DDR3 1333 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
KINGSTON	KVR1333D3N9/4G	4GB	SS	KTC	D2568JENCNGD9U	9-9-9-24-33	1.5V		•
ASint	SLA304G08-EDJ6A	4GB	SS	ASINT	304G08-DJ6A	9-9-9-24-33	1.5V	•	•
ASint	SLA304G08-EDJ6B	4GB	SS	ASINT	304G08-DJ6B	9-9-9-24-33	1.5V	•	•
MUSHKIN	PC3-10666	4GB	SS	N/A	Heat-Sink Package	9-9-9-24	1.50V	•	•
MUSHKIN	PC3-10600	2GB	SS	SEC 410 HC15	K4W2GO846P	9-9-9-24	1.50V	•	•
SMART	SH5126UD325893HE	4GB	DS	SEC 343 BYKO	K4B2GO8460	9-9-9-24-33	1.5V	•	•
SMART	SH5126UD325893SQ	4GB	DS	SEC 343 BYKO	K4B2GO8460	9-9-9-24-33	1.5V	•	•

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 1600 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
CRUCIAL	CT102464BA160B.C16FED	8GB	DS	CRUCIAL	CT512X8-160B		1.50V	●	●
G.SKILL	F3-1600C11S-4GNT	4GB	SS	SEC 343 XYKO	K4B4GO846D	11-11-11-28	1.5V	●	●
KINGMAX	FLGE85F-B6HYB	2GB	SS	HYNIX	H5TQ2G63FFR		1.50V	●	●
KINGSTON	KVR16N11S/4	4GB	SS	KINGSTON	D5128EC4BPGGBU		1.5V	●	●
KINGSTON	KVR16N11/4	4GB	SS	KINGSTON	D5128EC4BPGGBU		1.35V	●	●
KINGSTON	KVR16N11/4	4GB	SS	KINGSTON	D5128EC4BPGGBU		1.5V	●	●
MUSHKIN	PC3-12800	4GB	DS	N/A	Heat-Sink Package	9-9-9-24	1.50V	●	●
MUSHKIN	PC3-12800	4GB	DS	N/A	Heat-Sink Package	9-9-9-24	1.50V	●	●
MIRA	PLAF8L93B-GN2	8GB	DS	N/A	BJE159C3G-M	9-9-9-24	1.50V	●	●
Transcend	TS512MLK64W6H	4GB	SS	SEC 343 XYKO	K4B4GO846D	11-11-11-28-39	1.35V	●	
Transcend	TS1GLK64W6H	8GB	DS	SEC 343 XYKO	K4B4GO846D	11-11-28-39	1.35V	●	●
TEAM	TLD38G1600HC9BK	8GB	DS	-	-	9-9-9-24	1.5V	●	●
TEAM	TED34GM1600C11BK	4GB	DS	HYNIX	H5TQ2G83CFY	11-11-11-28	1.5V		
ADATA	N/A	4GB	SS	ADATA	3WCD-12IIA EL1348V	-	-	●	●
ASint	SLA304G08-EGN6A	4GB	SS	ASINT	304G08-GN6A	11-11-11-28-39	1.5V	●	●
ASint	SLA304G08-EGN6B	4GB	SS	ASINT	304G08-GN6B	11-11-11-28-39	1.5V	●	●
AVEXIR	AVD3U16000904G-4CI	4GB	SS	N/A	N/A		1.5V	●	●
AVEXIR	AVD3U16001008G-4CI	8GB	DS	N/A	N/A		1.5V	●	●
PANRAM	PUD31600C114GPSB	4GB	SS	N/A	N/A	11-11-28-39	1.5V		
PANRAM	PUD31600C118GPSB	8GB	DS	DS	N/A	11-11-28-39	1.5V	●	
SAMSUNG	M379B5273DHO-YKO 1325	4GB	DS	SEC 312 BJKO	J4208BBBG-GN-F	11-11-28-39	1.35V	●	
VENTURA	D3-55DK1145V-11	2GB	SS	SEC 404 BCKO	K4B2GO846Q	11-11-44-28-39	1.5V	●	

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 1866 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
CRUCIAL	BLS8G3D18ADS3.16FED	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	●	●
KINGSTON	KHX18C9T2K2/8X	8GB (2x 4GB)	DS	N/A	N/A	9-9-9-24-33	1.65	●	●
PANRAM	PUD31866C94G2PSB	4GB	SS	N/A	N/A	9-10-9-27	1.65V	●	●
PANRAM	PUD31866C98GPSB	8GB	DS	N/A	N/A	9-10-9-27	1.65V	●	
TEAM	TED38GM1866C13BK	8GB	DS	HYNIX	H5TQ4G83AFY	13-13-13-31	1.5V	●	
AVEXIR	AVD3U0904G-4CI	4GB	SS	N/A	N/A	9-9-9-28-39	1.65V	●	●
AVEXIR	AVD3U0908G-4CI	8GB	DS	N/A	N/A	9-9-9-28-39	1.5V	●	●
MUSHKIN	PC3-14900	8GB	DS	N/A	Heat-Sink Package	9-9-9-27	1.5V	●	●

