

### DDR4 4000 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)		
						1 DIMM	2 DIMM	4 DIMM
G.SKILL	F4-4000C18Q-16GTZ	16GB(4GB*4)	SS	18-22-22-40	1.35V		•	•
G.SKILL	F4-4000C18Q-32GTZ	32GB(8GB*4)	SS	18-19-19-39	1.35V		•	•
G.SKILL	F4-4000C18Q-32GTZSW	32GB(8GB*4)	SS	18-19-19-39	1.35V		•	•
G.SKILL	F4-4000C18Q-32GTZKW	32GB(8GB*4)	SS	18-19-19-39	1.35V		•	•
CORSAIR	CMK16GX4M2E4000C19R ver4.31	16GB(8GB*2)	SS	19-23-23-45R	1.35V		•	
CORSAIR	CMK16GX4M2B4000C19R ver4.31	16GB(8GB*2)	SS	19-23-23-45R	1.35V		•	
CORSAIR	CMK32GX4M4B4000C19R ver4.31	32GB(8GB*4)	SS	19-23-23-45R	1.35V		•	•

### DDR4 3866 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)		
						1 DIMM	2 DIMM	4 DIMM
G.SKILL	F4-3866C18Q-16GTZ	4G	SS	18-22-22-42	1.35V			•
G.SKILL	F4-3866C19D-8GTZ	8GB(4GB*2)	SS	18-22-22-40	1.35V		•	
G.SKILL	F4-3866C19Q-16GTZ	16GB(4GB*4)	SS	18-22-22-40	1.35V		•	•
G.SKILL	F4-3866C18Q-32GTZ	32GB(8GB*4)	SS	18-19-19-39	1.35V		•	•
G.SKILL	F4-3866C18Q-32GTZSW	32GB(8GB*4)	SS	18-19-19-39	1.35V		•	•
G.SKILL	F4-3866C18Q-32GTZKW	32GB(8GB*4)	SS	18-19-19-39	1.35V		•	•
CORSAIR	CMK8GX4M2B3866C18 ver4.24	8GB(4GB*2)	SS	18-22-22-40	1.35V		•	
CORSAIR	CMD8GX4M2B3866C18 ver4.24	8GB(4GB*2)	SS	18-22-22-40	1.35V		•	
CORSAIR	CMD16GX4M2B3866C18 ver4.31	16GB(8GB*2)	SS	18-22-22-40	1.35V		•	
CORSAIR	CMK16GX4M2B3866C18 ver4.31	16GB(8GB*2)	SS	18-22-22-40	1.35V		•	
CORSAIR	CMK16GX4M4B3866C18 ver4.24	16GB(4GB*4)	SS	18-22-22-40	1.35V		•	•
CORSAIR	CMK16GX4M4B3866C18R ver4.24	16GB(4GB*4)	SS	18-22-22-40R	1.35V		•	•
CORSAIR	CMD32GX4M4B3866C18 ver4.31	32GB(8GB*4)	SS	18-22-22-40	1.35V		•	•

CORSAIR	CMK32GX4M4B3866C18R ver4.31	32GB(8GB*4)	SS	18-22-22-40R	1.35V	•	•
TEAM GROUP	TCD44G3866C18ABK	16GB(4GB*4)	SS	18-20-20-39	1.35V	•	•
G.SKILL	F4-3866C18Q-32GTZR	32GB(8GB*4)	SS	18-19-19-39	1.35V		•
ADATA	AX4U386638G18-QRS	32GB(8GB*4)	SS	18-19-19-39	1.35V		•

### DDR4 3733 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)		
						1 DIMM	2 DIMM	4 DIMM
G.SKILL	F4-3733C17D-8GRK	8GB(4GB*2)	SS	17-19-19-39	1.35V		•	
G.SKILL	F4-3733C17D-8GTZ	8GB(4GB*2)	SS	17-19-19-39	1.35V		•	
G.SKILL	F4-3733C17D-8GVK	8GB(4GB*2)	SS	17-19-19-39	1.35V		•	
G.SKILL	F4-3733C17D-16GTZ	16GB(8GB*2)	SS	17-19-19-39	1.35V		•	
G.SKILL	F4-3733C17Q-16GRK	16GB(4GB*4)	SS	17-19-19-39	1.35V		•	•
G.SKILL	F4-3733C17Q-16GTZ	16GB(4GB*4)	SS	17-19-19-39	1.35V		•	•
G.SKILL	F4-3733C17Q-16GVK	16GB(4GB*4)	SS	17-19-19-39	1.35V		•	•
G.SKILL	F4-3733C17D-16GTZ	16GB(8GB*2)	SS	17-19-19-39	1.35V		•	
G.SKILL	F4-3733C17D-16GTZA	16GB(8GB*2)	SS	17-17-17-37	1.35V		•	
G.SKILL	F4-3733C17Q-32GTZ	32GB(8GB*4)	SS	17-17-17-37	1.35V		•	•
G.SKILL	F4-3733C17Q-32GTZSW	32GB(8GB*4)	SS	17-17-17-37	1.35V		•	•
G.SKILL	F4-3733C17Q-32GTZKW	32GB(8GB*4)	SS	17-17-17-37	1.35V		•	•
G.SKILL	F4-3733C17Q-32GTZR	32GB(8GB*4)	SS	17-17-17-37	1.35V		•	•
CORSAIR	CMD8GX4M2B3733C17 ver4.24	8GB(4GB*2)	SS	17-19-19-39	1.35V		•	
CORSAIR	CMK8GX4M2B3733C17 ver4.24	8GB(4GB*2)	SS	17-19-19-39	1.35V		•	
CORSAIR	CMD16GX4M2B3733C17 ver4.31	16GB(8GB*2)	SS	17-19-19-39	1.35V		•	
CORSAIR	CMK16GX4M2B3733C17R ver4.31	16GB(8GB*2)	SS	17-19-19-39R	1.35V		•	
CORSAIR	CMK16GX4M4B3733C17 ver4.24	16GB(4GB*4)	SS	17-19-19-39	1.35V		•	•
CORSAIR	CMD32GX4M4B3733C17 ver4.31	32GB(8GB*4)	SS	17-19-19-39	1.35V		•	•

CORSAIR	CMK32GX4M4B3733C17R ver4.31	32GB(8GB*4)	SS	17-19-19-39R	1.35V	•	•
APACER	AHU08GGB37CEU5H(EK.16GA6.G FBK2)	16GB(8GB*2)	SS	17-19-19-39	1.35V	•	
SUPERTAL ENT	F3733UB8G	8GB	SS	17-19-19-39	1.35V	•	•
PATRIOT	PV416G373C7K	16GB(8GB*2)	SS	17-19-19-39	1.35V	•	

### DDR4 3600 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)		
						1 DIMM	2 DIMM	4 DIMM
GALAXY	HOF4CALCS3600K17LD162C	16G(8G*2)	SS	17-18-18-38	1.35V		•	
G.SKILL	F4-3600C17D-8GRK	8GB(4GB*2)	SS	17-18-18-38	1.35V		•	
G.SKILL	F4-3600C17D-8GTZ	8GB(4GB*2)	SS	17-18-18-38	1.35V		•	
G.SKILL	F4-3600C17D-8GVK	8GB(4GB*2)	SS	17-18-18-38	1.35V		•	
G.SKILL	F4-3600C17D-16GVK	16GB(8GB*2)	SS	17-18-18-38	1.35V		•	
G.SKILL	F4-3600C17D-16GTZ	16GB(8GB*2)	SS	17-18-18-38	1.35V		•	
G.SKILL	F4-3600C16D-16GVK	16GB(8GB*2)	SS	16-16-16-36	1.35V		•	
G.SKILL	F4-3600C16D-16GTZ	16GB(8GB*2)	SS	16-16-16-36	1.35V		•	
G.SKILL	F4-3600C15D-16GTZ	16GB(8GB*2)	SS	15-15-15-35	1.35V		•	
G.SKILL	F4-3600C17Q-16GVK	16GB(4GB*4)	SS	17-18-18-38	1.35V		•	•
G.SKILL	F4-3600C17Q-16GRK	16GB(4GB*4)	SS	17-18-18-38	1.35V		•	•
G.SKILL	F4-3600C17Q-16GTZ	16GB(4GB*4)	SS	17-18-18-38	1.35V		•	•
G.SKILL	F4-3600C17Q-32GVK	32GB(8GB*4)	SS	17-18-18-38	1.35V		•	•
G.SKILL	F4-3600C17Q-32GTZ	32GB(8GB*4)	SS	17-18-18-38	1.35V		•	•
G.SKILL	F4-3600C17Q-32GTZA	32GB(8GB*4)	SS	17-17-17-37	1.35V		•	•
G.SKILL	F4-3600C16Q-32GTZB	32GB(8GB*4)	SS	16-18-18-38	1.35V		•	•
G.SKILL	F4-3600C16Q-32GTZSWB	32GB(8GB*4)	SS	16-18-18-38	1.35V		•	•
G.SKILL	F4-3600C16Q-32GTZBKW	32GB(8GB*4)	SS	16-18-18-38	1.35V		•	•
G.SKILL	F4-3600C17Q-32GTZR	32GB(8GB*4)	SS	17-18-18-38	1.35V		•	•
CORSAIR	CMD8GX4M2B3600C18 ver4.24	8GB(4GB*2)	SS	18-19-19-39	1.35V		•	

CORSAIR	CMK8GX4M2B3600C18 ver4.24	8GB(4GB*2)	SS	18-19-19-39	1.35V				•
CORSAIR	CMK16GX4M2B3600C16R ver4.31	16GB(8GB*2)	SS	16-18-18-36R	1.35V				•
CORSAIR	CMD16GX4M2B3600C18 ver4.31	16GB(8GB*2)	SS	18-19-19-39	1.35V				•
CORSAIR	CMK16GX4M2B3600C18 ver4.31	16GB(8GB*2)	SS	18-19-19-39	1.35V				•
CORSAIR	CMK16GX4M2B3600C18R ver4.31	16GB(8GB*2)	SS	18-19-19-39R	1.35V				•
CORSAIR	CMR16GX4M2C3600C18 ver4.31	16GB(8GB*2)	SS	18-19-19-39R	1.35V				•
CORSAIR	CMK16GX4M4B3600C18 ver4.24	16GB(4GB*4)	SS	18-19-19-39	1.35V				• •
CORSAIR	CMD32GX4M4B3600C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V				• •
CORSAIR	CMK32GX4M4B3600C16R ver4.31	32GB(8GB*4)	SS	16-18-18-36R	1.35V				• •
CORSAIR	CMD32GX4M4B3600C18 ver4.31	32GB(8GB*4)	SS	18-19-19-39	1.35V				• •
CORSAIR	CMK32GX4M4B3600C18 ver4.31	32GB(8GB*4)	SS	18-19-19-39	1.35V				• •
CORSAIR	CMK32GX4M4B3600C18R ver4.31	32GB(8GB*4)	SS	18-19-19-39R	1.35V				• •
CORSAIR	CMR32GX4M4C3600C18 ver4.31	32GB(8GB*4)	SS	18-19-19-39	1.35V				• •
CORSAIR	CMT32GX4M4K3600C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•			• •
APACER	AHU08GGB36CJU5H(EK.16GA4.G GBK2)	16GB(8GB*2)	SS	18-18-18-42	1.35V				•
KINGSTON	HX436C17PB3K4/32	32GB(8GB*4)	SS	17-18-18-38	1.35V				• •
PATRIOT	PV48G360C7K	8GB(4GB*2)	SS	17-18-18-36	1.35V				•
APACER	AHU08GGB36CEU5H(EK.16GA4.G FBK2)	8GB	SS	17-19-19-39	1.35V				• •

### DDR4 3466 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)			
						1 DIMM	2 DIMM	4 DIMM	
CORSAIR	CMD16GX4M4B3466C18 ( Ver4.23 )	16GB ( 4GB*4 )	SS	18-19-19-39	1.35V				•
G.SKILL	F4-3466C16Q2-64GTZ	64GB ( 8GBx8 )	SS	16-18-18-38	1.35V				•

G.SKILL	F4-3466C16D-8GRK	8GB(4GB*2)	SS	16-18-18-38	1.35V	•	
G.SKILL	F4-3466C16D-8GTZ	8GB(4GB*2)	SS	16-18-18-38	1.35V	•	
G.SKILL	F4-3466C16D-8GVK	8GB(4GB*2)	SS	16-18-18-38	1.35V	•	
G.SKILL	F4-3466C16Q-16GRK	16GB(4GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16D-16GVR	16GB(8GB*2)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16D-16GVK	16GB(8GB*2)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16D-16GTZ	16GB(8GB*2)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16D-16GTZKW	16GB(8GB*2)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16D-16GTZSW	16GB(8GB*2)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16D-16GTZSK	16GB(8GB*2)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16Q-16GVK	16GB(4GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16Q-32GVR	32GB(8GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16Q-32GVK	32GB(8GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16Q-32GTZ	32GB(8GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16Q-32GTZSW	32GB(8GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16Q-64GTZ	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16Q-64GTZSW	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3466C16Q-64GTZR	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
CORSAIR	CMD16GX4M2B3466C16 ver4.31	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	
CORSAIR	CMK16GX4M2B3466C16 ver4.31	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	
CORSAIR	CMK16GX4M2B3466C16R ver4.31	16GB(8GB*2)	SS	16-18-18-36R	1.35V	•	
CORSAIR	CMR16GX4M2C3466C16 ver4.31	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	
CORSAIR	CMD16GX4M4B3466C16 ver4.24	16GB(4GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMK16GX4M4B3466C16 ver4.24	16GB(4GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMK16GX4M4B3466C16R ver4.24	16GB(4GB*4)	SS	16-18-18-36R	1.35V	•	•
CORSAIR	CMD32GX4M4B3466C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMU32GX4M4C3466C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMU32GX4M4C3466C16R ver4.31	32GB(8GB*4)	SS	16-18-18-36R	1.35V	•	•

CORSAIR	CMU32GX4M4B3466C16 ver4.24	32GB(8GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMD32GX4M2B3466C16 ver4.31	32GB(16GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMK32GX4M2B3466C16 ver4.31	32GB(16GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMK32GX4M2B3466C16R ver4.31	32GB(16GB*2)	DS	16-18-18-36R	1.35V	•	
CORSAIR	CMK32GX4M4B3466C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMK32GX4M4B3466C16R ver4.31	32GB(8GB*4)	SS	16-18-18-36R	1.35V	•	•
CORSAIR	CMR32GX4M4C3466C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMD64GX4M4B3466C16 ver4.31	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMK64GX4M4B3466C16 ver4.31	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMK64GX4M4B3466C16R ver4.31	64GB(16GB*4)	DS	16-18-18-36R	1.35V	•	•
CORSAIR	CMR64GX4M4C3466C16R ver4.31	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
APACER	AHU08GGB34CJU5H(EK.16GA3.G GBK2)	16GB(8GB*2)	SS	18-18-18-42	1.35V	•	
APACER	AHU08GGB34CJU6H(EK.16GA3.G GAK2)	16GB(8GB*2)	SS	18-18-18-42	1.35V	•	
Hyper X	HX434C19FB2K2/16	16GB(8GB*2)	SS	19-23-23-42	1.2V	•	•

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Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)		
						1 DIMM	2 DIMM	4 DIMM
CORSAIR	CMU32GX4M4C3400C16R (Ver5.20)	32GB(4*8GB)	SS	16-18-18-36	1.35V			•
G.SKILL	F4-3466C16Q2-64GTZ	64GB ( 8GBx8 )	SS	16-18-18-38	1.35V			•
G.SKILL	F4-3400C16D-16GRK	16GB(8GB*2)	DS	16-18-18-38	1.35V		•	
G.SKILL	F4-3400C16D-16GTZ	16GB(8GB*2)	DS	16-18-18-38	1.35V		•	
G.SKILL	F4-3400C16D-16GVK	16GB(8GB*2)	DS	16-18-18-38	1.35V		•	
G.SKILL	F4-3400C16D-32GRK	32GB(16GB*2)	DS	16-18-18-38	1.35V		•	

G.SKILL	F4-3400C16D-32GVR	32GB(16GB*2)	DS	16-16-16-36	1.35V	•	
G.SKILL	F4-3400C16D-32GVK	32GB(16GB*2)	DS	16-16-16-36	1.35V	•	
G.SKILL	F4-3400C16D-32GTZ	32GB(16GB*2)	DS	16-16-16-36	1.35V	•	
G.SKILL	F4-3400C16D-32GVK	32GB(16GB*2)	DS	16-18-18-38	1.35V	•	
G.SKILL	F4-3400C16Q-16GRBD	16GB(4GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3400C16Q-16GRKD	16GB(4GB*4)	SS	16-16-16-36	1.35V	•	•
G.SKILL	F4-3400C16Q-16GRBD	16GB(4GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3400C16Q-32GRK	32GB(8GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3400C16Q-32GVK	32GB(8GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3400C16Q-32GTZ	32GB(8GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3400C16Q-32GTZSW	32GB(8GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3400C16Q-32GVK	32GB(8GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3400C16Q-64GRK	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3400C16Q-64GVR	64GB(16GB*4)	DS	16-16-16-36	1.35V	•	•
G.SKILL	F4-3400C16Q-64GVK	64GB(16GB*4)	DS	16-16-16-36	1.35V	•	•
G.SKILL	F4-3400C16Q-64GTZ	64GB(16GB*4)	DS	16-16-16-36	1.35V	•	•
G.SKILL	F4-3400C16Q-64GVK	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
CORSAIR	CMD16GX4M4B3400C16 ver. 4.24	16GB(4GB*4)	SS	16-18-18-40	1.35V	•	
CORSAIR	CMR16GX4M2C3400C16 ver. 4.31	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMK16GX4M4B3400C16 ver. 4.23	16GB(4GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMK16GX4M2B3400C16 ver. 4.23	16GB(8GB*2)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMR32GX4M4C3400C16 ver. 4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMU32GX4M4B3400C16 ver. 4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMU32GX4M4C3400C16 ver. 4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•

CORSAIR	CMU32GX4M4B3400C16R ver. 4.31	32GB(8GB*4)	SS	16-18-18-36R	1.35V	•	•
CORSAIR	CMU32GX4M4C3400C16R ver. 4.31	32GB(8GB*4)	SS	16-18-18-36R	1.35V	•	•
CORSAIR	CMK32GX4M4B3400C16 ver. 4.23	32GB(8GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMK32GX4M4C3400C16 ver. 4.23	32GB(8GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMK32GX4M4C3400C16R ver. 4.23	32GB(8GB*4)	DS	16-18-18-36R	1.35V	•	•
PATRIOT	PV48G340C6K	8GB(4GB*2)	SS	16-18-18-36	1.35V	•	
PATRIOT	PV416G340C6K	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	

