USER'S MANUAL

Universal PCI Remap Parallel Communication Board

English Version

Second Edition, March 2014

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Universal PCI Remap Parallel Communication Board User's Manual

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Safety Information

1. Keep this User's Manual for future reference.
2. Always read the safety information carefully.
3. Keep this equipment away from direct sunlight, or in humid or damp places.
4. Do not place this equipment in an unstable position, or on vibrating surface before setting it up.
5. Do not use or place this equipment near magnetic fields, televisions, or radios to avoid electronic interface that affects device performance.

Regulatory Compliance

FCC Conditions

This equipment has been tested and found to comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This equipment may not cause harmful interference
(2) This equipment must accept any interference received, including interference that may cause undesired operation.

Important! Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment. Use an approved phone set.

CE

This equipment is in compliance with the requirements of the following regulations: EN 55022:

CLASS B

WEEE Information

For EU (European Union) member users: According to the WEEE (Waste electrical and electronic equipment) Directive, do not dispose of this product as household waste or commercial waste. Waste electrical and electronic equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.

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WHQL Certification Approval

The Designed for Microsoft Windows 32/64-bit operation system WHQL logo identifies products that meet Microsoft's quality standards, SUNIX I/O products carry with this logo and listed on Windows Catalog. WHQL logo includes below operation system version

Microsoft Windows Client: XP / Vista / 7 / 8 / 8.1 (X86/X64)
Microsoft Windows Server: Windows 2003 / 2008 / 2012 (X64)

1.
Introduction

SUNIX Golden I/O series, a line of Universal PCI Remap Parallel Communication Board, is designed for both 3.3 / 5V and 32 / 64-bit PCI Bus with Plug and Play feature. Its can be installed in virtually any available PC system and compatible with all major operating systems..

This board supports independent parallel LPT port for connecting printers, IC programmers, ZIP Drives, software key locker or other Parallel devices

The following topics covered in this chapter:

- **1.1 Overview**
- **1.2 Package Checklist**
- **1.3 Product Features**
- **1.4 Product Specifications**

1.1 Overview

Thanks for purchasing SUNIX Universal PCI Parallel Communication Board. SUNIX PAR5008R card enables users to expand one additional real ECP/EPP/SPP/BPP communication LPT port on their PC-based system for connecting their parallel devices. Furthermore, this board can be installed as a fully featured I/O mapped parallel port as 278, 378, and 3BC legacy ISA address under Microsoft Windows and DOS operation systems.

User can connect software protection dongles, JTAG chip programmers, data acquisition, machine process control, scientific measurement systems, and other parallel devices as well as computer's native parallel port. SUNIX PAR5008R Remap card is designed with SUNIX high performance and realizable parallel connectivity controller, UL7502AQ and as well built with many of SUNIX advanced features and technologies, making it the advanced and high efficient solution for commercial and industrial automation applications.

1.2 Package Checklist

Please check if the following items are present and in good condition upon opening your package. Contact your vendor if any item is damaged or missing.

1. Hardware:
   Universal PCI Remap Parallel Communication Board × 1
2. CD Driver
3. User's Manual (This document)

1.3 Product Features

- High reliability SUNIX UL7502AQ Parallel controller on-board.
- Expand single IEEE1284 compatible DB-25 type Parallel port on system.
- Universal PCI compatible with 64/32-bit PCI-X/PCI Bus.
- Compliance with PCI 33MHz Version 3.0/2.3/2.2/2.1 specification.
- Support IEEE 1284-1994 parallel port standard.

  ECP (Enhance Capacity Port) / EPP (Enhance Parallel Port)

  SPP (Standard Parallel Port) / BPP (Bi-direction Parallel Port)
- User define ECP/EPP/SPP/BPP modes configuration.
- Support legacy ISA address (278, 378, 3BC) or PCI Plug-n-Play modes.
- Install as a fully featured I/O mapped as computer's native parallel LPT port.
- Certified by CE, FCC, RoHS, and Microsoft WHQL approval.
- Support Microsoft Windows, Linux, and DOS operation system.

1.4 Product Specifications

Parallel Communication

Interface	IEEE-1284
Mode	SPP/ECP/EPP/BPP (Auto-switching or User-Defined)
Controller	SUNIX UL7502AQ
BUS	Universal PCI 64/32bit PCI Spec.Ver3.0/2.3/2.2/2.1
IO	378, 278, 3BC or PCI Plug-n-play Assigned by System
IRQ &	Assigned by System
Data Speed	Maximum 1.8 MB/s
FIFO	16 byte Hardware
Number of Port	1-port
Board Connector	DB25 Female
Protection	±2KV ESD protection for each signal Human Body Model (HBM)

Driver Support

Windows Client	98 / XP / Vista / 7 / 8 / 8.1 (X86/X64)
Windows Server	2000 / 2003 / 2008 / 2012 (X64)
Microsoft Embedded	XP Embedded / POS Ready 2009 / Embedded System 2009
Linux	Linux 2.4.x / 2.6.x
DOS	DOS

Regulatory Approvals

Hardware	EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, FCC Part 15 Class B, RoHS
Software	Microsoft WHQL Windows Microsoft Client: XP / Vista / 7 / 8 / 8.1 (X86/X64) Microsoft Server: 2003 / 2008 / 2012 (X64)

Environment

Operation Temperature	0 to 60˚C (32 to 140˚F)
Operation Humidity	5 to 95% RH
Storage Temperature	-20 to 85˚C (-4 to 185˚F)

2.
Hardware Installation

This chapter includes information about hardware installation and jumper settings for Universal PCI Remap Parallel Communication Board. The following topics are covered:

- **2.1 Hardware Installation**
- **2.2 Jumper Settings**
- **2.3 Pin Assignments**

2.1 Hardware Installation

The hardware installation of PCI parallel board is easy to carry out. Before inserting the card into the PCI bus, please follow the detailed steps given below to install the PCI parallel board in your computer.

Safety First

To avoid damaging your system and boards, make sure your PC's power is turned off before installing PCI card.

Step 1: Turn your PC's power off, and shut off the power to any peripheral.

Step 2: Remove the power plug from the plug socket.

Step 3: Remove the cover from the computer case.

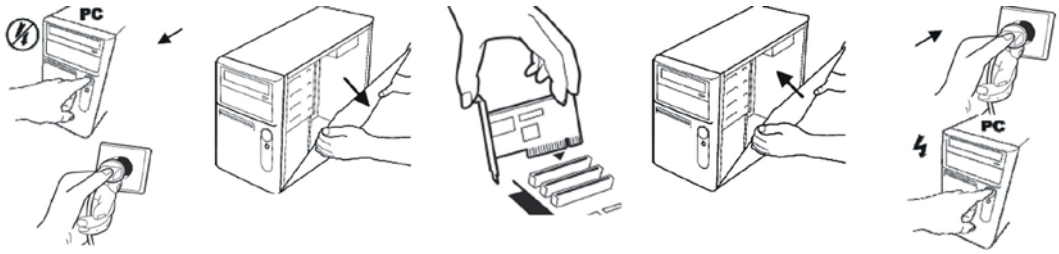
Step 4: If fitted. Remove the metal cover plate on the rear of a free PCI slot.

Step 5: Insert Universal PCI Parallel Communication Board into the free PCI slot and screw it firmly on the bracket side.

(Please set on board jumper firstly, and then install this board)

Step 6: Place the cover back onto the computer.

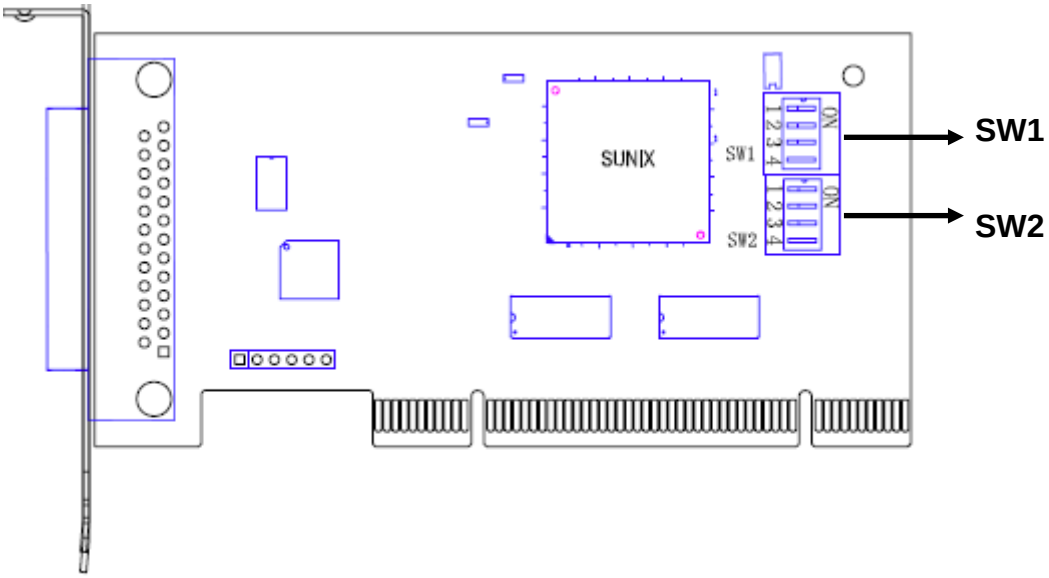
Step 7: Insert the plug into the plug socket.



2.2 Jumper Settings

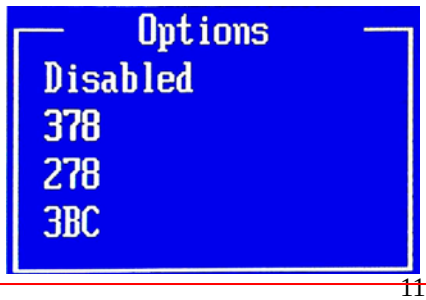
SUNIX PAR5008R can simulate onboard native Parallel port operation mode. User can define I/O address (278, 378, or 3BC) and IEEE1284 operation mode (SPP/ECP/EPP/BPP) by jumper settings. In order to avoid system resource conflicting problem, user must makes sure your main board's BIOS settings firstly.

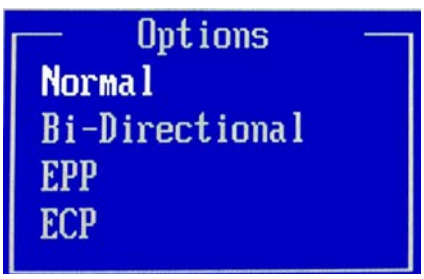
The onboard jumpers (SW1 and SW2) are used to specify the I/O address (278, 378, or 3BC) and IEEE1284 operation mode (SPP/ECP/EPP/BPP) for Parallel port.



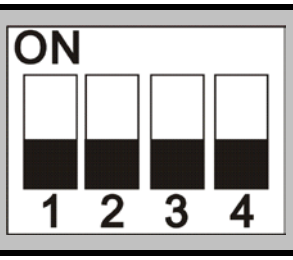
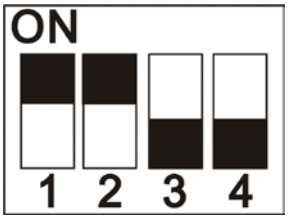
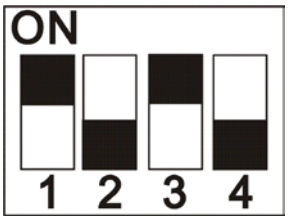
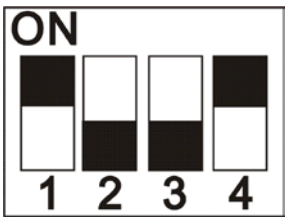
Note:

SUNIX PAR5008R can simulate onboard native Parallel port operation mode. Before you can configure LPT settings under BIOS, now you set it via card's hardware jumper (SW1 & 2). Below pictures are examples of standard mother's BIOS. PAR5008R board will NOT show those settings under BIOS.





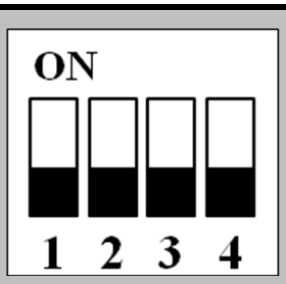
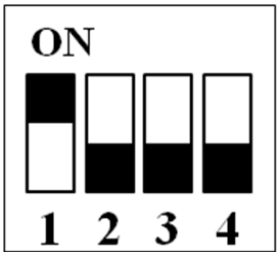
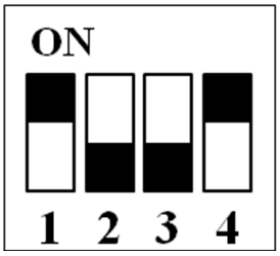
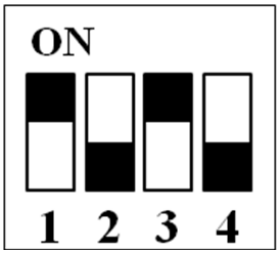
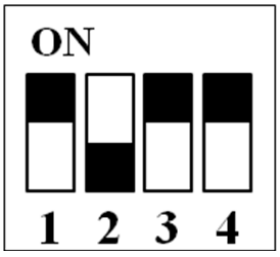
Switch 1 (SW1) is the jumper setting for I/O address configuration. User can select Auto (PCI plug-n-play), 378, 278. or 3BC address. The first pin of switch is defined to enable/disable legacy address feature, and other pins control different address settings. Please refer to the picture for detail.

SW1 Standard (Default)	***Mode 1***	***LPT Address assigned by system automatically***	**1 OFF 2 OFF 3 OFF 4 OFF**	
Legacy ISA Address Settings	***Mode 2***	***LPT Address assigned to 378***	**1 ON 2 ON 3 OFF 4 OFF**	
	Mode 3	***LPT Address assigned to 278***	**1 ON 2 OFF 3 ON 4 OFF**	
	Mode 4	***LPT Address assigned to 3BC***	**1 ON 2 OFF 3 OFF 4 ON**	

Note:

1. ***System default setting is Mode 1, and LPT Address assigned by system automatically.***
2. ***Do NOT switch the jumper setting when computer is still running.***
3. ***Mode1 (Auto) follows up PCI plug-n-play rule that LPT address is assigned randomly by system.***

Switch 2 (SW2) is the jumper setting for Parallel port operation mode configuration. User can select Auto, Bi-directional, EPP, or ECP mode. Please refer to the picture for detail.

