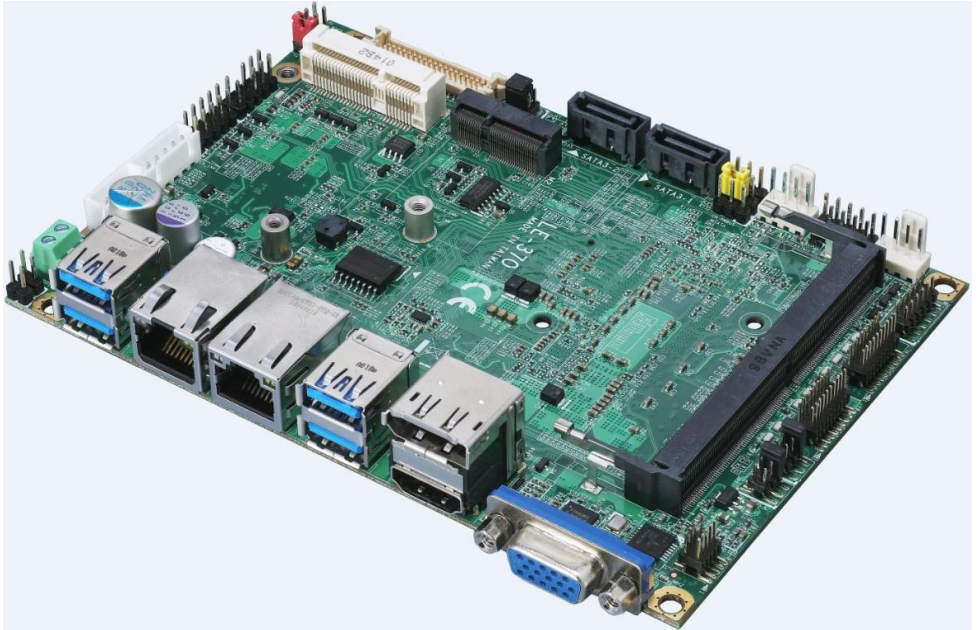


# Product Test Report



<b>Product Name</b>	<b>LE-370</b>
<b>Product Version</b>	<b>A</b>
<b>Issued Date</b>	<b>2021.07.16</b>
<b>Report Edition</b>	<b>1.0</b>
<b>BIOS Version</b>	<b>1.0</b>
<b>Testing Engineer</b>	<b>Perry</b>
<b>Check Engineer</b>	<b>Daniel</b>

<b>REVISION HISTORY</b>			
<b>DATE</b>	<b>REVISION NO.</b>	<b>PAGE</b>	<b>DESCRIPTONS</b>
<b>2021.07.16</b>	<b>Ver. 1.0</b>	<b>58</b>	<b>Initial Release</b>

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# 1. Function test

## 1.1 Hardware functions

### Base Function Test

Item	Description	Result
1	Power Button	PASS
2	Reset	PASS
3	Power LED	PASS
4	HDD LED	PASS
5	CPUFAN	PASS
6	SYSFAN	PASS
7	CN_AUDIO	PASS
8	LAN1(I219)	PASS
9	LAN2(I225)	PASS
10	DDR4	PASS
11	CN_SATA3-1/2	PASS
12	DC_OUT	PASS
13	USB1/2	PASS
14	CN_USB	PASS
15	CN_COM 1/2/3/4	PASS
16	CN_PS2	PASS
17	HDMI	PASS
18	Display Port	PASS
19	VGA	PASS
20	CN_LVDS	PASS

21	CN_INV	PASS
22	MINI_CRAD	PASS
23	M2(key E)	PASS
24	M2(key M)	PASS

### Jumper

Item	Description	Result
1	JRTC	PASS
2	JAT	PASS
3	JMSATA	PASS
4	JVLCD	PASS
5	JP1/2	PASS

### 1.2 BIOS function

Item	Description	Result	Remark
1	Press 'Del' to run Setup Utility	PASS	
2	Ctrl-Alt-Del – Soft-Reboot	PASS	
3	Save & Exit Setup	PASS	
4	Date & Time Setting	PASS	
5	Selection Language	PASS	
6	Numlock	PASS	
7	Quick Boot	PASS	
8	Active Processor Cores	PASS	
9	Hyper-Threading	PASS	
10	SATA Controller(s)	PASS	
11	HD Audio	PASS	

Item	Description	Result	Remark
12	LVDS Configuration	PASS	
13	Serial Port Configuration	PASS	
14	Restore On Power Loss	PASS	
15	Watch Dog Timer Select	PASS	
16	Power On By RTC Alarm	PASS	
17	Wake On LAN	PASS	
18	iAMT	PASS	

### 1.3 Driver

CD edition : IPCI2-1.1

#### 1. Windows 10 64 bit Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	3.1.7.131
2	VGA Driver	PASS	27.20.100.8935
3	Audio Driver	PASS	6.0.1.8036
4	LAN Driver	PASS	I219LM: 12.19.0.16 I225LM: 1.0.2.6

## 2. Compatibility test

### 2.1 CPU Test

Test environment:

OS: Windows 10 64bit

Test program : BurnIn Test8.1 & AIDA64

Spec	CPU Speed	Family	Processor	TDP	Smart Cache	Result
<a href="#">SRK0X</a>	2.8GHz	CORE	i7-1185G7E	28W	12 MB	PASS
<a href="#">SRK0Z</a>	2.6GHz	CORE	i5-1145G7E	28W	8 MB	PASS
<a href="#">SRK12</a>	3.0GHz	CORE	i3-1115G4E	28W	6 MB	PASS
<a href="#">SRK17</a>	1.8GHz	Celeron®	6305E	15W	4 MB	PASS
<a href="#">SRK0Y</a>	2.8GHz	CORE	i7-1185GRE	28W	12 MB	PASS

## 2.2 Memory Test

Test environment:

OS: Windows 10 64bit

Test program : BurnIn Test8.1 & MemTest64 & MemTest86+

Manufacturer	Chip	Frequency	Capacity Mbytes	Memory test Source
Kingston KVR32S22SD8/8	SKhynix H5AN8G8NDJ RXNC	DDR4 3200	8 GB	PASS
Kingston KVR32S22D8/16	SKhynix H5AN8G8NDJ RXNC	DDR4 3200	16GB	PASS
Kingston KVR32S22D8/32	Micron OTE47D9ZJV	DDR4 3200	32GB	PASS
Kingston KVR21S15D8/16	Micron 7JH45D9VHP	DDR4 2133	16 GB	PASS
Transcend 16G 2Rx8 DDR4 2133 SO	SEC 546 K4ABG085WB BCRC	DDR4 2133	16 GB	PASS
Transcend 8G 2Rx8 DDR4 2133 SO	SEC 607 K4A4G085WE BCRC	DDR4 2133	8 GB	PASS

