

WHQL Certification Approval2					
1.0	1.0 Introduction				
2.0					
	2.1 Features				
\triangleright	2.2 Universal Parallel PCI Card				
\triangleright	2.3 Low Profile				
\triangleright	2.4 System Requirement				
\triangleright	2.5 Package List				
\triangleright	2.6 Pin Assignments				
3.0	Operation Environment5				
4.0	Driver Install/Uninstall				
	4.1 Windows XP6				
\triangleright	4.2 Windows 20009				
\triangleright	4.3 Windows 95/98SE/ME14				
\triangleright	4.4 Windows NT4.017				
\triangleright	4.5 DOS				
\triangleright	4.6 Windows 3.123				
\triangleright	4.7 Linux27				

5.0 Configure LPT port

	ouble shooting	
\triangleright	5.4 How to configure LPT port (Windows3.1)	
\triangleright	5.3 How to configure your I/O Card (NT4.0)	
\triangleright	5.2 Remap the Parallel Port I/O address	
\triangleright	5.1 How to connect your peripheral LPT device	27
	· ·	

WHQL Certification Approval



The Designed for Microsoft Windows XP logo identifies products that meet Microsoft's quality standards, our I/O products carry with this logo and listed on Windows Catalog.

C€F©

1.0 Introduction

Thank you for purchasing of the **PCI Parallel Card**. This unique PCI I/O card allows you to attach your computer to support DB-25 F Parallel port, and get faster devices results.

The PCI I/O Card function of PCI Bus is for Plug and Play. Users do not need a jumper to set I/O address and IRQ location, and the system will search the device automatically. There is no conflict with other interface card or devices.

◆ 2.0 Specification

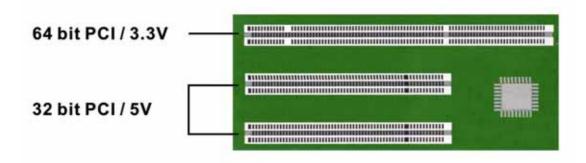
> 2.1 Features:

- 1. Improves I/O access speed up to 8 times faster than existing ISA-bus serial ports. Reduces CPU load and improves system performance dramatically.
- 2. IRQ sharing feature eliminates IRQ conflicts
- 3. One or two high-speed parallel ports support all types of parallel port devices including a removable cartridge drives, CD-R/ RW, printers, scanners, tape drives and other parallel port devices.
- 4. Works with various type of parallel devices

> 2.2 Universal Parallel PCI Card:

1. Bus type: Supports both 64-bit & 32-bit PCI Bus

3.3V & 5V connector keys



3. Interface: Support ECP(Enhance Capacity Port) / EPP(Enhance Parallerl Port) SPP(Stander Parallerl Port) / BPP(Bi-direction Parallerl Port) Conforms to IEEE 1284-1994 parallel port standard

4. Speed: Up to 770 KB/Sec SPP/BPP

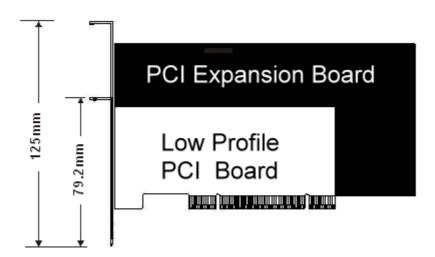
Up to 21.4 MB/Sec ECP/EPP/SPP/BPP (PS-)

Full support for DOS and Windows based software

- 5. Port type: One or Two DB25F parallel ports.
- 6. FIFO Length: Built-in high-speed with 32-byte transmit/receive hardware FIFO buffers.
- 7. I/O Address: Plug and Play or RE-Map to ISA address 278, 378.
- 8. IRQ sharing feature eliminates IRQ conflicts.

> 2.3 Low Profile:

Low Profile PCI cards are so small that they easily fit into almost any system.



> 2.4 System Requirements

- 1. Pentium or equivalent computer with an available PCI slot.
- 2. CD-ROM / DVD-ROM required for software installation.
- 3. Windows 3.1x/ 95/98SE/ME/NT4.0/2000/XP, DOS, Linux.

