

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	205W	DDR4-3200	
Intel® Xeon® Processor Gold 6330	IceLake	QWMC	D1	42MB	11.2GT/s	28	2 GHz	3.1 GHz	205W	DDR4-3200	
Intel® Xeon® Processor Gold 6330N	IceLake	QWLP	D1	42MB	11.2GT/s	28	2.2 GHz	3.4 GHz	165W	DDR4-2667	
Intel® Xeon® Processor Gold 6338	IceLake	QWN3	D1	48MB	11.2GT/s	32	2 GHz	3.2 GHz	205W	DDR4-3200	
Intel® Xeon® Processor Gold 6338N	IceLake	QWM6	D1	48MB	11.2GT/s	32	2.2 GHz	3.5 GHz	185W	DDR4-3200	
Intel® Xeon® Processor Gold 6346	IceLake	QWMD	D1	36MB	11.2GT/s	16	3.1 GHz	3.6 GHz	205W	DDR4-3200	
Intel® Xeon® Processor Platinum 8351N	IceLake	QWMW	D1	54MB	N/A	36	2.4 GHz	3.5 GHz	225W	DDR4-2933	
Intel® Xeon® Processor Platinum 8352V	IceLake	QWM3	D1	48MB	11.2GT/s	32	2.2 GHz	3.4 GHz	205W	DDR4-3200	
Intel® Xeon® Processor Platinum 8358P	IceLake	QXCM	D1	48MB	11.2GT/s	32	2.6 GHz	3.4 GHz	240W	DDR4-3200	
Intel® Xeon® Processor Platinum 8360V	IceLake	QXBZ	D1	54MB	11.2GT/s	36	2.4 GHz	3.5 GHz	250W	DDR4-3200	
Intel® Xeon® Processor Platinum 8368	IceLake	QWLL	D1	57MB	11.2GT/s	38	2.4 GHz	3.4 GHz	270W	DDR4-3200	
Intel® Xeon® Processor Platinum 8380	IceLake	QXC0	D1	60MB	11.2GT/s	40	2.3 GHz	3.4 GHz	270W	DDR4-3200	
Intel® Xeon® Processor Platinum 8362	IceLake	QXTL	D2	48MB	11.2GT/s	32	2.80 GHz	3.60 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 6336V	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	QXRK	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-1D7	1DRx4	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	
KSM32RS432MER	DDR4	Kingston	32GB	Micron-Rambus	1Rx4	1.2v	3200MHz	ECC Registered	22	288-pin	
MTA36ASF4G72PZ-3G2J3U1	DDR4	Micron	32GB	Micron-Rambus	2Rx4	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	
M393A4K40DB3-CWECQ	DDR4	Samsung	32GB	Samsung-Montage	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	
HMAA8GR7DJR4N-XN T4	DDR4	SKhynix	32GB	SKhynix-Montage	2Rx4	1.2v	3200MHz	ECC Registered	22	288-pin	
HMAA8GR7CJR4N-XN T4	DDR4	SKhynix	64GB	SKhynix-Montage	2Rx4	1.2v	3200MHz	ECC Registered	22	288-pin	
HMAA8GR7CJR4N-XN TG	DDR4	SKhynix	64GB	SKhynix-IDT	2Rx4	1.2v	3200MHz	ECC Registered	22	288-pin	
HMAA8GR7CJR4N-XN T8	DDR4	SKhynix	64GB	SKhynix-Rambus	2Rx4	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											
ST2000NX0243	SATA	Seagate	2.5"	4Kn	2TB	6Gb/s	Exos 7E2000 (Enterprise Capacity V.3)	128MB	7200	N/A	
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"	512e/4Kn	16TB	6Gb/s	EXOS X16	256MB	7200	N/A	
MG07ACA14TE	SATA	Toshiba	3.5"	512e	14TB	6Gb/s	Capacity	256MB	7200	N/A	
WUS721010ALE6L4	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											
SSDSC2K6019T8 D3-S4510 Series	SSD	Intel	2.5"	SATA	1.92TB	6Gb/s					
SSDSC2K6019T8 D3-S4610 Series	SSD	Intel	2.5"	SATA	1.92TB	6Gb/s					
