

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. Check CPU temperature in BIOS setup menu 4. Run PassMark BurnInTest and check CPU Temp. 5. Using CPU-Z check CPU info
Test Criteria	It should be correct for each test step

No.	CPU	Type	Idle CPU Temp.	Full Loading CPU Temp.	Result
1	Intel / 3.7GHz	Core i9-10900K (Cometlake-S/QUTF) / 125W / LGA1200	36.0°C	59.0°C	Pass
2	Intel / 2.8GHz	Core i9-10900E (Cometlake-S/QUK7) / 65W / LGA1200	31.0°C	52.0°C	Pass
3	Intel / 1.8GHz	Core i9-10900TE (Cometlake-S/QUK6) / 35W / LGA1200	31.0°C	53.0°C	Pass
4	Intel / 3.8GHz	Core i7-10700K (Cometlake-S/QUKR) / 125W / LGA1200	35.0°C	58.0°C	Pass
5	Intel / 2.9GHz	Core i7-10700E (Cometlake-S/QV20) / 65W / LGA1200	36.0°C	58.0°C	Pass
6	Intel / 2.0GHz	Core i7-10700TE (Cometlake-S/QUKC) / 35W / LGA1200	37.0°C	59.0°C	Pass
7	Intel / 3.1GHz	Core i5-10500E (Cometlake-S/QV22) / 65W / LGA1200	36.0°C	58.0°C	Pass
8	Intel / 2.3GHz	Core i5-10500TE (Cometlake-S/QTK3) / 35W / LGA1200	36.0°C	57.0°C	Pass
9	Intel / 3.2GHz	Core i3-10100E (Cometlake-S/QTK4) / 65W / LGA1200	35.0°C	57.0°C	Pass
10	Intel / 2.3GHz	Core i3-10100TE (Cometlake-S/QTK5) / 35W / LGA1200	37.0°C	60.0°C	Pass
11	Intel / 3.8GHz	Pentium Gold G6400E (CometLake/QUVA) / LGA1200	34.0°C	56.0°C	Pass
12	Intel / 3.2GHz	Celeron G5900E (CometLake/QUVB) / LGA1200	32.0°C	55.0°C	Pass
13	Intel / 3.0GHz	Celeron G5900TE (CometLake/QTK8) / LGA1200	36.0°C	58.0°C	Pass

1.1.1 Application Test:

No.	Software	Test Keypoint	Result
1	CPU-Z Ver.1.94.8	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.6.32.5600 1 time 4. Run Passmark Performance Test 10.0 Build1010 1 time 5. Run 3DMark for Windows Ver.2.15.7088 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
5	DIMM Slot1	Pass
6	DIMM Slot2	Pass
7	DIMM Slot3	Pass
8	DIMM Slot4	Pass

1.2.2 Application Test:

No.	Software	Test Keypoint	Test Environment	Result
1	PassMark MemTest86 V9.0 Pro	1. Burn-In test 12 hours.	DDR4: DDR4-2666/ADATA-AD4U2666732G19-BSSA/ SEC-K4AAG085WA-BCTD/32GB*4/DR077-1/2/3/4 (DIMM-1/2/3/4) DUAL CHANNEL O.S.: UEFI Shell Memtest86 V9.0	Pass

1.2.3 DDR4 Approved List:

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
1	Transcend	Samsung	16GB	PC4-19200 (DDR4-2400)	K4A8G085wB-BCRC	TS2GLH64V4B	Pass
2	Kingston	Micron	16GB	PC4-19200 (DDR4-2400)	7TE77 D9VPP	CBD24D4U7D8ME-16	Pass
3	Kingston	Micron	8GB	PC4-19200 (DDR4-2400)	7TE77 D9VPP	CBD24D4U7S8ME-8	Pass
4	Kingston	Micron	4GB	PC4-19200 (DDR4-2400)	7QE75 D9WFH	CBD24D4U7S1ME-4	Pass
5	Kingston	Micron	16GB	PC4-19200 (DDR4-2400)	7TE77 D9VPP	CBD24D4U7D8ME-16	Pass

