

Report NO: 10E010028

# EPIC-QM57

## P5 Test Report

Summary	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Pass with Deviation Comment: _____				
	Test Result Summary				
	Critical	Major	Minor	Enhancement	
Defect Found	0	0	0	0	
Defect	0	0	0	0	
Unsolved					

Issue date	Approval	Test Engineer
2010 / 11 / 09	Jansin Lee	Anderson Lin

**Platform Information:**

Item	Device Information	Test Item
PCB Model /Version	EPIC-QM57 A1.0	1,2,3
BIOS / Version	EPIC-QM57 1.1 (09/01/2010)	1,2,3
CPU Type	Intel ® Core™ i5CPU 520 M @ 2.4GHz	1,2,3
Memory Type	Transcend SO DDR3-1066 4GB	1,2,3
SATA HDD	FUJITSA MHY2080BH 2.5 SATA 80GB	1,2,3
LCD Monitor	Samsung SyncMaster 171s	1,2,3
LCD	AUO G065VN01 V.0 / 640x480x18bit / 6.5" / 3.3V LVDS Panel	1,2,3
Compact Flash	Transcend Compact Flash 4GB	1,2,3
Operating System	Fedora 13	1,2,3
	Windows XP Professional Service Pack 3 32Bit	1,2,3
	Windows 7 Ultimate 32Bit	1,2,3
	Windows 7 Ultimate64Bit	1,2,3
Power Supply	AT Power Supply : EMACS SP2-4400F	1,2,3

## Summary Table of contents:

Platform Information .....	2
Summary Table of contents .....	3
1. I/O Peripheral Function Test .....	4
2. Power Consumption Test .....	7
3. Timer Accuracy Test .....	8
4. Network HUB / LAN Connection Test .....	8
5. Hardware compatibility .....	9
6. O.S. Compatibility Test .....	13
7. BIOS Function Test .....	13
8. Performance Test .....	14

There are 3 test results in this document; they are described as follows:

Pass: Function worked perfectly

Fail: Function failed and must be modified in the next version

N/A: Outside of specifications or no test equipment

The test report would be tested and updated after version changed.

## Test Result for Certification

### 1. I/O Peripheral Function Test

I/O Function	Result			Note
	Pass	Fail	N/A	
Floppy Connector / Driver A:			X	
Primary IDE Master			X	
Primary IDE Slave			X	
Secondary IDE Master			X	
Secondary IDE Slave			X	
Third IDE Master			X	
Third IDE Slave			X	
RAID 0 Function Test	X			
RAID 1 Function Test	X			
SSD H.D Test	X			
SATA1 / Serial ATA Connector 1	X			SATA1
SATA2 / Serial ATA Connector 2	X			SATA2
Compact Flash – Type I	X			CN36
Compact Flash – Type II			X	
DOC (Disk On Chip)			X	
DOM (Disk On Module) – 40 Pin			X	Transcend / TS512MDOM40V / 512MB / IDE 40 Pin
DOM (Disk On Module) – 44 Pin			X	Transcend / TS512MDOM44V / 512MB / IDE 44 Pin
COM 1-232	X			CN11
COM 2-232	X			CN34
COM 3-232	X			CN26
COM 4-232	X			CN25
COM 2-422	X			CN34
COM 2-485	X			CN34
PS/2 Mouse & Keyboard (Internal)	X			CN23
PS/2 Mouse & Keyboard (External)			X	
Audio Connector	X			CN8
Audio 2.1 Channel	X			

