

# 1. Stability Test: Rev.031/0A1

## 1.1 CPU Test:

### Procedure:

- (1) Install O.S.
- (2) Check CPU information & specification with CPU-Z.
- (3) Run AIDA64 Cache and Memory Benchmark Ver.5.00.3300 - 1 time.
- (4) Run Passmark Performance Test 8.0 Build1040 - 1 time.
- (5) Run 3DMark for Windows Ver.1.4.828 BenchMark - 3 times or  
3DMark 2006 Demo Edition Build Ver.1.2.1 BenchMark - 3 times.
- (6) Check CPU temperature in the BIOS after running 3DMark.
- (7) Run S3/S4/S5 - 3 times.

No.	CPU	Type	CPU Temp.	Result
1	Intel / 3.2GHz	Core i7-4790S (Haswell/C0-SR1QM) / 65W / LGA1150	30.5 °C	Pass (was:ID24846)
2	Intel / 3.1GHz	Core i7-4770S (Haswell/C0-SR14H) / 65W / LGA1150	41.5 °C	Pass
3	Intel / 2.3GHz	Core i7-4770TE (Haswell/C0-SR183) / 45W / LGA1150	28.5 °C	Pass
4	Intel / 2.0GHz	Core i7-4765T (Haswell/C0-SR14Q) / 35W / LGA1150	48.5 °C	Pass
5	Intel / 3.1GHz	Core i5-4670S (Haswell/C0-SR14K) / 65W / LGA1150	40.5 °C	Pass
6	Intel / 3.0GHz	Core i5-4590S (Haswell/C0-SR1QN) / 65W / 3.0GHz	30.5 °C	Pass (was:ID24846)
7	Intel / 2.0GHz	Core i5-4590T (Haswell/C0-SR156) / 35W / 2.0GHz	50 °C	Pass (was:ID24846)
8	Intel / 2.7GHz	Core i5-4570TE (Haswell/C0-SR17Z) / 35W / LGA1150	28.5 °C	Pass
9	Intel / 2.7GHz	Core i5-4570TE (Haswell/C0-QEEH) / 35W / LGA1150	30.5 °C	Pass
10	Intel / 2.9GHz	Core i5-4570S (Haswell/C0-SR14J) / 65W / LGA1150	40 °C	Pass
11	Intel / 3.7GHz	Core i3-4360 (Haswell/C0-SR1PC) / 54W / LGA1150	34 °C	Pass (was:ID24846)
12	Intel / 3.1GHz	Core i3-4350T (Haswell/C0-SR1PA) / 35W / LGA1150	44.5 °C	Pass (was:ID24846)
13	Intel / 2.6GHz	Core i3-4340TE (Haswell/C0-SR1T5) / 35W / LGA1150	26 °C	Pass (was:ID24846)
14	Intel / 3.5GHz	Core i3-4330 (Haswell/C0-SR1NM) / 54W / LGA1150	29 °C	Pass
15	Intel / 2.4GHz	Core i3-4330TE (Haswell/C0-SR180) / 35W / LGA1150	28 °C	Pass
16	Intel / 3.2GHz	Pentium-G3420 (Haswell/C0-SR1NB) / 54W / LGA1150	44.5 °C	Pass

<b>17</b>	Intel / 2.3GHz	Pentium-G3320TE (Haswell/C0-SR181) / 35W / LGA1150	<b>28.5 °C</b>	<b>Pass</b>
<b>18</b>	Intel / 2.7GHz	Celeron G1820 (Haswell/C0-SR1CN) / 53W / LGA1150	<b>27 °C</b>	<b>Pass</b>
<b>19</b>	Intel / 2.2GHz	Celeron G1820TE (Haswell/C0-SR1T6) / 35W / LGA1150	<b>26 °C</b>	<b>Pass</b>

## 1.2 DDR3 Approved List:

### Procedure:

- (1) Install O.S.**
- (2) Check Memory information & specification with CPU-Z.**
- (3) Run AIDA64 Cache and Memory Benchmark Ver.5.00.3300 - 1 time.**
- (4) Run Passmark Performance Test 8.0 Build1040 - 1 time.**
- (5) Run 3DMark for Windows Ver.1.4.828 BenchMark - 3 times or  
3DMark 2006 Demo Edition Build Ver.1.2.1 BenchMark - 3 times.**
- (6) Run S3/S4/S5 - 3 times.**

