

"G150-B10" Qualification Vender List Ver:2.0											
Memory											
Product Name	Memory Type	Module Supplier	Size	Chip Brand	Rank	Voltage	Data Transfer Rate	Error Correction	CAS Latency	Pins	Note
RDIMM											
KVR21R15S4/8	DDR4	Kingston	8GB		1R	1.2v	2133MHz	ECC Registered	15	288-pin	
KVR21R15D4/16	DDR4	Kingston	16GB		2R	1.2v	2133MHz	ECC Registered	15	288-pin	
AD4V2133Y8G15-BHYM (VLP DIMM)	DDR4	ADATA	8GB		1R	1.2v	2133MHz	ECC Registered	15	288-pin	
T4D4R10H62158	DDR4	TeamGroup	8GB			1.2v	2133MHz	ECC Registered	15	288-pin	
T4D6R10S62000	DDR4	TeamGroup	8GB			1.2v	2133MHz	ECC Registered	15	288-pin	
T4E1R10S62000	DDR4	TeamGroup	16GB	Samsung		1.2v	2133MHz	ECC Registered	15	288-pin	
HMA41GR7MFR4N-TF TD	DDR4	HYNIX	8GB		1R	1.2v	2133MHz	ECC Registered	15	288-pin	
HMA42GR7MFR4N-TF TD	DDR4	HYNIX	16GB		2R	1.2v	2133MHz	ECC Registered	15	288-pin	
HMA81GR7AFR8N-UH TD	DDR4	SK Hynix	8GB	SKhynix	1Rx8	1.2v	2400MHz	ECC Registered	17	288-pin	
CT4G4RFS8213.9FA2	DDR4	CRUCIAL	4GB		1R	1.2v	2133MHz	ECC Registered	15	288-pin	
CT8G4RFS4213ES.18FDA2	DDR4	CRUCIAL	8GB		1R	1.2v	2133MHz	ECC Registered	15	288-pin	
CT8G4RFD8213.18FA1	DDR4	CRUCIAL	8GB		2R	1.2v	2133MHz	ECC Registered	15	288-pin	
CT16G4RFD4213.36FA2	DDR4	CRUCIAL	16GB		2R	1.2v	2133MHz	ECC Registered	15	288-pin	
75_CA3G0.G000B	DDR4	Apacer	8GB			1.2v	2133MHz	ECC Registered	15	288-pin	
HMA84GR7MFR4N-TFTD	DDR4	HYNIX	32GB	SKhynix	2R	1.2v	2133MHz	ECC Registered	15	288-pin	
HMA451R7MFR8N-TF	DDR4	SK Hynix	4GB		1R	1.2v	2133MHz	ECC Registered	15	288-pin	
VP9MR2G7228JBJSB	DDR5	Viking	16GB	Samsung	2R X8	1.2v	2400MHz	ECC Registered	17	288-pin	
VP9MR4G7224JBJSB	DDR5	Viking	32GB	Samsung	2R X4	1.2v	2400MHz	ECC Registered	17	288-pin	
HMA82GR7AFR8N-UHTD	DDR4	SKhynix	16GB	SKhynix	2R X8	1.2v	2400MHz	ECC Registered	17	288-pin	
J4AGR1G8PGXC	DDR4	MBG-JBM	16GB	SKhynix	2R X8	1.2v	2400MHz	ECC Registered	17	288-pin	
HMA82GR7AFR8N-UHT2	DDR4	SKhynix	16GB	SKhynix	2R X8	1.2v	2400MHz	ECC Registered	17	288-pin	
HMA84GR7AFR4N-UHTD	DDR4	SKhynix	32GB	SKhynix	2R X4	1.2v	2400MHz	ECC Registered	17	288-pin	

J4BGRH2G4PGXC	DDR4	MBG-JBM	32GB	SKhynix	2R X4	1.2v	2400MHz	ECC Registered	17	288-pin	
HMA84GR7AFR4N-UHT2	DDR4	SKhynix	32GB	SKhynix	2R X4	1.2v	2400MHz	ECC Registered	17	288-pin	
TR416G24S417	DDR4	V-color	16GB		1Rx4	1.2v	2400MHz	ECC Registered		288-pin	
TR432G24D417	DDR4	V-color	32GB		2Rx4	1.2v	2400MHz	ECC Registered		288-pin	
