

Intel Platform Memory Operations

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DDR3L 1333/1600 SoDIMM Validation Results

Listed below are the results from a small sample of DDR3L 1333 and DDR3L 1600 SoDIMM modules tested on Intel reference mobile platforms based on Intel® 7 series chipset using 3rd Gen Intel® Core™ i7 processors (codename Ivy Bridge). DDR3L 1333 SoDIMMs tested at 2DIMMs/channel, 2 channels loading configuration. DDR3L 1600 SoDIMMs tested at 1DIMM/channel, 2 channels loading configuration. We are providing this information as a guide to module performance with Intel® reference platforms. This testing is not intended to replace the normal OEM component qualification process. For results on specific Intel® motherboards or OEM production motherboards, please refer to the OEM's list of qualified memory suppliers.

DDR3L-1333 (9-9-9) SoDIMM, 2DIMM/ch, 2 channels, tested at 1.35V Vdd

DIMM Supplier	DIMM Part Number	DIMM Size	Native Voltage	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM DateCode	Tested Speed
A-Data	SUDS1333C4G9	4GB	DDR3L	F	Hynix	H5TC2G83BFR-H9A	2Gb	x8	1142	1333 CL9
A-Data	SUDS1333C2G9	2GB	DDR3L	B	Hynix	H5TC2G83BFR-H9A	2Gb	x8	1142	1333 CL9
Crucial	CT51264BF1339.16FMD	4GB	DDR3L	F	Micron	MT41K256M8DA-125:M	2Gb	x8	1129	1333 CL9
Crucial	CT25664BF1339.8FMD	2GB	DDR3L	B	Micron	MT41K256M8DA-125:M	2Gb	x8	1129	1333 CL9
Crucial	CT12864BF1339.4FDD	1GB	DDR3L	C	Micron	MT41K128M16HA-15E:D	2Gb	x16	1120	1333 CL9
Crucial	CT25664BF1339.8FDD	2GB	DDR3L	A	Micron	MT41K128M16HA-15E:D	2Gb	x16	1120	1333 CL9
Elpida	EBJ81UG8EBU0-DJ-F	8GB	DDR3L	F	Elpida	EDJ4208EBBG-DJ-F	4Gb	x8	1206	1333 CL9

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DIMM Supplier	DIMM Part Number	DIMM Size	Native Voltage	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM DateCode	Tested Speed
Elpida	EBJ40UG8EBU0-DJ-F	4GB	DDR3L	B	Elpida	EDJ4208EBBG-DJ-F	4Gb	x8	1206	1333 CL9
Elpida	EBJ41UF8EDU0-DJ-F	4GB	DDR3L	F	Elpida	EDJ2108EDBG-DJ-F	2Gb	x8	1203	1333 CL9
Elpida	EBJ20UF8EDU0-DJ-F	2GB	DDR3L	B	Elpida	EDJ2108EDBG-DJ-F	2Gb	x8	1203	1333 CL9
Micron	MT16KTF1G64HZ-1G4E1	8GB	DDR3L	F	Micron	MT41K512M8RH-125:E	4Gb	x8	1226	1333 CL9
Micron	MT8KTF51264HZ-1G4E1	4GB	DDR3L	B	Micron	MT41K512M8RH-125:E	4Gb	x8	1226	1333 CL9
Micron	MT4KTF25664HZ-1G4E1	2GB	DDR3L	C	Micron	MT41K256M16HA-125:E	4Gb	x16	1226	1333 CL9
Micron	MT16KTF1G64HZ-1G4D1	8GB	DDR3L	F	Micron	MT41K512M8RA-15E:D	4Gb	x8	1213	1333 CL9
Micron	MT8KTF51264HZ-1G4D1	4GB	DDR3L	B	Micron	MT41K512M8RA-15E:D	4Gb	x8	1130	1333 CL9
Micron	MT16KTF51264HZ-1G4K1	4GB	DDR3L	F	Micron	MT41K256M8DA-125:K	2Gb	x8	1215	1333 CL9
Micron	MT8KTF25664HZ-1G4K1	2GB	DDR3L	B	Micron	MT41K256M8DA-125:K	2Gb	x8	1215	1333 CL9
Micron	MT4KTF12864HZ-1G4K1	1GB	DDR3L	C	Micron	MT41K128M16JT-125:K	2Gb	x16	1215	1333 CL9
Micron	MT16KTF51264HZ-1G4M1	4GB	DDR3L	F	Micron	MT41K256M8DA-125:M	2Gb	x8	1129	1333 CL9
Micron	MT8KTF25664HZ-1G4M1	2GB	DDR3L	B	Micron	MT41K256M8DA-125:M	2Gb	x8	1129	1333 CL9
Micron	MT8KSF25664HDZ-1G4D1	2GB	DDR3L	A	Micron	MT41K128M16HA-15E:D	2Gb	x16	1120	1333 CL9
Micron	MT4KSF12864HZ-1G4D1	1GB	DDR3L	C	Micron	MT41K128M16HA-15E:D	2Gb	x16	1120	1333 CL9