### DDR4 3300 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)		
						1 DIMM	2 DIMM	4 DIMM
ADATA	AX4U3333W4G16-QGZ	32GB ( 8GB*4 )	SS	16-16-16	1.35V			•
G.SKILL	F4-3300C16Q-16GRKD	16GB ( 4GB*4)	SS	16-16-16-36	1.35V			•
G.SKILL	F4-3333C16Q-16GRKD	16GB(4GB*4)	SS	16-18-18-36	1.35V		•	•
G.SKILL	F4-3333C16D-16GVR	16GB(8GB*2)	SS	16-16-16-36	1.35V		•	
G.SKILL	F4-3333C16D-16GVK	16GB(8GB*2)	SS	16-16-16-36	1.35V		•	
G.SKILL	F4-3333C16D-16GTZ	16GB(8GB*2)	SS	16-16-16-36	1.35V		•	
G.SKILL	F4-3333C16D-16GTZB	16GB(8GB*2)	SS	16-18-18-38	1.35V		•	
G.SKILL	F4-3333C16D-16GTZKW	16GB(8GB*2)	SS	16-18-18-38	1.35V		•	
G.SKILL	F4-3333C16D-16GTZSW	16GB(8GB*2)	SS	16-18-18-38	1.35V		•	
G.SKILL	F4-3333C16D-16GTZSK	16GB(8GB*2)	SS	16-18-18-38	1.35V		•	
G.SKILL	F4-3333C16Q-32GVR	32GB(8GB*4)	SS	16-16-16-36	1.35V		•	•
G.SKILL	F4-3333C16Q-32GVK	32GB(8GB*4)	SS	16-16-16-36	1.35V		•	•
G.SKILL	F4-3333C16Q-32GTZ	32GB(8GB*4)	SS	16-16-16-36	1.35V		•	•
G.SKILL	F4-3333C16Q-32GTZB	32GB(8GB*4)	SS	16-18-18-38	1.35V		•	•
G.SKILL	F4-3333C16Q-32GTZSW	32GB(8GB*4)	SS	16-18-18-38	1.35V		•	•



G.SKILL	F4-3333C16D-32GVR	32GB(16GB*2)	DS	16-16-16-36	1.35V	•	
G.SKILL	F4-3333C16D-32GVK	32GB(16GB*2)	DS	16-16-16-36	1.35V	•	
G.SKILL	F4-3333C16D-32GTZ	32GB(16GB*2)	DS	16-16-16-36	1.35V	•	
G.SKILL	F4-3333C16D-32GTZB	32GB(16GB*2)	DS	16-18-18-38	1.35V	•	
G.SKILL	F4-3333C16D-32GTZKW	32GB(16GB*2)	DS	16-18-18-38	1.35V	•	
G.SKILL	F4-3333C16D-32GTZSW	32GB(16GB*2)	DS	16-18-18-38	1.35V	•	
G.SKILL	F4-3333C16D-32GTZSK	32GB(16GB*2)	DS	16-18-18-38	1.35V	•	
G.SKILL	F4-3333C16Q-64GVR	64GB(16GB*4)	DS	16-16-16-36	1.35V	•	•
G.SKILL	F4-3333C16Q-64GVK	64GB(16GB*4)	DS	16-16-16-36	1.35V	•	•
G.SKILL	F4-3333C16Q-64GTZ	64GB(16GB*4)	DS	16-16-16-36	1.35V	•	•
G.SKILL	F4-3333C16Q-64GTZB	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3333C16Q-64GTZSW	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
CORSAIR	CMD16GX4M2B3333C16 ver4.31	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	
CORSAIR	CMK16GX4M2C3333C16 ver4.31	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	
CORSAIR	CMK16GX4M2B3333C16 ver4.24	16GB(8GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMD16GX4M4B3333C16 ver4.24	16GB(4GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMK16GX4M4B3333C16 ver4.24	16GB(4GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMK16GX4M4B3333C16R ver4.24	16GB(4GB*4)	SS	16-18-18-36R	1.35V	•	•
CORSAIR	CMD32GX4M2B3333C16 ver4.31	32GB(16GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMD32GX4M4B3333C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMR32GX4M2C3333C16 ver4.31	32GB(16GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMR32GX4M4C3333C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMK32GX4M2B3333C16 ver4.31	32GB(8GB*4)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMK32GX4M4B3333C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMD64GX4M4B3333C16 ver4.31	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMR64GX4M4C3333C16 ver4.31	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMK64GX4M4B3333C16 ver4.31	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMK64GX4M4B3333C16R ver4.31	64GB(16GB*4)	DS	16-18-18-36R	1.35V	•	•
A-DATA	AX4U3333W4G16	16GB(4GB*4)	SS	16-16-16-36	1.35V	•	

KINGSTON	HX433C16PB3K4/32	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
KINGSTON	HX433C16PB3K2/16	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	

### DDR4 3200 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)		
						1 DIMM	2 DIMM	4 DIMM
MUSHKIN	997202F	8GB ( 4GB*2)	SS	15-15-15-36	1.2V			•
G.SKILL	F4-3200C16D-8GVKB	8GB ( 4GB*2)	SS	16-18-18-38	1.35V			•
APACER	78.BAGMD.AF20B	8GB ( 4GB*2)	SS	16-16-16-36	1.35V			•
PATRIOT	PV48G320C6K	8GB ( 4GB*2)	SS		1.35V			•
HyperX	HX432C16PB3K4/32	32GB(8GB*4)	SS	16-18-18-36	1.35V			•
ADATA	AX4U3200W8G16-BGZ		DS	16-16-16	1.35V		•	
G.SKILL	F4-3200C16D-16GTZR	8GB*2	SS	18-18-18-38	1.35V			•
CORSAIR	CMD16GX4M2B3200C16(Ver3.21)	16G	DS	16-18-18-36	1.35V		•	
TIGO	TMKU8GF58-3200X	8GB*2	DS	16-18-18-38	1.35V		•	
G.SKILL	F4-3200C14Q-32GFX	32GB ( 4x 8GB )	SS	14-14-14-34	1.35V			•
CORSAIR	CMK64GX4M8B3200C16(Ver4.31)	32GB(2*16GB)	DS	16-18-18-36	1.35V		•	
Team	TF1D48G3200HC16CBK	8GB	SS	16-18-18-38	1.35V			•
Team	TF2D48G3200HC16CBK	8GB	SS	16-18-18-38	1.35V			•
G.SKILL	F4-3200C16Q-32GTZR	32GB (4x8GB)	SS	16-18-18-38	1.35V			•
CORSAIR	CMK64GX4M8B3200C16(Ver4.31)	16GB ( 2x 8GB )	DS	16-18-18-36	1.35V		•	
G.SKILL	F4-3200C16D-16GTZ	16GB ( 2x 8GB )	DS	16-16-16-36	1.35V		•	
G.SKILL	F4-3200C16S-8GRKB	8GB	SS	16-18-18-38	1.35V		•	•
G.SKILL	F4-3200C16D-8GRK	8GB(4GB*2)	SS	16-16-16-36	1.35V		•	
G.SKILL	F4-3200C16D-8GTZ	8GB(4GB*2)	SS	16-16-16-36	1.35V		•	
G.SKILL	F4-3200C16D-8GVK	8GB(4GB*2)	SS	16-16-16-36	1.35V		•	
G.SKILL	F4-3200C16Q-16GRR	16GB(4GB*4)	SS	16-16-16-36	1.35V		•	•
G.SKILL	F4-3200C16Q-16GRB	16GB(4GB*4)	SS	16-16-16-36	1.35V		•	•
G.SKILL	F4-3200C16Q-16GRKD	16GB(4GB*4)	SS	16-16-16-36	1.35V		•	•
G.SKILL	F4-3200C16Q-16GTZ	16GB(4GB*4)	SS	16-16-16-36	1.35V		•	•
G.SKILL	F4-3200C16Q-16GVK	16GB(4GB*4)	SS	16-16-16-36	1.35V		•	•

G.SKILL	F4-3200C16D-16GRK	16GB(8GB*2)	DS	16-16-16-36	1.35V	•
G.SKILL	F4-3200C16D-16GVR	16GB(8GB*2)	DS	16-16-16-36	1.35V	•
G.SKILL	F4-3200C16D-16GVK	16GB(8GB*2)	DS	16-16-16-36	1.35V	•
G.SKILL	F4-3200C16D-16GVS	16GB(8GB*2)	DS	16-16-16-36	1.35V	•
G.SKILL	F4-3200C16D-16GVKB	16GB(8GB*2)	SS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-16GVGB	16GB(8GB*2)	SS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-16GTZLG	16GB(8GB*2)	SS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-16GTZLO	16GB(8GB*2)	SS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-16GTZB	16GB(8GB*2)	SS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-16GTZKW	16GB(8GB*2)	SS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-16GTZKY	16GB(8GB*2)	SS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-6GTZKO	16GB(8GB*2)	SS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-16GTZSW	16GB(8GB*2)	SS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-16GTZSK	16GB(8GB*2)	SS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C15D-16GVR	16GB(8GB*2)	SS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-16GVK	16GB(8GB*2)	SS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-16GTZ	16GB(8GB*2)	SS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-16GTZKW	16GB(8GB*2)	SS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-16GTZKY	16GB(8GB*2)	SS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-6GTZKO	16GB(8GB*2)	SS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-16GTZSW	16GB(8GB*2)	SS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-16GTZSK	16GB(8GB*2)	SS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C14D-16GVR	16GB(8GB*2)	SS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-16GVK	16GB(8GB*2)	SS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-16GTZ	16GB(8GB*2)	SS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-16GTZKW	16GB(8GB*2)	SS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-16GTZKY	16GB(8GB*2)	SS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-6GTZKO	16GB(8GB*2)	SS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-16GTZSW	16GB(8GB*2)	SS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-16GTZSK	16GB(8GB*2)	SS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C15D-32GRK	32GB(16GB*2)	DS	15-15-15-35	1.35V	•

G.SKILL	F4-3200C15D-32GTZ	32GB(16GB*2)	DS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-32GVK	32GB(16GB*2)	DS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-32GVR	32GB(16GB*2)	DS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C16D-32GRK	32GB(16GB*2)	DS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-32GTZA	32GB(16GB*2)	DS	16-16-16-36	1.35V	•
G.SKILL	F4-3200C16D-32GVK	32GB(16GB*2)	DS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-32GVKA	32GB(16GB*2)	DS	16-16-16-36	1.35V	•
G.SKILL	F4-3200C16D-32GTZ	32GB(16GB*2)	DS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-32GTZKW	32GB(16GB*2)	DS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-32GTZKY	32GB(16GB*2)	DS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-32GTZKO	32GB(16GB*2)	DS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-32GTZSW	32GB(16GB*2)	DS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16D-32GTZSK	32GB(16GB*2)	DS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C15D-32GTZ	32GB(16GB*2)	DS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-32GTZKW	32GB(16GB*2)	DS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-32GTZKY	32GB(16GB*2)	DS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-32GTZKO	32GB(16GB*2)	DS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-32GTZSW	32GB(16GB*2)	DS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C15D-32GTZSK	32GB(16GB*2)	DS	15-15-15-35	1.35V	•
G.SKILL	F4-3200C14D-32GVR	32GB(16GB*2)	DS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-32GVK	32GB(16GB*2)	DS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-32GTZ	32GB(16GB*2)	DS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-32GTZKW	32GB(16GB*2)	DS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-32GTZKY	32GB(16GB*2)	DS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-32GTZKO	32GB(16GB*2)	DS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-32GTZSW	32GB(16GB*2)	DS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C14D-32GTZSK	32GB(16GB*2)	DS	14-14-14-34	1.35V	•
G.SKILL	F4-3200C16D-32GVK	32GB(16GB*2)	DS	16-18-18-38	1.35V	•
G.SKILL	F4-3200C16Q-32GRK	32GB(8GB*4)	DS	16-16-16-36	1.35V	• •
G.SKILL	F4-3200C16Q-32GVK	32GB(8GB*4)	DS	16-16-16-36	1.35V	• •
G.SKILL	F4-3200C16Q-32GVKB	32GB(8GB*4)	SS	16-18-18-38	1.35V	• •

G.SKILL	F4-3200C16Q-32GTZB	32GB(8GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C16Q-32GTZKW	32GB(8GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C16Q-32GTZKY	32GB(8GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C16Q-32GTZKO	32GB(8GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C16Q-32GTZSW	32GB(8GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C16Q-32GTZSK	32GB(8GB*4)	SS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C15Q-32GVR	32GB(8GB*4)	SS	15-15-15-35	1.35V	•	•
G.SKILL	F4-3200C15Q-32GVK	32GB(8GB*4)	SS	15-15-15-35	1.35V	•	•
G.SKILL	F4-3200C15Q-32GTZ	32GB(8GB*4)	SS	15-15-15-35	1.35V	•	•
G.SKILL	F4-3200C15Q-32GTZSW	32GB(8GB*4)	SS	15-15-15-35	1.35V	•	•
G.SKILL	F4-3200C14Q-32GVR	32GB(8GB*4)	SS	14-14-14-34	1.35V	•	•
G.SKILL	F4-3200C14Q-32GVK	32GB(8GB*4)	SS	14-14-14-34	1.35V	•	•
G.SKILL	F4-3200C14Q-32GTZ	32GB(8GB*4)	SS	14-14-14-34	1.35V	•	•
G.SKILL	F4-3200C14Q-32GTZSW	32GB(8GB*4)	SS	14-14-14-34	1.35V	•	•
G.SKILL	F4-3200C16Q-32GVK	32GB(8GB*4)	DS	16-16-16-36	1.35V	•	•
G.SKILL	F4-3200C14Q-32GTZR	32GB(8GB*4)	SS	14-14-14-34	1.35V	•	•
G.SKILL	F4-3200C16Q-64GRK	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C16Q-64GVK	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C16Q-64GTZ	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C16Q-64GTZKW	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C16Q-64GTZKY	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C16Q-64GTZKO	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C16Q-64GTZSW	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C16Q-64GTZSK	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C15Q-64GVR	64GB(16GB*4)	DS	15-15-15-35	1.35V	•	•
G.SKILL	F4-3200C15Q-64GVK	64GB(16GB*4)	DS	15-15-15-35	1.35V	•	•
G.SKILL	F4-3200C15Q-64GTZ	64GB(16GB*4)	DS	15-15-15-35	1.35V	•	•
G.SKILL	F4-3200C15Q-64GTZSW	64GB(16GB*4)	DS	15-15-15-35	1.35V	•	•
G.SKILL	F4-3200C14Q-64GVR	64GB(16GB*4)	DS	14-14-14-34	1.35V	•	•
G.SKILL	F4-3200C14Q-64GVK	64GB(16GB*4)	DS	14-14-14-34	1.35V	•	•
G.SKILL	F4-3200C14Q-64GTZ	64GB(16GB*4)	DS	14-14-14-34	1.35V	•	•

G.SKILL	F4-3200C14Q-64GTZSW	64GB(16GB*4)	DS	14-14-14-34	1.35V	•	•
G.SKILL	F4-3200C16Q-64GVK	64GB(16GB*4)	DS	16-18-18-38	1.35V	•	•
G.SKILL	F4-3200C14Q-64GVR	64GB(16GB*4)	DS	14-14-14-34	1.35V	•	•
G.SKILL	F4-3200C14Q-64GTZR	64GB(16GB*4)	DS	14-14-14-34	1.35V	•	•
G.SKILL	F4-3200C15Q-64GTZR	64GB(16GB*4)	DS	15-15-15-35	1.35V	•	•
CORSAIR	CMK8GX4M2B3200C16 ver4.24	8GB(4GB*2)	SS	16-18-18-36	1.35V	•	
CORSAIR	CMD8GX4M2B3200C16 ver4.24	8GB(4GB*2)	SS	16-18-18-36	1.35V	•	
CORSAIR	CMD8GX4M2B3200C14 ver4.24	8GB(4GB*2)	SS	14-16-16-35	1.35V	•	
CORSAIR	CMU16GX4M2C3200C16 ver4.24	16GB(8GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMU16GX4M2C3200C16 ver5.39	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	
CORSAIR	CMK16GX4M2B3200C16 ver4.31	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	
CORSAIR	CMK16GX4M2B3200C16 ver4.24	16GB(8GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMK16GX4M2B3200C14 ver4.24	16GB(8GB*2)	DS	14-16-16-35	1.35V	•	
CORSAIR	CMR16GX4M2C3200C16 ver4.31	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMR16GX4M2D3200C16 ver4.31	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMD16GX4M4B3200C15 ver4.24	16GB(4GB*4)	SS	15-17-17-35	1.35V	•	•
CORSAIR	CMD16GX4M4B3200C16 ver4.24	16GB(4GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMD16GX4M4B3200C14 ver4.24	16GB(4GB*4)	SS	14-16-16-35	1.35V	•	•
CORSAIR	CMK16GX4M4B3200C16 ver4.24	16GB(4GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMK16GX4M4B3200C15 ver4.24	16GB(4GB*4)	SS	15-17-17-35	1.35V	•	•
CORSAIR	CMK16GX4M4C3200C15 ver4.24	16GB(4GB*4)	SS	15-17-17-35	1.35V	•	•
CORSAIR	CMK16GX4M4B3200C14 ver4.24	16GB(4GB*4)	SS	14-16-16-35	1.35V	•	•
CORSAIR	CMD32GX4M2B3200C16 ver4.31	32GB(16GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMD32GX4M2C3200C16C ver4.31	32GB(16GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMU32GX4M2C3200C16 ver4.31	32GB(16GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMU32GX4M2C3200C16 ver5.39	32GB(16GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMR32GX4M2C3200C16 ver5.39	32GB(16GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMK32GX4M2B3200C16 ver4.31	32GB(16GB*2)	DS	16-18-18-36	1.35V	•	
CORSAIR	CMK32GX4M2B3200C14 ver4.31	32GB(16GB*2)	DS	14-16-16-35	1.35V	•	
CORSAIR	CMK32GX4M2B3200C16 ver5.39	16GB(8GB*2)	DS	16-18-18-36	1.35V	•	

CORSAIR	CMD32GX4M4C3200C14C ver4.31	32GB(8GB*4)	SS	14-16-16-35	1.35V	•	•
CORSAIR	CMD32GX4M4B3200C16 ver4.24	32GB(8GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMD32GX4M2C3200C16 ver5.39	16GB(8GB*2)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMK32GX4M4B3200C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMK32GX4M4B3200C16 ver4.24	32GB(8GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMK32GX4M4B3200C14 ver4.24	32GB(8GB*4)	DS	14-16-16-35	1.35V	•	•
CORSAIR	CMK32GX4M4D3200C16 ver3.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMU32GX4M4C3200C16 ver5.39	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMU32GX4M4C3200C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMR32GX4M4C3200C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMR32GX4M4D3200C16 ver4.31	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
CORSAIR	CMD64GX4M4B3200C16 ver4.31	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMD64GX4M4C3200C16 ver5.39	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMK64GX4M4B3200C16 ver4.31	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMK64GX4M4B3200C16 ver5.39	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMU64GX4M4B3200C16 ver4.31	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMU64GX4M4B3200C16 ver5.39	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMR64GX4M4C3200C16 ver4.31	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
CORSAIR	CMR64GX4M4C3200C16 ver5.39	64GB(16GB*4)	DS	16-18-18-36	1.35V	•	•
KINGSTON	HX432C16PB3K4/16	16GB(4GB*4)	SS	16-18-18-36	1.35V	•	•
KINGSTON	HX432C16PB3K4/32	32GB(8GB*4)	SS	16-18-18-36	1.35V	•	•
GEIL	GEX416GB3200C16DC	16GB(8GB*2)	SS	16-16-16-36	1.35V	•	
APACER	AHU08GGB32CDU5H(EK.16GA1.G EBK2)	16GB(8GB*2)	SS	16-18-18-38	1.35V	•	
APACER	AHU08GGB32CDU6H(EK.16GA1.G EAK2)	16GB(8GB*2)	SS	16-18-18-38	1.35V	•	
APACER	AHU16GGB32CDU5H(EK.32GA1.G EBK2)	32GB(16GB*2)	DS	16-18-18-38	1.35V	•	
APACER	AHU16GGB32CDU6H(EK.32GA1.G EAK2)	32GB(16GB*2)	DS	16-18-18-38	1.35V	•	

