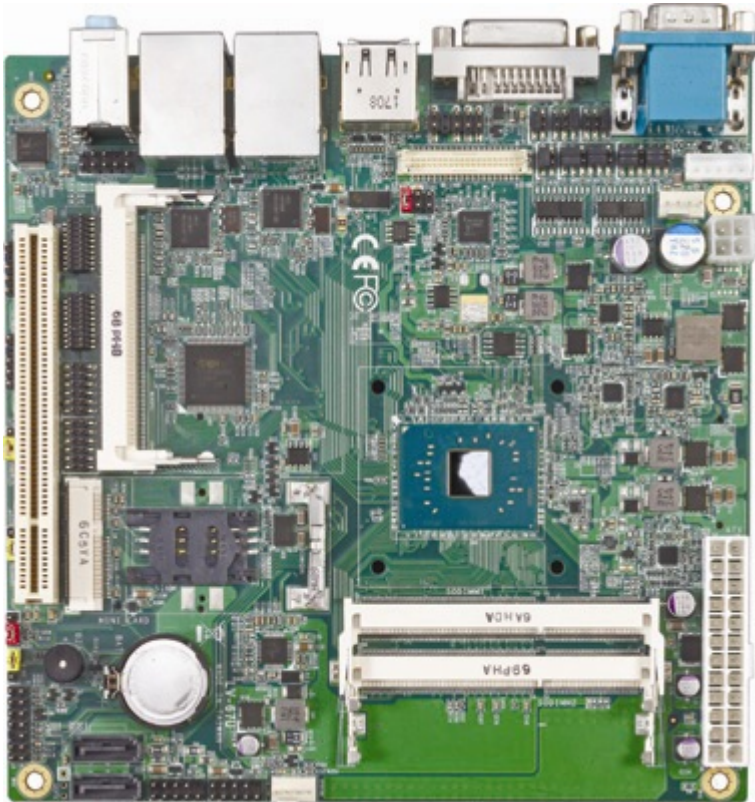


Product Test Report



Product Name	LV-67U
Product Version	A
Issued Date	2018.06.14
Report Edition	1.0
BIOS Version	1.1
Testing Engineer	Rick
Check Engineer	Daniel

REVISION HISTORY

DATE	REVISION NO.	PAGE	DESCRIPTONS
2018.06.14	Ver. 1.0	34	Initial Release

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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	PS2	PASS
8	AUDIO	PASS
9	CN_AUDIO	PASS
10	LAN1	PASS
11	LAN2	PASS
12	DDR3L 1/2	PASS
13	SATA1/2	PASS
14	USB2.0 1/2/3/4	PASS
15	USB3.0 1/2/3/4	PASS
16	COM 1/2/3/4/5/6	PASS
17	DVI	PASS
18	HDMI	PASS
19	Display Port	PASS
20	LVDS	PASS
21	MINI_CRAD	PASS
22	PCI	PASS

23	MINIPCI	PASS
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Jumper

Item	Description	Result
1	JRTC	PASS
2	JAT	PASS
4	JP1	PASS
5	JP2	PASS
6	JCSEL1	PASS
7	JCSEL2	PASS
8	JUSBS	PASS
9	JMSATA	PASS
10	JVLCD	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	NumLock	PASS	DOS
6	Selection Language	PASS	
7	Watch Dog Timer	PASS	

Item	Description	Result	Remark
8	Set Supervisor Password	PASS	
9	Power on Password	PASS	
10	HD Audio Support	PASS	
11	USB Configuration	PASS	DOS

1.3 Driver

CD edition : IPCLi1-1.7

1. Windows 10 64-bit Driver Test

Item	Description	Result	Version
1	Chipset Driver	PASS	10.1.1
2	VGA Driver	PASS	21.20.16.4550
3	Audio Driver	PASS	6.0.1.8036
4	LAN Driver	PASS	12.15.184.0

2. Compatibility test

2.1 CPU Test

Test environment:

OS: Windows 10 64-bit

Test program : PC MARK 2005

Link	CPU Speed	Family	Processor	MAX TDP	Smart Cache	Result
1	1.10 GHz	Celeron	N3350	6 W	2 MB	PASS
2	1.10 GHz	Pentium	N4200	6 W	2 MB	PASS

