Z97

DDR3 1333 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	MM socket support (Optional		
								1 DIMM	2 DIMM	4 DIMM
AMD	AE32G1339U1-U	2GB	SS	AMD	23EY4587MB3H	-	1.5	●	●	●
AMD	AE34G1339U2-U	4GB	DS	AMD	23EY4587MB3H	-	1.5	●	●	●
Apacer	78.B1GDE.9L10C	4GB	DS	Apacer	AM5D5908CEHSBG	9	-	●	●	●
Asint	SLA302G08-EDJ1C	2GB	SS	ASint	302G08-DJ1C	-	-	●	●	●
Asint	SLA304G08-EDJ1B	4GB	SS	Asint	304G08-DJ1B	9-10-10-26	-	●	●	●
Asint	SLB304G08-EDJ1B	8GB	DS	Asint	304G08-DJ1B	9-9-9-24	-	●	●	●
BUFFALO	D3U1333-1G	1GB	SS	Elpida	J1108BFBG-DJ-F	-	-	●	●	●
BUFFALO	D3U1333-2G	2GB	DS	Elpida	J1108BFBG-DJ-F		-	●	●	●
BUFFALO	D3U1333-4G	4GB	DS	NANYA	NT5CB256M8BN-CG		-	●	●	●
CORSAIR	CMV8GX3M1A1333C9	8GB	DS	-	-	9-9-9-24	-	●	●	●
CORSAIR	CMV8GX3M2A1333C9	8GB (2x 4GB)	DS	-	N/A	9-9-9-24	-	●	●	●
CORSAIR	CMX4GX3M1A1333C9 (Ver2.12)	4GB (1x 4GB)	DS	-	-	9-9-9-24	1.5	●	●	
CORSAIR	CMX4GX3M1A1333C9 (Ver5.11)	4GB (1x 4GB)	DS	-	-	9-9-9-24	1.5	●	●	
CORSAIR	CMX8GX3M1A1333C9 (Ver2.2)	8GB	DS	-	-	9-9-9-24	1.5	●	●	
CORSAIR	CMX8GX3M2A1333C9(XMP)	8GB (2x 4GB)	DS	-	-	9-9-9-24	1.5	●	●	●
G.SKILL	F3-10666CL9D-8GBXL	8GB (2x 4GB)	DS	-	-	9-9-9-24	1.5	●	●	●
GEIL	GG34GB1333C9DC	4GB (2x 2GB)	DS	GEIL	GL1L128M88BA15B	9-9-9-24	1.3	●	●	●
GEIL	GVP34GB1333C9DC	4GB (2x 2GB)	DS	-	-	9-9-9-24	1.5	●	●	●
GEIL	GVP38GB1333C9DC	8GB (2x 4GB)	DS	-	-	9-9-9-24	1.5	●	●	●
INNODISK	M3UN-2GHJBC09	2GB	SS	Hynix	H5TQ2G83CFRH9C	9-9-9-24	-	●	●	●
INNODISK	M3UN-4GHJAC09	4GB	DS	Hynix	H5TQ2G83CFRH9C	9-9-9-24	-	●	●	●
KINGMAX	FLFE85F-C8KL9	2GB	SS	KINGMAX	KFC8FNLBF-GXX-12A	-	-	●	●	●
KINGMAX	FLFE85F-C8KL9	2GB	SS	KINGMAX	KFC8FNLXF-DXX-15A	-	-	●	●	●
KINGMAX	FLFF65F-C8KL9	4GB	DS	KINGMAX	KFC8FNLXF-DXX-15A	-	-	●	●	●
KINGSTON	KVR1333D3E9S/4G	4GB	DS	Elpida	J2108ECSE-DJ-F	9	1.5	●	●	●
KINGSTON	KVR1333D3N9H/4G	4GB	DS	ELPIDA	J2108BDBG-GN-F	-	1.5	●	●	●
KINGSTON	KVR13N9S8H/4	4GB	SS	ELPIDA	J4208BBBG-GN-F	-	1.5	●	●	●
Mach Xtreme	MXD3U133316GQ	16GB (4x 4GB)	DS	-	-	-	-	●	●	●
Mach Xtreme	MXD3V13332GS	2GB	SS	Mach Xtreme	C2S46D30-D313	-	-	●	●	●
MICRON	MT8JTF25664AZ-1G4M1	2GB	SS	MICRON	D9PFJ	-	-	●	●	●
Patriot	PSD32G13332	2GB	DS	Prtriot	PM128M8D3BU-15	9	-	●	●	
RiDATA	C304627CB1AG22Fe	2GB	DS	RiDATA	C304627CB1AG22Fe	9	-	●	●	●
RiDATA	E304459CB1AG32Cf	4GB	DS	RiDATA	E304459CB1AG32Cf	9	-	●	●	●
Silicon Power	SP001GBLTU133S02	1GB	SS	S-POWER	10YT3E5	9	-	●	●	●
Silicon Power	SP002GBLTU133V02	2GB	SS	S-POWER	20YT3NG	9-9-9-24	-	●	●	●
Silicon Power	SP004GBLTU133V02	4GB	DS	S-POWER	20YT3NG	9-9-9-24	-	●	●	●
UMAX	84E44G93UM-13BPSYW	4GB	SS	UMAX	U2S96D30TP-13	1333-9-9-9-24	-	●	●	●

UMAX	84E48G93UM-13BPSYW	8GB	DS	UMAX	U2S96D30TP-13	1333-9-9-9-24	-	●	●	●

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 eithor 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.

