CyberSerial Dual PCI Quick Installation Guide

Introducing the *CyberSerial Dual PCI*

The *CyberSerial Dual PCI* high-speed serial I/O card provides two additional 9-pin serial ports. Depending on the model purchased, this board will fit into either a **Full** or **Low Profile** chassis.

Features and Benefits

- Conforms to PCI v2.2 Plug and Play
- Reduces CPU load and improves system performance dramatically
- IRQ sharing feature reduces IRQ conflicts
- High-speed serial port (9-pin) works with 56K V.90 external modems, ISDN terminal adapters, PDAs, digital cameras, label printers and other serial port devices
- Built-in FIFO buffers dramatically increase data transmit/receive speed, especially under Windows' multitasking environment
- Each serial port can be configured for either 5V or 12V output, for serial devices that require power

System Requirements

- Pentium or equivalent computer with an available PCI slot
- DOS, Windows 95/98/98SE/ME/NT 4.0/2000/XP/Server 2003
- Linux Kernel 2.4.x or later

Package Contents

- *CyberSerial Dual PCI* board
- 2-port fan-out cable
- Low profile bracket (Dual Profile board only)
- Driver CD
- Quick installation guide

Layout

Full
profile
bracket*

JP2 (Serial port 2)

Fan-out
cable
connector
(25-pin)

JP1 (Serial port 1)
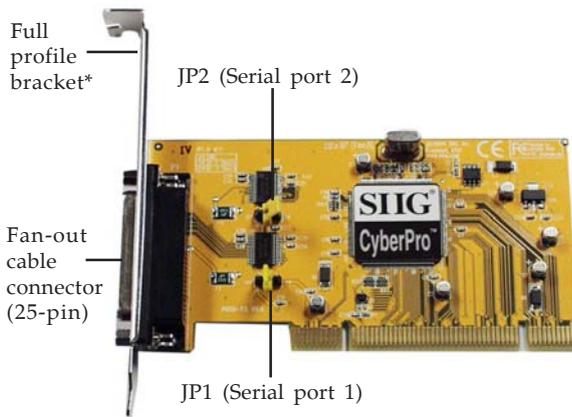
Figure 1. Layout

* Note: Depending on the model purchased, the bracket size will be either Full or Low profile.

Jumper Settings (JP1, JP2)

Open = 0 volts (default)

Short 1-2 = 5V

Short 2-3 = 12V

Note: Most serial devices do not require additional power through the serial port. Refer to your serial device's manual for more information.

Fan-out Cable

Figure 2. Fan-out cable

Hardware Installation

General instructions for installing the card are provided below. Since the design of computer cases and motherboards vary, refer to your computer's reference manual for further information, if needed.

Static Electricity Discharge may permanently damage your system. Discharge any static electricity build up in your body by touching your computer's case for a few seconds. Avoid any contact with internal parts and handle cards only by their external edges.

1. Turn OFF the power to your computer and any other connected peripheral devices.
2. Unplug the power cord from the back of the computer.
3. Remove your computer's cover.
4. Remove the slot bracket from an available PCI slot.

5. Change **JP1** and **JP2** jumper settings to the desired voltage only if your serial device needs additional power from the serial port. However, most serial devices do not require additional power. For more information see **Figure 1** on page **2**. The jumpers can be removed if power output is not required.

6. To install the card, carefully align the card's bus connector with the selected PCI slot on the motherboard. Push the board down firmly, but gently, until it is well seated.

7. Replace the slot bracket's holding screw to secure the card.

8. Replace the computer cover and reconnect the power cord.

9. Connect the **2-port fan-out cable** to the board's **25-pin connector**. See **Figure 2** on page **3** for more details.

Driver Installation

This section provides information on how to install the *CyberSerial Dual PCI* drivers.

DOS

1. Boot up DOS and insert the driver CD.

2. Copy **OXSER.EXE** from the **DOS** folder to your **C:** drive.

3. At the **C:** prompt, type in **OXSER io=3e8** and the serial ports will be set up as **COM3** and **COM4**.

    If your system already comes with 4 serial ports enabled, type in **OXSER io=220** instead and the ports will be set up as **COM5** and **COM6**.

