

CPU	Vendor	Supplier reference and Part Number		Revision Firmware Stepping
		Base Frequency		Stepping level
Xeon Bronze 3104 (1.7G,85W,L3:8.25M,6C,rev.U0)	Intel	1.7G	85W	U-0
Xeon Bronze 3106 (1.7G,85W,L3:11M,8C,rev.U0)	Intel	1.7G	85W	U-0
Xeon Bronze 3204 (1.9G, 85W, L3:8.25M, 6C)	Intel	1.9G	85W	6-C
Xeon Gold 5115 (2.4G,85W,L3:13.75M,10C,rev.M0,HT)	Intel	2.4G	85W	M-0 HT
Xeon Gold 5117 (2.0G,105W,L3:19.25M,14C,rev.H0,HT)	Intel	2.0G	105W	H-0 HT
Xeon Gold 5117M (2.0G,105W,L3:19.25M,14C,rev.H0,HT)	Intel	2.0G	105W	H-0 HT
Xeon Gold 5118 (2.3G,105W,L3:16.5M,12C,rev.M0,HT)	Intel	2.3G	105W	M-0 HT
Xeon Gold 5120 (2.2G,105W,L3:19.25M,14C,rev.M0,HT)	Intel	2.2G	105W	M-0 HT
Xeon Gold 5120T (2.2G,105W,L3:19.25M,14C,rev.M0,HT)	Intel	2.2G	105W	M-0 HT
Xeon Gold 5122 (3.6G,105W,L3:16.5M,4C,rev.H0,HT)	Intel	3.6G	105W	H-0 HT
Xeon Gold 5215 (2.5G, 85W, L3:13.75M, 10C, HT)	Intel	2.5G	85W	HT
Xeon Gold 5215L (2.5G, 85W, L3:13.75M, 10C, HT)	Intel	2.5G	85W	HT
Xeon Gold 5215M (2.5G, 85W, L3:13.75M, 10C, HT)	Intel	2.5G	85W	HT
Xeon Gold 5217 (3.0G, 115W, L3:11M, 8C, HT)	Intel	3.0G	115W	HT
Xeon Gold 5218 (2.3G, 125W, L3:22M, 16C, HT)	Intel	2.3G	125W	HT
Xeon Gold 5218B (2.3G, 125W, L3:22M, 16C, HT)	Intel	2.3G	125W	HT
Xeon Gold 5218N (2.3G, 105W, L3:22M, 16C, HT)	Intel	2.3G	105W	HT
Xeon Gold 5218T (2.1G, 105W, L3:22M, 16C, HT)	Intel	2.1G	105W	HT
Xeon Gold 5220 (2.2G, 125W, L3:24.75M, 18C, HT)	Intel	2.2G	125W	HT
Xeon Gold 5220S (2.7G, 125W, L3:24.75M, 18C, HT)	Intel	2.7G	125W	HT
Xeon Gold 5220T (1.9G, 105W, L3:24.75M, 18C, HT)	Intel	1.9G	105W	HT
Xeon Gold 5222 (3.8G, 105W, L3:16.5M, 4C, HT)	Intel	3.8G	105W	HT
Xeon Gold 6126 (2.6G,125W,L3:19.25M,12C,rev.H0,HT)	Intel	2.6G	125W	H-0 HT
Xeon Gold 6126T (2.6G,125W,L3:19.25M,12C,rev.H0,HT)	Intel	2.6G	125W	H-0 HT
Xeon Gold 6128 (3.4G,115W,L3:19.25M,6C,rev.H0,HT)	Intel	3.4G	115W	H-0 HT
Xeon Gold 6130 (2.1G,125W,L3:22M,16C,rev.H0,HT)	Intel	2.1G	125W	H-0 HT
Xeon Gold 6130T (2.1G,125W,L3:22M,16C,rev.H0,HT)	Intel	2.1G	125W	H-0 HT
Xeon Gold 6132 (2.6G,140W,L3:19.25M,14C,rev.H0,HT)	Intel	2.6G	140W	H-0 HT
