

Qualification Vendor List 1.1											
Intel CPU											
Product Name	Code Name	Q-Spec	Stepping	Cache	System Bus	# of Cores	Processor Base Frequency	Max Turbo Frequency	TDP	Memory Types	Note
IceLake											
Intel® Xeon® Processor Gold 6314U	IceLake	QWMB	D1	42MB	N/A	32	1.8 GHz	3.4 GHz	205	DDR4-3200	
Intel® Xeon® Processor Gold 6330	IceLake	QWMC	D1	42MB	11.2GT/s	28	2.0 GHz	3.1 GHz	205	DDR4-3200	
Intel® Xeon® Processor Gold 6330N	IceLake	QWLP	D1	42MB	11.2GT/s	28	2.2 GHz	3.4 GHz	165	DDR4-2667	
Intel® Xeon® Processor Gold 6338	IceLake	QWN3	D1	48MB	11.2GT/s	32	2.0 GHz	3.2 GHz	205	DDR4-3200	
Intel® Xeon® Processor Gold 6338N	IceLake	QWM6	D1	48MB	11.2GT/s	32	2.2 GHz	3.5 GHz	185	DDR4-3200	
Intel® Xeon® Processor Gold 6346	IceLake	QWMD	D1	36MB	11.2GT/s	16	3.1 GHz	3.6 GHz	205	DDR4-3200	
Intel® Xeon® Processor Platinum 8351N	IceLake	QWMW	D1	54MB	N/A	36	2.4 GHz	3.5 GHz	225	DDR4-2933	
Intel® Xeon® Processor Platinum 8352Y	IceLake	QWM3	D1	48MB	11.2GT/s	32	2.2 GHz	3.4 GHz	205	DDR4-3200	
Intel® Xeon® Processor Platinum 8356P	IceLake	QXCM	D1	48MB	11.2GT/s	32	2.6 GHz	3.4 GHz	240	DDR4-3200	
Intel® Xeon® Processor Platinum 8360Y	IceLake	QXBZ	D1	54MB	11.2GT/s	36	2.4 GHz	3.5 GHz	250	DDR4-3200	
Intel® Xeon® Processor Platinum 8368	IceLake	QWLL	D1	57MB	11.2GT/s	38	2.4 GHz	3.4 GHz	270	DDR4-3200	
Intel® Xeon® Processor Platinum 8380	IceLake	QXC0	D1	60MB	11.2GT/s	40	2.3 GHz	3.4 GHz	270	DDR4-3200	
Intel® Xeon® Processor Platinum 8362V	IceLake	QXTL	D2	48MB	2.0 GHz	32	2.6 GHz	3.6 GHz	265 W	DDR4-3200	
Intel® Xeon® Processor Platinum 8352V	IceLake	SRK32	D2	54MB	11.2GT/s	36	2.10 GHz	3.50 GHz	195 W	DDR4-2933	
Intel® Xeon® Processor Platinum 8352M	IceLake	QXZ0	D2	48MB	11.2GT/s	32	2.30 GHz	3.50 GHz	185W	DDR4-3200	
Intel® Xeon® Processor Gold 6342	IceLake	QXRU	M1	36MB	11.2GT/s	24	2.80 GHz	3.50 GHz	230 W	DDR4-3200	
Intel® Xeon® Processor Gold 6338T	IceLake	QXS3	M1	36MB	11.2GT/s	24	2.10 GHz	3.40 GHz	165 W	DDR4-3200	
Intel® Xeon® Processor Gold 6336Y	IceLake	QXRV	M1	36MB	11.2GT/s	24	2.40 GHz	3.60 GHz	185 W	DDR4-3200	
Intel® Xeon® Processor Gold 6334	IceLake	QXRQ	M1	18MB	11.2GT/s	8	3.60 GHz	3.70 GHz	165 W	DDR4-3200	
Intel® Xeon® Processor Gold 6326	IceLake	QXS7	M1	24MB	11.2GT/s	16	2.90 GHz	3.50 GHz	185 W	DDR4-3200	
Intel® Xeon® Processor Gold 6312U	IceLake	QXRW	M1	36MB	N/A	24	2.40 GHz	3.60 GHz	185 W	DDR4-3200	
Intel® Xeon® Processor Gold 5320T	IceLake	QXS6	M1	30MB	11.2GT/s	20	2.30 GHz	3.50 GHz	150 W	DDR4-2993	
Intel® Xeon® Processor Gold 5320	IceLake	QXRT	M1	39MB	11.2GT/s	26	2.20 GHz	3.40 GHz	185 W	DDR4-2933	
