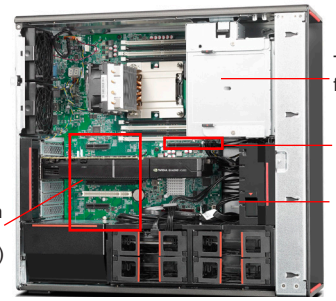
ThinkStation P510 Platform Specifications

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 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	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 adpater, 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	• 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 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.

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

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Model	30B5000R++
Product	ThinkStation P510
Region	EMEA
Machine Type	30B5
TopSeller	TopSeller
Processor	Xeon E5-1650 v4 6C/3.6GHz/ 15MB/140W/DDR4-2400
Graphics	NVIDIA Quadro M2000 4GB
Memory	4x8GB RDIMM DDR4-2400 ECC
RAID Controller	Onboard
Max Drives in 3.5" Bays	4
Storage	1x1TB HDD 7.2K 3.5" SATA6Gbs
Optical	HH DVD±RW
Media Reader	9-in-1
Power Supply	490W 90%
Add-on Ports	None
Keyboard / Mouse	USB / USB Optical
Operating System	Windows 10 Pro 64
Warranty	3-year
Global	No
Ann Date (mm/yy)	06/16