

Qualification Vender List 2.0										
Intel CPU										
Raptor Lake-E										
Product Name	Vendor	Code Name	Q-Spec	Stepping	Cache	# of Cores	Processor Base Frequency	Max Turbo Frequency	TDP(W)	Memory Type
Intel Xeon E- E-2434	Intel	Raptor Lake-E	Q2JE	B-0	12MB	4c	3.40GHz	5.00GHz	55W	DDR5-4800
Intel Xeon E- E-2414	Intel	Raptor Lake-E	Q2JG	B-0	12MB	4c	2.60GHz	4.50GHz	55W	DDR5-4800
Intel Xeon E- E-2436	Intel	Raptor Lake-E	Q2JC	B-0	18MB	6c	2.90GHz	5.00GHz	65W	DDR5-4800
Intel Xeon E- E-2456	Intel	Raptor Lake-E	Q2JB	B-0	18MB	6c	3.30GHz	5.10GHz	80W	DDR5-4800
Intel Xeon E- E-2486	Intel	Raptor Lake-E	Q2JA	B-0	18MB	6c	3.50GHz	5.60GHz	95W	DDR5-4800
Intel Xeon E- E-2468	Intel	Raptor Lake-E	Q2J8	B-0	24MB	8c	2.60GHz	5.20GHz	65W	DDR5-4800
Intel Xeon E- E-2478	Intel	Raptor Lake-E	Q2J7	B-0	24MB	8c	2.80GHz	5.20GHz	80W	DDR5-4800
Intel Xeon E- E-2488	Intel	Raptor Lake-E	Q2J6	B-0	24MB	8c	3.20GHz	5.60GHz	95W	DDR5-4800
Alder Lake-S										
Product Name	Vendor	Code Name	Q-Spec	Stepping	Cache	# of Cores	Processor Base Frequency	Max Turbo Frequency	TDP(W)	Memory Type
Intel Pentium Gold G7400	Intel	Alder Lake-S	QYVV	H-0	6 MB	2c	3.7GHz	N/A	46W	DDR5-4800
Intel Pentium Gold G7400T	Intel	Alder Lake-S	QYVU	H-0	6 MB	2c	3.1GHz	N/A	35W	DDR5-4800
Memory										
Product Name	Vendor	Memory Type	Size	Chip Brand	Voltage	Data Transfer Rate	Error Correction	Pins	Note	
DDR5 Non-ECC UDIMM										
CT8G48C40U5	CRUCIAL	DDR5	8GB	Micron	1.1v	4800MHz		288-pin	Restricted to 4400MHz	
CT16G48C40U5	CRUCIAL	DDR5	16GB	Micron	1.1v	4800MHz		288-pin	Restricted to 4400MHz	
9270333	Kingston	DDR5	16GB	Micron	1.1v	4800MHz		288-pin	Restricted to 4400MHz	
CT32G48C40U5	CRUCIAL	DDR5	32GB	Micron	1.1v	4800MHz		288-pin	Restricted to 4400MHz	
KF556C40BCK2-16	Kingston	DDR5	8GB	SEC	1.1v	4800MHz		288-pin	Restricted to 4400MHz	
DDR5 ECC UDIMM										
M5C0-AGS2LCVP-D33	InnoDisk	DDR5	16GB	SEC	1.1v	4800MHz	ECC Unbuffered	288-pin	Restricted to 4400MHz	
D32.31280S.001	Apacer	DDR5	16GB	SEC	1.1v	4800MHz	ECC Unbuffered	288-pin	Restricted to 4400MHz	
KSM48E40BS8KM-16HM	Kingston	DDR5	16GB	Skhynix	1.1v	4800MHz	ECC Unbuffered	288-pin	Restricted to 4400MHz	
TE16GFLEV1MH	TEAMGROU	DDR5	16GB	Skhynix	1.1v	4800MHz	ECC Unbuffered	288-pin	Restricted to 4400MHz	
TE32GFLEV1MH	TEAMGROU	DDR5	32GB	Skhynix	1.1v	4800MHz	ECC Unbuffered	288-pin	Restricted to 4400MHz	