Z97

DDR3 1600 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	MM socket support (Optiona		
								1 DIMM	2 DIMM	4 DIMM
A-DATA	AD3U1600W4G11	4GB	SS	A-DATA	3WCD-1211A	11-11-11-28	-	●	●	●
A-DATA	AD3U1600W8G11	8GB	DS	A-DATA	3WCD-1211A	11-11-11-28	-	●	●	●
A-DATA	ADDU1600W4G11-B	4GB	SS	A-DATA	DWND-1211A	9-9-9-24	-	●	●	●
A-DATA	ADDU1600W8G11-B	8GB	DS	ELPIDA	J4208EBBG-GN-F	9-9-9-24	-	●	●	●
A-DATA	AX3U1600W4G9-DB(XMP)	8GB (2x 4GB)	SS	-	-	9-9-9-24	1.5	●	●	●
A-DATA	AX3U1600W8G9-DB(XMP)	16GB (2x 8GB)	DS	-	-	9-9-9-24	1.5	●	●	●
AMD	AE32G1609U1-U	2GB	SS	AMD	23EY4587MB6H	-	1.5	●	●	●
AMD	AE34G1609U2-U	4GB	DS	AMD	23EY4587MB6H	-	1.5	●	●	●
AMD	AP38G1608U2K(XMP)	8GB (2x 4GB)	DS	-	-	9-9-9-28	1.65	●	●	●
Apacer	78.B1GE3.9L10C	4GB	DS	Apacer	AM5D5908DEQSCK	-	1.65	●	●	●
Apacer	78.B1GET.9K00C	4GB	SS	Apacer	AM5D6008BQQSCK	11-11-11-28	-	●	●	●
Apacer	78.C1GET.9K10C	8GB	DS	Apacer	AM5D6008BQQSCK	11-11-11-31	-	●	●	●
Apacer	AHU04GFA60C9Q3R(XMP)	4GB	DS	-	-	11-11-11-28	-	●	●	●
Apacer	AHU08GFA60CBT3R(XMP)	8GB	DS	-	-	9-9-9-24	-	●	●	
Asint	SLA302G08-EGG1C(XMP)	4GB	DS	Asint	302G08-GG1C	9-9-9-27	-	●	●	●
Asint	SLA302G08-EGJ1C(XMP)	4GB	DS	Asint	302G08-GJ1C	9-9-9-27	-	●	●	●
Asint	SLA302G08-EGN1C	4GB	DS	ASint	302G08-GN1C	-	-	●	●	●
Asint	SLA304G08-ENG1B	4GB	SS	Asint	304G08-GN1B	9-11-11-28	-	●	●	●
Asint	SLB304G08-EGJ1B(XMP)	8GB	DS	-	-	9-9-9-27	-	●	●	●
Asint	SLB304G08-EGN1B	8GB	DS	ASint	304G08-GN1B	-	-	●	●	●
Asint	SLZ302G08-EGN1C	2GB	SS	ASint	302G08-GN1C	-	-	●	●	●
AVEXIR	AVD3U16000904G-2CW(XMP)	8GB (2x 4GB)	DS	-	-	11-11-11-28	1.5	●	●	●
CORSAIR	CMD16GX3M2A1600C9 (Ver8.21)(XMP)	16GB (2x 8GB)	DS	-	-	9-9-9-24	1.5	●	●	
CORSAIR	CMD8GX3M2A1600C8 (Ver5.12)(XMP)	8GB (2x 4GB)	DS	-	-	1600 8-8-8-24	1.5	●	●	●
CORSAIR	CMD8GX3M2A1600C9 (Ver2.12)(XMP)	8GB (2x 4GB)	DS	-	-	9-9-9-24	1.5	●	●	●
CORSAIR	CML16GX3M2A1600C10 (Ver2.21)(XMP)	16GB (2x 8GB)	DS	-	-	10-10-10-27	1.5	●	●	●
CORSAIR	CML8GX3M2A1600C9 (Ver7.12)(XMP)	8GB (2x 4GB)	DS	-	-	9-9-9- 24	1.5	●	●	●
CORSAIR	CMV8GX3M1A1600C11	8GB	DS	-	-	11-11-11-30	-	●	●	●
CORSAIR	CMX8GX3M2A1600C9 (Ver3.19)(XMP)	8GB (2x 4GB)	SS	-	-	9-9-9-24	1.65	●	●	●
CORSAIR	CMZ16GX3M2A1600C10 (Ver.3.24)(XMP)	16GB (2x 8GB)	DS	-	-	10-10-10-27	1.5	●	●	●
CORSAIR	CMZ16GX3M4A1600C9(XMP)	16GB (4x 4GB)	DS	-	-	9-9-9-24	1.5	●	●	●
CORSAIR	CMZ16GX3M4X1600C9 (Ver8.16)(XMP)	16GB (4x 4GB)	DS	-	-	1600-9-9-9-24	1.5	●	●	●
CORSAIR	CMZ32GX3M4X1600C10 (Ver2.2)(XMP)	32GB (4x 8GB)	DS	-	-	10-10-10-27	1.5	●	●	●
CORSAIR	CMZ4GX3M1A1600C9 (Ver8.16)(XMP)	4GB (1x 4GB)	DS	-	-	9-9-9-24	1.5	●	●	
CORSAIR	CMZ8GX3M1A1600C10 (Ver3.23)(XMP)	8GB (1x 8GB)	DS	-	-	10-10-10-27	1.5	●	●	
CORSAIR	CMZ8GX3M1A1600C10 (Ver8.21)(XMP)	8GB (1x 8GB)	DS	-	-	10-10-10-27	1.5	●	●	
CORSAIR	CMZ8GX3M2A1600C8(XMP)	8GB (2x 4GB)	DS	-	-	8-8-8-24	1.5	●	●	●
Crucial	BLS4G3D1609DS1S00.16FMR(XMP)	4GB	DS	-	-	1600-9-9-9-24	1.5	●	●	●
Crucial	BLT4G3D1608DT1TX0.16FM(XMP)	4GB	DS	-	-	8-8-8-24	1.5	●	●	●
Elixir	M2X2G64CB88G7N-DG(XMP)	2GB	SS	Elixir	N2CB2G80GN-DG	9-9-9-28	-	●	●	●

