

### Qualified Vendors List (QVL) for GA-X99-UD4P

Memory modules listed as below 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。

DDR4 3333													
Module Supplier	Size	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support				XMP	Native
								2	4	6	8		
G.SKILL	4GB	F4-3333C16Q-16GRKD	SS	Hynix		16-16-16-36	1.35v	v	v			v	2133
Kingston	4GB	HX433C17PBK4/16	SS			17-17-17-43	1.35v	v	v			v	2133
DDR4 3200													
Module Supplier	Size	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support				XMP	Native
								2	4	6	8		
Apacer	4GB	78.BAGMD.AF20B	SS			16-16-16-36	1.35v	v	v			v	2133
CORSAIR	4GB	CMD16GX4M4B3200C16	SS	Hynix		16-18-18-36	1.35v	v	v			v	2133
G.SKILL	4GB	F4-3200C16Q-16GRKD	SS	Hynix		16-16-16-36	1.35v	v	v	v	v	v	2133
GEIL	4GB	GPR416GB3200C16QC	SS			16-16-16-36	1.35v	v	v	v	v	v	2133
Kingston	4GB	HX432C16PBK4/16	SS	Hynix		16-16-16-39	1.35v	v	v			v	2133
Panram	4GB	PUD43200C164G4NJW	SS	Hynix		16-18-18-36	1.35v	v	v			v	2133
DDR4 3000													
Module Supplier	Size	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support				XMP	Native
								2	4	6	8		
ADATA	4GB	AX4U3000W4G16-B	SS			16-16-16	1.35	v	v	v	v	v	2133
CORSAIR	4GB	CMD16GX4M4B3000C15	SS	Hynix		15-17-17-35	1.35v	v	v			v	2133
CORSAIR	4GB	CMD16GX4M4B3000C15	SS	Samsung		15-17-17-35	1.35v	v	v			v	2133
G.SKILL	4GB	F4-3000C15Q-16GRR	SS	Hynix		15-15-15-35	1.35v	v	v	v	v	v	2133
G.SKILL	8GB	F4-3000C15Q-32GRK	DS	Hynix		15-15-15-35	1.35v	v	v			v	2133
GEIL	8GB	GPR432GB3000C15QC	DS			15-15-15-35	1.35v	v	v			v	2133
Kingston	4GB	HX430C15PB2K4/16	SS	Hynix		CL15	1.35v	v	v			v	2133
Panram	4GB	PUD43000C154G4NJW	SS	Hynix		15-17-17-35	1.35v	v	v	v	v	v	2133
Team	4GB	TCD44G3000C16ABK	SS	Samsung		16-16-16-36	1.35v	v	v	v	v	v	2133
DDR4 2800													
Module Supplier	Size	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support				XMP	Native
								2	4	6	8		
ADATA	4GB	AX4U2800W4G17	SS	Hynix		17-17-17-36	1.2v	v	v	v	v	v	2133
ADATA	8GB	AX4U2800W8G17	DS	Hynix		17-17-17-36	1.2v	v	v	v	v	v	2133
Apacer	4GB	78.BAGM8.AF20B	SS			17-17-17-36	1.2v	v	v	v	v	v	2133
Apacer	8GB	78.CAGM8.AF30B	DS			17-17-17-36	1.2v	v	v	v	v	v	2133
CORSAIR	4GB	CMK16GX4M4A2800C16	SS	Hynix		16-18-18-36	1.2v	v	v	v	v	v	2133
CORSAIR	4GB	CMD16GX4M4A2800C16	SS	Hynix		16-18-18-36	1.2v	v	v	v	v	v	2133
CORSAIR	4GB	CMK16GX4M4A2800C16	SS	Samsung		16-18-18-36	1.2v	v	v			v	2133
CORSAIR	4GB	CMD16GX4M4A2800C16	SS	Samsung		16-18-18-36	1.2v	v	v			v	2133
CORSAIR	8GB	CMD32GX4M4A2800C16	DS	Hynix		16-18-18-36	1.2v	v	v			v	2133
CORSAIR	8GB	CMK32GX4M4A2800C16	DS	Hynix		16-18-18-36	1.2v	v	v			v	2133
G.SKILL	4GB	F4-2800C16Q-16GRR	SS			16-16-16-36	1.2v	v	v	v	v	v	2133
G.SKILL	8GB	F4-2800C16Q-32GRR	DS			16-16-16-36	1.2v	v	v	v	v	v	2133
Kingston	4GB	HX428C14PB2K4/16	SS	Hynix		15-15-15-39	1.35v	v	v	v	v	v	2133
Panram	4GB	PUD42800C164G4NJW	SS	Hynix		16-18-18-36	1.25v	v	v	v	v	v	2133
DDR4 2666													
Module Supplier	Size	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support				XMP	Native
								2	4	6	8		
Apacer	4GB	78.B1GM7.AF20B	SS			16-16-16-36	1.2v	v	v	v	v	v	2133
Apacer	8GB	78.C1GM7.AF30B	DS			16-16-16-36	1.2v	v	v	v	v	v	2133
CORSAIR	4GB	CMK16GX4M4A2666C15	SS	Samsung		15-17-17-35	1.2v	v	v			v	2133
CORSAIR	4GB	CMK16GX4M4A2666C16	SS	Samsung		16-18-18-35	1.2v	v	v			v	2133
CORSAIR	4GB	CMD16GX4M4A2666C15	SS	Samsung		15-17-17-35	1.2v	v	v			v	2133
CORSAIR	4GB	CMD16GX4M4A2666C16	SS	Samsung		16-18-18-35	1.2v	v	v			v	2133
CORSAIR	8GB	CMK32GX4M4A2666C15	DS	Samsung		15-17-17-35	1.2v	v	v			v	2133
CORSAIR	8GB	CMD32GX4M4A2666C15	DS	Samsung		15-17-17-35	1.2v	v	v			v	2133
CORSAIR	8GB	CMD32GX4M4A2666C16	DS	Samsung		16-18-18-35	1.2v	v	v			v	2133
CORSAIR	8GB	CMK32GX4M4A2666C16R	DS	Samsung		16-18-18-35	1.2v	v	v			v	2133
CRUCIAL	4GB	BLE4G4D26AFE4.8FAD	SS			16-17-17-36	1.2v	v	v	v	v	v	2400
CRUCIAL	8GB	BLE8G4D26AFE4.16FAD	DS			16-17-17-36	1.2v	v	v			v	2400
G.SKILL	4GB	F4-2666C15Q-16GRR	SS			15-15-15-35	1.2v	v	v	v	v	v	2133
G.SKILL	8GB	F4-2666C15Q-32GRR	DS			15-15-15-35	1.2v	v	v	v	v	v	2133
ISDT	4GB	IMA451U6MFR8N-CF0	SS			15-15-15-35	1.2v	v	v	v	v	v	2133