Intel® Xeon® Processor Gold 5318Y	IceLake	QXS2	M1	36MB	11.2GT/s	24	2.10 GHz	3.40 GHz	165 W	DDR4-2933	
Intel® Xeon® Processor Gold 5318S	IceLake	QXRX	M1	36MB	11.2GT/s	24	2.10 GHz	3.40 GHz	165 W	DDR4-2933	
Intel® Xeon® Processor Gold 5318N	IceLake	QXS4	M1	36MB	11.2GT/s	24	2.10 GHz	3.40 GHz	150 W	DDR4-2667	
Intel® Xeon® Processor Gold 5317	IceLake	QXRM	M1	18MB	11.2GT/s	12	3.00 GHz	3.60 GHz	150 W	DDR4-2933	
Intel® Xeon® Processor Gold 5315Y	IceLake	QXRR	M1	12MB	11.2GT/s	8	3.20 GHz	3.60 GHz	140 W	DDR4-2933	
Intel® Xeon® Processor Silver 4316	IceLake	QXS5	M1	30MB	10.4GT/s	20	2.30 GHz	3.40 GHz	150 W	DDR4-2667	
Intel® Xeon® Processor Silver 4314	IceLake	QXS8	M1	24MB	11.2GT/s	16	2.40 GHz	3.40 GHz	135 W	DDR4-2667	
Intel® Xeon® Processor Silver 4310T	IceLake	QXRP	M1	15MB	11.2GT/s	10	2.30 GHz	3.40 GHz	105 W	DDR4-2667	
Intel® Xeon® Processor Silver 4310	IceLake	QXRN	M1	18MB	10.4GT/s	12	2.10 GHz	3.30 GHz	120 W	DDR4-2667	
Intel® Xeon® Processor Silver 4309Y	IceLake	QXRS	M1	12MB	11.2GT/s	8	2.80 GHz	3.60 GHz	105 W	DDR4-2667	
Candidate											
Intel® Xeon® W-3375	IceLake	QXZL	M1	57MB	11.2GT/s	38	2.5 GHz	4.0 GHz	270W	DDR4-3200	
Intel® Xeon® W-3365	IceLake	QXZK	M1	48MB	11.2GT/s	32	2.7 GHz	4.0 GHz	270W	DDR4-3200	
Intel® Xeon® W-3345	IceLake	QXZJ	M1	36MB	11.2GT/s	24	3.0 GHz	4.0 GHz	250W	DDR4-3200	
Intel® Xeon® W-3335	IceLake	QXQS	M1	24MB	11.2GT/s	16	3.4 GHz	4.0 GHz	250W	DDR4-3200	
Intel® Xeon® W-3323	IceLake	QXQQ	M1	21MB	11.2GT/s	12	3.5 GHz	3.9 GHz	220W	DDR4-3200	
Memory											
Product Name	Memory Type	Module Supplier	Size	Chip Brand	Rank	Voltage	Data Transfer Rate	Error Correction	CAS Latency	Pins	Note
LRDIMM											
M386A8K40DM2-CWELQ	DDR4	Samsung	64GB	Samsung-IDT	HDRx4	1.2v	3200MHz	ECC Registered	22	288-pin	
RDIMM											
AD4R3200716G22-BHYA	DDR4	ADATA	16GB	SKhynix-Montage	1Rx8	1.2v	3200MHz	ECC Registered	22	288-pin	
KSM32RS816MER	DDR4	Kingston	16GB	Micron-Rambus	1Rx8	1.2v	3200MHz	ECC Registered	22	288-pin	
KSM32RD916HDR	DDR4	Kingston	16GB	SKhynix-Rambus	2Rx8	1.2v	3200MHz	ECC Registered	22	288-pin	
MTA18ASF4G72PD2-3G2E1T1	DDR4	Micron	32GB	Micron-Montage	2Rx8	1.2v	3200MHz	ECC Registered	22	288-pin	
MTA18ASF4G72PD2-3G2E1U1	DDR4	Micron	32GB	Micron-Rambus	2Rx8	1.2v	3200MHz	ECC Registered	22	288-pin	
MTA18ASF4G72PD2-3G2E1V1	DDR4	Micron	32GB	Micron	2Rx8	1.2v	3200MHz	ECC Registered	22	288-pin	
M393A4K40DB3-CWEGQ	DDR4	Samsung	32GB	Samsung-Rambus	2Rx4	1.2v	3200MHz	ECC Registered	22	288-pin	
M393A4K40DB3-CWBEQ	DDR4	Samsung	32GB	Samsung-IDT	2Rx4	1.2v	3200MHz	ECC Registered	22	288-pin	
M393A8G40AB2-CWBEQ	DDR4	Samsung	64GB	Samsung-IDT	2Rx4	1.2v	3200MHz	ECC Registered	22	288-pin	
