

## DDR Qualified Vendors List (QVL)

### Model Name: J/N-Series SO-DIMM J4005/J4105/J5005 N4000/N4100/N5000

#### DDR4 3000MHz (downgrade to 2400)

Module Supplier	Density	# of Ranks x DRAM devices	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support	
									1	2
GSkill	16GB	2Rx8	F4-3000C16D-32GRS	DS			16-18-18-43	1.2v	V	V

#### DDR4 2800MHz (downgrade to 2400)

Module Supplier	Density	# of Ranks x DRAM devices	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support	
									1	2
GSkill	16GB	2Rx8	F4-2800C18D-32GRS	DS			18-18-18-43	1.2v	V	V

#### DDR4 2666MHz (downgrade to 2400)

Module Supplier	Density	# of Ranks x DRAM devices	Module P/N.	SS/DS	Chip Brand	Chip P/N.	Timing	Voltage	Memory socket support	
									1	2
Crucial	4GB	1Rx8	BLS4G4S26BFSD.8FBR2	SS				1.2v	V	V
Crucial	8GB	2Rx8	BLS8G4S26BFSD.16FBR2	DS				1.2v	V	V
GSkill	8GB	2Rx8	F4-2666C18D-16GRS	DS			18-18-18-43	1.2v	V	V
GSkill	8GB	2Rx8	F4-2666C18S-8GRS	DS			18-18-18-43	1.2v	V	V
CORSAIR	8GB	2Rx8	CMSX16GX4M2A266C18	DS	Samsung		C18	1.2v	V	V

#### 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	
									1	2
Crucial	4GB	1Rx8	CT4G4SFS824A.C8FBR2	SS	Micron		CL17	1.2v	V	V
HyperX	4GB	1Rx8	HX424S14IBK2/8	SS	SKHynix		14-14-14	1.2v	V	V
Kingston	4GB	1Rx8	KVR24S17S8/4	SS	Micron		CL17	1.2v	V	V
HyperX	4GB	1Rx8	HX424S14IB/4	SS	SKHynix		CL14	1.2v	V	V
innodisk	4GB	1Rx8	M4S0-4GSSNCSJ	SS	Samsung			1.2v	V	V
Team	4GB	1Rx8	TI3CFSD4H61188	SS	SKHynix		CL17	1.2v	V	V
GSkill	8GB	2Rx8	F4-2400C16S-8GRS	DS			16-16-16-39	1.2v	V	V
HyperX	8GB	2Rx8	HX424S14IBK2/16	DS	SKHynix		14-14-14	1.2v	V	V
HyperX	8GB	2Rx8	HX424S14IB/8	DS	SKHynix		CL14	1.2v	V	V
innodisk	8GB	2Rx8	M4S0-8GSSOCSJ	DS	Samsung			1.2v	V	V
Team	8GB	1Rx8	TI3DFSD4H61188	SS	SKHynix		CL17	1.2v	V	V
Panram	8GB	1Rx8	W4N2400PS-8G	SS			CL15	1.2v	V	V
HyperX	16GB	2Rx8	HX424S14IB/16	DS			14-14-14	1.2v	V	V
innodisk	16GB	2Rx8	M4S0-AGS1OCSJ	DS	Samsung			1.2v	V	V
Team	16GB	2Rx8	TI3E6SD4H61189	DS	SKHynix		CL17	1.2v	V	V

#### 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	
									1	2
ADATA	4GB	1Rx8	AD4S2133W4G15-B	SS	SKHynix		CL15	1.2v	V	V
Crucial	4GB	1Rx8	CT4G4SFS8213.8FA2	SS	Micron			1.2v	V	V
GSkill	4GB	1Rx8	F4-2133C15S-4GRS	SS	SKHynix		15-15-15-36	1.2v	V	V
Kingston	4GB	1Rx8	KCP421SS8/4	SS	Micron		CL15	1.2v	V	V
Kingston	4GB	1Rx8	KVR21S15S8/4	SS	SKHynix		CL15	1.2v	V	V
Transcend	4GB	1Rx8	TS512MSH64V1H	SS	SKHynix			1.2v	V	V
ADATA	8GB	2Rx8	AD4S2133W8G15-B	DS	SKHynix		CL15	1.2v	V	V
Crucial	8GB	2Rx8	CT8G4SFD8213.16FA2	DS	Micron			1.2v	V	V
GSkill	8GB	2Rx8	F4-2133C15S-8GRS	DS	SKHynix		15-15-15-36	1.2v	V	V
Kingston	8GB	1Rx8	KVR21S15S8/8	SS	Micron		CL15	1.2v	V	V
Kingston	8GB	2Rx8	KCP421SD8/8	DS	Micron		CL15	1.2v	V	V
Kingston	8GB	2Rx8	KVR21S15D8/8	DS	SKHynix		CL15	1.2v	V	V
Transcend	8GB	2Rx8	TS1GSH64V1H	DS	SKHynix			1.2v	V	V
Panram	8GB	1Rx8	W4N2133PS-8G	SS			CL15	1.2v	V	V
V-color	8GB	1Rx8	TF48G21S815-iMS	SS			CL15	1.2v	V	V
Kingston	16GB	2Rx8	KVR21S15D8/16	DS	Micron		CL15	1.2v	V	V
Kingston	16GB	2Rx8	KCP421SD8/16	DS	Micron		CL15	1.2v	V	V

• 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 modules, it is recommended that using the same capacity, brand, speed, and chips of memory modules and also installed in the same color of DDR3 slots.

若要安裝兩支DDR3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。