CT8G4RFS824A.2G3B1	DDR4	Crucial	8GB	Micron	1R X8	1.2v	2400MHz	ECC Registered	17	288-pin	Just test this DIMM to cover
MTA9ASF1G72PZ-2G3B1MG	DDR4	Micron	8GB	Micron-Monta	1R X8	1.2v	2400MHz	ECC Registered	17	288-pin	Same as above
M4R0-8GSSBCSJ	DDR4	Innodisk	8GB		2Rx8	1.2v	2400MHz	ECC Registered		288-pin	
CT16G4RFD8266-2G6H1.001	DDR4	CRUCIAL	16GB		2Rx8	1.2v	2666MHz	ECC Registered	19	288-pin	For Intel Purley support; Just test this DIMM to cover
MTA18ASF2G72PDZ-2G6H1QG	DDR4	Micron	16GB		2Rx8	1.2v	2666MHz	ECC Registered	19	288-pin	For Intel Purley support; Same as above
CT32G4RFD4266-2G6H1.001	DDR4	CRUCIAL	32GB		2Rx4	1.2v	2666MHz	ECC Registered	19	288-pin	For Intel Purley support; Just test this DIMM to cover
MTA36ASF4G72PZ-2G6H1QG	DDR4	Micron	32GB		2Rx4	1.2v	2666MHz	ECC Registered	19	288-pin	For Intel Purley support; Same as above
ECC UDIMM											
M4C0-8GSSMCRG	DDR4	INNODISK	8GB	Samsung		1.2v	2133MHz	ECC Unbuffer	15	288-pin	
M4C0-4GSSLCRG	DDR4	INNODISK	4GB	Samsung		1.2v	2133MHz	ECC Unbuffer	15	288-pin	
TS512MLH72V1H	DDR4	Transcend	4GB	Samsung	1R	1.2v	2133MHz	ECC Unbuffer	15	288-pin	
TS1GLH72V1H	DDR4	Transcend	8GB	Samsung	2R	1.2v	2133MHz	ECC Unbuffer	15	288-pin	
PED42133C158GVS	DDR4	Panram	8GB	SKhynix		1.2v	2133MHz	ECC Unbuffer	15	288-pin	
PED42133C154GVS	DDR4	Panram	4GB	SKhynix		1.2v	2133MHz	ECC Unbuffer	15	288-pin	
78.B1GM4.AF00B	DDR4	Apacer	4GB	SKhynix		1.2v	2133MHz	ECC Unbuffer	15	288-pin	
78.C1GM4.AF10B	DDR4	Apacer	8GB	SKhynix		1.2v	2133MHz	ECC Unbuffer	15	288-pin	
M391A1G43DB0-CPB	DDR4	Samsung	8GB	Samsung	2R	1.2v	2133MHz	ECC Unbuffer	15	288-pin	
CT8G4WFD8213.18FA1	DDR4	Crucial	8GB	Micron	2R	1.2v	2133MHz	ECC Unbuffer	15	288-pin	
CT4G4WFS8213.9FA1	DDR4	Crucial	4GB	Micron	1R	1.2v	2133MHz	ECC Unbuffer	15	288-pin	
T2D4C10S61163	DDR4	TeamGroup	8GB	Samsung	1R	1.2v	2133MHz	ECC Unbuffer	15	288-pin	
T2C8C10S61164	DDR4	TeamGroup	4GB	Samsung	1R	1.2v	2133MHz	ECC Unbuffer	15	288-pin	
CMA6-3G A01DAR01ME0	DDR4	ACPi	8GB	SKhynix	2R	1.2v	2133MHz	ECC Unbuffer	15	288-pin	
KVR21E15D8/8HA	DDR4	Kingston	8GB	SKhynix	2R	1.2v	2133MHz	ECC Unbuffer	15	288-pin	
CT8G4WFD824A.18FB1	DDR4	Crucial	8GB	Micron	2RX8	1.2V	2400MHz	ECC Unbuffer	17	288-pin	
MTA18ASF1G72AZ-2G3B1ZK	DDR4	Micron	8GB	Micron	2RX8	1.2V	2400MHz	ECC Unbuffer	17	288-pin	
KVR21N15D8/8	DDR4	Kingston	8GB			1.2V	2133MHz	ECC Unbuffer	15	288-pin	
HMA81GU7AFR8N-UHT0	DDR4	SKhynix	8GB		1Rx8	1.2V	2400MHz	ECC Unbuffer	17	288-pin	