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
<b>1</b>	Transcend	Micron	8GB	PC3-12800 (DDR3-1600)	1ZD27-D9PBC/2CD27-D9PBC	TS1GLK64V6H 1.5V [512Mx8b-x16/1024Mx64b,CL=11]	<b>Pass</b>
<b>2</b>	Kingston	Kingston	8GB	PC3-12800 (DDR3-1600)	D5128JC4BPGGBU	KVR16N11/8 1.5V [512Mx8b-x16/1024Mx64b, CL=11]	<b>Pass</b>
<b>3</b>	Kingston	Kingston	8GB	PC3-12800 (DDR3-1600)	D5128JC4BPGGBU	KVR16N11H/8 1.5V [512Mx8b-x16/1024Mx64b, CL=11]	<b>Pass</b>
<b>4</b>	Apacer	Micron	8GB	PC3-12800 (DDR3L-1600)	2ED27-D9PCP	75.C93DK.G000C 1.35V/1.5V [512Mx8b-x16/1024Mx64b,CL=11]	<b>Pass</b>
<b>5</b>	Crucial	Micron	8GB	PC3-12800 (DDR3L-1600)	2REI7D9QBJ	CT102464BD160B.16FED(MT16KTF1 G64AZ-1G6E1) 1.35V/1.5V [512Mx8b-x16/1024Mx64b,CL=11-1 1-11-30]	<b>Pass</b>
<b>6</b>	Apacer	Hynix	4GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	78.B1GE3.AF10C 1.5V [256Mx8b-x16/512Mx64b,CL=11]	<b>Pass</b>
<b>7</b>	Hynix	Hynix	4GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	HMT351U6BFR8C-PBNO 1.5V [256Mx8b-x16/512Mx64b,CL=11]	<b>Pass</b>
<b>8</b>	ADATA	Micron	4GB	PC3-12800 (DDR3-1600)	2GKI2-D9PSH	AD3U1600C4G11-BMIK 1.5V [256Mx8b-x16/512Mx64b,CL=11]	<b>Pass</b>
<b>9</b>	Hynix	Hynix	2GB	PC3-12800 (DDR3-1600)	H5TQ2G83BFR PBC	HMT325U6BFR8C-PBNO 1.5V [256Mx8b-x8/256Mx64b,CL=11]	<b>Pass</b>
<b>10</b>	INNODISK	Micron	2GB	PC3-12800 (DDR3L-1600)	1WM77-D9PFJ	M3UP-2GMJBL0C-M 1.35V/1.5V [256Mx8b-x8/256Mx64b,CL=9]	<b>Pass</b>
<b>11</b>	Transcend	Micron	8GB	PC3-10600 (DDR3-1333)	1ZD27-D9PBC/2CD27-DP9BC	TS1GLK64V3H 1.5V [512Mx8b-x16/1Gx64b,CL=9]	<b>Pass</b>