2.2 Memory Test

Test environment:

OS: Windows 10 64-bit

Test program : PC MARK 2005

Manufacturer	Chip	Frequency	Capacity Mbytes	Memory test Score
Transcend TS512MSK64W6H	SEC 234 HYKO K4B4G0846B	DDR3L 1600	4 GB	PASS
Kingston KVR16LS11/4	NANYA NT5CC512M8B N-DI	DDR3L 1600	4 GB	PASS
Kingston KVR16LS11/8	Micro HSN77 D9RVX	DDR3L 1600	8 GB	PASS
acpi CMA5-GA01BAL01 A00	SK hynix H5TC4GB3AFR	DDR3L 1600	8 GB	PASS

2.3 HDMI Graphic Quality Test

Test environment:

OS Windows 10 64-bit

Driver version : 21.20.16.4550

Resolution	Color	Result	Remark
800 x 600	16 /32bit	PASS	
1024 x 768	16 /32bit	PASS	
1152 x 864	16 /32bit	PASS	
1280 x 600	16 /32bit	PASS	
1280 x 720	16 /32bit	PASS	
1280 x 768	16 /32bit	PASS	
1280 x 800	16 /32bit	PASS	
1280 x 960	16 /32bit	PASS	
1280 x 1024	16 /32bit	PASS	
1360 x 768	16 /32bit	PASS	
1366 x 768	16 /32bit	PASS	
1400 x 1050	16 /32bit	PASS	
1440 x 900	16 /32bit	PASS	
1600 x 900	16 /32bit	PASS	
1600 x 1200	16 /32bit	PASS	
1680 x 1050	16 /32bit	PASS	
1792 x 1344	16 /32bit	PASS	
1856 x 1392	16 /32bit	PASS	
1920 x 1080	16 /32bit	PASS	
1920 x 1200	16 /32bit	PASS	

2.4 Display Port Graphic Quality Test

Test environment:

OS Windows 10 64-bit

Driver version : 21.20.16.4550

Resolution	Color	Result	Remark
800 x 600	16 /32bit	PASS	
1024 x 768	16 /32bit	PASS	
1152 x 864	16 /32bit	PASS	
1280 x 600	16 /32bit	PASS	
1280 x 720	16 /32bit	PASS	
1280 x 768	16 /32bit	PASS	
1280 x 800	16 /32bit	PASS	
1280 x 960	16 /32bit	PASS	
1280 x 1024	16 /32bit	PASS	
1360 x 768	16 /32bit	PASS	
1366 x 768	16 /32bit	PASS	
1400 x 1050	16 /32bit	PASS	
1440 x 900	16 /32bit	PASS	
1600 x 900	16 /32bit	PASS	
1600 x 1200	16 /32bit	PASS	
1680 x 1050	16 /32bit	PASS	
1792 x 1344	16 /32bit	PASS	
1856 x 1392	16 /32bit	PASS	
1920 x 1080	16 /32bit	PASS	
1920 x 1200	16 /32bit	PASS	

2.5 Audio

Test environment:

OS Windows 10 64-bit

Driver version : 6.0.1.6086

Item	Description	Result	Remark
1	2.1 CH	PASS	
2	Microphone	PASS	
3	LINE	PASS	

2.6 HDD Test

Test environment:

OS Windows 10 64-bit

HDD Model	Interface	Capacity	HDD Size Detect	HDD Data Transfer	HDD LED Check
Western Digital WD800BEVS-00RST0	SATA	80 GB	PASS	PASS	PASS
Seagate ST3160815AS	SATA	160 GB	PASS	PASS	PASS
Western Digital WD3200BVPT00JJ50	SATA	320 GB	PASS	PASS	PASS
Western Digital WD3200BEKT-00F3T0	SATA	320 GB	PASS	PASS	PASS
Western Digital WD5000LPCX-22VHAT0	SATA	500 GB	PASS	PASS	PASS
Western Digital WD5000BPKT-00PK40	SATA	500 GB	PASS	PASS	PASS
TOSHIBA DT01ACA200	SATA	2.0 TB	PASS	PASS	PASS
MemoRight MRSAJ6C064GC125C00	SSD	64 GB	PASS	PASS	PASS
INTEL SSDSC2BW240A4	SSD	240 GB	PASS	PASS	PASS