SW2 Standard (Default)	*Mode 1*	*SPP/BPP/EPP/ECP Full Function Mode*	*1 OFF 2 OFF 3 OFF 4 OFF*	
Parallel Port Default Settings	*Mode 2*	*Bi-Directional Mode*	*1 ON 2 OFF 3 OFF 4 OFF*	
	Mode 3	*EPP Mode*	*1 ON 2 OFF 3 OFF 4 ON*	
	Mode 4	*ECP Mode*	*1 ON 2 OFF 3 ON 4 OFF*	
	Mode 5	*Manufacture Mode*	*1 ON 2 OFF 3 ON 4 ON*	

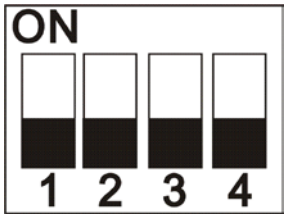
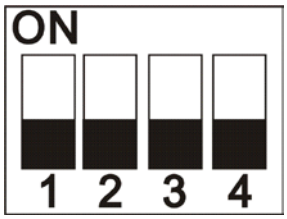
Note:

1. ***System default setting is Mode 1, and operation mode is assigned by system or software automatically.***
2. ***Do NOT switch the jumper setting when computer is still running.***

Please note that be sure to enable SW1 legacy address function jumper; then SW2 operation mode works. Here are some examples for reference.

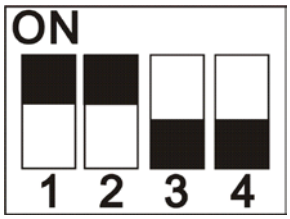
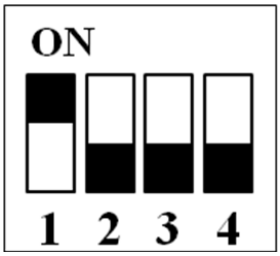
1). Manufactory default:

Under manufactory mode, all functions are disabling. It runs as standard PCI Parallel Card without remap function.

Feature	Description	Switch
I/O address ***(SW1)***	Assigned by system automatically (SW1: Mode1)	
Operation mode ***(SW2)***	Auto-switching between ECP/EPP/SPP/ BPP modes without configuration. (SW2: Mode1)	
Driver	Please install SUNIX PCI driver.	

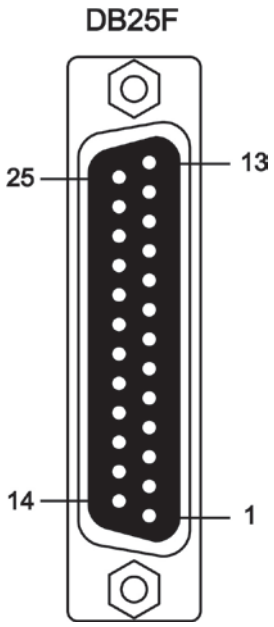
2). Common User Mode:

Under common user mode, it runs 378 and BPP mode.

Feature	Description	Switch
I/O address ***(SW1)***	378 (SW1: Mode2)	
Operation mode ***(SW2)***	Bi-directional mode. (SW2: Mode2)	
Driver	Please install **windows in-box**. Do NOT install SUNIX PCI driver.	

2.3 Pin Assignment

This chapter provides the DB25 female connector's pin assignments for SUNIX Universal PCI Remap Parallel Communication Board.



DB25F	PIN	DB25F	PIN
1	STROBE	14	AUTO FEED
2	DATA0	15	ERROR
3	DATA1	16	INT
4	DATA2	17	SELECT INPUT
5	DATA3	18	GND
6	DATA4	19	GND
7	DATA5	20	GND
8	DATA6	21	GND
9	DATA7	22	GND
10	ACKNOWLEDGE	23	GND
11	BUSY	24	GND
12	PAPER EMPTY	25	GND
13	SELECT		

3.
Driver Installation

After installing the Universal PCI Parallel Communication Board in your system successfully, please follow the step by step software installation guide to confirm how to install appropriate driver and configure the LPT port settings.

Please note that there are different drivers and different installation guides for “Legacy ISA Address Operation mode” and “Standard PCI Plug-n-Play mode” under Windows operation system.

The driver for PCI parallel board supports Windows and Linux operating systems, and you can select your requirement in the following chapter:

The following topics covered in this chapter:

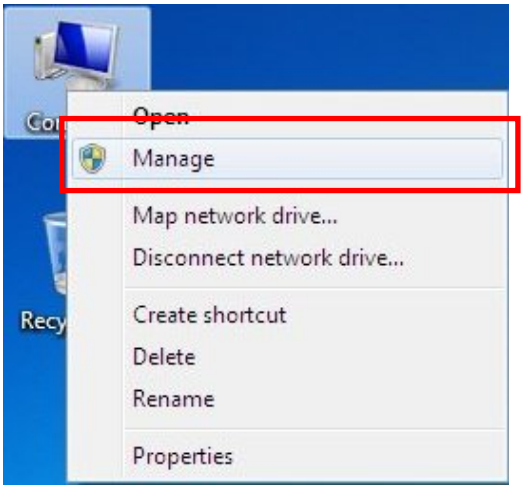
3.1 Windows Driver Install

- Legacy ISA Address Operation Mode

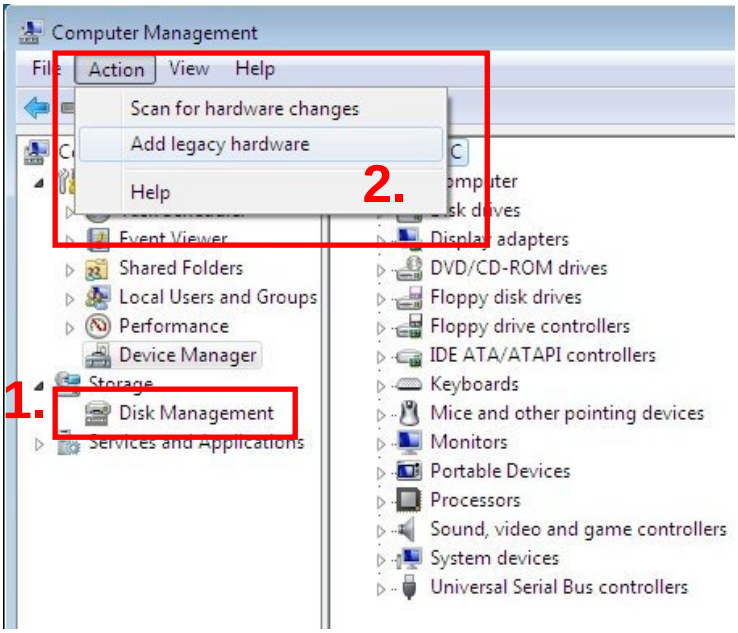
Please refer to following instructions to install the driver for the first time under Windows operation system. You will need to plug the board in an available PCI or PCI-X slot first, before installing the driver. This chapter makes a description of driver installation under Legacy ISA Address Operation Mode. Be sure to set jumper at Mode 2 (378), Mode 3 (278). or Mode 4 (3BC).

Windows 7 / 2008

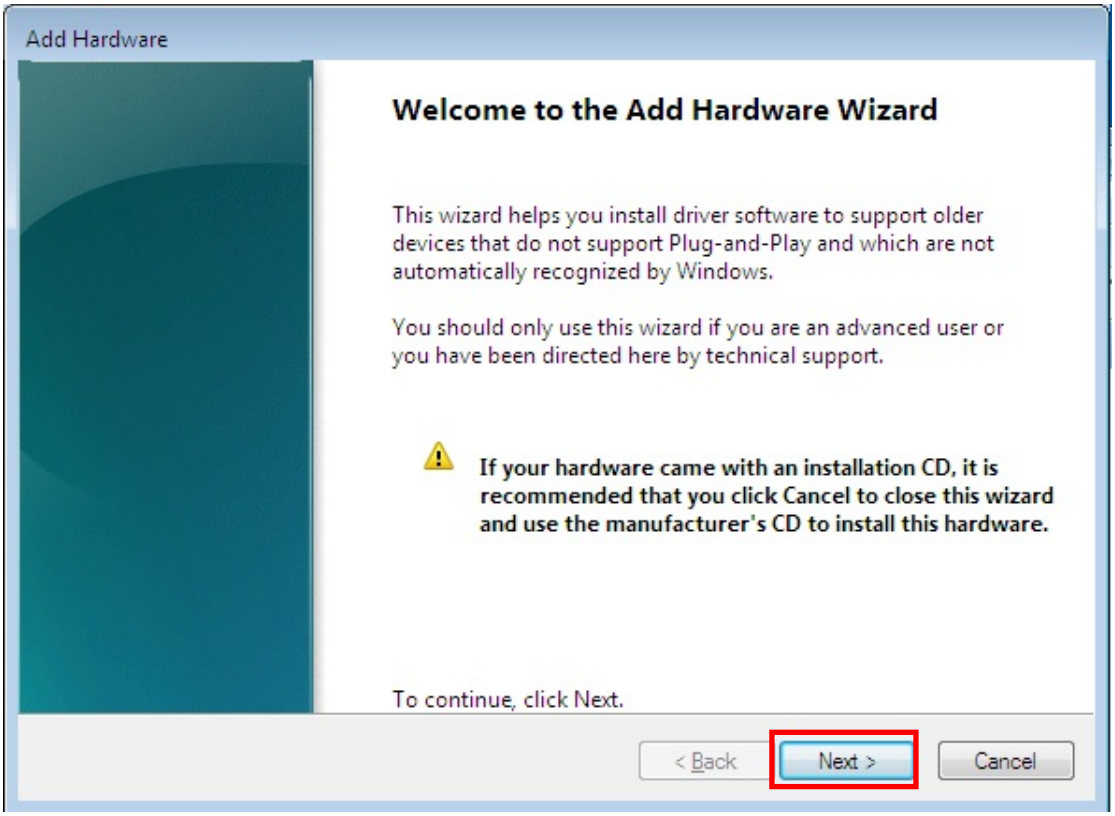
(1) Right-click the mouse on "**Computer**" icon, and select "**Manage**".



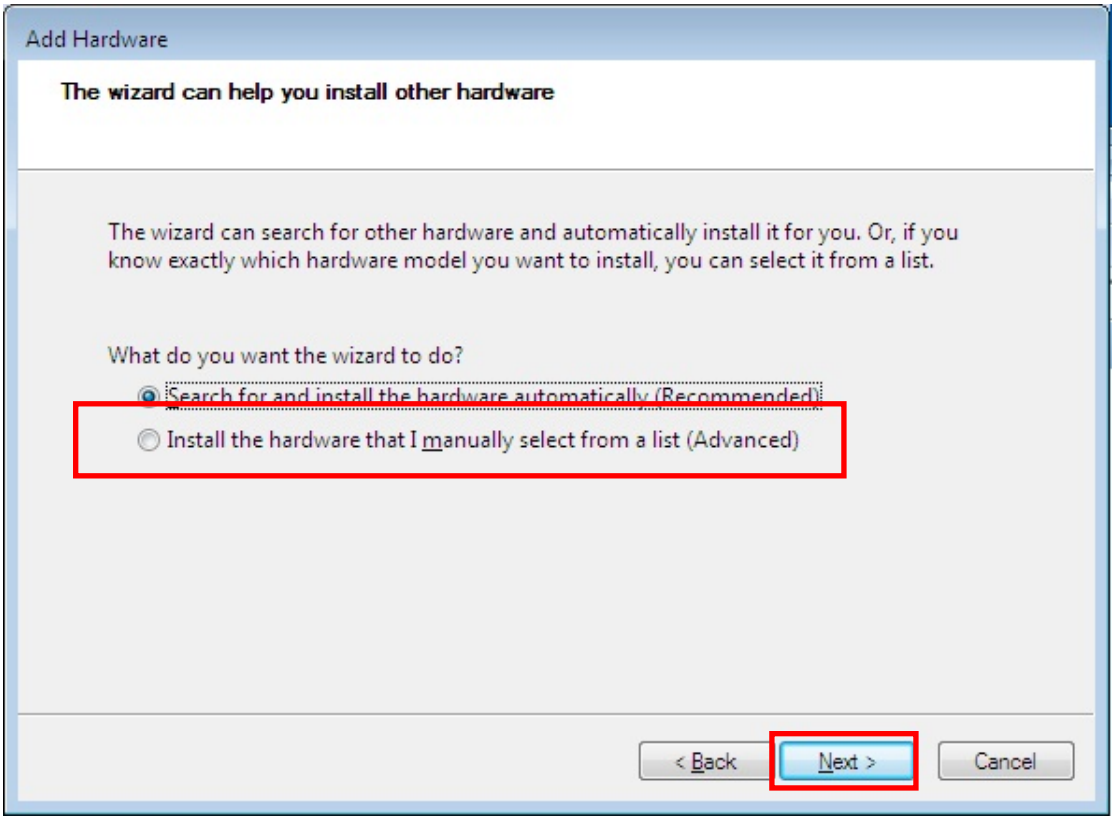
(2) Please select "**Device Manager**". Click "**Action**" on the tool bar, and select "**Add legacy hardware**".



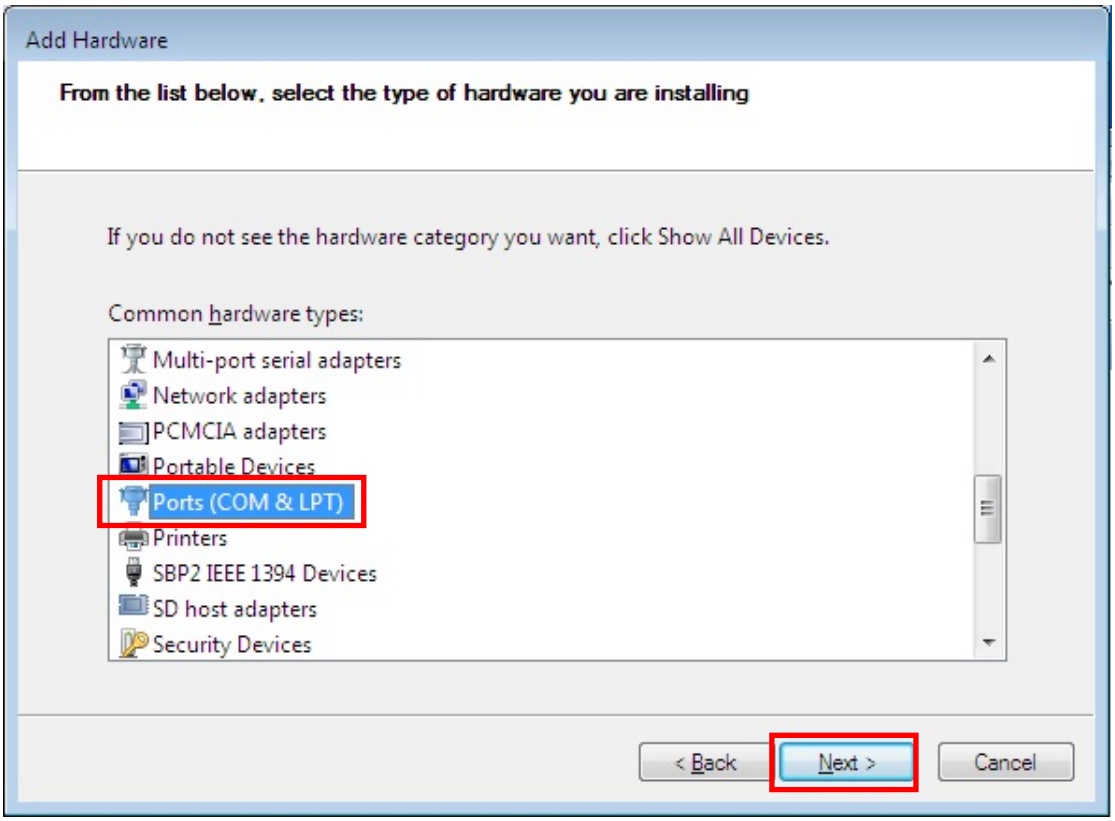
(3) Add Hardware Wizard window pops up. Please click "**Next**".



