

**Qualified Vendors List (QVL), Model Name: GA-A320M-H**

DDR4 3200MHz												
Module Supplier	Density	# of Ranks x DRAM devices	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support		XMP	Native
									1	2		
HyperX	8GB	1Rx8	HX432C16PB3K4/32	SS	SKhynix		16-18-18	1.35v	v	v	v	2133
			HX432C16PB3K2/16	SS			16-18-18	1.35v	v	v	v	2133
CORSAIR	8GB	1Rx8	CMK64GX4M8B3200C16	SS			16-18-18-36	1.35v	v	v	v	2133
G.SKILL	4GB	1Rx8	F4-3200C16Q-16GRKD	SS	SKhynix		16-16-16-36	1.35v	v	v	v	2133
Apacer	4GB	1Rx8	78.BAGMD.AF20B	SS			16-16-16-36	1.35v	v	v	v	2133
GEIL	4GB	1Rx8	GPR416GB3200C16QC	SS			16-16-16-36	1.35v	v	v	v	2133

DDR4 3000MHz (downgrade to DDR4 2933MHz)												
Module Supplier	Density	# of Ranks x DRAM devices	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support		XMP	Native
									1	2		
HyperX	8GB	1Rx8	HX430C15PB3K4/32	SS	SKhynix		C15	1.35v	v	v	v	2133
HyperX	8GB	1Rx8	HX430C15PB3K2/16	SS	SKhynix		C15	1.35v	v	v	v	2133
G.SKILL	8GB	1Rx8	F4-3000C15Q2-64GVR	SS			15-15-15-35	1.35v	v	v	v	2133
ADATA	4GB	1Rx8	AX4U3000W4G16-BWZ	SS			16-16-16	1.35v	v	v	v	2133
ADATA	8GB	1Rx8	AX4U3000W8G16-DBZ	SS			16-18-18	1.35v	v	v	v	2133
Apacer	8GB	1Rx8	AHU08GGB30CDU7V	SS			16-16-16-36	1.35v	v	v	v	2133
Avexir	4GB	1Rx8	AVD4U30001604G-4CIR	SS			16-18-18-36	1.35v	v	v	v	2133
Avexir	8GB	1Rx8	AVD4UZ130001608G-4RD	SS			16-18-18-36	1.35v	v	v	v	2133
Avexir	8GB	1Rx8	AVD4UZ130001608G-2RD	SS			16-18-18-36	1.35v	v	v	v	2133
Avexir	8GB	1Rx8	AVD4UZ130001608G-4BZ1RR	SS	Samsung		16-18-18-36	1.35v	v	v	v	2133
			AVD4UZ130001608G-4BZ1GY						v	v	v	2133
			AVD4UZ130001608G-4BZ1SW						v	v	v	2133
GEIL	8GB	1Rx8	GEX416GB3000C15ADC	SS			15-17-17-35	1.35v	v	v	v	2133
KLEVV	4GB	1Rx8	KM4B4GX1A-3000-15-16-16-36-0	SS			15-16-16-36	1.2v	v	v	v	2400
KLEVV	4GB	1Rx8	KM4Z4GX1A-3000-15-16-16-36-1	SS			15-16-16-36	1.2v	v	v	v	2400
KLEVV	8GB	1Rx8	KM4B8GX1A-3000-15-16-16-36-0	SS			15-16-16-36	1.2v	v	v	v	2400
KLEVV	8GB	1Rx8	KM4Z8GX1A-3000-15-16-16-36-1	SS			15-16-16-36	1.2v	v	v	v	2400
Team	4GB	1Rx8	TLRED416G3000HC16CQC01	SS			16-18-18-38	1.35v	v	v	v	2133
Team	4GB	1Rx8	TLRED48G3000HC16CDC01	SS			16-18-18-38	1.35v	v	v	v	2133
Team	4GB	1Rx8	TLRED44G3000HC16C01	SS			16-18-18-38	1.35v	v	v	v	2133
V-Color	8GB	1Rx8	TL48G30S816B	SS			CL16	1.35v	v	v	v	2133

