

"G491-Z51" Qualification Vender List

Please contact FAE support for below orange blocks

AMD CPU										
Product Name	Code Name	Package	Stepping	L3 Cache	# of Cores / Threads	Processor Base Freq (GHz)	Processor Boost Max Freq (GHz)	Default TDP	cTDP Min / cTDP Max	Memory Types
AMD 7601 PS7601BDVIHAF	Naples	SP3	B2	64MB	32 / 64	2.20	3.20	180W	180W	DDR4-2666
AMD 7551 PS7551BDVIHAF	Naples	SP3	B2	64MB	32 / 64	2.00	3.00	180W	180W	DDR4-2666
AMD 7451 PS7451BDVHCAF	Naples	SP3	B2	64MB	24 / 48	2.30	3.20	180W	180W	DDR4-2666
AMD 7351 PS7351BEVGPFAF	Naples	SP3	B2	64MB	16 / 32	2.40	2.90	155W	155/170W	DDR4-2400/2666
AMD 7501 PS7501BEVIHAF	Naples	SP3	B2	64MB	32 / 64	2.00	3.00	155W	155/170W	DDR4-2400/2666
AMD 7401 PS7401BEVHCAF	Naples	SP3	B2	64MB	24 / 48	2.00	3.00	155W	155/170W	DDR4-2400/2666
AMD 7371 PS7371BDVGPFAF	Naples	SP3	B2	64MB	16 / 32	3.10	3.80	200W	200W	DDR4-2666
AMD 7301 PS7301BEVGPFAF	Naples	SP3	B2	64MB	16 / 32	2.20	2.70	155W	155/170W	DDR4-2400/2666
AMD 7281 PS7281BEVGAAF	Naples	SP3	B2	64MB	16 / 32	2.10	2.70	155W	155/170W	DDR4-2400/2666
AMD 7261 PS7261BEV8RAF	Naples	SP3	B2	64MB	8 / 16	2.50	2.90	155W	155/170W	DDR4-2400/2666
AMD 7251 PS7251BFV8SAF	Naples	SP3	B2	32MB	8 / 16	2.00	2.90	120W	120W	DDR4-2400
Product Name	Code Name	Package	Stepping	L3 Cache	# of Cores / Threads	Processor Base Freq (GHz)	Processor Boost Max Freq (GHz)	Default TDP	cTDP Min / cTDP Max	Memory Types
AMD 7H12 100-000000055	ROME	SP3	PD	256MB	64 / 128	2.60	3.40	280W	225W/280W	DDR4-3200
AMD 7742 100-000000053	ROME	SP3	B0 PR	256MB	64 / 128	2.25	3.40	225W	225W/240W	DDR4-3200
AMD 7702 100-000000038	ROME	SP3	B0 PR	256MB	64 / 128	2.00	3.35	200W	165W/200W	DDR4-3200
AMD 7662 100-000000137	ROME	SP3	PD	256MB	64 / 128	2.00	3.30	225W	225W/240W	DDR4-3200
AMD 7642 100-000000074	ROME	SP3	B0 PR	192MB	48 / 96	2.30	3.40	225W	225W/240W	DDR4-3200
AMD 7552 100-000000076	ROME	SP3	B0 PR	192MB	48 / 96	2.20	3.30	200W	165W/200W	DDR4-3200
AMD 7542 100-000000075	ROME	SP3	B0 PR	128MB	32 / 64	2.90	3.40	225W	225W/240W	DDR4-3200
AMD 7532 100-000000136	ROME	SP3	PD	256MB	32 / 64	2.40	3.30	200W	180W/200W	DDR4-3200
AMD 7502 100-000000054	ROME	SP3	B0 PR	128MB	32 / 64	2.50	3.35	180W	165W/200W	DDR4-3200
AMD 7452 100-000000057	ROME	SP3	B0 PR	128MB	32 / 64	2.35	3.35	155W	155W/180W	DDR4-3200
AMD 7F72 100-000000141	ROME	SP3	PD	192MB	24 / 48	3.20	3.70	240W	225W/240W	DDR4-3200
AMD 7402 100-000000046	ROME	SP3	B0 PR	128MB	24 / 48	2.80	3.35	180W	165W/200W	DDR4-3200
AMD 7352 100-000000077	ROME	SP3	B0 PR	128MB	24 / 48	2.30	3.20	155W	155W/180W	DDR4-3200
AMD 7F52 100-000000140	ROME	SP3	PD	256MB	16 / 32	3.50	3.90	240W	225W/240W	DDR4-3200
AMD 7302 100-000000043	ROME	SP3	B0 PR	128MB	16 / 32	3.00	3.30	155W	155W/180W	DDR4-3200
AMD 7282 100-000000078	ROME	SP3	B0 PR	64MB	16 / 32	2.80	3.20	120W	120W/150W	DDR4-2666
AMD 7272 100-000000079	ROME	SP3	PD	64MB	12 / 24	2.90	3.20	120W	120W/150W	DDR4-2666
AMD 7F32 100-000000139	ROME	SP3	B0 PR	128MB	8 / 16	3.70	3.90	180W	165W/200W	DDR4-3200
AMD 7262 100-000000041	ROME	SP3	B0 PR	128MB	8 / 16	3.20	3.40	155W	155W/180W	DDR4-3200
AMD 7252 100-000000080	ROME	SP3	PD	64MB	8 / 16	3.10	3.20	120W	120W/150W	DDR4-2666
Product Name	Code Name	Package	Stepping	L3 Cache	# of Cores / Threads	Processor Base Freq (GHz)	Processor Boost Max Freq (GHz)	Default TDP	cTDP Min / cTDP Max	Memory Types
AMD 7763 100-0000000312	Milan	SP3	PR	256MB	64 / 128	2.45	3.50	280W	225W/280W	DDR4-3200
AMD 7713 100-0000000344	Milan	SP3	PR	256MB	64 / 128	2.00	3.675	225W	225W/240W	DDR4-3200
AMD 7663 100-0000000318	Milan	SP3	PR	256MB	56 / 112	2.00	3.50	240W	225W/240W	DDR4-3200
AMD 7643 100-0000000326	Milan	SP3	PR	256MB	48 / 96	2.30	3.60	225W	225W/240W	DDR4-3200
AMD 75F3 100-0000000313	Milan	SP3	PR	256MB	32 / 64	2.95	4.00	280W	225W/280W	DDR4-3200
AMD 7543 100-0000000345	Milan	SP3	PR	256MB	32 / 64	2.80	3.70	225W	225W/240W	DDR4-3200
AMD 7513 100-0000000334	Milan	SP3	PR	128MB	32 / 64	2.60	3.65	200W	165W/200W	DDR4-3200
AMD 74F3 100-0000000317	Milan	SP3	PR	256MB	24 / 48	3.20	4.00	240W	225W/240W	DDR4-3200
AMD 7443 100-0000000340	Milan	SP3	PR	128MB	24 / 48	2.85	4.00	200W	165W/200W	DDR4-3200
AMD 7413 100-0000000323	Milan	SP3	PR	128MB	24 / 48	2.65	3.60	180W	165W/200W	DDR4-3200