> 2.5 Package list :

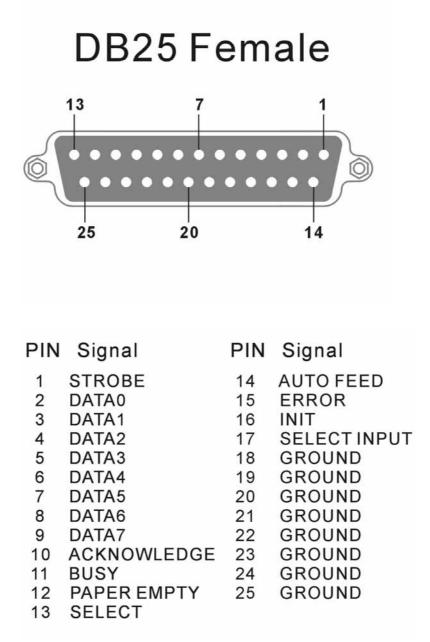
1. Hardware:

PCI Parallel IO Card × 1

Print Cable 25PIN Female cable (only for 2 ports card)

44Pin -(25Pin female) cable × 1 (only for Low Profile card)

- 2. CD Driver
- 3. User's Manual



• 3.0 Operation Environment

- 1. Operation temperature: $0 \sim 57$
- 2. Operation humidity: 5 to 95% RH
- 3. Storage temperature:-20 ~ 85

➤ 4.1 Driver Installation Guide (Windows XP)

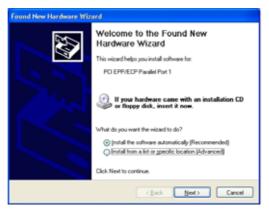
Follow the steps below on installing the PCI Parallel Printer Card for the first time:

- 1. Open your computer case and plug the PCI Parallel Printer Card into your PCI slot.
- 2. Power on your computer and screen will show the PCI device listing display in a very short time (The data is reference resources).

Bus No	Device No	Func No	Vendor ID	Device ID	Device Class	IRQ
0	7	1	8086	7010	IDE Controller	14
0	13	0	1409	7268	Simple COMM.	10
					Controller	

3. When PCI Parallel Printer Card working normally, the system will detect the PCI Parallel controller automatically and run the Add New Hardware Wizard to assist you in setting up the new device.

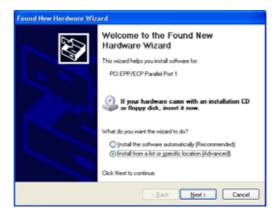
Please insert the CD Driver into the CD/DVD-ROM, and select "**Install the software automatically**", then click "**Next**" to continue install driver.



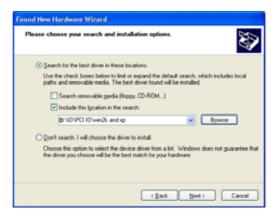
4.The system will search the driver automatically. Please choose the CD driver location: D:\IO\PCI\Win2k and xp, and click "**Next**"



*If the system can't find the suitable driver, please click "**Back**" and follow the step: Please select "**Install from a list or specific location**", and click "**Next**"



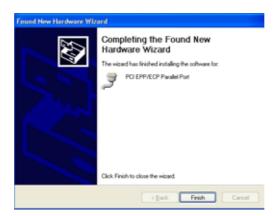
Please select "**Specify a location**" and click **Browse**. Change the folder of your CD-ROM drive **D:\IO\PCI IO\Win2k and xp**. Please click "**Next**" to continue installation.



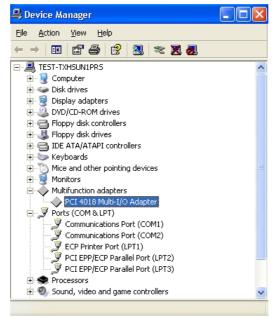
5. When this picture show up, please select "**Continue Anyway**". The system will copy the needed files automatically.



6.Please click "Finish" to finish installing the software.

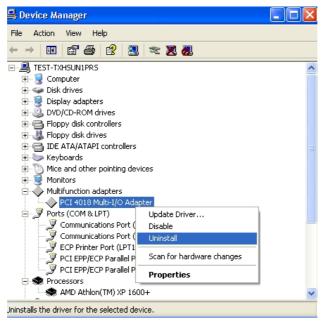


- Note: If you install PCI parallel ports to your system, you will be requested to restart your computer when you finish setting up each parallel port. Click 【Yes】 if all parallel ports have been installed, others click 【No】. For example, if you install two parallel ports in your system, click 【No】 for the first System Setting Change and click 【Yes】 for the last System Setting Change.
- 7. When Windows finished installing the software. You have to check the Control Panel-System-Hardware-Device Manager-Ports[COM&LPT] will show the additional ports.



> Driver Uninstall Guide (Windows XP)

- Please shot down your computer, and remove PCI I/O Card from PCI slot. The system will uninstall the device automatically after rebooting the computer, or follow the step to uninstall:
- 2. Please check the Control Panel-System-Hardware-Device Manager-Multifunction adapters-**PCI Multi-I/O Adapter**, and right check the mouse select "**Uninstall**".



3.Please click "OK" to uninstall the device.



