

MOXA Multiport Board

Windows XP Driver Installation Guide

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Moxa Technologies Co., Ltd.

Tel: +866-2-8919-1230

Fax: +886-2-8919-1231

www.moxa.com

service@moxa.com.tw

Table of Contents

Automatic Installation - for C218T/PCI and C32010T/PCI only	2
Installing the C218T/PCI Multiport Board	2
Manual Installation	5
Installing Moxa Multiport Board via Add New Hardware	5
Installing the Multiport Board' s Serial Ports	15
Multiport Board Properties	18
General	22
Configuration	22
Driver	23
Resources	24
Port Configuration	24

We explain in this manual how to configure Moxa Multiport Boards to operate under the Windows XP operating system. The installation and configuration procedure is substantially different than for Windows NT/95/98/ME, but is quite similar to Windows 2000.

Note that there are two different methods for installing Moxa Multiport Boards under Windows XP. Listed by name, they are:

(1) Automatic Installation by *Windows XP*

	Product Name
<i>Intelligent Family</i>	C32010T PCI
	C218Turbo/PCI

(2) Manual Installation by *Add New Hardware*

	Product Name
<i>Intelligent Family</i>	C320Turbo/ISA
	C218Turbo/ISA
	CP-204J
<i>Smartio Family</i>	C168H & C168H/PCI series
	C104H & C104H/PCI series
	CI-104J & CI-104JS
<i>Industio Family</i>	CI-132 series
	CI-134 series
	CP-132 series
	CP-114 series

Check the product name of your Moxa Multiport Board, and then refer to the installation procedure that applies to your product.

Automatic Installation - for C218T/PCI and C32010T/PCI only

The examples in this section were produced using MOXA Intelligent C218T/PCI, which is an 8-port, RS-232/422/485 PCI Multiport Board for embedded systems. If you are installing an C32010T/PCI multiport board, the procedures you need to follow may be slightly different, but you should be able to use this as a guide to see how to install and manage your board.

Installing the C218T/PCI Multiport Board

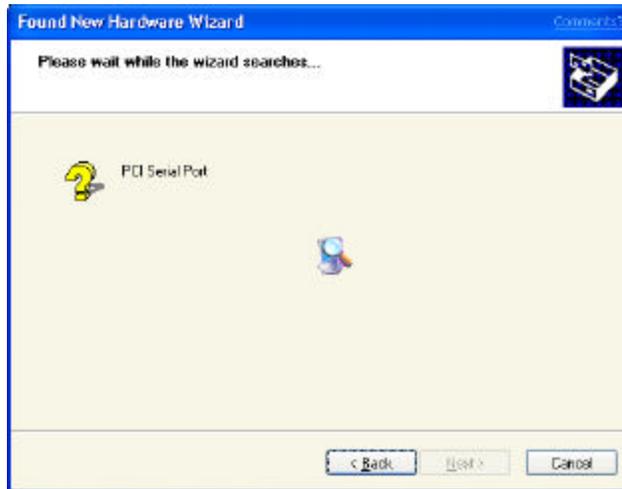
1. After first making sure your PC is powered off, remove the PC's cover and insert your C218T/PCI Multiport Board into an empty PCI slot.
2. Replace the PC's cover and then power-up the computer.
3. The Windows XP operating system will automatically alert you with the **Found New Hardware** message shown in the following figure.



4. After waiting several seconds, the Windows XP **Found New Hardware Wizard** will automatically start up. Insert the software CD or diskette containing the Intellio driver software into either the CD or floppy disk drive. Select the **Install the software automatically** option, and then click on **Next** to continue.



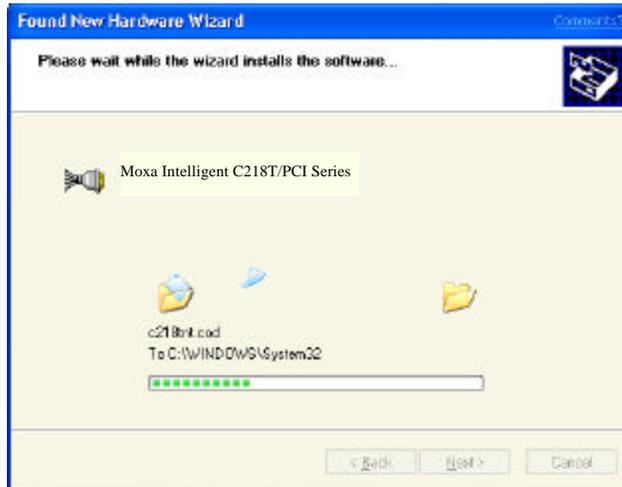
5. The Windows XP operating system will take a few seconds to search for the new hardware.



6. You may safely ignore any warnings from the operating system about compatibility with Whistler. Click on **Continue Anyway** to proceed.



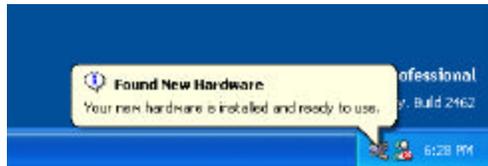
7. Wait patiently while the appropriate files are copied to your hard drive.