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DIMM Supplier	DIMM Part Number	DIMM Size	Native Voltage	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM DateCode	Tested Speed
Nanya	NT4GC64C8HG0NS-CG	4GB	DDR3L	F	Nanya	NT5CC256M8GN-CG	2Gb	x8	1142	1333 CL9
Nanya	NT2GC64C88G0NS-CG	2GB	DDR3L	B	Nanya	NT5CC256M8GN-CG	2Gb	x8	1140	1333 CL9
Samsung	M471B1G73BH0-YH9	8GB	DDR3L	F	Samsung	K4B4G0846B-HYH9	4Gb	x8	1128	1333 CL9
Samsung	M471B5273DH0-YH9	4GB	DDR3L	F	Samsung	K4B2G0846D-HYH9	2Gb	x8	1107	1333 CL9
Samsung	M471B5773DH0-YH9	2GB	DDR3L	B	Samsung	K4B2G0846D-HYH9	2Gb	x8	1107	1333 CL9
Samsung	M471B5673GB0-YH9	2GB	DDR3L	F	Samsung	K4B1G0846G-BYH9	1Gb	x8	1119	1333 CL9
Samsung	M471B2873GB0-YH9	1GB	DDR3L	B	Samsung	K4B1G0846G-BYH9	1Gb	x8	1104	1333 CL9
SK hynix	HMT41GS6MFR8A-H9	8GB	DDR3L	F	SK hynix	H5TC4G83MFR-H9A	4Gb	x8	1142	1333 CL9
SK hynix	HMT351S6EFR8A-H9	4GB	DDR3L	F	SK hynix	H5TC2G83EFR-H9A	2Gb	x8	1232	1333 CL9
SK hynix	HMT325S6EFR8A-H9	2GB	DDR3L	B	SK hynix	H5TC2G83EFR-H9A	2Gb	x8	1232	1333 CL9
SK hynix	HMT351S6CFR8A-H9	4GB	DDR3L	F	SK hynix	H5TC2G83CFR-H9A	2Gb	x8	1133	1333 CL9
SK hynix	HMT325S6CFR8A-H9	2GB	DDR3L	B	SK hynix	H5TC2G83CFR-H9A	2Gb	x8	1133	1333 CL9

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DDR3L-1600 (11-11-11) SoDIMM, 1DIMM/ch, 2 channels, tested at 1.35V Vdd

DIMM Supplier	DIMM Part Number	DIMM Size	Native Voltage	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM DateCode	Tested Speed
A-Data	SUDS1600C4G11	4GB	DDR3L	F	Micron	MT41K256M8DA-125:M	2Gb	x8	1129	1600 CL11
A-Data	SUDS1600C2G11	2GB	DDR3L	B	Micron	MT41K256M8DA-125:M	2Gb	x8	1129	1600 CL11
Crucial	CT51264BF160B.16FMD	4GB	DDR3L	F	Micron	MT41K256M8DA-125:M	2Gb	x8	1129	1600 CL11
Crucial	CT25664BF160B.8FMD	2GB	DDR3L	B	Micron	MT41K256M8DA-125:M	2Gb	x8	1130	1600 CL11
Elpida	EBJ81UG8EBU0-GN-F	8GB	DDR3L	F	Elpida	EDJ4208EBBG-GN-F	4Gb	x8	1206	1600 CL11
Elpida	EBJ40UG8ECU0-GN-F	4GB	DDR3L	B	Elpida	EDJ4208ECBG-GN-F	4Gb	x8	1240	1600 CL11
Elpida	EBJ40UG8EBU0-GN-F	4GB	DDR3L	B	Elpida	EDJ4208EBBG-GN-F	4Gb	x8	1206	1600 CL11
Elpida	EBJ41UF8EDU0-GN-F	4GB	DDR3L	F	Elpida	EDJ2108EDBG-GN-F	2Gb	x8	1208	1600 CL11
Elpida	EBJ20UF8EDU0-GN-F	2GB	DDR3L	B	Elpida	EDJ2108EDBG-GN-F	2Gb	x8	1208	1600 CL11
Micron	MT16MTF1G64HZ-1G6E1	8GB	DDR3L	F	Micron	MT41K512M8RH-125 M:E	4Gb	x8	1248	1600 CL11
Micron	MT16KTF1G64HZ-1G6E1	8GB	DDR3L	F	Micron	MT41K512M8RH-125:E	4Gb	x8	1226	1600 CL11
Micron	MT8MTF51264HZ-1G6E1	4GB	DDR3L	B	Micron	MT41K512M8RH-125 M:E	4Gb	x8	1248	1600 CL11
Micron	MT8MTF51264HSZ-1G6E1	4GB	DDR3L	G	Micron	MT41K512M8RH-125 M:E	4Gb	x8	1248	1600 CL11
Micron	MT8MTF51264HRZ-1G6E1	4GB	DDR3L	H	Micron	MT41K512M8RH-125 M:E	4Gb	x8	1248	1600 CL11

