

# 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>	1. Install Windows operating system 2. Install M/B device drivers 3. Check CPU temperature in BIOS setup menu 4. Run PassMark BurnIn Test and check CPU Temp. 5. Using CPU-Z check CPU info
<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 / 1.70GHz	Core i7-8665UE (WhiskeyLake / SRFDS) / 15W / FCBGA1528	33.0°C	64.0°C	Pass
2	Intel / 1.60GHz	Core i5-8365UE (WhiskeyLake / SRFDU) / 15W / FCBGA1528	30.0°C	61.0°C	Pass
3	Intel / 2.20GHz	Core i3-8145UE (WhiskeyLake / SRFDT) / 15W / FCBGA1528	37.0°C	58.0°C	Pass
4	Intel / 2.00GHz	Celeron 4305UE(WhiskeyLake/SRFDZ) / 15W FCBGA1528	36.0°C	61.0°C	Pass

### 1.1.1 Application Test:

No.	Software	Test Keypoint	Result
1	CPU-Z Ver.1.93.0	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.6.20.5300 1 time</li> <li>4. Run Passmark Performance Test 9.0 Build1035 1 time</li> <li>5. Run 3DMark for Windows Ver.2.11.6846 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 DDR4:

No.	Function	Result
1	DDR4 DIMM Slot Examine	Pass
2	Single Channel mode	Pass

### 1.2.2 Application Test:

No.	Software	Test Keypoint	Test Environment	Result
1	PassMark MemTest86 V8.4 Pro	1. Burn-In test 24 hours.	DDR4: DDR4-2666 (BIOS-2400)-32768(1pc-32GB)/ ADATA-AD4S2666732G19-BSSA / SEC-949-K4AAG085WA-BCTD (NON-ECC) (1090417-17) (SO_DIMM-1) Single Channel O.S.: UEFI Shell Memtest86 V8.4	Pass

### 1.2.3 DDR4 Approved List:

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
1	ADATA	Samsung	32GB	PC4-21300 (DDR4-2666)	SEC-949-K4AAG085WA-BCTD	AD4S2666732G19-BSSA	Pass
2	ATP	ATP	32GB	PC4-21300 (DDR4-2666)	OCB45-D9XPF	X4G32Q28BVTDM-E-7-DR1	Pass
3	APACER	Samsung	32GB	PC4-21300 (DDR4-2666)	SEC-940-K4AAG085WM-BCTD	D22.23308S.001	Pass
4	TRANSCEND	Samsung	32GB	PC4-21300 (DDR4-2666)	SEC-001-K4AAG085WN-BCTD	TS4GSH64V6E	Pass
5	MICRON	Micron	16GB	PC4-25600 (DDR4-3200)	8EE75-D9WFL	MTA16ATF2G64HZ-3G2E1	Pass
6	KINGSTON	Micron	8GB	PC4-21300 (DDR4-2666)	8QE75-D9VPP	CBD26D4S9S8ME-8	Pass
7	KINGSTON	Micron	16GB	PC4-21300 (DDR4-2666)	8PE75 D9VPP	CBD26D4S9D8ME-16	Pass
8	Innodisk	Samsung	4GB	PC4-21300 (DDR4-2666)	SEC-807-K4A4G085WE-BCTD	M450-4GSSNCIK	Pass
9	Micron	Micron	8GB	PC4-25600 (DDR4-3200)	9FE75-D9WFL	MTABATF1G64HZ-3G2E1	Pass
10	Transcend	Samsung	4GB	PC4-19200 (DDR4-2400)	SEC-740-K4A4G085WE-BCRC	TS512MSH644H	Pass
11	Innodisk	Samsung	8GB	PC4-21300 (DDR4-2666)	SEC-807-K4A4G085WE-BCTD	M450-8GSS0CIK	Pass
12	Transcend	Samsung	4GB	PC4-1700 (DDR4-2133)	SEC-446-BCPB-K4A4G085WD	TS512MSH64V1H	Pass