DDR4 2400

Module Supplier	Size	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support				XMP	Native
								2	4	6	8		
ADATA	4GB	AX4U2400W4G16	SS	Hynix		16-16-16-39	1.2v	v	v	v	v	v	2133
ADATA	8GB	AX4U2400W8G16	DS	Hynix		16-16-16-39	1.2v	v	v	v	v	v	2133
Apacer	4GB	78.B1GM6.AF20B	SS			16-16-16-36	1.2v	v	v	v	v	v	2133
Apacer	8GB	78.C1GM6.AF30B	DS			16-16-16-36	1.2v	v	v	v	v	v	2133
Avexir	8GB	AVD4U24001608G-4M	DS	Hynix	H5AN4G8NMFR 427A	CL16	1.2v	v	v				2400
CORSAIR	4GB	CMK16GX4M4A2400C14	SS	Samsung		14-16-16-31	1.2v	v	v				2133
CORSAIR	4GB	CMD16GX4M4A2400C14	SS	Samsung		14-16-16-31	1.2v	v	v				2133
CORSAIR	8GB	CMK32GX4M4A2400C14	DS	Samsung		14-16-16-31	1.2v	v	v				2133
CORSAIR	8GB	CMD32GX4M4A2400C14	DS	Samsung		14-16-16-31	1.2v	v	v				2133
CRUCIAL	4GB	BLS4G4D240FSA	SS	Micron		16-16-16-40	1.2v	v	v	v	v	v	2400
CRUCIAL	8GB	BLS8G4D240FSA	DS	Micron		16-16-16-40	1.2v	v	v	v	v	v	2400
G.SKILL	4GB	F4-2400C15Q-16GRR	SS	Micron		15-15-15-35	1.2v	v	v	v	v	v	2133
G.SKILL	8GB	F4-2400C15Q-32GRR	DS	Micron		15-15-15-35	1.2v	v	v	v	v	v	2133
GEIL	4GB	GPB416GB2400C15QC	SS			15-15-15-35	1.2v	v	v	v	v	v	2133
Kingston	4GB	HX424C12PB2K4/16	SS	Hynix		CL12	1.35v	v	v	v	v	v	2133
PATRIOT	4GB	PX416G240C5QK	SS			15-15-15-35	1.2v	v	v				2133
PATRIOT	4GB	PX48G240C5K	SS			15-15-15-35	1.2v	v	v				2133
PATRIOT	8GB	PV432G240C5QK	DS			15-15-15-35	1.2v	v	v	v	v	v	2133
PATRIOT	8GB	PX432G240C5QK	DS			15-15-15-35	1.2v	v	v				2133
PATRIOT	8GB	PX416G240C5K	DS			15-15-15-35	1.2v	v	v				2133
Panram	4GB	PUD42400C154G4NJW	SS	Hynix		15-15-15-35	1.2v	v	v	v	v		2400
Panram	8GB	PUD42400C158G4NJW	DS	Hynix		15-15-15-35	1.2v	v	v	v	v		2400
Team	4GB	TED44GM2400C16BK	SS	Samsung		16-16-16-39	1.2v	v	v	v	v		2400
Team	8GB	TED48GM2400C16BK	DS	Samsung		16-16-16-39	1.2v	v	v	v	v		2400
V-Color	4GB	TD4G8C17-UH	SS			CL17	1.2v	v	v	v	v		2400

