

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

Vendors	Part No.	Size	SS/DS	Chip Brand	Part No.	Chip NO.	Timing	Voltage	DIMM socket support (Optional)		
									1 DIMM	2 DIMM	4 DIMM
CORSAIR	CMV4GX3M1A1333C9	4GB	SS	CORSAIR	512M8DCJGELBO3O1319	-	-	-	•	•	•
CORSAIR	CMX4GX3M1A1333C9	4GB	DS	-	-	-	9-9-9-24	1.50V	•	•	•
CORSAIR	CMX16GX3M2A1333C9(Ver7.21)	8GB	DS	-	-	-	9-9-9-24	1.50V	•	•	•
TEAM	TED34GM1333C9BK	4GB	DS	HYNIX	DWLDL9J5HL	-	9-9-9-24	1.5V	•	•	•
TEAM	TED38GM1333C9BK	8GB	DS	HYNIX	DT38J3bbDHJ	-	9-9-9-24	1.5V	•	•	•
KINGSTON	KVR13N9S8/4-SP(low profile)	4GB	SS	NANYA	NT5CC512MDDN-CG	-	-	1.5V	•	•	•
CORSAIR	CMV8GX3M1A1333C9	8GB	DS	CORSAIR	512M8DCJGELAO401213	-	-	-	•	•	•
ASint	SLA304G08-EDJ6B	4GB	SS	ASINT	304G08-DJ6B	-	9-9-9-24-33	1.5V	•	•	•
MUSHKIN	PC3-10600	2GB	SS	-	-	-	-	1.50V	•	•	•
G.SKILL	F3-1333C9D-16GISL	8G	DS	N/A	Heat-Sink Package	-	9-9-9-24	1.35V	•	•	•

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

Vendors	Part No.	Size	SS/DS	Chip Brand	Part No.	Chip NO.	Timing	Voltage	DIMM socket support (Optional)		
									1 DIMM	2 DIMM	4 DIMM
CORSAIR	CML16GX3M2A1600C10	8GB	DS	-	-	-	10-10-10-27	1.50V	•	•	•
CORSAIR	CMV8GX3M1A1600C11	8GB	DS	CORSAIR	512M8DDLGPBBO381311	-	-	-	•	•	•
CORSAIR	CMY16GX3M2A1600C9	8GB	DS	-	-	-	9-9-9-24	1.50V	•	•	•
CORSAIR	CMZ8GX3M1A1600C10(XMP)	8GB	DS	-	-	-	10-10-10-27	1.50V	•	•	•
KINGSTON	KVR16N11S8/4(Low Profile)	4GB	SS	KINGSTON	U317X8BRRRA19	-	-	1.50V	•	•	•
SANMAX	SMD-4G28N1P-16KM	4GB	SS	ELPIDA	J4208BBBG-GN-F	-	-	-	•	•	•
SANMAX	SMD-8G28NP-16KM	8GB	DS	ELPIDA	J4208BBBG-GN-F	-	-	1.50V	•	•	•
TEAM	TED34GM1600C11BK	4GB	DS	HYNIX	DW3DJJ273	-	-	1.5V	•	•	•
TEAM	TED38GM1600C11BK	8GB	DS	HYNIX	DT38J3bb4AM	-	11-11-11-28	1.5V	•	•	•
ADATA	ADDU1600W4G11-B	4GB	SS	ADATA	DWND-1211A	-	-	-	•	•	•
ADATA	AX3U1600W8G9-DB	16GB ( 2x 8GB )	DS	-	-	-	9-9-9-24	1.5V	•	•	•
ADATA	ADDU1600W8G11-B	8GB	DS	ELPIDA	J4208BBBG-GN-F	-	-	-	•	•	•
V-COLOR	TD4G8C11-H11	4GB	SS	HYNIX	H5TQ4G83MFR	-	-	-	•	•	•
APACER	78.BAQEJ.9LK0C ( XMP )	4GB	DS	-	-	-	9-9-9-27	-	•	•	•
GEIL	GB34GB1600C11DC ( XMP )	4GB	DS	GEIL	GL11256M88BA15GL	-	-	1.5V	•	•	•
GEIL	GVP38GB1600C9SC ( XMP )	4GB	DS	-	-	-	11-11-11-28	1.5V	•	•	•
KINGSTON	KHX1600C9D3K2/8GX ( XMP )	4GB	SS	-	-	-	-	1.65V	•	•	•
AMD	AE38G1609U1K	4GB	SS	-	-	-	9-9-9-28	1.5V	•	•	•
CORSAIR	CMV4GX3M1A1600C11	4GB	SS	CORSAIR	512M8DDLGPBBO381320	-	-	-	•	•	•
CORSAIR	CMY8GX3M2A1600C9	4GB	SS	-	-	-	9-9-9-24	1.50V	•	•	•
CORSAIR	CML8GX3M2A1600C9	4GB	DS	-	-	-	9-9-9-24	1.50V	•	•	•
CORSAIR	CMZ4GX3M1A1600C9	4GB	DS	-	-	-	9-9-9-24	1.50V	•	•	•
KINGSTON	KVR16N11S/4	4GB	SS	KINGSTON	D5128EC4BPGGBU	-	-	1.5V	•	•	•
KINGSTON	KVR16N11/4	4GB	SS	KINGSTON	D5128EC4BPGGBU	-	-	1.35V	•	•	•
KINGSTON	KVR16N11/8-SP	8GB	DS	KINGSTON	BJM730C3G-M	-	-	1.5V	•	•	•
MIRA	PLAF8L93B-GN2	8GB	DS	N/A	BJE159C3G-M	-	9-9-9-24	1.50V	•	•	•
ASint	SLA304G08-EGN6B	4GB	SS	ASINT	304G08-GN6B	-	11-11-11-28-39	1.5V	•	•	•
VENTURA	D3-55DK1145V-11	2GB	SS	-	-	-	-	1.5V	•	•	•
G.SKILL	F3-1600C11D-16GISL	8G	DS	ELPIDA	J4208FEBG-GNL-F	-	-	1.35V	•	•	•
KINGSTON	HX316C10F/4	4GB	SS	N/A	Heat-Sink Package	-	-	1.5V	•	•	•
KINGSTON	HX316C10F/4	8GB	DS	N/A	Heat-Sink Package	-	-	1.5V	•	•	•
TEAM	TED38G1600C11BK	8G	SS	TEAM	T3D10248HT-16	-	-	1.5V	•	•	•
AVEXIR	AVD3U16001108G-1LW	8G	DS	HYNIX	H5TQ4G83MFR	-	-	1.35V	•	•	•
AVEXIR	AVD3U16001104G-1LW	4G	SS	-	-	-	-	1.35V	•	•	•
SK HYNIX	HMT41GU6BFR8A-PB NO AA	8GB	DS	SK HYNIX	H5TC4GB3BFR	-	11-11-28-39	1.35V	•	•	•
MUSHKIN	PC3L-12800	4G	DS	N/A	Heat-Sink Package	-	9-9-9-24	1.35V	•	•	•
TEAM	TED3L8G1600C11BK	8G	DS	TEAM	T3D5128HT-16	-	-	1.35V	•	•	•
APOTPO	L3A4G*2-16CBDA	4G	DS	APOTPO	CA32G0BE3D-13BL	-	-	1.35V	•	•	•
Silicon Power	SP008GLLTU160N01	8G	DS	NANYA	NT5CB512M8CN-DI	-	-	1.35V	•	•	•
Silicon Power	SP004GLLTE160N01	4G	SS	NANYA	NT5CB512M8CN-DI	-	-	1.35V	•	•	•