HMA82GU7AFR8N-UHT0	DDR4	SK Hynix	16GB	SKhynix	2Rx8	1.2v	2400MHz	ECC Unbuffer	17	288-pin	
AD4U2400316G17-B	DDR4	ADATA	16GB			1.2v	2400MHz	ECC Unbuffer	17	288-pin	
KVR24E17D8/16MA	DDR4	Kingston	16GB		2Rx8	1.2v	2400MHz	ECC Unbuffer	17	288-pin	
KVR24E17S8/8MA	DDR4	Kingston	8GB		1Rx8	1.2v	2400MHz	ECC Unbuffer	17	288-pin	
CT32G4RFD424A.2G3B1	DDR4	Crucial	32GB	Micron	2R X4	1.2v	2400MHz	ECC Registered	17	288-pin	Just test this DIMM to cover
CT32G4RFD424A.36FB1	DDR4	Crucial	32GB	Micron	2R X4	1.2v	2400MHz	ECC Registered	17	288-pin	Same as above
MTA36ASF4G72PZ-2G3B1MG	DDR4	Micron	32GB	Micron	2R X4	1.2v	2400MHz	ECC Registered	17	288-pin	Same as above
Seagate HDD (SAS HDD may need RAID Card support)											

Product Name	Type	Vendor	Form Factor	Format	Capacity	Interface Speed	Series	Cache	RPM	Encryption	FW
Seagate Enterprise Capacity 2.5 HDD											
ST1800MM0018	SAS	Seagate	2.5"	N/A	1.8TB	12Gb/s	Performance	129MB	10000	N/A	E004
ST9250610NS	SATA	Seagate	2.5"	N/A	250GB	6Gb/s	Constellation 2	64MB	7200	N/A	SN02
ST91000640NS	SATA	Seagate	2.5"	N/A	1TB	6Gb/s	Constellation 2	64MB	7200	N/A	
ST2000NX0403	SATA	Seagate	2.5"	512n	2TB	6Gb/s	Enterprise Capacity V.3	128MB	7200	N/A	
ST1000NX0423	SATA	Seagate	2.5"	512n	1TB	6Gb/s	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											
ST4000NM0033	SATA	Seagate	3.5"	512N	4TB	6Gb/s	ES.3	128MB	7200	N/A	
ST6000NM0024	SATA	Seagate	3.5"	512E	6TB	6Gb/s	V.4	128MB	7200	N/A	
ST8000NM0016	SATA	Seagate	3.5"	N/A	8TB	12Gb/s	Performance	256MB	7200	N/A	SNC0
ST8000NM0055	SATA	Seagate	3.5"	512E	8TB	6Bb/s	ES.3	256MB	7200	N/A	
ST8000NM0045	SATA	Seagate	3.5"	4Kn	8TB	6Gb/s	Enterprise Capacity V.5	256MB	7200	N/A	
ST8000NM0115	SATA	Seagate	3.5"	4Kn	8TB	6Gb/s	Enterprise Capacity V.5	256MB	7200	N/A	
ST8000NM0145	SATA	Seagate	3.5"	4Kn	8TB	6Gb/s	Enterprise Capacity V.5	256MB	7200	N/A	
ST6000NM0125	SATA	Seagate	3.5"	4Kn	8TB	6Gb/s	Enterprise Capacity V.5	256MB	7200	N/A	
ST6000NM0185	SATA	Seagate	3.5"	4Kn	8TB	6Gb/s	Enterprise Capacity V.5	256MB	7200	N/A	
ST6000NM0265	SATA	Seagate	3.5"	4Kn	8TB	6Gb/s	Enterprise Capacity V.5	256MB	7200	N/A	
ST10000NM0146	SATA	Seagate	3.5"	4Kn	10TB	6Gb/s	Enterprise Capacity V.6	256MB	7200	N/A	
ST10000NM0166	SATA	Seagate	3.5"	4Kn	10TB	6Gb/s	Enterprise Capacity V.6	256MB	7200	N/A	
ST10000NM0186	SATA	Seagate	3.5"	4Kn	10TB	6Gb/s	Enterprise Capacity V.6	256MB	7200	N/A	
Seagate Desktop HDD											
ST1000DM003	SATA	Seagate	3.5"	N/A	1TB	6Gb/s	7200.14	64MB	7200	N/A	
