

# 1. Stability Test: Rev.021

## 1.1 CPU Function Test:

<b>Test Purpose</b>	Test CPU functions work normally under Windows Operating System
<b>Test Procedure</b>	<ol style="list-style-type: none"> <li>1. Install Windows Operating System</li> <li>2. Install M/B Device Driver</li> <li>3. CPU-Z check CPU info</li> <li>4. Run AIDA64 Cache and Memory Benchmark Ver.5.60.3700 1 time</li> <li>5. Run Passmark Performance Test 8.0 Build1053 1 time</li> <li>6. Run 3DMark for Windows Ver.1.5.915 BenchMark 3 times</li> <li>7. S3/Hibernate Test 3 times</li> </ol>
<b>Test Criteria</b>	It should be no problem for all tests

No.	CPU	Type	CPU Temp.	Result
1	Intel / 2.60GHz	Core i7-6600U (Skylake-U/D1-SR2F1) / 15W / BGA1356	28.5 °C	Pass
2	Intel / 2.40GHz	Core i5-6300U (Skylake-U/D1-SR2F0) / 15W / BGA1356	28.5 °C	Pass

## 1.2 Memory Function Test:

<b>Test Purpose</b>	Test Memory functions work normally under Windows Operating System
<b>Test Procedure</b>	<ol style="list-style-type: none"> <li>1. Install Windows Operating System</li> <li>2. Install M/B Device Driver</li> <li>3. Run AIDA64 Cache and Memory Benchmark Ver.5.60.3700 1 time</li> <li>4. Run Passmark Performance Test 8.0 Build1053 1 time</li> <li>5. Run 3DMark for Windows Ver.1.5.915 BenchMark 3 times</li> <li>6. S3/Hibernate Test 3 times</li> </ol>
<b>Test Criteria</b>	It should be no problem for the test

### 1.2.1 DDRIII:

No.	Function	Result
1	Single Channel mode	Pass
2	DIMM Slot1	Pass

### 1.2.2 Application Test:

No.	Software	Test Keypoint	Test Environment	Result
1	MemTest86 Ver.6.0.0	1. Burn-In test 12 hours.	M/B: SU551-NB-6300U Rev.2 (021) (BSG030400012) & EIO-EVT Rev.2 (021) (BSG040700004) M/B BIOS: Insyde 01/22/2016 M/B Driver: Demo ver.0.2.1601.0 CPU: Intel / Core i7-6600U (Skylake-U/D1-SR2F1) / 2.6GHz DDR3: Kingston (CBD16D3LS1KNG/8G (BTMK16A1597/9905621-E02.A01G) 1.35V) [2Rx8,CL=11] / Kingston (D5128EU5NPGGB) / PC3L-12800 (DDR3L-1600) / 8GB *1 Intel / SSDSC2CT080A4 SATA3 80GB/2.5" On Board (using DP) Lite-On / It iHAS324-07 SATA Delta / GPS-500BB 500W SSD: Display: DVD-RW: Power: O.S.: DOS	Pass



### 1.2.3 DDR3 SO-DIMM Approved List:

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
1	Crucial	Micron	8GB	PC3L-12800 (DDR3L-1600)	2RD27D9PCP	CT102464BF160B.16FDD (MT16KTF1G64HZ-1G6D1) 1.35V/1.5V [512Mx8b-x16/1024Mx64b,CL=11-11-11-30]	Pass
2	Kingston	Kingston	8GB	PC3L-12800 (DDR3L-1600)	D5128EU5NPGGB	CBD16D3LS1KNG/8G (BTMK16A1597/9905621-E02.A01G) 1.35V [2Rx8,CL=11]	Pass
3	Transcend	SEC	4GB	PC3L-12800 (DDR3L-1600)	K4B4G0846D	TS512MSK64W6H 1.35V/1.5V [512Mx8b-x8/512Mx64b,CL=11-11-11]	Pass
4	ADATA	Micron	4GB	PC3L-12800 (DDR3L-1600)	4OE77D9QBJ	ADDS1600W4G11-BMIE 1.35V/1.5V [512Mx8b-x8/512Mx64b,CL=11-11-11]	Pass
5	ATLA	Hynix(SK)	4GB	PC3L-12800 (DDR3L-1600)	H5TC4G83BFR-PBA	AD3SHT4GG5WB-CKGBL 1.35V [512Mx8,CL=11]	Pass
6	Transcend	Hynix	4GB	PC3-10600 (DDR3L-1333)	H5TQ2G83BFR-H9C	TS512MSK64W3N 1.35V/1.5V [256Mx8b-x16/512Mx64b,CL=9]	Pass
7	Transcend	Hynix	2GB	PC3-10600 (DDR3L-1333)	H5TQ2G83BFR-H9C	TS256MSK64W3N 1.35V/1.5V [256Mx8b-x8/256Mx64b,CL=9]	Pass
8	Crucial	Micron	2GB	PC3L-10600 (DDR3L-1333)	2EM77D9PFJ	CT25664BF1339.8FMR (MT8KTF25664HZ-1G4M1) 1.35V/1.5V [56Mx8b-x8/256Mx64b,CL=9]	Pass

