

## Z87-WS Memory Qualified Vendors List (QVL)

### DDR3 1333 MHz Capability BIOS Version:1504

DDR3 1333 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
UMAX	84E44G93UM-13BPSYW	4GB	SS	UMAX	U2S96D30TP-13	1333-9-9-24	-	•	•	•
UMAX	84E48G93UM-13BPSYW	8GB	DS	UMAX	U2S96D30TP-13	1333-9-9-24	-	•	•	•

### DDR3 1600 MHz Capability BIOS Version:1504

DDR3 1600 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
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	•	•	•
CORSAIR	CMZ16GX3M4X1600C9 (Ver8.16)(XMP)	16GB ( 4x 4GB )	DS	-	-	1600-9-9-24	1.5	•	•	•
Crucial	BL54G3D1609DS1500.16FMR(XMP)	4GB	DS	-	-	1600-9-9-24	1.5	•	•	•
Patriot	PV316G160C9K(XMP)	16GB ( 2x 4GB )	SS	-	-	1600-9-9-24	1.5	•	•	•
Patriot	PV316G160C9K(XMP)	16GB ( 2x 8GB )	SS	-	-	1600-9-9-24	1.5	•	•	•
SanMax	SMD-4G28N1P-16KM	4GB	SS	ELPIDA	J4208BBBG-GN-F	1600	-	•	•	•
SanMax	SMD-8G28NP-16KM	8GB	DS	ELPIDA	J4208BBBG-GN-F	1600	-	•	•	•
Silicon Power	SP004GXYU160NSA(XMP)	4GB	SS	-	-	1600-9-9-27	-	•	•	•
Silicon Power	SP008GXYU160NSA(XMP)	8GB	DS	-	-	1600-9-9-27	-	•	•	•
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	-	•	•	•

### DDR3 1866 MHz Capability BIOS Version:1504

DDR3 1866 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
CORSAIR	CMZ16GX3M2A1866C9(XMP)	16GB ( 2x 8GB )	DS	-	-	1866-9-10-9-27	1.5	•	•	•
Crucial	BLE8G3D1869DE1TX0.16FED(XMP)	16GB ( 2x 8GB )	DS	-	-	1866-9-9-27	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	•	•	•
GEIL	GEEL316GB1866C9DC(XMP)	16GB ( 2x 8GB )	DS	-	-	1866-9-10-9-28	1.65	•	•	•
Silicon Power	SP004GXYU186NSA(XMP)	4GB	SS	-	-	1866-9-11-9-27	-	•	•	•
Silicon Power	SP008GXYU186NSA(XMP)	8GB	DS	-	-	1866-9-11-9-27	-	•	•	•

### DDR3 2133 MHz Capability BIOS Version:1504

DDR3 2133 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
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	•	•	•
Silicon Power	SP004GXYU213NSA(XMP)	4GB	SS	-	-	2133-11-12-11-30	-	•	•	•
Silicon Power	SP008GXYU213NSA(XMP)	8GB	DS	-	-	2133-11-12-11-30	-	•	•	•

### DDR3 2400 MHz Capability BIOS Version:1504

DDR3 2400 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
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	•	•	•
KINGSTON	KHX24C11T3K2/16X(XMP)	16GB ( 2x 8GB )	DS	-	-	2400-11-13-13-32	1.65	•	•	•
Silicon Power	SP004GXYU240NSA(XMP)	4GB	SS	-	-	2400-11-13-13-32	-	•	•	•

### DDR3 2666 MHz Capability BIOS Version:1008

DDR3 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
Apacer	78.BAGFF.AFCOC(XMP)	8GB ( 2x 4GB )	DS	-	-	12-13-13-35	-	•	•
Apacer	78.BAGFR.AFD0C(XMP)	8GB ( 2x 4GB )	DS	-	-	12-13-13-35	-	•	•
GEIL	GOC332GB2666C11QC(XMP)	32GB ( 4x 8GB )	DS	-	-	11-13-13-32	1.65	•	•
Team	TXD34G2666HC11CBK(XMP)	8GB ( 2x 4GB )	SS	-	-	11-13-13-35	1.65	•	•

### DDR3 2600 MHz Capability BIOS Version:0901

DDR3 2600 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	AX3U2600GW8G11(XMP)	16GB ( 2x 8GB )	DS	-	-	11-13-13-35	1.65	•	•

