

TUF Z390M-PRO GAMING

DDR4 2133 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
SAMSUNG	M378A5143DB0--CPB	4GB	15-15-15-36	1.2	●	●	●
SAMSUNG	M378A1G43DB0--CPB	8GB	15-15-15-36	1.2	●	●	●
G.SKILL	F4-2133C15Q-32GRK	4*8GB	15-15-15-35	1.2	●	●	●
GLOWAY	PC4-17000	4GB	15-15-15-35	1.2	●	●	
KINGSTON	HX421C13PBK4/16	4*4GB	15-15-15-36	1.2	●	●	●
PANRAM	PUD42133C138G4NJW	4*8GB	13-13-13-35	1.2	●	●	
PANRAM	PUD42133C134G4NJW	4*4GB	13-13-13-35	1.2	●	●	●
CORSAIR	CMK16GX4M4A2133C15(Ver4.23)	4*4GB	15-15-15-36	1.2	●	●	●
CRUCIAL	MTA8ATF51264AZ-2G1A1	4GB	15-15-15-36	1.2	●	●	●
CORSAIR	CMV4GX4M1A2133C15	4GB	15-15-15-36	1.2	●	●	
CORSAIR	CMV8GX4M1A2133C15	8GB	15-15-15-36	1.2	●	●	●
KINGSTON	HX421C14FB/8	8GB	14-14-14-35	1.2	●	●	
APACER	78.C1GM3.AF10B	8GB	16-16-16-36	1.2	●	●	●
KINGSTON	HX421C13SBK4/16	4*4GB	15-15-15-36	1.2	●	●	●
KINGSTON	KVR21N15D8/8	8GB	15-15-15-36	1.2	●	●	
GALAXY	GAM4DBLBM213315IE081C	8GB	15-15-15-35	1.2	●	●	
AVEXIR	AVD4U21331508G-1C0B	8GB	15-15-15-35	1.2	●	●	●
CORSAIR	CMK16GX4M4A2133C13 (Ver5.29)	4*4GB	13-15-15-28	1.2	●	●	●
GEIL	GPR48GB2133C15DC	2*4GB	15-15-15-36	1.2	●	●	●
KINGSTON	HX421C14FBK4/32	4*8GB	14-14-14-35	1.2	●	●	●
TEKISM	T4U2133B8G15-SAD	8GB	15-15-15-36	1.2	●	●	●
G.SKILL	F4-2133C15Q-16GRB	4*4GB	15-15-15-35	1.2	●	●	●
CENTURY	PC4-17000	8GB	15-15-15-36	1.2	●	●	●
ADATA	AX4U2133W4G15-QRZ	4*4GB	15-15-15-36	1.2	●	●	●
TEAM	TED48GM2133C15BK	8GB	15-15-15-36	1.2	●	●	
ADATA	AD4U2133W8G15-B	16*8GB	15-15-15-36	1.2	●	●	●
CRUCIAL	CT8G4DFD8213.16FA11	4*8GB	15-15-15-36	1.2	●	●	
KINGSTON	KVR21E15S8/4	4GB	15-15-15-36	1.2	●	●	
G.SKILL	F4-2133C15S-4GNT	4GB	15-15-15-35	1.2	●	●	
G.SKILL	F4-2133C15S-8GNT	8GB	15-15-15-35	1.2	●	●	●
TEAM	TPAD44G2133HC15BK	4GB	15-15-15-36	1.2	●	●	
APACER	AHU08GGB13CGT7G	8GB	16-16-16-36	1.2	●	●	
ASINT	SLB404G08-CCN2B 1615	8GB	15-15-15-36	1.2	●	●	
PATRIOT	PSD48G21332	8GB	15-15-15-36	1.2	●	●	
APACER	AU08GGB13CDTBGC	8GB	16-16-16-36	1.2	●	●	
SAMSUNG	M378A1K43BB1-CPB	8GB	15-15-15-36	1.2	●	●	
KINGSTON	HX421C14FB2/8	8GB	14-14-14-35	1.2	●	●	
KINGSTON	HX421C14FBK2/8	2*4GB	14-14-14-35	1.2	●	●	
KINGSTON	HX421C14FB/4	4GB	14-14-14-35	1.2	●	●	
V-COLOR	TC48G21S818-IMS	4*8GB	15-15-15-36	1.2	●	●	
TEAM	TED416G2133C15BK	16GB	15-15-15-36	1.2	●	●	
TIGO	TMKU8GF58-2133P	8GB	15-15-15-36	1.2	●	●	
SAMSUNG	M378A5143EB1-CPB	4GB	15-15-15-36	1.2	●	●	
SAMSUNG	M378A5143EB1-CPB	4GB	15-15-15-36	1.2	●	●	
TEAM	TED48G2133C15BK	8GB	15-15-15-36	1.2	●	●	
ANUCCELL	GRPIF1621033818594	8GB	16-16-16-35	1.2	●	●	●

Xiede	1.2V-PC4-17000-1620	4GB	15-15-15-36	1.2	●	●	●
Xiede	1.2V-PC4-17000-1620	8GB	15-15-15-36	1.2	●	●	
V-COLOR	TC48G21S815	8GB	15-15-15-36	1.2	●	●	
V-COLOR	TC48G21S815-IMS	8GB	15-15-15-36	1.2	●	●	●
SAMSUNG	M378A2K43BB1CPB	16GB	15-15-15-36	1.2	●	●	●
G.SKILL	F4-2133C15Q-32GRR	4*8GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2133C15Q2-64GRR	8*8GB	15-15-15-35	1.2	●	●	●
CRUCIAL	CT16G4DFD8213.C16FAD1	16GB	15-15-15-36	1.2	●	●	
CRUCIAL	CT8G4DFD8213.C16FDR2	8GB	15-15-15-36	1.2	●	●	●
CRUCIAL	CT4G4DFS8213.C8FBD2	4GB	15-15-15-36	1.2	●	●	●
GEIL	GFY48GB2133C15DC	4GB	15-15-15-36	1.2	●	●	●
Klevv	IM48GU88N21-FFHMB	8GB	15-15-15-35	1.2	●	●	●
Klevv	IM44GU48N21-FFHAB	4GB	15-15-15-35	1.2	●	●	●
Klevv	IM4AGU88N21-FFHMB	16GB	15-15-15-35	1.2	●	●	●
GEIL	GPR432GB2133C15QC	8GB	15-15-15-36	1.2	●	●	●
SK HYNIX	HMA451U6AFR8N-TF	4*4GB	15-15-15-36	1.2	●	●	
GLOWAY	STK4U2133D15041C/ PC4-17000	4GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2133C15Q-64GFX	4*16GB	15-15-15-36	1.2	●	●	●
G.SKILL	F4-2133C15Q-32GFX	4*8GB	15-15-15-36	1.2	●	●	●
G.SKILL	F4-2133C15S-8GDB	8GB	15-15-15-35	1.2	●	●	
AVANT	AVW6451U67J5213N3-SAEP	4GB	15--15-15-36	1.2	●	●	●
AVANT	AVW641GU67J5213N2-SAEP	8GB	15--15-15-36	1.2	●	●	●
AVANT	AVW642GU42J5213N2-SAEP	16GB	15--15-15-36	1.2	●	●	
SanMax	SMD4-U4G28SE-21P	4GB	15-15-15-36	1.2	●	●	
CRUCIAL	CT16G4DFD8213.C16FH1	16GB	15-15-15-36	1.2	●	●	●
ADATA	AD4U213338G15-B	8*8GB	15-15-15-36	1.2	●	●	●
ADATA	AD4U2133W4G15-BP	8*4GB	15-15-15-36	1.2	●	●	●
Ramsta	R2DD4N04G2133	4GB	15-15-15-35	1.2	●	●	●
Ramsta	R2DD4N08G2133	8GB	15-15-15-36	1.2	●	●	●
APACER	AU16GGB13CDYBGC	16GB	15-15-15-36	1.2	●	●	●
silicon power	SP004GBLFU213N02	4GB	15-15-15-36	1.2	●	●	●
TEKISM	T4U2133B8G15-HYM	2* 8GB	15-15-15-36	1.2	●	●	●
TIGO	TMKU4G456-2133P	4GB	15-15-15-36	1.2	●	●	●
HYUNDAI	HYE16G21C15	16GB	15-15-15-35	1.2	●	●	●
Asgard	VML40UI-MIC1U22ZG	32GB	15-15- 15-35	1.2	●	●	
KINGSTON	HX421C14FB/4	4GB	14-14-14-35	1.2	●	●	●
GLOWAY	STK4U2133D15161C	16GB	15-15-15-35	1.2	●	●	●
RAMAXEL	RMUA5090KB78HAF2133	8GB	15-15--15-36	1.2	●	●	

- 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.

For the best results, please ensure all memory modules are of the same version or have the same date code (D/C) from the same vendor. Check with the memory vendor to get the correct memory modules.

-The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.

-The stability and compatibility of memory modules with XMP profiles that operate beyond the JEDEC memory standard are not guaranteed. The stability and compatibility of these memory modules depend on the CPU's capabilities and other installed devices.

TUF Z390M-PRO GAMING

DDR4 2400 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
ADATA	AX4U2400W8G16-DRZ	8GB	17-16-16-39	1.2	●	●	●
G.SKILL	F4-2400C15Q-32GRB	4*8GB	15-15-15-35	1.2	●	●	●
PATRIOT	PX416G240C5QK	4*4GB	15-15-15-35	1.2	●	●	●
GLOWAY	PC4-19200	4GB	16-16-16-35	1.2	●	●	
PANRAM	PUD42400C154G4NJW	4*4GB	15-15-15-35	1.2	●	●	
PANRAM	PUD42400C158G4NJW	4*8GB	15-15-15-35	1.2	●	●	
CRUCIAL	BLS4K4G4D240FSA	4GB	16-16-16-39	1.2	●	●	
ADATA	AX4U2400W4G16-DRZ	4GB	17-16-16-39	1.2	●	●	
GEIL	GPR416GB2400C15QC	4GB	15-15-15-35	1.2	●	●	●
MUSHKIN	997199F	2*8GB	15-15-15-35	1.2	●	●	●
KINGSTON	HX424C15FBK4/32	4*8GB	15-15-15-35	1.2	●	●	
APACER	78.C1GMA.AF30B	8G	16-16-16-36	1.2	●	●	
PNY	MD16GK2D4240015AB	2*8GB	15-15-15-35	1.2	●	●	●
G.SKILL	F4-2400C15D-16GVR	2*8GB	15-15-15-35	1.2	●	●	
APACER	AHU08GGB24CDT7G	8GB	16-16-16-36	1.2	●	●	●
CORSAIR	CM4X8GE2400C14K4-CN (Ver4.24)	8GB	14-16-16-31	1.2	●	●	
CORSAIR	CMK8GX4M1A2400C14(Ver3.20)	8GB	14-16-16-31	1.2	●	●	
PATRIOT	PV416G240C5QK	4*4GB	15-15-15-35	1.2	●	●	●
KINGSTON	HX424C15FBK4/16	4*4GB	15-15-15-35	1.2	●	●	
G.SKILL	F4-2400C14Q2-128GRK	8*16GB	14-14-14-34	1.2	●	●	
G.SKILL	F4-2400C14Q-16GRK	4*4GB	14-14-14-34	1.2	●	●	●
G.SKILL	F4-2400C15Q-16GRR	4*4GB	15-15-15-35	1.2	●	●	●
AVEXIR	AVD4UZ124001608G-4COR	4*8GB	16-16-16-36	1.2	●	●	
AVEXIR	AVD4UZ124001604G-4COB	4*4GB	16-16-16-36	1.2	●	●	●
CRUCIAL	BLS8G4D240FSA.16FADG	8GB	16-16-16-39	1.2	●	●	
KINGSTON	HX424C12PBK4/32	4*8GB	12-13-13-35	1.35	●	●	●
G.SKILL	F4-2400C15Q-32GRR	4*8GB	15-15-15-35	1.2	●	●	●
GEIL	DDR48GB2400C16QC	8GB	17-16-16-36	1.2	●	●	●
CORSAIR	CM4X8GE2400C16K4-CN (Ver5.20)	8GB	16-16-16-39	1.2	●	●	●
LEORICE	DDR4/2400MHZ/CL15/1.2V	4*8GB	15-15-15-35	1.2	●	●	●
CORSAIR	CMD32GX4M4A2400C14 (Ver4.23)	4*8GB	14-16-16-31	1.2	●	●	●
AMD	R748G2400U2S	8GB	15-15-15-36	1.2	●	●	
MICRON	MTA16ATF2G64AZ-2G3B1	16GB	17-17-17-39	1.2	●	●	
MICRON	MTA8ATF1G64AZ-2G3B1	8GB	17-17-17-39	1.2	●	●	●
KINGSTON	HX424C12SB2K4/16	4*4GB	12-14-14-35	1.35	●	●	
KINGSTON	HX424C12SB2K4/32	4*8GB	12-14-14-35	1.35	●	●	
KINGSTON	HX424C15FBK2/16	2*8GB	15-15-15-35	1.2	●	●	
GALAXY	GAM4BXLBS240016JE164C	4*4GB	16-16-16-36	1.2	●	●	●
APACER	AH08GGB24CDT5H	2*8GB	16-16-16-36	1.2	●	●	●
CORSAIR	CMK8GX4M2A2400C14(Ver3.28)	2* 4GB	14-16-16-31	1.2	●	●	●
CORSAIR	CMK16GX4M2A2400C14	2*8GB	14-16-16-31	1.2	●	●	●
AVEXIR	AVD4UZ124001608G-1COB	8GB	16-16-16-36	1.2	●	●	●
AVEXIR	AVD4U24001608G-1BW	8GB	16-16-16-36	1.2	●	●	●
APACER	AU08GGB24CETBGC	8GB	17-17-17-39	1.2	●	●	
AVEXIR	AVD4UZ124001608G-2COR	2*8GB	16-16-16-36	1.2	●	●	●
V-COLOR	8GTC48G24S817-IMS	4*8GB	17-17-17-39	1.2	●	●	●