LPT 1	X			CN20
IrDA			X	
USB 1/2 Ports	X			CN31
USB 3/4 Ports	X			CN32
USB 5/6 Ports	X			CN17
USB 2.0 1/2 Ports	X			CN31
USB 2.0 3/4 Ports	X			CN32
USB 2.0 5/6 Ports	X			CN17
DIO Connector	X			CN21
Card Bus			X	
PC/104	X			CN14
PC/104-Plus			X	
PCI-104+	X			CN14
CD-In Connector	X			
TFT TTL LCD			X	
TFT LVDS LCD	X			CN3
LCD Invert Connector	X			CN2
TV-out / AV Terminal			X	ViewSonic VT2430 LCDTV
TV-out / S-Video			X	ViewSonic VT2430 LCDTV
Component Video : Y/ Pb /Pr			X	ViewSonic VT2430 LCDTV
DVI Function	X			LG / L1753T / 17"
HDMI Output (Embedded Audio)			X	ViewSonic VT2430 LCDTV
DisplayPort	X			
Touch Screen – 4/8 Wire			X	
Touch Screen – 5 Wire			X	
DIMM Slots	X			
Watchdog IRQ n			X	
Watchdog Software Control	X			
FAN1 Connector	X			CN28
FAN2 Connector			X	
Speaker Connector			X	
DC in Connector			X	
Power Button	X			
Front Panel (CN1)	Result			Notes
	Pass	Fail	N/A	

Power On Button	X			
IDE LED	X			
External Buzzer	X			
On Board Buzzer	X			
Power LED	X			
Reset Switch	X			
Keyboard Lock			X	
Jumpers Function	Result			Notes
	Pass	Fail	N/A	
PCI/104+ (PCI-104) I/O Voltage Selection	X			JP2
ATX Power simulate AT Power	X			SW1
COM2 +12V/+5V/RING Selection	X			JP6
LCD Inverter Voltage Selection	X			JP3-1
LCD Voltage Selection	X			JP3-2
Clear ME ROM	X			JP4-2
Clear CMOS Selection	X			JP4-1
Power Connector & Function	Result			Notes
	Pass	Fail	N/A	
Standard AT Power Connector			X	
Standard ATX Power 12V Connector	X			CN5
5V Only Power Connector			X	
DC Adapter			X	
LAN Connector & Function	Result			Notes
	Pass	Fail	N/A	
LAN Link / Speed LED	LAN1	X		
	LAN2	X		
LAN Active LED	LAN1	X		
	LAN2	X		
LAN 10/100 Ethernet	X			
LAN 1G Ethernet	X			
PCI Connector & Function	Result			Notes
	Pass	Fail	N/A	
Mini PCI Slot			X	
PCI Slot			X	
PCI Express x1 / x4 / x16			X	

Mini PCI Express card	X			CN19
Express card			X	

## 2. Power Consumption Test (Run Prime95 Program)

### Platform Information

Test Equipment						
Equipment	AC/DC Digital Clamp meter					
Manufacturer	KYORITSU					
Model name	2010					
Test Environment						
AT Power Model	N/A					
ATX Power Model	Delta GPS-350EB-102A					
CPU	Intel ® Core ™ i7 CPU M620 @ 2.67GHz					
Memory	Transcend ELPIDA J1108BABG-AE-E 1066 1GB					
HDD	FUJITSA MHY2080BH 2.5 SATA 120GB					
Power Supply		ATX Power		AT Power		Note
Windows XP SP3 with Prime 95 Full Loading Test	(+5V)	----	A		A	
	(+12V)	4.02	A		A	
	(-5V)	----	A		A	
	(-12V)	----	A		A	
	(+3.3V)	----	A	No Support 3.3V		
Suspend in XP (S1)	(+3.3V)	----	A	Support 3.3V		
	(+5V)	----	A		A	
	(+12V)	1.74	A		A	
	(-5V)	----	A		A	
	(-12V)	----	A		A	
5VSB in Power Off Mode (just for ATX)		----	A	No		
5VSB in Power On Mode (just for ATX)		----	A	Support		
5VSB in S1 Suspend Mode (just for ATX)		----	A	5VSB		

### 3. Timer Accuracy Test

System Clock & RTC Clock Test				
Test Method	Margin for error	Result		
		Pass	Fail	N/A
RTC Clock in Power On Mode	±2 second during 24 hours	X		
RTC Clock in Power Off Mode	±2 second during 24 hours	X		
Watchdog Timer Test		Result		
		Pass	Fail	N/A
Time-out Interval	10 sec	X		
	60 sec	X		

