

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 Driver 3. Check CPU temperature in BIOS setup menu 4. Run 3DMark for Windows BenchMark 3 times and check CPU Temp 5. Using CPU-Z heck CPU info
Test Criteria	It should be no problem for the test

No.	CPU	Type	Idle CPU Temp.	Full Loading CPU Temp.	Result
1	Intel / 3.6GHz	Core i7-7700 (KabyLake/SR338) / 65W / LGA1151	38°C	54.5 °C	Pass
2	Intel / 3.5GHz	Core i5-7600 (KabyLake/SR334) / 65W / LGA1151	39°C	56 °C	Pass
3	Intel / 4.0GHz	Core i3-7300 (KabyLake/SR359) / 51W / LGA1151	38°C	55 °C	Pass
4	Intel / 3.4GHz	Core i7-6700 (Skylake/SR2BT) / 65W / LGA1151	38°C	52 °C	Pass
5	Intel / 3.2GHz	Core i5-6500 (Skylake/SR2BX) / 65W / LGA1151	36°C	42.5 °C	Pass
6	Intel / 2.3GHz	Core i5-6500TE (Skylake/SR2LR) / 35W / LGA1151	32.5°C	52 °C	Pass
7	Intel / 2.7GHz	Core i3-6100TE (Skylake/SR2LS) / 35W / LGA1151	36.5°C	37 °C	Pass
8	Intel / 3.7GHz	Core i3-6100 (Skylake/SR2HG) / 51W / LGA1151	39°C	51 °C	Pass
9	Intel / 3.3GHz	Pentium-G4400 (Skylake/SR2DC) / 54W / LGA1151	35.5°C	39.5 °C	Pass
10	Intel / 2.4GHz	Pentium-G4400TE (Skylake/SR2LT) / 35W / LGA1151	34.5°C	39.5 °C	Pass
11	Intel / 2.8GHz	Celeron G3900 (Skylake/SR2HV) / 51W / LGA1151	35.5°C	38 °C	Pass
12	Intel / 2.3GHz	Celeron G3900TE (Skylake/SR2LU) / 35W / LGA1151	30.5°C	36 °C	Pass

1.1.1 Application Test:

No.	Software	Test Keypoint	Result
1	CPU-Z	1. Check all information.	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.5.95.4500 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	Single Channel mode	Pass
2	Dual channel mode	Pass
3	DIMM Slot0	Pass
4	DIMM Slot1	Pass
5	DIMM Slot2	Pass
6	DIMM Slot3	Pass

1.2.2 Application Test:

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

1.2.3 DDR4 Approved List:

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
1	Transcend	SEC	16GB	DDR4-2400	K4A86085WB-BCRC	TS2GL H64V4B	Pass
2	Kingston	Micron	16GB	DDR4-2400	7TE77D9VPP	CBD24D4 U7D8ME-16	Pass
3	ADATA	SK hynix	8GB	DDR4-2400	H5AN8G8NAFR-UHC	AD4U2400 38G17-BHYA	Pass
4	Kingston	Micron	8GB	DDR4-2400	7TE77D9VPP	CBD24D4 U7S8ME-8	Pass
5	Transcend	SEC	8GB	DDR4-2400	K4A4G085WE-BCRC	TS1GL H64V4H	Pass
6	Transcend	SEC	8GB	DDR4-2400	K4A4G085WE-BCRC	TS1GL H64V4H	Pass
7	Kingston	Micron	4GB	DDR4-2400	7QE75D9WFH	CBD24D4 U7S1ME-4	Pass