FORZA	NFMUD480E8-3200DH2A	16GB(8GB*2)	SS	16-18-18-36	1.35V	•	
ADATA	AX4U320038G16-BRS	8GB	SS	16-18-18-36	1.35V	•	•
TEAMGRO UP	TF1D416G3200HC16CDC01	16GB(8GB*2)	SS	16-18-18-38	1.35V	•	
TEAMGRO UP	TF2D416G3200HC16CDC01	16GB(8GB*2)	SS	16-18-18-38	1.35V	•	
SUPERTAL ENT	F3200UB4G	4GB	SS	16-18-18-36	1.35V	•	•
SUPERTAL ENT	F3200UB16G	16GB	DS	16-18-18-36	1.35V	•	•
PATRIOT	PV416G320C6K	16GB(8GB*2)	SS	16-16-16-36	1.35V	•	
PATRIOT	PVE416G320C6KGY	16GB(8GB*2)	SS	16-16-16-36	1.35V	•	
PATRIOT	PV432G320C6K	32GB(16GB*2)	SS	16-16-16-36	1.35V	•	
KLEVV	IM48GU88A32-GIISEZ	32GB(8GB*4)	DS	16-18-18-38	1.35V	•	•
Hyper X	HX432C18FB2K2/16	16GB(8GB*2)	SS	18-21-21-39	1.2V	•	•

### DDR4 3000 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)		
						1 DIMM	2 DIMM	4 DIMM
CORSAIR	CMD32GX4M2B3000C15(Ver4.31)	32GB ( 16GB*2 )	DS	15-17-17-35	1.35V	•	•	•
KINGSTON	HX430C15PB2K4/16	16GB ( 4GB*4 )	SS	15-15-15-36-50	1.35V	•	•	•
PANRAM	PUD43000C154G4NJW	16GB ( 4GB*4 )	SS	15-17-17-35	1.35V	•	•	•
KINGSTON	HX430C15PBK4/32	32GB ( 8GB*4 )	DS	15-15-15-36-50	1.35V	•	•	
KINGSTON	HX430C15SB2K4/32	32GB ( 8GB*4 )	DS	15-15-15-36-50	1.35V	•	•	•
AVEXIR	AVD4UZ130001604G-4COB	16GB ( 4GB*4 )	SS	15-15-15-36-51	1.35V	•	•	•
AVEXIR	AVD4UZ130001608G-4COB	32GB ( 8GB*4 )	DS	15-15-15-36-51	1.35V	•	•	•



KINGSTON	HX430C16PBK4/64	64GB ( 16GB*4 )	DS	15-15-15-36-50	1.35V	•	•	
KINGSTON	HX430C15SBK2/16	16GB ( 8GB*2 )	DS	15-15-15-36-50	1.35V	•	•	•
KLEVV	IM44GU48A30-GIIHMC	16GB ( 4GB*4)	SS	16-18-18	1.35V	•	•	•
CORSAIR	CMK16GX4M2B3000C15(Ver4.24)	16GB (8GB*2)	DS	15-17-17-35	1.35V	•	•	
KINGSTON	HX430C15SB2K4/16	16GB ( 4GB*4)	SS	15-15-15-36-50	1.35V	•	•	
TEAM	TDGED48G3000HC16ABK	16GB ( 8GB*2)	DS	16-16-16-36	1.35V	•		
PATRIOT	PV416G300C6QK	16GB ( 4GB*4)	SS	16-16-16-36	1.35V	•	•	
G.SKILL	F4-3000C15D-32GVR	32GB ( 16GB*2 )	DS	15-15-15-35	1.35V	•	•	
CORSAIR	CMK64GX4M4B3000C15(Ver4.31)	64GB ( 16GB*4 )	DS	15-17-17-35	1.35V	•	•	•
TEAM	TCD48G300C16ABK	8G	SS	16-16-16-36	1.35V	•	•	
ADATA	AX4U300038G16-DBZ	8G	DS	16-18-18-36	1.35V	•	•	•
ADATA	AX4U3000316G16-BGZ	16G	DS	16-18-18	1.35V	•	•	•
CORSAIR	CMD16GX4M4B3000C15(Ver4.24)	4G	SS	15-17-17-35	1.35V	•	•	•
CORSAIR	CMK32GX4M2B3000C15(Ver5.39)	16G	DS	15-17-17-35	1.35V	•	•	
CORSAIR	CMU16GX4M2C3000C15(Ver4.31)	8G	SS	15-17-17-35	1.35V	•	•	
CORSAIR	CMK16GX4M4B3000C15(Ver3.21)	4G	SS	15-17-17-35	1.35V	•	•	
G.SKILL	F4-3000C15Q-32GRK(XMP)	8G*4	DS	15-15-15-35	1.35V	•	•	•
CORSAIR	CMK8GX4M2B3000C15(Ver3.21)	8GB(2*4GB)	SS	15-17-17-35	1.35V	•	•	•
CORSAIR	CMU32GX4M4C3000C15(Ver5.3)	32GB(8GB*4)	DS	15-17-17-35	1.35V	•	•	•
GEIL	GFR416GB3000C15ADC	8G	SS	15-17-17-35	1.35V	•	•	
TEAM	TFWD416G3000C16CBK	16G	DS	16-18-18-38	1.35V	•	•	•
TEAM	TFRD48G3000C16CBK	8G	DS	16-18-18-38	1.35V	•	•	•
TEAM	TCD44G3000C16CBK	4G	SS	16-18-18-38	1.35V	•	•	•
Klevv	IM4AGU88A30-FGGHMZ	16GB	DS	15-16-16	1.35V	•	•	•
Klevv	IM48GU88A30-FGGHMZ	8GB	SS	15-16-16	1.35V	•	•	•
Klevv	IM44GU48A30-FGGHAZ	4GB	SS	15-16-16	1.35V	•	•	•
Klevv	IM48GU88A30-FGGHMB	8GB	SS	15-16-16	1.35V	•	•	•
Klevv	IM44GU48A30-FGGHAB	4GB	SS	15-16-16	1.35V	•	•	•

Klevv	IM4AGU88A30-FGGHMB	16GB	DS	15-16-16	1.35V	•	•	•
G.SKILL	F4-3000C16D-16GISB	8GB*2	SS	16-18-18-38	1.35V	•	•	
CORSAIR	CMD16GX4M2B3000C15(Ver5.30)	16GB ( 2x 8GB )	SS	15-17-17-35	1.35V	•	•	
CORSAIR	CMD32GX4M4C3000C15(Ver5.30)	32GB ( 4x 8GB )	SS	15-17-17-35	1.35V	•	•	•
NEO FORZA	NFMUD416E8-3000DH2A	16GB	DS	15-17-17-35	1.35V	•		•
NEO FORZA	NFMUD480E8-3000DH2A	8GB	SS	15-17-17-35	1.35V	•	•	•
CORSAIR	CMR16GX4M2C3000C15(Ver4.31)	16GB ( 2x 8GB )	SS	15-17-17-35	1.35V	•	•	
CORSAIR	CMR32GX4M4C3000C15	32GB ( 4x 8GB )	DS	15-17-17-35	1.35V	•	•	•
Team	TDRRD48G3000HC16CBK	8GB	DS	16-18-18-38	1.35V	•	•	•
Team	TDRGD48G3000HC16CBK	8GB	DS	16-18-18-38	1.35V	•	•	•
GALAXY	HOF DDR4-3000	16GB ( 2x 8GB )	SS	16-18-18-38	1.35V	•	•	
GeIL	GLR416GB3000C15ADC	8GB	SS	15-17-17-35	1.35V	•	•	•
G.SKILL	F4-3000C15S-16GVR	16GB	DS	15-15-15-35	1.35V	•	•	
NEO FORZA	NMUD416E82-3000DB30	16GB	DS	15-17-17-35	1.35V	•	•	
NEO FORZA	NMUD480E82-3000DB30	8GB	SS	15-17-17-35	1.35V	•	•	•
PATRIOT	PV432G300C6QK	32GB ( 4x 8GB )	SS	16-16-16-36	1.35V	•	•	•
HyperX	HX430C15PB3K4/32	32GB ( 4x 8GB )	SS	15-17-17-36	1.35V	•	•	•
CRUCIAL	BLT8G4D30AETA.K16FE	8GB	DS	15-16-16-35	1.35V	•	•	
PATRIOT	PVE416G300C6KBL	16GB ( 2x 8GB )	SS	16-16-16-36	1.35V	•	•	•
PATRIOT	PVE48G300C6KRD	8GB ( 2x 4GB )	SS	16-16-16-36	1.35V	•	•	•
G.SKILL	F4-3000C14Q2-128GVKD	128GB ( 16GBx8)	DS	14-14-14-34	1.35V	•	•	
Team	TF3D48G3000HC16CBK	8GB	SS	16-18-18-38	1.35V	•	•	•
Team	TF4D48G3000HC16CBK	8GB	SS	16-18-18-38	1.35V	•	•	•
GALAXY	N/A	16GB ( 2x 8GB )	SS	16-18-18-38	1.35V	•	•	
TIGO	TMKU8GF58-3000X	8GB	DS	16-18-18-36	1.35V	•	•	•
ADATA	AX4U3000W4G16-BWZ(XMP)	4GB		16-16-16-36	1.35	•	•	

ADATA	AX4U3000W8G16-BWZ(XMP)	8GB	16-16-16-36	1.35	•	•	
Apacer	EK.16GAW.KFBK2(XMP)	8GB	16-16-16-36	-	•	•	
Apacer	AHU08GGB30CDG6H (EK.16GAZ.GEAK2)	2 x 8GB	16-16-16-36	1.35	•	•	
Apacer	AHU08GGB30CDU5H (EK.16GAZ.GEBK2)	2 x 8GB	16-16-16-36	1.35	•	•	
CORSAIR	CMD16GX4M2B3000C15(Ver4.23)( XMP)	2 x 8GB	15-17-17-35	1.35	•	•	
CORSAIR	CMD16GX4M4B3000C15(Ver4.23)( XMP)	4 x 4GB	15-17-17-35	1.35	•	•	•
CORSAIR	CMD16GX4M4B3000C15(Ver5.29)( XMP)	4 x 4GB	15-17-17-35	1.35	•	•	
CORSAIR	CMD32GX4M2B3000C15(Ver5.39)( XMP)	2 x 16GB	15-17-17-35	1.35	•	•	
CORSAIR	CMD32GX4M4B3000C15(Ver4.23)( XMP)	4 x 8GB	15-17-17-35	1.35	•	•	•
CORSAIR	CMD32GX4M4C3000C15(Ver3.32)( XMP)	4 x 8GB	15-17-17-35	1.35	•	•	•
CORSAIR	CMK16GX4M1B3000C15(Ver3.32)( XMP)	16GB	15-17-17-35	1.35	•	•	
CORSAIR	CMK16GX4M2B3000C15(Ver3.32)( XMP)	2 x 8GB	15-17-17-35	1.35	•	•	
CORSAIR	CMK16GX4M2B3000C15(Ver4.23)( XMP)	2 x 8GB	15-17-17-35	1.35	•	•	
CORSAIR	CMK16GX4M2B3000C15(Ver5.30)( XMP)	2 x 8GB	15-17-17-35	1.35	•	•	
CORSAIR	CMK16GX4M4B3000C15(Ver5.29)( XMP)	4 x 4GB	15-17-17-35	1.35	•	•	•
CORSAIR	CMK32GX4M2B3000C15(Ver4.31)( XMP)	2 x 16GB	15-17-17-35	1.35	•	•	

CORSAIR	CMK32GX4M4B3000C15(Ver4.24)(XMP)	4 x 8GB	15-17-17-35	1.35	•	•	•
CORSAIR	CMK32GX4M4B3000C15(Ver5.29)(XMP)	4 x 8GB	15-17-17-35	1.35	•	•	
CORSAIR	CMK8GX4M2B3000C15(Ver4.23)(XMP)	2 x 4GB	15-17-17-35	1.35	•	•	
CORSAIR	CMR16GX4M2C3000C15(Ver5.30)(XMP)	2 x 8GB	15-17-17-35	1.35	•	•	
CORSAIR	CMR32GX4M4C3000C15(Ver3.32)(XMP)	4 x 8GB	15-17-17-35	1.35	•	•	•
CORSAIR	CMR32GX4M4C3000C15(Ver4.31)(XMP)	4 x 8GB	15-17-17-35	1.35	•	•	•
CORSAIR	CMU16GX4M2C3000C15(Ver3.21)(XMP)	2 x 8GB	15-17-17-35	1.35	•	•	
crucial	BLE4G4D30AEEA.K8FE(XMP)	4GB	15-16-16-35	1.35	•	•	
crucial	BLE8G4D30AEEA.K16FE(XMP)	8GB	15-16-16-35	1.35	•	•	
crucial	BLT4G4D30AETA.K8FE(XMP)	4GB	15-16-16-35	1.35	•	•	
G.SKILL	F4-3000C14Q2-128GVK(XMP)	8 x 16GB	14-14-14-34	1.35	•	•	•
G.SKILL	F4-3000C15D-8GTZB(XMP)	2 x 4GB	15-16-16-35	1.35	•	•	
G.SKILL	F4-3000C15Q-16GRK(XMP)	4 x 4GB	15-15-15-35	1.35	•	•	•
G.SKILL	F4-3000C15Q-16GRR(XMP)	4 x 4GB	15-15-15-35	1.35	•	•	•
G.SKILL	F4-3000C16Q2-128GVKB(XMP)	8 x 16GB	16-18-18-38	1.35	•	•	•
GeIL	GLR416GB3000C15ADC(XMP)	8GB	15-17-17-35	1.35	•	•	
GeIL	GLR416GB3000C16QC(XMP)	4 x 4GB	16-16-16-36	1.35	•	•	•
GeIL	GWW416GB3000C15DC(XMP)	2 x 8GB	15-17-17-35	1.35	•	•	
Hyper X	HX430C15PB2K4/16(XMP)	4 x 4GB	15-16-16-39	1.35	•	•	•
Hyper X	HX430C15PB3K2/16(XMP)	2 x 8GB	15-17-17-36	1.35	•	•	•
Hyper X	HX430C15PB3K2/32(XMP)	2 x 16GB	15-17-17-36	1.35	•	•	•
Hyper X	HX430C15PB3K2/8(XMP)	2 x 4GB	15-17-17-36	1.35	•	•	•
Hyper X	HX430C15PB3K4/16(XMP)	4 x 4GB	15-17-17-36	1.35	•	•	•
Hyper X	HX430C15PB3K4/64(XMP)	4 x 16GB	15-17-17-36	1.35	•	•	•

Hyper X	HX430C15PB3K8/128(XMP)	8 x 16GB	15-17-17-36	1.35	•	•	•
Hyper X	HX430C15PBK4/32(XMP)	4 x 8GB	15-16-16-39	1.35	•	•	
Hyper X	HX430C15SB2/4(XMP)	4GB	15-17-17-39	1.35	•	•	•
Hyper X	HX430C15SB2K2/8(XMP)	2 x 4GB	15-17-17-39	1.35	•	•	•
Hyper X	HX430C15SB2K4/16(XMP)	4 x 4GB	15-17-17-39	1.35	•	•	•
Hyper X	HX430C15SB2K4/32(XMP)	4 x 8GB	15-17-17-39	1.35	•	•	•
Hyper X	HX430C15SBK2/16(XMP)	2 x 8GB	15-16-16-39	1.35	•	•	
Hyper X	HX430C16PBK4/64(XMP)	4 x 16GB	16-16-16-39	1.35	•	•	•
Klevv	IM44GU48N30-FFFHAB(XMP)	4GB	15-15-16-36	1.2	•	•	
Klevv	IM48GU48A30-GIIHMC(XMP)	8GB	16-18-18-36	1.35	•	•	
Klevv	IM48GU88N30-FFFHMB(XMP)	8GB	15-15-16-36	1.2	•	•	
Klevv	IM4AGU88N30-FFFHMB(XMP)	16GB	15-15-16-36	1.2	•	•	
NEO FORZA	NFMUD416E8-3000DB2A(XMP)	16GB	15-17-17-35	-	•	•	
NEO FORZA	NFMUD416E8-3000DB3A(XMP)	16GB	15-17-17-35	-	•	•	
NEO FORZA	NFMUD416E8-3000DC2A(XMP)	16GB	15-17-17-35	-	•	•	
NEO FORZA	NFMUD416E8-3000DC3A(XMP)	16GB	15-17-17-35	-	•	•	
NEO FORZA	NFMUD416E8-3000DD2A(XMP)	16GB	15-17-17-35	-	•	•	
NEO FORZA	NFMUD416E8-3000DD3A(XMP)	16GB	15-17-17-35	-	•	•	
NEO FORZA	NFMUD480E8-3000DB2A(XMP)	8GB	15-17-17-35	-	•	•	
NEO FORZA	NFMUD480E8-3000DB3A(XMP)	8GB	15-17-17-35	-	•	•	
NEO FORZA	NFMUD480E8-3000DC2A(XMP)	8GB	15-17-17-35	-	•	•	