AMD 73F3 100-000000321	Milan	SP3	PR	256MB	16 / 32	3.50	4.00	240W	225W/240W	DDR4-3200
AMD 7343 100-000000338	Milan	SP3	PR	128MB	16 / 32	3.20	3.90	190W	165W/200W	DDR4-3200
AMD 7313 100-000000329	Milan	SP3	PR	128MB	16 / 32	3.00	3.70	155W	155W/180W	DDR4-3200
AMD 72F3 100-000000327	Milan	SP3	PR	256MB	8 / 16	3.70	4.10	180W	165W/200W	DDR4-3200

Memory (Memory actually maximum frequency will follow memory controller's spec of CPU you used)

Product Name	Memory Type	Module Supplier	Size	Chip Brand	Rank	Voltage	Data Transfer Rate	Error Correction	CAS Latency	Pins
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RDIMM

M393A8G40AB2-CVFBY	DDR4	Samsung	64GB	Samsung-IDT	2Rx4	1.2v	2933MHz	ECC Registered	21	288-pin
CT16G4RFD8293.18FE1	DDR4	CRUCIAL	16GB	Micron	2Rx8	1.2v	2933MHz	ECC Registered	21	288-pin
CT32G4RFD4293-2G9E2.001	DDR4	CRUCIAL	32GB	Micron	2Rx4	1.2v	2933MHz	ECC Registered	21	288-pin
HMAA8GR7MJR4N-WM T4	DDR4	SKhynix	64GB	SKhynix-Montage	2Rx4	1.2v	2933MHz	ECC Registered	21	288-pin
HMA84GR7DJR4N-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
M393AAG40M32-CAEBQ	DDR4	Samsung	128GB	Samsung	2S2Rx4	1.2v	3200MHz	ECC Registered	22	288-pin
KSM32RS8/16MER	DDR4	Kingston	16GB	Micron-Rambus	1Rx8	1.2v	3200MHz	ECC Registered	22	288-pin
KSM32RS4/32MER	DDR4	Kingston	32GB	Micron-Rambus	1Rx4	1.2v	3200MHz	ECC Registered	22	288-pin
AD4R3200716G22-BHYA	DDR4	ADATA	16GB	SKhynix-Montage	1Rx8	1.2v	3200MHz	ECC Registered	22	288-pin