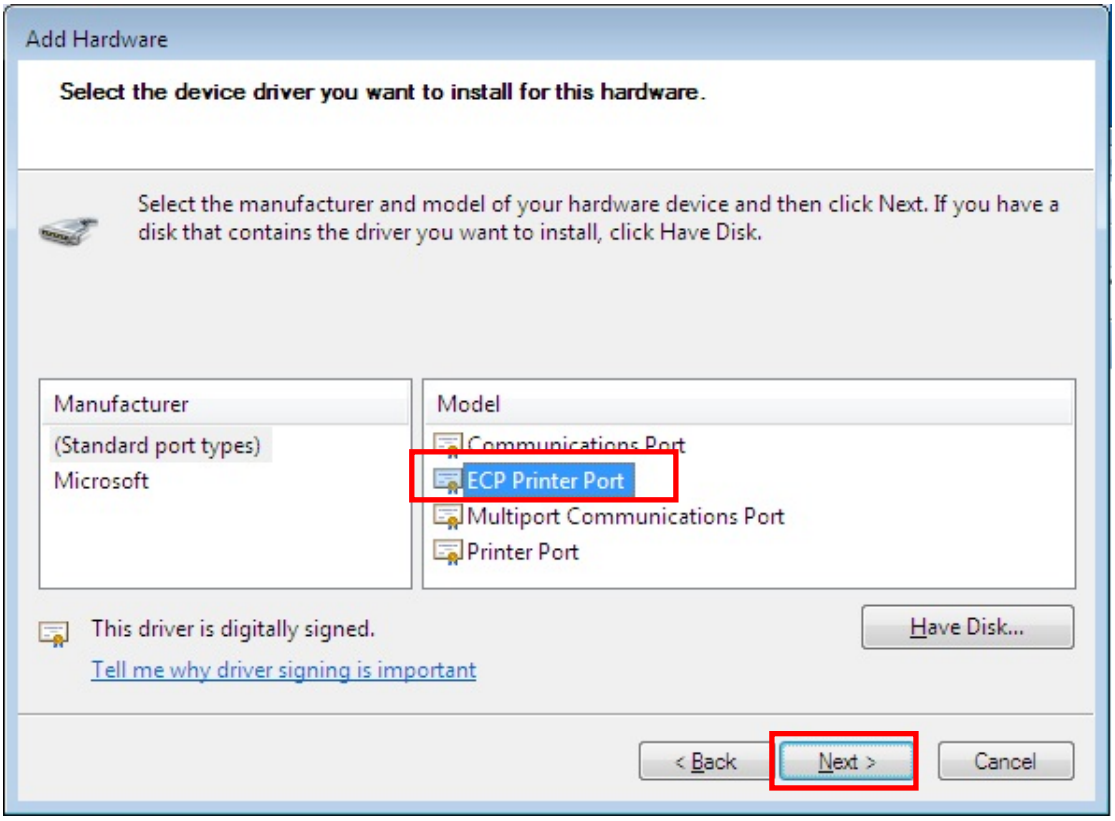
(4) Please select "**Install the hardware that I manually select from a list**".



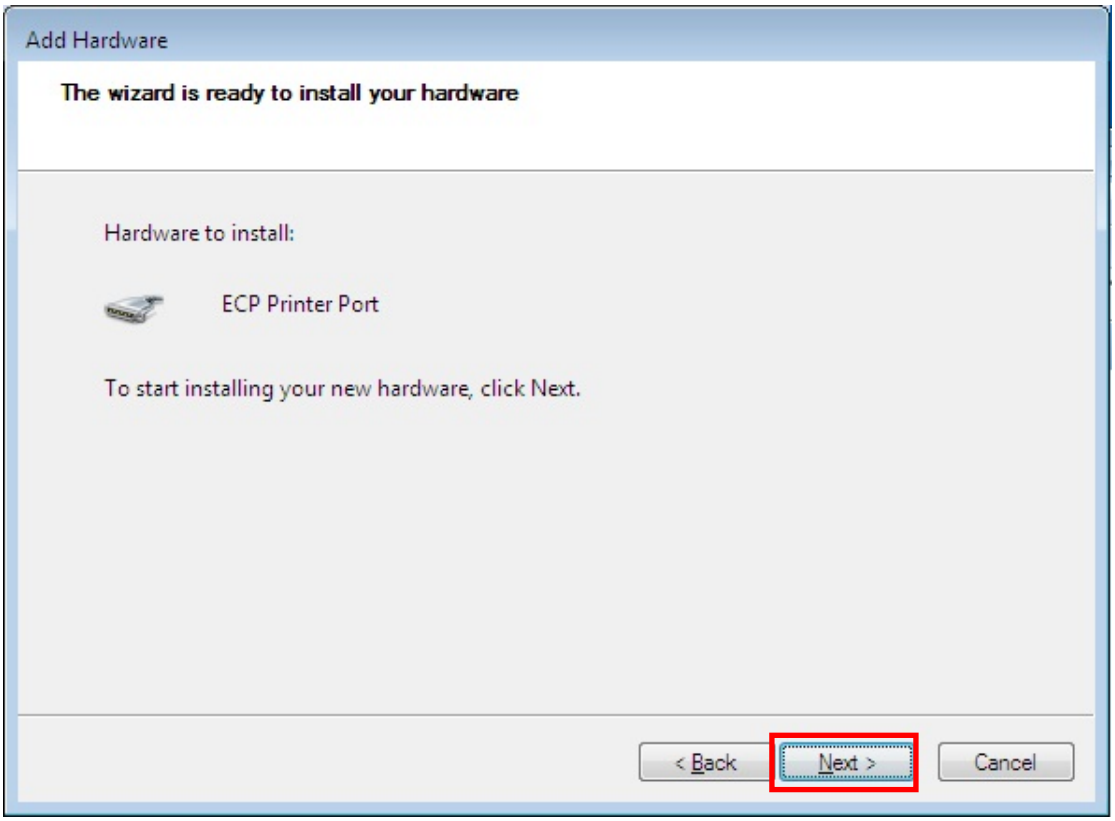
(5) Please select “**Ports (COM & LPT)**”, and click “**Next**”.



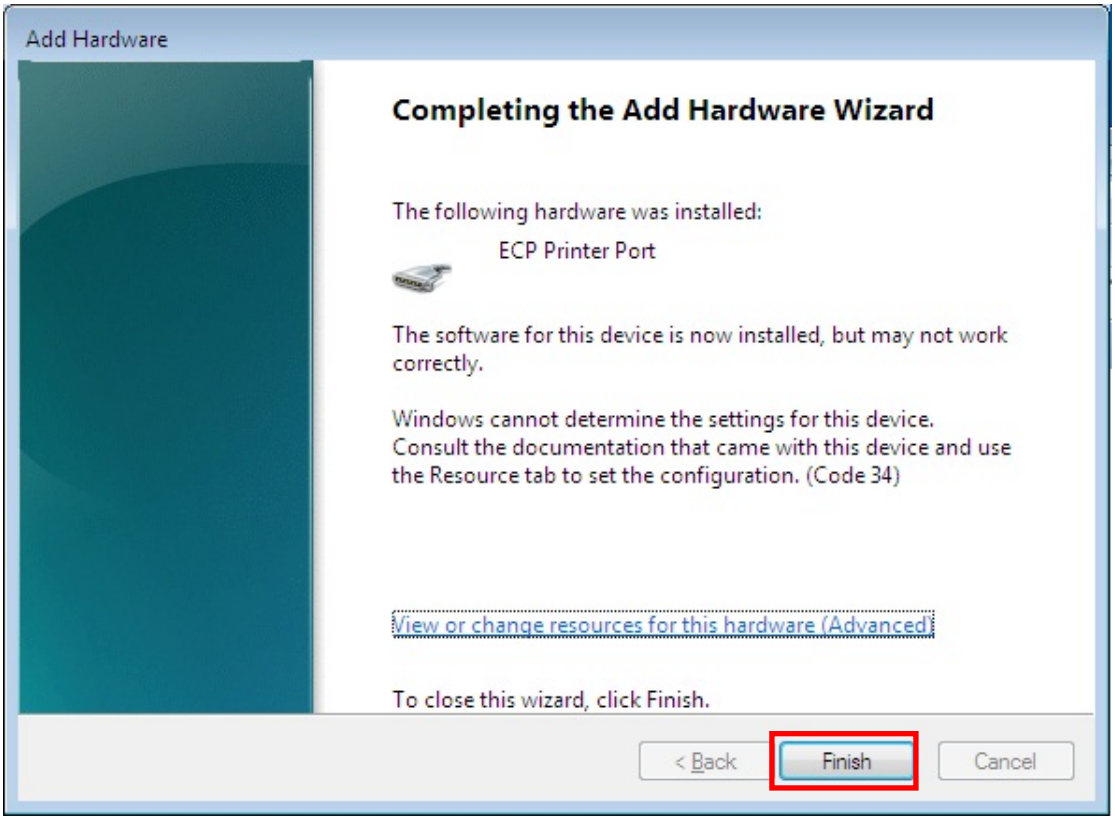
(6) Please select “ECP Printer Port” and click “**Next**”.



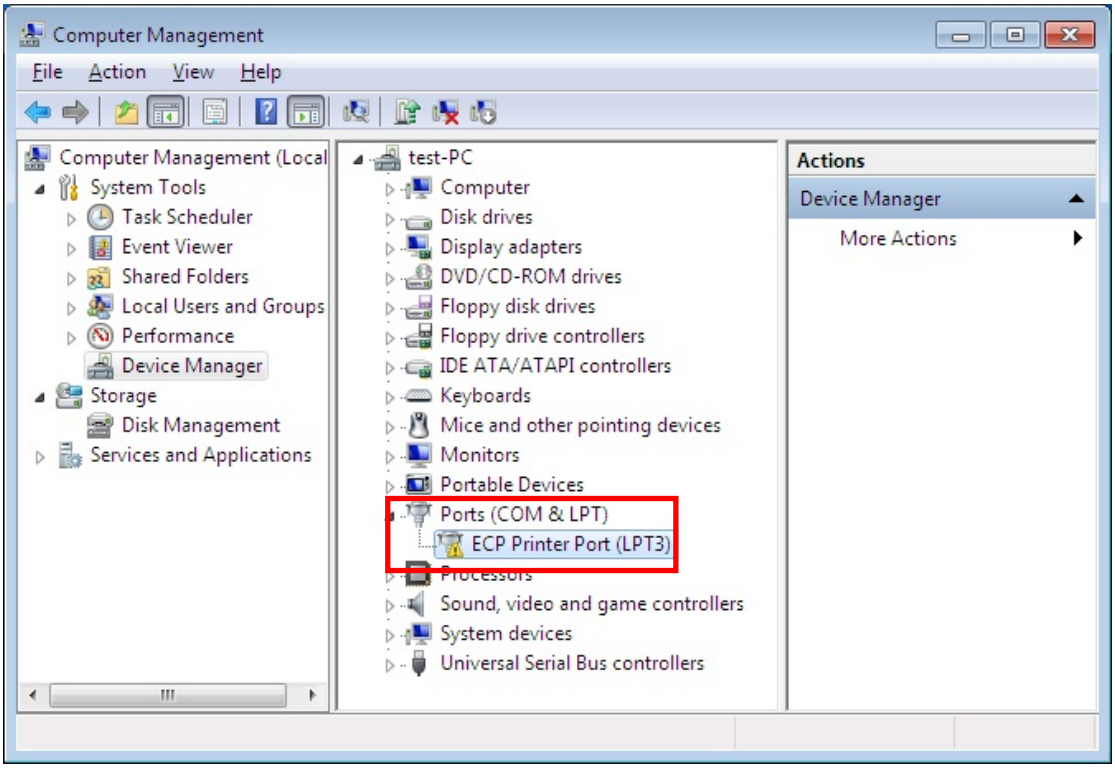
(7) Please click “**Next**” to continue LPT port installation.



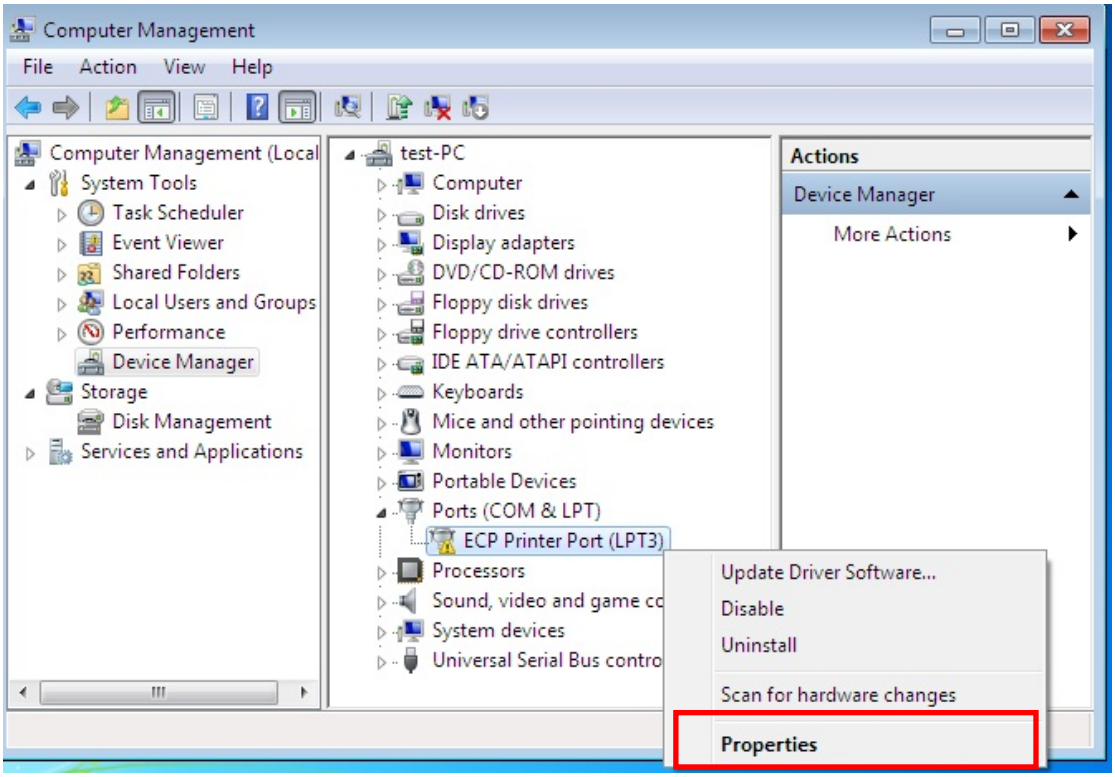
(8) Please click “**Finish**” to end the Add Hardware Wizard.



