

# QE 【Mainboard】

## P5 Verification Test Plan

Release No : 07E010016

Product Model	<b>PFM-T800</b>
Description	<b>PCI-104 Module</b>
Test Configuration	<p><input checked="" type="checkbox"/> PCI-104 Module:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> PCB : PFM-T800 A1.0-A <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> COM Chipset : OXFORD OXmPCI954-LQAG, Support four COM Ports</li> <li><input checked="" type="checkbox"/> USB Chipset : VIA VT6212, Support four USB Ports</li> </ul> </li> <li><input checked="" type="checkbox"/> CPU Board: <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> PCB(1) : PFM-620S A1.0 <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> North Bridge : VIA VT8606</li> <li><input checked="" type="checkbox"/> South Bridge : VT82C686B</li> <li><input checked="" type="checkbox"/> VGA Chipset : VIA VT8606</li> <li><input checked="" type="checkbox"/> Audio Chipset : N/A (PER-U00A Audio+USB Daughter Board)</li> <li><input checked="" type="checkbox"/> Ethernet Chipset : Realtek 8100BL</li> </ul> </li> <li><input checked="" type="checkbox"/> PCB(2) : GENE-6315 A1.0-A <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> North Bridge : VIA Mark</li> <li><input checked="" type="checkbox"/> South Bridge : VIA VT82C686B</li> <li><input checked="" type="checkbox"/> VGA Chipset : VIA Mark Integrated VGA</li> <li><input checked="" type="checkbox"/> Audio Chipset : Realtek ALC655 CODEC</li> <li><input checked="" type="checkbox"/> Ethernet Chipset : Realtek RTL8139DL, 10/100 Mbps</li> </ul> </li> <li><input checked="" type="checkbox"/> PCB(3) : PFM-550S A1.0 <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> North Bridge : VIA Mark</li> <li><input checked="" type="checkbox"/> South Bridge : VIA VT82C686B</li> <li><input checked="" type="checkbox"/> VGA Chipset : VIA VT8606, Share up to 32MB</li> <li><input checked="" type="checkbox"/> Audio Chipset : N/A (PER-U00A Audio+USB Daughter Board)</li> <li><input checked="" type="checkbox"/> Ethernet Chipset : Realtek RTL8100BL</li> </ul> </li> </ul> </li> </ul> <p><input checked="" type="checkbox"/> Remark : QE NPDP P5 External Report for PFM-T800 A1.0-A (Update new driver to solve COM port issue during stress test)</p>
<b>Test Result Summary</b>	
<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Pass with Deviation  Comment: _____ _____	

2007/06/23

Issue date

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**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 specification or no test equipment

## Test Result for Certification

### 1. Environment Test

Please refers to report NO: 07E020023 for more detail

PCI-104 Module	PFM-T800 A1.0-A
PCB Model / Version	PFM-620S A1.0
BIOS	PFM-620S BIOS Rev. 1.0 (08/16/2006)
Operating System	Windows XP Professional English Version V2002 Service Pack 2
CPU	Intel ULV Celeron M 650MHz onboard CPU
Memory	PC133 SODIMM SDRAM DSL 512MB (0624PR V54C3256804VDJ7)
Primary IDE Master	Seagate ST340015A 3.5" 40GB
Primary IDE Slave	N/A
CRT	ViewSonic E70 17"
LCD	N/A
Compact Flash	N/A
Backplane	N/A
Riser Card	N/A
4 in 1 Driver	VIA Service Pack 4.48v
Graphics Media	S3 Graphics Twister + S3Hotkey 6.13.10.1039 1/24/2002
LAN Driver	Realtek RTL8139/810x Family Fast Ethernet NIC 5.505.1004.2002 10/4/2002
Audio Driver	N/A, it needs Audio daughter board to perform this function
Power Supply	Zippy SP2-4300F AT Power
Multifunction adapters-	OX16PCI954 PCI UARTs 6.5.1.5 1/24/2007
	OX16PCI95x PCI bridge 6.5.1.5 1/24/2007
USB driver	VIA USB Enhanced Host Controller 5.1.2600.0 6/1/2002
	VIA Rev 5 or later USB Universal Host Controller 5.1.2600.2180 7/1/2001

