

# Product Test Report



<b>Product Name</b>	ME-C79
<b>Product Version</b>	A
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<b>Report Edition</b>	1.0
<b>BIOS Version</b>	1.0
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# 1. Function test

## 1.1 Hardware function

### Base Function Test

Item	Description	Result	Remark
1	Power Button	PASS	
2	Reset	PASS	
3	Power LED	PASS	
4	HDD LED	PASS	
5	SATA3 1/2/3/4	PASS	
6	USB3.0 1/2/3/4	PASS	
7	CN_USB3	PASS	
8	CN_USB2-1/2	PASS	
9	DDR3 1/2/3/4	PASS	
10	COM 1/2	PASS	B&B BurnInTest 7.0 mouse
11	CN_COM 3/4/5/6	PASS	B&B BurnInTest 7.0 mouse
12	DVI	PASS	
13	DisplayPort	PASS	
14	PS/2	PASS	
15	AUDIO	PASS	
16	CN_AUDIO	PASS	
17	CD_IN	PASS	
18	CN_DIO	PASS	DOS
19	CN_LPC	PASS	ADP-TPM
20	CPUFAN	PASS	
21	SYSFAN	PASS	
22	Mini PCIe 1/2	PASS	

23	CN_CRT	PASS	
24	CN_LVDS	PASS	
25	CN_INV	PASS	
26	LAN1/2	PASS	
27	IrDA	PASS	
28	DC_IN	PASS	
29	ATX	PASS	
30	RS422-485	PASS	
31	PCIEx16	PASS	

### Jumper

Item	Description	Result
1	JRTC	PASS
2	JCSEL1	PASS
3	JCSEL2	PASS
4	JVLCD	PASS
5	JAT	PASS
6	JP1	PASS
7	JP2	PASS
8	JP3	PASS
9	JP4	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	
6	Quick Boot	PASS	
7	Diagnostic Splash Screen	PASS	
8	Diagnostic Summary Screen	PASS	
9	Console Redirection	PASS	
10	View Error Manager Log	PASS	
11	Clear Error Manager Log	PASS	
12	Active Processor Cores	PASS	
13	Intel(R) HT Technology	PASS	
14	SATA Device	PASS	
15	Interface Combination	PASS	IDE ∨ AHCI ∨ RAID ∨
16	Max TOLUD	PASS	
17	Boot Type	PASS	CRT ∨ DVI ∨ LVDS ∨ DP ∨
18	Azalia	PASS	
19	PCH Internal LAN	PASS	
20	LAN OPROM Selection	PASS	
21	Wake on PCH LAN	PASS	Shutdown ∨
22	Intel(R) AMT	PASS	
23	Serial Port	PASS	
24	IR Func.	PASS	

25	Paraller Port	PASS	
26	Watch Dog Timer	PASS	
27	PowerLoss	PASS	Power on Power off
28	CPU Shutdown Temp	PASS	
29	CPU Warning Temp	PASS	
30	CPU Smart Fan	PASS	
31	Power On By RTC Alarm	PASS	
32	Set Supervisor Password	PASS	
33	Set User password	PASS	
34	ADP-TPM	PASS	
35	VCORE, 3.3V, 5V, 5VSB, 12V, VBAT	PASS	

## 1.3 Driver

### CD Edition : IPCI5-1.0

#### 1. Windows XP SP2 32-bit driver test

Item	Description	Result	version
1	Chipset Driver	PASS	9.4.01027
2	VGA Driver	N/A	
3	Audio Driver	PASS	5.10.0.6914
4	LAN Driver	N/A	

#### 2. Windows XP SP2 64-bit driver test

Item	Description	Result	version
1	Chipset Driver	N/A	
2	VGA Driver	N/A	
3	Audio Driver	N/A	
4	LAN Driver	N/A	

#### 3. Windows Server 2003 32-bit Driver Test

Item	Description	Result	version
1	Chipset Driver	PASS	9.4.0.1027
2	VGA Driver	N/A	
3	Audio Driver	PASS	5.10.0.6914
4	LAN Driver	N/A	



#### 4. Windows Server 2003 64-bit driver test

Item	Description	Result	Version
1	Chipset Driver	PASS	9.4.0.1027
2	VGA Driver	N/A	
3	Audio Driver	PASS	5.10.0.6914
4	LAN Driver	N/A	