Elixir	M2X4G64CB8HG5N-DG(XMP)	4GB	DS	Elixir	N2CB2G80GN-DG	9-9-9-28	-	●	●	●
G.SKILL	F3-12800CL9D-8GBSR2(XMP)	8GB (2x 4GB)	DS	-	-	9-9-9-24	1.25	●	●	●
G.SKILL	F3-12800CL9Q-16GBXL(XMP)	16GB (4x 4GB)	DS	-	-	9-9-9-24	1.5	●	●	●
G.Skill	F3-12800CL9Q-16GBZL(XMP)	16GB (4x 4GB)	DS	-	-	9-9-9-24	1.5	●	●	●
G.SKILL	F3-1600C9Q-32GXM(XMP)	32GB (4x 8GB)	DS	-	-	-	1.5	●	●	●
GEIL	GUP34GB1600C7DC(XMP)	4GB (2x 2GB)	DS	-	-	7-7-7-24	1.6	●	●	●
KINGMAX	FLGE85F-C8KL9A(XMP)	2GB	SS	KINGMAX	N/A	9-9-9-28	-	●	●	●
KINGMAX	FLGF65F-C8KL9A(XMP)	4GB	DS	KINGMAX	N/A	9-9-9-28	-	●	●	●
KINGSTON	KHX16009CD3K2/8GX(XMP)	8GB (2x 4GB)	DS	-	-	9-9-9-27	1.65	●	●	●
KINGSTON	KHX1600C9D3B1/4G(XMP)	4GB	SS	-	-	9-9-9-27	1.65	●	●	●
KINGSTON	KHX1600C9D3K3/12GX(XMP)	12GB (3x 4GB)	DS	-	-	9	1.65	●	●	
KINGSTON	KHX1600C9D3K3/6GX(XMP)	6GB (3x 2GB)	DS	-	-	9	1.65	●	●	●
KINGSTON	KHX1600C9D3K3/6GX(XMP)	6GB (3x 2GB)	DS	-	-	9	1.65	●	●	●
KINGSTON	KHX1600C9D3K4/16GX(XMP)	16GB (4x 4GB)	DS	-	-	9-9-9-24	1.65	●	●	●
KINGSTON	KHX1600C9D3K6/24GX(XMP)	24GB (6x 4GB)	DS	-	-	9	1.65	●	●	●
KINGSTON	KHX1600C9D3LK2/8GX(XMP)	8GB (2x 4GB)	DS	-	-	9-9-9-24	1.35	●	●	●
KINGSTON	KHX1600C9D3P1K2/8G	8GB (2x 4GB)	DS	-	-	9	1.5	●	●	●
KINGSTON	KHX16C10B1K2/16X(XMP)	16GB (2x 8GB)	DS	-	-	-	1.5	●	●	●
KINGSTON	KHX16C9K2/16	16GB (2x 8GB)	DS	-	-	1333-9-9-9-24	1.5	●	●	●
KINGSTON	KHX16C9P1K2/16	16GB (2x 8GB)	DS	-	-	-	1.5	●	●	●
KINGSTON	KVR16N11/4	4GB	DS	KINGSTON	D2568JPUCPGGBU	11-11-11-28-1	-	●	●	●
KINGSTON	KVR16N11/4	4G	DS	Hynix	H5TQ2G83CFRPBC	-	1.5	●	●	●
