

# 1. Stability Test: Rev.021/0A1

## 1.1 DDR3 SO-DIMM Test:

### Procedure:

- (1) Install O.S.
- (2) Check Memory information & specification with CPU-Z.
- (3) Run 3DMark11 Professional Edition Ver.1.0.5 BenchMark - 3 times or 3DMark11 Professional Edition Ver.1.0.3 BenchMark - 3 times.
- (4) Run S3/S4/S5 - 3 times.

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
1	Transcend	Micron	8GB	PC3-12800 (DDR3-1600)	1ZD27-D9PBC	TS1GSK64V6H 1.5V [512Mx8b-x16/1024Mx64b,CL=11]	Pass
2	Apacer	Micron	8GB	PC3-12800 (DDR3L-1600)	2ED27-D9PCP	75.C93DL.G000C 1.35V/1.5V [512Mx8b-x16/1024Mx64b,CL=11]	Pass
3	Crucial	Micron	8GB	PC3-12800 (DDR3L-1600)	2RD27D9PCP	CT102464BF160B.16FDD (MT16KTF1G64HZ-1G6D1) 1.35/1.5V [512Mx8b-x16/1024Mx64b,CL=11-1 1-11-30]	Pass
4	Apacer	Hynix	4GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	78.B2GCJAF10C 1.5V [256Mx8b-x16/512Mx64b,CL=11]	Pass
5	Hynix	Hynix	4GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	HMT351S6BFR8C-PBNO 1.5V [256Mx8b-x16/512Mx64b,CL=11]	Pass
6	ADATA	ELPIDA	4GB	PC3-12800 (DDR3-1600)	J2108BCSE-GN-F	SU3S1600C4G11-B 1.5V [256Mx8b-x16/512Mx64b,CL=11]	Pass
7	ADATA	Micron	4GB	PC3-12800 (DDR3-1600)	2GKI2-D9PSH	AD3S1600C4G11-BMIK 1.5V [256Mx8b-x16/512Mx64b,CL=11]	Pass
8	INNODISK	Micron	4GB	PC3-12800 (DDR3L-1600)	1XM77-D9PFJ	M3SP-4GMJDL0C-M 1.35V/1.5V [256Mx8b-x16/512Mx64b,CL=9]	Pass
9	Apacer	Micron	4GB	PC3-12800 (DDR3L-1600)	2DM77-D9PFJ	75.B83DL.G000C 1.35V/1.5V [256Mx8b-x16/512Mx64b,CL=11]	Pass
10	Crucial	Micron	4GB	PC3-12800 (DDR3L-1600)	2RM77D9PFJ	CT51264BF160B.16FMR (MT16KTF51264HZ-1G6M1) 1.35V/1.35V [256Mx8b-x16/512Mx64b,CL=11-11- 11-30]	Pass
11	Hynix	Hynix	2GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	HMT325S6BFR8C-PBNO 1.5V [256Mx8b-x8/256Mx64b,CL=11]	Pass
12	ADATA	ELPIDA	2GB	PC3-12800 (DDR3-1600)	J2108BCSE-GN-F	EL74C1B08 10281590 1.5V [256Mx8b-x8/256Mx64b,CL=11-11-1 1]	Pass

<b>13</b>	Transcend	Transcend	2GB	PC3-12800 (DDR3-1600)	TK483PCW3-T1125	JJM11660000KSN--22G 1.5V [256Mx8b-x8/256Mx64b,CL=11]	<b>Pass</b>
<b>14</b>	INNODISK	Micron	2GB	PC3-12800 (DDR3L-1600)	1WM77-D9PFJ	M3SP-2GMJCL0C-M 1.35V/1.5V [256Mx8b-x8/256Mx64b,CL=9]	<b>Pass</b>
<b>15</b>	Hynix	Hynix	1GB	PC3-12800 (DDR3-1600)	H5TQ2G63BFR PBC	HMT312S6BFR6C-PBNO 1.5V [128Mx16b-x4/128Mx64b,CL=11]	<b>Pass</b>
<b>16</b>	Panram	NB	8GB	PC3-10600 (DDR3-1333)	K2BASESF	200D38G328 1.5V [512Mx8b-x16/1024Mx64b,CL=9]	<b>Pass</b>
<b>17</b>	Transcend	Micron	8GB	PC3-10600 (DDR3-1333)	1ZD27-D9PBC	TS1GSK64V3H 1.5V [512Mx8b-x16/1024Mx64b,CL=9]	<b>Pass</b>
<b>18</b>	INNODISK	Hynix	8GB	PC3-10600 (DDR3-1333)	H5TQ4G83MFR PBC	M3SP-8GHSDCN9-M 1.5V [512Mx8b-x16/1Gx64b,CL=9]	<b>Pass</b>



No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
19	Transcend	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TQ2G83AFR H9C	TS512MSK64V3N 1.5V [256Mx8b/512Mx64b, Timings(Max) =9-9-9-24]	Pass
20	DSL	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	D3SH56082XH15AA 1.5V	Pass
21	Crucial	Micron	4GB	PC3-10600 (DDR3-1333)	ICD77D9LGK	CT51264BC1339.16FR 1.5V [256Mx8b-x16/512Mx64b, CL=9]	Pass
22	Transcend	SEC	4GB	PC3-10600 (DDR3-1333)	K4B2G0846C	TS512MSK64V3N-I 1.5V [256Mx8b-*16/512Mx64b, CL=9]	Pass
23	Transcend	SEC	4GB	PC3-10600 (DDR3-1333)	K4B2G0846C	TS512MSK64V3N 1.5V [256Mx8b-*16/512Mx64b, CL=9]	Pass
24	Transcend	SEC	4GB	PC3-10600 (DDR3-1333)	K4B2G0846D	TS512MSK64V3N-I 1.5V [256Mx8b-*16/512Mx64b, CL=9]	Pass
25	Transcend	SEC	4GB	PC3-10600 (DDR3-1333)	K4B2G0846D	TS512MSK64V3N 1.5V [256Mx8b-*16/512Mx64b, CL=9]	Pass
26	INNODISK	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TC2G83EFR PBA	M3SW-4GHJDCN9-E 1.5V [256Mx8b-x16/512Mx64b, CL=9]	Pass
27	Apacer	ELPIDA	4GB	PC3-10600 (DDR3L-1333)	J2108ECSE-DJ-F	78.B2GCL4210C 1.35V [256Mx8b-x16/512Mx64b, CL=9]	Pass
28	Transcend	SEC	4GB	PC3-10600 (DDR3L-1333)	K4B2G0846D	TS512MSK64W3N 1.35V/1.5V [256Mx8b-x16/512Mx64b, CL=9]	Pass
29	ELPIDA	SILICON	2GB	PC3-10600 (DDR3-1333)	J1108BABG-DJ-E	SP002GBSTU133S02 1.5V [128Mx8b/256Mx64b, CL=9-9-9-24]	Pass
30	DSL	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	D3SH56081XH15AA 1.5V [256Mx8b-x8/256Mx64b, CL=9]	Pass
31	Transcend	ELPIDA	2GB	PC3-10600 (DDR3-1333)	J1108BFBG-DJ-F	TS256MSK64V3U 1.5V [128Mx8b-*16/256Mx64b, CL=9]	Pass
32	Crucial	Micron	2GB	PC3-10600 (DDR3-1333)	OMD12D9LGK	CT25664BC1339.8FD 1.5V [256Mx8b-x8/256Mx64b, CL=9]	Pass
33	Transcend	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	TS256MSK64V3N 1.5V [256Mx8b-*8/256Mx64b, CL=9]	Pass
34	Transcend	SEC	2GB	PC3-10600 (DDR3-1333)	K4B2G0846C	TS256MSK64V3N 1.5V [256Mx8b-*8/256Mx64b, CL=9]	Pass
35	Transcend	SEC	2GB	PC3-10600 (DDR3-1333)	K4B2G0846D	TS256MSK64V3N-I 1.5V [256Mx8b-*8/256Mx64b, CL=9]	Pass