DDR4 2800MHz (downgrade to DDR4 2667MHz)												
Module Supplier	Density	# of Ranks x DRAM devices	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support		XMP	Native
									1	2		
CORSAIR	4GB	1Rx8	CMD16GX4M4A2800C16	SS	Samsung		16-18-18-36	1.2v	v	v	v	2133
CORSAIR	4GB	1Rx8	CMK16GX4M4A2800C16R	SS			16-18-18-36	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMD32GX4M4A2800C16 ver5.20	DS	SKhynix		16-18-18-36	1.2v	v	v	v	2133
G.SKILL	4GB	1Rx8	F4-2800C16Q-16GRK	SS			16-16-16-36	1.2v	v	v	v	2133
G.SKILL	8GB	2Rx8	F4-2800C16Q-32GRK	DS			16-16-16-36	1.2v	v	v	v	2133
G.SKILL	16GB	2Rx8	F4-2800C15Q2-128GRKD	DS			15-15-15-35	1.35v	v	v	v	2133
HyperX	4GB	1Rx8	HX428C14SB2K4/16	SS	SKhynix		C14	1.35v	v	v	v	2133
HyperX	4GB	1Rx8	HX428C14SB2K2/8	SS	SKhynix		C14	1.35v	v	v	v	2133
HyperX	4GB	1Rx8	HX428C14SB2/4	SS	SKhynix		C14	1.35v	v	v	v	2133
HyperX	8GB	2Rx8	HX428C14SB2K4/32	DS	SKhynix		C14	1.35v	v	v	v	2133
HyperX	8GB	2Rx8	HX428C14SB2K2/16	DS	SKhynix		C14	1.35v	v	v	v	2133
HyperX	8GB	2Rx8	HX428C14SB2/8	DS	SKhynix		C14	1.35v	v	v	v	2133
ADATA	4GB	1Rx8	AX4U2800W4G17-BRZ	SS			17-17-17-36	1.2v	v	v	v	2133
ADATA	8GB	2Rx8	AX4U2800W8G17-BRZ	DS			17-17-17-36	1.2v	v	v	v	2133
ADATA	8GB	2Rx8	AX4U2800W8G15-QRD	DS			CL15	1.35v	v	v	v	2133
ADATA	8GB	1Rx8	AX4U280038G17-SBF	SS			17-17-17	1.2v	v	v	v	2133
ADATA	16GB	2Rx8	AX4U2800316G16	DS			16-16-16-36	1.2v	v	v	v	2133
ADATA	16GB	2Rx8	AX4U2800316G16-SBF	DS			16-16-16	1.2v	v	v	v	2133
Avexir	4GB	1Rx8	AVD4U28001504G-4CIR	SS			CL15	1.2v	v	v	v	2133
Apacer	8GB	2Rx8	AHU08GGB28CET6H	DS			17-17-17-36	1.2v	v	v	v	2133
KLEVV	4GB	1Rx8	KM4C4GX4N-2800-16-16-16-36-0	SS			16-16-16-36	1.2v	v	v	v	2133
KLEVV	8GB	2Rx8	KM4C8GX4N-2800-16-16-16-36-0	DS			16-16-16-36	1.2v	v	v	v	2133
PATRIOT	4GB	1Rx8	PV48G280C6K	SS			CL16	1.2v	v	v	v	2133
PATRIOT	4GB	1Rx8	PVE48G280C6KGY	SS			CL16	1.2v	v	v	v	2133
PATRIOT	8GB	2Rx8	PV416G280C6K	DS			CL16	1.2v	v	v	v	2133
Team	4GB	1Rx8	TLRED416G2800HC16CQC01	SS			16-18-18-38	1.2v	v	v	v	2133
Team	4GB	1Rx8	TLRED48G2800HC16CDC01	SS			16-18-18-38	1.2v	v	v	v	2133
Team	4GB	1Rx8	TLRED44G2800HC16C01	SS			16-18-18-38	1.2v	v	v	v	2133
Team	8GB	2Rx8	TLRED432G2800HC16CQC01	DS			16-18-18-38	1.2v	v	v	v	2133
Team	8GB	2Rx8	TLRED416G2800HC16CDC01	DS			16-18-18-38	1.2v	v	v	v	2133
Team	8GB	2Rx8	TLRED48G2800HC16C01	DS			16-18-18-38	1.2v	v	v	v	2133
Team	16GB	2Rx8	THRD464G2800HC16CQC01	DS			16-18-18-38	1.2v	v	v	v	2133
Team	16GB	2Rx8	THRD432G2800HC16CDC01	DS			16-18-18-38	1.2v	v	v	v	2133
Team	16GB	2Rx8	THRD416G2800HC16C01	DS			16-18-18-38	1.2v	v	v	v	2133

DDR4 2667MHz												
Module Supplier	Density	# of Ranks x DRAM devices	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support		XMP	Native
									1	2		
HyperX	4GB	1Rx8	HX426C13SB2K4/16	SS	SKhynix		CL13	1.35v	v	v	v	2133
HyperX	4GB	1Rx8	HX426C13SB2K2/8	SS	SKhynix		CL13	1.35v	v	v	v	2133
HyperX	4GB	1Rx8	HX426C13SB2/4	SS	SKhynix		CL13	1.35v	v	v	v	2133
HyperX	4GB	1Rx8	HX426C15FBK4/16	SS	SKhynix		CL15	1.2v	v	v	v	2666