DDR4 2133

Module Supplier	Size	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support				XMP	Native
								2	4	6	8		
ADATA	4GB	AD4U2133W4G15-B	SS	Hynix		CL15	1.2v	v	v	v	v		v
ADATA	8GB	AD4U2133W8G15-B	DS	Hynix		CL15	1.2v	v	v	v	v		v
Apacer	4GB	78.B1GM3.AF00B	SS			CL15	1.2v	v	v	v	v		v
Apacer	8GB	78.C1GM3.AF10B	DS			CL15	1.2v	v	v	v	v		v
CORSAIR	4GB	CMV4GX4M1A2133C15-ESM	SS	Micron		CL15	1.2v	v	v				v
CORSAIR	4GB	CMV4GX4M1A2133C15	SS	Hynix		CL15	1.2v	v	v	v	v		v
CORSAIR	4GB	CMK16GX4M4A2133C13	SS			13-15-15-28	1.2v	v	v				v
CORSAIR	8GB	CMV8GX4M1A2133C15-ESM	DS	Micron		CL15	1.2v	v	v				v
CORSAIR	8GB	CMV8GX4M1A2133C15	DS	Hynix		CL15	1.2v	v	v	v	v		v
CORSAIR	8GB	CMK32GX4M4A2133C13	DS			13-15-15-28	1.2v	v	v				v
CORSAIR	8GB	CMK64GX4M8A2133C13	DS			13-15-15-28	1.2v	v	v	v	v		v
CRUCIAL	4GB	CT4G4DFS8213	SS	Micron			1.2v	v	v	v	v		v
CRUCIAL	8GB	CT8G4DFD8213	DS	Micron			1.2v	v	v	v	v		v
G.SKILL	4GB	F4-2133C15Q-16GRR	SS	Micron		15-15-15-35	1.2v	v	v	v	v		v
G.SKILL	8GB	F4-2133C15Q-32GRR	DS	Micron		15-15-15-35	1.2v	v	v	v	v		v
Panram	4GB	PUD42133C154G2VS	SS	Hynix		15-15-15-36	1.2v	v	v				v
Panram	4GB	PUD42133C134G4NJW	SS	Hynix		13-13-13-35	1.2v	v	v	v	v		v
Panram	8GB	PUD42133C158G2VS	DS	Hynix		15-15-15-36	1.2v	v	v				v
Panram	8GB	PUD42133C138G4NJW	DS	Hynix		13-13-13-35	1.2v	v	v	v	v		v
SAMSUNG	4GB	M378A5143DB0-CPB	SS				1.2v	v	v				v
SAMSUNG	8GB	M378A1G43DB0-CPB	DS				1.2v	v	v	v	v		v
Team	4GB	TED44GM2133C15BK	SS			15-15-15-36	1.2v	v	v	v	v		v

RDIMM DDR4 2133 (Non ECC mode)

Module Supplier	Size	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support				XMP	Native
								2	4	6	8		
ADATA	4GB (1Rx8)	AD4R2133W4G15	DS	Micron		CL15	1.2v	v	v	v	v		v
ADATA	8GB (1Rx4)	AD4R2133Y8G15	DS	Hynix		CL15	1.2v	v	v				v
ADATA	16GB (2Rx4)	AD4R2133Y16G15	DS	Micron		CL15	1.2v	v	v				v
CRUCIAL	4GB (1Rx8)	CT4G4RFS8213.9FA2	DS	Micron	41A77D9RGQ		1.2v	v	v	v	v		v
CRUCIAL	8GB (1Rx4)	CT8G4RFS4213	DS	Micron		CL15	1.2	v	v	v	v		v
CRUCIAL	16GB (2Rx4)	CT16G4RFD4213	DS	Micron		CL15	1.2	v	v	v	v		v
Kingston	8GB (1Rx4)	KVR21R15S4/8	DS	Hynix		CL15	1.2	v	v	v	v		v

Kingston	16GB (2Rx4)	KVR21R15D4/16	DS	Hynix		CL15	1.2	v	v	v	v		v
SAMSUNG	8GB (1Rx4)	M393A1G40DB0-CPB	DS	Samsung			1.2v	v	v	v	v		v
SAMSUNG	16GB (2Rx4)	M393A2G40DB0-CPB	DS	Samsung			1.2v	v	v	v	v		v