

X99 Series Memory Qualified Vendors List (QVL)

X99 Series Motherboard Qualified Vendors Lists (QVL)

DDR4 3200 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)			
								2 DIMM	4 DIMM	6 DIMM	8 DIMM
G. SKILL	F4-3200C16Q-16GRR	16GB (4GB*4)	SS	Hynix	H5AN4G8NMFR	16-16-16-36	1.35V	●	●		

DDR4 3000 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)			
								2 DIMM	4 DIMM	6 DIMM	8 DIMM
G. SKILL	F4-3000C16Q-32GRR	32GB (8GB*4)	DS	Hynix	H5AN4G8NMFR	16-16-16-36	1.35V	●	●		
G. SKILL	F4-3000C15Q-16GRR	16GB (4GB*4)	SS	Hynix	H5AN4G8NMFR	15-15-15-35	1.35V	●	●		
G. SKILL	F4-3000C15Q2-32GRR	32GB (4GB*8)	SS	Hynix	H5AN4G8NMFR	15-15-15-35	1.35V	●	●	●	●

DDR4 2800 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)			
								2 DIMM	4 DIMM	6 DIMM	8 DIMM
A DATA	AX4U2800W8G17-DRZ	8GB	DS	Hynix	H5AN4G8NMFR	17-18-18-36	1.2V	●	●		
A DATA	AX4U2800W4G17	16GB (4GB*4)	SS	Hynix	H5AN4G8NMFR	17-17-17-36	1.2V	●	●		
A DATA	AX4U2800W4G17	32GB (4GB*8)	SS	Hynix	H5AN4G8NMFR	17-17-17-36	1.2V	●	●	●	●
A DATA	AX4U2800W8G17	32GB (8GB*4)	DS	Hynix	H5AN4G8NMFR	17-17-17-36	1.2V	●	●		
CORSAIR	CMD16GX4M4A2800C16	16GB (4GB*4)	SS	-	-	16-18-18-36	1.2V	●	●		
CORSAIR	CMD32GX4M4A2800C16	32GB (8GB*4)	DS	-	-	16-18-18-36	1.2V	●	●		
CORSAIR	CMD64GX4M8A2800C16	64GB (8GB*8)	DS	-	-	16-18-18-36	1.2V	●	●	●	●
CORSAIR	CMD16GX4M4A2800C15	16GB (4GB*4)	SS	-	-	15-17-17-36	1.2V	●	●		
CORSAIR	CMD32GX4M4A2800C15	32GB (8GB*4)	DS	-	-	15-17-17-36	1.2V	●	●		
CORSAIR	CMK16GX4M4A2800C16	16GB (4GB*4)	SS	-	-	16-18-18-36	1.2V	●	●		
CORSAIR	CMK32GX4M4A2800C16	32GB (8GB*4)	DS	-	-	16-18-18-36	1.2V	●	●		
CORSAIR	CMK64GX4M8A2800C16	64GB (8GB*8)	DS	-	-	16-18-18-36	1.2V	●	●	●	●
CORSAIR	CMK16GX4M4A2800C15R	16GB (4GB*4)	SS	-	-	15-17-17-36	1.2V	●	●		
CORSAIR	CMK32GX4M4A2800C15R	32GB (8GB*4)	DS	-	-	15-17-17-36	1.2V	●	●		
G. SKILL	F4-2800C17Q-16GRR	16GB (4GB*4)	SS	-	-	17-18-18-35	1.2V	●	●		
G. SKILL	F4-2800C17Q-32GRR	32GB (8GB*4)	DS	-	-	17-18-18-35	1.2V	●	●		

DDR4 2666 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)			
								2 DIMM	4 DIMM	6 DIMM	8 DIMM
CORSAIR	CMD16GX4M4A2666C14	16GB (4GB*4)	SS	-	-	14-16-16-35	1.2V	●	●		
CORSAIR	CMD32GX4M4A2666C14	32GB (8GB*4)	DS	-	-	14-16-16-35	1.2V	●	●		
CORSAIR	CMK16GX4M4A2666C15	16GB (4GB*4)	SS	-	-	15-17-17-35	1.2V	●	●		
CORSAIR	CMK32GX4M4A2666C15	32GB (8GB*4)	DS	-	-	15-17-17-35	1.2V	●	●		
CORSAIR	CMK16GX4M4A2666C14R	16GB (4GB*4)	SS	-	-	14-16-16-35	1.2V	●	●		
CORSAIR	CMK32GX4M4A2666C14R	32GB (8GB*4)	DS	-	-	14-16-16-35	1.2V	●	●		
G. SKILL	F4-2666C15Q-16GRR	16GB (4GB*4)	SS	-	-	15-17-17-36	1.2V	●	●		
G. SKILL	F4-2666C15Q-32GRR	32GB (8GB*4)	DS	-	-	15-17-17-36	1.2V	●	●		