<b>12</b>	Transcend	Transcend	2GB	PC3-10600 (DDR3-1333)	TK243WAF3	JM1333KLU-2G 1.5V [128Mx8b/256Mx64b,CL=9-9-9]	<b>Pass</b>
<b>13</b>	Elixir	Elixir	2GB	PC3-10600 (DDR3-1333)	M2Y2G64CB8HA9N-CG 1.5V	M2Y2G64CB8HA9N-CG 1.5V [256Mx64b,CL=9-9-9-25]	<b>Pass</b>
<b>14</b>	Apacer	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	78.A1GDE.AF00C 1.5V [256Mx8b-x8/256Mx64b,CL=9]	<b>Pass</b>
<b>15</b>	DSL	Hynix	2GB	PC3-10600 (DDR3-1333)	H5TQ2G83BFR H9C	D3UH56081XH15AA 1.5V [256Mx8b-x8/256Mx64b,CL=9]	<b>Pass</b>
<b>16</b>	Transcend	ELPIDA	2GB	PC3-10600 (DDR3-1333)	J1108BDBG-DJ-F	TS256MLK64V3U 1.5V [128Mx8b-x16/256Mx64b,CL=9]	<b>Pass</b>
<b>17</b>	Crucial	Micron	2GB	PC3-10600 (DDR3-1333)	MT8JTF25664AZ-1G4D1	CT25664BA1339.8FD 1.5V [256Mx8b-x8/256Mx64b,CL=9]	<b>Pass</b>
<b>18</b>	Transcend	ELPIDA	1GB	PC3-10600 (DDR3-1333)	J1108BASE-DJ-E	TS128MLK64V3U 1.5V [128Mx8b/128Mx64b,CL=9]	<b>Pass</b>
<b>19</b>	Kingston	ELPIDA	1GB	PC3-10600 (DDR3-1333)	J1108BABG-DJ-E	KVR1333D3N9/1G 1.5V	<b>Pass</b>
<b>20</b>	Transcend	SEC	2GB	PC3-8500 (DDR3-1066)	K4B1G0846D	TS256MLK64V1U 1.5V [128Mx8b/256Mx64b,CL=7-7-7]	<b>Pass</b>
<b>21</b>	ADATA	ELPIDA	1GB	PC3-8500 (DDR3-1066)	J1108BABG-DJ-E	SU3U1066B1G7-B 1.5V [1Gx8,CL=7]	<b>Pass</b>



### 1.3 DDR3 Module Test Procedures:

**Procedure:**

- (1) Install O.S.**
- (2) Check Memory information & specification with CPU-Z.**
- (3) Run AIDA64 Cache and Memory Benchmark Ver.5.00.3300 - 1 time.**
- (4) Run Passmark Performance Test 8.0 Build1040 - 1 time.**
- (5) Run 3DMark for Windows Ver.1.4.828 BenchMark - 3 times or  
3DMark 2006 Demo Edition Build Ver.1.2.1 BenchMark - 3 times.**
- (6) Run S3/S4/S5 - 3 times.**

No.	DDR3 Module	Test Environment	Result
<b>1</b>	Transcend (TS1GLK64V6H 1.5V) [512Mx8b-x16/1024Mx64b,CL=11] / Micron (1ZD27-D9PBC/2CD27-D9PBC) / PC3-12800 (DDR3-1600) / 8GB *2	M/B: HD332-H81X Rev.3 (031) (BSE440500019) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i5-4570S (Haswell/C0-SR14J) / 2.9GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 SATA2 80GB Display: On board DVD-RW: Asus / SDRW-08D2S-U/BLK/G/AS USB2.0 Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English) Test Summary: Environment Temp.:26.5°C CPU Temp.:41.5°C CPU Temp. after 3DMark:40.0°C 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:24119 MB/s WRITE:25020 MB/s COPY:23682 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:6819 Memory Mark:2469 3.3DMark for Windows Ver.1.4.828 Cloud Gate:6048 Ice Storm Extreme:32927 Skydiver:3171 Fire Strike:759	<b>Pass</b>

<p><b>2</b></p>	<p>Kingston (KVR16N11/8 1.5V) [512Mx8b-x16/1024Mx64b,CL=11] / Kingston (D5128JC4BPGGBU) / PC3-12800 (DDR3-1600) / 8GB *2</p>	<p>M/B: HD332-H81X Rev.3 (031) (BSE440500024) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i7-4790S (Haswell/C0-SR1QM) / 3.2GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Maxtor / STM3320614AS SATA2 NCQ 320GB/7200RPM Display: On board DVD-RW: Archgon / MD-3107-U3 USB3.0 Power: Jagier / KY-580ATX 480W O.S.: Windows 8 Enterprise 64Bit (English) Test Summary: Environment Temp.:25.0℃ CPU Temp.:30.5℃ CPU Temp. after 3DMark:30.5℃ 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:24197 MB/s WRITE:25070 MB/s COPY:23785 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:9190 Memory Mark:2604 3.3DMark for Windows Ver.1.4.828 Cloud Gate:7738 Ice Storm Extreme:40903 Skydiver:3525 Fire Strike:870</p>	<p><b>Pass</b></p>
-----------------	--	---	--------------------



