

CPU**Test Procedures:**

1. Check processor information during the POST and in O.S.
2. Install Windows and check memory information in OS.
3. Running the "Burn-In" 2hrs test for Uni-processor of intel

Expected Result:

- Processor information is correct.
- Install OS without problem and CPU information is correct.
- No errors and system hang during test.

Vendor	Code Name	Processor Number	Freq	L3	TDP	Cores	Stepping	Socket	Q'ty	Model	Test Result	IMS
Intel	ICELAKE	8352M	2.3GHz	48MB	185W	32Cores	D2	LGA4189	2P	CD8068904686504QXZ0	Pass	
Intel	ICELAKE	8362	2.8GHz	48MB	265W	32Cores	D2	LGA4189	2P	CD8068904722404QXTL	Pass	
Intel	ICELAKE	6330N	2.2GHz	42MB	165W	28Cores	D2	LGA4189	2P	CD8068904582501	Pass	
Intel	ICELAKE	N/A	1.8GHz	48MB	205W	32Cores	D2	LGA4189	2P	CD8068904544903 QV2F	Pass	
Intel	ICELAKE	N/A	1.5GHz	42MB	205W	28Cores	D2	LGA4189	2P	CD8068904546104 QV2G	Pass	
Intel	ICELAKE	N/A	2.2GHz	54MB	270W	36Cores	D2	LGA4189	2P	CD8068904544703 QV2D	Pass	
Intel	ICELAKE	N/A	2.2GHz	48MB	250W	32Cores	D2	LGA4189	2P	CD8068904590102 QVM8	Pass	
Intel	ICELAKE	6346	3.1GHz	36MB	205W	16Cores	D2	LGA4189	2P	CD8068904570201	Pass	
Intel	ICELAKE	6330	2.0GHz	42MB	205W	28Cores	D2	LGA4189	2P	CD8068904572101 QWMC	Pass	

Memory

Test Procedures:

1. Check memory information during the POST / check frequency via BIOS setup menu as
2. Install Windows and check memory information in OS.
3. Running the "Memtest86 V10.0 Pro" 2hrs test

Expected Result:

- Memory information/frequency is correct.
- Install OS without problem and Memory information is correct.
- No errors and system hang during test.

Vendor	Size	L/SOD	Reg/Unb	ECC	DDR	Freq.	Rank	Q'ty	Model	Test Result	IMS
Apacer	32GB	LDIMM	Registered	ECC	DDR4	3200	2R*8	32DIMMs	D52.27307S.001	Pass	
SKHynix	04GB	LDIMM	Registered	ECC	DDR4	2133	1R*8	32DIMMs	HMA451R7MFR8N-TFT1	Pass	
SKHynix	08GB	LDIMM	Registered	ECC	DDR4	2133	1R*4	32DIMMs	HMA41GR7MFR4N-TFT1	Pass	
Samsung	16GB	LDIMM	Registered	ECC	DDR4	2133	2R*4	32DIMMs	M393A2G40DB0-CPB	Pass	
Samsung	32GB	LDIMM	Registered	ECC	DDR4	3200	2Rx4	32DIMMs	M393A4K40EB3-CWECO	Pass	
Samsung	64GB	LDIMM	Registered	ECC	DDR4	3200	2Rx4	32DIMMs	M393A8G40BB4-CWECO	Pass	
Samsung	128GB	LDIMM	Registered	ECC	DDR4	3200	2Rx4	32DIMMs	M393AAG40M32-CAEBY	Pass	
Kingston	64GB	LDIMM	Registered	ECC	DDR4	3200	2R*4	32DIMMs	KSM32RD4/64HAR	Pass	
Transcend	32GB	LDIMM	Registered	ECC	DDR4	3200	2R*8	32DIMMs	TS4GHR72V2E	Pass	

VGA_GPU

Test Procedures:

- 1. Plug full device
- 2. Run "Burn-in Full load stress" 2Hrs test for Intel

Expected Result:

- Check the driver can be load under OS
- No errors and system hang during test.