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 2000 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
AVEXIR	AVD3U20000904G-4CI	4GB	SS	N/A	N/A	11-11-11-28-39	1.65V	●	●
AVEXIR	AVD3U20000908G-4CI	8GB	DS	N/A	N/A	11-11-11-28-39	1.65V	●	●

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 2133 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
G.SKILL	F3-2133C10D-16GAB	8GB	DS	N/A	N/A	10-12-12-31	1.6V	●	
KINGSTON	KHX21C11T2K2/8X	8GB (2x 4GB)	SS	N/A	N/A	11-11-11-28-39	1.6V	●	●
AVEXIR	AVD3U21330908G-4BZ1	8GB	DS	N/A	N/A		1.65V	●	●
AVEXIR	AVD3U21330908G-4BZ1	4GB	SS	N/A	N/A		1.65V	●	●
AVEXIR	AVD3U21331104G-4CI	4GB	SS	N/A	N/A		1.5V	●	●
AVEXIR	AVD3U21331108G-4CI	8GB	DS	N/A			1.5V	●	●

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 2200 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
GEIL	GET34GB2200C9DC(XMP)	2GB	DS	N/A	N/A	9-10-9-28	1.65V		
GEIL	GET38GB2200C9ADC(XMP)	4GB	DS	N/A	N/A	9-11-9-28	1.65V		
KINGMAX	FLKE85F-B8KJAA-FEIS(XMP)	2GB	DS	N/A	N/A	9-9-9-24-33	1.5V		

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 2250 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
KINGSTON	KHX2250C9D3T1K2/4GX(XMP)	4GB (2x 2GB)	DS	N/A	N/A	9-9-9-24-33	1.65V		

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 2400 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
G.SKILL	F3-2400C11D-8GRS	4GB	DS	N/A	N/A	11-11-13-31	1.65V	●	●
AVEXIR	AVD3U24001008G-4BZ1	8GB	DS	N/A	N/A		1.65V	●	●
AVEXIR	AVD3U24001004G-4BZ1	4GB	SS	N/A	N/A		1.65V	●	●
AVEXIR	AVD3U24001104G-4CI	4GB	SS	N/A	N/A		1.65V	●	●
AVEXIR	AVD3U24001108G-4CI	8GB	DS	N/A	N/A		1.65V		●
PANRAM	PUD32400C118G2LSK	8GB	DS	N/A	N/A	11-13-13-35	1.65V	●	●
TEAM	TLD38G2400HC11CBK	8GB	DS	-	-	11-13-13-35	1.65V		●

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 2600 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
G.SKILL	F3-2600CL10Q-16GBZMD(XMP)	16GB(4x 4GB)	DS	N/A	N/A	10-12-12-31	1.65V		
G.SKILL	F3-2600CL11Q-32GBZHD(XMP)	32GB(8GBX4)	DS	N/A	N/A	11-13-13-35	1.65V		
ADATA	AX3U2600GW8G11	16GB (2x 8GB)	DS	N/A	N/A	11-13-13-35	1.65V		

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 2666 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
AVEXIR	AVD3U26661204G-4CI	8GB	SS	N/A	N/A		1.65V	●	●
AVEXIR	AVD3U26661208G-4CI	8GB	DS	N/A	N/A		1.65V	●	●
AVEXIR	AVD3U26661104G-4BZ1	4GB	SS	N/A	N/A		1.65V	●	●
AVEXIR	AVD3U26661108G-4BZ1	8GB	DS	N/A	N/A		1.65V	●	

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 2800 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
AVEXIR	AVD3UH28001208G-4BZ1	8GB	DS	N/A	N/A		1.65V	●	

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 2933 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
AVEXIR	AVD3UH29331204G-4BZ1	4GB	SS	N/A	N/A	9-9-9-28-39	1.65V		
AVEXIR	AVD3UH29331208G-4BZ1	8GB	DS	N/A	N/A	9-9-9-28-39	1.65V		•

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 3000 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
AVEXIR	AVD3UH31001204G-4BZ1	4GB	SS	N/A	N/A	9-9-9-28-39	1.65V	●	●

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.

DDR3 3100 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	ocket support (O	
								1 DIMM	2 DIMM
AVEXIR	AVD3UH31001204G-2CIR	4GB	SS	N/A	N/A	11-11-28-39	1.65V	●	●
AVEXIR	AVD3UH31001204G-4BZ1	4GB	SS	N/A	N/A	11-11-28-39	1.65V	●	●
ADATA	AX3U3100W4G12-DGV	4GB	SS	N/A	N/A	12-14-14-36	1.65V	●	●
ADATA	AX3U3100W4G12-DMV	4GB	SS	N/A	N/A	12-14-14-36	1.65V	●	●

2 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports 2 modules inserted into both the blue or 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.