### 1.2.4 DDR3 SO-DIMM Test Procedures:

No.	DDR3 Module	Test Environment	Result
1	Crucial (CT102464BF160B.16FDD (MT16KTF1G64HZ-1G6D1) 1.35V/1.5V) [512Mx8b-x16/1024Mx64b,CL=11-11-11-30] / Micron (2RD27D9PCP) / PC3L-12800 (DDR3L-1600) / 8GB *1	M/B: SU551-NB-6300U Rev.2 (021) (BSG030400012) M/B BIOS: Insyde 01/22/2016 M/B Driver: Demo ver.0.2.1601.0 CPU: Intel / Core i5-6300U (Skylake-U/D1-SR2F0) / 2.4GHz DIMM Slot: DIMM-1 (Single channel) Seagate / ST3320620SV SATA2 NCQ 320GB/7200RPM SATA HDD: On Board (using D-Sub) Display: Lite-On / It iHAS324-07 SATA DVD-RW: CWT / CWT-550AD 550W Power: Windows 8.1 Embedded Pro 64Bit (with update 1) (English) O.S.: Environment Temp.:24.1°C Test Summary: CPU Temp.:26.5°C CPU Temp. after 3DMark:26.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.60.3700 READ:12295 MB/s WRITE:11947 MB/s COPY:12486 MB/s 2.PassMark Performance Test 8.0 Build 1053 CPU Mark:4178 Memory Mark:1707 3.3DMark for Windows Ver.1.5.915 Cloud Gate:5206 Ice Storm:33172 Sky Diver:3124 Strike Test:648	Pass



No.	DDR3 Module	Test Environment	Result
2	Kingston (CBD16D3LS1KNG/8G (BTMK16A1597/9905621-E02.A01G) 1.35V) [2Rx8,CL=11] / Kingston (D5128EU5NPGGB) / PC3L-12800 (DDR3L-1600) / 8GB *1	M/B: SU551-NB-6300U Rev.2 (021) (BSG030400012) & EIO-EVT Rev.2 (021) (BSG040700004) M/B BIOS: Insyde 01/22/2016 M/B Driver: Demo ver.0.2.1601.0 CPU: Intel / Core i7-6600U (Skylake-U/D1-SR2F1) / 2.6GHz DIMM Slot: DIMM-1 (Single channel) Intel / SSDSC2CT080A4 SATA3 80GB/2.5" SSD: On Board (using DP) Display: Lite-On / It iHAS324-07 SATA DVD-RW: Delta / GPS-500BB 500W Power: Windows 8.1 Embedded Pro 64Bit (with update 1) (English) O.S.: Environment Temp.:24.0°C Test Summary: CPU Temp.:27.5°C CPU Temp. after 3DMark:28.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.60.3700 READ:12443 MB/s WRITE:12184 MB/s COPY:12708 MB/s 2.PassMark Performance Test 8.0 Build 1053 CPU Mark:4686 Memory Mark:1784 3.3DMark for Windows Ver.1.5.915 Cloud Gate:5602 Ice Storm:35111 Sky Diver:3314 Strike Test:694	Pass
3	Transcend (TS512MSK64W6H 1.35V/1.5V) [512Mx8b-x8/512Mx64b,CL=11-11-11] / SEC (K4B4G0846D) / PC3L-12800(DDR3L-1600) / 4GB *1	M/B: SU551-NB-6300U Rev.2 (021) (BSG030400012) M/B BIOS: Insyde 01/22/2016 M/B Driver: Demo ver.0.2.1601.0 CPU: Intel / Core i5-6300U (Skylake-U/D1-SR2F0) / 2.4GHz DIMM Slot: DIMM-1 (Single channel) Seagate / ST3320620SV SATA2 NCQ 320GB/7200RPM SATA HDD: On Board (using D-Sub) Display: Lite-On / It iHAS324-07 SATA DVD-RW: CWT / CWT-550AD 550W Power: Windows 8.1 Embedded Pro 64Bit (with update 1) (English) O.S.: Environment Temp.:23.7°C Test Summary: CPU Temp.:26.5°C CPU Temp. after 3DMark:26.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.60.3700 READ:11568 MB/s WRITE:11484 MB/s COPY:11324 MB/s 2.PassMark Performance Test 8.0 Build 1053 CPU Mark:4230 Memory Mark:1537 3.3DMark for Windows Ver.1.5.915 Cloud Gate:4980 Ice Storm:31094 Sky Diver:2969 Strike Test:595	Pass