HyperX	4GB	1Rx8	HX426C15FBK2/8	SS	SKhynix		CL15	1.2v	v	v	v	2666
HyperX	4GB	1Rx8	HX426C15FB/4	SS	SKhynix		CL15	1.2v	v	v	v	2666
HyperX	8GB	2Rx8	HX426C15FBK4/32	DS	SKhynix		CL15	1.2v	v	v	v	2666
HyperX	8GB	2Rx8	HX426C15FBK2/16	DS	SKhynix		CL15	1.2v	v	v	v	2666
HyperX	8GB	2Rx8	HX426C15FB/8	DS	SKhynix		CL15	1.2v	v	v	v	2666
HyperX	16GB	2Rx8	HX426C15SBK8/128	DS	SKhynix		CL15	1.2v	v	v	v	2133
HyperX	16GB	2Rx8	HX426C16FBK4/64	DS	SKhynix		CL16	1.2v	v	v	v	2400
CORSAIR	4GB	1Rx8	CMK16GX4M4A2666C15	SS	Samsung		15-17-17-35	1.2v	v	v	v	2133
CORSAIR	4GB	1Rx8	CMK16GX4M4A2666C15R	SS	Samsung		15-17-17-35	1.2v	v	v	v	2133
CORSAIR	4GB	1Rx8	CMD16GX4M4A2666C16	SS	Samsung		16-18-18-35	1.2v	v	v	v	2133
CORSAIR	4GB	1Rx8	CMD8GX4M2A2666C15	SS			15-17-17-35	1.2v	v	v	v	2133
CORSAIR	4GB	1Rx8	CMD16GX4M4A2666C12 ver5.20	SS	SKhynix		12-14-14-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMK32GX4M4A2666C15	DS	Samsung		15-17-17-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMD32GX4M4A2666C15	DS	Samsung		15-17-17-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMD32GX4M4A2666C16	DS	Samsung		16-18-18-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMK16GX4M2A2666C16	DS			16-18-18-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMK16GX4M2A2666C16R	DS			16-18-18-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMK16GX4M2A2666C16W	DS			16-18-18-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMD16GX4M2A2666C15	DS			15-17-17-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMK64GX4M8A2666C16	DS	Samsung		16-18-18-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMU32GX4M4A2666C16 ver3.21	DS	Micron		16-18-18-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMU32GX4M4A2666C16R ver3.21	DS	Micron		16-18-18-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMK32GX4M4A2666C16 ver3.21	DS	Micron		16-18-18-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMK32GX4M4A2666C16B ver3.21	DS	Micron		16-18-18-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMK32GX4M4A2666C16R ver3.21	DS	Micron		16-18-18-35	1.2v	v	v	v	2133
CORSAIR	8GB	2Rx8	CMK32GX4M4A2666C16W ver3.21	DS	Micron		16-18-18-35	1.2v	v	v	v	2133
CORSAIR	16GB	2Rx8	CMK32GX4M2A2666C16	DS			16-18-18-35	1.2v	v	v	v	2133
CORSAIR	16GB	2Rx8	CMK32GX4M2A2666C16R	DS			16-18-18-35	1.2v	v	v	v	2133
CORSAIR	16GB	2Rx8	CMK32GX4M2A2666C16W	DS			16-18-18-35	1.2v	v	v	v	2133
CORSAIR	16GB	2Rx8	CMK64GX4M4A2666C16 ver4.31	DS	Samsung		16-18-18-35	1.2v	v	v	v	2133
CORSAIR	16GB	2Rx8	CMK64GX4M4A2666C16W ver4.31	DS	Samsung		16-18-18-35	1.2v	v	v	v	2133
CORSAIR	16GB	2Rx8	CMD128GX4M8A2666C15	DS	Samsung		15-17-17-35	1.2v	v	v	v	2133
CORSAIR	16GB	2Rx8	CMK128GX4M8A2666C16	DS	Samsung		16-18-18-35	1.2v	v	v	v	2133
CORSAIR	16GB	2Rx8	CMK32GX4M2A2666C16R	DS			16-18-18-35	1.2v	v	v	v	2133
CORSAIR	16GB	2Rx8	CMU64GX4M4A2666C16	DS			16-18-18-35	1.2v	v	v	v	2133
CORSAIR	16GB	2Rx8	CMD64GX4M4A2666C15	DS			15-17-17-35	1.2v	v	v	v	2133
ADATA	4GB	1Rx8	AX4U2666W4G16-DRZ	SS	SKhynix		16-16-16	1.2v	v	v	v	2133
Avexir	8GB	1Rx8	AVD4U2126661708G-4COR	SS	Samsung		17-17-17-37	1.2v	v	v	v	2133
			AVD4U2126661708G-4COB						v	v	v	2133
			AVD4U2126661708G-4COG						v	v	v	2133
			AVD4U2126661708G-4COW						v	v	v	2133
			AVD4U2126661708G-4COY						v	v	v	2133
			AVD4U2126661708G-4COO						v	v	v	2133
AVD4U2126661708G-4CWW	v	v	v	2133								
CRUCIAL	4GB	1Rx8	BLT4G4D26AFTA.8FADG	SS			16-17-17-36	1.2v	v	v	v	2400
CRUCIAL	4GB	1Rx8	BLE4G4D26AFAE.8FADG	SS			16-17-17-36	1.2v	v	v	v	2400
CRUCIAL	8GB	2Rx8	BLT8G4D26AFTA.16FAD	DS	Micron		16-17-17-36	1.2v	v	v	v	2400
PATRIOT	4GB	1Rx8	PVE48G266C5KBL	SS			CL15	1.2v	v	v	v	2133
KLEVV	4GB	1Rx8	KM4Z4GX1N-2666-15-15-15-35-1	SS			15-15-15-35	1.2v	v	v	v	2400
KLEVV	8GB	1Rx8	KM4Z8GX1N-2666-15-15-15-35-1	SS			15-15-15-35	1.2v	v	v	v	2400
KLEVV	16GB	2Rx8	KM4Z16X1N-2666-15-15-15-35-1	DS			15-15-15-35	1.2v	v	v	v	2400
Team	4GB	1Rx8	TLRED416G2666HC15BQC01	SS			15-17-17-35	1.2v	v	v	v	2133
Team	4GB	1Rx8	TLRED48G2666HC15BDC01	SS			15-17-17-35	1.2v	v	v	v	2133
Team	4GB	1Rx8	TLRED44G2666HC15B01	SS			15-17-17-35	1.2v	v	v	v	2133
Team	8GB	2Rx8	TLRED432G2666HC15BQC01	DS			15-17-17-35	1.2v	v	v	v	2133
Team	8GB	2Rx8	TLRED416G2666HC15BDC01	DS			15-17-17-35	1.2v	v	v	v	2133
Team	8GB	2Rx8	TLRED48G2666HC15B01	DS			15-17-17-35	1.2v	v	v	v	2133
Team	16GB	2Rx8	THRD464G2666HC15BQC01	DS			15-17-17-35	1.2v	v	v	v	2133
Team	16GB	2Rx8	THRD432G2666HC15BDC01	DS			15-17-17-35	1.2v	v	v	v	2133
Team	16GB	2Rx8	THRD416G2666HC15B01	DS			15-17-17-35	1.2v	v	v	v	2133

