

**DDR4 2133 Qualified Vendors List (QVL)**

Vendors	Part No.	Size	Chip Brand
APACER	AS08GGB13CDTBGC	8GB	N/A
KINGSTON	HX421S13BK2/8	4GB	SK HYNIX
KINGSTON	HX421S13B/8	8GB	SK HYNIX
KINGSTON	KVR21S15S8/4	4GB	SK HYNIX
CORSAIR	CMSO4GX4M1A2133C15	4GB	SEC 504 BCPB
TEKISM	T4S2133B4G15-SAD	4GB	SEC 446 BCPB
KINGBANK	M471A1K43BB0-CPB	8GB	SEC 543
SAMSUNG	M471A1K43BB0-CPB	8GB	SEC 546
MUSHKIN	MES4S213FF4G18	4GB	SEC510 BCPB
HYNIX	HMA451S6AFR8N-TF NO AC	4GB	SK HYNIX
SAMSUNG	M471A5143EB0-CPB	4GB	SEC 531
SAMSUNG	M471A1K43BB0-CPB	8GB	SEC 610
HYNIX	HMA451S6AFR8N-TF	4GB	SK hynix
HYNIX	HMA41GS6AFR8N-TF	8GB	SK hynix
TEAM	TED44G2133C15-SBK	4GB	TEAM
TEAM	TED48G2133C15-SBK	8GB	TEAM
AVANT	AVJ641GU67J5213N1-SAEP	8GB	SEC 549
AVANT	AVJ6451U67J5213N0-SAEP	4GB	SEC 549
TEKISM	T4S2133B4G15-HY	8GB	SK HYNIX

**DDR4 2400 Qualified Vendors List (QVL)**

Vendors	Part No.	Size	Chip Brand
G.SKILL	F4-2400C16D-16GRS	8GB	N/A
SAMSUNG	M471A5644EB0-CRC	2GB	SEC 631
SAMSUNG	M471A5244BB0-CRC	4GB	SEC 625
SAMSUNG	M471A5244CB0-CRC	4GB	SEC 631
SAMSUNG	M471A1K43BB1-CRC	8GB	SEC 625
SAMSUNG	M471A1K43CB1-CRC	8GB	SEC 637
HYNIX	HMA425S6AFR6N-UH	2GB	N/A
HYNIX	HMA851S6AFR6N-UH	4GB	N/A
HYNIX	HMA81GS6AFR8N-UH	8GB	SK hynix
MICRON	MTA8ATF1G64HZ-2G3B1	8GB	MICRON
MICRON	MTA4ATF51264HZ-2G3B1	4GB	MICRON
TEAM	TED44G2400C16-SBK	4GB	TEAM
TEAM	TED48G2400C16-SBK	8GB	TEAM
TRANSCEND	TS256MSH64V4X	2GB	SEC725
HYNIX	HMA425S6BJR6N	2GB	SK HYNIX
APACER	A305G.D330B	2GB	SEC707

## DDR4 2400+ Qualified Vendors List (QVL)

Vendors	Part No.	Size	Chip Brand
G.SKILL	F4-2800C18D-16GRS	8GB	
G.SKILL	F4-2666C18D-8GRS	4GB	
G.SKILL	F4-3000C16D-16GRS	8GB	SEC 634
CRUCIAL	BLS4G4S26BFSD.8FBR2	4GB	N/A
CRUCIAL	BLS8G4S26BFSD.16FBR2	8GB	N/A

-PN40 Model support up to 8GB DDR4 memory.

-When installing total memory of 4GB capacity or more, Windows 32-bit operation system may only recognize less than 3GB. Hence, a total installed memory of less than 3GB is recommended.

-It is recommended to install the memory modules from the slots for better overclocking capability.

-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.

-Memory module with memory frequency higher than 2133 MHz and its corresponding timing or the loaded XMP Profile is not the JEDEC memory standard. The stability and compatibility of these memory modules depend on the CPU's capabilities and other installed devices.

-Always install DIMMs with the same CAS latency. For optimal compatibility, we recommend that you install memory modules of the same version or date code (D/C) from the same vendor. Check with the retailer to get the correct memory modules.