No.	DDR3 Module	Test Environment	Result
4	ADATA (ADD51600W4G11-BMIE 1.35V/1.5V) [512Mx8b-x8/512Mx64b,CL=11-11-11] / Micron (40E77D9QB) / PC3L-12800 (DDR3L-1600) / 4GB *1	M/B: SU551-NB-6300U Rev.2 (021) (BSG030400012) M/B BIOS: Insyde 01/22/2016 M/B Driver: Demo ver.0.2.1601.0 CPU: Intel / Core i5-6300U (Skylake-U/D1-SR2F0) / 2.4GHz DIMM Slot: DIMM-1 (Single channel) SATA HDD: Seagate / ST3320620SV SATA2 NCQ 320GB/7200RPM On Board (using D-Sub) Display: Lite-On / It iHAS324-07 SATA DVD-RW: CWT / CWT-550AD 550W Power: Windows 8.1 Embedded Pro 64Bit (with update 1) (English) O.S.: Environment Temp.:23.8°C Test Summary: CPU Temp.:25.5°C CPU Temp. after 3DMark:25.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.60.3700 READ:11569 MB/s WRITE:11493 MB/s COPY:11353 MB/s 2.PassMark Performance Test 8.0 Build 1053 CPU Mark:4200 Memory Mark:1531 3.3DMark for Windows Ver.1.5.915 Cloud Gate:4985 Ice Storm:31049 Sky Diver:2976 Strike Test:596	Pass
5	ATLA (AD3SHT4GG5WB-CKGBL 1.35V) / Hynix(SK) (H5TC4G83BFR-PBA) / PC3L-12800 (DDR3L-1600) / 4GB *1	M/B: SU551-NB-6300U Rev.2 (021) (BSG030400012) M/B BIOS: Insyde 01/22/2016 M/B Driver: Demo ver.0.2.1601.0 CPU: Intel / Core i5-6300U (Skylake-U/D1-SR2F0) / 2.4GHz DIMM Slot: DIMM-1 (Single channel) SATA HDD: Seagate / ST3320620SV SATA2 NCQ 320GB/7200RPM On Board (using D-Sub) Display: Lite-On / It iHAS324-07 SATA DVD-RW: CWT / CWT-550AD 550W Power: Windows 8.1 Embedded Pro 64Bit (with update 1) (English) O.S.: Environment Temp.:23.0°C Test Summary: CPU Temp.:25.5°C CPU Temp. after 3DMark:24.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.60.3700 READ:11551MB/s WRITE:11469 MB/s COPY:11357 MB/s 2.PassMark Performance Test 8.0 Build 1053 CPU Mark:4180 Memory Mark:749 3.3DMark for Windows Ver.1.5.915 Cloud Gate:4985 Ice Storm:31126 Sky Diver:2975 Strike Test:592	Pass

