

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 / 2.10GHz	Xeon Gold 6252 (SkyLake/QRAL) / 150W / LGA3647-0	35°C	58°C	Pass
2	Intel / 2.00GHz	Xeon Gold 6138 (SkyLake/SR3B5) / 125W / LGA3647-0	35°C	57°C	Pass
3	Intel / 2.10GHz	Xeon Silver 4110 (SkyLake/SR3GH) / 85W / LGA3647-0	32°C	48°C	Pass
4	Intel / 1.70GHz	Xeon Bronze 3106 (SkyLake/SR3GL) / 85W / LGA3647-0	26°C	30°C	Pass
5	Intel / 2.10GHz	Xeon Gold 5218T (CascadeLake/QS1T) / 105W / LGA3647-0	35.5°C	59°C	Pass
6	Intel / 2.50GHz	Xeon Gold 5215 (CascadeLake/QRG9) / 85W / LGA3647-0	34.5°C	56°C	Pass
7	Intel / 2.20GHz	Xeon Silver 4210 (CascadeLake/QPJF) / 85W / LGA3647-0	36°C	58°C	Pass
8	Intel / 2.40GHz	Xeon Platinumv8260 (CascadeLake/QRC3) / 165W / LGA3647-0	37°C	60°C	Pass

1.1.1 Application Test:

No.	Software	Test Keypoint	Result
1	CPU-Z Ver.1.89.0	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.5.97.4600 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	PassMark MemTest86 V8.1 Pro	1. Stress test 12 hours.	DDR4: DDR4-2933/SAMSUNG-M393A2K40CB2-CVFBY/SEC-K4A8G045WC-BCVF/16GB*6/DR071-1/2/3/4/5/6 (DIMM-1/2/3/4/5/6) Dual Channel O.S.: UEFI Shell Memtest86 V8.1	Pass

1.2.3 DDR4 Approved List:

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
1	SAMSUNG	SEC	16GB	DDR4-2933	K4A8G045WC-BCVF	M393A2K40CB2-CVFBY	Pass
2	Kingston	Micron	32GB	DDR4-2933	9CE75-D9WFK	KSM29RD4/32MEI	Pass
3	Transcend	SEC	4GB	DDR4-2400	K4A4G085WE-BCRC	TS512MHR72V4H	Pass

1.2.4 DDR4 Module Test Procedures:

No.	DDR4 Module	Test Procedures	Result
1	DDR4-2933/ SAMSUNG-M393A2K40CB2-CVFBY/ SEC-K4A8G045WC-BCVF/ 16GB*6	CPU: Intel Xeon Gold 6252 2.10GHz (QRAL) DIMM Slot: DIMM-1/2/3/4/5/6 Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.00.5100) DUAL CHANNEL(DIMM-1/2/3/4/5/6) READ:123.40 MB/s WRITE:92372 MB/s COPY:100707 MB/s Passmark PerformanceTest 9.0 Build 1031 CPU Mark:19443.1 Memory Mark:223 3DMark for Windows(V 2.8.6546)3times Cloud Gate:6968 Ice Storm:42688 Sky diver:3636 Fire Strike:770	Pass
2	DDR4-2933/ Kingston-KSM29RD4/ 32MI/Micron-9CE75-D9WFK/ 32GB*4	CPU: Intel Xeon Silver 4210 2.20GHz (QPJF) DIMM Slot: DIMM-1/2/3/4/5/6 Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.00.5100) DUAL CHANNEL(DIMM-1/2/4/5) READ:69019 MB/s WRITE:65562 MB/s COPY:66455 MB/s Passmark PerformanceTest 9.0 Build 1031 CPU Mark:12980.6 Memory Mark:2214 3DMark for Windows(V 2.8.6546)3times Cloud Gate:674 Ice Storm:2550 Sky diver:224 Fire Strike:70	Pass
3	DDR4-2400/Transcend-TS512MHR72V4H /SEC-K4A4G085WE-BCRC/4GB*2	CPU: Intel Xeon Bronze 3106 1.70GHz (SR3GL) DIMM Slot: DIMM-3/6 Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.00.5100) DUAL CHANNEL(DIMM-3/6) READ:32844 MB/s WRITE:30595 MB/s COPY:29503 MB/s Passmark PerformanceTest 9.0 Build 1031 CPU Mark:7381.9 Memory Mark:1600.7 3DMark for Windows(V 2.8.6546)3times Cloud Gate:423 Ice Storm:1631 Sky diver:121 Fire Strike:39	Pass
4	DDR4-2933/SAMSUNG-M393A2K40CB2- CVFBY/SEC-K4A8G045WC-BCVF/16GB*3	CPU: Intel Xeon Silver 4110 2.10GHz (SR3GH) DIMM Slot: DIMM-4/5/6 Single Channel Test Summary: AIDA64 Cache and Memory Benchmark(V6.00.5100) SINGLE CHANNEL(DIMM-4/5/6) READ:45649 MB/s WRITE:47668 MB/s COPY:45007 MB/s Passmark PerformanceTest 9.0 Build 1031 CPU Mark:9096.3 Memory Mark:2031.5 3DMark for Windows(V 2.8.6546)3times Cloud Gate:515 Ice Storm:1875 Sky diver:146 Fire Strike:49	Pass

