Xeon E5-2600 v4 processors are also available: | | | | | |
| | E5-2637 v4 | 4C/3.5GHz/15MB/135W/DDR4-2400 | | | | |
| | E5-2623 v4 | 4C/2.6GHz/10MB/85W/DDR4-2133 | | | | |
| | E5-2620 v4 | 8C/2.1GHz/20MB/85W/DDR4-2133 | | | | |
| | E5-1680 v4 | 8C/3.4GHz/20MB/140W/DDR4-2400 333 | | | | |
| | E5-1660 v4 | 8C/3.2GHz/20MB/140W/DDR4-2400 | | | | |
| | E5-1650 v4 | 6C/3.6GHz/15MB/140W/DDR4-2400 | | | | |
| | E5-1630 v4 | 4C/3.7GHz/10MB/140W/DDR4-2400 | | | | |
| | E5-1620 v4 | 4C/3.5GHz/10MB/140W/DDR4-2400 | | | | |
| | E5-1607 v4 | 4C/3.1GHz/10MB/140W/DDR4-2133 | | | | |
| E5-1603 v4 | 4C/2.8GHz/10MB/140W/DDR4-2133 | | | | | |
| Coprocessor | None | | | | | |
| Memory DIMM slots | 4 DIMM sockets. 4-channel capable. RDIMM. ECC. DDR4-2400 | | | | | |
| Memory capacity | 128GB (32GB x 4) | | | | | |
| Graphics | Two PCIe 3.0 x16 slots, up to two NVIDIA Quadro M4000, or up to one Quadro M5000 | | | | | |
| Supporting Graphics and GPU computing | Adapter | Cores | Memory | Power | SLI | Connector*** |
| | NVS 310 | 48 | 1GB | 19.5W | | 2xDP |
| | NVS 315 | 48 | 1GB | 19.5W | | 2xDVI-I SL/2xDP |
| | NVS 510 | 192 | 2GB | 35W | | 4xmini DP |
| | NVS 810 | 1024 | 4GB | 68W | | 8xmini DP |
| | Quadro K420 | 192 | 2GB | 41W | | DVI-I DL+DP |
| | Quadro K620 | 384 | 2GB | 45W | | DVI-I DL+DP |
| | Quadro K1200 | 512 | 4GB | 45W | | 4xmini DP |
| | Quadro M2000 | 768 | 4GB | 75W | | 4xDP |
| | Quadro M4000 | 1664 | 8GB | 120W | | 4xDP |
| Quadro M5000 | 2048 | 8GB | 150W | | DVI-I DL+4xDP | |
| Disk drive controller | RAID 0, 1, 5, 10 with onboard SATA controller in chipset, SATA 6Gb/s. Optional RAID 0, 1, 10 with optional LSI 9340-8i PCIe adapter, 12Gb/s SAS and SATA, optional upgrade to RAID 5 is available | | | | | |
| Drive Bays | Two external 5.25" flex bays, two internal 3.5" bays. Up to one 9.5mm optical plus four 3.5"/2.5" disk drives plus three M.2 PCIe SSD (see right) | | | | | |
| Supporting storage | 3.5" HDD, 7.2K SATA6Gbs | 500GB/1TB/2TB/3TB/4TB, 1TB/2TB hybrid | | | | |
| | 2.5" HDD, 10K SAS12Gbs | 300GB/600GB | | | | |
| | 2.5" SSD, SATA6Gbs | 180GB/240GB/256GB/480GB with OPAL, 256GB/512GB/1TB without OPAL | | | | |
| | PCIe SSD, M.2 via PCIe 3.0 x4 adapter | 256GB/512GB/1TB, NVMe | | | | |
| Flex connector | None | | | | | |
| Network interfaces | One onboard gigabit ethernet, Intel I218LM, supports Wake-on-LAN. Optional discrete ethernet adapters are available | | | | | |
| HD Audio | Realtek ALC662 codec | | | | | |
| TPM | TCG 1.2-compliant | | | | | |
| Power supply | One fixed 450 watts, autosensing, 92%, 80 PLUS Platinum qualified | | | | | |
| Front ports | Two USB 3.0, microphone (3.5mm), headphone (3.5mm) | | | | | |
| Rear ports | Two USB 2.0, four USB 3.0, one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in) | | | | | |
| Additional ports | Supports the following optional ports: Two IEEE 1394 (one on rear and one on front flex module) via PCIe adapter, up to one adapter per system. Two rear USB 3.0 per PCIe adapter, up to three adapters per system. One rear Thunderbolt via PCIe adapter, or two front Thunderbolt (on flex module) via PCIe adapter, front and rear Thunderbolt cannot be intermixed. One rear serial via cable, up to one per system. One front eSATA (on flex module), or one rear eSATA via cable and PCIe slot bracket, up to one eSATA port per system | | | | | |
| Media reader | 9-in-1 USB 2.0 card reader. Optional 29-in-1 USB 2.0 card reader on flex module | | | | | |

| Components | Specification | | | | | | | | | | | |
|--|---|-------------------------|---------------------------------|--|-----------------------------------|--|------------------------------------|----------------------|--------------------------------------|----------------------|-------------------------|-----------------------------------|
| Mechanical | <ul style="list-style-type: none"> 6.89"W x 16.77"D x 14.8"H 175mm W x 426mm D x 376mm H 30.86 lb (14kg) max configuration 25-liter | | | | | | | | | | | |
| | <table border="1"> <tr> <td>Temperature - operating</td> <td>50 °F to 95 °F (10 °C to 35 °C)</td> </tr> <tr> <td>Temperature - non operating (no package)</td> <td>14 °F to 140 °F (-10 °C to 60 °C)</td> </tr> <tr> <td>Temperature - non operating (with package)</td> <td>-40 °F to 140 °F (-40 °C to 60 °C)</td> </tr> <tr> <td>Altitude - operating</td> <td>(Unpressurized): 0-10000ft (0-3048m)</td> </tr> <tr> <td>Humidity - operating</td> <td>10%-80%, non-condensing</td> </tr> <tr> <td>Humidity - storage (with package)</td> <td>10%-90%, non-condensing</td> </tr> </table> | Temperature - operating | 50 °F to 95 °F (10 °C to 35 °C) | Temperature - non operating (no package) | 14 °F to 140 °F (-10 °C to 60 °C) | Temperature - non operating (with package) | -40 °F to 140 °F (-40 °C to 60 °C) | Altitude - operating | (Unpressurized): 0-10000ft (0-3048m) | Humidity - operating | 10%-80%, non-condensing | Humidity - storage (with package) |
| Temperature - operating | 50 °F to 95 °F (10 °C to 35 °C) | | | | | | | | | | | |
| Temperature - non operating (no package) | 14 °F to 140 °F (-10 °C to 60 °C) | | | | | | | | | | | |
| Temperature - non operating (with package) | -40 °F to 140 °F (-40 °C to 60 °C) | | | | | | | | | | | |
| Altitude - operating | (Unpressurized): 0-10000ft (0-3048m) | | | | | | | | | | | |
| Humidity - operating | 10%-80%, non-condensing | | | | | | | | | | | |
| Humidity - storage (with package) | 10%-90%, non-condensing | | | | | | | | | | | |
| Environmental specification | RoHS-compliant, GREENGUARD on all models. EPEAT Gold rating, ENERGY STAR 6.1 qualified on selected models. | | | | | | | | | | | |
| Base warranty | 1 or 3-year limited onsite service with 9x5/NBD | | | | | | | | | | | |



| Expansion slots | |
|-----------------|--|
| Slot 1 | PCIe 3.0 x16, full length, full height |
| Slot 2 | PCIe 3.0 x8, full length, full height |
| Slot 3 | PCIe 3.0 x16, full length, full height |
| Slot 4 | PCIe 2.0 x4, half length, full height |

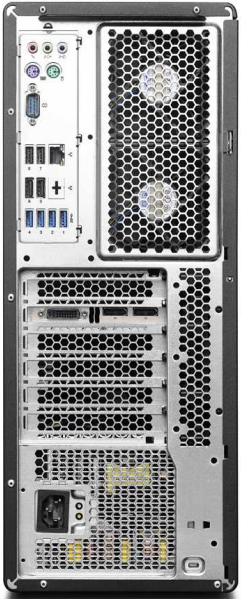
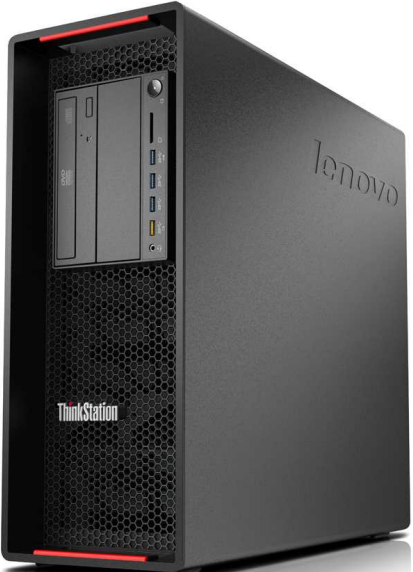
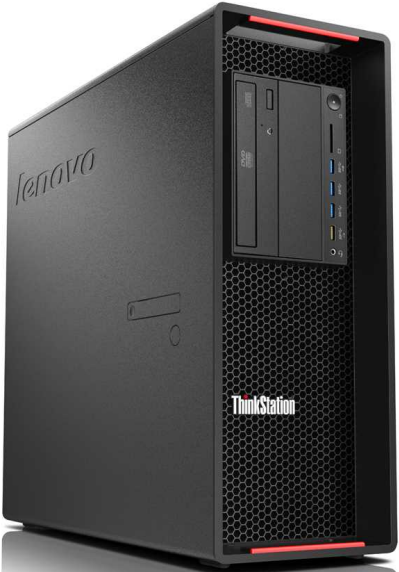
| Drive Bays | |
|------------|---|
| HDD bay 1 | 3.5", for one 3.5"/2.5" drive |
| HDD bay 2 | 3.5", for one 3.5"/2.5" drive |
| Flex bay 1 | HH optical, or 3.5" HDD bay via optional conversion kit, or slim optical+3.5" HDD bay kit via optional conversion kit, or flex module |
| Flex bay 2 | HH optical, or 3.5" HDD bay via optional conversion kit, or slim optical+3.5" HDD bay kit via optional conversion kit, or flex module |

Note:
 1. HDD bay 2 is not available when one Quadro M5000, two Quadro M4000, or two NVS 810 are used.
 2. Flex module supports one or more of the following options: 9.5mm optical/29-in-1 USB 2.0 reader/one front IEEE 1394/one front eSATA/two front Thunderbolt. Up to one flex module is supported per system.
 3. Up to one slim optical+3.5" HDD bay kit is supported per system.