No.	DDR3 Module	Test Environment	Result
6	Transcend (TS512MSK64W3N 1.35V/1.5V) [256Mx8b-x16/512Mx64b,CL=9] / Hynix (H5TQ2G83BFR-H9C) / PC3-10600 (DDR3L-1333) / 4GB *1	M/B: SU551-NB-6300U Rev.2 (021) (BSG030400012) M/B BIOS: Insyde 01/22/2016 M/B Driver: Demo ver.0.2.1601.0 CPU: Intel / Core i5-6300U (Skylake-U/D1-SR2F0) / 2.4GHz DIMM Slot: DIMM-1 (Single channel) SATA HDD: Seagate / ST3320620SV SATA2 NCQ 320GB/7200RPM On Board (using D-Sub) Display: Lite-On / It iHAS324-07 SATA DVD-RW: CWT / CWT-550AD 550W Power: Windows 8.1 Embedded Pro 64Bit (with update 1) (English) O.S.: Environment Temp.:23.0°C Test Summary: CPU Temp.:24.5°C CPU Temp. after 3DMark:24.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.60.3700 READ:10431 MB/s WRITE:10217 MB/s COPY:10463 MB/s 2.PassMark Performance Test 8.0 Build 1053 CPU Mark:4227 Memory Mark:1462 3.3DMark for Windows Ver.1.5.915 Cloud Gate:4931 Ice Storm:31178 Sky Diver:2978 Strike Test:597	Pass
7	Transcend (TS256MSK64W3N 1.35V/1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Hynix (H5TQ2G83BFR-H9C) / PC3-10600 (DDR3L-1333) / 2GB *1	M/B: SU551-NB-6300U Rev.2 (021) (BSG030400012) M/B BIOS: Insyde 01/22/2016 M/B Driver: Demo ver.0.2.1601.0 CPU: Intel / Core i5-6300U (Skylake-U/D1-SR2F0) / 2.4GHz DIMM Slot: DIMM-1 (Single channel) SATA HDD: Seagate / ST3320620SV SATA2 NCQ 320GB/7200RPM On Board (using D-Sub) Display: Lite-On / It iHAS324-07 SATA DVD-RW: CWT / CWT-550AD 550W Power: Windows 8.1 Embedded Pro 64Bit (with update 1) (English) O.S.: Environment Temp.:23.1°C Test Summary: CPU Temp.:29.5°C CPU Temp. after 3DMark:29.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.60.3700 READ:9948 MB/s WRITE:9841 MB/s COPY:9769 MB/s 2.PassMark Performance Test 8.0 Build 1053 CPU Mark:4136 Memory Mark:1144 3.3DMark for Windows Ver.1.5.915 Cloud Gate:4699 Ice Storm:28759 Sky Diver:2814 Strike Test:554	Pass



No.	DDR3 Module	Test Environment	Result
8	Crucial (CT25664BF1339.8FMR (MT8KTF25664HZ-1G4M1) 1.35V/1.5V) [256Mx8b-x8/256Mx64b,CL=9] / Micron (2EM77D9PFJ) / PC3L-10600 (DDR3L-1333) / 2GB *1	M/B: SU551-NB-6300U Rev.2 (021) (BSG030400012) M/B BIOS: Insyde 01/22/2016 M/B Driver: Demo ver.0.2.1601.0 CPU: Intel / Core i5-6300U (Skylake-U/D1-SR2F0) / 2.4GHz DIMM Slot: DIMM-1 (Single channel) SATA HDD: Seagate / ST3320620SV SATA2 NCQ 320GB/7200RPM On Board (using D-Sub) Display: Lite-On / It iHAS324-07 SATA DVD-RW: CWT / CWT-550AD 550W Power: Windows 8.1 Embedded Pro 64Bit (with update 1) (English) O.S.: Environment Temp.:23.1°C Test Summary: CPU Temp.:29.5°C CPU Temp. after 3DMark:29.5°C 1.AIDA64 Cache and Memory Benchmark Ver.5.60.3700 READ:9933 MB/s WRITE:9774 MB/s COPY:9577 MB/s 2.PassMark Performance Test 8.0 Build 1053 CPU Mark:4126 Memory Mark:1124 3.3DMark for Windows Ver.1.5.915 Cloud Gate:4733 Ice Storm:28879 Sky Diver:2808 Strike Test:552	Pass