### 1.1. AT Power Supply

Test Method	Test Condition	Result		
		Pass	Fail	N/A
Dynamic Burn-In Test	-5°C ~65°C, 0%RH~90%RH, 48 hrs	<b>X</b>		

## 2. [PFM-T800 + PFM-620S]

### Platform Information:

PCI-104 Module	PFM-T800 A1.0-A
PCB Model / Version	PFM-620S A1.0
BIOS	PFM-620S BIOS Rev. 1.0 (04/04/2005)
Operating System	Windows XP Professional English Version V2002 Service Pack 2 MS-DOS
CPU	Onboard Intel ULV Celeron 650MHz CPU
Memory	ELPIDA PC133 SODIMM SDRAM 512MB (HB52RF648DC-75B)
Primary IDE Master	Western Digital WD800BB-00JHA0 3.5" IDE 80GB
Primary IDE Slave	BenQ DVD-ROM 1650V
CRT	ViewSonic E70 17"
4 in 1 Driver	VIA Service Pack 4.48v
Graphics Media	S3 Graphics Twister + S3Hotkey 6.13.10.1039 1/24/2002
LAN Driver	Realtek RTL8139/810x Family Fast Ethernet NIC 5.505.1004.2002 10/4/2002
Audio Driver	N/A, it needs Audio daughter board to perform this function
Power Supply	EMACS SP2-4300F AT Power
Multifunction adapters-	OX16PCI954 PCI UARTs 6.5.1.5 1/24/2007
	OX16PCI95x PCI bridge 6.5.1.5 1/24/2007
USB driver	VIA USB Enhanced Host Controller 5.1.2600.0 6/1/2002
	VIA Rev 5 or later USB Universal Host Controller 5.1.2600.2180 7/1/2001

### 2.1. I/O Peripheral Function Test

I/O Function	Result			Note
	Pass	Fail	N/A	
COM 1	X			CN3 on PFM-T800
COM 2-232	X			CN4 on PFM-T800
COM 2-422	X			CN4 on PFM-T800
COM 2-485	X			CN4 on PFM-T800 (ICP CON i-7044D DIO Module)
COM 2-Ring /+5V	X			CN4 on PFM-T800
COM 3	X			CN5 on PFM-T800
COM 4	X			CN6 on PFM-T800
USB 1/2 Ports	X			CN7 on PFM-T800
USB 3/4 Ports	X			CN8 on PFM-T800
USB 5/6 Ports			X	
USB 7/8 Ports			X	
USB 2.0 1/2 Ports	X			CN7 on PFM-T800
USB 2.0 3/4 Ports	X			CN8 on PFM-T800
USB 2.0 5/6 Ports			X	
USB 2.0 7/8 Ports			X	
Jumpers Function	Result			Note
	Pass	Fail	N/A	
CN10	X			INTA selection for COM port function
CN11	X			INTB selection for COM port function
JP1	X			COM2 RS-232/422/485 Selection
JP2	X			
JP4	X			
JP3	X			COM2 Ring/+5V Selection
CN12	X			INTA selection for USB port function
CN13	X			INTB selection for USB port function

CN14	X		INTC selection for USB port function
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Remark: COM1 to COM4 only can be used in Windows environment because that external COM chipset (OXFORD OXmPCI954-LQAG) does not provide COM driver in DOS

