



DDR4 nECC/ECC SODIMM

Validation Results

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DDR4 nECC/ECC SODIMM Validation Results

Listed below are validation results from a small sample of DDR4 nECC/ECC SODIMM tested on Intel client reference platforms. We are providing this information as a guide to memory compatibility with Intel reference platforms and in-accordance to Intel platform memory POR (Plan of Record). This testing is not intended to replace the normal OEM component qualification process. For test results on specific Intel motherboards refer to Intel Client Customer Enabling support. For test results on OEM production motherboards, please refer to the OEM's list of qualified memory suppliers.



DDR4 3200 nECC SODIMM, 1/2DIMM/Ch, 2 Channels, Tested at 1.2V Vdd

DIMM Supplier	DIMM Part Number	DIMM Size	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM Date Code	Die Revision
ADATA	AO1P32NCST2-BZ6SHD	16 GB	E1	SK Hynix	H5AN8G8NDJR-XNC	8 Gb	X8	1940	D
ADATA	AO1P32NC8T1-BZ4SHD	8 GB	A1	SK Hynix	H5AN8G8NDJR-XNC	8 Gb	X8	1940	D
ADATA	AO1P32NC4U1-BZMSHD	4 GB	C0	SK Hynix	H5AN8G6NDJR-XNC	8 Gb	X16	2016	D
Crucial	CT32G4SFD832A.16FB2	32 GB	E1	Micron	MT40A2G8VA-062E:B	16 Gb	x8	1916	B
Crucial	CT32G4SFD832A.16FB4	32 GB	E1	Micron	MT40A2G8VA-062E:B	16 Gb	x8	2020	B
Crucial	CT32G4SFD832A.16FE1	32 GB	E1	Micron	MT40A2G8JC-062E:E	16 Gb	x8	1936	E
Crucial	CT16G4SFD832A.16FE1	16 GB	E1	Micron	MT40A1G8SA-062E:E	8 Gb	x8	1801	E
Crucial	CT16G4SFD832A.16FJ1	16 GB	E1	Micron	MT40A1G8SA-062E:J	8 Gb	x8	1828	J
Crucial	CT16G4SFS832A.8FE1	16 GB	A2	Micron	MT40A2G8JC-062E:E	16 Gb	x8	1936	E
Crucial	CT16G4SFRA32A.8FB2	16 GB	A2	Micron	MT40A2G8VA-062E:B	16 Gb	x8	2020	B
Crucial	CT8G4SFS832A.8FE1	8 GB	A2	Micron	MT40A1G8SA-062E:E	8 Gb	x8	1801	E
Crucial	CT8G4SFS832A.8FJ1	8 GB	A2	Micron	MT40A1G8SA-062E:J	8 Gb	x8	1828	J
Crucial	CT8G4SFS632A.4FE1	8 GB	C0	Micron	MT40A1G16KD-062E:E	16 Gb	x16	1940	E
Crucial	CT8G4SFRA32A.4FB2	8 GB	C0	Micron	MT40A1G16RC-062E:B	16 Gb	x16	2024	B
Crucial	CT8G4SFS832A.M8FR	8 GB	A2	Micron	MT40A1G8SA-062E ES:R	8 Gb	X8	2052	R
Crucial	CT8G4SFRA32A.M8FR	8 GB	A2	Micron	MT40A1G8SA-062E ES:R	8 Gb	X8	2052	R