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DIMM Supplier	DIMM Part Number	DIMM Size	Native Voltage	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM DateCode	Tested Speed
Micron	MT8KTF51264HZ-1G6E1	4GB	DDR3L	B	Micron	MT41K512M8RH-125:E	4Gb	x8	1226	1600 CL11
Micron	MT4MTF25664HZ-1G6E1	2GB	DDR3L	C	Micron	MT41K512M8RH-125 M:E	4Gb	x16	1248	1600 CL11
Micron	MT4KTF25664HZ-1G6E1	2GB	DDR3L	C	Micron	MT41K256M16HA-125:E	4Gb	x16	1226	1600 CL11
Micron	MT16KTF51264HZ-1G6K1	4GB	DDR3L	F	Micron	MT41K256M8DA-125:K	2Gb	x8	1215	1600 CL11
Micron	MT8KTF25664HZ-1G6K1	2GB	DDR3L	B	Micron	MT41K256M8DA-125:K	2Gb	x8	1215	1600 CL11
Micron	MT4KTF12864HZ-1G6K1	1GB	DDR3L	C	Micron	MT41K128M16JT-125:K	2Gb	x16	1215	1600 CL11
Micron	MT16KTF51264HZ-1G6M1	4GB	DDR3L	F	Micron	MT41K256M8DA-125:M	2Gb	x8	1129	1600 CL11
Micron	MT8KTF25664HZ-1G6M1	2GB	DDR3L	B	Micron	MT41K256M8DA-125:M	2Gb	x8	1130	1600 CL11
Nanya	NT8GC64C8HB0NS-DI	8GB	DDR3L	F	Nanya	NT5CC512M8BN-DI	4Gb	x8	1208	1600 CL11
Nanya	NT4GC64C88B0NS-DI	4GB	DDR3L	B	Nanya	NT5CC512M8BN-DI	4Gb	x8	1202	1600 CL11
Nanya	NT4GC64C8HG0NS-DI	4GB	DDR3L	F	Nanya	NT5CC256M8GN-DI	2Gb	x8	1140	1600 CL11
Nanya	NT2GC64C88G0NS-DI	2GB	DDR3L	B	Nanya	NT5CC256M8GN-DI	2Gb	x8	1140	1600 CL11
Samsung	M471B1G73BH0-YK0	8GB	DDR3L	F	Samsung	K4B4G0846B-HYK0	4Gb	x8	1128	1600 CL11
Samsung	M471B1G73CB0-YK0	8GB	DDR3L	F	Samsung	K4B4G0846C-BYK0	4Gb	x8	1227	1600 CL11
Samsung	M471B5173CB0-YK0	4GB	DDR3L	B	Samsung	K4B4G0846C-BYK0	4Gb	x8	1227	1600 CL11

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DIMM Supplier	DIMM Part Number	DIMM Size	Native Voltage	Raw Card	DRAM Supplier	DRAM Part Number	DRAM Density	DRAM Width	DRAM DateCode	Tested Speed
Samsung	M471B5273DH0-YK0	4GB	DDR3L	F	Samsung	K4B2G0846D-HYK0	2Gb	x8	1145	1600 CL11
Samsung	M471B5773DH0-YK0	2GB	DDR3L	B	Samsung	K4B2G0846D-HYK0	2Gb	x8	1145	1600 CL11
Samsung	M471B5673GB0-YK0	2GB	DDR3L	F	Samsung	K4B1G0846G-BYK0	1Gb	x8	1119	1600 CL11
Samsung	M471B2873GB0-YK0	1GB	DDR3L	B	Samsung	K4B1G0846G-BYK0	1Gb	x8	1107	1600 CL11
SK hynix	HMT451S6AFR6A-PB	4GB	DDR3L	A	SK hynix	H5TC4G63AFR-PBA	4Gb	x16	1242	1600 CL11
SK hynix	HMT41GS6AFR8A-PB	8GB	DDR3L	F	SK hynix	H5TC4G83AFR-PBA	4Gb	x8	1242	1600 CL11
SK hynix	HMT451S6AFR8A-PB	4GB	DDR3L	B	SK hynix	H5TC4G83AFR-PBA	4Gb	x8	1242	1600 CL11
SK hynix	HMT41GS6MFR8A-PB	8GB	DDR3L	F	SK hynix	H5TC4G83MFR-PBA	4Gb	x8	1142	1600 CL11
SK hynix	HMT351S6EFR8A-PB	4GB	DDR3L	F	SK hynix	H5TC2G83EFR-PBA	2Gb	x8	1224	1600 CL11
SK hynix	HMT325S6EFR8A-PB	2GB	DDR3L	B	SK hynix	H5TC2G83EFR-PBA	2Gb	x8	1224	1600 CL11
SK hynix	HMT351S6CFR8A-PB	4GB	DDR3L	F	SK hynix	H5TC2G83CFR-PBA	2Gb	x8	1133	1600 CL11
SK hynix	HMT325S6CFR8A-PB	2GB	DDR3L	B	SK hynix	H5TC2G83CFR-PBA	2Gb	x8	1133	1600 CL11

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Approved test labs

The following test labs have the capability of performing DDR3/L SoDIMM system-level testing. For further information, please contact:

Advanced Validation Labs

Attn: Rhonda Duda, Program Manager
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USA Phone: 714-438-2787
rduda@validationlabs.com