CORSAIR	CMD32GX4M4A2400C12 (Ver5.20)	4*8GB	12-14-14-28	1.2	●	●	
G.SKILL	F4-2400C15Q-64GIS	4*16GB	15-15-15-35	1.2	●	●	
CRUCIAL	BLS8G4D24OFB.16FARG	4*8GB	16-16-16-39	1.2	●	●	
GEIL	GLW416GB2400C15DC	8GB	15-15-15-35	1.2	●	●	●
TEAM	TDTRD48G2400HC15ABK	8GB	15-15-15-35	1.2	●	●	●
TEAM	TDRED48G2400HC14BK	8GB	14-16-16-31	1.2	●	●	
GEIL	GRP416GB2400C16DC	8GB	16-16-16-36	1.2	●	●	●
ADATA	AX4U2400W8G16-BRZ	8GB	17-16-16-39	1.2	●	●	●
KINGSTON	HX424C15FB/16	16GB	15-15-15-35	1.2	●	●	
CRUCIAL	BLS8G4D240FSC.16FARG	8GB	16-16-16-39	1.2	●	●	
CORSAIR	CMK32GX4M2A2400C14(Ver3.31)	2*16GB	14-16-16-31	1.2	●	●	●
GALAXY	GAM4HFL1BM2400D15IE08IC	8G	15-15-15-35	1.2	●	●	
CORSAIR	CMK32GX4M4A2400C16R(Ver3.31)	4*8GB	16-16-16-39	1.2	●	●	
CORSAIR	CMD16GX4M4B2400C10	4*4GB	10-12-12-28	1.35	●	●	●
MUSHKIN	997199T	2*8GB	15-15-15-35	1.2	●	●	●
GEIL	8G2133C151.2V	8GB	14-16-16-35	1.2	●	●	
TEAM	TED416G2400C16BK	16GB	16-16-16-39	1.2	●	●	
TEAM	TCD44G2400C14BK	4GB	14-16-16-31	1.2	●	●	
TIGO	TMKU8GF28-2400U	8GB	17-17-17-39	1.2	●	●	●
APACER	AU08GGB24CEYBGC	8GB	17-17-17-39	1.2	●	●	
KINGSTON	HX424C12SB2K2/16	16G	12-14-14-35	1.35	●	●	
GLOWAY	PC4-19200	8GB	15-15-15-35	1.2	●	●	●
ADATA	AX4U240038G16-BWZ	8*8GB	17-16-16-39	1.2	●	●	●
ADATA	AX4U2400316G16-SBF	16*16GB	17-16-16-39	1.2	●	●	●
AVEXIR	AVD4UZ124001608G-4COR	4*8GB	16-16-16-36	1.2	●	●	●
AVEXIR	AVD4UZ124001604G-4COR	4*4GB	16-16-16-36	1.2	●	●	●
KINGSTON	TF24D4U7S8MB-8	8GB	17-17-17-39	1.2	●	●	
KINGSTON	TF24D4U7S8MBD-4	4GB	17-17-17-39	1.2	●	●	
RAMAXEL	RMUA5120MB86H9F-2400	4GB	17-17-17-39	1.2	●	●	●
RAMAXEL	RMUA5120MB76H8F-2400	2GB	17-17-17-39	1.2	●	●	●
V-COLOR	TC48G24S817	8GB	17-17-17-39	1.2	●	●	●
G.SKILL	F4-2400C15Q2-64GRK	8*8GB	15-15-15-35	1.2	●	●	●
TEAM	TCD48G2400C14BK	8GB	14-16-16-31	1.2	●	●	
CRUCIAL	BLS16G4D240FSE.16FAD	16GB	16-16-16-39	1.2	●	●	
CRUCIAL	BLS4G4D240FSA.8FARG	4GB	16-16-16-39	1.2	●	●	●
PATRIOT	PV48G240C5	8GB	15-15-15-35	1.2	●	●	●
TEAM	TFWD416G2400C15BBK	16GB	15-17-17-35	1.2	●	●	
TEAM	TFRD48G2400C15ABK	8GB	15-15-15-35	1.2	●	●	
TEAM	TFRD44G2400C15ABK	4GB	15-15-15-35	1.2	●	●	
Klevv	IM44GU48N24-FFFAZ	4GB	15-15-15-35	1.2	●	●	●
Klevv	IM4AGU88N24-FFHMHZ	16GB	15-15-15-35	1.2	●	●	
Klevv	IM48GU88N24-FFHMHZ	8GB	15-15-15-35	1.2	●	●	
Klevv	IM4AGU88N24-FFHMB	16GB	15-15-15-35	1.2	●	●	●
Klevv	IM48GU88N24-FFHMB	8GB	15-15-15-35	1.2	●	●	●
Klevv	IM44GU48N24-FFFHAB	4GB	15-15-15-35	1.2	●	●	
GEIL	GPR432GB2400C16QC	8GB	16-16-16-36	1.2	●	●	
G.SKILL	F4-2400C15D-16GTZR	8GB	15-15-15-35	1.2	●	●	●
CRUCIAL	MTA16ATF1G64AZ-2G3A2	8GB	17-17-17-39	1.2	●	●	
G.SKILL	F4-2400C15Q-64GFX	4*16GB	15-15-15-39	1.2	●	●	●
G.SKILL	F4-2400C15Q-32GFX	4*8GB	15-15-15-39	1.2	●	●	●
G.SKILL	F4-2400C16Q-64GFX	4*16GB	16-16-16-39	1.2	●	●	●

G.SKILL	F4-2400C16Q-32GFX	4*8GB	16-16-16-39	1.2	●	●	●
CORSAIR	CMK16GX4M2Z2400C16(Ver3.31)	2* 8GB	16-16-16-18	1.2	●	●	
CORSAIR	CMK128GX4M8A2400C14(Ver5.30)	8*16GB	14-16-16-31	1.2	●	●	●
AMD	R744G2400U1S	4GB	15-15-15-36	1.2	●	●	
CORSAIR	CMK128GX4M8A2400C14(Ver5.30)	8*16GB	14-16-16-31	1.2	●	●	●
CORSAIR	CMK16GX4M2Z2400C16(Ver3.31)	2*8GB	16-16-16-39	1.2	●	●	
GelL	GFR416GB2400C16S	16GB	16-16-16-36	1.2	●	●	
GelL	GFR432GB2400C16D	16GB	16-16-16-36	1.2	●	●	●
HyperX	HX424C15FB2K4/32	4*8GB	15-15-15-35	1.2	●	●	●
GLOWAY	STK4U2400D17081C	8GB	17-17-17-39	1.2	●	●	●
GLOWAY	STK4U2400D17161C	16GB	17-17-17-39	1.2	●	●	
PATRIOT	PSD48G240081	8GB	17-17-17-39	1.2	●	●	●
PATRIOT	PSD44G240081	4GB	16-16-16-39	1.2	●	●	●
PATRIOT	PSD416G24002	16GB	17-17-17-39	1.2	●	●	●
PATRIOT	PV432G240C5QK	4*8GB	15-15-15-35	1.2	●	●	●
PATRIOT	PVE48G240C5KRD	2*4GB	15-15-15-35	1.2	●	●	●
PATRIOT	PVE416G240C5KBL	2*8GB	15-15-15-35	1.2	●	●	●
SAMSUNG	M378A2K43CB1-CRC	16GB	17-17-17-39	1.2	●	●	●
Crucial	CT8G4DFS824A.C8FBD1	8GB	17-17-17-39	1.2	●	●	●
ADATA	AD4X240038G17-BP	8*8GB	17-17-17-39	1.2	●	●	●
APACER	AHU08GGB24CDU7S	8GB	16-16-16-36	1.2	●	●	
Crucial	BLS8G4D240FSC.16FBR2	8GB	16-16-16-39	1.2	●	●	●
Asgard	VML41UG-MIC1U22ZG	8GB	17-17-17-39	1.2	●	●	●
KINGMAX	GLLF62F-DAKZIG CLBU	4GB	17-17-17-39	1.2	●	●	●
KINGMAX	GLLH22F-18KIIA CFBU2	16GB	17-17-17-39	1.2	●	●	●
KINGMAX	GLLG42F-D8KBIA CFDU	8GB	17-17-17-39	1.2	●	●	
GEIL	GP44GB2400C16SC	4GB	17-16-16-36	1.2	●	●	
Kingston	KVR24N17S8/4	4GB	17-17-17-39	1.2	●	●	
CRUCIAL	BLS16G4D240FSC.16FBR	16GB	16-16-16-39	1.2	●	●	●
CRUCIAL	BLS8G4D240FSC.8FBD	8GB	16-16-16-39	1.2	●	●	●
CRUCIAL	CT8G4DFD824A.C16FBD2	8GB	17-17-17-39	1.2	●	●	●
CRUCIAL	CT16G4DFD824A.C16FHD1	16GB	17-17-17-39	1.2	●	●	●
ADATA	AX4U240038G16-BRZ	8*8GB	17-16-16-39	1.2	●	●	
G.SKILL	F4-2400C15S-8GNT	8GB	15-15-15-35	1.2	●	●	●
Crucial	CT8G4DFS824A.C8FHD1	8GB	17-17-17-39	1.2	●	●	●
APACER	AU08GGB24CEYBGH	8GB	17-17-17-39	1.2	●	●	●
GALAXY	GAMER D4-2400 8G C16 紅燈	8GB	16-16-16-36	1.2	●	●	●
GALAXY	GAMER D4-2400 8G C16 綠燈	8GB	16-16-16-36	1.2	●	●	●
GALAXY	GAMER III DDR4-2400 8G C16	8GB	16-16-16-36	1.2	●	●	●
Ramsta	R2DD4N04G2400	4GB	16-16-16-39	1.2	●	●	●
Ramsta	R2DD4N16G2400	16GB	17-17-17-39	1.2	●	●	●
Ramsta	R2DD4N08G2400	8GB	17-17-17-39	1.2	●	●	●
TIGO	TMKU8G868-2400U	8GB	16-16-16-39	1.2	●	●	
HyperX	HX424C15FB/4	4GB	15-15-15-35	1.2	●	●	●
CRUCIAL	BLS8G4D240FSE.16FBR2	8GB	16-16-16-39	1.2	●	●	●
APACER	AHU08GGB24CDU7G	8GB	16-16-16-36	1.2	●	●	
GEIL	GASB416GB2400C16QC	4GB	16-16-16-36	1.2	●	●	●
GEIL	GASB432GB2400C16QC	8GB	16-16-16-36	1.2	●	●	●
G.SKILL	F4-2400C17S-8GDB	8GB	17-17-17-39	1.2	●	●	
TIGO	TMKU8G868-2400U	8GB	17-17-17-39	1.2	●	●	●
TIGO	TMKG8G868-2400U	8GB	16-16-16-39	1.2	●	●	●