For the list of ISV certifications, please visit www.thinkworkstations.com/isv-certifications
 For a list of all supported options, please visit https://download.lenovo.com/pccbbs/options_iso/ocm_april_2016.xlsx sheet

| Model | Region | Processor | Graphics | Memory | RAID Controller | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|---|-------------------------|---------------------------|-----------------|---|-----------|--------------|--------------|--------------|-------------------|-------------------|----------|--------|------------------|
| 30B3001B++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B3001C++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B3001D++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B3001E++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B3001F++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | NVIDIA Quadro K1200 4GB | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B3001J++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B3001K++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | NVIDIA Quadro M2000 4GB | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B3001L++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | NVIDIA Quadro M4000 8GB | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B3001M++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x512GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B3002R++ | EMEA | Xeon E5-1603 v4 4C/2.8GHz/10MB/140W/DDR4-2133 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 1x1TB HDD 7.2K 3.5" SATA6Gbs | None | 29-in-1 | 450W 92% | Front eSATA | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30B3002S++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | None | 29-in-1 | 450W 92% | Front eSATA | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30B3002T++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | None | 29-in-1 | 450W 92% | Front eSATA | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30B3002U++ | EMEA | Xeon E5-1603 v4 4C/2.8GHz/10MB/140W/DDR4-2133 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30B3002V++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD M.2 PCIe Opal | None | 29-in-1 | 450W 92% | Front eSATA | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30B3002W++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | NVIDIA Quadro M4000 8GB | 4x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal+1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30B3002X++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | NVIDIA Quadro M2000 4GB | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal+1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30B3002Y++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal+1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 450W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |

| Model | Region | Processor | Graphics | Memory | RAID Controller | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|---|-------------------------|---------------------------|-----------------|---|--------------|--------------|--------------|--------------|-------------------|--------------------------------|----------|--------|------------------|
| 30B30032++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 450W 92% | 2xUSB3.0 | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B30033++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 450W 92% | 2xUSB3.0 | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B30034++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 450W 92% | 2xUSB3.0 | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B30035++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 450W 92% | 2xUSB3.0 | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B30037++ | EMEA | Xeon E5-1603 v4 4C/2.8GHz/10MB/140W/DDR4-2133 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 450W 92% | 2xUSB3.0 | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B30038++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal+1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 450W 92% | 2xUSB3.0 | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B30039++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | NVIDIA Quadro M2000 4GB | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal+1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 450W 92% | 2xUSB3.0 | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B3003A++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | NVIDIA Quadro M4000 8GB | 4x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal+1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 450W 92% | 2xUSB3.0 | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B3003B++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 450W 92% | 1xSerial | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B3003C++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | NVIDIA Quadro M2000 4GB | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 450W 92% | 1xSerial | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B3003D++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | NVIDIA Quadro M4000 8GB | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 450W 92% | 1xSerial | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B3003E++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x512GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 450W 92% | 1xSerial | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B3003F++ | EMEA | Xeon E5-1603 v4 4C/2.8GHz/10MB/140W/DDR4-2133 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 1x1TB HDD 7.2K 3.5" SATA6Gbs | 9.5mm DVD±RW | 29-in-1 | 450W 92% | 1xSerial | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B3003G++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | 9.5mm DVD±RW | 29-in-1 | 450W 92% | 1xSerial | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B3003H++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | 9.5mm DVD±RW | 29-in-1 | 450W 92% | 1xSerial | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B3003J++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD M.2 PCIe Opal | 9.5mm DVD±RW | 29-in-1 | 450W 92% | 1xSerial | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B30046++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | NVIDIA Quadro K1200 4GB | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 450W 92% | 2xUSB3.0 | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |



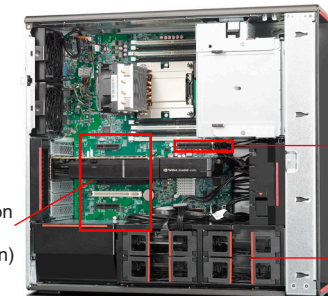
ThinkStation P500 Platform Specifications

| 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 processors, Or up to one 140W Intel Xeon E5-1600 v3 family processor: |
| | E5-2699 v3 18C/2.3GHz/45MB/145W/DDR4-2133 |
| | E5-2698 v3 16C/2.3GHz/40MB/135W/DDR4-2133 |
| | E5-2697 v3 14C/2.6GHz/35MB/145W/DDR4-2133 |
| | E5-2695 v3 14C/2.3GHz/35MB/120W/DDR4-2133 |
| | E5-2690 v3 12C/2.6GHz/30MB/135W/DDR4-2133 |
| | E5-2685 v3 12C/2.6GHz/30MB/120W/DDR4-2133 |
| | E5-2683 v3 14C/2GHz/35MB/120W/DDR4-2133 |
| | E5-2680 v3 12C/2.5GHz/30MB/120W/DDR4-2133 |
| | E5-2670 v3 12C/2.3GHz/30MB/120W/DDR4-2133 |
| | E5-2667 v3 8C/3.2GHz/20MB/135W/DDR4-2133 |
| | E5-2660 v3 10C/2.6GHz/25MB/105W/DDR4-2133 |
| | E5-2650L v3 12C/1.8GHz/30MB/65W/DDR4-2133 |
| | E5-2650 v3 10C/2.3GHz/25MB/105W/DDR4-2133 |
| | E5-2643 v3 6C/3.4GHz/20MB/135W/DDR4-2133 |
| | E5-2640 v3 8C/2.6GHz/20MB/90W/DDR4-1866 |
| | E5-2637 v3 4C/3.5GHz/15MB/135W/DDR4-2133 |
| | E5-2630L v3 8C/1.8GHz/20MB/55W/DDR4-1866 |
| | E5-2630 v3 8C/2.4GHz/20MB/85W/DDR4-1866 |
| | E5-2623 v3 4C/3GHz/10MB/105W/DDR4-1866 |
| | E5-2620 v3 6C/2.4GHz/15MB/85W/DDR4-1866 |
| | E5-2609 v3 6C/1.9GHz/15MB/85W/DDR4-1600 |
| | E5-2603 v3 6C/1.6GHz/15MB/85W/DDR4-1600 |
| | E5-1680 v3 8C/3.2GHz/20MB/140W/DDR4-2133 |
| E5-1660 v3 8C/3GHz/20MB/140W/DDR4-2133 | |
| E5-1650 v3 6C/3.5GHz/15MB/140W/DDR4-2133 | |
| E5-1630 v3 4C/3.7GHz/10MB/140W/DDR4-2133 | |
| E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | |
| E5-1607 v3 4C/3.1GHz/10MB/140W/DDR4-1866 | |
| E5-1603 v3 4C/2.8GHz/10MB/140W/DDR4-1866 | |
| Coprocessor | None |
| Memory DIMM slots | 8 DIMM sockets, 4-channel capable. RDIMM and LRDIMM (cannot be intermixed), ECC, DDR4-2133 |
| Memory capacity | 512GB (LRDIMM)/256GB (RDIMM) |
| 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 | 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) |
| 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: • Up to one LSI RAID flex adapter for SATA/SAS RAID • Up to one Multi-I/O flex adapters for one PCIe SSD • Up to one M.2 flex adapters for one M.2 SSD |
| Network interfaces | Integrated one Gigabit Ethernet (Intel i218LM), supports Wake-on-LAN. 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 | • 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 • 48.94 lb (22.2kg) 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



Expansion slots 1-6 (top-down)

Flex connector

HDD 1 HDD 3
HDD 2 HDD 4*

Note:

- 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).
- More than 4 drives requires LSI RAID flex adapter or 9364-8i adapter.

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 | 1GB | 19.5W | | 2xDP |
| NVS 315 | 48 | 1024MB | 19.5W | | 2xDVI-I SL/2xDP |
| NVS 510 | 192 | 2048MB | 33.4W | | 4xmini DP |
| Quadro 410 | 192 | 512MB | 36.7W | | DVI-I DL+DP |
| Quadro K600 | 192 | 1GB | 41W | | DVI-I DL+DP |
| Quadro K2000 | 384 | 2GB | 51.1W | | DVI-I DL+2xDP |
| Quadro K2000D | 384 | 2GB | 51.1W | | DVI-I DL+DVI-D DL+mini DP |
| Quadro K4000 | 768 | 3GB | 80W | | DVI-I DL+2xDP |
| Quadro K5000 | 1536 | 4GB | 122W | | DVI-I DL+DVI-D DL+2xDP |
| Quadro K6000 | 2880 | 12GB | 225W | | DVI-I DL+DVI-D DL+2xDP |
| Quadro K420 | 192 | 2GB | 41W | | DVI-I DL+DP |
| Quadro K620 | 384 | 2GB | 45W | | DVI-I DL+DP |
| Quadro K2200 | 640 | 4GB | 68W | | DVI-I DL+2xDP |
| Quadro K4200 | 1344 | 4GB | 108W | | DVI-I DL+2xDP |
| Quadro K5200 | 2304 | 8GB | 150W | SLI | DVI-I DL+DVI-D DL+2xDP |
| Quadro M4000 | 1664 | 8GB | 120W | | 4xDP |
| Quadro M5000 | 2048 | 8GB | 150W | | DVI-I DL+4xDP |
| Quadro M6000 | 3072 | 12GB | 250W | | DVI-I DL+4xDP |
| Tesla K20 | 2496 | 5GB | 225W | | |
| GRID K2 | 3072 | 8GB | 225W | | |