DIMM Supplier	DIMM Part Number	DIMM Size	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM Date Code	Die Revision
Crucial	MTA4ATF51264HZ-3G2E1	4 GB	C0	Micron	MT40A512M16LY-062E:E	8 Gb	x16	1801	E
Crucial	MTA4ATF51264HZ-3G2J1	4 GB	C0	Micron	MT40A512M16TB-062E:J	8 Gb	x16	1830	J
Kingston	KVR32S22D8/32	32 GB	E1	SK Hynix	H5ANAG8NCJR-XNC	16 Gb	x8	2044	C
Kingston	KVR32S22D8/32	32 GB	E1	Micron	MT40A2G8VA-062E:B	16 Gb	x8	1918	B
Kingston	KVR32S22D8/32	32 GB	E1	SK Hynix	H5ANAG8NAJR-XNC	16 Gb	x8	1942	A
Kingston	KVR32S22D8/16	16 GB	E1	SK Hynix	H5AN8G8NCJR-XNC	8 Gb	x8	2010	C
Kingston	KVR32S22S8/16	16 GB	A2	SK Hynix	H5ANAG8NCJR-XNC	16 Gb	x8	2044	C
Kingston	KVR32S22S8/16	16 GB	A2	Micron	MT40A2G8VA-062E:B	16 Gb	x8	1934	B
Kingston	KVR32S22D8/16	16 GB	E1	Micron	MT40A1G8SA-062E:E	8 Gb	X8	1906	E
Kingston	KVR32S22D8/16	16 GB	E1	Micron	MT40A1G8SA-062E:J	8 Gb	X8	1902	J
Kingston	KVR32S22D8/16	16 GB	E1	SK Hynix	H5AN8G8NDJR-XNC	8 Gb	x8	1930	D
Kingston	KVR32S22S8/16	16 GB	A2	SK Hynix	H5ANAG8NAJR-XNC	16 Gb	x8	1942	A
Kingston	KVR32S22S8/16	16 GB	A2	Micron	MT40A2G8JC-062E:E	16 Gb	x8	2004	E
Kingston	KVR32S22S8/16	16 GB	A2	Micron	MT40A2G8JC-062E:E	16 Gb	x8	2004	E
Kingston	KVR32S22S8/16	16 GB	A2	Micron	MT40A2G8VA-062E:B	16 Gb	x8	2108	B
Kingston	KVR32S22D8/16	16 GB	E1	Micron	MT40A1G8SA-062E:R	8 Gb	x8	2116	R
Kingston	KVR32S22S8/8	8 GB	A2	SK Hynix	H5AN8G8NCJR-XNC	8 Gb	x8	2010	C
Kingston	KVR32S22S8/8	8 GB	A2	Micron	MT40A1G8SA-062E:E	8 Gb	x8	1906	E
Kingston	KVR32S22S8/8	8 GB	A2	Micron	MT40A1G8SA-062E:J	8 Gb	x8	1902	J



DIMM Supplier	DIMM Part Number	DIMM Size	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM Date Code	Die Revision
Kingston	KVR32S22S8/8	8 GB	A2	Micron	MT40A1G8SA-062E:R	8 Gb	x8	2116	R
Kingston	KVR32S22S8/8	8 GB	A2	SK Hynix	H5AN8G8NDJR-XNC	8 Gb	x8	1930	D
Kingston	KVR32S22S6/8	8 GB	C0	SK Hynix	H5ANAG6NCJR-XNC	16 Gb	x16	2040	C
Kingston	KVR32S22S6/8	8 GB	C0	Micron	MT40A1G16KD-062E:E	16 Gb	x16	2004	E
Kingston	KVR32S22S6/8	8 GB	C0	Micron	MT40A1G16KD-062E:E	16 Gb	x16	2004	E
Kingston	KVR32S22S6/8	8 GB	C0	Micron	MT40A1G16RC-062E:B	16 Gb	x16	2108	B
Kingston	KVR32S22S6/4	4 GB	C0	Micron	MT40A512M16LY-062E:E	8 Gb	x16	1904	E
Kingston	KVR32S22S6/4	4 GB	C0	Micron	MT40A512M16TB-062E:J	8 Gb	x16	1902	J
Kingston	KVR32S22S6/4	4 GB	C0	SK Hynix	H5AN8G6NCJR-XNC	8 Gb	x16	2003	C
Kingston	KVR32S22S6/4	4 GB	C0	SK Hynix	H5AN8G6NDJR-XNC	8 Gb	x16	1930	D
Kingston	KVR32S22S6/4	4 GB	C0	SK Hynix	H5AN8G6NCJR-XNC	8 Gb	x16	2003	C
Kingston	KVR32S22S6/4	4 GB	C0	SK Hynix	H5AN8G8NDJR-XNC	8 Gb	x8	1930	D
Kingston	KVR32S22S6/4	4 GB	C0	Micron	MT40A512M16TB-062E:R	8 Gb	x16	2116	R
Micron	MTA16ATF4G64HZ-3G2B2	32 GB	E1	Micron	MT40A2G8VA-062E:B	16 Gb	x8	1916	B
Micron	MTA16ATF4G64HZ-3G2B4	32 GB	E1	Micron	MT40A2G8VA-062E:B	16 Gb	x8	2020	B
Micron	MTA16ATF4G64HZ-3G2E1	32 GB	E1	Micron	MT40A2G8JC-062E:E	16 Gb	x8	1936	E
Micron	MTA16ATF4G64HZ-3G2E2	32 GB	E1	Micron	MT40A2G8JC-062E:E	16 Gb	x8	2026	E
Micron	MTA8ATF2G64HZ-3G2B2	16 GB	A2	Micron	MT40A2G8VA-062E:B	16 Gb	x8	2020	B
Micron	MTA16ATF2G64HZ-3G2E1	16 GB	E1	Micron	MT40A1G8SA-062E:E	8 Gb	x8	1801	E

