

**DDR3 1333 Qualified Vendors List (QVL)**

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM
KINGSTON	KVR13N9S8H/4	4GB	SS	ELPIDA	J4208BBBG-GN-F	9-9-9-24	1.5	•	•
Transcend	TS1GLK64V3H(620053)	8GB	DS	MICRON	D9QBJ	9-9-9-24	N/A	•	•

**DDR3 1600 Qualified Vendors List (QVL)**

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM
Apacer	78.B1GET.9K00C	4GB	SS	Apacer	AM5D6008BQQSCK	11-11-11-28	1.5	•	•
Apacer	78.C1GET.9K10C	8GB	DS	Apacer	AM5D6008BQQSCK	11-11-11-31	N/A	•	•
A-DATA	AD3U1600W8G11	8GB	DS	A-DATA	3WCD-1211A	11-11-11-28	N/A	•	•
Apacer	AHU08GFA60CBT3R	8GB	DS	N/A	Heat-Sink Package	10-10-10-28	N/A	•	•
A-DATA	AX3U1600GW8G9	16GB (2x 8GB )	DS	N/A	Heat-Sink Package	9-9-9-24	1.5	•	•
KINGSTON	KHX16009CD3K2/8GX	8GB (2x 4GB )	DS	N/A	Heat-Sink Package	9-9-9-27	1.65	•	•
KINGSTON	KHX16C10B1K2/16X	16GB (2x 8GB )	DS	N/A	Heat-Sink Package	9-9-9-24	1.5	•	•
Patriot	PV316G160C9QKRD	16GB (4x 4GB )	DS	N/A	Heat-Sink Package	11-11-11-31	1.5	•	•
Transcend	TS1GLK64V6H(620645)	8GB	DS	SAMSUNG	K4B4G0846B	11-11-11-28	N/A	•	•

**DDR3 1866 Qualified Vendors List (QVL)**

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM
G.SKILL	F3-1866C9Q-32GXM	32GB (4x 8GB )	DS	N/A	Heat-Sink Package	9-10-9-28	1.5	•	•
Team	TLD38G1866HC10SBK	8GB	DS	N/A	Heat-Sink Package	10-11-10-30	1.5	•	•

**DDR3 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
Apacer	AHU04GFB33CAQ3R	4GB	DS	N/A	Heat-Sink Package	11-13-13-31	N/A	•	•
A-DATA	AX3U2133XW8G10	8GB	DS	N/A	Heat-Sink Package	10-11-11-30	1.65	•	•
KINGSTON	KHX21C11T3FK8/64X	64GB (8x 8GB )	DS	N/A	Heat-Sink Package	11-12-11-32	1.65	•	•
Patriot	PV316G213C1K	16GB (2x 8GB )	DS	N/A	Heat-Sink Package	11-11-11-30	1.5	•	•
Team	TLD38G2133HC11ABK	8GB	DS	N/A	Heat-Sink Package	11-11-11-31	1.65	•	•

**DDR3 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
A-DATA	AX3U2400GC4G10	4GB	DS	N/A	Heat-Sink Package	10-12-12-31	1.65	•	•
CORSAIR	CMZ16GX3M2A2400C10 (Ver4.21)	16GB (2x 8GB )	DS	N/A	Heat-Sink Package	10-12-12-31	1.65	•	•
KINGSTON	KHX24C11T2K2/8X	8GB (2x 4GB )	DS	N/A	Heat-Sink Package	9-9-9-24	1.65	•	•

4 DIMM Slots

 • **1 DIMM:** Supports one module inserted in any slot as Single-channel memory configuration

 • **2 DIMM:** Supports one pair of modules inserted into either the blue slots or the black slots as one pair of Dual-channel memory configuration

 • **4 DIMM:** Supports 4 modules inserted into both the blue and black slots as two pairs of Dual-channel memory configuration

-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.

-It is recommended to install the memory modules from the slots for better overclocking capability.

-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.

-Memory module with memory frequency higher than 2133 MHz 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.

-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.