

# ThinkStation P920 Platform Specifications

Product Specifications Reference (PSREF)

Components	Specification																																																																																																																																			
Form factor	55L Tower																																																																																																																																			
Dimensions	200mm/7.87" W x 620mm/24.4" D x 446mm/17.56" H (with feet)																																																																																																																																			
Weight	Maximum configuration: 71.3 lb (32.3kg)																																																																																																																																			
Processor	Up to two 205W Intel Xeon Scalable family processors, Bronze, Silver, Gold, or Platinum. Up to 28 cores at 2.5GHz, up to 3.6GHz with 4 cores. Two processors are connected with two UPI (Ultra Path Interconnect) links up to 10.4GT/s																																																																																																																																			
Chipset	Intel C621 Chipset																																																																																																																																			
Memory	Up to 16 DIMM sockets. Each processor supports up to 8 DIMM sockets with 6 channels. DDR4-2666. RDIMMs and LRDIMMs are supported, but memory types cannot be intermixed																																																																																																																																			
Memory capacity	Up to 512GB with 16 x 32GB RDIMMs and two processors. Or up to 1TB with 16 x 64GB LRDIMMs and two processors																																																																																																																																			
Memory protection	ECC																																																																																																																																			
Expansion slots	Slot 1 (CPU1) PCIe 3.0 x16, full height, full length, 75W, double-width Slot 2 (CPU1) PCIe 3.0 x4, full height, full length, 25W, open ended Slot 3 (CPU1) PCIe 3.0 x16, full height, full length, 75W, double-width Slot 4 (CPU1) PCIe 3.0 x4, full height, full length, 25W, open ended Slot 5 (PCH) PCIe 3.0 x4, full height, half length, 25W, open ended Slot 6 (CPU2) PCIe 3.0 x16, full height, half length, 75W Slot 7 (CPU2) PCIe 3.0 x16, full height, full length, 75W, double-width Slot 8 (CPU2) PCIe 3.0 x16, full height, full length, 75W																																																																																																																																			
Graphics	Up to five PCIe 3.0 x16 slots depending on the processors installed (see Expansion slots section). Up to three NVIDIA Quadro P6000 or Quadro P5000, or up to four Quadro P4000, or up to two NVS 810. Other graphics adapters under 75W up to 5. Supports the following graphics adapters:																																																																																																																																			
	Adapter	Cores	Memory	Power	Connector	SLI	NVS 310	48	1GB DDR3	19.5W	2xDP		NVS 315	48	1GB DDR3	19.3W	2x DVI-I SL, 2x DP		NVS 510	192	2GB DDR3	33.4W	4xmini DP		NVS 810	1024	4GB DDR3	68W	8xmini DP		Quadro P400	256	2GB GDDR5	30W	3xminiDP		Quadro P600	384	2GB GDDR5	45W	4xminiDP		Quadro P620	512	2GB GDDR5	40W	4x miniDP		Quadro P1000	640	4GB GDDR5	50W	4xminiDP		Quadro P2000	1024	5GB GDDR5	75W	4xDP		Quadro P4000	1792	8GB GDDR5	120W	4xDP		Quadro P5000	2560	16GB GDDR5X	180W	DVI-D DL+4xDP	SLI	Quadro P6000	3840	24GB GDDR5X	250W	DVI-D DL+4xDP	SLI	Quadro GP100	3584	16GB HBM2	235W	1xDVI-D DL, 4xDP	NVLink	Quadro GV100	5120	32GB HBM2	250W	4xDP	NVLink	Tesla M60	4096	16GB GDDR5	300W			Geforce GTX 1060	1280	6GB GDDR5	120W	DVI-D DL, HDMI, 3x DP		Geforce GTX 1070	1920	8GB GDDR5	150W	DVI-D DL, HDMI, 3x DP		Geforce GTX 1080	2560	8GB GDDR5X	180W	DVI-D DL, HDMI, 3x DP		Radeon Pro WX4100	1024	4GB GDDR5	50W	4x miniDP		Radeon Pro WX5100	1792	8GB GDDR5	75W	4x DP		Radeon Pro WX7100	2304	8GB GDDR5	130W	4x DP	
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	NVS 510	192	2GB DDR3	33.4W	4xmini DP																																																																																																																															
	NVS 810	1024	4GB DDR3	68W	8xmini DP																																																																																																																															
	Quadro P400	256	2GB GDDR5	30W	3xminiDP																																																																																																																															
	Quadro P600	384	2GB GDDR5	45W	4xminiDP																																																																																																																															
	Quadro P620	512	2GB GDDR5	40W	4x miniDP																																																																																																																															
	Quadro P1000	640	4GB GDDR5	50W	4xminiDP																																																																																																																															
	Quadro P2000	1024	5GB GDDR5	75W	4xDP																																																																																																																															
	Quadro P4000	1792	8GB GDDR5	120W	4xDP																																																																																																																															
	Quadro P5000	2560	16GB GDDR5X	180W	DVI-D DL+4xDP	SLI																																																																																																																														
	Quadro P6000	3840	24GB GDDR5X	250W	DVI-D DL+4xDP	SLI																																																																																																																														
	Quadro GP100	3584	16GB HBM2	235W	1xDVI-D DL, 4xDP	NVLink																																																																																																																														
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	Tesla M60	4096	16GB GDDR5	300W																																																																																																																																
	Geforce GTX 1060	1280	6GB GDDR5	120W	DVI-D DL, HDMI, 3x DP																																																																																																																															
	Geforce GTX 1070	1920	8GB GDDR5	150W	DVI-D DL, HDMI, 3x DP																																																																																																																															
	Geforce GTX 1080	2560	8GB GDDR5X	180W	DVI-D DL, HDMI, 3x DP																																																																																																																															
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		Notes: Parts in red text are SBO.																																																																																																																																		
Storage controllers	Integrated Intel SATA AHCI/RAID controller in chipset, 6Gbps SATA, RAID 0/1/10/5. 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	Three 5.25" flex bays, supports the following: <ul style="list-style-type: none"><li>Up to three half-height optical drives.</li><li>Up to two 5.25" slim ODD cages, each supports one 9.0mm optical drive.</li><li>Up to one 5.25" slim ODD and HDD cage for one 9.0mm optical drive plus one 3.5" or 2.5" SATA disk.</li><li>Up to one Front Access Storage Enclosure for one 3.5" or 2.5" SATA disk.</li><li>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</li><li>Up to three Front Removable Drive Enclosure, supports one M.2 SSD each. Each Front Removable Drive Enclosure comes with a PCIe x4 adapter</li></ul> Note: 1. Only one can be supported from 15-in-1 reader, Thunderbolt, and 4-digit display 2. Up to two ports are supported from 1394, eSATA, and USB Type-C																																																																																																																																			