NEO FORZA	NFMUD480E8-3000DC3A(XMP)	8GB	15-17-17-35	-	•	•
NEO FORZA	NFMUD480E8-3000DD2A(XMP)	8GB	15-17-17-35	-	•	•
NEO FORZA	NFMUD480E8-3000DD3A(XMP)	8GB	15-17-17-35	-	•	•
PATRIOT	PV416G300C6K	2 x 8GB	16-16-16-36	-	•	•
PATRIOT	PV48G300C6K	2 x 4GB	16-16-16-36	1.35	•	•
Team	TLRED416G3000HC16CQC01	4 x 4GB	16-18-18-38	1.35	•	•
Team	TLGD416G3000HC16CQC01	4 x 4GB	16-18-18-38	1.35	•	•
Team	TDRED416G3000HC16CQC01	4 x 4GB	16-18-18-38	1.35	•	•
Team	TDGED416G3000HC16CQC01	4 x 4GB	16-18-18-38	1.35	•	•
Team	TLRED48G3000HC16CDC01	2 x 4GB	16-18-18-38	1.35	•	•
Team	TLGD48G3000HC16CDC01	2 x 4GB	16-18-18-38	1.35	•	•
Team	TDRED48G3000HC16CDC01	2 x 4GB	16-18-18-38	1.35	•	•
Team	TDGED48G3000HC16CDC01	2 x 4GB	16-18-18-38	1.35	•	•
Team	TLRED432G3000HC16CQC01	4 x 8GB	16-18-18-38	1.35	•	•
Team	TLGD432G3000HC16CQC01	4 x 8GB	16-18-18-38	1.35	•	•
Team	TDRED432G3000HC16CQC01	4 x 8GB	16-18-18-38	1.35	•	•
Team	TDGED432G3000HC16CQC01	4 x 8GB	16-18-18-38	1.35	•	•
Team	TDPRD432G3000HC16CQC01	4 x 8GB	16-18-18-38	1.35	•	•
Team	TDPGD432G3000HC16CQC01	4 x 8GB	16-18-18-38	1.35	•	•
Team	THRD432G3000HC16CQC01	4 x 8GB	16-18-18-38	1.35	•	•
Team	THWD432G3000HC16CQC01	4 x 8GB	16-18-18-38	1.35	•	•
Team	THBD432G3000HC16CQC01	4 x 8GB	16-18-18-38	1.35	•	•
Team	TDTRD432G3000HC16CQC01	4 x 8GB	16-18-18-38	1.35	•	•
Team	TDTWD432G3000HC16CQC01	4 x 8GB	16-18-18-38	1.35	•	•
Team	TDTBD432G3000HC16CQC01	4 x 8GB	16-18-18-38	1.35	•	•
Team	TLRED416G3000HC16CDC01	2 x 8GB	16-18-18-38	1.35	•	•
Team	TLGD416G3000HC16CDC01	2 x 8GB	16-18-18-38	1.35	•	•
Team	TDRED416G3000HC16CDC01	2 x 8GB	16-18-18-38	1.35	•	•

Team	TDGED416G3000HC16CDC01	2 x 8GB	16-18-18-38	1.35	•	•
Team	TDPRD416G3000HC16CDC01	2 x 8GB	16-18-18-38	1.35	•	•
Team	TDPGD416G3000HC16CDC01	2 x 8GB	16-18-18-38	1.35	•	•
Team	THRD416G3000HC16CDC01	2 x 8GB	16-18-18-38	1.35	•	•
Team	THWD416G3000HC16CDC01	2 x 8GB	16-18-18-38	1.35	•	•
Team	THBD416G3000HC16CDC01	2 x 8GB	16-18-18-38	1.35	•	•
Team	TDTRD416G3000HC16CDC01	2 x 8GB	16-18-18-38	1.35	•	•
Team	TDTWD416G3000HC16CDC01	2 x 8GB	16-18-18-38	1.35	•	•
Team	TDTBD416G3000HC16CDC01	2 x 8GB	16-18-18-38	1.35	•	•
Team	TDPRD464G3000HC16CQC01	4 x 16GB	16-18-18-38	1.35	•	•
Team	TDPGD464G3000HC16CQC01	4 x 16GB	16-18-18-38	1.35	•	•
Team	THRD464G3000HC16CQC01	4 x 16GB	16-18-18-38	1.35	•	•
Team	THWD464G3000HC16CQC01	4 x 16GB	16-18-18-38	1.35	•	•
Team	THBD464G3000HC16CQC01	4 x 16GB	16-18-18-38	1.35	•	•
Team	TDTRD464G3000HC16CQC01	4 x 16GB	16-18-18-38	1.35	•	•
Team	TDTWD464G3000HC16CQC01	4 x 16GB	16-18-18-38	1.35	•	•
Team	TDTBD464G3000HC16CQC01	4 x 16GB	16-18-18-38	1.35	•	•
Team	TDPRD432G3000HC16CDC01	2 x 16GB	16-18-18-38	1.35	•	•
Team	TDPGD432G3000HC16CDC01	2 x 16GB	16-18-18-38	1.35	•	•
Team	THRD432G3000HC16CDC01	2 x 16GB	16-18-18-38	1.35	•	•
Team	THWD432G3000HC16CDC01	2 x 16GB	16-18-18-38	1.35	•	•
Team	THBD432G3000HC16CDC01	2 x 16GB	16-18-18-38	1.35	•	•
Team	TDTRD432G3000HC16CDC01	2 x 16GB	16-18-18-38	1.35	•	•
Team	TDTWD432G3000HC16CDC01	2 x 16GB	16-18-18-38	1.35	•	•
Team	TDTBD432G3000HC16CDC01	2 x 16GB	16-18-18-38	1.35	•	•
V-color	TL48G30S816RGB(XMP)	8GB	16-18-18-38	1.35	•	•

### DDR4 2800 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)		
						1 DIMM	2 DIMM	4 DIMM
CORSAIR	CMK16GX4M4A2800C16(Ver5.29)	16GB ( 4GB*4)	SS	16-18-18-36	1.2V	•	•	

KINGSTON	HX428C14PB2K4/16	16GB ( 4GB*4)	SS	15-15-15-36-50	1.35V	•	•	•
PATRIOT	PX416G280C6QK	16GB ( 4GB*4)	SS	16-18-18-36	1.2V	•	•	•
PANRAM	PUD42800C164G4NJW	16GB ( 4GB*4)	SS	16-18-18-36	1.25V	•	•	•
MUSHKIN	994207F	16GB ( 4GB*4)	SS	16-16-16-36	1.2V	•		
KINGSTON	HX428C14PBK4/32	32GB ( 8GB*4 )	DS	15-15-15-36-50	1.35V	•	•	•
AVEXIR	AVD4UZ128001604G-4COB	16GB ( 4GB*4)	SS	15-15-15-36-51	1.2V	•	•	•
AVEXIR	AVD4UZ128001608G-4COB	32GB ( 8GB*4 )	DS	15-15-15-36-51	1.2V	•	•	•
KINGSTON	HX428C14SB2K4/32	32GB ( 8GB*4 )	DS	15-15-15-36-50	1.35V	•	•	•
KINGSTON	HX428C14SB2K4/16	16GB ( 4GB*4)	SS	15-15-15-36-50	1.35V	•	•	
TEAM	TDGED48G2800HC16ABK	16GB ( 8GB*2)	SS	16-16-16-36	1.2V	•	•	
PATRIOT	PV416G280C6QK	16GB ( 4GB*4)	SS	16-18-18-36	1.2V	•	•	
ADATA	Digital Storm	8G	DS			•	•	
G.SKILL	F4-2800C16D-16GRR	8G*2	SS		1.2V	•	•	
ADATA	AX4U280038G17-SBF	8GB*8	SS	18-17-17-36	1.2V	•	•	•
ADATA	AX4U2800316G16-SBF	16GB	DS	17-16-16-36	1.2V	•	•	
CORSAIR	CMD32GX4M4A2800C16 ( Ver5.20 )	8G	DS	16-18-18-36	1.2V	•	•	•
G.SKILL	F4-2800C14Q-64GVK	16G*4	DS	14-14-14-35	1.35V	•	•	
G.SKILL	F4-2800C16Q-32GVR	8G*4	SS	16-16-16-36	1.20V	•	•	•
AVEXIR	AVD4UZ128001504G-4BZ1RR	4G*4	SS		1.35V	•	•	•
AVEXIR	AVD4UZ128001508G-4BZ1RR	8G*4	DS		1.35V	•	•	•
CORSAIR	CMD16GX4M4A2800C16(Ver3.21)	16GB(4*4GB)	SS	16-18-18-36	1.2V	•	•	•
CORSAIR	CMK64GX4M8B2800C14 ( Ver4.24 )	64GB(8*8GB)	DS	14-16-16-36	1.35V	•	•	•
TEAM	TFWD416G2800C16CBK	16G	DS	16-18-18-38	1.2V	•	•	•



TEAM	TFRD48G2800C16CBK	8G	DS	16-18-18-38	1.2V	•	•	•
TEAM	TCD44G2800C16CBK	4G	SS	16-18-18-38	1.2V	•	•	•
ADATA	AX4U2800W8G17-BRD	8GB	DS	17-17-17-36	1.2V	•	•	•
G.SKILL	F4-2800C15Q-32GVR	32GB ( 4x 8GB )	SS	15-15-15-35	1.25V	•	•	•
ADATA	AX4U2800W4G17-BRZ	8GB(2*4GB)	SS	17-17-17-36	1.2V	•	•	
ADATA	AX4U280038G17-BWZ	8G	SS	17-17-17-36	1.2V	•	•	
KINGMAX	GLMG42F-18KIIA CJBR4	8GB	SS	17-17-17-39	1.20V	•	•	•
ADATA	AX4U2800316G16(XMP)	16GB		16-16-16-36	1.2	•	•	
ADATA	AX4U2800316G16-SBF(XMP)	16GB		16-16-16-36	1.2	•	•	
ADATA	AX4U280038G17-SBF(XMP)	8GB		17-17-17-36	1.2	•	•	
ADATA	AX4U2800W4G17-BRZ(XMP)	4GB		17-17-17-36	1.2	•	•	
ADATA	AX4U2800W8G15(XMP)	8GB		15-16-16-35	1.25	•	•	
ADATA	AX4U2800W8G17-BRD(XMP)	8GB		17-17-17-36	1.2	•	•	
ADATA	AX4U2800W8G17-BRZ(XMP)	8GB		17-17-17-36	1.2	•	•	
Apacer	78.BAGM8.AF20B(XMP)	4 x 4GB		17-17-17-36	-	•	•	•
Apacer	78.CAGM8.AF30B(XMP)	4 x 8GB		17-17-17-36	-	•	•	•
Apacer	AHU08GGB28CET6H (EK.16GAW.KFAK2)	8GB		17-17-17-36	1.2	•	•	•
Apacer	AHU08GGB28CEU6H (EK.16GAW.GFAK2)	2 x 8GB		17-17-17-36	1.2	•	•	•
Apacer	AHU08GGB28CEU5H (EK.16GAW.GFBK2)	2 x 8GB		17-17-17-36	1.2	•	•	•
CORSAIR	CMD16GX4M4A2800C16(Ver4.23)( XMP)	4 x 4GB		16-18-18-36	1.2	•	•	•
CORSAIR	CMD16GX4M4A2800C16(Ver5.29)( XMP)	4 x 4GB		16-18-18-36	1.2	•	•	•
CORSAIR	CMD32GX4M4A2800C15(Ver5.29)( XMP)	4 x 8GB		15-17-17-36	1.2	•	•	•
CORSAIR	CMD32GX4M4A2800C16(Ver5.29)( XMP)	4 x 8GB		18-18-18-36	1.2	•	•	•

CORSAIR	CMK16GX4M4A2800C16(Ver4.23)(XMP)	4 x 4GB	16-16-18-36	1.2	•	•	•
CORSAIR	CMK16GX4M4A2800C16(Ver5.29)(XMP)	4 x 4GB	16-18-18-36	1.2	•	•	•
CORSAIR	CMK32GX4M4A2800C16(Ver5.29)(XMP)	4 x 8GB	16-18-18-36	1.2	•	•	•
CORSAIR	CMK64GX4M8B2800C14(Ver4.24)(XMP)	8 x 8GB	14-16-16-36	1.35	•	•	•
G.SKILL	F4-2800C14Q-64GVK(XMP)	4 x 16GB	14-14-14-35	1.35	•	•	
G.SKILL	F4-2800C15Q2-128GRKD(XMP)	5 x 16GB	15-15-15-35	1.35	•	•	•
G.SKILL	F4-2800C15Q2-64GRK(XMP)	6 x 16GB	15-16-16-35	1.25	•	•	•
G.SKILL	F4-2800C16Q-16GRK(XMP)	7 x 16GB	16-16-16-36	1.2	•	•	•
G.SKILL	F4-2800C16Q-16GRR(XMP)	8 x 16GB	16-16-16-36	1.2	•	•	•
G.SKILL	F4-2800C16Q-32GRK(XMP)	9 x 16GB	16-16-16-36	1.2	•	•	•
G.SKILL	F4-2800C16Q-32GRR(XMP)	10 x 16GB	16-16-16-36	1.2	•	•	•
G.SKILL	F4-2800C16Q-32GVB	11 x 16GB	16-16-16-36	1.2	•	•	•
G.SKILL	F4-2800C16Q-32GVK	12 x 16GB	16-16-16-36	1.2	•	•	•
G.SKILL	F4-2800C16Q-32GVG	13 x 16GB	16-16-16-36	1.2	•	•	•
G.SKILL	F4-2800C16Q-32GVS	14 x 16GB	16-16-16-36	1.2	•	•	•
GeIL	GPR416GB2800C16QC(XMP)	15 x 16GB	16-16-16-36	1.2	•	•	•
GeIL	GPR432GB2800C16QC(XMP)	16 x 16GB	16-16-16-36	1.2	•	•	•
Hyper X	HX428C14PBK8/64(XMP)	17 x 16GB	14-15-15-39	1.35	•	•	•
Hyper X	HX428C14SB2/4(XMP)	18 x 16GB	14-16-16-39	1.35	•	•	•
Hyper X	HX428C14SB2/8(XMP)	19 x 16GB	14-16-16-39	1.35	•	•	•
Hyper X	HX428C14SB2K2/16(XMP)	20 x 16GB	14-16-16-39	1.35	•	•	•
Hyper X	HX428C14SB2K2/8(XMP)	21 x 16GB	14-16-16-39	1.35	•	•	•
Hyper X	HX428C14SB2K4/16(XMP)	22 x 16GB	14-16-16-39	1.35	•	•	•
Hyper X	HX428C14SB2K4/32(XMP)	23 x 16GB	14-16-16-39	1.35	•	•	•
KINGMAX	GLMG42F-18KIIA-CJBR4(XMP)	24 x 16GB	17-17-17-39	1.2	•	•	
Klevv	IMA451U6MFR8N-DG0(Ver1.05)(XMP)	25 x 16GB	16-16-16-36	1.2	•	•	

NEO FORZA	NFMUD416E8-2800EB2A(XMP)	26 x 16GB	17-17-17-36	-	•	•
NEO FORZA	NFMUD416E8-2800EB3A(XMP)	27 x 16GB	17-17-17-36	-	•	•
NEO FORZA	NFMUD416E8-2800EC2A(XMP)	28 x 16GB	17-17-17-36	-	•	•
NEO FORZA	NFMUD416E8-2800EC3A(XMP)	29 x 16GB	17-17-17-36	-	•	•
NEO FORZA	NFMUD416E8-2800ED2A(XMP)	30 x 16GB	17-17-17-36	-	•	•
NEO FORZA	NFMUD416E8-2800EH2A(XMP)	31 x 16GB	17-17-17-36	-	•	•
NEO FORZA	NFMUD480E8-2800DB2A(XMP)	32 x 16GB	17-17-17-36	-	•	•
NEO FORZA	NFMUD480E8-2800DB3A(XMP)	33 x 16GB	17-17-17-36	-	•	•
NEO FORZA	NFMUD480E8-2800DC2A(XMP)	34 x 16GB	17-17-17-36	-	•	•
NEO FORZA	NFMUD480E8-2800DC3A(XMP)	35 x 16GB	17-17-17-36	-	•	•
NEO FORZA	NFMUD480E8-2800DD2A(XMP)	36 x 16GB	17-17-17-36	-	•	•
NEO FORZA	NFMUD480E8-2800DD3A(XMP)	37 x 16GB	17-17-17-36	-	•	•
NEO FORZA	NFMUD480E8-2800DH2A(XMP)	38 x 16GB	17-17-17-36	-	•	•
Team	TCD44G2800C16CBK(XMP)	39 x 16GB	16-18-18-38	1.2	•	•
Team	TLRED416G2800HC16CQC01	40 x 16GB	16-18-18-38	1.2	•	•
Team	TLGD416G2800HC16CQC01	41 x 16GB	16-18-18-38	1.2	•	•
Team	TDRED416G2800HC16CQC01	42 x 16GB	16-18-18-38	1.2	•	•
Team	TDGED416G2800HC16CQC01	43 x 16GB	16-18-18-38	1.2	•	•
Team	TLRED48G2800HC16CDC01	44 x 16GB	16-18-18-38	1.2	•	•

Team	TLGD48G2800HC16CDC01	45 x 16GB	16-18-18-38	1.2	•	•
Team	TDRED48G2800HC16CDC01	46 x 16GB	16-18-18-38	1.2	•	•
Team	TDGED48G2800HC16CDC01	47 x 16GB	16-18-18-38	1.2	•	•
Team	TFRD48G2800C16CBK(XMP)	48 x 16GB	16-18-18-38	1.2	•	•
Team	TLRED432G2800HC16CQC01	49 x 16GB	16-18-18-38	1.2	•	•
Team	TLGD432G2800HC16CQC01	50 x 16GB	16-18-18-38	1.2	•	•
Team	TDRED432G2800HC16CQC01	51 x 16GB	16-18-18-38	1.2	•	•
Team	TDGED432G2800HC16CQC01	52 x 16GB	16-18-18-38	1.2	•	•
Team	THRD432G2800HC16CQC01	53 x 16GB	16-18-18-38	1.2	•	•
Team	THWD432G2800HC16CQC01	54 x 16GB	16-18-18-38	1.2	•	•
Team	THBD432G2800HC16CQC01	55 x 16GB	16-18-18-38	1.2	•	•
Team	TLRED416G2800HC16CDC01	56 x 16GB	16-18-18-38	1.2	•	•
Team	TLGD416G2800HC16CDC01	57 x 16GB	16-18-18-38	1.2	•	•
Team	TDRED416G2800HC16CDC01	58 x 16GB	16-18-18-38	1.2	•	•
Team	TDGED416G2800HC16CDC01	59 x 16GB	16-18-18-38	1.2	•	•
Team	THRD416G2800HC16CDC01	60 x 16GB	16-18-18-38	1.2	•	•
Team	THWD416G2800HC16CDC01	61 x 16GB	16-18-18-38	1.2	•	•
Team	THBD416G2800HC16CDC01	62 x 16GB	16-18-18-38	1.2	•	•
Team	TFWD416G2800C16CBK(XMP)	63 x 16GB	16-18-18-38	1.2	•	•

### DDR4 2666 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)		
						1 DIMM	2 DIMM	4 DIMM
CORSAIR	CMK16GX4M4A2666C16 (Ver5.29)	16GB ( 4GB*4)	SS	16-18-18-35	1.2V	•	•	•
CORSAIR	CMD32GX4M4A2666C15(Ver5.29)	32GB ( 8GB*4 )	DS	15-17-17-35	1.2V	•	•	•
PATRIOT	PX416G266C5QK	16GB ( 4GB*4)	SS	15-15-15-35	1.2V	•	•	•
MUSHKIN	997192F	8GB(4GB*2)	SS	15-15-15-35	1.2V	•	•	
KINGSTON	HX426C13PBK4/32	32GB ( 8GB*4 )	DS	15-15-15-36	1.35V	•	•	
KINGSTON	HX426C15FBK4/32	32GB ( 8GB*4 )	DS	15-17-17-35	1.2V	•	•	
KINGSTON	HX426C15FBK4/16	16GB ( 4GB*4)	SS	15-17-17-35	1.2V	•	•	