➢ 4.2 Driver Installation Guide (Windows 2000)

Follow the steps below on installing the PCI Parallel Printer Card for the first time:

- 1. Open your computer case and plug the PCI Parallel Printer Card into your PCI slot.
- 2. Power on your computer and screen will show the PCI device listing display in a very short time (The data is reference resources).

Bus No	Device No	Func No	Vendor ID	Device ID	Device Class	IRQ
0	7	1	8086	7010	IDE Controller	14
0	13	0	1409	7268	Simple COMM.	10
					Controller	

3. When PCI Parallel Printer Card working normally, the system will detect the

PCI Parallel controller automatically and run the **Add New Hardware Wizard** to assist you in setting up the new device. Click "**Next**" to continue.



4.Please insert the CD Driver into the CD/DVD-ROM, and select "Search for a suitable driver for my devices", then click "Next" to continue install driver.



5. Please select "specific location", and click "Next".



6. Click "**Browser**" to install driver from CD-ROM "**D**:**IO****PCI IO****Win2k and xp**".

Please click "Next" to continue installation.



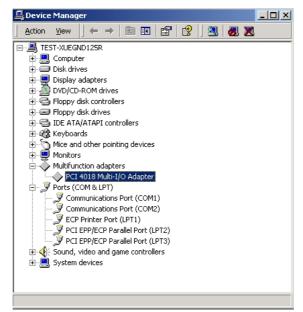
 Windows will detect the driver (snxpci.inf) and shows the device: PCI Multi IO Adapter. Click "Next" to copy the needed files to your computer.



8. e Please click "Finish" to finish installing the software.

ound New Hardware Wizard	
	Completing the Found New Hardware Wizard
	Windows has finished installing the software for this device.
	To close this wizard, click Finish.
	c Back. Finish Center

- Note: If you install PCI parallel ports to your system, you will be requested to restart your computer when you finish setting up each parallel port. Click 【Yes】 if all parallel ports have been installed, others click 【No】. For example, if you install two parallel ports in your system, click 【No】 for the first System Setting Change and click 【Yes】 for the last System Setting Change.
- 9. When Windows finished installing the software. You have to check the Control Panel-System-Hardware-Device Manager-Ports[COM&LPT] will show the additional ports.



> Driver Uninstall Guide (Windows 2000)

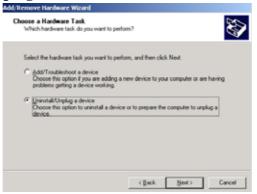
- Please shot down your computer, and remove PCI I/O Card from PCI slot. The system will uninstall the device automatically after rebooting the computer, or follow the step to uninstall:
- 2. Click the "Hardware Wizard" in "Hardware" of System Properties.



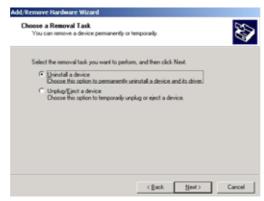
3.Please "Next" to continue.



4. Select "Uninstall/Unplug a device" and click "Next".



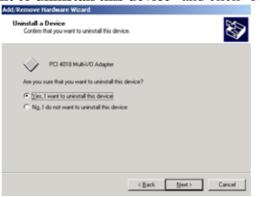
5. Select "Uninstall a device and click "Next".



6. Select the "PCI Multi I/O Adapter" and click "Next".

Select the device you want to un	install.	
Devices		-
AMD-768 Power Manageme	nt Controller	
PCI standard PCI to PCI brid		
NVidia Riva TNT2 Model 64		
PCI 4010 Multi-I/O Adapter		
Primary IDE Channel		
Secondary IDE Channel		
E. Logical Dick Manager		-

7. Select the "Yes, I want to uninstall this device" and click "Next"



8.Please click "Finish" to complete the Add/Remove Hardware wizard.

dd/Remove Hardware Wiza	rd
	Completing the Add/Remove Hardware Wizard You have successfully completed the Add/Remove Hardware wizard.
	Windows successfully uninstalled the selected device.
	To close this wizard, click Finish.
	cgeck Finish Cancel

> 4.3 Driver Installation Guide (Windows 95/98SE/ME)

Follow the steps below on installing the PCI Parallel Printer Card for the first time:

- 1. Open your computer case and plug the PCI Parallel Printer Card into your PCI slot.
- 2. Power on your computer and screen will show the PCI device listing display in a very short time (The data is reference resources).

Bus No	Device No	Func No	Vendor ID	Device ID	Device Class	IRQ
0	7	1	8086	7010	IDE Controller	14
0	13	0	1409	7268	Simple COMM.	10
					Controller	

3. When PCI Parallel Printer Card working normally, the system will detect the

PCI Parallel controller automatically and run the **Add New Hardware Wizard** to assist you in setting up the new device. Click "**Next**" to continue.

