

# 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>	<ol style="list-style-type: none"> <li>1. Install Windows operating system</li> <li>2. Install M/B device drivers</li> <li>3. Check CPU temperature in BIOS setup menu</li> <li>4. Run PassMark BurnInTest and check CPU temperature</li> <li>5. Using CPU-Z check CPU info</li> <li>6. S3(Sleep)/S4(Hibernate)/S5(Shutdown) test - 3 times</li> </ol>
<b>Test Criteria</b>	It should be correct for each test step

<b>Test Environment</b>	
DUT:	DUT#1
M/B:	ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002]
M/B BIOS:	B22A.24A (AMI)
M/B Driver:	Driver_643-ADS630-100G_220519_01.iso
CPU:	Intel Core i7-12700E 2.1GHz
DDR4:	Transcend /DDR4-3200 /32GB*4 /TS4GLH64V2E3 /Dual-Channel
SSD:	innodisk /DGS25-A28D81SW1QC /128GB (using SATA1(R5))
Display:	Onboard DP
DVD-ROM:	ASUS /SDRW-08U7M-U/BLK/G/AS /90DD01X0-M2T000
Power:	DELTA /GPS-500B
Monitor:	ASUS /PA238Q 23" (1920*1080*60p)
O.S.:	Windows 10 IOT Enterprise LTSC 64Bit (English) Ver.19044 Build19044.1682 (21H2) (UEFI)
DUT:	DUT#2
M/B:	ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002]
M/B BIOS:	B22A.24A (AMI)
M/B Driver:	Driver_643-ADS630-100G_220519_01.iso
CPU:	Intel Core i9-12900E 2.3GHz
DDR4:	Transcend /DDR4-2666 ECC /32GB*4 /TS4GLH72V6E /Dual-Channel
SSD:	Transcend /TS128GSSD420K /128GB (using SATA0(R4))
Display:	Onboard DP
DVD-ROM:	ASUS /SDRW-08U7M-U/BLK/G/AS /90DD01X0-M2T000
Power:	SUPER /SF-550P14HE
Monitor:	ASUS /PA238Q 23" (1920*1080*60p)
O.S.:	Windows 10 IOT Enterprise LTSC 64Bit (English) Ver.19044 Build19044.1682 (21H2) (UEFI)
DUT:	DUT#3
M/B:	ADS630-Q670ECRM Rev.A (0A3) [774-ADS6301-500G/KSM522400003]
M/B BIOS:	B232.13A (AMI)
M/B Driver:	Driver:Driver_643-ADS630-300G_230217_01.iso
CPU:	Intl Core i9-13900K 3.00GHz /(Raptor Lake)
DDR4:	Transcend /DDR4-3200 /32GB*4 /TS4GLH64V2E3 /Dual-Channel
SSD:	innodisk /DGS25-A28D81SW1QC /128GB (using SATA1(R5))
Display:	Onboard DP
DVD-ROM:	ASUS /SDRW-08U7M-U/BLK/G/AS /90DD01X0-M2T000
Power:	DELTA /GPS-500B
Monitor:	ASUS /PA238Q 23" (1920*1080*60p)
O.S.:	Windows 10 IOT Enterprise LTSC 64Bit (English) Ver.19044 Build19044.1682 (21H2) (UEFI)
DUT:	DUT#4
M/B:	ADS630-R680ECRM Rev.A (0A3) [774-ADS6301-300G/KSM522700001]
M/B BIOS:	B232.13A (AMI)
M/B Driver:	Driver:Driver_643-ADS630-300G_230217_01.iso
CPU:	Intl Core i7-13700K 3.40GHz /(Raptor Lake)
DDR4:	Transcend /DDR4-2666 ECC /32GB*4 /TS4GLH72V6E /Dual-Channel
SSD:	Transcend /TS128GSSD420K /128GB (using SATA0(R4))
Display:	Onboard DP
DVD-ROM:	ASUS /SDRW-08U7M-U/BLK/G/AS /90DD01X0-M2T000
Power:	SUPER /SF-550P14HE
Monitor:	ASUS /PA238Q 23" (1920*1080*60p)
O.S.:	Windows 10 IOT Enterprise LTSC 64Bit (English) Ver.19044 Build19044.1682 (21H2) (UEFI)