2.7 DVD-ROM Test

Test environment:

OS Windows 10 64-bit

DVD-ROM Model	Interface	DVD-ROM Detect	DVD-ROM Data Transfer	Play DVD
ASUS DRW-1814BLT	SATA	PASS	PASS	PASS
PIONEER DVR-S19LBK	SATA	PASS	PASS	PASS
LITE-ON iHES312	SATA	PASS	PASS	PASS
LITEON DVD eTAU108	USB	PASS	PASS	PASS
ZYNET GT32N A201	USB	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	

2.9 Serial Port Test

1. Windows 10 64-bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	

2.10 PS2 Keyboard 、 Mouse Test

1. Windows 10 64-bit

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)

2.12 Power Supply & Adapter Test

Item	Type	Description	Result	Remark
1	ATX Power	SEED BS400 400W	PASS	
2	ATX Power	ANTEC EA350 GREEN 350W	PASS	
3	ATX Power	COOLER MASTER RS-390-PMSR-A3 390W	PASS	

2.13 OS Install

Item	Description	Result	Remark
1	Windows 10 64 bit	PASS	

2.14 PCI Express Mini Card

Motherboard	PCI Express mini card	Mini Card	Remark
LV-67U	MPX-210D	PASS	WIN 10
	MPX-210D2	NO SUPPLY	WIN 10
	MPX-350	PASS	WIN 10
	MPX-574D	PASS	WIN 10
	MPX-574D2	NO SUPPLY	WIN 10
	MPX-885	NO SUPPLY	Driver
	MPX-954	PASS	WIN 10
	MPX-954E	PASS	WIN 10
	MPX-2213	PASS	WIN 10

	MPX-6864	NO SUPPLY	Driver
	MPX-7202	PASS	WIN 10
	MPX-8188	PASS	WIN 10
	MPX-25858	NO SUPPLY	Driver
	mSATA	PASS	WIN 10

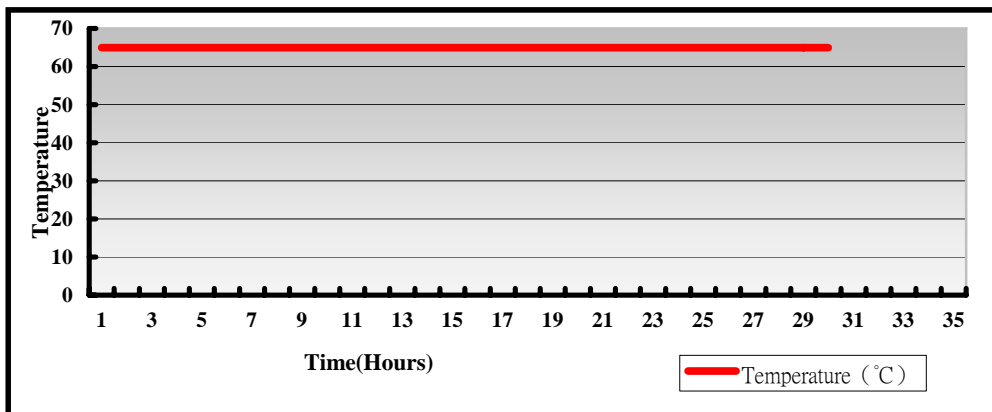
3. Environmental test

3.1 Temperature Test

Hardware Device list:

System Board	LV-67UPN3_A
CPU	Intel(R) Celeron(R) N3350 1.10GHz
Memory	Transcend DDR3L 1600 (SEC 234 HYK0 K4B4G0846B)
HDD	TOSHIBA DT01ACA200 2TB
Operating OS	Windows 10 64-bit
Test Equipment	GIANT FORCE GTH-150-60-SP-AR LCD-9530 Programmer/Controller
Test Program	3DMark 2006 + Prime95