No.	DDR3 Module	Test Environment	Result
<b>3</b>	Kingston (KVR16N11H/8 1.5V) [512Mx8b-x16/1024Mx64b,CL=11] / Kingston (D5128JC4BPGGBU) / PC3-12800 (DDR3-1600) / 8GB *2	M/B: HD332-H81X Rev.3 (031) (BSE440500019) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i3-4340TE (Haswell/C0-SR1T5) / 2.6GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 SATA2 80GB Display: On board DVD-ROM: Pioneer / DVD-232DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English) Test Summary: Environment Temp.:27.0°C CPU Temp.:29°C CPU Temp. after 3DMark:26°C 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:21152 MB/s WRITE:25061 MB/s COPY:22430 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:4070 Memory Mark:2143 3.3DMark for Windows Ver.1.4.828 Cloud Gate:3927 Ice Storm Extreme:19846 Skydiver:1884 Fire Strike:467	<b>Pass</b>

<b>4</b>	<p>Apacer (75.C93DK.G000C 1.35V/1.5V) [512Mx8b-x16/1024Mx64b,CL=11] / Micron (2ED27-D9PCP) / PC3-12800 (DDR3L-1600) / 8GB *1</p>	<p>M/B: HD332-H81X Rev.3 (031) (BSE440500024) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Celeron G1820TE (Haswell/C0-SR1T6) / 2.2GHz DIMM Slot: DIMM-2 (Single channel) SATA HDD: Hitachi / HDP725025GLA380 SATA2 NCQ 250GB/7200RPM Display: On board DVD-RW: Lite-On / IT iHAS324 SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1 Test Summary: Environment Temp.:24.3℃ CPU Temp.:25℃ CPU Temp. after 3DMark:26℃ 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:10034 MB/s WRITE:10367 MB/s COPY:9476 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:2470 Memory Mark:1426 3.3DMark for Windows Ver.1.4.828 Cloud Gate:2575 Ice Storm Extreme:15900 Skydiver:1345 Fire Strike:319</p>	<b>Pass</b>
----------	--	--	-------------



No.	DDR3 Module	Test Environment	Result
5	Crucial (CT102464BD160B.16FED (MT16KTF1G64AZ-1G6E1) 1.35V/1.5V) [512Mx8b-x16/1024Mx64b, CL=11-11-11-30] / Micron (2REI7D9QBJ) / PC3-12800 (DDR3L-1600) / 8GB *2	M/B: HD332-H81X Rev.3 (031) (BSE440500024) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i7-4770S (Haswell/C0-SR14H) / 3.1GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HDP725025GLA380 SATA2 NCQ 250GB/7200RPM Display: On board DVD-RW: Lite-On / IT iHAS324 SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 8 Enterprise 64Bit (English) Test Summary: Environment Temp.:24.9°C CPU Temp.:37°C CPU Temp. after 3DMark:41.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:24254 MB/s WRITE:25066 MB/s COPY:23288 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:9042 Memory Mark:2544 3.3DMark for Windows Ver.1.4.828 Cloud Gate:7343 Ice Storm Extreme:36197 Skydiver:3497 Fire Strike:851	Pass



<b>6</b>	<p>Apacer (78.B1GE3.AF10C 1.5V) [256Mx8b-x16/512Mx64b,CL=11] / Hynix (H5TQ2G83BFR PBC) / PC3-12800 (DDR3-1600) / 4GB *1</p>	<p>M/B: HD332-H81X Rev.3 (031) (BSE440500024) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i3-4360 (Haswell/C0-SR1PC) / 3.7GHz DIMM Slot: DIMM-2 (Single channel) SATA HDD: Maxtor / STM3320614AS SATA2 NCQ 320GB/7200RPM Display: On board DVD-ROM: Pioneer / DVD-231DW 18X SATA Power: Jagier / KY-580ATX 480W O.S.: Windows XP Professional 32Bit (English) &amp; SP3 Test Summary: Environment Temp.:24.0℃ CPU Temp.:30.0℃ CPU Temp. after 3DMark:34.0℃ 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:12011 MB/s WRITE:12183 MB/s COPY:10921 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:3823 Memory Mark:1485 3.3DMark2006 Ver.1.2.1 Score:2869</p>	<b>Pass</b>
----------	---	--	-------------