## 2.3 HDMI Graphic Quality Test

Test environment:

OS Windows 10 64bit

Driver version : 27.20.100.8935

Resolution	Color	Result	Remark
800 x 600	32bit	PASS	
1024 x 768	32bit	PASS	
1152 x 864	32bit	PASS	
1280 x 600	32bit	PASS	
1280 x 720	32bit	PASS	
1280 x 768	32bit	PASS	
1280 x 800	32bit	PASS	
1280 x 960	32bit	PASS	
1280 x 1024	32bit	PASS	
1360 x 768	32bit	PASS	
1366 x 768	32bit	PASS	
1400 x 1050	32bit	PASS	
1440 x 900	32bit	PASS	
1600 x 900	32bit	PASS	
1680 x 1050	32bit	PASS	
1920 x 1080	32bit	PASS	
3840 x 2160	32bit	PASS	

## 2.4 Display Port Graphic Quality Test

Test environment:

OS Windows 10 64bit



## Driver version : 27.20.100.8935

Resolution	Color	Result	Remark
800 x 600	32bit	PASS	
1024 x 768	32bit	PASS	
1152 x 864	32bit	PASS	
1280 x 600	32bit	PASS	
1280 x 720	32bit	PASS	
1280 x 768	32bit	PASS	
1280 x 800	32bit	PASS	
1280 x 960	32bit	PASS	
1280 x 1024	32bit	PASS	
1360 x 768	32bit	PASS	
1366 x 768	32bit	PASS	
1400 x 1050	32bit	PASS	
1440 x 900	32bit	PASS	
1600 x 900	32bit	PASS	
1600 x 1050	32bit	PASS	
1920 x 1080	32bit	PASS	
3840 x 2160	32bit	PASS	

## 2.5 Audio

Test environment:

OS Windows 10 64-bit

Driver version : 6.0.1.8036

Item	Description	Result	Remark
1	2.1CH	PASS	

2	Microphone	PASS	
---	------------	------	--

## OS Ubuntu 20.10

Item	Description	Result	Remark
1	2.1CH	PASS	

## OS Fedoro 33

Item	Description	Result	Remark
1	2.1CH	PASS	

## 2.6 HDD Test

Test environment:

OS Windows 10 64bit

Test program : BurnIn Test8.1 & CrystalDiskMark

HDD Model	Interface	Capacity	HDD Size Detect	HDD Data Transfer	HDD LED Check
INTEL SSDSC2BW240A4	SSD	240 GB	PASS	PASS	PASS
SPCC Solid State disk(S55)	SSD	120 GB	PASS	PASS	PASS
CT120 BX500	SSD	120 GB	PASS	PASS	PASS
WD 10EZEX	HDD	1 TB	PASS	PASS	PASS
Kingston DT100G3/32G	USB	32 GB	PASS	PASS	PASS
Kingston DT Hyper X 3.0	USB	63 GB	PASS	PASS	PASS
Crucial_CT 120M500SSD	mSATA	120 GB	PASS	PASS	PASS

## 2.7 DVD-ROM Test

Test environment:

OS Windows 10 64bit

DVD-ROM Model	Interface	DVD-ROM Detect	DVD-ROM Data Transfer	Play DVD
Transcend DVD TS8XDVDS-K	USB	PASS	PASS	PASS
LITEON DVD eTAU108	USB	PASS	PASS	PASS
ASUS DRW-24D1ST	SATA	PASS	PASS	PASS
Pioneer DVR-S19LBK	SATA	PASS	PASS	PASS

## 2.8 USB Test

### 1. Windows 10 64-bit

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
DVD-ROM	PASS	
USB Mass storage	PASS	

### 2. Ubuntu 20.10

Item	Result	Remark
External USB Keyboard Test	PASS	

<b>External USB Mouse Test</b>	PASS	
<b>Hot plugging test</b>	PASS	
<b>DVD-ROM</b>	PASS	
<b>USB Mass storage</b>	PASS	

### 3. Fedoro 33

<b>Item</b>	<b>Result</b>	<b>Remark</b>
<b>External USB Keyboard Test</b>	PASS	
<b>External USB Mouse Test</b>	PASS	
<b>Hot plugging test</b>	PASS	
<b>DVD-ROM</b>	PASS	
<b>USB Mass storage</b>	PASS	

## 2.9 Serial Port Test

### 1. Windows 10 64-bit

<b>Item</b>	<b>Description</b>	<b>Result</b>	<b>Remark</b>
1	<b>Device Manager Check</b>	PASS	
2	<b>RS-232 Mouse Test</b>	PASS	

## 2.10 PS2 Keyboard 、 Mouse Test

### 1. Windows 10 64-bit

<b>Item</b>	<b>Description</b>	<b>Result</b>	<b>Remark</b>
1	<b>Device Manager Check</b>	PASS	
2	<b>Keyboard Typing Test</b>	PASS	
3	<b>Mouse Detect Test</b>	PASS	

## 2. Ubuntu 20.10

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

## 2. Fedoro 33

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

### 2.11 LAN Test

Data Transfer Test environment:

-CAT 6 UTP 100M

-8 HR. continuous

#### 1. Windows 10 64-bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	(IPERF)
2	Data Transfer Test	PASS	(IPERF)

#### 2. Ubuntu 20.10

Item	Description	Result	Remark
1	Device Manager Check	PASS	

### 3. Fedoro 33

Item	Description	Result	Remark
1	Device Manager Check	PASS	

### 2.12 Power Supply Test

Item	Type	Description	Result	Remark
1	ATX Power	Thermaltake TR2-450AH2NCB	PASS	
2	ATX Power	SEED BS400	PASS	
3	ATX Power	Seasonic SS-520GB 520W	PASS	
4	ATX Power	AcBel PC7008 430W	PASS	

### 2.13 OS Install

Item	Description	Result	Remark
1	Windows 10 64 bit	PASS	
2	Ubuntu 20.10 (ubuntu-20.10-desktop-amd64)	PASS	
3	Fedoro 33 (Fedora-Workstation-Live-x86_64-3 3-1.2)	PASS	

### 2.14 PCI Express Mini Card

Motherboard	PCI Express mini card	Result	Remark
LE-370	MPX-M2E+M2-210	PASS	
	MPX-M2E+M2-225	PASS	
	MPX-210D	PASS	

	<b>MPX-210D2</b>	PASS	
	<b>MPX-350</b>	PASS	
	<b>MPX-225</b>	PASS	
	<b>MPX-2213</b>	PASS	
	<b>MPX-8188</b>	PASS	