Add New Hardware Wiz-	ard
	This wicard searches for new drivers for: PCI Parallel Controller A device driver is a software program that makes a hardware device work.
	Cancel

4.Please insert the CD-Driver into your CD/DVD-ROM.

Please select "Search for the best driver for your device" and click "Next".



Windows ME will search the drive automatically. Please select the driver: "Multi IO Controller" "E:\IO\PCI IO\Win9x\SPCIMIO.INF and click "**OK**" (Please skip to the step7)

Select Other Driver						
	Windows has found more I matches your language an	han one driver that may work for your hardware. Pleas d device.	e select the driver that			
	Driver Description	Location	Driver Date			
	Multi IO Controller	D:\IO\PCIIO~7\WIN9X\SPCIMIO.INF	7-15-2001			
	Multi IO Controller	D:\R\$422~19\PCI\WIN9X\\$PCIMIO.INF	7-15-2001			
		0	K Cancel			

5. Please select "**Specify a location**" and click **Browse**. Change the folder of your CD-ROM drive **D:\IO\PCI IO\Win9x**. Please click "**Next**" to continue installation.

Add New Hardware Wiz	sard
	Windows will search for new drives in its driver database on your hard drive, and in any of the following selected locations. Dick Newt to start the search. Dppy drik drives Dp ADM drive Microsoft Windows Update Specify a jocation: D-VO/PC/Winftx Upgever.
	<pre>Cancel</pre>

6. Windows will detect the driver (SPCIMIO.INF) and shows the device:

Multi IO Controller. Click "Next" to copy the needed files to your hard disk .

dd New Hardware Wi	windows driver file search for the device: Multi ID Controller
	Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
	E-VOVPCIO-7/WINBOSPCIMO.INF
	<back next=""> Cancel</back>

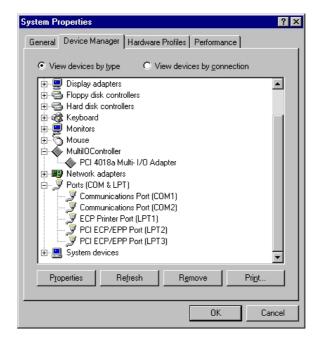
7. The system will show that **Multi IO Controller** software had been installed successfully, and please click "**Finish**".



Note: If you install PCI parallel ports to your system, you will be requested to restart your computer when you finish setting up each parallel port. Click 【Yes】 if all parallel ports have been installed, others click 【No】. For example, if you install two parallel ports in your system, click 【No】 for the first System Setting Change and click 【Yes】 for the last System Setting Change.

System 9	Settings Change 🛛 🕅
?	To finish setting up your new hardware, you must restart your computer.
	Do you want to restart your computer now?
	<u>Yes</u> <u>N</u> o

7. When Windows finished installing the software. You have to check the Control Panel-System-Hardware-Device Manager-Ports[COM&LPT] will show the additional ports.



- > Driver Uninstall Guide (Windows 95/98SE/ME)
- 1. Double click Add/Remove Programs in Control Panel.



2. Choose "PCI Multi-I/O Card", and click "Add/Remove", and click "OK"

Add/Remo	ive Programs Properties				
Instal/Un	Instal/Uninstall Windows Setup Startup Disk				
2	To install a new program from a floppy disk or CD-RIDM drive, click Install.				
	jnstal				
1	The following software can be automatically removed by Windows. To remove a program or to modify its installed components, select it from the list and click Add/Remove.				
AMD IF AMD P PCI Au	us Master IDE Driver 19 Driver v1 20C M INF Installation do Driver 2600 Entd				
	Add@smove				
	OK Cancel Acoly				

3.Click "Yes" to remove Multi-I/O Card driver

Confirm	×
?	Are you sure to remove Multi I/O Card drivers ?
	Yes No

4. Click "Yes" to restart the computer.

Confirm	×
?	Driver has been removed, restart windows now ?
	<u>Y</u> es <u>N</u> o

- ➢ 4.4 Driver installation Guide (NT4.0)
- 1. Run the **setup.exe** program in CD Driver (D:IO\PCI IO\WinNT)