1.2.4 DDR4 Module Test Procedures:

No.	DDR4 Module	Test Procedures	Result
1	DDR4-2400/ Transcend-TS2GLH64V4B/ SEC- K4A86085WB-BCRC/ 16GB*4	M/B: KD300-Q170 Rev.2 (021) (BSI041810008) CPU: Intel Core i7-7700 3.60GHz DIMM Slot: DIMM-1/2/3/4 Dual Channel Test Summary: Environment Temp.:25.0°C CPU Temp.:38.0°C CPU Temp. after 3DMark:54.5°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) DUAL CHANNEL(DIMM-1/2/3/4) READ:32881 MB/s WRITE:37150 MB/s COPY:33529 MB/s Passmark PerformanceTest 9.0 Build 1023 CPU Mark:11524.4 Memory Mark:2800.2 3DMark for Windows(V 2.4.4264)3times Cloud Gate:10439 Ice Storm:63326 Sky diver:5203 Fire Strike:1283	Pass
2	DDR4-2400/ Kingston-CBD24D4U7D8M -16/ Micron-7TE77D9VPP/ 16GB*	M/B: KD300-Q170 Rev.2 (021) (BSI041810008) CPU: Intel Core i5-6500 3.20GHz DIMM Slot: DIMM-1 Single Channel Test Summary: Environment Temp.:25.0°C CPU Temp.:36.0°C CPU Temp. after 3DMark:42.5°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) SINGLE CHANNEL(DIMM-1) READ:15838 MB/s WRITE:15485 MB/s COPY:15870 MB/s Passmark PerformanceTest 9.0 Build 1023 CPU Mark:7363.8 Memory Mark:2075.3 3DMark for Windows(V 2.4.4264) 3 times Cloud Gate:6985 Ice Storm:45021 Sky diver:4000 Fire Strike:883	Pass
3	DDR4-2400/ Transcend-TS2GLH64V4B/ SEC-K4A86085WB-BCRC/ 16GB*2	M/B: KD300-Q170 Rev.2 (021) (BSI041810008) CPU: Intel Core i3-600 3.70GHz DIMM Slot: DIMM-1/3 Dual Channel Test Summary: Environment Temp.:24.6°C CPU Temp.:39.0°C CPU Temp. after 3DMark:51.0°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) DUAL CHANNEL(DIMM-1/3) READ:29756 MB/s WRITE:31496 MB/s COPY:28885 MB/s Passmark PerformanceTest 9.0 Build 1023 CPU Mark:5907.6 Memory Mark:2590.4 3DMark for Windows(V 2.4.4264)3times Cloud Gate:7364 Ice Storm:51617 Sky diver:4171 Fire Strike:1027	Pass
4	DDR4-2400/ ADATA-AD4U240038G17-BHYA / SK hynix-H5AN8G8NAFR-UHC/ 8GB*2	M/B: KD300-H1 10 Rev.2 (021) (BSI041710008) CPU: Intel Core i5-7600 3.50GHz DIMM Slot: DIMM-1/3 Dual Channel Test Summary: Environment Temp.:24.5°C CPU Temp.:39.0°C CPU Temp. after 3DMark:56.0°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) DUAL CHANNEL(DIMM-1/3) READ:32620 MB/s WRITE:34029 MB/s COPY:29032 MB/s Passmark PerformanceTest 9.0 Build 1023 CPU Mark:8412 Memory Mark:2691.7 3DMark for Windows(V 2.4.4264) 3 times Cloud Gate:8922 Ice Storm:61117 Sky diver:5062 Fire Strike:1252	Pass

5	DDR4-2400/ Kingston-CBD24D4U7S8ME-8/ Micom-7TE77D9VPP/ 8GB*2	M/B: KD300-Q170 Rev.2 (021) (BSI041810008) CPU: Intel Core i3-7300 4.00GHz DIMM Slot: DIMM-2/4 Dual Channel Test Summary: Environment Temp.:24.9°C CPU Temp.:38.0°C CPU Temp. after 3DMark:55.0°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) DUAL CHANNEL(DIMM-2/4) READ:32695 MB/s WRITE:34310 MB/s COPY:28559 MB/s Passmark PerformanceTest 9.0 Build 1023 CPU Mark:6477 Memory Mark:2904.9 3DMark for Windows(V 2.4.4264) 3 times Cloud Gate:8134 Ice Storm:56346 Sky diver:4663 Fire Strike:1150	Pass
6	DDR4-2400/Transcend-TS1GLH64V4H/ SEC-K4A4G085WE-BCRC/8GB*	M/B: KD300-Q170 Rev.2 (021) (BSI041810008) CPU: Intel Core i5-6500TE 2.30GHz DIMM Slot: DIMM-2 Single Channel Test Summary: Environment Temp.:24.7°C CPU Temp.:32.5°C CPU Temp. after 3DMark:52.0°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) SINGLE CHANNEL(DIMM-2) READ:14456 MB/s WRITE:13611 MB/s COPY:14051 MB/s Passmark PerformanceTest 9.0 Build 1023 CPU Mark:4736.7 Memory Mark:1501.9 3DMark for Windows(V 2.4.4264) 3 times Cloud Gate:1907 Ice Storm:7982 Sky diver:775 Fire Strike:206	Pass
7	DDR4-2400/ Transcend-TS1GLH64V4H/ SEC-K4A4G085WE-BCRC/ 8GB*	M/B: KD300-Q170 Rev.2 (021) (BSI041810008) CPU: Intel Celeron G3900 2.80GHz DIMM Slot: DIMM-3 Single Channel Test Summary: Environment Temp.:25.0°C CPU Temp.:35.5°C CPU Temp. after 3DMark:38.0°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) SINGLE CHANNEL(DIMM-3) READ:15308 MB/s WRITE:15305 MB/s COPY:14979 MB/s Passmark PerformanceTest 9.0 Build 1023 CPU Mark:3073.2 Memory Mark:1781.5 3DMark for Windows(V 2.4.4264) 3 times Cloud Gate:3938 Ice Storm:24178 Sky diver:2143 Fire Strike:527	Pass
8	DDR4-2400/ Transcend-TS1GLH64V4H/ SEC-K4A4G085WE-BCRC/ 8GB*	M/B: KD300-Q170 Rev.2 (021) (BSI041810008) CPU: Intel Celeron G3900TE 2.30GHz DIMM Slot: DIMM-4 Single Channel Test Summary: Environment Temp.:25.1°C CPU Temp.:30.5°C CPU Temp. after 3DMark:36.0°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) SINGLE CHANNEL(DIMM-4) READ:15250 MB/s WRITE:15255 MB/s COPY:14788 MB/s Passmark PerformanceTest 9.0 Build 1023 CPU Mark:2545.8 Memory Mark:1613 3DMark for Windows(V 2.4.4264) 3 times Cloud Gate:3663 Ice Storm:23271 Sky diver:2138 Fire Strike:528	Pass