### 1.1.1 CPU Approved List:

No.	CPU	Type	Idle CPU Temp.	Full Loading CPU Temp.	Result
1	Intel / 2.4GHz	Core i9-12900K (Alder Lake-S) / 125W / FC-LGA16A	41 °C	46 °C	Pass
2	Intel / 2.7GHz	Core i7-12700K (Alder Lake-S) / 125W / FC-LGA16A	40 °C	43 °C	Pass
3	Intel / 2.4GHz	Core i9-12900 (AlderLake-S) / 65W / FCLGA1700	35 °C	38 °C	Pass
4	Intel / 2.3GHz	Core i9-12900E (AlderLake-S) / 65W / FCLGA1700	35 °C	37 °C	Pass
5	Intel / 2.1GHz	Core i7-12700 (AlderLake-S) / 65W / FCLGA1700	30 °C	35 °C	Pass
6	Intel / 2.1GHz	Core i7-12700E (AlderLake-S) / 65W / FCLGA1700	31 °C	33 °C	Pass
7	Intel / 1.4GHz	Core i7-12700TE (AlderLake-S) / 35W / FCLGA1700	30 °C	33 °C	Pass
8	Intel / 3.0GHz	Core i5-12500 (AlderLake-S) / 65W / FCLGA1700	27 °C	32 °C	Pass
9	Intel / 2.9GHz	Core i5-12500E (AlderLake-S) / 65W / FCLGA1700	26 °C	30 °C	Pass
10	Intel / 1.9GHz	Intel / Core i5-12500TE (AlderLake-S) / 35W / FCLGA1700	35 °C	37 °C	Pass
11	Intel / 3.3GHz	Core i3-12100 (AlderLake-S) / 60W / FCLGA1700	37 °C	38 °C	Pass
12	Intel / 2.1GHz	Core i3-12100TE (AlderLake-S) / 35W / FCLGA1700	29 °C	31 °C	Pass
13	Intel / 3.0GHz	Pentium Gold G7400TE (AlderLake-S) / 35W / FCLGA1700	30 °C	32 °C	Pass
14	Intel / 3.0GHz	Celeron G6900E (AlderLake-S) / 46W / FCLGA1700	31 °C	32 °C	Pass
15	Intel / 3.0GHz	Core i9-13900K (RaptorLake) / 125W / LGA1700	35 °C	39 °C	Pass
16	Intel / 1.8GHz	Core i9-13900E (RaptorLake) / 65W / LGA1700	30 °C	38 °C	Pass
17	Intel / 1.0GHz	Core i9-13900TE (RaptorLake) / 35W / LGA1700	37 °C	40 °C	Pass
18	Intel / 3.4GHz	Core i7-13700K (RaptorLake) / 125W / LGA1700	31 °C	33 °C	Pass
19	Intel / 1.9GHz	Core i7-13700E (RaptorLake) / 65W / LGA1700	36 °C	38 °C	Pass
20	Intel / 1.1GHz	Core i7-13700TE (RaptorLake) / 35W / LGA1700	30 °C	38 °C	Pass
21	Intel / 3.5GHz	Core i5-13600K (RaptorLake) / 125W / LGA1700	34 °C	36 °C	Pass
22	Intel / 2.4GHz	Core i5-13400E (RaptorLake) / 65W / LGA1700	35 °C	37 °C	Pass
23	Intel / 1.3GHz	Core i5-13500TE (RaptorLake) / 35W / LGA1700	37 °C	40 °C	Pass
24	Intel / 2.5GHz	Core i5-13500E (RaptorLake) / 35W / LGA1700	26 °C	31 °C	Pass
25	Intel / 1.6GHz	Core i5-13500T (RaptorLake) / 125W / LGA1700	27 °C	31 °C	Pass
26	Intel / 2.4GHz	Core i5-13400E (RaptorLake) / 65W / LGA1700	31 °C	33 °C	Pass
27	Intel / 3.3GHz	Core i3-13100E (RaptorLake) / 65W / LGA1700	35 °C	40 °C	Pass
28	Intel / 2.4GHz	Core i3-13100TE (RaptorLake) / 35W / LGA1700	30 °C	35 °C	Pass
29	Intel / 2.4GHz	Core i3-13100T (RaptorLake) / 35W / LGA1700	29 °C	31 °C	Pass