Vendor	Model & Description	Firmware Version	System Interface Type	Model	Test Result	IMS
Leadtek	NVIDIA Quadro M4000 8GB GDDR5 256bit PCI-EGen3 x16, 120W	84.04.88.00.06	PCI Express Gen3 x16	Quadro M4000	Pass	
NVIDIA	NVIDIA / Quadro P4000 / 8GB GDDR5 256bit 105W PCI Express 3.0x16 Graphic card High End	86.04.56.00.0B	PCI Express Gen3 x16	Quadro P4000	Pass	
NVIDIA	NVIDIA / Quadro P2000 / 5GB GDDR5 160bit 75W PCI Express 3.0x16 Graphic card Mid Range	86.06.3F.00.0D	PCI Express Gen3 x16	Quadro P2000	Pass	

Storage card

Test Procedures:

- 1. Plug full device
- 2. Run "Burn-in Full load stress" 2Hrs test for Intel

Expected Result:

- Check the driver can be load under OS
- No errors and system hang during test.

Vendor	Model & Description	Firmware Version	System Interface Type	Model	Test Result	IMS
LSILogic	Alcor-TU(SV23623932)/LSIMegaRAIDSAS9270CV-8i/PCIExpress3.0x8/6Gb/s1GBDDR3(1333MHz),RAID0/1/5/6,(withModule13.5V/6.4F)	3.230.35-2385	PCI Express Gen3 x8	SAS9270CV-8i	Pass	
LSILogic	SAS9272-8i/LSIMegaRAIDSAS9272-8i/1GB/PCI-E3.0x8/6Gb/sRAIDController	23.2.1-0061	PCI Express Gen3 x8	SAS9272-8i	Pass	
LSILogic	N8103-178/Mega2GBRAID0/1/5/6/OnlyforS090 · S091(NavyGem)	4.220.60-3324	PCI Express Gen3 x8	N8103-178	Pass	
MSI	609-S101B-03S(001)/MS-S101B11OPT:AEPScard/Lowprofile/LSI3008chipset/12Gbps,miniSASHDconnector*2/goldenfinger, IRRRAIDSKUforpowerleader,withbracket/Raidcard/forS165/Goldensample	4.680.01-8455	PCI Express Gen3 x8	LSI3008chipset	Pass	

NIC

Test Procedures:

1. Plug full device
2. Run "Burn-in Full load stress" 2Hrs test for Intel

Expected Result:

- Check the driver can be load under OS
- No errors and system hang during test.

Vendor	Description	Firmware Version	System Interface Type	Model	Test Result	IMS
Intel	I350-T2/I350T2G1P20/IntelEthernetServerAdapterI350-T2-Networkadapter-PCIExpress2.1(x4)lowprofile-10MbLAN,100MbLAN,GigabitLAN-10Base-T,100Base-TX,1000Base-TRJ45Copper	NA	PCI Express Gen2.1 x4	I350-T2	Pass	
Intel	Intel 82572GI/1000BASE-T 1ch LAN PCI-Express(x1) for 92H9/S0011/S0021/S085	NA	PCI Express Gen1.0a x1	82572GI	Pass	
Intel	Intel 82571GB/1000BASE-T 2ch LAN PCI-Express(x4) for 92H9/92J0/S005/S0021/S033/S066/S085	NA	PCI Express Gen1.0a x4	82571GB	Pass	
Intel	Intel / I350-T2 / I350T2G1P20 / Intel Ethernet Server Adapter I350-T2 -Network adapter - PCI Express 2.1 (x4) low profile - 10Mb LAN, 100Mb LAN, Gigabit LAN -10Base-T, 100Base-TX, 1000Base-T RJ45 Copper	NA	PCI Express Gen2.1 x4	I350-T2	Pass	
Intel	868970 /Intel PRO/1000 PT Server Adapter PCI-E x4 /EXPI9400PTBLK /Sample	NA	PCI Express Gen1.0a x4	EXPI9400PTBLK	Pass	
Intel	82572GI/881983/Intel Pro 1000PT / 1000BASE-T PCIe(x1), FH/LP LAN card for S005,NEC P/N:N8104-126 / LAN Card / NEC Sample	NA	PCI Express Gen1.0a x1	881983	Pass	
Intel	IntelR Ethernet Converged Network Adapter X520-DA2 10Gbps PCI Express 2.0 x8 SFP x2+ Direct Attached Twin Axial Cabling up to 10m	NA	PCI Express Gen2.0 x8	X520-DA2	Pass	
Intel	IntelR Ethernet Converged Network Adapter X520-DA2 10Gbps PCI Express 2.0*8 SFP*2+ Direct Attached Twin Axial Cabling up to 10m	NA	PCI Express Gen2.0 x8	X520-DA2	Pass	
NEC	E1G42HTG1P20 / N8104-145 / IntelR Ethernet Server Adapter I340-T2 / 1000BASE-T 2ch LAN PCI-Express(x4)	NA	PCI Express Gen2.0 x4	N8104-145	Pass	
NEC	EXPI9402PTG2P20 / IntelR Server Adapter / PRO 1000 PT 2ch LAN PCI-Express(x4)	NA	PCI Express Gen1.0a x4	EXPI9402PTG2P20	Pass	
Intel	Intel Gigabit ET Dual Port Server Adapter/E1G42ETBLK/PCI Express 2.0 x4/Sample	NA	PCI Express Gen2.0 x4	E1G42ETBLK	Pass	
Intel	Intel PRO/1000 PT DUAL PORT/PCIe X4 Dual Channel Intel Gigabit NIC-PRO/1000 PT DUAL PORT Server Adapter	NA	PCI Express Gen1.0a x4	1000 PT	Pass	