**DDR4 2400MHz**

Module Supplier	Density	# of Ranks x DRAM devices	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support		XMP	Native
									1	2		
HyperX	4GB	1Rx8	HX424C12SB2K4/16	SS	SKhynix		C12	1.35v	v	v	v	2133
HyperX	4GB	1Rx8	HX424C12SB2K2/8	SS	SKhynix		C12	1.35v	v	v	v	2133
HyperX	4GB	1Rx8	HX424C12SB2/4	SS	SKhynix		C12	1.35v	v	v	v	2133
HyperX	8GB	2Rx8	HX424C12SB2K4/32	DS	SKhynix		C12	1.35v	v	v	v	2133
HyperX	8GB	2Rx8	HX424C12SB2K2/16	DS	SKhynix		C12	1.35v	v	v	v	2133
HyperX	8GB	2Rx8	HX424C12SB2/8	DS	SKhynix		C12	1.35v	v	v	v	2133
HyperX	8GB	2Rx8	HX424C15FB/8	DS	SKhynix		C15	1.2v	v	v	v	2133
HyperX	8GB	1Rx8	HX424C15FB2K4/32	SS			C15	1.2v	v	v	v	2133
HyperX	8GB	1Rx8	HX424C15FB2K2/16	SS			C15	1.2v	v	v	v	2133
HyperX	8GB	1Rx8	HX424C15FB2/8	SS			C15	1.2v	v	v	v	2133
HyperX	16GB	2Rx8	HX424C15FBK4/64	DS			C15	1.2v	v	v	v	2133
HyperX	16GB	2Rx8	HX424C15FBK2/32	DS			C15	1.2v	v	v	v	2133
HyperX	16GB	2Rx8	HX424C15FB/16	DS			C15	1.2v	v	v	v	2133
HyperX	16GB	2Rx8	HX424C14SBK4/64	DS			C14	1.2v	v	v	v	2133
Kingston	4GB	1Rx8	KVR24N17S8/4	SS	Micron		CL17	1.2v	v	v		2400
Kingston	8GB	2Rx8	KVR24N17D8/8	DS	Micron		CL17	1.2v	v	v		2400