### DDR3 2500 MHz Capability BIOS Version:1008

DDR3 2500 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	F3-20000CL10Q-16GBZHD(XMP)	16GB ( 4x 4GB )	DS	-	-	10-11-11-31	1.65	•	•

DDR3 2400 MHz Capability BIOS Version:0901

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
Apacer	78.BAGFL.AFD0C(XMP)	8GB (2x4GB)	DS	-	-	11-12-12-30	-	•	•
Apacer	783BAGF3.AFD0C(XMP)	8GB (2x4GB)	DS	-	-	11-11-11-30	-	•	•
CORSAIR	CMD16GX3M2A2400C10 (Ver4.21)(XMP)	16GB (2x8GB)	DS	-	-	10-12-12-31	1.65	•	•
CORSAIR	CMD32GX3M4A2400C10 (Ver5.29)(XMP)	32GB (4x8GB)	DS	-	-	10-12-12-31	1.65	•	•
CORSAIR	CMY16GX3M2A2400C10R (Ver4.21)(XMP)	16GB (2x8GB)	DS	-	-	10-12-12-31	1.65	•	•
CORSAIR	CMZ16GX3M4A2400C9R (Ver4.13)(XMP)	16GB (4x4GB)	DS	-	-	2400 9-11-11-31	1.65	•	•
G.SKILL	F3-19200CL10Q-32GBZHD(XMP)	32GB (4x8GB)	DS	-	-	10-12-12-31	1.65	•	•
G.SKILL	F3-19200CL11Q-16GBZHD(XMP)	16GB (4x4GB)	DS	-	-	11-11-11-31	1.65	•	•
G.SKILL	F3-19200CL11Q-16GBZHD(XMP)	16GB (4x4GB)	DS	-	-	11-11-11-31	1.65	•	•
G.SKILL	F3-19200CL9D-4GBBPI(XMP)	4G (2x2G)	DS	-	-	9-11-9-28	1.65	•	•
G.SKILL	F3-19200CL9Q-16GBZMD(XMP)	16GB (4x4GB)	DS	-	-	9-11-11-31	1.65	•	•
GEIL	GOC316GB2400C10QC(XMP)	16GB (4x4GB)	DS	-	-	10-11-11-30	1.65	•	•
GEIL	GOC316GB2400C11QC(XMP)	16GB (4x4GB)	DS	-	-	11-11-11-30	1.65	•	•
Kingston	KHX2400C11D3K4/8GX(XMP)	8GB (4x2GB)	SS	-	-	11-13-11-30	1.65	•	•
KINGSTON	KHX24C11K4/16X(XMP)	16GB (4x4GB)	DS	-	-	11-13-13-30	1.65	•	•
Patriot	PVV34G2400C9K(XMP)	4GB (2x2GB)	DS	-	-	9-11-9-27	1.66	•	•
Patriot	PXD38G2400C11K(XMP)	8GB (2x4GB)	DS	-	-	2400 11-11-11-11	1.65	•	•

DDR3 2200 MHz Capability BIOS Version:0901

DDR3 2200 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	F3-17600CL7D-4GBFLS(XMP)	4G (2x2G)	DS	-	-	7-10-10-28	1.65	•	•
GEIL	GET34GB2200C9DC(XMP)	4GB (2x2GB)	DS	-	-	9-10-9-28	1.65	•	•
GEIL	GET38GB2200C9ADC(XMP)	8GB (2x4GB)	DS	-	-	9-11-9-28	1.65	•	•