CRUCIAL	BLE4G4D26AFEA.8FAD	8G	SS	16-16-17-36	1.2V	●	●	●
CRUCIAL	BLE8G4D26AFEA.16FAD	8G	DS	16-17-17-36	1.2V	●		●
AVEXIR	AVD4UZ126661504G-4COB	16GB ( 4GB*4)	SS	15-15-15-36	1.2V	●	●	●
AVEXIR	AVD4UZ126661508G-4COB	32GB ( 8GB*4 )	DS	15-15-15-36	1.2V	●	●	
CRUCIAL	BLT4G4D26AFTA.8FADG	4G	SS	16-17-17-36	1.2V		●	●
CRUCIAL	BLT8G4D26AFTA.16FAD	8G	DS	16-17-17-36	1.2V	●		
KLEVV	IMA41GU6MFR8N-C F0	8G	DS	15-15-15	1.2V	●	●	●
KINGSTON	HX426C13SB2K4/16	16GB ( 4GB*4)	SS	15-15-15-36	1.35V	●	●	
PNY	MD16GK4D4266615AXR	16GB ( 4GB*4)	SS		1.2V	●	●	●
AVEXIR	AVD4UZ126661504G-4IPROG	16G(4G*4)	DS		1.2V	●	●	
AVEXIR	AVD4UZ126661504G	8G(4G*2)	DS		1.2V	●	●	
CORSAIR	CMU32GX4M2A2666C16 ( Ver5.20)	32GB(2*16GB)	DS	16-18-18-35	1.2V	●	●	●
CORSAIR	CMK16GX4M2A2666C16 ( Ver3.31)	16GB(2*8GB)	SS	16-18-18-35	1.2V		●	●
CORSAIR	CMK32GX4M2A2666C16 ( Ver5.39)	32GB(2*16GB)	DS	16-18-18-35	1.2V	●	●	●
CORSAIR	CMK16GX4M4A2666C15 ( Ver5.20)	16GB ( 4GB*4)	SS	15-17-17-35	1.2V	●	●	●
CORSAIR	CMK64GX4M4A2666C16 ( Ver5.3)	64GB(16GB*4)	DS	16-18-18-35	1.2V	●	●	
G.SKILL	F4-2666C15Q-32GRR	8G*4	SS	15-15-15-35	1.2V	●	●	●
AVEXIR	AVD4UZ126661704G-4COR	4G*4	SS		1.2V	●	●	●
AVEXIR	AVD4UZ126661708G-4COR	8G*4	SS		1.2V	●	●	●
CORSAIR	CMK32GX4M4A2666C15 ( Ver5.20)	32GB(4*8GB)	DS	15-17-17-35	1.2V	●	●	
TEAM	TFRD4162666C15BBK	16G	DS	15-17-17-35	1.2V	●	●	
TEAM	TCD44G2666C15BBK	4G	SS	15-17-17-35	1.2V	●	●	●
Klevv	IM4AGU88N26-FFFHMZ	16GB	DS	15-15-15	1.2V	●	●	●
Klevv	IM44GU48N26-FFFHAZ	4GB	SS	15-15-15	1.2V	●	●	●
CORSAIR	CMK16GX4M2A2666C16(Ver5.30)	8GB	SS	16-18-18-35	1.2V	●	●	
ADATA	AX4U2666W4G16-BRZ	4GB	SS	16-16-16-39	1.2V	●	●	

ADATA	AX4U266638G16-DRZ	16GB ( 2x 8GB )	SS	16-16-16-39	1.2V	●	●	●
ADATA	AX4U2666W8G16-QRZ	32GB ( 4x 8GB )	DS	16-16-16-39	1.2V	●	●	●
CRUCIAL	BLS8G4D26BFSC.16FBR2	8GB	DS	16-18-18-38	1.20V	●	●	●
CRUCIAL	BLS4G4D26BFSC.8FBR2	4GB	SS	16-18-18-38	1.20V	●	●	●
CORSAIR	CMK128GX4M8A2666C16(Ver5.39)	128GB(8*16GB)	DS	16-18-18-36	1.20V	●	●	●
CORSAIR	CMR16GX4M2A2666C16(Ver5.30)	16GB ( 2x 8GB )	SS	16-18-18-35	1.20V	●	●	
CORSAIR	CMK128GX4M8A2666C16(Ver5.39)	128GB ( 8x 16GB )	DS	16-18-18-35	1.20V	●	●	●
CORSAIR	CMR64GX4M8A2666C16(Ver5.30)	64GB ( 8x 8GB )	SS	16-18-18-35	1.20V		●	
HyperX	HX426C16FB2K4/64	64GB(4*16GB)	DS	16-18-18-39	1.20V	●	●	●
G.SKILL	F4-2666C16Q2-64GRB	64GB ( 8GBx8 )	SS	16-16-16-36	1.20V	●	●	●
HyperX	HX426C15SBK8/128	128GB ( 16GBx8 )	DS	15-16-16-35	1.20V	●	●	
HyperX	HX426C13PB3/8	32GB ( 4x 8GB )	SS	13-15-15-35	1.35V	●	●	
HyperX	HX426C13PB3K2/16	32GB ( 4x 8GB )	SS	13-15-15-35	1.35V	●	●	
HyperX	HX424C12PB3/8	32GB ( 4x 8GB )	SS	13-15-15-35	1.35V	●	●	
HyperX	HX424C12PB3K2/16	32GB ( 4x 8GB )	SS	13-15-15-35	1.35V	●	●	
HyperX	HX424C12PB3K4/32	32GB ( 4x 8GB )	SS	13-15-15-35	1.35V	●	●	
HyperX	HX426C13PB3/16	64GB(4*16GB)	DS	13-15-15-35	1.35V	●	●	●
HyperX	HX426C13PB3K2/32	64GB(4*16GB)	DS	13-15-15-35	1.35V	●	●	●
HyperX	HX424C12PB3K4/64	64GB(4*16GB)	DS	13-15-15-35	1.35V	●	●	●
HyperX	HX424C12PB3/16	64GB(4*16GB)	DS	13-15-15-35	1.35V	●	●	●
HyperX	HX424C12PB3K2/32	64GB(4*16GB)	DS	13-15-15-35	1.35V	●	●	●
CRUCIAL	BLS8G4D26BFSC.8FBR	8GB	SS	16-18-18-38	1.20V	●	●	●
CRUCIAL	BLS8G4D26BFSC.8FBD	8GB	SS	16-18-18-38	1.20V	●	●	●
MICRON	MTA16ATF2G64AZ-2G6H1	16GB	DS	19-19-19-43	1.20V	●	●	●
MICRON	MTA8ATF1G64AZ-2G6H1	8GB	SS	19-19-19-43	1.20V	●	●	●
ADATA	AX4U266638G16-DRZ(XMP)	2 x 8GB		16-16-16-39	1.2	●	●	
ADATA	AX4U2666W4G16-BRZ(XMP)	4GB		16-16-16-39	1.2	●	●	
ADATA	AX4U2666W8G16-QRZ(XMP)	4 x 8GB		16-16-16-39	1.2	●	●	●

CORSAIR	CMD128GX4M8A2666C15(Ver4.31)(XMP)	8 x 16GB	15-17-17-35	1.2	•	•	•
CORSAIR	CMD16GX4M2A2666C15(Ver4.23)(XMP)	2 x 8GB	15-17-17-35	1.2	•	•	
CORSAIR	CMD16GX4M4A2666C15(Ver4.23)(XMP)	4 x 4GB	15-17-17-35	1.2	•	•	•
CORSAIR	CMD16GX4M4A2666C16(Ver4.23)(XMP)	4 x 4GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMD16GX4M4A2666C16(Ver5.29)(XMP)	4 x 4GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMD32GX4M4A2666C15(Ver4.23)(XMP)	4 x 8GB	15-17-17-35	1.2	•	•	•
CORSAIR	CMD32GX4M4A2666C15(Ver5.29)(XMP)	4 x 8GB	15-17-17-35	1.2	•	•	•
CORSAIR	CMD32GX4M4A2666C16(Ver4.23)(XMP)	4 x 8GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMD64GX4M8A2666C15(Ver4.23)(XMP)	8 x 8GB	15-17-17-35	1.2	•	•	•
CORSAIR	CMD64GX4M8A2666C15(Ver4.24)(XMP)	8 x 8GB	15-17-17-35	1.2	•	•	•
CORSAIR	CMD8GX4M2A2666C15(Ver4.23)(XMP)	2 x 4GB	15-17-17-35	1.2	•	•	
CORSAIR	CMK128GX4M8A2666C16(Ver5.39)(XMP)	8 x 16GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMK16GX4M2A2666C16(Ver5.29)(XMP)	2 x 8GB	16-18-18-35	1.2	•	•	
CORSAIR	CMK16GX4M2A2666C16(Ver5.30)(XMP)	2 x 8GB	16-18-18-35	1.2	•	•	
CORSAIR	CMK16GX4M4A2666C15(Ver4.23)(XMP)	4 x 4GB	15-17-17-35	1.2	•	•	•
CORSAIR	CMK16GX4M4A2666C15(Ver5.29)(XMP)	4 x 4GB	15-17-17-35	1.2	•	•	•

CORSAIR	CMK16GX4M4A2666C16(Ver3.21)(XMP)	4 x 4GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMK16GX4M4A2666C16(Ver4.23)(XMP)	4 x 4GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMK16GX4M4A2666C16(Ver5.29)(XMP)	4 x 4GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMK32GX4M2A2666C16(Ver4.31)(XMP)	2 x 16GB	16-18-18-35	1.2	•	•	
CORSAIR	CMK32GX4M2A2666C16R(Ver3.31)(XMP)	2 x 16GB	16-18-18-35	1.2	•	•	
CORSAIR	CMK32GX4M4A2666C15(Ver4.23)(XMP)	4 x 8GB	15-17-17-35	1.2	•	•	•
CORSAIR	CMK32GX4M4A2666C15(Ver5.29)(XMP)	4 x 8GB	15-17-17-35	1.2	•	•	
CORSAIR	CMK32GX4M4A2666C16(Ver3.20)(XMP)	4 x 8GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMK32GX4M4A2666C16(Ver3.21)(XMP)	4 x 8GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMK32GX4M4A2666C16(Ver5.29)(XMP)	4 x 8GB	16-16-18-35	1.2	•	•	•
CORSAIR	CMK32GX4M4A2666C16(Ver5.30)(XMP)	4 x 8GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMK32GX4M4A2666C16R(Ver4.23)(XMP)	4 x 8GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMK64GX4M4A2666C16(Ver3.31)(XMP)	4 x 16GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMK64GX4M4A2666C16(Ver4.31)(XMP)	4 x 16GB	16-18-18-35	1.2	•	•	•
CORSAIR	CMR16GX4M2A2666C16(Ver5.30)(XMP)	2 x 8GB	16-18-18-35	1.2	•	•	
CORSAIR	CMU32GX4M4A2666C16(Ver5.30)(XMP)	4 x 8GB	16-18-18-35	1.2	•	•	•



<b>crucial</b>	<b>BLE4G4D26AFEA.8FAD (XMP)</b>	4GB	16-17-17-36	1.2	●	●	
<b>crucial</b>	<b>BLE8G4D26AFEA.16FAD(XMP)</b>	8GB	16-17-17-36	1.2	●	●	
<b>crucial</b>	<b>BLS16G4D26BFSC.16FBD(XMP)</b>	16GB	16-18-18-38	1.2	●	●	
<b>crucial</b>	<b>BLS4G4D26BFSC.8FBR2(XMP)</b>	4GB	16-18-18-38	1.2	●	●	
<b>crucial</b>	<b>BLS8G4D26BFSC.16FBR2(XMP)</b>	8GB	16-18-18-38	1.2	●	●	
<b>crucial</b>	<b>BLT4G4D26AFTA.8FADG(XMP)</b>	4 x 4GB	16-17-17-36	1.2	●	●	●
<b>crucial</b>	<b>BLT4G4D26AFTA.8FADG(XMP)</b>	4GB	16-17-17-36	1.2	●	●	
<b>crucial</b>	<b>BLT8G4D26AFTA.16FAD(XMP)</b>	4 x 8GB	16-17-17-36	1.2	●	●	●
<b>crucial</b>	<b>BLT8G4D26AFTA.16FAD(XMP)</b>	8GB	16-17-17-36	1.2	●	●	
<b>G.SKILL</b>	<b>F4-2666C15Q-16GRR(XMP)</b>	4 x 4GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-16GVR</b>	4 x 4GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-16GVB</b>	4 x 4GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-16GVG</b>	4 x 4GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-16GVK</b>	4 x 4GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-16GVS</b>	4 x 4GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-16GRK</b>	4 x 4GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-16GRB</b>	4 x 4GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-32GRR(XMP)</b>	4 x 8GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-32GVR</b>	4 x 8GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-32GVB</b>	4 x 8GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-32GVG</b>	4 x 8GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-32GVK</b>	4 x 8GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-32GVS</b>	4 x 8GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-32GRK</b>	4 x 8GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C15Q-32GRB</b>	4 x 8GB	15-15-15-35	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C16Q2-128GVK(XMP)</b>	8 x 16GB	16-16-16-36	1.2	●	●	●
<b>G.SKILL</b>	<b>F4-2666C16Q2-128GVR</b>	8 x 16GB	16-16-16-36	1.2	●	●	●
<b>Hyper X</b>	<b>HX426C13PB3/16(XMP)</b>	16GB	13-15-15-35	1.35	●	●	●
<b>Hyper X</b>	<b>HX426C13PB3K2/32(XMP)</b>	2 x 16GB	13-15-15-35	1.35	●	●	●
<b>Hyper X</b>	<b>HX426C13PB3K4/64(XMP)</b>	4 x 16GB	13-15-15-35	1.35	●	●	●
<b>Hyper X</b>	<b>HX426C13SB2/4(XMP)</b>	4GB	13-15-15-39	1.35	●	●	

Hyper X	HX426C13SB2/8(XMP)	8GB	13-15-15-39	1.35	●	●
Hyper X	HX426C13SB2K2/16(XMP)	2 x 8GB	13-15-15-39	1.35	●	●
Hyper X	HX426C13SB2K2/8(XMP)	2 x 4GB	13-15-15-39	1.35	●	●
Hyper X	HX426C13SB2K4/16(XMP)	4 x 4GB	13-15-15-39	1.35	●	●
Hyper X	HX426C13SB2K4/32(XMP)	4 x 8GB	13-15-15-39	1.35	●	●
Hyper X	HX426C15FB/4	4GB	15-17-17-35	1.2	●	● ●
Hyper X	HX426C15FB/8	8GB	15-17-17-35	1.2	●	● ●
Hyper X	HX426C15FBK2/16	2 x 8GB	15-15-17-35	1.2	●	● ●
Hyper X	HX426C15FBK2/16	2 x 8GB	15-17-17-35	1.2	●	● ●
Hyper X	HX426C15FBK2/8	2 x 4GB	15-17-17-35	1.2	●	● ●
Hyper X	HX426C15FBK4/16	4 x 4GB	15-17-17-35	1.2	●	● ●
Hyper X	HX426C15FBK4/32	4 x 8GB	15-15-17-35	1.2	●	● ●
Hyper X	HX426C15FBK4/32	4 x 8GB	15-17-17-35	1.2	●	● ●
Hyper X	HX426C15SBK4/64(XMP)	4 x 16GB	15-15-15-35	1.2	●	● ●
Hyper X	HX426C16FB/16	16GB	16-18-18-39	1.2	●	● ●
Hyper X	HX426C16FB2/8(XMP)	8GB	16-18-18-39	1.2	●	● ●
Hyper X	HX426C16FB2K2/16(XMP)	2 x 8GB	16-18-18-39	1.2	●	● ●
Hyper X	HX426C16FB2K4/32(XMP)	4 x 8GB	16-18-18-39	1.2	●	● ●
Hyper X	HX426C16FBK2/32	2 x 16GB	16-18-18-39	1.2	●	● ●
Hyper X	HX426C16FBK4/64	4 x 16GB	16-18-18-39	1.2	●	● ●
Hyper X	HX426C16FBK4/64	4 x 16GB	16-18-18-39	-	●	●
Hyper X	HX426C16FW/16	16GB	16-18-18-39	1.2	●	● ●
Hyper X	HX426C16FWK2/32	2 x 16GB	16-18-18-39	1.2	●	● ●
Hyper X	HX426C16FWK4/64	4 x 16GB	16-18-18-39	1.2	●	● ●
Kingston	KVR26N19D8/16	16GB	19-19-19-43	1.2	●	●
Kingston	KVR26N19S8/8	8GB	19-19-19-43	1.2	●	●
Klevv	IM44GU48N26-FFFHAZ(XMP)	4GB	15-15-15-35	1.2	●	●
Klevv	KM4Z4GX1N-2666-15-15-15-35-1	4GB	15-15-15-35	1.2	●	●
Klevv	KM4Z4GX2N-2666-15-15-15-35-1	4GB	15-15-15-35	1.2	●	●
Klevv	KM4Z4GX4N-2666-15-15-15-35-1	4GB	15-15-15-35	1.2	●	●
Klevv	IM48GU88N26-FFFHMZ(XMP)	8GB	15-15-15-35	1.2	●	●

Klevv	KM4Z8GX1N-2666-15-15-15-35-1	8GB	15-15-15-35	1.2	●	●
Klevv	IM4AGU88N26-FFFHMZ(XMP)	16GB	15-15-15-35	1.2	●	●
Klevv	KM4Z16X1N-2666-15-15-15-35-0	16GB	15-15-15-35	1.2	●	●
Klevv	KM4Z16X2N-2666-15-15-15-35-0	16GB	15-15-15-35	1.2	●	●
Klevv	KM4Z16X4N-2666-15-15-15-35-0	16GB	15-15-15-35	1.2	●	●
Klevv	KM4C4GX4N-2666-15-15-15-35-0 (XMP)	4GB	15-15-15-35	1.2	●	●
Klevv	KM4C4GX4N-2666-15-15-15-35-1 (XMP)	4GB	15-15-15-35	1.2	●	●
Klevv	KM4C8GX4N-2666-15-15-15-35-0 (XMP)	8GB	15-15-15-35	1.2	●	●
Klevv	KM4C8GX4N-2666-15-15-15-35-1 (XMP)	8GB	15-15-15-35	1.2	●	●
Team	TFRD416G2666C15BBK(XMP)	16GB	15-17-17-35	1.2	●	
Team	TCD44G2666C15BBK(XMP)	4GB	15-17-17-35	1.2	●	●
Team	TLRED416G2666HC15BQC01	4 x 4GB	15-17-17-35	1.2	●	●
Team	TLGD416G2666HC15BQC01	4 x 4GB	15-17-17-35	1.2	●	●
Team	TDRED416G2666HC15BQC01	4 x 4GB	15-17-17-35	1.2	●	●
Team	TDGED416G2666HC15BQC01	4 x 4GB	15-17-17-35	1.2	●	●
Team	TLRED48G2666HC15BDC01	2 x 4GB	15-17-17-35	1.2	●	●
Team	TLGD48G2666HC15BDC01	2 x 4GB	15-17-17-35	1.2	●	●
Team	TDRED48G2666HC15BDC01	2 x 4GB	15-17-17-35	1.2	●	●
Team	TDGED48G2666HC15BDC01	2 x 4GB	15-17-17-35	1.2	●	●
Team	TFRD416G2666C15BBK(XMP)	16GB	15-17-17-35	1.2	●	●
Team	THRD464G2666HC15BQC01	4 x 16GB	15-17-17-35	1.2	●	●
Team	THWD464G2666HC15BQC01	4 x 16GB	15-17-17-35	1.2	●	●
Team	THBD464G2666HC15BQC01	4 x 16GB	15-17-17-35	1.2	●	●
Team	THRD432G2666HC15BDC01	2 x 16GB	15-17-17-35	1.2	●	●
Team	THWD432G2666HC15BDC01	2 x 16GB	15-17-17-35	1.2	●	●
Team	THBD432G2666HC15BDC01	2 x 16GB	15-17-17-35	1.2	●	●
Team	TFWD48G2666C15BBK(XMP)	8GB	15-17-17-35	1.2	●	●