### 1.1.2 Application Test:

No.	Software	Test Keypoint	Result
1	CPU-Z Ver.2.03	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 drivers</li> <li>3. Run AIDA64 Cache and Memory Benchmark Ver.6.60.5900 - 1 time</li> <li>4. Run PassMark Performance Test 10.1 Build1002 - 1 time</li> <li>5. Run 3DMark for Windows Ver.2.15.7088 BenchMark - 3 times</li> <li>6. Run PassMark BurnInTest Professional 9.2 Build1007 - 5 minutes</li> <li>7. Run Memtest86 Stress test 12 hours</li> <li>8. S3(Sleep)/S4(Hibernate)/S5(Shutdown) test - 3 times</li> </ol>
<b>Test Criteria</b>	It should be correct for each test step

<b>Test Environment</b>	
DUT:	DUT#1
M/B:	ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002]
M/B BIOS:	B22A.24A (AMI)
M/B Driver:	Driver_643-ADS630-100G_220519_01.iso
CPU:	Intel Core i7-12700E 2.1GHz
DDR4:	Transcend /DDR4-3200 /32GB*4 /TS4GLH64V2E3 /Dual-Channel
SSD:	innodisk /DGS25-A28D81SW1QC /128GB (using SATA1(R5))
Display:	Onboard DP
DVD-ROM:	ASUS /SDRW-08U7M-U/BLK/G/AS /90DD01X0-M2T000
Power:	DELTA /GPS-500B
Monitor:	ASUS /PA238Q 23" (1920*1080*60p)
O.S.:	Windows 10 IOT Enterprise LTSC 64Bit (English) Ver.19044 Build19044.1682 (21H2) (UEFI)
DUT:	DUT#2
M/B:	ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002]
M/B BIOS:	B22A.24A (AMI)
M/B Driver:	Driver_643-ADS630-100G_220519_01.iso
CPU:	Intel Core i9-12900E 2.3GHz
DDR4:	Transcend /DDR4-2666 ECC /32GB*4 /TS4GLH72V6E /Dual-Channel
SSD:	Transcend /TS128GSSD420K /128GB (using SATA0(R4))
Display:	Onboard DP
DVD-ROM:	ASUS /SDRW-08U7M-U/BLK/G/AS /90DD01X0-M2T000
Power:	SUPER /SF-550P14HE
Monitor:	ASUS /PA238Q 23" (1920*1080*60p)
O.S.:	Windows 10 IOT Enterprise LTSC 64Bit (English) Ver.19044 Build19044.1682 (21H2) (UEFI)
DUT:	DUT#3
M/B:	ADS630-Q670ECRM Rev.A (0A3) [774-ADS6301-500G/KSM522400003]
M/B BIOS:	B232.13A (AMI)
M/B Driver:	Driver:Driver_643-ADS630-300G_230217_01.iso
CPU:	Intl Core i9-13900K 3.00GHz /(Raptor Lake)
DDR4:	Transcend /DDR4-3200 /32GB*4 /TS4GLH64V2E3 /Dual-Channel
SSD:	innodisk /DGS25-A28D81SW1QC /128GB (using SATA1(R5))
Display:	Onboard DP
DVD-ROM:	ASUS /SDRW-08U7M-U/BLK/G/AS /90DD01X0-M2T000
Power:	DELTA /GPS-500B
Monitor:	ASUS /PA238Q 23" (1920*1080*60p)
O.S.:	Windows 10 IOT Enterprise LTSC 64Bit (English) Ver.19044 Build19044.1682 (21H2) (UEFI)
DUT:	DUT#4
M/B:	ADS630-R680ECRM Rev.A (0A3) [774-ADS6301-300G/KSM522700001]
M/B BIOS:	B232.13A (AMI)
M/B Driver:	Driver:Driver_643-ADS630-300G_230217_01.iso
CPU:	Intl Core i7-13700K 3.40GHz /(Raptor Lake)
DDR4:	Transcend /DDR4-2666 ECC /32GB*4 /TS4GLH72V6E /Dual-Channel
SSD:	Transcend /TS128GSSD420K /128GB (using SATA0(R4))
Display:	Onboard DP
DVD-ROM:	ASUS /SDRW-08U7M-U/BLK/G/AS /90DD01X0-M2T000
Power:	SUPER /SF-550P14HE
Monitor:	ASUS /PA238Q 23" (1920*1080*60p)
O.S.:	Windows 10 IOT Enterprise LTSC 64Bit (English) Ver.19044 Build19044.1682 (21H2) (UEFI)