** 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/480GB/512GB/1TB (Optional OPAL) |
| M.2 SSD | 256 GB/512GB (Optional NVMe) |
| PCIe SSD 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 models, ENERGY STAR 6.1 qualified on selected models. | |

For the latest list of ISV certifications, please visit www.lenovo.com/support/ISV
For a list of all supported options, please visit https://download.lenovo.com/pccbbs/options_iso/ocm_april_2016.xlsx sheet

| Model | Region | Processor | Graphics | Memory | RAID Controller | Max Drives in 3.5" Bays | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|--|-------------------------|---------------------------|-----------------|-------------------------|--|-----------|--------------|--------------|--------------|-------------------|---------------------------------|----------|--------|------------------|
| 30A70008++ | EMEA | Xeon E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | NVIDIA Quadro K2200 4GB | 2x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 09/14 |
| 30A70009++ | EMEA | Xeon E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | Open | 1x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x240GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 09/14 |
| 30A7000A++ | EMEA | Xeon E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | Open | 2x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 09/14 |
| 30A7000C++ | EMEA | Xeon E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | Open | 2x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x2TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 09/14 |
| 30A7000F++ | EMEA | Xeon E5-1650 v3 6C/3.5GHz/15MB/140W/DDR4-2133 | Open | 2x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x128GB SSD 2.5" SATA6Gbs+1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 09/14 |
| 30A7000G++ | EMEA | Xeon E5-1650 v3 6C/3.5GHz/15MB/140W/DDR4-2133 | NVIDIA Quadro K2200 4GB | 1x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 09/14 |
| 30A7000H++ | EMEA | Xeon E5-1650 v3 6C/3.5GHz/15MB/140W/DDR4-2133 | Open | 1x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 09/14 |
| 30A7000J++ | EMEA | Xeon E5-1660 v3 8C/3GHz/20MB/140W/DDR4-2133 | Open | 2x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x2TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 09/14 |
| 30A7002L++ | EMEA | Xeon E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | Open | 1x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 02/15 |
| 30A7002M++ | EMEA | Xeon E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | Open | 1x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 12/14 |
| 30A7002N++ | EMEA | Xeon E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | Open | 1x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 01/15 |
| 30A7002P++ | EMEA | Xeon E5-1650 v3 6C/3.5GHz/15MB/140W/DDR4-2133 | Open | 1x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 02/15 |
| 30A7002Q++ | EMEA | Xeon E5-1660 v3 8C/3GHz/20MB/140W/DDR4-2133 | NVIDIA Quadro K2200 4GB | 2x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x128GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 12/14 |
| 30A7002R++ | EMEA | Xeon E5-2603 v3 6C/1.6GHz/15MB/85W/DDR4-1600 | NVIDIA Quadro K2200 4GB | 2x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 02/15 |
| 30A70031++ | EMEA | Xeon E5-1650 v3 6C/3.5GHz/15MB/140W/DDR4-2133 | NVIDIA Quadro K2200 4GB | 4x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs+1x240GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 02/15 |

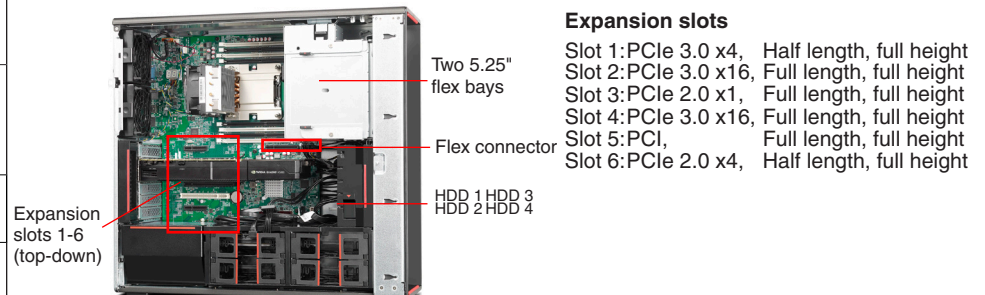
| Model | Region | Processor | Graphics | Memory | RAID Controller | Max Drives in 3.5" Bays | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|--|-------------------------|---------------------------|-----------------|-------------------------|---|-----------|--------------|--------------|--------------|-------------------|---------------------------------|----------|--------|------------------|
| 30A70034++ | EMEA | Xeon E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | NVIDIA Quadro K2200 4GB | 2x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 2x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 02/15 |
| 30A70035++ | EMEA | Xeon E5-1650 v3 6C/3.5GHz/15MB/140W/DDR4-2133 | Open | 1x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 02/15 |
| 30A70036++ | EMEA | Xeon E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | NVIDIA Quadro K4200 4GB | 2x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x500GB HDD 7.2K 3.5" SATA6Gbs+1x256GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 03/15 |
| 30A70037++ | EMEA | Xeon E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | Open | 1x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs+1x256GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 03/15 |
| 30A70038++ | EMEA | Xeon E5-1607 v3 4C/3.1GHz/10MB/140W/DDR4-1866 | NVIDIA Quadro K420 1GB | 1x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 03/15 |

ThinkStation P510 Platform Specifications

Product Specifications Reference (PSREF)

| 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 v4 or E5-1600 v4 family processors. 22 cores up to 2.2GHz, 16 cores up to 2.6GHz, 14 cores up to 2.6GHz, 12 cores up to 2.2GHz, 10 cores up to 2.4GHz, 8 cores up to 3.4GHz, 6 cores up to 3.6GHz, 4 cores up to 3.7GHz Or up to one Intel Xeon E5-2600 v3 or E5-1600 v3 processors (not available in EMEA). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Coprocessor | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory DIMM slots | 8 DIMM sockets, 4-channel capable. RDIMM, ECC, DDR4, 2400MHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory capacity | 256GB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics, GPU computing | Two PCIe 3.0 x16 slots for graphics and GPU computing adapters. Up to two NVIDIA Quadro M5000 SLI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supporting Graphics and GPU computing | <table border="1"> <thead> <tr> <th>Adapter</th> <th>Cores</th> <th>Memory</th> <th>Power</th> <th>SLI</th> <th>Connector***</th> </tr> </thead> <tbody> <tr> <td>NVS 310</td> <td>48</td> <td>1GB</td> <td>19.5W</td> <td></td> <td>2xDP</td> </tr> <tr> <td>NVS 315</td> <td>48</td> <td>1GB</td> <td>19.5W</td> <td></td> <td>2xDVI-I SL/2xDP</td> </tr> <tr> <td>NVS 510</td> <td>192</td> <td>2GB</td> <td>35W</td> <td></td> <td>4xmini DP</td> </tr> <tr> <td>NVS 810</td> <td>1024</td> <td>4GB</td> <td>68W</td> <td></td> <td>8xmini DP</td> </tr> <tr> <td>Quadro K420</td> <td>192</td> <td>2GB</td> <td>41W</td> <td></td> <td>DVI-I DL+DP</td> </tr> <tr> <td>Quadro K620</td> <td>384</td> <td>2GB</td> <td>45W</td> <td></td> <td>DVI-I DL+DP</td> </tr> <tr> <td>Quadro K1200</td> <td>512</td> <td>4GB</td> <td>45W</td> <td></td> <td>4xmini DP</td> </tr> <tr> <td>Quadro K2200</td> <td>640</td> <td>4GB</td> <td>68W</td> <td></td> <td>DVI-I DL+2xDP</td> </tr> <tr> <td>Quadro K4200</td> <td>1344</td> <td>4GB</td> <td>108W</td> <td></td> <td>DVI-I DL+2xDP</td> </tr> <tr> <td>Quadro K5200</td> <td>2304</td> <td>8GB</td> <td>150W</td> <td>SLI</td> <td>DVI-I DL+DVI-D DL+2xDP</td> </tr> <tr> <td>Quadro M2000</td> <td>768</td> <td>4GB</td> <td>75W</td> <td></td> <td>4xDP</td> </tr> <tr> <td>Quadro M4000</td> <td>1664</td> <td>8GB</td> <td>120W</td> <td></td> <td>4xDP</td> </tr> <tr> <td>Quadro M5000</td> <td>2048</td> <td>8GB</td> <td>150W</td> <td>SLI</td> <td>DVI-I DL+4xDP</td> </tr> <tr> <td>Quadro M6000</td> <td>3072</td> <td>24GB</td> <td>250W</td> <td></td> <td>DVI-I DL+4xDP</td> </tr> <tr> <td>Tesla K40</td> <td>2880</td> <td>12GB</td> <td>235W</td> <td></td> <td></td> </tr> </tbody> </table> | Adapter | Cores | Memory | Power | SLI | Connector*** | NVS 310 | 48 | 1GB | 19.5W | | 2xDP | NVS 315 | 48 | 1GB | 19.5W | | 2xDVI-I SL/2xDP | NVS 510 | 192 | 2GB | 35W | | 4xmini DP | NVS 810 | 1024 | 4GB | 68W | | 8xmini DP | Quadro K420 | 192 | 2GB | 41W | | DVI-I DL+DP | Quadro K620 | 384 | 2GB | 45W | | DVI-I DL+DP | Quadro K1200 | 512 | 4GB | 45W | | 4xmini DP | Quadro K2200 | 640 | 4GB | 68W | | DVI-I DL+2xDP | Quadro K4200 | 1344 | 4GB | 108W | | DVI-I DL+2xDP | Quadro K5200 | 2304 | 8GB | 150W | SLI | DVI-I DL+DVI-D DL+2xDP | Quadro M2000 | 768 | 4GB | 75W | | 4xDP | Quadro M4000 | 1664 | 8GB | 120W | | 4xDP | Quadro M5000 | 2048 | 8GB | 150W | SLI | DVI-I DL+4xDP | Quadro M6000 | 3072 | 24GB | 250W | | DVI-I DL+4xDP | Tesla K40 | 2880 | 12GB | 235W | | |
| | Adapter | Cores | Memory | Power | SLI | Connector*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NVS 310 | 48 | 1GB | 19.5W | | 2xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NVS 315 | 48 | 1GB | 19.5W | | 2xDVI-I SL/2xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NVS 510 | 192 | 2GB | 35W | | 4xmini DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NVS 810 | 1024 | 4GB | 68W | | 8xmini DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K420 | 192 | 2GB | 41W | | DVI-I DL+DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K620 | 384 | 2GB | 45W | | DVI-I DL+DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K1200 | 512 | 4GB | 45W | | 4xmini DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K2200 | 640 | 4GB | 68W | | DVI-I DL+2xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K4200 | 1344 | 4GB | 108W | | DVI-I DL+2xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K5200 | 2304 | 8GB | 150W | SLI | DVI-I DL+DVI-D DL+2xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro M2000 | 768 | 4GB | 75W | | 4xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quadro M4000 | 1664 | 8GB | 120W | | 4xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quadro M5000 | 2048 | 8GB | 150W | SLI | DVI-I DL+4xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quadro M6000 | 3072 | 24GB | 250W | | DVI-I DL+4xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tesla K40 | 2880 | 12GB | 235W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RAID controller | Supports one of the following: 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, 12Gb/s SAS and SATA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drive Bays | Two external 5.25" flex bays for flex module, optical drives, or optional disk drives. Four 3.5" internal bays. Each 3.5" bay can support dual drives on selected models (see right). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supporting storage | 3.5" HDD, 7.2K SATA6Gbs | 500GB/1TB/2TB/3TB/4TB, 1TB/2TB hybrid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2.5" HDD, 15K SAS12Gbs | 300GB/600GB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2.5" SSD, SAS12Gbs | 200GB/400GB/800GB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2.5" SSD, SATA6Gbs | 180GB/240GB/256GB/480GB with OPAL, 256GB/512GB/1TB without OPAL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PCIe SSD, U.2 | 400GB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PCIe SSD, M.2 | 256 GB/512GB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PCIe SSD, PCIe adapter | 400GB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flex connector | One flex connector, 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 one 2.5" PCIe SSD • Up to one M.2 flex adapters for one M.2 PCIe SSD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Network interfaces | Integrated one Gigabit Ethernet (Intel i218LM), supports Wake-on-LAN. 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Components | Specification | |
|-----------------------------------|--|--------------------------------------|
| 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 | |
| Add-on ports | Supports the following optional ports: Two IEEE 1394 (one on rear and one on front flex module) via PCIe adapter, up to one adapter per system. Two rear USB 3.0 per PCIe adapter, up to three adapters per system. One rear Thunderbolt via PCIe adapter. One front eSATA (on flex module), or one rear eSATA via cable (also needs one PCIe slot), up to one eSATA port per system. One internal USB 3.0 port via cable, cannot be intermixed with 29-in-1 reader | |
| Media reader | 9-in-1 USB 2.0 or 29-in-1 USB 3.0 card reader | |
| Mechanical | <ul style="list-style-type: none"> 36-liter: 175mm/6.89" W x 470mm/18.5" D x 440mm/17.32" H (with feet) Tool-less parts: all except CPU fansink 48.94 lb (22.2kg) max configuration | |
| Environmental specification | Temperature - operating | 50 °F to 95 °F (10 °C to 35 °C) |
| | Temperature - non operating (no package) | 14 °F to 140 °F (-10 °C to 60 °C) |
| | Temperature - non operating (with package) | -40 °F to 140 °F (-40 °C to 60 °C) |
| | Altitude - operating | (Unpressurized): 0-10000ft (0-3048m) |
| | Humidity - operating | 10%-80%, non-condensing |
| Humidity - storage (with package) | 10%-90%, non-condensing | |
| | RoHS-compliant, GREENGUARD on all models. EPEAT Gold rating, ENERGY STAR 6.1 qualified on selected models. | |
| Base warranty | 3-year limited onsite service with 9x5/NBD | |