WD HDD (SAS HDD may need RAID Card support)											
Product Name	Type	Vendor	Form Factor	Format	Capacity	Interface Speed	Series	Cache	RPM	Encryption	FW
Datacenter											
WD6001FSYZ-01SS7B0	SATA	WD	3.5"	4KN	6TB	6Gb/s	WD Re	128MB	7200	N/A	
WD4000FYYZ-01UL1B0	SATA	WD	3.5"	N/A	4TB	6Gb/s	WD Re	64MB	7200	N/A	01UL1B0
Workstation											
WD2500BHTZ-04JCPV0	SATA	WD	2.5"	N/A	250GB	6Gb/s	WD VelociRaptor	64MB	10K	N/A	04JCPV0
HGST HDD (SAS HDD may need RAID Card support)											
Product Name	Type	Vendor	Form Factor	Format	Capacity	Interface Speed	Series	Cache	RPM	Encryption	FW
Enterprise Hard Drives											
HUA722010CLA330	SATA	HGST	3.5"	512	1TB	3Gb/s	Ultrastar A7K2000	32MB	7200	N/A	
HUS724040ALA640	SATA	HGST	3.5"	512N	4TB	6Gb/s	Ultrastar 7K4000	64MB	7200	N/A	8B0

HUS726060ALA640	SATA	HGST	3.5"	512N	6TB	6Gb/s	Ultrastar He6	64MB	7200	N/A	
HMS5C4040BLE640	SATA	HGST	3.5"	512e	4TB	6Gb/s	MegaScale DC 4000.B	64MB	5400	N/A	5D0
HUH728080ALE604	SATA	HGST	3.5"	512e	8TB	6Gb/s	Ultrastar He8	128MB	7200	N/A	7J0
Toshiba HDD (SAS HDD may need RAID Card support)											
Product Name	Type	Vendor	Form Factor	Format	Capacity	Interface Speed	Series	Cache	RPM	Encryption	FW
AL13SXB60EE	SAS	Toshiba	2.5"	N/A	600GB	12Gb/s	Performance	128MB	15000	N/A	O1O1
Storage Products											
MG03ACA300	SATA	Toshiba	3.5"	512B	3TB	6Gb/s	Enterprise Capacity	64MB	7200	N/A	FL0A
MG04ACA600E	SATA	Toshiba	3.5"	512e	6TB	6Gb/s	Enterprise Capacity	128MB	7200	N/A	FS2B
MG05ACA800A	SATA	Toshiba	3.5"	4KN	8TB	6Gb/s	Enterprise Capacity	128MB	7200	N/A	GX1A
MG05ACA800E	SATA	Toshiba	3.5"	512e	8TB	6Gb/s	Enterprise Capacity	128MB	7200	N/A	GX1A
MG04ACA100N	SATA	Toshiba	3.5"	512e	1TB	6Gb/s	Capacity	128MB	7200	N/A	A0
ST1000NX0313	SATA	Seagate	2.5"	512e	1TB	6Gb/s	Enterprise Capacity V.3	128MB	7200	N/A	
SSD											
Product Name	Type	Vendor	Form Factor	Interface	Capacity	Interface Speed	FW	Note			
Hard drive											
MTFDDAK800MBB	SSD	Micron	2.5"	SATA	800GB	6 Gb/s					
SSDPEDMD400G4	SSD	Intel	NVMe	PCI-E 3.0	400GB	-					
PX04PMC320	SSD	Toshiba	NVMe	PCI-E	3.2T	-					
SDLF1CRR-019T-1HA1	SSD	SanDisk	SATA	2.5"	1.92TB						
SSDPEDMD400G4	SSD	Intel	NVMe	PCI-E 3.0	400GB	-					
SSDPEDME400G4	SSD	Intel	NVMe	PCI-E 3.0	400GB	-					
Hard Drive SATA DOM											
Product Name	Type	Vendor	Capacity	Flash Type	Max. Channels	FW	Max. Power Consumption	Note			
DESSL-64GM41BC1SCB	Vertical	INNODISK	64GB	MLC	1	0.734W (5V x 146.9mA)					