### 2.15 M2(Key E) Expansion slot

Motherboard	M2(Key E)	Result	Remark
LE-370	<b>M2-210</b>	PASS	
	<b>M2-225</b>	PASS	
	<b>M2(WiFi)</b>	PASS	
	<b>M2-2213</b>	PASS	

### 2.16 M2\_NVME(Key M) Expansion slot

Motherboard	M2(Key M)	Result	Remark
LE-370	<b>NVMe SSD (Intel)</b>	PASS	Model : SSDPEKKW512G7
	<b>NVMe SSD (ADATA)</b>	PASS	Model : ASX8000NP-128GM-C
	<b>NVMe SSD (SEAGATE)</b>	PASS	Model : ZP500GM30002
	<b>NVMe SSD(ACPI)</b>	PASS	Model : M2PDD-8L

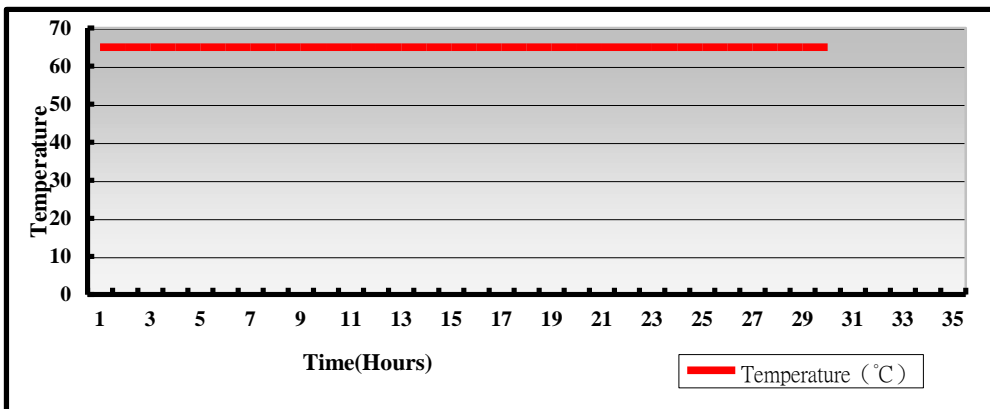
### 3. Environmental test

#### 3.1 Temperature Test

Hardware Device list:

System Board	LE-370
CPU	Intel® Core™ i7-1185G7E 2.8GHz
Memory	Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV)
HDD	WD BLUE 3D NAND SSD 250GB (WDS250G2B0A-00SM50)
Operating OS	Windows 10 64bit
Test Equipment	GIANT FORCE GTH-150-60-SP-AR LCD-9530 Programmer/Controller
Test Program	BurnIn 8.1

Test Result:

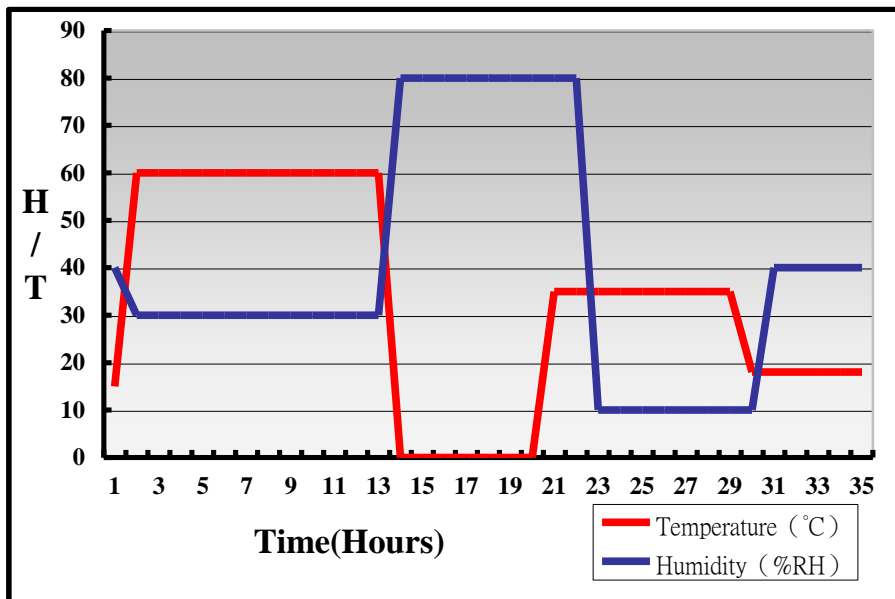




### Hardware Device list:

System Board	LE-370
CPU	Intel® Core™ i7-1185G7E 2.8GHz
Memory	Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV)
HDD	WD BLUE 3D NAND SSD 250GB (WDS250G2B0A-00SM50)
Operating OS	Windows 10 64bit
Test Equipment	GIANT FORCE GTH-150-60-SP-AR LCD-9530 Programmer/Controller
Test Program	BurnIn 8.1

### Test Result:



## Boot up Test:

### Hardware Device list:

<b>System Board</b>	<b>LE-370</b>
<b>CPU</b>	<b>Intel(R) Core(TM) i7-1185G7E 2.8GHz</b>
<b>Memory</b>	<b>Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFY)</b>
<b>HDD</b>	<b>WD BLUE 3D NAND SSD 250GB (WDS250G2B0A-00SM50)</b>

<b>Temperature</b>	<b>Result</b>	<b>Remark</b>
<b>-10°C</b>	PASS	50 Times
<b>60°C</b>	PASS	50 Times