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

Vendors	Part No.	Size	SS/DS	Chip Brand	Part No.	Chip NO.	Timing	Voltage	DIMM socket support (Optional)		
									1 DIMM	2 DIMM	4 DIMM
CORSAIR	CMY8GX3M2A1866C9	4GB	SS	-	-	-	9-10-9-27	1.50V	•	•	•
CORSAIR	CMZ16GX3M2A1866C10(Ver4.21)	8GB	DS	-	-	-	10-11-10-30	1.50V	•	•	•
AMD	AP38G1869U2K	8GB(4GBX2)	DS	-	-	-	9-10-9-27	1.5V	•	•	•
TEAM	TED38GM1866C13BK	8GB	DS	HYNIX	DT38G54BHM	-	-	1.5V	•	•	•
AMD	AP38G1869U1K(XMP)	4GB	SS	-	-	-	9-10-9-27	1.5V	•	•	•
TEAM	TED34GM1866C13BK	4GB	DS	HYNIX	DW3DJ472B3	-	-	1.5V	•	•	•
TEAM	TLD34G1866HC9KKB	4GB	DS	-	-	-	9-11-9-27	1.5V	•	•	•
CORSAIR	CMY32GX3M4A1866C9	8GB	DS	-	-	-	9-10-9-27	1.50V	•	•	•
CORSAIR	CMY16GX3M2A1866C9(Ver3.24)	8GB	DS	-	-	-	9-10-9-27	1.50V	•	•	•
CRUCIAL	BL58G3D18ADS3.16FED	8GB	DS	N/A	N/A	-	10-10-10-30	1.5V	•	•	•
CRUCIAL	BLE4G3D1869DE1TX0.16FKR	4GB	DS	N/A	N/A	-	9-9-9-27	1.5V	•	•	•
CRUCIAL	BLE8G3D1869DE1TX0.16FED	8GB	DS	N/A	N/A	-	9-9-9-27	1.5V	•	•	•
CRUCIAL	BLT8G3D1869DT1TX0.16FED	8GB	DS	N/A	N/A	-	9-9-9-27	1.5V	•	•	•
PANRAM	PUD31866C94G2PSB	4GB	SS	N/A	Heat-Sink Package	-	9-10-9-27	1.65V	•	•	•
PANRAM	PUD31866C98G2PSB	8GB	DS	N/A	Heat-Sink Package	-	9-10-9-27	1.65V	•	•	•
AVEXIR	AVD3U18661108G-1LW	8G	DS	HYNIX	H5TQ4G83MFR	-	-	1.35V	•	•	•
AVEXIR	AVD3U18661104G-1LW	4G	SS	-	-	-	-	1.35V	•	•	•
MUSHKIN	PC3L-14900	8G	DS	N/A	Heat-Sink Package	-	11-11-11-27	1.35V	•	•	•