HMA82GR7JR8N-XN T8	DDR4	SKhynix	16GB	SKhynix-Rambus	2Rx8	1.2v	3200MHz	ECC Registered	22	288-pin	
HMA82GR7JR8N-XN TG	DDR4	SKhynix	16GB	SKhynix-IDT	2Rx8	1.2v	3200MHz	ECC Registered	22	288-pin	
HMA84GR7JR4N-XN T4	DDR4	SKhynix	32GB	SKhynix-Montage	2Rx4	1.2v	3200MHz	ECC Registered	22	288-pin	
HMA84GR7JR4N-XN TG	DDR4	SKhynix	32GB	SKhynix-Montage	2Rx4	1.2v	3200MHz	ECC Registered	22	288-pin	
HMA88GR7CJR4N-XN T8	DDR4	SKhynix	64GB	SKhynix-Rambus	2Rx4	1.2v	3200MHz	ECC Registered	22	288-pin	
HMA88GR7CJR4N-XN TG	DDR4	SKhynix	64GB	SKhynix-IDT	2Rx4	1.2v	3200MHz	ECC Registered	22	288-pin	
TR416G32S422-XNC	DDR4	V-color	16GB	SKhynix-Rambus	1Rx4	1.2v	3200MHz	ECC Registered	22	288-pin	
SATA/SAS HDD											
Product Name	Type	Vendor	Form Factor	Format	Capacity	Interface Speed	Series	Cache	RPM	Encription	FW
SATA											
HUH721212ALE604	SATA	HGST / WD	3.5"	512e	12TB	6Gb/s	Ultrastar DC HC520 (He12)	256MB	7200	N/A	
ST2000NX0243	SATA	Seagate	2.5"	4Kn	2TB	6Gb/s	Exos 7E2000 (Enterprise Capacity V.3)	128MB	7200	N/A	
ST2000NM0008	SATA	Seagate	3.5"	512n	2TB	6Gb/s	EXOS 7E2	128MB	7200	N/A	
ST2000NX0253	SATA	Seagate	2.5"	512E	2TB	6Gb/s	Exos 7E2000 (Enterprise Capacity V.3)	128MB	7200	N/A	
ST8000NM000A	SATA	Seagate	3.5"	512e	8TB	6Gb/s	EXOS 7E8	256MB	7200	N/A	
ST10000NM0016	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"	512e/4Kn	16TB	6Gb/s	EXOS X16	256MB	7200	N/A	
MG04ACA100N	SATA	Toshiba	3.5"	512e	1TB	6Gb/s	Capacity	128MB	7200	N/A	
MG04ACA800E	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	
WU5721010ALE6L4	SATA	WD	3.5"	512e	10TB	6Gb/s	Ultrastar® DC HC330	256MB	7200	N/A	
WUH721818ALE6L4	SATA	WD	3.5"	512e	18TB	6Gb/s	Ultrastar DC HC550	512MB	7200	N/A	
SATA/SAS SSD											
Product Name	Type	Vendor	Form Factor	Interface	Capacity	Interface Speed	Note				
SATA											
SSDSC2K8019T8 D3-S4510 Series	SSD	Intel	2.5"	SATA	1.92TB	6Gb/s					
SSDSC2K9019T8 D3-S4610 Series	SSD	Intel	2.5"	SATA	1.92TB	6Gb/s					
MTFDDAK1T9TDD-1AT1ZABYY (6200 PRO)	SSD	Micron	2.5"	SATA	1.92TB	6Gb/s					
MTFDDAK1T9TDN-1AT1ZABYY (6200 MAX)	SSD	Micron	2.5"	SATA	1.92TB	6Gb/s					
MTFDDAK1T9TDS-1AW1ZABYY (5300 PRO)	SSD	Micron	2.5"	SATA	1.92TB	6Gb/s					
MTFDDAK1T9TDC-1AT1ZABYY (6200 ECO)	SSD	Micron	2.5"	SATA	1.92TB	6Gb/s					
MTFDDAK3T8TDS-1AW1ZABYY (5300 PRO)	SSD	Micron	2.5"	SATA	3.84TB	6Gb/s					
SSB1K9GTLCG-D2-SME520GBT SME520 Series	SATA	Phison	2.5"	SATA	1.92TB	6Gb/s					
SRE100-480G00210000	SSD	Phison	2.5"	SATA	480GB	6Gb/s					
SRE100-960G00210000	SSD	Phison	2.5"	SATA	960GB	6Gb/s					
MZ-7LH1T9NE 883 DCT Series	SSD	Samsung	2.5"	SATA	1.92TB	6Gb/s					
XA960LE100S3	SSD	Seagate	2.5"	SATA	960GB	6Gb/s					