4. Copy the OXSER command in step 3 into your **autoexec.bat** and restart your system.

Windows 95

1. At the **Update Device Driver Wizard**, click **Next**.
2. Insert the driver CD, click **Other Locations**.
3. Type in **D:\9x**, click **OK**, then click **Finish**. (Change **D:** to match your CD-ROM drive letter)
4. From the **Insert Disk** window, click **OK**. When the **Copying Files** dialog box pops up, type in **D:\9x**, then click **OK**.
5. Restart Windows to complete the installation.

Windows 98/98SE

1. At the **Add New Hardware Wizard**, click **Next**.
2. Select **Search for the best driver for your device (Recommend)**, then click **Next**.
3. Insert the driver CD, check **Specify a location**, uncheck the other boxes, type in **D:\9x,** then click **Next**. (Change **D:** to match your CD-ROM drive letter)
4. Click **Next,** then **Finish**.
5. Repeat steps **1-4**.
6. Restart Windows to complete the installation.

Windows ME

1. At the **Add New Hardware Wizard**, select **Specify the location of the driver (Advanced),** then click **Next.**
2. Insert the driver CD, check **Specify a location**, uncheck the other box, type in **D:\ME,** then click **Next.** (Change **D:** to match your CD-ROM drive letter)
3. Click **Next**, then **Finish**.

4. Repeat steps **1** and **2**.

5. Click **Next**, **Next**, then **Finish**.

6. Restart Windows to complete the installation.

To Verify Windows 95/98/98SE/ME Installation

1. Right click **My Computer**, click **Properties**, then click **Device Manager**.

2. Double click **Ports (COM & LPT)**, **CyberSerial PCI 16Cxxx...** should be displayed two times.

3. Double click **Multi-function adapters, SIIG CyberPro 2S PCI board** and **PCI Function** should be displayed.

Windows NT 4.0

1. From the desktop click **Start,** then **Run**.

2. Insert the driver CD, type in **D:\NT4\Install_serial.exe,** then click **OK**. (Change **D:** to match your CD-ROM drive letter)

3. Click **Next** when the **Welcome** window appears.

4. Select **Install**, then click **Next**.

5. Click **Yes**, then click **Exit**.

6. Restart Windows to complete the installation.

To Verify Windows NT 4.0 Installation

1. Click **Start**, **Settings**, **Control Panel**. Double click **Ports** device icon.

2. Two new **COM** ports will be assigned when successfully installed.

Windows 2000

1. At the **Found New Hardware Wizard**, click **Next**.
2. Select **Search for a suitable driver for my device (recommended)**, then click **Next**.
3. Check **Specify a location**, uncheck the other boxes, then click **Next**.
4. Insert the driver CD, type in **D:\2000**, then click **OK**. (Change **D:** to match your CD-ROM drive letter)
5. Click **Next** and **Finish**.
6. Repeat steps **1-5** two more times.
7. Restart Windows to complete the installation.

Windows XP

1. At the **Found New Hardware Wizard**, select **Install from a list or specific location (Advanced)**, then click **Next**.
2. Insert the driver CD, check **Include this location in the search**, uncheck the other box, type in **D:\XP**, and click **Next**. (Change **D:** to match your CD-ROM drive letter)
3. If the **Hardware Installation** window pops up, click **Continue Anyway**, then **Finish**. *Our driver has been tested for stability and compatibility.*
4. Repeat steps **1-3** three more times.
5. Restart Windows to complete the installation.

Windows Server 2003

1. At the **Found New Hardware Wizard**, select **Install from a list or specific location (Advanced)**, then click **Next**.

2. Insert the driver CD, check **Include this location in the search**, uncheck the other box, type in **D:\2003**, then click **Next**. (Change **D:** to match your CD-ROM drive letter)

3. If the **Hardware Installation** window pops up, click **Continue Anyway**, then **Finish**. *Our driver has been tested for stability and compatibility.*

4. Repeat steps **1-3** three more times.

5. Restart Windows to complete the installation.

To Verify Windows 2000/XP/2003 Installation

1. Right click **My Computer**, click **Manage**, then click **Device Manager**.

2. Click on the **+** (plus sign) in front of **Ports (COM & LPT)**, **CyberSerial PCI 16Cxxx...** should be displayed two times.