Micron	MT16JTF1G64AZ-1G6E1	8GB	DS	Micron	D9QBJ	-	-	●	●	●
Micron	MT8JTF51264AZ-1G6E1	4GB	SS	Micron	D9QBJ	-	-	●	●	●
MICRON	MT8KTF25664AZ-1G6M1	2GB	SS	MICRON	D9PFJ	-	-	●	●	●
Patriot	PV316G160C9K(XMP)	16GB (2x 4GB)	SS	-	-	1600-9-9-9-24	1.5	●	●	●
Patriot	PV316G160C9K(XMP)	16GB (2x 8GB)	SS	-	-	1600-9-9-9-24	1.5	●	●	●
SanMax	SMD-4G28N1P-16KM	4GB	SS	ELPIDA	J4208BBBG-GN-F	1600	-	●	●	●
SanMax	SMD-4G68HP-16KZ	4GB	DS	Hynix	H5TQ2G83BFRPBC	-	1.5	●	●	●
SanMax	SMD-4G68NG-16KK	4GB	DS	ELPIDA	J2108BDBG-GN-F	-	-	●	●	●
SanMax	SMD-8G28NP-16KM	8GB	DS	ELPIDA	J4208BBBG-GN-F	1600	-	●	●	●
Silicon Power	SP002GBLTU160V02(XMP)	2GB	SS	S-POWER	20YT5NG	9-11-11-28	1.5	●	●	●
Silicon Power	SP004GBLTU160V02(XMP)	4GB	DS	S-POWER	20YT5NG	9-9-9-24	1.5	●	●	●
Silicon Power	SP004GXLYU160NSA(XMP)	4GB	SS	-	-	1600-9-9-9-27	-	●	●	●
Silicon Power	SP008GXLYU160NSA(XMP)	8GB	DS	-	-	1600-9-9-9-27	-	●	●	●
Team	TED34GM1600C11BK	4GB	DS	Hynix	H5TC2G83EFR	11-11-11-28	1.5	●	●	●
Team	TED38GM1600C11BK	8GB	DS	Hynix	H5TQ4G83AFR	11-11-11-28	1.5	●	●	●
Team	TLD34G1600HC9BK(XMP)	8GB (2x 4GB)	DS	-	-	9-9-9-24	1.5	●	●	●
Team	TLD38G1600HC9BK(XMP)	16GB (2x 8GB)	DS	-	-	9-9-9-24	1.5	●	●	●
Team	TXD34096M1600HC9-D(XMP)	4GB	DS	Hynix	H5TC2G83BFRH9A	9-9-9-24	1.5	●	●	●
Transcend	TS1GLK64V6H(620945)	8GB	DS	SAMSUNG	K4B4G0846B	-	-	●	●	●
Transcend	TS1GLK64W6H	8GB	DS	SAMSUNG	K4B4G0846B	11-11-11-28-1	-	●	●	●
Transcend	TS512MLK64W6H	4GB	SS	SAMSUNG	K4B4G0846B	11-11-11-28-2	-	●	●	●
UMAX	84E44G93UM-16BPSYW	4GB	SS	UMAX	U2S96D30TP-16	1600-11-11-11-28	-	●	●	●

