

C5. Qualification Vendor List

Attention! You must to enabled BIOS runtime error to monitor correctable and uncorrectable issue during test

Intel CPU											
Product Name	Code Name	Q-Spec	Stepping	Cache	System Bus	# of Cores	Processor Base Frequency	Max Turbo Frequency	TDP	Memory Types	Note
CoffeeLake-S(E) (Meinow-Entry Server/Workstation) Xeon E											
Intel® Xeon® E-2286G	QS Coffee Lake-S	QRRS	U-0	12MB	6	6	4.0 GHz	4.8 GHz	65W	DDR4-2666	
Intel® Xeon® E-2278G	QS Coffee Lake-S	QRXH	R-0	18MB	6	6	3.4 GHz	5.0 GHz	80W	DDR4-2666	
Intel® Xeon® E-2276G	QS Coffee Lake-S	QRS1	U-0	12MB	6	6	3.8 GHz	4.9 GHz	80W	DDR4-2666	
Intel® Xeon® E-2274G	QS Coffee Lake-S	QSB1	U-0	8MB	4	4	4.0 GHz	4.9 GHz	83W	DDR4-2666	
Intel® Xeon® E-2246G	QS Coffee Lake-S	QRS2	U-0	12MB	6	6	3.6 GHz	4.8 GHz	80W	DDR4-2666	
Intel® Xeon® E-2244G	QS Coffee Lake-S	QRWF	U-0	8MB	4	4	3.8 GHz	4.8 GHz	71W	DDR4-2666	
Intel® Xeon® E-2226G	QS Coffee Lake-S	QRVY	U-0	12MB	6	6	3.4 GHz	4.7 GHz	63W	DDR4-2666	
Intel® Xeon® E-2224G	QS Coffee Lake-S	QRWE	U-0	8MB	4	4	3.5 GHz	4.7 GHz	71W	DDR4-2666	
Intel® Xeon® E-2236	QS Coffee Lake-S	QRVW	U-0	12MB	6	6	3.4 GHz	4.8 GHz	80W	DDR4-2666	
Intel® Xeon® E-2234	QS Coffee Lake-S	QRWE	U-0	8MB	4	4	3.6 GHz	4.8 GHz	71W	DDR4-2666	
Intel® Xeon® E-2224	QS Coffee Lake-S	QRWC	U-0	8MB	4	4	3.4 GHz	4.6 GHz	71W	DDR4-2666	
Intel® Xeon® E-2186G	QS Coffee Lake-S	QNTB	U-0	12MB	6	6	3.8GHz	4.3GHz	95W	DDR4-2666	
Intel® Xeon® E-2178G	QS Coffee Lake-S	QNTB	U-0	12MB	6	6	3.7GHz	4.3GHz	80W	DDR4-2666	
Intel® Xeon® E-2174G	QS Coffee Lake-S	QPAD	U-0	8MB	4	4	3.8GHz	4.3GHz	71W	DDR4-2666	
Intel® Xeon® E-2146G	QS Coffee Lake-S	QNT9	U-0	12MB	6	6	3.5GHz	4.2GHz	80W	DDR4-2666	
Intel® Xeon® E-2144G	QS Coffee Lake-S	QP9Z	U-0	8MB	4	4	3.6GHz	4.2GHz	71W	DDR4-2666	
Intel® Xeon® E-2136	QS Coffee Lake-S	QP4C	U-0	12MB	6	6	3.3GHz	4.2GHz	71W	DDR4-2666	
Intel® Xeon® E-2134	QS Coffee Lake-S	QPA1	U-0	8MB	4	4	3.5GHz	4.2GHz	71W	DDR4-2666	
Intel® Xeon® E-2126G	QS Coffee Lake-S	QNTA	U-0	12MB	6	6	3.3GHz	4.1GHz	80W	DDR4-2666	
Intel® Xeon® E-2124G	QS Coffee Lake-S	QPY9	U-0	8MB	4	4	3.4GHz	4.1GHz	71W	DDR4-2666	
Intel® Xeon® E-2124	QS Coffee Lake-S	QPA2	U-0	8MB	4	4	3.3GHz	4.1GHz	71W	DDR4-2666	
Intel® Xeon® E-2104G	QS Coffee Lake-S	QNTB	U-0	8MB	4	4	3.2GHz	3.7GHz	65W	DDR4-2666	
CoffeeLake-S (Desktop) i9/i7/i5/i3/Pentium/Celeron											
Intel® Core™ i7-8700K	QS Coffee Lake-S	QNMK	U-0	12 MB	6	6	3.70 GHz	4.70 GHz	95 W	DDR4-2666	
Intel® Core™ i7-8700	QS Coffee Lake-S	QNMJ	U-0	12 MB	6	6	3.20 GHz	4.60 GHz	65 W	DDR4-2666	
Intel® Core™ i7-8700T	QS Coffee Lake-S	QP4P	U-0	12 MB	6	6	2.40 GHz	4.00 GHz	35 W	DDR4-2666	
Intel® Core™ i5-8600K	QS Coffee Lake-S	QJPL	P-0	9 MB	6	6	3.70 GHz	4.60 GHz	95 W	DDR4-2666	