DDR3 2133 MHz Capability BIOS Version:0901

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
A-DATA	AX3U2133XC4G10(XMP)	4GB	DS	-	-	10-11-11-30	1.65	•	•
A-DATA	AX3U2133XW9G10(XMP)	16GB (2x8GB)	DS	-	-	10-11-11-30	1.65	•	•
Apacer	78.BAGE4.AFD0C(XMP)	8GB (2x4GB)	DS	-	-	9-9-9-24	-	•	•
Apacer	AHU04GFB33CAG3R(XMP)	4GB	DS	-	-	11-13-13-31	-	•	•
CORSAIR	CMD16GX3M2A2133C9 (Ver4.21)(XMP)	16GB (2x8GB)	DS	-	-	9-11-11-31	1.65	•	•
CORSAIR	CMD32GX3M4A2133C9 (Ver4.21)(XMP)	32GB (4x8GB)	DS	-	-	9-11-11-31	1.65	•	•
CORSAIR	CMD8GX3M2A2133C9 (Ver1.5)(XMP)	8GB (2x4GB)	DS	-	-	9-11-10-27	1.5	•	•
CORSAIR	CMD8GX3M2B2133C9 (Ver5.12)(XMP)	8GB (2x4GB)	DS	-	-	9-11-11-31	1.65	•	•
CORSAIR	CMY8GX3M2A2133C11R (Ver4.21)(XMP)	8GB (2x4GB)	DS	-	-	11-11-11-27	1.5	•	•
CORSAIR	CMZ8GX3M2A2133C11R (Ver4.21)(XMP)	8GB (2x4GB)	DS	-	-	11-11-11-27	1.5	•	•
G.SKILL	F3-17000CL11Q2-64GBZLD(XMP)	64GB (8x8GB)	DS	-	-	11-11-11-30	1.5	•	•
G.SKILL	F3-17000CL9Q-16GBZLD(XMP)	16GB (4x4GB)	DS	-	-	9-11-9-28	1.65	•	•
G.SKILL	F3-17000CL9Q-16GBZHD(XMP)	16GB (4x4GB)	DS	-	-	9-11-10-28	1.65	•	•
G.SKILL	F3-2133C10Q-32GSR(XMP)	32GB (4x8GB)	DS	-	-	10-12-12-31	1.5	•	•
G.SKILL	F3-2133C11Q-32GZL(XMP)	32GB (4x8GB)	DS	-	-	11-11-11-31	1.5	•	•
KINGSTON	KHX2133C11D3K4/16GX(XMP)	16GB (4x4GB)	DS	-	-	11-12-11-30	1.65	•	•
KINGSTON	KHX21C11T3FK8/64X(XMP)	64GB (8x8GB)	DS	-	-	9-9-9-24	1.5	•	•
Patriot	PVV34G2133C9K(XMP)	4GB (2x2GB)	DS	-	-	9-11-9-27	1.66	•	•
Patriot	PXD38G2133C11K(XMP)	8GB (2x4GB)	DS	-	-	9-9-9-24	1.65	•	•
Patriot	PXD38G2133C11K(XMP)	8GB (2x4GB)	DS	-	-	2133 11-11-11-27	1.5	•	•
Team	TLD38G2133HC11ABK(XMP)	8GB	DS	-	-	11-11-11-31	1.65	•	•
Team	TXD34096M2133HC11A-V(XMP)	4GB	DS	-	-	11-11-11-31	1.65	•	•

DDR3 2000 MHz Capability BIOS Version:0901

DDR3 2000 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM
AEXEA	AXA3ES2G2000LG28V(XMP)	2GB	DS	-	-	-	1.65	•	•
AEXEA	AXA3ES4GK2000LG28V(XMP)	4GB (2x2GB)	DS	-	-	-	1.65	•	•
Apacer	78.AAGDS.9KD(XMP)	6GB (3x2GB)	DS	-	-	9-9-9-27	-	•	•
Asint	SLA302G08-ML2HB(XMP)	4GB	DS	Hynix	H5TQ2G83BFRH9C	9-9-9-27	-	•	•
G.SKILL	F3-16000CL9D-4GBRH(XMP)	4GB (2x2GB)	DS	-	-	9-9-9-24	1.65	•	•
G.SKILL	F3-16000CL9D-4GBTD(XMP)	4GB (2x2GB)	DS	-	-	9-9-9-24	1.65	•	•
GEIL	GUP34GB2000C9DC(XMP)	4GB (2x2GB)	DS	-	-	9-9-9-28	1.65	•	•
Patriot	PV736G2000ELK(XMP)	8GB (3x2GB)	DS	-	-	7-7-7-20	1.65	•	•
Patriot	PX7312G2000ELK(XMP)	12GB (3x4GB)	DS	-	-	9-11-9-27	1.65	•	•
Silicon Power	SP002GBLYU200S02(XMP)	2GB	DS	-	-	-	-	•	•