#### 5. Windows Vista 32-bit driver test

Item	Description	Result	version
1	Chipset Driver	PASS	9.4.0.1027
2	VGA Driver	N/A	
3	Audio Driver	PASS	6.0.1.6914
4	LAN Driver	N/A	

#### 6. Windows Vista 64-bit driver test

Item	Description	Result	version
1	Chipset Driver	PASS	9.4.0.1027
2	VGA Driver	N/A	
3	Audio Driver	PASS	6.0.1.6914
4	LAN Driver	N/A	

## 7. Windows Server 2008 32-bit driver test

Item	Description	Result	version
1	Chipset Driver	PASS	9.4.0.1027
2	VGA Driver	N/A	
3	Audio Driver	PASS	6.0.1.6914
4	LAN Driver	N/A	
5	USB 3.0 Driver	N/A	

## 8. Windows Server 2008R2 64-bit driver test

Item	Description	Result	version
1	Chipset Driver	PASS	9.4.0.1027
2	VGA Driver	PASS	9.18.10.3254
3	Audio Driver	PASS	6.0.1.6914
4	LAN Driver	PASS	12.10.30.0(I217-LM) 12.7.28.0(I210)
5	USB 3.0 Driver	PASS	2.5.1.28

## 9. Windows 7 32-bit Driver Test

Item	Description	Result	version
1	Chipset Driver	PASS	9.4.0.1027
2	VGA Driver	PASS	9.18.10.3257
3	Audio Driver	PASS	6.0.1.6914
4	LAN Driver	PASS	12.10.30.0(I217-LM) 12.7.28.0(I210)
5	USB 3.0 Driver	PASS	2.5.1.28

### 10. Windows 7 64-bit Driver Test

Item	Description	Result	version
1	Chipset Driver	PASS	9.4.0.1027
2	VGA Driver	PASS	9.18.10.3257
3	Audio Driver	PASS	6.0.1.6914
4	LAN Driver	PASS	12.10.30.0(I217-LM) 12.7.28.0(I210)
5	USB 3.0 Driver	PASS	2.5.1.28

### 11. Windows 8 32-bit Driver Test

Item	Description	Result	version
1	Chipset Driver	PASS	9.4.0.1027
2	VGA Driver	PASS	9.18.10.3257
3	Audio Driver	PASS	6.0.1.6914
4	LAN Driver	PASS	12.10.30.0(I217-LM) 12.7.28.0(I210)

### 12. Windows 8.1 Enterprise 32-bit Driver Test

Item	Description	Result	version
1	Chipset Driver	PASS	9.4.0.1027
2	VGA Driver	PASS	9.18.10.3257
3	Audio Driver	PASS	6.0.1.6914
4	LAN Driver	PASS	12.10.30.0(I217-LM) 12.7.28.0(I210)

## 12. Windows 8.1 Enterprise 64-bit Driver Test

Item	Description	Result	version
1	Chipset Driver	PASS	9.4.0.1027
2	VGA Driver	PASS	9.18.10.3257
3	Audio Driver	PASS	6.0.1.6914
4	LAN Driver	PASS	12.10.30.0(I217-LM) 12.7.28.0(I210)

## 2. Compatibility test

### 2.1 CPU Test

Test environment:

OS : Windows 7 32-bit

Test program : PC MARK 2005

Spec Code	CPU Speed	Family	Processor	Max TDP	DMI	Smart Cache	Result
<a href="#">SR17L</a>	2.40 GHz	Core	i7-4700EQ	47W	5 GT/s	6 MB	PASS

## 2.2 Operation System Test

Item	Description	Result	Remark
1	Windows 8.1 Enterprise 64-bit	PASS	
2	Windows 8.1 Enterprise 32-bit	PASS	
3	Windows 8 64-bit	PASS	
4	Windows 8 32-bit	PASS	
5	Windows 7 64-bit	PASS	
6	Windows 7 32-bit	PASS	
7	Windows Server 2008R2 64-bit	PASS	
8	Windows Server 2008 32-bit	PASS	
9	Windows Vista 64-bit	PASS	
10	Windows Vista 32-bit	PASS	
11	Windows XP SP2 64-bit	PASS	
12	Windows XP SP2 32-bit	PASS	
13	Windows Server 2003 64-bit	PASS	
14	Windows Server 2003 32-bit	PASS	