## 1.2.4 DDR4 Module Test Procedures:

No.	DDR4 Module	Test Procedures	Result
1	ADATA / DDR4-2666-32GB*1 / AD4S2666732G19-BSSA / SEC-949-K4A4G085WA-BCTD	CPU: Intel Core i7-8665UE 1.70GHz (SRFDS) DIMM SLOT: SO_DIMM-1 Single Channel Test Summary: AIDA64 Cache and Memory Benchmark (Ver.6.25.5400) SINGLE CHANNEL(SODIMM1) READ: 18169MB/s WRITE: 16599MB/s COPY: 18549MB/s Passmark PerformanceTest 10.0 Build 1008 CPU Mark: 6547.3 Memory Mark: 2546.2 3DMark for Windows (Ver.2.12.6964) 3times Cloud Gate: 8209 Ice Storm: 41384 Sky Diver: 4419 Fire Strike: 1048 Looping under 12hrs.: Pass S3/S4/S5: Pass	Pass
2	Micron / DDR4-3200-16*1 / MTA16ATF2G64HZ 3G2E1 / 8EE75-D9WFL	CPU: Intel Core i7-8665UE 1.70GHz (SRFDS) DIMM Slot: SO_DIMM-1 Single Channel Test Environment: 1. Install O.S & Driver 2. Power Management Function Test 3. Memory Frequency Check 4. Memory Capacity Check	Pass
3	Kingston / DDR4-2600-8GB*1 / CBD26D4S9S8ME-8 / 8QE75-D9VPP	CPU: Intel Core i7-8665UE 1.70GHz (SRFDS) DIMM Slot: SO_DIMM-1 Single Channel Test Environment: 1. Install O.S & Driver 2. Power Management Function Test 3. Memory Frequency Check 4. Memory Capacity Check	Pass
4	ATP / DDR4-2666-32GB*1 / X4G32Q28BVTDMC-7-DR1 / OCB45-D9XP (NEW)	CPU: Intel Core i5-8365UE 1.60GHz (SRFDU) DIMM Slot: SO_DIMM-1 Single Channel Test Summary: AIDA64 Cache and Memory Benchmark (Ver.6.25.5400) SINGLE CHANNEL(SODIMM1) READ: 17410MB/s WRITE: 16356MB/s COPY: 17248MB/s Passmark PerformanceTest 10.0 Build 1008 CPU Mark: 6218.8 Memory Mark: 2403.2 3DMark for Windows (Ver.2.12.6964) 3times Cloud Gate: 7203 Ice Storm: 30920 Sky Diver: 4054 Fire Strike: 949 Looping under 12hrs.: Pass S3/S4/S5: Pass	Pass
5	Kingston / DDR4-2666-16GB*1 / CBD26D4S9D8ME-16 / 8PE75-D9VPP	CPU: Intel Core i5-8365UE 1.60GHz (SRFDU) DIMM Slot: SO_DIMM-1 Single Channel Test Environment: 1. Install O.S & Driver 2. Power Management Function Test 3. Memory Frequency Check 4. Memory Capacity Check	Pass
6	Innodisk / DDR4-2600-4GB*1 / M4S0-4GSSNCIK / 9FE75-D9WFL	CPU: Intel Core i5-8365UE 1.60GHz (SRFDU) DIMM Slot: SO_DIMM-1 Single Channel Test Environment: 1. Install O.S & Driver 2. Power Management Function Test 3. Memory Frequency Check 4. Memory Capacity Check	Pass
7	Apacer / DDR4-2666-32GB*1 / D22.23308S.001 / SEC-940-K4AAG085WM-BCTD	CPU: Intel Core i3-8145UE 2.20GHz (SRFDT) DIMM Slot: SO_DIMM-1 Single Channel Test Environment: AIDA64 Cache and Memory Benchmark (Ver.6.25.5400) SINGLE CHANNEL(SODIMM1) READ: 17277MB/s WRITE: 16256MB/s COPY: 17092MB/s Passmark PerformanceTest 10.0 Build 1008 CPU Mark: 4180.2 Memory Mark: 2275.7 3DMark for Windows (Ver.2.12.6964) 3times Cloud Gate: 5943 Ice Storm: 28799 Sky Diver: 3609 Fire Strike: 873 Looping under 12hrs.: Pass S3/S4/S5: Pass	Pass

<b>8</b>	Micron / DDR4-3200-8GB*1 / MTABATF1G64HZ-3G2E1 / 9FE75-D9WFL	CPU: Intel Core i3-8145UE 2.20GHz (SRFDT) DIMM Slot: SO_DIMM-1 Single Channel Test Environment: 1. Install O.S & Driver 2. Power Management Function Test 3. Memory Frequency Check 4. Memory Capacity Check	<b>Pass</b>
<b>9</b>	Transcend / DDR4-2400-4GB*1 / TS512MSH644H / SEC-740-K4A4G085WE-BCRC	CPU: Intel Core i3-8145UE 2.20GHz (SRFDT) DIMM Slot: SO_DIMM-1 Single Channel Test Environment: 1. Install O.S & Driver 2. Power Management Function Test 3. Memory Frequency Check 4. Memory Capacity Check	<b>Pass</b>
<b>10</b>	Transcend / DDR4-2666-32GB*1 / TS4GSH64V6E / SEC-001-K4AAG085WN-BCTD	CPU: Intel Celeron 4305UE 2.00GHz (SRFDZ) DIMM Slot: SO_DIMM-1 Single Channel Test Environment: AIDA64 Cache and Memory Benchmark (Ver.6.25.5400) SINGLE CHANNEL(SODIMM1) READ: 14547MB/s WRITE: 14748MB/s COPY: 14606MB/s Passmark PerformanceTest 10.0 Build 1008 CPU Mark: 1824.1 Memory Mark: 1572.8 3DMark for Windows (Ver.2.12.6964) 3times Cloud Gate: 3307 Ice Storm: 17705 Sky Diver: 2235 Fire Strike: 591 Looping under 12hrs.: Pass S3/S4/S5: Pass	<b>Pass</b>
<b>11</b>	Innodisk / DDR4-2666-8GB*1 / M4S0-8GSS0CIK / SEC-807-K4A4G085WE-BCTD	CPU: Intel Celeron 4305UE 2.00GHz (SRFDZ) DIMM Slot: SO_DIMM-1 Single Channel Test Environment: 1. Install O.S & Driver 2. Power Management Function Test 3. Memory Frequency Check 4. Memory Capacity Check	<b>Pass</b>
<b>12</b>	Transcend / DDR4-2133-4GB*1 / TS512MSH64V1H / SEC-446-BCPB-K4A4G085WD	CPU: Intel Celeron 4305UE 2.00GHz (SRFDZ) DIMM Slot: SO_DIMM-1 Single Channel Test Environment: 1. Install O.S & Driver 2. Power Management Function Test 3. Memory Frequency Check 4. Memory Capacity Check	<b>Pass</b>