APACER	AU16GGB24CEYBGC	16GB	17-17-17-39	1.2	●	●	
GEIL	GLS48GB2400C16DC	4GB	17-16-16-36	1.2	●	●	
GLOWAY	TYP8U2400E17042C	8GB	17-17-17-39	1.2	●	●	●
Asgard	VML41UG-MEC1U2BQ1	8GB	17-17-17-39	1.2	●	●	●
silicon power	SP008GBLFU240B02	8GB	17-17-17-39	1.2	●	●	
GelL	GLS48GB2400C16DC	4GB	17-16-16-36	1.2	●	●	
TIGO	TMKU4G456-2400U	4GB	17-17-17-39	1.2	●	●	●
TIGO	TMKUF68-2400U	16GB	17-17-17-39	1.2	●	●	●
HYUNDAI	HYE4G24C17	4GB	17-17-17-39	1.2	●	●	●
HYUNDAI	HYE8G24C17	8GB	17-17-17-39	1.2	●	●	●
Apacer	AU16GGB24CEYBGH	16GB	17-17-17-39	1.2	●	●	●
MAXSUN	MSD44G24Q3	4GB	17-17-17-39	1.2	●	●	●
MAXSUN	MSD48G24Q3	8GB	17-17-17-39	1.2	●	●	●
TECLAST	TLD44G24A30	4GB	17-17-17-39	1.2	●	●	●
TECLAST	TLD48G24A30	8GB	17-17-17-39	1.2	●	●	●
Kingson	KVR24N17S8/80-SP	8GB	17-17-17-39	1.2	●	●	●
GEIL	DDR48GB2400C17QC	8GB	17-17-17-39	1.2	●	●	●
Ramsta	R2DD4J16G2400	2*8GB	16-16-16-36	1.2	●	●	
GEIL	DDR48GB2400C17QC	8GB	17-17-17-39	1.2	●	●	●
GLOWAY	WAR4U2400D17081C	8GB	17-17-17-39	1.2	●	●	
Asgard	VML41UH-MIC1U22T1	16GB	17-17-17-39	1.2	●	●	
KINGSTON	KVR24N17D8/16-SP	16GB	17-17-17-39	1.2	●	●	●
KINGSTON	KVR24N17S6/4	4GB	17-17-17-39	1.2	●	●	●
KINGBANK	KB42400Y1803	4GB	17-17-17-39	1.2	●	●	●
KINGBANK	KB42400Y1803	8GB	17-17-17-39	1.2	●	●	●
KINGBANK	KB42400Y1803	8GB	15-15-15-36	1.2	●	●	●
GALAXY	GAL4AXR2BSR2400D17KE041C	4GB	17-17-17-39	1.2	●	●	●
GALAXY	GAL4AXL1BMR2400D17KE081C	8GB	17-17-17-39	1.2	●	●	●
GALAXY	GAL4AXT1BMT2400D17KE161C	16GB	17-17-17-39	1.2	●	●	●
GALAXY	GAM4IRR2BMR2400D16JE081C	8GB	16-16-16-36	1.2	●	●	●
Asgard	VML41UG-MIC1U22T1	8GB	17-17-17-39	1.2	●	●	●
HyperX	HX424C15FB2/8-SP	8GB	15-15-15-35	1.2	●	●	●
ADATA	AX4U2400W8G16-BRD	8GB	17-16-16-39	1.2	●	●	●
Antec	AMD4UZ1240001508G-3S	8GB	16-18-18-36	1.35	●	●	●
KingFast	KF2400DSCD4-8GB	8GB	17-17-17-39	1.2	●	●	●
Vaseky	VK168BCH1642-0C	8GB	17-17-17-39	1.2	●	●	
ADATA	AX4U240038G16-BRZ	8*8GB	17-16-16-39	1.2	●	●	●
CORSAIR	CMK16GX4M2A2400C16	2*8GB	17-16-16-39	1.2	●	●	
GALAXY	GAM4IRL1BMR2400D16JE081C	8GB	16-16-16-36	1.2	●	●	●
TEAM	TCD48G2400C14BK	8GB	15-16-16-31	1.2	●	●	●
TEAM	TED416G2400C16BK	16GB	16-16-16-39	1.2	●	●	●
BR	BR-PC-8G-2400	8GB	17-17-17-39	1.2	●	●	●
X-STAR	A2MD2018042901	8GB	17-17-17-39	1.2	●	●	
OSCOO	DDR4 2400MHz 8G	8GB	17-17-17-39	1.2	●	●	●

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For the best results, please ensure all memory modules are of the same version or have the same date code (D/C) from the same vendor. Check with the memory vendor to get the correct memory modules.

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TUF Z390M-PRO GAMING

DDR4 2666 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
CORSAIR	CMK16GX4M4A2666C16 (Ver5.29)	4*4GB	16-18-18-35	1.2	●	●	
CORSAIR	CMD32GX4M4A2666C15(Ver5.29)	4*8GB	15-17-17-35	1.2	●	●	●
G.SKILL	F4-2666C15Q-16GRR	4*4GB	15-15-15-35	1.2	●	●	
MUSHKIN	997192F	2*4GB	15-15-15-35	1.2	●	●	●
KINGSTON	HX426C13PBK4/32	4*8GB	15-15-15-36	1.35	●	●	
KINGSTON	HX426C15FBK4/32	4*8GB	15-17-17-35	1.2	●	●	
CORSAIR	CMD128GX4M8A2666C15	4*16GB	15-17-17-35	1.2	●	●	●
KINGSTON	HX426C15FBK4/16	4*4GB	15-17-17-35	1.2	●	●	●
CRUCIAL	BLE4G4D26AFEA.8FAD	4GB	16-16-17-36	1.2	●	●	●
CRUCIAL	BLE8G4D26AFEA.16FAD	8GB	16-17-17-36	1.2	●	●	
AVEXIR	AVD4UZ126661504G-4COB	4*4GB	15-15-15-36	1.2	●	●	
AVEXIR	AVD4UZ126661508G-4COB	4*8GB	15-15-15-36	1.2	●	●	
CRUCIAL	BLT4G4D26AFTA.8FADG	4GB	16-17-17-36	1.2	●	●	●
KLEVV	IMA41GU6MFR8N-C F0	8GB	15-15-15-35	1.2	●	●	●
KINGSTON	HX426C13SB2K4/32	4*8GB	15-15-15-36	1.35	●	●	
KINGSTON	HX426C13SB2K4/16	4*4GB	15-15-15-36	1.35	●	●	
PNY	MD16GK4D4266615AXR	4*4GB	15-15-15-35	1.2	●	●	●
AVEXIR	AVD4UZ126661504G-4IPROG	4*4GB	15-15-15-35	1.2	●	●	●
AVEXIR	AVD4UZ126661504G	2*4GB	15-15-15-35	1.2	●	●	
CORSAIR	CMU32GX4M2A2666C16 (Ver5.20)	2*16GB	16-18-18-35	1.2	●	●	
CORSAIR	CMK32GX4M4A2666C16(Ver3.20)	4*8GB	16-18-18-35	1.2	●	●	●
CORSAIR	CMK16GX4M2A2666C16 (Ver3.31)	2*8GB	16-18-18-35	1.2	●	●	●
CORSAIR	CMK32GX4M2A2666C16 (Ver5.39)	2*16GB	16-18-18-35	1.2	●	●	●
CORSAIR	CMK16GX4M4A2666C15 (Ver5.20)	4*4GB	15-17-17-35	1.2	●	●	●
CORSAIR	CMK64GX4M4A2666C16 (Ver5.3)	4*16GB	16-18-18-35	1.2	●	●	
G.SKILL	F4-2666C15Q-32GRR	4*8GB	15-15-15-35	1.2	●	●	●
AVEXIR	AVD4UZ126661704G-4COR	4*4GB	17-17-17-37	1.2	●	●	●
AVEXIR	AVD4UZ126661708G-4COR	4*8GB	17-17-17-37	1.2	●	●	●
CORSAIR	CMK32GX4M4A2666C15 (Ver5.20)	4*8GB	15-17-17-35	1.2	●	●	●
TEAM	TFRD4162666C15BBK	16GB	15-17-17-35	1.2	●	●	
TEAM	TFWD48G2666C15BBK	8GB	15-17-17-35	1.2	●	●	●
TEAM	TCD44G2666C15BBK	4GB	15-17-17-35	1.2	●	●	●
HyperX	HX426C15FBK2/16	2*8GB	15-17-17-35	1.2	●	●	
Klevv	IM48GU88N26-FFHFMZ	8GB	15-15-15-35	1.2	●	●	
Klevv	IM4AGU88N26-FFHFMZ	16GB	15-15-15-35	1.2	●	●	
Klevv	IM44GU48N26-FFHAZ	4GB	15-15-15-35	1.2	●	●	●
CORSAIR	CMK16GX4M2A2666C16(Ver5.30)	8GB	16-18-18-35	1.2	●	●	
ADATA	AX4U2666W4G16-BRZ	4GB	16-16-16-39	1.2	●	●	
ADATA	AX4U266638G16-DRZ	2*8GB	16-16-16-39	1.2	●	●	

ADATA	AX4U2666W8G16-QRZ	4*8GB	16-16-16-39	1.2	●	●	●
crucial	BLS8G4D26BFSC.16FBR2	8GB	16-18-18-38	1.2	●	●	
crucial	BLS16G4D26BFSC.16FBD	16GB	16-18-18-38	1.2	●	●	
crucial	BLS4G4D26BFSC.8FBR2	4GB	16-18-18-38	1.2	●	●	
CORSAIR	CMK128GX4M8A2666C16(Ver5.39)	8*16GB	16-18-18-36	1.2	●	●	●
CORSAIR	CMR16GX4M2A2666C16(Ver5.30)	2*8GB	16-18-18-35	1.2	●	●	
CORSAIR	CMK128GX4M8A2666C16(Ver5.39)	8*16GB	16-18-18-35	1.2	●	●	●
CORSAIR	CMR64GX4M8A2666C16(Ver5.30)	8* 8GB	16-18-18-35	1.2	●	●	●
HyperX	HX426C16FB2K4/64	4*16GB	16-18-18-39	1.2	●	●	●
G.SKILL	F4-2666C16Q2-64GRB	8*8GB	16-16-16-36	1.2	●	●	●
HyperX	HX426C15SBK8/128	8*16GB	15-16-16-35	1.2	●	●	●
HyperX	HX426C13PB3/8	4*8GB	13-15-15-35	1.35	●	●	
HyperX	HX426C13PB3K2/16	4*8GB	13-15-15-35	1.35	●	●	
HyperX	HX424C12PB3/8	4*8GB	13-15-15-35	1.35	●	●	
HyperX	HX424C12PB3K2/16	4*8GB	13-15-15-35	1.35	●	●	
HyperX	HX424C12PB3K4/32	4*8GB	13-15-15-35	1.35	●	●	
HyperX	HX426C13PB3/16	4*16GB	13-15-15-35	1.35	●	●	●
HyperX	HX426C13PB3K2/32	4*16GB	13-15-15-35	1.35	●	●	●
HyperX	HX424C12PB3K4/64	4*16GB	13-15-15-35	1.35	●	●	●
HyperX	HX424C12PB3/16	4*16GB	13-15-15-35	1.35	●	●	●
HyperX	HX424C12PB3K2/32	4*16GB	13-15-15-35	1.35	●	●	●
CRUCIAL	BLS8G4D26BFSC.8FBR	8GB	16-18-18-38	1.2	●	●	●
CRUCIAL	BLS8G4D26BFSC.8FBD	8GB	16-18-18-38	1.2	●	●	●
MICRON	MTA16ATF2G64AZ-2G6H1	16GB	19-19-19-43	1.2	●	●	●
MICRON	MTA8ATF1G64AZ-2G6H1	8GB	19-19-19-43	1.2	●	●	●
TIGO	TMKG8G868-2666N	8GB	19-19-19-43	1.2	●	●	
ADATA	AX4U266638G16-BRS	8*8GB	16-16-16-39	1.2	●	●	●
ADATA	AD4U266638G19-B	8*8GB	19-19-19-43	1.2	●	●	●
ADATA	AD4U2666316G19-B	16*16GB	19-19-19-43	1.2	●	●	●
PANRAM	W4U2666PS-16G	2*16GB	16-18-18-35	1.2	●	●	●
PANRAM	W4U2666PS-8G	2*8GB	16-18-18-35	1.2	●	●	
Team	TPD416G2666HC19BK	16GB	19-19-19-43	1.2	●	●	●
Team	TED416G2666C1901	16GB	19-19-19-43	1.2	●	●	●
Team	TPRD416G2666HC1901	16GB	19-19-19-43	1.2	●	●	●
Team	TPD416G2666HC1901	16GB	19-19-19-43	1.2	●	●	●
Team	TED432G2666C19DC01	16GB	19-19-19-43	1.2	●	●	●
Team	TPRD432G2666HC19DC01	16GB	19-19-19-43	1.2	●	●	●
Team	TPD432G2666HC19DC01	16GB	19-19-19-43	1.2	●	●	●
Team	TED464G2666C19OC01	16GB	19-19-19-43	1.2	●	●	●
Team	TPRD464G2666HC19OC01	16GB	19-19-19-43	1.2	●	●	●
Team	TPD464G2666HC19OC01	16GB	19-19-19-43	1.2	●	●	●
Team	TPD48G2666HC19BK	8GB	19-19-19-43	1.2	●	●	●
Team	TED48G2666C1901	8GB	19-19-19-43	1.2	●	●	●
Team	TPRD48G2666HC1901	8GB	19-19-19-43	1.2	●	●	●
Team	TPD48G2666HC1901	8GB	19-19-19-43	1.2	●	●	●
Team	TED416G2666C19DC01	8GB	19-19-19-43	1.2	●	●	●
Team	TPRD416G2666HC19DC01	8GB	19-19-19-43	1.2	●	●	●
Team	TPD416G2666HC19DC01	8GB	19-19-19-43	1.2	●	●	●
Team	TED432G2666C19OC01	8GB	19-19-19-43	1.2	●	●	●
Team	TPRD432G2666HC19OC01	8GB	19-19-19-43	1.2	●	●	●
Team	TPD432G2666HC19OC01	8GB	19-19-19-43	1.2	●	●	●