## 2.3 Memory Test

Test environment:

OS : Windows 7 64-bit

Test program : PC MARK 2005

Manufacturer	Chip	Frequency	Capacity Mbytes	Result
Acpi	SKhynix H5TC4G83AFR	DDR3L 1600	8 GB	PASS
ATLA	SKhynix H5TC4G83AFR	DDR3L 1600	8 GB	PASS
Transcend	SEC 234 HYK0 K4B4G0846B	DDR3L 1600	8 GB	PASS
Kingston	Kingston KHX1600C9D3LK2	DDR3 1333	8 GB	PASS

## 2.4 VGA Graphic Quality Test

Test environment:

OS : Windows 7 32/64-bit

Driver version : 9.18.10.3257

Resolution	Color	CRT	DVI	DP	Remark
800*600	16 / 32bit	PAS-S	PASS	PASS	
1024*768	16 / 32bit	PASS	PASS	PASS	
1152*864	16 / 32bit	PASS	PASS	PASS	
1280*600	16 / 32bit	PASS	PASS	PASS	
1280*720	16 / 32bit	PASS	PASS	PASS	
1280*768	16 / 32bit	PASS	PASS	PASS	
1280*800	16 / 32bit	PASS	PASS	PASS	
1280*960	16 / 32bit	PASS	PASS	PASS	
1280*1024	16 / 32bit	PASS	PASS	PASS	
1360*768	16 / 32bit	PASS	PASS	PASS	
1366*768	16 / 32bit	PASS	PASS	PASS	
1400*1050	16 / 32bit	PASS	PASS	PASS	
1440*900	16 / 32bit	PASS	PASS	PASS	
1600*900	16 / 32bit	PASS	PASS	PASS	
1680*1050	16 / 32bit	PASS	PASS	PASS	
1920*1080	16 / 32bit	PASS	PASS	PASS	

## 2.5 Audio

Test environment:

OS Windows XP professional SP2 32-bit

Driver version : 5.10.0.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	

OS Windows Server 2003 32-bit

Driver version : 5.10.0.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	

OS Windows Server 2003 64-bit

Driver version : 5.10.0.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	



## OS Windows Vista 32 bit

Driver version : 6.0.1.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	

## OS Windows Vista 64 bit

Driver version : 6.0.1.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	

## OS Windows Server 2008 32-bit

Driver version : 6.0.1.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	

## OS Windows Server 2008R2 64-bit

Driver version : 6.0.1.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	

## OS Windows 7 32-bit

Driver version : 6.0.1.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	

## OS Windows 7 64-bit

Driver version : 6.0.1.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	

## OS Windows 8 32-bit

Driver version : 6.0.1.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	

## OS Windows 8 64-bit

Driver version : 6.0.1.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	

## OS Windows 8.1 Enterprise 32-bit

Driver version : 6.0.1.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	

## OS Windows 8.1 Enterprise 64-bit

Driver version : 6.0.1.6914

Item	Description	Result	Remark
1	2 CH	PASS	
2	Microphone	PASS	
3	Line in	PASS	
4	CDIN	N/A	

## 2.6 HDD Test

Test environment:

OS : Windows 7

Model	Interface	Capacity	Size Detect	Data Transfer
Western Digital WD5000AAKX-22ERMA0	SATA	500 GB	PASS	PASS
Kingston SKC300S37A(SSD)	SATA	180GB	PASS	PASS
Western Digital WD5002AALX-00J37A0	SATA	500 GB	PASS	PASS

## 2.7 CD-ROM Test

Test environment:

OS Windows 7 64-bit

Model	Interface	Detect	Data Transfer	Play CD
<b>LITE-ON iHES312-33 3</b>	<b>SATA</b>	PASS	PASS	PASS
<b>PIONEER DDVR-S199LBK</b>	<b>SATA</b>	PASS	PASS	PASS
<b>BUFFALO DVSM-PC58U2VB</b>	<b>USB</b>	PASS	PASS	PASS
<b>ZYNET HL-DT-ST DVD+-RW GT32N</b>	<b>USB</b>	PASS	PASS	PASS