<b>36</b>	Transcend	SEC	2GB	PC3-10600 (DDR3-1333)	K4B2G0846D	TS256MSK64V3N 1.5V [256Mx8b-*8/256Mx64b,CL=9]	<b>Pass</b>
<b>37</b>	INNODISK	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TC2G83EFR PBA	M3SW-2GHJCCN9-E 1.5V [256Mx8b-x8/256Mx64b,CL=9]	<b>Pass</b>
<b>38</b>	Apacer	ELPIDA	2GB	PC3-10600 (DDR3L-1333)	J2108ECSE-DJ-F	78.A2GCL4200C 1.35V [256Mx8b-x8/256Mx64b,CL=9]	<b>Pass</b>
<b>39</b>	Transcend	Hynix	2GB	PC3-10600 (DDR3L-1333)	H5TQ2G83BFR-H9C	TS256MSK64W3N 1.35V/1.5V [256Mx8b-x8/256Mx64b,CL=9]	<b>Pass</b>
<b>40</b>	INNODISK	Hynix	1GB	PC3-10600 (DDR3-1333)	H5TQ1G83DFR H9C	M3SN-1GHFCC09-D 1.5V [128Mx8b-*8/128Mx64b,CL=9]	<b>Pass</b>
<b>41</b>	DSL	Hynix	1GB	PC3-10600 (DDR3-1333)	H5TQ1G83BFR H9C	D3SH28081XH15AA 1.5V [128Mx8b-*8/128Mx64b,CL=9]	<b>Pass</b>
<b>42</b>	Apacer	ELPIDA	1GB	PC3-10600 (DDR3-1333)	J1108BFBG-DJ-F	78.02GC6.420 1.5V [128Mx8b-x8/128Mx64b,CL=9]	<b>Pass</b>
<b>43</b>	Crucial	Micron	1GB	PC3-10600 (DDR3-1333)	0NDI2-D9LGQ	CT12864BC1339.4FD 1.5V [128Mx16b-x4/128Mx64b,CL=9]	<b>Pass</b>
<b>44</b>	Transcend	SEC	1GB	PC3-10600 (DDR3-1333)	K4B1G0846G	TS128MSK64V3U 1.5V [128Mx8b-x8/128Mx64b,CL=9]	<b>Pass</b>
<b>45</b>	Apacer	Apacer	2GB	PC3-8500 (DDR3-1066)	AM5D5808MIJSBG 1.5V	AM5D5808MIJSBG 1.5V	<b>Pass</b>

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
46	Transcend	ELPIDA	2GB	PC3-8500 (DDR3-1066)	J1108BASE-AE-E	TS256MSK64V1U 1.5V±0.75 [128Mx8bits/256Mx64bits,CL=7]	Pass
47	Kingston	ELPIDA	2GB	PC3-8500 (DDR3-1066)	J1108BABG-DJ-E	KVR1066D3S7/2G 1.5V [128Mx8bits/256Mx64bits,CL=7-7-7-20]	Pass
48	ADATA	ADATA	2GB	PC3-8500 (DDR3-1066)	AD30908C8D-18GG	AD31066002GOS (AD7YG1B16723) 1.5V [128Mx8bits/256Mx64bits,CL=7-7-7-20]	Pass
49	SILICON	S-POWER	2GB	PC3-8500 (DDR3-1066)	IOYT3NO	SP002GBSTU106S02 1.5V [128Mx8b/256Mx64b,CL=7-7-7-20]	Pass
50	Transcend	SEC	1GB	PC3-8500 (DDR3-1066)	K4B1G0846D	TS128MSK64V1U 1.5V±0.75 [128Mx8bits/128Mx64bits,CL=6,7,8]	Pass
51	Kingston	ELPIDA	1GB	PC3-8500 (DDR3-1066)	J1108BABG-DJ-E	KVR1066D3S7/1G 1.5V [128Mx8bits/128Mx64bits,CL=7-7-7-20]	Pass

## 1.2 DDR3 SO-DIMM Test Procedures:

### Procedure:

- (1) Install O.S.
- (2) Check Memory information & specification with CPU-Z.
- (3) Run 3DMark11 Professional Edition Ver.1.0.5 BenchMark - 3 times.
- (4) Run S3/S4/S5 - 3 times.

No.	DDR3 Module	Test Environment	3DMark Score	Result
1	Apacer (75.C93DL.G000C 1.35V/1.5V) [512Mx8b-x16/1024Mx64b,CL=11] / Micron (2ED27-D9PCP) / PC3-12800 (DDR3L-1600) / 8GB *2	M/B: HM960-QM87B50-4700EQ Rev.2 (021) [QM87/C2] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD7500BPVT-22HXZT1 SATA2 750GB/5400RPM/2.5" Display: On Board DVD-RW: Archgon / MD-3107-U3 USB3.0 Blu-Ray Combo Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P562	Pass
2	Crucial (CT102464BF160B.16FDD (MT16KTF1G64HZ-1G6D1) 1.35V/1.5V) [512Mx8b-x16/1024Mx64b, CL=11-11-11-30] / Micron (2RD27D9PCP) / PC3-12800 (DDR3L-1600) / 8GB *1	M/B: HM960-QM87B50-4700EQ Rev.2 (021) [QM87/C2] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-1 (Single channel) SATA HDD: WD / WD15EADS-00R6B0 SATA2 NCQ 1.5TB/7200RPM Display: On Board DVD-RW: Lite-On / iHAS324-U32D SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1 Test Summary: Overnight looping under 11 hours	P564	Pass

No.	DDR3 Module	Test Environment	3DMark Score	Result
3	INNODISK (M3SP-4GMJDL0C-M 1.35V/1.5V) [256Mx8b-x16/512Mx64b,CL=9] / Micron (1XM77-D9PFJ) / PC3-12800 (DDR3L-1600) / 4GB *2	M/B: HM960-QM87BS0-4700EQ Rev.2 (021) [QM87/C2] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD15EADS-00R6B0 SATA2 NCQ 1.5TB/7200RPM Display: On Board DVD-RW: Lite-On / iHAS324-U32D SATA Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English)	<b>P565</b>	<b>Pass</b>
4	Apacer (75.B83DL.G000C 1.35V/1.5V) [256Mx8b-x16/512Mx64b,CL=11] / Micron (2DM77-D9PFJ) / PC3-12800 (DDR3L-1600) / 4GB *1	M/B: HM960-QM87BS0-4700EQ Rev.2 (021) [QM87/C2] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-1 (Single channel) SATA HDD: WD / WD15EADS-00R6B0 SATA2 NCQ 1.5TB/7200RPM Display: On Board DVD-RW: Lite-On / iHAS324-U32D SATA Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English)	<b>P570</b>	<b>Pass</b>

<p><b>5</b></p>	<p>Crucial (CT51264BF160B.16FMR) (MT16KTF51264HZ-1G6M1) 1.35V/1.5V) [256Mx8b-x16/512Mx64b,CL=11-11-11-30] / Micron (2RM77D9PFJ) / PC3-12800 (DDR3L-1600) / 4GB *1</p>	<p>M/B: HM960-QM87BS0-4700EQ Rev.2 (021) [QM87/C2] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-2 (Single channel) SATA HDD: WD / WD15EADS-00R6B0 SATA2 NCQ 1.5TB/7200RPM Display: On Board DVD-RW: Lite-On / iHAS324-U32D SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P564</b></p>	<p><b>Pass</b></p>
<p><b>6</b></p>	<p>INNODISK (M3SP-2GMJCL0C-M 1.35V/1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Micron (1WM77-D9PFJ) / PC3-12800 (DDR3L-1600) / 2GB *2</p>	<p>M/B: HM960-QM87BS0-4400E Rev.A (0A1) [QM87/C2] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i5-4400E / 2.7GHz DIMM Slot: DIMM-2 (Single channel) SATA HDD: Seagate / ST1500DL003 SATA3 NCQ 1.5TB/5900RPM Display: On Board DVD-ROM: Pioneer / DVD-231DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 32Bit (English)</p>	<p><b>P576</b></p>	<p><b>Pass</b></p>
<p><b>7</b></p>	<p>Apacer (78.B2GCL4210C 1.35V) [256Mx8b-x16/512Mx64b,CL=9] / ELPIDA (J2108ECSE-DJ-F) / PC3-10600 (DDR3L-1333) / 4GB *2</p>	<p>M/B: HM960-QM87BS0-4700EQ Rev.2 (021) [QM87/C2] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD7500BPVT-22HXZT1 SATA2 750GB/5400RPM/2.5" Display: On Board DVD-RW: Lite-On / iHAS324-U32D SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1</p>	<p><b>P564</b></p>	<p><b>Pass</b></p>



No.	DDR3 Module	Test Environment	3DMark Score	Result
8	Apacer (78.A2GCL4200C 1.35V) [256Mx8b-x8/256Mx64b,CL=9] / ELPIDA (J2108ECSE-DJ-F) / PC3-10600 (DDR3L-1333) / 2GB *2	M/B: HM960-QM87BS0-4700EQ Rev.2 (021) [QM87/C2] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD15EADS-00R6B0 SATA2 NCQ 1.5TB/7200RPM Display: On Board DVD-RW: Lite-On / iHAS324-U32D SATA Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 32Bit (English)	P573	Pass
9	Transcend (TS256MSK64W3N 1.35V/1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Hynix (H5TQ2G83BFR-H9C) / PC3-10600 (DDR3L-1333) / 2GB *2	M/B: HM960-QM87BS0-4400E Rev.A (0A1) [QM87/C2] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i5-4400E / 2.7GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Seagate / ST1500DL003 SATA3 NCQ 1.5TB/5900RPM Display: On Board DVD-ROM: Pioneer / DVD-231DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) & SP1	P491	Pass