Storage SATA HDD**Test Procedures:**

Expected Result:

- No errors and system hang during test.

1. Install HDD in HDD tray (if project support)
2. Make sure install OS without problem.
3. Check HDD information in BIOS and device manager under Windows or Linux (by Project or Device)
4. Run "Burn-in HDD Stress" 2Hrs test. For Intel

Vendor	Type	Form Factor	Class	Capacity	RPM	Performance	Model	Test Result	IMS
Seagate	SATA III	2.5"	SATA	2TB	7200RPM	N/A	ST2000NX0243	Pass	
Seagate	SATA III	3.5"	SATA	12TB	7200RPM	N/A	ST12000NM001G	Pass	
Seagate	SATA III	3.5"	SATA	14TB	7200RPM	N/A	ST14000NM001G	Pass	
Seagate	SATA3	2.5"	SATA	10TB	7200RPM	N/A	ST10000NM018G	Pass	
Seagate	SATA3	3.5"	SATA	16TB	7200RPM	N/A	ST16000NM001G	Pass	
Intel	SATA3	2.5"	SSD	480GB	N/A	R:540MB/s ; W:490MB/s	SSDSC2BW480H6	Pass	

Storage SAS HDD**Test Procedures:**

1. Install HDD in HDD tray (if project support)
2. Make sure install OS without problem.
3. Check HDD information in BIOS and device manager under Windows or Linux (by Project or Device)
4. Run "Burn-in HDD Stress" 2Hrs test. For Intel

Expected Result:

- No errors and system hang during test.

Vendor	Type	Form Factor	Class	Capacity	RPM	Transfer Rate	Performance	Model	Test Result	IMS
HGST	SAS3	2.5"	SAS	1.2TB	1000RPM	12 Gb/sec	N/A	HUC101812CSS200	Pass	
Seagate	SAS	3.5"	SAS	6TB	7200RPM	12 Gb/sec	N/A	ST6000NM029A	Pass	
Western Digital	SAS	3.5"	SAS	4TB	7200RPM	12 Gb/sec	N/A	HUS726T4TAL5204	Pass	

Storage NVME

Test Procedures:

1. Install HDD in HDD tray (if project support)
2. Make sure install OS without problem.
3. Check HDD information in BIOS and device manager under Windows or Linux (by Project or Device)
4. Run "Burn-in HDD Stress" 2Hrs test. For Intel

Expected Result:

- No errors and system hang during test.

Vendor	Interface	Form Factor	Capacity	SLC/MLC	Performance	Model	Test Result	IMS
Intel	PCI Express Gen3.0 x4	2.5"	375 GB	N/A	R:2400MB/s ; W: 2000MB/s	SSDPE21K375GA	Pass	
Intel	PCI Express Gen3.1 x4	2.5"	1.6 TB	N/A	N/A	SSDPE2KE016T8	Pass	
Intel	PCI Express Gen4.0 x4	2.5"	3.84TB	N/A	R:6500MB/s ; W:3400MB/s	SSDPF2KX038TZ	Pass	

Storage M.2**Test Procedures:**

1. Make sure install OS without problem.
2. Check HDD information in BIOS and device manager under Windows or Linux (by Project or Device)
3. Run "Burn-in HDD Stress" 2Hrs test. For Intel

Expected Result:

- No errors and system hang during test.