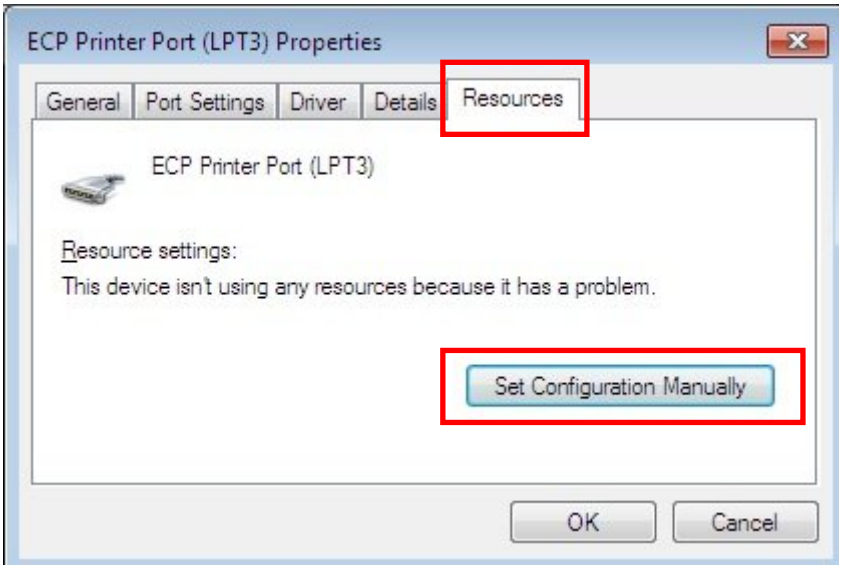
(9) There is a new ECP Printer Port (LPT3) with **exclamation mark** shown in the device manger. Note: This LPT port is not ready for using at this time.



(10) Right-click the mouse on “LPT3” icon, and select “**Properties**”.

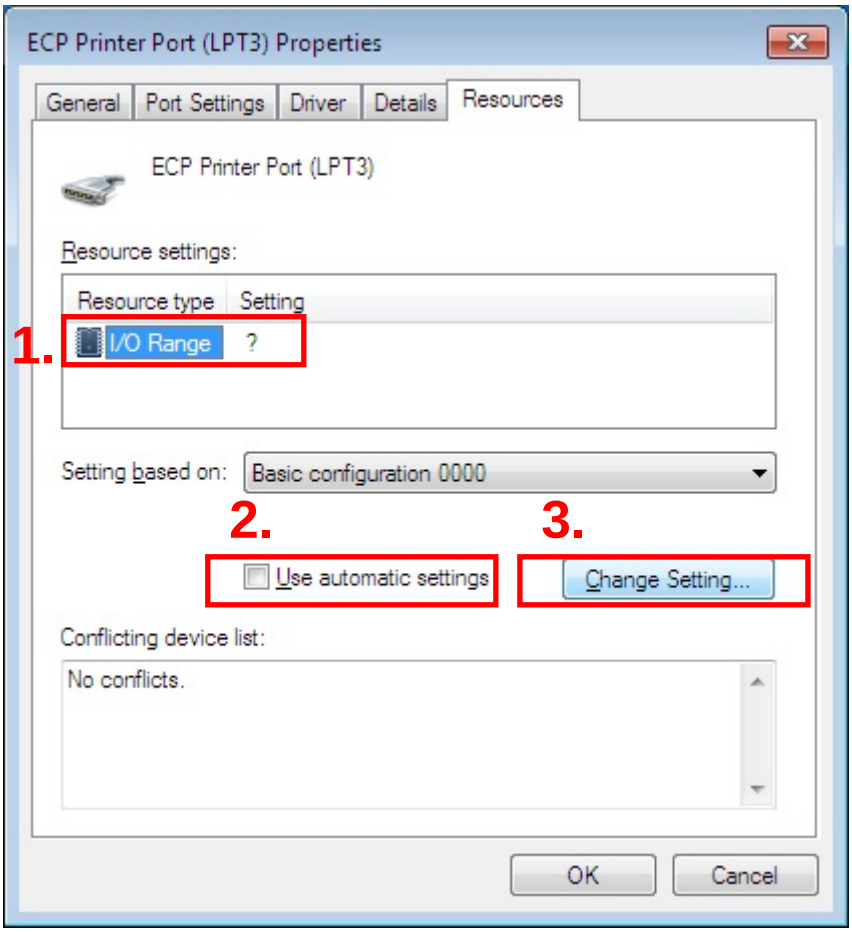


(11) Go to "**Resource**" table and click "**Set Configuration Manually**".

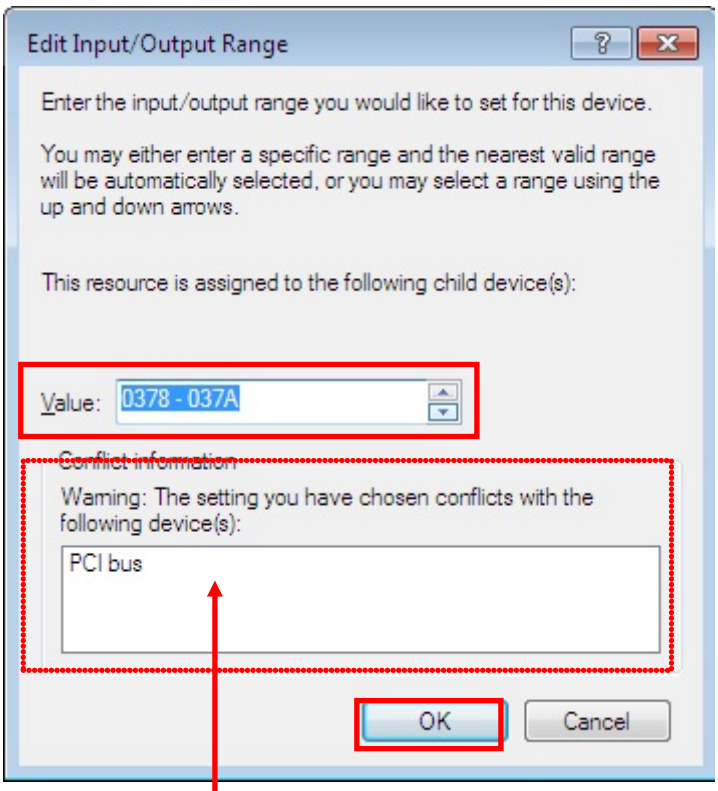


(12) Select **"I/O Range**" icon.

"**Uncheck**" the Use automatically settings, and click "**Change Settings**".



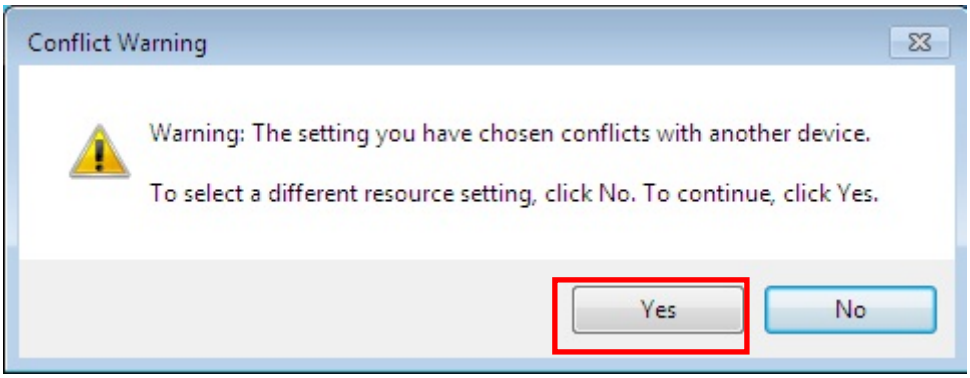
(13) Select IO address which is same as your jumper settings, such as **"378**" in this example. After IO address settings finish, click "**OK**" to continue.



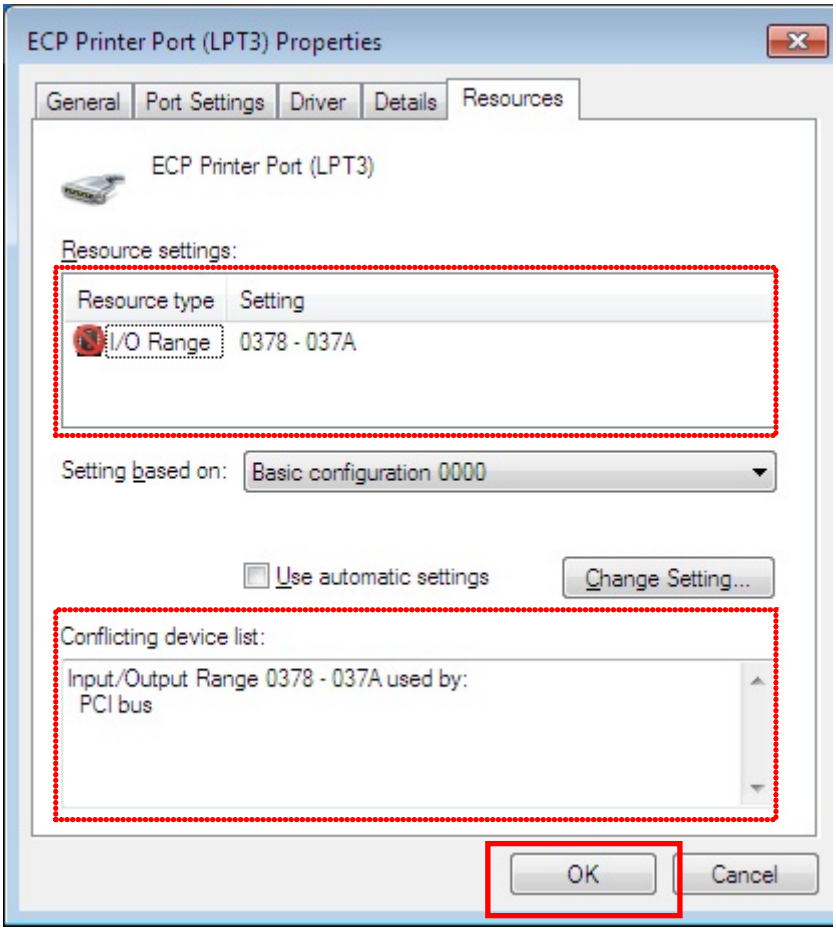
Note:

Please pay attention to the Conflict information dialog, if address resource is occupied by system, and this address is not workable.

Click "**Yes**" to continue.



(14) You can read IO setting information in this table, click "**OK**" to finish steps.

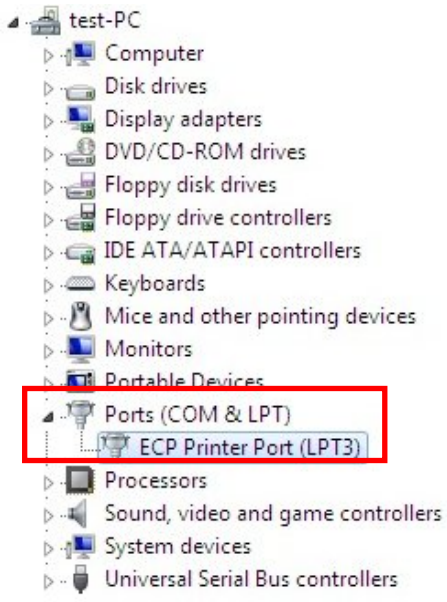


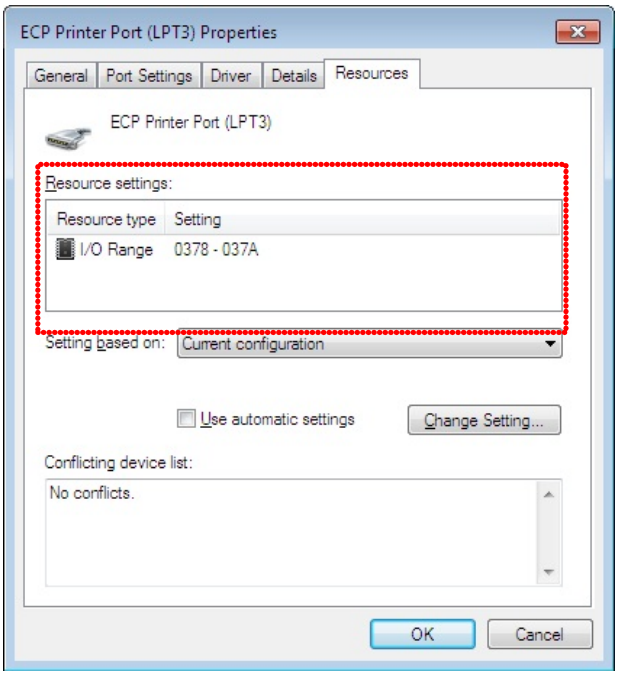
Note:

Be sure to **reboot your system**, and then new IO setting works.

Or there is still exclamation mark shown on the LPT port

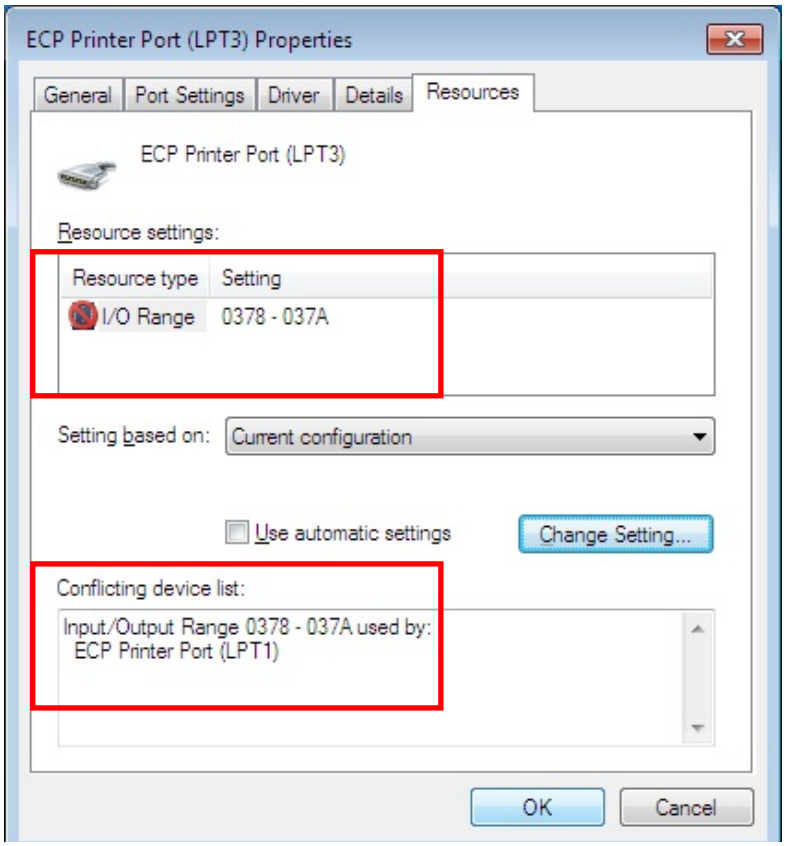
(15) After system rebooting, you can go to device manager to check LPT working status on your system. In this example, the 378 address setting is workable for LPT3.