## 2.8 USB device Test

### 1. Windows XP SP2 32/64-bit

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

### 2. Windows Server 2003 32/64-bit

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PSSS	

### 3. Windows Vista 32/64-bit

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

#### 4. Windows Server 2008 32-bit /2008R2 64-bit

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	
USB 3.0	PASS	

#### 5. Windows 7 32/64-bit

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	
USB 3.0	PASS	

#### 6. Windows 8 32/64-bit

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	
USB 3.0	PASS	

## 6. Windows 8.1 Enterprise 32/64-bit

Item	Result	Remark
External USB Keyboard Test	PASS	
External USB Mouse Test	PASS	
Hot plugging test	PASS	
CD ROM	PASS	
USB Mass storage	PASS	
USB 3.0	PASS	

## 2.9 Serial Port Test

### 1. MS-DOS

Item	Description	Result	Remark
1	RS-422 & RS-485	PASS	
2	CHKIT	PASS	

### 2. Windows XP SP2 32-bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	b&b com port test	PASS	



### 3. Windows XP SP2 64-bit

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

### 4. Windows Server 2003 32-bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	b&b com port test	PASS	

### 5. Windows Server 2003 64-bit

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

### 6. Windows Vista 32-bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	b&b com port test	PASS	

### 7. Windows Vista 64-bit

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

### 8. Windows Server 2008 32-bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	b&b com port test	PASS	

### 9. Windows Server 2008R2 64-bit

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

### 10. Windows 7 32-bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	b&b com port test	PASS	

### 11. Windows 7 64-bit

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

### 12. Windows 8 32-bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	b&b com port test	PASS	

### 13. Windows 8 64-bit

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

### 14. Windows 8.1 Enterprise 32-bit

Item	Description	Result	Remark
1	Device Manager Check	PASS	
2	RS-232 Mouse Test	PASS	
3	b&b com port test	PASS	

## 14. Windows 8.1 Enterprise 64-bit

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

## 2.10 PS2 Keyboard 、 Mouse Test

### 1. MS-DOS

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	

### 2. Windows XP SP2 32/64-bit

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

### 3. Windows Server 2003 32/64-bit

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

#### 4. Windows Vista 32/64-bit

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

#### 5. Windows server 2008 32-bit / 2008R2 64-bit

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

#### 6. Windows 7 32/64-bit

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

#### 7. Windows 8 32/64-bit

Item	Description	Result	Remark
1	Keyboard LED Status Test	PASS	
2	Keyboard Typing Test	PASS	
3	Mouse Detect Test	PASS	

## 8. Windows 8.1 Enterprise 32/64-bit

Item	Description	Result	Remark
1	Keyboard LED Status Test	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 Server 2008R2 Standard 64-bit

64-bit driver version : 12.10.30.0(I217-LM), 12.7.28.0(I210)

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

2. Windows 7 32/64-bit

32-bit driver version : 12.10.30.0(I217-LM), 12.7.28.0(I210)

64-bit driver version : 12.10.30.0(I217-LM), 12.7.28.0(I210)

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

### 3. Windows 8.1 Enterprise 32-bit

32-bit driver version : 12.10.30.0(I217-LM), 12.7.28.0(I210)

64-bit driver version : 12.10.30.0(I217-LM), 12.7.28.0(I210)

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

### 4. Windows 8 32/64-bit

32-bit driver version : 12.10.30.0(I217-LM), 12.7.28.0(I210)

64-bit driver version : 12.10.30.0(I217-LM), 12.7.28.0(I210)

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

## 2.12 Power Supply Test

Item	TYPE	Description	Result	Remark
1	ATX Power	AcBel API3PC50 350W	PASS	
2	ATX Power	AcBel PC7008 430W	PASS	
3	ATX Power	Snake PK-350W 350W	PASS	
4	ATX Power	CHANNEL WELL CWT300-ATX12 300W	PASS	