## 2.2. Hardware Compatibility

USB Function Test			
<b>USB Basic Function Test</b>		<b>Result</b>	
Remark: USB1 to USB4 only can be used in Windows environment because that external USB chipset (VIA VT6212) does not provide USB driver in DOS		<b>Pass</b>	<b>Fail</b>
USB Controller			X
USB 2.0 Controller			X
USB Keyboard Support			X
USB Mouse Support			X
<b>USB 1.1 Compatible Test</b>		<b>Result</b>	
		<b>Pass</b>	<b>Fail</b>
USB 1.1 Compatible Test			X
<b>USB 2.0 Compatible Test</b>		<b>Result</b>	
Remark: USB1 to USB4 only can be used in Windows environment because that external USB chipset (VIA VT6212) does not provide USB driver in DOS and its speed is limited to USB 2.0		<b>Pass</b>	<b>Fail</b>
USB 2.0 Compatible Test		X	
<b>USB 2.0 Function Test</b>		<b>Result</b>	
Remark: USB1 to USB4 only can be used in Windows environment because that external USB chipset (VIA VT6212) does not provide USB driver in DOS		<b>Pass</b>	<b>Fail</b>
Use High Speed Device USB2.0 CD-R/W Ben-Q / 4824W1-ON2 to play Nero CD/DVD Speed			X
<b>USB Device Full Loading Test</b>		<b>Result</b>	
<b>Model</b>		<b>Pass</b>	<b>Fail</b>
PQI Thumb drive 1GB		X	
Jetflash USB Flash disk 256MB		X	
BENQ 4824WI-ON2		X	
1394b + USB2.0 External Box (MP-FBHUB20P-V2.0 E10-7073161D60)		X	
<b>COM Port Send / Receive Test</b>		<b>Result</b>	
Remark: COM1 to COM4 only can be used in Windows environment because that external COM chipset (OXFORD OXmPCI954-LQAG) does not provide COM driver in DOS		<b>Pass</b>	<b>Fail</b>
Use software program: COMTEST.exe			X
Use software program: LL5.exe			X
<b>COM/LPT Ports &amp; RS-232/422/485 Function Test</b>		<b>Result</b>	
		<b>Pass</b>	<b>Fail</b>
RS-422 for COM2		X	
RS-485 for COM2 (Uses ICP CON i-7044D DIO Module)		X	
COM1 (CN3)		X	
COM2 (CN4)		X	
COM3 (CN5)		X	
COM4 (CN6)		X	

### 2.3. O.S. Compatibility Test

Installation Operation System Compatibility Test			Result		
			Pass	Fail	N/A
Windows XP Professional English Version V2002 Service Pack 2 (Install OS with PFM-T800 on it)			X		
Utility and Driver Test					
OS	Drivers Version		Result		
			Pass	Fail	N/A
Windows XP Professional English Version V2002 Service Pack 2	4 in 1 Driver	VIA Service Pack 4.48v	X		
	Graphics Media	S3 Graphics Twister + S3Hotkey 6.13.10.1039 1/24/2002	X		
	LAN Driver	Realtek RTL8139/810x Family Fast Ethernet NIC 5.505.1004.2002 10/4/2002	X		
	Audio Driver	N/A, it needs Audio daughter board to perform this function	X		
	Power Supply	Zippy SP2-4300F AT Power	X		
	Multifunction adapters-	OX16PCI954 PCI UARTs 6.5.1.5 1/24/2007	X		
		OX16PCI95x PCI bridge 6.5.1.5 1/24/2007	X		
	USB driver	VIA USB Enhanced Host Controller 5.1.2600.0 6/1/2002	X		
		VIA Rev 5 or later USB Universal Host Controller 5.1.2600.2180 7/1/2001	X		

