

## WS Z390 PRO

### DDR4 2133 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM
Apacer	78.B1GM3.AF00B	4x 4GB	SS	SK Hynix	H5AN4G8NMFRTFC	15-15-15-36	1.2	•	•
Apacer	78.C1GM3.AF10B	4x 8GB	DS	SK Hynix	H5AN4G8NMFRTFC	15-15-15-36	1.2	•	•
Apacer	AHU08GGB13CGT7G	4x 8GB	DS	Apacer	AM6F60080THMA1	15-15-15-36	1.2	•	
Apacer	AU04GGB13CDWBGH	4GB	DS	Micron	PPE05-075E	15-15-15-36	1.2	•	•
Apacer	AU08GGB13CDYBGH	8GB	SS	Micron	AM6F6308BTHSB2	15-15-15-36	1.2	•	•
Apacer	EL.04G2R.LDH	4GB	DS	Micron	PPE05-075E	15-15-15-36	1.2	•	•
Apacer	EL.08G2R.GDH	8GB	SS	Micron	AM6F6308BTHSB2	15-15-15-36	1.2	•	•
CENTURY MICRO INC	CD8G-D4U2133	8GB	DS	SK Hynix	H5AN4G8NMFRTFC	15-15-15-36	-	•	•
CENTURY MICRO INC	CK8GX4-D4U2133	4x 8GB	DS	SK hynix	H5AN4G8NMFRTFC	15-15-15-35	1.2	•	•
CORSAIR	CMK16GX4M4A2133C13(Ver4.23)(XMP)	4x 4GB	SS	-	-	13-15-15-28	1.2	•	•
CORSAIR	CMK32GX4M2A2133C13(Ver4.31)(XMP)	2x 16GB	DS	-	-	15-15-15-36	1.2	•	
CORSAIR	CMK32GX4M4A2133C13(Ver4.23)(XMP)	4x 8GB	DS	-	-	13-15-15-28	1.2	•	•
CORSAIR	CMK32GX4M4A2133C15(Ver3.20)	4x 8GB	DS	-	-	15-15-15-36	1.2	•	•
CORSAIR	CMK32GX4M4A2133C15(Ver5.29)	4x 8GB	DS	-	-	15-15-15-36	1.2	•	•
CORSAIR	CMK64GX4M8A2133C13(Ver5.39)(XMP)	8x 8GB	SS	SK Hynix	-	14-15-15-28	1.2	•	•
CORSAIR	CMV16GX4M1A2133C15	16GB	DS	-	-	15-15-15-36	1.2	•	
CORSAIR	CMV16GX4M1A2133C15	16GB	DS	-	-	15-15-15-36	-	•	
CORSAIR	CMV4GX4M1A2133C15	4GB	SS	-	-	15-15-15-36	1.2	•	•
CORSAIR	CMV8GX4M1A2133C15	8GB	DS	-	-	15-15-15-36	1.2	•	•
crucial	CT16G4DFD8213.16FB1	16GB	DS	Micron	D9TBH	15-15-15-36	1.2	•	•
crucial	CT4G4DFS8213.8FA2	4GB	SS	Micron	D9RGQ	15-15-15-36	1.2	•	•
crucial	CT4G4DFS8213.8FB1	4GB	SS	Micron	-	15-15-15-36	1.2	•	•
crucial	CT8G4DFD8213.16FA1	8GB	DS	Micron	D9RGQ	15-15-15-37	1.2	•	•
crucial	CT8G4DFS8213.8FB1	8GB	SS	Micron	-	15-15-15-36	1.2	•	•
G.SKILL	F4-2133C15Q-16GRR	4x 4GB	SS	Micron	-	15-15-15-35	1.2	•	•
G.SKILL	F4-2133C15Q2-128GVK	8x 16GB	DS	SK Hynix	-	15-15-15-36	1.2	•	•
G.SKILL	F4-2133C15Q2-64GRR	8x 8GB	DS	SpecTek	-	15-15-15-35	1.2	•	•
G.SKILL	F4-2133C15Q-32GRR	4x 8GB	DS	Micron	-	15-15-15-35	-	•	•
GelL	GPR416GB2133C15QC	4x 4GB	SS	Micron	-	15-15-15-36	1.2	•	•
GelL	GPR432GB2133C15QC	4x 8GB	SS	Micron	-	15-15-15-36	1.2	•	•
Hyper X	HX421C13SB/4(XMP)	4GB	SS	SK Hynix	-	15-15-15-36	1.2	•	•
Hyper X	HX421C13SB/8(XMP)	8GB	DS	SK Hynix	-	15-15-15-36	1.2	•	
Hyper X	HX421C13SBK2/16(XMP)	2x 8GB	DS	SK Hynix	-	15-15-15-36	1.2	•	
Hyper X	HX421C13SBK2/8(XMP)	2x 4GB	SS	SK Hynix	-	15-15-15-36	1.2	•	
Hyper X	HX421C13SBK4/16(XMP)	4x 4GB	SS	SK Hynix	-	15-15-15-36	1.2	•	•
Hyper X	HX421C13SBK4/32(XMP)	4x 8GB	DS	SK Hynix	-	15-15-15-36	1.2	•	
Hyper X	HX421C14FB/4	4GB	SS	SK Hynix	-	14-14-14-35	1.2	•	
Hyper X	HX421C14FB/8	8GB	DS	SK Hynix	-	14-14-14-35	1.2	•	•
Hyper X	HX421C14FB2K4/32(XMP)	4x 8GB	SS	Micron	-	14-14-14-35	1.2	•	•
Hyper X	HX421C14FBK2/16	2x 8GB	DS	SK Hynix	-	14-14-14-35	1.2	•	

Hyper X	HX421C14FBK2/8	2x 4GB	SS	SK Hynix	-	14-14-14-35	1.2	●	
Hyper X	HX421C14FBK4/16	4x 4GB	SS	SK Hynix	-	14-14-14-35	1.2	●	
Hyper X	HX421C14FBK4/32	4x 8GB	DS	SK Hynix	-	14-14-14-35	1.2	●	●
Hyper X	HX421C14FBK4/64	4x 16GB	DS	Micron	-	15-15-15-35	1.2	●	●
Hyper X	HX421C14FBK8/64	8x 8GB	DS	SK Hynix	-	14-14-14-35	1.2	●	●
Kingston	KVR21N15D8/16	16GB	DS	Micron	D9VHP	15-15-15-36	1.2	●	●
Kingston	KVR21N15D8/8	8GB	DS	SK Hynix	H5AN4G8NAFR	15-15-15-36	1.2	●	●
Kingston	KVR21N15D8/8	8GB	DS	SK Hynix	H5AN4G8NMFRTFC	15-15-15-37	1.2	●	●
Kingston	KVR21N15S8/4	4GB	SS	SK Hynix	H5AN4G8NAFRTFC	15-15-15-36	1.2	●	
Klevv	IM44GU48N21-FFFHAB(XMP)	4GB	SS	SK Hynix	-	15-15-15-35	1.2	●	●
Klevv	IM48GU88N21-FFFHMB(XMP)	8GB	SS	SK Hynix	-	15-15-15-35	1.2	●	●
Klevv	IM4AGU88N21-FFFHMB(XMP)	16GB	DS	SK Hynix	-	15-15-15-35	1.2	●	
Klevv	KM4C4GX4N-2133-15-15-15-35-0	4GB	SS	SK Hynix	-	15-15-15-35	1.2	●	
Klevv	KM4C4GX4N-2133-15-15-15-35-1	4x 4GB	SS	SK Hynix	-	15-15-15-35	1.2	●	
Klevv	KM4C8GX4N-2133-15-15-15-35-0	8GB	DS	SK Hynix	-	15-15-15-35	1.2	●	●
Klevv	KM4C8GX4N-2133-15-15-15-35-1	4x 8GB	DS	SK Hynix	-	15-15-15-35	1.2	●	●
Micron	MTA16ATF2G64AZ-2G1B1	16GB	DS	Micron	D9TBH	15-15-15-36	1.2	●	●
Micron	MTA8ATF1G64AZ-2G1B1	8GB	SS	Micron	-	15-15-15-36	1.2	●	●
Micron	MTA8ATF51264AZ-2G1A2	4GB	SS	Micron	D9RG0	15-15-15-36	-	●	●
panram	W4U2133PS-8G	8GB	SS	SK Hynix	DTCCH872HA2	16-16-16-36	-	●	●
SanMax	SMD-4G28HP-21P	4GB	SS	SK Hynix	H5AN4G8NMFRTFC	15-15-15-37	-	●	●
SanMax	SMD-8G28HP-21P	8GB	DS	SK Hynix	H5AN4G8NMFRTFC	15-15-15-37	-	●	●
Silicon Power	SP004GBLFU213N01	4GB	SS	Samsung	K4A4G085WD	15-15-15-37	-	●	●
Silicon Power	SP008GBLFU213N01	8GB	DS	Samsung	K4A4G085WD	15-15-15-37	-	●	●
SK Hynix	HMA41GU6MFR8N-TF	8GB	DS	SK Hynix	H5AN4G8NMFRTFC	15-15-15-37	1.2	●	
SK Hynix	HMA41GU7AFR8N-TF	8GB	DS	SK Hynix	H5AN4G8NAFRTFC	15-15-15-36	-	●	
SK Hynix	HMA451U7AFR8N-TF	4GB	SS	SK Hynix	H5AN4G8NAFR	15-15-15-36	-	●	●
SK Hynix	HMA82GU6MFR8N-TF	16GB	DS	SK Hynix	H5AN8G8NMFRTFC	15-15-15-36	-	●	●
SK Hynix	HMA82GU7MFR8N-TF	16GB	DS	SK Hynix	H5AN8G8NMFR	15-15-15-36	-	●	
SUPER TALENT	FBU2B008GM	8GB	DS	Micron	D9RGQ	15-15-15-36	1.2	●	●
Team	TED416G2133C15BK	16GB	DS	Micron	T4D10248MT-24	15-15-15-36	1.2	●	
Team	TED44GM2133C15ABK	4GB	SS	SK Hynix	H5AN4G8NMFRTFC	15-15-15-36	1.2	●	●
UMAX	84G44G93MC-21OMCALGF15	4GB	SS	Micron	D9RGQ	15-15-15-36	-	●	●
UMAX	84G48G93MC-21OMCGNGF15	8GB	DS	Micron	D9RGQ	15-15-15-36	-	●	●
V-color	TC48G21S815-IMS	8GB	SS	Micron	-	15-15-15-36	1.2	●	
V-color	TE48G21S815	8GB	SS	V-color	A8G8H-21CS(ECC)	15-15-15-36	1.2	●	●

### DDR4 2400 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM
ADATA	AD4U2400316G17	16GB	DS	Nanya	NT5AD1024M8A3-GZ	17-17-17-39	1.2	●	
ADATA	AD4X240038G17	8GB	SS	SpecTech	PS023-093 TP	17-17-17-39	1.2	●	
ADATA	AD4X2400W4G17	4GB	SS	SK Hynix	H5AN4G8NBJRUHC	17-17-17-39	1.2	●	
Antec	AMD4UZ124001508G-3S	8GB	SS	Samsung	K4A8G085WBBCPB	15-15-15-39	1.2	●	
Antec	AMD4UZ124001608G-5S	8GB	SS	Micron	-	16-16-16-36	1.2	●	
Apacer	78.C1GMS.4010B	4x 8GB	DS	Samsung	K4A4G085WD	17-17-17-39	-	●	●

Apacer	AHU08GGB24CDU7G(XMP)	8GB	SS	-	-	16-16-16-36	1.2	●	
Apacer	AU04GGB24CETBGH	4GB	SS	Micron	AM6F67080THSB2	17-17-17-39	1.2	●	
Apacer	AU04GGB24CEWBGH	4GB	DS	SK Hynix	H5AN4G6NAFRUHC	17-17-17-39	-	●	
Apacer	AU08GGB24CEYBGH	8GB	SS	Apacer	AM6F63080HJMB2	17-17-17-39	-	●	
Apacer	EK.08G2T.GEC(XMP)	8GB	SS	Micron	-	17-17-17-39	-	●	
Apacer	EL.04G2T.KFH	4GB	SS	Micron	AM6F67080THSB2	17-17-17-39	1.2	●	
Apacer	EL.04G2T.LFH	4GB	DS	SK Hynix	H5AN4G6NAFRUHC	17-17-17-39	-	●	
Apacer	EL.08G2T.GFH	8GB	SS	Apacer	AM6F63080HJMB2	17-17-17-39	-	●	
Apacer	EL.08G2T.GFM	8GB	SS	SK Hynix	AM6F6308MHHSB2	17-17-17-39	-	●	
Asgard	VML41UE-MIC1U22Q1	2GB	SS	Micron	-	17-17-17-39	1.2	●	
CORSAIR	CMK128GX4M8A2400C14(Ver3.31)(XMP)	8x 16GB	DS	Micron	-	15-16-16-31	1.2	●	●
CORSAIR	CMK16GX4M2A2400C16(Ver3.31)(XMP)	2x 8GB	DS	Micron	-	15-15-15-36	1.2	●	
CORSAIR	CMK16GX4M2D2400C14(Ver4.21)(XMP)	2x 8GB	DS	Samsung	-	14-16-16-31	1.2	●	
CORSAIR	CMK16GX4M2Z2400C16(Ver3.31)	2x 8GB	SS	Micron	-	16-16-16-39	1.2	●	
CORSAIR	CMK16GX4M4A2400C14(Ver4.23)(XMP)	4x 4GB	SS	-	-	14-16-16-31	1.2	●	●
CORSAIR	CMK16GX4M4A2400C14(Ver5.20)(XMP)	4x 4GB	SS	SK Hynix	-	14-16-16-31	1.2	●	●
CORSAIR	CMK32GX4M4A2400C14(Ver3.31)(XMP)	4x 8GB	SS	Micron	-	14-16-16-31	1.2	●	●
CORSAIR	CMK32GX4M4A2400C14(Ver4.23)(XMP)	4x 8GB	DS	-	-	14-16-16-31	1.2	●	●
CORSAIR	CMK32GX4M4A2400C16(Ver3.31)(XMP)	4x 8GB	SS	Micron	-	15-15-15-36	1.2	●	●
CORSAIR	CMK64GX4M4A2400C14(Ver3.31)(XMP)	4x 16GB	DS	Micron	-	15-15-15-36	1.2	●	●
CORSAIR	CMK64GX4M4A2400C14(Ver4.31)(XMP)	4x 16GB	DS	Samsung	-	15-15-15-36	1.2	●	●
CORSAIR	CMK64GX4M4A2400C16(Ver3.32)(XMP)	4x 16GB	DS	Micron	-	16-16-16-39	1.2	●	
CORSAIR	CMK8GX4M2D2400C14(Ver3.11)(XMP)	2x 4GB	DS	Micron	-	14-16-16-31	1.2	●	
crucial	BLS16G4D240FSB.16FBD(XMP)	16GB	DS	Micron	-	16-16-16-39	1.2	●	
crucial	BLS4G4D240FSB.8FBD(XMP)	4GB	SS	Micron	-	16-16-16-39	1.2	●	
crucial	BLS8G4D240FSBK.8FBD(XMP)	8GB	SS	Micron	-	16-16-16-39	1.2	●	
crucial	CT16G4DFD824A.16FB1	16GB	DS	Micron	D9TBH	17-17-17-39	1.2	●	
crucial	CT16G4DFD824A.C16FDR1	16GB	DS	Micron	C9BGV	17-17-17-39	1.2	●	
crucial	CT8G4DFS824A.8FB1	8GB	SS	Micron	-	17-17-17-39	1.2	●	
G.SKILL	F4-2400C14Q2-128GRK(XMP)	8x 16GB	DS	Samsung	-	14-14-14-34	1.2	●	●
G.SKILL	F4-2400C14Q2-128GRK(XMP)	8x 16GB	DS	Samsung	-	15-15-15-36	1.2	●	●
G.SKILL	F4-2400C14Q2-128GRK(XMP)	8x 16GB	DS	SK Hynix	-	14-14-14-34	1.2	●	●
G.SKILL	F4-2400C15Q-16GRR(XMP)	4x 4GB	SS	Micron	-	15-15-15-35	1.2	●	●
G.SKILL	F4-2400C15Q2-128GRK(XMP)	8x 16GB	DS	Samsung	-	15-15-15-35	1.2	●	●
G.SKILL	F4-2400C15Q2-128GVK(XMP)	8x 16GB	DS	SK Hynix	-	15-15-15-36	1.2	●	●
G.SKILL	F4-2400C15Q2-64GRK(XMP)	8x 8GB	DS	Samsung	-	15-15-15-35	1.2	●	●
G.SKILL	F4-2400C15Q-32GRR(XMP)	4x 8GB	DS	Micron	-	15-15-15-35	1.2	●	●
GALAX	Gamer Aurira Vision (XMP)	8GB	SS	Micron	-	17-16-16-36	1.2	●	
GeIL	GASB416GB2400C16QC(XMP)	4GB	SS	Micron	-	16-16-16-36	1.2	●	
GeIL	GASB432GB2400C16QC(XMP)	8GB	SS	Micron	-	16-16-16-36	1.2	●	
GeIL	GEL416GB2400C17SC	16GB	DS	GeIL	CG4L1GM88BA093AH	17-17-17-39	-	●	
GeIL	GEL48GB2400C17SC	8GB	SS	GeIL	GEL48GB2400C17SC	17-17-17-39	-	●	
GeIL	GFR416GB2400C16S(XMP)	16GB	SS	Micron	-	16-16-16-36	1.2	●	
GeIL	GFR432GB2400C16D(XMP)	16GB	SS	Micron	-	16-16-16-36	1.2	●	
GeIL	GLR464GB2400C14QC(XMP)	4x 16GB	DS	Micron	-	14-14-14-35	1.2	●	●
GeIL	GLS48GB2400C16DC(XMP)	4GB	SS	Micron	-	16-16-16-36	1.2	●	