UMAX	84E48G93UM-16BPSYW	8GB	DS	UMAX	U2S96D30TP-16	1600-11-11-11-28	-	●	●	●

4 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
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Z97-A

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CORSAIR	CMD16GX3M2A1866C9 (Ver5.29)(XMP)	16GB (2x 8GB)	DS	-	-	1866 9-9-9-27	1.5	●	●	
CORSAIR	CMD16GX3M4A1866C9 (Ver4.13)(XMP)	16GB (4x 4GB)	DS	-	-	9-10-9-27	1.5	●	●	●
CORSAIR	CMD16GX3M4A1866C9 (Ver8.16)(XMP)	16GB (4x 4GB)	DS	-	-	9-10-9-27	1.5	●	●	●
CORSAIR	CMD32GX3M4A1866C9 (Ver3.24)(XMP)	32GB (4x 8GB)	DS	-	-	9-10-9-27	1.5	●	●	●
CORSAIR	CMD8GX3M2A1866C9 (Ver4.13)(XMP)	8GB (2x 4GB)	DS	-	-	-	1.5	●	●	●
CORSAIR	CMD8GX3M2A1866C9 (Ver5.12)(XMP)	8GB (2x 4GB)	DS	-	-	9-10-9-27	1.5	●	●	
CORSAIR	CMD8GX3M2A1866C9 (Ver8.16)(XMP)	8GB (2x 4GB)	DS	-	-	9-10-9-27	1.5	●	●	
CORSAIR	CMT32GX3M4X1866C9(Ver3.23)(XMP)	32GB (4x 8GB)	DS	-	-	9-10-9-27	1.5	●	●	●
CORSAIR	CMY16GX3M2A1866C9 (Ver 4.21)(XMP)	16GB (2x 8GB)	DS	-	-	9-10-9-27	1.5	●	●	●
CORSAIR	CMY8GX3M2A1866C9 (Ver3.24)(XMP)	8GB (2x 4GB)	DS	-	-	9-10-9-27	1.5	●	●	●
CORSAIR	CMZ16GX3M2A1866C10 (Ver5.29)(XMP)	16GB (2x 8GB)	DS	-	-	10-11-10-30	1.5	●	●	●
CORSAIR	CMZ16GX3M2A1866C9(XMP)	16GB (2x 8GB)	DS	-	-	1866-9-10-9-27	1.5	●	●	●
CORSAIR	CMZ32GX3M4X1866C10 (Ver3.23)(XMP)	32GB (4x 8GB)	DS	-	-	10-11-10-27	1.5	●	●	●
CORSAIR	CMZ32GX3M4X1866C10(Ver3.23)(XMP)	32GB (4x 8GB)	DS	-	-	10-11-10-27	1.5	●	●	●
CORSAIR	CMZ8GX3M2A1866C9 (Ver8.16)(XMP)	8GB (2x 4GB)	DS	-	-	9-10-9-27	1.5	●	●	●
CORSAIR	CMZ8GX3M2A1866C9(XMP)	8GB (2x 4GB)	DS	-	-	9-10-9-27	1.5	●	●	
CORSAIR	CMZ8GX3M2A1866C9G (Ver5.12)(XMP)	8GB (2x 4GB)	DS	-	-	1866 9-10-9-27	1.5	●	●	●
Cricial	BLE8G3D1869DE1TX0.16FED(XMP)	16GB (2x 8GB)	DS	-	-	1866-9-9-9-27	1.5	●	●	●
Crucial	BLE4G3D1869DE1XT0.16FMD(XMP)	4GB	DS	-	-	9-9-9-27	1.5	●	●	●
G.SKILL	F3-14900CL10Q-32GBZL(XMP)	32GB (4x 8GB)	DS	-	-	10-11-10-30	1.5	●	●	●
G.SKILL	F3-14900CL9D-8GBSR(XMP)	8GB (2x 4GB)	DS	-	-	9-10-9-28	1.5	●	●	●
G.SKILL	F3-14900CL9Q-16GBXL(XMP)	16GB (4x 4GB)	DS	-	-	9-10-9-28	1.5	●	●	●
G.SKILL	F3-14900CL9Q-16GBZL(XMP)	16GB (4x 4GB)	DS	-	-	9-10-9-28	1.5	●	●	●
G.SKILL	F3-14900CL9Q-16GBZL(XMP)	16GB (4x 4GB)	DS	-	-	9-10-9-28	1.5	●	●	●
G.SKILL	F3-1866C10Q2-64GZM(XMP)	64GB (2x 8GB)	DS	-	-	10-11-10-30	1.5	●	●	●
G.SKILL	F3-1866C10Q2-64GZM(XMP)	64GB (2x 8GB)	DS	-	-	10-11-10-30	1.5	●	●	●
G.SKILL	F3-1866C9Q-32GXM(XMP)	32GB (4x 8GB)	DS	-	-	9-10-9-28	1.5	●	●	●
GEIL	GEEL316GB1866C9DC(XMP)	16GB (2x 8GB)	DS	-	-	1866-9-10-9-28	1.65	●	●	●
KINGSTON	KHX1866C9D3K2/8GX(XMP)	8GB (2x 4GB)	DS	-	-	-	1.65	●	●	●
Silicon Power	SP004GXLYU186NSA(XMP)	4GB	SS	-	-	1866-9-11-9-27	-	●	●	●
Silicon Power	SP008GXLYU186NSA(XMP)	8GB	DS	-	-	1866-9-11-9-27	-	●	●	●

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 eithor 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.

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DDR3 2000 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)		
								1 DIMM	2 DIMM	4 DIMM
AEXEA	AXA3ES4GK2000LG28V(XMP)	4GB (2x 2GB)	DS	-	-	-	1.65	●	●	●
Asint	SLA302G08-ML2HB(XMP)	4GB	DS	Hynix	H5TQ2G83BFRH9C	9-9-9-27	-	●	●	●
GEIL	GUP34GB2000C9DC(XMP)	4GB (2x 2GB)	DS	-	-	9-9-9-28	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 eithor 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.