**DDR3 2133 Qualified Vendors List (QVL)(frequency down grade to 1866)**

Vendors	Part No.	Size	SS/DS	Chip Brand	Part No.	Chip NO.	Timing	Voltage	DIMM socket support (Optional)		
									1 DIMM	2 DIMM	4 DIMM
CORSAIR	CMY8GX3M2A2133C11R	8GB(4 x 2GB)	SS	-	-	-	11-11-11-27	1.50V	•	•	•
CORSAIR	CMD8GX3M2B2133C9(Ver5.12)	4GB	DS	-	-	-	9-11-11-31	1.65V	•	•	•
CORSAIR	CMD16GX3M2A2133C9(Ver4.21)	8GB	DS	-	-	-	9-11-11-31	1.65V	•	•	•
CORSAIR	CMZ8GX3M2A2133C11(Ver4.21)	4GB	SS	-	-	-	11-11-11-27	1.50V	•	•	•
AMD	AG34G2130UI	4GB	SS	-	-	-	10-11-11-30	1.65V	•	•	•
AMD	AP38G2133U2K	4GB	DS	-	-	-	11-12-11-30	1.65V	•	•	•
TEAM	TLD34G2133HC11ABK	4GB	SS	-	-	-	11-11-11-31	1.65V	•	•	•
TEAM	TLD38G2133HC11ABK	8GB	DS	-	-	-	11-13-13-31	1.65V	•	•	•
CORSAIR	CMD32GX3M4A2133C9(Ver4.21)	8GB	DS	-	-	-	9-11-11-31	1.65V	•	•	•
G.SKILL	F3-2133C10D-16GAB	8GB	DS	N/A	N/A	-	10-12-12-31	1.6V	•	•	•
GALAXY	HOF3B213311B8G2C(XMP1.5)	4G	SS	N/A	N/A	-	10-11-11-30	1.65V	•	•	•

**DDR3 2400 Qualified Vendors List (QVL)(frequency down grade to 1866)**

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)		
								1 DIMM	2 DIMM	4 DIMM
CORSAIR	CMD32GX3M4A2400C10(Ver5.29)	8GB	DS	-	-	10-12-12-31	1.65V	•	•	•
CORSAIR	CMY16GX3M2A2400C10R(Ver4.21)	8GB	DS	-	-	10-12-12-31	1.65V	•	•	•
G.SKILL	F3-2400C11D-8GRS	4GB	DS	N/A	N/A	11-11-13-31	1.65V	•	•	•
PANRAM	PUD32400C118G2LSK	8GB	DS	N/A	N/A	11-13-13-35	1.65V	•	•	•

**DDR3 2666 Qualified Vendors List (QVL)(frequency down grade to 1866)**

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)		
								1 DIMM	2 DIMM	4 DIMM
CORSAIR	CMD16GX3M4A2666C10 (Ver4.13)	4GB	DS	-	-	10-12-12-31	1.65V	•		•

**DDR3 2800 Qualified Vendors List (QVL)(frequency down grade to 1866)**

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)		
								1 DIMM	2 DIMM	4 DIMM
G.SKILL	F3-2800C12Q-32GGTXDG	8GB	DS	-	-	12-14-14-35	1.65V	•	•	•

**DDR3 2933 Qualified Vendors List (QVL)(frequency down grade to 1866)**

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)		
								1 DIMM	2 DIMM	4 DIMM
G.SKILL	F3-2933C12D-16GTDXG	8GB	DS	-	-	12-14-14-35	1.65V	•	•	•

**DDR3 3100 Qualified Vendors List (QVL)(frequency down grade to 1866)**

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)		
								1 DIMM	2 DIMM	4 DIMM
ADATA	AX3U3100W4G12-DMV	4GB	SS	N/A	N/A	12-14-14-36	1.65V	•	•	•

**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 **blue** 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.