### 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
9	Memory Frequency Check	Pass
10	Memory Capacity Check	Pass

### 1.2.2 Application Test:

No.	Software	Test Keypoint	Test Summary	Result
1	MemTest86 Ver.9.4 Pro	1. Burn-In test 12 hours.	DUT#1 MB:ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU:Intel Core i7-12700E 2.1GHz  O.S.:UEFI Shell  For ECC in BIOS Test Summary (for BIOS setup) 1.ECC=Disable: pass (Memory=128G) 2.ECC=Enable: pass (Memory=128G)	Pass
			DUT#2 MB: ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] CPU:Intel Core i9-12900E 2.3GHz  O.S.:UEFI Shell  Test Summary (for BIOS setup) 1.ECC=Disable: pass (Memory=128G)	Pass
			DUT#3 MB:ADS630-Q670ECRM Rev.A (0A3) [774-ADS6301-500G/KSM522400003] CPU: Intl Core i9-13900K 3.00GHz /(Raptor Lake) DDR4: Transcend (TS4GLH64V2E3 1.2V) [2Rx8] / Micron (0RE75-D9ZfV) / PC4-25600 (DDR4-3200) / 32GB *2/DIMM1-3  O.S.: UEFI Shell  Test Summary (for BIOS setup) 1.Memory = 65536	Pass
			DUT#4 MB: ADS630-R680ECRM Rev.A (0A3) [774-ADS6301-300G/KSM522700001] CPU: Intl Core i7-13700K 3.40GHz /(Raptor Lake) DDR4: Transcend (TS4GLH72V6E 1.2V) [2Rx8] / SEC (K4AAG085WM-BCTD) / PC4-21300 (DDR4-2666)/ECC / 32GB *4/DIMM1-2-3-4  O.S.: UEFI Shell  Test Summary (for BIOS setup) 1.Memory = 131072	Pass

### 1.2.3 DDR4 Approved List:

No.	Brand	Chip	Size	Type	Chip Model No.	Vendor Part No.	Result
1	Transcend	Micron	32GB	PC4-25600 (DDR4-3200)	0RE75-D9ZFV	TS4GLH64V2E3 1.2V [2Rx8]	Pass
2	ADATA	SEC	32GB	PC4-25600 (DDR4-3200)	K4AAG085WA-BCWE	AD4U3200732G22-BSSA 1.2V [32GX16]	Pass
3	Transcend	SEC	32GB	PC4-21300 (DDR4-2666)/ECC	K4AAG085WM-BCTD	TS4GLH72V6E 1.2V [2Rx8]	Pass
4	Apacer	SEC	16GB	PC4-21300 (DDR4-2666)	K4A8G085WB-BCTD	78.D1GS7.4010B 1.2V	Pass
5	Transcend	SEC	16GB	PC4-21300 (DDR4-2666)	K4A8G085WC-BCTD	TS2GLH64V6B 1.2V [2Rx8]	Pass
6	ADATA	SEC	16GB	PC4-21300 (DDR4-2666)/ECC	K4A8G085WC-BCTD	AD4E2666316G19-BSSC 1.2V [16GX18]	Pass
7	Transcend	SEC	16GB	PC4-19200 (DDR4-2400)	K4A8G085WB-BCRC	TS2GLH64V4B [2Rx8]	Pass
8	ADATA	SKhynix	16GB	PC4-19200 (DDR4-2400)/ECC	H5AN8G8NAFR-UHC	AD4E2400316G17-BHYA 1.2V	Pass
9	Apacer	SEC	8GB	PC4-21300 (DDR4-2666)	K4A8G085WB-BCTD	78.C1GS7.40F0B	Pass
10	Innodisk	SEC	8GB	PC4-21300 (DDR4-2666)	K4A4G085WE-BCTD	M4U0-8GSSKCIK	Pass
11	Transcend	SEC	8GB	PC4-21300 (DDR4-2666)	K4A8G085WC-BCTD	TS1GLH64V6B 1.2V [1Rx8]	Pass
12	Transcend	SEC	8GB	PC4-21300 (DDR4-2666)	K4A8G085WC-BCTD	TS1GLH64V6B 1.2V [1Rx8]	Pass
13	ADATA	Skhynix	8GB	PC4-19200 (DDR4-2400)	H5AN8G8NAFR UHC	AD4U240038G17-BHYA 1.2V [8GX8]	Pass
14	Transcend	SEC	8GB	PC4-19200 (DDR4-2400)	K4A4G085WE-BCRC	TS1GLH64V4H [2Rx8]	Pass
15	Transcend	SEC	8GB	PC4-17000 (DDR4-2133)/ECC	K4A4G085WE-BCRC	TS1GLH72V1H	Pass
16	Innodisk	SEC	4GB	PC4-21300 (DDR4-2666)	K4A4G05WE-BCTD	M4U0-4GSSJCIK	Pass