💐 Exploring - Win_NT					
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>T</u> ools <u>H</u> elp					
All Folders	Contents of 'Win_NT	Contents of 'Win_NT'			
🚵 Desktop 🔺	Name	Size	Туре	Modified	
🖶 🚚 My Computer	🙀 Setup.exe	481KB	Application	01/01/2000 8:00 AM	
	📓 Setup.ini	1KB	Configuration Setti	01/01/2000 8:00 AM	
	SNPCICTL.cpl	584KB	Control Panel exte	01/01/2000 8:00 AM	
hpw5	🗑 SNUnInst.exe	395KB	Application	01/01/2000 8:00 AM	
	🔊 snxpar.sys	22KB	System file	01/01/2000 8:00 AM	
	SNXSER.sys	76KB	System file	01/01/2000 8:00 AM	
1 object(s) selected 481KB				11	

2. Press "Continue" to install the driver.

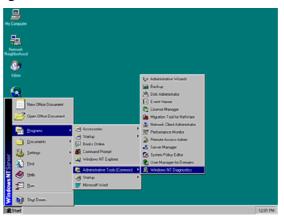
🚰 Multi-I/O Card Setup	
	Welcome to the setup program, the following procedure will copy all necessary file to your system, it will also update your registry entry.
	Press "Continue" to install the driver, "Cancel" to abort.
	Continue

3. Click "**OK**" to reboot computer to load the new installed driver to NT.

🚰 Multi-I/O Card Setup	
Hulti-1/O Card Setup	Setup Complete You need to reboot your system so that the change will take effect.
è	♂ Yes, I want to restart my computer now ○ No, I will restart my computer later.
	OK

4. Check Your Windows NT 4.0 Installation

Click 【Start】 【Programs】 【Administrative Tools [Common] 】 【Windows NT Diagnostics 】



Press Resources then press I/O port.You can find the I/O address of one parallel port (SNXPAR) and two serial ports (SNXSER). You can find the IRQ information by press "IRQ". You can find the IRQ information by press "IRQ".

٨	Vindows NT Di	agnostics	- \\SUNIX-NT		_ 🗆 ×
<u>F</u> ile	<u>H</u> elp				
	Version Services	System	Display Resources	1	Memory rironment
	Address	Device			Type
	0064 - 0064	i8042prt			sa
	0170 - 0177	atapi Mar Caura			lsa Pci
	01CE - 01CF 01F0 - 01F7	VgaSave atapi		-	rci Isa
	02F8 - 02FE	atapi Serial		-	sa
	0376 - 0376	atapi		-	sa
	03B0 - 03BB	VgaSave			Pci
	03BC - 03BE	Parport			sa
	03C0 - 03DF	VgaSave		-	Pci
	03F0 - 03F5	Floppy		0	sa
	03F6 - 03F6	atapi		0	sa
	03F7 - 03F7	Floppy		0	sa
	03F8 - 03FE	Serial		0	sa
	9600 - B807	SNXPAR			Pci
(D000 - D007	SNXSER			Pci
	D008 - D00F	SNXSER		0	Pci 🔽
	IRQ	1/0 Port	<u>D</u> MA	<u>M</u> emory	De <u>v</u> ices
	E	roperties	<u>R</u> efresh	Pri <u>n</u> t	ОК

> Windows NT 4.0 Uninstall Guide

1. Double click Add/Remove Programs in Control Panel.



2. Select Multi-I/O Card Uninstall, press "Add/Remove".

Add/Remo	ve Programs Properties	? ×		
Install/Uni	nstall Windows NT Setup			
Ð	To install a new program from a floppy disk or CD-R drive, click Install.	ом		
	Install			
3	The following software can be automatically remove Windows. To remove a program or to modify its inst components, select it from the list and click Add/Remove.			
IomegaWare for Windows NT Microsoft Office 97, Professional Edition				
Multi-I/O Card Uninstall Ulead PhotoImpact 3.01 SE Special Edition				
	Add/ <u>R</u> emov	e		
	OK Cancel A	,pply		

3. Press "OK" to remove Multi-I/O Card driver.

🗑 Mulit-1/0 Card Uninst	all 🗵
Do you want to remove I	Multi-I/O Card drivers?
ОК	Cancel

4. Click "**OK**" to reboot the computer.

📷 Mulit-170 Card Uninsta	ll	×
You must reboot the comp unnecessary Files.	outer to remove all	
OK	Cancel	

➢ 4.5 Driver installation Guide (DOS)

This installation guide describes the procedures to install the PCI parallel ports in MS-DOS environment.

Normally serial and parallel I/O ports can be supported by BIOS call services in DOS environment. However there are only support 4 serial ports (3F8h,2F8h,3E8h,2E8h) and 3 parallel ports (3BCh/378h/278h) are supported by BIOS/DOS.

In case the PCI parallel ports are different from the above configurations (e.g. I/O address or more than 4 serial ports / 3 parallel ports), they are not supported by BIOS/DOS directly. However some applications (e.g. "PComm Plus" could support 8 serial ports and each I/O address is settable) have their own driver, thus the PCI cards could work correctly.