9	DDR4-2400/ Kingston-CBD24D4U7S8ME-8/ Microm-7TE77D9VPP/ 8GB*2	M/B: KD300-Q170 Rev.2 (021) (BSI041810008) CPU: Intel Core i7-6700 3.40GHz DIMM Slot: DIMM-3/4 Single Channel Test Summary: Environment Temp.:25.0°C CPU Temp.:38.0°C CPU Temp. after 3DMark:52.0°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) SINGLE CHANNEL(DIMM-3/4) READ:15197 MB/s WRITE:15576 MB/s COPY:16650 MB/s Passmark PerformanceTest 9.0 Build 1019 CPU Mark:9018.3 Memory Mark:2042.3 3DMark for Windows(V 2.4.4264) 3 times Cloud Gate:8272 Ice Storm:47379 Sky diver:4339 Fire Strike:928	Pass
10	DDR4-2400/ Kingston-CBD24D4U7S8ME-8/ Microm-7TE77D9VPP/ 8GB*2	M/B: KD300-Q170 Rev.2 (021) (BSI041810008) CPU: Intel Petium G4400TE 2.40GHz DIMM Slot: DIMM-0/1 Single Channel Test Summary: Environment Temp.:24.5°C CPU Temp.:34.5°C CPU Temp. after 3DMark:39.5°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) SINGLE CHANNEL(DIMM-0/1) READ:14990 MB/s WRITE:15258 MB/s COPY:14672 MB/s Passmark PerformanceTest 9.0 Build 1023 CPU Mark:2708.9 Memory Mark:1743.7 3DMark for Windows(V 2.4.4264) 3 times Cloud Gate:4289 Ice Storm:24870 Sky diver:2268 Fire Strike:498	Pass
11	DDR4-2400/ Kingston-CBD24D4U7S8ME-8/ Microm-7TE77D9VPP/ 8GB*2	M/B: KD300-Q170 Rev.2 (021) (BSI041810008) CPU: Intel Core i3-6100TE 2.70GHz DIMM Slot: DIMM-2/3 Dual Channel Test Summary: Environment Temp.:24.7°C CPU Temp.:36.5°C CPU Temp. after 3DMark:37.0°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) DUAL CHANNEL(DIMM-2/3) READ:29121 MB/s WRITE:31222 MB/s COPY:26112 MB/s Passmark PerformanceTest 9.0 Build 1023 CPU Mark:4565.9 Memory Mark:2084.6 3DMark for Windows(V 2.4.4264) 3 times Cloud Gate:6264 Ice Storm:45086 Sky diver:3873 Fire Strike:960	Pass
12	DDR4-2400/ Kingston-CBD24D4U7S1ME-4/ Micron-7QE7SD9WFH/ 4GH*2	M/B: KD300-Q170 Rev.2 (021) (BSI041810008) CPU: Intel Pentium G4400 3.30GHz DIMM Slot: DIMM-3/4 Single Channel Test Summary: Environment Temp.:24.5°C CPU Temp.:35.5°C CPU Temp. after 3DMark:39.5°C AIDA64 Cache and Memory Benchmark(V5. 95.4500) SINGLE CHANNEL(DIMM-3/4) READ:14665 MB/s WRITE:14752 MB/s COPY:14428 MB/s Passmark PerformanceTest 9.0 Build 1023 CPU Mark:3601.1 Memory Mark:1823.7 3DMark for Windows(V 2.4.4264) 3 times Cloud Gate:4311 Ice Storm:25620 Sky diver:2294 Fire Strike:554	Pass