Kingston	8GB	1Rx8	KVR24N17S8/8	SS	Micron		CL17	1.2v	v	v		2400	
Kingston	16GB	2Rx8	KVR24N17D8/16	DS	Micron		CL17	1.2v	v	v		2400	
CORSAIR	4GB	1Rx8	CMK16GX4M4A2400C14	SS	Samsung		14-16-16-31	1.2v	v	v	v	2133	
CORSAIR	4GB	1Rx8	CMK16GX4M4A2400C14B	SS	Samsung		14-16-16-31	1.2v	v	v	v	2133	
CORSAIR	4GB	1Rx8	CMK16GX4M4A2400C14R	SS	Samsung		14-16-16-31	1.2v	v	v	v	2133	
CORSAIR	4GB	1Rx8	CMD16GX4M4A2400C14	SS	Samsung		14-16-16-31	1.2v	v	v	v	2133	
CORSAIR	8GB	2Rx8	CMK32GX4M4A2400C14	DS	Samsung		14-16-16-31	1.2v	v	v	v	2133	
CORSAIR	8GB	2Rx8	CMK32GX4M4A2400C14B	DS	Samsung		14-16-16-31	1.2v	v	v	v	2133	
CORSAIR	8GB	2Rx8	CMK32GX4M4A2400C14R	DS	Samsung		14-16-16-31	1.2v	v	v	v	2133	
CORSAIR	8GB	1Rx8	CMD64GX4M8A2400C14	SS			14-16-16-31	1.2v	v	v	v	2133	
CORSAIR	8GB	2Rx8	CMK64GX4M8A2400C14	DS			14-16-16-31	1.2v	v	v	v	2133	
CORSAIR	8GB	2Rx8	CMK32GX4M4A2400C16	SS			16-16-16-39	1.2v	v	v	v	2133	
CORSAIR	8GB	2Rx8	CMK32GX4M4A2400C16R	SS			16-16-16-39	1.2v	v	v	v	2133	
CORSAIR	8GB	1Rx8	CMK16GX4M2A2400C16	SS			16-16-16-39	1.2v	v	v	v	2133	
CORSAIR	8GB	1Rx8	CMK16GX4M2A2400C16R	SS			16-16-16-39	1.2v	v	v	v	2133	
CORSAIR	8GB	2Rx8	CMD32GX4M4A2400C12	DS			12-14-14-28	1.2v	v	v	v	2133	
CORSAIR	8GB	2Rx8	CMD32GX4M4B2400C10	DS			10-12-12-28	1.35v	v	v	v	2133	
CORSAIR	8GB	2Rx8	CMK32GX4M4A2400C12	DS			12-14-14-28	1.2v	v	v	v	2133	
CORSAIR	16GB	2Rx8	CMK128GX4M8A2400C14	DS			14-16-16-31	1.2v	v	v	v	2133	
CORSAIR	16GB	2Rx8	CMK64GX4M4A2400C14	DS			14-16-16-31	1.2v	v	v	v	2133	
CORSAIR	16GB	2Rx8	CMD128GX4M8A2400C14	DS			14-16-16-31	1.2v	v	v	v	2133	
G.SKILL	4GB	1Rx8	F4-2400C15Q-16GRR	SS	Micron		15-15-15-35	1.2v	v	v	v	2133	
G.SKILL	8GB	2Rx8	F4-2400C15Q-32GRR	DS	Micron		15-15-15-35	1.2v	v	v	v	2133	
G.SKILL	8GB	2Rx8	F4-2400C15Q2-64GRK	DS			15-15-15-35	1.2v	v	v	v	2133	
G.SKILL	16GB	2Rx8	F4-2400C15Q2-128GRK	DS			15-15-15-35	1.2v	v	v	v	2133	
G.SKILL	16GB	2Rx8	F4-2400C14Q2-128GRK	DS			14-14-14-34	1.2v	v	v	v	2133	
ADATA	4GB	1Rx8	AD4U2400W4G17-B	SS	SKHynix			1.2v	v	v		2400	
ADATA	8GB	2Rx8	AD4U2400W8G17-B	DS	SKHynix			1.2v	v	v		2400	
ADATA	8GB	2Rx8	AX4U2400W8G16-DRD	DS			16-16-16	1.2v	v	v	v	2133	
ADATA	8GB	1Rx8	AX4U240038G16-SBF	SS			16-16-16	1.2v	v	v	v	2133	
ADATA	16GB	2Rx8	AX4U2400316G16-SBF	DS			16-16-16	1.2v	v	v	v	2133	
ADATA	16GB	2Rx8	AX4U2400316G16-DRD	DS			16-16-16	1.2v	v	v	v	2133	
Apacer	8GB	2Rx8	AU08GGB24CETBGC	DS			CL17	1.2v	v	v		2400	
Apacer	8GB	1Rx8	AHU08GGB24CDU7G	SS			16-16-16-36		v	v	v	2133	
Apacer	8GB	1Rx8	AU08GGB24CEYBGC	SS			CL17	1.2v	v	v	v	2400	
Apacer	16GB	2Rx8	AHU16GGB24CDU7V	DS			16-16-16-36	1.2v	v	v	v	2133	
Avexir	4GB	1Rx8	AVD4U24001604G-4M	SS	SKHynix		CL16	1.2v	v	v	v	2133	
Avexir	4GB	1Rx8	AVD4UZ124001604G-2COB	SS	Spectek		CL16	1.2v	v	v	v	2133	
Avexir	4GB	1Rx8	AVD4UZ124001604G-4COR	SS	Spectek		16-16-16-36	1.2v		v	v	v	2133
			AVD4UZ124001604G-4COB						v	v	v	2133	
			AVD4UZ124001604G-4COG						v	v	v	2133	
			AVD4UZ124001604G-4COW						v	v	v	2133	
			AVD4UZ124001604G-4COY						v	v	v	2133	
			AVD4UZ124001604G-4COO						v	v	v	2133	
			AVD4UZ124001604G-4CWW						v	v	v	2133	
Avexir	8GB	2Rx8	AVD4U24001608G-4M	DS	SKHynix		CL16	1.2v	v	v	v	2133	
Avexir	8GB	2Rx8	AVD4UZ124001608G-2COB	DS	Spectek		CL16	1.2v	v	v	v	2133	
Avexir	8GB	2Rx8	AVD4UZ124001608G-4COR	DS	Micron		16-16-16-36	1.2v		v	v		2400
			AVD4UZ124001608G-4COB						v	v		2400	
			AVD4UZ124001608G-4COG						v	v		2400	
			AVD4UZ124001608G-4COW						v	v		2400	
			AVD4UZ124001608G-4COY						v	v		2400	
			AVD4UZ124001608G-4COO						v	v		2400	
			AVD4UZ124001608G-4CWW						v	v		2400	
Avexir	16GB	2Rx8	AVD4UZ124001616G-4CWW	DS	Micron		16-16-16-36	1.2v		v	v		2400
			AVD4UZ124001616G-4COB						v	v		2400	
			AVD4UZ124001616G-4COG						v	v		2400	
			AVD4UZ124001616G-4COW						v	v		2400	
			AVD4UZ124001616G-4COY						v	v		2400	
			AVD4UZ124001616G-4COO						v	v		2400	
			AVD4UZ124001616G-4COR						v	v		2400	
CRUCIAL	4GB	1Rx8	BLS4G4D240FSB.8FADG	SS	Micron		16-16-16-39	1.2v	v	v	v	2400	
CRUCIAL	8GB	2Rx8	BLS8G4D240FSB.16FARG	DS	Micron		16-16-16-39	1.2v	v	v	v	2400	
CRUCIAL	8GB	2Rx8	BLS8G4D240FSA.16FARG	DS	Micron		16-16-16-39	1.2v	v	v	v	2400	
CRUCIAL	8GB	1Rx8	CT8G4DFS824A.8FB1	SS	Micron		CL17	1.2v	v	v	v	2400	
CRUCIAL	8GB	2Rx8	CT8G4WFD824A.18FB1	DS	Micron		CL17	1.2v	v	v		2400	
CRUCIAL	8GB	2Rx8	BLS8G4D240FSB.16FAR	DS	Micron		16-16-16-39	1.2v	v	v		2400	
CRUCIAL	16GB	2Rx8	BLS16G4D240FSB.16FAD	DS	Micron		16-16-16-39	1.2v	v	v	v	2400	
CRUCIAL	16GB	2Rx8	CT16G4DFD824A.16FB1	DS	Micron		CL17	1.2v	v	v	v	2400	
CRUCIAL	16GB	2Rx8	CT16G4WFD824A.18FB1	DS	Micron		CL17	1.2v	v	v		2400	
GEIL	8GB	2Rx8	GPR432GB2400C15QC	DS			15-15-15-35	1.2v	v	v	v	2133	
GLOWAY	8GB	2Rx8	8G-2400	DS			15-15-15-35	1.2v	v	v	v	2133	
KLEVV	4GB	1Rx8	KM4B4GX1N-2400-15-15-15-35-0	SS			15-15-15-35	1.2v	v	v	v	2400	
KLEVV	4GB	1Rx8	KM4Z4GX1N-2400-15-15-15-35-1	SS			15-15-15-35	1.2v	v	v	v	2400	
KLEVV	8GB	1Rx8	KM4B8GX1N-2400-15-15-15-35-0	SS			15-15-15-35	1.2v	v	v	v	2400	
KLEVV	8GB	1Rx8	KM4Z8GX1N-2400-15-15-15-35-1	SS			15-15-15-35	1.2v	v	v	v	2400	
KLEVV	16GB	2Rx8	KM4B16X1N-2400-15-15-15-35-0	DS			15-15-15-35	1.2v	v	v	v	2400	
KLEVV	16GB	2Rx8	KM4Z16X1N-2400-15-15-15-35-0	DS			15-15-15-35	1.2v	v	v	v	2400	
PATRIOT	4GB	1Rx8	PV48G240C5K	SS			CL15	1.2v	v	v	v	2133	