5	DR4-2933/Kingston-KSM29RD4/32MI/ Micron-9CE75-D9WFK/32GB*	CPU: DIMM Slot: Test Summary: Intel Xeon Bronze 3106 1.70GHz (SR3GL) DIMM-1 Single Channel AIDA64 Cache and Memory Benchmark(V6.00.5100) SINGLE CHANNEL(DIMM-1) READ:23155 MB/s WRITE:17964 MB/s COPY:23255 MB/s Passmark PerformanceTest 9.0 Build 1031 CPU Mark:13760.6 Memory Mark:1898.5 3DMark for Windows(V 2.8.6546)3times Cloud Gate:728 Ice Storm:2820 Sky diver299 Fire Strike:84	Pass
6	DDR4-2933/SAMSUNG-M393A2K40CB2- CVFBY/SEC-K4A8G045WC-BCVF/16GB*	CPU: DIMM Slot: Test Summary: Intel Xeon Gold 5215 2.50GHz (QRG9) DIMM-4 Single Channel AIDA64 Cache and Memory Benchmark(V6.00.5100) SINGLE CHANNEL(DIMM-4) READ:21092 MB/s WRITE:18213 MB/s COPY:19875 MB/s Passmark PerformanceTest 9.0 Build 1031 CPU Mark:11383.5 Memory Mark:2010 3DMark for Windows(V 2.8.6546)3times Cloud Gate:665 Ice Storm:2274 Sky diver:210 Fire Strike:67	Pass
7	DDR4-2933/SAMSUNG-M393A2K40CB2- CVFBY/SEC-K4A8G045WC- BCVF/16GB*	CPU: DIMM Slot: Test Summary: Intel Xeon Gold 5218T 2.10GHz (QS1T) DIMM-5 Single Channel AIDA64 Cache and Memory Benchmark(V6.00.5100) SINGLE CHANNEL(DIMM-5) READ:21758 MB/s WRITE:17172 MB/s COPY:20500 MB/s Passmark PerformanceTest 9.0 Build 1031 CPU Mark:12734.6 Memory Mark:1831.7 3DMark for Windows(V 2.8.6546)3times Cloud Gate:942 Ice Storm:3801 Sky diver:365 Fire Strike:111	Pass
8	DR4-2933/Kingston-KSM29RD4/32MI/ Micron- 9CE75-D9WFK/32GB*	CPU: DIMM Slot: Test Summary: Intel Xeon Gold 5218T 2.10GHz (QS1T) DIMM-2 Single Channel AIDA64 Cache and Memory Benchmark(V6.00.5100) SINGLE CHANNEL(DIMM-2) READ:26341 MB/s WRITE:20311 MB/s COPY:26591 MB/s Passmark PerformanceTest 9.0 Build 1031 CPU Mark:17333.3 Memory Mark:2184.9 3DMark for Windows(V 2.8.6546)3times Cloud Gate:870 Ice Storm:3190 Sky diver:385 Fire Strike:107	Pass