<b>GeIL</b>	GPR416GB2400C15QC(XMP)	4x 4GB	SS	-	-	15-15-15-35	1.2	●	●
<b>GeIL</b>	GPR432GB2400C15QC(XMP)	4x 8GB	DS	SK Hynix	-	15-15-15-35	1.2	●	●
<b>GeIL</b>	GPR432GB2400C16QC(XMP)	4x 8GB	SS	Micron	-	16-16-16-36	1.2	●	●
<b>GLOWAY</b>	TYP4U2400D17021C	2GB	SS	Micron	-	17-17-17-39	1.2	●	
<b>Hyper X</b>	HX424C12PB2K4/16(XMP)	4x 4GB	SS	SK Hynix	-	12-13-13-35	1.2	●	●
<b>Hyper X</b>	HX424C12SB2/4(XMP)	4GB	SS	SK Hynix	-	15-15-15-36	1.35	●	
<b>Hyper X</b>	HX424C12SB2/8(XMP)	8GB	DS	SK Hynix	-	15-15-15-36	1.35	●	
<b>Hyper X</b>	HX424C12SB2K2/16(XMP)	2x 8GB	DS	SK Hynix	-	15-15-15-36	1.35	●	
<b>Hyper X</b>	HX424C12SB2K2/16(XMP)	2x 8GB	DS	Nanya	NT5AD512M8B1-GN	15-15-15-36	1.35	●	
<b>Hyper X</b>	HX424C12SB2K4/16(XMP)	4x 4GB	SS	SK Hynix	-	15-15-15-36	1.35	●	●
<b>Hyper X</b>	HX424C12SB2K4/32(XMP)	4x 8GB	DS	SK Hynix	-	15-15-15-36	1.35	●	●
<b>Hyper X</b>	HX424C12SB2K4/32(XMP)	4x 8GB	DS	Nanya	NT5AD512M8B1-GN	15-15-15-36	1.35	●	
<b>Hyper X</b>	HX424C15B2K4/32(XMP)	4x 8GB	SS	Micron	-	15-15-15-35	1.2	●	●
<b>Hyper X</b>	HX424C15FB/4	4GB	SS	SK Hynix	-	15-15-15-35	1.2	●	
<b>Hyper X</b>	HX424C15FB/8(XMP)	8GB	SS	SK Hynix	-	14-14-14-32	1.2	●	
<b>Hyper X</b>	HX424C15FB2/8(XMP)	8GB	SS	Hynix	-	15-15-15-35	1.2	●	
<b>Hyper X</b>	HX424C15FBK2/32	2x 16GB	DS	Hynix	-	15-15-15-35	1.2	●	
<b>Hyper X</b>	HX424C15FBK2/32	2x 16GB	DS	Nanya	-	15-15-15-35	1.2	●	
<b>Hyper X</b>	HX424C15FBK2/8	2x 4GB	SS	SK Hynix	-	15-15-15-35	1.2	●	
<b>Hyper X</b>	HX424C15FBK4/16	4x 4GB	SS	SK Hynix	-	15-15-15-35	1.2	●	●
<b>Hyper X</b>	HX424C15FBK4/16	4x4GB	SS	SK Hynix	-	14-14-14-32	1.2	●	●
<b>Hyper X</b>	HX424C15FBK4/32	4x 8GB	DS	SK Hynix	-	15-15-15-35	1.2	●	
<b>Hyper X</b>	HX424C15FBK4/32	4x 8GB	DS	PSC	-	15-15-15-35	1.2	●	●
<b>Hyper X</b>	HX424C15FBK4/64	4x 16GB	DS	Micron	-	15-15-15-35	1.2	●	●
<b>J&amp;A</b>	JRLL4U2400172408-8M	8GB	SS	-	PPE34-093DG	17-17-17-39	1.2	●	
<b>J&amp;A</b>	JRLL4U2400172408-4M	4GB	SS	-	PPE62-093DG	17-17-17-39	1.2	●	
<b>KINGMAX</b>	GLLF62F-DAKZIG-CLBU	4GB	SS	KINGMAX	KGDACZ-CU	17-17-17-39	-	●	
<b>KINGMAX</b>	GLLF62F-DAKZIG-CLBU	4GB	SS	KINGMAX	PS029-093-TP	17-17-17-39	-	●	
<b>KINGMAX</b>	GLLH22F-18KIIA-CFBU2	16GB	DS	KINGMAX	PS0223-093-TP	17-17-17-39	-	●	
<b>Kingston</b>	KVR24N17D8/16	16GB	DS	Micron	D9SRJ	17-17-17-39	1.2	●	
<b>Kingston</b>	KVR24N17D8/8	8GB	DS	Micron	D9TGG	17-17-17-39	1.2	●	
<b>Kingston</b>	KVR24N17S6/4	4GB	SS	Micron	-	17-17-17-39	1.2	●	
<b>Kingston</b>	KVR24N17S8/4	4GB	SS	Micron	D9TGG	17-17-17-39	1.2	●	
<b>Kingston</b>	KVR24N17S8/8	8GB	SS	Micron	D9TBH	17-17-17-39	1.2	●	
<b>Klevv</b>	IM44GU48N24-FFFHAB(XMP)	4GB	SS	SK Hynix	-	15-15-15-35	1.2	●	
<b>Klevv</b>	IM44GU48N24-FFFHAZ(XMP)	4GB	SS	SK Hynix	-	15-15-15-35	1.2	●	
<b>Klevv</b>	IM48GU88N24-FFFHMB(XMP)	8GB	SS	SK Hynix	-	15-15-15-35	1.2	●	
<b>Klevv</b>	IM48GU88N24-FFFHMZ(XMP)	8GB	SS	SK Hynix	-	15-15-15-35	1.2	●	
<b>Klevv</b>	IM4AGU88N24-FFFHMB(XMP)	16GB	DS	SK Hynix	-	15-15-15-35	1.2	●	
<b>Klevv</b>	IM4AGU88N24-FFFHMZ(XMP)	16GB	DS	SK Hynix	-	15-15-15-35	1.2	●	
<b>Micron</b>	MTA16ATF2G64AZ-2G3B1	16GB	DS	Micron	D9TBH	17-17-17-39	1.2	●	
<b>Micron</b>	MTA8ATF1G64AZ-2G3B1	8GB	SS	-	-	17-17-17-39	1.2	●	●
<b>panram</b>	W4U2400PS-8G	8GB	SS	SK Hynix	DTCCH912G2	14-14-14-31	-	●	
<b>PATRIOT</b>	PSD416G24002	16GB	DS	Samsung	K4A8G085WB	17-17-17-39	1.2	●	
<b>PATRIOT</b>	PSD44G240081	4GB	SS	Samsung	K4A4G085WE	16-16-16-39	1.2	●	
<b>PATRIOT</b>	PSD48G240081	8GB	SS	Samsung	K4A8G085WB	17-17-17-39	1.2	●	

<b>PATRIOT</b>	PSD48G240082	8GB	DS	-	N/A	17-17-17-39	1.2	●
<b>PATRIOT</b>	PVE416G240C5KRD(XMP)	2x 8GB	SS	-	-	15-15-15-35	-	●
<b>PATRIOT</b>	PVE48G240C5KRD(XMP)	2x 4GB	SS	-	-	15-15-15-35	-	●
<b>SK Hynix</b>	HMA81GU6AFR8N-UH	8GB	SS	SK Hynix	H5AN8GBNAFRUHC	17-17-17-39	-	●
<b>SK Hynix</b>	HMA82GU6AFR8N-UH	16GB	DS	SK Hynix	H5AN8GBNAFRUHC	17-17-17-39	-	● ●
<b>SK Hynix</b>	HMA851U6AFR6N-UH	4GB	SS	SK Hynix	H5AN8G6NAFRUHC	17-17-17-39	-	●
<b>Team</b>	TCD44G2400C14BK(XMP)	4GB	SS	SK Hynix	H5AN4GBNAFRUHC	14-16-16-31	1.2	●
<b>Team</b>	TCD48G2400C14BK(XMP)	8GB	SS	-	T4D10248MT-24	15-16-16-31	1.2	●
<b>Team</b>	TED416G2400C16BK	16GB	DS	Micron	T4D10248MT-24	16-16-16-39	1.2	●
<b>Team</b>	TED416G2400C16DC01	2x 8GB	SS	Team	T4D10248MT-24	16-16-16-39	1.2	●
<b>Team</b>	TED416G2400C16QC01	4x 4GB	SS	Team	H5AN4G8NAFR	16-16-16-39	1.2	●
<b>Team</b>	TED432G2400C16QC01	4x 8GB	SS	Team	T4D10248MT-24	16-16-16-39	1.2	●
<b>Team</b>	TED44G2400C1601	4GB	SS	Team	H5AN4G8NAFR	16-16-16-39	1.2	●
<b>Team</b>	TED44G2400C16BK	4GB	SS	Team	H5AN4G8NAFR	16-16-16-39	1.2	●
<b>Team</b>	TED48G2400C1601	8GB	SS	Team	T4D10248MT-24	16-16-16-39	1.2	●
<b>Team</b>	TED48G2400C16BK	8GB	SS	Team	T4D10248MT-24	16-16-16-39	1.2	●
<b>Team</b>	TED48G2400C16BK	8GB	DS	SK Hynix	T4D5128HT-24	16-16-16-39	1.2	●
<b>Team</b>	TED48G2400C16DC01	2x 4GB	SS	Team	H5AN4G8NAFR	16-16-16-39	1.2	●
<b>Team</b>	TF3D48G2400HC15BBK(XMP)	8GB	SS	SK Hynix	-	15-17-17-35	1.2	●
<b>Team</b>	TF4D48G2400HC15BBK(XMP)	8GB	SS	SK Hynix	-	15-17-17-35	1.2	●
<b>Team</b>	TLTYD416G2400HC14DC01(XMP)	2x 8GB	SS	SK Hynix	-	14-16-16-31	1.2	●
<b>Team</b>	TLTYD432G2400HC15BDC01(XMP)	2x 16GB	SS	SK Hynix	-	15-17-17-35	1.2	●
<b>Team</b>	TPD416G2400HC16DC01	2x 8GB	SS	Team	T4D10248MT-24	16-16-16-39	1.2	●
<b>Team</b>	TPD416G2400HC16QC01	4x 4GB	SS	Team	H5AN4G8NAFR	16-16-16-39	1.2	●
<b>Team</b>	TPD432G2400HC16QC01	4x 8GB	SS	Team	T4D10248MT-24	16-16-16-39	1.2	●
<b>Team</b>	TPD44G2400HC1601	4GB	SS	Team	H5AN4G8NAFR	16-16-16-39	1.2	●
<b>Team</b>	TPD48G2400HC1601	8GB	SS	Team	T4D10248MT-24	16-16-16-39	1.2	●
<b>Team</b>	TPD48G2400HC16DC01	2x 4GB	SS	Team	H5AN4G8NAFR	16-16-16-39	1.2	●
<b>Team</b>	TPRD416G2400HC16DC01	2x 8GB	SS	Team	T4D10248MT-24	16-16-16-39	1.2	●
<b>Team</b>	TPRD416G2400HC16QC01	4x 4GB	SS	Team	H5AN4G8NAFR	16-16-16-39	1.2	●
<b>Team</b>	TPRD432G2400HC16QC01	4x 8GB	SS	Team	T4D10248MT-24	16-16-16-39	1.2	●
<b>Team</b>	TPRD44G2400HC1601	4GB	SS	Team	H5AN4G8NAFR	16-16-16-39	1.2	●
<b>Team</b>	TPRD48G2400HC1601	8GB	SS	Team	T4D10248MT-24	16-16-16-39	1.2	●
<b>Team</b>	TPRD48G2400HC16DC01	2x 4GB	SS	Team	H5AN4G8NAFR	16-16-16-39	1.2	●
<b>V-color</b>	TD4G8C17-UH	4GB	SS	SK Hynix	DW3J0460HM	15-15-15-36	1.2	●

### DDR4 2666 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM
<b>ADATA</b>	AD4U2666316G19-B	16GB	DS	SpecTek	-	19-19-19-43	1.2	●	
<b>ADATA</b>	AD4U266638G19	8GB	SS	Nanya	NT5AD1024MBA3-GZ	19-19-19-43	1.2	●	
<b>ADATA</b>	AO2P26KCST2	16GB	DS	ADATA	43QA-0819HNA1810K	19-19-19-43	1.2	●	
<b>AITC</b>	AID48G26RDZ	8GB	SS	Micron	-	19-19-19-43	-	●	
<b>Antec</b>	AMD4UZ126661608G-5S(XMP)	8GB	SS	Micron	-	16-18-18-35	1.2	●	
<b>Apacer</b>	AHU08GGB26CDU7G(XMP)	8GB	SS	SK Hynix	-	16-16-16-36	1.2	●	
<b>Apacer</b>	AU04GGB26CQTBGH	4GB	SS	-	PPE22-093	19-19-19-43	-	●	