8. Click on **Finish** to complete the installation.



9. This completes the installation of your MOXA C218T/PCI. You should see the following message from the Windows XP operating system.



Continue in the Multiport Board Properties section to learn how to manage your board's ports.

Manual Installation

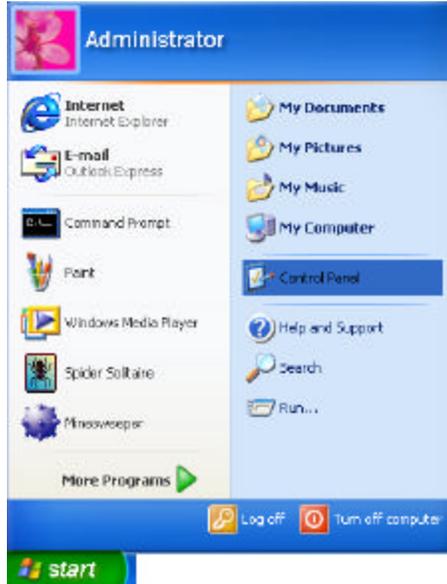
The examples in this section were produced using MOXA Smartio C168H, which is an 8-port, RS-232 or RS-422/485 ISA multiport board. If you are installing a different Multiport Board, then the procedures you need to follow may be slightly different, but you should be able to use this manual as a guide to see how to install and manage your Moxa Multiport Board.

Installing Moxa Multiport Board via Add New Hardware

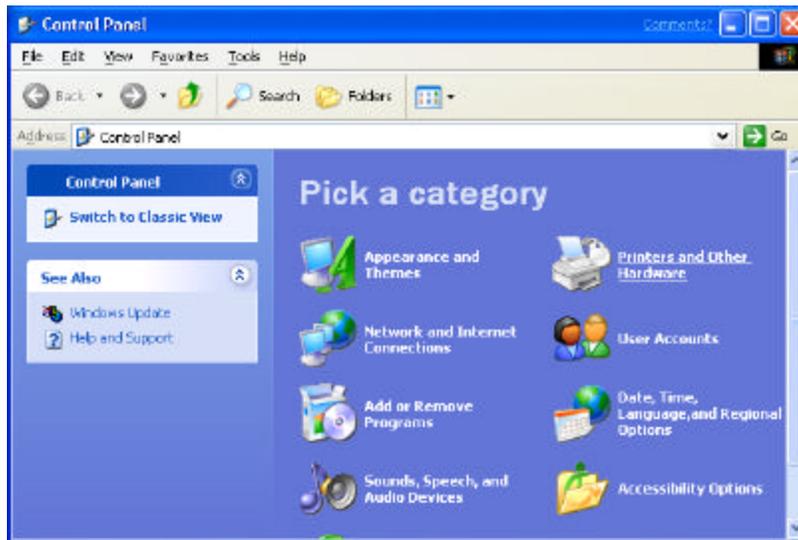
1. After first making sure your PC is powered off, remove the PC's cover and insert your MOXA Multiport Board into an empty ISA slot.
2. Replace the PC's cover and then power-up the computer.

 **NOTE:** *The Windows XP operating system does not automatically recognize the existence of uninstalled ISA boards, so you will need to invoke the Windows XP Add New Hardware wizard yourself, as described below.*

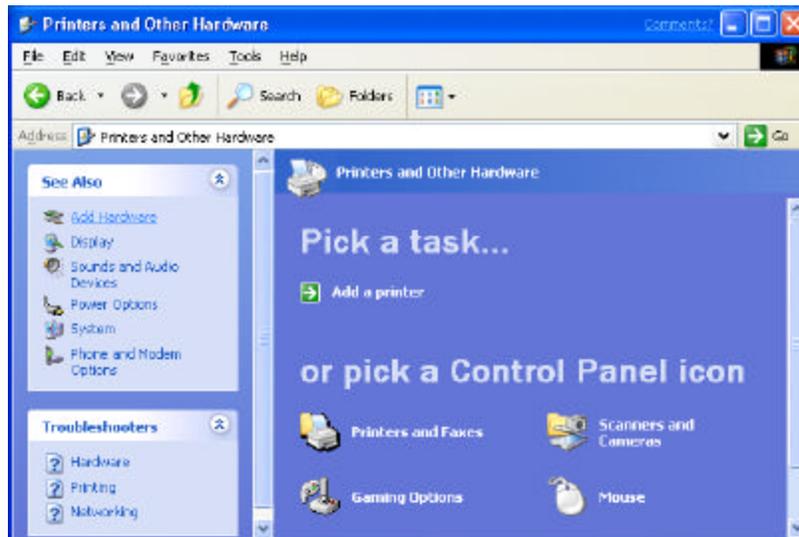
3. From the Windows XP desktop, click on **Start** → **Control Panel**.