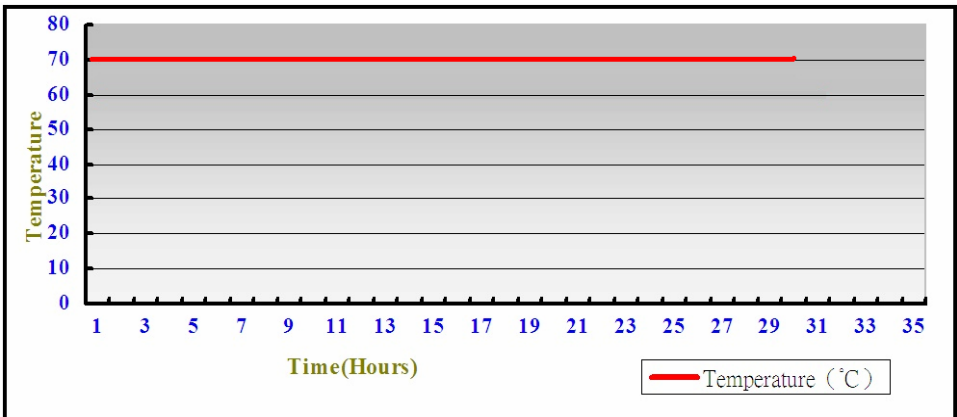
## 2.13 mini PCI card

Motherboard	PCI Express mini card	Result	Remark
ME-C79	mSATA	PASS	Only support mSATA

## 3. Environmental test

### 3.1 Temperature Test

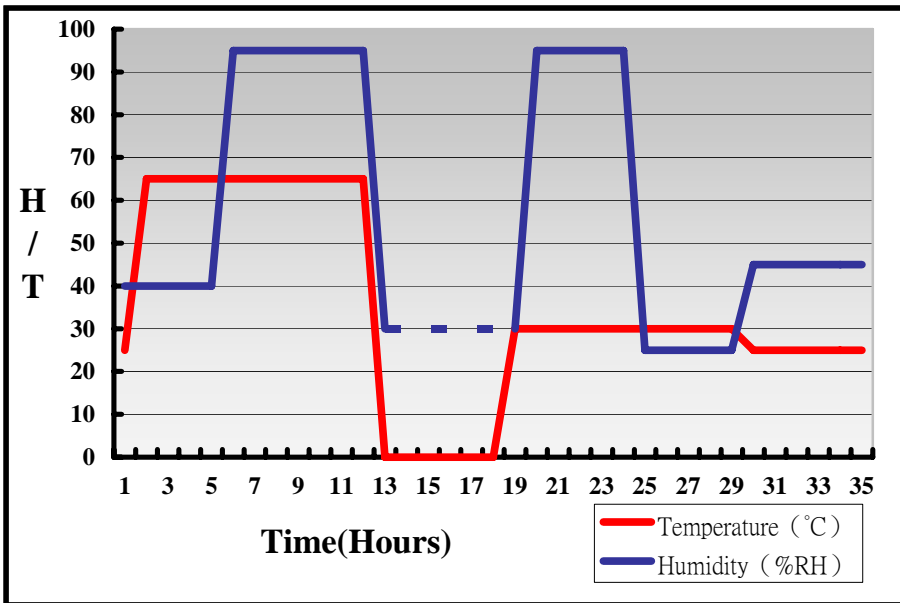
System Board	ME-C79
CPU	Intel® Core™ i7-4700EQ 2.40GHz
Memory	Transcend DDR3L 1600 4GB x1 (SEC 234 HYK0 K4B4G0846B)
HDD	Western Digital WD5000AAKX-22ERMA0
Operating OS	Windows 7 SP1 64-bit
Test Equipment	GIANT FORCE (GTH-150-60-CP-AR)
Test Program	3DMark06+Prime95-255a





## Hardware Device list:

System Board	ME-C79
CPU	Intel® Core™ i7-4700EQ 2.40GHz
Memory	Transcend DDR3L 1600 4GB x1 (SEC 234 HYK0 K4B4G0846B)
HDD	Western Digital WD5000AAKX-22ERMA0
Operating OS	Windows 7 SP1 64-bit
Test Equipment	GIANT FORCE (GTH-150-60-CP-AR)
Test Program	3DMark06+Prime95-255a



**Definition :** When the temperature is 30 degrees below arrive, humidity measurements have not, so by the dashed line express.

