

# 4-Port RS232 Serial PCI with 16550 UART Quick Installation Guide

### Introduction

The 4-Port RS232 Serial PCI with 16550 UART is a high-speed serial card that provides four additional serial ports to your system.

# **Key Features and Benefits**

- Compliant with PCI Local Bus Specification, Revision 2.3
- Supports data transfer rate up to 230Kb/s
- Supports up to 256-byte FIFO buffer

### System Requirements

- Pentium<sup>®</sup> or equivalent computer with an available 32-/64-bit PCI or PCI-X slot
- Windows® 8 (32-/64-bit) / 7 (32-/64-bit) / Vista (32-/64-bit) / XP (32-/64-bit) / Server 2003 & 2008 (32-/64-bit) / Server 2008 R2 / 2000 / ME / 98SE / 98 / DOS

# **Package Contents**

- 4-Port RS232 Serial PCI with 16550 UART
- Slot bracket with 2 DB9 (9-pin) serial ports
- Driver CD
- Quick installation guide

# Layout

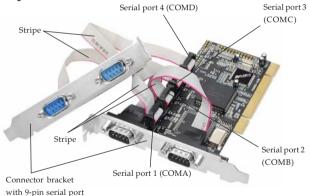


Figure 1: Layout

**Note**: Make sure the stripe on the ribbon cable is align to the pin 1 of the serial header when connected for proper connection.

### 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 and remove the cover from the computer.
- 3. Remove the slot bracket from an available PCI slot.
- 4. Connect the **2-Port DB9 (9-Pin) serial port cable** connector and remove another slot bracket cover from from the system chassis. See **Figure 1** on page 2 for more details. Skip this step if you only need two serial ports.

- 5. 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.
- 6. Replace the slot bracket's holding screw to secure the card.
- 7. Mount the second serial port and secure it with the slot bracket holding screw. Skip this step if you only need two serial ports.
- 8. Replace the computer cover and reconnect the power cord.

### **Driver Installation**

This section provides information on how to install the *4-Port RS232 Serial PCI with 16550 UART* drivers.

# Windows 8 (32-/64-bit) / 7 (32-/64-bit) / Server 2008 R2

1. Install the board and boot up Windows.

**Note**: Windows 7 will automatically search preconfigured driver folders for the proper driver. This process may take several minutes. Do not interrupt this process.

- 2. Right click **Computer**, click **Manage**, click **Device Manager**.
- Insert the driver CD. Starting from top, right click PCI Serial Port under Other Devices, click Update Driver Software. Close the AutoPlay box if displayed.
- 4. Click Browse my computer for driver software.

*For 32-bit*: Type in **D:\32-bit**, then click **Next**. (Change **D:** to match your CD/DVD-ROM drive letter)

*For 64-bit*: Type in **D:\64-bit**, then click **Next**. (Change **D:** to match your CD/DVD-ROM drive letter)

- 5. At Windows has successfully updated your driver software, click Close.
- 6. Repeat steps **3-5**.
- 7. Right click PCI Simple Communications Controller, click Update Driver Software.
- 8. Repeat steps **4-5** to complete the installation.

# Windows Vista (32-/64-bit)

1. Install the board and boot up Windows.

- 2. At the Found New Hardware window, click Locate and install driver software (recommended), then click Continue.
- 3. Click I don't have the disk. Show me other options.
- 4. Insert the driver CD. Click **Browse my** computer for driver software.
- 5. <u>For 32-bit</u>: Type in **D:\32-bit**, then click **Next**. (Change **D:** to match your CD/DVD-ROM drive letter)
  <u>For 64-bit</u>: Type in **D:\64-bit**, then click **Next**. (Change **D:** to match your CD/DVD-ROM drive letter)
- 6. At The software for this device has been successfully installed, click Close.
- 7. Repeat steps **3-6** to complete the installation.

# Windows XP (32-/64-bit) / Server 2003 (32-/64-bit)

- 1. Install the board and boot up Windows.
- At the Found New Hardware Wizard, select No, not this time, click Next. (Skip this step if not prompted)

- 3. Select Install from a list or specific location, then click Next.
- 4. Insert the driver CD. Select **Include this location in the search**, uncheck the other box

*For 32-bit*: Type in **D:\32-bit**, then click **Next**. (Change **D:** to match your CD/DVD-ROM drive letter)

*For 64-bit*: Type in **D:\64-bit**, then click **Next**. (Change **D:** to match your CD/DVD-ROM drive letter)

- 5. Click Finish.
- 6. Repeat steps **2-5** to complete the installation.