KSM48E40BD8KM-32HM	Kingston	DDR5	32GB	Skhynix	1.1v	4800MHz	ECC Unbuffered	288-pin	Restricted to 4400MHz	
M5C0-BGS2MCPV-D33	InnoDisk	DDR5	32GB	SEC	1.1v	4800MHz	ECC Unbuffered	288-pin	Restricted to 4400MHz	
TE16GFLEV2MH	TEAMGROU	DDR5	16GB	Skhynix	1.1v	4800MHz	ECC Unbuffered	288-pin	Restricted to 4400MHz	
MTC10C1084S1EC56BAZ BC	Micron	DDR5	16GB	Micron	1.1v	4800MHz	ECC Unbuffered	288-pin	Restricted to 4400MHz	
MTC20C2085S1EC56BAZ BC	Micron	DDR5	32GB	Micron	1.1v	4800MHz	ECC Unbuffered	288-pin	Restricted to 4400MHz	
SATA										
HDD 2.5"										
Product Name	Vendor	Form Factor	Interface	Capacity	Rotational speed (RPM)	Cache (MB)	Note			
ST2000NX0253	Seagate	2.5-inch	SATAIII 6 Gb/s	2TB	7200 RPM	128MB				
ST2000NX0243	Seagate	2.5-inch	SATAIII 6 Gb/s	2TB	7200 RPM	128MB				
HDD 3.5"										
Product Name	Vendor	Form Factor	Interface	Capacity	Rotational speed (RPM)	Cache (MB)	Note			
ST16000NM001G	Seagate	3.5-inch	SATAIII 6 Gb/s	16TB	7200 RPM	256MB				
ST10000NM017B	Seagate	3.5-inch	SATAIII 6 Gb/s	10TB	7200 RPM	256MB				
ST18000NM000J	Seagate	3.5-inch	SATAIII 6 Gb/s	18TB	7200 RPM	256MB				
ST20000NM007D	Seagate	3.5-inch	SATAIII 6 Gb/s	20TB	7200 RPM	256MB				
ST22000NM001E	Seagate	3.5-inch	SATAIII 6 Gb/s	22TB	7200 RPM	512MB				
HUS722T2TALA604	WD	3.5-inch	SATAIII 6 Gb/s	2TB	7200 RPM	128MB				
HUS726T6TALE6L4	WD	3.5-inch	SATAIII 6 Gb/s	6TB	7200 RPM	256MB				
WUH721818ALE6L4	WD	3.5-inch	SATAIII 6 Gb/s	18TB	7200 RPM	512MB				
WUS721010ALE6L4	WD	3.5-inch	SATAIII 6 Gb/s	10TB	7200 RPM	256MB				
HUH721212ALE604	WD	3.5-inch	SATAIII 6 Gb/s	12TB	7200 RPM	256MB				
WUH722020BLE6L4	WD	3.5-inch	SATAIII 6 Gb/s	20TB	7200 RPM	512MB				
WUH722222ALE6L4	WD	3.5-inch	SATAIII 6 Gb/s	22TB	7200 RPM	512MB				
MG08ACA16TE	Toshiba	3.5-inch	SATAIII 6 Gb/s	16TB	7200 RPM	512MB				
MG08ADA800E	Toshiba	3.5-inch	SATAIII 6 Gb/s	8TB	7200 RPM	256MB				
MG09ACA18TE	Toshiba	3.5-inch	SATAIII 6 Gb/s	18TB	7200 RPM	512MB				
MG10ACA20TE	Toshiba	3.5-inch	SATAIII 6 Gb/s	20TB	7200 RPM	512MB				
SSD										

Product Name	Vendor	Form Factor	Interface	Capacity	Note				
SSDSC2KB019TZ	Solidigm	2.5-inch	SATAIII 6 Gb/s	1.92TB	D3-S4520 Series				
SSDSC2KG019TZ	Solidigm	2.5-inch	SATAIII 6 Gb/s	1.92TB	D3-S4620 Series				
SSDSC2KG038TZ	Solidigm	2.5-inch	SATAIII 6 Gb/s	3.84TB	D3-S4620 Series				
MTFDDAK1T9TGB-1BC1ZABYY	Micron	2.5-inch	SATAIII 6 Gb/s	1.92TB	5400 MAX Series				