No.	DDR3 Module	Test Environment	Result
<b>7</b>	Hynix (HMT351U6BFR8C-PBNO 1.5V) [256Mx8b-x16/512Mx64b,CL=11] / Hynix (H5TQ2G83BFR PBC) / PC3-12800 (DDR3-1600) / 4GB *2	M/B: HD332-H81X Rev.3 (031) (BSE440500024) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Pentium-G3320TE (Haswell/C0-SR181) / 2.3GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HDP725025GLA380 SATA2 NCQ 250GB/7200RPM Display: On board DVD-RW: Lite-On / IT iHAS324 SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 64Bit (English) & SP1 Test Summary: Environment Temp.:25.3°C CPU Temp.:26.5°C CPU Temp. after 3DMark:28.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:21784 MB/s WRITE:25048 MB/s COPY:23122 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:4347 Memory Mark:2119 3.3DMark for Windows Ver.1.4.828 Cloud Gate:4347 Ice Storm Extreme:23070 Skydiver:2156 Fire Strike:530	<b>Pass</b>



<b>8</b>	<p>ADATA (AD3U1600C4G11-BMIK 1.5V) [256Mx8b-x16/512Mx64b,CL=11] / Micron (2GKI2-D9PSH) / PC3-12800 (DDR3-1600) / 4GB *2</p>	<p>M/B: HD332-H81X Rev.3 (031) (BSE440500024) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i3-4330 (Haswell/C0-SR1NM) / 3.5GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HDP725025GLA380 SATA2 NCQ 250GB/7200RPM Display: On board DVD-RW: Lite-On / IT iHAS324 SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1 Test Summary: Environment Temp.:27.0℃ CPU Temp.:29.5℃ CPU Temp. after 3DMark:29℃ 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:22641 MB/s WRITE:25076 MB/s COPY:23429 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:5335 Memory Mark:2397 3.3DMark for Windows Ver.1.4.828 Cloud Gate:6069 Ice Storm Extreme:30805 Skydiver:3199 Fire Strike:759</p>	<b>Pass</b>
----------	---	--	-------------



No.	DDR3 Module	Test Environment	Result
9	Hynix (HMT325U6BFR8C-PBNO 1.5V) [256Mx8b-x8/256Mx64b,CL=11] / Hynix (H5TQ2G83BFR PBC) / PC3-12800 (DDR3-1600) / 2GB *2	M/B: HD332-H81X Rev.3 (031) (BSE440500024) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Pentium-G3320TE (Haswell/C0-SR181) / 2.3GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Hitachi / HDP725025GLA380 SATA2 NCQ 250GB/7200RPM Display: On board DVD-RW: Lite-On / IT iHAS324 SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 8 Enterprise 32Bit (English) Test Summary: Environment Temp.:24.3°C CPU Temp.:25.5°C CPU Temp. after 3DMark:25°C 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:18387 MB/s WRITE:19974 MB/s COPY:15597 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:1976 Memory Mark:1329 3.3DMark for Windows Ver.1.4.828 Cloud Gate:4347 Ice Storm Extreme:23070 Skydiver:2156 Fire Strike:530	Pass



<b>10</b>	<p>INNODISK (M3UP-2GMJBL0C-M 1.35V/1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Micron (1WM77-D9PFJ) / PC3-12800 (DDR3L-1600) / 2GB *2</p>	<p>M/B: HD332-H81X Rev.3 (031) (BSE440500019) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i5-4670S (Haswell/C0-SR14K) / 3.1GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 SATA2 80GB Display: On board DVD-RW: Archgon / MD-3107-U3 USB3.0 (USB3 port1) Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 32Bit (English) Test Summary: Environment Temp.:24.2℃ CPU Temp.:37.5℃ CPU Temp. after 3DMark:40.5℃ 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:23195 MB/s WRITE:23275 MB/s COPY:21136 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:5318 Memory Mark:1706 3.3DMark for Windows Ver.1.4.828 Cloud Gate:6427 Ice Storm Extreme:37937 Skydiver:3394 Fire Strike:818</p>	<b>Pass</b>
-----------	--	--	-------------