LRDIMM

M386AAG40MMB-CVFC0	DDR4	Samsung	128GB	Samsung	4DRx4	1.2v	2933MHz	ECC Registered	21	288-pin
M386A8K40DM2-CWELQ	DDR4	Samsung	64GB	Samsung-IDT	4DRx4	1.2v	3200MHz	ECC Registered	22	288-pin

HDD (If the system build-in with RAID card ,please refer to RAID card QVL list)

Product Name	Type	Vendor	Form Factor	Format	Capacity	Interface Speed	Series	Cache	RPM	Encryption
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Seagate Enterprise Capacity 2.5 HDD

ST2000NX0243	SATA	Seagate	2.5"	4Kn	2TB	6Gb/s	Exos 7E2000 (Enterprise Capacity V.3)	128MB	7200	N/A
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Seagate Enterprise Capacity 3.5 HDD

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

WD Enterprise Hard Drives

WUS721010ALE6L4	SATA	WD	3.5"	512e	10TB	6Gb/s	Ultrastar® DC HC330	256MB	7200	N/A
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SATA/SAS SSD

Product Name	Type	Vendor	Form Factor	Interface	Capacity	Interface Speed	FW	Note		
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SATA SSD

MZ-7LH1T9NE 883 DCT Series	SSD	Samsung	2.5"	SATA	1.92TB	6Gb/s				
SSDSC2KB019T8 D3-S4510 Series	SSD	Intel	2.5"	SATA	1.92TB	6Gb/s				
XA960LE10063	SSD	Seagate	2.5"	SATA	960GB	6Gb/s				
SSB240GTLCG-D2-SME520GBT ESM1220 Series	SSD	Phison	2.5"	SATA	240GB	6Gb/s				
KHK61RSE960G	SSD	Toshiba	2.5"	SATA	960GB	6Gb/s				

PCIe SSD

Product Name	Type	Vendor	Form Factor	Interface	Capacity	Interface Speed	Note			
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PCIe SSD

SSDPEDKX040T701 P4500 Series PCIe Gen3 x4 4TB	PCIe	Intel	PCI-E 3.0	PCIe(NVMe)	4TB	PCIe Gen3 x4				
Samsung PM1725b MZPLL3T2HAJQ PCIe Gen3 x8 3.2TB	PCIe	Samsung	PCI-E 3.0	PCIe(NVMe)	3.2TB	PCIe Gen3 x8				

U.2

Product Name	Type	Vendor	Form Factor	Interface	Capacity	Interface Speed	Note			
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U.2

SSDPE2KE032T801 P4610 Series	U.2	Intel	2.5"	SFF8639(NVMe)	3.2TB	PCIe Gen3 x4				
SSDPE2KX020T801 P4510 Series	U.2	Intel	2.5"	SFF8639(NVMe)	2TB	PCIe Gen3 x4				
MZWLL3T2HAJQ PM1725b Series	U.2	Samsung	2.5"	SFF8639(NVMe)	3.2TB	PCIe Gen3 x4				
MZQLW1T9HMJP PM963 Series	U.2	Samsung	2.5"	SFF8639(NVMe)	1.92TB	PCIe Gen3 x4				

GPGPU Card (GPGPU server only)

Product Name	Processor Cores	Memory Bandwidth (GB/sec)	VRAM	OpenGL	Microsoft DirectX	Graphics Card Power (W)	NVIDIA SLI / AMD CrossFire Ready	Note		
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NVIDIA Tesla (<http://www.nvidia.com/object/tesla-supercomputing-solutions.html>)

T4 (TURING)	2560	320 GB/s	16GB			70 W	-			
A100 (Ampere) 40GB	6912	1555 GB/s	40GB			250 W				

NVIDIA Quadro (<https://www.nvidia.com/zh-tw/design-visualization/quadro/>)

RTX 6000 Passive	4608	624GB/s	24GB			250W				
RTX 8000 Passive	4608	624GB/s	48GB			250W				

Graphics Card (GPGPU server & Workstation server only)

Product Name	Processor Cores	Memory Bandwidth (GB/sec)	VRAM	OpenGL	Microsoft DirectX	Graphics Card Power (W)	NVIDIA SLI / AMD CrossFire Ready	Note		
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NVIDIA Quadro (<http://www.nvidia.com/object/quadro-desktop-gpus.html>)

RTX 4000	2304	416GB/s	8GB			160 W				
RTX 5000	3072	448GB/s	16GB			230 W				
RTX 6000 Active	4608	624GB/s	24GB			260 W				