[DOS platform]

• Microsoft DOS : V5.0/V6.0/ V6.22

[Installation Steps]

(1) Run Install.exe (from CD Drive disk : \PCI IO\DOS\INSTALL.exe)

Please enter the directory path for installation C:\PCI_DOS (return for default)

(2) Enter the destination subdirectory

You could enter your preferred destination subdirectory for installation, RETURN for default path. Once the dos driver has been installed successfully, the response looks like below.

succeed ... Press Any Key

Note:

- 1. The installation program will add the dos driver (one command line) "C:\ \SunixPCI.exe AUTO" to autoexec.bat file. The original batch file will be saved to autoexec.SNX.
- 2. For uninstallation, just restore autoexec.snx into autoexec.bat.

(3) Start the dos driver automatically

Once the installation is completed, Install.exe will start the dos driver (SunixPCI.exe) automatically. This means that it is not necessary to restart the system once again.

On-Board/ISA Serial COM1	3f8H	
On-Board/ISA Serial COM2	2f8H	
PCI Serial COM3 Remap	3e8H,IRQ 11	
PCI Serial COM4 Remap	2e8H,IRQ 11	
On-Board/ISA Parallel LPT1	3bcH	
DCT Darallal I.DT? Reman	378¤ TPA 11	

Note : This display is dependent on which PCI card you have.

(4) Check / inquire the PCI card information

You could run SunixPCI.exe any time to inquire the PCI parallel port's I/O address & IRQ information.

ISA PCI	Setup	Card	About
On-Board/ISA	Serial COM1	3f8H	
On-Board/ISA	Serial COM2	2£8H	
PCI Serial CO	OM3 Remap	3e8H,IRQ	11
PCI Serial CO	OM4 Remap	2e8H,IRQ	11
On-Board/ISA	Parallel LPT1	ЗЬСН	
PCI Parallel	LPT2 Remap	378H,IRQ	11
PCI Parallel	LPT3 Remap	278H,IRQ	10
FSC: Fyit			

ESC: Exit

ISA : Detect on-board/ISA legacy serial /parallel ports.

PCI : Find PCI serial /parallels ports.

Setup: Remap PCI serial port to legacy port / display port resources.

Card : Display PCI card model.

About : Version Information.

NOTE :

 All the PCI parallel ports are possible to be remapped to legacy I/O address (378h,278h), thus the DOS driver will start remapping function automatically if any one of legacy ports is free. 2. Since some PCI Serial ports can support the remapping function (e.g. /4027D/4037D/4056D/4079D). Thus please check it by PCIDOS.exe

Item		BIOS/DOS setting	Remark
1	921600		Do not support
2	460800		Do not support
3	230400		Do not support
4	115200	115200	
5	57600	57600	
6	38400	38400	
7	19200	19200	
8	9600	9600	
9	4800	4800	
10	2400	2400	
11	1200	1200	
12	300	300	

Clock= 1.8432 Mhz for remapable port in DOS

3. Since the PCI serial card are drived by a higher CLK (14.7456 Mhz), thus the actual baud rate is 8 times higher than the BIOS/DOS baud rate setting. The below table shows the relation.

Clock=14.7456 Mhz for all non-remapable port

Clock-14.7450 Will for an non-remapable port				
Item	Actual Baud rate	BIOS/DOS setting	Remark	
1	921600	115200		
2	460800	57600		
3	230400	28800	Non BIOS standard	
4	115200	14400	Non BIOS standard	
5	57600	7200	Non BIOS standard	
6	38400	4800		
7	19200	2400		
8	9600	1200		
9	4800	600	Non BIOS standard	
10	2400	300		
11	1200	150		
12	300	37.5	Non BIOS standard	

➢ 4.6 Driver installation Guide (Windows3.1)

This installation guide describes the procedures to install the PCI parallel ports in MS WINDOWS 3.1 environment.

Normally serial and parallel I/O ports can be supported by WINDOWS 3.1 default device driver. However there are only 4 serial ports (3F8h,2F8h, 3E8h,2E8h) and 3 parallel ports (3BCh/378h/278h) are supported by default.

Most likely the PCI serial ports are different from the above configuration (eg. I/O address or IRQ), these ports setting need to changed / modified in WINDOWS 3.1 manually. However it is necessary to inquire these PCI serial and parallel ports's resources in advance.