Team	TPD44G2666HC19BK	4GB	19-19-19-43	1.2	●	●	●
Team	TED44G2666C1901	4GB	19-19-19-43	1.2	●	●	●
Team	TPRD44G2666HC1901	4GB	19-19-19-43	1.2	●	●	●
Team	TPD44G2666HC1901	4GB	19-19-19-43	1.2	●	●	●
Team	TED48G2666C19DC01	4GB	19-19-19-43	1.2	●	●	●
Team	TPRD48G2666HC19DC01	4GB	19-19-19-43	1.2	●	●	●
Team	TPD48G2666HC19DC01	4GB	19-19-19-43	1.2	●	●	●
Team	TED416G2666C19OC01	4GB	19-19-19-43	1.2	●	●	●
Team	TPRD416G2666HC19OC01	4GB	19-19-19-43	1.2	●	●	●
Team	TPD416G2666HC19OC01	4GB	19-19-19-43	1.2	●	●	●
KINGSTON	KVR26N19S8/8-SP	8GB	19-19-19-43	1.2	●	●	●
ADATA	AD4U266638G19-B	8*8GB	19-19-19-43	1.2	●	●	●
ADATA	AO2P26KCST2-BWFS	16GB	19-19-19-43	1.2	●	●	●
ADATA	AX4U266638G16-BRS	8*8GB	16-16-16-39	1.2	●	●	●
G.SKILL	F4-2666C18Q-32GTZR	4*8GB	18-18-18-43	1.2	●	●	●
MICRON	MTA8ATF1G64AZ-2G6E1	8GB	19-19--19-43	1.2	●	●	●
Asgard	VMA42UG-MEC1U2AW1	8GB	19-19-19-43	1.2	●	●	●
Micron	MTA16ATF2G64AZ-2G6E1	16GB	19-19-19-43	1.2	●	●	●
HyperX	HX426C16FB2/8	8GB	16-18-18-39	1.2	●	●	●
Apacer	AU16GGB26CQYBGH	16GB	19-19-19-43	1.2	●	●	
Apacer	AU08GGB26CQABGH	8GB	19-19-19-43	1.2	●	●	●
CRUCIAL	BLS8G4D26BFSC.16FE	8GB	16-18-18-38	1.2	●	●	●
Micron	MTA8ATF1G64AZ-2G6E1	8GB	19-19-19-43	1.2	●	●	●
Micron	MTA16ATF2G64AZ-2G6E1	16GB	19-19-19-43	1.2	●	●	●
SL LINK	J4BGUS2G8QHBC	32GB	19-19-19-43	1.2	●	●	●
Patriot	FVE432G266C6KGY	2*16GB	16-17-17-36	1.2	●	●	●
Patriot	FVE416G266C6KGY	2*8GB	16-17-17-36	1.2	●	●	●
ADATA	AX4U266638G19-BRZ1	8*8GB	19-19-19-43	1.2	●	●	●
CRUCIAL	CT32G4DFD8266.16FB1	32GB	19-19-19-43	1.2	●	●	●
CORSAIR	CMV32GX4M1A2666C18	32GB	18-18-18-43	1.2	●	●	●

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TUF Z390M-PRO GAMING

DDR4 2800 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
CORSAIR	CMK16GX4M4A2800C16(Ver5.29)	4*4GB	16-18-18-36	1.2	●	●	
KINGSTON	HX428C14PB2K4/16	4*4GB	15-15-15-36	1.35	●	●	●
PATRIOT	PX416G280C6QK	4*4GB	16-18-18-36	1.2	●	●	

PANRAM	PUD42800C164G4NJW	4*4GB	16-18-18-36	1.25	●	●	
KINGSTON	HX428C14PBK4/32	4*8GB	15-15-15-36	1.35	●	●	
AVEXIR	AVD4UZ128001604G-4COB	4*4GB	15-15-15-36	1.2	●	●	●
AVEXIR	AVD4UZ128001608G-4COB	4*8GB	15-15-15-36	1.2	●	●	●
CORSAIR	CMK32GX4M4A2800C16	4*8GB	16-18-18-36	1.2	●	●	●
KINGSTON	HX428C14SB2K4/32	4*8GB	15-15-15-36	1.35	●	●	●
KINGSTON	HX428C14SB2K4/16	4*4GB	15-15-15-36	1.35	●	●	
TEAM	TDGED48G2800HC16ABK	2*8GB	16-16-16-36	1.2	●	●	
PATRIOT	PV416G280C6QK	4*4GB	16-18-18-36	1.2	●	●	
G.SKILL	F4-2800C16D-16GRR	2*8GB	16-16-16-36	1.2	●	●	
ADATA	AX4U280038G17-SBF	8*8GB	18-17-17-36	1.2	●	●	●
ADATA	AX4U2800316G16-SBF	16GB	17-16-16-36	1.2	●	●	
CORSAIR	CMD32GX4M4A2800C16 (Ver5.20)	8GB	16-18-18-36	1.2	●	●	●
G.SKILL	F4-2800C16Q-32GVR	4*8GB	16-16-16-36	1.2	●	●	●
AVEXIR	AVD4UZ128001504G-4BZ1RR	4*4GB	15-15-15-35	1.35	●	●	
AVEXIR	AVD4UZ128001508G-4BZ1RR	4*8GB	15-15-15-35	1.35	●	●	●
CORSAIR	CMD16GX4M4A2800C16(Ver3.21)	4*4GB	16-18-18-36	1.2	●	●	●
CORSAIR	CMK64GX4M8B2800C14 (Ver4.24)	8*8GB	14-16-16-36	1.35	●	●	●
TEAM	TFWD416G2800C16CBK	16GB	16-18-18-38	1.2	●	●	●
TEAM	TFRD48G2800C16CBK	8GB	16-18-18-38	1.2	●	●	
TEAM	TCD44G2800C16CBK	4GB	16-18-18-38	1.2	●	●	●
FORZA	NFMUD416E8-2800EH2A	16GB	17-17-17-36	1.2	●	●	●
FORZA	NFMUD480E8-2800DH2A	8GB	17-17-17-36	1.2	●	●	●
ADATA	AX4U2800W8G17-BRD	8GB	17-17-17-36	1.2	●	●	●
G.SKILL	F4-2800C15Q-32GVR	4*8GB	15-15-15-35	1.25	●	●	●
ADATA	AX4U280038G17-BWZ	8GB	17-17-17-36	1.2	●	●	
KINGMAX	GLMG42F-18KIIA CJBR4	8GB	17-17-17-39	1.2	●	●	●

- 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.

For the best results, please ensure all memory modules are of the same version or have the same date code (D/C) from the same vendor. Check with the memory vendor to get the correct memory modules.

-The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.

-The stability and compatibility of memory modules with XMP profiles that operate beyond the JEDEC memory standard are not guaranteed. The stability and compatibility of these memory modules depend on the CPU's capabilities and other installed devices.

TUF Z390M-PRO GAMING

DDR4 3000 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
CORSAIR	CMD32GX4M2B3000C15(Ver4.31)	2*16GB	15-17-17-35	1.35	●	●	●
KINGSTON	HX430C15PB2K4/16	4*4GB	15-15-15-36	1.35	●	●	
G.SKILL	F4-3000C15Q-16GRR	4*4GB	15-15-15-35	1.35	●	●	●
PANRAM	PUD43000C154G4NJW	4*4GB	15-17-17-35	1.35	●	●	●
KINGSTON	HX430C15SB2K4/32	4*8GB	15-15-15-36	1.35	●	●	
AVEXIR	AVD4UZ130001604G-4COB	4*4GB	15-15-15-36	1.35	●	●	

AVEXIR	AVD4UZ130001608G-4COB	4*8GB	15-15-15-36	1.35	●	●	●
KLEVV	IM44GU48A30-GIIHMC	4*4GB	17-18-18-36	1.35	●	●	●
CORSAIR	CMK16GX4M2B3000C15 (Ver4.24)	2*8GB	15-17-17-35	1.35	●	●	
KINGSTON	HX430C15SB2K4/16	4*4GB	15-15-15-36	1.35	●	●	
TEAM	TDGED48G3000HC16ABK	2*8GB	16-16-16-36	1.35	●	●	
PATRIOT	PV416G300C6QK	4*4GB	16-16-16-36	1.35	●	●	
G.SKILL	F4-3000C15D-32GVR	2*16GB	15-15-15-35	1.35	●	●	
CORSAIR	CMK64GX4M4B3000C15 (Ver4.31)	4*16GB	15-17-17-35	1.35	●	●	●
ADATA	AX4U300038G16-DBZ	8*8GB	16-18-18-36	1.35	●	●	●
ADATA	AX4U3000316G16-BGZ	16GB	16-18-18-36	1.35	●	●	●
CORSAIR	CMD16GX4M4B3000C15(Ver4.24)	4GB	15-17-17-35	1.35	●	●	●
CORSAIR	CMK32GX4M2B3000C15(Ver5.39)	16GB	15-17-17-35	1.35	●	●	
CORSAIR	CMU16GX4M2C3000C15 (Ver4.31)	8GB	15-17-17-35	1.35	●	●	
CORSAIR	CMK16GX4M4B3000C15(Ver3.21)	4GB	15-17-17-35	1.35	●	●	●
G.SKILL	F4-3000C15Q-32GRK	4*8GB	15-15-15-35	1.35	●	●	●
CORSAIR	CMK8GX4M2B3000C15(Ver3.21)	2*4GB	15-17-17-35	1.35	●	●	●
CORSAIR	CMU32GX4M4C3000C15 (Ver5.3)	4*8GB	15-17-17-35	1.35	●	●	●
GEIL	GFR416GB3000C15ADC	8GB	15-17-17-35	1.35	●	●	
TEAM	TFWD416G3000C16CBK	16GB	16-18-18-38	1.35	●	●	●
TEAM	TCD44G3000C16CBK	4GB	16-18-18-38	1.35	●	●	
Klevv	IM4AGU88A30-FGGHMZ	16GB	16-16-16-36	1.35	●	●	
Klevv	IM48GU88A30-FGGHMZ	8GB	16-16-16-36	1.35	●	●	●
Klevv	IM44GU48A30-FGGHAZ	4GB	16-16-16-36	1.35	●	●	
Klevv	IM48GU88A30-FGGHMB	8GB	16-16-16-36	1.35	●	●	●
Klevv	IM44GU48A30-FGGHAB	4GB	16-16-16-36	1.35	●	●	
Klevv	IM4AGU88A30-FGGHMB	16GB	16-16-16-36	1.35	●	●	●
CORSAIR	CMD16GX4M2B3000C15(Ver5.30)	2* 8GB	15-17-17-35	1.35	●	●	
CORSAIR	CMD32GX4M4C3000C15(Ver5.30)	4* 8GB	15-17-17-35	1.35	●	●	●
FORZA	NFMUD480E8-3000DH2A	8GB	15-17-17-35	1.35	●	●	●
CORSAIR	CMR16GX4M2C3000C15(Ver4.31)	2* 8GB	15-17-17-35	1.35	●	●	
CORSAIR	CMR32GX4M4C3000C15	4* 8GB	15-17-17-35	1.35	●	●	●
Team	TDRRD48G3000HC16CBK	8GB	16-18-18-38	1.35	●	●	●
Team	TDRGD48G3000HC16CBK	8GB	16-18-18-38	1.35	●	●	●
GALAXY	HOF DDR4-3000	2* 8GB	16-18-18-38	1.35	●	●	
GeiL	GLR416GB3000C15ADC	8GB	15-17-17-35	1.35	●	●	●
G.SKILL	F4-3000C15S-16GVR	16GB	15-15-15-35	1.35	●	●	
FORZA	NMUD416E82-3000DB30	16GB	15-17-17-35	1.35	●	●	●
FORZA	NMUD480E82-3000DB30	8GB	15-17-17-35	1.35	●	●	●
PATRIOT	PV432G300C6QK	4* 8GB	16-16-16-36	1.35	●	●	●
HyperX	HX430C15PB3K4/32	4* 8GB	15-17-17-36	1.35	●	●	
CRUCIAL	BLT8G4D30AETA.K16FE	8GB	15-16-16-35	1.35	●	●	
PATRIOT	PVE416G300C6KBL	2* 8GB	16-16-16-36	1.35	●	●	●
PATRIOT	PVE48G300C6KRD	2*4GB	16-16-16-36	1.35	●	●	●
G.SKILL	F4-3000C14Q2-128GVKD	8*16GB	14-14-14-34	1.35	●	●	
Team	TF3D48G3000HC16CBK	8GB	16-18-18-38	1.35	●	●	●
GALAXY	N/A	2*8GB	16-18-18-38	1.35	●	●	●
TIGO	TMKU8GF58-3000X	8GB	16-18-18-36	1.35	●	●	●
CORSAIR	CMK16GX4M2B3000C15R (Ver5.30)	8GB*2	15-17-17-35	1.35	●	●	
CORSAIR	CMK16GX4M2B3000C15R (Ver3.32)	8GB*2	15-17-17-35	1.35	●	●	
CORSAIR	CM4X8GD3000C15U4-CN(Ver.5.39)	8GB	15-17-17-35	1.35	●	●	●
ADATA	AX4U300038G16-BRS	8*8GB	16-18-18-36	1.35	●	●	●