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DDR3 2133 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	MM socket support (Optional)		
								1 DIMM	2 DIMM	4 DIMM
A-DATA	AX3U2133W4G10-DR(XMP)	8GB (2x 4GB)	SS	-	-	10-11-11-30	1.65	●	●	●
A-DATA	AX3U2133W8G10-DR(XMP)	16GB (2x 8GB)	DS	-	-	10-11-11-30	1.65	●	●	●
Apacer	78.BAGE4.AFD0C(XMP)	8GB (2x 4GB)	DS	-	-	9-9-9-24	-	●	●	●
Apacer	AHU04GFB33CAQ3R(XMP)	4GB	DS	-	-	11-13-13-31	-	●	●	●
CORSAIR	CMD16GX3M2A2133C9 (Ver4.21)(XMP)	16GB (2x 8GB)	DS	-	-	9-11-11-31	1.65	●	●	●
CORSAIR	CMD32GX3M4A2133C9 (Ver4.21)(XMP)	32GB (4x 8GB)	DS	-	-	9-11-11-31	1.65	●	●	●
CORSAIR	CMD8GX3M2A2133C9 (Ver1.5)(XMP)	8GB (2x 4GB)	DS	-	-	9-11-10-27	1.5	●	●	
CORSAIR	CMD8GX3M2B2133C9 (Ver5.12)(XMP)	8GB (2x 4GB)	DS	-	-	9-11-11-31	1.65	●	●	●
CORSAIR	CMY8GX3M2A2133C11R (Ver4.21)(XMP)	8GB (2x 4GB)	DS	-	-	11-11-11-27	1.5	●	●	●
CORSAIR	CMZ8GX3M2A2133C11R (Ver4.21)(XMP)	8GB (2x 4GB)	DS	-	-	11-11-11-27	1.5	●	●	●
G.SKILL	F3-17000CL11Q2-64GBZLD(XMP)	64GB (8x 8GB)	DS	-	-	11-11-11-30	1.5	●	●	●
G.SKILL	F3-17000CL9Q-16GBZH(XMP)	16GB (4x 4GB)	DS	-	-	9-11-10-28	1.65	●	●	●
G.SKILL	F3-2133C10Q-32GSR(XMP)	32GB (4x 8GB)	DS	-	-	10-12-12-31	1.5	●	●	●
G.SKILL	F3-2133C11Q-32GZL(XMP)	32GB (4x 8GB)	DS	-	-	11-11-11-31	1.5	●	●	●
KINGSTON	KHX2133C11D3K4/16GX(XMP)	16GB (4x 4GB)	DS	-	-	11-12-11-30	1.65	●	●	●
KINGSTON	KHX21C11T3FK8/64X(XMP)	64GB (8x 8GB)	DS	-	-	9-9-9-24	1.5	●	●	●
Silicon Power	SP004GXLYU213NSA(XMP)	4GB	SS	-	-	2133-11-12-11-30	-	●	●	●
Silicon Power	SP008GXLYU213NSA(XMP)	8GB	DS	-	-	2133-11-12-11-30	-	●	●	●
Transcend	TX2133KLH-16GK(XMP)	16GB (2x 8GB)	DS	-	-	2133-10-11-10-27	1.6	●	●	●
Transcend	TX2133KLN-8GK(XMP)	8GB (2x 4GB)	DS	-	-	2133-10-11-10-27	1.6	●	●	●

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 eithor 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.