PATRIOT	4GB	1Rx8	PVE48G240C5KRD	SS			CL15	1.2v	v	v	v	2133
PATRIOT	8GB	2Rx8	PV432G240C5QK	DS			15-15-15-35	1.2v	v	v	v	2133
PATRIOT	8GB	2Rx8	PX432G240C5QK	DS			15-15-15-35	1.2v	v	v	v	2133
PATRIOT	8GB	2Rx8	PX416G240C5K	DS			15-15-15-35	1.2v	v	v	v	2133
PATRIOT	8GB	2Rx8	PV416G240C5K	DS			CL15	1.2v	v	v	v	2133
Team	4GB	1Rx8	TDTRD416G2400HC15AQC01	SS			15-15-15-35	1.2v	v	v	v	2133
Team	4GB	1Rx8	TDTRD48G2400HC15ADC01	SS			15-15-15-35	1.2v	v	v	v	2133
Team	4GB	1Rx8	TDTRD44G2400HC15A01	SS			15-15-15-35	1.2v	v	v	v	2133
Team	8GB	2Rx8	TED48G2400C16BK	DS			16-16-16-39	1.2v	v	v		2400
Team	8GB	1Rx8	TDTRD432G2400HC15AQC01	SS			15-15-15-35	1.2v	v	v	v	2133
Team	8GB	1Rx8	TDTRD416G2400HC15ADC01	SS			15-15-15-35	1.2v	v	v	v	2133
Team	8GB	1Rx8	TDTRD48G2400HC15A01	SS			15-15-15-35	1.2v	v	v	v	2133
Team	16GB	2Rx8	TED416G2400C16BK	DS			16-16-16-39	1.2v	v	v		2400
Team	16GB	2Rx8	TDTRD464G2400HC15BQC01	DS			15-17-17-35	1.2v	v	v	v	2133
Team	16GB	2Rx8	TDTRD432G2400HC15BDC01	DS			15-17-17-35	1.2v	v	v	v	2133
Team	16GB	2Rx8	TDTRD416G2400HC15B01	DS			15-17-17-35	1.2v	v	v	v	2133
Panram	8GB	1Rx8	PUD42400C158G4NJW	SS			CL15	1.2v	v	v		2400
innodisk	4GB	1Rx8	M4C0-4GSSLCSJ	SS	Samsung			1.2v	v	v		2400
innodisk	8GB	2Rx8	M4C0-8GSSMCSJ	DS	Samsung			1.2v	v	v		2400
V-Color	4GB	1Rx8	TD4G8C17-UH	SS			CL17	1.2v	v	v		2400
V-Color	8GB	2Rx8	TD8G16C17-UH	DS			CL17	1.2v	v	v		2400