### 3. [PFM-T800 + GENE-6315]

**Platform Information:**

PCI-104 Module	PFM-T800 A1.0-A
PCB Model / Version	GENE-6315 A1.0-A
BIOS	GENE-6315 BIOS Rev 1.0 (11/21/2006)
Operating System	Windows XP Professional English Version V2002 Service Pack 2 MS-DOS
CPU	Onboard VIA Mark C3 800A MHz / FSB: 133MHz (with Fan)
Memory	ELPIDA PC133 SODIMM SDRAM 512MB (HB52RF648DC-75B)
Primary IDE Master	N/A
Primary IDE Slave	BenQ DVD-ROM 1650V
CF	Transcend Type-I CF 2GB for Industrial
CRT	ViewSonic E70 17"
4 in 1 Driver	VIA Service Pack 4.47v
Graphics Media	S3 Graphics Twister 6.13.10.1100 11/7/2002
LAN Driver	Realtek RTL8139/810x family Fast Ethernet NIC 5.505.1004.2002 10/4/2002
Audio Driver	Realtek AC'97 Audio for VIA® Audio Controller 5.10.0.6030 2/17/2006
Power Supply	EMACS SP2-4300F AT Power
Multifunction adapters-	OX16PCI954 PCI UARTs 6.5.1.5 1/24/2007
	OX16PCI95x PCI bridge 6.5.1.5 1/24/2007
USB driver	VIA USB Enhanced Host Controller 5.1.2600.0 6/1/2002
	VIA Rev 5 or later USB Universal Host Controller 5.1.2600.2180 7/1/2001

#### 3.1. I/O Peripheral Function Test

I/O Function	Result			Note
	Pass	Fail	N/A	
COM 1	X			CN3 on PFM-T800
COM 2-232	X			CN4 on PFM-T800
COM 2-422	X			CN4 on PFM-T800
COM 2-485	X			CN4 on PFM-T800 (ICP CON i-7044D DIO Module)
COM 2-Ring /+5V	X			CN4 on PFM-T800
COM 3	X			CN5 on PFM-T800
COM 4	X			CN6 on PFM-T800
USB 1/2 Ports	X			CN7 on PFM-T800
USB 3/4 Ports	X			CN8 on PFM-T800
USB 5/6 Ports			X	
USB 7/8 Ports			X	
USB 2.0 1/2 Ports	X			CN7 on PFM-T800
USB 2.0 3/4 Ports	X			CN8 on PFM-T800
USB 2.0 5/6 Ports			X	
USB 2.0 7/8 Ports			X	
Jumpers Function	Result			Note
	Pass	Fail	N/A	
CN10	X			INTA selection for COM port function
CN11	X			INTB selection for COM port function
JP1	X			COM2 RS-232/422/485 Selection
JP2	X			
JP4	X			
JP3	X			
CN12	X			COM2 Ring/+5V Selection
CN13	X			INTA selection for USB port function
	X			INTB selection for USB port function

CN14	X		INTC selection for USB port function
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Remark: COM1 to COM4 only can be used in Windows environment because that external COM chipset (OXFORD OXmPCI954-LQAG) does not provide COM driver in DOS

### 3.2. O.S. Compatibility Test

Installation Operation System Compatibility Test			Result		
			Pass	Fail	N/A
Windows XP Professional English Version V2002 Service Pack 2 (Install OS with PFM-T800 on it)			X		
Utility and Driver Test					
OS	Drivers Version		Result		
			Pass	Fail	N/A
Windows XP Professional English Version V2002 Service Pack 2	4 in 1 Driver	VIA Service Pack 4.47v	X		
	Graphics Media	S3 Graphics Twister 6.13.10.1100 11/7/2002	X		
	LAN Driver	Realtek RTL8139/810x family Fast Ethernet NIC 5.505.1004.2002 10/4/2002	X		
	Audio Driver	Realtek AC'97 Audio for VIA® Audio Controller 5.10.0.6030 2/17/2006	X		
	Power Supply	EMACS SP2-4300F AT Power	X		
	Multifunction adapters-	OX16PCI954 PCI UARTs 6.5.1.5 1/24/2007	X		
		OX16PCI95x PCI bridge 6.5.1.5 1/24/2007	X		
	USB driver	VIA USB Enhanced Host Controller 5.1.2600.0 6/1/2002	X		
VIA Rev 5 or later USB Universal Host Controller 5.1.2600.2180 7/1/2001		X			