Expansion slots

- 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

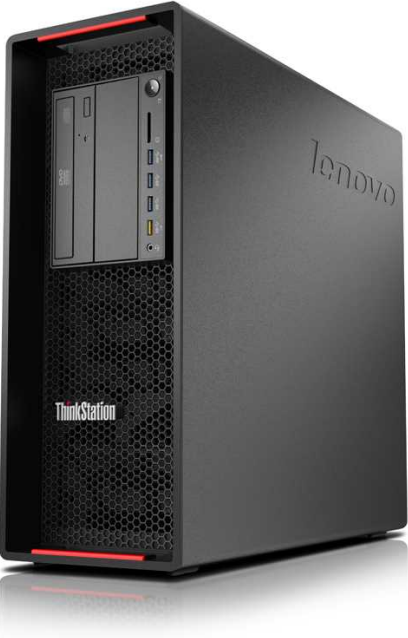
Drive Bays

- HDD 1-4: Standard 3.5" HDD bay, up to four 3.5" or 2.5" disk drives.
On selected models, each 3.5" bay can support 2.5" (9mm or less) drive plus 3.5" drive, or two 2.5" (15mm or less) drives.
- Flex bay: Two 5.25" flex bays, for HH optical drives.
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 HDD bays for two drives, 3.5" or 2.5" each, SATA only.

For the list of ISV certifications, please visit www.thinkworkstations.com/isv-certifications
For a list of all supported options, please visit https://download.lenovo.com/pccbbs/options_iso/ocm_july_2016.xlsx sheet

| Model | Region | Processor | Graphics | Memory | RAID Controller | Max Drives in 3.5" Bays | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|---|-------------------------|---------------------------|-----------------|-------------------------|-------------------------------------|----------------|--------------|--------------|--------------|-------------------|--------------------------------|----------|--------|------------------|
| 30B50006++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 06/16 |
| 30B50007++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B50008++ | EMEA | Xeon E5-2603 v4 6C/1.7GHz/15MB/85W/DDR4-1866 | NVIDIA Quadro M2000 4GB | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs | HH DVD±RW Opal | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 06/16 |
| 30B50009++ | EMEA | Xeon E5-1650 v3 6C/3.5GHz/15MB/140W/DDR4-2133 | NVIDIA Quadro M2000 4GB | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs | HH DVD±RW Opal | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 06/16 |
| 30B5000A++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs | HH DVD±RW Opal | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 06/16 |
| 30B5000B++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 06/16 |
| 30B5000C++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD M.2 PCIe | Opal HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B5000D++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | NVIDIA Quadro M2000 4GB | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs | HH DVD±RW Opal | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B5000G++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 06/16 |
| 30B5000K++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 06/16 |
| 30B5000M++ | EMEA | Xeon E5-2603 v4 6C/1.7GHz/15MB/85W/DDR4-1866 | NVIDIA Quadro M2000 4GB | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs | HH DVD±RW Opal | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B5000N++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B5000P++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD M.2 PCIe | Opal HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 06/16 |
| 30B5000R++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | NVIDIA Quadro M2000 4GB | 4x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 490W 90% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B5000T++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD M.2 PCIe | Opal HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B50011++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs | HH DVD±RW Opal | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B50012++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |

| Model | Region | Processor | Graphics | Memory | RAID Controller | Max Drives in 3.5" Bays | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|---|----------|---------------------------|-----------------|-------------------------|---|--------------|--------------|--------------|--------------|-------------------|--------------------------------|----------|--------|------------------|
| 30B50019++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B5001A++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 06/16 |
| 30B5001B++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 06/16 |
| 30B5001C++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 06/16 |
| 30B5001D++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD M.2 PCIe Opal | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 06/16 |
| 30B50037++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 29-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30B50038++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 29-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30B50039++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 4x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x512GB SSD M.2 PCIe | HH DVD±RW | 29-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30B5003A++ | EMEA | Xeon E5-2630 v4 10C/2.2GHz/25MB/85W/DDR4-2133 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x2TB HDD 7.2K 3.5" SATA6Gbs+1x512GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30B5004Q++ | EMEA | Xeon E5-2630 v4 10C/2.2GHz/25MB/85W/DDR4-2133 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x2TB HDD 7.2K 3.5" SATA6Gbs+1x512GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B5004R++ | EMEA | Xeon E5-1620 v4 4C/3.5GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | 9.5mm DVD±RW | 29-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B5004S++ | EMEA | Xeon E5-1630 v4 4C/3.7GHz/10MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | 9.5mm DVD±RW | 29-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B5004T++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 4x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x512GB SSD M.2 PCIe | 9.5mm DVD±RW | 29-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |
| 30B5005E++ | EMEA | Xeon E5-1650 v4 6C/3.6GHz/15MB/140W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |



ThinkStation P700 Platform Specifications

| 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, Or up to one 140W Intel Xeon E5-1600 v3 family processor: |
| | E5-2699 v3 18C/2.3GHz/45MB/145W/DDR4-2133 |
| | E5-2698 v3 16C/2.3GHz/40MB/135W/DDR4-2133 |
| | E5-2697 v3 14C/2.6GHz/35MB/145W/DDR4-2133 |
| | E5-2695 v3 14C/2.3GHz/35MB/120W/DDR4-2133 |
| | E5-2690 v3 12C/2.6GHz/30MB/135W/DDR4-2133 |
| | E5-2685 v3 12C/2.6GHz/30MB/120W/DDR4-2133 |
| | E5-2683 v3 14C/2GHz/35MB/120W/DDR4-2133 |
| | E5-2680 v3 12C/2.5GHz/30MB/120W/DDR4-2133 |
| | E5-2670 v3 12C/2.3GHz/30MB/120W/DDR4-2133 |
| | E5-2667 v3 8C/3.2GHz/20MB/135W/DDR4-2133 |
| | E5-2660 v3 10C/2.6GHz/25MB/105W/DDR4-2133 |
| | E5-2650L v3 12C/1.8GHz/30MB/65W/DDR4-2133 |
| | E5-2650 v3 10C/2.3GHz/25MB/105W/DDR4-2133 |
| | E5-2643 v3 6C/3.4GHz/20MB/135W/DDR4-2133 |
| | E5-2640 v3 8C/2.6GHz/20MB/90W/DDR4-1866 |
| | E5-2637 v3 4C/3.5GHz/15MB/135W/DDR4-2133 |
| | E5-2630L v3 8C/1.8GHz/20MB/55W/DDR4-1866 |
| | E5-2630 v3 8C/2.4GHz/20MB/85W/DDR4-1866 |
| | E5-2623 v3 4C/3GHz/10MB/105W/DDR4-1866 |
| | E5-2620 v3 6C/2.4GHz/15MB/85W/DDR4-1866 |
| | E5-2609 v3 6C/1.9GHz/15MB/85W/DDR4-1600 |
| | E5-2603 v3 6C/1.6GHz/15MB/85W/DDR4-1600 |
| E5-1680 v3 8C/3.2GHz/20MB/140W/DDR4-2133 | |
| E5-1660 v3 8C/3GHz/20MB/140W/DDR4-2133 | |
| E5-1650 v3 6C/3.5GHz/15MB/140W/DDR4-2133 | |
| E5-1630 v3 4C/3.7GHz/10MB/140W/DDR4-2133 | |
| E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | |
| E5-1607 v3 4C/3.1GHz/10MB/140W/DDR4-1866 | |
| E5-1603 v3 4C/2.8GHz/10MB/140W/DDR4-1866 | |
| 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, DDR4-2133. |
| Memory capacity | 768GB (LRDIMM)/384GB, 2nd CPU is needed |
| Graphics, GPU computing, coprocessors | Three PCIe 3.0 x16 slots, two via CPU1, one via CPU2 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, supports Wake-on-LAN. 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), two 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 1HDD 3
HDD 2HDD 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

Note:

- 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).
- More than 4 drives requires LSI RAID flex adapter or 9364-8i adapter.