DIMM Supplier	DIMM Part Number	DIMM Size	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM Date Code	Die Revision
Micron	MTA16ATF2G64HZ-3G2J1	16 GB	E1	Micron	MT40A1G8SA-062E:J	8 Gb	x8	1828	J
Micron	MTA8ATF2G64HZ-3G2E1	16 GB	A2	Micron	MT40A2G8JC-062E:E	16 Gb	x8	1936	E
Micron	MTA8ATF2G64HZ-3G2E2	16 GB	A2	Micron	MT40A2G8JC-062E:E	16 Gb	x8	2026	E
Micron	MTA8ATF1G64HZ-3G2E1	8 GB	A2	Micron	MT40A1G8SA-062E:E	8 Gb	x8	1801	E
Micron	MTA8ATF1G64HZ-3G2J1	8 GB	A2	Micron	MT40A1G8SA-062E:J	8 Gb	x8	1828	J
Micron	MTA8ATF1G64HZ-3G2R1	8 GB	A2	Micron	MT40A1G8SA-062E ES:R	8 Gb	X8	2052	R
Micron	MTA4ATF1G64HZ-3G2E1	8 GB	C0	Micron	MT40A1G16KD-062E:E	16 Gb	x16	1940	E
Micron	MTA4ATF1G64HZ-3G2E2	8 GB	C0	Micron	MT40A1G16KD-062E:E	16 Gb	x16	2026	E
Micron	MTA4ATF1G64HZ-3G2B2	8 GB	C0	Micron	MT40A1G16RC-062E:B	16 Gb	X16	2024	B
Micron	MTA4ATF51264HZ-3G2E1	4 GB	C0	Micron	MT40A512M16LY-062E:E	8 Gb	x16	1801	E
Micron	MTA4ATF51264HZ-3G2J1	4 GB	C0	Micron	MT40A512M16TB-062E:J	8 Gb	x16	1830	J
Micron	MTA4ATF51264HZ-3G2R1	4 GB	C0	Micron	MT40A512M16TB-062E:R	8 Gb	x16	2052	R
Nanya	NT8GA64D88CX3S-JR	8 GB	A2	Nanya	NT5AD1024M8C3-JR	8 Gb	X8	2022	C
Nanya	NT8GA64D88FX3S-JR	8 GB	A2	Nanya	NT5AD1024M8F3-JR	8 Gb	X8	2039	F
Nanya	NT4GA64DH4CX4S-JR	4 GB	C0	Nanya	NT5AD512M16C4-JR	8 Gb	X16	2049	C
Ramaxel	RMSA3330ME88HCF-3200	32 GB	E1	Micron	MT40A2G8JC-062E:E	16 Gb	x8	2012	E
Ramaxel	RMSA3330MJ78HBF-3200	16 GB	E1	Micron	MT40A1G8SA-062E:J	8 Gb	x8	1922	J
Ramaxel	RMSA3320ME88HBF-3200	16 GB	A2	Micron	MT40A2G8JC-062E:E	16 Gb	x8	2002	E
Ramaxel	RMSA3320MJ78HAF-3200	8 GB	A2	Micron	MT40A1G8SA-062E:J	8 Gb	x8	1902	J