Xeon Gold 6134 (3.2G,130W,L3:24.75M,8C,rev.H0,HT)	Intel	3.2G	130W	H-0 HT
Xeon Gold 6134 (3.2G 8/16)	Intel	3.2G		
Xeon Gold 6136 (3.0G,150W,L3:24.75M,12C,rev.H0,HT)	Intel	3.0G	150W	H-0 HT
Xeon Gold 6138 (2.0G,125W,L3:27.5M,20C,rev.H0,HT)	Intel	2.0G	125W	H-0 HT
Xeon Gold 6138T (2.0G,125W,L3:27.5M,20C,rev.H0,HT)	Intel	2.0G	125W	H-0 HT
Xeon Gold 6140 (2.3G,140W,L3:24.75M,18C,rev.H0,HT)	Intel	2.3G	140W	H-0 HT
Xeon Gold 6140M (2.3G,140W,L3:24.75M,18C,rev.H0,HT)	Intel	2.3G	140W	H-0 HT
Xeon Gold 6142 (2.6G,150W,L3:22M,16C,rev.H0,HT)	Intel	2.6G	150W	H-0 HT
Xeon Gold 6142M (2.6G,150W,L3:22M,16C,rev.H0,HT)	Intel	2.6G	150W	H-0 HT
Xeon Gold 6144 (3.5G,150W,L3:24.75M,8C,rev.H0,HT)	Intel	3.5G	150W	H-0 HT
Xeon Gold 6148 (2.4G,150W,L3:27.5M,20C,rev.H0,HT)	Intel	2.4G	150W	H-0 HT
Xeon Gold 6152 (2.1G,140W,L3:30.25M,22C,rev.H0,HT)	Intel	2.1G	140W	H-0 HT
Xeon Gold 6209U (2.1G,125W,L3:27.5M,20C,HT)	Intel	2.1G	125W	HT
Xeon Gold 6210U (2.5G,150W,L3:27.5M,20C,HT)	Intel	2.5G	150W	HT
Xeon Gold 6222V (1.8G, 115W, L3:27.5M, 20C, HT)	Intel	1.8G	115W	HT
Xeon Gold 6226 (2.7G, 125W, L3:19.25M, 12C, HT)	Intel	2.7G	125W	HT
Xeon Gold 6230 (2.1G, 125W, L3: 27.5M, 20C, HT)	Intel	2.1G	125W	HT
Xeon Gold 6230N (2.3G, 125W, L3:27.5M, 20C, HT)	Intel	2.3G	125W	HT
Xeon Gold 6230T (2.1G, 125W, L3:27.5M, 20C, HT)	Intel	2.1G	125W	HT
Xeon Gold 6234 (3.3G, 130W, L3:24.75M, 8C, HT)	Intel	3.3G	130W	HT
Xeon Gold 6238 (2.1G, 140W, L3:30.25M, 22C, HT)	Intel	2.1G	140W	HT
Xeon Gold 6238L (2.1G, 140W, L3:30.25M, 22C, HT)	Intel	2.1G	140W	HT
Xeon Gold 6238M (2.1G, 140W, L3:30.25M, 22C, HT)	Intel	2.1G	140W	HT
Xeon Gold 6238T (1.9G, 125W, L3:30.25M, 22C, HT)	Intel	1.9G	125W	HT
Xeon Gold 6240 (2.6G, 150W, L3:24.75M, 18C,HT)	Intel	2.6G	150W	HT

Xeon Gold 6240L (2.6G, 150W, L3:24.75M, 18C, HT)	Intel	2.6G	150W	HT
Xeon Gold 6240M (2.6G, 150W, L3:24.75M, 18C, HT)	Intel	2.6G	150W	HT
Xeon Gold 6240Y (2.6G, 150W, L3:24.75M, 18C, HT)	Intel	2.6G	150W	HT
Xeon Gold 6242 (2.8G, 150W, L3:22M, 16C, HT)	Intel	2.8G	150W	HT
Xeon Gold 6244 (3.6G, 150W, L3:24.75M, 8C, HT)	Intel	3.6G	150W	HT