Vendor	Interface	Form Factor	Class	Capacity	C-Temp	SLC/MLC	Performance	Model	Test Result	IMS
ADATA	PCI Express Gen3.0 x4	2280	M.2	1TB	-40°C ~ +85°C	TLC	R:3500MB/s ; W:3200MB/s	IM2P33E8-001TP	Pass	
ADATA	PCI Express Gen3.0 x4	2280	M.2	128 GB	0~+70°C	TLC	R:1850MB/s ; W:650MB/s	IM2P33F8-128GD	Pass	
Apacer	PCI Express Gen3.0 x4	2280	M.2	480 GB	-40°C ~ +85°C	TLC	R:2660MB/s ; W:2085MB/s	APP480G1DC-01VWD	Pass	
Innodisk	PCI Express Gen3.0 x4	2280	M.2	256 GB	-40°C ~ +85°C	TLC	R:1850MB/s ; W:600MB/s	DEM28-B56DD1GCAQF-A44	Pass	
Innodisk	PCI Express Gen3.0 x4	2280	M.2	512 GB	-40°C ~ +85°C	TLC	R:2000MB/s ; W:1200MB/s	DEM28-C12DD1GCAQF-A44	Pass	
Micron	PCI Express Gen3.0 x4	2280	M.2	512 GB	N/A	N/A	R:2200MB/s;W: 1070MB/s	MTFDHBA512QFD-1AX1AABYY	Pass	
Micron	PCI Express Gen4.0 x4	2280	M.2	512 GB	0~+70°C	TLC	R:6600MB/s ; W:3600MB/s	MTFDKBA512TFH	Pass	
Innodisk	PCI Express Gen3.0 x4	2280	M.2	100 GB	-40°C ~ +85°C	TLC	R:2000MB/s ; W:1850MB/s	DEM28-A28M61EWAQF-ONP100GB	Pass	
Innodisk	PCI Express Gen3.0 x2	2280	M.2	200 GB	N/A	TLC	R:140MB/s;W:700MB/s	DEM28-B56M61EWAQF	Pass	
Innodisk	PCI Express Gen3.0 x2	2280	M.2	400 GB	N/A	TLC	R:140MB/s;W:700MB/s	DEM28-C12M61EWAQF	Pass	

PSU

Test Procedures:

- 1. Plug full device
- 2. Run "Burn-in Full load stress" 2Hrs test for Intel

Expected Result:

- No errors and system hang during test.

Vendor	Watt	Description	Model	Test Result	IMS
Great-wall	800W	Great-wall深圳長城 / GW-CRPS800B / Input: 100-240V~10-5A 60/50Hz, DC Output:+12V-65A/+12VSB-3A, Output Power:800W / for MS-S258 / Power Supply / Order	GW-CRPS800B	Pass	
Great-wall	1200W	Great-wall 長城 / GW-CRPS1200D / Input:200~240V,50/60Hz, Output:1200W(FW更新) for S1651 / Power Supply / 寶德 consign	GW-CRPS1200D	Pass	
AcBel	1200W	AcBel / R1CA2122A-P00A / (AC Input:100-127V~50/60Hz, 10A / DC Output:+12V~66.7A, +12Vsb~3A / Max. Power: 800W), (AC Input:200-240V~50/60Hz, 8.0A / DC Input:240V~6A / DC Output: +12V~100A, +12Vsb~3A / Max. Power: 1200W)	R1CA2122A-P00A	Pass	
AcBel	800W	AcBel / R1CA2801A-P00A / (AC Input:100-127V~50/60Hz, 10A; 200-240V~50/60Hz, 5A) (DC Input: 240V~5A)(DC Output: +12V~66.7A, +12Vsb~3A) (Max. Power: 800W)	R1CA2801A-P00A	Pass	
Delta	1000W	Delta / DPS-1200AB-4 A / Input: 100~127V /12.47A Output: 1000W / Power Supply	DPS-1200AB-4 A	Pass	