**Procedure:**

- (1) Install O.S.**
- (2) Check Memory information & specification with CPU-Z.**
- (3) Run 3DMark11 Professional Edition Ver.1.0.3 BenchMark - 3 times.**
- (4) Run S3/S4/S5 - 3 times.**

No.	DDR3 Module	Test Environment	3DMark Score	Result
<b>1</b>	Transcend (TS1GSK64V6H 1.5V) [512Mx8b-x16/1024Mx64b,CL=11] / Micron (1ZD27-D9PBC) / PC3-12800 (DDR3-1600) / 8GB *2	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	<b>P692</b>	<b>Pass</b>
<b>2</b>	Apacer (78.B2GCJAF10C 1.5V) [256Mx8b-x16/512Mx64b,CL=11] / Hynix (H5TQ2G83BFR PBC) / PC3-12800 (DDR3-1600) / 4GB *2	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: TEAM / TG060GS25AS2M SATA3 60GB/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	<b>P698</b>	<b>Pass</b>

No.	DDR3 Module	Test Environment	3DMark Score	Result
3	Hynix (HMT351S6BFR8C-PBNO 1.5V) [256Mx8b-x16/512Mx64b,CL=11] / Hynix (H5TQ2G83BFR PBC) / PC3-12800 (DDR3-1600) / 4GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Seagate / ST9320423AS SATA2 NCQ 320GB/7200RPM/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P699	Pass
4	ADATA (SU3S1600C4G11-B 1.5V) [256Mx8b-x16/512Mx64b,CL=11] / ELPIDA (J2108BCSE-GN-F) / PC3-12800 (DDR3-1600) / 4GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: ADATA / AS396S-30GM-C SATA2 30GB/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P699	Pass
5	ADATA (AD3S1600C4G11-BMIK 1.5V) [256Mx8b-x16/512Mx64b,CL=11] / Micron (2GKI2-D9PSH) / PC3-12800 (DDR3-1600) / 4GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD7500BPVT-22HXZT1 SATA2 750GB/5400RPM/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P699	Pass

<p><b>6</b></p>	<p>Hynix (HMT325S6BFR8C-PBNO 1.5V) [256Mx8b-x8/256Mx64b,CL=11] / Hynix (H5TQ2G83BFR PBC) / PC3-12800 (DDR3-1600) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: ADATA / ASE1032GSAMPL SATA2 32GB/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P680</b></p>	<p><b>Pass</b></p>
<p><b>7</b></p>	<p>ADATA (EL74C1B08 10281590 1.5V) [256Mx8b-x8/256Mx64b,CL=11-11-11] / ELPIDA (J2108BCSE-GN-F) / PC3-12800 (DDR3-1600) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: ADATA / ASE1032GSAMPL SATA2 32GB/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P675</b></p>	<p><b>Pass</b></p>



No.	DDR3 Module	Test Environment	3DMark Score	Result
8	Transcend (JJM11660000KSN--22G 1.5V) [256Mx8b-x8/256Mx64b,CL=11] / Transcend (TK483PCW3-T1125) / PC3-12800 (DDR3-1600) / 2GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD7500BPVT-22HXZT1 SATA2 750GB/5400RPM/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) & SP1	P674	Pass
9	Hynix (HMT312S6BFR6C-PBNO 1.5V) [128Mx16b-x4/128Mx64b,CL=11] / Hynix (H5TQ2G63BFR PBC) / PC3-12800 (DDR3-1600) / 1GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: Pretec / SATG2032G SATA2 32GB/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) & SP1	P685	Pass

<p><b>10</b></p>	<p>Panram (200D38G328 1.5V) [512Mx8b-x16/1024Mx64b,CL=9] / NB (K2BASESF) / PC3-10600 (DDR3-1333) / 8GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: Pretec / G2000 SATA2 64GB/2.5" Display: Asus / DVD-E818AT 18X SATA DVD-ROM: Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1 Test Summary: Overnight looping under 36 hours</p>	<p>-</p>	<p><b>Pass</b></p>
<p><b>11</b></p>	<p>Transcend (TS1GSK64V3H 1.5V) [512Mx8b-x16/1024Mx64b,CL=9] / Micron (1ZD27-D9PBC) / PC3-10600 (DDR3-1333) / 8GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-XD01-W 8X USB2.0 Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English)</p>	<p><b>P673</b></p>	<p><b>Pass</b></p>
<p><b>12</b></p>	<p>INNODISK (M3SP-8GHSDCN9-M 1.5V) [512Mx8b-x16/1Gx64b,CL=9] / Hynix (H5TQ4G83MFR PBC) / PC3-10600 (DDR3-1333) / 8GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1</p>	<p><b>P672</b></p>	<p><b>Pass</b></p>

No.	DDR3 Module	Test Environment	3DMark Score	Result
13	Transcend (TS512MSK64V3N 1.5V) [256Mx8b/512Mx64b, Timings(Max)=9-9-9-24] / Hynix (H5TQ2G83AFR H9C) / PC3-10600 (DDR3-1333) / 4GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Maxtor / STM3320614AS SATA2 NCQ 320GB/7200RPM Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P432	Pass
14	DSL (D3SH56082XH15AA 1.5V) / Hynix (H5TQ2G83BFR H9C) / PC3-10600 (DDR3-1333) / 4GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P679	Pass
15	Crucial (CT51264BC1339.16FR 1.5V) [256Mx8b-x16/512Mx64b,CL=9] / Micron (ICD77D9LGK) / PC3-10600 (DDR3-1333) / 4GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P593	Pass

<p><b>16</b></p>	<p>Transcend (TS512MSK64V3N-I 1.5V) [256Mx8b-*16/512Mx64b,CL=9] / SEC (K4B2G0846C) / PC3-10600 (DDR3-1333) / 4GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1</p>	<p><b>P633</b></p>	<p><b>Pass</b></p>
<p><b>17</b></p>	<p>Transcend (TS512MSK64V3N 1.5V) [256Mx8b-*16/512Mx64b,CL=9] / SEC (K4B2G0846C) / PC3-10600 (DDR3-1333) / 4GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1</p>	<p><b>P675</b></p>	<p><b>Pass</b></p>





No.	DDR3 Module	Test Environment	3DMark Score	Result
18	Transcend (TS512MSK64V3N-I 1.5V) [256Mx8b-*16/512Mx64b,CL=9] / SEC (K4B2G0846D) PC3-10600 (DDR3-1333) / 4GB *2	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P630	Pass
19	Transcend (TS512MSK64V3N 1.5V) [256Mx8b-*16/512Mx64b,CL=9] / SEC (K4B2G0846D) / PC3-10600 (DDR3-1333) / 4GB *2	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P671	Pass
20	INNODISK (M3SW-4GHJDCN9-E 1.5V) [256Mx8b-x16/512Mx64b,CL=9] / Hynix (H5TC2G83EFR PBA) / PC3-10600 (DDR3-1333) / 4GB *2	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English)	P677	Pass

<p><b>21</b></p>	<p>Transcend (TS512MSK64W3N 1.35V/1.5V) [256Mx8b-x16/512Mx64b,CL=9] / SEC (K4B2G0846D) / PC3-10600 (DDR3L-1333) / 4GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Seagate / ST9320423AS SATA2 NCQ 320GB/7200RPM/2.5" Display: On Board DVD-ROM: Pioneer / DVD-XD01-W 8X USB2.0 Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English)</p>	<p><b>P673</b></p>	<p><b>Pass</b></p>
<p><b>22</b></p>	<p>ELPIDA (SP002GBSTU133S02 1.5V) [128Mx8b/256Mx64b,CL=9-9-9-24] / SILICON (J1108BABG-DJ-E) / PC3-10600 (DDR3-1333) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD3200YS SATA2 NCQ 320GB/7200RPM Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P620</b></p>	<p><b>Pass</b></p>



No.	DDR3 Module	Test Environment	3DMark Score	Result
23	DSL (D3SH56081XH15AA 1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Hynix (H5TQ2G83BFR H9C) / PC3-10600 (DDR3-1333) / 2GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) & SP1	P658	Pass
24	Transcend (TS256MSK64V3U 1.5V) [128Mx8b-*16/256Mx64b,CL=9] / ELPIDA (J1108BFBG-DJ-F) / PC3-10600 (DDR3-1333) / 2GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: PLEXTOR / PX-64M2S-04 SATA3 64GB/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 32Bit (English) & SP1 Test Summary: Overnight Looping under 11 hours	P632	Pass



<p><b>25</b></p>	<p>Crucial (CT25664BC1339.8FD 1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Micron (OMD12D9LGK) / PC3-10600 (DDR3-1333) / 2GB *1</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-2 (Single channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1 Test Summary: Overnight looping under 12 hours</p>	<p><b>P506</b></p>	<p><b>Pass</b></p>
<p><b>26</b></p>	<p>Transcend (TS256MSK64V3N 1.5V) [256Mx8b-*8/256Mx64b,CL=9] / Hynix (H5TQ2G83BFR H9C) / PC3-10600 (DDR3-1333) / 2GB *1</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1 (Single channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1 Test Summary: Overnight Looping under 20 hours</p>	<p><b>P507</b></p>	<p><b>Pass</b></p>