Apacer	AU04GGB26CQWBGH	4GB	DS	Micron	PPE05-075E	19-19-19-43	1.2	●	
Apacer	AU08GGB26CQYBGH	8GB	SS	Apacer	AM6F63080HHMF5	19-19-19-43	1.2	●	
Apacer	AU08GGB26CQYBGH	8GB	SS	Apacer	AM6F63080HJMF5	19-19-19-43	-	●	
Apacer	AU16GGB26CQYBGH	16GB	DS	Apacer	AM6F6308BRHSF5	19-19-19-43	1.2	●	
Apacer	EL.04G2V.LNH	4GB	DS	Micron	PPE05-075E	19-19-19-43	1.2	●	
Apacer	EL.08G2V.GNH	8GB	SS	Apacer	AM6F63080HJMF5	19-19-19-43	-	●	
Apacer	EL.16G2V.GNH	16GB	DS	Apacer	AM6F6308BRHSF5	19-19-19-43	1.2	●	
Asgard	VMA42UH-MEC1U2AJ2(XMP)	16GB	SS	-	-	19-19-19-43	1.2	●	
CORSAIR	CMD128GX4M8A2666C15(Ver4.31)(XMP)	8x 16GB	DS	Samsung	-	15-15-15-36	1.2	●	●
CORSAIR	CMD16GX4M2A2666C15(Ver4.23)(XMP)	2x 8GB	DS	-	-	15-17-17-35	1.2	●	
CORSAIR	CMD16GX4M4A2666C15(Ver4.23)(XMP)	4x 4GB	SS	-	-	15-17-17-35	1.2	●	●
CORSAIR	CMD16GX4M4A2666C16(Ver4.23)(XMP)	4x 4GB	SS	-	-	16-18-18-35	1.2	●	●
CORSAIR	CMD16GX4M4A2666C16(Ver5.29)(XMP)	4x 4GB	SS	-	-	16-18-18-35	1.2	●	●
CORSAIR	CMD32GX4M4A2666C15(Ver4.23)(XMP)	4x 8GB	DS	-	-	15-17-17-35	1.2	●	●
CORSAIR	CMD32GX4M4A2666C15(Ver5.29)(XMP)	4x 8GB	DS	-	-	15-17-17-35	1.2	●	●
CORSAIR	CMD32GX4M4A2666C16(Ver4.23)(XMP)	4x 8GB	DS	-	-	16-18-18-35	1.2	●	●
CORSAIR	CMD64GX4M8A2666C15(Ver4.24)(XMP)	8x 8GB	DS	Samsung	-	15-15-15-36	1.2	●	●
CORSAIR	CMD64GX4M8A2666C15(Ver5.32)(XMP)	8x 8GB	SS	Hynix	-	15-17-17-35	1.2	●	●
CORSAIR	CMD8GX4M2A2666C15(Ver4.23)(XMP)	2x 4GB	DS	-	-	15-17-17-35	1.2	●	
CORSAIR	CMD8GX4M2A2666C15(Ver4.23)(XMP)	2x 4GB	DS	-	-	15-17-17-35	1.2	●	
CORSAIR	CMK128GX4M8A2666C16(Ver3.31)(XMP)	8x 16GB	DS	Micron	-	16-18-18-35	1.2	●	●
CORSAIR	CMK128GX4M8A2666C16(Ver3.32)(XMP)	8x 16GB	DS	Micron	-	16-18-18-35	1.2	●	●
CORSAIR	CMK128GX4M8A2666C16(Ver5.39)(XMP)	8x 16GB	DS	SK Hynix	-	16-18-18-35	1.2	●	●
CORSAIR	CMK16GX4M2A2666C16(Ver5.30)(XMP)	2x 8GB	SS	SK Hynix	-	16-18-18-35	1.2	●	
CORSAIR	CMK16GX4M2D2666C16(Ver4.21)(XMP)	2x 8GB	DS	Samsung	-	16-18-18-35	1.2	●	
CORSAIR	CMK16GX4M4A2666C16(Ver3.21)(XMP)	4x 4GB	SS	Micron	-	16-18-18-35	1.2	●	●
CORSAIR	CMK16GX4M4A2666C16(Ver3.21)(XMP)	4x 4GB	SS	Micron	-	16-18-18-35	1.2	●	●
CORSAIR	CMK16GX4M4A2666C16(Ver4.23)(XMP)	4x 4GB	SS	-	-	16-18-18-35	1.2	●	●
CORSAIR	CMK32GX4M2A2666C16(Ver4.31)(XMP)	2x 16GB	DS	-	-	16-18-18-35	1.2	●	
CORSAIR	CMK32GX4M2A2666C16R(Ver3.31)(XMP)	2x 16GB	DS	Micron	-	15-15-15-36	1.2	●	
CORSAIR	CMK32GX4M4A2666C15(Ver4.23)(XMP)	4x 8GB	DS	-	-	15-17-17-35	1.2	●	●
CORSAIR	CMK32GX4M4A2666C16(Ver3.20)(XMP)	4x 8GB	DS	Micron	-	15-15-15-36	1.2	●	●
CORSAIR	CMK32GX4M4A2666C16(Ver3.21)(XMP)	4x 8GB	DS	Micron	-	16-18-18-35	1.2	●	●
CORSAIR	CMK32GX4M4A2666C16(Ver5.30)(XMP)	4x 8GB	SS	SK Hynix	-	16-18-18-35	1.2	●	●
CORSAIR	CMK32GX4M4A2666C16(Ver5.30)(XMP)	4x 8GB	SS	SK Hynix	-	16-18-18-35	1.2	●	●
CORSAIR	CMK32GX4M4A2666C16(Ver5.30)(XMP)	4x 8GB	SS	SK Hynix	-	16-18-18-35	1.2	●	●
CORSAIR	CMK32GX4M4A2666C16(Ver5.39)(XMP)	4x 8GB	SS	SK Hynix	-	16-18-18-35	1.2	●	
CORSAIR	CMK32GX4M4A2666C16R(Ver4.23)(XMP)	4x 8GB	DS	-	-	16-18-18-35	1.2	●	●
CORSAIR	CMK64GX4M4A2666C16(Ver3.31)(XMP)	4x 16GB	DS	Micron	-	16-18-18-35	1.2	●	●
CORSAIR	CMK64GX4M4A2666C16(Ver4.31)(XMP)	4x 16GB	DS	Samsung	-	15-15-15-36	1.2	●	●
CORSAIR	CMK8GX2M2D2666C16(Ver3.21)(XMP)	2x 4GB	SS	Micron	-	16-18-18-35	1.2	●	
CORSAIR	CMK8GX4M2A2666C16(Ver3.22)(XMP)	2x 4GB	SS	Micron	-	16-18-18-35	1.2	●	
CORSAIR	CMK8GX4M2D2666C16(Ver3.11)(XMP)	2x 4GB	DS	Micron	-	16-18-18-35	1.2	●	
CORSAIR	CMR16GX4M2A2666C16(Ver5.30)(XMP)	2x 8GB	SS	SK Hynix	-	16-18-18-35	1.2	●	
CORSAIR	CMR64GX4M8A2666C16(Ver5.30)(XMP)	8x 8GB	SS	SK Hynix	-	16-18-18-35	1.2	●	●
CORSAIR	CMU32GX4M4A2666C16(Ver5.30)(XMP)	4x 8GB	SS	SK Hynix	-	16-18-18-35	1.2	●	●

<b>CORSAIR</b>	CMV16GX4M1A2666C18	16GB	DS	Micron	-	18-18-18-43	1.2	●
<b>CORSAIR</b>	CMV4GX4M1A2666C18	4GB	SS	Micron	-	18-18-18-43	1.2	●
<b>CORSAIR</b>	CMV8GX4M1A2666C18	8GB	SS	Micron	-	18-18-18-43	1.2	●
<b>crucial</b>	BLE4G4D26AFE.8FAD(XMP)	4GB	SS	Micron	-	16-17-17-36	1.2	●
<b>crucial</b>	BLE8G4D26AFE.16FAD(XMP)	8GB	DS	Micron	-	16-17-17-36	1.2	●
<b>crucial</b>	BLS16G4D26BFSB.16FD(XMP)	16GB	DS	Micron	-	16-18-18-38	1.2	●
<b>crucial</b>	BLS16G4D26BFSC.16FBD(XMP)	16GB	DS	Micron	-	16-18-18-38	1.2	●
<b>crucial</b>	BLS4G4D26BFSB.8FB(XMP)	4GB	SS	Micron	-	16-18-18-38	1.2	●
<b>crucial</b>	BLS4G4D26BFSC.8FBR2(XMP)	4GB	SS	Micron	-	16-18-18-38	1.2	●
<b>crucial</b>	BLS8G4D26BFSBK.8FD(XMP)	8GB	SS	Micron	-	16-18-18-38	1.2	●
<b>crucial</b>	BLS8G4D26BFSC.16FBR2(XMP)	8GB	DS	Micron	-	16-18-18-38	1.2	●
<b>crucial</b>	BLS8G4D26BFSC.8FBR(XMP)	8GB	SS	Micron	-	16-18-18-38	1.2	●
<b>crucial</b>	BLT4G4D26AFTA.8FADG(XMP)	4GB	SS	Micron	-	16-16-16-39	1.2	●
<b>crucial</b>	BLT4G4D26AFTA.8FADG(XMP)	4x4GB	SS	Micron	-	16-17-17-36	1.2	● ●
<b>crucial</b>	BLT8G4D26AFTA.16FAD(XMP)	4x 8GB	DS	Micron	-	16-17-17-36	1.2	● ●
<b>crucial</b>	BLT8G4D26AFTA.16FAD(XMP)	8GB	DS	Micron	-	16-16-16-39	1.2	●
<b>crucial</b>	CT16G4DFD8266.16FE1	16GB	DS	Micron	D9VPP	19-19-19-43	1.2	●
<b>Crucial</b>	CT16G4DFD8266.M16FE	16GB	DS	Micron	D9VPP	19-19-19-43	1.2	●
<b>crucial</b>	CT32G4DFD8266.16FB1	32GB	DS	Micron	D9XPF	19-19-19-43	1.2	●
<b>crucial</b>	CT8G4DFS8266.8FE1	8GB	SS	Micron	-	19-19-19-43	1.2	●
<b>crucial</b>	CT8G4DFS8266.M8FE	8GB	SS	Micron	D9VPP	19-19-19-43	1.2	●
<b>G.SKILL</b>	F4-2666C15Q-16GRR(XMP)	4x 4GB	SS	Hynix	-	15-15-15-35	1.2	● ●
<b>G.SKILL</b>	F4-2666C15Q-32GRR(XMP)	4x 8GB	DS	SK Hynix	-	15-15-15-35	1.2	● ●
<b>G.SKILL</b>	F4-2666C16Q2-128GVK(XMP)	8x 16GB	DS	SK Hynix	-	16-16-16-36	1.2	● ●
<b>GelL</b>	GREXR432GB2666C16QC(XMP)	4x 8GB	SS	Micron	-	16-18-18-36	1.35	● ●
<b>GelL</b>	GREXR464GB2666C16QC(XMP)	4x 16GB	DS	Micron	-	16-18-18-36	1.35	● ●
<b>Hyper X</b>	HX426C13PB3/16(XMP)	16GB	DS	SK Hynix	-	13-15-15-35	1.35	●
<b>Hyper X</b>	HX426C13PB3K2/32(XMP)	2x 16GB	DS	SK Hynix	-	13-15-15-35	1.35	●
<b>Hyper X</b>	HX426C13PB3K4/64(XMP)	4x 16GB	DS	SK Hynix	-	13-15-15-35	1.35	● ●
<b>Hyper X</b>	HX426C13SB2/4(XMP)	4GB	SS	SK Hynix	-	15-15-15-36	1.35	●
<b>Hyper X</b>	HX426C13SB2K2/16(XMP)	2x 8GB	DS	Nanya	NT5AD512M8B1-GN	15-15-15-36	1.35	●
<b>Hyper X</b>	HX426C13SB2K2/8(XMP)	2x 4GB	SS	SK Hynix	-	15-15-15-36	1.35	●
<b>Hyper X</b>	HX426C13SB2K4/16(XMP)	4x 4GB	SS	SK Hynix	-	15-15-15-36	1.35	● ●
<b>Hyper X</b>	HX426C13SB2K4/32(XMP)	4x 8GB	DS	Nanya	NT5AD512M8B1-GN	15-15-15-36	1.35	● ●
<b>Hyper X</b>	HX426C15FB/4	4GB	SS	SK Hynix	-	15-17-17-35	1.2	●
<b>Hyper X</b>	HX426C15FB/4	4GB	SS	Micron	-	15-17-17-35	1.2	●
<b>Hyper X</b>	HX426C15FB/8	8GB	DS	SK Hynix	-	15-17-17-35	1.2	●
<b>Hyper X</b>	HX426C15FB/8	8GB	DS	Micron	-	15-17-17-35	1.2	●
<b>Hyper X</b>	HX426C15FBK2/16	2x 8GB	DS	SK Hynix	-	15-15-17-35	1.2	●
<b>Hyper X</b>	HX426C15FBK2/16	2x 8GB	DS	SK Hynix	-	15-17-17-35	1.2	●
<b>Hyper X</b>	HX426C15FBK2/16	2x 8GB	DS	Micron	-	15-17-17-35	1.2	●
<b>Hyper X</b>	HX426C15FBK2/8	2x 4GB	SS	SK Hynix	-	15-17-17-35	1.2	●
<b>Hyper X</b>	HX426C15FBK2/8	2x 4GB	SS	Micron	-	15-17-17-35	1.2	●
<b>Hyper X</b>	HX426C15FBK4/16	4x 4GB	SS	SK Hynix	-	15-17-17-35	1.2	● ●
<b>Hyper X</b>	HX426C15FBK4/16	4x 4GB	SS	SK Hynix	-	15-17-17-35	1.2	● ●
<b>Hyper X</b>	HX426C15FBK4/16	4x 4GB	SS	Micron	-	15-17-17-35	1.2	● ●

Hyper X	HX426C15FBK4/32	4x 8GB	DS	SK Hynix	-	15-15-17-35	1.2	•	•
Hyper X	HX426C15FBK4/32	4x 8GB	DS	SK Hynix	-	15-17-17-35	1.2	•	
Hyper X	HX426C15FBK4/32	4x 8GB	DS	Micron	-	15-17-17-35	1.2	•	
Hyper X	HX426C15SBK4/64(XMP)	4x 16GB	DS	SK Hynix	-	15-15-15-35	1.2	•	
Hyper X	HX426C16FB/16	16GB	DS	SK Hynix	-	16-18-18-39	1.2	•	
Hyper X	HX426C16FB2/8(XMP)	8GB	SS	SK Hynix	-	16-18-18-39	1.2	•	
Hyper X	HX426C16FB2K2/16(XMP)	2x 8GB	SS	SK Hynix	-	16-18-18-39	1.2	•	
Hyper X	HX426C16FB2K4/32(XMP)	4x 8GB	SS	SK Hynix	-	16-18-18-39	1.2	•	•
Hyper X	HX426C16FBK2/32	2x 16GB	DS	SK Hynix	-	16-18-18-39	1.2	•	
Hyper X	HX426C16FBK4/64	4x 16GB	DS	SK Hynix	-	16-18-18-39	1.2	•	•
Hyper X	HX426C16FBK4/64	4x 16GB	DS	SK Hynix	-	16-18-18-39	-	•	•
Hyper X	HX426C16FW/16	16GB	DS	SK Hynix	-	16-18-18-39	1.2	•	
Hyper X	HX426C16FWK2/32	2x 16GB	DS	SK Hynix	-	16-18-18-39	1.2	•	
Hyper X	HX426C16FWK4/64	4x 16GB	DS	SK Hynix	-	16-18-18-39	1.2	•	•
INNODISK	M4C0-8GS1LCIK-E93	8GB	SS	Samsung	K4A8G085WCBCTD(E CC)	19-19-19-43	1.2	•	
INNODISK	M4C0-8GSSMCIK-E93	8GB	DS	Samsung	K4A4G085WFBCTD(E CC)	19-19-19-43	1.2	•	
INNODISK	M4C0-AGS1MCIK-E93	16GB	DS	Samsung	K4A8G085WCBCTD(E CC)	19-19-19-43	1.2	•	
INNODISK	M4U0-8GS1JCIK-E93	8GB	SS	Samsung	K4A8G085WCBCTD	19-19-19-43	1.2	•	
INNODISK	M4U0-AGS1KCIK-E93	16GB	DS	Samsung	K4A8G085WCBCTD	19-19-19-43	1.2	•	
J&A	JRLL4U2666172408-4M	4GB	SS	-	PPE62-093DG	19-19-19-43	1.2	•	
Kingston	KVR26N19D8/16	16GB	DS	Micron	D9TZV	19-19-19-43	1.2	•	•
Kingston	KVR26N19D8/16	16GB	DS	Micron	D9VHP	19-19-19-43	1.2	•	
Kingston	KVR26N19D8/16I	16GB	DS	Kingston	D1028AN9APGRK	19-19-19-43	1.2	•	
Kingston	KVR26N19S8/8	8GB	SS	Micron	D9TZV	19-19-19-43	1.2	•	•
Kingston	KVR26N19S8/8	8GB	SS	Micron	-	19-19-19-43	1.2	•	
Klevv	IM44GU48N26-FFFHAZ(XMP)	4GB	SS	SK Hynix	-	15-15-15-35	1.2	•	
Klevv	IM48GU88N26-FFFHMZ(XMP)	8GB	SS	SK Hynix	-	15-15-15-35	1.2	•	
Klevv	IM4AGU88N26-FFFHMZ(XMP)	16GB	DS	SK Hynix	-	15-15-15-35	1.2	•	
Klevv	KD44GU481-26N1600(XMP)	4GB	SS	ESSENCE	E5AN4G8N1JR	16-18-18-38	1.2	•	
Klevv	KD48GU481-26N1600(XMP)	8GB	DS	ESSENCE	E5AN4G8N1JR	16-18-18-38	1.2	•	
Klevv	KM4C8GX4N-2666-15-15-15-35-0 (XMP)	8GB	DS	SK Hynix	-	15-15-15-35	1.2	•	
Klevv	KM4C8GX4N-2666-15-15-15-35-1(XMP)	8GB	DS	SK Hynix	-	15-15-15-35	1.2	•	
Micron	MTA16ATF2G64AZ-2G6E1	16GB	DS	Micron	D9VPP	19-19-19-43	1.2	•	
Micron	MTA16ATF2G64AZ-2G6E1	16GB	DS	Micron	D9WFL	19-19-19-43	-	•	
Micron	MTA16ATF2G64AZ-2G6H1	16GB	DS	Micron	D9VHP	19-19-19-43	-	•	•
Micron	MTA16ATF4G64AZ-2G6B1	32GB	DS	Micron	D9XPF	19-19-19-43	1.2	•	
Micron	MTA8ATF1G64AZ-2G6E1	8GB	SS	Micron	D9VPP	19-19-19-43	1.2	•	
Micron	MTA8ATF1G64AZ-2G6E1	8GB	SS	Micron	-	19-19-19-43	1.2	•	
Micron	MTA8ATF1G64AZ-2G6H1	8GB	SS	Micron	D9VHP	19-19-19-43	-	•	•
panram	W4U2666PS-16G	2x 16GB	DS	SK Hynix	DDR4-1GM8-26	16-18-18-35	1.2	•	
panram	W4U2666PS-8G	2x 8GB	SS	SK Hynix	DDR4-1GM8-26	16-18-18-35	1.2	•	