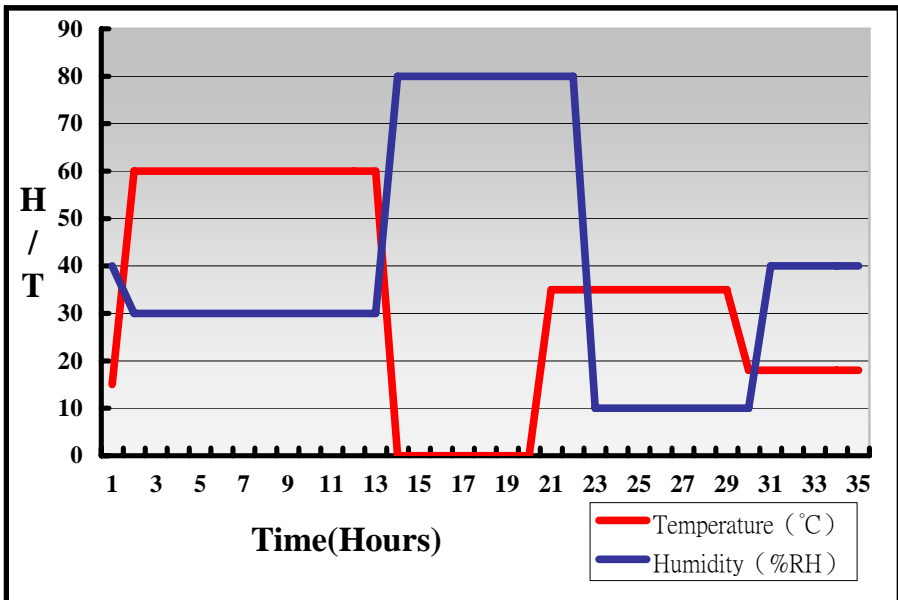
Test Result:



Hardware Device list:

System Board	LV-67UPN3_A
CPU	Intel(R) Celeron(R) N3350 1.10GHz
Memory	Transcend DDR3L 1600 (SEC 234 HYK0 K4B4G0846B)
HDD	TOSHIBA DT01ACA200 2TB
Operating OS	Windows 10 64-bit
Test Equipment	GIANT FORCE GTH-150-60-SP-AR LCD-9530 Programmer/Controller
Test Program	3DMark 2006 + Prime95

Test Result:



Boot up Test:

Hardware Device list:

System Board	LV-67UPN3_A
CPU	Intel(R) Celeron(R) N3350 1.10GHz
Memory	Transcend DDR3L 1600 (SEC 234 HYK0 K4B4G0846B)
HDD	TOSHIBA DT01ACA200 2TB

Temperature	Result	Remark
-20℃	PASS	50 Times.
85℃	PASS	50 Times

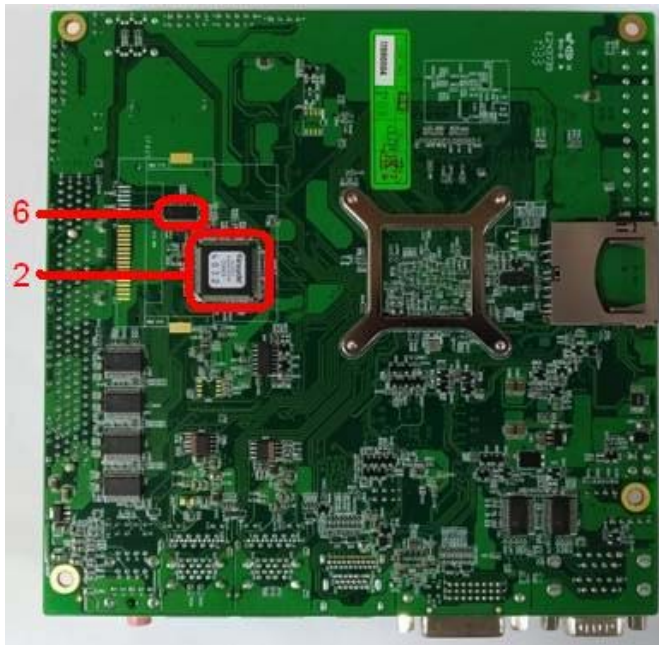
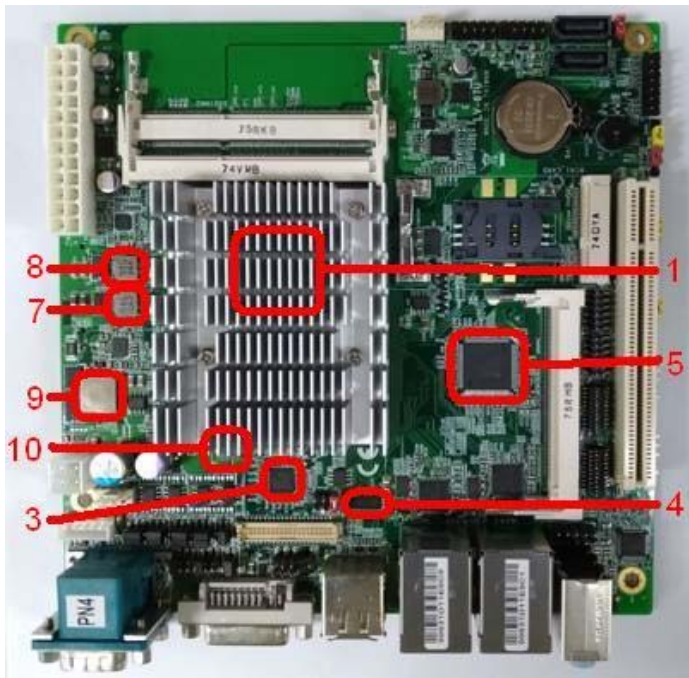
3.2 Thermal measurements at various points on the board