DIMM Supplier	DIMM Part Number	DIMM Size	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM Date Code	Die Revision
Ramaxel	RMSA3320MJ78HAF-3200	8 GB	A2	Micron	MT40A1G8SA-062E:J	8 Gb	x8	1927	J
Ramaxel	RMSA3310ME96HAF-3200	8 GB	C0	Micron	MT40A1G16KD-062E:E	16 Gb	x16	2002	E
Ramaxel	RMSA3310MJ86H9F-3200	4 GB	C0	Micron	MT40A512M16TB-062E:J	8 Gb	x16	1846	J
Ramaxel	RMSA3310MJ86H9F-3200	4 GB	C0	Micron	MT40A512M16TB-062E:J	4 Gb	x16	1928	J
Samsung	M471A4G43AB1-CWE	32 GB	E1	Samsung	K4AAG085WA-BCWE	16 Gb	x8	1852	A
Samsung	M471A2K43DB1-CWE	16 GB	E1	Samsung	K4A8G085WD-BCWE	8 Gb	x8	1845	D
Samsung	M471A2G43AB2-CWE	16 GB	A2	Samsung	K4AAG085WA-BCWE	16 Gb	X8	1943	A
Samsung	M471A2K43EB1-CWE	16 GB	E1	Samsung	K4A8G085WE-BCWE	8 Gb	X8	2024	E
Samsung	M471A1K43EB1-CWE	8 GB	A1	Samsung	K4A8G085WE-BCWE	8 Gb	X8	2022	E
Samsung	M471A1K43DB1-CWE	8 GB	A1	Samsung	K4A8G085WD-BCWE	8 Gb	x8	1845	D
Samsung	M471A1G44AB0-CWE	8 GB	C0	Samsung	K4AAG165WA-BCWE	16 Gb	X16	1928	A
Samsung	M471A5244CB0-CWE	4 GB	C0	Samsung	K4A8G165WC-BCWE	8 Gb	x16	1901	C
SK Hynix	HMAA4GS6AJR8N-XNN0	32 GB	E1	SK Hynix	H5ANAG8NAJR-XNC	16 Gb	x8	1910	A
SK Hynix	HMAA4GS6CJR8N-XNN0	32 GB	E1	SK Hynix	H5ANAG8NCJR-XNC	16 Gb	X8	1940	C
SK Hynix	HMAA2GS6AJR8N-XNN0	16 GB	A2	SK Hynix	H5ANAG8NAJR-XNC	16 Gb	x8	1910	A
SK Hynix	HMA82GS6CJR8N-XNN0	16 GB	E1	SK Hynix	H5AN8G8NCJR-XNC	8 Gb	x8	1833	C
SK Hynix	HMA82GS6DJR8N-XNN0	16 GB	E1	SK Hynix	H5AN8G8NDJR-XNC	8 Gb	x8	1843	D
SK Hynix	HMAA2GS6CJR8N-XNN0	16 GB	A2	SK Hynix	H5ANAG8NCJR-XNC	16 Gb	X8	1940	C
SK Hynix	HMA81GS6CJR8N-XNN0	8 GB	A2	SK Hynix	H5AN8G8NCJR-XNC	8 Gb	x8	1833	C

DIMM Supplier	DIMM Part Number	DIMM Size	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM Date Code	Die Revision
SK Hynix	HMA81GS6DJR8N-XNN0	8 GB	A2	SK Hynix	H5AN8G8NDJR-XNC	8 Gb	x8	1843	D
SK Hynix	HMAA1GS6CJR6N-XNN0	8 GB	C0	SK Hynix	H5ANAG6NCJR-XNC	16 Gb	X16	1944	C
SK Hynix	HMA851S6CJR6N-XNN0	4 GB	C0	SK Hynix	H5AN8G6NCJR-XNC	8 Gb	x16	1833	C
SK Hynix	HMA851S6DJR6N-XNN0	4 GB	C0	SK Hynix	H5AN8G6NDJR-XNC	8 Gb	x16	1843	D



DDR4 2933 nECC SODIMM, 1/2DIMM/Ch, 2 Channels, Tested at 1.2V Vdd

DIMM Supplier	DIMM Part Number	DIMM Size	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM Date Code	Die Revision
Kingston	KVR29S21D8/16	16 GB	E1	SK Hynix	H5AN8G8NCJR-WMC	8 Gb	x8	1911	C
Kingston	KVR29S21D8/16	16 GB	E1	Micron	MT40A1G8SA-062E:J	8 Gb	x8	1914	J
Kingston	KVR29S21D8/16	16 GB	E1	SK Hynix	H5AN8G8NDJR-XNC	8 Gb	x8	1930	D
Kingston	KVR29S21S8/8	8 GB	A2	SK Hynix	H5AN8G8NCJR-WMC	8 Gb	x8	1911	C
Kingston	KVR29S21S8/8	8 GB	A2	Micron	MT40A1G8SA-062E:E	8 Gb	x8	1906	E
Kingston	KVR29S21S8/8	8 GB	A2	Micron	MT40A1G8SA-062E:J	8 Gb	x8	1902	J
Kingston	KVR29S21S8/8	8 GB	A2	SK Hynix	H5AN8G8NDJR-XNC	8 Gb	x8	1930	D
Kingston	KVR29S21S6/4	4 GB	C0	SK Hynix	H5AN8G6NCJ-RWMC	8 Gb	x16	1912	C
Kingston	KVR29S21S6/4	4 GB	C0	Micron	MT40A512M16LY-062E:E	8 Gb	x16	1904	E
Kingston	KVR29S21S6/4	4 GB	C0	Micron	MT40A512M16TB-062E:J	8 Gb	x16	1902	J
Kingston	KVR29S21S6/4	4 GB	C0	SK Hynix	H5AN8G6NDJR-XNC	8 Gb	x16	1930	D
Samsung	M471A2G43AB2-CWE	16 GB	A2	Samsung	K4AAG085WA-BCWE	16 Gb	X8	1943	A