KHK61RSE960G	SSD	Toshiba	2.5"	SATA	960GB	6Gb/s					
PCIe SSD											
Product Name	Type	Vendor	Form Factor	Interface	Capacity	Interface Speed	Note				
PCIe											
Samsung PM1725b MZPLL3T2HJQ PCIe Gen3 x8 3.2TB	PCIe	Samsung	PCI-E 3.0	PCIe(NVMe)	3.2TB	PCIe Gen3 x8					
SSDPEDKX040T701 P4500 Series PCIe Gen3 x4 4TB	PCIe	Intel	PCI-E 3.0	PCIe(NVMe)	4TB	PCIe Gen3 x4					
RAID Card											
Product Name	RAID-on-Chip Controller	Vendor	Host Bus Type	Internal Ports	Internal Connectors	Extrenal Ports	External Connectors	Data Transfer Rate	Note		
GIGABYTE											
CRA3338	LSI SAS 3008	GIGABYTE	PCIe Gen3 x8	8	2 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port			
CRA4448	LSI SAS 3108	GIGABYTE	PCIe Gen3 x8	8	2 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port			
CSA3548	LSI SAS 3008	GIGABYTE	PCIe Gen3 x8	-	-	8	2 x Mini-SAS HD SFF-8644	Up to 12Gb/s per port			
LSI											
LSI SAS 9400-16i without Tri-mode	SAS3416	LSI	PCIe Gen3 x8	16	4 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port			
LSI SAS 9500-16i without Tri-mode	SAS3816	LSI	PCIe Gen4 x8	16	2 x SlimSAS SFF-8654	-	-	Up to 12Gb/s per port			

MegaRAID 9560-16i with Tri-mode	SAS3916 Tri-Mode RAID-on-Chip (ROC)	LSI	PCIe Gen4 x8	16	2 x8 SlimSAS SFF-8654	-	-	Up to 12Gbps per port
MegaRAID 9560-8i with Tri-mode	SAS3908 Tri-Mode RAID-on-Chip (ROC)	LSI	PCIe Gen4 x8	8	1 x8 SlimSAS SFF-8654	-	-	Up to 12Gbps per port
MegaRAID SAS 9460-16i with Tri-mode	SAS3516 dual-core RAID-on-Chip (ROC)	LSI	PCIe Gen3 x8	8	4 x Mini-SAS HD SFF-8643	-	-	Up to 12Gbps per port
MegaRAID SAS 9460-8i with tri-mode	SAS3508 dual-core RAID-on-Chip (ROC)	LSI	PCIe Gen3 x8	8	2 x Mini-SAS HD SFF-8643	-	-	Up to 12Gbps per port
P411W-32P	PEX88048	LSI	PCIe Gen4 x16	8 x4, 16 x2, or 32 x1 NVMe SSD connect	4 x8 SlimSAS SFF-8654	-	-	
<b>Microsemi</b>								
SmartHBA 2100-8i	PM8222	Microsemi	PCIe Gen3 x8	8	2 x Mini-SAS HD SFF-8643	-	-	Up to 12Gbps per port
SmartRAID 3154-16i	PM8236	Microsemi	PCIe Gen3 x8	16	4 x Mini-SAS HD SFF-8643	-	-	Up to 12Gbps per port
<b>LAN Card</b>								
<b>Product Name</b>	<b>Connector</b>	<b>Vendor</b>	<b>System Interface Type</b>	<b># of Ports</b>	<b>Data Rate</b>	<b>Note</b>		
<b>Broadcom</b>								
BCM957412A4120AC	SFP+	Broadcom	PCIe Gen3 x8	Dual	10Gb/s per port	BCM57412		
BCM957414A4142CC	SFP28	Broadcom	PCIe Gen3 x8	Dual	25Gb/s per port	BCM57414		
BCM957416A4160C	RJ-45	Broadcom	PCIe Gen3 x8	Dual	10Gb/s per port	BCM5741 (P210TP)		
BCM957508-P2100G	QSFP56	Broadcom	PCIe Gen4 x16	Dual	100Gb/s per port	BCM57508		