Xeon Gold 6248 (2.5G, 150W, L3:27.5M, 20C, HT)	Intel	2.5G	150W	HT
Xeon Gold 6252 (2.1G, 150W, L3:35.75M, 24C, HT)	Intel	2.1G	150W	HT
Xeon Gold 6252N (2.3G, 150W, L3:35.75M, 24C, HT)	Intel	2.3G	150W	HT
Xeon Gold 6262V (1.9G, 135W, L3:33M, 24C, HT)	Intel	1.9G	135W	HT
Xeon Platinum 8153 (2.0G,125W,L3:22M,16C,rev.H0,HT)	Intel	2.0G	125W	H-0 HT
Xeon Platinum 8160 (2.1G,150W,L3:33M,24C,rev.H0,HT)	Intel	2.1G	150W	H-0 HT
Xeon Platinum 8160T (2.1G,150W,L3:35.75M,26C,rev.H0,HT)	Intel	2.1G	150W	H-0 HT
Xeon Platinum 8164 (2.0G,150W,L3:35.75M,26C,rev.H0,HT)	Intel	2.0G	150W	H-0 HT
Xeon Platinum 8253 (2.2G, 125W, L3:22M, 16C ,HT)	Intel	2.2G	125W	HT
Xeon Platinum 8256 (3.8G, 105W, L3:16.5M, 4C ,HT)	Intel	3.8G	105W	HT
Xeon Silver 4108 (1.8G,85W,L3:11M,8C,rev.U0,HT)	Intel	1.8G	85W	U-0 HT
Xeon Silver 4109T (2.0G,70W,L3:11M,8C,rev.U0,HT)	Intel	2.0G	70W	U-0 HT
Xeon Silver 4110 (2.1G,85W,L3:11M,8C,rev.U0,HT)	Intel	2.1G	85W	U-0 HT
Xeon Silver 4112 (2.6G,85W,L3:8.25M,4C,rev.U0,HT)	Intel	2.6G	85W	U-0 HT
Xeon Silver 4114 (2.2G,85W,L3:13.75M,10C,rev.U0,HT)	Intel	2.2G	85W	U-0 HT
Xeon Silver 4114T (2.2G,85W,L3:13.75M,10C,rev.U0,HT)	Intel	2.2G	85W	U-0 HT
Xeon Silver 4116 (2.1G,85W,L3:16.5M,12C,rev.M0,HT)	Intel	2.1G	85W	M-0 HT
Xeon Silver 4208 (2.1G, 85W, L3:11MB, 8C, HT)	Intel	2.1G	85W	HT
Xeon Silver 4209T (2.2G, 70W, L3:11MB, 8C, HT)	Intel	2.2G	70W	HT
Xeon Silver 4210 (2.2G, 85W, L3:13.75MB, 10C, HT)	Intel	2.2G	85W	HT
Xeon Silver 4214 (2.2G, 85W, L3:16.5MB, 12C, HT)	Intel	2.2G	85W	HT
Xeon Silver 4214Y (2.2G, 85W, L3:16.5MB, 12C, HT)	Intel	2.2G	85W	HT
Xeon Silver 4215 (2.5G, 85W, L3:11MB, 8C, HT)	Intel	2.5G	85W	HT
Xeon Silver 4216 (2.1G, 100W, L3:22MB, 16C, HT)	Intel	2.1G	100W	HT

Memory	Rank	Vendor	Memory Chip	P/N	Register Clock Driver
8GB DDR4-2666 ECC/REG	1	Skhynix	Skhynix H5AN8G8NAFR-VKC	HMA81GR7AFR8N-VKT3	Montage M88DDR4RCD02(A0)
8GB DDR4-2666 ECC/REG	1	Micron	Micron MT40A1G8WE-075E:D	MTA9ASF1G72PZ-2G6D1SG	IDT 4RCD0229KB1ATG
8GB DDR4-2666 ECC/REG	1	Micron	Micron MT40A1G8WE-075E:D	MTA9ASF1G72PZ-2G6D1SK	IDT 4RCD0229KB1ATG
