

# 1. Stability Test:

## 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 drivers</li> <li>3. Check CPU temperature in BIOS setup menu</li> <li>4. Run PassMark BurnIn Test and check CPU Temp.</li> <li>5. Using CPU-Z check CPU info</li> </ol>
<b>Test Criteria</b>	It should be correct for each test step

No.	CPU	Type	Idle CPU Temp.	Full Loading CPU Temp.	Result
1	Intel / 4.2GHz	Core i7-7700K (KabyLake / SR33A) / 91W / LGA1151	32.0°C	79.0°C	Pass
2	Intel / 4.0GHz	Core i7-6700K (SkyLake/SR2L0) / LGA1151	30.0°C	76.0°C	Pass
3	Intel / 3.6GHz	Core i7-7700 (Kaby Lake/QKHA) / 65W / LGA1151	30.0°C	73.0°C	Pass
4	Intel / 2.70GHz	Core i5-7500T (KabyLake/QKHG) / 35W / LGA1151	28.0°C	50.0°C	Pass
5	Intel / 3.40GHz	Core i7-6700(Skylake/SR2BT) / 65W / LGA1151	30.0°C	72.0°C	Pass
6	Intel / 3.20GHz	Core i5-6500(SkyLake/SR2BX) / 65W / LGA1151	29.0°C	62.0°C	Pass
7	Intel / 2.30GHz	Core i5-6500TE (SkyLake/SR2LR) / 35W / LGA1151	28.0°C	60.0°C	Pass
8	Intel / 4.00GHz	Core i3-7300 (KabyLake / SR359) / 51W / LGA1151	30.0°C	61.0°C	Pass
9	Intel / 3.70GHz	Core i3-6100 (SkyLake/SR2HG) / 51W / LGA1151	28.0°C	58.0°C	Pass
10	Intel / 2.70GHz	Core i3-6100TE (SkyLake/SR2LS) / 35W / LGA1151	26.0°C	46.0°C	Pass
11	Intel / 3.30GHz	Pentium-G4400 (SkyLake/SR2DC) / 54W / LGA1151 /	25.0°C	43.0°C	Pass
12	Intel / 2.40GHz	Pentium-G4400TE (SkyLake/SR2LT) / 35W / LGA1151	24.0°C	40.0°C	Pass
13	Intel / 2.80GHz	Celeron G3900 (SkyLake/SR2HV) / 51W / LGA1151	26.0°C	42.0°C	Pass
14	Intel / 2.30GHz	Celeron G3900TE (SkyLake/SR2LU) / 35W / LGA1151	24.0°C	40.0°C	Pass

### 1.1.1 Application Test:

No.	Software	Test Keypoint	Result
1	CPU-Z Ver.1.92.0	1. Check all information.	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.6.25.5400 1 time</li> <li>4. Run Passmark Performance Test 10.0 Build1008 1 time</li> <li>5. Run 3DMark for Windows V2.12.6964 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 Application Test:

No.	Software	Test Keypoint	Test Environment	Result
<b>1</b>	PassMark MemTest86 V8.4 Pro	1. Running test 12 hours.	DDR4: DDR4-2666/ADATA/SEC 949-K4AAG085WA-BCTD/ O.S.: AD4S2666732G19-BSSA/32GB(DIMM-1/2) Dual Channel EFI Shell Memtest86 V8.4	<b>Pass</b>

### 1.2.2 DDR4 Approved List:

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
<b>1</b>	Apacer	SEC	16GB	DDR4-2666	K4A8G085WB BCTD	78.D1GS7.4010B	<b>Pass</b>
<b>2</b>	Transcend	SEC	16GB	DDR4-2666	K4A8G085WC-BCTD	TS2GLH64V6B	<b>Pass</b>
<b>3</b>	Apacer	SEC	8GB	DDR4-2666	K4A8G085WB-BCTD	78.C1GS7.40F0B	<b>Pass</b>
<b>4</b>	Transcend	SEC	8GB	DDR4-2666	K4A8G085WC BCTD	TS1GLH64V6B	<b>Pass</b>
<b>5</b>	Innodisk	SEC	8GB	DDR4-2666	K4A4G085WE-BCTD	M4U0-8GSSKCIK	<b>Pass</b>
<b>6</b>	Innodisk	SEC	8GB	DDR4-2666	K4A8G085WC-BCTD	M4U0-8GS1JCIK	<b>Pass</b>
<b>7</b>	Apacer	SEC	4GB	DDR4-2666	K4A4G085WE-BCTD	78.B1GS6.40F0B	<b>Pass</b>
<b>8</b>	Innodisk	SEC	4GB	DDR4-2666	K4A4G05WE-BCTD	M4U0-4GSSJCIK	<b>Pass</b>