1.2.4 DDR4 Module Test Procedures:

No.	DDR4 Module	Test Procedures	Result
1	DDR4-2666/ADATA-AD4U2666732G19-BSSA/SEC-K4AAG085WA-BCTD/32GB*4	M/B: CMS330-Q470ECRM Rev.1 (011) (BSK530700007) CPU: Intel Core i9-10900K CPU 3.70GHz (QUTF) DIMM Slot: DIMM-1/2/3/4 Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) DUAL CHANNEL(DIMM-1/2/3/4) READ:34219 MB/s WRITE:39691 MB/s COPY:36787 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:18396 Memory Mark:3573.8 3DMark for Windows(V 2.15.7088)3times Cloud Gate:12705 Ice Storm:54315 Sky diver:5660 Fire Strike:1394	Pass
2	DDR4-2666/ Transcend-TS1GLH64V6B/SEC- K4A8G085WC BCTD/8GB*	M/B: CMS330-Q470ECRM Rev.1 (011) (BSK530700007) CPU: Intel Core i9-10900TE CPU 1.80GHz DIMM Slot: DIMM-1 Single Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) SINGLE CHANNEL(DIMM-1) READ:21210 MB/s WRITE:18719 MB/s COPY:21535 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:9043.9 Memory Mark:1716.8 3DMark for Windows(V 2.15.7088)3times Cloud Gate:8684 Ice Storm:37637 Sky diver:5065 Fire Strike:548	Pass
3	DDR4-2666/ Transcend-TS2GLH64V6B/SEC- K4A8G085WC BCTD/16GB* 2	M/B: CMS330-H420EC Rev.1 (011) (BSK530800007) CPU: Intel Core i9-10900E CPU 2.80GHz DIMM Slot: DIMM-1/3 Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) DUAL CHANNEL(DIMM-1/3) READ:36865 MB/s WRITE:38984 MB/s COPY:36745 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:12719.1 Memory Mark:3003.4 3DMark for Windows(V 2.15.7088)3times Cloud Gate:8545 Ice Storm:41748 Sky diver:3912 Fire Strike:978	Pass
4	DDR4-2666/ Apacer-78.C1GS7.40F0B/SEC- K4A8G085WB-BCTD/8GB*	M/B: CMS330-H420EC Rev.1 (011) (BSK530800007) CPU: Intel Core i5-10500E CPU 3.10GHz DIMM Slot: DIMM-3 Single Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) SINGLE CHANNEL(DIMM-3) READ:20277 MB/s WRITE:19335 MB/s COPY:18394 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:9796.9 Memory Mark:2211.9 3DMark for Windows(V 2.15.7088)3times Cloud Gate:9914 Ice Storm:48352 Sky diver:4850 Fire Strike:1123	Pass

5	DDR4-2666/ Apacer-78.D1GS7.4010B/SEC- K4A8G085WB-BCTD/16GB*	M/B: CMS330-Q470ECRM Rev.1 (011) (BSK530700007) CPU: Intel Core i7-10700E CPU 2.90GHz DIMM Slot: DIMM-2 Single Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) SINGLE CHANNEL(DIMM-2) READ:21931 MB/s WRITE:19728 MB/s COPY:21359 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:14145.6 Memory Mark:2372.4 3DMark for Windows(V 2.15.7088)3times Cloud Gate:10314 Ice Storm:20722 Sky diver:5064 Fire Strike:1167	Pass
6	DDR4-2666/ Innodisk- M4U0-4GSSJCIK/SEC- K4A4G085WE-BTCD/4GB*	M/B: CMS330-Q470ECRM Rev.1 (011) (BSK530700007) CPU: Intel Core i7-10700TE CPU 2.00GHz DIMM Slot: DIMM-3 Single Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) SINGLE CHANNEL(DIMM-3) READ:21417 MB/s WRITE:19489 MB/s COPY:20575 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:1228.7 Memory Mark:1757.6 3DMark for Windows(V 2.15.7088)3times Cloud Gate:8903 Ice Storm:36140 Sky diver:4891 Fire Strike:1168	Pass
7	DDR4-3200/ADATA-AD4U3200732G22-BSSA/SEC-K4AAG085WA-BCWE/32GB*	M/B: CMS330-Q470ECRM Rev.1 (011) (BSK530700007) CPU: Intel Core i7-10700K CPU 3.80GHz DIMM Slot: DIMM-4 Single Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) SINGLE CHANNEL(DIMM-4) READ:23846 MB/s WRITE:21215 MB/s COPY:24859 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:14276.3 Memory Mark:2382.8 3DMark for Windows(V 2.15.7088)3times Cloud Gate:11482 Ice Storm:38982 Sky diver:5192 Fire Strike:1249	Pass
8	DDR4-2666/Apacer-78.B1GS6.40F0B/SEC-K4A4G085WE-BCTD/4GB* 2	M/B: CMS330-H420EC Rev.1 (011) (BSK530800007) CPU: Intel Core i3-10100TE CPU 2.30GHz DIMM Slot: DIMM-1/3 Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) DUAL CHANNEL(DIMM-1/3) READ:37490 MB/s WRITE:40014 MB/s COPY:33533 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:5441.7 Memory Mark:21361 3DMark for Windows(V 2.15.7088)3times Cloud Gate:8927 Ice Storm:44620 Sky diver:4834 Fire Strike:1207	Pass