ADATA	AX4U300038G16-BBG	8*8GB	16-18-18-36	1.35	●	●	●
Hyper X	HX430C15PB3/8 HX430C15PB3K2/16	8GB 2*8GB	15-17-17-36	1.35	●	●	●
TEKISM	T4X3000B8G17-HY	8GB	17-17-17-36	1.35	●	●	
CORSAIR	CMK16GX4M2B3000C15 (Ver5.39)	2*8GB	15-17-17-35	1.35	●	●	●
GALAXY	GAM4IRL1BMR3000G16LD162C	2*8GB	16-18-18-38	1.35	●	●	●
APACER	ZD4-MO23000C16-08GAG	8GB	16-18-18-38	1.35	●	●	●
ADATA	AX4U300038G16-DRZ	8*8GB	16-18-18-36	1.35	●	●	●
CRUCIAL	BLT8G4D30BET4K.C8FD	8GB	16-18-18-38	1.35	●	●	●
KINGSTON	HX430C15PB3/16-SP	16GB	15-17-17-36	1.35	●	●	●
KINGSTON	HX429C15PB3AK4/32	4*8GB	15-17-17-39	1.35	●	●	●
ADATA	AX4U300038G16-BRS	8*8GB	16-18-18-36	1.35	●	●	●
V-COLOR	TL48G30S8SRGB15	8GB	15-16-16-35	1.35	●	●	●
G.SKILL	F4-2933C14Q-32GFX	4*8GB	14-14-14-34	1.35	●	●	
CORSAIR	CMK64GX4M4C3000C15(Ver5.32)	4*16GB	15-17-17-35	1.35	●	●	●
HYUNDAI	HYE8G30C16XY	8GB	16-18-18-38	1.35	●	●	●

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TUF Z390M-PRO GAMING

DDR4 3200 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
PANRAM	PUD43200C16G4NJW	4* 4GB	16-18-18-39	1.35	●	●	
MUSHKIN	997202F	2*4GB	15-15-15-36	1.2	●	●	
APACER	78.BAGMD.AF20B	2*4GB	16-16-16-36	1.35	●	●	●
PATRIOT	PV48G320C6K	2*4GB	16-16-16-36	1.35	●	●	
HyperX	HX432C16PB3K4/32	4*8GB	16-18-18-36	1.35	●	●	●
ADATA	AX4U3200W8G16-BGZ	8GB	16-16-16-36	1.35	●	●	●
TEAM	TFWD416G3200C16CBK	16GB	16-18-18-38	1.35	●	●	
TEAM	TFWD48G3200C16CBK	8GB	16-18-18-38	1.35	●	●	
G.SKILL	F4-3200C16D-16GTZR	2*8GB	18-18-18-38	1.35	●	●	
CORSAIR	CMD16GX4M2B3200C16(Ver3.21)	16GB	16-18-18-36	1.35	●	●	
G.SKILL	F4-3200C14Q-32GFX	4*8GB	14-14-14-34	1.35	●	●	●
CORSAIR	CMK16GX4M2B3200C16(Ver4.24)	2*16GB	16-18-18-36	1.35	●	●	
CORSAIR	CMU16GX4M2C3200C16(Ver5.39)	8*8GB	16-18-18-36	1.35	●	●	●
Team	TF1D48G3200HC16CBK	8GB	16-18-18-38	1.35	●	●	
Team	TF2D48G3200HC16CBK	8GB	16-18-18-38	1.35	●	●	
CORSAIR	CMK64GX4M8B3200C16(Ver4.31)	2*8GB	16-18-18-36	1.35	●	●	
G.SKILL	F4-3200C16D-16GTZ	2*8GB	16-16-16-36	1.35	●	●	
CORSAIR	CMU16GX4M2C3200C16(Ver5.39)	2*8GB	16-18-18-36	1.35	●	●	

G.SKILL	F4-3200C16S-8GRKB	8GB	16-18-18-38	1.35	●	●	●
CORSAIR	CMU32GX4M2C3200C16(Ver5.39)	2*16GB	16-18-18-36	1.35	●	●	
ADATA	AX4U320038G16-BRS	8*8GB	16-18-18-36	1.35	●	●	●
Hyper X	HX432C16PB3K2/16	2*8GB	16-18-18-36	1.35	●	●	●
TIGO	TMKG8G3200C16.RGB	8GB	16-18-18-38	1.35	●	●	●
Ramsta	R2DD4J16G3200	2*8GB	16-18-18-38	1.35	●	●	
Ramsta	R2DD4J32G3200	2*16GB	16-18-18-38	1.35	●	●	
KINGMAX	GZOG43F-43F-18SIGP	8GB	16-18-18-38	1.35	●	●	●
ADATA	AX4U320038G16-SRS	8*8GB	16-18-18-36	1.35	●	●	●
V-COLOR	TL48G32S8CRGB16	8GB	16-18-18-38	1.35	●	●	●
G.SKILL	F4-3200C16D-8GVKB	2*4GB	16-18-18-38	1.35	●	●	●
HyperX	HX432C18FB/16	16GB	18-21-21-39	1.2	●	●	
Patriot	PVLW416G320C6K	2*8GB	16-18-18-36	1.35	●	●	●
G.SKILL	F4-3200C16D-8GRK	8GB(4GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3200C16D-8GTZ	8GB(4GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3200C16D-8GVK	8GB(4GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3200C16Q-16GRR	16GB(4GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3200C16Q-16GRB	16GB(4GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3200C16Q-16GRKD	16GB(4GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3200C16Q-16GTZ	16GB(4GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3200C16Q-16GVK	16GB(4GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3200C16D-16GRK	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3200C16D-16GTZ	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3200C16D-16GVR	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3200C16D-16GVK	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3200C16D-16GVS	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3200C16D-16GVKB	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GVGB	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GTZLG	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GTZLO	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GTZB	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GTZKW	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GTZKY	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-6GTZKO	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GTZSW	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GTZSK	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GSXWB	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GSXKB	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GSXFB	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GTRG	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-16GTRS	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C15D-16GVR	16GB(8GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-16GVK	16GB(8GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-16GTZ	16GB(8GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-16GTZKW	16GB(8GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-16GTZKY	16GB(8GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-6GTZKO	16GB(8GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-16GTZSW	16GB(8GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-16GTZSK	16GB(8GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C14D-16GVR	16GB(8GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-16GVK	16GB(8GB*2)	14-14-14-34	1.35V	●	●	

G.SKILL	F4-3200C14D-16GTZ	16GB(8GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-16GTZKW	16GB(8GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-16GTZKY	16GB(8GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-6GTZKO	16GB(8GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-16GTZSW	16GB(8GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-16GTZSK	16GB(8GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-16GSXW	16GB(8GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-16GTRG	16GB(8GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-16GTRS	16GB(8GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C19D-16GSXW	16GB(8GB*2)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3200C19D-16GSXK	16GB(8GB*2)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3200C19D-16GSXF	16GB(8GB*2)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3200C15D-32GRK	32GB(16GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-32GTZ	32GB(16GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-32GVK	32GB(16GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-32GVR	32GB(16GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C16D-32GRK	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-32GTZA	32GB(16GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3200C16D-32GVK	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-32GVKA	32GB(16GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3200C16D-32GTZ	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-32GTZKW	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-32GTZKY	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-32GTZKO	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-32GTZSW	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-32GTZSK	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C15D-32GTZ	32GB(16GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-32GTZKW	32GB(16GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-32GTZKY	32GB(16GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-32GTZKO	32GB(16GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-32GTZSW	32GB(16GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C15D-32GTZSK	32GB(16GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3200C14D-32GVR	32GB(16GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-32GVK	32GB(16GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-32GTZ	32GB(16GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-32GTZKW	32GB(16GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-32GTZKY	32GB(16GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-32GTZKO	32GB(16GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-32GTZSW	32GB(16GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-32GTZSK	32GB(16GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-32GSXW	32GB(16GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-32GTRG	32GB(16GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C14D-32GTRS	32GB(16GB*2)	14-14-14-34	1.35V	●	●	
G.SKILL	F4-3200C16D-32GVK	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-32GSXWB	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-32GSXKB	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-32GTRG	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-32GTRS	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16D-32GSXFB	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C19D-32GSXW	32GB(16GB*2)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3200C19D-32GSXK	32GB(16GB*2)	19-19-19-39	1.35V	●	●	

G.SKILL	F4-3200C19D-32GSXF	32GB(16GB*2)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3200C16Q-32GRK	32GB(8GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3200C16Q-32GVK	32GB(8GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3200C16Q-32GVKB	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-32GTZB	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-32GTZKW	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-32GTZKY	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-32GTZKO	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-32GTZSW	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-32GTZSK	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-32GSXWB	32GB(8GB*4)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16Q-32GSXKB	32GB(8GB*4)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C16Q-32GSXFB	32GB(8GB*4)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3200C19Q-32GSXW	32GB(8GB*4)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3200C19Q-32GSXK	32GB(8GB*4)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3200C19Q-32GSXF	32GB(8GB*4)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3200C15Q-32GVR	32GB(8GB*4)	15-15-15-35	1.35V	●	●	●
G.SKILL	F4-3200C15Q-32GVK	32GB(8GB*4)	15-15-15-35	1.35V	●	●	●
G.SKILL	F4-3200C15Q-32GTZ	32GB(8GB*4)	15-15-15-35	1.35V	●	●	●
G.SKILL	F4-3200C15Q-32GTZSW	32GB(8GB*4)	15-15-15-35	1.35V	●	●	●
G.SKILL	F4-3200C14Q-32GVR	32GB(8GB*4)	14-14-14-34	1.35V	●	●	●
G.SKILL	F4-3200C14Q-32GVK	32GB(8GB*4)	14-14-14-34	1.35V	●	●	●
G.SKILL	F4-3200C14Q-32GTZ	32GB(8GB*4)	14-14-14-34	1.35V	●	●	●
G.SKILL	F4-3200C14Q-32GTZSW	32GB(8GB*4)	14-14-14-34	1.35V	●	●	●
G.SKILL	F4-3200C16Q-32GVK	32GB(8GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3200C14Q-32GTZR	32GB(8GB*4)	14-14-14-34	1.35V	●	●	●
G.SKILL	F4-3200C16Q-32GTZR	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-64GRK	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-64GVK	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-64GTZ	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-64GTZKW	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-64GTZKY	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-64GTZKO	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-64GTZSW	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C16Q-64GTZSK	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C15Q-64GVR	64GB(16GB*4)	15-15-15-35	1.35V	●	●	●
G.SKILL	F4-3200C15Q-64GVK	64GB(16GB*4)	15-15-15-35	1.35V	●	●	●
G.SKILL	F4-3200C15Q-64GTZ	64GB(16GB*4)	15-15-15-35	1.35V	●	●	●
G.SKILL	F4-3200C15Q-64GTZSW	64GB(16GB*4)	15-15-15-35	1.35V	●	●	●
G.SKILL	F4-3200C14Q-64GVR	64GB(16GB*4)	14-14-14-34	1.35V	●	●	●
G.SKILL	F4-3200C14Q-64GVK	64GB(16GB*4)	14-14-14-34	1.35V	●	●	●
G.SKILL	F4-3200C14Q-64GTZ	64GB(16GB*4)	14-14-14-34	1.35V	●	●	●
G.SKILL	F4-3200C14Q-64GTZSW	64GB(16GB*4)	14-14-14-34	1.35V	●	●	●
G.SKILL	F4-3200C16Q-64GVK	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3200C14Q-64GVR	64GB(16GB*4)	14-14-14-34	1.35V	●	●	●
G.SKILL	F4-3200C14Q-64GTZR	64GB(16GB*4)	14-14-14-34	1.35V	●	●	●
G.SKILL	F4-3200C15Q-64GTZR	64GB(16GB*4)	15-15-15-35	1.35V	●	●	●
CORSAIR	CMK8GX4M2B3200C16 ver4.24	8GB(4GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMD8GX4M2B3200C16 ver4.24	8GB(4GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMD8GX4M2B3200C14 ver4.24	8GB(4GB*2)	14-16-16-35	1.35V	●	●	
CORSAIR	CMU16GX4M2C3200C16 ver4.24	16GB(8GB*2)	16-18-18-36	1.35V	●	●	

