

### 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
<b>KINGSTON</b>	KVR13N9S8H/4	4GB	SS	ELPIDA	J4208BBBG-GN-F	9-9-9-24	1.5	•	•
<b>Transcend</b>	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
<b>Apacer</b>	78.B1GET.9K00C	4GB	SS	Apacer	AM5D6008BQQSCK	11-11-11-28	1.5	•	•
<b>Apacer</b>	78.C1GET.9K10C	8GB	DS	Apacer	AM5D6008BQQSCK	11-11-11-31	N/A	•	•
<b>A-DATA</b>	AD3U1600W8G11	8GB	DS	A-DATA	3WCD-1211A	11-11-11-28	N/A	•	•
<b>Apacer</b>	AHU08GFA60CBT3R	8GB	DS	N/A	Heat-Sink Package	10-10-10-28	N/A	•	•
<b>A-DATA</b>	AX3U1600GW8G9	16GB ( 2x 8GB )	DS	N/A	Heat-Sink Package	9-9-9-24	1.5	•	•
<b>KINGSTON</b>	KHX16009CD3K2/8GX	8GB ( 2x 4GB )	DS	N/A	Heat-Sink Package	9-9-9-27	1.65	•	•
<b>KINGSTON</b>	KHX16C10B1K2/16X	16GB ( 2x 8GB )	DS	N/A	Heat-Sink Package	9-9-9-24	1.5	•	•
<b>Patriot</b>	PV316G160C9QKRD	16GB ( 4x 4GB )	DS	N/A	Heat-Sink Package	11-11-11-31	1.5	•	•
<b>Transcend</b>	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
<b>CORSAIR</b>	CMD16GX3M2A1866C9 (Ver5.29)	16GB ( 2x 8GB )	DS	N/A	Heat-Sink Package	9-9-9-27	1.5	•	•
<b>G.SKILL</b>	F3-1866C9Q-32GXM	32GB ( 4x 8GB )	DS	N/A	Heat-Sink Package	9-10-9-28	1.5	•	•
<b>Team</b>	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
<b>G.SKILL</b>	F3-2133C11Q-32GZL	32GB ( 4x 8GB )	DS	N/A	Heat-Sink Package	11-11-11-31	1.5	•	•
<b>KINGSTON</b>	KHX21C11T3FK8/64X	64GB ( 8x 8GB )	DS	N/A	Heat-Sink Package	11-12-11-32	1.65	•	•
<b>Patriot</b>	PV316G213C1K	16GB ( 2x 8GB )	DS	N/A	Heat-Sink Package	11-11-11-30	1.5	•	•
<b>Team</b>	TLD38G2133HC11ABK	8GB	DS	N/A	Heat-Sink Package	11-11-11-31	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.