No.	DDR3 Module	Test Environment	Result
11	Transcend (TS1GLK64V3H 1.5V) [512Mx8b-x16/1Gx64b,CL=9] / Micron (1ZD27-D9PBC/2CD27-DP9BC) / PC3-10600 (DDR3-1333) / 8GB *1	M/B: HD332-H81X Rev.3 (031) (BSE440500019) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i7-4770TE (Haswell/C0-SR183) / 2.3GHz DIMM Slot: DIMM-1 (Single channel) SATA HDD: WD / WD800AAJS-00PSA0 SATA2 80GB Display: On board DVD-RW: Asus / SDRW-08D2S-U USB2.0 (USB2 port2) Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 64Bit (English) Test Summary: Environment Temp.:24.6°C CPU Temp.:25.5°C CPU Temp. after 3DMark:28.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:10422 MB/s WRITE:10480 MB/s COPY:10688 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:6822 Memory Mark:1558 3.3DMark for Windows Ver.1.4.828 Cloud Gate:4838 Ice Storm Extreme:23203 Skydiver:2244 Fire Strike:552	Pass

<b>12</b>	<p>Transcend (JM1333KLU-2G 1.5V) [128Mx8b/256Mx64b,CL=9-9-9] / Transcend (TK243WAF3) / PC3-10600 (DDR3-1333) / 2GB *2</p>	<p>M/B: HD332-H81X Rev.3 (031) (BSE440500024)</p> <p>M/B BIOS: AMI-Aptio 12/09/2014</p> <p>M/B Driver: Demo Oct/08/2014</p> <p>CPU: Intel / Celeron G1820 (Haswell/C0-SR1CN) / 2.7GHz</p> <p>DIMM Slot: DIMM-1/2 (Dual channel)</p> <p>SATA HDD: Hitachi / HDP725025GLA380 SATA2 NCQ 250GB/7200RPM</p> <p>Display: On board</p> <p>DVD-RW: Lite-On / IT iHAS324 SATA</p> <p>Power: Jagier / KY-580ATX 480W</p> <p>O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1</p> <p>Test Summary: Environment Temp.:25.3℃</p> <p>CPU Temp.:26℃</p> <p>CPU Temp. after 3DMark:27℃</p> <p>1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300</p> <p>    READ:19073 MB/s</p> <p>    WRITE:20693 MB/s</p> <p>    COPY:17924 MB/s</p> <p>2.Passmark Performance Test 8.0 Build1040</p> <p>    CPU Mark:2273</p> <p>    Memory Mark:1424</p> <p>3.3DMark for Windows Ver.1.4.828</p> <p>    Cloud Gate:3250</p> <p>    Ice Storm Extreme:22262</p> <p>    Skydiver:1688</p> <p>    Fire Strike:386</p>	<b>Pass</b>
-----------	---	---	-------------



No.	DDR3 Module	Test Environment	Result
13	Elixir (M2Y2G64CB8HA9N-CG 1.5V) [256Mx64b,CL=9-9-9-25] / Elixir (M2Y2G64CB8HA9N-CG 1.5V) / PC3-10600 (DDR3-1333) / 2GB *1	M/B: HD332-H81X Rev.3 (031) (BSE440500024) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i3-4350T (Haswell/C0-SR1PA) / 3.1GHz DIMM Slot: DIMM-2 (Single channel) SATA HDD: Maxtor / STM3320614AS SATA2 NCQ 320GB/7200RPM Display: On board DVD-ROM: Pioneer / DVD-231DW 18X SATA Power: Jagier / KY-580ATX 480W O.S.: Windows 8 Enterprise 32Bit (English) Test Summary: Environment Temp.:26.5°C CPU Temp.:42.5°C CPU Temp. after 3DMark:44.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:10341 MB/s WRITE:10472 MB/s COPY:10494 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:3431 Memory Mark:1150 3.3DMark for Windows Ver.1.4.828 Cloud Gate:4246 Ice Storm Extreme:22540 Skydiver:2152 Fire Strike:477 Running Overnight looping for 12 hours:Pass	Pass