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DDR3 2400 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	MM socket support (Optional		
								1 DIMM	2 DIMM	4 DIMM
A-DATA	AX3U2400W4G11-DMV(XMP)	8GB (2x 4GB)	SS	-	-	11-13-13-35	1.65	●	●	●
A-DATA	AX3U2400W8G11-DMV(XMP)	16GB (2x 8GB)	DS	-	-	11-13-13-35	1.65	●	●	●
Apacer	78.BAGFL.AFD0C(XMP)	8GB (2x 4GB)	DS	-	-	11-12-12-30	-	●	●	●
Apacer	783BAGF3.AFD0C(XMP)	8GB (2x 4GB)	DS	-	-	11-11-11-30	-	●	●	●
CORSAIR	CMD16GX3M2A2400C10 (Ver4.21)(XMP)	16GB (2x 8GB)	DS	-	-	10-12-12-31	1.65	●	●	●
CORSAIR	CMD32GX3M4A2400C10 (Ver5.29)(XMP)	32GB (4x 8GB)	DS	-	-	10-12-12-31	1.65	●	●	
CORSAIR	CMY16GX3M2A2400C10A (Ver4.21)(XMP)	16GB (8x 2GB)	DS	-	-	10-12-12-31	1.65	●	●	●
CORSAIR	CMY16GX3M2A2400C10R (Ver4.21)(XMP)	16GB (2x 8GB)	DS	-	-	10-12-12-31	1.65	●	●	●
CORSAIR	CMZ16GX3M2A2400C10 (Ver4.21)	16GB (2x 8GB)	DS	-	-	10-12-12-31	1.65	●	●	●
G.SKILL	F3-19200CL10Q2-64GBZHD(XMP)	64GB (8x 8GB)	DS	-	-	10-12-12-31	1.65	●	●	●
G.SKILL	F3-19200CL10Q-32GBZHD(XMP)	32GB (4x 8GB)	DS	-	-	10-12-12-31	1.65	●	●	
G.SKILL	F3-19200CL11Q-16GBZHD(XMP)	16GB (4x 4GB)	DS	-	-	11-11-11-31	1.65	●	●	●
G.SKILL	F3-19200CL9D-4GBPIS(XMP)	4G (2x 2G)	DS	-	-	9-11-9-28	1.65	●	●	
G.SKILL	F3-19200CL9Q-16GBZMD(XMP)	16GB (4x 4GB)	DS	-	-	9-11-11-31	1.65	●	●	●
G.SKILL	F3-2400C11Q-32GXM(XMP)	32GB (4x 8GB)	DS	-	-	11-13-13-31	1.65	●	●	●
GEIL	GOC316GB2400C10QC(XMP)	16GB (4x 4GB)	DS	-	-	10-11-11-30	1.65	●	●	●
GEIL	GOC316GB2400C11QC(XMP)	16GB (4x 4GB)	DS	-	-	11-11-11-30	1.65	●	●	●
Kingston	KHX2400C11D3K4/8GX(XMP)	8GB (4x 2GB)	SS	-	-	11-13-11-30	1.65	●	●	●
KINGSTON	KHX24C11K4/16X(XMP)	16GB (4x 4GB)	DS	-	-	11-13-13-30	1.65	●	●	●
KINGSTON	KHX24C11T2K2/8X(XMP)	8GB (2x 4GB)	DS	-	-	-	1.65	●	●	●
KINGSTON	KHX24C11T3K2/16X(XMP)	16GB (2x 8GB)	DS	-	-	2400-11-13-13-32	1.65	●	●	
KINGSTON	KHX24C11T3K4(XMP)	16GB (4x 4GB)	DS	-	-	2400-11-13-13-30	1.65	●	●	●
KINGSTON	KHX24C11T3K4/32X(XMP)	32GB (4x 8GB)	DS	-	-	9-9-9-24	1.65	●	●	●
Mushkin	997122R(XMP)	16GB (2x 8GB)	DS	-	-	2400-10-12-12-28	1.65	●	●	●
Silicon Power	SP004GXLYU240NSA(XMP)	4GB	SS	-	-	2400-11-13-13-32	-	●	●	●
Transcend	TX2400KLN-8GK(XMP)	8GB (2x 4GB)	DS	-	-	2400-11-12-11-29	1.6	●	●	●

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 eithor 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.

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DDR3 2666 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	MM socket support (Optional)		
								1 DIMM	2 DIMM	4 DIMM
Apacer	78.BAGFF.AFC0C(XMP)	8GB (2x 4GB)	DS	-	-	12-13-13-35	-	●	●	●
Apacer	78.BAGFR.AFD0C(XMP)	8GB (2x 4GB)	DS	-	-	12-13-13-35	-	●	●	●
Apacer	78.CAGFF.AFD0C(XMP)	16GB (2x 8GB)	DS	-	-	12-13-13-35	-	●	●	●
CORSAIR	CMD16GX3M4A2666C11 (Ver5.12)(XMP)	16GB (4x 4GB)	DS	-	-	11-13-13-35	1.65	●	●	●
G.SKILL	F3-2666CL10Q-16GBZHD(XMP)	16GB (4x 4GB)	DS	-	-	10-12-12-31	1.65	●	●	●
GEIL	GOC332GB2666C11QC(XMP)	32GB (4x 8GB)	DS	-	-	11-13-13-32	1.65	●	●	●
KINGSTON	KHX26C11T2K2/8X(XMP)	8GB (2x 4GB)	SS	-	-	2666-11-13-13-32	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 eithor 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.