MZ7L3480HCHQ-00A07	Samsung	2.5-inch	SATAIII 6 Gb/s	480GB	PM893 Series				
MZ7L33T8HBLT-00A07	Samsung	2.5-inch	SATAIII 6 Gb/s	3.84TB	PM893 Series				
MZ7L31T9HBNA-00A07	Samsung	2.5-inch	SATAIII 6 Gb/s	1.92TB	PM897 Series				
SSBTK93TLCVW-02-2M54789CPT	Phison	2.5-inch	SATAIII 6 Gb/s	1.92TB	ESM1720 Series				
PCIe SSD									
Product Name	Vendor	Type	Form Factor	Interface	Capacity	Interface Speed	Note		
SSDPEDKX040T701	Solidigm	PCIe	PCI-E 3.0	PCIe(NVMe)	4TB	PCIe Gen3 x4	P4500 Series		
MZPLL3T2HAJQ	Samsung	PCIe	PCI-E 3.0	PCIe(NVMe)	3.2TB	PCIe Gen3 x8	PM1725b Series		
M.2 NVMe									
Product Name	Vendor	Type	Form Factor	Interface	Capacity	Interface Speed	Note		
SSDPELKX010T801	Solidigm	M.2	22110	PCIe(NVMe)	1TB	PCIe Gen3 x4	P4511 Series		
MZ1L21T9HCLS	Samsung	M.2	22110	PCIe(NVMe)	1.92TB	PCIe Gen4 x4	PM9A3 Series		
MZ1L2960HCJR	Samsung	M.2	22110	PCIe(NVMe)	960GB	PCIe Gen4 x4	PM9A3 Series		
MTFDKBG3T8TFR	Micron	M.2	22110	PCIe(NVMe)	3.84TB	PCIe Gen4 x4	7450 Pro Series		
MTFDHBA800TDG	Micron	M.2	2280	PCIe(NVMe)	800GB	PCIe Gen3 x4	7300 Max Series		
MTFDHBA960TDF	Micron	M.2	2280	PCIe(NVMe)	960GB	PCIe Gen3 x4	7300 Pro Series		
MTFDKBA800TFS	Micron	M.2	2280	PCIe(NVMe)	800GB	PCIe Gen4 x4	7450 Max Series		
IM2P41B8-480GC	ADATA	M.2	2280	PCIe(NVMe)	480GB	PCIe Gen4 x4			
IM2P41B8-240GC	ADATA	M.2	2280	PCIe(NVMe)	240GB	PCIe Gen4 x4			
RAID Cards									
GIGABYTE									
Product Name	Vendor	RAID-on-Chip Controller	Host Bus Type	Internal Ports	Internal Connectors	External Ports	External Connectors	Data Transfer Rates	Note
CRA3338	GIGABYTE	LSI SAS 3008	PCIe Gen3 x8	8	2 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port	
CSA4648	GIGABYTE	LSI SAS 3008	PCIe Gen3 x8	8	2 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port	
CRA4448	GIGABYTE	LSI SAS 3108	PCIe Gen3 x8	8	2 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port	
CSA4820	GIGABYTE	LSI SAS 3816	PCIe Gen4 x8	16	2 SlimSAS SFF-8654	-	-	Up to 12Gb/s per port	
CSA4710	GIGABYTE	LSI SAS 3808	PCIe Gen4 x8	8	1 SlimSAS SFF-8654	-	-	Up to 12Gb/s per port	
CRA4961	GIGABYTE	LSI SAS 3916 (Up to 240 x physical devices)	PCIe Gen4 x8	16	2 SlimSAS SFF-8654	-	-	Up to 24Gb/s per port	
CRA4761	GIGABYTE	LSI SAS 3908 (Up to 240 x physical devices)	PCIe Gen4 x8	8	1 SlimSAS SFF-8654	-	-	Up to 24Gb/s per port	
Broadcom									
