

ThinkStation P330 Tower Platform Specifications

Product Specifications Reference (PSREF)

Components	Specification																																																																								
Machine Type	MT 30C5 for Transactional model and MT 30C6 for Relationship model. For configuration of all 30C5 EMEA and US models, please visit: http://psref.lenovo.com/Product/ThinkStation/ThinkStation_P330_Tower																																																																								
Form factor	18L Tower																																																																								
Dimensions	Height: 376 mm (14.8 in). Width: 165 mm (6.5 in). Depth: 328 mm (12.9 in)																																																																								
Weight	Maximum configuration: 23.4 lb (10.6kg)																																																																								
Processor	Up to one Intel Xeon E family processor, up to 95W, up to 6 cores at 3.8GHz, up to 12MB cache, up to DDR4-2666 memory speed. Or up to one 8th Intel Core family processor, i7, i5, or i3, up to 95W, up to 6 cores at 3.7GHz, up to 12MB cache, up to DDR4-2666 memory speed. Or up to one Intel Pentium Gold G5400 via Special Bids, 54W, 2 cores at 3.7GHz, 4MB cache, DDR4-2400 memory speed																																																																								
Chipset	Intel C246 Chipset																																																																								
Memory	4 DIMM sockets. DDR4-2666. UDIMM. ECC and non-ECC are supported, but memory types cannot be intermixed																																																																								
Memory capacity	Up to 64GB with 4x 16GB, both ECC and non-ECC																																																																								
Memory protection	ECC with ECC UDIMM. Core i7 and i5 processors cannot support ECC UDIMM																																																																								
Expansion slots	Three PCIe 3.0 slots as following:																																																																								
	Slot 1 PCIe 3.0 x16, full height, half length, links to CPU																																																																								
	Slot 2 PCIe 3.0 x1, full height, full length, links to PCH																																																																								
	Slot 3 PCIe 3.0 x16 (negotiable link width x4), full height, half length, links to PCH																																																																								
Graphics - Processor graphics	Integrated Intel UHD Graphics P630 in -G suffix Xeon processors, or Intel UHD Graphics 630 in Core i7, i5, or i3 processors, or Intel UHD Graphics 610 in Pentium Gold G5400. Works along with discrete graphics to support multi-display, enables three display connectors (2x DP, 1x HDMI. HDMI is optional) on rear																																																																								
Graphics - Discrete graphics card	Up to two PCIe 3.0 x16 slots for discrete graphics card (Slot 1 and 3). Supports the following graphics adapters:																																																																								
	<table border="1"> <thead> <tr> <th>Adapter</th> <th>Cores</th> <th>Memory</th> <th>Power</th> <th>Connectors</th> <th>Max qty</th> </tr> </thead> <tbody> <tr> <td>NVS 810</td> <td>1024</td> <td>4GB DDR3</td> <td>68W</td> <td>8x miniDP</td> <td>1</td> </tr> <tr> <td>Quadro P400</td> <td>256</td> <td>2GB GDDR5</td> <td>30W</td> <td>3x miniDP</td> <td>2</td> </tr> <tr> <td>Quadro P620</td> <td>512</td> <td>2GB GDDR5</td> <td>40W</td> <td>4x miniDP</td> <td>2</td> </tr> <tr> <td>Quadro P1000</td> <td>640</td> <td>4GB GDDR5</td> <td>47W</td> <td>4x miniDP</td> <td>2</td> </tr> <tr> <td>Quadro P2000</td> <td>1024</td> <td>5GB GDDR5</td> <td>75W</td> <td>4x DP</td> <td>2</td> </tr> <tr> <td>Quadro P4000</td> <td>1792</td> <td>8GB GDDR5</td> <td>105W</td> <td>4x DP</td> <td>1</td> </tr> <tr> <td>Geforce GTX 1060</td> <td>1280</td> <td>6GB GDDR5</td> <td>120W</td> <td>DVI-D DL, HDMI, 3x DP</td> <td>1</td> </tr> <tr> <td>Geforce GTX 1070</td> <td>1920</td> <td>8GB GDDR5</td> <td>150W</td> <td>DVI-D DL, HDMI, 3x DP</td> <td>1</td> </tr> <tr> <td>Geforce GTX 1080</td> <td>2560</td> <td>8GB GDDR5X</td> <td>180W</td> <td>DVI-D DL, HDMI, 3x DP</td> <td>1</td> </tr> <tr> <td>Radeon Pro WX 3100</td> <td>512</td> <td>4GB GDDR5</td> <td>50W</td> <td>DP, 2x miniDP</td> <td>2</td> </tr> <tr> <td>Radeon Pro WX 4100</td> <td>1024</td> <td>4GB GDDR5</td> <td>50W</td> <td>4x miniDP</td> <td>2</td> </tr> </tbody> </table>	Adapter	Cores	Memory	Power	Connectors	Max qty	NVS 810	1024	4GB DDR3	68W	8x miniDP	1	Quadro P400	256	2GB GDDR5	30W	3x miniDP	2	Quadro P620	512	2GB GDDR5	40W	4x miniDP	2	Quadro P1000	640	4GB GDDR5	47W	4x miniDP	2	Quadro P2000	1024	5GB GDDR5	75W	4x DP	2	Quadro P4000	1792	8GB GDDR5	105W	4x DP	1	Geforce GTX 1060	1280	6GB GDDR5	120W	DVI-D DL, HDMI, 3x DP	1	Geforce GTX 1070	1920	8GB GDDR5	150W	DVI-D DL, HDMI, 3x DP	1	Geforce GTX 1080	2560	8GB GDDR5X	180W	DVI-D DL, HDMI, 3x DP	1	Radeon Pro WX 3100	512	4GB GDDR5	50W	DP, 2x miniDP	2	Radeon Pro WX 4100	1024	4GB GDDR5	50W	4x miniDP	2
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<i>Notes:</i>																																																																									
1. Quadro P4000, 2x Quadro P2000, Geforce GTX1060/1070/1080 needs 400W PSU.																																																																									
2. Geforce GTX 1060/1070/1080 are dual-slot width.																																																																									
3. Geforce GTX 1060/1070/1080 and Radeon Pro WX 3100/4100 are SBO.																																																																									
Storage controllers	Integrated Intel SATA AHCI/RAID controller in chipset, 6Gbps SATA, RAID 0/1/10/5. Four onboard SATA ports for max 4 SATA HDD/SSD/ODD																																																																								
Internal storage bay	Up to five bays with four disk bays plus one slim optical bay, supports up to 3x 3.5" HDD plus 1x 2.5" SSD, or 4x 2.5" SSD																																																																								
	Bay 1 Primary disk bay, 3.5" or 2.5"																																																																								
	Bay 2 2.5" SATA bay, cannot be available when 2nd Quadro P2000 is used																																																																								
	Bay 3 Secondary disk bay, 3.5" or 2.5"																																																																								
	Bay 4 5.25" Flex bay, supports one of the following: <ul style="list-style-type: none"> Flex module for optional front eSATA/Thunderbolt/IEEE1394 3rd disk bay, 3.5" or 2.5", removable, via Front Access Storage Enclosure, using SATA 4 connector as eSATA mode 3rd disk bay, 3.5" or 2.5", via 5.25" to 3.5" HDD Kit M.2 drive, via Front removable M.2 enclosure, also occupies slot 1 or 3 																																																																								
	Bay 5 9mm Slim ODD bay																																																																								
Disks	3.5" HDD supports up to 4TB each, 6Gbps SATA, 7.2K 2.5" SSD supports up to 1TB each, 6Gbps SATA																																																																								