<b>Patriot</b>	PVR416G266C5K(XMP)	2x 8GB	SS	Micron	-	15-17-17-35	1.2	•	
<b>SK Hynix</b>	HMA81GU6CJR8N-VK	8GB	SS	SK Hynix	H5AN8G8NCJR	19-19-19-43	1.2	•	
<b>SK Hynix</b>	HMA82GU6CJR8N-VK	16GB	DS	SK Hynix	H5AN8G8NCJ	19-19-19-43	-	•	
<b>SK Hynix</b>	HMA82GU7CJR8N-VK	16GB	DS	SK Hynix	H5AN8G8NCJRVKC	19-19-19-43	-	•	
<b>SK Hynix</b>	HMA851U6CJR6N-VK	4GB	SS	SK Hynix	H5AN8G6NCJR	19-19-19-43	1.2	•	
<b>SK Hynix</b>	HMAA4GU6AJR8N-VK	32GB	DS	SK Hynix	H5ANAG8NAJRVKC	19-19-19-43	-	•	
<b>SL LINK</b>	J4AGUH1G8QHBC	16GB	DS	SK Hynix	H5AN8G8NAFRVKC	19-19-19-43	1.2	•	
<b>SL LINK</b>	J4BGUS2G8QHBC	32GB	DS	-	K4AAG085WMBCTD	19-19-19-43	1.2	•	
<b>Team</b>	TCD44G2666C15BBK(XMP)	4GB	SS	SK Hynix	T4D5128HT-266	15-17-17-35	1.2	•	
<b>Team</b>	TED416G2666C1901	16GB	DS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TED416G2666C19DC01	2x 8GB	SS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TED416G2666C19QC01	4x 4GB	SS	Team	T4D5128MT-266	19-19-19-43	1.2	•	•
<b>Team</b>	TED432G2666C19DC01	2x 16GB	DS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TED432G2666C19QC01	4x 8GB	SS	SK Hynix	-	19-19-19-43	1.2	•	•
<b>Team</b>	TED44G2666C1901	4GB	SS	Team	T4D5128MT-266	19-19-19-43	1.2	•	
<b>Team</b>	TED44G2666C19BK	4GB	SS	Team	T4D5128MT-266	19-19-19-43	1.2	•	
<b>Team</b>	TED464G2666C19QC01	4x 16GB	DS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TED48G2666C1901	8GB	SS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TED48G2666C19DC01	2x 4GB	SS	Team	T4D5128MT-266	19-19-19-43	1.2	•	
<b>Team</b>	TPD416G2666HC1901	16GB	DS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TPD416G2666HC19BK	16GB	DS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TPD416G2666HC19DC01	2x 8GB	SS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TPD416G2666HC19QC01	4x 4GB	SS	Team	T4D5128MT-266	19-19-19-43	1.2	•	•
<b>Team</b>	TPD432G2666HC19DC01	2x 16GB	DS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TPD432G2666HC19QC01	4x 8GB	SS	Micron	-	19-19-19-43	1.2	•	•
<b>Team</b>	TPD44G2666HC1901	4GB	SS	Team	T4D5128MT-266	19-19-19-43	1.2	•	
<b>Team</b>	TPD464G2666HC19QC01	4x 16GB	DS	Micron	-	19-19-19-43	1.2	•	•
<b>Team</b>	TPD48G2666HC1901	8GB	SS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TPD48G2666HC19BK	8GB	SS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TPD48G2666HC19DC01	2x 4GB	SS	Team	T4D5128MT-266	19-19-19-43	1.2	•	
<b>Team</b>	TPRD416G2666HC1901	16GB	DS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TPRD416G2666HC19DC01	2x 8GB	SS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TPRD416G2666HC19QC01	4x 4GB	SS	Team	T4D5128MT-266	19-19-19-43	1.2	•	•
<b>Team</b>	TPRD432G2666HC19DC01	2x 16GB	DS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TPRD432G2666HC19QC01	4x 8GB	SS	Micron	-	19-19-19-43	1.2	•	•
<b>Team</b>	TPRD44G2666HC1901	4GB	SS	Team	T4D5128MT-266	19-19-19-43	1.2	•	
<b>Team</b>	TPRD464G2666HC19QC01	4x 16GB	DS	Micron	-	19-19-19-43	1.2	•	•
<b>Team</b>	TPRD48G2666HC1901	8GB	SS	Micron	-	19-19-19-43	1.2	•	
<b>Team</b>	TPRD48G2666HC19DC01	2x 4GB	SS	Team	T4D5128MT-266	19-19-19-43	1.2	•	
<b>Tigo</b>	TMKG8G2666C16(XMP)	8GB	SS	Micron	-	16-18-18-38	1.2	•	
<b>SL LINK</b>	J4BGUS2G8QHBC	32GB	DS	Samsung		19-19-19-43	1.2	•	•
<b>SAMSUNG</b>	M378A4G43MB1-CTD	32GB	DS	Samsung		19-19-19-43	1.2	•	•

### DDR4 2800 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM

<b>ADATA</b>	AX4U2800W8G17-BRD(XMP)	8GB	DS	Samsung	-	17-17-17-36	1.2	●	
<b>Apacer</b>	78.BAGM8.AF20B(XMP)	4x 4GB	SS	SK Hynix	-	17-17-17-36	-	●	●
<b>Apacer</b>	78.CAGM8.AF30B(XMP)	4x 8GB	DS	SK Hynix	-	17-17-17-36	-	●	●
<b>G.SKILL</b>	F4-2800C14Q-64GVK(XMP)	4x 16GB	DS	Samsung	-	14-14-14-35	1.35	●	
<b>G.SKILL</b>	F4-2800C15Q2-128GRKD(XMP)	8x 16GB	DS	Samsung	-	15-15-15-36	1.35	●	●
<b>G.SKILL</b>	F4-2800C15Q2-64GRK(XMP)	8x 8GB	DS	SK Hynix	-	15-16-16-35	1.25	●	●
<b>G.SKILL</b>	F4-2800C15Q2-64GRK(XMP)	8x 8GB	DS	SK Hynix	-	15-15-15-35	1.25	●	●
<b>G.SKILL</b>	F4-2800C16Q-16GRK(XMP)	4x 4GB	SS	Samsung	-	16-16-16-36	1.2	●	●
<b>G.SKILL</b>	F4-2800C16Q-16GRR(XMP)	4x 4GB	SS	SK Hynix	-	16-16-16-36	1.2	●	●
<b>G.SKILL</b>	F4-2800C16Q-32GRK(XMP)	4x 8GB	DS	Samsung	-	16-16-16-36	1.2	●	●
<b>G.SKILL</b>	F4-2800C16Q-32GRR(XMP)	4x 8GB	DS	SK Hynix	-	16-16-16-36	1.2	●	●
<b>GelL</b>	GPR416GB2800C16QC(XMP)	4x 4GB	SS	SK Hynix	-	16-16-16-36	1.2	●	●
<b>GelL</b>	GPR432GB2800C16QC(XMP)	4x 8GB	DS	SK Hynix	-	16-16-16-36	1.2	●	●
<b>Hyper X</b>	HX428C14PBK8/64(XMP)	8x 8GB	DS	SK Hynix	-	14-15-15-39	1.35	●	●
<b>Hyper X</b>	HX428C14SB2/4(XMP)	4GB	SS	SK Hynix	-	15-15-15-36	1.35	●	
<b>Hyper X</b>	HX428C14SB2/8(XMP)	8GB	DS	SK Hynix	-	15-15-15-36	1.35	●	
<b>Hyper X</b>	HX428C14SB2K2/16(XMP)	2x 8GB	DS	SK Hynix	-	15-15-15-36	1.35	●	
<b>Hyper X</b>	HX428C14SB2K2/8(XMP)	2x 4GB	SS	SK Hynix	-	15-15-15-36	1.35	●	
<b>Hyper X</b>	HX428C14SB2K4/16(XMP)	4x 4GB	SS	SK Hynix	-	15-15-15-36	1.35	●	
<b>Hyper X</b>	HX428C14SB2K4/32(XMP)	4x 8GB	DS	SK Hynix	-	15-15-15-36	1.35	●	
<b>KINGMAX</b>	GLMG42F-18KIIA-CJBR4(XMP)	8GB	SS	KINGMAX	-	17-17-17-39	1.2	●	
<b>Klevv</b>	IMA451U6MFR8N-DG0(Ver1.05)(XMP)	4GB	SS	SK Hynix	-	16-16-16-36	1.2	●	
<b>NEO FORZA</b>	NFMUD416E8-2800EB2A(XMP)	16GB	DS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD416E8-2800EB3A(XMP)	16GB	DS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD416E8-2800EC2A(XMP)	16GB	DS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD416E8-2800EC3A(XMP)	16GB	DS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD416E8-2800ED2A(XMP)	16GB	DS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD416E8-2800EH2A(XMP)	16GB	DS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD416E8-2800EH2A(XMP)	16GB	DS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD480E8-2800DB2A(XMP)	8GB	SS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD480E8-2800DB3A(XMP)	8GB	SS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD480E8-2800DC2A(XMP)	8GB	SS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD480E8-2800DC3A(XMP)	8GB	SS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD480E8-2800DD2A(XMP)	8GB	SS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD480E8-2800DD3A(XMP)	8GB	SS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD480E8-2800DH2A(XMP)	8GB	SS	SK Hynix	-	17-17-17-36	-	●	
<b>NEO FORZA</b>	NFMUD480E8-2800DH2A(XMP)	8GB	SS	SK Hynix	-	17-17-17-36	-	●	

### DDR4 2933 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM
<b>CORSAIR</b>	CMK128GX4M8Z2933C16(Ver4.31)	8x 16GB	DS	Samsung	-	16-18-18-36	1.35	●	●
<b>CORSAIR</b>	CMK128GX4M8Z2933C16(Ver4.31)(XMP)	8x 16GB	DS	Samsung	-	16-18-18-36	1.35	●	●
<b>G.SKILL</b>	F4-2933C16D-16GFX(XMP)	2x 8GB	SS	Samsung	-	16-16-16-36	1.35	●	
<b>G.SKILL</b>	F4-2933C16Q-32GFX(XMP)	4x 8GB	SS	Samsung	-	16-16-16-36	1.35	●	●
<b>Hyper X</b>	HX429C15PB3AK4/32(XMP)	4x 8GB	SS	Micron	-	15-17-17-39	1.35	●	●

Hyper X	HX429C17FB/16(XMP)	16GB	DS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FB/4	4GB	SS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FB2/8(XMP)	8GB	SS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FB2K2/16(XMP)	2x 8GB	SS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FB2K4/32(XMP)	4x 8GB	SS	Micron	-	17-19-19-39	1.2	●	●
Hyper X	HX429C17FBK2/32(XMP)	2x 16GB	DS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FBK2/8	2x 4GB	SS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FBK4/16	4x 4GB	SS	Micron	-	17-19-19-39	1.2	●	●
Hyper X	HX429C17FBK4/64(XMP)	4x 16GB	DS	Micron	-	17-19-19-39	1.2	●	●
Hyper X	HX429C17FR/16(XMP)	16GB	DS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FR2/8(XMP)	8GB	SS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FR2K2/16(XMP)	2x 8GB	SS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FR2K4/32(XMP)	4x 8GB	SS	Micron	-	17-19-19-39	1.2	●	●
Hyper X	HX429C17FRK2/32(XMP)	2x 16GB	DS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FRK4/64(XMP)	4x 16GB	DS	Micron	-	17-19-19-39	1.2	●	●
Hyper X	HX429C17FW/16(XMP)	16GB	DS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FW2/8(XMP)	8GB	SS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FW2K2/16(XMP)	2x 8GB	SS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FW2K4/32(XMP)	4x 8GB	SS	Micron	-	17-19-19-39	1.2	●	●
Hyper X	HX429C17FWK2/32(XMP)	2x 16GB	DS	Micron	-	17-19-19-39	1.2	●	
Hyper X	HX429C17FWK4/64(XMP)	2x 16GB	DS	Micron	-	17-19-19-39	1.2	●	

### DDR4 3000 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM
ADATA	AX4U300038G16-BBG(XMP)	8GB	SS	SK Hynix	-	16-18-18-36	1.35	●	
ADATA	AX4U300038G16-BRZ(XMP)	8x 8GB	SS	Nanya	-	16-18-18-36	1.35	●	●
Antec	AMD4UZ130001608G-5S(XMP)	8GB	SS	Micron	-	16-18-18-36	1.35	●	
Apacer	EK.16GAW.KFBK2(XMP)	8GB	DS	SK Hynix	-	16-18-18-38	-	●	
CORSAIR	CMD16GX4M2B3000C15(Ver4.23)(XMP)	2x 8GB	DS	-	-	15-17-17-35	1.35	●	
CORSAIR	CMD16GX4M2B3000C15(Ver5.30)(XMP)	2x 8GB	SS	SK Hynix	-	15-17-17-35	1.35	●	
CORSAIR	CMD16GX4M4B3000C15(Ver4.23)(XMP)	4x 4GB	SS	-	-	15-17-17-35	1.35	●	●
CORSAIR	CMD16GX4M4B3000C15(Ver4.24)(XMP)	4x 4GB	SS	SAMSUNG	-	15-17-17-35	1.35	●	●
CORSAIR	CMD32GX4M2B3000C15(Ver5.31)(XMP)	2x 16GB	DS	SK Hynix	-	15-17-17-35	1.35	●	
CORSAIR	CMD32GX4M4B3000C15(Ver4.23)(XMP)	4x 8GB	DS	-	-	15-17-17-35	1.35	●	●
CORSAIR	CMD32GX4M4C3000C15(Ver3.32)(XMP)	4x 8GB	DS	SK Hynix	-	15-17-17-35	1.35	●	●
CORSAIR	CMD32GX4M4C3000C15(Ver5.32)(XMP)	4x 8GB	SS	SK Hynix	-	15-17-17-35	1.35	●	●
CORSAIR	CMK16GX4M1B3000C15(Ver3.32)(XMP)	16GB	DS	Micron	-	15-17-17-35	1.35	●	
CORSAIR	CMK16GX4M2B3000C15(Ver3.32)(XMP)	2x 8GB	SS	Micron	-	15-17-17-35	1.35	●	
CORSAIR	CMK16GX4M2B3000C15(Ver4.23)(XMP)	2x 8GB	DS	-	-	15-17-17-35	1.35	●	
CORSAIR	CMK16GX4M2B3000C15(Ver5.30)(XMP)	2x 8GB	SS	SK Hynix	-	15-17-17-35	1.35	●	
CORSAIR	CMK16GX4M2B3000C15(Ver5.30)(XMP)	2x 8GB	SS	SK Hynix	-	15-17-17-35	1.35	●	
CORSAIR	CMK16GX4M2B3000C15(Ver5.30)(XMP)	2x 8GB	SS	SK Hynix	-	15-17-17-35	1.35	●	
CORSAIR	CMK16GX4M2C3000C16(Ver3.31)(XMP)	2x 8GB	SS	Micron	-	16-18-18-36	1.35	●	
CORSAIR	CMK16GX4M2C3000C16(Ver3.31)(XMP)	2x 8GB	SS	Micron	-	16-18-18-36	1.35	●	
CORSAIR	CMK16GX4M4B3000C15(Ver5.20)(XMP)	4x 4GB	SS	SK Hynix	-	15-17-17-35	1.35	●	●