[OS platform]

Microsoft WINDOWS : V3.1/V3.11

[Installation Steps]

Run PCIDOS.exe (from CD Drive disk : \PCI IO\DOS\ PCIDOS.exe)

On-Board/ISA Serial COM1	3£8H	
On-Board/ISA Serial COM2	2£8H	
PCI Serial COM3	b800H,IRQ	10
PCI Serial COM4	b808H,IRQ	10
On-Board/ISA Parallel LPT1	ЗЬсн	

Start the WINDOWS 3.1



Change the port setting in Control Panel

📼 Control Panel 💌
Settings Help
Color Fonts Ponts Mouse Desktop Keyboard
Printers International Date/Time 386 Enhanced Drivers Sound
Printers International Date/Time 386 Enhanced Drivers Sound
Specifies communications settings for serial ports
- Ports
Cancel
COM <u>1</u> : COM <u>2</u> : <u>Settings</u>
<u> </u>
COM <u>3</u> : COM <u>4</u> :
Settings for COM3:
<u>B</u> aud Rate: 19200 ± OK
Parity: None ± Advanced
Stop Bits: 1 👱
<u>Flow</u> Control: Hardware <u>+</u> <u>H</u> elp
Advanced Settings for COM3:

	Advance	d Settings	for COM	3:
<u>B</u> ase 1/0 F	ort Address:	b800	±	OK
<u>I</u> nterrupt R	equest Line (I	RQ):		Cancel
		10	±	Help

Restart the system



Check the new setting

After system restart, the I/O port setting maybe become DEFAULT.

Advanced Settings for CON	13:
<u>B</u> ase I/O Port Address: Default 👤	OK
Interrupt Request Line (IRQ):	Cancel
10 💻	<u>H</u> elp

At this time, it is possible to check the PCI serial port setting in \windows\system.ini file.

[386Enh]
COM3Base=B800
COM4Base=B808
COM3Irq=10
COM4Irq=10

NOTE :

1. Since some PCI serial ports can support the remapping function

(4025D/4027D/4028D/4036D/4037D/4038D/4079D/E/F), thus please check the PCI card by SunixPCI.exe utility.

Clock= 1.8432 Mhz	for remapable port
-------------------	--------------------

Item	Actual Baudrate	BIOS/DOS setting	Remark
1	<mark>921600</mark>		Do not support
2	<mark>460800</mark>		Do not support
3	<mark>230400</mark>		Do not support
4	115200	115200	
5	57600	57600	
6	38400	38400	
7	19200	19200	
8	9600	9600	
9	4800	4800	
10	2400	2400	
11	1200	1200	
12	300	300	

2. Since PCI serial card are drived by a higher CLK (14.7456 Mhz), thus the actual baud rate is 8 times higher than the BIOS/DOS baud rate setting. The below table shows the relation.

Item	Actual Baud rate	BIOS/DOS setting	Remark
1	<mark>921600</mark>	115200	
2	<mark>460800</mark>	57600	
3	<mark>230400</mark>	28800	Non BIOS standard
4	115200	<mark>14400</mark>	Non BIOS standard
5	57600	7200	Non BIOS standard
6	38400	4800	
7	19200	2400	
8	9600	1200	
9	4800	<mark>600</mark>	Non BIOS standard
10	2400	300	
11	1200	150	
12	300	<mark>37.5</mark>	Non BIOS standard

Clock= 14.7456 Mhz for all non-remapable port

✤ 4.7 Driver installation Guide (Linux)

Please read the detail files about the Linux OS system installation step from CD ROM: \ IO\ PCI IO\Linux\Red Hat V8.0.pdf CD ROM: \ IO\ PCI IO\Linux\Red Hat V6.0.pdf

◆ 5.0 Configure LPT port

> 5.1 How to connect your peripheral LPT device

- 1. Be sure your printer or other parallel peripheral had connected to PCI Multi I/O Parallel card.
- 2. Double click my computer icon, Double click "Printers" icon.



3. Double click Add Printer icon and click "Next".



4. Pleas ckick "Next" when Add Printer Wizard show up.

Add Printer Wizard	
	This wicard will help you to install your printer quickly and easily. To begin installing your printer, click Next.
	< Back Next > Cancel

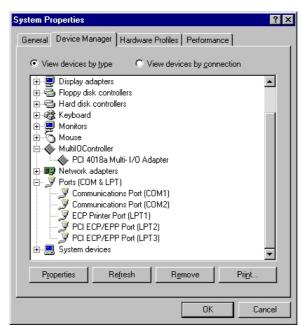
5. Please install your printer driver. If you want to connect the printer to your PCI Multi I/O Parallel Card, select PCI ECP/EPP Port to your device. Please click "**Next**", and finish the add new printer step.