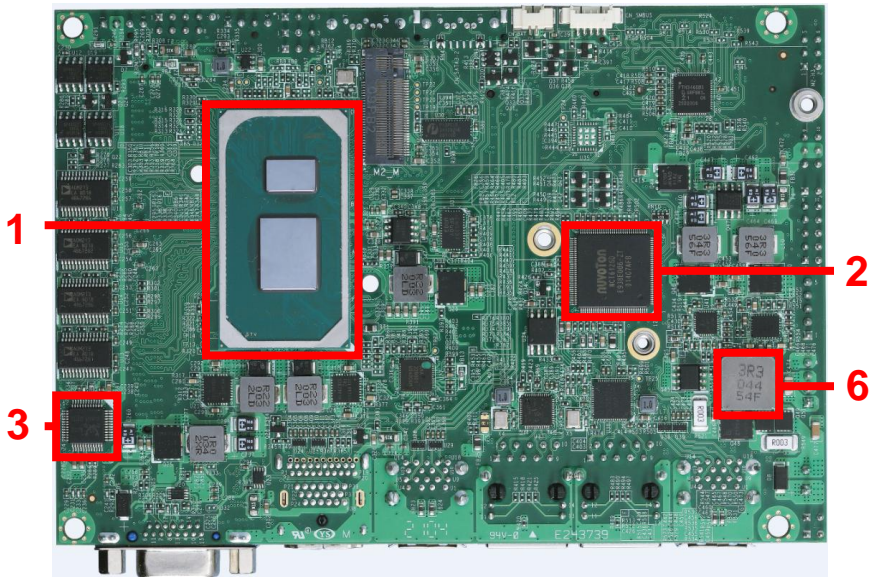
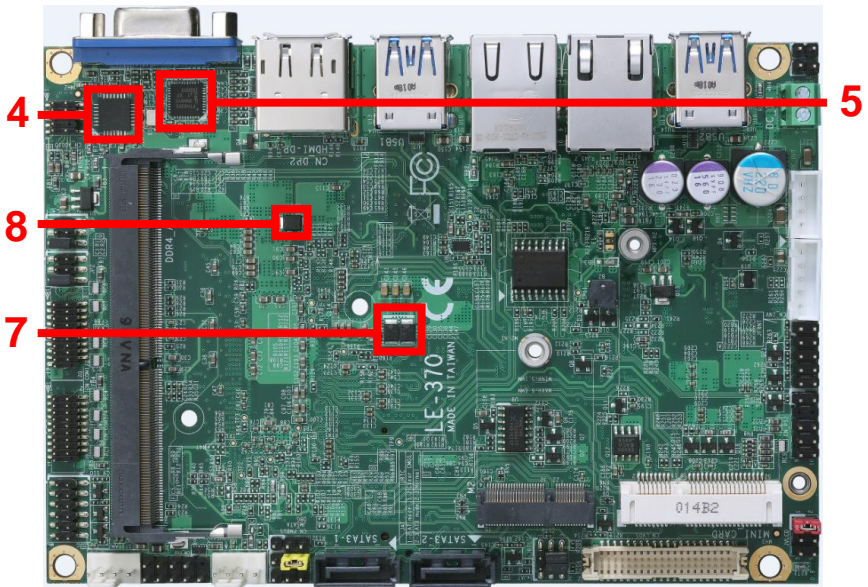
## 3.2 Thermal measurements at various points on the board

### Test Environment:

<b>CPU</b>	<b>Intel(R) Core(TM) i7-1185G7E 2.8GHz</b>
<b>Memory</b>	<b>Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV)</b>
<b>HDD</b>	<b>WD BLUE 3D NAND SSD 250GB (WDS250G2B0A-00SM50)</b>
<b>Power</b>	<b>GW INSTEK SPS-3610(DC Power Supply)</b>
<b>Operating System</b>	<b>Windows 10 64-bit</b>
<b>Test Program</b>	<b>BurnIn Test 8.1 (Run 80%)</b>

### Test Result:

<b>Item</b>	<b>Environmental temperature</b>	<b>25°C</b>
<b>1</b>	<b>CPU(Bottom)</b>	<b>90°C</b>
<b>2</b>	<b>U37</b>	<b>48.2°C</b>
<b>3</b>	<b>U17</b>	<b>51.8°C</b>
<b>4</b>	<b>U2</b>	<b>45.7°C</b>
<b>5</b>	<b>U3</b>	<b>44.5°C</b>
<b>6</b>	<b>L9</b>	<b>32.3°C</b>
<b>7</b>	<b>C144 &amp; C147</b>	<b>44.7°C</b>
<b>8</b>	<b>C93</b>	<b>49.4°C</b>



## 4. Reliability Test

### 4.1 Power Consumption Test

#### 1. Test Environment:

<b>Motherboard</b>	<b>LE-370</b>
<b>CPU</b>	Intel(R) Core(TM) i7-1185G7E 2.8GHz
<b>Memory</b>	Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV)
<b>HDD</b>	WD BLUE 3D NAND SSD 250GB(WDS250G2B0A-00SM50)

**Power Supply: GW INSTEK SPS-3610(DC Power Supply)**

Voltage	MS-DOS Boot up		Windows 10 64bit 3DMARK + Prime95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	1.92	23.04	4.59	55.08
19V	1.31	24.89	2.93	55.67
24V	1.11	26.64	2.35	56.4

#### 1. a. Test Environment:

The same as above but with LCD

<b>Display Panel</b>	<b>AUO M215HW03 V1 21.5”LCD</b>
----------------------	---------------------------------

**Power Supply: GW INSTEK SPS-3610(DC Power Supply)**

Voltage	MS-DOS Boot up		Windows 10 64bit 3DMARK + Prime95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	3.08	36.96	6.33	75.96
19V	2.01	38.19	3.93	74.67
24V	1.68	40.32	3.14	75.36

## 2. Test Environment:

<b>Motherboard</b>	<b>LE-370</b>
<b>CPU</b>	Intel(R) Celeron(R) 6305E 1.8GHz
<b>Memory</b>	Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFY)
<b>HDD</b>	WD BLUE 3D NAND SSD 250GB(WDS250G2B0A-00SM50)

**Power Supply: GW INSTEK SPS-3610(DC Power Supply)**

Voltage	MS-DOS Boot up		Windows 10 64bit 3DMARK + Prime95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	1.71	20.52	2.13	25.56
19V	1.21	22.99	1.52	28.88
24V	1.04	24.96	1.28	30.72

## 2. a. Test Environment:

The same as above but with LCD

<b>Display Panel</b>	<b>AUO M215HW03 V1 21.5"LCD</b>
----------------------	---------------------------------

**Power Supply: GW INSTEK SPS-3610(DC Power Supply)**

Voltage	MS-DOS Boot up		Windows 10 64bit 3DMARK + Prime95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	2.95	35.4	3.85	46.2
19V	1.98	37.62	2.50	47.5
24V	1.67	40.08	2.09	50.16

### 3. Test Environment:

<b>Motherboard</b>	<b>LE-370</b>
<b>CPU</b>	Intel(R) Core(TM) i5-1145G7E 2.6GHz
<b>Memory</b>	Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV)
<b>HDD</b>	WD BLUE 3D NAND SSD 250GB(WDS250G2B0A-00SM50)

**Power Supply: GW INSTEK SPS-3610(DC Power Supply)**

Voltage	MS-DOS Boot up		Windows 10 64bit 3DMARK + Prime95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	1.92	23.04	4.30	51.6
19V	1.32	25.08	2.80	53.2
24V	1.13	27.12	2.33	55.92

### 3. a. Test Environment:

The same as above but with LCD

<b>Display Panel</b>	<b>AUO M215HW03 V1 21.5"LCD</b>
----------------------	---------------------------------