Intel® Core™ i5-8600	QS Coffee Lake-S	QRNE	R-0	9 MB	6	6	3.70 GHz	4.60 GHz	95 W	DDR4-2666	
Intel® Core™ i5-8600T	QS Coffee Lake-S	QNMN	U-0	9 MB	6	6	3.60 GHz	4.30 GHz	95 W	DDR4-2666	
Intel® Core™ i5-9600	QS Coffee Lake-S	QOU4	U-0	9 MB	6	6	3.10 GHz	4.60 GHz	65 W	DDR4-2666	
Intel® Core™ i5-9600T	QS Coffee Lake-S	QOU7	U-0	9 MB	6	6	3.00 GHz	4.40 GHz	65 W	DDR4-2666	
Intel® Core™ i5-9400	QS Coffee Lake-S	QRNN	R-0	9 MB	6	6	2.90 GHz	4.10 GHz	65 W	DDR4-2666	
Intel® Core™ i5-9400T	QS Coffee Lake-S	QPY9	U-0	9 MB	6	6	2.90 GHz	4.10 GHz	65 W	DDR4-2666	
Intel® Core™ i5-9400	QS Coffee Lake-S	QJPM	P-0	9 MB	6	6	2.90 GHz	4.10 GHz	65 W	DDR4-2666	
Intel® Core™ i3-9600	QS Coffee Lake-S	QP4W	U-0	9 MB	6	6	3.10 GHz	4.30 GHz	65 W	DDR4-2666	
Intel® Core™ i3-9500	QS Coffee Lake-S	QF5J	U-0	9 MB	6	6	3.00 GHz	4.10 GHz	65 W	DDR4-2666	
Intel® Core™ i3-8400	QS Coffee Lake-S	QNMN	U-0	9 MB	6	6	2.80 GHz	4.00 GHz	65 W	DDR4-2666	
Intel® Core™ i3-9600T	QS Coffee Lake-S	QOUS	U-0	9 MB	6	6	2.30 GHz	3.90 GHz	35 W	DDR4-2666	
Intel® Core™ i3-9500T	QS Coffee Lake-S	QOUS	U-0	9 MB	6	6	2.20 GHz	3.70 GHz	35 W	DDR4-2666	
Intel® Core™ i3-9400T	QS Coffee Lake-S	QRNR	R-0	9 MB	6	6	1.80 GHz	3.40 GHz	35 W	DDR4-2666	
Intel® Core™ i3-9400T	QS Coffee Lake-S	QP70	U-0	9 MB	6	6	1.80 GHz	3.40 GHz	35 W	DDR4-2666	
Intel® Core™ i3-8600T	QS Coffee Lake-S	QP50	U-0	9 MB	6	6	2.30 GHz	3.70 GHz	35 W	DDR4-2666	
Intel® Core™ i3-8500T	QS Coffee Lake-S	QP5H	U-0	9 MB	6	6	2.10 GHz	3.50 GHz	35 W	DDR4-2666	
Intel® Core™ i3-8400T	QS Coffee Lake-S	QP5Z	U-0	9 MB	6	6	1.70 GHz	3.30 GHz	35 W	DDR4-2666	
Intel® Core™ i3-9350K	QS Coffee Lake-S	QOFU	B-0	8 MB	4	4	4.00 GHz	4.60 GHz	91 W	DDR4-2400	
Intel® Core™ i3-8350K	QS Coffee Lake-S	QNES	B-0	8 MB	4	4	4.00 GHz	N/A	91 W	DDR4-2400	
Intel® Core™ i3-9300	QS Coffee Lake-S	QOFV	B-0	8 MB	4	4	3.70 GHz	4.30 GHz	62 W	DDR4-2400	
Intel® Core™ i3-9100	QS Coffee Lake-S	QOFW	B-0	6 MB	4	4	3.60 GHz	4.20 GHz	65 W	DDR4-2400	
Intel® Core™ i3-8300	QS Coffee Lake-S	QP5N	B-0	8 MB	4	4	3.70 GHz	N/A	62 W	DDR4-2400	
Intel® Core™ i3-8100	QS Coffee Lake-S	QNET	B-0	6 MB	4	4	3.60 GHz	N/A	65 W	DDR4-2400	
Intel® Core™ i3-8100	QS Coffee Lake-S	QNSK	U-0	6 MB	4	4	3.60 GHz	N/A	65 W	DDR4-2400	
Intel® Core™ i3-9300T	QS Coffee Lake-S	QOFX	B-0	8 MB	4	4	3.20 GHz	3.80 GHz	35 W	DDR4-2400	
Intel® Core™ i3-9100T	QS Coffee Lake-S	QOFY	B-0	6 MB	4	4	3.10 GHz	3.70 GHz	35 W	DDR4-2400	
Intel® Core™ i3-8300T	QS Coffee Lake-S	QP5P	B-0	6 MB	4	4	3.20 GHz	N/A	35 W	DDR4-2400	
Intel® Core™ i3-8100T	QS Coffee Lake-S	QP5Q	B-0	6 MB	4	4	3.10 GHz	N/A	35 W	DDR4-2400	
Intel® Pentium™ G5620	QS Coffee Lake-S	QP7L	B-0	4 MB	2	2	4.00 GHz	N/A	54 W	DDR4-2400	
Intel® Pentium™ G5600	QS Coffee Lake-S	QP5R	B-0	4 MB	2	2	3.90 GHz	N/A	54 W	DDR4-2400	