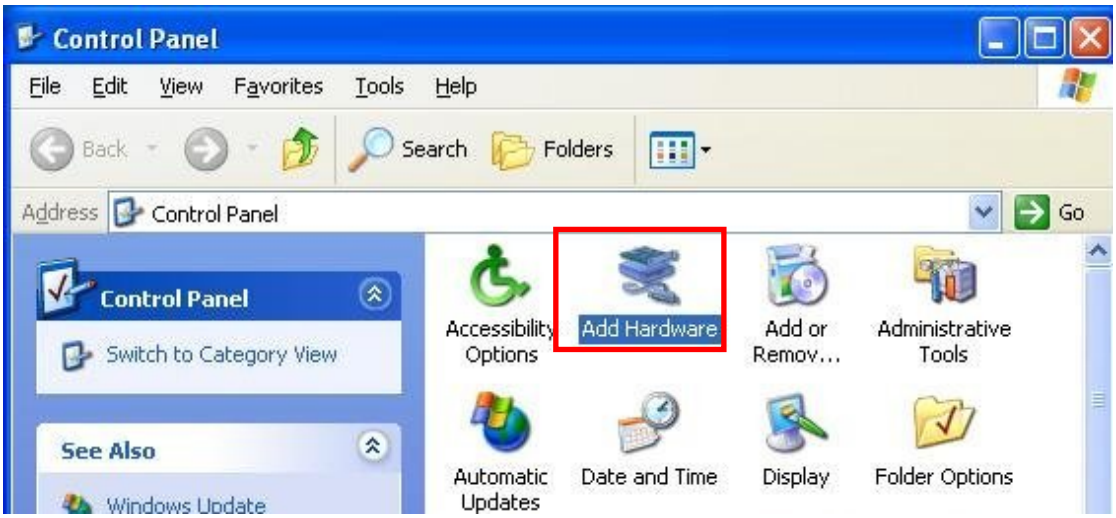
Note:

Wrong or conflicting address setting makes exclamation mark existing on LPT port. This port does NOT work until correct setting.



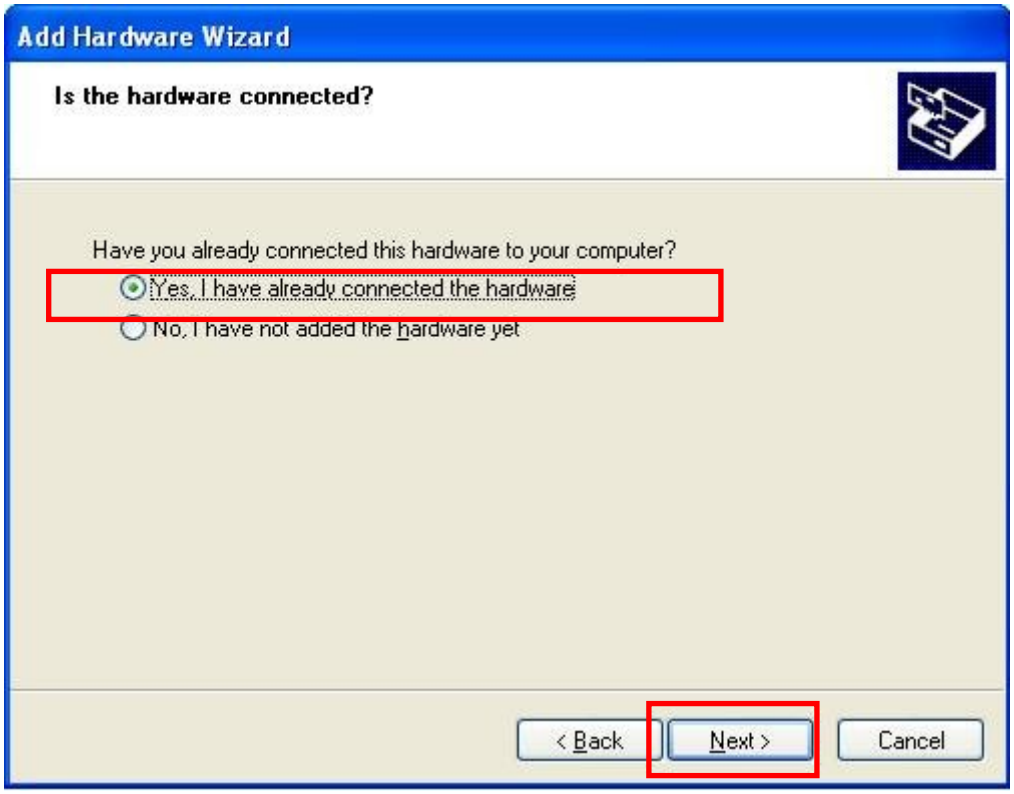
Windows Vista/XP/2003/2000/98

(1) Go the "**Control Panel**", and select "**Add Hardware**" icon.

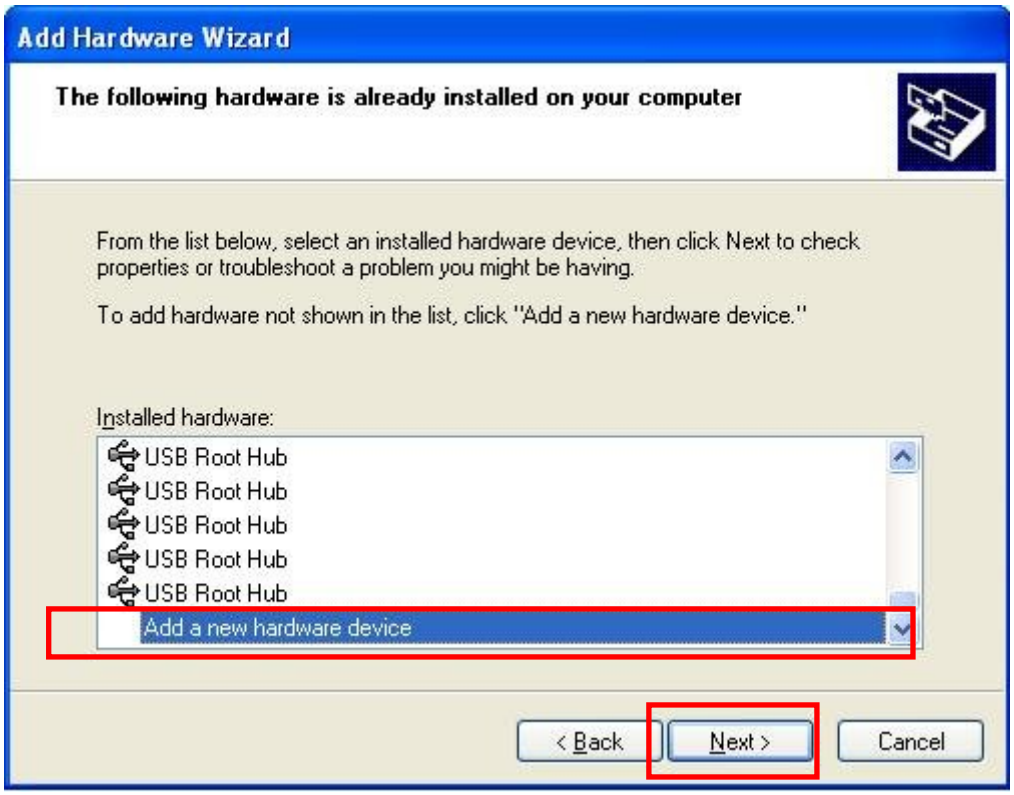


(2) Add Hardware Wizard window pops up. Please click "**Next**".

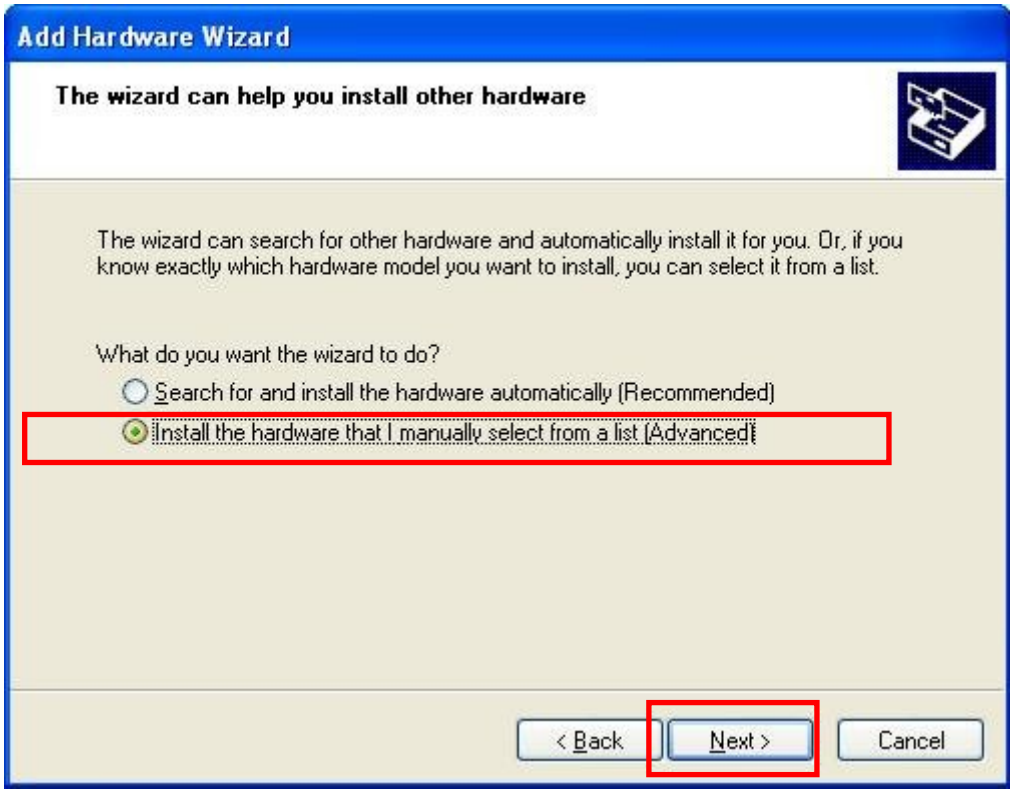
(3) Select “**Yes, I have already connected the hardware**”. Click “**Next**”.



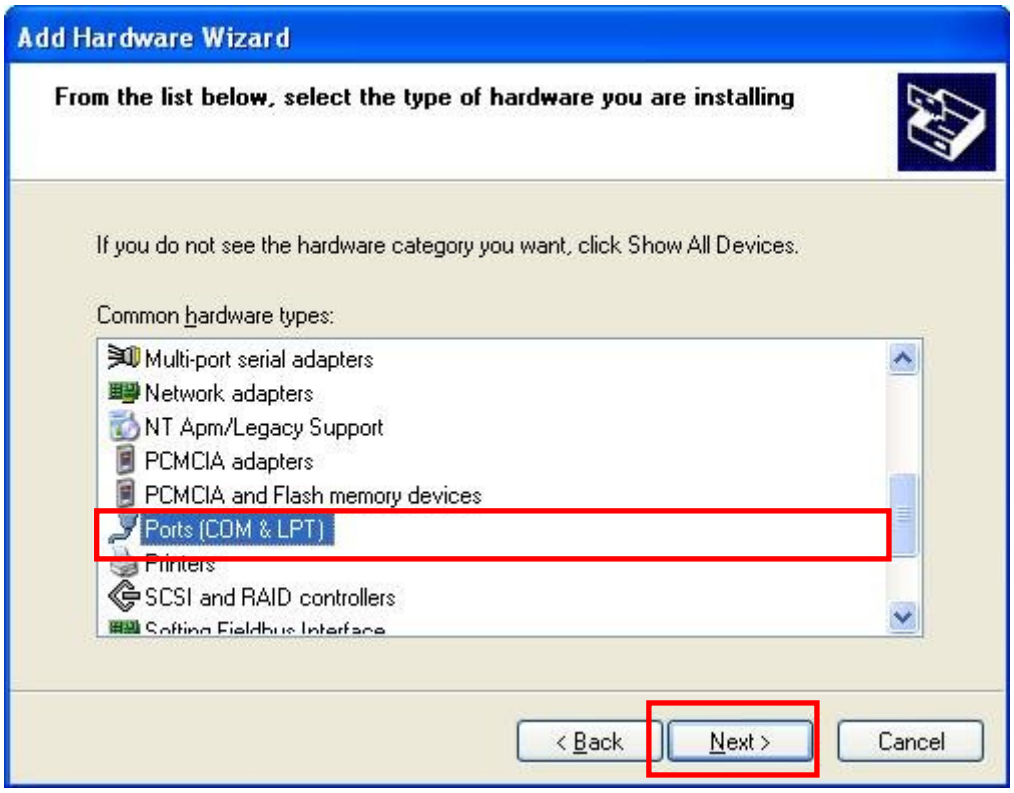
(4) Select “**Add a new hardware device**”, and click “**Next**” to continue.