<p><b>27</b></p>	<p>Transcend (TS256MSK64V3N 1.5V) [256Mx8b-*8/256Mx64b,CL=9] / SEC (K4B2G0846C) / PC3-10600 (DDR3-1333) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2)</p> <p>M/B BIOS: AMI-UEFI 01/31/2013</p> <p>M/B Driver: Demo Jan/11/2013</p> <p>CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0)</p> <p>DIMM Slot: DIMM-1/2 (Dual channel)</p> <p>SATA HDD: WD / WD800AAJS-00PSA0 80GB</p> <p>Display: On Board</p> <p>DVD-ROM: Pioneer / DVD-230DW 18X SATA</p> <p>Power: Delta / GPS-500BB 500W</p> <p>O.S.: Windows 8 Enterprise 32Bit (English)</p>	<p><b>P653</b></p>	<p><b>Pass</b></p>
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No.	DDR3 Module	Test Environment	3DMark Score	Result
28	Transcend (TS256MSK64V3N-I 1.5V) [256Mx8b-*8/256Mx64b,CL=9] / SEC (K4B2G0846D) / PC3-10600(DDR3-1333) / 2GB *2	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 32Bit (English) & SP1 Test Summary: Overnight Looping under 14 hours	P603	Pass
29	Transcend (TS256MSK64V3N 1.5V) [256Mx8b-*8/256Mx64b,CL=9] / SEC (K4B2G0846D) / PC3-10600 (DDR3-1333) / 2GB *1	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-2 (Single channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P671	Pass



<p><b>30</b></p>	<p>INNODISK (M3SW-2GHJCCN9-E 1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Hynix (H5TC2G83EFR PBA) / PC3-10600(DDR3-1333) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P659</b></p>	<p><b>Pass</b></p>
<p><b>31</b></p>	<p>INNODISK (M3SN-1GHFCC09-D 1.5V) [128Mx8b-*8/128Mx64b,CL=9] / Hynix (H5TQ1G83DFR H9C) / PC3-10600 (DDR3-1333) / 1GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P665</b></p>	<p><b>Pass</b></p>
<p><b>32</b></p>	<p>DSL (D3SH28081XH15AA 1.5V) [128Mx8b-*8/128Mx64b,CL=9] / Hynix (H5TQ1G83BFR H9C) / PC3-10600 (DDR3-1333) / 1GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1 Test Summary: Overnight looping under 12 hours</p>	<p><b>P660</b></p>	<p><b>Pass</b></p>



No.	DDR3 Module	Test Environment	3DMark Score	Result
33	Apacer (78.02GC6.420 1.5V) [128Mx8b-x8/128Mx64b,CL=9] / ELPIDA (J1108BFBG-DJ-F) / PC3-10600 (DDR3-1333) / 1GB *2	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: Transcend / TS64GSSD500 SATA2 64GB/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) & SP1 Test Summary: Overnight looping under 14hours	P653	Pass
34	Crucial (CT12864BC1339.4FD 1.5V) [128Mx16b-x4/128Mx64b,CL=9] / Micron (0NDI2-D9LGQ) / PC3-10600 (DDR3-1333) / 1GB *2	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 32Bit (English) & SP1	P277	Pass



<p><b>35</b></p>	<p>Transcend (TS128MSK64V3U 1.5V) [128Mx8b-x8/128Mx64b,CL=9] / SEC (K4B1G0846G) / PC3-10600 (DDR3-1333) / 1GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2)</p> <p>M/B BIOS: AMI-UEFI 01/31/2013</p> <p>M/B Driver: Demo Jan/11/2013</p> <p>CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0)</p> <p>DIMM Slot: DIMM-1/2 (Dual channel)</p> <p>SATA HDD: WD / WD800AAJS-00PSA0 80GB</p> <p>Display: On Board</p> <p>DVD-ROM: Pioneer / DVD-230DW 18X SATA</p> <p>Power: Delta / GPS-500BB 500W</p> <p>O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p> <p>Test</p> <p>Summary: Overnight looping under 12 hours</p>	<p><b>P665</b></p>	<p><b>Pass</b></p>
<p><b>36</b></p>	<p>Apacer (AM5D5808MIJSBG 1.5V) / Apacer (AM5D5808MIJSBG 1.5V) / PC3-8500 (DDR3-1066) / 2GB *1</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2)</p> <p>M/B BIOS: AMI-UEFI 01/31/2013</p> <p>M/B Driver: Demo Jan/11/2013</p> <p>CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0)</p> <p>DIMM Slot: DIMM-2 (Single channel)</p> <p>SATA HDD: WD / WD800AAJS-00PSA0 80GB</p> <p>Display: On Board</p> <p>DVD-ROM: Pioneer / DVD-230DW 18X SATA</p> <p>Power: Delta / GPS-500BB 500W</p> <p>O.S.: Windows 8 Enterprise 32Bit (English)</p>	<p><b>P494</b></p>	<p><b>Pass</b></p>
<p><b>37</b></p>	<p>Transcend (TS256MSK64V1U 1.5V±0.75) [128Mx8bits/256Mx64bits,CL=7] / ELPIDA (J1108BASE-AE-E) / PC3-8500 (DDR3-1066) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2)</p> <p>M/B BIOS: AMI-UEFI 01/31/2013</p> <p>M/B Driver: Demo Jan/11/2013</p> <p>CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0)</p> <p>DIMM Slot: DIMM-1/2 (Dual channel)</p> <p>SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5"</p> <p>Display: On Board</p> <p>DVD-RW: Asus / DRW-1814BLT SATA</p> <p>Power: Jagier / KY-580ATX 480W</p> <p>O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P607</b></p>	<p><b>Pass</b></p>

No.	DDR3 Module	Test Environment	3DMark Score	Result
38	Kingston (KVR1066D3S7/2G 1.5V) [128Mx8bits/256Mx64bits,CL=7-7-7-20] / ELPIDA (J1108BABG-DJ-E) / PC3-8500 (DDR3-1066) / 2GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 32Bit (English) & SP1	P600	Pass
39	ADATA (AD31066002GOS (AD7YG1B16723) 1.5V) [128Mx8bits/256Mx64bits,CL=7-7-7-20] / ADATA (AD30908C8D-18GG) / PC3-8500 (DDR3-1066) / 2GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD2001FASS-00U0B0 SATA2 NCQ 2TB/7200RPM On Board Display: Pioneer / DVD-230DW 18X SATA DVD-ROM: Delta / GPS-500BB 500W Power: Windows 7 Ultimate 32Bit (English) & SP1 O.S.:	P643	Pass

<p><b>40</b></p>	<p>SILICON (SP002GBSTU106S02 1.5V) [128Mx8b/256Mx64b,CL=7-7-7-20] / S-POWER (IOYT3NO) / PC3-8500 (DDR3-1066) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD2001FASS-00U0B0 SATA2 NCQ 2TB/7200RPM On Board Display: Pioneer / DVD-230DW 18X SATA DVD-ROM: Delta / GPS-500BB 500W Power: Windows 7 Ultimate 32Bit (English) &amp; SP1 O.S.:</p>	<p><b>P643</b></p>	<p><b>Pass</b></p>
<p><b>41</b></p>	<p>Transcend (TS128MSK64V1U 1.5V±0.75) [128Mx8bits/128Mx64bits,CL=6,7,8] / SEC (K4B1G0846D) / PC3-8500 (DDR3-1066) / 1GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-XD01-W 8X USB2.0 Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P626</b></p>	<p><b>Pass</b></p>
<p><b>42</b></p>	<p>Kingston (KVR1066D3S7/1G 1.5V) [128Mx8bits/128Mx64bits,CL=7-7-7-20] / ELPIDA (J1108BABG-DJ-E) / PC3-8500 (DDR3-1066) / 1GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Seagate / ST9320325AS SATA2 NCQ 320GB/5400RPM/2.5" Display: Pioneer / DVD-230DW 18X SATA DVD-ROM: On Board Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P629</b></p>	<p><b>Pass</b></p>

## 2. Stability Test: Rev.021/0A1

### 2.1 DDR3 SO-DIMM Test:

**Procedure:**

- (1) Install O.S.**
- (2) Check Memory information & specification with CPU-Z.**
- (3) Run 3DMark11 Professional Edition Ver.1.0.5 BenchMark - 3 times or 3DMark11 Professional Edition Ver.1.0.3 BenchMark - 3 times.**
- (4) Run S3/S4/S5 - 3 times.**