CORSAIR	CMU16GX4M2C3200C16 ver5.39	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMK16GX4M2B3200C16 ver4.31	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMK16GX4M2B3200C16 ver4.24	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMK16GX4M2B3200C14 ver4.24	16GB(8GB*2)	14-16-16-35	1.35V	●	●	
CORSAIR	CMR16GX4M2C3200C16 ver4.31	16GB(8GB*2)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMR16GX4M2D3200C16 ver4.31	16GB(8GB*2)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMR16GX4M2D3200C16 ver3.31	16GB(8GB*2)	16-19-19-36	1.35V	●	●	
CORSAIR	CMK32GX4M2B3200C16 ver5.39	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMD32GX4M2C3200C16 ver5.39	16GB(8GB*2)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMD16GX4M4B3200C15 ver4.24	16GB(4GB*4)	15-17-17-35	1.35V	●	●	●
CORSAIR	CMD16GX4M4B3200C16 ver4.24	16GB(4GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMD16GX4M4B3200C14 ver4.24	16GB(4GB*4)	14-16-16-35	1.35V	●	●	●
CORSAIR	CMK16GX4M4B3200C16 ver4.24	16GB(4GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK16GX4M4B3200C15 ver4.24	16GB(4GB*4)	15-17-17-35	1.35V	●	●	●
CORSAIR	CMK16GX4M4C3200C15 ver4.24	16GB(4GB*4)	15-17-17-35	1.35V	●	●	●
CORSAIR	CMK16GX4M4B3200C14 ver4.24	16GB(4GB*4)	14-16-16-35	1.35V	●	●	●
CORSAIR	CMD32GX4M2B3200C16 ver4.31	32GB(16GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMD32GX4M2C3200C16C ver4.31	32GB(16GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMU32GX4M2C3200C16 ver4.31	32GB(16GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMU32GX4M2C3200C16 ver5.39	32GB(16GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMR32GX4M2C3200C16 ver5.39	32GB(16GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMK32GX4M2B3200C16 ver4.31	32GB(16GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMK32GX4M2B3200C14 ver4.31	32GB(16GB*2)	14-16-16-35	1.35V	●	●	
CORSAIR	CMR32GX4M2D3200C16 ver3.31	32GB(16GB*2)	16-19-19-36	1.35V	●	●	
CORSAIR	CMD32GX4M4C3200C14C ver4.31	32GB(8GB*4)	14-16-16-35	1.35V	●	●	●
CORSAIR	CMD32GX4M4B3200C16 ver4.24	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK32GX4M4B3200C16 ver4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK32GX4M4B3200C16 ver4.24	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK32GX4M4B3200C14 ver4.24	32GB(8GB*4)	14-16-16-35	1.35V	●	●	●
CORSAIR	CMK32GX4M4D3200C16 ver3.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMU32GX4M4C3200C16 ver5.39	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMU32GX4M4C3200C16 ver4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMR32GX4M4C3200C16 ver4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMR32GX4M4D3200C16 ver4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK32GX4M4D3200C16 ver3.31	32GB(8GB*4)	16-19-19-36	1.35V	●	●	●
CORSAIR	CMR32GX4M4D3200C16 ver3.31	32GB(8GB*4)	16-19-19-36	1.35V	●	●	●
CORSAIR	CMD64GX4M4B3200C16 ver4.31	64GB(16GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMD64GX4M4C3200C16 ver5.39	64GB(16GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK64GX4M4B3200C16 ver4.31	64GB(16GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK64GX4M4B3200C16 ver5.39	64GB(16GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMU64GX4M4B3200C16 ver4.31	64GB(16GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMU64GX4M4B3200C16 ver5.39	64GB(16GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMR64GX4M4C3200C16 ver4.31	64GB(16GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMR64GX4M4C3200C16 ver5.39	64GB(16GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMR64GX4M4D3200C16 ver3.31	64GB(16GB*4)	16-19-19-36	1.35V	●	●	●
Hyper X	HX432C16PB3K4/16	16GB(4GB*4)	16-18-18-36	1.35V	●	●	●
Hyper X	HX432C16PB3K4/32	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
Hyper X	HX432C18FB2K2/16	16GB(8GB*2)	18-21-21-39	1.2V	●	●	●
Hyper X	HX432C18FBK2/32	32GB(16GB*2)	18-21-21-39	1.2V	●	●	●
Hyper X	HX432C16PB3AK2/16	16GB(8GB*2)	16-18-18-36	1.35V	●	●	●
Hyper X	HX432C16PB3AK4/32	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●

Hyper X	HX432C16PB3K2/32	32GB(16GB*2)	16-18-18-36	1.35V	●	●	●
Hyper X	HX432C16PB3K4/64	64GB(16GB*4)	16-18-18-36	1.35V	●	●	●
GEIL	GEX416GB3200C16DC	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
APACER	AHU08GGB32CDU5H(EK.16GA1.GEBK2)	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
APACER	AHU08GGB32CDU6H(EK.16GA1.GEAK2)	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
APACER	AHU16GGB32CDU5H(EK.32GA1.GEBK2)	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
APACER	AHU16GGB32CDU6H(EK.32GA1.GEAK2)	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
FORZA	NFMUD480E8-3200DH2A	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
ADATA	AX4U320038G16-BRS	8GB	16-18-18-36	1.35V	●	●	●
TEAMGROUP	TF1D416G3200HC16CDC01	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
TEAMGROUP	TF2D416G3200HC16CDC01	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
SUPERTALENT	F3200UB4G	4GB	16-18-18-36	1.35V	●	●	●
SUPERTALENT	F3200UB16G	16GB	16-18-18-36	1.35V	●	●	●
PATRIOT	PV48G320C6K	8GB(4GB*2)	16-16-16-36	1.35V	●	●	
PATRIOT	PV416G320C6K	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
PATRIOT	PVE416G320C6KGY	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
PATRIOT	PV432G320C6K	32GB(16GB*2)	16-16-16-36	1.35V	●	●	
PATRIOT	PVR416G320C6K	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
APACER	AHU08GGB32CKU7M	8GB	16-18-18-38	1.35V	●	●	●
ZADAK	ZD4-SHA3200C16-08GAS	8GB	16-18-18-38	1.35V	●	●	●
KINGMAX	GZOG43F-18SIGP	8GB	16-18-18-38	1.35V	●	●	●
V-COLOR	TL48G32S8CRGB16	8GB	16-18-18-38	1.35V	●	●	●
KLEVV	IM48GU88A32-GIISEZ	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●

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TUF Z390M-PRO GAMING

DDR4 3300 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
HyperX	HX433C16PB3K2/16	2*8GB	16-18-18-36	1.35	●	●	●
G.SKILL	F4-3300C16Q-16GRKD	4*4GB	16-16-16-36	1.35	●	●	●
CORSAIR	CMR32GX4M4C3333C16(Ver4.31)	4*8GB	16-18-18-35	1.35	●	●	
G.SKILL	F4-3333C16Q-16GRKD	16GB(4GB*4)	16-18-18-36	1.35V	●	●	●
G.SKILL	F4-3333C16D-16GVR	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3333C16D-16GVK	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3333C16D-16GTZ	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3333C16D-16GTZB	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3333C16D-16GTZKW	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3333C16D-16GTZSW	16GB(8GB*2)	16-18-18-38	1.35V	●	●	

G.SKILL	F4-3333C16D-16GTZSK	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3333C16Q-32GVR	32GB(8GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3333C16Q-32GVK	32GB(8GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3333C16Q-32GTZ	32GB(8GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3333C16Q-32GTZB	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3333C16Q-32GTZSW	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3333C16D-32GVR	32GB(16GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3333C16D-32GVK	32GB(16GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3333C16D-32GTZ	32GB(16GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3333C16D-32GTZB	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3333C16D-32GTZKW	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3333C16D-32GTZSW	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3333C16D-32GTZSK	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3333C16Q-64GVR	64GB(16GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3333C16Q-64GVK	64GB(16GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3333C16Q-64GTZ	64GB(16GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3333C16Q-64GTZB	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3333C16Q-64GTZSW	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
CORSAIR	CMD16GX4M2B3333C16 ver4.31	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMK16GX4M2C3333C16 ver4.31	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMK16GX4M2B3333C16 ver4.24	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMK16GX4M2B3333C16 ver5.32	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMW16GX4M2C3333C16 ver4.31	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMD16GX4M4B3333C16 ver4.24	16GB(4GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK16GX4M4B3333C16 ver4.24	16GB(4GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK16GX4M4B3333C16R ver4.24	16GB(4GB*4)	16-18-18-36R	1.35V	●	●	●
CORSAIR	CMD32GX4M4B3333C16 ver4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMR32GX4M4C3333C16 ver4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK32GX4M2B3333C16 ver4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	
CORSAIR	CMK32GX4M4B3333C16 ver4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK32GX4M4C3333C16 ver5.32	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMW32GX4M4C3333C16 ver4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMD32GX4M2B3333C16 ver4.31	32GB(16GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMR32GX4M2C3333C16 ver4.31	32GB(16GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMR32GX4M2C3333C16 ver5.32	32GB(16GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMD64GX4M4B3333C16 ver4.31	64GB(16GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMR64GX4M4C3333C16 ver4.31	64GB(16GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK64GX4M4B3333C16 ver4.31	64GB(16GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK64GX4M4B3333C16R ver4.31	64GB(16GB*4)	16-18-18-36R	1.35V	●	●	●
A-DATA	AX4U3333W4G16	16GB(4GB*4)	16-16-16-36	1.35V	●	●	
Hyper X	HX433C16PB3K4/32	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
Hyper X	HX433C16PB3K2/16	16GB(8GB*2)	16-18-18-36	1.35V	●	●	

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TUF Z390M-PRO GAMING

DDR4 3300 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
HyperX	HX433C16PB3K2/32	32GB(16GB*2)	16-18-18-36	1.35	●	●	●
HyperX	HX433C16PB3K4/64	64GB(16GB*4)	16-16-16-36	1.35	●	●	●

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TUF Z390M-PRO GAMING

DDR4 3400 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
GEIL	GLWR416GB3400C16AQC	4*4GB	16-18-18-36	1.35			●
G.SKILL	F4-3400C16Q-16GRBD	4*4GB	16-18-18-38	1.35	●	●	●
G.SKILL	F4-3466C16Q-16GVK	4*4GB	16-18-18-38	1.35	●	●	
CORSAIR	CMD16GX4M4B3466C18 (Ver4.23)	4*4GB	18-19-19-39	1.35	●	●	●
PATRIOT	PV48G340C6K	2*4GB	17-18-18-36	1.35	●	●	
CORSAIR	CMU32GX4M4C3400C16R (Ver5.20)	4*8GB	16-18-18-36	1.35	●	●	●
CORSAIR	CMD32GX4M2B3466C16(Ver4.31)	2*16GB	16-18-18-36	1.35	●	●	
CORSAIR	CMR16GX4M2C3466C16(Ver4.31)	2*8GB	16-18-18-36	1.35	●	●	
G.SKILL	F4-3466C16Q2-64GTZ	8* 8GB	16-18-18-38	1.35	●	●	●
KINGSTON	HX434C19FBK2/32	2*16GB	19-23-23-42	1.2	●	●	
KINGSTON	HX434C19FB2/8	8GB	19-23-23-42	1.2	●	●	●
G.SKILL	F4-3466C18D-16GTZRXB	2*16GB	18-22-22-42	1.35	●	●	
G.SKILL	F4-3400C16D-16GRK	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3400C16D-16GTZ	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3400C16D-16GVK	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3400C16D-16GSXW	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3400C16D-32GRK	32GB(16GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3400C16D-32GVR	32GB(16GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3400C16D-32GVK	32GB(16GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3400C16D-32GTZ	32GB(16GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3400C16D-32GVK	32GB(16GB*2)	16-18-18-38	1.35V	●	●	

G.SKILL	F4-3400C16Q-16GRBD	16GB(4GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3400C16Q-16GRKD	16GB(4GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3400C16Q-16GRBD	16GB(4GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3400C16Q-32GRK	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3400C16Q-32GVK	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3400C16Q-32GTZ	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3400C16Q-32GTZSW	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3400C16Q-32GVK	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3400C16Q-64GRK	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3400C16Q-64GVR	64GB(16GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3400C16Q-64GVK	64GB(16GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3400C16Q-64GTZ	64GB(16GB*4)	16-16-16-36	1.35V	●	●	●
G.SKILL	F4-3400C16Q-64GVK	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
CORSAIR	CMD16GX4M4B3400C16 ver. 4.24	16GB(4GB*4)	16-18-18-40	1.35V	●	●	
CORSAIR	CMR16GX4M2C3400C16 ver. 4.31	16GB(8GB*2)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK16GX4M4B3400C16 ver. 4.23	16GB(4GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK16GX4M2B3400C16 ver. 4.23	16GB(8GB*2)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMR32GX4M4C3400C16 ver. 4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMU32GX4M4B3400C16 ver. 4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMU32GX4M4C3400C16 ver. 4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMU32GX4M4B3400C16R ver. 4.31	32GB(8GB*4)	16-18-18-36R	1.35V	●	●	●
CORSAIR	CMU32GX4M4C3400C16R ver. 4.31	32GB(8GB*4)	16-18-18-36R	1.35V	●	●	●
CORSAIR	CMK32GX4M4B3400C16 ver. 4.23	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK32GX4M4C3400C16 ver. 4.23	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK32GX4M4C3400C16R ver. 4.23	32GB(8GB*4)	16-18-18-36R	1.35V	●	●	●
PATRIOT	PV48G340C6K	8GB(4GB*2)	16-18-18-36	1.35V	●	●	
PATRIOT	PV416G340C6K	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
BTM	J4AGUH1G8UJBC	16GB	17-18-18-36	1.35V	●	●	●
G.SKILL	F4-3466C16D-8GRK	8GB(4GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3466C16D-8GTZ	8GB(4GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3466C16D-8GVK	8GB(4GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3466C16Q-16GRK	16GB(4GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16D-16GVR	16GB(8GB*2)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16D-16GVK	16GB(8GB*2)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16D-16GTZ	16GB(8GB*2)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16D-16GTZKW	16GB(8GB*2)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16D-16GTZSW	16GB(8GB*2)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16D-16GTZSK	16GB(8GB*2)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C18D-16GSXW	16GB(8GB*2)	16-18-18-38	1.35V	●	●	
G.SKILL	F4-3466C16Q-16GVK	16GB(4GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16Q-32GVR	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16Q-32GVK	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16Q-32GTZ	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16Q-32GTZSW	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16Q-64GTZ	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16Q-64GTZSW	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3466C16Q-64GTZR	64GB(16GB*4)	16-18-18-38	1.35V	●	●	●
CORSAIR	CMD16GX4M2B3466C16 ver4.31	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMK16GX4M2B3466C16 ver4.31	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMK16GX4M2B3466C16R ver4.31	16GB(8GB*2)	16-18-18-36R	1.35V	●	●	
CORSAIR	CMR16GX4M2C3466C16 ver4.31	16GB(8GB*2)	16-18-18-36	1.35V	●	●	

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

- 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.