RAID Cards

Product Name	RAID-on-Chip Controller	Host Bus Type	Internal Ports	Internal Connectors	External Ports	External Connectors	Data Transfer Rates	Note		
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GIGABYTE Storage Cards

CRA3338	LSI SAS 3008	PCIe Gen3 x8	8	2 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port			
CSA3548	LSI SAS 3008	PCIe Gen3 x8	-	-	8	2 x Mini-SAS HD SFF-8644	Up to 12Gb/s per port			
CRA4448	LSI SAS 3108	PCIe Gen3 x8	8	2 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port			

LSI RAID Controller Cards

MegaRAID SAS 9460-16i without Tri-mode	SAS3516 dual-core RAID-on-Chip (ROC)	PCIe Gen3 x8	8	4 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port		
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LSI Host Bus Adapters (HBAs)

LSI SAS 9400-16i without Tri-mode	SAS3416	PCIe Gen3 x8	16	4 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port		
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Microsemi RAID Cards

SmartRAID 3154-16i	PM8236	PCIe Gen3 x8	16	4 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port		
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Microsemi Host Bus Adapters

SmartHBA 2100-8i	PM8222	PCIe Gen3 x8	8	2 x Mini-SAS HD SFF-8643	-	-	Up to 12Gb/s per port		
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LAN Cards

Product Name	Connector	System Interface Type	# of Ports	Data Rate	Note
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GIGABYTE LAN Cards

CLN4752	QSFP+	PCIe Gen3 x8	Dual	40Gb/s per port	INTEL XL710
CLN4224	RJ-45	PCIe Gen3 x4	Quad	10Gb/s per port	INTEL X550-AT2
CLN4M34	SFP28	PCIe Gen3 x16	Quad	10Gb/s per port	Mellanox ConnectX-4

Intel_10GbE

Intel® Ethernet Network Adapter X722-DA4	SFP+	PCIe Gen3 x8	Quad	10Gb/s per port	
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Intel_25GbE

Intel® Ethernet Network Adapter XXV710-DA2	SFP28	PCIe Gen3 x8	Dual	25Gb/s per port	
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Intel_40GbE

Intel® Ethernet Converged Network Adapter XL710-QDA2	QSFP+	PCIe Gen3 x8	Dual	40Gb/s per port	
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Intel_100GbE

Intel® Ethernet Network Adapter E810-CQDA2 for OCP	QSFP28	OC P PCIe Gen4 x16	Dual	100Gb/s per port	Support OCP 3.0
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Mellanox ConnectX

MCX516A-CCAT	QSFP28	PCIe Gen3 x16	Dual	100Gb/s per port	Mellanox ConnectX-5 EN
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Mellanox VPI Adapter Cards

MCX654106A-HCAT	QSFP56	PCIe Gen3 x16	Dual	200Gb/s per port	Mellanox ConnectX-6 Ex VPI (InfiniBand) PCIe3.0 x16 + PCIe3.0x16 aux. card Socket Direct
MCX653106A-HDAT	QSFP56	PCIe Gen4 x16	Dual	200Gb/s per port	Mellanox ConnectX-6 Ex VPI (InfiniBand)
MCX555A-ECAT	QSFP28	PCIe Gen3 x16	Single	100Gb/s per port	Mellanox ConnectX-5 VPI (InfiniBand)

(Mellanox) NVIDIA BlueField-2 DPU Cards

MBF2H322A-AEEOT	SFP56	PCIe Gen4 x8	Dual	25Gb/s per port	P-Series/ 2.5GHz
QL45611HLCU	QSFP28	PCIe Gen3 x16	Single	100Gb/s per port	

Broadcom (Emulex) Ethernet Networking Adapters

BCM957508-P2100G	QSFP56	PCIe Gen4 x16	Dual	100Gb/s per port	BCM57508
BCM957414A4142CC	SFP28	PCIe Gen3 x8	Dual	25Gb/s per port	BCM57414
BCM957508-N2100G	QSFP56	OC P PCIe 4.0	Dual	100Gb/s per port	BCM57508 / Support OC P 3.0

USB Device

Product Name	Type	Vendor	Capacity	Note
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USB 3.0

PURE CLASSIC X176B1FWBO75	HDD	Gigabyte	500G						
GoFlex STAA500305	HDD	Seagate	500G						
TOSHIBA CANVIO BASIC	HDD	Toshiba	500G						
NA317U+	Device	ineo							
SST-TS13	Device	Silver Stone							
S1-DS3-Plus	Device	CyberSLIM							
MB981U3-1S	Device	ICYDOCK							
i310-SB3(6G)	Device	STARDOM							