CORSAIR	CMK32GX4M2B3000C15(Ver4.31)(XMP)	2x 16GB	DS	-	-	15-15-15-36	1.35	•	
CORSAIR	CMK32GX4M4B3000C15(Ver4.24)(XMP)	4x 8GB	DS	Samsung	-	15-17-17-35	1.35	•	•
CORSAIR	CMK32GX4M4B3000C15(Ver5.29)(XMP)	4x 8GB	DS	-	-	15-17-17-35	1.35	•	•
CORSAIR	CMK64GX4M2D3000C16(Ver3.40)(XMP)	2x 32GB	DS	Micron	-	16-20-20-38	1.35	•	
CORSAIR	CMK64GX4M4B3000C15(Ver4.31)(XMP)	4x 16GB	DS	-	-	15-17-17-35	1.35	•	•
CORSAIR	CMK8GX4M2B3000C15(Ver4.23)(XMP)	2x 4GB	DS	-	-	15-17-17-35	1.35	•	
CORSAIR	CMR128GX4M8C3000C16(Ver4.31)(XMP)	8x 16GB	DS	Samsung	-	16-18-18-36	1.35	•	•
CORSAIR	CMR16GX4M2C3000C15(Ver4.31)(XMP)	2x 8GB	SS	SK Hynix	-	15-17-17-35	1.35	•	
CORSAIR	CMR16GX4M2C3000C15(Ver5.30)(XMP)	2x 8GB	SS	SK Hynix	-	15-17-17-35	1.35	•	
CORSAIR	CMR32GX4M2C3000C15(Ver4.31)(XMP)	2x 16GB	DS	Samsung	-	15-17-17-35	1.35	•	
CORSAIR	CMR32GX4M4C3000C15(Ver3.32)(XMP)	4x 8GB	SS	Micron	-	15-17-17-35	1.35	•	•
CORSAIR	CMR32GX4M4C3000C15(Ver5.39)(XMP)	4x 8GB	SS	SK Hynix	-	15-17-17-35	1.35	•	•
CORSAIR	CMR64GX4M4C3000C15(Ver3.32)(XMP)	4x 16GB	DS	Micron	-	15-17-17-35	1.35	•	•
CORSAIR	CMU16GX4M2C3000C15(Ver3.21)(XMP)	2x 8GB	DS	Micron	-	15-15-15-36	1.35	•	
CORSAIR	CMW32GX4M4C3000C15(Ver5.32)(XMP)	4x 8GB	SS	SK Hynix	-	15-17-17-35	1.35	•	•
CORSAIR	CMW64GX4M8C3000C15(Ver5.32)(XMP)	8x 8GB	SS	SK Hynix	-	15-17-17-35	1.35	•	•
crucial	BLE4G4D30AEEA.K8FE(XMP)	4GB	SS	Samsung	-	15-16-16-35	1.35	•	
crucial	BLE8G4D30AEEA.K16FE(XMP)	8GB	DS	Samsung	-	15-16-16-35	1.35	•	
crucial	BLS16G4D30AESB.M16FE1(XMP)	16GB	DS	Micron	-	15-16-16-35	1.35	•	
crucial	BLS8G4D30AESBK.M8FE(XMP)	8GB	SS	Micron	-	15-16-16-35	1.35	•	
crucial	BLT4G4D30AETA.K8FE(XMP)	4GB	SS	Samsung	-	15-16-16-35	1.35	•	
crucial	BLT8G4D30AETA.K16FE(XMP)	8GB	DS	Samsung	-	15-16-16-35	1.35	•	
Crucial	BLT8G4D30BET4K.C8FD(XMP)	8GB	SS	Micron	-	16-18-18-38	1.35	•	
G.SKILL	F4-3000C14Q2-128GVK(XMP)	8x 16GB	DS	Samsung	-	15-15-15-36	1.35	•	•
G.SKILL	F4-3000C15D-8GTZB(XMP)	2x 4GB	SS	Samsung	-	15-16-16-35	1.35	•	
G.SKILL	F4-3000C15Q-16GRK(XMP)	4x 4GB	SS	Samsung	-	15-15-15-35	1.35	•	•
G.SKILL	F4-3000C15Q-16GRR(XMP)	4x 4GB	SS	SK Hynix	-	15-15-15-35	1.35	•	•
G.SKILL	F4-3000C16D-16GTZR(XMP)	2x 8GB	SS	SK Hynix	-	16-18-18-38	1.35	•	
G.SKILL	F4-3000C16Q2-128GVKB(XMP)	8x 16GB	DS	SK Hynix	-	16-18-18-38	1.35	•	•
GeIL	GEXB432GB3000C15AQC(XMP)	4x 8GB	SS	Samsung	-	15-17-17-35	1.35	•	•
GeIL	GLR416GB3000C15ADC(XMP)	8GB	SS	SK Hynix	-	15-17-17-35	1.35	•	
GeIL	GLR416GB3000C16QC(XMP)	4x 4GB	SS	Samsung	-	16-16-16-36	1.35	•	•
GeIL	GWV416GB3000C15DC(XMP)	2x 8GB	DS	SK Hynix	CG4L512G88BA093L	15-17-17-35	1.35	•	
Hyper X	HX430C15PB2K4/16(XMP)	4x 4GB	SS	SK Hynix	-	15-16-16-39	1.35	•	•
Hyper X	HX430C15PB3/16(XMP)	16GB	DS	SK Hynix	-	15-17-17-36	1.35	•	
Hyper X	HX430C15PB3/8(XMP)	8GB	SS	SK Hynix	-	15-17-17-36	1.2	•	
Hyper X	HX430C15PB3AK4/32(XMP)	4x 8GB	SS	Hynix	-	15-17-17-36	1.35	•	•
Hyper X	HX430C15PB3AK4/64(XMP)	4x 16GB	DS	Hynix	-	15-17-17-36	1.35	•	
Hyper X	HX430C15PB3K2/16(XMP)	2x 8GB	SS	SK Hynix	-	15-17-17-36	1.35	•	
Hyper X	HX430C15PB3K2/16(XMP)	2x 8GB	SS	SK Hynix	-	15-17-17-36	1.2	•	
Hyper X	HX430C15PB3K2/32(XMP)	2x 16GB	DS	SK Hynix	-	15-17-17-36	1.35	•	
Hyper X	HX430C15PB3K2/32(XMP)	2x 16GB	DS	SK Hynix	-	15-17-17-36	1.35	•	
Hyper X	HX430C15PB3K2/8(XMP)	2x 4GB	SS	SK Hynix	-	15-17-17-36	1.35	•	
Hyper X	HX430C15PB3K4/16(XMP)	4x 4GB	SS	SK Hynix	-	15-17-17-36	1.35	•	•
Hyper X	HX430C15PB3K4/32(XMP)	4x 8GB	SS	SK Hynix	-	15-17-17-36	1.35	•	•
Hyper X	HX430C15PB3K4/64(XMP)	4x 16GB	DS	SK Hynix	-	15-17-17-36	1.35	•	•

Hyper X	HX430C15PB3K4/64(XMP)	4x 16GB	DS	SK Hynix	-	15-17-17-36	1.35	•	•
Hyper X	HX430C15PB3K8/128(XMP)	8x 16GB	DS	SK Hynix	-	15-17-17-36	1.35	•	•
Hyper X	HX430C15SB2/4(XMP)	4GB	SS	SK Hynix	-	15-15-15-36	1.35	•	
Hyper X	HX430C15SB2K2/8(XMP)	2x 4GB	SS	SK Hynix	-	15-15-15-36	1.35	•	
Hyper X	HX430C15SB2K4/16(XMP)	4x 4GB	SS	SK Hynix	-	15-15-15-36	1.35	•	
Hyper X	HX430C15SB2K4/32(XMP)	4x 8GB	DS	SK Hynix	-	15-17-17-39	1.35	•	•
Hyper X	HX430C15SBK2/16(XMP)	2x 8GB	DS	SK Hynix	-	15-16-16-39	1.35	•	
Hyper X	HX430C16PBK4/64(XMP)	4x 16GB	DS	SK Hynix	-	16-16-16-39	1.35	•	•
Klevv	IM44GU48A30-FGGHAZ(XMP)	4GB	SS	SK Hynix	-	15-15-16-36	1.35	•	
Klevv	IM44GU48A30-GIIHMC(XMP)	4GB	SS	SK Hynix	-	16-18-18-36	1.35	•	
Klevv	IM44GU48N30-FFFHAB(XMP)	4GB	SS	SK Hynix	-	15-15-16-36	1.2	•	
Klevv	IM48GU48A30-GIIHMC(XMP)	8GB	DS	SK Hynix	-	15-15-15-35	1.35	•	
Klevv	IM48GU88A30-FGGHMZ(XMP)	8GB	DS	SK Hynix	-	15-15-16-36	1.35	•	
Klevv	IM48GU88N30-FFFHMB(XMP)	8GB	SS	SK Hynix	-	15-15-16-36	1.2	•	
Klevv	IM4AGU88A30-FGGHMZ(XMP)	16GB	DS	SK Hynix	-	15-15-16-36	1.35	•	
Klevv	IM4AGU88N30-FFFHMB(XMP)	16GB	DS	SK Hynix	-	15-15-16-36	1.2	•	
NEO FORZA	NFMUD416E8-3000DB2A(XMP)	16GB	DS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD416E8-3000DB3A(XMP)	16GB	DS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD416E8-3000DC2A(XMP)	16GB	DS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD416E8-3000DC3A(XMP)	16GB	DS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD416E8-3000DD2A(XMP)	16GB	DS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD416E8-3000DD3A(XMP)	16GB	DS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD416E8-3000DH2A(XMP)	16GB	DS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD416E8-3000DH2A(XMP)	16GB	DS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD480E8-3000DB2A(XMP)	8GB	SS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD480E8-3000DB3A(XMP)	8GB	SS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD480E8-3000DC2A(XMP)	8GB	SS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD480E8-3000DC3A(XMP)	8GB	SS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD480E8-3000DD2A(XMP)	8GB	SS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD480E8-3000DD3A(XMP)	8GB	SS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD480E8-3000DH2A(XMP)	8GB	SS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NFMUD480E8-3000DH2A(XMP)	8GB	SS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NMUD416E82-3000DB30(XMP)	16GB	DS	SK Hynix	-	15-17-17-35	-	•	
NEO FORZA	NMUD480E82-3000DB30(XMP)	8GB	SS	SK Hynix	-	15-17-17-35	-	•	
PATRIOT	PV416G300C6K(XMP)	2x 8GB	SS	-	-	16-16-16-36	-	•	
PATRIOT	PV416G300C6K(XMP)	4x 8GB	SS	-	-	16-16-16-36	1.35	•	•
PATRIOT	PV48G300C6K(XMP)	4x 4GB	SS	-	-	16-16-16-36	1.35	•	•
Team	TCD44G3000C16CBK(XMP)	4GB	SS	SK Hynix	T4D5128HT-30	16-18-18-38	1.35	•	
Team	TF3D48G3000HC16CBK(XMP)	8GB	SS	Micron	-	16-18-18-38	1.35	•	
Team	TF3D48G3000HC16CBK(XMP)	8GB	SS	Hynix	-	16-18-18-38	1.35	•	
Team	TLTYD432G3000HC16CDC01(XMP)	2x 16GB	SS	Micron	-	16-18-18-38	1.35	•	
Thermaltake	R009D408GX2-3000C16A(XMP)	2x 8GB	SS	SK Hynix	H5AN8G8NMFR-VKC	16-18-18-38	1.35	•	
V-color	TL48G30S816RGB(XMP)	8GB	SS	SK Hynix	-	16-18-18-38	1.35	•	
V-color	TL48G30S8SRGB15(XMP)	8GB	SS	SK Hynix	-	15-15-16-35	1.35	•	
ZADAK	ZD4-MO23000C16-08GAG(XMP)	8GB	SS	Samsung	-	16-18-18-38	1.35	•	

## DDR4 3200 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optional)	
								2 DIMM	4 DIMM
<b>ADATA</b>	AX4U3200316G16-QGZ(XMP)	4x 16GB	DS	-	-	16-18-18-36	1.35	●	
<b>Apacer</b>	AH4U08G32C08YNBAA(XMP)	8GB	SS	Apacer	AM6E6308CHHSE3	16-18-18-38	1.2	●	
<b>Apacer</b>	AHU08GGB26CDU7M(XMP)	8GB	SS	-	-	16-16-16-36	1.35	●	
<b>Apacer</b>	AHU08GGB32CKU7M(XMP)	8GB	SS	-	-	16-16-16-36	1.35	●	
<b>CORSAIR</b>	CMD16GX4M4B3200C15(Ver4.23)(XMP)	4x 4GB	SS	-	-	15-15-15-36	1.35	●	●
<b>CORSAIR</b>	CMD16GX4M4B3200C16(Ver5.29)(XMP)	4x 4GB	SS	-	-	16-18-18-36	1.35	●	●
<b>CORSAIR</b>	CMD16GX4M4C3200C15(Ver4.24)(XMP)	4x 4GB	SS	-	-	15-17-17-35	1.35	●	●
<b>CORSAIR</b>	CMD32GX4M2C3200C16(Ver5.39)(XMP)	2x 16GB	DS	-	-	16-18-18-36	1.35	●	
<b>CORSAIR</b>	CMD64GX4M8B3200C16(Ver4.31)(XMP)	8x 8GB	SS	-	-	16-18-18-36	1.35	●	●
<b>CORSAIR</b>	CMD64GX4M8B3200C16(Ver5.32)(XMP)	8x 8GB	SS	SK Hynix	-	16-18-18-36	1.35	●	●
<b>CORSAIR</b>	CMK16GX4M2B3200C16(Ver4.23)(XMP)	2x 8GB	DS	-	-	16-18-18-36	1.35	●	
<b>CORSAIR</b>	CMK16GX4M2Z3200C16(Ver4.31)(XMP)	2x 8GB	SS	Samsung	-	16-18-18-36	1.35	●	
<b>CORSAIR</b>	CMK32GX4M2B3200C16(4.31)(XMP)	2x 16GB	DS	-	-	16-18-18-36	1.35	●	
<b>CORSAIR</b>	CMK32GX4M2B3200C16(5.39)(XMP)	2x 16GB	DS	-	-	16-18-18-36	1.35	●	
<b>CORSAIR</b>	CMK32GX4M2Z3200C16(Ver3.31)(XMP)	2x 16GB	DS	Mircon	-	16-18-18-36	1.35	●	
<b>CORSAIR</b>	CMK64GX4M4B3200C16(Ver4.31)(XMP)	4x 16GB	DS	-	-	16-18-18-36	1.35	●	●
<b>CORSAIR</b>	CMT32GX4M4C3200C16(Ver4.31)(XMP)	4x 8GB	SS	Hynix	-	16-18-18-36	1.35	●	●
<b>CORSAIR</b>	CMT32GX4M4Z3200C16(Ver5.32)(XMP)	4x 8GB	SS	Hynix	-	16-18-18-36	1.35	●	●
<b>CORSAIR</b>	CMT64GX4M4C3200C16(Ver4.31)(XMP)	4x 16GB	DS	Samsung	-	16-18-18-36	1.35	●	●
<b>CORSAIR</b>	CMW32GX4M2Z3200C16(Ver3.31)(XMP)	2x 16GB	DS	Mircon	-	16-18-18-36	1.35	●	
<b>CORSAIR</b>	CMW32GX4M4C3200C16(Ver5.32)(XMP)	4x 8GB	SS	Hynix	-	16-18-18-36	1.35	●	●
<b>crucial</b>	BLE4G4D32AEEA.K8FE(XMP)	4GB	SS	-	-	16-18-18-36	1.35	●	
<b>crucial</b>	BLS16G4D32AESB.M16FE(XMP)	16GB	DS	-	-	16-18-18-36	1.35	●	
<b>crucial</b>	BLS16G4D32AESB.M16FE1(XMP)	16GB	DS	Micron	-	16-18-18-36	1.35	●	
<b>crucial</b>	BLS16G4D32AEST.M16FE1(XMP)	16GB	DS	Micron	-	16-18-18-36	1.35	●	
<b>Crucial</b>	BLS8G4D32AESBK.8FE(XMP)	8GB	SS	Micron	-	16-18-18-36	1.35	●	
<b>crucial</b>	BLS8G4D32AESTK.M8FE(XMP)	8GB	SS	Micron	-	16-18-18-36	1.35	●	
<b>crucial</b>	BLT8G4D32AET4K.M8FE1(XMP)	8GB	SS	Mircon	-	16-18-18-36	1.35	●	
<b>G.SKILL</b>	F4-3200C14D-16GVK(XMP)	2x 8GB	SS	-	-	14-14-14-34	1.35	●	
<b>G.SKILL</b>	F4-3200C14Q-32GFX(XMP)	4x 8GB	SS	-	-	14-14-14-34	1.35	●	●
<b>G.SKILL</b>	F4-3200C14Q-32GTZR(XMP)	4x 8GB	SS	Samsung	-	14-14-14-34	1.35	●	●
<b>G.SKILL</b>	F4-3200C16D-32GTZA(XMP)	2x 16GB	DS	-	-	16-16-16-36	1.35	●	
<b>G.SKILL</b>	F4-3200C16Q-32GTRS(XMP)	4x 8GB	SS	Hynix	-	16-18-18-38	1.35	●	●
<b>G.SKILL</b>	F4-3200C16Q-32GTZB(XMP)	4x 8GB	DS	-	-	16-18-18-38	1.35	●	●
<b>G.SKILL</b>	F4-3200C16S-16GTZKW(XMP)	16GB	DS	Hynix	-	16-18-18-38	1.35	●	
<b>Hyper X</b>	HX432C16PB3/16(XMP)	16GB	DS	-	-	16-18-18-36	1.35	●	
<b>Hyper X</b>	HX432C16PB3A/8(XMP)	8GB	SS	-	-	16-18-18-36	1.35	●	
<b>Hyper X</b>	HX432C16PB3AK2/16(XMP)	2x 8GB	SS	-	-	16-18-18-36	1.35	●	
<b>Hyper X</b>	HX432C16PB3AK4/64(XMP)	4x 16GB	DS	Hynix	-	16-18-18-36	1.35	●	●
<b>Hyper X</b>	HX432C16PB3K2/16(XMP)	2x 8GB	SS	-	-	16-18-18-36	1.35	●	
<b>Hyper X</b>	HX432C16PB3K2/32(XMP)	2x 16GB	DS	-	-	16-18-18-36	1.35	●	
<b>Hyper X</b>	HX432C16PB3K4/64(XMP)	4x 16GB	DS	-	-	16-18-18-36	1.35	●	
<b>Hyper X</b>	HX432C18FBK4/16	4x 4GB	SS	Micron	-	18-21-21-39	1.2	●	●