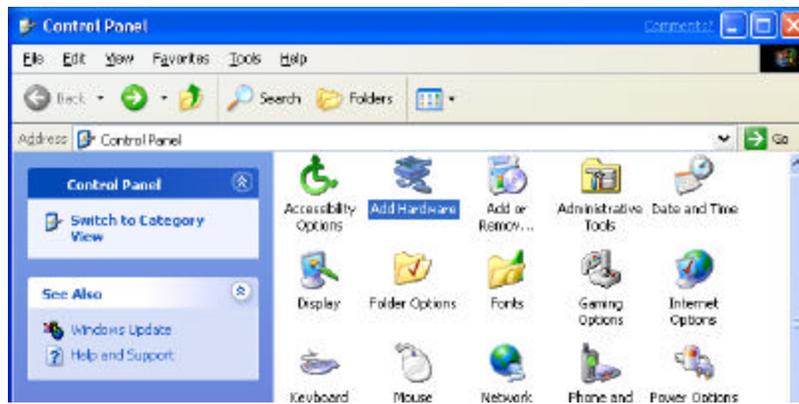
4. [To work from “Classic View”, skip to step 6.] If your operating system is set to the new XP “Category View” style, click on **Printers and Other Hardware**.



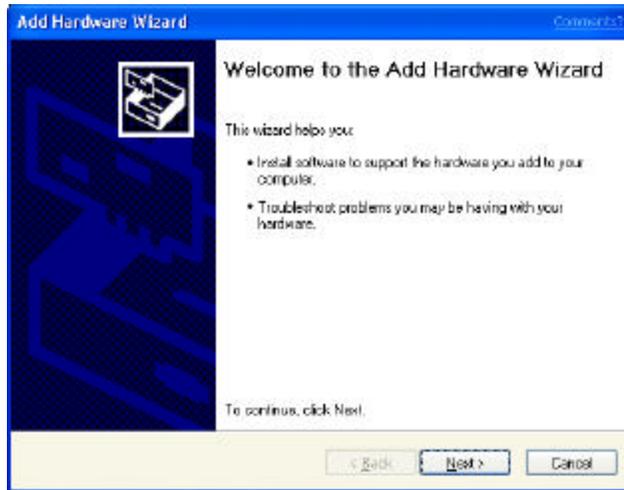
5. Click on **Add Hardware**, found under the **See Also** options.



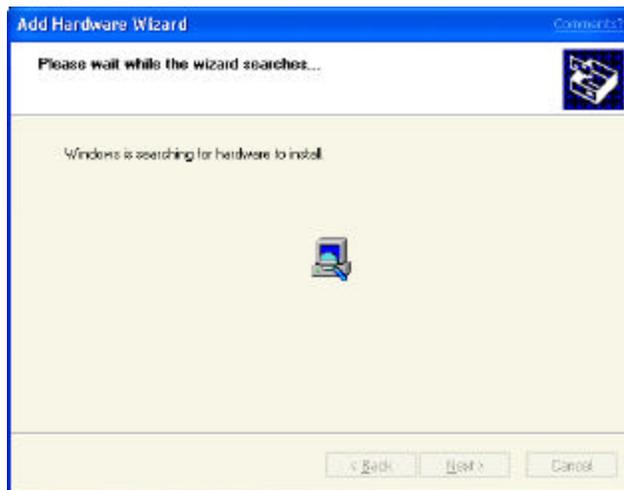
6. If your operating system is set to the older "Classic view" style, double click on the Control Panel's **Add Hardware** icon.



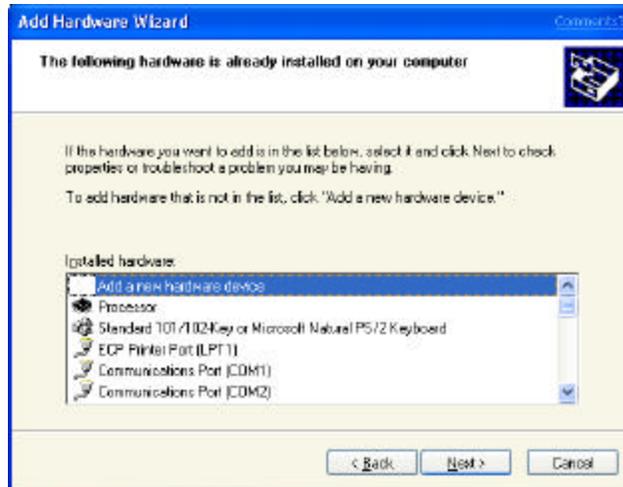
7. When the **Welcome to the Add Hardware Wizard** window opens, click on **Next** to continue with the installation process.



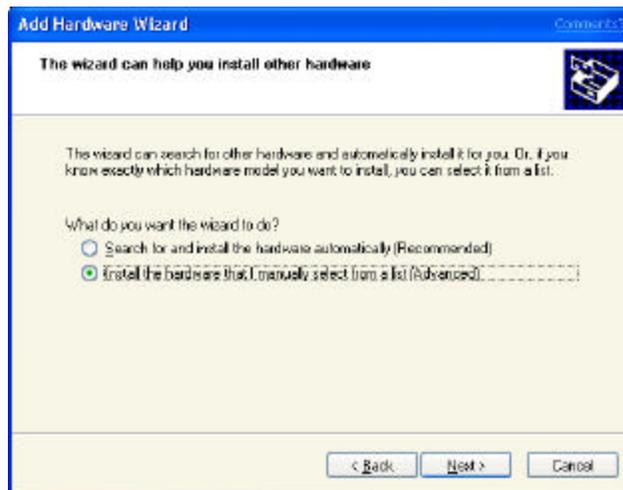
8. The Windows XP operating system will take a few seconds to search for new hardware. Keep in mind that it does not have the capability to locate ISA boards, so that at this stage of the installation process it will not be able to locate your Moxa ISA Multiport Board.