Test Environment:

CPU	Intel(R) Celeron(R) N4200 1.10GHz
Memory	Kingston DDR3L 1600 8GB (Micro HSN77D R9VX)
HDD	Western Digital WD10EALX-009BA0 1.0TB
Power Supply	SEED BS400 400W
Operating System	Windows 10 64-bit
Test Program	Burnin7.0 + Prime95

Test Result:

Item	Environmental temperature	24°C
1	CPU	56.8°C
2	LPCIO (ICNCT6106D)	44°C
3	U15 (ICPTN3460BS)	37.4°C
4	U17 (ICPCIE3412)	38.3°C
5	U25 (ICTSI383)	40.7°C
6	U45 (ICPCIE3412)	41°C
7	L1 (LLC0.47UH/063T)	56.6°C
8	L2 (LLC0.47UH/063T)	56.4 °C
9	LC1 (LLC3.3UH/0445)	50.9°C
10	LC2 (LLC3.3UH/063T)	38.6°C



4. Reliability Test

4.1 Power Consumption Test

1. Test Environment:

Motherboard	LV-67U
CPU	Intel(R) Celeron(R) N3350 1.10GHz
Memory	Kingston DDR3L 1600 8GB (Micro HSN77 DR9VX)
HDD	TOSHIBA DT01ACA200 2TB

Power Supply : SEED BS400

Voltage	MS-DOS Boot up		Windows 10 64-bit 3D MARK VANTAGE + PRIME95	
	Current (A)	Power (W)	Current (A)	Power (W)
12V	0.32	3.84	1.4	16.8
5V	0.35	1.75	0.87	4.35
5VSB	0.274	1.37	0.01	0.05

1. a. Test Environment:

The same as above but with LCD

Display Panel	AUO M170EG01 17"LCD
----------------------	----------------------------

Power Supply : SEED BS400

Voltage	MS-DOS Boot up		Windows 10 64-bit 3D MARK VANTAGE + PRIME95	
	Current (A)	Power (W)	Current (A)	Power (W)
12V	1.94	23.28	3.13	37.56
5V	1.04	5.2	1.46	7.3
5VSB	0.89	4.45	0.015	0.075

2. Test Environment:

Motherboard	LV-67U
CPU	Intel(R) Celeron(R) N3350 1.10GHz
Memory	acpi DDR3L 1600 8GB (SK hynix H5TC4GB3AFR)
HDD	TOSHIBA DT01ACA200 2TB

Power Supply : SEED BS400

Voltage	MS-DOS Boot up		Windows 10 64-bit 3D MARK VANTAGE + PRIME95	
	Current (A)	Power (W)	Current (A)	Power (W)
12V	0.32	3.84	1.33	15.96
5V	0.35	1.75	0.91	4.55
5VSB	0.352	1.76	0.011	0.055

2. a. Test Environment:

The same as above but with LCD

Display Panel	AUO M170EG01 17”LCD
----------------------	----------------------------

