

Intel Platform Memory Operations

Disclaimer

INTEL DISCLAIMS ALL LIABILITY FOR THESE DEVICES, INCLUDING LIABILITY FOR INFRINGEMENT OF ANY PROPRIETARY RIGHTS RELATING TO THESE DEVICES OR THE IMPLEMENTATION OF INFORMATION IN THIS DOCUMENT. INTEL DOES NOT WARRANT OR REPRESENT THAT SUCH DEVICES OR IMPLEMENTATION WILL NOT INFRINGE SUCH RIGHTS. INTEL IS NOT OBLIGATED TO PROVIDE ANY SUPPORT, INSTALLATION, OR OTHER ASSISTANCE WITH REGARD TO THESE DEVICES.

THE INTEL PRODUCT REFERRED TO IN THIS DOCUMENT IS INTENDED FOR STANDARD COMMERCIAL USE ONLY. CUSTOMERS ARE SOLELY RESPONSIBLE FOR ASSESSING THE SUITABILITY OF THE PRODUCT AND/OR DEVICES FOR USE IN PARTICULAR APPLICATIONS. THE REFERENCED INTEL PRODUCT IS NOT INTENDED FOR USE IN CRITICAL CONTROL OR SAFETY SYSTEMS OR IN NUCLEAR FACILITY APPLICATIONS.

Information in this document is provided in connection with Intel products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by the sale of Intel products. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel products are not intended for use in medical, lifesaving, or life sustaining applications. Intel retains the right to make changes to its test specifications and memory list at any time, without notice.

The hardware vendor remains solely responsible for the design, sale and functionality of its product, including any liability arising from product infringement or product warranty. Only approved software drivers and accessories that are recommended for the revision number of the boards and system being operated should be used with Intel products. Please note that, as a result of warranty repairs or replacements, alternate software and firmware versions may require for proper operation of the equipment.

© 2016 Intel Corporation.

* Other brands and names are the property of their respective owners.

Intel Platform Memory Operations

DDR4 2133 Memory Down Validation Results

Listed below are the results from a small sample of DDR4 2133 DRAM tested on Intel reference mobile platforms based on 6th Gen Intel® Core™ i7 processors (codename Skylake). We are providing this information as a guide to component 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.

DRAM DDR4-2133 (Memory Down)

Supplier	Part Number	Packaged Density	Density Die	Package	Width	Die Revision	DRAM DateCode	Note
Micron	MT40A512M8HX-093E:A	4Gb	4Gb	SDP	x8	A	1422	2
Micron	MT40A512M8RH-083E:B	4Gb	4Gb	SDP	x8	B	1618	
Micron	MT40A256M16GE-083E:B	4Gb	4Gb	SDP	x16	B	1602	
Micron	MT40A256M16GE-075E:B	4Gb	4Gb	SDP	x16	B	1618	
Micron	MT40A1G8PM-083E:A	8Gb	8Gb	SDP	x8	A	1618	
Micron	MT40A1G8WE-083E:B	8Gb	8Gb	SDP	x8	B	1608	3
Micron	MT40A512M16HA-083E:A	8Gb	8Gb	SDP	x16	A	1618	

Intel Platform Memory Operations

Micron	MT40A512M16JY-083E:B	8Gb	8Gb	SDP	x16	B	1602	3
Micron	MT40A1G16HBA-083E:A	16Gb	8Gb	DDP	x16	A	1618	
SK hynix	H5AN4G8NAFR-TFC	4Gb	4Gb	SDP	x8	A	1618	1
SK hynix	H5AN8G8NMFR-TFC	8Gb	8Gb	SDP	x8	M	1618	1
SK hynix	H5AN8G6NAFR-TFC	8Gb	8Gb	SDP	x16	A	1622	
SK hynix	H5AN8G8NAFR-TFC	8Gb	8Gb	SDP	x8	A	1605	
SK hynix	H5AN4G6NAFR-UHC	4Gb	4Gb	SDP	x16	A	1618	
SK hynix	H5AN8G8NAFR-UHC	8Gb	8Gb	SDP	x8	A	1622	
SK hynix	H5AN8G6NAFR-UHC	8Gb	8Gb	SDP	x16	A	1622	
SK hynix	H5AN8G8NMFR-UHC	8Gb	8Gb	SDP	x8	M	1618	
Samsung	K4A4G085WB-BCPB	4Gb	4Gb	SDP	x8	D	1618	
Samsung	K4A4G085WE-BCRC	4Gb	4Gb	SDP	x8	E	1622	
Samsung	K4A4G165WE-BCRC	4Gb	4Gb	SDP	x16	E	1622	
Samsung	K4A4G165WE-BCPB	4Gb	4Gb	SDP	x16	E	1618	
Samsung	K4A4G085WD-BCPB	4Gb	4Gb	SDP	x8	D	1618	

Intel Platform Memory Operations

Samsung	K4A4G165WD-BCPB	4Gb	4Gb	SDP	x16	D	1618	
Samsung	K4A4G085WE-BCPB	4Gb	4Gb	SDP	x8	E	1618	
Samsung	K4A8G165WB-BCRC	8Gb	8Gb	SDP	x16	B	1628	
Samsung	K4A8G085WB-BCRC	8Gb	8Gb	SDP	x8	B	1622	
Samsung	K4A8G085WC-BCRC	8Gb	8Gb	SDP	x8	C	1619	
Samsung	K4A8G085WC-BCPB	8Gb	8Gb	SDP	x8	C	1619	
Samsung	K4A8G165WC-BCRC	8Gb	8Gb	SDP	x16	C	1616	
Samsung	K4A8G165WC-BCPB	8Gb	8Gb	SDP	x16	C	1616	
Samsung	K4A8G085WB-BCPB	8Gb	8Gb	SDP	x8	B	1618	
Samsung	K4A8G165WB-BCPB	8Gb	8Gb	SDP	x16	B	1618	
Samsung	K4AAG165WB-MCRC	16Gb	8Gb	DDP	x16	B	1601	

Note: 1. MRC revision 1.3.0 or later is required.

Note: 2. MRC revision 1.8.0.2 or later is required.

Note: 3. MRC revision 2.1.0 or later is required.

Created on Feb 3rd, 2017

Intel Platform Memory Operations

Approved test labs

The following test labs have the capability of performing DDR4 Non-ECC SoDIMM system-level testing. For further information, please contact:

Advanced Validation Labs

Attn: Rhonda Duda, Program Manager

17665B Newhope Street

Fountain Valley, CA 92708

USA Phone: 714-438-2787

rduda@validationlabs.com