Intel® Pentium™ G5500	QS Coffee Lake-S	QP5U	B-0	4 MB	2	2	3.80 GHz	N/A	54 W	DDR4-2400	
Intel® Pentium™ G5420	QS Coffee Lake-S	QP7T	B-0	4 MB	2	2	3.80 GHz	N/A	54 W	DDR4-2400	
Intel® Pentium™ G5420	QS Coffee Lake-S	QP7I	U-0	4 MB	2	2	3.80 GHz	N/A	58 W	DDR4-2400	
Intel® Pentium™ G5400	QS Coffee Lake-S	QP5W	B-0	4 MB	2	2	3.70 GHz	N/A	54 W	DDR4-2400	
Intel® Pentium™ G5400	QS Coffee Lake-S	QP5T	U-0	4 MB	2	2	3.70 GHz	N/A	58 W	DDR4-2400	
Intel® Pentium™ G5600T	QS Coffee Lake-S	QP7M	B-0	4 MB	2	2	3.30 GHz	N/A	35 W	DDR4-2400	
Intel® Pentium™ G5500T	QS Coffee Lake-S	QP5V	B-0	4 MB	2	2	3.20 GHz	N/A	35 W	DDR4-2400	
Intel® Pentium™ G5420T	QS Coffee Lake-S	QP7U	B-0	4 MB	2	2	3.20 GHz	N/A	35 W	DDR4-2400	
Intel® Pentium™ G5420T	QS Coffee Lake-S	QP7Z	U-0	4 MB	2	2	3.20 GHz	N/A	35 W	DDR4-2400	
Intel® Pentium™ G5400T	QS Coffee Lake-S	QP5X	B-0	4 MB	2	2	3.10 GHz	N/A	35 W	DDR4-2400	
Intel® Pentium™ G5400T	QS Coffee Lake-S	QP53	U-0	4 MB	2	2	3.10 GHz	N/A	35 W	DDR4-2400	
Intel® Celeron™ G4950	QS Coffee Lake-S	QP7W	B-0	2 MB	2	2	3.30 GHz	N/A	54 W	DDR4-2400	
Intel® Celeron™ G4920	QS Coffee Lake-S	QP5Y	B-0	2 MB	2	2	3.20 GHz	N/A	54 W	DDR4-2400	
Intel® Celeron™ G4900	QS Coffee Lake-S	QP9G	B-0	2 MB	2	2	3.10 GHz	N/A	54 W	DDR4-2400	
Intel® Celeron™ G4900T	QS Coffee Lake-S	QP5Z	B-0	2 MB	2	2	2.90 GHz	N/A	35 W	DDR4-2400	
Memory											
Product Name	Memory Type	Module Supplier	Size	Chip Brand	Rank	Voltage	Data Transfer Rate	Error Correction	CAS Latency	Pins	Note
M40C40SSLCRB	DDR4	INNODISK	4GB	Samsung	ECC UDIMM	1.2v	2133MHz	ECC Unbuffer	15	288-pin	
T5512MLH72Y1H	DDR4	Transcend	4GB	Samsung	TRx8	1.2v	2133MHz	ECC Unbuffer	15	288-pin	
76 B1GM4 AF00B	DDR4	Apacer	4GB	SKhynix		1.2v	2133MHz	ECC Unbuffer	15	288-pin	

M4C0-9GSSMCRG	DDR4	INNOISK	8GB	Samsung	2Rx8	1.2v	2133MHz	ECC Unbuffer	15	288-pin		
TS1GLH2VYH	DDR4	Transcend	8GB	Samsung	2Rx8	1.2v	2133MHz	ECC Unbuffer	15	288-pin		
I391A1G43DB0-CPB	DDR4	SAMSUNG	8GB	Samsung	2Rx8	1.2v	2133MHz	ECC Unbuffer	15	288-pin		
I391A2K43B01-CPB	DDR4	SAMSUNG	16GB	Samsung	2Rx8	1.2v	2133MHz	ECC Unbuffer	15	288-pin		
HMA81GU7AFR8N-UH TO AA 1643	DDR4	SKhynix	8GB	SKhynix	1Rx8	1.2v	2400MHz	ECC Unbuffer	17	288-pin		
HMA81GU7AFR8N-UH TO AA 1623	DDR4	SKhynix	8GB	SKhynix	1Rx8	1.2v	2400MHz	ECC Unbuffer	17	288-pin		
CT824NF163A4_16F01	DDR4	Crucial	8GB	Micron	2Rx8	1.2v	2400MHz	ECC Unbuffer	17	288-pin		
KVR24E17S8/8MA	DDR4	Kingston	8GB	Micron	1Rx8	1.2v	2400MHz	ECC Unbuffer	17	288-pin		
KVR24E17D8/16MA	DDR4	Kingston	16GB	Micron	2Rx8	1.2v	2400MHz	ECC Unbuffer	17	288-pin		
HMA81GU7AFR8N-UH TO AC 1626	DDR4	SKhynix	16GB	SKhynix	2Rx8	1.2v	2400MHz	ECC Unbuffer	17	288-pin		
M4C0-AGSM1CSJ	DDR4	Innodisk	16GB	Samsung		1.2v	2400MHz	ECC Unbuffer	17	288-pin		
M4C0-4GSSLQK-D33	DDR4	Innodisk	4GB	Samsung		1.2v	2666MHz	ECC Unbuffer	19	288-pin		