Components	Specification								
Disk drive bays	Four internal 3.5" dual drive bays (two standard, two optional), supports up to eight 2.5" SATA SSD, or up to four 3.5" SATA HDD. Over 6 disk drives needs 9440-8i or 9460-16i. Supports up to four 2.5" U.2 SSD on selected models. Supports up to two 2.5" or 3.5" SATA disks on 5.25" flex bays via one 5.25" Front Access Storage Enclosure plus one 5.25" slim ODD and HDD cage								
M.2 slots	Up to 9 x M.2 PCIe NVMe SSD: <ul style="list-style-type: none"><li>• Two onboard M.2 slots.</li><li>• Up to one full height, full length PCIe 3.0 x16 adapter with four M.2 slots.</li><li>• Up to three PCIe 3.0 x4 adapters, each adapter supports one M.2 slot</li></ul> <i>Note: Supports RAID 0/1 on onboard M.2 disks and RAID 0/1/10/5 on quad M.2 PCIe x16 adapter, NVMe RAID upgrade is needed</i>								
M.2 RAID	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.								
Internal storage	<table><tr><td>HDD 7.2K 3.5" SATA6Gbps</td><td>1TB/2TB/4TB/6TB</td></tr><tr><td>HDD 7.2K 2.5" SATA6Gbps</td><td>500GB FIPS</td></tr><tr><td>SSD 2.5" SATA6Gbps</td><td>256GB Opal/512GB/512GB Opal/1TB Opal/2TB Opal</td></tr><tr><td>M.2 PCIe NVMe, PCIe 3.0 x4</td><td>256GB Opal/512GB Opal/1TB Opal/2TB Opal</td></tr></table>	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
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								
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 two-port gigabit ethernet (Intel i219LM and i210AT), supports Wake-on-LAN on both two ports. 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. Chassis intrusion switch. Optional access panel lock, Kensington lock, and pad lock								
Systems management	Intel Active Management Technology 11. Front 4-digit diagnostic display. ThinkStation Diagnostics for Windows. Photo-audio transfer with Lenovo PC Diagnostics for Android and iOS								
Base warranty	1 or 3-year limited onsite service with 9x5/NBD								
HD Audio	Realtek ALC662 codec								
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, two ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in), two PS/2								
Optional ports	Supports the following optional ports: <ul style="list-style-type: none"><li>• Optional COM port</li><li>• Two USB Type-C ports via PCIe adapter, USB 3.1 gen 2. One 15W, one 5W</li><li>• Two Thunderbolt ports (USB Type-C) on flex module, one of two ports supports video-out.</li><li>• One eSATA on flex module</li><li>• One internal USB 3.0 port</li></ul>								
Power supply	One fixed 1400 watts, autosensing, 92% PSU, 80 PLUS Platinum qualified. Supports three 6+2-pin aux power connectors. Countries with input voltage under 115V, output power limited to 1125 watts								
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. EPEAT Gold rating and ENERGY STAR 6.1 qualified on following models:								
	Model	30BC0008US	30BC0009US						
	Processor	2 x Intel Xeon Gold 5115	2 x Intel Xeon Gold 5120						
	Memory	4 x 8GB RDIMM DDR4-2666 ECC	4 x 8GB RDIMM DDR4-2666 ECC						
Disks	2 x 256GB SSD 2.5" SATA6Gbps Opal	2 x 512GB SSD 2.5" SATA6Gbps							
Graphics	NVIDIA Quadro P4000 8GB	NVIDIA Quadro P5000 16GB							
Optical	HH DVD±RW	HH DVD±RW							
PSU	1400W PSU	1400W PSU							
OS	Win10 Pro 64	Win10 Pro 64							
ISV certifications	Please visit <a href="http://www.thinkworkstations.com/isv-certifications/">www.thinkworkstations.com/isv-certifications/</a>								