Product Name	Vendor	RAID-on-Chip Controller	Host Bus Type	Internal Ports	Internal Connectors	External Ports	External Connectors	Data Transfer Rates	Note
MegaRAID 9670W-16i	Broadcom	SAS4116W (Avenger ROC)	PCIe Gen4 x8	16	2 SlimSAS SFF-8654	-	-	Up to 24Gb/s per port	
MegaRAID 9660-16i	Broadcom	SAS4116 (Avenger ROC)	PCIe Gen4 x8	16	2 SlimSAS SFF-8654	-	-	Up to 24Gb/s per port	
MegaRAID 9560-16i	Broadcom	SAS3916 Tri-Mode RAID-on-Chip (ROC)	PCIe Gen4 x8	16	2 SlimSAS SFF-8654	-	-	Up to 12Gb/s per port	
MegaRAID 9560-8i	Broadcom	SAS3908 Tri-Mode RAID-on-Chip (ROC)	PCIe Gen4 x8	8	1 SlimSAS SFF-8654	-	-	Up to 12Gb/s per port	
MegaRAID 9580-8i8e	Broadcom	SAS3916 Tri-Mode RAID-on-Chip (ROC)	PCIe Gen4 x8	8	2 SlimSAS SFF-8654	8	2 SFF-8644	Up to 12Gb/s per port	
eHBA 9620-16i	Broadcom	SAS4106 (Avenger IOC)	PCIe Gen4 x8	16	2 SlimSAS SFF-8654	-	-	Up to 24Gb/s per port	
eHBA 9600-24i	Broadcom	SAS4024 (Avenger IOC)	PCIe Gen4 x8	24	3 SlimSAS SFF-8654	-	-	Up to 24Gb/s per port	
eHBA 9600-16i	Broadcom	SAS4016 (Avenger IOC)	PCIe Gen4 x8	16	2 SlimSAS SFF-8654	-	-	Up to 24Gb/s per port	
eHBA 9600W-16e	Broadcom	SAS4016W (Avenger IOC)	PCIe Gen4 x16	-	-	16	4 SFF-8644	Up to 24Gb/s per port	
eHBA 9600-16e	Broadcom	SAS4016 (Avenger IOC)	PCIe Gen4 x8	-	-	16	4 SFF-8644	Up to 24Gb/s per port	
HBA 9500-16i	Broadcom	SAS3816	PCIe Gen4 x8	16	2 SlimSAS SFF-8654	-	-	Up to 12Gb/s per port	
HBA 9500-8i	Broadcom	SAS3808	PCIe Gen4 x8	8	1 SlimSAS SFF-8654	-	-	Up to 12Gb/s per port	
HBA 9500-16e	Broadcom	SAS3816	PCIe Gen4 x8	-	-	16	4 SFF-8644	Up to 12Gb/s per port	
HBA 9500-8e	Broadcom	SAS3808	PCIe Gen4 x8	-	-	8	2 SFF-8644	Up to 12Gb/s per port	
P411W-32P	Broadcom	PEX88048	PCIe Gen4 x16	8 x4, 16 x2, or 32 x1 NVMe SSD connect	4 SlimSAS SFF-8654	-	-		
Adaptec									
Product Name	Vendor	RAID-on-Chip Controller	Host Bus Type	Internal Ports	Internal Connectors	External Ports	External Connectors	Data Transfer Rates	Note
81605ZQ	Adaptec	-	PCIe Gen3 x8	16	4 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port	
Microsemi									
Product Name	Vendor	RAID-on-Chip Controller	Host Bus Type	Internal Ports	Internal Connectors	External Ports	External Connectors	Data Transfer Rates	Note
SmartRAID 3154-16i	Microsemi	PM8236	PCIe Gen3 x8	16	4 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port	