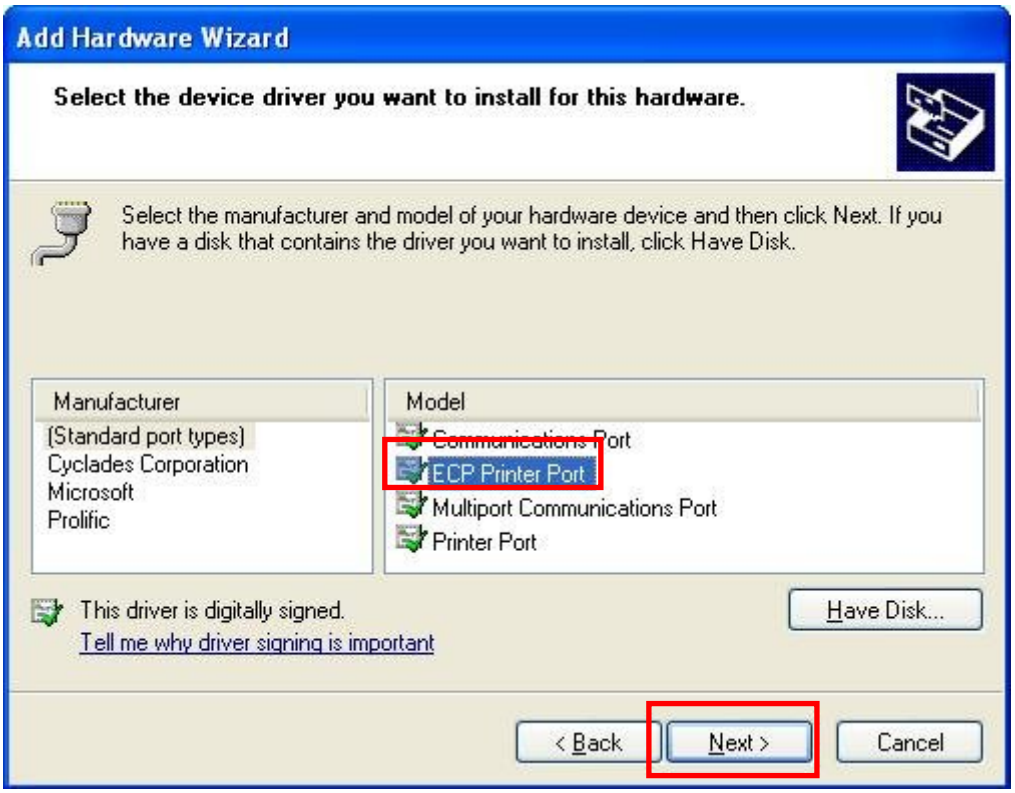
(5) Select "**Install the hardware that I manually select from a list**".
Click "**Next**" to continue.



(6) Select "**Port (COM & LPT)**", and click "**Next**" to continue.



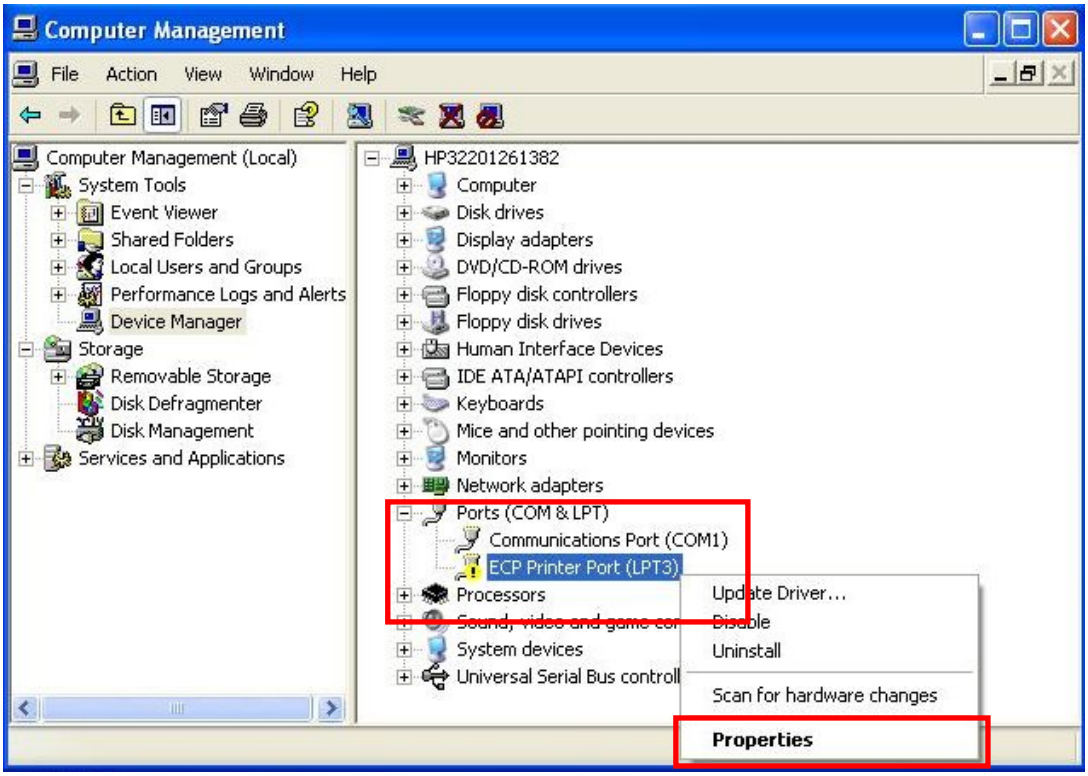
(7) Select “**ECP Printer Port**”, and click “**Next**” to continue.



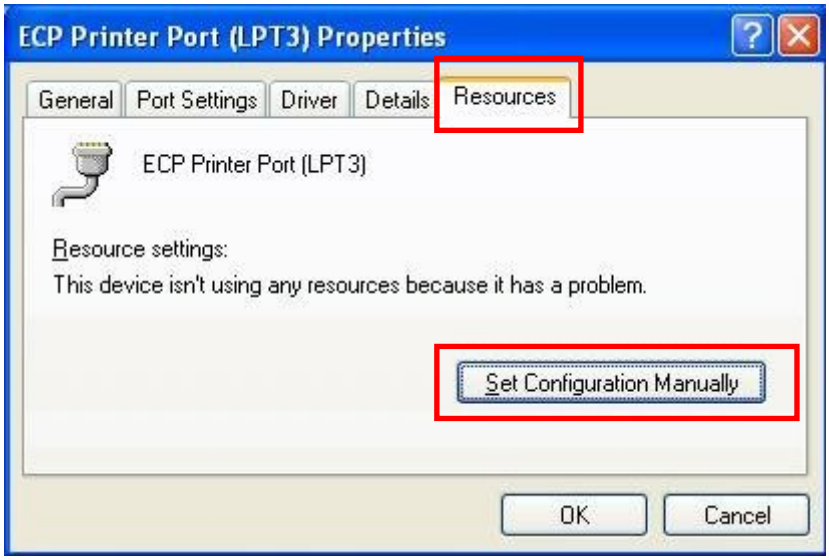
(8) Click “**Next**” to start installing the LPT port on your system.

(9) Click “**Finish**” to end of installation operation.

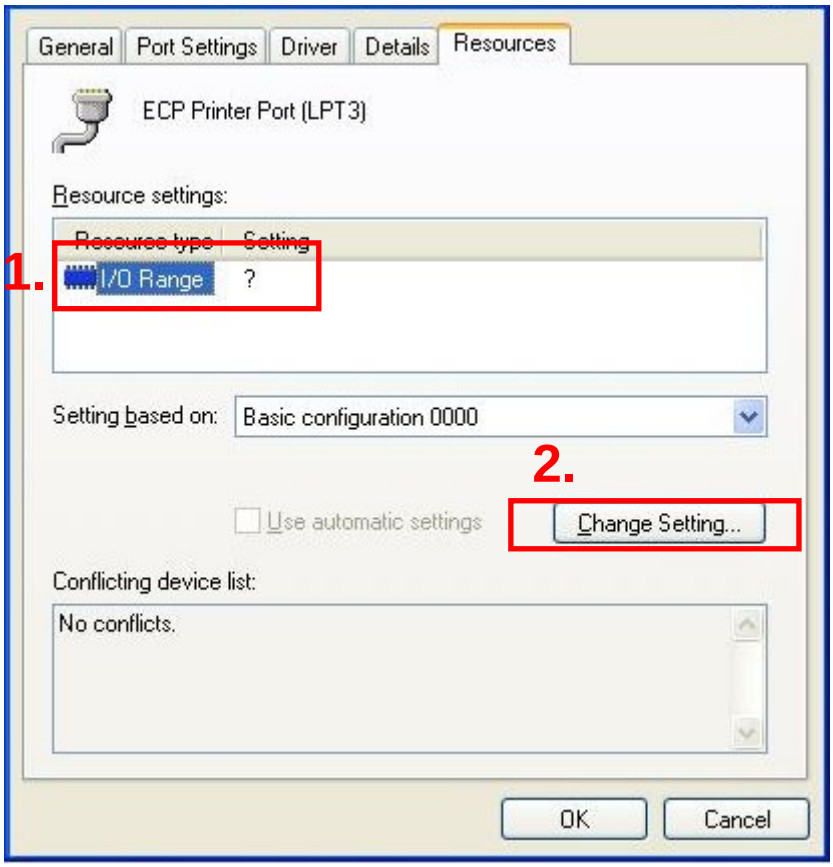
(10) There is a new ECP Printer Port (LPT3) with **exclamation mark** shown in the device manger. Note: This LPT port is not ready for using at this time. Right-click the mouse on “LPT3” icon, and select “**Properties**”.



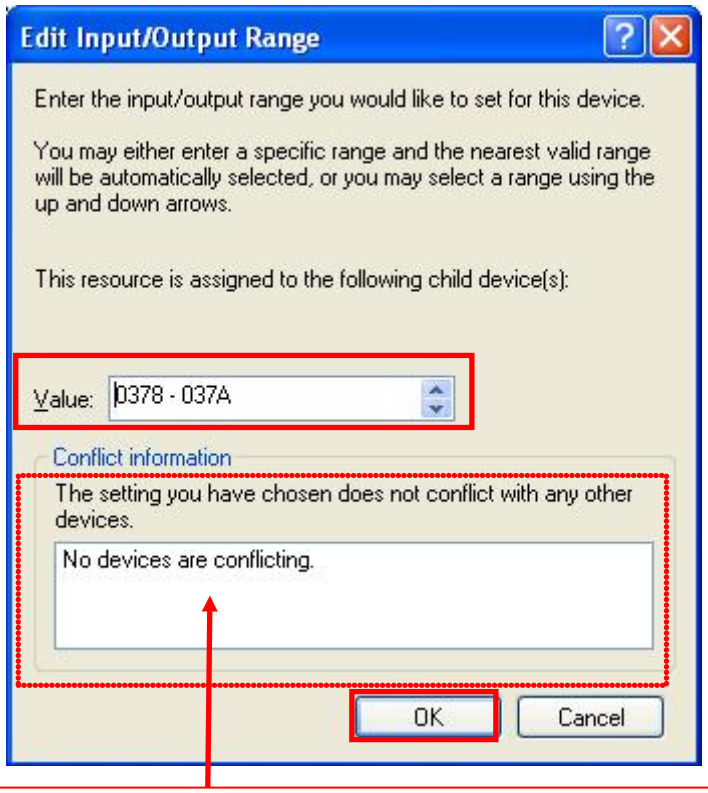
(11) Go to "**Resource**" table and click "**Set Configuration Manually**".



(12) Select **"I/O Range**" icon, and click "**Change Settings**".



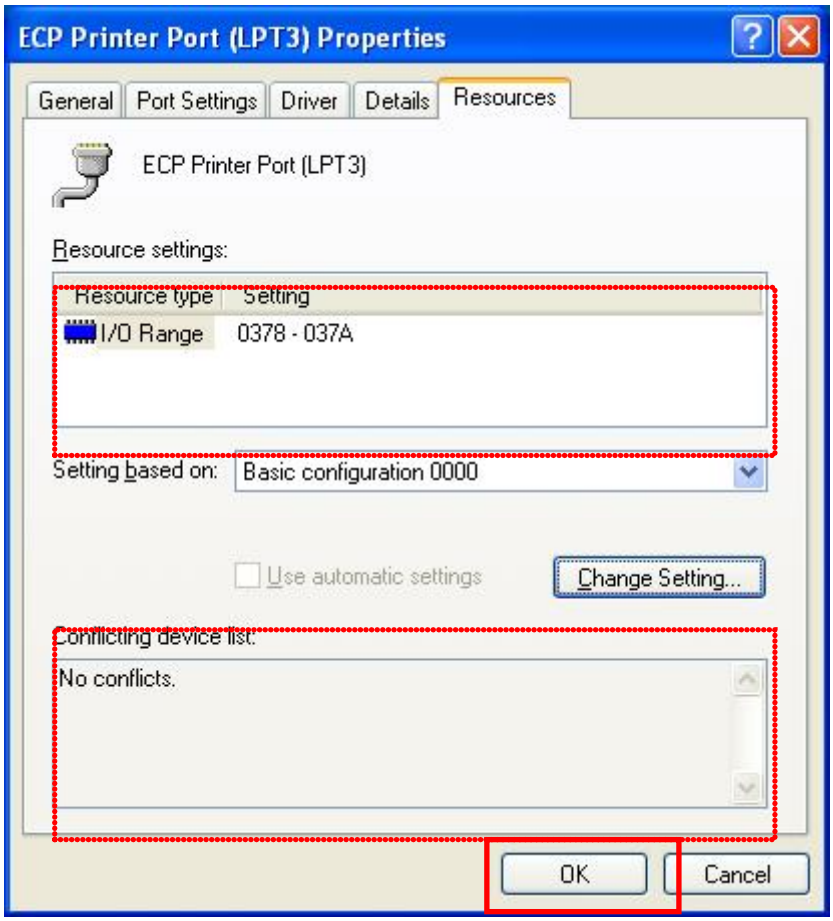
(13) Select IO address which is same as your jumper settings, such as **"378**" in this example. After IO address settings finish, click "**OK**" to continue.



Note:

Please pay attention to the Conflict information dialog, if address resource is occupied by system, and this address is not workable.

(14) You can read IO setting information in this table, click "**OK**" to finish steps.