**Power Supply: GW INSTEK SPS-3610(DC Power Supply)**

Voltage	MS-DOS Boot up		Windows 10 64bit 3DMARK + Prime95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	3.18	38.16	5.59	67.08
19V	2.04	38.76	3.86	73.34
24V	1.69	40.56	3.23	77.52

#### 4. Test Environment:

<b>Motherboard</b>	<b>LE-370</b>
<b>CPU</b>	Intel(R) Core(TM) i3-1115G4E 3.0GHz
<b>Memory</b>	Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV)
<b>HDD</b>	WD BLUE 3D NAND SSD 250GB(WDS250G2B0A-00SM50)

#### Power Supply: GW INSTEK SPS-3610(DC Power Supply)

Voltage	MS-DOS Boot up		Windows 10 64bit 3DMARK + Prime95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	1.82	21.84	3.71	44.52
19V	1.26	23.94	2.38	45.22
24V	1.08	25.92	1.98	47.52

#### 4. a. Test Environment:

The same as above but with LCD

<b>Display Panel</b>	<b>AUO M215HW03 V1 21.5"LCD</b>
----------------------	---------------------------------

#### Power Supply: GW INSTEK SPS-3610(DC Power Supply)

Voltage	MS-DOS Boot up		Windows 10 64bit 3DMARK + Prime95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	3.09	37.08	5.40	64.8
19V	2.04	38.76	3.44	65.36
24V	1.69	40.56	2.78	66.72



## 5. Test Environment:

<b>Motherboard</b>	<b>LE-370</b>
<b>CPU</b>	Intel(R) Core(TM) i7-1185GRE 2.8GHz
<b>Memory</b>	Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV)
<b>HDD</b>	WD BLUE 3D NAND SSD 250GB(WDS250G2B0A-00SM50)

**Power Supply: GW INSTEK SPS-3610(DC Power Supply)**

Voltage	MS-DOS Boot up		Windows 10 64bit 3DMARK + Prime95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	1.91	22.92	4.02	48.24
19V	1.31	24.89	2.60	49.4
24V	1.10	26.4	2.12	50.88

## 5. a. Test Environment:

The same as above but with LCD

<b>Display Panel</b>	<b>AUO M215HW03 V1 21.5”LCD</b>
----------------------	---------------------------------

**Power Supply: GW INSTEK SPS-3610(DC Power Supply)**

Voltage	MS-DOS Boot up		Windows 10 64bit 3DMARK + Prime95	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	3.07	36.84	5.69	68.28
19V	2.05	38.95	3.66	69.54
24V	1.74	41.76	3.01	72.24

## 5. Performance Test

### 5.1 3D MARK VANTAGE

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	P9881
2	GPU SCORE		PASS	8075
3	CPU SCORE		PASS	29587

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	P9944
2	GPU SCORE		PASS	8132
3	CPU SCORE		PASS	29991

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22SD8/8 8GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	P9300
2	GPU SCORE		PASS	7524
3	CPU SCORE		PASS	31856

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Core(TM) i5-1145G7E 2.6GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	P8223
2	GPU SCORE		PASS	6638
3	CPU SCORE		PASS	28980

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Core(TM) i5-1145G7E 2.6GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	P8252
2	GPU SCORE		PASS	6665
3	CPU SCORE		PASS	28881

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Core(TM) i3-1115G4E 3.0GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	P5774
2	GPU SCORE		PASS	4760
3	CPU SCORE		PASS	15999

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Core(TM) i3-1115G4E 3.0GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	P5822
2	GPU SCORE		PASS	4799
3	CPU SCORE		PASS	16155

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Core(TM) i7-1185GRE 2.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	P9869
2	GPU SCORE		PASS	8083
3	CPU SCORE		PASS	29270

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Core(TM) i7-1185GRE 2.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	P9942
2	GPU SCORE		PASS	8144
3	CPU SCORE		PASS	29461

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>3DMARK SCORE</b>	<b>Intel(R) Celeron(R) 6305E 1.8GHz Kingston KVR21S15D8/16 16GB (Micron 7JH45D9VHP) Kingston SSDNow V300 240GB</b>	PASS	P4683
<b>2</b>	<b>GPU SCORE</b>		PASS	4351
<b>3</b>	<b>CPU SCORE</b>		PASS	6074

## 5.2 3D MARK 11

### Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFB) WDS250G2B0A-00SM50	PASS	P2561
2	Graphics SCORE		PASS	2252
3	Physics SCORE		PASS	10305
4	Combined SCORE		PASS	2212

### Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	P2564
2	Graphics SCORE		PASS	2255
3	Physics SCORE		PASS	10337
4	Combined SCORE		PASS	2296

### Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22SD8/8 8GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	P2520
2	Graphics SCORE		PASS	2231
3	Physics SCORE		PASS	10623
4	Combined SCORE		PASS	2150

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	<b>Intel(R) Core(TM) i5-1145G7E 2.6GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50</b>	PASS	P2256
2	Graphics SCORE		PASS	1981
3	Physics SCORE		PASS	9769
4	Combined SCORE		PASS	2031

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	<b>Intel(R) Core(TM) i5-1145G7E 2.6GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	P2256
2	Graphics SCORE		PASS	1980
3	Physics SCORE		PASS	9750
4	Combined SCORE		PASS	2038

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	<b>Intel(R) Core(TM) i3-1115G4E 3.0GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50</b>	PASS	P1638
2	Graphics SCORE		PASS	1425
3	Physics SCORE		PASS	6342
4	Combined SCORE		PASS	1653

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	<b>Intel(R) Core(TM) i3-1115G4E 3.0GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	P1643
2	Graphics SCORE		PASS	1431
3	Physics SCORE		PASS	6351
4	Combined SCORE		PASS	1650

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	<b>Intel(R) Core(TM) i7-1185GRE 2.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50</b>	PASS	P2552
2	Graphics SCORE		PASS	2271
3	Physics SCORE		PASS	8847
4	Combined SCORE		PASS	2245

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	<b>Intel(R) Core(TM) i7-1185GRE 2.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	P2538
2	Graphics SCORE		PASS	2244
3	Physics SCORE		PASS	9600
4	Combined SCORE		PASS	2268



## 5.3 3D MARK

### Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	Time Spy	Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	620
2	Graphics SCORE		PASS	539
3	CPU SCORE		PASS	4151

### Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	Time Spy	Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	616
2	Graphics SCORE		PASS	536
3	CPU SCORE		PASS	4187

### Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	Time Spy	Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22SD8/8 8GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	602
2	Graphics SCORE		PASS	524
3	CPU SCORE		PASS	3961

### Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	Time Spy	Intel(R) Celeron(R) 6305E 1.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	350
2	Graphics SCORE		PASS	313
3	CPU SCORE		PASS	1109