DDR3 1866 MHz Capability BIOS Version:1008

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
A-DATA	AX3U1866XW8G10(XMP)	16GB (2x8GB)	DS	-	-	10-11-10-30	1.5	•	•
CORSAIR	CMD16GX3M2A1866C9 (Ver5.29)(XMP)	16GB (2x8GB)	DS	-	-	1866 9-9-9-27	1.5	•	•
CORSAIR	CMD16GX3M4A1866C9 (Ver4.13)(XMP)	16GB (4x4GB)	DS	-	-	9-10-9-27	1.5	•	•
CORSAIR	CMD16GX3M4A1866C9 (Ver8.16)(XMP)	16GB (4x4GB)	DS	-	-	9-10-9-27	1.5	•	•
CORSAIR	CMD32GX3M4A1866C9 (Ver3.24)(XMP)	32GB (4x8GB)	DS	-	-	9-10-9-27	1.5	•	•
CORSAIR	CMD8GX3M2A1866C9 (Ver4.13)(XMP)	8GB (2x4GB)	DS	-	-	-	1.5	•	•
CORSAIR	CMD8GX3M2A1866C9 (Ver5.12)(XMP)	8GB (2x4GB)	DS	-	-	9-10-9-27	1.5	•	•
CORSAIR	CMD8GX3M2A1866C9 (Ver8.16)(XMP)	8GB (2x4GB)	DS	-	-	9-10-9-27	1.5	•	•
CORSAIR	CMT32GX3M4A1866C9 (Ver3.23)(XMP)	32GB (4x8GB)	DS	-	-	9-10-9-27	1.5	•	•
CORSAIR	CMY16GX3M2A1866C9 (Ver4.21)(XMP)	16GB (2x8GB)	DS	-	-	9-10-9-27	1.5	•	•
CORSAIR	CMY8GX3M2A1866C9 (Ver3.24)(XMP)	8GB (2x4GB)	DS	-	-	9-10-9-27	1.5	•	•
CORSAIR	CMZ16GX3M2A1866C10 (Ver5.29)(XMP)	16GB (2x8GB)	DS	-	-	10-11-10-30	1.5	•	•
CORSAIR	CMZ32GX3M4A1866C10 (Ver3.23)(XMP)	32GB (4x8GB)	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	•	•	
Crucial	BLE4G3D1869DE1XT0.16FMD(XMP)	4GB	DS	-	-	9-9-9-27	1.5	•	•	
G.SKILL	F3-14900CL10Q2-64GBZLD(XMP)	64GB ( 8x 8GB )	DS	-	-	10-11-10-30	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	F3-14900CL9Q-8GBFLD(XMP)	8GB ( 2x 4GB )	DS	-	-	9-9-9-24	1.6	•	•	
G.SKILL	F3-1866C9Q-32GX(XMP)	32GB ( 4x 8GB )	DS	-	-	9-10-9-28	1.5	•	•	
KINGSTON	KHX1866C9D3K2/8GX(XMP)	8GB ( 2x 4GB )	DS	-	-	-	1.65	•	•	
Patriot	PXD34G1866ELK(XMP)	4GB ( 2x 2GB )	SS	-	-	-	9-9-9-24	1.65	•	•
Patriot	PXD38G1866ELK(XMP)	8GB ( 2x 4GB )	DS	-	-	-	9-11-9-27	1.65	•	•
Patriot	PXD38G1866ELK(XMP)	8GB ( 2x 4GB )	DS	-	-	-	9-11-9-27	1.65	•	•
Patriot	PXD38G1866ELK(XMP)	8GB ( 2x 4GB )	DS	-	-	1866 9-10-9-27	1.5	•	•	
Team	TED34G1866HC13BK	4GB	SS	-	-	-	-	•	•	
Team	TED38G1866HC-13BK	8GB	DS	-	-	-	-	•	•	
Team	TLD34G1866HC9KBK(XMP)	4GB	DS	-	-	9-11-9-27	1.5	•	•	
Team	TLD38G1866HC10SBK(XMP)	8GB	DS	-	-	10-11-10-30	1.5	•	•	