## Boot Up Test:

### Hardware Device list:

<b>System Board</b>	<b>ME-C79</b>
<b>CPU</b>	<b>Intel® Core™ i7-4700EQ 2.40GHz</b>
<b>Memory</b>	<b>Transcend DDR3L 1600 4GB x1 (SEC 234 HYK0 K4B4G0846B)</b>
<b>HDD</b>	<b>Western Digital WD5000AAKX-22ERMA0</b>
<b>Operating OS</b>	<b>Windows 7 SP1 64-bit</b>

<b>Temperature</b>	<b>Result</b>	<b>Remark</b>
<b>60°C</b>	<b>PASS</b>	<b>50 Times</b>
<b>- 30°C</b>	<b>PASS</b>	<b>50 Times</b>

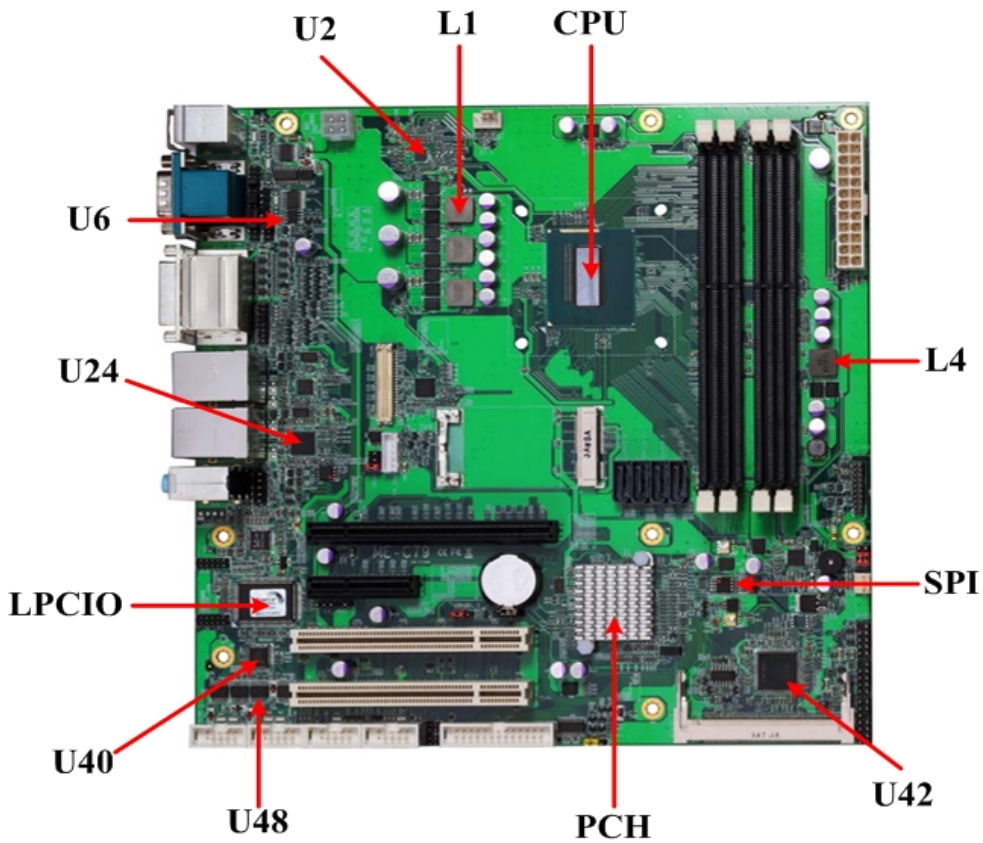
## 3.2 Thermal measurements at various points on the board

### Test Environment :

<b>CPU</b>	<b>Intel® Core™ i7-4700EQ 2.40GHz</b>
<b>Memory</b>	<b>Transcend DDR3L 1600 4GB x2 (SEC 234 HYK0 K4B4G0846B)</b>
<b>HDD</b>	<b>Western Digital WD10EALS-00P8B0</b>
<b>Power</b>	<b>AcBel ATX-350P-DNSS</b>
<b>Operating OS</b>	<b>Windows 7 64-bit</b>
<b>Test Program</b>	<b>3DMark 2006+Prime95-255a</b>