DDR4 2133MHz

Module Supplier	Density	# of Ranks x DRAM devices	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support		XMP	Native
									1	2		
HyperX	4GB	1Rx8	HX421C13SBK4/16	SS	SKhynix		CL13	1.2v	v	v		v
HyperX	4GB	1Rx8	HX421C13SBK2/8	SS	SKhynix		CL13	1.2v	v	v		v
HyperX	4GB	1Rx8	HX421C13SB/4	SS	SKhynix		CL13	1.2v	v	v		v
HyperX	8GB	2Rx8	HX421C13SBK4/32	DS	SKhynix		CL13	1.2v	v	v		v
HyperX	8GB	2Rx8	HX421C13SBK2/16	DS	SKhynix		CL13	1.2v	v	v		v
HyperX	8GB	2Rx8	HX421C13SB/8	DS	SKhynix		CL13	1.2v	v	v		v
HyperX	8GB	1Rx8	HX421C14FB2K4/32	SS			CL14	1.2v	v	v	v	v
HyperX	8GB	1Rx8	HX421C14FB2K2/16	SS			CL14	1.2v	v	v	v	v
HyperX	8GB	1Rx8	HX421C14FB2/8	SS			CL14	1.2v	v	v	v	v
HyperX	16GB	2Rx8	HX421C14FBK4/64	DS			CL14	1.2v	v	v	v	v
HyperX	16GB	2Rx8	HX421C14FBK2/32	DS			CL14	1.2v	v	v	v	v
HyperX	16GB	2Rx8	HX421C14FB/16	DS			CL14	1.2v	v	v	v	v
Kingston	4GB	1Rx8	KVR21N15S8/4	SS	SKhynix		CL15	1.2v	v	v		v
Kingston	8GB	2Rx8	KVR21N15D8/8	DS	SKhynix		CL15	1.2v	v	v		v
Kingston	8GB	2Rx8	KVR21E15D8/8HA	DS	SKhynix		CL15	1.2v	v	v		v
Kingston	8GB	1Rx8	KVR21N15S8/8	DS	Micron		CL15	1.2v	v	v		v
Kingston	16GB	2Rx8	KVR21N15D8/16	DS	Micron		CL15	1.2v	v	v	v	v
CORSAIR	4GB	1Rx8	CMK16GX4M4A2133C13	SS			13-15-15-28	1.2v	v	v		v
CORSAIR	4GB	1Rx8	CMK16GX4M4A2133C13B	SS			13-15-15-28	1.2v	v	v		v
CORSAIR	4GB	1Rx8	CMK16GX4M4A2133C13R	SS			13-15-15-28	1.2v	v	v		v
CORSAIR	4GB	1Rx8	CMD16GX4M4B2133C10	SS			10-12-12-31	1.35v	v	v		v
CORSAIR	8GB	2Rx8	CMV8GX4M1A2133C15	DS	SKhynix		CL15	1.2v	v	v		v
CORSAIR	8GB	2Rx8	CMK64GX4M8A2133C13	DS			13-15-15-28	1.2v	v	v		v
CORSAIR	8GB	2Rx8	CMD32GX4M4B2133C10	DS			10-12-12-31	1.35v	v	v	v	v
CORSAIR	16GB	2Rx8	CMV16GX4M1A2133C15	DS			C15	1.2v	v	v		v
CORSAIR	16GB	2Rx8	CMK32GX4M2A2133C13	DS			13-15-15-28	1.2v	v	v		v
CORSAIR	16GB	2Rx8	CMK128GX4M8A2133C13	DS			13-15-15-28	1.2v	v	v		v
G.SKILL	4GB	1Rx8	F4-2133C15Q-16GRR	SS	Micron		15-15-15-35	1.2v	v	v		v
G.SKILL	8GB	2Rx8	F4-2133C15Q-32GRR	DS	Micron		15-15-15-35	1.2v	v	v		v
ADATA	4GB	1Rx8	AD4U2133W4G15-B	SS	SKhynix		CL15	1.2v	v	v		v
Apacer	8GB	2Rx8	78.C1GM3.AF10B	DS			CL15	1.2v	v	v		v
Avexir	4GB	1Rx8	AVD4UZ121331504G-4COR	SS	Spectek		15-15-15-35	1.2v	v	v		v
			AVD4UZ121331504G-4COB						v	v		v
			AVD4UZ121331504G-4COG						v	v		v
			AVD4UZ121331504G-4COW						v	v		v
			AVD4UZ121331504G-4COY						v	v		v
			AVD4UZ121331504G-4COO						v	v		v
			AVD4UZ121331504G-4CWW						v	v		v
Avexir	8GB	2Rx8	AVD4UZ121331508G-4COB	DS	Spectek		15-15-15-35	1.2v	v	v		v
			AVD4UZ121331508G-4COR						v	v		v
			AVD4UZ121331508G-4COG						v	v		v
			AVD4UZ121331508G-4COW						v	v		v
			AVD4UZ121331508G-4COY						v	v		v
			AVD4UZ121331508G-4COO						v	v		v
			AVD4UZ121331508G-4CWW						v	v		v
CRUCIAL	4GB	1Rx8	CT4G4DFS8213.C8FAR1	SS	Micron		CL15	1.2v	v	v		v
CRUCIAL	4GB	1Rx8	CT4G4WFS8213.9FA1	SS	Micron		CL15	1.2v	v	v		v
CRUCIAL	4GB	1Rx8	CT4G4DFS8213.8FA2	SS	Micron			1.2v	v	v		v
CRUCIAL	8GB	2Rx8	CT8G4WFD8213	DS	Micron		CL15	1.2v	v	v		v
CRUCIAL	8GB	2Rx8	CT8G4DFD8213.16FA2	DS	Micron			1.2v	v	v		v
CRUCIAL	8GB	2Rx8	CT8G4DFD8213.C16FAR11	DS	Micron			1.2v	v	v		v
CRUCIAL	8GB	1Rx8	CT8G4DFS8213.8FB1	SS	Micron		CL15	1.2v	v	v		v
CRUCIAL	16GB	2Rx8	CT16G4DFD8213.16FB1	DS	Micron		CL15	1.2v	v	v		v
GEIL	4GB	1Rx8	GPR416GB2133C15QC	SS			15-15-15-36	1.2v	v	v		v
GLOWAY	4GB	1Rx8	4G-2133	SS			15-15-15-35	1.2v	v	v		v

