ThinkStation P520 30BE006QGE

Region
WE

Country
Germany

Machine Type
30BE

TopSeller
TopSeller

Processor
Xeon W-2123 4C/3.6GHz/8.25MB/120W/DDR4-2666

Memory
1x 8GB RDIMM DDR4-2666 ECC

Discrete Graphics Card
Open

Monitor Cable
None

Storage Controller
Integrated Intel SATA

Internal Disks
1x 256GB SSD 2.5" SATA6Gbps Opal

Disks in Flex Bay
None

Flex Bay
None

M.2 RAID
None

M.2 Drives - Onboard
None

M.2 Drives - via Quad M.2 PCIe adapter
None

M.2 Drives - via Single M.2 PCIe adapter
None

M.2 Drives - Front Removable
None

Optical
1x HH DVD±RW

WLAN + Bluetooth
None

Media Reader
9-in-1

Available Networking Ports
1x GbE

Chassis Intrusion Switch
Chassis Intrusion Switch

Front Diagnostic LED
None

System Management
Intel AMT 11

Thunderbolt Ports
None

USB Type-C Ports
None

Optionl Legacy Ports (COM/1394/eSATA/Parallel)
1x COM (Rear)

Internal USB
None

Power Supply
Fixed 900W Platinum

Keyboard
USB Full

Mouse
USB Optical

Operating System
Windows 10 Pro 64 for Workstations

Warranty
3-year, Onsite

Global
No

End of Support
2024/02/25

Ann Date
2018/01/25

Note:
* Country Code "US" is for United States, "++" is for EMEA countries (e.g. AD - Saudi, Arabia, AT - Austria, BM - Bulgaria, etc.), "xx" is for EAST countries (e.g. BM - Bulgaria, CX - Hungary, CY - Cyprus, etc.), and "**" is for MEA countries (e.g. AD - Saudi, Arabia, ED - Egypt, EQ - Sweden, etc.). Please be aware that the EMEA/ EAST/MEA models listed above might not be available in all countries

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ThinkStation P520 Platform Specifications

Components	Specification
Form factor	33L Tower
Dimensions	165mm/6.5" W x 460mm/18.1" D x 440mm/17.3" H (with feet)
Weight	Maximum configuration: 52.91 lb (24kg)
Processor	Up to one 140W Intel Xeon W family processor. Up to 18 cores at 2.3GHz, up to 4.0GHz with 4 cores. Memory speed up to DDR4-2666
Chipset	Intel C422 Chipset
Memory	8 DIMM sockets with 4 channels. RDIMMs. DDR4-2666
Memory capacity	Up to 256GB with 8 x 32GB RDIMMs
Memory protection	ECC
Graphics	Two PCIe 3.0 x16 slots (see Expansion slots section). Up to two NVIDIA Quadro P6000 (900W PSU is needed). Supports the following graphics adapters:

Adapter	Cores	Memory	Power	Connector	SLI
NVS 310	48	1GB	19.5W	2xDP	
NVS 315	48	1GB	19.3W	2xDVI-I SL/2xDP	
NVS 510	192	2GB	33.4W	4xmini DP	
NVS 810	1024	4GB	68W	8xmini DP	
Quadro P400	256	2GB	30W	3xminiDP	
Quadro P600	384	2GB	45W	4xminiDP	
Quadro P620	512	2GB GDDR5	40W	4x miniDP	
Quadro P1000	640	4GB	50W	4xminiDP	
Quadro P2000	1024	5GB	75W	4xDP	
Quadro P4000	1792	8GB	120W	4xDP	
Quadro P5000	2560	16GB	180W	DVI-D DL+4xDP	SLI
Quadro P6000	3840	24GB	250W	DVI-D DL+4xDP	
Quadro GV100	5120	32GB HBM2	250W	4xDP	

Components	Specification
Storage controllers	Integrated Intel SATA AHCI/RAID controller in chipset, 6Gbps SATA, RAID 0/1/10/5. Integrated Intel PCIe host in processor for M.2 PCIe NVMe drives, optional RAID 0/1/10 with Intel NVMe RAID upgrade basic, optional RAID 0/1/10/5 with Intel NVMe RAID upgrade premium. Optional Broadcom 9440-8i, PCIe adapter, 12Gbps, SATA/SAS, RAID 0/1/10/5. Or optional Broadcom 9460-16i with 4GB DDR4 memory and SuperCap, PCIe adapter, 12Gbps, SATA/SAS, RAID 0/1/10/5/6
5.25" flex bay	Two 5.25" flex bays, supports the following options: • Up to two half-height optical drives. • Up to two 5.25" slim ODD cages. • Up to two 5.25" slim ODD and HDD cages. • Up to one Front Access Storage Enclosure. • Up to one flex module for one or more of the following options: 9.0mm optical/ 15-in-1 USB 3.0 reader/front eSATA/front Thunderbolt/front USB 3.0 Type-C/ 4-digit diagnostic display *Note:* *1. Only one can be supported from 15-in-1 reader, Thunderbolt, and 4-digit display* *2. Up to two ports are suppported from 1394, eSATA, and USB Type-C*
Disk drive bays	Up to four internal 3.5" drive bays. Two standard, two optional. Each bay supports one 3.5" or 2.5" disk. Up to two 2.5" or 3.5" SATA/SAS disk drives on 5.25" flex bays via 5.25" Front Access Storage Enclosure supports SATA or 5.25" slim ODD and HDD cage
M.2 slots	Up to 9 x M.2 PCIe NVMe SSD: • Two onboard M.2 slots. • Up to one full height, full length PCIe 3.0 x16 adapter, supports four M.2 slots. • Up to three PCIe 3.0 x4 adapters, each adapter supports one M.2 slot Supports RAID 0/1 on onboard M.2 disks and RAID 0/1/10/5 on quad M.2 PCIe x16 adapter, optional NVMe RAID upgrade is needed
Internal storage	