#### 4. [PFM-T800 + PFM-550S]

##### Platform Information:

PCI-104 Module	PFM-T800 A1.0-A
PCB Model / Version	PFM-550S A1.0
BIOS	PFM-550S BIOS Rev 1.0A FOR AEI (2006/08/24)
Operating System	Windows XP Professional English Version V2002 Service Pack 2 MS-DOS
CPU	Onboard VIA Mark C3 533A MHz (133x4.0)
Memory	ELPIDA PC133 SODIMM SDRAM 512MB (HB52RF648DC-75B)
Primary IDE Master	Maxtor 2F040L0 IDE 3.5" 40GB
Primary IDE Slave	BenQ DVD-ROM 1650V
CRT	ViewSonic E70 17"
4 in 1 Driver	VIA Service Pack 4.55v (VIA 4 in 1)
Graphics Media	S3 Graphics Twister 6.13.10.1031 12/25/2001
LAN Driver	Realtek RTL8139/810x Family Fast Ethernet NIC 5.612.413.2004 4/13/2004
Audio Driver	N/A, it needs Audio daughter board to perform this function
Power Supply	EMACS SP2-4300F AT Power
Multifunction adapters-	OX16PCI954 PCI UARTs 6.5.1.5 1/24/2007
	OX16PCI95x PCI bridge 6.5.1.5 1/24/2007
USB driver	VIA USB Enhanced Host Controller 5.1.2600.0 6/1/2002
	VIA Rev 5 or later USB Universal Host Controller 5.1.2600.2180 7/1/2001

#### 4.1. I/O Peripheral Function Test

I/O Function	Result			Note
	Pass	Fail	N/A	
COM 1	X			CN3 on PFM-T800
COM 2-232	X			CN4 on PFM-T800
COM 2-422	X			CN4 on PFM-T800
COM 2-485	X			CN4 on PFM-T800 (ICP CON i-7044D DIO Module)
COM 2-Ring /+5V	X			CN4 on PFM-T800
COM 3	X			CN5 on PFM-T800
COM 4	X			CN6 on PFM-T800
USB 1/2 Ports	X			CN7 on PFM-T800
USB 3/4 Ports	X			CN8 on PFM-T800
USB 5/6 Ports			X	
USB 7/8 Ports			X	
USB 2.0 1/2 Ports	X			CN7 on PFM-T800
USB 2.0 3/4 Ports	X			CN8 on PFM-T800
USB 2.0 5/6 Ports			X	
USB 2.0 7/8 Ports			X	
Jumpers Function	Result			Note
	Pass	Fail	N/A	
CN10	X			INTA selection for COM port function
CN11	X			INTB selection for COM port function
JP1	X			COM2 RS-232/422/485 Selection
JP2	X			
JP4	X			
JP3	X			
CN12	X			COM2 Ring/+5V Selection
CN13	X			INTA selection for USB port function
CN14	X			INTB selection for USB port function
	X			INTC selection for USB port function

Remark: COM1 to COM4 only can be used in Windows environment because that external COM chipset (OXFORD OXmPCI954-LQAG) does not provide COM driver in DOS

## 4.2. O.S. Compatibility Test

Installation Operation System Compatibility Test			Result		
			Pass	Fail	N/A
Windows XP Professional English Version V2002 Service Pack 2 (Install OS with PFM-T800 on it)			X		
Utility and Driver Test					
OS	Drivers Version		Result		
			Pass	Fail	N/A
Windows XP Professional English Version V2002 Service Pack 2	4 in 1 Driver	VIA Service Pack 4.55v (VIA 4 in 1)	X		
	Graphics Media	S3 Graphics Twister 6.13.10.1031 12/25/2001	X		
	LAN Driver	Realtek RTL8139/810x Family Fast Ethernet NIC 5.612.413.2004 4/13/2004	X		
	Audio Driver	N/A, it needs Audio daughter board to perform this function	X		
	Power Supply	EMACS SP2-4300F AT Power	X		
	Multifunction adapters-	OX16PCI954 PCI UARTs 6.5.1.5 1/24/2007	X		
		OX16PCI95x PCI bridge 6.5.1.5 1/24/2007	X		
	USB driver	VIA USB Enhanced Host Controller 5.1.2600.0 6/1/2002	X		
VIA Rev 5 or later USB Universal Host Controller 5.1.2600.2180 7/1/2001		X			