### 4. Network HUB / LAN Connection Test

Location		LED Type				Result		
						Pass	Fail	N/A
LAN1 LED		Link / Speed LED				X		
		Active LED				X		
LAN2 LED		Link / Speed LED				X		
		Active LED				X		
Location	Speed	HUB Type	Cable Length	HUB Speed	Onboard LAN Speed	Result		
						Pass	Fail	N/A
Onboard LAN1	10/100/1000 Mbps	D-Link DGS-1008T	100M	1GBps	1000	X		
		Accton DeskTop-3005	100M	100 MBps	100	X		
		SVEC FD916H (10 Mbps HUB)	100M	10 MBps	10	X		
Onboard LAN2	10/100/1000 Mbps	D-Link DGS-1008T	100M	1GBps	1000	X		
		Accton DeskTop-3005	100M	100 MBps	100	X		
		SVEC FD916H (10 Mbps HUB)	100M	10 MBps	10	X		



## 5. Hardware Compatibility

CPU Compatible Test							
CPU Type	DMI	Prime95 Version	Result				
			Pass	Fail	N/A		
Intel ® Core™ i7 CPU M620 @ 2.67GHz	2.5 GT/s	V25.9	X				
Memory Compatibility Test							
Memory Brand	Memory Chipset	Frequency	Size	MemTest86 Version	Result		
					Pass	Fail	N/A
Transcend	ELPIDA J1108BABG-AE-E	DDR3-1066	1GB	V 4.10	X		
Audio Basic Function Test					Result		
					Pass	Fail	N/A
System Sound					X		
CD_In					X		
Play Sound Recorder					X		
Line Out					X		
Line In					X		
Line In Sound Record					X		
MIC Speaker			Condenser		X		
MIC Sound Recorder			Condenser		X		
Audio 5.1 Channel with S/P DIF Function Test					Result		
					Pass	Fail	N/A
2-channel mode for stereo speaker output					X		
4-channel mode for 4 speaker output							X
6-channel mode for 5.1 speaker output							X
8-channel mode for 7.1 speaker output							X
S/P DIF function Test			Input				X
			Output				X
On Board TV Function Test					Result		
					Pass	Fail	N/A
NTSC		AV Terminal					X
PAL							X
NTSC		S Terminal					X
PAL							X
On Board LCD Function Test							

TFT LCD	Type	Voltage	Result		
			Pass	Fail	N/A
LVDS	AUO G065VN01 V.0 / 6.5" / 640x480 / 18bit (4:3)	3.3V	X		
	AUO G065VN01 V.0 / 6.5" / 640x480 / 24bit (4:3)	3.3V	X		
	Data Image 7" / 800*480 / 18bit (16:9)	3.3V	X		
	AU G084SN05 V.3 / 8.4" / 800*600 / 18bit (4:3)	3.3V	X		
	AUO G084SN05 v7 / 8.4" / 800*600 / 24bit (4:3)	3.3V	X		
	AU G150XG01 V.0 / 15" / 1024*768 / 18bit (4:3)	3.3V	X		
	AU M150XN07 V.2 / 15" / 1024x768 / 24bit (4:3)	5V	X		
	Toshiba /12.1"/1280 x 768 x 18bit (16:9)	5V	X		
	AU M170EG01 V.D/ 17"/ 1280*1024 / 48bit (4:3)	5V	X		
	AU M170XW01 V.1 / 17" / 1280x768 / 24bit (16:9)	5V	X		
	AUO T260XW02 / 26" / 1366x768 / 24bit	5V	X		
	AU M201UN02 V.5 / 20.1" / 1600x1200x48bit	5V	X		
	AUO T370HW01 / 37" / 1920x1080 / 48bit	12V	X		
	AUO M190PW01 V0 / 19"/1440X900/48 bit	5V	X		