## 1.2.4 DDR4 Module Test Procedures:

No.	DDR4 Module	Test Procedures	Result
1	DDR4-2666/ Apacer-78.D1GS7.4010B/ SEC-K4A8G085WB-BCTD/16GB*2	CPU: Intel Core i7-7700 3.70GHz (QNMK) (DIMM-1/2) Dual Channel DIMM Slot: Test Summary: AIDA64 Cache and Memory Benchmark(V6.25.5400) READ:34526 MB/s WRITE:37335 MB/s COPY:34281 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark:9322.2 Memory Mark:3292.3 3DMark for Windows(V2.12.6964)3times Cloud Gate:10815 Ice Storm:51378 Sky diver:5152 Fire Strike:1265	Pass
2	DDR4-2666/Transcend- TS2GLH64V6B/ SEC-K4A8G085WC BCTD/16GB* 2	CPU: Intel Core i7-6700K 4.00GHz (SR2L0) DIMM Slot: (DIMM-1/2) Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.25.5400) READ: 30790 MB/s WRITE: 32725 MB/s COPY: 30610 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark:9198.8 Memory Mark:3196.3 3DMark for Windows(V2.12.6964)3times Cloud Gate:10328 Ice Storm:60938 Sky diver:4986 Fire Strike:1182	Pass
3	DDR4-2666/ Apacer-78.C1GS7.40F0B/ SEC-K4A8G085WB-BCTD/8GB*2	CPU: Intel Core i7-6700 3.40GHz (SR2BT) (DIMM-1/2) Dual Channel DIMM Slot: Test Summary: AIDA64 Cache and Memory Benchmark(V6.25.5400) READ: 30995 MB/s WRITE: 31484 MB/s COPY: 28210 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark:8509 Memory Mark:3032.8 3DMark for Windows(V2.12.6964)3times Cloud Gate:9925 Ice Storm:58717 Sky diver:4897 Fire Strike:1153	Pass
4	DDR4-2666/ Innodisk-M4U0- 8GS1JCIK / SEC- K4A8G085WC- BCTD/8GB *2	CPU: Intel Core i5-7500T 3.00GHz DIMM Slot: (QKHG) (DIMM-1/2) Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.25.5400) READ:33368 MB/s WRITE:37101 MB/s COPY:33203 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark:5684.2 Memory Mark:2812.1 3DMark for Windows(V2.12.6964)3times Cloud Gate:8559 Ice Storm:49812 Sky diver:4786 Fire Strike:1209	Pass
5	DDR4-2666/ Transcend- TS1GLH64V6B/SEC-K4A8G085WC BCTD/8GB*2	CPU: Intel Core i5-6500 3.20GHz (SR2BX) DIMM Slot: (DIMM-1/2) Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.25.5400) READ: 30412 MB/s WRITE: 31000 MB/s COPY: 27635 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark: 6008.8 Memory Mark: 2852.1 3DMark for Windows(V2.12.6964)3times Cloud Gate:8044 Ice Storm:54661 Sky diver:4392 Fire Strike:1034	Pass