Team	TLRED432G2666HC15BQC01	4 x 8GB	15-17-17-35	1.2	●	●
Team	TLGD432G2666HC15BQC01	4 x 8GB	15-17-17-35	1.2	●	●
Team	TDRED432G2666HC15BQC01	4 x 8GB	15-17-17-35	1.2	●	●
Team	TDGED432G2666HC15BQC01	4 x 8GB	15-17-17-35	1.2	●	●
Team	THRD432G2666HC15BQC01	4 x 8GB	15-17-17-35	1.2	●	●
Team	THWD432G2666HC15BQC01	4 x 8GB	15-17-17-35	1.2	●	●
Team	THBD432G2666HC15BQC01	4 x 8GB	15-17-17-35	1.2	●	●
Team	TLRED416G2666HC15BDC01	2 x 8GB	15-17-17-35	1.2	●	●
Team	TLGD416G2666HC15BDC01	2 x 8GB	15-17-17-35	1.2	●	●
Team	TDRED416G2666HC15BDC01	2 x 8GB	15-17-17-35	1.2	●	●
Team	TDGED416G2666HC15BDC01	2 x 8GB	15-17-17-35	1.2	●	●
Team	THRD416G2666HC15BDC01	2 x 8GB	15-17-17-35	1.2	●	●
Team	THWD416G2666HC15BDC01	2 x 8GB	15-17-17-35	1.2	●	●
Team	THBD416G2666HC15BDC01	2 x 8GB	15-17-17-35	1.2	●	●

### DDR4 2400 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)		
						1 DIMM	2 DIMM	4 DIMM
ADATA	AX4U2400W8G16-DRZ	8G	DS	16-16-16	1.2V	●	●	●
G.SKILL	F4-2400C15Q-32GRB	32GB ( 8GB*4 )	DS	15-15-15-35	1.2V	●	●	●
PATRIOT	PX416G240C5QK	4G	SS	15-15-15-35	1.2V	●	●	●
GLOWAY	PC4-19200	4G	DS	16-16-16-35	1.2V	●		
PANRAM	PUD42400C154G4NJW	16GB ( 4GB*4)	SS	15-15-15-35	1.2V	●	●	
PANRAM	PUD42400C158G4NJW	8G	DS	15-15-15-35	1.2V	●	●	
CRUCIAL	BLS4K4G4D240FSA	4G	SS	16-16-16-39	1.2V	●	●	
ADATA	AX4U2400W4G16-DRZ	4G	SS	16-16-16	1.2V	●	●	
GEIL	GPR416GB2400C15QC	4G	SS	15-15-15-35	1.2V	●	●	●
MUSHKIN	997199F	8G	DS	15-15-15-35-50	1.2V	●	●	●
KINGSTON	HX424C15FBK4/32	32GB ( 8GB*4 )	DS	15-15-15-35-56	1.2V	●	●	

APACER	78.C1GMA.AF30B	8G	DS	16-16-16-36	1.2V	•	•	•
PNY	MD16GK2D4240015AB	16GB ( 8GB*2)	DS		1.2V	•	•	•
V-COLOR	TD8G16C16-UHK	16GB ( 8GB*2)	DS	16-16-16-35	1.2V	•	•	•
G.SKILL	F4-2400C15D-169GVR	16GB ( 8GB*2)	DS	15-15-15-35	1.2V	•	•	•
APACER	AHU08GGB24CDT7G	8G	DS	16-16-16-36		•	•	•
CORSAIR	CM4X8GE2400C14K4-CN ( Ver4.24 )	8G	DS	14-16-16-31	1.2V	•	•	
CORSAIR	CMK8GX4M1A2400C14(Ver3.20)	8G	DS	14-16-16-31	1.2V	•	•	
PATRIOT	PV416G240C5QK	16GB ( 4GB*4)	SS	15-15-15-35	1.2V	•	•	•
PATRIOT	PSD44G240081	4G	SS			•	•	
APACER	78.B1GMA.AF20B	4G	SS	16-16-16-36	1.2V	•	•	
KINGSTON	HX424C15FBK4/16	4G	SS		1.2V	•	•	•
G.SKILL	F4-2400C14Q2-128GRK	16G	DS	14-14-14-34	1.2V	•		
G.SKILL	F4-2400C14Q-16GRK	4G	SS	14-14-14-34	1.2V	•	•	•
G.SKILL	F4-2400C15Q-16GRR	4G	SS	15-15-15-35	1.2V	•	•	•
AVEXIR	AVD4UZ124001608G-4COR	8G	DS		1.2V	•	•	
AVEXIR	AVD4UZ124001604G-4COB	4G	SS		1.2V	•	•	•
CRUCIAL	BLS8G4D240FSA.16FADG	8G	DS	16-16-16-39	1.2V	•	•	
TEAM	TED48G2400C16BK	8GB	DS	16-16-16-39	1.2V	•	•	
KINGSTON	HX424C12PBK4/32	8G	DS		1.35V	•	•	•
G.SKILL	F4-2400C15Q-32GRR	8G	DS	15-15-15-35	1.2V	•	•	•
PATRIOT	PSD48G240002	8G	DS			•		
GALAXY	GAL4AXLBM2400D16JE081C	8G	SS		1.2V	•	•	•
GEIL	DDR48GB2400C16QC	8G	SS	16-16-16-36	1.2V	•	•	
CORSAIR	CM4X8GE2400C16K4-CN ( Ver5.20 )	8G	DS	16-16-16-39	1.2V	•	•	•
LEORICE	DDR4/2400MHZ/CL15/1.2V	32GB ( 8GB*4 )	SS		1.2V	•	•	•
CORSAIR	CMD32GX4M4A2400C14 ( Ver4.23 )	8G	DS	14-16-16-31	1.2V	•	•	•
AMD	R748G2400U2S	8G	DS	15-15-15-36	1.2V	•	•	•
MICRON	MTA16ATF2G64AZ-2G3B1	16G	DS			•	•	•

MICRON	MTA8ATF1G64AZ-2G3B1	8G	SS	17-17-17-39-55	1.2V	•	•	•
KINGSTON	HX424C12SB2K4/16	16GB ( 4GB*4)	SS		1.35V	•	•	
KINGSTON	HX424C12SB2K4/32	32GB ( 8GB*4 )	DS		1.35V	•	•	•
KINGSTON	HX424C15FBK2/16	16GB ( 8GB*2 )	DS		1.2V	•	•	•
GALAXY	GAM4BXLBS240016JE164C	16GB ( 4GB*4)	SS	16-16-16-36	1.2V	•	•	•
APACER	AH08GGB24CDT5H	16GB ( 2x 8G )	DS	16-16-16-36		•	•	•
CORSAIR	CMK8GX4M2A2400C14(Ver3.28)	8GB ( 2x 4G )	SS	14-16-16-31	1.2V	•	•	•
CORSAIR	CMK16GX4M2A2400C14	16GB ( 2x 8G )	DS	14-16-16-31	1.2V	•	•	•
AVEXIR	AVD4UZ124001608G-1COB	8G	DS		1.2V	•	•	•
AVEXIR	AVD4U24001608G-1BW	8G	DS		1.2V	•	•	•
APACER	AU08GGB24CETBGC	8G	DS			•	•	•
AVEXIR	AVD4UZ124001608G-2COR	16GB (8GB*2)	DS		1.2V	•	•	•
V-COLOR	8GTC48G24S817-IMS	32GB ( 8GB*4 )	SS		1.2V	•	•	•
CORSAIR	CMD32GX4M4A2400C12 ( Ver5.20 )	32GB(8GB*4)	DS		1.2V	•	•	•
G.SKILL	F4-2400C15Q-64GIS	64GB(16GB*4)	DS		1.2V	•	•	•
G.SKILL	F4-2400C15Q-32GNT	32GB(8GB*4)	SS		1.2V	•	•	
CRUCIAL	BLS8G4D24OFSB.16FARG	32GB(8GB*4)	DS		1.2V	•	•	
GEIL	GLW416GB2400C15DC	8G	SS	15-15-15-35	1.2V	•	•	•
TEAM	TDTRD48G2400HC15ABK	8GB	SS	15-15-15-35	1.2V	•	•	•
TEAM	TDRED48G2400HC14BK	8GB	DS	14-16-16-31	1.2V	•	•	
GEIL	GRP416GB2400C16DC	8GB	SS	16-16-16-36	1.2V	•	•	•
ADATA	AX4U2400W8G16-BRZ	8G	DS	16-16-16	1.2V	•	•	•
KINGSTON	HX424C15FB/16	16GB	DS		1.2V	•	•	
CRUCIAL	BLS8G4D240FSC.16FARG	8GB	DS	16-16-16-39	1.2V	•	•	•
CORSAIR	CMK32GX4M2A2400C14(Ver3.31)	32GB(16GB*2)	DS	14-16-16-31	1.2V	•	•	•
GALAXY	GAM4HFL1BM2400D15IE08IC	8G	DS		1.2V	•	•	
CORSAIR	CMK32GX4M4A2400C16R(Ver3.31 )	32GB(4*8GB)	SS	16-16-16-39	1.2V	•	•	•
CORSAIR	CMD16GX4M4B2400C10	16GB(4*4GB)	SS	10-12-12-28	1.35V	•	•	•

MUSHKIN	997199T	16GB(2*8GB)	SS	15-15-15-35	1.2V	•	•	•
GEIL	8G2133C151.2V	8G	DS		1.2V	•	•	•
TEAM	TCD44G2400C14BK	4GB	SS	14-16-16-31	1.2V	•	•	•
TIGO	TMKU8GF28-2400U	8G	DS		1.2V	•	•	•
APACER	AU08GGB24CEYBGC	8G	SS	17-17-17-39	1.2V	•	•	
KINGSTON	HX424C12SB2K2/16	16G	DS		1.35V	•	•	•
KINGSTON	KVR24N17D8/8-SP	8G	DS		1.2V	•		
GLOWAY	PC4-19200	8G	SS	15-15-15-35	1.2V	•	•	•
ADATA	AX4U240038G16-BWZ	8GB*8	SS	17-16-16-39	1.2V	•	•	•
ADATA	AX4U2400316G16-SBF	16G*16	DS	17-16-16-39	1.2V	•	•	•
AVEXIR	AVD4UZ124001608G-4COR	8GB*4	SS	16-16-16-36	1.2V	•		
AVEXIR	AVD4UZ124001604G-4COR	16GB ( 4x 4GB )	SS	16-16-16-36	1.2V	•	•	•
KINGSTON	TF24D4U7S8MB-8	8GB	SS	17-17-17-39	1.2V	•	•	
KINGSTON	TF24D4U7S1MBD-2	2GB	SS	17-17-17-39	1.2V	•	•	•
KINGSTON	TF24D4U7S8MBD-4	4GB	SS	17-17-17-39	1.2V	•	•	
RAMAXEL	RMUA5120MB86H9F-2400	4GB	SS	17-17-17-39	1.2V	•	•	•
RAMAXEL	RMUA5120MB76H8F-2400	2GB	SS	17-17-17-39	1.2V	•	•	•
V-COLOR	TC48G24S817	8GB	SS	17-17-17-39	1.2V	•	•	•
ADATA	AX4U240038G16-SBF	8GB	SS	17-17-17-39	1.2V	•	•	•
ADATA	AX4U2400W8G16-DRD	8GB	DS	17-17-17-39	1.2V	•	•	•
ADATA	AX4U2400316G16-DRD	16G	DS	17-17-17-39	1.2V	•	•	•
G.SKILL	F4-2400C15Q2-64GRK	8GB*8	SS	15-15-15-35	1.2V	•	•	•
TEAM	TCD48G2400C14BK	8G	SS	14-16-16-31	1.2V	•	•	•
CRUCIAL	BLS16G4D240FSE.16FAD	16G	DS	16-16-16-39	1.2V	•	•	•
CRUCIAL	BLS4G4D240FSA.8FARG	4G	SS	16-16-16-39	1.2V	•	•	
PATRIOT	PV48G240C5	8G	DS		1.2V	•	•	•
TEAM	TFWD416G2400C15BBK	16G	DS	15-17-17-35	1.2V	•	•	•
TEAM	TFRD48G2400C15ABK	8G	SS	15-15-15-35	1.2V	•	•	
TEAM	TFRD44G2400C15ABK	4G	SS	15-15-15-35	1.2V	•	•	•
Klevv	IM44GU48N24-FFFHAZ	4GB	SS	15-15-15	1.2V	•	•	•
Klevv	IM4AGU88N24-FFFHMZ	16GB	DS	15-15-15	1.2V	•	•	

Klevv	IM48GU88N24-FFFHMZ	8GB	SS	15-15-15	1.2V	•	•	•
Klevv	IM4AGU88N24-FFFHMB	16GB	DS	15-15-15	1.2V	•	•	•
Klevv	IM48GU88N24-FFFHMB	8GB	SS	15-15-15	1.2V	•	•	•
Klevv	IM44GU48N24-FFFHAB	4GB	SS	15-15-15	1.2V	•	•	
GEIL	GPR432GB2400C16QC	8GB	SS	16-16-16-36	1.2V	•	•	•
G.SKILL	F4-2400C15D-16GTZR	8GB	SS	15-15-15-35	1.2V	•	•	•
CRUCIAL	MTA16ATF1G64AZ-2G3A2	8GB	DS	17-17-17-39	1.2V	•	•	
Kingston	KVR24N17S8/8	8GB	SS	17-17-17-39	1.2V	•	•	•
G.SKILL	F4-2400C15Q-64GFX	64GB(4*16GB)	DS	15-15-15-39	1.20V	•	•	•
G.SKILL	F4-2400C15Q-32GFX	32GB ( 4x 8GB )	SS	15-15-15-39	1.20V	•	•	•
G.SKILL	F4-2400C16Q-64GFX	64GB(4*16GB)	DS	16-16-16-39	1.20V	•	•	•
G.SKILL	F4-2400C16Q-32GFX	32GB ( 4x 8GB )	SS	16-16-16-39	1.20V	•	•	•
CORSAIR	CMK16GX4M2Z2400C16(Ver3.31)	16GB ( 2x 8GB )	SS	16-16-16-18	1.20V	•	•	
CORSAIR	CMK128GX4M8A2400C14(Ver5.30)	128GB(8*16GB)	DS	14-16-16-31	1.20V	•	•	•
SAMSUNG	M378A5244CB0--CRC	16GB(4*4GB)	SS	17-17-17-39	1.20V	•	•	
CORSAIR	CMK128GX4M8A2400C14(Ver5.30)	128GB ( 8x 16GB )	DS	14-16-16-31	1.20V	•	•	•
CORSAIR	CMK16GX4M2Z2400C16(Ver3.31)	16GB ( 2x 8GB )	SS	16-16-16-39	1.20V	•	•	
GeIL	GFR416GB2400C16S	16GB	SS	16-16-16-36	1.20V	•	•	
GeIL	GFR432GB2400C16D	16GB	SS	16-16-16-36	1.20V	•	•	•
HyperX	HX424C15FB2K4/32	32GB ( 4x 8GB )	SS	15-15-15-35	1.20V	•	•	•
GLOWAY	STK4U2400D17081C	8GB	DS	17-17-17-39	1.20V	•	•	•
GLOWAY	STK4U2400D17081C	8GB	SS	17-17-17-39	1.20V	•	•	•
GLOWAY	STK4U2400D17161C	16GB	SS	17-17-17-39	1.20V	•	•	
PATRIOT	PSD48G240081	8GB	SS	17-17-17-39	1.20V	•	•	•
PATRIOT	PSD44G240081	4GB	SS	16-16-16-39	1.20V	•	•	•
PATRIOT	PSD416G24002	16GB	DS	17-17-17-39	1.20V	•	•	•
PATRIOT	PV432G240C5QK	32GB ( 4x 8GB )	SS	15-15-15-35	1.20V	•	•	•
PATRIOT	PVE48G240C5KRD	8GB ( 2x 4GB )	SS	15-15-15-35	1.20V	•	•	•
PATRIOT	PVE416G240C5KBL	16GB ( 2x 8GB )	SS	15-15-15-35	1.20V	•	•	•



SAMSUNG	M378A2K43CB1-CRC	16GB	DS	17-17-17-39	1.20V	•	•	•
Crucial	CT8G4DFS824A.C8FBD1	8GB	SS	17-17-17-39	1.20V	•	•	•
ADATA	AD4X240038G17-BP	64GB ( 8GBx8 )	SS	17-17-17-39	1.20V	•	•	•
APACER	AHU08GGB24CDU7S	8GB	SS	16-16-16-36	1.20V	•	•	
Crucial	BLS8G4D240FSC.16FBR2	8GB	DS	16-16-16-39	1.20V	•	•	•
Asgard	VML41UG-MIC1U22ZG	8GB	SS	17-17-17-39	1.20V	•	•	•
KINGMAX	GLLF62F-DAKZIG CLBU	4GB	SS	17-17-17-39	1.20V	•	•	•
KINGMAX	GLLH22F-18KIIA CFBU2	16GB	DS	17-17-17-39	1.20V	•	•	•
KINGMAX	GLLG42F-D8KBIA CFDU	8GB	DS	17-17-17-39	1.20V	•	•	
GEIL	GP44GB2400C16SC	4GB	SS	17-16-16-36	1.20V	•	•	
Kingston	KVR24N17S8/4	4GB	SS	17-17-17-39	1.20V	•	•	
CRUCIAL	BLS16G4D240FSC.16FBR	16G	DS	16-16-16-39	1.20V	•	•	•
CRUCIAL	BLS8G4D240FSCK.8FBD	8GB	SS	16-16-16-39	1.20V	•	•	•
CRUCIAL	CT8G4DFD824A.C16FBD2	8GB	DS	17-17-17-39	1.20V	•	•	•
CRUCIAL	CT16G4DFD824A.C16FHD1	16GB	DS	17-17-17-39	1.20V	•	•	•
ADATA	AX4U240038G16-BRZ	64GB(8x 8GB )	SS	17-16-16-39	1.20V	•	•	•
G.SKILL	F4-2400C15S-8GNT	8GB	SS	15-15-15-35	1.20V	•	•	•
ADATA	AD4U2400W4G17-B	4GB		15-15-15-35	1.2	•	•	
ADATA	AD4U2400W8G17-B	8GB		15-15-15-35	1.2	•	•	
ADATA	AX4U2400316G16-DRD(XMP)	16GB		16-16-16-39	1.2	•	•	
ADATA	AX4U2400316G16-SBF(XMP)	16GB		16-16-16-36	1.2	•	•	
ADATA	AX4U240038G16-BRS-R(XMP)	8GB		16-16-16-39	1.2	•	•	
ADATA	AX4U240038G16-SBF(XMP)	8GB		16-16-16-39	1.2	•	•	
ADATA	AX4U2400W8G16-BRZ(XMP)	8GB		16-16-16-39	1.2	•	•	
ADATA	AX4U2400W8G16-DRD(XMP)	8GB		16-16-16-39	1.2	•	•	
Apacer	78.B1GMS.4050B	4 x 4GB		17-17-17-39	-	•	•	
Apacer	78.C1GMS.4010B	4 x 8GB		17-17-17-39	-	•	•	•
Apacer	EK.08G2T.GEC(XMP)	8GB		16-16-16-36	-	•	•	
Apacer	AU08GGB24CEYBGC (EL.08G2T.GFM)	8GB		17-17-17-39	1.2	•	•	