16GB DDR4-2666 ECC/REG	2	Skhynix	Skhynix H5AN8G8NAFR-VKC	HMA82GR7AFR8N-VKTF	IDT 4RCD0229KB1ATG
32GB DDR4-2666 ECC/REG	2	Skhynix	Skhynix H5AN8G4NAFR-VKC	HMA84GR7AFR4N-VKTF	IDT 4RCD0229KB1ATG
32GB DDR4-2933 ECC/REG	2	SKhynix	SKhynix H5AN8G4NCJR-WMC	HMA84GR7CJR4N-WMT8	Rambus iDDR4RCD2-GS03
8GB DDR4-2666 ECC/REG	1	Micron	Micron MT40A1G8WE-075E:D	MTA9ASF1G72PZ-2G6D1RG	Inphi IDDR4RCD2-GS01
8GB DDR4-2666 ECC/REG	1	Micron	Micron MT40A1G8WE-075E:D	MTA9ASF1G72PZ-2G6D1QK	Montage M88DDR4RCD02(A0)
8GB DDR4-2933 ECC/REG	1	Micron	Micron MT40A1G8SA-062E:E	MTA9ASF1G72PZ-2G9E1TK	Montage M88DR4RCD02P
16GB DDR4-2666 ECC/REG	2	Micron	Micron MT40A1G8WE-075E:D	MTA18ASF2G72PDZ-2G6D1SK	IDT 4RCD0229KB1ATG
16GB DDR4-2666 ECC/REG	2	Micron	Micron MT40A1G8WE-075E:D	MTA18ASF2G72PDZ-2G6D1QG	Montage M88DDR4RCD02(A0)
32GB DDR4-2666 ECC/REG	2	Micron	Micron MT40A2G4WE-075E:D	MTA36ASF4G72PZ-2G6D1SI	IDT 4RCD0229KB1ATG
32GB DDR4-2400 ECC/REG	2	Micron	Micron MT40A2G4WE-083E:B	MTA36ASF4G72PZ-2G3B1IG	IDT 4RCD0124KC0ATG
32GB DDR4-2666 ECC/REG	2	Micron	Micron MT40A2G4WE-075E:D	MTA36ASF4G72PZ-2G6D1QG	Montage M88DDR4RCD02(A0)
8GB DDR4-21300 (2666)EEG-ECC	1	Samsung	Samsung Evo860 M.2 2280	PNY RTX 2080 TI Blower	
16GB DDR4-2666 ECC/REG	1	Samsung	Samsung K4A8G045WC-BCTD	M393A2K40CB2-CTD6Q	Montage M88DDR4RCD02(A0)
16GB DDR4-2933 ECC/REG	2	Samsung	Samsung K4A8G085WC-BCVF	M393A2K43CB2-CVFGQ	Rambus iDDR4RCD2-GS03
32GB DDR4-2666 ECC/REG	2	Samsung	Samsung K4A8G045WB-BCTD	M393A4K40BB2-CTD6Q	Montage M88DDR4RCD02(A0)
32GB DDR4-2666 ECC/REG	2	Samsung	Samsung K4A8G045WC-BCTD	M393A4K40CB2-CTD6Q	Montage M88DDR4RCD02(A0)
32GB DDR4-2933 ECC/REG	2	Samsung	Samsung K4A8G045WC-BCVF	M393A4K40CB2-CVFBQ	IDT 4RCD0232KC1
64G BDDR4-2666 ECC/REG	2	Samsung	Samsung K4AAG045WB-2CWD	M393A8K40B22-CWD7Q	IDT 4RCD0229KB1ATG
8GB DDR4-2666 ECC/REG	1	Kingston	Skhynix H5AN8G8NAFR-VKC	KSM26RS8/8HAI	IDT 4RCD0229KB1ATG
16GB DDR4-2666 ECC/REG	1	Kingston	Skhynix H5AN8G4NAFR-VKC	KSM26RS4/16HAI	IDT 4RCD0229KB1ATG

16GB DDR4-2666 ECC/REG	1	Kingston	Micron MT40A2G4SA-075:E	KSM26RS4/16MEI	IDT 4RCD0229KB1ATG