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
1	Transcend	MICron	8GB	PC3-12800 (DDR3-1600)	1ZD27-D9PBC	TS1GSK64V6H 1.5V [512Mx8b-x16/1024Mx64b,CL=11]	Pass
2	Apacer	MICron	8GB	PC3-12800 (DDR3L-1600)	2ED27-D9PCP	75.C93DL.G000C 1.35V/1.5V [512Mx8b-x16/1024Mx64b,CL=11]	Pass
3	Crucial	MICron	8GB	PC3-12800 (DDR3L-1600)	2RD27D9PCP	CT102464BF160B.16FDD (MT16KTF1G64HZ-1G6D1) 1.35/1.5V [512Mx8b-x16/1024Mx64b,CL=11-1 1-11-30]	Pass
4	Apacer	Hynix	4GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	78.B2GCJAF10C 1.5V [256Mx8b-x16/512Mx64b,CL=11]	Pass
5	Hynix	Hynix	4GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	HMT351S6BFR8C-PBNO 1.5V [256Mx8b-x16/512Mx64b,CL=11]	Pass
6	ADATA	ELPIDA	4GB	PC3-12800 (DDR3-1600)	J2108BCSE-GN-F	SU3S1600C4G11-B 1.5V [256Mx8b-x16/512Mx64b,CL=11]	Pass
7	ADATA	MICron	4GB	PC3-12800 (DDR3-1600)	2GKI2-D9PSH	AD3S1600C4G11-BMIK 1.5V [256Mx8b-x16/512Mx64b,CL=11]	Pass
8	INNODISK	MICron	4GB	PC3-12800 (DDR3L-1600)	1XM77-D9PFJ	M3SP-4GMJDL0C-M 1.35V/1.5V [256Mx8b-x16/512Mx64b,CL=9]	Pass
9	Apacer	MICron	4GB	PC3-12800 (DDR3L-1600)	2DM77-D9PFJ	75.B83DL.G000C 1.35V/1.5V [256Mx8b-x16/512Mx64b,CL=11]	Pass
10	Crucial	MICron	4GB	PC3-12800 (DDR3L-1600)	2RM77D9PFJ	CT51264BF160B.16FMR (MT16KTF51264HZ-1G6M1) 1.35V/1.35V [256Mx8b-x16/512Mx64b,CL=11-11- 11-30]	Pass
11	Hynix	Hynix	2GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	HMT325S6BFR8C-PBNO 1.5V [256Mx8b-x8/256Mx64b,CL=11]	Pass
12	ADATA	ELPIDA	2GB	PC3-12800 (DDR3-1600)	J2108BCSE-GN-F	EL74C1B08 10281590 1.5V [256Mx8b-x8/256Mx64b,CL=11-11-1 1]	Pass

<b>13</b>	Transcend	Transcend	2GB	PC3-12800 (DDR3-1600)	TK483PCW3-T1125	JJM11660000KSN--22G 1.5V [256Mx8b-x8/256Mx64b,CL=11]	<b>Pass</b>
<b>14</b>	INNODISK	MICron	2GB	PC3-12800 (DDR3L-1600)	1WM77-D9PFJ	M3SP-2GMJCL0C-M 1.35V/1.5V [256Mx8b-x8/256Mx64b,CL=9]	<b>Pass</b>
<b>15</b>	Hynix	Hynix	1GB	PC3-12800 (DDR3-1600)	H5TQ2G63BFR PBC	HMT312S6BFR6C-PBNO 1.5V [128Mx16b-x4/128Mx64b,CL=11]	<b>Pass</b>
<b>16</b>	Panram	NB	8GB	PC3-10600 (DDR3-1333)	K2BASESF	200D38G328 1.5V [512Mx8b-x16/1024Mx64b,CL=9]	<b>Pass</b>
<b>17</b>	Transcend	MICron	8GB	PC3-10600 (DDR3-1333)	1ZD27-D9PBC	TS1GSK64V3H 1.5V [512Mx8b-x16/1024Mx64b,CL=9]	<b>Pass</b>
<b>18</b>	INNODISK	Hynix	8GB	PC3-10600 (DDR3-1333)	H5TQ4G83MFR PBC	M3SP-8GHSDCN9-M 1.5V [512Mx8b-x16/1Gx64b,CL=9]	<b>Pass</b>

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
19	Transcend	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TQ2G83AFR H9C	TS512MSK64V3N 1.5V [256Mx8b/512Mx64b, Timings(Max) =9-9-9-24]	Pass
20	DSL	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	D3SH56082XH15AA 1.5V	Pass
21	Crucial	MICron	4GB	PC3-10600 (DDR3-1333)	ICD77D9LGK	CT51264BC1339.16FR 1.5V [256Mx8b-x16/512Mx64b, CL=9]	Pass
22	Transcend	SEC	4GB	PC3-10600 (DDR3-1333)	K4B2G0846C	TS512MSK64V3N-I 1.5V [256Mx8b-*16/512Mx64b, CL=9]	Pass
23	Transcend	SEC	4GB	PC3-10600 (DDR3-1333)	K4B2G0846C	TS512MSK64V3N 1.5V [256Mx8b-*16/512Mx64b, CL=9]	Pass
24	Transcend	SEC	4GB	PC3-10600 (DDR3-1333)	K4B2G0846D	TS512MSK64V3N-I 1.5V [256Mx8b-*16/512Mx64b, CL=9]	Pass
25	Transcend	SEC	4GB	PC3-10600 (DDR3-1333)	K4B2G0846D	TS512MSK64V3N 1.5V [256Mx8b-*16/512Mx64b, CL=9]	Pass
26	INNODISK	Hynix	4GB	PC3-10600 (DDR3-1333)	H5TC2G83EFR PBA	M3SW-4GHJDCN9-E 1.5V [256Mx8b-x16/512Mx64b, CL=9]	Pass
27	Apacer	ELPIDA	4GB	PC3-10600 (DDR3L-1333)	J2108ECSE-DJ-F	78.B2GCL4210C 1.35V [256Mx8b-x16/512Mx64b, CL=9]	Pass
28	Transcend	SEC	4GB	PC3-10600 (DDR3L-1333)	K4B2G0846D	TS512MSK64W3N 1.35V/1.5V [256Mx8b-x16/512Mx64b, CL=9]	Pass
29	ELPIDA	SILICON	2GB	PC3-10600 (DDR3-1333)	J1108BABG-DJ-E	SP002GBSTU133S02 1.5V [128Mx8b/256Mx64b, CL=9-9-9-24]	Pass
30	DSL	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	D3SH56081XH15AA 1.5V [256Mx8b-x8/256Mx64b, CL=9]	Pass
31	Transcend	ELPIDA	2GB	PC3-10600 (DDR3-1333)	J1108BFBG-DJ-F	TS256MSK64V3U 1.5V [128Mx8b-*16/256Mx64b, CL=9]	Pass
32	Crucial	MICron	2GB	PC3-10600 (DDR3-1333)	OMD12D9LGK	CT25664BC1339.8FD 1.5V [256Mx8b-x8/256Mx64b, CL=9]	Pass
33	Transcend	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	TS256MSK64V3N 1.5V [256Mx8b-*8/256Mx64b, CL=9]	Pass
34	Transcend	SEC	2GB	PC3-10600 (DDR3-1333)	K4B2G0846C	TS256MSK64V3N 1.5V [256Mx8b-*8/256Mx64b, CL=9]	Pass
35	Transcend	SEC	2GB	PC3-10600 (DDR3-1333)	K4B2G0846D	TS256MSK64V3N-I 1.5V [256Mx8b-*8/256Mx64b, CL=9]	Pass

<b>36</b>	Transcend	SEC	2GB	PC3-10600 (DDR3-1333)	K4B2G0846D	TS256MSK64V3N 1.5V [256Mx8b-*8/256Mx64b,CL=9]	<b>Pass</b>
<b>37</b>	INNODISK	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TC2G83EFR PBA	M3SW-2GHJCCN9-E 1.5V [256Mx8b-x8/256Mx64b,CL=9]	<b>Pass</b>
<b>38</b>	Apacer	ELPIDA	2GB	PC3-10600 (DDR3L-1333)	J2108ECSE-DJ-F	78.A2GCL4200C 1.35V [256Mx8b-x8/256Mx64b,CL=9]	<b>Pass</b>
<b>39</b>	Transcend	Hynix	2GB	PC3-10600 (DDR3L-1333)	H5TQ2G83BFR-H9C	TS256MSK64W3N 1.35V/1.5V [256Mx8b-x8/256Mx64b,CL=9]	<b>Pass</b>
<b>40</b>	INNODISK	Hynix	1GB	PC3-10600 (DDR3-1333)	H5TQ1G83DFR H9C	M3SN-1GHFCC09-D 1.5V [128Mx8b-*8/128Mx64b,CL=9]	<b>Pass</b>
<b>41</b>	DSL	Hynix	1GB	PC3-10600 (DDR3-1333)	H5TQ1G83BFR H9C	D3SH28081XH15AA 1.5V [128Mx8b-*8/128Mx64b,CL=9]	<b>Pass</b>
<b>42</b>	Apacer	ELPIDA	1GB	PC3-10600 (DDR3-1333)	J1108BFBG-DJ-F	78.02GC6.420 1.5V [128Mx8b-x8/128Mx64b,CL=9]	<b>Pass</b>
<b>43</b>	Crucial	MICron	1GB	PC3-10600 (DDR3-1333)	0NDI2-D9LGQ	CT12864BC1339.4FD 1.5V [128Mx16b-x4/128Mx64b,CL=9]	<b>Pass</b>
<b>44</b>	Transcend	SEC	1GB	PC3-10600 (DDR3-1333)	K4B1G0846G	TS128MSK64V3U 1.5V [128Mx8b-x8/128Mx64b,CL=9]	<b>Pass</b>
<b>45</b>	Apacer	Apacer	2GB	PC3-8500 (DDR3-1066)	AM5D5808MIJSBG 1.5V	AM5D5808MIJSBG 1.5V	<b>Pass</b>