## 1.2.4 Memory Compatibility Test:

No.	DDR4 Memory	Test Summary	Result
1	Transcend (TS4GLH64V2E3 1.2V) [2Rx8] / Micron (0RE75-D9ZV) / PC4-25600 (DDR4-3200) / 32GB *4	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: Intel Core i7-12700E 2.1GHz  DIMM Slot: DIMM-1/2/3/4 Dual Channel Test Summary: 1.Install OS 2.Power Management Function Test 3.Memory Frequency Check 4.Memory Capacity Check	Pass
2	ADATA (AD4U3200732G22-BSSA 1.2V) [32GX16] / SEC (K4AAG085WA-BCWE) / PC4-25600 (DDR4-3200) / 32GB *2	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: Intel Core i7-12700E 2.1GHz  DIMM Slot: DIMM-1/3 Dual Channel Test Summary: 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	Pass
3	Transcend (TS4GLH72V6E 1.2V) [2Rx8] / SEC (K4AAG085WM-BCTD) / PC4-21300 (DDR4-2666)/ECC / 32GB *4	DUT: DUT#2 M/B: ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] CPU: Intel Core i9-12900E 2.3GHz  DIMM Slot: DIMM-1/2/3/4 Dual Channel Test Summary: 1.Install OS 2.Power Management Function Test 3.Memory Frequency Check 4.Memory Capacity Check	Pass
4	Apacer (78.D1GS7.4010B 1.2V) / SEC (K4A8G085WB-BCTD) / PC4-21300 (DDR4-2666) / 16GB *3	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: Intel Core i7-12700E 2.1GHz  DIMM Slot: DIMM-1/2/3 Dual Channel Test Summary: 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	Pass
5	Transcend (TS2GLH64V6B 1.2V) [2Rx8] / SEC (K4A8G085WC-BCTD) / PC4-21300 (DDR4-2666) / 16GB *2	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: 12 Gen Intel Core i5-12500E /2.9GHz (QYYP)  DIMM Slot: DIMM-2/4 Dual Channel Test Summary: 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	Pass
6	ADATA (AD4E2666316G19-BSSC 1.2V) [16GX18] / SEC (K4A8G085WC-BCTD) / PC4-21300 (DDR4-2666)/ECC / 16GB *2	DUT: DUT#2 M/B: ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] CPU: 12 Gen Intel Core i7-12700TE /1.4GHz (QYMJ)  DIMM Slot: DIMM-1/3 Dual Channel Test Summary: 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	Pass
7	Transcend (TS2GLH64V4B) [2Rx8] / SEC (K4A8G085WB-BCRC) / PC4-19200 (DDR4-2400) / 16GB *2	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM Slot: DIMM-3/4 Singel Channel Test Summary: 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	Pass
8	ADATA (AD4E2400316G17-BHYA 1.2V) / SKhynix (H5AN8G8NAFR-UHC) / PC4-19200 (DDR4-2400)/ECC / 16GB *2	DUT: DUT#2 M/B: ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] CPU: 12 Gen Intel Core i5-12500E /2.9GHz (QYYP)  DIMM Slot: DIMM-2/4 Dual Channel Test Summary: 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	Pass