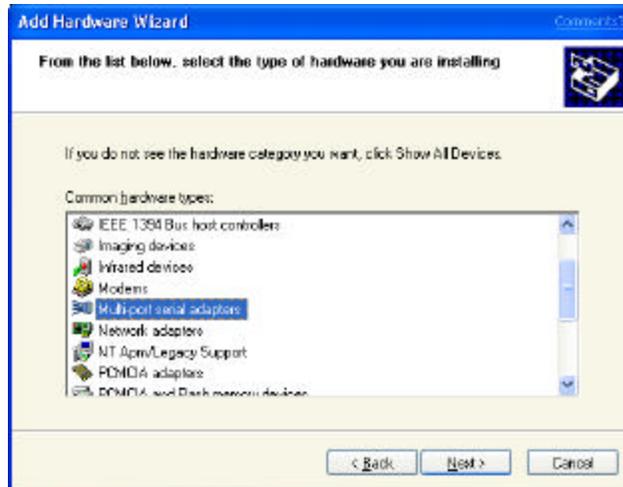
9. The next window to open reads: **The following hardware is already installed on your computer.** Click on the **Add a new hardware device** option to highlight it, and then click on **Next** to continue.



10. The next window to open reads: **The wizard can help you install other hardware.** Select the **Install the hardware that I manually select from a list (Advanced)** option, and then click on **Next** to continue.

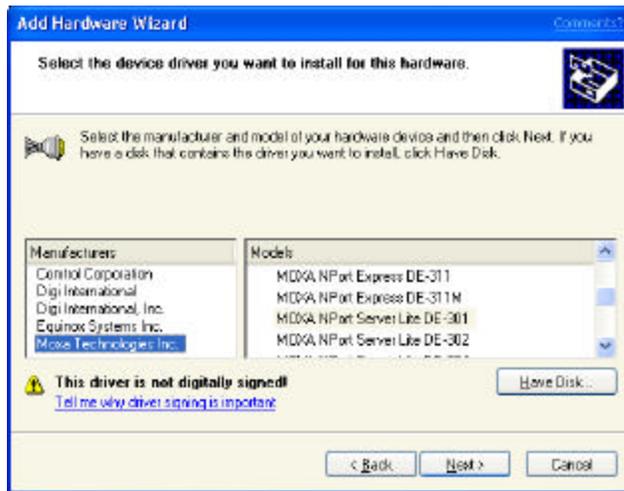


11. The next window to open reads: **From the list below, select the type of hardware you are installing**. Click on the **Multiport serial adapters** option to highlight it, and then click on **Next** to continue.



12. The next window to open reads: **Select the device driver you want to install for this hardware**.

If **Moxa Technologies Inc.** appears in the left selection window under **Manufacturers**, click on the company name to highlight it, and then search for the model of your Multiport Board from the right selection window under **Models**. If you locate the correct model, click on the model name to highlight it, and then click on **Next** to continue.



If the company name, **Moxa Technologies Inc.**, is not listed, or you are unable to find the correct model name for the ISA Multiport Board you are installing, click on the **Have Disk..** button to continue.

 *NOTE: The rest of these instructions are written assuming you are using this second option.*

13. The next window to open gives you the ability to easily select the location of your ISA Multiport Board's driver files. The easiest way to proceed is to click on the **Browse...** button.



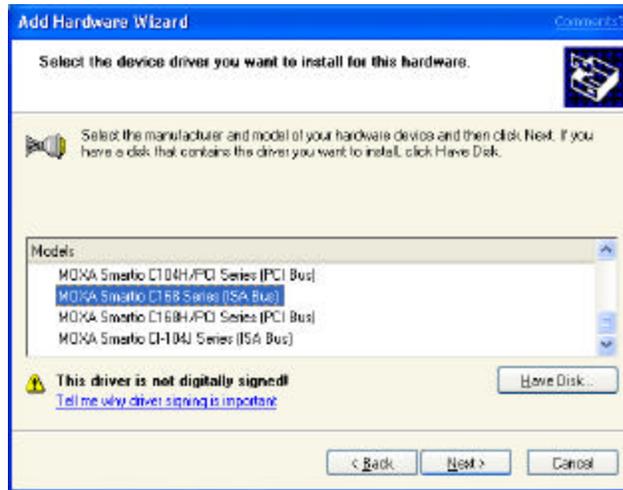
14. Use the folder selection tool located to the right of **Look in:** to find the folder in which your ISA Multiport Board's driver files are located. For this explanation, we copied the files into a folder located on the computer's hard disk, although the more normal circumstance would be for the files to be located on either a floppy disk or CD. Use the left mouse button to click on the appropriate folder.
15. You should next see a window that shows two files: **MXSER** and **MXSPORT**. One file is for installing the ISA Multiport Board, and the other is for installing ports—as long as you've chosen the correct folder, it does not really matter which file appears in the **File name** input box. The system will choose the correct file to use as needed. Click on the **Open** box to continue.