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
46	Transcend	ELPIDA	2GB	PC3-8500 (DDR3-1066)	J1108BASE-AE-E	TS256MSK64V1U 1.5V±0.75 [128Mx8bits/256Mx64bits,CL=7]	Pass
47	Kingston	ELPIDA	2GB	PC3-8500 (DDR3-1066)	J1108BABG-DJ-E	KVR1066D3S7/2G 1.5V [128Mx8bits/256Mx64bits,CL=7-7-7-20]	Pass
48	ADATA	ADATA	2GB	PC3-8500 (DDR3-1066)	AD30908C8D-18GG	AD31066002GOS (AD7YG1B16723) 1.5V [128Mx8bits/256Mx64bits,CL=7-7-7-20]	Pass
49	SILICON	S-POWER	2GB	PC3-8500 (DDR3-1066)	IOYT3NO	SP002GBSTU106S02 1.5V [128Mx8b/256Mx64b,CL=7-7-7-20]	Pass
50	Transcend	SEC	1GB	PC3-8500 (DDR3-1066)	K4B1G0846D	TS128MSK64V1U 1.5V±0.75 [128Mx8bits/128Mx64bits,CL=6,7,8]	Pass
51	Kingston	ELPIDA	1GB	PC3-8500 (DDR3-1066)	J1108BABG-DJ-E	KVR1066D3S7/1G 1.5V [128Mx8bits/128Mx64bits,CL=7-7-7-20]	Pass

## 2.2 DDR3 SO-DIMM Test Procedures:

### Procedure:

- (1) Install O.S.
- (2) Check Memory information & specification with CPU-Z.
- (3) Run 3DMark11 Professional Edition Ver.1.0.5 BenchMark - 3 times.
- (4) Run S3/S4/S5 - 3 times.

No.	DDR3 Module	Test Environment	3DMark Score	Result
1	Apacer (75.C93DL.G000C 1.35V/1.5V) [512Mx8b-x16/1024Mx64b,CL=11] / MICron (2ED27-D9PCP) / PC3-12800 (DDR3L-1600) / 8GB *2	M/B: HM960-QM87BS0-4700EQ Rev.2 (021) [QM87/C2] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD7500BPVT-22HXZT1 SATA2 750GB/5400RPM/2.5" Display: On Board DVD-RW: Archgon / MD-3107-U3 USB3.0 Blu-Ray Combo Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P562	Pass



<p><b>2</b></p>	<p>Crucial (CT102464BF160B.16FDD (MT16KTF1G64HZ-1G6D1) 1.35V/1.5V) [512Mx8b-x16/1024Mx64b, CL=11-11-11-30] / MICron (2RD27D9PCP) / PC3-12800 (DDR3L-1600) / 8GB *1</p>	<p>M/B: HM960-QM87BS0-4700EQ Rev.2 (021) [QM87/C2] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-1 (Single channel) SATA HDD: WD / WD15EADS-00R6B0 SATA2 NCQ 1.5TB/7200RPM Display: On Board DVD-RW: Lite-On / iHAS324-U32D SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1 Test Summary: Overnight looping under 11 hours</p>	<p><b>P564</b></p>	<p><b>Pass</b></p>
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No.	DDR3 Module	Test Environment	3DMark Score	Result
3	INNODISK (M3SP-4GMJDL0C-M 1.35V/1.5V) [256Mx8b-x16/512Mx64b,CL=9] / MICron (1XM77-D9PFJ) / PC3-12800 (DDR3L-1600) / 4GB *2	M/B: HM960-QM87BS0-4700EQ Rev.2 (021) [QM87/C2] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD15EADS-00R6B0 SATA2 NCQ 1.5TB/7200RPM Display: On Board DVD-RW: Lite-On / iHAS324-U32D SATA Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English)	<b>P565</b>	<b>Pass</b>
4	Apacer (75.B83DL.G000C 1.35V/1.5V) [256Mx8b-x16/512Mx64b,CL=11] / MICron (2DM77-D9PFJ) / PC3-12800 (DDR3L-1600) / 4GB *1	M/B: HM960-QM87BS0-4700EQ Rev.2 (021) [QM87/C2] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-1 (Single channel) SATA HDD: WD / WD15EADS-00R6B0 SATA2 NCQ 1.5TB/7200RPM Display: On Board DVD-RW: Lite-On / iHAS324-U32D SATA Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English)	<b>P570</b>	<b>Pass</b>



<p><b>5</b></p>	<p>Crucial (CT51264BF160B.16FMR) (MT16KTF51264HZ-1G6M1) 1.35V/1.5V) [256Mx8b-x16/512Mx64b,CL=11-11-11-30] / MICron (2RM77D9PFJ) / PC3-12800 (DDR3L-1600) / 4GB *1</p>	<p>M/B: HM960-QM87BS0-4700EQ Rev.2 (021) [QM87/C2] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-2 (Single channel) SATA HDD: WD / WD15EADS-00R6B0 SATA2 NCQ 1.5TB/7200RPM Display: On Board DVD-RW: Lite-On / iHAS324-U32D SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P564</b></p>	<p><b>Pass</b></p>
<p><b>6</b></p>	<p>INNODISK (M3SP-2GMJCL0C-M 1.35V/1.5V) [256Mx8b-x8/256Mx64b,CL=9] / MICron (1WM77-D9PFJ) / PC3-12800 (DDR3L-1600) / 2GB *2</p>	<p>M/B: HM960-QM87BS0-4400E Rev.A (0A1) [QM87/C2] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i5-4400E / 2.7GHz DIMM Slot: DIMM-2 (Single channel) SATA HDD: Seagate / ST1500DL003 SATA3 NCQ 1.5TB/5900RPM Display: On Board DVD-ROM: Pioneer / DVD-231DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 32Bit (English)</p>	<p><b>P576</b></p>	<p><b>Pass</b></p>
<p><b>7</b></p>	<p>Apacer (78.B2GCL4210C 1.35V) [256Mx8b-x16/512Mx64b,CL=9] / ELPIDA (J2108ECSE-DJ-F) / PC3-10600 (DDR3L-1333) / 4GB *2</p>	<p>M/B: HM960-QM87BS0-4700EQ Rev.2 (021) [QM87/C2] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD7500BPVT-22HXZT1 SATA2 750GB/5400RPM/2.5" Display: On Board DVD-RW: Lite-On / iHAS324-U32D SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1</p>	<p><b>P564</b></p>	<p><b>Pass</b></p>

No.	DDR3 Module	Test Environment	3DMark Score	Result
8	Apacer (78.A2GCL4200C 1.35V) [256Mx8b-x8/256Mx64b,CL=9] / ELPIDA (J2108ECSE-DJ-F) / PC3-10600 (DDR3L-1333) / 2GB *2	M/B: HM960-QM87BS0-4700EQ Rev.2 (021) [QM87/C2] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i7-4700EQ / 2.4GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD15EADS-00R6B0 SATA2 NCQ 1.5TB/7200RPM Display: On Board DVD-RW: Lite-On / iHAS324-U32D SATA Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 32Bit (English)	P573	Pass
9	Transcend (TS256MSK64W3N 1.35V/1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Hynix (H5TQ2G83BFR-H9C) / PC3-10600 (DDR3L-1333) / 2GB *2	M/B: HM960-QM87BS0-4400E Rev.A (0A1) [QM87/C2] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 06/04/2013 M/B Driver: Demo Jun/07/2013 CPU: Intel / Core i5-4400E / 2.7GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Seagate / ST1500DL003 SATA3 NCQ 1.5TB/5900RPM Display: On Board DVD-ROM: Pioneer / DVD-231DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) & SP1	P491	Pass

**Procedure:**

- (1) Install O.S.
- (2) Check Memory information & specification with CPU-Z.
- (3) Run 3DMark11 Professional Edition Ver.1.0.3 BenchMark - 3 times.
- (4) Run S3/S4/S5 - 3 times.