9	DDR4-2400/Transcend-TS1GLH64V4H/SEC-K4A4G085WE-BCRC/8GB*	M/B: CMS330-Q470ECRM Rev.1 (011) (BSK530700007) CPU: Intel Celeron G5900TE CPU 3.00GHz DIMM Slot: DIMM-2 Single Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) SINGLE CHANNEL(DIMM-2) READ:18337 MB/s WRITE:18233 MB/s COPY:17946 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:2456 Memory Mark:2076.6 3DMark for Windows(V 2.15.7088)3times Cloud Gate:4562 Ice Storm:24844 Sky diver:2598 Fire Strike:652	Pass
10	DDR4-2400/ Transcend- TS2GLH64V4B/SEC- K4A8G085WB-BCRC/16GB*	M/B: CMS330-Q470ECRM Rev.1 (011) (BSK530700007) CPU: Intel Celeron G5900E CPU 3.20GHz DIMM Slot: DIMM-3 Single Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) SINGLE CHANNEL(DIMM-3) READ:18235 MB/s WRITE:18056 MB/s COPY:17856 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:2646.5 Memory Mark:2285.7 3DMark for Windows(V 2.15.7088)3times Cloud Gate:4649 Ice Storm:25095 Sky diver:2616 Fire Strike:651	Pass
11	DDR4-2666/ Innodisk- M4U0-8GSSKCIK-SEC- K4A4G085WE-BCTD/8GB*2	M/B: CMS330-Q470ECRM Rev.1 (011) (BSK530700007) CPU: Intel Core i5-10500TE CPU 2.30GHz DIMM Slot: DIMM-2/4 Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) DUAL CHANNEL(DIMM-2/4) READ:38321 MB/s WRITE:40779 MB/s COPY:36060 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:7994.2 Memory Mark:2343.2 3DMark for Windows(V 2.15.7088)3times Cloud Gate:10537 Ice Storm:30026 Sky diver:5366 Fire Strike:1357	Pass
12	DDR4-2666/Transcend-TS1GLH64V6B/SEC-K4A8G085WC-BCTD/8GB*	M/B: CMS330-Q470ECRM Rev.1 (011) (BSK530700007) CPU: Intel Core i3-10100E CPU 3.20GHz DIMM Slot: DIMM-1 Single Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) SINGLE CHANNEL(DIMM-1) READ:19917 MB/s WRITE:19896 MB/s COPY:19393 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:6630 Memory Mark:2374.6 3DMark for Windows(V 2.15.7088)3times Cloud Gate:6784 Ice Storm:20276 Sky diver:4388 Fire Strike:1022	Pass

13	DDR4-2666/ Innodisk- M4U0-4GSSJCIK/SEC- K4A4G085WE-BTCD/4GB*2	M/B: CMS330-Q470ECRM Rev.1 (011) (BSK530700007) CPU: Intel Pentium Gold G6400E CPU 3.80GHz DIMM Slot: DIMM-3/4 Single Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.32.5600) SINGLE CHANNEL(DIMM-3/4) READ:17589 MB/s WRITE:18224 MB/s COPY:18570 MB/s Passmark PerformanceTest 10.0 Build 1010 CPU Mark:3976.9 Memory Mark:2472.4 3DMark for Windows(V 2.15.7088)3times Cloud Gate:5946 Ice Storm:28572 Sky diver:2881 Fire Strike:695	Pass
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