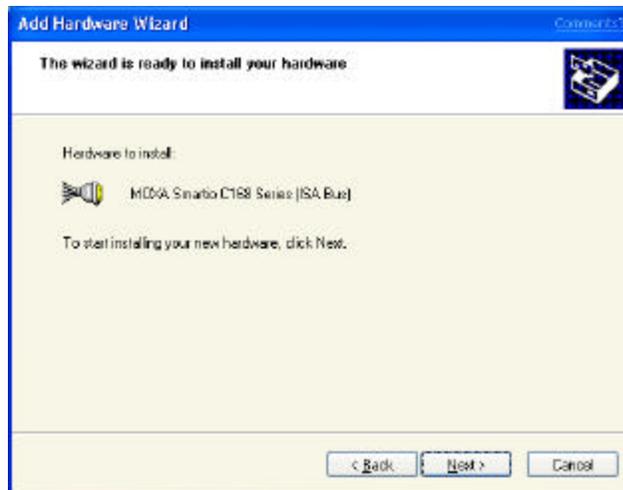
16. Click **OK**, located in the window's top right corner.



17. Click on the correct model to highlight it—for this example, we installed MOXA Smartio C168 Series (ISA Bus)—and then click on **Next** to continue.



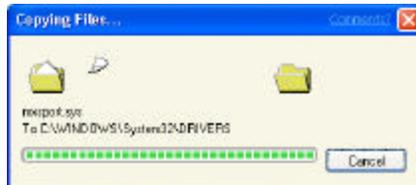
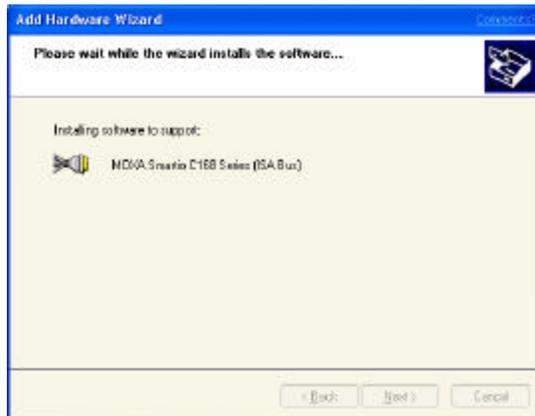
18. The next window to open reads: **The wizard is ready to install your hardware.** Click on **Next** to continue.



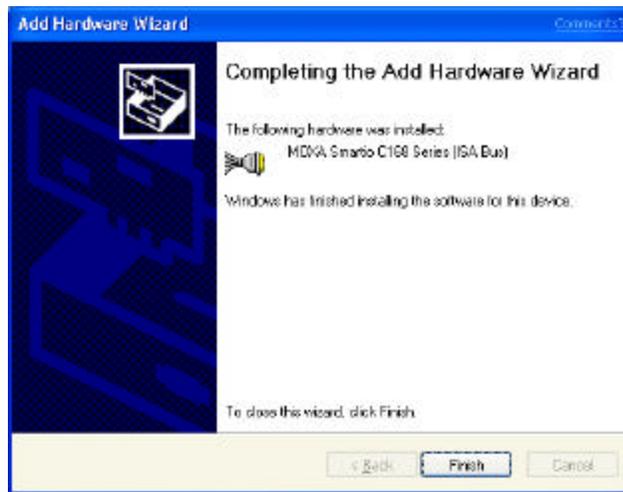
19. You may safely ignore any warnings from the operating system about compatibility with Whistler. Click on **Continue Anyway** to proceed.



20. A series of windows indicating the progress of the installation procedure will open and then close.



21. The next window verifies that the driver software for your ISA Multiport Board has been installed. Click on **Finish** to continue.



Installing the Multiport Board' s Serial Ports

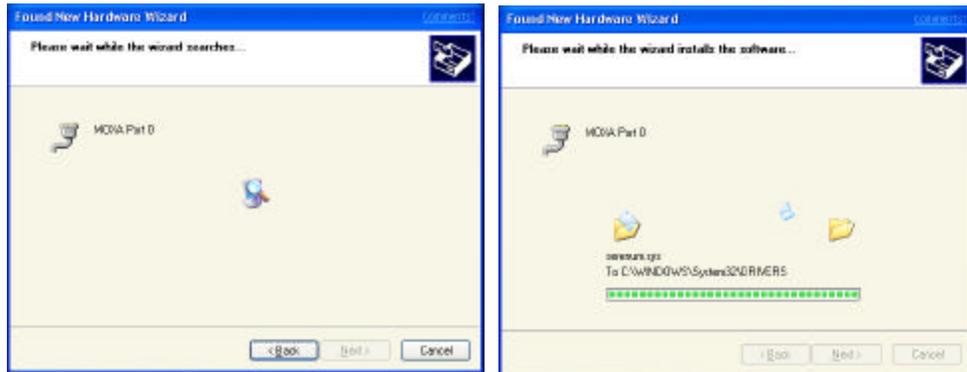
1. Once you have successfully installed your ISA Multiport Board, the Windows XP operating system will automatically detect the board' s ports, and then begin installing them—one by one.
2. You should see the following **Found New Hardware** message. Wait patiently.