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	Time Spy	Intel(R) Celeron(R) 6305E 1.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	350
2	Graphics SCORE		PASS	313
3	CPU SCORE		PASS	1110

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	Time Spy	Intel(R) Core(TM) i5-1145G7E 2.6GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	530
2	Graphics SCORE		PASS	460
3	CPU SCORE		PASS	4018

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	Time Spy	Intel(R) Core(TM) i5-1145G7E 2.6GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	530
2	Graphics SCORE		PASS	460
3	CPU SCORE		PASS	4041

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	Time Spy	Intel(R) Core(TM) i3-1115G4E 3.0GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	360
2	Graphics SCORE		PASS	313
3	CPU SCORE		PASS	2704

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	Time Spy	Intel(R) Core(TM) i3-1115G4E 3.0GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	360
2	Graphics SCORE		PASS	313
3	CPU SCORE		PASS	2702

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	Time Spy	Intel(R) Core(TM) i7-1185GRE 2.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	612
2	Graphics SCORE		PASS	533
3	CPU SCORE		PASS	4015

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	Time Spy	Intel(R) Core(TM) i7-1185GRE 2.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	612
2	Graphics SCORE		PASS	533
3	CPU SCORE		PASS	4011

## 5.4 PC MARK 7 & 8

### Windows 10 64-bit

Weighted Suite	Test Environment	Result	Remark
PCMARK 7 Scores	Intel(R) Core(TM) i7-1185G7E 2.8GHz	PASS	7683
PCMARK 8 Scores	Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	Work 2.0 : 3072 Work 1.0 : 5420

### Windows 10 64-bit

Weighted Suite	Test Environment	Result	Remark
PCMARK 7 Scores	Intel(R) Core(TM) i7-1185G7E 2.8GHz	PASS	6738
PCMARK 8 Scores	Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	Work 2.0 : 3090 Work 1.0 : 5423

### Windows 10 64-bit

Weighted Suite	Test Environment	Result	Remark
PCMARK 7 Scores	Intel(R) Core(TM) i7-1185G7E 2.8GHz	PASS	6711
PCMARK 8 Scores	Kingston KVR32S22SD8/8 8GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	Work 2.0 : 3074 Work 1.0 : 5410

**Windows 10 64-bit**

Weighted Suite	Test Environment	Result	Remark
PCMARK 8 Scores	Intel(R) Celeron(R) 6305E 1.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	Work 2.0 : 1920 Work 1.0 : 4020

**Windows 10 64-bit**

Weighted Suite	Test Environment	Result	Remark
PCMARK 8 Scores	Intel(R) Celeron(R) 6305E 1.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	Work 2.0 : 1913 Work 1.0 : 4054

**Windows 10 64-bit**

Weighted Suite	Test Environment	Result	Remark
PCMARK 7 Scores	Intel(R) Core(TM) i5-1145G7E 2.6GHz	PASS	6576
PCMARK 8 Scores	Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	Work 2.0 : 3000 Work 1.0 : 5318

**Windows 10 64-bit**

Weighted Suite	Test Environment	Result	Remark
PCMARK 7 Scores	Intel(R) Core(TM) i5-1145G7E 2.6GHz	PASS	6566
PCMARK 8 Scores	Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	Work 2.0 : 3016 Work 1.0 : 5369

**Windows 10 64-bit**

Weighted Suite	Test Environment	Result	Remark
PCMARK 7 Scores	Intel(R) Core(TM) i3-1115G4E 3.0GHz	PASS	6166
PCMARK 8 Scores	Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	Work 2.0 : 2829 Work 1.0 : 5259

**Windows 10 64-bit**

Weighted Suite	Test Environment	Result	Remark
PCMARK 7 Scores	Intel(R) Core(TM) i3-1115G4E 3.0GHz	PASS	6249
PCMARK 8 Scores	Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	Work 2.0 : 2831 Work 1.0 : 5255

## Windows 10 64-bit

Weighted Suite	Test Environment	Result	Remark
PCMARK 7 Scores	Intel(R) Core(TM) i7-1185GRE 2.8GHz	PASS	6720
PCMARK 8 Scores	Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFY) WDS250G2B0A-00SM50	PASS	Work 2.0 : 3075 Work 1.0 : 5420

## Windows 10 64-bit

Weighted Suite	Test Environment	Result	Remark
PCMARK 7 Scores	Intel(R) Core(TM) i7-1185GRE 2.8GHz	PASS	6672
PCMARK 8 Scores	Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	Work 2.0 : 3089 Work 1.0 : 5465

## 5.5 PC MARK 10

### Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	PCMARK10 Scores	Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFY) WDS250G2B0A-00SM50	PASS	4124
2	Essentials		PASS	9447
3	Productivity		PASS	6725
4	Digital Content Creation		PASS	2998

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	PCMARK10 Scores	<b>Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	4111
2	Essentials		PASS	9403
3	Productivity		PASS	6680
4	Digital Content Creation		PASS	3004

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	PCMARK10 Scores	<b>Intel(R) Celeron(R) 6305E 1.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50</b>	PASS	2029
2	Essentials		PASS	5231
3	Productivity		PASS	3290
4	Digital Content Creation		PASS	1317

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	PCMARK10 Scores	<b>Intel(R) Celeron(R) 6305E 1.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	2021
2	Essentials		PASS	5180
3	Productivity		PASS	3281
4	Digital Content Creation		PASS	1319



### Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	PCMARK10 Scores	Intel(R) Core(TM) i5-1145G7E 2.6GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	3873
2	Essentials		PASS	8987
3	Productivity		PASS	6303
4	Digital Content Creation		PASS	2784

### Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	PCMARK10 Scores	Intel(R) Core(TM) i5-1145G7E 2.6GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50	PASS	3872
2	Essentials		PASS	8939
3	Productivity		PASS	6305
4	Digital Content Creation		PASS	2796

### Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	PCMARK10 Scores	Intel(R) Core(TM) i3-1115G4E 3.0GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50	PASS	3299
2	Essentials		PASS	7976
3	Productivity		PASS	5929
4	Digital Content Creation		PASS	2061

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	PCMARK10 Scores	<b>Intel(R) Core(TM) i3-1115G4E 3.0GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	3329
2	Essentials		PASS	8195
3	Productivity		PASS	5928
4	Digital Content Creation		PASS	2063

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	PCMARK10 Scores	<b>Intel(R) Core(TM) i7-1185GRE 2.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50</b>	PASS	4080
2	Essentials		PASS	9269
3	Productivity		PASS	6703
4	Digital Content Creation		PASS	2968

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	PCMARK10 Scores	<b>Intel(R) Core(TM) i7-1185GRE 2.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	4101
2	Essentials		PASS	9327
3	Productivity		PASS	6726
4	Digital Content Creation		PASS	2986