# Windows Server 2008 (32-/64-bit)

- 1. Install the board and boot up Windows.
- At the Found New Hardware window, click Locate and install driver software (recommended).
- 3. Insert the driver CD.
- 4. Click Don't search online.
- 5. Click I don't have the disc. Show me other options.

- Click Browse my computer for driver software (advanced).
- For 32-bit: Type in D:\32-bit, then click Next. (Change D: to match your CD/DVD-ROM drive letter)

*For 64-bit*: Type in **D:\64-bit**, then click **Next**. (Change **D:** to match your CD/DVD-ROM drive letter)

- 8. Click Close.
- 9. Repeat steps **4-8** to complete the installation.

#### Windows 2000

- 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 options and click **Next**.
- 4. Insert the driver CD, type in **D:\2000**, then click **OK**. (Change **D:** to match your CD/DVD-ROM drive letter)
- 5. Click **Next**, then click **Finish**.
- 6. Repeat steps **1-5** to complete the installation.

### To Verify Windows Installation

1. Check in Device Manager to verify installation.

For Windows 8 / 7 / XP / Server 2003 & 2008 / Server 2008 R2 / 2000: Right click Computer or My Computer, click Manage, then click Device Manager.

<u>For Windows Vista</u>: Right click **Computer**, click **Manage**, click **Continue**, then click **Device Manager**.

For Windows Server 2008: Right click Computer, click Manage, double click Diagnostics, then click Device Manager.

- Double click Ports (COM & LPT), High-Speed PCI Serial Port listed two times and PCI-ISA Communication listed two times...should be displayed.
- Double click Multifunction adapters, PCI Multifunction-IO Controller should be displayed.

### **Changing Serial Port Number**

Some serial port devices need a specific communication port in order to function properly. If your serial port device works, do not make any changes. This feature available in Windows 8/7/Vista/XP/Server 2003 & 2008/Server 2008 R2/2000 only.

- 1. Right click **My Computer**, click **Manage**, then click **Device Manager**.
- Click on the + (plus sign) in front of Ports (COM & LPT), double click the High-Speed PCI Serial serial port you want to change.
- 3. Click the **Port Settings** tab.
- 4. Click Change Port Number or Advanced.
- Click the down arrow next to the COM Port Number box. Select a communication port that is not in use, then click OK.
- 6. Click **OK** to save the changes.

### Windows ME

1. At the Add New Hardware Wizard, select Specify the location of the driver (Advanced), click Next.

- Check Specify a location, uncheck the other box, insert the driver CD, type in D:\ME, then click Next. (Change D: to match your CD/DVD-ROM drive letter)
- 3. Click **Next**, then **Finish**.
- 4. Type in **D:\ME**, then click **OK** to complete the installation. (Change **D:** to match your CD/DVD-ROM drive letter)

#### Windows 98 / 98SE

- At the Add New Hardware Wizard, click Next.
- Select Search for the best driver for your device. (Recommended), then click Next.
- Select Specify a location, uncheck the other boxes, insert the driver CD, type in D:\9x, then click Next. (Change D: to match your CD/DVD-ROM drive letter)
- Click Next, then Finish. If prompted, at the Insert Disk box click OK. Type in D:\9x, click OK to complete the installation. (Change D: to match your CD/DVD-ROM drive letter)

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

- 1. Right click **Computer** or **My Computer**, click **Properties**, click **Device Manager**.
- Click on the + (plus sign) in front of Ports (COM & LPT), and a M65-PCI Serial Port ... should be displayed four times.
- Double click M65Multifunction, M65-PCI Multi-I/O Controller should be displayed.

### DOS

- Insert the driver CD. From the C:\> prompt, type copy D:\dos\\*.\*, and press Enter. (Change D: to match your CD-ROM drive letter)
- 2. Type edit autoexec.bat, and press Enter.
- 3. Add C:\Gemdosin.exe -a -r at the bottom of the Autoexec.bat file.
- 4. Go to **File**, save the changes and exit.
- 5. Restart your system for the new setup to take effect.