<b>14</b>	<p>Apacer (78.A1GDE.AF00C 1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Hynix (H5TQ2G83BFR H9C) / PC3-10600 (DDR3-1333) / 2GB *2</p>	<p>M/B: HD332-H81X Rev.3 (031) (BSE440500019) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i3-4330TE (Haswell/C0-SR180) / 2.4GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 SATA2 80GB Display: On board DVD-RW: Archgon / MD-3107-U3 USB3.0 (USB3 port3) Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 32Bit (English) Test Summary: Environment Temp.:24.0℃ CPU Temp.:25.5℃ CPU Temp. after 3DMark:28.0℃ 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:18792 MB/s WRITE:19935 MB/s COPY:17854 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:2618 Memory Mark:1355 3.3DMark for Windows Ver.1.4.828 Cloud Gate:4034 Ice Storm Extreme:24246 Skydiver:2165 Fire Strike:519</p>	<b>Pass</b>
-----------	---	---	-------------



No.	DDR3 Module	Test Environment	Result
15	DSL (D3UH56081XH15AA 1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Hynix (H5TQ2G83BFR H9C) / PC3-10600 (DDR3-1333) / 2GB *1	M/B: HD332-H81X Rev.3 (031) (BSE440500019) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i5-4570TE (Haswell/C0-QEEH) / 2.7GHz DIMM Slot: DIMM-1 (Single channel) SATA HDD: WD / WD800AAJS-00PSA0 SATA2 80GB Display: On board DVD-RW: Asus / SDRW-08D2S-U (USB2 port11) Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) & SP1 Test Summary: Environment Temp.:26.4°C CPU Temp.:30.5°C CPU Temp. after 3DMark:30.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:10133 MB/s WRITE:10099 MB/s COPY:9275 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:3000 Memory Mark:1029 3.3DMark for Windows Ver.1.4.828 Cloud Gate:3728 Ice Storm Extreme:19599 Skydiver:1876 Fire Strike:394	Pass



<b>16</b>	<p>Transcend (TS256MLK64V3U 1.5V) [128Mx8b-x16/256Mx64b,CL=9] / ELPIDA (J1108BDBG-DJ-F) / PC3-10600 (DDR3-1333) / 2GB *2</p>	<p>M/B: HD332-H81X Rev.3 (031) (BSE440500024) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i5-4590T (Haswell/C0-SR1S6) / 2.0GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Maxtor / STM3320614AS SATA2 NCQ 320GB/7200RPM Display: On board DVD-RW: Archgon / MD-3107-U3 USB3.0 (USB3 port3) Power: Jagier / KY-580ATX 480W O.S.: Windows 7 Ultimate 64Bit (English) &amp; SP1 Test Summary: Environment Temp.:26.0℃ CPU Temp.:48.0℃ CPU Temp. after 3DMark:50.0℃ 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:20435 MB/s WRITE:20908 MB/s COPY:20022 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:4920 Memory Mark:1772 3.3DMark for Windows Ver.1.4.828 Cloud Gate:4455 Ice Storm Extreme:23931 Skydiver:2219 Fire Strike:556</p>	<b>Pass</b>
-----------	--	--	-------------



No.	DDR3 Module	Test Environment	Result
17	Crucial (CT25664BA1339.8FD 1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Micron (MT8JTF25664AZ-1G4D1) / PC3-10600 (DDR3-1333) / 2GB *2	M/B: HD332-H81X Rev.3 (031) (BSE440500019) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i7-4765T (Haswell/C0-SR14Q) / 2.0GHz DIMM Slot: DIMM-1/2 (Dual channel) SSD: Silicon Power / SP120GBSS3V60S25 SATA3 120GB/2.5" Display: On board DVD-ROM: Pioneer / DVD-232DW 18X SATA Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) & SP1 Test Summary: Environment Temp.:25.4°C CPU Temp.:48.0°C CPU Temp. after 3DMark:48.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:20086 MB/s WRITE:19886 MB/s COPY:18389 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:4555 Memory Mark:1363 3.3DMark for Windows Ver.1.4.828 Cloud Gate:5060 Ice Storm Extreme:29041 Skydiver:2557 Fire Strike:561	Pass