Supporting NVIDIA graphics and GPU computing list

| Adapter | Cores | Memory | Power | SLI | Connector*** |
|---------------|-------|--------|-------|-----|---------------------------|
| NVS 310 | 48 | 1GB | 19.5W | | 2xDP |
| NVS 315 | 48 | 1024MB | 19.5W | | 2xDVI-I SL/2xDP |
| NVS 510 | 192 | 2048MB | 33.4W | | 4xmini DP |
| Quadro 410 | 192 | 512MB | 36.7W | | DVI-I DL+DP |
| Quadro K600 | 192 | 1GB | 41W | | DVI-I DL+DP |
| Quadro K2000 | 384 | 2GB | 51.1W | | DVI-I DL+2xDP |
| Quadro K2000D | 384 | 2GB | 51.1W | | DVI-I DL+DVI-D DL+mini DP |
| Quadro K4000 | 768 | 3GB | 80W | | DVI-I DL+2xDP |
| Quadro K5000 | 1536 | 4GB | 122W | | DVI-I DL+DVI-D DL+2xDP |
| Quadro K6000 | 2880 | 12GB | 225W | | DVI-I DL+DVI-D DL+2xDP |
| Quadro K420 | 192 | 2GB | 41W | | DVI-I DL+DP |
| Quadro K620 | 384 | 2GB | 45W | | DVI-I DL+DP |
| Quadro K2200 | 640 | 4GB | 68W | | DVI-I DL+2xDP |
| Quadro K4200 | 1344 | 4GB | 108W | | DVI-I DL+2xDP |
| Quadro K5200 | 2304 | 8GB | 150W | SLI | DVI-I DL+DVI-D DL+2xDP |
| Quadro M4000 | 1664 | 8GB | 120W | | 4xDP |
| Quadro M5000 | 2048 | 8GB | 150W | | DVI-I DL+4xDP |
| Quadro M6000 | 3072 | 12GB | 250W | | DVI-I DL+4xDP |
| Tesla K20 | 2496 | 5GB | 225W | | |
| GRID K2 | 3072 | 8GB | 225W | | |

** 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/480GB/512GB/1TB (Optional OPAL) |
| M.2 SSD | 256 GB/512GB (Optional NVMe) |
| PCIe SSD 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 6.1 qualified on selected models.

For the latest list of ISV certifications, please visit www.lenovo.com/support/ISV
For a list of all supported options, please visit https://download.lenovo.com/pccbbs/options_iso/ocm_april_2016.xlsx sheet

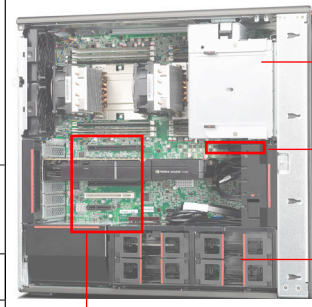
| Model | Region | Processor | Graphics | Memory | RAID Controller | Max Drives in 3.5" Bays | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|--|----------|---------------------------|-----------------|-------------------------|---|-----------|--------------|--------------|--------------|-------------------|---------------------------------|----------|--------|------------------|
| 30A90009++ | EMEA | 1xE5-2609 v3 6C/1.9GHz/15MB/85W/DDR4-1600 | Open | 2x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 10/14 |
| 30A9000A++ | EMEA | 1xE5-2620 v3 6C/2.4GHz/15MB/85W/DDR4-1866 | Open | 2x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 10/14 |
| 30A9000D++ | EMEA | 1xE5-2630 v3 8C/2.4GHz/20MB/85W/DDR4-1866 | Open | 2x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x2TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 10/14 |
| 30A90010++ | EMEA | 1xE5-2603 v3 6C/1.6GHz/15MB/85W/DDR4-1600 | Open | 1x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 10/14 |
| 30A9001G++ | EMEA | 1xE5-2620 v3 6C/2.4GHz/15MB/85W/DDR4-1866 | Open | 1x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 850W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 02/15 |
| 30A9001J++ | EMEA | 1xE5-2630 v3 8C/2.4GHz/20MB/85W/DDR4-1866 | Open | 1x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 850W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 02/15 |
| 30A9001Q++ | EMEA | 2xE5-2620 v3 6C/2.4GHz/15MB/85W/DDR4-1866 | Open | 4x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x2TB HDD 7.2K 3.5" SATA6Gbs+1x256GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 02/15 |
| 30A9001R++ | EMEA | 2xE5-2630 v3 8C/2.4GHz/20MB/85W/DDR4-1866 | Open | 4x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x2TB HDD 7.2K 3.5" SATA6Gbs+1x256GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 02/15 |
| 30A90023++ | EMEA | 2xXeon E5-2670 v3 12C/2.3GHz/30MB/120W/DDR4-2133 | Open | 2x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 06/15 |
| 30A90024++ | EMEA | 2xE5-2650 v3 10C/2.3GHz/25MB/105W/DDR4-2133 | Open | 2x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 06/15 |
| 30A90025++ | EMEA | 1xE5-2650 v3 10C/2.3GHz/25MB/105W/DDR4-2133 | Open | 2x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 06/15 |

ThinkStation P710 Platform Specifications

Product Specifications Reference (PSREF)