<b>9</b>	Apacer (78.C1GS7.40F0B) / SEC (K4A8G085WB-BCTD) / PC4-21300 (DDR4-2666) / 8GB *1	DUT: M/B: CPU:  DIMM Slot: Test Summary:	DUT#1 ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM-4 Singel Channel 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	<b>Pass</b>
<b>10</b>	Innodisk (M4U0-8GSSKCIK) / SEC (K4A4G085WE-BCTD) / PC4-21300 (DDR4-2666) / 8GB *3	DUT: M/B: CPU:  DIMM Slot: Test Summary:	DUT#2 ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] Intel Core i7-12700E 2.1GHz  DIMM-1/2/4 Dual Channel 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	<b>Pass</b>
<b>11</b>	Transcend (TS1GLH64V6B 1.2V) [1Rx8] / SEC (K4A8G085WC-BCTD) / PC4-21300 (DDR4-2666) / 8GB *1	DUT: M/B: CPU:  DIMM Slot: Test Summary:	DUT#1 ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM-3 Singel Channel 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	<b>Pass</b>
<b>12</b>	Transcend (TS1GLH64V6B 1.2V) [1Rx8] / SEC (K4A8G085WC-BCTD) / PC4-21300 (DDR4-2666) / 8GB *3	DUT: M/B: CPU:  DIMM Slot: Test Summary:	DUT#2 ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] 12 Gen Intel Core i7-12700TE /1.4GHz (QYMJ)  DIMM-2/3/4 Dual Channel 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	<b>Pass</b>
<b>13</b>	ADATA (AD4U240038G17-BHYA 1.2V) [8GX8] / Skhynix (H5AN8G8NAFR UHC) / PC4-19200 (DDR4-2400) / 8GB *2	DUT: M/B: CPU:  DIMM Slot: Test Summary:	DUT#1 ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM-1/2 Singel Channel 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	<b>Pass</b>
<b>14</b>	Transcend (TS1GLH64V4H) [2Rx8] / SEC (K4A4G085WE-BCRC) / PC4-19200 (DDR4-2400) / 8GB *1	DUT: M/B: CPU:  DIMM Slot: Test Summary:	DUT#1 ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM-1 Singel Channel 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	<b>Pass</b>
<b>15</b>	Transcend (TS1GLH72V1H) / SEC (K4A4G085WE-BCRC) / PC4-17000 (DDR4-2133)/ECC / 8GB *1	DUT: M/B: CPU:  DIMM Slot: Test Summary:	DUT#2 ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM-3 Singel Channel 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	<b>Pass</b>
<b>16</b>	Innodisk (M4U0-4GSSJCIK) / SEC (K4A4G05WE-BCTD) / PC4-21300 (DDR4-2666) / 4GB *1	DUT: M/B: CPU:  DIMM Slot: Test Summary:	DUT#1 ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM-2 Singel Channel 1. Power Management Function Test 2. Memory Frequency Check 3. Memory Capacity Check	<b>Pass</b>
<b>17</b>	Transcend (TS4GLH64V2E3 1.2V) [2Rx8] / Micron (0RE75-D9ZFB) / PC4-25600 (DDR4-3200) / 32GB *2	DUT: M/B: CPU:  DIMM Slot: Test Summary:	DUT#1 ADS630-Q670ECRM Rev.A (0A3) [774-ADS6301-500G/KSM522400003]  Intl Core i9-13900K 3.00GHz /(Raptor Lake)  DIMM-1/3 Dual Channel 1.Install OS 2.Power Management Function Test 3.Memory Frequency Check 4.Memory Capacity Check	<b>Pass</b>

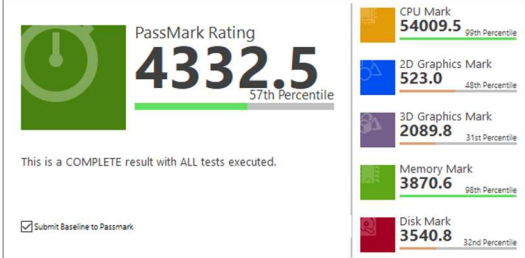
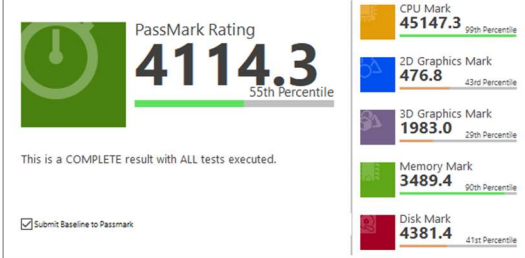
<b>18</b>	Transcend (TS4GLH72V6E 1.2V) [2Rx8] / SEC (K4AAG085WM-BCTD) / PC4-21300 (DDR4-2666)/ECC / 32GB *4	DUT: DUT#2 M/B: ADS630-R680ECRM Rev.A (0A3) [774-ADS6301-300G/KSM522700001]  CPU: Intl Core i7-13700K 3.40GHz /(Raptor Lake)  DIMM Slot: DIMM-1/2/3/4 Dual Channel  Test Summary: 1.Install OS 2.Power Management Function Test 3.Memory Frequency Check 4.Memory Capacity Check	<b>Pass</b>
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## 1.2.5 DDR4 Memory Test Procedures:

No.	DDR4 Memory	Test Summary	Result
1	Transcend (TS4GLH64V2E3 1.2V) [2Rx8] / Micron (0RE75-D9ZV) / PC4-25600 (DDR4-3200) / 32GB *4	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: Intel Core i7-12700E 2.1GHz  DIMM Slot: DIMM-1/2/3/4 Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark ver.6.60.5900 READ:38440 MB/s WRITE:38685 MB/s COPY:43939 MB/s  3DMark for Windows ver.2.15.7088 Cloud Gate:18108 Ice Storm Extreme:61919 Skydiver:9133 Fire Strike:2483  BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	Pass
2	ADATA (AD4U3200732G22-BSSA 1.2V) [32GX16] / SEC (K4AAG085WA-BCWE) / PC4-25600 (DDR4-3200) / 32GB *2	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: Intel Core i7-12700E 2.1GHz  DIMM Slot: DIMM-1/3 Dual Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	Pass
3	Transcend (TS4GLH72V6E 1.2V) [2Rx8] / SEC (K4AAG085WWM-BCTD) / PC4-21300 (DDR4-2666)/ECC / 32GB *4	DUT: DUT#2 M/B: ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] CPU: Intel Core i9-12900E 2.3GHz  DIMM Slot: DIMM-1/2/3/4 Dual Channel Test Summary: AIDA64 Cache and Memory Benchmark ver.6.60.5900 READ:38440 MB/s WRITE:38685 MB/s COPY:43939 MB/s  3DMark for Windows ver.2.15.7088 Cloud Gate:18003 Ice Storm Extreme:61510 Skydiver:9197 Fire Strike:2529  BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	Pass
4	Apacer (78.D1GS7.4010B 1.2V) / SEC (K4A8G085WB-BCTD) / PC4-21300 (DDR4-2666) / 16GB *3	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: Intel Core i7-12700E 2.1GHz  DIMM Slot: DIMM-1/2/3 Dual Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	Pass
5	Transcend (TS2GLH64V6B 1.2V) [2Rx8] / SEC (K4A8G085WC-BCTD) / PC4-21300 (DDR4-2666) / 16GB *2	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: 12 Gen Intel Core i5-12500E /2.9GHz (QYYP)  DIMM Slot: DIMM-2/4 Dual Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	Pass
6	ADATA (AD4E2666316G19-BSSC 1.2V) [16GX18] / SEC (K4A8G085WC-BCTD) / PC4-21300 (DDR4-2666)/ECC / 16GB *2	DUT: DUT#2 M/B: ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] CPU: 12 Gen Intel Core i7-12700TE /1.4GHz (QYMJ)  DIMM Slot: DIMM-1/3 Dual Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	Pass
7	Transcend (TS2GLH64V4B) [2Rx8] / SEC (K4A8G085WB-BCRC) / PC4-19200 (DDR4-2400) / 16GB *2	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM Slot: DIMM-3/4 Singel Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	Pass

<b>8</b>	ADATA (AD4E2400316G17-BHYA 1.2V) / SKhynix (H5AN8G8NAFR-UHC) / PC4-19200 (DDR4-2400)/ECC / 16GB *2	DUT: DUT#2 M/B: ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] CPU: 12 Gen Intel Core i5-12500E /2.9GHz (QYYP)  DIMM Slot: DIMM-2/4 Dual Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	<b>Pass</b>
<b>9</b>	Apacer (78.C1GS7.40F0B) / SEC (K4A8G085WB-BCTD) / PC4-21300 (DDR4-2666) / 8GB *1	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM Slot: DIMM-4 Singel Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	<b>Pass</b>
<b>10</b>	Innodisk (M4U0-8GSSKCIK) / SEC (K4A4G085WE-BCTD) / PC4-21300 (DDR4-2666) / 8GB *3	DUT: DUT#2 M/B: ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] CPU: Intel Core i7-12700E 2.1GHz  DIMM Slot: DIMM-1/2/4 Dual Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	<b>Pass</b>
<b>11</b>	Transcend (TS1GLH64V6B 1.2V) [1Rx8] / SEC (K4A8G085WC-BCTD) / PC4-21300 (DDR4-2666) / 8GB *1	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM Slot: DIMM-3 Singel Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	<b>Pass</b>
<b>12</b>	Transcend (TS1GLH64V6B 1.2V) [1Rx8] / SEC (K4A8G085WC-BCTD) / PC4-21300 (DDR4-2666) / 8GB *3	DUT: DUT#2 M/B: ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] CPU: 12 Gen Intel Core i7-12700TE /1.4GHz (QYMJ)  DIMM Slot: DIMM-2/3/4 Dual Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	<b>Pass</b>
<b>13</b>	ADATA (AD4U240038G17-BHYA 1.2V) [8GX8] / SKhynix (H5AN8G8NAFR UHC) / PC4-19200 (DDR4-2400) / 8GB *2	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM Slot: DIMM-1/2 Singel Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	<b>Pass</b>
<b>14</b>	Transcend (TS1GLH64V4H) [2Rx8] / SEC (K4A4G085WE-BCRC) / PC4-19200 (DDR4-2400) / 8GB *1	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM Slot: DIMM-1 Singel Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	<b>Pass</b>
<b>15</b>	Transcend (TS1GLH72V1H) / SEC (K4A4G085WE-BCRC) / PC4-17000 (DDR4-2133)/ECC / 8GB *1	DUT: DUT#2 M/B: ADS630-R680ECRM Rev.2 (022) [774-ADS6301-300G/KSM383100002] CPU: 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM Slot: DIMM-3 Singel Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	<b>Pass</b>
<b>16</b>	Innodisk (M4U0-4GSSJCIK) / SEC (K4A4G05WE-BCTD) / PC4-21300 (DDR4-2666) / 4GB *1	DUT: DUT#1 M/B: ADS630-Q670ECRM Rev.2 (022) [774-ADS6301-100G/KSM381800002] CPU: 12 Gen Intel Core i3-12100 /3.3GHz (QYVR)  DIMM Slot: DIMM-2 Singel Channel Test Summary: BurnIn test 5 mins:Pass S3/S4/S5 -3times:Pass	<b>Pass</b>