For the best results, please ensure all memory modules are of the same version or have the same date code (D/C) from the same vendor. Check with the memory vendor to get the correct memory modules.

-The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.

-The stability and compatibility of memory modules with XMP profiles that operate beyond the JEDEC memory standard are not guaranteed. The stability and compatibility of these memory modules depend on the CPU's capabilities and other installed devices.

TUF Z390M-PRO GAMING

DDR4 3466 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
KLEVV	KD48GU880-34A170X	16GB(8GB*2)	17-19-19-39	1.35V	●	●	●

- 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.

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For the best results, please ensure all memory modules are of the same version or have the same date code (D/C) from the same vendor. Check with the memory vendor to get the correct memory modules.

-The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.

-The stability and compatibility of memory modules with XMP profiles that operate beyond the JEDEC memory standard are not guaranteed. The stability and compatibility of these memory modules depend on the CPU's capabilities and other installed devices.

TUF Z390M-PRO GAMING

DDR4 3600 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
G.SKILL	F4-3600C17D-8GRK	8GB(4GB*2)	17-18-18-38	1.35V	●	●	
G.SKILL	F4-3600C17D-8GTZ	8GB(4GB*2)	17-18-18-38	1.35V	●	●	
G.SKILL	F4-3600C17D-8GVK	8GB(4GB*2)	17-18-18-38	1.35V	●	●	
G.SKILL	F4-3600C17D-16GVK	16GB(8GB*2)	17-18-18-38	1.35V	●	●	
G.SKILL	F4-3600C17D-16GTZ	16GB(8GB*2)	17-18-18-38	1.35V	●	●	
G.SKILL	F4-3600C17D-16GSXW	16GB(8GB*2)	17-18-18-38	1.35V	●	●	
G.SKILL	F4-3600C17D-16GTRG	16GB(8GB*2)	17-18-18-38	1.35V	●	●	
G.SKILL	F4-3600C17D-16GTRS	16GB(8GB*2)	17-18-18-38	1.35V	●	●	
G.SKILL	F4-3600C16D-16GVK	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3600C16D-16GTZ	16GB(8GB*2)	16-16-16-36	1.35V	●	●	
G.SKILL	F4-3600C15D-16GTZ	16GB(8GB*2)	15-15-15-35	1.35V	●	●	
G.SKILL	F4-3600C19D-16GSXW	16GB(8GB*2)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3600C19D-16GSXK	16GB(8GB*2)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3600C19D-16GSXF	16GB(8GB*2)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3600C19D-16GSXWB	16GB(8GB*2)	19-20-20-40	1.35V	●	●	
G.SKILL	F4-3600C19D-16GSXKB	16GB(8GB*2)	19-20-20-40	1.35V	●	●	
G.SKILL	F4-3600C19D-16GTRG	16GB(8GB*2)	19-20-20-40	1.35V	●	●	
G.SKILL	F4-3600C19D-16GTRS	16GB(8GB*2)	19-20-20-40	1.35V	●	●	
G.SKILL	F4-3600C17Q-16GVK	16GB(4GB*4)	17-18-18-38	1.35V	●	●	●
G.SKILL	F4-3600C17Q-16GRK	16GB(4GB*4)	17-18-18-38	1.35V	●	●	●
G.SKILL	F4-3600C17Q-16GTZ	16GB(4GB*4)	17-18-18-38	1.35V	●	●	●
G.SKILL	F4-3600C17Q-32GVK	32GB(8GB*4)	17-18-18-38	1.35V	●	●	●
G.SKILL	F4-3600C17Q-32GTZ	32GB(8GB*4)	17-18-18-38	1.35V	●	●	●
G.SKILL	F4-3600C17Q-32GTZA	32GB(8GB*4)	17-17-17-37	1.35V	●	●	●
G.SKILL	F4-3600C16Q-32GTZB	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3600C16Q-32GTZSWB	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3600C16Q-32GTZBKW	32GB(8GB*4)	16-18-18-38	1.35V	●	●	●
G.SKILL	F4-3600C17Q-32GTZR	32GB(8GB*4)	17-18-18-38	1.35V	●	●	●
G.SKILL	F4-3600C19Q-32GSXW	32GB(8GB*4)	19-20-20-39	1.35V	●	●	●
G.SKILL	F4-3600C17D-32GSXW	32GB(16GB*2)	17-19-19-39	1.35V	●	●	
G.SKILL	F4-3600C17Q-64GTZ	64GB(16GB*4)	17-19-19-39	1.35V	●	●	●
G.SKILL	F4-3600C17Q-64GTZSWB	64GB(16GB*4)	17-19-19-39	1.35V	●	●	●
G.SKILL	F4-3600C17Q-64GTZKWB	64GB(16GB*4)	17-19-19-39	1.35V	●	●	●
G.SKILL	F4-3600C17Q-64GTZR	64GB(16GB*4)	17-19-19-39	1.35V	●	●	●
G.SKILL	F4-3600C19D-32GSXW	32GB(16GB*2)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3600C19D-32GSXK	32GB(16GB*2)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3600C19D-32GSXF	32GB(16GB*2)	19-19-19-39	1.35V	●	●	
G.SKILL	F4-3600C19Q-64GSXW	64GB(16GB*4)	19-19-19-39	1.35V	●	●	●
G.SKILL	F4-3600C19Q-64GSXK	64GB(16GB*4)	19-19-19-39	1.35V	●	●	●

G.SKILL	F4-3600C19Q-64GSXF	64GB(16GB*4)	19-19-19-39	1.35V	●	●	●
G.SKILL	F4-3600C19D-32GSXWB	32GB(16GB*2)	19-20-20-39	1.35V	●	●	●
G.SKILL	F4-3600C19D-32GSXKB	32GB(16GB*2)	19-20-20-39	1.35V	●	●	
G.SKILL	F4-3600C19D-32GTRG	32GB(16GB*2)	19-20-20-39	1.35V	●	●	
G.SKILL	F4-3600C19D-32GTRS	32GB(16GB*2)	19-20-20-39	1.35V	●	●	
G.SKILL	F4-3600C19Q-64GSXWB	64GB(16GB*4)	19-20-20-39	1.35V	●	●	●
G.SKILL	F4-3600C19Q-64GSXKB	64GB(16GB*4)	19-20-20-39	1.35V	●	●	●
G.SKILL	F4-3600C19Q-64GTRG	64GB(16GB*4)	19-20-20-39	1.35V	●	●	●
G.SKILL	F4-3600C19Q-64GTRS	64GB(16GB*4)	19-20-20-39	1.35V	●	●	●
CORSAIR	CMD8GX4M2B3600C18 ver4.24	8GB(4GB*2)	18-19-19-39	1.35V	●	●	
CORSAIR	CMK8GX4M2B3600C18 ver4.24	8GB(4GB*2)	18-19-19-39	1.35V	●	●	
CORSAIR	CMK16GX4M2B3600C16R ver4.31	16GB(8GB*2)	16-18-18-36R	1.35V	●	●	
CORSAIR	CMD16GX4M2B3600C18 ver4.31	16GB(8GB*2)	18-19-19-39	1.35V	●	●	
CORSAIR	CMK16GX4M2B3600C18 ver4.31	16GB(8GB*2)	18-19-19-39	1.35V	●	●	
CORSAIR	CMK16GX4M2B3600C18R ver4.31	16GB(8GB*2)	18-19-19-39R	1.35V	●	●	
CORSAIR	CMR16GX4M2C3600C18 ver4.31	16GB(8GB*2)	18-19-19-39R	1.35V	●	●	
CORSAIR	CMW16GX4M2K3600C16 ver4.31	16GB(8GB*2)	16-18-18-36	1.35V	●	●	
CORSAIR	CMK16GX4M4B3600C18 ver4.24	16GB(4GB*4)	18-19-19-39	1.35V	●	●	●
CORSAIR	CMD32GX4M4B3600C16 ver4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
CORSAIR	CMK32GX4M4B3600C16R ver4.31	32GB(8GB*4)	16-18-18-36R	1.35V	●	●	●
CORSAIR	CMD32GX4M4B3600C18 ver4.31	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
CORSAIR	CMK32GX4M4B3600C18 ver4.31	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
CORSAIR	CMK32GX4M4B3600C18R ver4.31	32GB(8GB*4)	18-19-19-39R	1.35V	●	●	●
CORSAIR	CMR32GX4M4C3600C18 ver4.31	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
CORSAIR	CMT32GX4M4K3600C16 ver4.31	32GB(8GB*4)	16-18-18-36	1.35V	●	●	●
APACER	AHU08GGB36CJU5H(EK.16GA4.GGBK2)	16GB(8GB*2)	18-18-18-42	1.35V	●	●	
APACER	AHU08GGB36CEU5H(EK.16GA4.GFBK2)	8GB	17-19-19-39	1.35V	●	●	●
ZADAK	ZD4-SHD3600C17-08GAS	8GB	17-19-19-39	1.35V	●	●	●
Hyper X	HX436C17PB3K4/32	32GB(8GB*4)	17-18-18-38	1.35V	●	●	●
Hyper X	HX436C17PB3K2/32	32GB(16GB*2)	17-19-19-39	1.35V	●	●	
Hyper X	HX436C17PB3K2/32	32GB(16GB*2)	17-19-19-39	1.35V	●	●	
Hyper X	HX436C17PPB3AK4/32	32GB(8GB*4)	17-18-18-39	1.35V	●	●	●
Hyper X	HX436C17PB3AK4/32	32GB(8GB*4)	17-18-18-39	1.35V	●	●	●
Hyper X	HX436C17PB3K4/64	64GB(16GB*4)	17-19-19-39	1.35V	●	●	●
Hyper X	HX436C17PB3K4/64	64GB(16GB*4)	17-19-19-39	1.35V	●	●	●
ADATA	AX4U360038G17-BRZ	8GB	17-18-18-38	1.35V	●	●	●
TEAMGROUP	TFOD48G3600C18EBK	16GB(8GB*2)	18-20-20-44	1.35V	●	●	
TEAMGROUP	TF1D416G3600HC18EDC01	16GB(8GB*2)	18-20-20-44	1.35V	●	●	
TEAMGROUP	TF2D416G3600HC18EDC01	16GB(8GB*2)	18-20-20-44	1.35V	●	●	
TEAMGROUP	TF5D416G3600HC18EDC01	16GB(8GB*2)	18-20-20-44	1.35V	●	●	
TEAMGROUP	TF6D416G3600HC18EDC01	16GB(8GB*2)	18-20-20-44	1.35V	●	●	
PATRIOT	PV48G360C7K	8GB(4GB*2)	17-18-18-36	1.35V	●	●	
G.SKILL	F4-3600-C17Q-16GVK	4*4GB	17-18-18-38	1.35	●	●	
GALAXY	HOF4CALCS3600K17LD162C	2*8GB	17-18-18-38	1.35	●	●	●
CORSAIR	CMK16GX4M2B3600C18(Ver4.31)	2*8GB	18-19-19-39	1.35	●	●	●
CORSAIR	CMD8GX4M2B3600C18 (Ver4.24)	2*4GB	18-19-19-39	1.35	●	●	
GALAXY	HOF4CXL1BSR3600K17LD162C	2*8GB	17-18-18-38	1.35	●	●	
G.SKILL	F4-3600C19D-16GSXK	2*8GB	19-19-19-39	1.35	●	●	●
G.SKILL	F4-3600C18D-16GTZR	2*8GB	18-22-22-42	1.35	●	●	
V-COLOR	TL48G36S8BNRGB18	8GB	18-19-19-39	1.35	●	●	●
CRUCIAL	BLS8G4D36BESBK.8FE	8GB	16-18-18-38	1.35	●	●	●

ADATA	AX4U360038G17-BR80	8GB	17-18-18-38	1.35	●	●	●
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- **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.

For the best results, please ensure all memory modules are of the same version or have the same date code (D/C) from the same vendor. Check with the memory vendor to get the correct memory modules.

-The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module.

Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.