SSDSC2K6019T8 D3-S4610 Series	SSD	Intel	2.5"	SATA	1.92TB	6Gb/s					
MTFDDAK1T9TDS-1AW1ZABYY (5300 PRO)	SSD	Micron	2.5"	SATA	1.92TB	6Gb/s					
MTFDDAK3T8TDS-1AW1ZABYY (5300 PRO)	SSD	Micron	2.5"	SATA	3.84TB	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					
MZ-7LH1T9NE 883 DCT Series	SSD	Samsung	2.5"	SATA	1.92TB	6Gb/s					
XA480LE10063	SSD	Seagate	2.5"	SATA	480GB	6Gb/s					
XA480LE10063	SSD	Seagate	2.5"	SATA	480GB	6Gb/s					
XA960LE10063	SSD	Seagate	2.5"	SATA	960GB	6Gb/s					
XA960LE10063	SSD	Seagate	2.5"	SATA	960GB	6Gb/s					
KHK61RSE960G	SSD	Toshiba	2.5"	SATA	960GB	6Gb/s					
M.2											
Product Name	Type	Vendor	Form Factor	Interface	Capacity	Interface Speed	Note				
M.2											
MZ-1LB1T9N 983 DCT Series	M.2	Samsung	22110	PCIe(NVMe)	1.92TB	6Gb/s					
IM2P33F8-S12GD	M.2	ADATA	NVME	PCIe(NVMe)	512GB	6Gb/s	PCIe Gen 3.0x4				
IM2P33F8-S12GD1	M.2	ADATA	2280	PCIe(NVMe)	512GB	6Gb/s	PCIe Gen3 x4				
MTFDHBA960TDF 960GB 7300 Pro Series	M.2	Micron	2280	PCIe(NVMe)	960GB	6Gb/s	PCIe Gen3 x4				
MZ-1LB1T9N 983 DCT Series	M.2	Samsung	22110	PCIe(NVMe)	1.92TB	6Gb/s	PCIe Gen3 x4				
PCIe SSD											
Product Name	Type	Vendor	Form Factor	Interface	Capacity	Interface Speed	Note				
PCIe											
Samsung PM1725b MZPLL3T2HAJQ PCIe Gen3 x8 3.2TB	PCIe	Samsung	PCI-E 3.0	PCIe(NVMe)	3.2TB	6Gb/s	PCIe Gen3 x8	1(Candition)			
Samsung PM1725a MZPLL1T8EHP PCIe Gen3 x8 1.6TB	PCIe	Samsung	PCI-E 3.0	PCIe(NVMe)	1.6TB	6Gb/s	-				
SSDPEDKX040T701 P4500 Series PCIe Gen3 x4 4TB	PCIe	Intel	PCI-E 3.0	PCIe(NVMe)	4TB	6Gb/s	-				
SSDPEDKX040T701 P4500 Series PCIe Gen3 x4 4TB	PCIe	Intel	PCI-E 3.0	PCIe(NVMe)	4TB	6Gb/s	PCIe Gen3 x4	1(Candition)			
RAID Card											
Product Name	RAID-on-Chip Controller	Vendor	Host Bus Type	Internal Ports	Internal Connectors	Extrenal Ports	External Connectors	Data Transfer Rate	Note		
Broadcom											
MegaRAID 9560-16i	SAS3916 Tri-Mode	Broadcom	x8 PCIe 4.0	16	2 SFF-8654 (SlimSAS)	-	-	-			
Broadcom											
PA111W-32P	PEX88048	Broadcom	x16 PCIe 4.0	-	4 x SFF-8654	-	-	-			
GIGABYTE											
CRA3338	LSI SAS 3008	Gigabyte	PCIe-x8 Gen3 x8 bus	8	2 x Mini-SAS HD for 8x SAS	-	-	-	12Gb/s ports		
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-x8 Gen3 x8 bus	8	2 x internal Mini-SAS HD SFF8643	-	-	-	12Gb/s ports		

GRA4448	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- x8 Gen3 x8 bus	-	-	8	2 x external Mini-SAS HD SFF8644	12Gb/s ports			
CSA3548	LSI SAS 3008	GIGABYTE	PCIe Gen3 x8	-	-	8	2 x Mini-SAS HD SFF-8644	Up to 12Gb/s per port			
<b>LSI</b>											
LSI SAS 9400-16i	SAS3416	LSI	PCIe Gen3 x8	16	4 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port			
LSI SAS 9400-16i	SAS3416	LSI	x8 lane PCI Express 3.1	16	4 x Mini-SAS HD SFF-8643	-	-	12Gb/s SAS 3.0			