<b>6</b>	DDR4-2666/ Innodisk- M4U0-8GSSKCIK/ SEC- K4A4G085WE-BCTD/8GB*1	CPU: DIMM Slot: Test Summary:	Intel Core i5-6500TE 2.30GHz (SR2LR) (DIMM-1) Single Channel AIDA64 Cache and Memory Benchmark(V6.25.5400) READ: 16675 MB/s WRITE:16233 MB/s COPY: 16704 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark:5352.5 Memory Mark:2173.3 3DMark for Windows(V2.12.6964)3times Cloud Gate:6739 Ice Storm:44244 Sky diver:3860 Fire Strike:912	<b>Pass</b>
<b>7</b>	DDR4-2666/ Transcend-TS1GLH64V6B/SEC -K4A8G085WC BCTD/8GB*2	CPU: DIMM Slot: Test Summary:	Intel Core i3-7300 4.00GHz (SR359) (DIMM-1/2) Dual Channel AIDA64 Cache and Memory Benchmark(V6.25.5400) READ:33111 MB/s WRITE:34388 MB/s COPY:29100 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark:4850.7 Memory Mark:2963.8 3DMark for Windows(V2.12.6964)3times Cloud Gate:8398 Ice Storm:49041 Sky diver:4742 Fire Strike:1182	<b>Pass</b>
<b>8</b>	DDR4-2666/Transcend-TS1GLH64V6B/ SEC-K4A8G085WC-BCTD/8GB*2	CPU: DIMM Slot: Test Summary:	Intel Core i3-6100 3.70GHz (SR2HG) (DIMM-1/2) Dual Channel AIDA64 Cache and Memory Benchmark(V6.25.5400) READ: 30158 MB/s WRITE: 31083 MB/s COPY: 26264 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark: 4429.2 Memory Mark: 2532.6 3DMark for Windows(V2.12.6964)3times Cloud Gate: 7428 Ice Storm:51461 Sky diver: 4169 Fire Strike: 1389	<b>Pass</b>
<b>9</b>	DDR4-2666/ Apacer-78.B1GS6.40F0B/ SEC- K4A4G085WE-BCTD/4GB*2	CPU: DIMM Slot: Test Summary:	Intel Core i3-6100TE 2.70GHz (SR2LS) (DIMM-1/2) Dual Channel AIDA64 Cache and Memory Benchmark(V6.25.5400) READ: 30173 MB/s WRITE: 31325 MB/s COPY: 26790 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark: 3289.8 Memory Mark: 2245.8 3DMark for Windows(V2.12.6964)3times Cloud Gate:6414 Ice Storm:46900 Sky diver:3938 Fire Strike:968	<b>Pass</b>
<b>10</b>	DDR4-2666/ Apacer-78.B1GS6.40F0B/ SEC- K4A4G085WE-BCTD/4GB*2	CPU: DIMM Slot: Test Summary:	Intel Pentium-G4400 3.30GHz (SR2DC) (DIMM-1/2) Dual Channel AIDA64 Cache and Memory Benchmark(V6.25.5400) READ: 29214 MB/s WRITE: 31346 MB/s COPY: 27350 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark: 2704.2 Memory Mark: 2414.5 3DMark for Windows(V2.12.6964)3times Cloud Gate:4672 Ice Storm:27630 Sky diver:2506 Fire Strike:619	<b>Pass</b>
<b>11</b>	DDR4-2666/ Apacer-78.B1GS6.40F0B/ SEC- K4A4G085WE-BCTD/4GB*2	CPU: DIMM Slot: Test Summary:	Intel Pentium-G4400TE 2.40GHz (SR2LT) (DIMM-1/2) Dual Channel AIDA64 Cache and Memory Benchmark(V6.25.5400) READ: 27578 MB/s WRITE: 31192 MB/s COPY: 26888 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark: 1967.7 Memory Mark: 2052.9 3DMark for Windows(V2.12.6964)3times Cloud Gate:3986 Ice Storm:25995 Sky diver:2322 Fire Strike:587	<b>Pass</b>

<b>12</b>	DDR4-2666/ Apacer-78.B1GS6.40F0B/ SEC- K4A4G085WE-BCTD/4GB*2	CPU: Intel Celeron G3900 2.80GHz (SR2HV) DIMM Slot: (DIMM-1/2) Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.25.5400) READ: 28487 MB/s WRITE: 31282 MB/s COPY: 27250 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark: 2280.5 Memory Mark: 2231.5 3DMark for Windows(V2.12.6964)3times Cloud Gate:4203 Ice Storm:25541 Sky diver:2309 Fire Strike:968	<b>Pass</b>
<b>13</b>	DDR4-2666/ Innodisk - M4U0-4GSSJCIK / SEC- K4A4G05WE-BCTD /4GB*2	CPU: Intel Celeron G3900TE 2.30GHz (SR2LU) DIMM Slot: (DIMM-1/2) Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.25.5400) READ: 27787 MB/s WRITE: 31159 MB/s COPY: 27416 MB/s Passmark PerformanceTest 10.0 Build 1009 CPU Mark: 1887.8 Memory Mark: 1972.4 3DMark for Windows(V2.12.6964)3times Cloud Gate:3895 Ice Storm:25599 Sky diver:2305 Fire Strike:583	<b>Pass</b>