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TUF Z390M-PRO GAMING

DDR4 3733 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
G.SKILL	F4-3733C17D-8GRK	8GB(4GB*2)	17-19-19-39	1.35V	●	●	
G.SKILL	F4-3733C17D-8GTZ	8GB(4GB*2)	17-19-19-39	1.35V	●	●	
G.SKILL	F4-3733C17D-8GVK	8GB(4GB*2)	17-19-19-39	1.35V	●	●	
G.SKILL	F4-3733C17D-16GTZ	16GB(8GB*2)	17-19-19-39	1.35V	●	●	
G.SKILL	F4-3733C17Q-16GRK	16GB(4GB*4)	17-19-19-39	1.35V	●	●	●
G.SKILL	F4-3733C17Q-16GTZ	16GB(4GB*4)	17-19-19-39	1.35V	●	●	●
G.SKILL	F4-3733C17Q-16GVK	16GB(4GB*4)	17-19-19-39	1.35V	●	●	●
G.SKILL	F4-3733C17D-16GTZ	16GB(8GB*2)	17-19-19-39	1.35V	●	●	
G.SKILL	F4-3733C17D-16GTZA	16GB(8GB*2)	17-17-17-37	1.35V	●	●	
G.SKILL	F4-3733C17Q-32GTZ	32GB(8GB*4)	17-17-17-37	1.35V	●	●	●
G.SKILL	F4-3733C17Q-32GTZSW	32GB(8GB*4)	17-17-17-37	1.35V	●	●	●
G.SKILL	F4-3733C17Q-32GTZKW	32GB(8GB*4)	17-17-17-37	1.35V	●	●	●
G.SKILL	F4-3733C17Q-32GTZR	32GB(8GB*4)	17-17-17-37	1.35V	●	●	●
CORSAIR	CMD8GX4M2B3733C17 ver4.24	8GB(4GB*2)	17-19-19-39	1.35V	●	●	
CORSAIR	CMK8GX4M2B3733C17 ver4.24	8GB(4GB*2)	17-19-19-39	1.35V	●	●	
CORSAIR	CMD16GX4M2B3733C17 ver4.31	16GB(8GB*2)	17-19-19-39	1.35V	●	●	
CORSAIR	CMK16GX4M2B3733C17R ver4.31	16GB(8GB*2)	17-19-19-39R	1.35V	●	●	
CORSAIR	CMK16GX4M4B3733C17 ver4.24	16GB(4GB*4)	17-19-19-39	1.35V	●	●	●
CORSAIR	CMD32GX4M4B3733C17 ver4.31	32GB(8GB*4)	17-19-19-39	1.35V	●	●	●
CORSAIR	CMK32GX4M4B3733C17R ver4.31	32GB(8GB*4)	17-19-19-39R	1.35V	●	●	●
APACER	AHU08GGB37CEU5H(EK.16GA6.GFBK2)	16GB(8GB*2)	17-19-19-39	1.35V	●	●	
SUPERTALENT	F3733UB8G	8GB	17-19-19-39	1.35V	●	●	●
PATRIOT	PV416G373C7K	16GB(8GB*2)	17-19-19-39	1.35V	●	●	
CORSAIR	CMD8GX4M2B3733C17 (Ver4.24)	2*4GB	17-19-19-39	1.35	●	●	

- **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.

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For the best results, please ensure all memory modules are of the same version or have the same date code (D/C) from the same vendor. Check with the memory vendor to get the correct memory modules.

-The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.

-The stability and compatibility of memory modules with XMP profiles that operate beyond the JEDEC memory standard are not guaranteed. The stability and compatibility of these memory modules depend on the CPU's capabilities and other installed devices.

TUF Z390M-PRO GAMING

DDR4 3866 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
G.SKILL	F4-3866C19D-8GTZ	8GB(4GB*2)	18-22-22-40	1.35V	●	●	
G.SKILL	F4-3866C19Q-16GTZ	16GB(4GB*4)	18-22-22-40	1.35V	●	●	●
G.SKILL	F4-3866C18D-32GTZR	16GB(8GB*2)	18-19-19-39	1.35V	●	●	
G.SKILL	F4-3866C18Q-32GTZ	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
G.SKILL	F4-3866C18Q-32GTZSW	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
G.SKILL	F4-3866C18Q-32GTZKW	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
G.SKILL	F4-3866C18Q-32GTZR	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
CORSAIR	CMK8GX4M2B3866C18 ver4.24	8GB(4GB*2)	18-22-22-40	1.35V	●	●	
CORSAIR	CMD8GX4M2B3866C18 ver4.24	8GB(4GB*2)	18-22-22-40	1.35V	●	●	
CORSAIR	CMD16GX4M2B3866C18 ver4.31	16GB(8GB*2)	18-22-22-40	1.35V	●	●	
CORSAIR	CMK16GX4M2B3866C18 ver4.31	16GB(8GB*2)	18-22-22-40	1.35V	●	●	
CORSAIR	CMK16GX4M4B3866C18 ver4.24	16GB(4GB*4)	18-22-22-40	1.35V	●	●	●
CORSAIR	CMK16GX4M4B3866C18R ver4.24	16GB(4GB*4)	18-22-22-40R	1.35V	●	●	●
CORSAIR	CMD32GX4M4B3866C18 ver4.31	32GB(8GB*4)	18-22-22-40	1.35V	●	●	●
CORSAIR	CMK32GX4M4B3866C18R ver4.31	32GB(8GB*4)	18-22-22-40R	1.35V	●	●	●
TEAM GROUP	TCD44G3866C18ABK	16GB(4GB*4)	18-20-20-39	1.35V	●	●	●
ADATA	AX4U386638G18-QRS	32GB(8GB*4)	18-19-19-39	1.35V			●
G.SKILL	F4-3866C18Q-16GTZ	4*4GB	18-22-22-42	1.35	●	●	

- 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.

For the best results, please ensure all memory modules are of the same version or have the same date code (D/C) from the same vendor. Check with the memory vendor to get the correct memory modules.

-The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.

-The stability and compatibility of memory modules with XMP profiles that operate beyond the JEDEC memory standard are not guaranteed. The stability and compatibility of these memory modules depend on the CPU's capabilities and other installed devices.

TUF Z390M-PRO GAMING

DDR4 4000 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
G.SKILL	F4-4000C17D-16GTZSW	16GB(8GB*2)	17-17-17-37	1.35V	●	●	
G.SKILL	F4-4000C17D-16GTZKK	16GB(8GB*2)	17-17-17-37	1.35V	●	●	
G.SKILL	F4-4000C17D-16GTZR	16GB(8GB*2)	17-17-17-37	1.35V	●	●	
G.SKILL	F4-4000C17D-16GTRG	16GB(8GB*2)	17-17-17-37	1.35V	●	●	
G.SKILL	F4-4000C17D-16GTRS	16GB(8GB*2)	17-17-17-37	1.35V	●	●	

G.SKILL	F4-4000C18Q-16GTZ	16GB(8GB*4)	18-22-22-40	1.35V	●	●	●
G.SKILL	F4-4000C18Q-32GTZ	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
G.SKILL	F4-4000C18Q-32GTZSW	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
G.SKILL	F4-4000C18Q-32GTZKW	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
G.SKILL	F4-4000C18Q-32GTZR	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
G.SKILL	F4-4000C18Q-32GTRG	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
G.SKILL	F4-4000C18Q-32GTRS	32GB(8GB*4)	18-19-19-39	1.35V	●	●	●
G.SKILL	F4-4000C17Q-32GTZSW	32GB(8GB*4)	17-17-17-37	1.35V	●	●	●
G.SKILL	F4-4000C17Q-32GTZKK	32GB(8GB*4)	17-17-17-37	1.35V	●	●	●
G.SKILL	F4-4000C17Q-32GTZR	32GB(8GB*4)	17-17-17-37	1.35V	●	●	●
G.SKILL	F4-4000C17Q-32GTRG	32GB(8GB*4)	17-17-17-37	1.35V	●	●	●
G.SKILL	F4-4000C17Q-32GTRS	32GB(8GB*4)	17-17-17-37	1.35V	●	●	●
CORSAIR	CMK16GX4M2E4000C19R ver4.31	16GB(8GB*2)	19-23-23-45R	1.35V	●	●	
CORSAIR	CMK16GX4M2B4000C19R ver4.31	16GB(8GB*2)	19-23-23-45R	1.35V	●	●	
CORSAIR	CMK32GX4M4B4000C19R ver4.31	32GB(8GB*4)	19-23-23-45R	1.35V	●	●	●
CORSAIR	CMR16GX4M2F4000C19 ver4.31	16GB(8GB*2)	19-23-23-45	1.35V	●	●	
CORSAIR	CMW16GX4M2K4000C19R ver4.31	16GB(8GB*2)	19-23-23-45R	1.35V	●	●	
CORSAIR	CMW32GX4M4K4000C19R ver4.31	32GB(8GB*4)	19-23-23-45R	1.35V	●	●	●
Hyper X	HX440C19PB3/8	8GB	19-21-21-42	1.35V	●	●	
Hyper X	HX440C19PB3AK2/16	16GB(8GB*2)	19-21-21-42	1.35V	●	●	
Hyper X	HX440C19PB3K2/16	16GB(8GB*2)	19-21-21-42	1.35V	●	●	
ADATA	AX4U400038G18-QRS	32GB(8GB*4)	18-19-19-39	1.4V			●
G.SKILL	F4-4000C19D-8GTZ	2*4GB	19-21-21-41	1.35	●	●	
G.SKILL	F4-4000C19D-16GTZSW	2*8GB	19-21-21-41	1.35	●	●	
GALAXY	HOF4CRL1CST4000M19SF162C	2*8GB	19-25-25-45	1.4	●	●	

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- 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.

For the best results, please ensure all memory modules are of the same version or have the same date code (D/C) from the same vendor. Check with the memory vendor to get the correct memory modules.

-The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.

-The stability and compatibility of memory modules with XMP profiles that operate beyond the JEDEC memory standard are not guaranteed. The stability and compatibility of these memory modules depend on the CPU's capabilities and other installed devices.

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DDR4 4133 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
G.SKILL	F4-4133C19Q-32GTZR	32GB(8GB*4)	19-19-19-39	1.4V			●
G.SKILL	F4-4133C19Q-32GTRG	32GB(8GB*4)	19-19-19-39	1.4V			●
G.SKILL	F4-4133C19Q-32GTRS	32GB(8GB*4)	19-19-19-39	1.4V			●
G.SKILL	F4-4133C19Q-32GTZSWC	32GB(8GB*4)	19-19-19-39	1.4V			●
G.SKILL	F4-4133C19Q-32GTZKKC	32GB(8GB*4)	19-19-19-39	1.4V			●
G.SKILL	F4-4133C17Q-32GTZR	32GB(8GB*4)	17-17-17-37	1.4V			●
G.SKILL	F4-4133C17Q-32GTRG	32GB(8GB*4)	17-17-17-37	1.4V			●
G.SKILL	F4-4133C17Q-32GTRS	32GB(8GB*4)	17-17-17-37	1.4V			●

G.SKILL	F4-4133C17Q-32GTZSW	32GB(8GB*4)	17-17-17-37	1.4V			●
G.SKILL	F4-4133C17Q-32GTZKK	32GB(8GB*4)	17-17-17-37	1.4V			●
CORSAIR	CMK16GX4M2B4133C19R ver4.31	16GB(8GB*2)	19-25-25-45R	1.4V			●
CORSAIR	CMK32GX4M4E4133C19R ver4.31	32GB(8GB*4)	19-25-25-45R	1.4V			●
CORSAIR	CMK32GX4M4K4133C19R ver4.31	32GB(8GB*4)	19-25-25-45R	1.4V			●

- **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.

For the best results, please ensure all memory modules are of the same version or have the same date code (D/C) from the same vendor. Check with the memory vendor to get the correct memory modules.

-The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.

-The stability and compatibility of memory modules with XMP profiles that operate beyond the JEDEC memory standard are not guaranteed. The stability and compatibility of these memory modules depend on the CPU's capabilities and other installed devices.

TUF Z390M-PRO GAMING

DDR4 4266 Qualified Vendors List (QVL)							
Vendors	Part No.	Size	Timing	Voltage (V)	DIMM socket support (Optional)		
					1 DIMM	2 DIMM	4 DIMM
G.SKILL	F4-4266C19Q-32GTZSW	32GB(8GB*4)	19-19-19-39	1.4V			●
G.SKILL	F4-4266C19Q-32GTZKK	32GB(8GB*4)	19-19-19-39	1.4V			●
G.SKILL	F4-4266C19Q-32GTZR	32GB(8GB*4)	19-19-19-39	1.4V			●
G.SKILL	F4-4266C19Q-32GTRG	32GB(8GB*4)	19-19-19-39	1.4V			●
G.SKILL	F4-4266C19Q-32GTRS	32GB(8GB*4)	19-19-19-39	1.4V			●
G.SKILL	F4-4266C17Q-32GTZSW	32GB(8GB*4)	17-18-18-38	1.45V			●
G.SKILL	F4-4266C17Q-32GTZKK	32GB(8GB*4)	17-18-18-38	1.45V			●
G.SKILL	F4-4266C17Q-32GTZR	32GB(8GB*4)	17-18-18-38	1.45V			●
G.SKILL	F4-4266C17Q-32GTRG	32GB(8GB*4)	17-18-18-38	1.45V			●
G.SKILL	F4-4266C17Q-32GTRS	32GB(8GB*4)	17-18-18-38	1.45V			●
G.SKILL	F4-4200C19D-8GTZ	2*4GB	19-26-26-46	1.4	●	●	

- **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.

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