Components	Specification
M.2 slot for SSD	Up to 3x M.2 SSD with one dedicated onboard M.2 slot plus two PCIe to M.2 adapters. PCIe to M.2 adapter uses slot 1 or 3. Supports RAID 0/1 with PCH, When used as RAID, M.2 SSD should be installed in onboard M.2 slot and slot 3. Up to one Optane memory per system; Optane memory must work with a HDD or SSD; Optane memory cannot supported on Pentium G5400 models
M.2 SSD	M.2 SSD supports up to 1TB each, PCIe 3.0 x4, NVMe, Opal. Optane memory supports 32GB, PCIe 3.0 x2, NVMe, 3D Xpoint
M.2 slot for Wi-Fi and Bluetooth	One dedicated onboard M.2 slot for optional Intel Wireless-AC 9560, 2x2, 2.4GHz/5GHz (160MHz channels), 802.11ac, Bluetooth 5, up to 1.73Gbps
Media reader	Optional SD card reader on most models
Network interfaces	One onboard GbE port via integrated gigabit ethernet Intel i219LM, supports Wake-on-LAN. Optional PCIe ethernet adapters are available
Security features	Power-on and admin password. Trusted Platform Module, TCG 2.0 compliant. Optional chassis intrusion switch, cable lock, Kensington lock, and pad lock
Intel vPro	Supports Intel vPro on Xeon models. vPro also requires Wireless-AC 9560 if Wi-Fi is needed
Intel AMT	Intel Active Management Technology 12 on Xeon models, Intel Standard Manageability on other models
Base warranty	US models comes with 3-year limited onsite service with 9x5/NBD. 1 or 3-year limited onsite service with 9x5/NBD in EMEA or other GEOs
HD Audio	Intel HD Audio interface with Realtek ALC233 Codec
Front ports	2x USB 3.1 Gen 1 Type A. 2x USB 3.1 Gen 2 Type A. 1x USB 3.1 Gen 1 Type-C. 1x Mic-in. 1x Combo jack
Rear ports	2x USB 3.1 Gen 1 Type A. 2x USB 2.0 Type-A. 1x RJ-45. 1x COM. 2x DP. 1x Audio line-out <i>Notes: DP needs Core, Pentium, or -G suffix Xeon processor</i>
Optional front ports (on flex module)	2x Thunderbolt (USB Type-C), one of two ports supports video-out. 1x eSATA. 1x IEEE1394
Optional rear ports	2x USB 3.1 Type-C. 1x COM. PS/2. 1x Parallel. 1x Thunderbolt. 1x IEEE1394. 1x HDMI. <i>Notes: HDMI needs Core, Pentium, or -G suffix Xeon processor</i>
Temperature	Operating: 41 °F to 104 °F (10 °C to 35 °C) Non operating (no package): 14 °F to 140 °F (-10 °C to 60 °C) Non operating (with package): -40 °F to 140 °F (-40 °C to 60 °C)
Altitude	Operating: -15.2 m (-50 ft) to 3048 m (10 000 ft). Storage: -15.2 m (-50 ft) to 10, 668 m (35 000 ft)
Humidity	Operating: 30%-90%, non-condensing Storage (with package): 20%-90%, non-condensing
Environmental certification	RoHS-compliant. GREENGUARD. EPEAT Gold rating and ENERGY STAR 7 qualified
Power supply	Supports one 250W or 400W power supply, 100V - 240V, 92% PSU. Climate Savers Computing Platinum and 80 PLUS Platinum qualified. 400W PSU supports one 6+2-pin aux power connector.
ISV certifications	Please visit www.thinkworkstations.com/isv-certifications/

Note:
1. Depending on many factors, actual data transfer speed mentioned on this page may be lower than theoretical speed.
2. Any questions or advice on ThinkStation PSREF, please contact [ThinkStation PSREF developer](mailto:ThinkStation_PSREF_developer)