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DDR3 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
AVEXIR	AVD3UH28001208G-4BZ1(XMP)	32GB (4x 8GB)	DS	-	-	12-14-14-35	1.65V	●	●
A_DATA	AX3U2800W4G12(XMP)	16GB (4x 4GB)	SS	-	-	12-14-14-36	1.65V	●	●
A_DATA	AX3U2800W8G12(XMP)	32GB (4x 8GB)	DS	-	-	12-14-14-36	1.65V	●	
G.SKILL	F3-2800C12Q-32GTXD(XMP)	32GB (4x 8GB)	DS	-	-	12-13-13-35	1.65V	●	●
G.SKILL	F3-2800C12Q-32GTXDG(XMP)	32GB (4x 8GB)	DS	-	-	12-14-14-35	1.65V	●	●
G.SKILL	F3-2800C11Q-16GTXD(XMP)	16GB (4x 4GB)	DS	-	-	11-13-13-35	1.65V	●	●
G.SKILL	F3-2800C11D-8GTXD(XMP)	8GB (2x 4GB)	DS	-	-	11-13-13-35	1.65V	●	●
G.SKILL	F3-2800C11D-8GTXDG(XMP)	8GB (2x 4GB)	DS	-	-	11-14-14-35	1.65V	●	●
G.SKILL	F3-2800C11Q-16GTXDG(XMP)	16GB (4x 4GB)	DS	-	-	11-14-14-35	1.65V	●	●
G.SKILL	F3-2800C10D-8GTXD(XMP)	8GB (2x 4GB)	DS	-	-	10-12-12-35	1.65V	●	●
G.SKILL	F3-2800C12Q-16GTXDG(XMP)	16GB (4x 4GB)	DS	-	-	12-14-14-35	1.65V	●	●
G.SKILL	F3-2800C11D-16GTXDG(XMP)	16GB (2 x 8GB)	DS	-	-	11-14-14-35	1.65V	●	●
G.SKILL	F3-2800C11Q-32GTXDG(XMP)	32GB (4 x 8GB)	DS	-	-	11-14-14-35	1.65V	●	●
G.SKILL	F3-2800C11D-16GTXD(XMP)	16GB (2x 8GB)	DS	-	-	11-13-13-35	1.65V	●	●
G.SKILL	F3-2800C11Q-32GTXD(XMP)	32GB (4 x 8GB)	DS	-	-	11-13-13-35	1.65V	●	●
G.SKILL	F3-2800C12D-16GTXD(XMP)	16GB (2 x 8GB)	DS	-	-	12-14-14-35	1.65V	●	●
APACER	78.BAGH5.AFD0C(XMP)	8GB (2x 4GB)	DS	-	-	12-14-14-35	1.65V	●	
APACER	78.CAGH6.AFD0C(XMP)	16GB (2x 8GB)	DS	-	-	12-14-14-35	1.65V	●	
CORSAIR	CMD16GX3M4A2800C11(XMP)	16GB (4x 4GB)	DS	-	-	11-14-14-35	1.65V	●	●
CORSAIR	CMD16GX3M4A2800C12(XMP)	16GB (4x 4GB)	DS	-	-	12-14-14-36	1.65V	●	●
CORSAIR	CMY16GX3M4A2800C12R(XMP)	16GB (4x 4GB)	SS	-	-	12-14-14-36	1.65V	●	●
KINGSTON	KHX28C12T2K2/8X	8GB (2x 4GB)	SS			12-14-14-32	1.65V	●	●
Team	TXD38G2800HC12DBK(XMP)	32GB (4 x 8GB)	DS	-	-	11-14-14-35	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 eithor 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.

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DDR3 2933 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM
AVEXIR	AVD3UH29331204G-4CI(XMP)	16GB (4x 4GB)	SS			12-14-14-35	1.65V	●	●
GEIL	GPW38GB2933C12ADC(XMP)	8GB (2 x 4GB)	SS			12-14-14-36	1.65V	●	●
APACER	78.BAGHB.AFL0C(XMP)	8GB (2 x 4GB)	SS			12-14-14-35	1.65V	●	●
A_DATA	AX3U2933W4G12(XMP)	16GB (4x 4GB)	SS			12-14-14-36	1.65V	●	●
G.SKILL	F3-2933C12D-8GTXDG(XMP)	8GB (2 x 4GB)	SS			12-14-14-35	1.65V	●	●
G.SKILL	F3-2933C12Q-16GTXDG(XMP)	16GB (4 x 4GB)	SS			12-14-14-35	1.65V	●	●
CORSAIR	CMY16GX3M4A2933C12R(XMP)	16GB(4 x 4GB)	SS			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 eithor 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.

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DDR3 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
AVEXIR	AVD3UH30001204G-4BZ1(XMP)	16GB (4x 4GB)	SS	-	-	12-14-14-35	1.65V	●	●
APACER	78.BAGHN.AFL0C	16GB (4x 4GB)	SS			12-14-14-35	1.65V	●	●
G.SKILL	F3-3000C12Q-16GTXDG(XMP)	16GB (4x 4GB)	SS	-	-	12-14-14-35	1.65V	●	●
G.SKILL	F3-3000C12D-8GTXDG(XMP)	8GB (2 x 4B)	SS			12-14-14-35	1.65V	●	●
CORSAIR	CMY8GX3M2A3000C12R(XMP)	8GB (2 x 4B)	SS			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 eithor 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.

Z97 ALL SERIES

DDR3 3100 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM
AVEXIR	AVD3UH31001204G-4CI(XMP)	16GB (4x 4GB)	SS	-	-	12-14-14-35	1.65V	●	●
A-DATA	AX3U3100W4G12-DMV(XMP)	8GB (2x 4GB)	SS	-	-	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 eithor 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.

Z97 ALL SERIES

DDR3 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
AVEXIR	AVD3UH32001304G-4CI(XMP)	16GB (4x 4GB)	SS	-	-	13-15-15-35	1.65V	●	●
G.SKILL	F3-3200C12Q-16GTXDG(XMP)	16GB (4x 4GB)	SS	-	-	12-15-15-35	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 eithor 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.