16GB DDR4-2666 ECC/REG	2	Kingston	Micron MT40A1G8SA-075:E	KSM26RD8/16MEI	IDT 4RCD0229KB1ATG
16GB DDR4-2933 ECC/REG	2	Kingston	Micron MT40A1G8SA-062E:E	KSM29RD8/16MEI	IDT 4RCD0232KC1
32GB DDR4-2666 ECC/REG	2	Kingston	SKhynix H5AN8G4NAFR-VKC	KSM26RD4/32HAI	IDT 4RCD0229KB1ATG
32GB DDR4-2666 ECC/REG	2	Kingston	Micron MT40A2G4SA-075:E	KSM26RD4/32MEI	IDT 4RCD0229KB1ATG

Add-on card	Max # of GPUs	Vendor	Model#	Type	Remark
GPU card	4	NVIDIA	Tesla V100 32G	Computing	
	4	NVIDIA	Tesla V100 16G	Computing	
	4	NVIDIA	Tesla P100 16G	Computing	
	4	NVIDIA	Tesla P40	Computing	
	4	NVIDIA	Tesla T4	Computing	
	4	NVIDIA	Tesla P4	Computing	
	4	NVIDIA	Tesla M60	Computing	
	2	NVIDIA	Quadro GV100	Graphics & Workstation	
	4	NVIDIA	Quadro GP100	Graphics & Workstation	
	4	NVIDIA	Quadro RTX6000	Graphics & Workstation	
	4	NVIDIA	Quadro P5000	Graphics & Workstation	
	8	NVIDIA	Quadro P4000	Graphics & Workstation	
	4	AMD	Radeon™ Vega10	Graphics & Workstation	
RAID card	-	ASUS	PIKE II 3008-8i	Storage	-
	-	ASUS	PIKE II 3108-8i Series	Storage	-
		Broadcom	MegaRAID SAS 9271-8i	Storage	
		Broadcom	MegaRAID SAS 9260-8i	Storage	
		Broadcom	MegaRAID SAS 9361-8i	Storage	
		Broadcom	MegaRAID SAS 9341-8i	Storage	
		Microsemi	Adaptec RAID 71685	Storage	
	Microsemi	Adaptec RAID 8885	Storage		
Omni-Path		Intel	Omni-Path Host Fabric Adapter 100 Series 1 Port PCIe x16	Interconnection	
InfiniBand card	-	ASUS	PEM-FDR	Interconnection	-
		Mellanox	MCX456A-ECAT	Interconnection	
		Mellanox	MCX-555A-ECAT	Interconnection	
		Mellanox	MCX-556A-ECAT	Interconnection	
Ethernet card : 10GbE		ASUS	PEI-10G/82599-2S	LAN	
		ASUS	PEB-10G/57840-2S	LAN	
		ASUS	PEB-10G/57811-1S	LAN	
		ASUS	PEB-10G/57840-2T	LAN	
		Intel	Intel(R) Ethernet Server Adapter X710-DA4	LAN	
		Intel	Intel(R) Ethernet Server Adapter X540-T2	LAN	
		Intel	Intel(R) Ethernet Converged Network Adapter X520-QDA1	LAN	
Ethernet card : 1GbE		Intel	I350-T2	LAN	
	-	Intel	I340-T2	LAN	-
Fiber Channel HBA		Qlogic	QLE 2672	Interconnection	
		Qlogic	QLE 2562	Interconnection	