**Test Result:**

<b>Item</b>	<b>Environmental temperature</b>	24.1°C
<b>1</b>	<b>CPU (Fan Speed 4700 rpm)</b>	43.4°C
<b>2</b>	<b>PCH</b>	43.8°C
<b>3</b>	<b>LPCIO</b>	35.8°C
<b>4</b>	<b>L1</b>	40.1°C
<b>5</b>	<b>L4</b>	33.5°C
<b>6</b>	<b>SPI</b>	35.2°C
<b>7</b>	<b>U2</b>	34.4°C
<b>8</b>	<b>U6</b>	35.1°C
<b>9</b>	<b>U24</b>	34.0°C
<b>10</b>	<b>U40</b>	39.4°C
<b>11</b>	<b>U42</b>	37.5°C
<b>12</b>	<b>U48</b>	39.0°C



## 4. Reliability Test

### 4.1 Power Consumption Test

#### 1. Test Environment:

CPU	Intel® Core™ i7-4700EQ 2.40GHz
Memory	Transcend DDR3L 1600 4GB x2 (SEC 234 HYK0 K4B4G0846B)
HDD	Western Digital WD10EALS-00P8B0

Power Supply : AcBel ATX-350P-DNSS

Voltage	MS-DOS Boot up		Win8 PRO(32Bit) 3DMark2006 + Prime95-255a	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	1.37	16.44	3.37	40.44
5V	0.37	1.85	1.00	5.0
3.3V	0.3	0.99	0.72	2.376
5VSB	0.01	0.05	0.02	0.10

The same as above but with LCD panel

Display Panel	AUO M170EG01 17"LCD
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Power Supply : snake PK-350W

Voltage	MS-DOS Boot up		Win7(64Bit) 3DMark06 + Prime95-255a	
	Current ( A )	Power ( W )	Current ( A )	Power ( W )
12V	1.4	16.8	4.65	55.8
5V	0.65	3.25	1.98	9.9
3.3V	0.61	2.01	0.70	2.31

## 5. Performance Test

### 5.1 Performance Test 8.0

Windows 7 SP1 64-bit

<b>Test Environment</b>		
<b>CPU</b>	Intel® Core™ i7-4700EQ 2.40GHz	
<b>Memory</b>	Transcend DDR3L 1600 4GB x2 (SEC 234 HYK0 K4B4G0846B)	
<b>HDD</b>	Western Digital WD10EALS-00P8B0	
<b>Test Program</b>	Performance Test 8.0	
<b>WEIGHTED SUITE</b>	<b>Result</b>	<b>Score</b>
PassMark Rating	PASS	1903
CPU Mark	PASS	7055
2D Graphics Mark	PASS	730
3D Graphics Mark	PASS	508
Memory Mark	PASS	1713
Disk Mark	PASS	824

## 5.2 3DMark

Windows 7 64-bit

<b>Test Environment</b>			
<b>CPU</b>	Intel® Core™ i7-4700EQ 2.40GHz		
<b>Memory</b>	Acpi DDR3L 8GB x4 (SK hynix H5TC4G83AFR)		
<b>HDD</b>	Western Digital WD5002AALX-00J37A0		
<b>WEIGHTED SUITE</b>	<b>Result</b>	<b>Score</b>	<b>Remark</b>
<b>3DMark06</b>			
<b>3DMarks</b>	PASS	7287	
<b>SM2.0</b>	PASS	2461	
<b>HDR/SM3.0</b>	PASS	2908	
<b>CPU</b>	PASS	5677	
<b>3DMarkVantage</b>			
<b>3DMarl</b>	PASS	P4983	
<b>GPU</b>	PASS	3979	
<b>CPU</b>	PASS	20514	
<b>3DMark11</b>			
<b>3DMark</b>	PASS	P968	
<b>Graphics</b>	PASS	841	
<b>Physics</b>	PASS	5571	
<b>Combined</b>	PASS	879	
<b>3DMark (2013)</b>			
<b>FIRE STRIKE 1.1</b>	PASS	673	
<b>CLOUD GATE 1.1</b>	PASS	6517	
<b>ICE vSTORM 1.1</b>	PASS	54173	