**PCI Slot Function (PCI Adapter Card) Test**

Model	Type	Result		
		Pass	Fail	N/A
CHANTECH NVIDIA GeForce4 MX440-8X	VGA Card	X		
Intel GD82559 10/100 Mbps Fast Ethernet Adapter	LAN Card	X		

**ISA Slot Function Test**

Model	Result		
	Pass	Fail	N/A
NE2000 Compatible LAN Card (RTL8019AS)			X
Adaptec AHA-1510/20/22B SCSI Card			X

**PCI-Express Function Test(From PCI-104 Express Card)**

Model	Result		
	Pass	Fail	N/A
SksKonnnect SK-9E21D 10/100/1000 Base-T Adapter PCI-Express x1 LAN Card	X		
Adaptec AAR-1430SA SATAII HostRAID Controllers PCI-Express x4 RAID Card	X		
ASUS NVIDIA PCI-E x16 VGA Card (ENGT220/D1/1GD2(LP))	X		

**HDD Compatibility Test**

Model	Result		
	Pass	Fail	N/A
FUJITSA MHY2080BH 2.5 SATA 120GB	X		
Transcend SSD 16G - TS16GSSD25S	X		

**IDE Cable Function test**

IDE Model	Result		
	Pass	Fail	N/A
40 Pin Cable ATA100			X

44 Pin Cable ATA33				X	
80 Pin Cable ATA100				X	
<b>USB Function Test</b>					
<b>USB Basic Function Test</b>	<b>Result</b>				
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>		
Mitsumi FLL3.5 D353GUE/FUE	X				
USB HDD 20GB	X				
USB Card Reader	X				
USB Mouse	X				
USB Flash drive Transcend 2GB	X				
<b>USB 2.0 Function Test</b>	<b>Result</b>				
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>		
Install Windows XP Professional from HighSpeed Device: USB2.0 DRW-1604P-D/WHT/G/ASUS	X				
<b>Peripheral Compatibility-Storage Device</b>					
<b>Model</b>	<b>Interface</b>	<b>Result</b>			
		<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
Type-I CF	Fix / PIO Mode	X			
Type-I CF	Fix / UDMA Mode	X			
<b>Digital I/O Connector Test</b>	<b>Result</b>				
	<b>Pass</b>	<b>Fail</b>	<b>N/A</b>		
Input Address:		X			
Output Address:		X			
VCC: (5V)		X			
DIO-1 Function Test		X			
DIO-2 Function Test		X			
<b>Adapter Compatibility- Industry Control Card PC/104, PC/104+, PCI-104 Modules</b>					
<b>Interface</b>	<b>Model</b>	<b>Type</b>	<b>Result</b>		
			<b>Pass</b>	<b>Fail</b>	<b>N/A</b>
PC/104	AAEON PCM-3600	Lan Module			X
PC/104+	AAEON PCM-3430	SCSI Module			X
PCI-104	AAEON PCM-3730	Intel 82559 LAN Module	X		
PCI/104 Express	AAEON PER-123		X		
<b>On-Board RAID Function Test</b>					
<b>Model</b>	<b>Interface</b>	<b>Result</b>			
		<b>Pass</b>	<b>Fail</b>	<b>N/A</b>	
Set SATA HDDs as RAID 0	SATA	X			
Set SATA HDDs as RAID 1	SATA	X			
Set SATA HDDs as RAID 10	SATA			X	
Set SATA HDDs as RAID 5	SATA			X	