## 5.6 PerformanceTest 9.0

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	PassMark Rating	<b>Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50</b>	PASS	4237.8
2	CPU Mark		PASS	11621
3	2D Graphics Mark		PASS	991.1
4	3D Graphics Mark		PASS	1258.9
5	Memory Mark		PASS	2772.4
6	Disk Mark		PASS	4773.5

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	PassMark Rating	<b>Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	4241.8
2	CPU Mark		PASS	11756.5
3	2D Graphics Mark		PASS	997.1
4	3D Graphics Mark		PASS	1256.2
5	Memory Mark		PASS	2681.4
6	Disk Mark		PASS	4944.2

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
1	PassMark Rating	<b>Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22SD8/8 8GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	4189.5
2	CPU Mark		PASS	12102.4
3	2D Graphics Mark		PASS	1022.2
4	3D Graphics Mark		PASS	1235.5
5	Memory Mark		PASS	2429.3
6	Disk Mark		PASS	4892.2

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
1	PassMark Rating	<b>Intel(R) Celeron(R) 6305E 1.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFB) WDS250G2B0A-00SM50</b>	PASS	1987.7
2	CPU Mark		PASS	2730.9
3	2D Graphics Mark		PASS	465.4
4	3D Graphics Mark		PASS	896.3
5	Memory Mark		PASS	1636.1
6	Disk Mark		PASS	4741.6

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	PassMark Rating	<b>Intel(R) Celeron(R) 6305E 1.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	1990
2	CPU Mark		PASS	2769.9
3	2D Graphics Mark		PASS	463
4	3D Graphics Mark		PASS	894.5
5	Memory Mark		PASS	1609.3
6	Disk Mark		PASS	4743.9

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	PassMark Rating	<b>Intel(R) Core(TM) i5-1145G7E 2.6GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50</b>	PASS	3988.6
2	CPU Mark		PASS	11100.3
3	2D Graphics Mark		PASS	954.1
4	3D Graphics Mark		PASS	1098.2
5	Memory Mark		PASS	2687.9
6	Disk Mark		PASS	4821.6

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
1	PassMark Rating	<b>Intel(R) Core(TM) i5-1145G7E 2.6GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	3959.7
2	CPU Mark		PASS	11096.3
3	2D Graphics Mark		PASS	950.1
4	3D Graphics Mark		PASS	1097.1
5	Memory Mark		PASS	2596.9
6	Disk Mark		PASS	4823.9

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Test Environment</b>	<b>Result</b>	<b>Remark</b>
1	PassMark Rating	<b>Intel(R) Core(TM) i3-1115G4E 3.0GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50</b>	PASS	3261.1
2	CPU Mark		PASS	6759.8
3	2D Graphics Mark		PASS	889.6
4	3D Graphics Mark		PASS	853
5	Memory Mark		PASS	2650.4
6	Disk Mark		PASS	4700.3

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	PassMark Rating	<b>Intel(R) Core(TM) i3-1115G4E 3.0GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	3257
2	CPU Mark		PASS	6760.9
3	2D Graphics Mark		PASS	892.2
4	3D Graphics Mark		PASS	851.6
5	Memory Mark		PASS	2564.8
6	Disk Mark		PASS	4888.8

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	PassMark Rating	<b>Intel(R) Core(TM) i7-1185GRE 2.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50</b>	PASS	4157.6
2	CPU Mark		PASS	10876.4
3	2D Graphics Mark		PASS	972.8
4	3D Graphics Mark		PASS	1268.2
5	Memory Mark		PASS	2734.3
6	Disk Mark		PASS	4722.1

**Windows 10 64-bit**

Item	Weighted Suite	Test Environment	Result	Remark
1	PassMark Rating	<b>Intel(R) Core(TM) i7-1185GRE 2.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50</b>	PASS	4195
2	CPU Mark		PASS	11152.1
3	2D Graphics Mark		PASS	988.1
4	3D Graphics Mark		PASS	1264
5	Memory Mark		PASS	2679.6
6	Disk Mark		PASS	4925.4

**5.8 Geekbench 4**

Test Environment
<b>Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFY) WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

Item	Weighted Suite		Result	Remark
1	Run CPU Benchmark Score	Single-core	PASS	5543
		Multi-core		16661
2	Run Compute Benchmark (OpenCL Score)		PASS	20452



<b>Test Environment</b>
<b>Intel(R) Core(TM) i7-1185G7E 2.8GHz</b> <b>Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>		<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>Run CPU Benchmark</b> <b>Score</b>	<b>Single-core</b>	PASS	5992
		<b>Multi-core</b>		18673
<b>2</b>	<b>Run Compute Benchmark</b> <b>(OpenCL Score)</b>		PASS	20551

<b>Test Environment</b>
<b>Intel(R) Core(TM) i7-1185G7E 2.8GHz</b> <b>Kingston KVR32S22SD8/8 8GB (SKhynix H5AN8G8NDJ RXNC)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>		<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>Run CPU Benchmark</b> <b>Score</b>	<b>Single-core</b>	PASS	5903
		<b>Multi-core</b>		20087
<b>2</b>	<b>Run Compute Benchmark</b> <b>(OpenCL Score)</b>		PASS	19453

<b>Test Environment</b>
<b>Intel(R) Celeron(R) 6305E 1.8GHz</b> <b>Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>		<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>Run CPU Benchmark Score</b>	<b>Single-core</b>	PASS	2823
		<b>Multi-core</b>		4768
<b>2</b>	<b>Run Compute Benchmark (OpenCL Score)</b>		PASS	13848

<b>Test Environment</b>
<b>Intel(R) Celeron(R) 6305E 1.8GHz</b> <b>Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>		<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>Run CPU Benchmark Score</b>	<b>Single-core</b>	PASS	2737
		<b>Multi-core</b>		4594
<b>2</b>	<b>Run Compute Benchmark (OpenCL Score)</b>		PASS	13736

<b>Test Environment</b>
<b>Intel(R) Core(TM) i5-1145G7E 2.6GHz</b> <b>Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>		<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>Run CPU Benchmark</b> <b>Score</b>	<b>Single-core</b>	PASS	5503
		<b>Multi-core</b>		17113
<b>2</b>	<b>Run Compute Benchmark</b> <b>(OpenCL Score)</b>		PASS	18511

<b>Test Environment</b>
<b>Intel(R) Core(TM) i5-1145G7E 2.6GHz</b> <b>Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>		<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>Run CPU Benchmark</b> <b>Score</b>	<b>Single-core</b>	PASS	5533
		<b>Multi-core</b>		18164
<b>2</b>	<b>Run Compute Benchmark</b> <b>(OpenCL Score)</b>		PASS	18398

