

1. Stability Test:

1.1 CPU Function Test:

Test Purpose	Test CPU functions work normally under Windows Operating System
Test Procedure	1. Install Windows operating system 2. Install M/B device drivers 3. CPU-Z check CPU info 4. Run AIDA64 Cache and Memory Benchmark Ver.5.95.4500 – 1 time 5. Run PassMark Performance Test 9.0 Build1022 – 1 time 6. Run 3DMark for Windows Ver.2.4.4180 BenchMark – 3 times 7. S3(Sleep)/S4(Hiberbate)/S5(Shutdown) test – 3 times
Test Criteria	It should be correct for each test step

No.	CPU	Type	CPU Temp.	Result
1	Intel / 3.6GHz	Core i7-7700 (KabyLake / SR338) / 65W / LGA1151	30.0°C	Pass
2	Intel / 3.5GHz	Core i5-7600 (KabyLake / SR334) / 65W / LGA1151	38.0°C	Pass
3	Intel / 4.0GHz	Core i3-7300 (KabyLake / SR359) / 51W / LGA1151	35.0°C	Pass
4	Intel / 3.8GHz	Xeon E3-1275 v6 (KabyLake /) / 73W / LGA1151	34.0°C	Pass
5	Intel / 3.40GHz	Core i7-6700 (Skylake-S/R0-SR2BT) / 65W / LGA1151	48.5°C	Pass
6	Intel / 3.20GHz	Core i5-6500 (Skylake-S/R0-SR2BX) / 65W / LGA1151	52.0°C	Pass
7	Intel / 3.70GHz	Core i3-6100 (Skylake-S/S0-SR2HG) / 51W / LGA1151	48.5°C	Pass
8	Intel / 2.80GHz	Celeron G3900(Skylake-S/S0-SR2HV) / 51W / LGA1151	43.5°C	Pass
9	Intel / 3.30GHz	Pentium-G4400 (Skylake-S/R0-SR2DC) / 54W / LGA1151	54.5°C	Pass

1.1.1 Application Test:

No.	Software	Test Keypoint	Result
1	PassMark Memtest86 V7.4 Pro	1. Stress-In test 12 hours.	Pass

1.2 Memory Function Test:

Test Purpose	Test Memory functions work normally under Windows Operating System
Test Procedure	<ol style="list-style-type: none"> 1. Install Windows Operating System 2. Install M/B Device Driver 3. Run AIDA64 Cache and Memory Benchmark Ver.5.97.4600 1 time 4. Run Passmark Performance Test 9.0 Build1023 1 time 5. Run 3DMark for Windows Ver.2.4.4264 BenchMark 3 times 6. S3/Hibernate Test 3 times
Test Criteria	It should be no problem for the test

1.2.1 DDR4:

No.	Function	Result
1	DDR4 DIMM Slot Examine	Pass
2	Single Channel mode	Pass
3	Dual channel mode	Pass
4	Warning beep sound when no memory install	Pass

1.2.2 Application Test:

No.	Software	Test Keypoint	Test Environment	Result
1	MemTest86 Ver.7.5.0	1. Stress test 24 hours.	DDR4: PC4-19200 (DDR4-2400) / Transcend-TS2GLH64V4B / SEC-K4A8G085WB-BCRC / 16GB*4 (Non ECC) (DR041-1/2/3/4) (DIMM-1/2/3/4) Dual Channel O.S.: DOS	Pass

1.2.3 DDR4 Approved List: (Non-ECC)

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
1	Kingston	Micron	16GB	DDR4-2400	7TE77-D9VPP	CBD24D4U708ME-16	Pass
2	Transcend	SEC	16GB	DDR4-2400	K4A8G085WB-BCRC	TS2GLH64V4B	Pass
3	Transcend	SEC	8GB	DDR4-2400	K4A4G085WE-BCRC	TS1GLH64V4H	Pass
4	ADATA	SK Hynix	8GB	DDR4-2400	H5AN8G8NAFR-UHC	AD4U240038G17-BHYA	Pass
5	Transcend	SEC	8GB	DDR4-2400	K4A4G085WE-BCRC	TS1GLH64V4H(ASG450200004)	Pass

1.2.4 DDR4 Module Test Procedures: (ECC)

No.	DDR4 Module	Test Procedures	Result
1	DDR4-2400 / ADATA- AD4E2400316 BHVA / SK Hynix- H5AN8G8NAFR-UHC / 16GB*2 (ECC)	CPU: Intel Xeon CPU E3-1275 v6 @ 3.80GHz DIMM Slot: DIMM-2/4 Dual Channel Test Summary: Environment Temp.:23.6° CPU Temp.:37.0°C CPU Temp. after 3DMark:56.0°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) DUAL CHANNEL(DIMM-2/4) READ:34753 MB/s WRITE: 37250 MB/s COPY:34035 MB/s Passmark PerformanceTest 9.0 Build 1022 CPU Mark:11726.2 Memory Mark:3173.7 3DMark for Windows(V 2.4. 4180)3times Cloud Gate:10340 Ice Storm:64512 Sky diver:5095 Fire Strike:1196	Pass
2	DDR4-2133 / Transcend- TS1GLH72V1H / SEC- K4A4G085WE- BCRC / 8GB*4 (ECC)	CPU: Intel Xeon CPU E3-1275 v6 @ 3.80GHz DIMM Slot: DIMM-1/2/3/4 Dual Channel Test Summary: Environment Temp.:20.5°C CPU Temp.:34.0°C CPU Temp. after 3DMark:56.0°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) DUAL CHANNEL(DIMM-1/2/3/4) READ:31377 MB/s WRITE: 33354 MB/s COPY:31448 MB/s Passmark PerformanceTest 9.0 Build 1022 CPU Mark:11400.3 Memory Mark:2855.4 3DMark for Windows(V 2.4.4180)3times Cloud Gate:10150 Ice Storm:56954 Sky diver:5109 Fire Strike:1180	Pass