Add Printer Witzard	Click the port you want to use with this printer, and then click Next. Available ports: COM1: Communications Port COM2: Communications Port PLLE: Communications Port PLLE: Consetus all on otals PPT: ECP Private Port ESPR: CREATERSTATE LPT: PCI ECP/EPP Port
***	Configure Port
	(gack Next) Cancel

Note: If you want to connect the scanner or the zip disk to PCI multi I/O Card, you need to remap the Parallel Port I/O address to 0x378 or 0x278.

> 5.2Remap the Parallel Port I/O address

1.Double click **"Multi IO Controller"** in Device Manager of System Properties. Select **PCI Multi-I/O Adapter**, and right click the mouse choose **"Properties"**.



2. Please choose the "**Configure**" page. If you want to remap I/O address, select Remap to legacy 0x378 and/or 0x278 I/O ports. Click "**OK**", then it will be set after reboot computer

PCI 4018	a Multi- 170) Adap	ter Prop	erties	? ×
General	Configure	Driver	Resour	ces	
- Pa	rallel port ren				
	_				
	Remap to				
	Remap to	legacy (0x2781/C	port	
				OK	Cancel
			[0K	Cancel

- 3. After reboot computer, you can check Parallel Port I/O address from System Properties.
- Note: If you don't want to remap Parallel Port I/O address to 0x378 or 0x278, unselect Remap to legacy 0x378 and/or 0x278 I/O port. Click "OK", then it will be set after reboot computer.

➢ 5.3 How to configure LPT port (NT4.0)

1. Double click Multi-I/O Card Configuration icon.



Click PCI Parallel Ports to configure the I/O address of parallel port. Select Remap to legacy 0x378 and/or 0x278 I/O Ports, if you want to remap I/O

address to 0x378 and/or 0x278.

Click "Ok"

🚟 Multi-1/O Configuration Utility 🛛 🛛 🔀			
PCI/ISA Serial Ports PCI Parallel Ports ISA Multi-I/O Setup About			
 Remap to legacy 0x278 1/0 ports Remap to legacy 0x378 1/0 ports (When remap, the M/B LPT will be the last) 			
Ok Cancel			

It will be set after reboot computer.

Note:

The on board parallel port is always LPT1 if the remap function is disabled. When the parallel port is remap to 0x378 or 0x278, the on board parallel port will become the last LPT port.

When you connect the scanner to the remap parallel port, you must turn on the scanner before the computer.

➤ 5.4 How to configure LPT port (Windows 3.1))

Since WINDOWS 3.1 only support 3 parallel port (3BCh, 378h,278h) by default device driver. Thus the PCI parallel ports can be recognized in WINDOWS 3.1 if the DOS driver is activated in advance.

[Installation Steps]

Check the PCI parallel port resources in DOS

Run PCIDOS.exe (from CD Drive disk : \PCI IO\DOS\ PCIDOS.exe)

On-Board/ISA Serial COM1	3f8H
On-Board/ISA Serial COM2	2f8H
PCI Serial COM3	b800H,IRQ 10
PCI Serial COM4	b808H,IRQ 10
On-Board/ISA Parallel LPT1	ЗЪсн

Install the Printer in Control Panel

-		Contro	ol Panel		•
<u>S</u> ettings	<u>H</u> elp				
Color	Fonts	Ports	Mouse	Val Desktop	Keyboard
Printers	() International	Date/Time	386 Enhanced	Drivers	Sound Sound
Installs an	id removes p	printers, and	d sets printing	options	

- Printers	
☐ Default Printer HP LaserJet 5P/5MP (HP) on LPT1:	Close
Installed <u>Printers:</u> HP LaserJet 5P/5MP (HP) on LPT1:	<u>Setup</u> <u>Remove</u> <u>A</u> dd >> <u>H</u> elp

Select Parallel Port for Printer Connection

😑 Connect	
HP LaserJet 5P/5MP (HP)	OK
Ports:	Cancel
LPT2: Local Port	Settings
LPT3: Local Port COM1: Local Port Not Present COM2: Local Port +	Network
Timeouts (seconds) <u>D</u> evice Not Selected: 15	<u>H</u> elp
Transmission Retry: 45	
East Printing Direct to Port	

NOTE :

All PCI parallel ports are possible to be remapped to legacy I/O address (378h,278h), thus the DOS driver will start remapping function automatically if any one of the legacy ports is free.

For the better compatibility, it is recommended that on-board LPT1 is set to 3BCh.

- 1. When Display Vendor ID, Device Id, Device Class or IRQ aren't DISPLAY or ERROR value.
- Ans: Because motherboard ignore the screen or show that immediately, you can press "Pause" key on the keyboard to see the message when PCI device listing display. If the Device Class or IRQ value error, please change other slot, clean your slot, or clean PCI card golden finger.

The problem still can't be solve, and please return PCI I/O card to manufacture.