No.	DDR3 Module	Test Environment	3DMark Score	Result
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<p><b>1</b></p>	<p>Transcend (TS1GSK64V6H 1.5V) [512Mx8b-x16/1024Mx64b,CL=11] / MICron (1ZD27-D9PBC) / PC3-12800 (DDR3-1600) / 8GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1</p>	<p><b>P692</b></p>	<p><b>Pass</b></p>
<p><b>2</b></p>	<p>Apacer (78.B2GCJAF10C 1.5V) [256Mx8b-x16/512Mx64b,CL=11] / Hynix (H5TQ2G83BFR PBC) / PC3-12800 (DDR3-1600) / 4GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: TEAM / TG060GS25AS2M SATA3 60GB/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1</p>	<p><b>P698</b></p>	<p><b>Pass</b></p>



No.	DDR3 Module	Test Environment	3DMark Score	Result
3	Hynix (HMT351S6BFR8C-PBNO 1.5V) [256Mx8b-x16/512Mx64b,CL=11] / Hynix (H5TQ2G83BFR PBC) / PC3-12800 (DDR3-1600) / 4GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Seagate / ST9320423AS SATA2 NCQ 320GB/7200RPM/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P699	Pass
4	ADATA (SU3S1600C4G11-B 1.5V) [256Mx8b-x16/512Mx64b,CL=11] / ELPIDA (J2108BCSE-GN-F) / PC3-12800 (DDR3-1600) / 4GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: ADATA / AS396S-30GM-C SATA2 30GB/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P699	Pass
5	ADATA (AD3S1600C4G11-BMIK 1.5V) [256Mx8b-x16/512Mx64b,CL=11] / MICron (2GKI2-D9PSH) / PC3-12800 (DDR3-1600) / 4GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD7500BPVT-22HXZT1 SATA2 750GB/5400RPM/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P699	Pass

<p><b>6</b></p>	<p>Hynix (HMT325S6BFR8C-PBNO 1.5V) [256Mx8b-x8/256Mx64b,CL=11] / Hynix (H5TQ2G83BFR PBC) / PC3-12800 (DDR3-1600) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: ADATA / ASE1032GSAMPL SATA2 32GB/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P680</b></p>	<p><b>Pass</b></p>
<p><b>7</b></p>	<p>ADATA (EL74C1B08 10281590 1.5V) [256Mx8b-x8/256Mx64b,CL=11-11-11] / ELPIDA (J2108BCSE-GN-F) / PC3-12800 (DDR3-1600) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: ADATA / ASE1032GSAMPL SATA2 32GB/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P675</b></p>	<p><b>Pass</b></p>



No.	DDR3 Module	Test Environment	3DMark Score	Result
8	Transcend (JJM11660000KSN--22G 1.5V) [256Mx8b-x8/256Mx64b,CL=11] / Transcend (TK483PCW3-T1125) / PC3-12800 (DDR3-1600) / 2GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD7500BPVT-22HXZT1 SATA2 750GB/5400RPM/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) & SP1	P674	Pass
9	Hynix (HMT312S6BFR6C-PBNO 1.5V) [128Mx16b-x4/128Mx64b,CL=11] / Hynix (H5TQ2G63BFR PBC) / PC3-12800 (DDR3-1600) / 1GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: Pretec / SATG2032G SATA2 32GB/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) & SP1	P685	Pass



<p><b>10</b></p>	<p>Panram (200D38G328 1.5V) [512Mx8b-x16/1024Mx64b,CL=9] / NB (K2BASESF) / PC3-10600 (DDR3-1333) / 8GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: Pretec / G2000 SATA2 64GB/2.5" Display: Asus / DVD-E818AT 18X SATA DVD-ROM: Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1 Test Summary: Overnight looping under 36 hours</p>	<p>-</p>	<p><b>Pass</b></p>
<p><b>11</b></p>	<p>Transcend (TS1GSK64V3H 1.5V) [512Mx8b-x16/1024Mx64b,CL=9] / MICron (1ZD27-D9PBC) / PC3-10600 (DDR3-1333) / 8GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-XD01-W 8X USB2.0 Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English)</p>	<p><b>P673</b></p>	<p><b>Pass</b></p>
<p><b>12</b></p>	<p>INNODISK (M3SP-8GHSDCN9-M 1.5V) [512Mx8b-x16/1Gx64b,CL=9] / Hynix (H5TQ4G83MFR PBC) / PC3-10600 (DDR3-1333) / 8GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1</p>	<p><b>P672</b></p>	<p><b>Pass</b></p>

No.	DDR3 Module	Test Environment	3DMark Score	Result
13	Transcend (TS512MSK64V3N 1.5V) [256Mx8b/512Mx64b, Timings(Max)=9-9-9-24] / Hynix (H5TQ2G83AFR H9C) / PC3-10600 (DDR3-1333) / 4GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Maxtor / STM3320614AS SATA2 NCQ 320GB/7200RPM Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P432	Pass
14	DSL (D3SH56082XH15AA 1.5V) / Hynix (H5TQ2G83BFR H9C) / PC3-10600 (DDR3-1333) / 4GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P679	Pass
15	Crucial (CT51264BC1339.16FR 1.5V) [256Mx8b-x16/512Mx64b,CL=9] / MICron (ICD77D9LGK) / PC3-10600 (DDR3-1333) / 4GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P593	Pass

<p><b>16</b></p>	<p>Transcend (TS512MSK64V3N-I 1.5V) [256Mx8b-*16/512Mx64b,CL=9] / SEC (K4B2G0846C) / PC3-10600 (DDR3-1333) / 4GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1</p>	<p><b>P633</b></p>	<p><b>Pass</b></p>
<p><b>17</b></p>	<p>Transcend (TS512MSK64V3N 1.5V) [256Mx8b-*16/512Mx64b,CL=9] / SEC (K4B2G0846C) / PC3-10600 (DDR3-1333) / 4GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1</p>	<p><b>P675</b></p>	<p><b>Pass</b></p>



No.	DDR3 Module	Test Environment	3DMark Score	Result
18	Transcend (TS512MSK64V3N-I 1.5V) [256Mx8b-*16/512Mx64b,CL=9] / SEC (K4B2G0846D) PC3-10600 (DDR3-1333) / 4GB *2	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P630	Pass
19	Transcend (TS512MSK64V3N 1.5V) [256Mx8b-*16/512Mx64b,CL=9] / SEC (K4B2G0846D) / PC3-10600 (DDR3-1333) / 4GB *2	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P671	Pass
20	INNODISK (M3SW-4GHJDCN9-E 1.5V) [256Mx8b-x16/512Mx64b,CL=9] / Hynix (H5TC2G83EFR PBA) / PC3-10600 (DDR3-1333) / 4GB *2	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English)	P677	Pass

<p><b>21</b></p>	<p>Transcend (TS512MSK64W3N 1.35V/1.5V) [256Mx8b-x16/512Mx64b,CL=9] / SEC (K4B2G0846D) / PC3-10600 (DDR3L-1333) / 4GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Seagate / ST9320423AS SATA2 NCQ 320GB/7200RPM/2.5" Display: On Board DVD-ROM: Pioneer / DVD-XD01-W 8X USB2.0 Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English)</p>	<p><b>P673</b></p>	<p><b>Pass</b></p>
<p><b>22</b></p>	<p>ELPIDA (SP002GBSTU133S02 1.5V) [128Mx8b/256Mx64b,CL=9-9-9-24] / SILICON (J1108BABG-DJ-E) / PC3-10600 (DDR3-1333) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD3200YS SATA2 NCQ 320GB/7200RPM Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P620</b></p>	<p><b>Pass</b></p>



No.	DDR3 Module	Test Environment	3DMark Score	Result
23	DSL (D3SH56081XH15AA 1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Hynix (H5TQ2G83BFR H9C) / PC3-10600 (DDR3-1333) / 2GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) & SP1	P658	Pass
24	Transcend (TS256MSK64V3U 1.5V) [128Mx8b-*16/256Mx64b,CL=9] / ELPIDA (J1108BFBG-DJ-F) / PC3-10600 (DDR3-1333) / 2GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: PLEXTOR / PX-64M2S-04 SATA3 64GB/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 32Bit (English) & SP1 Test Summary: Overnight Looping under 11 hours	P632	Pass

<p><b>25</b></p>	<p>Crucial (CT25664BC1339.8FD 1.5V) [256Mx8b-x8/256Mx64b,CL=9] / MICron (OMD12D9LGK) / PC3-10600 (DDR3-1333) / 2GB *1</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-2 (Single channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1 Test Summary: Overnight looping under 12 hours</p>	<p><b>P506</b></p>	<p><b>Pass</b></p>
<p><b>26</b></p>	<p>Transcend (TS256MSK64V3N 1.5V) [256Mx8b-*8/256Mx64b,CL=9] / Hynix (H5TQ2G83BFR H9C) / PC3-10600 (DDR3-1333) / 2GB *1</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1 (Single channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1 Test Summary: Overnight Looping under 20 hours</p>	<p><b>P507</b></p>	<p><b>Pass</b></p>