M4C0-9GSLQK-D33	DDR4	Innodisk	8GB	Samsung		1.2v	2666MHz	ECC Unbuffer	19	288-pin		
78 C1GSC 4050B	DDR4	Apacer	8GB	Samsung		1.2v	2666MHz	ECC Unbuffer	19	288-pin		
KSM26ES8/8ME	DDR4	Kingston	8GB	Micron	1Rx8	1.2v	2666MHz	ECC Unbuffer	19	288-pin		
HMA81GU7CJIR8N-VK TO AC 1620	DDR4	SKhynix	8GB	SKhynix	1Rx8	1.2v	2666MHz	ECC Unbuffer	19	288-pin		
KSM26ED8/16ME	DDR4	Kingston	16GB	Micron	2Rx8	1.2v	2666MHz	ECC Unbuffer	19	288-pin		
CT18G4WFD8266_18F01	DDR4	Crucial	16GB	Micron	2Rx8	1.2v	2666MHz	ECC Unbuffer	19	288-pin		
78 D1GSC 4010B	DDR4	Apacer	16GB	Samsung		1.2v	2666MHz	ECC Unbuffer	19	288-pin		
M4C0-AGSM1CKR-D33	DDR4	Innodisk	16GB	Samsung		1.2v	2666MHz	ECC Unbuffer	19	288-pin		
HMA81GU7CJIR8N-VK TO AC 1801	DDR4	SKhynix	16GB	SKhynix	2Rx8	1.2v	2666MHz	ECC Unbuffer	19	288-pin		
M4A4021	DDR4	Panram	16GB	Panram		1.2v	2666MHz	ECC Unbuffer	19	288-pin		
Non ECC UDIMM												
75 B93G2 G000B 4GB UNB	DDR4	Apacer	4GB	Samsung	1Rx8	1.2v	2133MHz			15	288-pin	
CT4G4DF58213_BFA1 4GB	DDR4	CRUCIAL	4GB	Micron	1Rx8	1.2v	2133MHz			15	288-pin	
I3512M1H4V1H	DDR4	Transcend	4GB	Samsung	1Rx8	1.2v	2133MHz			15	288-pin	
B4G44G93MC-210MCALGF15T	DDR4	UMAX	4GB	Micron		1.2v	2133MHz			15	288-pin	
AD4U2133W4G15-BHYM	DDR4	ADATA	4GB	SKhynix		1.2v	2133MHz			15	288-pin	
KVR21N15S8/4	DDR4	Kingston	4GB	SKhynix		1.2v	2133MHz			15	288-pin	
TS1GLH4V1H	DDR4	Transcend	8GB	Samsung	2Rx8	1.2v	2133MHz			15	288-pin	
78 CTG1M3 AP 10B 8GB UNB	DDR4	Apacer	8GB	SKhynix		1.2v	2133MHz			15	288-pin	
CT824DF38213_16FA1 8GB	DDR4	CRUCIAL	8GB	Micron	2Rx8	1.2v	2133MHz			15	288-pin	
AD4U2133W8G15-BHYM	DDR4	ADATA	8GB	SKhynix		1.2v	2133MHz			15	288-pin	
KVR21N15D8/8	DDR4	Kingston	8GB	SKhynix		1.2v	2133MHz			15	288-pin	
KVR24N17S8/8	DDR4	Kingston	8GB	SKhynix		1.2v	2400MHz			17	288-pin	
KVR24N17D8/16	DDR4	Kingston	16GB	Micron		1.2v	2400MHz			17	288-pin	
KVR20N19S8/8	DDR4	Kingston	8GB	Micron		1.2v	2666MHz			19	288-pin	
CT824DF38266_BFB1	DDR4	CRUCIAL	8GB	Micron	1Rx8	1.2v	2666MHz			19	288-pin	
KVR26N19D8/8	DDR4	Kingston	16GB	Micron		1.2v	2666MHz			19	288-pin	
CT18G4DFD8266_16FH1	DDR4	CRUCIAL	16GB	Micron	2Rx8	1.2v	2666MHz			19	288-pin	
Seagate HDD (SAS HDD may need RAID Card support)												
Product Name Type Vendor Form Factor Format Capacity Interface Speed Series Cache RPM Encryption Note												
Seagate Enterprise Capacity 2.5 HDD												
ST1000NX0313	SATA	Seagate	2.5"	512e	1TB	6Gb/s	Exos 7E2000 (Enterprise Capacity V.3)	128MB	7200	N/A		
ST2000NX0243	SATA	Seagate	2.5"	4Kn	2TB	6Gb/s	Exos 7E2000 (Enterprise Capacity V.3)	128MB	7200	N/A		
ST2000NX0253	SATA	Seagate	2.5"	512E	2TB	6Gb/s	Exos 7E2000 (Enterprise Capacity V.3)	128MB	7200	N/A		
Seagate Enterprise Capacity 3.5 HDD												