DDR3 1600 MHz Capability BIOS Version:1008

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
A-DATA	AD3U1600C2G11	2GB	SS	MICRON	D9PFJ	11-11-11-28	-	•	•
A-DATA	AD3U1600C4G11	4GB	DS	MICRON	D9PFJ	11-11-11-28	-	•	•
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	AX3U1600GW8G9(XMP)	16GB ( 2x 8GB )	DS	-	-	9-9-9-24	1.5	•	•
A-DATA	AX3U1600W8G11	16GB ( 2x 8GB )	DS	-	-	9-11-9-27	1.5	•	•
A-DATA	AXDU1600GW8G9B(XMP)	16GB ( 2x 8GB )	DS	-	-	9-11-9-27	1.65	•	•
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	AM5D5908DEQSKC	-	1.65	•	•
Apacer	78.B1GET.9K00C	4GB	SS	Apacer	AM5D6008BQQSKC	11-11-11-28	-	•	•
Apacer	78.C1GET.9K10C	8GB	DS	Apacer	AM5D6008BQQSKC	11-11-11-31	-	•	•
Apacer	AHU04GFA80C9Q3R(XMP)	4GB	DS	-	-	11-11-11-28	-	•	•
Apacer	AHU08GFA80CBT3R(XMP)	8GB	DS	-	-	9-9-9-24	-	•	•
Asint	SLA302G08-EGG1C(XMP)	4GB	DS	Asint	302G08-GG1C	9-9-9-27	-	•	•
Asint	SLA302G08-EJJ1C(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-EJJ1B(XMP)	8GB	DS	-	-	9-9-9-27	-	•	•
Asint	SLB304G08-EGN1B	8GB	DS	ASint	304G08-GN1B	-	-	•	•
Asint	SLZ302G08-EGN1C	2GB	SS	ASint	302G08-GN1C	-	-	•	•
Asint	SLZ3128M8-EJJ1D(XMP)	2GB	DS	Asint	3128M8-GJ1D	-	-	•	•
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	CML16GX3M4X1600C8(Ver 2.12)(XMP)	16GB ( 4x 4GB )	DS	-	-	Heat-Sink Package	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	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	T754	8GB ( 2x 4GB )	DS	-	-	8-8-8-24	1.5	•	•
CORSAIR	CMZ8GX3M2A1600C9 (Ver8.16)(XMP)	8GB ( 2x 4GB )	DS	-	-	9-9-9-24	1.5	•	•
Crucial	BL12864B11608.8FF(XMP)	2GB ( 2x 1GB )	SS	-	-	8-8-8-24	1.65	•	•
Crucial	BLT4G3D1608D1T1X0.16FMI(XMP)	4GB	DS	-	-	8-8-8-24	1.5	•	•
EK Memory	EKM324L28BP8-116(XMP)	4GB ( 2x 2GB )	DS	-	-	9	-	•	•
EK Memory	EKM324L28BP8-116(XMP)	4GB ( 2x 2GB )	DS	-	-	9	-	•	•
Elixir	M2X2G64CB88G7N-DG(XMP)	2GB	SS	Elixir	N2CB2G80GN-DG	9-9-9-28	-	•	•
Elixir	M2X4G64CB88G5N-DG(XMP)	4GB	DS	Elixir	N2CB2G80GN-DG	9-9-9-28	-	•	•
G.SKILL	F3-12800CL8D-8GBECO(XMP)	8GB ( 2x 4GB )	DS	-	-	8-8-8-24	1.35	•	•
G.SKILL	F3-12800CL9D-8GBRL(XMP)	8GB ( 2x 4GB )	DS	-	-	9-9-9-24	1.5	•	•