- When the **Found New Hardware Wizard** starts up, choose the option **Install the software automatically (Recommended)**, and then click on **Next** to continue. For this example, we installed the driver software from a floppy disk located in the computer's 'a:' drive.



- Wait patiently while the software is copied to your hard drive. Note that it starts off installing **MOXA Port 0**.



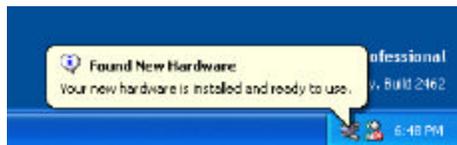
- The next window to open verifies that the software for **MOXA Port 0** has been successfully installed. Click on **Finish** to complete the installation procedure.



- For multiport boards, you will receive the **Found New Hardware** message, indicating that another communication port has been located. Follow the above procedure for installing this and subsequent ports.



- Once all ports have been successfully installed, you will receive the following message, indicating that your hardware has been installed and is ready to use.

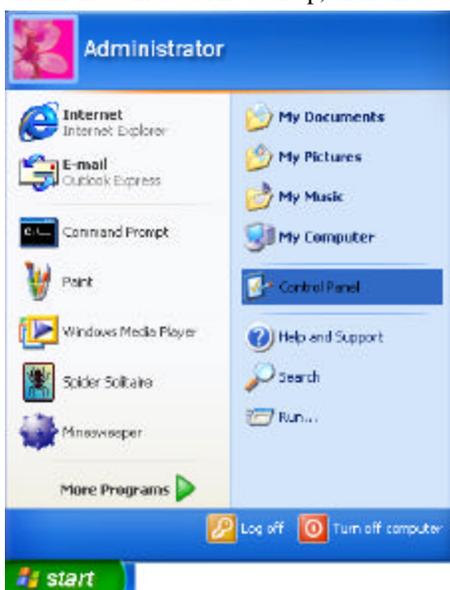


- Continue in the section Multiport Board Properties to learn how to configure your MOXA Multiport Board's individual ports.

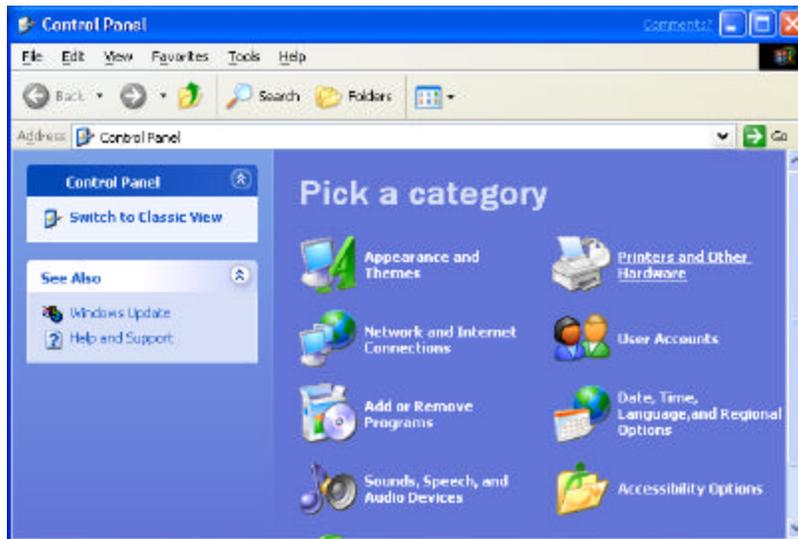
Multiport Board Properties

Your Multiport Board's configuration parameters are easily changed from within the Windows XP system's device manager.

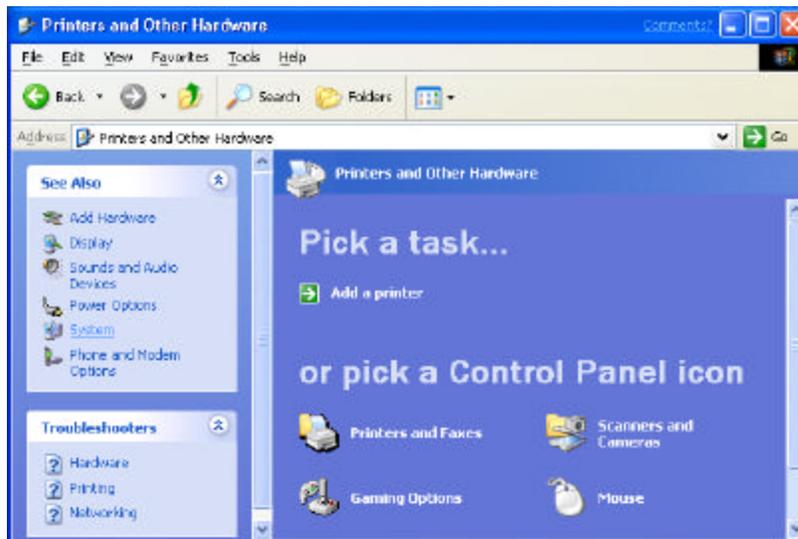
1. From the Windows XP desktop, click on **Start → Control Panel**.