LPe32002-M2	SFP+	Broadcom	PCIe Gen3 x8	Dual	32Gb/s per port	XE501 controller		
<b>GIGABYTE</b>								
CLN4121	RJ-45	GIGABYTE	PCIe Gen3 x4	Single	10Gb/s per port	INTEL X550-AT		
CLN4222	RJ-45	GIGABYTE	PCIe Gen3 x4	Dual	10Gb/s per port	INTEL X550-AT2		
CLN4224	RJ-45	GIGABYTE	PCIe Gen3 x4	Quad	10Gb/s per port	INTEL X550-AT2		
CLN4312	RJ-45	GIGABYTE	PCIe Gen2 x4	Dual	1Gb/s per port	INTEL 350-AM2		
CLN4314	RJ-45	GIGABYTE	PCIe Gen2 x4	Quad	1Gb/s per port	INTEL 350-AM4		
CLN4752	QSFP+	GIGABYTE	PCIe Gen3 x8	Dual	40Gb/s per port	INTEL XL710		
CLN4831	SFP+	GIGABYTE	PCIe Gen2 x8	Single	10Gb/s per port	INTEL 82599EN		
CLN4832	SFP+	GIGABYTE	PCIe Gen2 x8	Dual	10Gb/s per port	INTEL 82599ES		
CLN4M32	SFP28	GIGABYTE	PCIe Gen3 x16	Dual	10Gb/s per port	Mellanox ConnectX-4		
CLN4M34	SFP28	GIGABYTE	PCIe Gen3 x16	Quad	10Gb/s per port	Mellanox ConnectX-4		
<b>Intel</b>								
Intel® Ethernet Converged Network Adapter X520-DA2	SFP+	Intel	PCIe Gen2 x8	Dual	10Gb/s per port	This card should be tested in DVT stage when onboa		
Intel® Ethernet Converged Network Adapter X550-T2	RJ-45	Intel	PCIe Gen3 x4	Dual	10Gb/s per port			
Intel® Ethernet Converged Network Adapter X710-T4	RJ-45	Intel	PCIe Gen3 x8	Quad	10Gb/s per port			
Intel® Ethernet Converged Network Adapter XL710-QD	QSFP+	Intel	PCIe Gen3 x8	Dual	40Gb/s per port			
Intel® Ethernet Network Adapter E810-CQDA2	QSFP28	Intel	PCIe Gen4 x16	Dual	100Gb/s per port			
Intel® Ethernet Network Adapter E810-XXVDA4	SFP28	Intel	PCIe Gen4 x16	Dual	25Gb/s per port			
Intel® Ethernet Network Adapter X722-DA4	SFP+	Intel	PCIe Gen3 x8	Quad	10Gb/s per port			
Intel® Ethernet Network Adapter XXV710-DA2	SFP28	Intel	PCIe Gen3 x8	Dual	25Gb/s per port			
<b>Mellanox</b>								
MCX516A-CCAT	QSFP28	Mellanox	PCIe Gen3 x16	Dual	100Gb/s per port	Mellanox ConnectX-6 EN		
MCX555A-ECAT	QSFP28	Mellanox	PCIe Gen3 x16	Single	100Gb/s per port	Mellanox ConnectX-6 VPI (InfiniBand)		
MCX813106A-VDAT	QSFP56	Mellanox	PCIe Gen4 x16	Dual	200Gb/s per port	Mellanox ConnectX-6 EN		
MCX823106AN-CDAT	QSFP56	Mellanox	PCIe Gen4 x16	Dual	100Gb/s per port	ConnectX®-6 Dx No Crypto, No Secure Boot		
MCX853105A-ECAT	QSFP56	Mellanox	PCIe Gen4 x16	Single	100Gb/s per port	Mellanox ConnectX-6 Ex VPI (InfiniBand)		
MCX853106A-HDAT	QSFP56	Mellanox	PCIe Gen4 x16	Dual	200Gb/s per port	Mellanox ConnectX-6 Ex VPI (InfiniBand)		
<b>Qlogic</b>								
QL41132HLCU-SP	SFP28	Qlogic	PCIe Gen3 x8	Dual	10Gb/s per port			
QL45611HLCU	QSFP28	Qlogic	PCIe Gen3 x16	Single	100Gb/s per port			
QL3442-CU-CK	SFP+	Qlogic	PCIe Gen3 x8	Dual	10Gb/s per port			
QL3442-RJ-CK	RJ-45	Qlogic	PCIe Gen3 x8	Dual	10Gb/s per port			