ST1000NM0016	SATA	Seagate	3.5"	512e	10TB	6Gb/s	Exos X10 (Enterprise Capacity V.6)	256MB	7200	N/A		
ST14000NM0018	SATA	Seagate	3.5"	512e	14TB	6Gb/s	Exos X14 (Enterprise Capacity)	256MB	7200	N/A		
ST16000NM001G	SATA	Seagate	3.5"	512e4Kn	16TB	6Gb/s	EXOS X16	256MB	7200	N/A		
WD HDD												
Product Name Type Vendor Form Factor Format Capacity Interface Speed Series Cache RPM Encryption Note												
Datacenter												
WD4000FYYZ-01UL1B2	SATA	WD	3.5"	512n	4TB	6Gb/s	WD Re	64MB	7200	N/A		
WDB001FSYZ-01SS7B0	SATA	WD	3.5"	512e	6TB	6Gb/s	WD Re	128MB	7200	N/A		
WU5721010ALEGL4	SATA	WD	3.5"	512e	10TB	6Gb/s	Ultrastar® DC HC330	256MB	7200	N/A		
HGST HDD (SAS HDD may need RAID Card support)												
Product Name Type Vendor Form Factor Format Capacity Interface Speed Series Cache RPM Encryption Note												
Enterprise Hard Drives												
HUH721212ALE604	SATA	HGST / WD	3.5"	512e	12TB	6Gb/s	Ultrastar He12	256MB	7200	N/A		
Toshiba HDD (SAS HDD may need RAID Card support)												
Product Name Type Vendor Form Factor Format Capacity Interface Speed Series Cache RPM Encryption Note												
Enterprise Hard Drives												
MG04ACA000E	SATA	Toshiba	3.5"	512e	6TB	6Gb/s	Capacity	128MB	7200	N/A		
MG06ACA000A	SATA	Toshiba	3.5"	4Kn	6TB	6Gb/s	Capacity	128MB	7200	N/A		
MG06ACA000E	SATA	Toshiba	3.5"	512e	6TB	6Gb/s	Capacity	128MB	7200	N/A		
MG06ACA10TE	SATA	Toshiba	3.5"	512e	10TB	6Gb/s	Capacity	256MB	7200	N/A		
MG07ACA14TE	SATA	Toshiba	3.5"	512e	14TB	6Gb/s	Capacity	256MB	7200	N/A		
SATA/SAS SSD												
Product Name Type Vendor Form Factor Interface Capacity Interface Speed FW Note												
SATA/SAS SSD												
SSDSC2K8960G701 (Series DC S4500)	SSD	Intel	2.5"	SATA	960GB	6Gb/s						
SSDSC2K6019T701 (Series DC S4600)	SSD	Intel	2.5"	SATA	1.92TB	6Gb/s						
MZTKM1T9HMJP-0005 (SM863a)	SSD	Samsung	2.5"	SATA	1.92TB	6Gb/s						
Micron 5100 MTFDDAK9607BY-1AR1ZABYY	SSD	Micron	2.5"	SATA	960GB	6Gb/s						
MTFDDAK19TDCN-1AT1ZABYY (5200 MAX)	SSD	Micron	2.5"	SATA	1.92TB	6Gb/s						
MZ-7LH1T9NE 883 DCT Series	SSD	Samsung	2.5"	SATA	1.92TB	6Gb/s						
SSDSC2K6019TB D3-S4610 Series	SSD	Intel	2.5"	SATA	1.92TB	6Gb/s						
SSDSC2K6019TB D3-S4510 Series	SSD	Intel	2.5"	SATA	1.92TB	6Gb/s						
XA960LE10063	SSD	Seagate	2.5"	SATA	960GB	6Gb/s						
XA480LE10063	SSD	Seagate	2.5"	SATA	480GB	6Gb/s						
WHK61RSE960G	SSD	Toshiba	2.5"	SATA	960GB	6Gb/s						
PCIe SSD												
Product Name Type Vendor Form Factor Interface Capacity Interface Speed Note												
PCIe SSD												
SSDPEKX0401701 P4500 Series PCIe Gen3 x4 4TB	PCIe	Intel		PCI-E 3.0	PCIe(NVMe)	4TB						
samsung PM17250 MZPLL1T0HEHP PCIe Gen3 x8 1.6TB	PCIe	Samsung		PCI-E 3.0	PCIe(NVMe)	1.6TB						