HDD 7.2K 3.5" SATA6Gbps	1TB/2TB/4TB/6TB
HDD 7.2K 2.5" SATA6Gbps	500GB FIPS
SSD 2.5" SATA6Gbps	256GB Opal/512GB/512GB Opal/1TB Opal/2TB Opal
M.2 PCIe NVMe, PCIe 3.0 x4	256GB Opal/512GB Opal/1TB Opal/2TB Opal

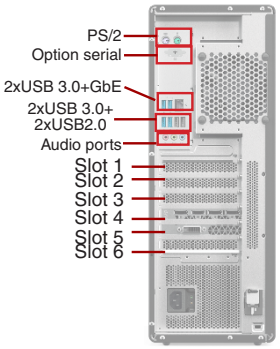
Components	Specification
Media reader	9-in-1 USB 2.0 card reader on most models. Optional UHS-II 15-in-1 USB 3.0 reader on flex module
Network interfaces	Integrated one gigabit ethernet (Intel i219LM), supports Wake-on-LAN. Optional PCIe ethernet or wireless adapters are available
Security features	Power-on and admin password. Trusted Platform Module, TCG 2.0 compliant, switch to 1.2 via UEFI setting. Optional access panel lock, Kensington lock, and pad lock
Systems management	Intel Active Management Technology 11. Front panel warning LED. ThinkStation Diagnostics for Windows. Photo-audio transfer with Lenovo PC Diagnostics for Android and iOS. Optional front 4-digit diagnostic display on flex module
Base warranty	1 or 3-year limited onsite service with 9x5/NBD
HD Audio	Realtek ALC662 codec for rear audio ports, Realtek ALC233 codec for front audio port
Front ports	Four USB 3.0 (includes one 11W charging), one combo audio/microphone jack (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), two PS/2
Optional ports	Supports the following optional ports: • Optional COM port • Two USB Type-C ports via PCIe adapter, USB 3.1 gen 2. One 15W, one 5W • Two Thunderbolt ports (USB Type-C) on flex module, one of two ports supports video-out. • One eSATA on flex module • One internal USB 3.0 port
Power supply	One fixed 690W or 900W, autosensing, 92%, 80 PLUS Platinum qualified
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): -50ft-10000ft (-15.2m-3048m)
Humidity - operating	10%~80%, non-condensing
Humidity - storage (with package)	10%~90%, non-condensing

RoHS-compliant. GREENGUARD. EPEAT Gold rating and ENERGY STAR 6.1 qualified on following models:

Model	30BE0008US	30BE0009US
Processor	Intel Xeon W-2123	Intel Xeon W-2123
Memory	2 x 8GB RDIMM DDR4-2666 ECC	2 x 8GB RDIMM DDR4-2666 ECC
Disks	2x1TB HDD 7.2K 3.5" SATA6Gbps	2 x 256GB SSD 2.5" SATA6Gbps Opal
Graphics	NVIDIA Quadro P400 2GB	NVIDIA Quadro P4000 8GB
Optical	HH DVD±RW	HH DVD±RW
PSU	690W	690W
OS	Win10 Pro 64	Win10 Pro 64

Components	Specification
ISV certifications	Please visit www.thinkworkstations.com/isv-certifications/



Note: All expansion cards are optional

Expansion slots

Slot 1 (CPU)	PCIe 3.0 x8, full height, full length, 25W, open ended
Slot 2 (CPU)	PCIe 3.0 x16, full height, full length, 75W, double-width
Slot 3 (PCH)	PCIe 3.0 x4, full height, half length, 25W, open ended
Slot 4 (CPU)	PCIe 3.0 x16, full height, full length, 75W, double-width
Slot 5	PCI, full height, full length, 25W
Slot 6 (PCH)	PCIe 3.0 x4, full height, half length, 25W, open ended

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