<b>Test Environment</b>
<b>Intel(R) Core(TM) i3-1115G4E 3.0GHz</b> <b>Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>		<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>Run CPU Benchmark</b> <b>Score</b>	<b>Single-core</b>	PASS	5316
		<b>Multi-core</b>		10583
<b>2</b>	<b>Run Compute Benchmark</b> <b>(OpenCL Score)</b>		PASS	14030

<b>Test Environment</b>
<b>Intel(R) Core(TM) i3-1115G4E 3.0GHz</b> <b>Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>		<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>Run CPU Benchmark</b> <b>Score</b>	<b>Single-core</b>	PASS	5426
		<b>Multi-core</b>		10543
<b>2</b>	<b>Run Compute Benchmark</b> <b>(OpenCL Score)</b>		PASS	14051

<b>Test Environment</b>
<b>Intel(R) Core(TM) i7-1185GRE 2.8GHz</b> <b>Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>		<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>Run CPU Benchmark Score</b>	<b>Single-core</b>	PASS	5951
		<b>Multi-core</b>		17497
<b>2</b>	<b>Run Compute Benchmark (OpenCL Score)</b>		PASS	20305

<b>Test Environment</b>
<b>Intel(R) Core(TM) i7-1185GRE 2.8GHz</b> <b>Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>		<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>Run CPU Benchmark Score</b>	<b>Single-core</b>	PASS	5978
		<b>Multi-core</b>		17934
<b>2</b>	<b>Run Compute Benchmark (OpenCL Score)</b>		PASS	20513

## 5.9 Cinebench R15

Test Environment
Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFV) WDS250G2B0A-00SM50

Windows 10 64-bit

Item	Weighted Suite	Result	Remark
1	OpenGL	PASS	40.96 fps
2	CPU	PASS	790 cb

Test Environment
Intel(R) Core(TM) i7-1185G7E 2.8GHz Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC) WDS250G2B0A-00SM50

Windows 10 64-bit

Item	Weighted Suite	Result	Remark
1	OpenGL	PASS	41.48 fps
2	CPU	PASS	806 cb

<b>Test Environment</b>
<b>Intel(R) Core(TM) i7-1185G7E 2.8GHz</b> <b>Kingston KVR32S22SD8/8 8GB (SKhynix H5AN8G8NDJ RXNC)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>OpenGL</b>	PASS	40.75 fps
<b>2</b>	<b>CPU</b>	PASS	896 cb

<b>Test Environment</b>
<b>Intel(R) Celeron(R) 6305E 1.8GHz</b> <b>Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFY)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>OpenGL</b>	PASS	28.78 fps
<b>2</b>	<b>CPU</b>	PASS	165 cb

<b>Test Environment</b>
<b>Intel(R) Celeron(R) 6305E 1.8GHz</b> <b>Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>OpenGL</b>	PASS	28.89 fps
<b>2</b>	<b>CPU</b>	PASS	162 cb

<b>Test Environment</b>
<b>Intel(R) Core(TM) i5-1145G7E 2.6GHz</b> <b>Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFY)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>OpenGL</b>	PASS	37.01 fps
<b>2</b>	<b>CPU</b>	PASS	779 cb



<b>Test Environment</b>
<b>Intel(R) Core(TM) i5-1145G7E 2.6GHz</b> <b>Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>OpenGL</b>	PASS	37.53 fps
<b>2</b>	<b>CPU</b>	PASS	782 cb

<b>Test Environment</b>
<b>Intel(R) Core(TM) i3-1115G4E 3.0GHz</b> <b>Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFY)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>OpenGL</b>	PASS	29.22 fps
<b>2</b>	<b>CPU</b>	PASS	464 cb

<b>Test Environment</b>
<b>Intel(R) Core(TM) i3-1115G4E 3.0GHz</b> <b>Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>OpenGL</b>	PASS	29.45 fps
<b>2</b>	<b>CPU</b>	PASS	464 cb

<b>Test Environment</b>
<b>Intel(R) Core(TM) i7-1185GRE 2.8GHz</b> <b>Kingston KVR32S22D8/32 32GB (Micron OTE47D9ZFY)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
<b>1</b>	<b>OpenGL</b>	PASS	41.36 fps
<b>2</b>	<b>CPU</b>	PASS	798 cb

<b>Test Environment</b>
<b>Intel(R) Core(TM) i7-1185GRE 2.8GHz</b> <b>Kingston KVR32S22D8/16 16GB (SKhynix H5AN8G8NDJ RXNC)</b> <b>WDS250G2B0A-00SM50</b>

**Windows 10 64-bit**

<b>Item</b>	<b>Weighted Suite</b>	<b>Result</b>	<b>Remark</b>
1	OpenGL	PASS	41.40 fps
2	CPU	PASS	794 cb

## 5.10 Storage Performance

### 5.10.1 HDD

**Test environment:**

**OS Windows 10 64bit**

**Program: HD Tune**

<b>HDD Model</b>	<b>Interface</b>	<b>Capacity</b>	<b>Average</b>	<b>Burst Rate</b>	<b>Access Time</b>
<b>SPCC Solid State disk(S55)</b>	<b>SSD</b>	<b>120 GB</b>	<b>418.6 MB/sec</b>	<b>131.2 MB/sec</b>	<b>0.055 ms</b>
<b>WDS250G2B0A</b>	<b>SSD</b>	<b>250 GB</b>	<b>415.8 MB/sec</b>	<b>121.1 MB/sec</b>	<b>0.068 ms</b>
<b>Kingston SV300S37A</b>	<b>SSD</b>	<b>240 GB</b>	<b>241.2 MB/sec</b>	<b>138.6 MB/sec</b>	<b>0.155 ms</b>
<b>Kingston DT100G3/32G</b>	<b>USB</b>	<b>32 GB</b>	<b>94.1 MB/sec</b>	<b>78.5 MB/sec</b>	<b>0.331 ms</b>
<b>ADATA UV128/16GB</b>	<b>USB</b>	<b>16 GB</b>	<b>115.5 MB/sec</b>	<b>62.4 MB/sec</b>	<b>0.936 ms</b>

## 5.10.2 DVD-ROM

Test environment:

OS Windows 10 64bit

Program (NERO)

DVD-ROM Model	Interface	Average Speed	Full Read	Burst Rate	DVD
Transcend DVD TS8XDVDS-K	USB	5.76 x	294 ms	19 MB/s	1 - 16 x
LITEON DVD eTAU108	USB	5.76 x	195 ms	26 MB/s	1 - 16 x
ASUS DRW-24D1ST	SATA	11.36 x	224 ms	47 MB/s	1 - 16 x
Pioneer DVR-S19LBK	SATA	11.48 x	203 ms	60 MB/s	1 - 16 x