## 5.3 PCMark

Windows 7 SP1 64-bit

<b>Test Environment</b>			
<b>CPU</b>	Intel® Core™ i7-4700EQ 2.40GHz		
<b>Memory</b>	Kingston DDR3 1600 8GB x2 (ELPIDA J4208BBBG-GN-F)		
<b>HDD</b>	Western Digital WD5002AALX-00J37A0		
<b>WEIGHTED SUITE</b>	<b>Result</b>	<b>Score</b>	<b>Remark</b>
<b>PCMark Vantage</b>			
<b>PCMark</b>	PASS	8213	
<b>Memories</b>	PASS	5124	
<b>TV and Movies</b>	PASS	5514	
<b>Gaming</b>	PASS	6155	
<b>Music</b>	PASS	7334	
<b>Communications</b>	PASS	9003	
<b>Productivity</b>	PASS	8347	
<b>HDD</b>	PASS	4255	
<b>PCMark8</b>			
<b>Home Score</b>	PASS	3498.0	
<b>Web Browsing-Amazonia</b>	PASS	0.13s	
<b>Web Browsing-JunglePin</b>	PASS	0.32s	
<b>Photo Editing</b>	PASS	3.41s	
<b>Writing</b>	PASS	3.85s	
<b>Video Chat encoding</b>	PASS	70.0 ms	
<b>Video Chat playback 1</b>	PASS	30 fps	
<b>Casual Gaming</b>	PASS	18.1 fps	



## 5.4 AQUAMARK3

Test Environment	
CPU	Intel® Core™ i7-4700EQ 2.40GHz
Memory	Acpi DDR3L 8GB x4 (SK hynix H5TC4G83AFR)
HDD	Western Digital WD10EALS-00P8B0

Windows 7 64-bit

WEIGHTED SUITE	Result	Sorce	Remark
GFX	PASS	17061	
CPU	PASS	9511	

## 5.5 CINEBENCH R15

Test Environment	
CPU	Intel® Core™ i7-4700EQ 2.40GHz
Memory	Kingston DDR3 1600 8GB x2 (ELPIDA J4208BBBG-GN-F)
HDD	Western Digital WD5002AALX-00J37A0

Windows 7 64-bit

WEIGHTED SUITE	Result	Sorce	Remark
OpenGL	PASS	17.32fps	
CPU	PASS	558cb	

## 5.6 ZD CPUMARK

Test Environment	
CPU	Intel® Core™ i7-4700EQ 2.40GHz
Memory	Acpi DDR3L 8GB x4 (SKhynix H5TC4G83AFR)
HDD	Western Digital WD5002AALX-00J37A0

### Windows 7 64bit

WEIGHTED SUITE	Result	Sorce	Remark
SCORE	PASS	582	

## 5.7 Storage Performance

### 5.7.1 HDD

Test environment:

OS Windows 7 64-bit

Program (HD Tune)

<b>HDD Model</b>	<b>Interface</b>	<b>Capacity (GB)</b>	<b>Average (MB/s)</b>	<b>Burst Rate(MB/s)</b>	<b>Access time (ms)</b>
<b>Western Digital WD5002AALX-00J37A0</b>	<b>SATA</b>	<b>500</b>	104.1	177.3	16.6
<b>Western Digital WD5000AAKX</b>	<b>SATA</b>	<b>500</b>	100.8	206.8	15.8
<b>Kingston SKC300S37A(SSD)</b>	<b>SATA</b>	<b>180</b>	169.4	181	0.2
<b>Kingston DataTraveler</b>	<b>USB 2.0</b>	<b>16</b>	19.9	14.7	0.6
<b>ADATA UV128</b>	<b>USB 3.0</b>	<b>32</b>	103	50.9	0.6

## 5.7.2 CD-ROM

Test environment:

OS Windows 7 64-bit

Program (NERO)

CD-ROM Model	Interface	Average Speed	Access times (Full Read, ms)	Burst Rate (MB/s)	CD
<b>BUFFALU DVSM-PC58U2V</b>	<b>USB</b>	5.34x	254	24	52x
<b>PIONEER DDVR-S19LBK</b>	<b>SATA</b>	5.63x	203	38	52x
<b>LITEON DVD ETAU108</b>	<b>SATA</b>	5.52x	159	49	52x