3. Double click **Multifunction adapters**, **SIIG CyberPro 2S PCI board** should be displayed.

Linux Kernel 2.4.x or later

1. Open the terminal.

2. Type **setserial -bg /dev/ttyS*** and hit <enter> to show the current serial ports installed. SIIG board will be set up at the next available address. For example, if your system comes with /dev/ttyS0 and /dev/ttyS1, set up SIIG board as /dev/tty2 and /dev/ttyS3.

3. Type **lspci -v** and hit <enter>. This command displays the *CyberSerial Dual PCI*'s information similar to the example listed below. This information is needed to configure the serial ports.

   - 02:0b.0 Serial controller: Oxford Semiconductor Ltd EXSYS EX-41092 Dual 16950 Serial ....

   - Subsystem: SIIG Inc: ....

   *- Flags: medium devsel, **IRQ 9***

   *- I/O ports at **a000** [size=32]*

   - Memory at ed800000 (32-bit, ...) ....

   - I/O ports at 9800 [size=32]

   - Memory at ed000000 (32-bit, ...) ....

   - Capabilities: [40] Power Management ....

4. Edit the **startup file** and add these two command lines at end of the startup file.

   - **setserial /dev/ttyS2 port 0xa000 irq 9 uart 16950**.
   - **setserial /dev/ttyS3 port 0xa008 irq 9 uart 16950**.

   > **Note: ttyS** value, **I/O** port address and **irq** should be different from one system to another. These values should be based on the results you get from steps 2 & 3.

5. Save the startup file and restart your system.

Changing COM Port Address

Some serial devices need a specific COM port in order to work. If your serial device works properly, do not change this setting.

Windows 95/98/98SE/ME

1. From the **Device Manager** window double click **Ports (COM & LPT)**, then double click the **CyberSerial PCI** serial port you want to change.

2. Click **Settings** tab, click the down arrow that is next to the **Port Name** box and select a COM address that is not currently in use.

3. Click **OK**, then close **Device Manager** to save the changes.

Windows 2000/XP/Server 2003

1. From the **Device Manager** window double click **Ports (COM & LPT)**, then double click the **CyberSerial PCI** serial port you want to change.

2. Click **Settings** tab and click **Advanced**.

3. Click the down arrow that is next to the **COM Port number** box and select a COM port that is not in use. Click **OK**.

4. Click **OK**, then close **Device Manager** to save the changes.

Technical Support and Warranty

QUESTIONS? SIIG's **Online Support** has answers! Simply visit our website at *www.siig.com* and click on **Support**. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and one of our technical support analysts will promptly respond.

A lifetime manufacturer warranty supplied with this product is offered by SIIG, Inc. Please see SIIG website for more warranty details. If you should happen to encounter any problems with this product, please follow the procedures below.

If it is within the store's return policy period, please return the product to the store where you purchased from.

If your purchase has passed the store's return policy period, please follow these steps to have the product repaired or replaced.

Step 1: Submit your RMA request.

Go to **www.siig.com**, click **Support**, then **RMA** to submit a request to <u>SIIG RMA</u>. If the product is determined to be defective, an RMA number will be issued. SIIG RMA department can also be reached at (510)413-5333.

Step 2: After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All software, cable(s) and any other accessories that came with the original package must be included.

- Clearly write your RMA number on the top of the returned package. SIIG will refuse to accept any shipping package, and will not be responsible for a product returned without an RMA number posted on the outside of the shipping carton.

- You are responsible for the cost of shipping the product to SIIG at the following address:

  SIIG, Inc.
  6078 Stewart Avenue
  Fremont, CA 94538
  RMA #: ————————————

- SIIG will ship the repaired or replaced product via Ground in the U.S and International Economy outside of the U.S at no cost to the customer.

About SIIG, Inc.

Founded in 1985, SIIG, Inc. is a leading computer upgrade manufacturer of I/O connectivity products, including PCI & ISA serial and parallel ports, USB, Serial ATA & UltraATA controllers, FireWire (1394a/b), Networking, Sound Cards, and other accessories. SIIG is the premier one-stop source of upgrades.

SIIG products offer comprehensive user manuals, many user-friendly features, and are backed by an extensive manufacturer warranty. High-quality control standards are evident by the overall ease of installation and compatibility of our products, as well as one of the lowest defective return rates in the industry. SIIG products can be found in computer retail stores, mail order catalogs, and e-commerce sites in the Americas and the UK, as well as through major distributors, system integrators, and VARs.