DDR4 2400 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)			
								2 DIMM	4 DIMM	6 DIMM	8 DIMM

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip No.	Timing	Voltage	2 DIMM	4 DIMM	6 DIMM	8 DIMM
A DATA	AX4U2400W8G16-DRZ	8GB	SS	SK hynix	H5AN4G8NMFR	16-16-16-39	1.2V	●	●		
CORSAIR	CMD16GX4M4A2400C14	16GB (4GB*4)	SS	-	-	14-16-16-31	1.2V	●	●		
CORSAIR	CMD32GX4M4A2400C14	32GB (8GB*4)	DS	-	-	14-16-16-31	1.2V	●	●		
CORSAIR	CMD64GX4M8A2400C14	64GB (8GB*8)	DS	-	-	14-16-16-31	1.2V	●	●	●	●
CORSAIR	CMD16GX4M4A2400C13	16GB (4GB*4)	SS	-	-	13-15-15-31	1.2V	●	●		
CORSAIR	CMD32GX4M4A2400C13	32GB (8GB*4)	DS	-	-	13-15-15-31	1.2V	●	●		
CORSAIR	CMK16GX4M4A2400C14B	16GB (4GB*4)	SS	-	-	14-16-16-31	1.2V	●	●		
CORSAIR	CMK16GX4M4A2400C14R	16GB (4GB*4)	SS	-	-	14-16-16-31	1.2V	●	●		
CORSAIR	CMK16GX4M4A2400C14	16GB (4GB*4)	SS	-	-	14-16-16-31	1.2V	●	●		
CORSAIR	CMK32GX4M4A2400C14	32GB (8GB*4)	DS	-	-	14-16-16-31	1.2V	●	●		
CORSAIR	CMK64GX4M8A2400C14	64GB (8GB*8)	DS	-	-	14-16-16-31	1.2V	●	●	●	●
CORSAIR	CMK16GX4M4A2400C13R	16GB (4GB*4)	SS	-	-	13-15-15-31	1.2V	●	●		
CORSAIR	CMK32GX4M4A2400C13R	32GB (8GB*4)	DS	-	-	13-15-15-31	1.2V	●	●		
G. SKILL	F4-2400C17Q-16GRR	16GB (4GB*4)	SS	-	-	17-17-17-40	1.2V	●	●		
G. SKILL	F4-2400C17Q-32GRR	32GB (8GB*4)	DS	-	-	17-17-17-40	1.2V	●	●		
G. SKILL	F4-2400C17Q2-64GRR	64GB (8GB*8)	DS	-	-	17-17-17-40	1.2V	●	●	●	●
panram	PUD42400C154GNJK	4GB	SS	-	-	15-15-15-36	1.2V	●	●		
panram	PUD42400C158GNJK	8GB	DS	-	-	15-15-15-36	1.2V	●	●		
panram	PUD42400C154G2NJK	8GB (4GB*2)	SS	-	-	15-15-15-36	1.2V	●	●		
panram	PUD42400C158G2NJK	16GB (8GB*2)	DS	-	-	15-15-15-36	1.2V	●	●		