SmartHBA 2100-8i	Microsemi	PM8222	PCIe Gen3 x8	8	2 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port	
LAN Cards									
GIGABYTE LAN Cards									
Product Name	Vendor	Connector	System Interface	# of Ports	Data Rate	Note			
CLN4D40	GIGABYTE	SFP28	PCIe Gen3 x8	Dual	25Gb/s per port	Broadcom BCM57414			
CLN4B20	GIGABYTE	RJ-45	PCIe Gen3 x8	Dual	10Gb/s per port	Broadcom BCM57416			
CLN4A10	GIGABYTE	RJ-45	PCIe Gen3 x8	Dual	1Gb/s per port	Broadcom BCM5720L			
CLN4832	GIGABYTE	SFP+	PCIe Gen2 x8	Dual	10Gb/s per port	INTEL 82599ES			
CLN4751	GIGABYTE	QSFP+	PCIe Gen3 x8	Single	40Gb/s per port	INTEL XL710-BM1			

CLN4752	GIGABYTE	QSFP+	PCIe Gen3 x8	Dual	40Gb/s per port	INTEL XL710-BM2	
CLN4222	GIGABYTE	RJ-45	PCIe Gen3 x4	Dual	10Gb/s per port	INTEL X550-AT2	
CLN4312	GIGABYTE	RJ-45	PCIe Gen2 x4	Dual	1Gb/s per port	INTEL i350-AM2	
CLN4314	GIGABYTE	RJ-45	PCIe Gen2 x4	Quad	1Gb/s per port	INTEL i350-AM4	
<b>Intel LAN Cards</b>							
Product Name	Vendor	Connector	System Interface	# of Ports	Data Rate	Note	
X550-T2	Intel	RJ-45	PCIe Gen3 x4	Dual	10Gb/s per port		
X710-DA4	Intel	SFP+	PCIe Gen3 x8	Quad	10Gb/s per port		
X722-DA4	Intel	SFP+	PCIe Gen3 x8	Quad	10Gb/s per port		
XXV710-DA2	Intel	SFP28	PCIe Gen3 x8	Dual	25Gb/s per port		
<b>NVIDIA LAN Cards</b>							
Product Name	Vendor	Connector	System Interface	# of Ports	Data Rate	Note	
MCX631102AN-ADAT	NVIDIA	SFP28	PCIe Gen4 x8	Dual	25Gb/s per port	Mellanox ConnectX®-6 Lx without Crypto	
MCX623105AN-CDAT	NVIDIA	QSFP56	PCIe Gen4 x16	Single	100Gb/s per port	Mellanox ConnectX®-6 Dx No Crypto, No Secure Boot	
MCX623106AN-CDAT	NVIDIA	QSFP56	PCIe Gen4 x16	Dual	100Gb/s per port	Mellanox ConnectX®-6 Dx No Crypto, No Secure Boot	
MCX516A-CDAT	NVIDIA	QSFP28	PCIe Gen4 x16	Dual	100Gb/s per port	Mellanox ConnectX-5 Ex EN	
MCX516A-BDAT	NVIDIA	QSFP28	PCIe Gen4 x16	Dual	40Gb/s per port	Mellanox ConnectX-5 Ex EN	
MCX516A-CCAT	NVIDIA	QSFP28	PCIe Gen3 x16	Dual	100Gb/s per port	Mellanox ConnectX-5 EN	
MCX515A-CCAT	NVIDIA	QSFP28	PCIe Gen3 x16	Single	100Gb/s per port	Mellanox ConnectX-5 EN	
MCX516A-GCAT	NVIDIA	QSFP28	PCIe Gen3 x16	Dual	50Gb/s per port	Mellanox ConnectX-5 EN	
MCX4121A-ACAT	NVIDIA	SFP28	PCIe Gen3 x8	Dual	25Gb/s per port	Mellanox ConnectX-4 Lx EN	
MCX683105AN-HDAT	NVIDIA	QSFP	PCIe Gen4 x16	Single	200Gb/s per port	Mellanox ConnectX-6 DE VPI (InfiniBand)	
MCX653106A-HDAT	NVIDIA	QSFP56	PCIe Gen4 x16	Dual	200Gb/s per port	Mellanox ConnectX-6 Ex VPI (InfiniBand)	