Power Supply : SEED BS400

Voltage	MS-DOS Boot up		Windows 10 64-bit 3D MARK VANTAGE + PRIME95	
	Current (A)	Power (W)	Current (A)	Power (W)
12V	1.92	23.04	2.9	34.8
5V	1.05	5.25	1.38	6.9
5VSB	0.893	4.465	0.009	0.045

5. Performance Test

5.1 3D MARK2006

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK Score	Intel(R) Celeron(R) N3350 1.10GHz	PASS	3560
2	SM2.0 Score	Kingston DDR3L 1600 8GB (Micro HSN77	PASS	1226
3	HDR/SM3.0 Score	DR9VX)	PASS	1524
4	CPU Score	TOSHIBA DT01ACA200 2TB	PASS	1789

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK Score	Intel(R) Celeron(R) N3350 1.10GHz	PASS	3424
2	SM2.0 Score	Kingston DDR3L 1600 4GB (NANYA	PASS	1169
3	HDR/SM3.0 Score	NT5CC512M8BN-DI)	PASS	1458
4	CPU Score	TOSHIBA DT01ACA200 2TB	PASS	1808

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK Score	Intel(R) Celeron(R) N3350 1.10GHz acpi DDR3L 1600 8GB (SK hynix H5TC4GB3AFR) TOSHIBA DT01ACA200 2TB	PASS	3584
2	SM2.0 Score		PASS	1240
3	HDR/SM3.0 Score		PASS	1531
4	CPU Score		PASS	1785

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK Score	Intel(R) Celeron(R) N3350 1.10GHz Transcend DDR3L 1600 8GB (SEC 234 HYKO K4B4G0846B) TOSHIBA DT01ACA200 2TB	PASS	3360
2	SM2.0 Score		PASS	1143
3	HDR/SM3.0 Score		PASS	1433
4	CPU Score		PASS	1786

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK Score	Intel(R) Pentium(R) N4200 1.10GHz Transcend DDR3L 1600 4GB (SEC 234 HYKO K4B4G0846B) Kingston DDR3L 1600 8GB (Micro HSN77 DR9VX) Western Digital WD5000LPCX-22VHAT0 500GB	PASS	3937
2	SM2.0 Score		PASS	1314
3	HDR/SM3.0 Score		PASS	1586
4	CPU Score		PASS	3061

5.2 3D MARK VANTAGE

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Celeron(R) N3350 1.10GHz Kingston DDR3L 1600 4GB (NANYA NT5CC512M8BN-DI) TOSHIBA DT01ACA200 2TB	PASS	P1687
2	GPU SCORE		PASS	1644
3	CPU SCORE		PASS	3146

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Celeron(R) N3350 1.10GHz acpi DDR3L 1600 8GB (SK hynix H5TC4GB3AFR) TOSHIBA DT01ACA200 2TB	PASS	P1922
2	GPU SCORE		PASS	1699
3	CPU SCORE		PASS	3177

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Celeron(R) N3350 1.10GHz Kingston DDR3L 1600 8GB (Micro HSN77 DR9VX) TOSHIBA DT01ACA200 2TB	PASS	P1931
2	GPU SCORE		PASS	1705
3	CPU SCORE		PASS	3215

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Celeron(R) N3350 1.10GHz Transcend DDR3L 1600 4GB (SEC 234 HYKO K4B4G0846B) TOSHIBA DT01ACA200 2TB	PASS	P1850
2	GPU SCORE		PASS	1632
3	CPU SCORE		PASS	3093

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Pentium(R) N4200 1.10GHz Transcend DDR3L 1600 4GB (SEC 234 HYKO K4B4G0846B) Kingston DDR3L 1600 8GB (Micro HSN77 DR9VX) Western Digital WD5000LPCX-22VHAT0 500GB	PASS	P3326
2	GPU SCORE		PASS	2850
3	CPU SCORE		PASS	666.