DESSL-64GM41BCADCB	Vertical	INNODISK	64GB	MLC	2	0.815W (5V x 163mA)					
DESSH-64GM41BC1SCB	Horizontal	INNODISK	64GB	MLC							
GPGPU Card											
Product Name	Processor Cores	Memory Bandwidth (GB/sec)	FW	OpenGL	Microsoft DirectX	Graphics Card Power (W)	NVIDIA SLI / AMD CrossFire Ready	Note			
Intel											
Intel® Xeon Phi™ Coprocessor 3151P (6GB, 1.100 GHz, 57 core)	3151P	-	-	-	-	275 W	-				
Intel® Xeon Phi™ Coprocessor 3120P (6GB, 1.100 GHz, 57 core)	3120P	240 GB/s	-	-	-	300 W	-				
Intel® Xeon Phi™ Coprocessor 5110P (8GB, 1.053 GHz, 60 core)	5110P	320 GB/s	-	-	-	225 W	-				
Intel® Xeon Phi™ Coprocessor 7120P (16GB, 1.238 GHz, 61 core)	7120P	352 GB/s	-	-	-	300 W	-				
NvidiaTesla (http://www.nvidia.com/object/tesla-supercomputing-solutions.html)											
Tesla K40	2880	288 GB/sec	-	-	-	235W	-				
Tesla K80	4992 (2496 per GPU)	480 GB/sec (240 GB/sec per GPU)	-	-	-	375W	-				

M40	2560 (640/GPU)	-	-	-	-	225 W	-		
GRID K2	3072	-	-	-	-	225 W	-	(R2L)	
GRID K1	195	-	-	-	-	130 W	-		
M30	1920	-	-	-	-	225 W	-		
M60	1920	-	-	-	-	300 W	-		
AMD									
FirePro™ S9150 Server GPU	2814					235	-		
Graphics Card									
Product Name	Processor Cores	Memory Bandwidth (GB/sec)	FW	OpenGL	Microsoft DirectX	Graphics Card Power (W)	NVIDIA SLI / AMD CrossFire Ready	Note	
GIGABYTE Video Cards									
GC-IVA	Aspeed AST 1300	-	-	-	-	-	-		
ATI Graphics for Cloud + Data Centers									
AMD FirePro™ S9150 Server GPU	-	up to 320 GB/s		4.3	11.1	235W	-		
RAID Cards									
Model	RAID-on-Chip Controller	Host Bus Type	Internal Ports	Internal Connectors	External Ports	External Connectors	Data Transfer Rates	FW	Note
GIGABYTE Storage Cards									
GC-MSLZ2	LSI SAS 2008	PCIe- x8 Gen2 x8 bus	2	Mini-SAS for 8x SAS	-	-	6Gb/s ports		
RA200-8	LSI SAS 2308	PCIe- x8 Gen3 x8 bus	2	Mini-SAS for 8x SAS	-	-	6Gb/s ports		
CRA3338	LSI SAS 3208	PCIe- x8 Gen3 x8 bus	2	Mini-SAS for 8x SAS	-	-	12Gb/s ports		
CRA4548	LSI SAS 3108	PCIe- x8 Gen3 x8 bus	1	*1 x internal Mini-SAS HD SFF8643	1	*1 x external Mini-SAS HD SFF8644	12Gb/s ports		
CRA4448	LSI SAS 3108	PCIe- x8 Gen3 x8 bus	2	2 x internal Mini-SAS HD SFF8643	-	-	12Gb/s ports		
LAN Cards									
Product Name	Connector	System Interface Type	# of Ports	System Interface Type	Data rate	Note			
GIGABYTE LAN Cards									
GC-MNXE21	SFP+	PCIe x8 Gen3 x8	Dual	10Gb/s per port	Mellanox ConnectX-3				