| 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 v4 family processors. Each processor supports up to 22 cores up to 2.2GHz, 16 cores up to 2.6GHz, 14 cores up to 2.6GHz, 12 cores up to 2.2GHz, 10 cores up to 2.4GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.5GHz. Or up to two Intel Xeon E5-2620 v3 or E5-2609 v3 processors (not available in EMEA) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Coprocessor | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory DIMM slots | 12 DIMM sockets (6 DIMMs per processor), 8-channel capable (4-channel per processor). RDIMM, ECC, DDR4-2400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memory capacity | 384GB, 2nd CPU is needed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graphics, GPU computing | Three PCIe 3.0 x16 slots, two via CPU1, one via CPU2. Up to three graphics and GPU computing adapters, 2nd CPU is needed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PSU Maximum quantity of PCIe x16 adapters per system (by power) 650W 1x150W+2x75W with onboard SATA controller and up to two 120W CPU each 850W 1x300W+2x75W (up to two 120W CPU each), or 2x150W+1x75W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supporting Graphics and GPU computing | <table border="1"> <thead> <tr> <th>Adapter</th> <th>Cores</th> <th>Memory</th> <th>Power</th> <th>SLI</th> <th>Connector***</th> </tr> </thead> <tbody> <tr> <td>NVS 310</td> <td>48</td> <td>1GB</td> <td>19.5W</td> <td></td> <td>2xDP</td> </tr> <tr> <td>NVS 315</td> <td>48</td> <td>1GB</td> <td>19.5W</td> <td></td> <td>2xDVI-I SL/2xDP</td> </tr> <tr> <td>NVS 510</td> <td>192</td> <td>2GB</td> <td>35W</td> <td></td> <td>4xmini DP</td> </tr> <tr> <td>NVS 810</td> <td>1024</td> <td>4GB</td> <td>68W</td> <td></td> <td>8xmini DP</td> </tr> <tr> <td>Quadro K420</td> <td>192</td> <td>2GB</td> <td>41W</td> <td></td> <td>DVI-I DL+DP</td> </tr> <tr> <td>Quadro K620</td> <td>384</td> <td>2GB</td> <td>45W</td> <td></td> <td>DVI-I DL+DP</td> </tr> <tr> <td>Quadro K1200</td> <td>512</td> <td>4GB</td> <td>45W</td> <td></td> <td>4xmini DP</td> </tr> <tr> <td>Quadro K2200</td> <td>640</td> <td>4GB</td> <td>68W</td> <td></td> <td>DVI-I DL+2xDP</td> </tr> <tr> <td>Quadro K4200</td> <td>1344</td> <td>4GB</td> <td>108W</td> <td></td> <td>DVI-I DL+2xDP</td> </tr> <tr> <td>Quadro K5200</td> <td>2304</td> <td>8GB</td> <td>150W</td> <td>SLI</td> <td>DVI-I DL+DVI-D DL+2xDP</td> </tr> <tr> <td>Quadro M2000</td> <td>768</td> <td>4GB</td> <td>75W</td> <td></td> <td>4xDP</td> </tr> <tr> <td>Quadro M4000</td> <td>1664</td> <td>8GB</td> <td>120W</td> <td></td> <td>4xDP</td> </tr> <tr> <td>Quadro M5000</td> <td>2048</td> <td>8GB</td> <td>150W</td> <td>SLI</td> <td>DVI-I DL+4xDP</td> </tr> <tr> <td>Quadro M6000</td> <td>3072</td> <td>24GB</td> <td>250W</td> <td></td> <td>DVI-I DL+4xDP</td> </tr> <tr> <td>Tesla K40</td> <td>2880</td> <td>12GB</td> <td>235W</td> <td></td> <td></td> </tr> </tbody> </table> | Adapter | Cores | Memory | Power | SLI | Connector*** | NVS 310 | 48 | 1GB | 19.5W | | 2xDP | NVS 315 | 48 | 1GB | 19.5W | | 2xDVI-I SL/2xDP | NVS 510 | 192 | 2GB | 35W | | 4xmini DP | NVS 810 | 1024 | 4GB | 68W | | 8xmini DP | Quadro K420 | 192 | 2GB | 41W | | DVI-I DL+DP | Quadro K620 | 384 | 2GB | 45W | | DVI-I DL+DP | Quadro K1200 | 512 | 4GB | 45W | | 4xmini DP | Quadro K2200 | 640 | 4GB | 68W | | DVI-I DL+2xDP | Quadro K4200 | 1344 | 4GB | 108W | | DVI-I DL+2xDP | Quadro K5200 | 2304 | 8GB | 150W | SLI | DVI-I DL+DVI-D DL+2xDP | Quadro M2000 | 768 | 4GB | 75W | | 4xDP | Quadro M4000 | 1664 | 8GB | 120W | | 4xDP | Quadro M5000 | 2048 | 8GB | 150W | SLI | DVI-I DL+4xDP | Quadro M6000 | 3072 | 24GB | 250W | | DVI-I DL+4xDP | Tesla K40 | 2880 | 12GB | 235W | | |
| | Adapter | Cores | Memory | Power | SLI | Connector*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NVS 310 | 48 | 1GB | 19.5W | | 2xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NVS 315 | 48 | 1GB | 19.5W | | 2xDVI-I SL/2xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NVS 510 | 192 | 2GB | 35W | | 4xmini DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NVS 810 | 1024 | 4GB | 68W | | 8xmini DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K420 | 192 | 2GB | 41W | | DVI-I DL+DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K620 | 384 | 2GB | 45W | | DVI-I DL+DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K1200 | 512 | 4GB | 45W | | 4xmini DP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K2200 | 640 | 4GB | 68W | | DVI-I DL+2xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K4200 | 1344 | 4GB | 108W | | DVI-I DL+2xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro K5200 | 2304 | 8GB | 150W | SLI | DVI-I DL+DVI-D DL+2xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro M2000 | 768 | 4GB | 75W | | 4xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Quadro M4000 | 1664 | 8GB | 120W | | 4xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quadro M5000 | 2048 | 8GB | 150W | SLI | DVI-I DL+4xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quadro M6000 | 3072 | 24GB | 250W | | DVI-I DL+4xDP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tesla K40 | 2880 | 12GB | 235W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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, 12Gb/s SAS and SATA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drive Bays | Two external 5.25" flex bays, four 3.5" internal bays. Each 3.5" bay can support dual drives on selected models (see right) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supporting storage | 3.5" SATA HDD, 7.2K 6Gbs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2.5" SAS HDD, 15K 12Gbs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2.5" SAS SSD, 12Gbs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2.5" SATA SSD, 6Gbs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PCIe SSD, 2.5" | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PCIe SSD, M.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flex connector | One flex connectors (see right), supports one of the following: <ul style="list-style-type: none"> 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 PCIe SSD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | One flex connectors (see right), supports one of the following: <ul style="list-style-type: none"> 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 PCIe SSD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Network interfaces | Integrated two-port gigabit ethernet (Intel i218LM and i210AT), supports Wake-on-LAN. Optional discrete ethernet adapters are 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Components | Specification | | | | | | | | | | | | |
|--|--|--|-------------------------|---------------------------------|--|-----------------------------------|--|------------------------------------|----------------------|--------------------------------------|----------------------|-------------------------|-----------------------------------|
| 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 | | | | | | | | | | | | |
| Add-on ports | Supports the following optional ports: Two IEEE 1394 (one on rear and one on front flex module) via PCIe adapter, up to one adapter per system. Two rear USB 3.0 per PCIe adapter, up to three adapters per system. One rear Thunderbolt via PCIe adapter. One front eSATA (on flex module), or one rear eSATA via cable (also needs one PCIe slot), up to one eSATA port per system. One internal USB 3.0 port via cable, cannot be intermixed with 29-in-1 reader | | | | | | | | | | | | |
| Media reader | 9-in-1 USB 2.0 card reader. Optional 29-in-1 USB 3.0 card reader on flex module | | | | | | | | | | | | |
| Mechanical | <ul style="list-style-type: none"> 36-liter: 175mm/6.89" W x 485mm/19.1" D x 446mm/17.6" H (with feet) Tool-less parts: all except CPU fansink 52.25 lb (23.7kg) max configuration | | | | | | | | | | | | |
| | Environmental specification | <table border="1"> <tbody> <tr> <td>Temperature - operating</td> <td>50 °F to 95 °F (10 °C to 35 °C)</td> </tr> <tr> <td>Temperature - non operating (no package)</td> <td>14 °F to 140 °F (-10 °C to 60 °C)</td> </tr> <tr> <td>Temperature - non operating (with package)</td> <td>-40 °F to 140 °F (-40 °C to 60 °C)</td> </tr> <tr> <td>Altitude - operating</td> <td>(Unpressurized): 0-10000ft (0-3048m)</td> </tr> <tr> <td>Humidity - operating</td> <td>10%-80%, non-condensing</td> </tr> <tr> <td>Humidity - storage (with package)</td> <td>10%-90%, non-condensing</td> </tr> </tbody> </table> <p>RoHS-compliant, GREENGUARD on all models. EPEAT Gold rating, ENERGY STAR 6.1 qualified on selected models.</p> | Temperature - operating | 50 °F to 95 °F (10 °C to 35 °C) | Temperature - non operating (no package) | 14 °F to 140 °F (-10 °C to 60 °C) | Temperature - non operating (with package) | -40 °F to 140 °F (-40 °C to 60 °C) | Altitude - operating | (Unpressurized): 0-10000ft (0-3048m) | Humidity - operating | 10%-80%, non-condensing | Humidity - storage (with package) |
| Temperature - operating | 50 °F to 95 °F (10 °C to 35 °C) | | | | | | | | | | | | |
| Temperature - non operating (no package) | 14 °F to 140 °F (-10 °C to 60 °C) | | | | | | | | | | | | |
| Temperature - non operating (with package) | -40 °F to 140 °F (-40 °C to 60 °C) | | | | | | | | | | | | |
| Altitude - operating | (Unpressurized): 0-10000ft (0-3048m) | | | | | | | | | | | | |
| Humidity - operating | 10%-80%, non-condensing | | | | | | | | | | | | |
| Humidity - storage (with package) | 10%-90%, non-condensing | | | | | | | | | | | | |
| Base warranty | 3-year limited onsite service with 9x5/NBD | | | | | | | | | | | | |



Expansion slots 1-6 (top-down)

Drive Bays

HDD 1-4: Standard 3.5" HDD bay, up to four 3.5" or 2.5" disk drives.
On selected models, each 3.5" bay can supports 2.5" (9mm or less) drive plus 3.5" drive, or two 2.5" (15mm or less) drives.

Flex bay: Two 5.25" flex bays, for HH optical drives.

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 HDD bays for two drives, 3.5" or 2.5" each, SATA only.

Expansion slots

Slot 1: PCIe 3.0 x16, half length, full height, CPU2 needed (full length, full height if no flex adapter)
Slot 2: PCIe 3.0 x16, full length, full height
Slot 3: PCIe 3.0 x8, full length, full height, CPU2 needed
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
Also supports one flex connector

For the list of ISV certifications, please visit www.thinkworkstations.com/isv-certifications/
For a list of all supported options, please visit https://download.lenovo.com/pccbbs/options_iso/ocm_july_2016.xlsx sheet

| Model | Region | Processor | Graphics | Memory | RAID Controller | Max Drives in 3.5" Bays | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|---|----------|---------------------------------|-----------------|-------------------------|---|--------------|--------------|--------------|--------------|----------------------|--------------------------------------|----------|--------|------------------|
| 30B70005++ | EMEA | 2xXeon E5-2630 v4 10C/2.2GHz/ 25MB/85W/DDR4-2133 | Open | 4x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x512GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |
| 30B70006++ | EMEA | 1xXeon E5-2620 v4 8C/2.1GHz/ 20MB/85W/DDR4-2133 | Open | 4x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x512GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |
| 30B70007++ | EMEA | 1xXeon E5-2620 v4 8C/2.1GHz/ 20MB/85W/DDR4-2133 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |
| 30B7000D++ | EMEA | 2xXeon E5-2650 v4 12C/2.2GHz/ 30MB/105W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x1TB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 850W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |
| 30B7000E++ | EMEA | 1xXeon E5-2650 v4 12C/2.2GHz/ 30MB/105W/DDR4-2400 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 850W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |
| 30B7000F++ | EMEA | 1xXeon E5-2630 v4 10C/2.2GHz/ 25MB/85W/DDR4-2133 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 850W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |
| 30B7000P++ | EMEA | 1xXeon E5-2620 v4 8C/2.1GHz/ 20MB/85W/DDR4-2133 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 850W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |
| 30B7001L++ | EMEA | 2xXeon E5-2620 v4 8C/2.1GHz/ 20MB/85W/DDR4-2133 | Open | 4x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs+1x256GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 07/16 |
| 30B70026++ | EMEA | 2xXeon E5-2620 v4 8C/2.1GHz/ 20MB/85W/DDR4-2133 | Open | 4x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs+1x256GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 650W 92% | None | USB / USB Optical | Windows 10 DG Windows 7 Pro 64 | 3-year | No | 09/16 |



ThinkStation P900 Platform Specifications

Product Specifications Reference (PSREF)