5.3 3D MARK (Fire Strike)

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3D Mark Score	Intel(R) Celeron(R) N3350 1.10GHz Kingston DDR3L 1600 4GB (NANYA NT5CC512M8BN-DI) TOSHIBA DT01ACA200 2TB	PASS	298
2	Graphics Score		PASS	333
3	Physics Score		PASS	1462
4	Combined Score		PASS	100

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3D Mark Score	Intel(R) Celeron(R) N3350 1.10GHz Transcend DDR3L 1600 4GB (SEC 234 HYKO K4B4G0846B) TOSHIBA DT01ACA200 2TB	PASS	291
2	Graphics Score		PASS	309
3	Physics Score		PASS	994
4	Combined Score		PASS	118

5.4 3D MARK (TIME SPY)

Windows 10 64-bit

Item	Weighted Suite	Test Environment	Result	Remark
1	3DMARK SCORE	Intel(R) Pentium(R) N4200 1.10GHz Transcend DDR3L 1600 4GB (SEC 234 HYKO K4B4G0846B) Kingston DDR3L 1600 8GB (Micro HSN77 DR9VX) Western Digital WD5000LPCX-22VH	PASS	165
2	Graphics SCORE		PASS	144
3	CPU SCORE		PASS	971

5.5 PC MARK2004

Test Environment
Intel(R) Celeron(R) N3350 1.10GHz acpi DDR3L 1600 8GB (SK hynix H5TC4GB3AFR) TOSHIBA DT01ACA200 2TB

Windows 10 64-bit

Item	Weighted Suite	Result	Remark
1	PC Mark Score	PASS	N/A
2	CPU test Score	PASS	N/A
3	Memory test Score	PASS	5250
4	Graphic test Score	PASS	4938
5	HDD test Score	PASS	N/A

Test Environment
Intel(R) Celeron(R) N3350 1.10GHz Kingston DDR3L 1600 4GB (NANYA NT5CC512M8BN-DI) TOSHIBA DT01ACA200 2TB

Windows 10 64-bit

Item	Weighted Suite	Result	Remark
1	PC Mark Score	PASS	N/A
2	CPU test Score	PASS	N/A
3	Memory test Score	PASS	4724
4	Graphic test Score	PASS	4819
5	HDD test Score	PASS	N/A

Test Environment
Intel(R) Celeron(R) N3350 1.10GHz Kingston DDR3L 1600 8GB (Micro HSN77 DR9VX) TOSHIBA DT01ACA200 2TB

Windows 10 64-bit

Item	Weighted Suite	Result	Remark
1	PC Mark Score	PASS	N/A
2	CPU test Score	PASS	N/A
3	Memory test Score	PASS	5244
4	Graphic test Score	PASS	4925
5	HDD test Score	PASS	N/A

Test Environment
Intel(R) Celeron(R) N3350 1.10GHz Transcend DDR3L 1600 4GB (SEC 234 HYKO K4B4G0846B) TOSHIBA DT01ACA200 2TB

Windows 10 64-bit

Item	Weighted Suite	Result	Remark
1	PC Mark Score	PASS	N/A
2	CPU test Score	PASS	6648
3	Memory test Score	PASS	5056
4	Graphic test Score	PASS	4696
5	HDD test Score	PASS	N/A

Test Environment
Intel(R) Pentium(R) N4200 1.10GHz Transcend DDR3L 1600 4GB (SEC 234 HYKO K4B4G0846B) Kingston DDR3L 1600 8GB (Micro HSN77 DR9VX) Western Digital WD5000LPCX-22VHAT0 500GB

Windows 10 64-bit

Item	Weighted Suite	Result	Remark
1	PC Mark Score	PASS	N/A
2	CPU test Score	PASS	N/A
3	Memory test Score	PASS	5645
4	Graphic test Score	PASS	6569
5	HDD test Score	PASS	N/A

5.6 PC MARK2005

Test Environment
Intel(R) Celeron(R) N3350 1.10GHz Kingston DDR3L 1600 8GB (Micro HSN77 DR9VX) TOSHIBA DT01ACA200 2TB

Windows 10 64-bit

Item	Weighted Suite	Result	Remark
1	System test Score	PASS	N/A
2	CPU test Score	PASS	4809
3	Memory test Score	PASS	4526
4	Graphic test Score	PASS	N/A
5	HDD test Score	PASS	N/A

Test Environment
Intel(R) Celeron(R) N3350 1.10GHz Kingston DDR3L 1600 4GB (NANYA NT5CC512M8BN-DI) TOSHIBA DT01ACA200 2TB