MCX653105A-HDAT	NVIDIA	QSFP56	PCIe Gen4 x16	Single	200Gb/s per port	Mellanox ConnectX-6 Ex VPI (InfiniBand)	
MCX653105A-ECAT	NVIDIA	QSFP56	PCIe Gen4 x16	Single	100Gb/s per port	Mellanox ConnectX-6 Ex VPI (InfiniBand)	
MCX653106A-ECAT	NVIDIA	QSFP56	PCIe Gen4 x16	Dual	100Gb/s per port	Mellanox ConnectX-6 Ex VPI (InfiniBand)	
MBF2M345A-HESOT	NVIDIA	QSFP56	PCIe Gen4 x16	Single	200Gb/s per port	E-Series/ 2.0GHz	
MBF2H532C-AECOT	NVIDIA	SFP56	PCIe Gen4 x8	Dual	25Gb/s per port	P-Series/ 2.5GHz	
<b>Qlogic LAN Adapters</b>							
Product Name	Vendor	Connector	System Interface	# of Ports	Data Rate	Note	
QL45611HLCU	Qlogic	QSFP28	PCIe Gen3 x16	Single	100Gb/s per port		
QLE3442-CU-CK	Qlogic	SFP+	PCIe Gen3 x8	Dual	10Gb/s per port		
QLE3442-RJ-CK	Qlogic	RJ-45	PCIe Gen3 x8	Dual	10Gb/s per port		
QL41212HLCU-SP	Qlogic	SFP28	PCIe Gen3 x8	Dual	25Gb/s per port		
QL41132HLCU-SP	Qlogic	SFP28	PCIe Gen3 x8	Dual	10Gb/s per port		
<b>Broadcom (Emulex) Ethernet Networking Adapters</b>							
Product Name	Vendor	Connector	System Interface	# of Ports	Data Rate	Note	
BCM957508-P2100G	Broadcom	QSFP56	PCIe Gen4 x16	Dual	100Gb/s per port	BCM57508	
BCM957412A4120AC	Broadcom	SFP+	PCIe Gen3 x8	Dual	10Gb/s per port	BCM57412	
BCM957414A4142CC	Broadcom	SFP28	PCIe Gen3 x8	Dual	25Gb/s per port	BCM57414 (P225P)	
BCM957416A4160C	Broadcom	RJ-45	PCIe Gen3 x8	Dual	10Gb/s per port	BCM57416 (P210TP)	
<b>Chelsio Networking Adapters</b>							
Product Name	Vendor	Connector	System Interface	# of Ports	Data Rate	Note	
T6225-CR	Chelsio	SFP28	PCIe Gen3 x8	Dual	25Gb/s per port	Power 13w	
T6225-SO-CR	Chelsio	SFP28	PCIe Gen3 x8	Dual	25Gb/s per port	Power 10w	
T62100-CR	Chelsio	QSFP28	PCIe Gen3 x16	Dual	100Gb/s per port	Power 22w	
T62100-LP-CR	Chelsio	QSFP28	PCIe Gen3 x16	Dual	100Gb/s per port	Power 19w	
T62100-SO-CR	Chelsio	QSFP28	PCIe Gen3 x16	Dual	100Gb/s per port	Power 16w	
T540-LP-CR	Chelsio	SFP+	PCIe Gen3 x8	Quad	10Gb/s per port	Power 11w	
<b>USB Device</b>							
USB 3.2 Gen 1 (5Gbps)							
Product Name	Vendor	Type	Connector	Capacity	Note		
MB981U3-1S	ICYDOCK	HDD Dock	Type-A				
TS-RDF8K	Transcend	Card Reader	Type-A				
JUA350	j5 create	External display HDMI	Type-A				
U3I-682	雅利爾	HDD Dock	Type-A				
BW-H13C1039A	BROWAY	USB3.0 HUB	Type-A				
SUPERIOR S102 PRO	ADATA	Flash	Type-A	8GB			