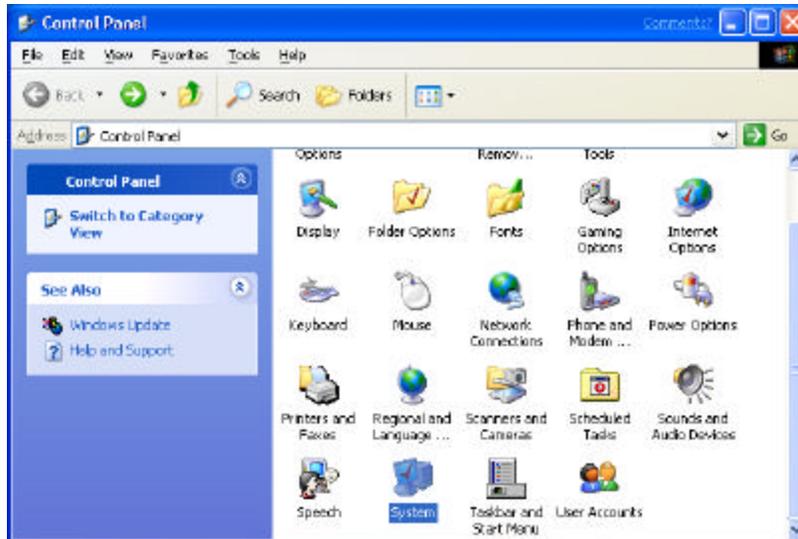
2. [To work from “Classic View”, skip to step 4.] If your operating system is set to the new XP “Category View” style, click on **Printers and Other Hardware**.



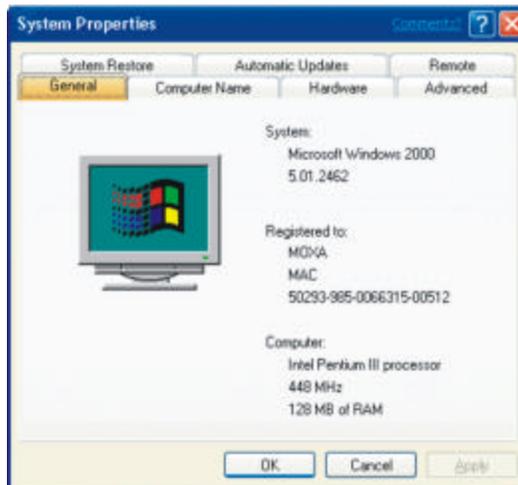
3. To evoke the device manager, click on **System**, located under the **See Also** options.



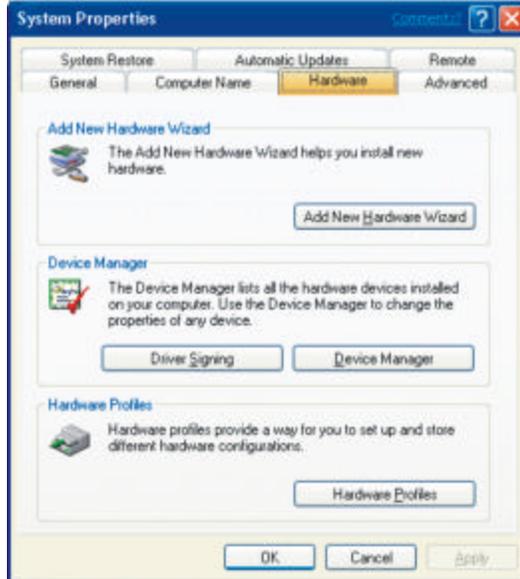
4. If your operating system is set to the older “Classic View” style, double click on the Control Panel’s **System** icon.



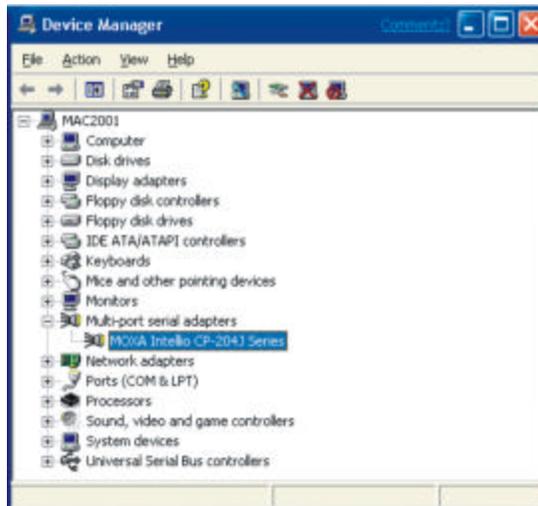
5. The Windows XP **System Properties** window opens next.



6. Select the **Hardware** tab, and then click on **Device Manager...**



7. Click on the plus sign to the left of **Multi-port serial adapters** and then double click on **MOXA [Multiport Board installed] (eg., Intelligent CP-204J Series)** to open the **Properties** window.