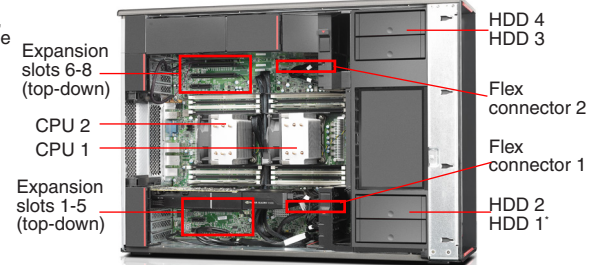
| Components | Specification | | | | | |
|--|---|---------------|---|---|------------------------|---|
| Chipset | Intel C612 Platform Controller Hub (PCH) | | | | | |
| System mgmt | Intel Active Management Technology 9 | | | | | |
| Processor | Up to two 160W Intel Xeon E5-2600 v3 family processors, Or up to one 140W Intel Xeon E5-1600 v3 family processor: | | | | | |
| | E5-2699 v3 18C/2.3GHz/45MB/145W/DDR4-2133 | | | | | |
| | E5-2698 v3 16C/2.3GHz/40MB/135W/DDR4-2133 | | | | | |
| | E5-2697 v3 14C/2.6GHz/35MB/145W/DDR4-2133 | | | | | |
| | E5-2695 v3 14C/2.3GHz/35MB/120W/DDR4-2133 | | | | | |
| | E5-2690 v3 12C/2.6GHz/30MB/135W/DDR4-2133 | | | | | |
| | E5-2687 w v3 10C/3.1GHz/25MB/160W/DDR4-2133 | | | | | |
| | E5-2685 v3 12C/2.6GHz/30MB/120W/DDR4-2133 | | | | | |
| | E5-2683 v3 14C/2GHz/35MB/120W/DDR4-2133 | | | | | |
| | E5-2680 v3 12C/2.5GHz/30MB/120W/DDR4-2133 | | | | | |
| | E5-2670 v3 12C/2.3GHz/30MB/120W/DDR4-2133 | | | | | |
| | E5-2667 v3 8C/3.2GHz/20MB/135W/DDR4-2133 | | | | | |
| | E5-2660 v3 10C/2.6GHz/25MB/105W/DDR4-2133 | | | | | |
| | E5-2650L v3 12C/1.8GHz/30MB/65W/DDR4-2133 | | | | | |
| | E5-2650 v3 10C/2.3GHz/25MB/105W/DDR4-2133 | | | | | |
| | E5-2643 v3 6C/3.4GHz/20MB/135W/DDR4-2133 | | | | | |
| | E5-2640 v3 8C/2.6GHz/20MB/90W/DDR4-1866 | | | | | |
| | E5-2637 v3 4C/3.5GHz/15MB/135W/DDR4-2133 | | | | | |
| | E5-2630L v3 8C/1.8GHz/20MB/55W/DDR4-1866 | | | | | |
| | E5-2630 v3 8C/2.4GHz/20MB/85W/DDR4-1866 | | | | | |
| | E5-2623 v3 4C/3GHz/10MB/105W/DDR4-1866 | | | | | |
| | E5-2620 v3 6C/2.4GHz/15MB/85W/DDR4-1866 | | | | | |
| E5-2609 v3 6C/1.9GHz/15MB/85W/DDR4-1600 | | | | | | |
| E5-2603 v3 6C/1.6GHz/15MB/85W/DDR4-1600 | | | | | | |
| E5-1680 v3 8C/3.2GHz/20MB/140W/DDR4-2133 | | | | | | |
| E5-1660 v3 8C/3GHz/20MB/140W/DDR4-2133 | | | | | | |
| E5-1650 v3 6C/3.5GHz/15MB/140W/DDR4-2133 | | | | | | |
| E5-1630 v3 4C/3.7GHz/10MB/140W/DDR4-2133 | | | | | | |
| E5-1620 v3 4C/3.5GHz/10MB/140W/DDR4-2133 | | | | | | |
| E5-1607 v3 4C/3.1GHz/10MB/140W/DDR4-1866 | | | | | | |
| E5-1603 v3 4C/2.8GHz/10MB/140W/DDR4-1866 | | | | | | |
| 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, DDR4-2133 | | | | | |
| Memory capacity | 1024GB(LRDIMM)/512GB (RDIMM), 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. | | | | | |
| | <table border="1"> <thead> <tr> <th>Installed CPU</th> <th>Maximum quantity of PCIe x16 adapters per system (by power)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1x300W+1x75W or 2x225W</td> </tr> <tr> <td>2</td> <td>2x300W+2x75W, or 1x300W+2x225W+1x75W, or 3x225W+1x150W</td> </tr> </tbody> </table> <p>Note: PSU needs to operate at full 1300W.</p> | Installed CPU | Maximum quantity of PCIe x16 adapters per system (by power) | 1 | 1x300W+1x75W or 2x225W | 2 |
| 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 | | | | | |
| 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: <ul style="list-style-type: none"> 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 i218LM and i210AT), supports Wake-on-LAN. 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 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. | | | | | |
| 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 | | | | | |

| Components | Specification |
|---------------|---|
| Thunderbolt | Up to one Thunderbolt via optional PCIe adapter. Uses slot 5. |
| Mechanical | <ul style="list-style-type: none"> 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



- Note:
- 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.
 - More than 4 drives requires LSI RAID flex adapter or 9364-8i adapter
- Slot 1: PCIe 3.0 x16, Full length, full height,
 - Slot 2: PCIe 2.0 x1, Full length, full height
 - Slot 3: PCIe 3.0 x16, Full length, full height
 - Slot 4: PCIe 2.0 x1, Full length, full height
 - Slot 5: PCIe 2.0 x4, Half length, full height
 - Slot 6: PCIe 3.0 x16, Full length, full height, CPU2 needed
 - Slot 7: PCIe 3.0 x16, Full length, full height, CPU2 needed
 - Slot 8: PCIe 2.0 x4, Full length, full height, CPU2 needed

Supporting NVIDIA graphics and GPU computing list

| Adapter | Cores | Memory | Power | SLI | Connector*** |
|---------------|-------|--------|-------|-----|---------------------------|
| NVS 310 | 48 | 1GB | 19.5W | | 2xDP |
| NVS 315 | 48 | 1024MB | 19.5W | | 2xDVI-I SL/2xDP |
| NVS 510 | 192 | 2048MB | 33.4W | | 4xmini DP |
| Quadro 410 | 192 | 512MB | 36.7W | | DVI-I DL+DP |
| Quadro K600 | 192 | 1GB | 41W | | DVI-I DL+2xDP |
| Quadro K2000 | 384 | 2GB | 51.1W | | DVI-I DL+2xDP |
| Quadro K2000D | 384 | 2GB | 51.1W | | DVI-I DL+DVI-D DL+mini DP |
| Quadro K4000 | 768 | 3GB | 80W | | DVI-I DL+2xDP |
| Quadro K5000 | 1536 | 4GB | 122W | | DVI-I DL+DVI-D DL+2xDP |
| Quadro K6000 | 2880 | 12GB | 225W | SLI | DVI-I DL+DVI-D DL+2xDP |
| Quadro K420 | 192 | 2GB | 41W | | DVI-I DL+DP |
| Quadro K620 | 384 | 2GB | 45W | | DVI-I DL+DP |
| Quadro K2200 | 640 | 4GB | 68W | | DVI-I DL+2xDP |
| Quadro K4200 | 1344 | 4GB | 108W | | DVI-I DL+2xDP |
| Quadro K5200 | 2304 | 8GB | 150W | SLI | DVI-I DL+DVI-D DL+2xDP |
| Quadro M4000 | 1664 | 8GB | 120W | | 4xDP |
| Quadro M5000 | 2048 | 8GB | 150W | | DVI-I DL+4xDP |
| Quadro M6000 | 3072 | 12GB | 250W | | DVI-I DL+4xDP |
| Tesla K20 | 2496 | 5GB | 225W | | |
| GRID K2 | 3072 | 8GB | 225W | | |

*** 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 |
| 2.5" SAS (15K 12Gbs HDD) | 300GB/450GB/600GB |
| 2.5" SATA SSD (6Gbs) | 128GB/180GB/240GB/256GB/480GB/512GB/1TB (Optional OPAL) |
| M.2 SSD | 256 GB/512GB (Optional NVMe) |
| 2.5" PCIe SSD | 400GB NVMe |
| PCIe SSD adapter | 410GB |

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 models, ENERGY STAR 6.1 qualified on selected models.

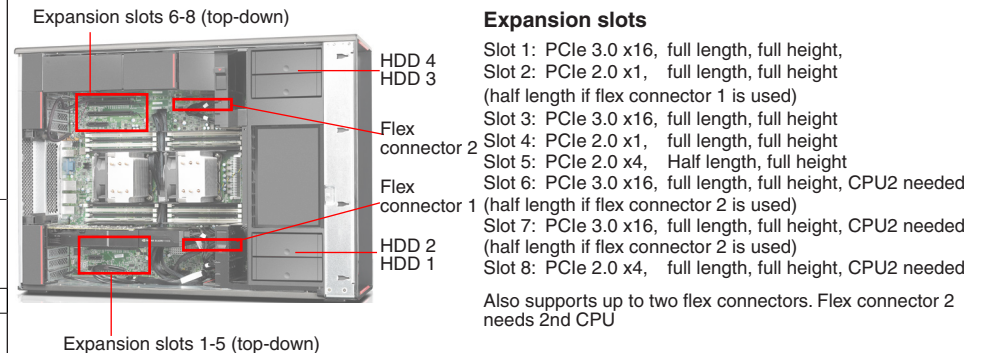
For the latest list of ISV certifications, please visit www.lenovo.com/support/ISV
For a list of all supported options, please visit https://download.lenovo.com/pccbbs/options_iso/ocm_april_2016.xlsx sheet

| Model | Region | Processor | Graphics | Memory | RAID Controller | Max Drives in 3.5" Bays | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|---|----------|-----------------------------------|-----------------|-------------------------|---|--------------|--------------|--------------|--------------|----------------------|---------------------------------------|----------|--------|------------------|
| 30A5000C++ | EMEA | 1xXeon E5-2620 v3 6C/2.4GHz/15MB/85W/DDR4-1866 | Open | 2x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 10/14 |
| 30A5000E++ | EMEA | 2xXeon E5-2620 v3 6C/2.4GHz/15MB/85W/DDR4-1866 | Open | 2x4GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 10/14 |
| 30A5000G++ | EMEA | 1xXeon E5-2630 v3 8C/2.4GHz/20MB/85W/DDR4-1866 | Open | 1x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 10/14 |
| 30A5000K++ | EMEA | 1xXeon E5-2643 v3 6C/3.4GHz/20MB/135W/DDR4-2133 | Open | 2x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 10/14 |
| 30A50011++ | EMEA | 2xXeon E5-2620 v3 6C/2.4GHz/15MB/85W/DDR4-1866 | Open | 2x8GB RDIMM DDR4-2133 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs Opal | HH DVD±RW | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 01/15 |
| 30A50012++ | EMEA | 2xXeon E5-2630 v3 8C/2.4GHz/20MB/85W/DDR4-1866 | Open | 2x16GB RDIMM DDR4- 2133 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 02/15 |
| 30A5001A++ | EMEA | 2xXeon E5-2670 v3 12C/2.3GHz/30MB/120W/DDR4-2133 | Open | 2x16GB RDIMM DDR4- 2133 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 8.1 DG Windows 7 Pro 64 | 3-year | No | 06/15 |