<b>18</b>	<p>Transcend (TS128MLK64V3U 1.5V) [128Mx8b/128Mx64b,CL=9] / ELPIDA (J1108BASE-DJ-E) / PC3-10600 (DDR3-1333) / 1GB *2</p>	<p>M/B: HD332-H81X Rev.3 (031) (BSE440500019) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i5-4590S (Haswell/C0-SR1QN) / 3.0GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 SATA2 80GB Display: On board DVD-RW: Asus / SDRW-08D2S-U (USB2 port8) Power: Delta / GPS-500BB 500W O.S.: Windows 7 Ultimate 32Bit (English) &amp; SP1 Test Summary: Environment Temp.:25.0℃ CPU Temp.:30.5℃ CPU Temp. after 3DMark:30.5℃ 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:19928 MB/s WRITE:20321 MB/s COPY:18698 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:5213 Memory Mark:1290 3.3DMark for Windows Ver.1.4.828 Cloud Gate:9164 Ice Storm Extreme:33810 Skydiver:3188 Fire Strike:737</p>	<b>Pass</b>
-----------	--	--	-------------

No.	DDR3 Module	Test Environment	Result
19	Kingston (KVR1333D3N9/1G 1.5V) / ELPIDA (J1108BABG-DJ-E) / PC3-10600 (DDR3-1333) / 1GB *2	M/B: HD332-H81X Rev.3 (031) (BSE440500019) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Pentium-G3420 (Haswell/C0-SR1NB) / 3.2GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: WD / WD800AAJS-00PSA0 SATA2 80GB Display: On board DVD-RW: Asus / SDRW-08D2S-U (USB2 port3) Power: Delta / GPS-500BB 500W O.S.: Windows 8 Enterprise 32Bit (English) Test Summary: Environment Temp.:26.5°C CPU Temp.:42.5°C CPU Temp. after 3DMark:44.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300 READ:19317 MB/s WRITE:20198 MB/s COPY:16146 MB/s 2.Passmark Performance Test 8.0 Build1040 CPU Mark:2720 Memory Mark:1360 3.3DMark for Windows Ver.1.4.828 Cloud Gate:3532 Ice Storm Extreme:25571 Skydiver:1782 Fire Strike:423	Pass

<b>20</b>	<p>Transcend (TS256MLK64V1U 1.5V) [128Mx8b/256Mx64b,CL=7-7-7] / SEC (K4B1G0846D) / PC3-8500 (DDR3-1066) / 2GB *2</p>	<p>M/B: HD332-H81X Rev.3 (031) (BSE440500024) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Core i3-4330 (Haswell/C0-SR1NM) / 3.5GHz DIMM Slot: DIMM-1/2 (Dual channel) SATA HDD: Maxtor / STM3320614AS SATA2 NCQ 320GB/7200RPM Display: On board DVD-ROM: Pioneer / DVD-231DW 18X SATA Power: Jagier / KY-580ATX 480W O.S.: Windows XP Professional 32Bit (English) &amp; SP3 Test Summary: 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300  READ:15621 MB/s  WRITE:16615 MB/s  COPY:14620 MB/s  2.Passmark Performance Test 8.0 Build1040  CPU Mark:3791  Memory Mark:1566  3.3DMark2006 Ver.1.2.1  Score:3224</p>	<b>Pass</b>
-----------	--	---	-------------



<b>21</b>	<p>ADATA (SU3U1066B1G7-B 1.5V) [1Gx8,CL=7] / ELPIDA (J1108BABG-DJ-E) / PC3-8500 (DDR3-1066) / 1GB *1</p>	<p>M/B: HD332-H81X Rev.3 (031) (BSE440500019) M/B BIOS: AMI-Aptio 12/09/2014 M/B Driver: Demo Oct/08/2014 CPU: Intel / Pentium-G3420 (Haswell/C0-SR1NB) / 3.2GHz DIMM Slot: DIMM-1 (Single channel) SATA HDD: WD / WD800AAJS-00PSA0 SATA2 80GB Display: On board DVD-RW: Asus / SDRW-08D2S-U/BLK/G/AS (USB2 port4) Power: Delta / GPS-500BB 500W O.S.: Windows XP Professional 32Bit (English) &amp; SP3 Test Summary: 1.AIDA64 Cache and Memory Benchmark Ver.5.00.3300  READ:7665 MB/s  WRITE:7384 MB/s  COPY:6630 MB/s  2.Passmark Performance Test 8.0 Build1040  CPU Mark:2657  Memory Mark:651  3.3DMark2006 Ver.1.2.1  Score:1960</p>	<b>Pass</b>
-----------	--	--	-------------