Apacer	AHU08GGB24CDT7G (EK.08G2T.KEC)	8GB	16-16-16-36	1.2	•	•	
Apacer	AHU08GGB24CDU7G (EK.08G2T.GEC)	8GB	16-16-16-36	1.2	•	•	
Apacer	AHU08GGB24CDU6H (EK.16GAT.GEAK2)	2 x 8GB	16-16-16-36	1.2	•	•	
Apacer	AHU08GGB24CDU5H (EK.16GAT.GEBK2)	2 x 8GB	16-16-16-36	1.2	•	•	
CORSAIR	CMD16GX4M4A2400C14(Ver4.23)( XMP)	4 x 4GB	14-16-16-31	1.2	•	•	•
CORSAIR	CMD32GX4M4A2400C14(Ver4.23)( XMP)	4 x 8GB	14-16-16-31	1.2	•	•	•
CORSAIR	CMK128GX4M8A2400C14(Ver5.30) (XMP)	8 x 16GB	14-16-16-31	1.2	•	•	•
CORSAIR	CMK16GX4M2A2400C16(Ver3.31)( XMP)	2 x 8GB	16-16-16-39	1.2	•	•	
CORSAIR	CMK16GX4M4A2400C14(Ver4.23)( XMP)	4 x 4GB	14-16-16-31	1.2	•	•	•
CORSAIR	CMK32GX4M4A2400C14(Ver4.23)( XMP)	4 x 8GB	14-16-16-31	1.2	•	•	•
CORSAIR	CMK32GX4M4A2400C16(Ver3.31)( XMP)	4 x 8GB	16-16-16-39	1.2	•	•	•
CORSAIR	CMK64GX4M4A2400C14(Ver3.31)( XMP)	4 x 16GB	14-16-16-31	1.2	•	•	•
CORSAIR	CMK64GX4M4A2400C14(Ver4.31)( XMP)	4 x 16GB	14-16-16-31	1.2	•	•	•
crucial	BLS16G4D240FSB.16FBD(XMP)	16GB	16-16-16-39	1.2	•	•	
crucial	BLS4G4D240FSB.8FBD(XMP)	4GB	16-16-16-39	1.2	•	•	
crucial	BLS8G4D240FSBK.8FBD(XMP)	8GB	16-16-16-39	1.2	•	•	
crucial	CT16G4DFD824A.16FB1	16GB	17-17-17-39	1.2	•	•	
crucial	CT16G4DFD824A.C16FDR1	16GB	17-17-17-39	1.2	•	•	
crucial	CT8G4DFS824A.8FB1	8GB	17-17-17-39	1.2	•	•	

G.SKILL	F4-2400C14Q2-128GRK(XMP)	8 x 16GB	14-14-14-34	1.2	●	●	●
G.SKILL	F4-2400C15Q-16GRR(XMP)	4 x 4GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-16GVR	4 x 4GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-16GVB	4 x 4GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-16GVG	4 x 4GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-16GVK	4 x 4GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-16GVS	4 x 4GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-16GRK	4 x 4GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-16GRB	4 x 4GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q2-128GRK(XMP)	8 x 16GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q2-128GVK(XMP)	8 x 16GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q2-128GVR	8 x 16GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q2-64GRK(XMP)	8 x 8GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-32GRR(XMP)	4 x 8GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-32GVR	4 x 8GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-32GVB	4 x 8GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-32GVG	4 x 8GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-32GVK	4 x 8GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-32GVS	4 x 8GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15Q-32GRK	4 x 8GB	15-15-15-35	1.2	●	●	●
GeIL	GFR416GB2400C16S(XMP)	16GB	16-16-16-36	1.2	●	●	
GeIL	GFR432GB2400C16D(XMP)	16GB	16-16-16-36	1.2	●	●	
GeIL	GLR464GB2400C14QC(XMP)	4 x 16GB	14-14-14-35	1.2	●	●	●
GeIL	GPR416GB2400C15QC(XMP)	4 x 4GB	15-15-15-35	1.2	●	●	
GeIL	GPR432GB2400C15QC(XMP)	4 x 8GB	15-15-15-35	1.2	●	●	●
GeIL	GPR432GB2400C16QC(XMP)	4 x 8GB	16-16-16-36	1.2	●	●	●
Hyper X	HX424C12PB2K4/16(XMP)	4 x 4GB	12-13-13-35	1.2	●	●	●
Hyper X	HX424C12SB2/4(XMP)	4GB	12-14-14-35	1.35	●	●	●
Hyper X	HX424C12SB2/8(XMP)	8GB	12-14-14-35	1.35	●	●	
Hyper X	HX424C12SB2K2/16(XMP)	2 x 8GB	12-14-14-35	1.35	●	●	●
Hyper X	HX424C12SB2K2/16(XMP)	2 x 8GB	12-14-14-35	1.35	●	●	

Hyper X	HX424C12SB2K4/16(XMP)	4 x 4GB	12-14-14-35	1.35	●	●	●
Hyper X	HX424C12SB2K4/32(XMP)	4 x 8GB	12-14-14-35	1.35	●	●	●
Hyper X	HX424C12SB2K4/32(XMP)	4 x 8GB	12-14-14-35	1.35	●	●	
Hyper X	HX424C15B2K4/32(XMP)	4 x 8GB	15-15-15-35	1.2	●	●	●
Hyper X	HX424C15FB/4	4GB	15-15-5-35	1.2	●	●	
Hyper X	HX424C15FB/8(XMP)	8GB	15-15-15-35	1.2	●	●	
Hyper X	HX424C15FB/8(XMP)	8GB	15-15-15-35	1.2	●	●	
Hyper X	HX424C15FBK2/16	2 x 16GB	15-15-15-35	1.2	●	●	
Hyper X	HX424C15FBK2/8	2 x 4GB	15-15-5-35	1.2	●	●	
Hyper X	HX424C15FBK4/16	4 x 4GB	15-15-5-35	1.2	●	●	●
Hyper X	HX424C15FBK4/16	4 x 4GB	15-15-15-35	1.2	●	●	●
Hyper X	HX424C15FBK4/32	4 x 8GB	15-15-15-35	1.2	●	●	
Hyper X	HX424C15FBK4/64	4 x 16GB	15-15-15-35	1.2	●	●	●
J&A	AD4U24001716-16M	16GB	17-17-17-39	-	●	●	
J&A	JAD4U24001708-04M	4GB	17-17-17-39	-	●	●	
J&A	JAD4U24001708-08M	8GB	17-17-17-39	-	●	●	
KINGMAX	GLLF62F-DAKZIG-CLBU	4GB	17-17-17-39	-	●	●	
KINGMAX	GLLH22F-18KIIA-CFBU2	16GB	17-17-17-39	-	●	●	
Kingston	KVR24N17D8/16	16GB	17-17-17-39	1.2	●	●	
Kingston	KVR24N17D8/8	8GB	17-17-17-39	1.2	●	●	
Klevv	IM44GU48N24-FFFHAB(XMP)	4GB	15-15-15-35	1.2	●	●	
Klevv	KM4B4GX1N-2133-15-15-15-35-0	4GB	15-15-15-35	1.2	●	●	
Klevv	KM4B4GX2N-2133-15-15-15-35-0	4GB	15-15-15-35	1.2	●	●	
Klevv	KM4B4GX4N-2133-15-15-15-35-0	4GB	15-15-15-35	1.2	●	●	
Klevv	IM44GU48N24-FFFHAZ(XMP)	4GB	15-15-15-35	1.2	●	●	
Klevv	KM4Z4GX1N-2400-15-15-15-35-1	4GB	15-15-15-35	1.2	●	●	
Klevv	KM4Z4GX2N-2400-15-15-15-35-1	4GB	15-15-15-35	1.2	●	●	
Klevv	KM4Z4GX4N-2400-15-15-15-35-1	4GB	15-15-15-35	1.2	●	●	
Klevv	IM48GU88N24-FFFHMB(XMP)	8GB	15-15-15-35	1.2	●	●	
Klevv	KM4B8GX1N-2400-15-15-15-35-0	8GB	15-15-15-35	1.2	●	●	
Klevv	KM4B8GX2N-2400-15-15-15-35-0	8GB	15-15-15-35	1.2	●	●	

Klevv	KM4B8GX4N-2400-15-15-15-35-0	8GB	15-15-15-35	1.2	•	•
Klevv	IM48GU88N24-FFFHMZ(XMP)	8GB	15-15-15-35	1.2	•	•
Klevv	KM4Z8GX1N-2400-15-15-15-35-1	8GB	15-15-15-35	1.2	•	•
Klevv	KM4Z8GX2N-2400-15-15-15-35-1	8GB	15-15-15-35	1.2	•	•
Klevv	KM4Z8GX4N-2400-15-15-15-35-1	8GB	15-15-15-35	1.2	•	•
Klevv	IM4AGU88N24-FFFHMB(XMP)	16GB	15-15-15-35	1.2	•	•
Klevv	KM4B16X1N-2133-15-15-15-35-0	16GB	15-15-15-35	1.2	•	•
Klevv	KM4B16X2N-2133-15-15-15-35-0	16GB	15-15-15-35	1.2	•	•
Klevv	IM4AGU88N24-FFFHMZ(XMP)	16GB	15-15-15-35	1.2	•	•
Klevv	KM4Z16X1N-2400-15-15-15-35-0	16GB	15-15-15-35	1.2	•	•
Klevv	KM4Z16X2N-2400-15-15-15-35-0	16GB	15-15-15-35	1.2	•	•
Klevv	KM4Z16X4N-2400-15-15-15-35-0	16GB	15-15-15-35	1.2	•	•
panram	W4U2400PS-8G	8GB	14-14-14-31	-	•	•
PATRIOT	PSD48G240082	8GB	17-17-17-39	1.2	•	•
PATRIOT	PV432G240C5QK(XMP)	4 x 8GB	15-15-15-35	1.2	•	• •
PATRIOT	PVE416G240C5KRD(XMP)	2 x 8GB	15-15-15-35	-	•	•
PATRIOT	PVE48G240C5KRD(XMP)	2 x 4GB	15-15-15-35	-	•	•
SK Hynix	HMA81GU6AFR8N-UH	8GB	17-17-17-39	-	•	•
SK Hynix	HMA82GU6AFR8N-UH	16GB	17-17-17-39	-	•	•
SK Hynix	HMA851U6AFR6N-UH	4GB	17-17-17-39	-	•	•
Team	TCD44G2400C14BK(XMP)	4GB	14-16-16-31	1.2	•	•
Team	TLRED416G2400HC14QC01	4 x 4GB	14-16-16-31	1.2	•	•
Team	TLGD416G2400HC14QC01	4 x 4GB	14-16-16-31	1.2	•	•
Team	TDRED416G2400HC14QC01	4 x 4GB	14-16-16-31	1.2	•	•
Team	TDGED416G2400HC14QC01	4 x 4GB	14-16-16-31	1.2	•	•
Team	TLRED48G2400HC14DC01	2 x 4GB	14-16-16-31	1.2	•	•
Team	TLGD48G2400HC14DC01	2 x 4GB	14-16-16-31	1.2	•	•
Team	TDRED48G2400HC14DC01	2 x 4GB	14-16-16-31	1.2	•	•
Team	TDGED48G2400HC14DC01	2 x 4GB	14-16-16-31	1.2	•	•
Team	TCD48G2400C14BK(XMP)	8GB	14-16-16-31	1.2	•	•

Team	TLRED432G2400HC14QC01	4 x 8GB	14-16-16-31	1.2	●	●
Team	TLGD432G2400HC14QC01	4 x 8GB	14-16-16-31	1.2	●	●
Team	TDRED432G2400HC14QC01	4 x 8GB	14-16-16-31	1.2	●	●
Team	TDGED432G2400HC14QC01	4 x 8GB	14-16-16-31	1.2	●	●
Team	TLRED416G2400HC14DC01	2 x 8GB	14-16-16-31	1.2	●	●
Team	TLGD416G2400HC14DC01	2 x 8GB	14-16-16-31	1.2	●	●
Team	TDRED416G2400HC14DC01	2 x 8GB	14-16-16-31	1.2	●	●
Team	TDGED416G2400HC14DC01	2 x 8GB	14-16-16-31	1.2	●	●
Team	TED416G2400C16BK	16GB	16-16-16-39	1.2	●	●
Team	TED464G2400C16QC01	4 x 16GB	16-16-16-39	1.2	●	●
Team	TPRD464G2400HC16QC01	4 x 16GB	16-16-16-39	1.2	●	●
Team	TPD464G2400HC16QC01	4 x 16GB	16-16-16-39	1.2	●	●
Team	TED432G2400C16DC01	2 x 16GB	16-16-16-39	1.2	●	●
Team	TPRD432G2400HC16DC01	2 x 16GB	16-16-16-39	1.2	●	●
Team	TPD432G2400HC16DC01	2 x 16GB	16-16-16-39	1.2	●	●
Team	TED416G2400C1601	16GB	16-16-16-39	1.2	●	●
Team	TPRD416G2400HC1601	16GB	16-16-16-39	1.2	●	●
Team	TPD416G2400HC1601	16GB	16-16-16-39	1.2	●	●
Team	TED432G2400C16QC01	4 x 8GB	16-16-16-39	1.2	●	●
Team	TPRD432G2400HC16QC01	4 x 8GB	16-16-16-39	1.2	●	●
Team	TPD432G2400HC16QC01	4 x 8GB	16-16-16-39	1.2	●	●
Team	TED416G2400C16DC01	2 x 8GB	16-16-16-39	1.2	●	●
Team	TPRD416G2400HC16DC01	2 x 8GB	16-16-16-39	1.2	●	●
Team	TPD416G2400HC16DC01	2 x 8GB	16-16-16-39	1.2	●	●
Team	TED48G2400C1601	8GB	16-16-16-39	1.2	●	●
Team	TPRD48G2400HC1601	8GB	16-16-16-39	1.2	●	●
Team	TPD48G2400HC1601	8GB	16-16-16-39	1.2	●	●
Team	TFRD44G2400C15ABK(XMP)	4GB	15-15-15-35	1.2	●	●
Team	TDTRD416G2400HC15AQC01	4 x 4GB	15-15-15-35	1.2	●	●
Team	TDTWD416G2400HC15AQC01	4 x 4GB	15-15-15-35	1.2	●	●

Team	TDTBD416G2400HC15AQC01	4 x 4GB	15-15-15-35	1.2	•	•
Team	TDTRD48G2400HC15ADC01	2 x 4GB	15-15-15-35	1.2	•	•
Team	TDTWD48G2400HC15ADC01	2 x 4GB	15-15-15-35	1.2	•	•
Team	TDTBD48G2400HC15ADC01	2 x 4GB	15-15-15-35	1.2	•	•
Team	TDTRD44G2400HC15A01	4GB	15-15-15-35	1.2	•	•
Team	TDTWD44G2400HC15A01	4GB	15-15-15-35	1.2	•	•
Team	TDTBD44G2400HC15A01	4GB	15-15-15-35	1.2	•	•
Team	TFRD48G2400C15ABK(XMP)	8GB	15-15-15-35	1.2	•	•
Team	TDTRD432G2400HC15AQC01	4 x 8GB	15-15-15-35	1.2	•	•
Team	TDTWD432G2400HC15AQC01	4 x 8GB	15-15-15-35	1.2	•	•
Team	TDTBD432G2400HC15AQC01	4 x 8GB	15-15-15-35	1.2	•	•
Team	TDTRD416G2400HC15ADC01	2 x 8GB	15-15-15-35	1.2	•	•
Team	TDTWD416G2400HC15ADC01	2 x 8GB	15-15-15-35	1.2	•	•
Team	TDTBD416G2400HC15ADC01	2 x 8GB	15-15-15-35	1.2	•	•
Team	TDTRD48G2400HC15A01	8GB	15-15-15-35	1.2	•	•
Team	TDTWD48G2400HC15A01	8GB	15-15-15-35	1.2	•	•
Team	TDTBD48G2400HC15A01	8GB	15-15-15-35	1.2	•	•
Team	TFWD416G2400C15BBK(XMP)	16GB	15-17-17-35	1.2	•	•
Team	TDTRD464G2400HC15BQC01	4 x 16GB	15-17-17-35	1.2	•	•
Team	TDTWD464G2400HC15BQC01	4 x 16GB	15-17-17-35	1.2	•	•
Team	TDTBD464G2400HC15BQC01	4 x 16GB	15-17-17-35	1.2	•	•
Team	TDTRD432G2400HC15BDC01	2 x 16GB	15-17-17-35	1.2	•	•
Team	TDTWD432G2400HC15BDC01	2 x 16GB	15-17-17-35	1.2	•	•
Team	TDTBD432G2400HC15BDC01	2 x 16GB	15-17-17-35	1.2	•	•
Team	TDTRD416G2400HC15B01	16GB	15-17-17-35	1.2	•	•
Team	TDTWD416G2400HC15B01	16GB	15-17-17-35	1.2	•	•
Team	TDTBD416G2400HC15B01	16GB	15-17-17-35	1.2	•	•
V-color	TC48G24S817-IMS	8GB	17-17-17-39	1.2	•	•
V-color	TD4G8C17-UH	4GB	15-15-15-36	1.2	•	•
V-color	TD8G16C17-UH	8GB	17-17-17-39	1.2	•	•