<b>KINGMAX</b>	GZOG43F-18SIGP(XMP)	8GB	SS	-	-	16-18-18-38	1.35	●
<b>Klevv</b>	IM48GU88A32-GIISEZ(XMP)	2x 8GB	DS	-	-	16-18-18-38	1.35	●
<b>Klevv</b>	KD48GU880-32A160T(XMP)	8GB	SS	SK Hynix	-	16-18-18-38	1.35	●
<b>NEO FORZA</b>	NFMUD416E8-3200DH2A(XMP)	16GB	SS	-	-	16-18-18-36	1.35	●
<b>PATRIOT</b>	PV48G320C6K(XMP)	2x 4GB	SS	-	-	16-18-18-36	1.35	●
<b>PATRIOT</b>	PVR416G320C6K(XMP)	2x 8GB	SS	-	-	16-18-18-36	1.35	●
<b>Silicon Power</b>	SP008GXLZU320BSB(XMP)	8GB	SS	-	-	16-18-18-38	1.35	●
<b>Super Talent</b>	F3200UA4G(XMP)	4GB	SS	-	-	16-18-18-36	1.35	●
<b>Super Talent</b>	F3200UB16G(XMP)	16GB	DS	-	-	16-18-18-36	1.35	●
<b>Team</b>	TF2D48G3200HC16CBK(XMP)	8GB	SS	-	-	16-18-18-38	1.35	●
<b>Thermaltake</b>	CL-W251-CA00SW-A(XMP)	2x 8GB	SS	-	1G832C18W48	16-18-18-38	1.35	●
<b>Thermaltake</b>	CL-W252-CA00SW-A(XMP)	4x 8GB	SS	-	1G832C18W48	16-18-18-38	1.35	● ●
<b>Thermaltake</b>	R009D408GX2-3200C16A(XMP)	2x 8GB	SS	SK Hynix	H5AN8G8NCJR-VKC	16-18-18-38	1.35	●
<b>V-color</b>	TL48G32S8CRGB16(XMP)	8GB	SS	SAMSUNG	-	16-16-18-38	1.35	●
<b>ZADAK</b>	ZD4-SHA3200C16-08GAS(XMP)	8GB	SS	Samsung	-	16-18-18-38	1.35	●

### DDR4 3333 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optio	
								2 DIMM	4 DIMM
<b>G.SKILL</b>	F4-3333C16Q-16GRKD	16GB(4GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
<b>G.SKILL</b>	F4-3333C16D-16GVR	16GB(8GB*2)	SS	Samsung	-	16-16-16-36	1.35V	●	
<b>G.SKILL</b>	F4-3333C16D-16GVK	16GB(8GB*2)	SS	Samsung	-	16-16-16-36	1.35V	●	
<b>G.SKILL</b>	F4-3333C16D-16GTZ	16GB(8GB*2)	SS	Samsung	-	16-16-16-36	1.35V	●	
<b>G.SKILL</b>	F4-3333C16D-16GTZB	16GB(8GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	
<b>G.SKILL</b>	F4-3333C16D-16GTZKW	16GB(8GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	
<b>G.SKILL</b>	F4-3333C16D-16GTZSW	16GB(8GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	
<b>G.SKILL</b>	F4-3333C16D-16GTZSK	16GB(8GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	
<b>G.SKILL</b>	F4-3333C16Q-32GVR	32GB(8GB*4)	SS	Samsung	-	16-16-16-36	1.35V	●	●
<b>G.SKILL</b>	F4-3333C16Q-32GVK	32GB(8GB*4)	SS	Samsung	-	16-16-16-36	1.35V	●	●
<b>G.SKILL</b>	F4-3333C16Q-32GTZ	32GB(8GB*4)	SS	Samsung	-	16-16-16-36	1.35V	●	●
<b>G.SKILL</b>	F4-3333C16Q-32GTZB	32GB(8GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3333C16Q-32GTZSW	32GB(8GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3333C16D-32GVR	32GB(16GB*2)	DS	Samsung	-	16-16-16-36	1.35V	●	
<b>G.SKILL</b>	F4-3333C16D-32GVK	32GB(16GB*2)	DS	Samsung	-	16-16-16-36	1.35V	●	
<b>G.SKILL</b>	F4-3333C16D-32GTZ	32GB(16GB*2)	DS	Samsung	-	16-16-16-36	1.35V	●	
<b>G.SKILL</b>	F4-3333C16D-32GTZB	32GB(16GB*2)	DS	Samsung	-	16-18-18-38	1.35V	●	
<b>G.SKILL</b>	F4-3333C16D-32GTZKW	32GB(16GB*2)	DS	Samsung	-	16-18-18-38	1.35V	●	
<b>G.SKILL</b>	F4-3333C16D-32GTZSW	32GB(16GB*2)	DS	Samsung	-	16-18-18-38	1.35V	●	
<b>G.SKILL</b>	F4-3333C16D-32GTZSK	32GB(16GB*2)	DS	Samsung	-	16-18-18-38	1.35V	●	
<b>G.SKILL</b>	F4-3333C16Q-64GVR	64GB(16GB*4)	DS	Samsung	-	16-16-16-36	1.35V	●	●
<b>G.SKILL</b>	F4-3333C16Q-64GVK	64GB(16GB*4)	DS	Samsung	-	16-16-16-36	1.35V	●	●
<b>G.SKILL</b>	F4-3333C16Q-64GTZ	64GB(16GB*4)	DS	Samsung	-	16-16-16-36	1.35V	●	●
<b>G.SKILL</b>	F4-3333C16Q-64GTZB	64GB(16GB*4)	DS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3333C16Q-64GTZSW	64GB(16GB*4)	DS	Samsung	-	16-18-18-38	1.35V	●	●
<b>CORSAIR</b>	CMD16GX4M2B3333C16 ver4.31	16GB(8GB*2)	SS	Samsung	-	16-18-18-36	1.35V	●	
<b>CORSAIR</b>	CMK16GX4M2C3333C16 ver4.31	16GB(8GB*2)	SS	Samsung	-	16-18-18-36	1.35V	●	

CORSAIR	CMK16GX4M2B3333C16 ver4.24	16GB(8GB*2)	DS	Samsung	-	16-18-18-36	1.35V	●	
CORSAIR	CMK16GX4M2B3333C16 ver5.32	16GB(8GB*2)	SS	Sk Hynix		16-18-18-36	1.35V	●	
CORSAIR	CMW16GX4M2C3333C16 ver4.31	16GB(8GB*2)	SS	Samsung		16-18-18-36	1.35V	●	
CORSAIR	CMD16GX4M4B3333C16 ver4.24	16GB(4GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMK16GX4M4B3333C16 ver4.24	16GB(4GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMK16GX4M4B3333C16R ver4.24	16GB(4GB*4)	SS	Samsung	-	16-18-18-36R	1.35V	●	●
CORSAIR	CMD32GX4M4B3333C16 ver4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMR32GX4M4C3333C16 ver4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMK32GX4M2B3333C16 ver4.31	32GB(8GB*4)	DS	Samsung	-	16-18-18-36	1.35V	●	
CORSAIR	CMK32GX4M4B3333C16 ver4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMK32GX4M4C3333C16 ver5.32	32GB(8GB*4)	SS	Sk Hynix		16-18-18-36	1.35V	●	●
CORSAIR	CMW32GX4M4C3333C16 ver4.31	32GB(8GB*4)	SS	Samsung		16-18-18-36	1.35V	●	●
CORSAIR	CMD32GX4M2B3333C16 ver4.31	32GB(16GB*2)	DS	Samsung	-	16-18-18-36	1.35V	●	
CORSAIR	CMR32GX4M2C3333C16 ver4.31	32GB(16GB*2)	DS	Samsung	-	16-18-18-36	1.35V	●	
CORSAIR	CMR32GX4M2C3333C16 ver5.32	32GB(16GB*2)	DS	Sk Hynix		16-18-18-36	1.35V	●	
CORSAIR	CMD64GX4M4B3333C16 ver4.31	64GB(16GB*4)	DS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMR64GX4M4C3333C16 ver4.31	64GB(16GB*4)	DS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMK64GX4M4B3333C16 ver4.31	64GB(16GB*4)	DS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMK64GX4M4B3333C16R ver4.31	64GB(16GB*4)	DS	Samsung	-	16-18-18-36R	1.35V	●	●
A-DATA	AX4U3333W4G16	16GB(4GB*4)	SS	Samsung	-	16-16-16-36	1.35V	●	
Hyper X	HX433C16PB3K4/32	32GB(8GB*4)	SS	Sk Hynix	-	16-18-18-36	1.35V	●	●
Hyper X	HX433C16PB3K2/16	16GB(8GB*2)	SS	Sk Hynix	-	16-18-18-36	1.35V	●	

### DDR4 3400 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optio	
								2 DIMM	4 DIMM
G.SKILL	F4-3400C16D-16GRK	16GB(8GB*2)	DS	Samsung	-	16-18-18-38	1.35V	●	
G.SKILL	F4-3400C16D-16GTZ	16GB(8GB*2)	DS	Samsung	-	16-18-18-38	1.35V	●	
G.SKILL	F4-3400C16D-16GVK	16GB(8GB*2)	DS	Samsung	-	16-18-18-38	1.35V	●	
G.SKILL	F4-3400C16D-16GSXW	16GB(8GB*2)	SS	Samsung	-	16-16-16-36	1.35V	●	
G.SKILL	F4-3400C16D-32GRK	32GB(16GB*2)	DS	Samsung	-	16-18-18-38	1.35V	●	
G.SKILL	F4-3400C16D-32GVR	32GB(16GB*2)	DS	Samsung	-	16-16-16-36	1.35V	●	
G.SKILL	F4-3400C16D-32GVK	32GB(16GB*2)	DS	Samsung	-	16-16-16-36	1.35V	●	
G.SKILL	F4-3400C16D-32GTZ	32GB(16GB*2)	DS	Samsung	-	16-16-16-36	1.35V	●	
G.SKILL	F4-3400C16D-32GVK	32GB(16GB*2)	DS	Samsung	-	16-18-18-38	1.35V	●	
G.SKILL	F4-3400C16Q-16GRBD	16GB(4GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
G.SKILL	F4-3400C16Q-16GRKD	16GB(4GB*4)	SS	Samsung	-	16-16-16-36	1.35V	●	●
G.SKILL	F4-3400C16Q-16GRBD	16GB(4GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
G.SKILL	F4-3400C16Q-32GRK	32GB(8GB*4)	DS	Samsung	-	16-18-18-38	1.35V	●	●
G.SKILL	F4-3400C16Q-32GVK	32GB(8GB*4)	DS	Samsung	-	16-18-18-38	1.35V	●	●
G.SKILL	F4-3400C16Q-32GTZ	32GB(8GB*4)	DS	Samsung	-	16-18-18-38	1.35V	●	●
G.SKILL	F4-3400C16Q-32GTZSW	32GB(8GB*4)	DS	Samsung	-	16-18-18-38	1.35V	●	●
G.SKILL	F4-3400C16Q-32GVK	32GB(8GB*4)	DS	Samsung	-	16-18-18-38	1.35V	●	●
G.SKILL	F4-3400C16Q-64GRK	64GB(16GB*4)	DS	Samsung	-	16-18-18-38	1.35V	●	●
G.SKILL	F4-3400C16Q-64GVR	64GB(16GB*4)	DS	Samsung	-	16-16-16-36	1.35V	●	●



<b>G.SKILL</b>	F4-3400C16Q-64GVK	64GB(16GB*4)	DS	Samsung	-	16-16-16-36	1.35V	●	●
<b>G.SKILL</b>	F4-3400C16Q-64GTZ	64GB(16GB*4)	DS	Samsung	-	16-16-16-36	1.35V	●	●
<b>G.SKILL</b>	F4-3400C16Q-64GVK	64GB(16GB*4)	DS	Samsung	-	16-18-18-38	1.35V	●	●
<b>CORSAIR</b>	CMD16GX4M4B3400C16 ver. 4.24	16GB(4GB*4)	SS	Samsung	-	16-18-18-40	1.35V	●	
<b>CORSAIR</b>	CMR16GX4M2C3400C16 ver. 4.31	16GB(8GB*2)	SS	Samsung	-	16-18-18-36	1.35V	●	●
<b>CORSAIR</b>	CMK16GX4M4B3400C16 ver. 4.23	16GB(4GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
<b>CORSAIR</b>	CMK16GX4M2B3400C16 ver. 4.23	16GB(8GB*2)	DS	Samsung	-	16-18-18-36	1.35V	●	●
<b>CORSAIR</b>	CMR32GX4M4C3400C16 ver. 4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
<b>CORSAIR</b>	CMU32GX4M4B3400C16 ver. 4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
<b>CORSAIR</b>	CMU32GX4M4C3400C16 ver. 4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
<b>CORSAIR</b>	CMU32GX4M4B3400C16R ver. 4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36R	1.35V	●	●
<b>CORSAIR</b>	CMU32GX4M4C3400C16R ver. 4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36R	1.35V	●	●
<b>CORSAIR</b>	CMK32GX4M4B3400C16 ver. 4.23	32GB(8GB*4)	DS	Samsung	-	16-18-18-36	1.35V	●	●
<b>CORSAIR</b>	CMK32GX4M4C3400C16 ver. 4.23	32GB(8GB*4)	DS	Samsung	-	16-18-18-36	1.35V	●	●
<b>CORSAIR</b>	CMK32GX4M4C3400C16R ver. 4.23	32GB(8GB*4)	DS	Samsung	-	16-18-18-36R	1.35V	●	●
<b>PATRIOT</b>	PV48G340C6K	8GB(4GB*2)	SS	Samsung	-	16-18-18-36	1.35V	●	
<b>PATRIOT</b>	PV416G340C6K	16GB(8GB*2)	SS	Samsung	-	16-18-18-36	1.35V	●	
<b>BTM</b>	J4AGUH1G8UJBC	16GB	DS			17-18-18-36	1.35V	●	●