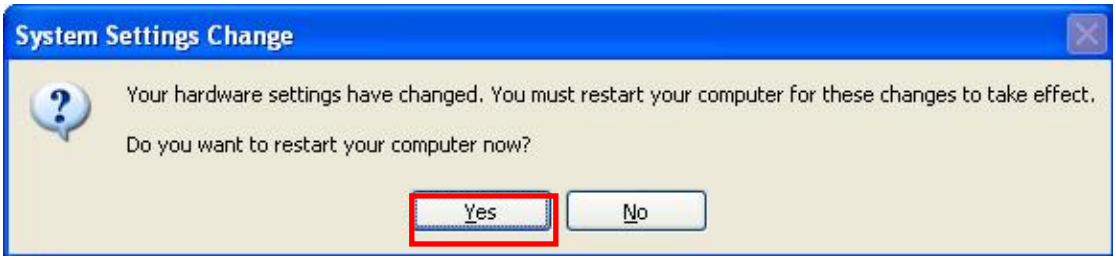


Note:

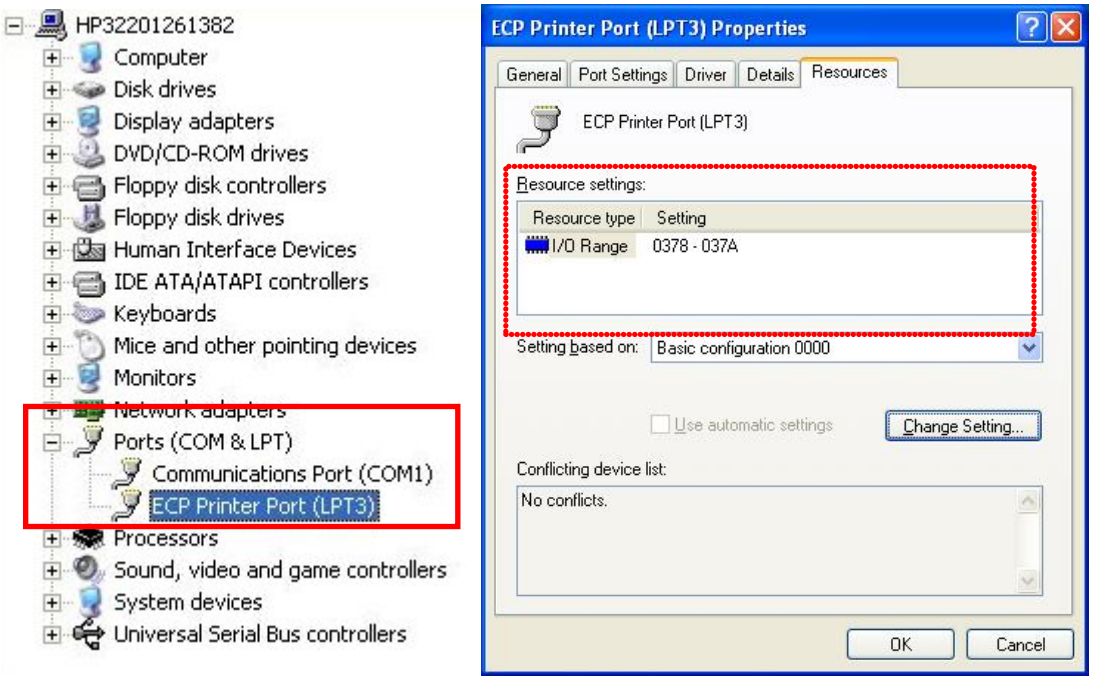
Be sure to **reboot your system**, and then new IO setting works.

Or there is still exclamation mark shown on the LPT port

(15) System asks restarting your computer. Please click "**Yes**" to continue.

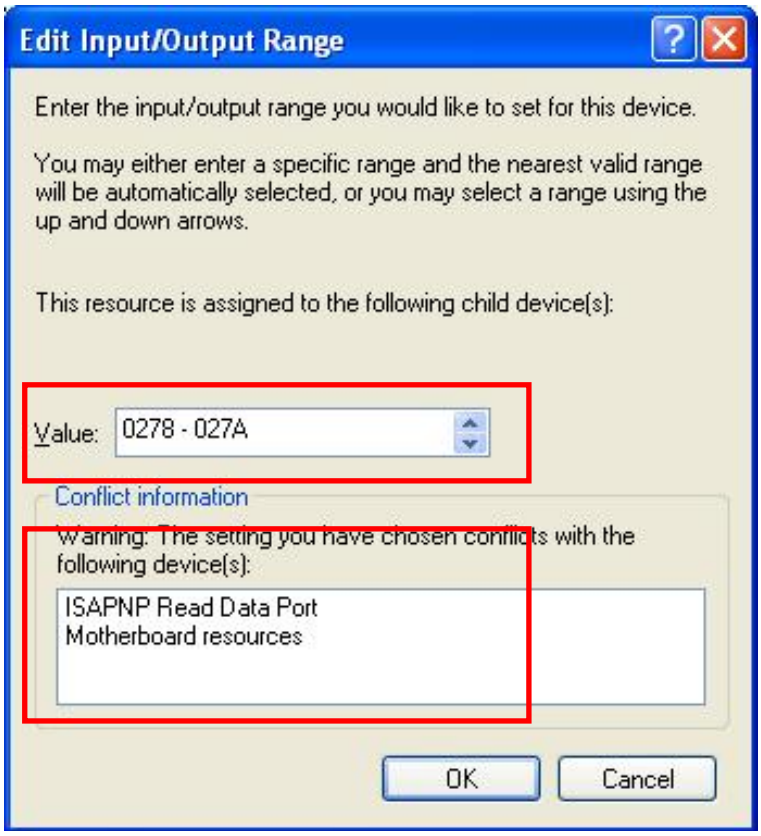


(15) After system rebooting, you can go to device manager to check LPT working status on your system. In this example, the 378 address setting is workable for LPT3.



Note:

Wrong or conflicting address setting makes exclamation mark existing on LPT port. This port does NOT work until correct setting.

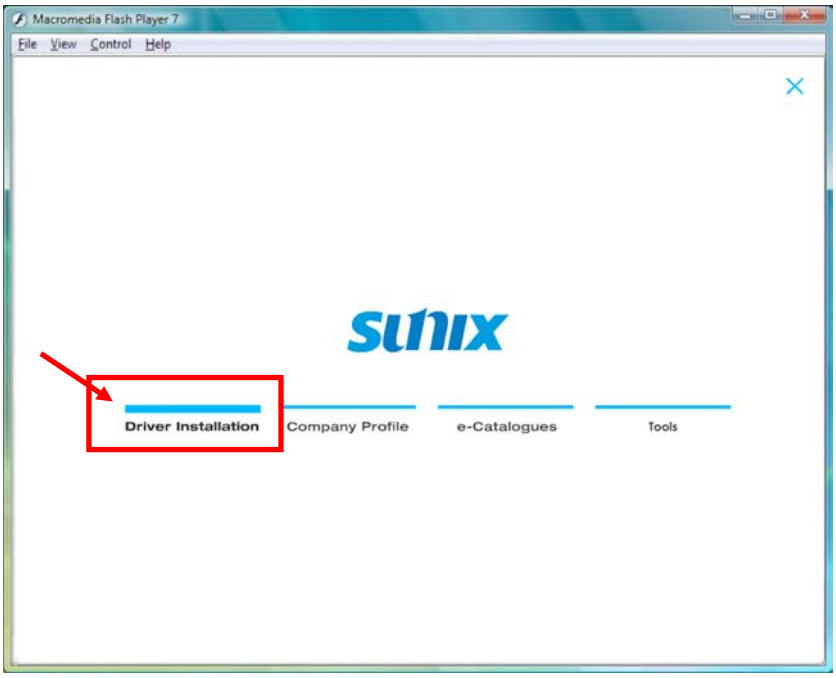


- Standard PCI Plug-n-Play Mode

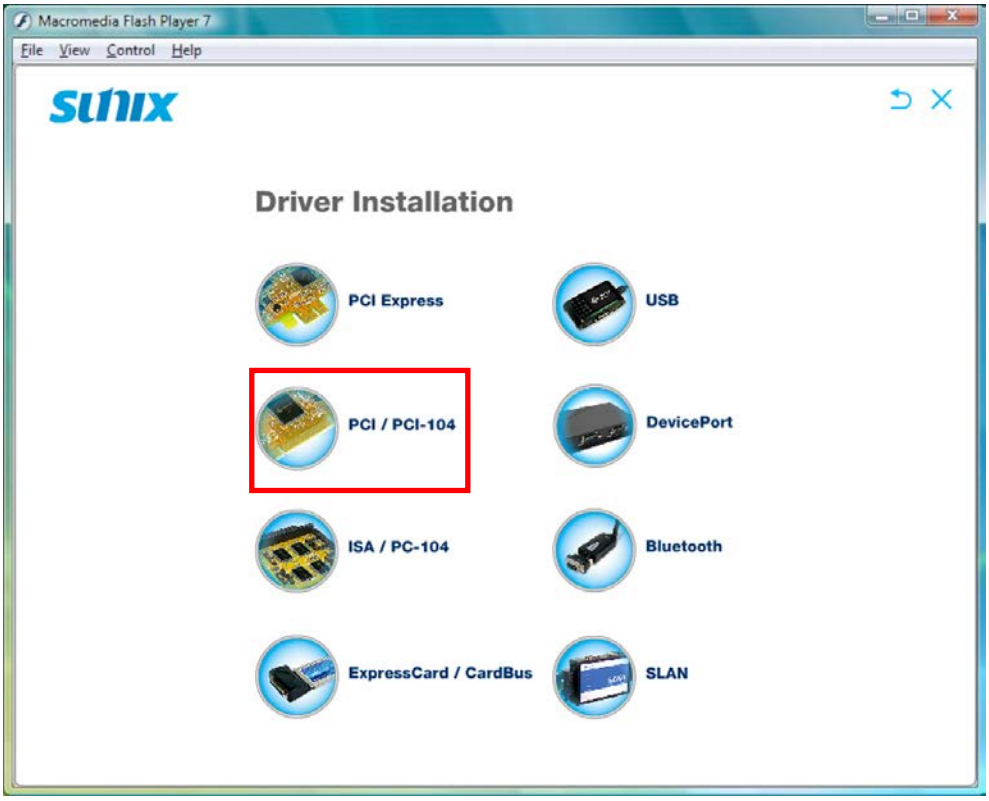
Please refer to following instructions to install the driver for the first time under Windows operation system when jumper setting at Mode 1 (default). You will need to plug the board in an available PCI or PCI-X slot first, before installing the driver.

(1) After the board is physically installed and the PC boots up, system will detect the PCI parallel board and prompt for driver installation wizard, please choose cancel.

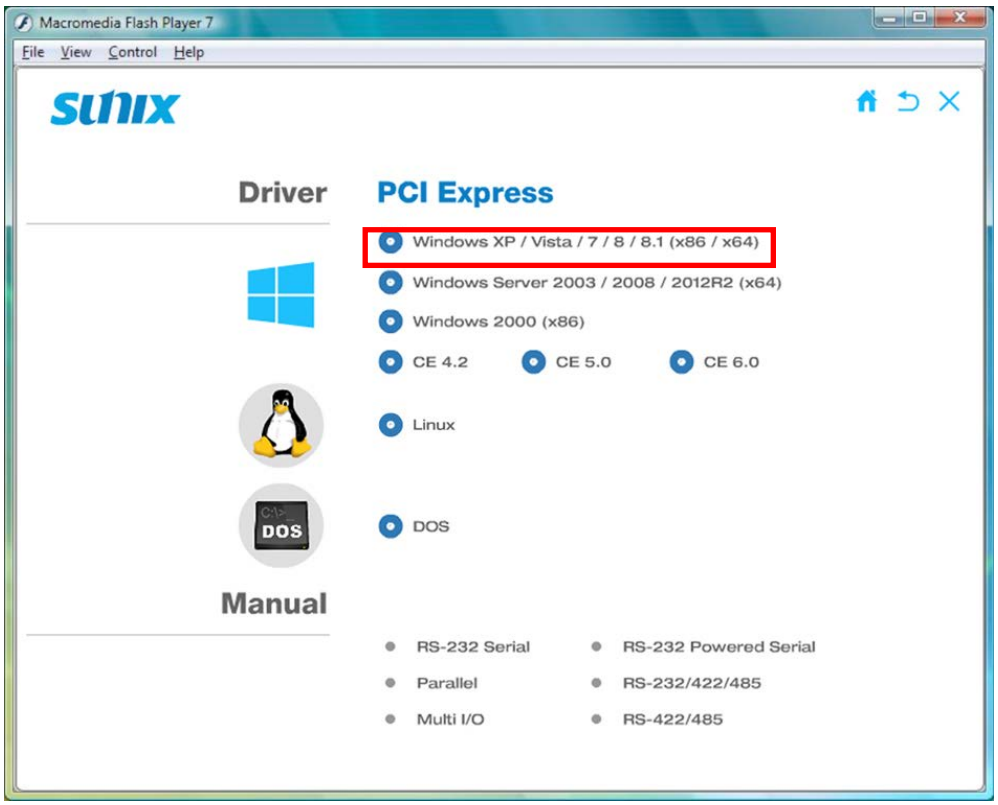
(2) Put CD driver bound with product in your CD / DVD ROM drive.
Please select Run autorun.exe., then select "**Driver Installation**".



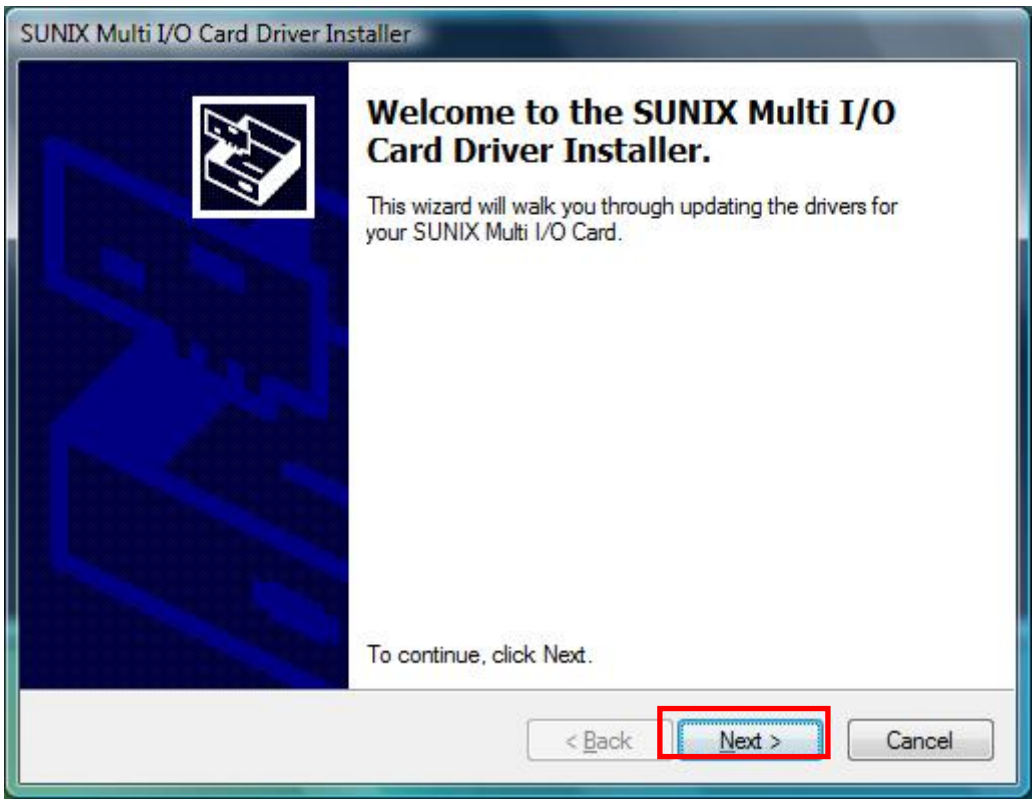
(3) Please select the product interface you bought, such as PCI.



(4) Please select the O.S. version you are using, such as Windows Vista. Then system will process the driver installation step automatically.



(5) Click “**Next**” to continue driver installation steps.