## DDR4 2133 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Timing	Voltage	DIMM socket support (Optional)		
						1 DIMM	2 DIMM	4 DIMM
SAMSUNG	M378A5143DB0--CPB	4G	SS	15-15-15-36	1.2V	•	•	•
SAMSUNG	M378A1G43DB0--CPB	8G	DS	15-15-15-36	1.2V	•	•	•
G.SKILL	F4-2133C15Q-32GRK	32GB ( 8GB*4 )	DS	15-15-15-35	1.2V	•	•	•
KINGSTON	HX421C13PBK4/16	16GB ( 4GB*4)	SS	15-15-15-36	1.2V	•	•	•
PANRAM	PUD42133C138G4NJW	32GB ( 8GB*4 )	DS	13-13-13-35	1.2V	•	•	
PANRAM	PUD42133C134G4NJW	16GB ( 4GB*4)	SS	13-13-13-35	1.2V	•	•	•
CORSAIR	CMK16GX4M4A2133C15(Ver4.23)	16GB ( 4GB*4)	SS	15-15-15-36	1.2V	•	•	•
CRUCIAL	MTA8ATF51264AZ-2G1A1	4G	SS	15-15-15-36	1.2V	•	•	•
CORSAIR	CMV4GX4M1A2133C15	4G	SS	15-15-15-36	1.2V	•	•	
KINGSTON	HX421C14FB/8	8G	DS	14-14-14-35	1.2V	•	•	
APACER	78.C1GM3.AF10B	8G	DS	16-16-16-36	1.2V	•	•	•
KINGSTON	HX421C13SBK4/16	16GB ( 4GB*4)	SS	15-15-15-36	1.2V	•	•	•
KINGSTON	KVR21N15D8/8	8G	DS	15-15-15-36	1.2V	•	•	•
GALAXY	GAM4DBLBM2133D15IE041C	4G	DS	15-15-15-36	1.2V	•		
GALAXY	GAM4DBLBM213315IE081C	8G	DS	15-15-15-35	1.2V	•	•	
AVEXIR	AVD4U21331508G-1C0B	8G	DS	15-15-15-35	1.2V	•	•	•
CORSAIR	CMK16GX4M4A2133C13 ( Ver5.29 )	16GB ( 4GB*4)	SS	13-15-15-28	1.2V	•	•	•
GEIL	GPR48GB2133C15DC	8GB ( 4GB*2)	SS	15-15-15-36	1.2V	•	•	•
KINGSTON	HX421C14FBK4/32	32GB ( 8GB*4 )	DS	14-14-14-35	1.2V	•	•	•
TEKISM	T4U2133B8G15-SAD	8G	DS	15-15-15-36	1.2V	•	•	•
G.SKILL	F4-2133C15Q-16GRB	16GB ( 4GB*4)	SS	15-15-15-35	1.2V	•	•	•
CENTURY	PC4-17000	8G	DS	15-15-15-36	1.2V	•	•	•
KINGSTON	KVR21N15S8/4	4G	SS	15-15-15-36	1.2V	•	•	
ADATA	AX4U2133W4G15-QRZ	16GB ( 4GB*4)	SS	15-15-15	1.2V	•	•	•
TEAM	TED48GM2133C15BK	8G	DS	15-15-15-36	1.2V	•	•	•
Transcend	TS1GLH72V1H (ECC)	8G	DS			•	•	•



ADATA	AD4U2133W8G15-B	128GB( 16x 8G)	DS			•	•	•
CRUCIAL	CT8G4DFD8213.16FA11	32GB ( 8GB*4 )	DS		1.2V	•	•	
KINGSTON	KVR21E15S8/4	4GB	SS		1.2V	•	•	
G.SKILL	F4-2133C15S-4GNT	4G	SS	15-15-15-35	1.2V	•	•	
G.SKILL	F4-2133C15S-8GNT	8G	DS	15-15-15-35	1.2V	•	•	•
TEAM	TPAD44G2133HC15BK	4G	SS	15-15-15-36	1.2V	•	•	
APACER	AHU08GGB13CGT7G	8G	DS			•	•	
ASINT	SLB404G08-CCN2B 1615	8G	DS			•	•	•
PATRIOT	PSD48G21332	8G	DS			•	•	
APACER	AU08GGB13CDTBGC	8G	DS			•	•	
SAMSUNG	M378A1K43BB1-CPB	8G	SS			•	•	
KINGSTON	HX421C14FB2/8	8G	SS		1.2V	•	•	
KINGSTON	HX421C14FBK2/8	8GB ( 4GB*2 )	SS		1.2V	•	•	•
KINGSTON	HX421C14FB/4	4G	SS		1.2V	•	•	
V-COLOR	TC48G21S818-IMS	32GB(8GB*4)	SS		1.2V	•	•	
TIGO	TMKU8GF58-2133P	8G	DS		1.2V	•	•	•
SAMSUNG	M378A5143EB1-CPB	4GB	SS	15-15-15-36	1.2V	•	•	•
SAMSUNG	M378A5143EB1-CPB	4GB	SS	15-15-15-36	1.2V	•	•	
TEAM	TED48G2133C15BK	8GB	SS	15-15-15-36	1.2V	•	•	
ANUCCELL	GRPIF1621033818594	8GB	DS	16-16-16-35	1.2V	•	•	•
GALAXY	GAL4AXLBM213315IE081C	8GB	SS	15-15-15-35	1.2V	•	•	
TIGO	TMKU8G868-2133P	8GB	SS	15-15-15-36	1.2V	•		
Xiede	1.2V-PC4-17000-1620	4GB	SS	15-15-15-36	1.2V	•	•	
Xiede	1.2V-PC4-17000-1620	8GB	DS	15-15-15-36	1.2V	•	•	•
V-COLOR	TC48G21S815	8GB	SS	15-15-15-36	1.2V	•	•	•
V-COLOR	TC48G21S815-IMS	8GB	SS	15-15-15-36	1.2V	•	•	•
SAMSUNG	M378A2K43BB1CPB	16G	DS		1.2V	•	•	•
G.SKILL	F4-2133C15Q-32GRR	8G*4	SS	15-15-15-35	1.20V	•	•	•
G.SKILL	F4-2133C15Q2-64GRR	8G*8	SS	15-15-15-35	1.20V	•	•	•
CRUCIAL	CT16G4DFD8213.C16FAD1	16G	DS		1.2V	•	•	
CRUCIAL	CT8G4DFD8213.C16FDR2	8G	DS		1.2V	•	•	•

CRUCIAL	CT4G4DFS8213.C8FBD2	4G	SS		1.2V	•	•	•
GEIL	GFY48GB2133C15DC	4G	SS	15-15-15-36	1.2V	•	•	•
Klevv	IM48GU88N21-FFFHMB	8GB	SS	15-15-15	1.2V	•	•	•
Klevv	IM44GU48N21-FFFHAB	4GB	SS	15-15-15	1.2V	•	•	•
Klevv	IM4AGU88N21-FFFHMB	16GB	DS	15-15-15	1.2V	•	•	•
PATRIOT	PVE48G213C4GY	8G	SS		1.2V	•	•	
GEIL	GPR432GB2133C15QC	8G	SS	15-15-15-36	1.2V	•	•	•
SK HYNIX	HMA451U6AFR8N-TF	16GB(4*4GB)	SS	15-15-15-36	1.2V	•	•	
GLOWAY	STK4U2133D15041C/ PC4-17000	4G	SS	15-15-15-35	1.2V	•	•	•
G.SKILL	F4-2133C15Q-64GFX	64GB(4*16GB)	DS	15-15-15-36	1.2V	•	•	•
G.SKILL	F4-2133C15Q-32GFX	32GB ( 4x 8GB )	SS	15-15-15-36	1.2V	•	•	•
G.SKILL	F4-2133C15S-8GDB	8GB	SS	15-15-15-35	1.35V	•	•	•
AVANT	AVW6451U67J5213N3-SAEP	4GB	SS	15--15-15-36	1.20V	•	•	•
AVANT	AVW641GU67J5213N2-SAEP	8GB	DS	15--15-15-36	1.20V	•	•	•
AVANT	AVW642GU42J5213N2-SAEP	16GB	DS	15--15-15-36	1.20V	•	•	
CRUCIAL	CT16G4DFD8213.C16FH1	16GB	DS	15-15-15-36	1.20V	•	•	•
ADATA	AD4U213338G15-B	64GB(8x 8GB )	SS	15-15-15-36	1.20V	•	•	•
ADATA	AD4U2133W4G15-BP	32GB(8x 4GB )	SS	15-15-15-36	1.20V	•	•	•
Apacer	78.B1GM3.AF00B	4 x 4GB		15-15-15-36	1.2	•	•	•
Apacer	AHU08GGB13CGT7G (EK.08G2R.KDC)	4 x 8GB		15-15-15-36	1.2	•	•	
Apacer	AHU08GGB13CGU7G (EK.08G2R.GDC)	8GB		15-15-15-36	1.2	•	•	
Apacer	AU08GGB13CDYBGC (EL.08G2R.GDM)	8GB		15-15-15-36	1.2	•	•	
CENTURY MICRO INC	CD8G-D4U2133	8GB		15-15-15-36	-	•	•	•
CENTURY MICRO INC	CK8GX4-D4U2133	4 x 8GB		15-15-15-35	1.2	•	•	•
CORSAIR	CMD16GX4M4B2133C10(Ver3.20)( XMP)	4 x 4GB		10-12-12-31	1.35	•	•	•

CORSAIR	CMD16GX4M4B2133C10(Ver3.20)(XMP)	4 x 4GB	10-12-12-31	1.35	•	•	
CORSAIR	CMK16GX4M4A2133C13(Ver4.23)(XMP)	4 x 4GB	13-15-15-28	1.2	•	•	•
CORSAIR	CMK32GX4M2A2133C13(Ver4.31)(XMP)	2 x 16GB	13-15-15-28	1.2	•	•	•
CORSAIR	CMK32GX4M4A2133C13(Ver4.23)(XMP)	4 x 8GB	13-15-15-28	1.2	•	•	•
CORSAIR	CMK32GX4M4A2133C15(Ver3.20)	4 x 8GB	15-15-15-36	1.2	•	•	•
CORSAIR	CMK32GX4M4A2133C15(Ver5.29)	4 x 8GB	15-15-15-36	1.2	•	•	•
CORSAIR	CMK64GX4M8A2133C13(Ver3.20)(XMP)	8 x 8GB	13-15-15-28	1.2	•	•	•
CORSAIR	CMK64GX4M8A2133C13(Ver4.23)(XMP)	8 x 8GB	13-15-15-28	1.2	•	•	•
CORSAIR	CMV16GX4M1A2133C15	16GB	15-15-15-36	1.2	•	•	•
CORSAIR	CMV16GX4M1A2133C15	16GB	15-15-15-36	-	•	•	
CORSAIR	CMV8GX4M1A2133C15	8GB	15-15-15-36	1.2	•	•	•
crucial	CT16G4DFD8213.16FB1	16GB	15-15-15-36	1.2	•	•	•
crucial	CT4G4DFS8213.8FA2	4GB	15-15-15-36	1.2	•	•	•
crucial	CT4G4DFS8213.8FB1	4GB	15-15-15-36	1.2	•	•	•
crucial	CT8G4DFD8213.16FA1	8GB	15-15-15-37	1.2	•	•	•
crucial	CT8G4DFS8213.8FB1	8GB	15-15-15-36	1.2	•	•	•
G.SKILL	F4-2133C15Q-16GRR	4 x 4GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q-16GVR	4 x 4GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q-16GVB	4 x 4GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q-16GVG	4 x 4GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q-16GVK	4 x 4GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q-16GVS	4 x 4GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q-16GRK	4 x 4GB	15-15-15-35	1.2	•	•	•
Kingston	KVR21N15D8/8	8GB	15-15-15-37	1.2	•	•	•
G.SKILL	F4-2133C15Q2-128GVK	8 x 16GB	15-15-15-35	1.2	•	•	•

G.SKILL	F4-2133C15Q2-128GVR	8 x 16GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q2-64GRB	8 x 8GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q-32GVR	4 x 8GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q-32GVB	4 x 8GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q-32GVG	4 x 8GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q-32GVK	4 x 8GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q-32GVS	4 x 8GB	15-15-15-35	1.2	•	•	•
G.SKILL	F4-2133C15Q-32GRB	4 x 8GB	15-15-15-35	1.2	•	•	•
Gell	GPR416GB2133C15QC	4 x 4GB	15-15-15-36	1.2	•	•	•
Hyper X	HX421C13SB/4(XMP)	4GB	13-13-13-36	1.2	•	•	•
Hyper X	HX421C13SB/8(XMP)	8GB	13-13-13-36	1.2	•	•	•
Hyper X	HX421C13SBK2/16(XMP)	2 x 8GB	13-13-13-36	1.2	•	•	•
Hyper X	HX421C13SBK2/8(XMP)	2 x 4GB	13-13-13-36	1.2	•	•	•
Hyper X	HX421C13SBK4/16(XMP)	4 x 4GB	13-13-13-36	1.2	•	•	•
Hyper X	HX421C13SBK4/32(XMP)	4 x 8GB	13-13-13-36	1.2	•	•	•
Hyper X	HX421C14FB/4	4GB	14-14-14-35	1.2	•	•	•
Hyper X	HX421C14FB/8	8GB	14-14-14-35	1.2	•	•	•
Hyper X	HX421C14FB2K4/32(XMP)	4 x 8GB	14-14-14-35	1.2	•	•	•
Hyper X	HX421C14FBK2/16	2 x 8GB	14-14-14-35	1.2	•	•	•
Hyper X	HX421C14FBK2/8	2 x 4GB	14-14-14-35	1.2	•	•	•
Hyper X	HX421C14FBK4/16	4 x 4GB	14-14-14-35	1.2	•	•	•
Hyper X	HX421C14FBK4/32	4 x 8GB	14-14-14-35	1.2	•	•	•
Hyper X	HX421C14FBK4/64	4 x 16GB	15-15-15-35	1.2	•	•	•
Hyper X	HX421C14FBK8/64	8 x 8GB	14-14-14-35	1.2	•	•	•
Kingston	KVR21N15D8/16	16GB	15-15-15-36	1.2	•	•	
Kingston	KVR21N15S8/4	4GB	15-15-15-37	1.2	•	•	•
Klevv	IM44GU48N21-FFFHAB(XMP)	4GB	15-15-15-35	1.2	•	•	•
Klevv	KM4B4GX1N-2133-15-15-15-35-0	4GB	15-15-15-35	1.2	•	•	•
Klevv	KM4B4GX2N-2133-15-15-15-35-0	4GB	15-15-15-35	1.2	•	•	•
Klevv	KM4B4GX4N-2133-15-15-15-35-0	4GB	15-15-15-35	1.2	•	•	•
Klevv	IM48GU88N21-FFFHMB(XMP)	8GB	15-15-15-35	1.2	•	•	•

Klevv	KM4B8GX1N-2133-15-15-15-35-0	8GB	15-15-15-35	1.2	•	•	•
Klevv	KM4B8GX2N-2133-15-15-15-35-0	8GB	15-15-15-35	1.2	•	•	•
Klevv	KM4B8GX4N-2133-15-15-15-35-0	8GB	15-15-15-35	1.2	•	•	•
Klevv	IM4AGU88N21-FFHMB(XMP)	16GB	15-15-15-35	1.2	•	•	•
Klevv	KM4B16X1N-2133-15-15-15-35-0	16GB	15-15-15-35	1.2	•	•	•
Klevv	KM4B16X2N-2133-15-15-15-35-0	16GB	15-15-15-35	1.2	•	•	•
Klevv	KM4B16X4N-2133-15-15-15-35-0	16GB	15-15-15-35	1.2	•	•	•
Klevv	KM4C4GX4N-2133-15-15-15-35-0	4GB	15-15-15-35	1.2	•	•	•
Klevv	KM4C4GX4N-2133-15-15-15-35-1	4 x 4GB	15-15-15-35	1.2	•	•	•
Klevv	KM4C8GX4N-2133-15-15-15-35-0	8GB	15-15-15-35	1.2	•	•	•
Klevv	KM4C8GX4N-2133-15-15-15-35-1	4 x 8GB	15-15-15-35	1.2	•	•	•
Micron	MTA16ATF1G64AZ-2G1A1	8GB	15-15-15-37	1.2	•	•	
Micron	MTA16ATF2G64AZ-2G1B1	16GB	15-15-15-36	1.2	•	•	
Micron	MTA8ATF1G64AZ-2G1B1	8GB	15-15-15-36	1.2	•	•	•
Micron	MTA8ATF51264AZ-2G1A2	4GB	15-15-15-36	-	•	•	•
panram	W4U2133PS-8G	8GB	16-16-16-36	-	•	•	•
SanMax	SMD-4G28HP-21P	4GB	15-15-15-37	-	•	•	•
SanMax	SMD-8G28HP-21P	8GB	15-15-15-37	-	•	•	•
Silicon Power	SP004GBLFU213N01	4GB	15-15-15-37	-	•	•	•
Silicon Power	SP008GBLFU213N01	8GB	15-15-15-37	-	•	•	•
SK Hynix	HMA41GU6MFR8N-TF	8GB	15-15-15-37	1.2	•	•	
SK Hynix	HMA41GU7AFR8N-TF	8GB	15-15-15-36	-	•	•	•
SK Hynix	HMA451U7AFR8N-TF	4GB	15-15-15-36	-	•	•	•
SK Hynix	HMA82GU6MFR8N-TF	16GB	15-15-15-36	-	•	•	•
SK Hynix	HMA82GU7MFR8N-TF	16GB	15-15-15-36	-	•	•	•
SUPER TALENT	FBU2B008GM	8GB	15-15-15-36	1.2	•	•	•
Team	TED416G2133C15BK	16GB	15-15-15-36	1.2	•	•	•
Team	TED464G2133C15QC01	4 x 16GB	15-15-15-36	1.2	•	•	•

Team	TPRD464G2133HC15QC01	4 x 16GB	15-15-15-36	1.2	•	•	•
Team	TPD464G2133HC15QC01	4 x 16GB	15-15-15-36	1.2	•	•	•
Team	TED432G2133C15DC01	2 x 16GB	15-15-15-36	1.2	•	•	•
Team	TPRD432G2133HC15DC01	2 x 16GB	15-15-15-36	1.2	•	•	•
Team	TPD432G2133HC15DC01	2 x 16GB	15-15-15-36	1.2	•	•	•
Team	TED44GM2133C15ABK	4GB	15-15-15-36	1.2	•	•	•
Team	TED432G2133C15QC01	4 x 8GB	15-15-15-36	1.2	•	•	•
Team	TPRD432G2133HC15QC01	4 x 8GB	15-15-15-36	1.2	•	•	•
Team	TPD432G2133HC15QC01	4 x 8GB	15-15-15-36	1.2	•	•	•
Team	TED416G2133C15DC01	2 x 8GB	15-15-15-36	1.2	•	•	•
Team	TPRD416G2133HC15DC01	2 x 8GB	15-15-15-36	1.2	•	•	•
Team	TPD416G2133HC15DC01	2 x 8GB	15-15-15-36	1.2	•	•	•
UMAX	84G44G93MC-21OMCALGF15	4GB	15-15-15-36	-	•	•	•
UMAX	84G48G93MC-21OMCGNGF15	8GB	15-15-15-36	-	•	•	•

- 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 A2 slots or the B2 slots that operates in a dual-channel memory configuration
- 4 DIMM: Supports 4 modules inserted into all slots as two pairs DIMMs operating in a dual-channel memory configuration

- Do not combine DIMMs from multiple kits - even ones of the same make and model.

Mixing and matching DIMMs can result in failure to boot.

- Purchasing single DIMMs is not recommended because compatibility cannot be guaranteed.

- The default DIMM frequency depends on its Serial Presence Detect (SPD),

- The stability and compatibility of memory modules with XMP profiles that