Silicon POWER	4GB	1Rx8	SP004GBLFU213N01	SS	Samsung		CL15	1.2v	v	v		v
Silicon POWER	8GB	2Rx8	SP008GBLFU213N01	DS	Samsung		CL15	1.2v	v	v		v
KLEVV	4GB	1Rx8	KM4B4GX1N-2133-15-15-15-35-0	SS			15-15-15-35	1.2v	v	v		v
KLEVV	8GB	1Rx8	KM4B8GX1N-2133-15-15-15-35-0	SS			15-15-15-35	1.2v	v	v		v
KLEVV	16GB	2Rx8	KM4B16X1N-2133-15-15-15-35-0	DS			15-15-15-35	1.2v	v	v		v
Team	8GB	2Rx8	TED48GM2133C15BK	DS	SKHynix	H5AN4G8NMFR 523V	15-15-15-36	1.2v	v	v		v
Team	16GB	2Rx8	TED416G2133C15BK	DS	SKHynix	H5AN4G8NMFR 523V	15-15-15-36	1.2v	v	v		v
Panram	8GB	1Rx8	PUD42133C158G2VS	SS			CL15	1.2v	v	v		v
V-Color	8GB	1Rx8	TE48G21S815	SS	SKHynix		CL15	1.2v	v	v		v
V-Color	16GB	2Rx8	TE416G21D815	DS	SKHynix		CL15	1.2v	v	v		v

• When running XMP at **DDR4 2667MHz or higher**, the system's stability depends on the CPU's capabilities.

當執行XMP至**DDR4 2667MHz或更高**，系統的穩定性會依據CPU的效能而有所差異。

• Memory modules listed as above is for reference only. Due to massive memory models in market, we can only verify some of them.

以下所列的記憶體模組僅供參考，因市面上的記憶體模組眾多，我們無法一一驗證。

• When enabling Dual Channel mode with two or four memory modules, it is recommended that using the same capacity, brand, speed, and chips of memory modules and also installed in the same color of DDR4 slots.

若要安裝兩支或四支DDR4記憶體模組，建議您使用相同容量/廠牌/速度/顆粒等之記憶體模組。