samsung PM17250 MZPLL3T2H0UJ PCIe Gen3 x8 4.2TB	PCIe	Samsung		PCI-E 3.0	PCIe(NVMe)	3.2TB	Gen3 x8					
M.2												
Product Name Type Vendor Form Factor Interface Capacity Interface Speed Note												
M.2												
SSDPEKKA256G701 P3100 Series 256GB	M.2	Intel	2280	PCIe(NVMe)	256GB							
SSDPEKKA010701 P3100 Series 1TB	M.2	Intel	2280	PCIe(NVMe)	1TB							
MZVPV512HDGL	M.2	Samsung	2280	PCIe(NVMe)	512GB							
HM2P33F8-512GD	M.2	ADATA	2280	PCIe(NVMe)	512GB							
Graphics Card (GPU server & Workstation server only)												
Product Name Processor Cores Memory Bandwidth (GB/sec) OpenGL Microsoft DirectX Graphics Card Power (W) NVIDIA SLI / AMD CrossFire Ready Note												
Nvidia GeForce (http://www.geforce.com/hardware)												
GeForce TITAN XP (Pascal)	3840	547.7 GB/s	4.5	12	250W	Yes (4-way)						
GeForce 1080 Ti	3584	484 GB/s	4.5	12	250W	Yes (4-way)						
GeForce TITAN X (Pascal)	3584	480.5 GB/s	4.5	12	250 W	Yes (4-way)						
RX V11080N-C-6PD GTX1080 G1 Gaming (passive heatsink) (Pascal)	2560	320 GB/s	4.5	12	180 W	Yes (2-way)						
GTX1070 G1 Gaming (passive heatsink) (Pascal)	1920	256 GB/s	4.5	12	150 W	Yes (2-way)						
GTX1060 G1 Gaming (passive heatsink) (Pascal)	1280	192 GB/s	4.5	12	120 W							
GeForce GTX 1080 founders edition (Pascal)	2560	320 GB/s	4.5	12	180 W	Yes (2-way)						
GeForce GTX 1070 founders edition (Pascal)	1920	256 GB/s	4.5	12	150 W	Yes (2-way)						
GeForce GTX 1060 founders edition (Pascal)	1280	192 GB/s	4.5	12	120 W							
GeForce GTX 750	812	80	4.4	11.2	85 W	SLI-Ready						
GeForce GTX 960	1024	112	4.4	12 API	120W							
GeForce GTX 970	1664	224	4.4	12 API	145W							
GeForce GTX 980	2048	224	4.4	12 API	165W							
GeForce GTX 1050Ti	768	112	4.5	12 API	75W							
GeForce GT 740	384	28.8	4.4	12 API	64 W							

GeForce GT 730 (DDR3, 128-bit)	96	28.8	4.4		12 API (feature level 11_0)	49 W	-	
GeForce GT 610	48	14.4	4.2		11	29 W	-	
GeForce 210	16	8	3.1		-	30.5 W	-	
RAID Cards								
Model	RAID-on-Chip Controller	Host Bus Type	Internal Ports	Internal Connectors	External Ports	External Connectors	Data Transfer Rates	Note
GIGABYTE Storage Cards								
GC-M5EE4	Marvell 9230	PCIe- x4 Gen2 x4 bus	4	SATA III	-	-	6Gb/s ports	
GC-MSI Z2	LSI SAS 2008	PCIe- x8 Gen2 x8 bus	8	2 x Mini-SAS for 8x SAS	-	-	6Gb/s ports	
RA200-8	LSI SAS 2308	PCIe- x8 Gen3 x8 bus	8	2 x Mini-SAS for 8x SAS	-	-	6Gb/s ports	
RA201-A	LSI SAS 2208	PCIe- x8 Gen3 x8 bus	8	2 x Mini-SAS for 8x SAS	-	-	6Gb/s ports	
CRA3338	LSI SAS 3208	PCIe- x8 Gen3 x8 bus	8	2 x Mini-SAS HD for 8x SAS	-	-	12Gb/s ports	
CSA3548	LSI SAS 3008	PCIe- x8 Gen3 x8 bus	-	-	8	2 x external Mini-SAS HD	12Gb/s ports	
CRA4548	LSI SAS 3108	PCIe- x8 Gen3 x8 bus	4	1 x internal Mini-SAS HD SFF8643	4	1 x external Mini-SAS HD	12Gb/s ports	