COM Function Test		Result		
		Pass	Fail	N/A
COM Port Burn In Test overnight		X		
Disk On Module [DOM] Compatibility Test				
Model	Interface	Result		
		Pass	Fail	N/A
Transcend / TS512MDOM40V / 512MB	IDE 40 Pin			X
Transcend / TS512MDOM44V / 512MB	IDE 44 Pin			X
Mini PCI Card Compatibility Test				
Model	Interface	Result		
		Pass	Fail	N/A
Mini PCI.10/100 Base-Tx LAN (W/Intel.82551QM .A1.0) (Model:PER-C10L)	LAN			X
GM-101 WLAN 11b/g 54Mbps Mini PCI Card (Model: VNT6655AM)	WLAN			X
COM/LPT Ports & RS-232/422/485 Function Test		Result		
		Pass	Fail	N/A
RS-422 for COM2		X		
RS-485 for COM2		X		
COM1		X		
COM2		X		
COM3		X		
COM4		X		
LPT1		X		
LPT2				X
Card Bus(PCMCIA) Compatibility Function Test				
Model	Result			
	Pass	Fail	N/A	
Intel PRO/Wireless 2011B LAN PC Card (WPC2011BWW)			X	
PQI 16MB Compact Flash Adapter (64MB PQI CF Card inserting)			X	
Kingston datapack DP-PCM2 / 2GB (PC Card Typell HDD)			X	
PCI GW-NS54SG Cardbus Adapter Wireless LAN Type-II			X	

## 6. O.S. Compatibility Test

Installation Operation System Compatibility Test	Result		
	Pass	Fail	N/A
Windows XP Professional English Version V2002 Service Pack 3	X		
Fedora13	X		
Windows 7 Ultimate 32Bit	X		
Windows 7 Ultimate64Bit	X		

## 7. BIOS Function Test

Test Item	Result		
	Pass	Fail	N/A
Memory Beep Test			X
Standard CMOS Setup Test	X		
Boot Sequence Test	X		
<b>Power Management Test</b>			
ATX Power Management Test	X		
AT Power Management Test			X
Power On Function Test			X
Wake Up Event Test	X		
Power On after Power Failure Test	X		
CMOS Backup / Clear CMOS Test	X		
Boot ROM Test (RPL/PXE)	X		
Supervisor / User Password Test	X		
CRT / LCD / TV / DVI Function Test	X		
TV Standard Function Test			X
Init Display First Function Test			X
On-Chip Serial ATA Function Test	X		
SATA Mode-IDE/RAID Function Test	X		
USB Onboard Device Function Test	X		
COM Address / IRQ Test	X		
LPT Address / IRQ Test	X		
BIOS AWDFLASH Program Test	X		
PC Health	X		
AAEON Tag Check Utility	X		

## 8. Performance Test

### Platform Information

PCB Board	EPIC-QM57 Rev A1.0
BIOS	EPIC-QM57 1.1 (09/01/2010)
Operating System	English Windows XP Professional Service Pack 3
CPU	Intel ® Core™ i7 CPU M620 @ 2.67GHz
Memory	Transcend ELPIDA J1108BABG-AE-E 1066 1GB
SATA HDD	FUJITSA MHY2080BH 2.5 SATA 120GB
CRT	View Sonic E70
Chipset Software	Intel Chipset Device Software 9.1.1.1020 (8/26/2009)
Graphics Media	Intel Graphics Media Accelerator HD 6.14.10.5160 (10/19/2009)
LAN Driver	Intel 82574L Gigabit Network Connection 11.1.6.0 (7/13/2009) Intel 82577LM Gigabit Network Connection 11.2.19.0 (9/23/2009)
Audio Driver	VIA High Definition Audio 6.0.1.1560 (12/19/2008)
Power Supply	ATX Power: Delta GPS-350EB-102A

### Test Result:

Testing Software	Result	Unit
<b>PCMark2002</b>		
CPU	10009	
Memory	36257	
HDD	1035	
<b>Final Reality V1.01—BenchMark Test</b>		
2D image	62.62	
3D	4.46	
Bus transfer	71.01	
Overall	31.89	Reality marks
<b>3Dmark2001</b>		
3DMark2001SE Build 330_Benchmark mode	9493	

### Test Result:

Testing Software	Result	Unit
<b>PCMark05</b>		
PCMark	N/A	PCMarks

CPU	7223	
Memory	5890	
Graphics	N/A	
HDD	3937	
3Dmark2003 v360		
3Dmark Score	3237	