DDR4 2933 ECC SODIMM, 1DIMM/Ch, 2 Channels, Tested at 1.2V Vdd

DIMM Supplier	DIMM Part Number	DIMM Size	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM Date Code	Die Revision
Kingston	KSM29SED8/32HA	32GB	G1	SK Hynix	H5ANAG8NAJR-XNC	16 Gb	x8	2008	A
Kingston	KSM32SED8/32HA	32GB	G1	SK Hynix	H5ANAG8NAJR-XNC	16 Gb	x8	2026	A
Kingston	KSM32SED8/32ME	32GB	G1	Micron	MT40A2G8JC-062E:E	16 Gb	x8	2018	E
Kingston	KSM29SED8/16HD	16 GB	G1	SK Hynix	H5AN8G8NDJR-XNC	8 Gb	x8	1943	D
Kingston	KSM29SES8/16ME	16 GB	D1	Micron	MT40A2G8JC-062E:E	16 Gb	x8	2006	E
Kingston	KSM32SES8/16HA	16 GB	D1	SK Hynix	H5ANAG8NAJR-XNC	16 Gb	x8	2026	A
Kingston	KSM32SES8/16ME	16 GB	D1	Micron	MT40A2G8JC-062E:E	16 Gb	x8	2018	E
Kingston	KSM29SES8/8HD	8 GB	D1	SK Hynix	H5AN8G8NDJR-XNC	8 Gb	x8	1943	D
Micron	MTA18ASF4G72HZ-3G2B1	32GB	G1	Micron	MT40A2G8VA-062E:B	16 Gb	x8	1946	B
Samsung	M474A4G43AB1-CVF	32GB	G1	Samsung	K4AAG085WA-BCVF	16 Gb	X8	1946	A
Samsung	M474A4G43AB1-CWE	32GB	G1	Samsung	K4AAG085WA-BCWE	16 Gb	X8	2004	A
Samsung	M474A2K43DB1-CVF	16 GB	G1	Samsung	K4A8G085WD-BCVF	8 Gb	X8	1949	D
Samsung	M474A2K43DB1-CWE	16 GB	G1	Samsung	K4A8G085WD-BCWE	8 Gb	X8	2004	D
Samsung	M474A1K43DB1-CVF	8 GB	D1	Samsung	K4A8G085WD-BCVF	8 Gb	X8	1949	D
Samsung	M474A1K43DB1-CWE	8 GB	D1	Samsung	K4A8G085WD-BCWE	8 Gb	X8	2001	D
SK Hynix	HMAA4GS7AJR8N-XNT0	32GB	G1	SK Hynix	H5ANAG8NAJR-XNC	16 Gb	X8	2006	A
SK Hynix	HMA82GS7DJR8N-WMT0	16 GB	G1	SK Hynix	H5AN8G8NDJR-WMC	8 Gb	X8	2001	D



DIMM Supplier	DIMM Part Number	DIMM Size	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM Date Code	Die Revision
SK Hynix	HMA82GS7DJR8N-XNT0	16 GB	G1	SK Hynix	H5AN8G8NDJR-XNC	8 Gb	X8	2010	D
SK Hynix	HMA81GS7DJR8N-WMT0	8 GB	D1	SK Hynix	H5AN8G8NDJR-WMC	8 Gb	X8	2001	D

Approved Test Labs

The following test labs have the capability of performing ATE and system-level validation testing:

Advanced Validation Labs

Attn: Rhonda Duda
Advanced Validation Labs
17665B Newhope Street
Fountain Valley, CA 92708
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<mailto:rduda@validationlabs.com>