CRA4448	LSI SAS 3108	PCIe- x8 Gen3 x8 bus	8	2 x internal Mini-SAS HD SFF8643	-	-	12Gb/s ports	
LSI RAID Controller Cards								
MegaRAID SAS 9341-B	LSISAS3008 PowerPC 476 controller @ 1.2 GHz	x8 lane PCI Express® 3.0	8	2 x HD Mini-SAS SFF8643 (Horizontal)	-	-	Up to 12Gb/s per port	
MegaRAID SAS 9271-B	LSISAS2208 Dual-Core RAID on Chip (ROC)	x8 lane PCI Express® 3.0	8	2 x Mini-SAS SFF8087 (side mount)	-	-	Up to 6Gb/s per port	
MegaRAID SAS 9361-B	LSISAS3108 dual core RAID on Chip (ROC)	x8 lane PCI Express® 3.0	8	2 x HD Mini-SAS SFF8643 (Horizontal)	-	-	Up to 12Gb/s per port	
MegaRAID SAS 9400-16i	SAS3516 dual-core RAID-on-Chip (ROC)	x8 lane PCI Express® 3.1	8	4 x Mini-SAS HD SFF-8643	-	-	12Gb/s SAS 3.0	
LSI Host Bus Adapters (HBAs)								
LSI SAS 9300-8e	SAS3008	x8 lane PCI Express® 3.0	-	-	8	2 x mini-SAS HD SFF8644	12Gb/s SAS 3.0	
LSI SAS 9300-8i	SAS3008	x8 lane PCI Express® 3.0	8	2 x Mini-SAS HD SFF-8643	-	-	12Gb/s SAS 3.0	
LSI SAS 9400-16i	SAS3416	x8 lane PCI Express® 3.1	16	4 x Mini-SAS HD SFF-8643	-	-	12Gb/s SAS 3.0	
PMC RAID Cards (Adaptec)								
Adaptec ASR-81605ZD	-	8-lane PCIe Gen3	16	4 x Internal mini-SAS HD (SFF-8643)	-	-	12Gb/s per port	
Microsemi RAID Cards								
SmartRAID 3154-8i	PM8204	8-Lane PCIe Gen3	8	2 x Internal, SFF-8643	-	-	12 Gb/s per port	
SmartRAID 3154-16i	PM8236	8-Lane PCIe Gen3	16	4 x Internal, SFF-8643	-	-	12 Gb/s per port	
Microsemi Host Bus Adapters								

HBA 1100-16	PM8242	8-Lane PCIe Gen3	16	4 x Internal, SFF-8643		12 Gb/s per port	
HBA 1100-24	PM8238	8-Lane PCIe Gen3	24	8 x Internal, SFF-8643		12 Gb/s per port	
SmartHBA 2100-8	PM8222	8-Lane PCIe Gen3	8	2 x Internal, SFF-8643		12 Gb/s per port	
Microsemi Expander Card							
LAN Cards							
Product Name	Connector	System Interface Type	# of Ports	Interface	Data rate	Note	
GIGABYTE LAN Cards							
GLN4831	SFP+	PCIe x8 Gen2 x8	Single	10Gb/s per port			
GLN4832	SFP+	PCIe x8 Gen2 x8	Dual	10Gb/s per port			
GLN4751	QSFP+	PCIe x8 Gen3 x8	Single	40Gb/s per port			
GLN4752	QSFP+	PCIe x8 Gen3 x8	Dual	40Gb/s per port			
GLN4C42	SFP28	PCIe Gen3 x16	Dual	25Gb/s per port			
GLN4C44	SFP28	PCIe Gen3 x16	Quad	25Gb/s per port			
GLN4M34	SFP28	PCIe Gen3 x16	Quad	10Gb/s per port			
GLN4312	RJ-45	PCIe x4 Gen2 x4	Dual	1Gb/s per port			
GLN4314	RJ-45	PCIe x4 Gen2 x4	Quad	1Gb/s per port			
GC-MNWE21	SFP+	PCIe x8 Gen3 x8	Dual	10Gb/s per port			
GC-MLE21	SFP+	PCIe x8 Gen2 x8	Dual	10Gb/s per port			
GLN4224	RJ-45	PCIe x8 Gen3 x4	Quad	10Gb/s per port		INTEL X550-AT2	
Intel® Ethernet Converged Network Adapter X550-12							
Intel® Ethernet Converged Network Adapter X550-12	RJ-45	PCIe v3.0 (8.0 GT/s)	Dual	10Gb/s per port			