### DDR4 3466 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optio	
								2 DIMM	4 DIMM
<b>G.SKILL</b>	F4-3466C16D-8GRK	8GB(4GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	
<b>G.SKILL</b>	F4-3466C16D-8GTZ	8GB(4GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	
<b>G.SKILL</b>	F4-3466C16D-8GVK	8GB(4GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	
<b>G.SKILL</b>	F4-3466C16Q-16GRK	16GB(4GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16D-16GVR	16GB(8GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16D-16GVK	16GB(8GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16D-16GTZ	16GB(8GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16D-16GTZKW	16GB(8GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16D-16GTZSW	16GB(8GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16D-16GTZSK	16GB(8GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C18D-16GSXW	16GB(8GB*2)	SS	Samsung	-	16-18-18-38	1.35V	●	
<b>G.SKILL</b>	F4-3466C16Q-16GVK	16GB(4GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16Q-32GVR	32GB(8GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16Q-32GVK	32GB(8GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16Q-32GTZ	32GB(8GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16Q-32GTZSW	32GB(8GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16Q-64GTZ	64GB(16GB*4)	DS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16Q-64GTZSW	64GB(16GB*4)	DS	Samsung	-	16-18-18-38	1.35V	●	●
<b>G.SKILL</b>	F4-3466C16Q-64GTZR	64GB(16GB*4)	DS	Samsung	-	16-18-18-38	1.35V	●	●
<b>CORSAIR</b>	CMD16GX4M2B3466C16 ver4.31	16GB(8GB*2)	SS	Samsung	-	16-18-18-36	1.35V	●	
<b>CORSAIR</b>	CMK16GX4M2B3466C16 ver4.31	16GB(8GB*2)	SS	Samsung	-	16-18-18-36	1.35V	●	
<b>CORSAIR</b>	CMK16GX4M2B3466C16R ver4.31	16GB(8GB*2)	SS	Samsung	-	16-18-18-36R	1.35V	●	
<b>CORSAIR</b>	CMR16GX4M2C3466C16 ver4.31	16GB(8GB*2)	SS	Samsung	-	16-18-18-36	1.35V	●	

CORSAIR	CMK16GX4M2B3466C16 ver5.32	16GB(8GB*2)	SS	Sk Hynix		16-18-18-36	1.35V	●	
CORSAIR	CMW16GX4M2C3466C16 ver5.32	16GB(8GB*2)	SS	Sk Hynix		16-18-18-36	1.35V	●	
CORSAIR	CMD16GX4M4B3466C16 ver4.24	16GB(4GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMK16GX4M4B3466C16 ver4.24	16GB(4GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMK16GX4M4B3466C16R ver4.24	16GB(4GB*4)	SS	Samsung	-	16-18-18-36R	1.35V	●	●
CORSAIR	CMD32GX4M4B3466C16 ver4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMU32GX4M4C3466C16 ver4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMU32GX4M4C3466C16R ver4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36R	1.35V	●	●
CORSAIR	CMU32GX4M4B3466C16 ver4.24	32GB(8GB*4)	DS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMD32GX4M2B3466C16 ver4.31	32GB(16GB*2)	DS	Samsung	-	16-18-18-36	1.35V	●	
CORSAIR	CMK32GX4M2B3466C16 ver4.31	32GB(16GB*2)	DS	Samsung	-	16-18-18-36	1.35V	●	
CORSAIR	CMK32GX4M2B3466C16R ver4.31	32GB(16GB*2)	DS	Samsung	-	16-18-18-36R	1.35V	●	
CORSAIR	CMK32GX4M4B3466C16 ver4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMK32GX4M4B3466C16R ver4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36R	1.35V	●	●
CORSAIR	CMR32GX4M4C3466C16 ver4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMD64GX4M4B3466C16 ver4.31	64GB(16GB*4)	DS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMK64GX4M4B3466C16 ver4.31	64GB(16GB*4)	DS	Samsung		16-18-18-36	1.35V	●	●
CORSAIR	CMK64GX4M4B3466C16R ver4.31	64GB(16GB*4)	DS	Samsung		16-18-18-36R	1.35V	●	●
CORSAIR	CMR64GX4M4C3466C16R ver4.31	64GB(16GB*4)	DS	Samsung		16-18-18-36	1.35V	●	●
CORSAIR	CMW64GX4M4C3466C16 ver4.31	64GB(16GB*4)	DS	Samsung		16-18-18-36	1.35V	●	●
APACER	AHU08GGB34CJU5H(EK.16GA3.GGBK2)	16GB(8GB*2)	SS	Samsung		18-18-18-42	1.35V	●	
APACER	AHU08GGB34CJU6H(EK.16GA3.GGAK2)	16GB(8GB*2)	SS	Samsung		18-18-18-42	1.35V	●	
Hyper X	HX434C19FBK2/16	16GB(8GB*2)	SS	Micron		19-23-23-42	1.2V	●	
Hyper X	HX434C19FBK2/32	32GB(16GB*2)	DS	Micron		19-23-23-42	1.2V	●	

### DDR4 3600 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optio	
								2 DIMM	4 DIMM
G.SKILL	F4-3600C17D-8GRK	8GB(4GB*2)	SS	Samsung	-	17-18-18-38	1.35V	●	
G.SKILL	F4-3600C17D-8GTZ	8GB(4GB*2)	SS	Samsung	-	17-18-18-38	1.35V	●	
G.SKILL	F4-3600C17D-8GVK	8GB(4GB*2)	SS	Samsung	-	17-18-18-38	1.35V	●	
G.SKILL	F4-3600C17D-16GVK	16GB(8GB*2)	SS	Samsung	-	17-18-18-38	1.35V	●	
G.SKILL	F4-3600C17D-16GTZ	16GB(8GB*2)	SS	Samsung	-	17-18-18-38	1.35V	●	
G.SKILL	F4-3600C17D-16GSXW	16GB(8GB*2)	SS	Samsung	-	17-18-18-38	1.35V	●	
G.SKILL	F4-3600C17D-16GTRG	16GB(8GB*2)	SS	Samsung	-	17-18-18-38	1.35V	●	
G.SKILL	F4-3600C17D-16GTRS	16GB(8GB*2)	SS	Samsung	-	17-18-18-38	1.35V	●	
G.SKILL	F4-3600C16D-16GVK	16GB(8GB*2)	SS	Samsung	-	16-16-16-36	1.35V	●	
G.SKILL	F4-3600C16D-16GTZ	16GB(8GB*2)	SS	Samsung	-	16-16-16-36	1.35V	●	
G.SKILL	F4-3600C15D-16GTZ	16GB(8GB*2)	SS	Samsung	-	15-15-15-35	1.35V	●	
G.SKILL	F4-3600C19D-16GSXW	16GB(8GB*2)	SS	Samsung	-	19-19-19-39	1.35V	●	
G.SKILL	F4-3600C19D-16GSXK	16GB(8GB*2)	SS	Samsung	-	19-19-19-39	1.35V	●	
G.SKILL	F4-3600C19D-16GSXF	16GB(8GB*2)	SS	Samsung	-	19-19-19-39	1.35V	●	
G.SKILL	F4-3600C19D-16GSXWB	16GB(8GB*2)	SS	Samsung	-	19-20-20-40	1.35V	●	
G.SKILL	F4-3600C19D-16GSXKB	16GB(8GB*2)	SS	Samsung	-	19-20-20-40	1.35V	●	
G.SKILL	F4-3600C19D-16GTRG	16GB(8GB*2)	SS	Samsung	-	19-20-20-40	1.35V	●	
G.SKILL	F4-3600C19D-16GTRS	16GB(8GB*2)	SS	Samsung	-	19-20-20-40	1.35V	●	

G.SKILL	F4-3600C17Q-16GVK	16GB(4GB*4)	SS	Samsung	-	17-18-18-38	1.35V	●	●
G.SKILL	F4-3600C17Q-16GRK	16GB(4GB*4)	SS	Samsung	-	17-18-18-38	1.35V	●	●
G.SKILL	F4-3600C17Q-16GTZ	16GB(4GB*4)	SS	Samsung	-	17-18-18-38	1.35V	●	●
G.SKILL	F4-3600C17Q-32GVK	32GB(8GB*4)	SS	Samsung	-	17-18-18-38	1.35V	●	●
G.SKILL	F4-3600C17Q-32GTZ	32GB(8GB*4)	SS	Samsung	-	17-18-18-38	1.35V	●	●
G.SKILL	F4-3600C17Q-32GTZA	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.35V	●	●
G.SKILL	F4-3600C16Q-32GTZB	32GB(8GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
G.SKILL	F4-3600C16Q-32GTZSWB	32GB(8GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
G.SKILL	F4-3600C16Q-32GTZBKW	32GB(8GB*4)	SS	Samsung	-	16-18-18-38	1.35V	●	●
G.SKILL	F4-3600C17Q-32GTZR	32GB(8GB*4)	SS	Samsung	-	17-18-18-38	1.35V	●	●
G.SKILL	F4-3600C19Q-32GSXW	32GB(8GB*4)	SS	Samsung	-	19-20-20-39	1.35V	●	●
G.SKILL	F4-3600C17D-32GSXW	32GB(16GB*2)	DS	Samsung	-	17-19-19-39	1.35V	●	
G.SKILL	F4-3600C17Q-64GTZ	64GB(16GB*4)	DS	Samsung	-	17-19-19-39	1.35V	●	●
G.SKILL	F4-3600C17Q-64GTZSWB	64GB(16GB*4)	DS	Samsung	-	17-19-19-39	1.35V	●	●
G.SKILL	F4-3600C17Q-64GTZKWB	64GB(16GB*4)	DS	Samsung	-	17-19-19-39	1.35V	●	●
G.SKILL	F4-3600C17Q-64GTZR	64GB(16GB*4)	DS	Samsung	-	17-19-19-39	1.35V	●	●
G.SKILL	F4-3600C19D-32GSXW	32GB(16GB*2)	DS	Sk Hynix	-	19-19-19-39	1.35V	●	
G.SKILL	F4-3600C19D-32GSXK	32GB(16GB*2)	DS	Sk Hynix	-	19-19-19-39	1.35V	●	
G.SKILL	F4-3600C19D-32GSXF	32GB(16GB*2)	DS	Sk Hynix	-	19-19-19-39	1.35V	●	
G.SKILL	F4-3600C19Q-64GSXW	64GB(16GB*4)	DS	Sk Hynix	-	19-19-19-39	1.35V	●	●
G.SKILL	F4-3600C19Q-64GSXK	64GB(16GB*4)	DS	Sk Hynix	-	19-19-19-39	1.35V	●	●
G.SKILL	F4-3600C19Q-64GSXF	64GB(16GB*4)	DS	Sk Hynix	-	19-19-19-39	1.35V	●	●
G.SKILL	F4-3600C19D-32GSXWB	32GB(16GB*2)	DS	Sk Hynix	-	19-20-20-39	1.35V	●	●
G.SKILL	F4-3600C19D-32GSXKB	32GB(16GB*2)	DS	Sk Hynix	-	19-20-20-39	1.35V	●	
G.SKILL	F4-3600C19D-32GTRG	32GB(16GB*2)	DS	Sk Hynix	-	19-20-20-39	1.35V	●	
G.SKILL	F4-3600C19D-32GTRS	32GB(16GB*2)	DS	Sk Hynix	-	19-20-20-39	1.35V	●	
G.SKILL	F4-3600C19Q-64GSXWB	64GB(16GB*4)	DS	Sk Hynix	-	19-20-20-39	1.35V	●	●
G.SKILL	F4-3600C19Q-64GSXKB	64GB(16GB*4)	DS	Sk Hynix	-	19-20-20-39	1.35V	●	●
G.SKILL	F4-3600C19Q-64GTRG	64GB(16GB*4)	DS	Sk Hynix	-	19-20-20-39	1.35V	●	●
G.SKILL	F4-3600C19Q-64GTRS	64GB(16GB*4)	DS	Sk Hynix	-	19-20-20-39	1.35V	●	●
CORSAIR	CMD8GX4M2B3600C18 ver4.24	8GB(4GB*2)	SS	Samsung	-	18-19-19-39	1.35V	●	
CORSAIR	CMK8GX4M2B3600C18 ver4.24	8GB(4GB*2)	SS	Samsung	-	18-19-19-39	1.35V	●	
CORSAIR	CMK16GX4M2B3600C16R ver4.31	16GB(8GB*2)	SS	Samsung	-	16-18-18-36R	1.35V	●	
CORSAIR	CMD16GX4M2B3600C18 ver4.31	16GB(8GB*2)	SS	Samsung	-	18-19-19-39	1.35V	●	
CORSAIR	CMK16GX4M2B3600C18 ver4.31	16GB(8GB*2)	SS	Samsung	-	18-19-19-39	1.35V	●	
CORSAIR	CMK16GX4M2B3600C18R ver4.31	16GB(8GB*2)	SS	Samsung	-	18-19-19-39R	1.35V	●	
CORSAIR	CMR16GX4M2C3600C18 ver4.31	16GB(8GB*2)	SS	Samsung	-	18-19-19-39R	1.35V	●	
CORSAIR	CMW16GX4M2K3600C16 ver4.31	16GB(8GB*2)	SS	Samsung	-	16-18-18-36	1.35V	●	
CORSAIR	CMK16GX4M4B3600C18 ver4.24	16GB(4GB*4)	SS	Samsung	-	18-19-19-39	1.35V	●	●
CORSAIR	CMD32GX4M4B3600C16 ver4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36	1.35V	●	●
CORSAIR	CMK32GX4M4B3600C16R ver4.31	32GB(8GB*4)	SS	Samsung	-	16-18-18-36R	1.35V	●	●
CORSAIR	CMD32GX4M4B3600C18 ver4.31	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	●	●
CORSAIR	CMK32GX4M4B3600C18 ver4.31	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	●	●
CORSAIR	CMK32GX4M4B3600C18R ver4.31	32GB(8GB*4)	SS	Samsung	-	18-19-19-39R	1.35V	●	●
CORSAIR	CMR32GX4M4C3600C18 ver4.31	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	●	●
CORSAIR	CMD64GX4M4B3600C18 ver4.31	64GB(16GB*4)	DS	Samsung	-	18-19-19-39	1.35V	●	●