General

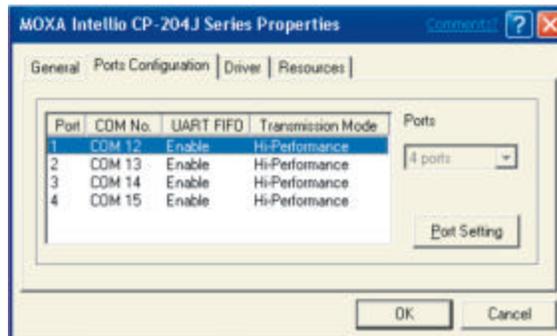
Information on the **General** page gives basic details about the Multiport Board and its current status.



Configuration

Select the **Properties** window's **Ports Configuration** tab to change parameter settings for your Multiport Board.

1. To change settings for a port, click on the port to highlight it (such as Port 1, as shown below), and then click on the **Port Setting** button.

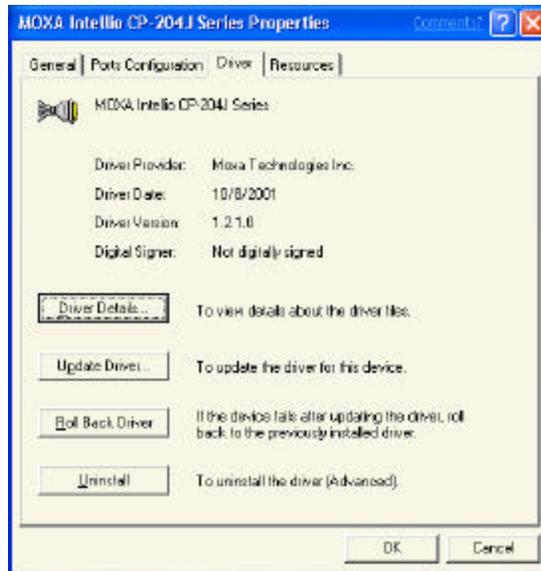


- This allows you to make changes to **Port Number**, **UART FIFO**, and **Transmission Mode**.



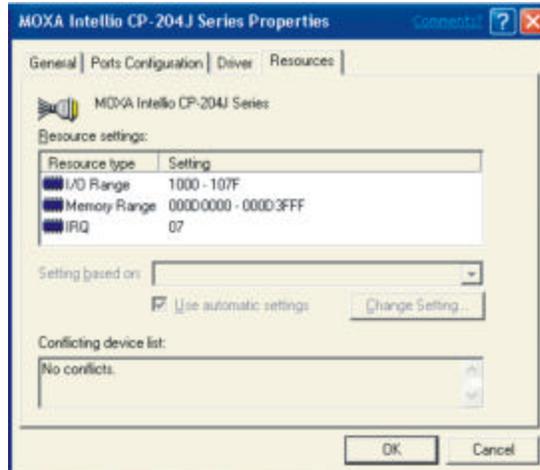
Driver

The **Driver** page displays important information about the driver. Use the buttons at the bottom of the window for **Driver Details...**, to **Uninstall** the driver, or **Update Driver**.



Resources

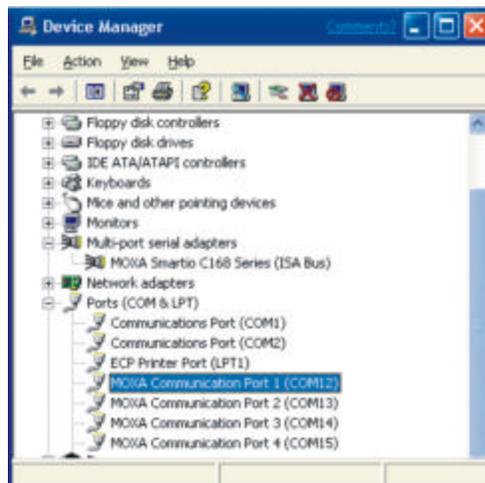
The **Resources** page displays information about **I/O Range**, **Memory Range**, and **IRQ**.



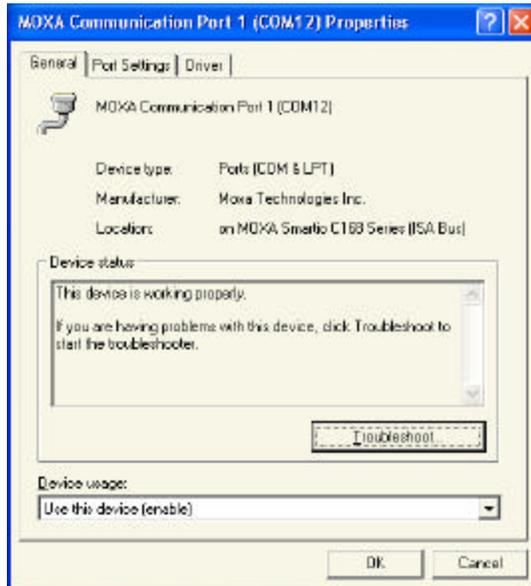
Port Configuration

In this section, we describe how to access and modify certain port settings.

1. From the **Device Manager** window, click on the plus sign to the left of **Ports (COM & LPT)**, and then double click on one of the **MOXA Communication Ports** listed.



2. The **MOXA Communication Port 1 (COM 12) Properties** page opens.



3. Click on the **Port Settings** tab to view and/or make changes to **Baud Rate**, **Data bits**, **Parity**, **Stop bits**, and **Flow control**.