Windows 10 64-bit

Item	Weighted Suite	Result	Remark
1	System test Score	PASS	N/A
2	CPU test Score	PASS	4812
3	Memory test Score	PASS	4517
4	Graphic test Score	PASS	N/A
5	HDD test Score	PASS	N/A

Test Environment
Intel(R) Celeron(R) N3350 1.10GHz acpi DDR3L 1600 8GB (SK hynix H5TC4GB3AFR) TOSHIBA DT01ACA200 2TB

Windows 10 64-bit

Item	Weighted Suite	Result	Remark
1	System test Score	PASS	N/A
2	CPU test Score	PASS	4811
3	Memory test Score	PASS	4515
4	Graphic test Score	PASS	N/A
5	HDD test Score	PASS	N/A

Test Environment
Intel(R) Celeron(R) N3350 1.10GHz Transcend DDR3L 1600 4GB (SEC 234 HYKO K4B4G0846B) TOSHIBA DT01ACA200 2TB

Windows 10 64-bit

Item	Weighted Suite	Result	Remark
1	System test Score	PASS	N/A
2	CPU test Score	PASS	4811
3	Memory test Score	PASS	4490
4	Graphic test Score	PASS	N/A
5	HDD test Score	PASS	N/A

Test Environment
Intel(R) Pentium(R) N4200 1.10GHz Transcend DDR3L 1600 4GB (SEC 234 HYKO K4B4G0846B) Kingston DDR3L 1600 8GB (Micro HSN77 DR9VX) Western Digital WD5000LPCX-22VHAT0 500GB

Windows 10 64-bit

Item	Weighted Suite	Result	Remark
1	System test Score	PASS	N/A
2	CPU test Score	PASS	6338
3	Memory test Score	PASS	4568
4	Graphic test Score	PASS	N/A
5	HDD test Score	PASS	N/A

5.7 Storage Performance

5.7.1 HDD

Test environment:

OS Windows 10 64-bit

Program (HD Tune)

HDD Model	Interface	Capacity	Average	Burst Rate	Access Time
Western Digital WD800BEVS-00RST0	SATA	80 GB	34.7 MB/sec	42.4 MB/sec	17.6 ms
Seagate ST3160815AS	SATA	160 GB	59.2 MB/sec	48.4 MB/sec	15.9 ms
Western Digital WD3200BEKT-00F3T0	SATA	320 GB	64 MB/sec	65.2 MB/sec	15.1 ms
Western Digital WD3200BPVT-00JJ50	SATA	320 GB	59.9 MB/sec	44.5 MB/sec	18.8 ms
Western Digital WD3200BPKT-00PK40	SATA	320 GB	75.9 MB/sec	54 MB/sec	15.8 ms
Western Digital WD5000LPCX-22VHAT0	SATA	500 GB	85.9 MB/sec	126 MB/sec	17.5 ms
Western Digital WD10EADS-00P8B0	SATA	1.0 TB	63.4 MB/sec	64 MB/sec	15 ms
TOSHIBA DT01ACA200	SATA	2.0 TB	134 MB/sec	117.1 MB/sec	13.3 ms
MemoRight MRS AJ6C064GC125C00	SSD	64 GB	101.5 MB/sec	40.6 MB/sec	0.4 ms
INTEL SSDSC2BW240A4	SSD	240 GB	157.5 MB/sec	184.5 MB/sec	0.4 ms
KINGSTON DT HyperX 3.0	USB 3.0	64 GB	140.7 MB/sec	60.6 MB/sec	0.8 ms
Silicon-Power	USB 2.0	4 GB	1.1 MB/sec	1.1 MB/sec	1.2 ms

5.7.2 DVD-ROM

Test environment:

OS Windows 10 64-bit

Program (NERO)

DVD-ROM Model	Interface	Average Speed	Full Read	Burst Rate	DVD
ASUS DRW-1814BLT	SATA	2.57 x	447 ms	27 MB/s	16 x
PIONEER DVR-S19LBK	SATA	10.25 x	182 ms	33 MB/s	16 x
LITE-ON iHES312	SATA	10.06 x	148 ms	33 MB/s	16 x
LITEON DVD eTAU108	USB	5.14 x	196 ms	18 MB/s	16 x
ZYNET GT32N A201	USB	4.98 x	365 ms	19 MB/s	16 x