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-32GX(XMP)	32GB ( 4x 8GB )	DS	-	-	-	1.5	•	•
GEIL	GET316GB1600C9QC(XMP)	16GB ( 4x 4GB )	DS	-	-	9-9-9-28	1.6	•	•
GEIL	GUP34GB1600C7DC(XMP)	4GB ( 2x 2GB )	DS	-	-	7-7-7-24	1.6	•	•
GoodRam	GR1600D364L9/2G	2GB	DS	GoodRam	GF1008KC-JN	-	-	•	•
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	KHX1600C9D3K6/32GX(XMP)	32GB ( 8x 4GB )	DS	-	-	9-9-9-27	1.65	•	•
KINGSTON	KHX1600C9D3K2/8GX(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	H5TQ2G83CFR9PBC	-	-	1.5	•	•
KINGTIGER	KTG2G1600PG3(XMP)	2GB	DS	-	-	-	-	-	•	•
MICRON	MT16JTF1G64AZ-1G6D1	8GB	DS	MICRON	D9PBC	-	-	1.5	•	•
Micron	MT16JTF1G64AZ-1G6E1	8GB	DS	Micron	D9QBJ	-	-	-	•	•
MICRON	MT16KTF51264AZ-1G6M1	4GB	DS	MICRON	D9PFJ	-	-	-	•	•
Micron	MT8JTF51264AZ-1G6E1	4GB	SS	Micron	D9QBJ	-	-	-	•	•
MICRON	MT8KTF25664AZ-1G6M1	2GB	SS	MICRON	D9PFJ	-	-	-	•	•
Mushkin	998805(XMP)	4GB ( 2x 2GB )	DS	-	-	6-8-6-24	1.65	•	•	•
Mushkin	998805(XMP)	6GB ( 3x 2GB )	DS	-	-	6-8-6-24	1.65	•	•	•
OCZ	OCZ3BE1600CLV4GK	4GB ( 2x 2GB )	DS	-	-	8-8-8	1.65	•	•	•
Patriot	PGD316G1600ELK(XMP)	16GB ( 2x 8GB )	DS	-	-	-	1.65	•	•	•
Patriot	PGD316G1600ELK(XMP)	16GB ( 2x 8GB )	DS	-	-	-	1.5	•	•	•
Patriot	PGD38G1600ELK(XMP)	8GB ( 2x 4GB )	DS	-	-	-	1.65	•	•	•
Patriot	PGD38G1600ELK(XMP)	8GB ( 2x 4GB )	DS	-	-	-	1.5	•	•	•
Patriot	PGS34G1600LLKA	4GB ( 2x 2GB )	DS	-	-	7-7-7-20	1.7	•	•	•
Patriot	PGS34G1600LLKA2	4GB ( 2x 2GB )	DS	-	-	8-8-8-24	1.7	•	•	•
Patriot	PV38G1600CRD(XMP)	8GB ( 2x 4GB )	DS	-	-	-	1.5	•	•	•
Patriot	PX7312G1600LLK(XMP)	12GB ( 3x 4GB )	DS	-	-	-	1.65	•	•	•
Patriot	PXD38G1600LLK(XMP)	8GB ( 2x 4GB )	DS	-	-	1600 8-9-8-24	1.65	•	•	•
PSC	AL9F8L93B-GN2E	4GB	SS	PSC	A3P4GF3BLF	-	-	-	•	•
PSC	ALAF8L93B-GN2E	8GB	DS	PSC	A3P4GF3BLF	-	-	-	•	•
SanMax	SMD-4G88HP-16KZ	4GB	DS	Hynix	H5TQ2G83BFR9PBC	-	-	1.5	•	•
SanMax	SMD-4G88NG-16KK	4GB	DS	ELPIDA	J2108BDBG-GN-F	-	-	-	•	•
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	•	•	•
Team	TXD34096M1600HC9-D(XMP)	4GB	DS	Hynix	H5TC2G83BFRH9A	9-9-9-24	1.5	•	•	•
Transcend	JM1600KHLH-8G(626633)	8GB	DS	Transcend	TK963EBF3	-	-	-	•	•
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	-	-	•	•