DDR4 2133 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip No.	Timing	Voltage	DIMM socket support (Optional)			
								2 DIMM	4 DIMM	6 DIMM	8 DIMM
Micron	MTA8ATF51264AZ-2G1A1	4GB	SS	Micron	D9RGQ	15-15-15-37	1.2V	●	●	●	●
Micron	MTA16ATF1G64AZ-2G1A1	8GB	DS	Micron	D9RGQ	15-15-15-37	1.2V	●	●	●	●
Crucial	CT4G4DFS8213.8FA1	4GB	SS	Micron	D9RGQ	15-15-15-37	1.2V	●	●	●	●
Crucial	CT8G4DFD8213.16FA1	8GB	DS	Micron	D9RGQ	15-15-15-37	1.2V	●	●	●	●
Samsung	M378A5143DB0-CPB	4GB	SS	Samsung	K4A4G085WD-BCPB	15-15-15-37	1.2V	●	●	●	●
SK hynix	HMA451U6MFR8N-TF	4GB	SS	SK hynix	H5AN4G8NMFRTFC	15-15-15-37	1.2V	●	●	●	●
SK hynix	HMA41GU6MFR8N-TF	8GB	DS	SK hynix	H5AN4G8NMFRTFC	15-15-15-37	1.2V	●	●	●	●
A DATA	AX4U2133W4G13-DRZ	4GB	SS	SK hynix	H5AN4G8NMFR	13-13-13-36	1.2V	●	●		
A DATA	AX4U2133W8G13-DRZ	8GB	DS	SK hynix	H5AN4G8NMFR	13-13-13-36	1.2V	●	●		
A DATA	AX4U2133W4G15-DRZ	4GB	SS	SK hynix	H5AN4G8NMFR	15-15-15-37	1.2V	●	●		
A DATA	AX4U2133W8G15-DRZ	8GB	DS	SK hynix	H5AN4G8NMFR	15-15-15-37	1.2V	●	●		
CORSAIR	CMK8GX4M2A2133C15	8GB (4GB*2)	SS	-	-	15-15-15-36	1.2V	●	●		
CORSAIR	CMK16GX4M2A2133C15	16GB (8GB*2)	DS	-	-	15-15-15-36	1.2V	●	●		
CORSAIR	CMK8GX4M2A2133C15R	8GB (4GB*2)	SS	-	-	15-15-15-36	1.2V	●	●		
CORSAIR	CMK16GX4M4A2133C13B	16GB (4GB*4)	SS	-	-	13-15-15-28	1.2V	●	●		
CORSAIR	CMK16GX4M4A2133C13R	16GB (4GB*4)	SS	-	-	13-15-15-28	1.2V	●	●		
CORSAIR	CMK16GX4M4A2133C13	16GB (4GB*4)	SS	-	-	13-15-15-28	1.2V	●	●		
CORSAIR	CMK32GX4M4A2133C13	32GB (8GB*4)	DS	-	-	13-15-15-28	1.2V	●	●		
CORSAIR	CMK64GX4M8A2133C13	64GB (8GB*8)	DS	-	-	13-15-15-28	1.2V	●	●	●	●
CORSAIR	CMK16GX4M4A2133C12R	16GB (4GB*4)	SS	-	-	12-14-14-27	1.2V	●	●		
CORSAIR	CMK32GX4M4A2133C12R	32GB (8GB*4)	DS	-	-	12-14-14-27	1.2V	●	●		
CORSAIR	CMD16GX4M4A2133C12	16GB (4GB*4)	SS	-	-	12-14-14-27	1.2V	●	●		
CORSAIR	CMD32GX4M4A2133C12	32GB (8GB*4)	DS	-	-	12-14-14-27	1.2V	●	●		
G. SKILL	F4-2133C15Q-16GRR	16GB (4GB*4)	SS	-	-	15-15-15-35	1.2V	●	●		

G. SKILL	F4-2133C15Q-32GRR	32GB (8GB*4)	DS	-	-	15-15-15-35	1.2V	●	●		
G. SKILL	F4-2133C15Q2-64GRR	64GB (8GB*8)	DS	-	-	15-15-15-35	1.2V	●	●	●	●
Kingston	KVR21N15/8	8GB	DS	SK hynix	H5AN4G8NMFRTFC	15-15-15-37	1.2V	●	●		
panram	PUD42133C154GNJK	4GB	DS	-	-	15-15-15-36	1.2V	●	●		
panram	PUD42133C158GNJK	8GB	DS	-	-	15-15-15-36	1.2V	●	●		
panram	PUD42133C154G2NJK	8GB (4GB*2)	SS	-	-	15-15-15-36	1.2V	●	●		
panram	PUD42133C158G2NJK	16GB (8GB*2)	DS	-	-	15-15-15-36	1.2V	●	●		
SUPER TALENT	FBU2B008GM	8GB	DS	-	-	15-15-15-36	1.2V	●	●	●	●

8 DIMM Slots

For **each** DRAM channel (A,B,C,D), make sure to install the DRAM module to **dark gray slot** first.

- **1 DIMM:** Supports one (1) module inserted into any dark gray slot as Single-channel memory configuration. **Install the module into the D1 slot for better compatibility.**
- **2 DIMMs:** Supports two (2) modules inserted into one pair of dark gray slots as one pair of Dual-channel memory configuration. **Install the modules into slots B1 and D1 for better compatibility.**
- **4 DIMMs:** Supports four (4) modules inserted into four dark gray slots as two pairs of Quad-channel memory configuration. **Install the modules into slots A1/B1/C1/D1 for better compatibility.**
- **6 DIMMs:** Supports six (6) modules inserted into four dark gray slots and one pair of black slots as three pairs of Quad-channel memory configurations. **Install the modules into slots A1/B1/B2/ C1/D1/D2 for better compatibility.**
- **8 DIMMs:** Supports eight (8) modules inserted into **all the slots** as fully-loaded Quad-channel memory configurations.

- Make sure to install the memory modules from the **dark gray** slots first when your platform is 8-DIMM design.

- Memory module with memory frequency higher than **DDR4 2133MHz** and its corresponding timing or the loaded XMP Profile is not the JEDEC memory standard. The stability and compatibility of these memory modules depend on the CPU' s capabilities and other installed devices.

- When installing total memory of 4GB capacity or more, Windows 32-bit operation system may only recognize less than 3GB. Hence, a total installed memory of less than 3GB is recommended.

- The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value

- Always install DIMMs with the same CAS latency. For optimal compatibility, we recommend that you install memory modules of the same version or date code (D/C) from the same vendor.

Check with the retailer to get the correct memory modules.

- DIMM fan design may vary, make sure the fan can fit into the motherboard.