ThinkStation P910 Platform Specifications

| 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 v4 family processors. Each processor supports up to 22 cores up to 2.2GHz, 16 cores up to 2.6GHz, 14 cores up to 2.6GHz, 12 cores up to 3GHz, 10 cores up to 2.4GHz, 8 cores up to 3.2GHz, 6 cores up to 3.4GHz, 4 cores up to 3.5GHz. Or up to two Intel Xeon E5-2620 v3 or E5-2609 v3 processors (not available in EMEA) | | | | | |
| Coprocessor | Optional. 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, 2400MHz | | | | | |
| Memory capacity | 896GB (LRDIMM, 14x64GB)/512GB (RDIMM, 16x32GB), 2nd CPU is needed | | | | | |
| Graphics and GPU computing | Four PCIe 3.0 x16 slots for graphics and GPU computing cards, two slots per processor | | | | | |
| | Installed CPU | Maximum quantity of PCIe x16 adapters per system (by power) | | | | |
| | 1 | 1x300W+1x75W or 2x150W | | | | |
| 2 | 2x300W+2x75W, or 1x300W+2x150W+1x75W, or 4x150W | | | | | |
| Supporting Graphics and GPU computing | Adapter | Cores | Memory | Power | SLI | Connector*** |
| | NVS 310 | 48 | 1GB | 19.5W | | 2xDP |
| | NVS 315 | 48 | 1GB | 19.5W | | 2xDVI-I SL/2xDP |
| | NVS 510 | 192 | 2GB | 35W | | 4xmini DP |
| | NVS 810 | 1024 | 4GB | 68W | | 8xmini DP |
| | Quadro K420 | 192 | 2GB | 41W | | DVI-I DL+DP |
| | Quadro K620 | 384 | 2GB | 45W | | DVI-I DL+DP |
| | Quadro K1200 | 512 | 4GB | 45W | | 4xmini DP |
| | Quadro K2200 | 640 | 4GB | 68W | | DVI-I DL+2xDP |
| | Quadro K4200 | 1344 | 4GB | 108W | | DVI-I DL+2xDP |
| | Quadro K5200 | 2304 | 8GB | 150W | SLI | DVI-I DL+DVI-D DL+2xDP |
| | Quadro M2000 | 768 | 4GB | 75W | | 4xDP |
| | Quadro M4000 | 1664 | 8GB | 120W | | 4xDP |
| Quadro M5000 | 2048 | 8GB | 150W | SLI | DVI-I DL+4xDP | |
| Quadro M6000 | 3072 | 24GB | 250W | SLI | DVI-I DL+4xDP | |
| Tesla K40 | 2880 | 12GB | 235W | | | |
| 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, 12Gb/s SAS and SATA | | | | | |
| Drive Bays | Three external 5.25" bays, four internal 3.5" dual drives bays (see right) | | | | | |
| Supporting storage | 3.5" SATA HDD, 7.2K 6Gbs | 500GB/1TB/2TB/3TB/4TB/1TB hybrid/2TB hybrid | | | | |
| | 2.5" SAS HDD, 15K 12Gbs | 300GB/600GB | | | | |
| | 2.5" SAS SSD, 12Gbs | 200GB/400GB/800GB | | | | |
| | 2.5" SATA SSD, 6Gbs | 180GB/240GB/256GB/480GB/512GB/1TB, optional OPAL | | | | |
| | PCIe SSD, 2.5" | 400GB | | | | |
| | PCIe SSD, M.2 | 256 GB/512GB | | | | |
| PCIe SSD adapter | 400GB | | | | | |
| 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 PCIe SSD (two M.2 PCIe SSD per adapter) | | | | | |
| Network interfaces | Integrated two-port gigabit ethernet (Intel i218LM and i210AT), supports Wake-on-LAN. Optional discrete ethernet adapters are 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> | | | | | |

| Components | Specification | |
|-----------------------------|--|--------------------------------------|
| 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 | |
| Add-on ports | Supports the following optional ports: Two IEEE 1394 (one on rear and one on front flex module) via PCIe adapter, up to one adapter per system. Two rear USB 3.0 per PCIe adapter, up to three adapters per system. One rear Thunderbolt via PCIe adapter. One front eSATA (on flex module), or one rear eSATA via cable (also needs one PCIe slot), up to one eSATA port per system. One internal USB 3.0 port via cable, cannot be intermixed with 29-in-1 reader | |
| Media reader | 9-in-1 USB 2.0 card reader. Optional 29-in-1 USB 3.0 card reader on flex module | |
| Mechanical | • 55-liter: 200mm/7.87" W x 620mm/24.4" D x 446mm/17.56" H (with feet) • Tool-less parts: all except CPU fansink • 71.3 lb (32.3kg) max configuration | |
| | Temperature - operating | 50 °F to 95 °F (10 °C to 35 °C) |
| Environmental specification | Temperature - non operating (no package) | 14 °F to 140 °F (-10 °C to 60 °C) |
| | Temperature - non operating (with package) | -40 °F to 140 °F (-40 °C to 60 °C) |
| | Altitude - operating | (Unpressurized): 0-10000ft (0-3048m) |
| | Humidity - operating | 10%-80%, non-condensing |
| | Humidity - storage (with package) | 10%-90%, non-condensing |
| | RoHS-compliant, GREENGUARD on all models. EPEAT Gold rating, ENERGY STAR 6.1 qualified on selected models. | |
| Base warranty | 3-year limited onsite service with 9x5/NBD | |



Expansion slots

Slot 1: PCIe 3.0 x16, full length, full height,
Slot 2: PCIe 2.0 x1, full length, full height (half length if flex connector 1 is used)
Slot 3: PCIe 3.0 x16, full length, full height
Slot 4: PCIe 2.0 x1, full length, full height
Slot 5: PCIe 2.0 x4, Half length, full height
Slot 6: PCIe 3.0 x16, full length, full height, CPU2 needed (half length if flex connector 2 is used)
Slot 7: PCIe 3.0 x16, full length, full height, CPU2 needed (half length if flex connector 2 is used)
Slot 8: PCIe 2.0 x4, full length, full height, CPU2 needed

Also supports up to two flex connectors. Flex connector 2 needs 2nd CPU

Drive bays
HDD 1-4: Standard 3.5" HDD bay, up to four 3.5" or 2.5" disk drives.
Each 3.5" bay supports 2.5" (9mm or less) drive plus 3.5" drive, or two 2.5" (15mm or less) drives. More than 4 drives requires LSI RAID flex adapter or 9364-8i adapter,
Flex bay: Three 5.25" flex bays, for HH optical drives.
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 HDD bays for two drives, 3.5" or 2.5" each, SATA only.

For the list of ISV certifications, please visit www.thinkworkstations.com/isv-certifications/
For a list of all supported options, please visit https://download.lenovo.com/pccbbs/options_iso/ocm_july_2016.xlsx

| Model | Region | Processor | Graphics | Memory | RAID Controller | Max Drives in 3.5" Bays | Storage | Optical | Media Reader | Power Supply | Add-on Ports | Keyboard / Mouse | Operating System | Warranty | Global | Ann Date (mm/yy) |
|------------|--------|--|-------------------------|----------------------------|-----------------|-------------------------|-------------------------------------|----------------|--------------|--------------|--------------|-------------------|-------------------|----------|--------|------------------|
| 30B90003++ | EMEA | 2xXeon E5-2620 v4 8C/2.1GHz/20MB/85W/DDR4-2133 | Open | 2x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x1TB Hybrid HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |
| 30B90004++ | EMEA | 1xXeon E5-2630 v4 10C/2.2GHz/25MB/85W/DDR4-2133 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs | HH DVD±RW Opal | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |
| 30B90005++ | EMEA | 1xXeon E5-2620 v4 8C/2.1GHz/20MB/85W/DDR4-2133 | Open | 1x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x1TB HDD 7.2K 3.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |
| 30B90006++ | EMEA | 2xXeon E5-2630 v4 10C/2.2GHz/25MB/85W/DDR4-2133 | Open | 4x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x512GB SSD 2.5" SATA6Gbs | HH DVD±RW | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |
| 30B9000A++ | EMEA | 2xXeon E5-2650 v4 12C/2.2GHz/30MB/105W/DDR4-2400 | NVIDIA Quadro M5000 8GB | 2x16GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x512GB SSD M.2 PCIe | HH DVD±RW | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |
| 30B9000D++ | EMEA | 2xXeon E5-2620 v4 8C/2.1GHz/20MB/85W/DDR4-2133 | Open | 4x8GB RDIMM DDR4-2400 ECC | Onboard | 4 | 1x256GB SSD 2.5" SATA6Gbs | HH DVD±RW Opal | 9-in-1 | 1300W 92% | None | USB / USB Optical | Windows 10 Pro 64 | 3-year | No | 04/16 |



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.

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

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

³ **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

⁴ **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.

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

⁶ **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.

⁷ **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.

⁸ **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.

⁹ **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.

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

²⁰ **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 and enter your machine type and model number for more information.

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