GC-MLBZ1	SFP+	PCIe x8 Gen2 x8	Dual	10Gb/s per port	Broadcom BCM57810S				
CLN4121	RJ-45	PCIe x4 Gen3 x4	single	10Gb/s per port					
CLN4222	RJ-45	PCIe x4 Gen3 x4	Dual	10Gb/s per port					
CLN4522	RJ-45	PCIe x8 Gen2 x8	Dual	10Gb/s per port	INTEL X540				

CLN4312	RJ-45	PCIe x4 Gen2 x4	Dual	1Gb/s per port	INTEL i350-AM4					
Qlogic Fibre Channel Adapters										
QLE3442-RJ-CK	RJ-45	PCIe x8 Gen3 x8	Dual	10Gb/s per port						
Intel_GbE										
Intel® Ethernet Server Adapter I350-T4	RJ-45	PCIe v2.1 (5.0GT/s)	Quad	1Gb/s per port						
Intel® Ethernet Converged Network Adapter X520-DA2	SFP+	PCIe v2.0 (5.0GT/s)	Dual	10Gb/s per port						
Intel_10GbE										
Intel® Ethernet Converged Network Adapter X540-T1	RJ-45	PCIe 2.1 (5.0 GT/s)	Single	10Gb/s per port						
Intel® Ethernet Converged Network Adapter X520-DA2	SFP+	PCIe v2.0 (5.0GT/s)	Dual	10Gb/s per port						
Solarflare Onload Server Adapters										
SFN6122F	SFP+	5.9W		Dual	5.0GT/s (Gen2)	-				
Transceiver / AOC / DAC										
Product Name / Product Number	Speed	Form Factor	Length	Connector type	nominal optical wavelength (nm)					Note
Direct Attach Copper (DAC)										
FCI 10110818-3030LF (RX003224)	10Gb	SFP+	3M	N/A	850					
安富利 586710005 (RX004518)	10Gb	SFP+	10M	N/A	850					
安富利 586710003	10Gb	SFP+	5M	N/A	850					
安富利 586710007 (RX002327)	10Gb	SFP+	1M	N/A	850					
MOLEX 747529004 (RX004630)	10Gb	SFP+	10M	N/A	850					
MOLEX 747524701	10Gb	SFP+	7M	N/A	850					
MOLEX 747524501 (RX004635)	10Gb	SFP+	5M	N/A	850					
MOLEX 747521301 (RX004523)	10Gb	SFP+	3M	N/A	850					
MOLEX 747521101 (RX004511)	10Gb	SFP+	1M	N/A	850					
Active Optical Cables (AOC)										
Avago AFBR-7CER03Z	10Gb	SFP+	3M	N/A	850					
Avago AFBR-7CER07Z	10Gb	SFP+	7M	N/A	850					
Transceiver										
Wavesplitter 10G Base SR WST-SFP+SRC-C	10Gb/1Gb	SFP+	N/A	SR	850					
UMEC SFP+ 10G Transceiver PDGSFTSRL00	10Gb/1Gb	SFP+	N/A	LC	850					
FTLX8574D3BCL (Not support 1G)	10G	SFP+	N/A		850					
FTLX8574D3BCV (Support 1G)	10G	SFP+	N/A		850					
Avago AFBR-709DMZ	10G/1G	SFP+	N/A	LC	850					
USB Device										
Product Name	Type	Vendor	Capacity							Note
USB 3.0										
GoFlex STAA500305	HDD	Seagate	500G							
TOSHIBA CANVIO BASIC	HDD	Toshiba	500G							
EXTEK BYTECC-ME535U3	Blue-ray	Pioneer								
NU EBC113	Blue-ray	NU								
NU ESW863 8X SLIM	DVD	NU								
SILICON POWER BLAZE B10 16GB	Flash	SILICON	16G							
S1-DS3 TURBO	Device	CyberSLIM								
NA317U+	Device	ineo								