1.2.5 DDR4 Module Test Procedures: (Non ECC)

No.	DDR4 Module	Test Procedures	Result
1	DDR4-2400/Kingston-CBD24D4U708ME-16 /Micron-7TE77-D9VPP/16GB*4 (Non-ECC)	CPU: Intel Core i7-7700 CPU @ 3.60GHz (SR338) DIMM Slot: DIMM-1//2/3/4 Dual Channel Test Summary: Environment Temp.:26.2°C CPU Temp.:30.0°C CPU Temp. after 3DMark:52.5°C AIDA64 Cache and Memory Benchmark(V 5. 95.4500) DUAL CHANNEL(DIMM-1/2/3/4) READ:33397 MB/s WRITE:36274 MB/s COPY:34416 MB/s Passmark PerformanceTest 9.0 Build 1022 CPU Mark:11554 Memory Mark:2883.1 3DMark for Windows(V 2.4.4180)3times Cloud Gate:9830 Ice Storm:53746 Sky diver:4851 Fire Strik:1186	Pass

2	DDR4-2400/Transcend-TS2GLH64V4B/ SEC-K4A8G085WB/16GB*2 (Non-ECC)	CPU: Intel Core i3-7300 4.00GHz (SR359) DIMM Slot: DIMM-2/4 Dual Channel Test Summary: Environment Temp.:25.2°C CPU Temp.:35.0°C CPU Temp. after 3DMark:50.0°C AIDA64 Cache and Memory Benchmark(V 5.95.4500) DUAL CHANNEL(DIMM-2/4) READ:33512 MB/s WRITE:36350 MB/s COPY:33894 MB/s Passmark PerformanceTest 9.0 Build 1022 CPU Mark:6487.7 Memory Mark:3145 3DMark for Windows(V 2.4.4180)3times Cloud Gate:7977 Ice Storm:57945 Sky diver:4580 Fire Strike:1090	Pass
3	DDR4-2400/Transcend-TS1GLH64V4H/ SEC-K4A8G085WB/16GB*2 (Non-ECC)	CPU: Intel Core i7-7700 CPU @ 3.60GHz (SR338) DIMM Slot: DIMM-1 Single Channel Test Summary: Environment Temp.:20.4°C CPU Temp.:32.0°C CPU Temp. after 3DMark:51.5°C AIDA64 Cache and Memory Benchmark(V 5.95.4500) SINGLE CHANNEL(DIMM-1) READ:18997 MB/s WRITE:18062 MB/s COPY:19310 MB/s Passmark PerformanceTest 9.0 Build 1022 CPU Mark:10265.3 Memory Mark:2391.1 3DMark for Windows(V 2.4.4180)3times Cloud Gate:8328 Ice Storm:42781 Sky diver:4388 Fire Strike:980	Pass
4	DDR4-2400/Transcend-TS2GLH64V4B/ SEC-K4A8G085WB/16GB*2 (Non-ECC)	CPU: Intel Core i3-7300 4.00GHz (SR359) DIMM Slot: DIMM-3/4 Dual Channel Test Summary: Environment Temp.:25.1°C CPU Temp.:54.0°C CPU Temp. after 3DMark:56.0°C AIDA64 Cache and Memory Benchmark(V 5.95.4500) DUAL CHANNEL(DIMM-3/4) READ:18186 MB/s WRITE:18352 MB/s COPY:18686 MB/s Passmark PerformanceTest 9.0 Build 1022 CPU Mark:6296.4 Memory Mark:2517.1 3DMark for Windows(V 2.4.4180)3times Cloud Gate:7066 Ice Storm:46703 Sky diver:4158 Fire Strike:896	Pass
5	DDR4-2400/Transcend-TS2GLH64V4B/ SEC-K4A8G085WB/16GB*2 (Non-ECC)	CPU: Intel Core i7-7700 CPU @ 3.60GHz (SR338) DIMM Slot: DIMM-4 Single Channel Test Summary: Environment Temp.:25.6°C CPU Temp.:53.0°C CPU Temp. after 3DMark:56.0°C AIDA64 Cache and Memory Benchmark(V 5.95.4500) SINGLE CHANNEL(DIMM-4) READ:19168 MB/s WRITE:18373 MB/s COPY:19187 MB/s Passmark PerformanceTest 9.0 Build 1022 CPU Mark:9535.7 Memory Mark:2308.4 3DMark for Windows(V 2.4.4180)3times Cloud Gate:8867 Ice Storm:53347 Sky diver:4676 Fire Strike:998	Pass