<p style="text-align: center;"><b>17</b></p>	<p>Transcend (TS4GLH64V2E3 1.2V) [2Rx8] / Micron (0RE75-D9ZfV) / PC4-25600 (DDR4-3200) / 32GB *2</p>	<p>DUT: DUT#3 M/B: ADS630-Q670ECRM Rev.A (0A3) [774-ADS6301-500G/KSM522400003] CPU: Intl Core i9-13900K 3.00GHz /(Raptor Lake)  DIMM Slot: DIMM-1/3 Dual Channel Test Summary: PassMark PerformanceTest 10.2 Build 1012</p> <div data-bbox="815 315 1342 667"> <p><b>PassMark Rating (PerformanceTest 10.2)</b></p>  <p>This is a COMPLETE result with ALL tests executed.</p> <p><input checked="" type="checkbox"/> Submit Baseline to Passmark</p> <p><a href="#">View Online Comparison Charts...</a></p> </div> <p>3DMark for Windows ver.2.15.7088  <b>19 555</b> IN Cloud Gate (V1.1)  <b>67 475</b> IN Ice Storm Extreme (V1.2)  <b>9 867</b> IN Sky Diver (V1.0)  <b>2 612</b> IN Fire Strike (V1.1)</p> <p>BurnInTest Professional 10.2 Build1004 - 5 minutes:Pass S3/S4/S5 -3times:Pass</p>	<p style="text-align: center;"><b>Pass</b></p>
<p style="text-align: center;"><b>18</b></p>	<p>Transcend (TS4GLH72V6E 1.2V) [2Rx8] / SEC (K4AAG085WM-BCTD) / PC4-21300 (DDR4-2666)/ECC / 32GB *4</p>	<p>DUT: DUT#4 M/B: ADS630-R680ECRM Rev.A (0A3) [774-ADS6301-300G/KSM522700001] CPU: Intl Core i7-13700K 3.40GHz /(Raptor Lake)  DIMM Slot: DIMM-1/2/3/4 Dual Channel Test Summary: PassMark PerformanceTest 10.2 Build 1012</p> <div data-bbox="815 1167 1342 1518"> <p><b>PassMark Rating (PerformanceTest 10.2)</b></p>  <p>This is a COMPLETE result with ALL tests executed.</p> <p><input checked="" type="checkbox"/> Submit Baseline to Passmark</p> <p><a href="#">View Online Comparison Charts...</a></p> </div> <p>3DMark for Windows ver.2.15.7088  <b>19 555</b> IN Cloud Gate (V1.1)  <b>67 475</b> IN Ice Storm Extreme (V1.2)  <b>9 867</b> IN Sky Diver (V1.0)  <b>2 612</b> IN Fire Strike (V1.1)</p> <p>BurnInTest Professional 10.2 Build1004 - 5 minutes:Pass S3/S4/S5 -3times:Pass</p>	<p style="text-align: center;"><b>Pass</b></p>