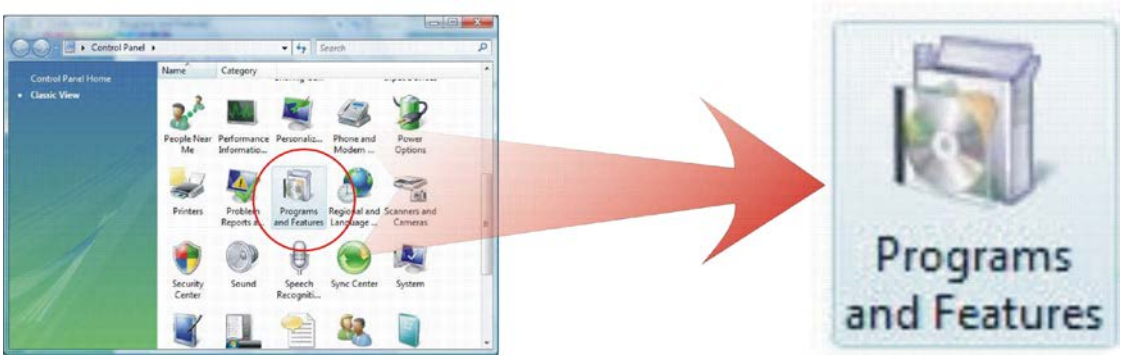
(6) Click “**Finish**” to end installation steps. If SUNIX I/O card install correct in your system, you can read “**V**” icon in this picture.

3.2 Windows Driver Uninstall

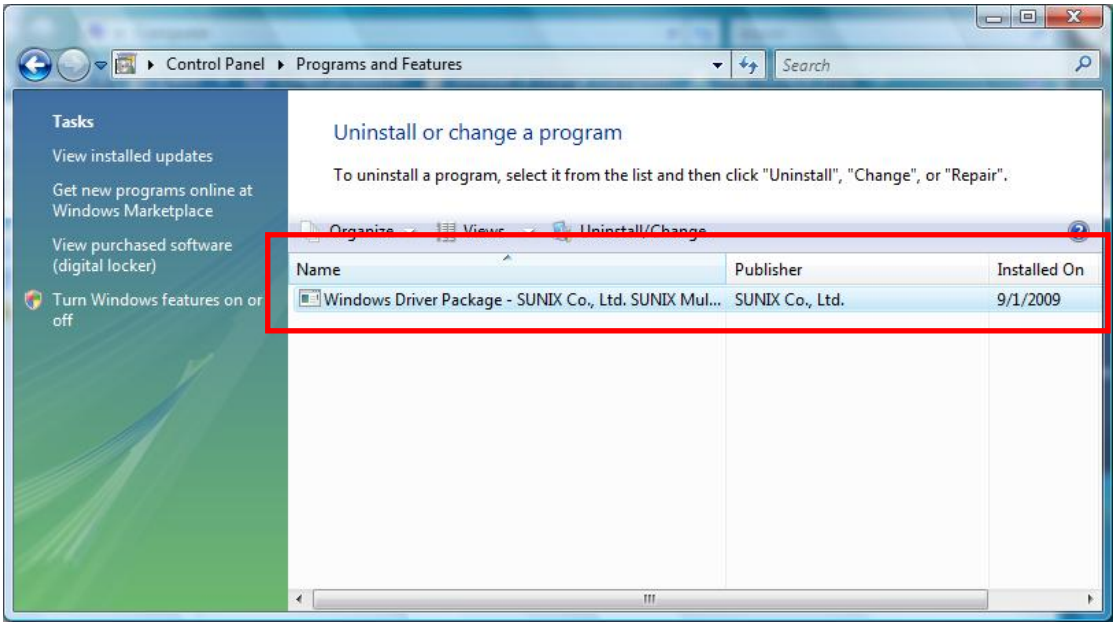
Please refer to following instructions uninstall Multi-I/O card driver.

(1) Click on the "**Programs and Features**" tab in the Windows Control Panel.

Start > Controller Panel > Programs and Features



(2) Entry Uninstall or change a program page, and double click "**Windows Driver Package – SUNIX Co., Ltd SUNIX Multi-I/O Controller**" to process driver uninstall procedure.

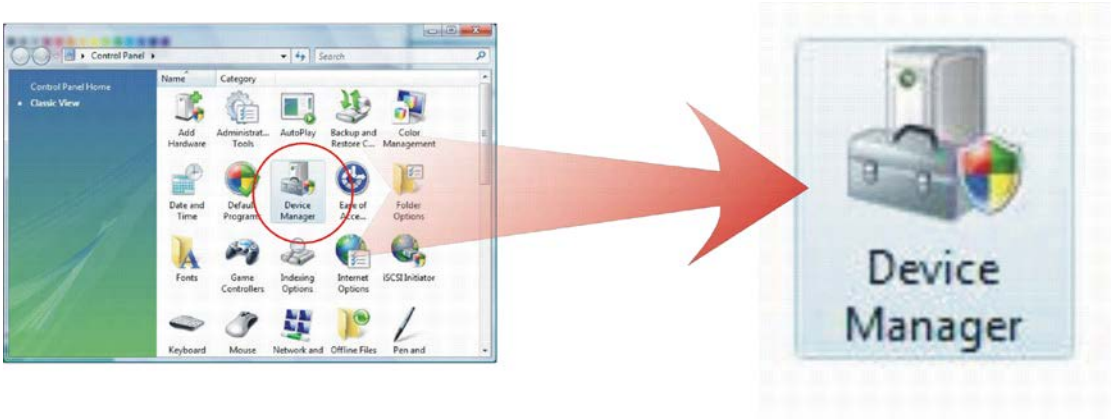


3.3 Windows Verify Installation

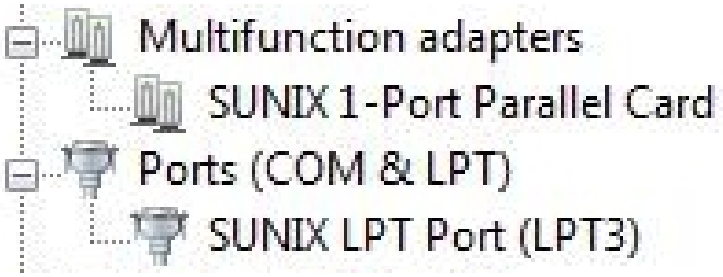
You can use Windows "**Device Manager**" to verify proper installation.

(1) Click on the "**Programs and Features**" tab in the Windows Control Panel.

Start > Controller Panel > Device Manager



(2) In the Device Manager window, you should see this board under **Multifunction adapters** (SUNIX 1-port Parallel Card in this example). You should also see SUNIX LPT port under **Ports (COM & LPT)**. (SUNIX LPT Port LPT3 in this example).



3.4 Linux Driver Install

This installation guide describes the procedures to install the PCI parallel board in Linux kernel 2.4.x and 2.6.x. Please refer to “snx_Vx.x.x.x.tar.gz” for driver installation detail in CD Driver (Linux folder) directory.

: \ PCI_IO \ Linux

(1) Driver install

Please create a directory under root directory, e.g /temp, do commands:

```
# cd /
# mkdir temp
```

After get driver file "snx_Vx.x.x.x.tar.gz". Copy file to /temp directory, then extract and install, do commands:

```
# cp snx_Vx.x.x.x.tar.gz /temp
# cd /temp
# tar xvfz snx_Vx.x.x.x.tar.gz
# cd /temp/snx
# make clean ; make install

************************************************************
* If system is Suse 9.0 and errors occur when
* "make clean ; make install", do commands:
*
* # cd /usr/src/linux/
* # make cloneconfig
* # make dep
*
* then do "make clean ; make install" again in /temp/snx
************************************************************
```

Load driver module, do command:

modprobe snx
or
insmod /temp/snx/driver/snx.ko (snx.o for kernel 2.4)

Check driver module, do command:
lsmod | grep snx

Unload driver, do command:
rmmod snx

(2) Device node creation

Each parallel port has two device node which is name "lp?" and "parport?". This step will backup lp2~lp3 and parport2~parport3 to lp?.bak and parport?.bak in /dev for your system first. Then, create lp2~lp3 and parport2~parport3 in /dev for sunix driver, maximum up tp 2 parallel ports.

This setp will be done when do "make clean ; make install", if device nodes aren't in /dev, do commands:

cd /temp/snx/snxmknod
./snxmknod

This will create device nodes in /dev.

If there are more than two boards installed, LPT port device nameing convention please refer to F1.

4.
Port Configuration

This chapter shows all Parallel LPT port settings that user came with usually, such as LPT port number, IO address and others.

The following topics covered in this chapter:

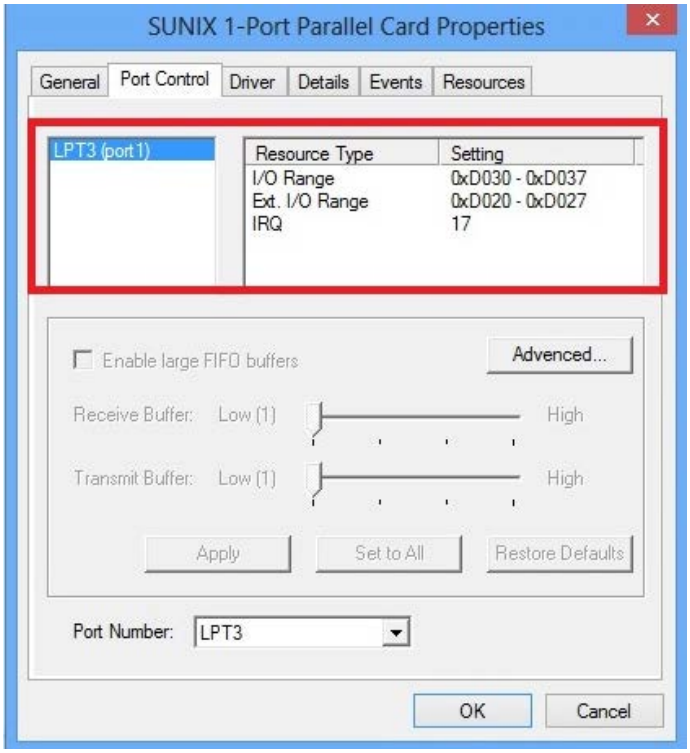
4.1 Configure Parallel LPT Port Settings

After the parallel board and LPT port drivers are installed, please refer to following instructions to configure LPT port settings.

(1) Please launch the "**Device Manager**".
(2) Right click the "**SUNIX 1-port Parallel Card"** item from the "**Multifunction adapters**" sub-tree and click "**Properties**" to execute the detail settings.

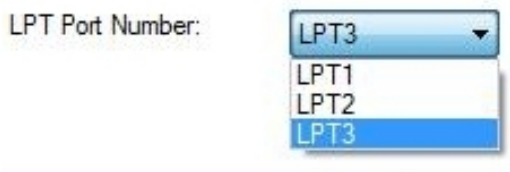
4.2 LPT I/O Resource

User can read the LPT port's "**IO Range**" and "**IRQ**" located in system by selecting "**Port Control**" tab.



4.3 LPT Port Number Settings

System default setting is LPT3, if you want to change LPT number to another port, please follow up below steps. Please select “**Port Control**” tab. Under LPT Port Number, select a LPT number to assign to the port. Click “**OK**” to approve the settings for the selected port.



Note: In order to prevent system resource conflict, do not select “**in use**” port.

5.
Appendix

This chapter shows some problems that user came with usually. Also you can check it if the PCI parallel board can not work properly in your system after following hardware and software installation steps. In addition, you could contact with us for detail technical product information.

In this appendix, we cover the following topics.

- **5.1 Troubleshooting**
- **5.2 Contact Information**

5.1 Troubleshooting

1. System fails to find the PCI parallel board or LPT port.

A: It may cause by following issue:

a. The board is not properly plugged into the PCI slot.

b. Please clean the golden finger.

c. The PCI slot is defective. Please try other slots until you find one that works.

d. The board itself might be defective. You can try another mainboard testing this board working or not.

2. There is a blue screen when I entry operation system.

A: The possible reason is an IRQ or I/O address conflict with other PCI bus adapters, such as LAN or serial boards, or with the system BIOS. Please try to update mainboard's BIOS to support leagacy ISA 378, 278, and 3BC address mode. Or plesae contact with vendor for driver update.

3. There are some exclamation marks on the LPT port and Parallel Card in device manager.

A: It may cause by following issue:

a. It caused by wrong or conflicting address setting makes exclamation mark existing on LPT port. This port does NOT work until correct setting. Make sure 378, 278, and 3BC address setting is available under your system. After finishing the IO address configuration, be sure to reboot your system, and then new IO setting works.

b. Make sure your jumper setting match with software driver contents.

c. You do not install correct driver for this LPT port. Please refer to driver installation guide in chapter 3. Be sure to use Microsoft original driver for the LPT port, if this board is defined as running under 378, 278, and 3BC address setting.

4. How can I set the LPT port to the legacy 278 or 378 ISA address under standard PCI plug-n-play mode (Mode 1, system default setting)?

A: Because of PCI plug-n-play rule, you can NOT remap LPT port to 278, 378, or 3BC legacy ISA IO address under this mode. Please set this board running at Mode 2~4, and you can refer to chapter 2 for detail.

5. How come my parallel device can not work on this Card, but work properly under on-board LPT port??

A: a. Please confirms your parallel device connect to the LPT port correctly.

b. Make sure the LPT port number you connected matches with parallel device settings.

c. Your parallel device only works under 278/378 legacy ISA IO address. Please use this card under Remap Mode.

d. Please check the selection of SPP/BPP/ECP/EPP operation mode.

6. How can I set the different SPP/BPP/ECP/EPP operation mode?

A: Under Windows OS such as 2000, XP, Vista, and 7, PCI parallel card will automatically communicate with the device to which it is connected and sets to that particular mode. For example if this card is connected to a printer that support SPP mode, then this parallel card will communicate with this printer and will automatically set to SPP mode. It means that this card will handshake with the device to which it is connected and configures to that mode. User does not require changing to any particular mode.

However, there’re some software (hardware) could not switch operation mode automatically, and user has to require changing LPT settings to the particular mode. So SUNIX PAR5008R can force setting Bi-Directional, EPP, or ECP mode by SW2 jumper settings! Please note that SPP mode is the default settings, and be sure to enable SW1 then SW2 can work. Please refer to jumper setting page for detail.

7. How can I know the LPT setting is correct?

A: After I/O address and operation mode setting are ready, please connect one parallel printer to this card. Printing windows default test page, if it works then your setting is correct.

5.2 Contact Information

Customer satisfaction is our number one concern, and to ensure that customers receive the full benefit of our products, SUNIX services has been set up to provide technical support, driver updates, product information, and user's manual updates.

The following services are provided

E-mail for technical support

..... info@sunix.com

World Wide Web (WWW) Site for product information:

..... http://www.sunix.com