DDR3 1333 MHz Capability BIOS Version:0901

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	
ACTICA	ACT1GHU6488F1333S	1GB	SS	SAMSUNG	K4B1G0846F	-	-	•	•	
ACTICA	ACT1GHU72C8G1333S	1GB	SS	SAMSUNG	K4B1G0846F(ECC)	-	-	•	•	
ACTICA	ACT2GHU8488G1333M	2GB	DS	Micron	D9KPT	-	-	•	•	
ACTICA	ACT2GHU8488G1333S	2GB	DS	SAMSUNG	K4B1G0846F	-	-	•	•	
ACTICA	ACT2GHU72D8G1333M	2GB	DS	Micron	D9KPT(ECC)	-	-	•	•	
ACTICA	ACT2GHU72D8G1333S	2GB	DS	SAMSUNG	K4B1G0846F(ECC)	-	-	•	•	
ACTICA	ACT4GHU6488H1333H	4GB	DS	Hynix	H5TQ2G83AFR	-	-	•	•	
ACTICA	ACT4GHU72D8H1333H	4GB	DS	Hynix	H5TQ2G83AFR(ECC)	-	-	•	•	
AMD	AE32G1339U1-U	2GB	SS	AMD	23EY4587MB3H	-	1.5	•	•	
AMD	AE34G1339U2-U	4GB	DS	AMD	23EY4587MB3H	-	1.5	•	•	
Apacer	78.A1GC6.9L1	2GB	DS	Apacer	AM5D5808FEQSBG	9	-	•	•	
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	SS	Asint	304G08-DJ1B	9-9-9-24	-	•	•	
Asint	SLZ302G08-EDJ1C	4GB	DS	ASint	302G08-DJ1C	-	-	•	•	
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	CMX8GX3M1A1333C9 (Ver2.2)	8GB	DS	-	-	9-9-9-24	1.5	•	•	
CORSAIR	CMX8GX3M1A1333C9 (Ver3.23)	8GB	DS	-	-	9-9-9-24	1.5	•	•	
CORSAIR	CMX8GX3M2A1333C9(XMP)	8GB ( 2x 4GB )	DS	-	-	9-9-9-24	1.5	•	•	
EK Memory	EKM324L28BP8-113	4GB ( 2x 2GB )	DS	-	-	9	-	•	•	
Elixir	M2F2G64C88G7N-CG	2GB	SS	Elixir	N2CB2G80GN-CG	-	-	•	•	
ELPIDA	EBJ41UF8BCFO-DJ-F	4GB	DS	ELPIDA	J2108BCE-DJ-F	-	-	•	•	
G.SKILL	F3-10600CL9D-4GBNT	4GB ( 2x 2GB )	DS	G.SKILL	D3 128M8CE9 2GB	9-9-9-24	1.5	•	•	
G.SKILL	F3-10666CL7D-8GBRH(XMP)	8GB ( 2x 4GB )	DS	-	-	7-7-7-21	1.5	•	•	
G.SKILL	F3-10666CL8D-4GBHK(XMP)	4GB ( 2x 2GB )	DS	-	-	8-8-8-21	1.5	•	•	
G.SKILL	F3-10666CL9D-8GBRL	8GB ( 2x 4GB )	DS	-	-	9-9-9-24	1.5	•	•	
G.SKILL	F3-10666CL9D-8GBRL	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	GET316GB1333C9QC	16GB ( 4x 4GB )	DS	-	-	9-9-9-24	1.5	•	•	
GEIL	GG34GB1333C9DC	4GB ( 2x 2GB )	DS	GEIL	GL1L128M88BA115F-W	9-9-9-24	1.3	•	•	
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	•	•	
GoodRam	GR1333D364L9/2G	2GB	DS	Qimonda	IDSHT1G-03A1TFU-12U	-	-	•	•	
Hynix	HMT125U6TFR8A-H9	2GB	DS	Hynix	H5TC1G83TFR	-	-	•	•	
Hynix	HMT325U6BFR8C-H9	2GB	SS	Hynix	H5TQ2G83BFR	-	-	•	•	
INNOISK	M3UN-2GHJBC09	2GB	SS	Hynix	H5TQ2G83CFRH9C	9-9-9-24	-	•	•	
INNOISK	M3UN-4GHJAC09	4GB	DS	Hynix	H5TQ2G83CFRH9C	9-9-9-24	-	•	•	
KINGMAX	FLFD45F-B8KL9	1GB	SS	KINGMAX	KFB8FNLFX-F-BNF-15A	-	-	•	•	
KINGMAX	FLFE85F-B8KL9	2GB	DS	KINGMAX	KFB8FNLFX-F-BNF-15A	-	-	•	•	
KINGMAX	FLFE85F-C8KL9	2GB	SS	KINGMAX	KFC8FNLFX-F-GXX-12A	-	-	•	•	
KINGMAX	FLFE85F-C8KL9	2GB	SS	KINGMAX	KFC8FNLFX-F-DXX-15A	-	-	•	•	
KINGMAX	FLFE85F-C8KM9	2GB	SS	Kingmax	KFC8FNLFX-F-BXX-15A	-	-	•	•	
KINGMAX	FLFF65F-C8KL9	4GB	DS	KINGMAX	KFC8FNLFX-F-GXX-12A	-	-	•	•	
KINGMAX	FLFF65F-C8KL9	4GB	DS	KINGMAX	KFC8FNLFX-F-DXX-15A	-	-	•	•	
KINGMAX	FLFF65F-C8KM9	4GB	DS	Kingmax	KFC8FNLFX-F-BXX-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	KVR1333D3N9H/8G	8GB	DS	ELPIDA	J4208EASE-DJ-F	9-9-9-24	1.5	•	•	
KINGSTON	KVR13N9S8H/4	4GB	SS	ELPIDA	J4208BBBG-GN-F	-	-	1.5	•	•