Intel® Ethernet Converged Network Adapter X710-14							
Intel® Ethernet Converged Network Adapter X710-14	RJ-45	PCIe v3.0 (8.0 GT/s)	Quad	10Gb/s per port			
Intel® Ethernet Network Adapter X710-DA2							
Intel® Ethernet Network Adapter X710-DA2	SFP+	PCIe v3.0 (8.0 GT/s)	Quad	10Gb/s per port			
Intel® Ethernet Network Adapter X722-DA4							
Intel® Ethernet Network Adapter X722-DA4	SFP+	PCIe v3.0 (8.0 GT/s)	Quad	10Gb/s per port			
Intel® Ethernet Network Adapter XXV710-DA2							
Intel® Ethernet Network Adapter XXV710-DA2	SFP28	PCIe v3.0 (8.0 GT/s)	Dual	25Gb/s per port			
Intel® Ethernet Converged Network Adapter XL710-QDA2							
Intel® Ethernet Converged Network Adapter XL710-QDA2	QSFP+	PCIe v3.0 (8.0 GT/s)	Dual	40Gb/s per port			
Intel® True Scale Fabric QLE7342							
Intel® True Scale Fabric QLE7342	Quad small form-factor pluggable (QSFP)	PCIe Gen2 x8	Dual	10G/20G/40Gb/s per port			
Mellanox ConnectX							
MX4121A-ACAT	SFP28	PCIe Gen3 x8	Dual	25Gb/s per port			
MX516A-CCAT	QSFP28	PCIe Gen3 x16	Dual	100Gb/s per port		Mellanox ConnectX-5 EN	
MX515A-CCAT	QSFP28	PCIe Gen3 x16	Single	100Gb/s per port		Mellanox ConnectX-5 EN	
Mellanox ConnectX8-3 VPI Adapter Cards							
MCB194A-FCAT	QSFP	PCIe 3.0	Dual	FDR IB (56Gb/s)			
MCX354A-FCBT	QSFP	PCIe 3.0	Dual	FDR and 40/56GbE			
MCX355A-ECAT	QSFP28	PCIe 3.0 x16	Single	100Gb/s per port		Mellanox ConnectX-5 VPI (InfiniBand)	
Solarflare Onload Server Adapters							
SFN7322F	SFP+	8.0GT/s (Gen3)	Dual	10Gb/s per port			
SFN6122F	SFP+	5.0GT/s (Gen2)	Dual	10Gb/s per port			
Qlogic LAN Adapters							
QL43442-CU-CK	SFP+	PCIe x8 Gen3 x8	Dual	10Gb/s per port			
QL41212H-LU-SP	SFP28	PCIe x8 Gen3 x8	Dual	25Gb/s per port			
QL41032H-LU-SP	SFP28	PCIe x8 Gen3 x8	Dual	10Gb/s per port			
QL41112H-RJ	RJ-45	PCIe x8 Gen3 x8	Dual	10Gb/s per port			
QL45611H-LU	QSFP28	PCIe x16 Gen3 x16	Single	100Gb/s per port			
QL43442-RJ-CK	RJ-45	PCIe x8 Gen3 x8	Dual	10Gb/s per port			
Broadcom (Emulex) Ethernet Networking Adapters							
BCM957414A4142CC	SFP28	PCIe 3.0 x8	Dual	25Gb/s per port		BCM57414	
PSU							
Product Name	Vendor	Input Voltage	Wattage	Application	Efficiency	Note	
FSP1200-50AAG	FSP	100-240Vac	1200W	Desktop	N/A		
FSP1000-50AAG	FSP	100-240Vac	1000W	Desktop	N/A		
FSP950-50AAG	FSP	100-240Vac	850W	Desktop	N/A		
SS-1250XM	SeaSonic	100-240Vac	1250W	Desktop	80Gold		
USB Device							
Product Name	Type	Vendor	Capacity	Note			
USB 3.0							
PURE CLASSIC X17681P/WB075	HDD	Onabyte	500G				
SeFlex STA520305	HDD	Seagate	500G				
TOSHIBA CANVIO BASIC	HDD	Toshiba	500G				
ADATA SUPERIOR S102 PRO 8GB	Flash	ADATA	8G				
NA317U+	Device	ineo					
SST-1ST3	Device	Silver Stone					
IB9811U3-1S	Device	ICYDOCK					
310-SS36(S)	Device	STARDOM					