CORSAIR	CMR64GX4M4C3600C18 ver4.31	64GB(16GB*4)	DS	Samsung	18-19-19-39	1.35V	●	●
CORSAIR	CMK64GX4M4B3600C18 ver4.31	64GB(16GB*4)	DS	Samsung	18-19-19-39	1.35V	●	●
CORSAIR	CMW64GX4M4K3600C18 ver4.31	64GB(16GB*4)	DS	Samsung	18-19-19-39	1.35V	●	●
APACER	AHU08GGB36CJU5H(EK.16GA4.GGBK2)	16GB(8GB*2)	SS	Samsung	18-18-18-42	1.35V	●	
APACER	AHU08GGB36CEU5H(EK.16GA4.GFBK2)	8GB	SS	Samsung	17-19-19-39	1.35V	●	●
ZADAK	ZD4-SHD3600C17-08GAS	8GB	SS	Samsung	17-19-19-39	1.35V	●	●
Hyper X	HX436C17PB3K4/32	32GB(8GB*4)	SS	Samsung	17-18-18-38	1.35V	●	●
Hyper X	HX436C17PB3K2/32	32GB(16GB*2)	DS	Samsung	17-19-19-39	1.35V	●	
Hyper X	HX436C17PB3K2/32	32GB(16GB*2)	DS	Sk Hynix	17-19-19-39	1.35V	●	
Hyper X	HX436C17PPB3AK4/32	32GB(8GB*4)	SS	Samsung	17-18-18-39	1.35V	●	●
Hyper X	HX436C17PB3K4/64	64GB(16GB*4)	DS	Samsung	17-19-19-39	1.35V	●	●
Hyper X	HX436C17PB3K4/64	64GB(16GB*4)	DS	Sk Hynix	17-19-19-39	1.35V	●	●
ADATA	AX4U360038G17-BRZ	8GB	SS	Samsung	17-18-18-38	1.35V	●	●
TEAMGROUP	TFOD48G3600C18EBK	16GB(8GB*2)	SS	Samsung	18-20-20-44	1.35V	●	
TEAMGROUP	TF1D416G3600HC18EDC01	16GB(8GB*2)	SS	Samsung	18-20-20-44	1.35V	●	
TEAMGROUP	TF2D416G3600HC18EDC01	16GB(8GB*2)	SS	Samsung	18-20-20-44	1.35V	●	
TEAMGROUP	TF5D416G3600HC18EDC01	16GB(8GB*2)	SS	Samsung	18-20-20-44	1.35V	●	
TEAMGROUP	TF6D416G3600HC18EDC01	16GB(8GB*2)	SS	Samsung	18-20-20-44	1.35V	●	
PATRIOT	PV48G360C7K	8GB(4GB*2)	SS	Samsung	17-18-18-36	1.35V	●	

### DDR4 3733 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optio	
								2 DIMM	4 DIMM
G.SKILL	F4-3733C17D-8GRK	8GB(4GB*2)	SS	Samsung	-	17-19-19-39	1.35V	●	
G.SKILL	F4-3733C17D-8GTZ	8GB(4GB*2)	SS	Samsung	-	17-19-19-39	1.35V	●	
G.SKILL	F4-3733C17D-8GVK	8GB(4GB*2)	SS	Samsung	-	17-19-19-39	1.35V	●	
G.SKILL	F4-3733C17D-16GTZ	16GB(8GB*2)	SS	Samsung	-	17-19-19-39	1.35V	●	
G.SKILL	F4-3733C17Q-16GRK	16GB(4GB*4)	SS	Samsung	-	17-19-19-39	1.35V	●	●
G.SKILL	F4-3733C17Q-16GTZ	16GB(4GB*4)	SS	Samsung	-	17-19-19-39	1.35V	●	●
G.SKILL	F4-3733C17Q-16GVK	16GB(4GB*4)	SS	Samsung	-	17-19-19-39	1.35V	●	●
G.SKILL	F4-3733C17D-16GTZ	16GB(8GB*2)	SS	Samsung	-	17-19-19-39	1.35V	●	
G.SKILL	F4-3733C17D-16GTZA	16GB(8GB*2)	SS	Samsung	-	17-17-17-37	1.35V	●	
G.SKILL	F4-3733C17Q-32GTZ	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.35V	●	●
G.SKILL	F4-3733C17Q-32GTZSW	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.35V	●	●
G.SKILL	F4-3733C17Q-32GTZKW	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.35V	●	●
G.SKILL	F4-3733C17Q-32GTZR	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.35V	●	●
G.SKILL	F4-3733C17Q-64GTZSW	64GB(16GB*4)	DS	Samsung	-	17-19-19-39	1.35V	●	●
G.SKILL	F4-3733C17Q-64GTZKK	64GB(16GB*4)	DS	Samsung	-	17-19-19-39	1.35V	●	●
G.SKILL	F4-3733C17Q-64GTZR	64GB(16GB*4)	DS	Samsung	-	17-19-19-39	1.35V	●	●
CORSAIR	CMD8GX4M2B3733C17 ver4.24	8GB(4GB*2)	SS	Samsung	-	17-19-19-39	1.35V	●	
CORSAIR	CMK8GX4M2B3733C17 ver4.24	8GB(4GB*2)	SS	Samsung	-	17-19-19-39	1.35V	●	
CORSAIR	CMD16GX4M2B3733C17 ver4.31	16GB(8GB*2)	SS	Samsung	-	17-19-19-39	1.35V	●	
CORSAIR	CMK16GX4M2B3733C17R ver4.31	16GB(8GB*2)	SS	Samsung	-	17-19-19-39R	1.35V	●	
CORSAIR	CMK16GX4M4B3733C17 ver4.24	16GB(4GB*4)	SS	Samsung	-	17-19-19-39	1.35V	●	●
CORSAIR	CMD32GX4M4B3733C17 ver4.31	32GB(8GB*4)	SS	Samsung	-	17-19-19-39	1.35V	●	●
CORSAIR	CMK32GX4M4B3733C17R ver4.31	32GB(8GB*4)	SS	Samsung	-	17-19-19-39R	1.35V	●	●

<b>CORSAIR</b>	CMR64GX4M4K3733C17R ver4.31	64GB(16GB*4)	DS	Samsung	-	17-19-19-39R	1.35V	•
<b>CORSAIR</b>	CMK64GX4M4K3733C17 ver4.31	64GB(16GB*4)	DS	Samsung	-	17-19-19-39R	1.35V	•
<b>APACER</b>	AHU08GGB37CEU5H(EK.16GA6.GFBK2)	16GB(8GB*2)	SS	Samsung	-	17-19-19-39	1.35V	•
<b>SUPERTALENT</b>	F3733UB8G	8GB	SS	-	-	17-19-19-39	1.35V	•
<b>PATRIOT</b>	PV416G373C7K	16GB(8GB*2)	SS	Samsung	-	17-19-19-39	1.35V	•

### DDR4 3866 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optio	
								2 DIMM	4 DIMM
<b>G.SKILL</b>	F4-3866C19D-8GTZ	8GB(4GB*2)	SS	Samsung	-	18-22-22-40	1.35V	•	
<b>G.SKILL</b>	F4-3866C19Q-16GTZ	16GB(4GB*4)	SS	Samsung	-	18-22-22-40	1.35V	•	•
<b>G.SKILL</b>	F4-3866C18D-32GTZR	16GB(8GB*2)	SS	Samsung	-	18-19-19-39	1.35V	•	
<b>G.SKILL</b>	F4-3866C18Q-32GTZ	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	•	•
<b>G.SKILL</b>	F4-3866C18Q-32GTZSW	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	•	•
<b>G.SKILL</b>	F4-3866C18Q-32GTZKW	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	•	•
<b>G.SKILL</b>	F4-3866C18Q-32GTZR	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	•	•
<b>CORSAIR</b>	CMK8GX4M2B3866C18 ver4.24	8GB(4GB*2)	SS	Samsung	-	18-22-22-40	1.35V	•	
<b>CORSAIR</b>	CMD8GX4M2B3866C18 ver4.24	8GB(4GB*2)	SS	Samsung	-	18-22-22-40	1.35V	•	
<b>CORSAIR</b>	CMD16GX4M2B3866C18 ver4.31	16GB(8GB*2)	SS	Samsung	-	18-22-22-40	1.35V	•	
<b>CORSAIR</b>	CMK16GX4M2B3866C18 ver4.31	16GB(8GB*2)	SS	Samsung	-	18-22-22-40	1.35V	•	
<b>CORSAIR</b>	CMK16GX4M4B3866C18 ver4.24	16GB(4GB*4)	SS	Samsung	-	18-22-22-40	1.35V	•	•
<b>CORSAIR</b>	CMK16GX4M4B3866C18R ver4.24	16GB(4GB*4)	SS	Samsung	-	18-22-22-40R	1.35V	•	•
<b>CORSAIR</b>	CMD32GX4M4B3866C18 ver4.31	32GB(8GB*4)	SS	Samsung	-	18-22-22-40	1.35V	•	•
<b>CORSAIR</b>	CMK32GX4M4B3866C18R ver4.31	32GB(8GB*4)	SS	Samsung	-	18-22-22-40R	1.35V	•	•
<b>TEAM GROUP</b>	TCD44G3866C18ABK	16GB(4GB*4)	SS	Samsung	-	18-20-20-39	1.35V	•	•
<b>ADATA</b>	AX4U386638G18-QRS	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V		•

### DDR4 4000 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optio	
								2 DIMM	4 DIMM
<b>G.SKILL</b>	F4-4000C17D-16GTZSW	16GB(8GB*2)	SS	Samsung	-	17-17-17-37	1.35V	•	
<b>G.SKILL</b>	F4-4000C17D-16GTZKK	16GB(8GB*2)	SS	Samsung	-	17-17-17-37	1.35V	•	
<b>G.SKILL</b>	F4-4000C17D-16GTZR	16GB(8GB*2)	SS	Samsung	-	17-17-17-37	1.35V	•	
<b>G.SKILL</b>	F4-4000C17D-16GTRG	16GB(8GB*2)	SS	Samsung	-	17-17-17-37	1.35V	•	
<b>G.SKILL</b>	F4-4000C17D-16GTRS	16GB(8GB*2)	SS	Samsung	-	17-17-17-37	1.35V	•	
<b>G.SKILL</b>	F4-4000C18Q-16GTZ	16GB(4GB*4)	SS	Samsung	-	18-22-22-40	1.35V	•	•
<b>G.SKILL</b>	F4-4000C18Q-32GTZ	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	•	•
<b>G.SKILL</b>	F4-4000C18Q-32GTZSW	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	•	•
<b>G.SKILL</b>	F4-4000C18Q-32GTZKW	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	•	•
<b>G.SKILL</b>	F4-4000C18Q-32GTZR	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	•	•
<b>G.SKILL</b>	F4-4000C18Q-32GTRG	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	•	•
<b>G.SKILL</b>	F4-4000C18Q-32GTRS	32GB(8GB*4)	SS	Samsung	-	18-19-19-39	1.35V	•	•
<b>G.SKILL</b>	F4-4000C17Q-32GTZSW	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.35V	•	•

<b>G.SKILL</b>	F4-4000C17Q-32GTZKK	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.35V	●	●
<b>G.SKILL</b>	F4-4000C17Q-32GTZR	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.35V	●	●
<b>G.SKILL</b>	F4-4000C17Q-32GTRG	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.35V	●	●
<b>G.SKILL</b>	F4-4000C17Q-32GTRS	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.35V	●	●
<b>CORSAIR</b>	CMD16GX4M2E4000C19 ver4.31	16GB(8GB*2)	SS	Samsung	-	19-23-23-45	1.35V	●	
<b>CORSAIR</b>	CMD16GX4M2B4000C19 ver4.31	16GB(8GB*2)	SS	Samsung	-	19-23-23-45	1.35V	●	
<b>CORSAIR</b>	CMK16GX4M2E4000C19R ver4.31	16GB(8GB*2)	SS	Samsung	-	19-23-23-45R	1.35V	●	
<b>CORSAIR</b>	CMK16GX4M2B4000C19R ver4.31	16GB(8GB*2)	SS	Samsung	-	19-23-23-45R	1.35V	●	
<b>CORSAIR</b>	CMD32GX4M4E4000C19 ver4.31	32GB(8GB*4)	SS	Samsung	-	19-23-23-45	1.35V	●	●
<b>CORSAIR</b>	CMK32GX4M4B4000C19R ver4.31	32GB(8GB*4)	SS	Samsung	-	19-23-23-45R	1.35V	●	●
<b>CORSAIR</b>	CMW16GX4M2K4000C19R ver4.31	16GB(8GB*2)	SS	Samsung	-	19-23-23-45R	1.35V	●	
<b>CORSAIR</b>	CMW32GX4M4K4000C19R ver4.31	32GB(8GB*4)	SS	Samsung	-	19-23-23-45R	1.35V	●	●
<b>Hyper X</b>	HX440C19PB3/8	8GB	SS	Samsung		19-21-21-42	1.35V	●	●
<b>ADATA</b>	AX4U400038G18-QRS	32GB(8GB*4)	SS	Samsung		18-19-19-39	1.4V		●

### DDR4 4133 Qualified Vendors List (QVL)

Vendors	Part No.	Size	SS/DS	Chip Brand	Chip NO.	Timing	Voltage	DIMM socket support (Optio	
								2 DIMM	4 DIMM
<b>G.SKILL</b>	F4-4133C19D-16GTZR	16GB(8GB*2)	SS	Samsung	-	19-19-19-39	1.35V	●	
<b>G.SKILL</b>	F4-4133C19D-16GTRG	16GB(8GB*2)	SS	Samsung	-	19-19-19-39	1.35V	●	
<b>G.SKILL</b>	F4-4133C19D-16GTRS	16GB(8GB*2)	SS	Samsung	-	19-19-19-39	1.35V	●	
<b>G.SKILL</b>	F4-4133C19D-16GTZSWC	16GB(8GB*2)	SS	Samsung	-	19-19-19-39	1.35V	●	
<b>G.SKILL</b>	F4-4133C19D-16GTZKCC	16GB(8GB*2)	SS	Samsung	-	19-19-19-39	1.35V	●	
<b>G.SKILL</b>	F4-4133C17D-16GTZR	16GB(8GB*2)	SS	Samsung	-	17-17-17-37	1.4V	●	
<b>G.SKILL</b>	F4-4133C17D-16GTRG	16GB(8GB*2)	SS	Samsung	-	17-17-17-37	1.4V	●	
<b>G.SKILL</b>	F4-4133C17D-16GTRS	16GB(8GB*2)	SS	Samsung	-	17-17-17-37	1.4V	●	
<b>G.SKILL</b>	F4-4133C17D-16GTZSW	16GB(8GB*2)	SS	Samsung	-	17-17-17-37	1.4V	●	
<b>G.SKILL</b>	F4-4133C17D-16GTZKK	16GB(8GB*2)	SS	Samsung	-	17-17-17-37	1.4V	●	
<b>G.SKILL</b>	F4-4133C19Q-32GTZR	32GB(8GB*4)	SS	Samsung	-	19-19-19-39	1.4V	●	●
<b>G.SKILL</b>	F4-4133C19Q-32GTRG	32GB(8GB*4)	SS	Samsung	-	19-19-19-39	1.4V	●	●
<b>G.SKILL</b>	F4-4133C19Q-32GTRS	32GB(8GB*4)	SS	Samsung	-	19-19-19-39	1.4V	●	●
<b>G.SKILL</b>	F4-4133C19Q-32GTZSWC	32GB(8GB*4)	SS	Samsung	-	19-19-19-39	1.4V	●	●
<b>G.SKILL</b>	F4-4133C19Q-32GTZKCC	32GB(8GB*4)	SS	Samsung	-	19-19-19-39	1.4V	●	●
<b>G.SKILL</b>	F4-4133C17Q-32GTZR	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.4V	●	●
<b>G.SKILL</b>	F4-4133C17Q-32GTRG	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.4V	●	●
<b>G.SKILL</b>	F4-4133C17Q-32GTRS	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.4V	●	●
<b>G.SKILL</b>	F4-4133C17Q-32GTZSW	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.4V	●	●
<b>G.SKILL</b>	F4-4133C17Q-32GTZKK	32GB(8GB*4)	SS	Samsung	-	17-17-17-37	1.4V	●	●
<b>CORSAIR</b>	CMK16GX4M2B4133C19R ver4.31	16GB(8GB*2)	SS	Samsung	-	19-25-25-45R	1.4V	●	●
<b>CORSAIR</b>	CMK32GX4M4E4133C19R ver4.31	32GB(8GB*4)	SS	Samsung	-	19-25-25-45R	1.4V	●	●
<b>CORSAIR</b>	CMK16GX4M2K4133C19R ver4.31	16GB(8GB*2)	SS	Samsung	-	19-25-25-45R	1.4V	●	●
<b>CORSAIR</b>	CMK32GX4M4K4133C19R ver4.31	32GB(8GB*4)	SS	Samsung	-	19-25-25-45R	1.4V	●	●
<b>Hyper X</b>	HX441C19PB3/8	8GB	SS	Samsung		19-23-23-45	1.35V		●