<b>KINGTIGER</b>	F10DA2T1680	2GB	DS	KINGTIGER	KTG1333PS1208NST-C9	-	-	•	•
<b>KINGTIGER</b>	KTG2G1333PG3	2GB	DS	-	-	-	-	•	•
<b>Mach Xtreme</b>	MXD3U133316GQ	16GB ( 4x 4GB )	DS	-	-	-	-	•	•
<b>Mach Xtreme</b>	MXD3V13332GS	2GB	SS	Mach Xtreme	C2S46D30-D313	-	-	•	•
<b>MICRON</b>	MT16JTF1G64AZ-1G4D1	8GB	DS	MICRON	D9PCP	-	-	•	•
<b>MICRON</b>	MT8JTF25664AZ-1G4M1	2GB	SS	MICRON	D9PFJ	-	-	•	•
<b>OCZ</b>	OCZ3G1333LV4GK	4GB ( 2x 2GB )	DS	-	-	9-9-9	1.65	•	•
<b>OCZ</b>	OCZ3G1333LV8GK	8GB ( 2x 4GB )	DS	-	-	9-9-9	1.65	•	•
<b>OCZ</b>	OCZ3G1333LV8GK	8GB ( 2x 4GB )	DS	-	-	9-9-9	1.65	•	•
<b>OCZ</b>	OCZ3RPR1333C9LV8GK	8GB ( 2x 4GB )	DS	-	-	9-9-9	1.65	•	•
<b>Patriot</b>	PG38G1333EL (XMP)	8GB	DS	-	-	-	1.5	•	•
<b>Patriot</b>	PGD316G1333ELK(XMP)	16GB ( 2x 8GB )	DS	-	-	9-9-9-24	1.5	•	•
<b>Patriot</b>	PGS34G1333LLKA	4GB ( 2x 2GB )	DS	-	-	7-7-7-20	1.7	•	•
<b>RiDATA</b>	C304627CB1AG22Fe	2GB	DS	RiDATA	C304627CB1AG22Fe	9	-	•	•
<b>RiDATA</b>	E304459CB1AG32Cf	4GB	DS	RiDATA	E304459CB1AG32Cf	9	-	•	•
<b>SAMSUNG</b>	M378B5273CH0-CH9	4GB	DS	SAMSUNG	K4B2G0846C	-	-	•	•
<b>SAMSUNG</b>	M378B5273DH0-CH9	4GB	DS	SAMSUNG	K4B2G08460	-	-	•	•
<b>SAMSUNG</b>	M378B5773DH0-CH9	2GB	SS	SAMSUNG	K4B2G08460	-	-	•	•
<b>Silicon Power</b>	SP001GBLTE133S01	1GB	SS	NANYA	NT5CB128M8AN-CG	-	-	•	•
<b>Silicon Power</b>	SP001GBLTU133S02	1GB	SS	S-POWER	10YT3E5	9	-	•	•
<b>Silicon Power</b>	SP002GBLTE133S01	2GB	DS	NANYA	NT5CB128M8AN-CG	-	-	•	•
<b>Silicon Power</b>	SP002GBLTU133V02	2GB	SS	S-POWER	20YT3NG	9-9-9-24	-	•	•
<b>Silicon Power</b>	SP004GBLTU133V02	4GB	DS	S-POWER	20YT3NG	9-9-9-24	-	•	•
<b>Team</b>	TED34096M1333HC9	4GB	DS	Team	T3D2568LT-13	-	-	•	•
<b>Transcend</b>	JM1333K1H-8G(623654)	8GB	DS	Transcend	TK963EBF3	-	-	•	•
<b>Transcend</b>	TS1GLK64V3H(620053)	8GB	DS	MICRON	D9QBJ	-	-	•	•

#### 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 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.