<p><b>27</b></p>	<p>Transcend (TS256MSK64V3N 1.5V) [256Mx8b-*8/256Mx64b,CL=9] / SEC (K4B2G0846C) / PC3-10600 (DDR3-1333) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2)</p> <p>M/B BIOS: AMI-UEFI 01/31/2013</p> <p>M/B Driver: Demo Jan/11/2013</p> <p>CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0)</p> <p>DIMM Slot: DIMM-1/2 (Dual channel)</p> <p>SATA HDD: WD / WD800AAJS-00PSA0 80GB</p> <p>Display: On Board</p> <p>DVD-ROM: Pioneer / DVD-230DW 18X SATA</p> <p>Power: Delta / GPS-500BB 500W</p> <p>O.S.: Windows 8 Enterprise 32Bit (English)</p>	<p><b>P653</b></p>	<p><b>Pass</b></p>
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No.	DDR3 Module	Test Environment	3DMark Score	Result
28	Transcend (TS256MSK64V3N-I 1.5V) [256Mx8b-*8/256Mx64b,CL=9] / SEC (K4B2G0846D) / PC3-10600(DDR3-1333) / 2GB *2	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 32Bit (English) & SP1 Test Summary: Overnight Looping under 14 hours	P603	Pass
29	Transcend (TS256MSK64V3N 1.5V) [256Mx8b-*8/256Mx64b,CL=9] / SEC (K4B2G0846D) / PC3-10600 (DDR3-1333) / 2GB *1	M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-2 (Single channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 64Bit (English) & SP1	P671	Pass



<p><b>30</b></p>	<p>INNODISK (M3SW-2GHJCCN9-E 1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Hynix (H5TC2G83EFR PBA) / PC3-10600(DDR3-1333) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P659</b></p>	<p><b>Pass</b></p>
<p><b>31</b></p>	<p>INNODISK (M3SN-1GHFCC09-D 1.5V) [128Mx8b-*8/128Mx64b,CL=9] / Hynix (H5TQ1G83DFR H9C) / PC3-10600 (DDR3-1333) / 1GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P665</b></p>	<p><b>Pass</b></p>
<p><b>32</b></p>	<p>DSL (D3SH28081XH15AA 1.5V) [128Mx8b-*8/128Mx64b,CL=9] / Hynix (H5TQ1G83BFR H9C) / PC3-10600 (DDR3-1333) / 1GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1 Test Summary: Overnight looping under 12 hours</p>	<p><b>P660</b></p>	<p><b>Pass</b></p>



No.	DDR3 Module	Test Environment	3DMark Score	Result
33	Apacer (78.02GC6.420 1.5V) [128Mx8b-x8/128Mx64b,CL=9] / ELPIDA (J1108BFBG-DJ-F) / PC3-10600 (DDR3-1333) / 1GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SSD: Transcend / TS64GSSD500 SATA2 64GB/2.5" Display: On Board DVD-ROM: Pioneer / DVD-230DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) & SP1 Test Summary: Overnight looping under 14hours	P653	Pass
34	Crucial (CT12864BC1339.4FD 1.5V) [128Mx16b-x4/128Mx64b,CL=9] / MICron (0NDI2-D9LGQ) / PC3-10600 (DDR3-1333) / 1GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 32Bit (English) & SP1	P277	Pass



<p><b>35</b></p>	<p>Transcend (TS128MSK64V3U 1.5V) [128Mx8b-x8/128Mx64b,CL=9] / SEC (K4B1G0846G) / PC3-10600 (DDR3-1333) / 1GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2)</p> <p>M/B BIOS: AMI-UEFI 01/31/2013</p> <p>M/B Driver: Demo Jan/11/2013</p> <p>CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0)</p> <p>DIMM Slot: DIMM-1/2 (Dual channel)</p> <p>SATA HDD: WD / WD800AAJS-00PSA0 80GB</p> <p>Display: On Board</p> <p>DVD-ROM: Pioneer / DVD-230DW 18X SATA</p> <p>Power: Delta / GPS-500BB 500W</p> <p>O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p> <p>Test</p> <p>Summary: Overnight looping under 12 hours</p>	<p><b>P665</b></p>	<p><b>Pass</b></p>
<p><b>36</b></p>	<p>Apacer (AM5D5808MIJSBG 1.5V) / Apacer (AM5D5808MIJSBG 1.5V) / PC3-8500 (DDR3-1066) / 2GB *1</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2)</p> <p>M/B BIOS: AMI-UEFI 01/31/2013</p> <p>M/B Driver: Demo Jan/11/2013</p> <p>CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0)</p> <p>DIMM Slot: DIMM-2 (Single channel)</p> <p>SATA HDD: WD / WD800AAJS-00PSA0 80GB</p> <p>Display: On Board</p> <p>DVD-ROM: Pioneer / DVD-230DW 18X SATA</p> <p>Power: Delta / GPS-500BB 500W</p> <p>O.S.: Windows 8 Enterprise 32Bit (English)</p>	<p><b>P494</b></p>	<p><b>Pass</b></p>
<p><b>37</b></p>	<p>Transcend (TS256MSK64V1U 1.5V±0.75) [128Mx8bits/256Mx64bits,CL=7] / ELPIDA (J1108BASE-AE-E) / PC3-8500 (DDR3-1066) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2)</p> <p>M/B BIOS: AMI-UEFI 01/31/2013</p> <p>M/B Driver: Demo Jan/11/2013</p> <p>CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0)</p> <p>DIMM Slot: DIMM-1/2 (Dual channel)</p> <p>SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5"</p> <p>Display: On Board</p> <p>DVD-RW: Asus / DRW-1814BLT SATA</p> <p>Power: Jagier / KY-580ATX 480W</p> <p>O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P607</b></p>	<p><b>Pass</b></p>

No.	DDR3 Module	Test Environment	3DMark Score	Result
38	Kingston (KVR1066D3S7/2G 1.5V) [128Mx8bits/256Mx64bits,CL=7-7-7-20] / ELPIDA (J1108BABG-DJ-E) / PC3-8500 (DDR3-1066) / 2GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 1.8GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HTS542525K9SA00 SATA1 NCQ 250GB/5400RPM/2.5" Display: On Board DVD-RW: Asus / DRW-1814BLT SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 32Bit (English) & SP1	P600	Pass
39	ADATA (AD31066002GOS (AD7YG1B16723) 1.5V) [128Mx8bits/256Mx64bits,CL=7-7-7-20] / ADATA (AD30908C8D-18GG) / PC3-8500 (DDR3-1066) / 2GB *2	M/B: HM960-QM87BS0 Rev.2 (021) [QM87/B0] & COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD2001FASS-00U0B0 SATA2 NCQ 2TB/7200RPM On Board Display: Pioneer / DVD-230DW 18X SATA DVD-ROM: Delta / GPS-500BB 500W Power: Windows 7 Ultimate 32Bit (English) & SP1 O.S.:	P643	Pass

<p><b>40</b></p>	<p>SILICON (SP002GBSTU106S02 1.5V) [128Mx8b/256Mx64b,CL=7-7-7-20] / S-POWER (IOYT3NO) / PC3-8500 (DDR3-1066) / 2GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD2001FASS-00U0B0 SATA2 NCQ 2TB/7200RPM On Board Display: Pioneer / DVD-230DW 18X SATA DVD-ROM: Delta / GPS-500BB 500W Power: Windows 7 Ultimate 32Bit (English) &amp; SP1 O.S.:</p>	<p><b>P643</b></p>	<p><b>Pass</b></p>
<p><b>41</b></p>	<p>Transcend (TS128MSK64V1U 1.5V±0.75) [128Mx8bits/128Mx64bits,CL=6,7,8] / SEC (K4B1G0846D) / PC3-8500 (DDR3-1066) / 1GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 80GB Display: On Board DVD-ROM: Pioneer / DVD-XD01-W 8X USB2.0 Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P626</b></p>	<p><b>Pass</b></p>
<p><b>42</b></p>	<p>Kingston (KVR1066D3S7/1G 1.5V) [128Mx8bits/128Mx64bits,CL=7-7-7-20] / ELPIDA (J1108BABG-DJ-E) / PC3-8500 (DDR3-1066) / 1GB *2</p>	<p>M/B: HM960-QM87B50 Rev.2 (021) [QM87/B0] &amp; COM331-B Rev.A (0A2) M/B BIOS: AMI-UEFI 01/31/2013 M/B Driver: Demo Jan/11/2013 CPU: Genuine Intel 0000 2.0GHz (Haswell ES2-B0) DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Seagate / ST9320325AS SATA2 NCQ 320GB/5400RPM/2.5" Display: Pioneer / DVD-230DW 18X SATA DVD-ROM: On Board Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p>	<p><b>P629</b></p>	<p><b>Pass</b></p>