LSI SAS 9500-16i	SAS3816	LSI	x8 PCIe 4.0	16	2 x8 SFF-8654 (SlimSAS)	-	-				
LSI SAS 9500-16i	SAS3816	LSI	PCIe Gen4 x8	16	2 x8 SlimSAS SFF-8654	-	-	Up to 12Gb/s per port			
MegaRAID 9560-16i	SAS3916 Tri-Mode RAID-on-Chip (ROC)	LSI	PCIe Gen4 x8	16	2 x8 SlimSAS SFF-8654	-	-	Up to 12Gb/s per port			
MegaRAID 9560-16i without Tri-mode	SAS3916 Tri-Mode RAID-on-Chip (ROC)	LSI	PCIe Gen4 x8	16	2 x8 SlimSAS SFF-8654	-	-	Up to 12Gb/s per port			
MegaRAID SAS 9460-16i	SAS3516 dual-core RAID-on-Chip (ROC)	LSI	x8 lane PCI Express 3.1	8	4 x Mini-SAS HD SFF-8643	-	-	12Gb/s SAS 3.0			
P411W-32P	PEX88048	LSI	PCIe Gen4 x16	8 x4, 16 x2, or 32 x1 NVMe SSD connect	4 x SlimSAS SFF-8654	-	-				
<b>Microsemi</b>											
SmartHBA 2100-8i	PM8222	Microsemi	PCIe Gen3 x8	8	2 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port			
SmartHBA 2100-8i	PM8222	Microsemi	8-Lane PCIe Gen3	8	2 x Internal, SFF-8643	-	-	12 Gb/s per port			
SmartRAID 3154-16i	PM8236	Microsemi	8-Lane PCIe Gen3	16	4 x Internal, SFF-8643	-	-	12 Gb/s per port			
SmartRAID 3154-16i	PM8236	Microsemi	PCIe Gen3 x8	16	4 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port			
<b>Storage-PCIe</b>											
Product Name	Type	Vendor	Form Factor	Format	Capacity	Interface Speed	Series	Cache	RPM	Encription	FW
<b>PCIe</b>											
SSDPEDKX040T701 P4500 Series PCIe Gen3 x4 4TB	PCIe	Intel	PCI-E 3.0	PCIe(NVMe)	4TB	PCIe Gen3 x4					
SSDPEDKX040T701 P4500 Series PCIe Gen3 x4 4TB	PCIe	Intel	PCI-E 3.0	PCIe(NVMe)	4TB	-					
Samsung PM1725b MZPLL3T2HAJQ PCIe Gen3 x8 3.2TB	PCIe	Samsung	PCI-E 3.0	PCIe(NVMe)	3.2TB	PCIe Gen3 x8					
Samsung PM1725a MZPLL1T6HEHP PCIe Gen3 x8 1.6TB	PCIe	Samsung	PCI-E 3.0	PCIe(NVMe)	1.6TB	-					
<b>LAN Card</b>											
Product Name	Connector	Vendor	System InterfaceType	# of Ports	Data Rate	Note					
<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 I350-AM2					
CLN4314	RJ-45	GIGABYTE	PCIe Gen2 x4	Quad	1Gb/s per port	INTEL I350-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	Quad	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-5 EN					
MCX555A-ECAT	QSFP28	Mellanox	PCIe Gen3 x16	Single	100Gb/s per port	Mellanox ConnectX-5 VPI (InfiniBand)					
MCX613106A-VDAT	QSFP56	Mellanox	PCIe Gen4 x16	Dual	200Gb/s per port	Mellanox ConnectX-5 EN					
MCX623106AN-CDAT	QSFP56	Mellanox	PCIe Gen4 x16	Dual	100Gb/s per port	ConnectX®-6 Dx No Crypto, No Secure Boot					
MCX653105A-ECAT	QSFP56	Mellanox	PCIe Gen4 x16	Single	100Gb/s per port	Mellanox ConnectX-6 Ex VPI (InfiniBand)					
MCX653106A-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						
QLE3442-CU-CK	SFP+	Qlogic	PCIe Gen3 x8	Dual	10Gb/s per port						
QLE3442-RJ-CK	RJ-45	Qlogic	PCIe Gen3 x8	Dual	10Gb/s per port						