

# Dual Voltage Serial Card

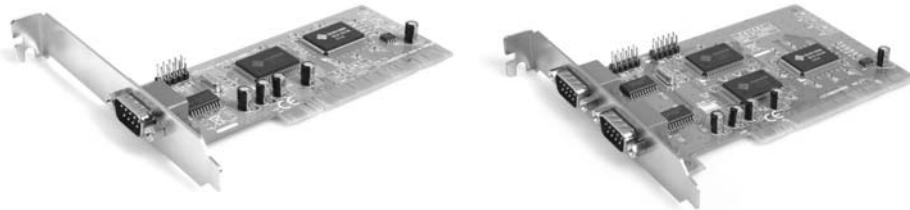
1 Port 16650 Dual Voltage Serial Card

2 Port 16650 Dual Voltage Serial Card

**PCI1S650DV**

**PCI2S650DV**

**Instruction Manual**



Actual product may vary from photo

**StarTech.com**

The Professionals' Source for Hard-to-Find Computer Parts

## **FCC Compliance Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **Use of Trademarks, Registered Trademarks, and other Protected Names and Symbols**

This manual may make reference to trademarks, registered trademarks, and other protected names and/or symbols of third-party companies not related in any way to StarTech.com. Where they occur these references are for illustrative purposes only and do not represent an endorsement of a product or service by StarTech.com, or an endorsement of the product(s) to which this manual applies by the third-party company in question. Regardless of any direct acknowledgement elsewhere in the body of this document, StarTech.com hereby acknowledges that all trademarks, registered trademarks, service marks, and other protected names and/or symbols contained in this manual and related documents are the property of their respective holders.

## Table of Contents

|                                             |          |
|---------------------------------------------|----------|
| <b>Introduction</b>                         | <b>1</b> |
| Features                                    | 1        |
| <b>Before You Begin</b>                     | <b>1</b> |
| System Requirements                         | 1        |
| Contents                                    | 1        |
| <b>Installation</b>                         | <b>2</b> |
| Installing the Serial Card                  | 2        |
| Installing the drivers                      | 2        |
| Verifying installation                      | 3        |
| COM Port configuration                      | 3        |
| Pin Assignments                             | 3        |
| <b>Troubleshooting Guide</b>                | <b>4</b> |
| <b>Specifications</b>                       | <b>5</b> |
| <b>Accessory Products from StarTech.com</b> | <b>5</b> |
| <b>Technical Support</b>                    | <b>6</b> |
| <b>Warranty Information</b>                 | <b>6</b> |

## Introduction

Thank you for purchasing a StarTech.com 16650 Dual Voltage Serial Card. This PCI I/O card allows you use DB-9 cables to connect various serial devices, to any computer with an available PCI expansion slot.

## Features

- Dual voltage card supports both 64-bit(3.3V) and 32-bit(5V) PCI
- High speed serial data transfers up to 920Kbps
- 128K transmit/receive FIFO buffer helps improve overall system performance
- IRQ sharing eliminates IRQ conflicts
- Low profile design saves space

## Before You Begin

### System Requirements

- A computer with an available PCI port
- A computer running Windows 95/98SE/NT/ME/2000/XP/2003, Linux or DOS
- A CD-ROM, DVD-ROM, or other compatible optical drive (for software installation)
- A standard DB9-M Serial Cable for each port (Please see **Accessory Products**)

### Contents

This package should contain:

- PCI Serial I/O card (1)
- Driver CD (1)
- Instruction Manual (1)

## Installation

### Installing the Serial Card

1. Shut down all power connected to the computer, as well as all devices connected to the computer peripherally (i.e. Printers, Monitors, Scanners etc.). As an added step to ensure safe installation, unplug the power supply from the computer.
2. Remove the computer cover. For more detailed instruction on how to perform this step, please refer to the documentation that was included with your computer at the time of purchase.
3. Locate an empty PCI slot, removing the metal bracket covering the accompanying empty port/socket.
4. Position the serial card above the open PCI slot, ensuring that the card is aligned with the entire slot. Insert the card firmly into the slot, distributing force evenly across the length of the board. Once inserted, secure the card into the adjoining socket (previously covered by metal bracket), using the correct size screw (please consult documentation that accompanied purchase of computer).
5. Replace the computer cover and re-connect all power to the computer.

### Installing the drivers

#### Windows

Upon rebooting the computer for the first time following the installation of the serial card, Windows will detect the PCI Serial card, and prompt for driver installation. When asked to specify a location where the driver is located, insert the driver CD into your CD/DVD ROM drive and browse to one of the following locations, based on the Operating System installed on the computer. Once you have specified the correct file, click **OK** to complete the driver installation.

**Windows 95/98SE/ME:**    \IO\PCI IO\Win9x  
**Windows 2000/XP/2003:** \IO\PCI IO\win2K\_XP\_2003  
**Windows NT4.0:**        \IO\PCI IO\WinNT

#### Linux

For detailed instructions on how to configure the serial card on the Linux Operating System, please refer to the appropriate .pdf file located in **\IO\PCI IO\Linux**.

#### DOS

Locate the **install.exe** file located in **\IO\PCI IO\DOS**. Double-click the executable file, and follow the installation notes located in **\IO\PCI IO\Manual**.

## Verifying installation

Once Windows has completed the driver installation, browse to the **Device Manager** to verify that the additional ports are displayed. To locate this: Open the **Control Panel, System, Hardware, Device Manager**. The new ports will appear under **Ports (COM & LPT)**.

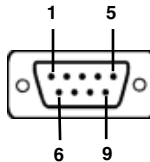
## COM Port configuration

1. From the **Device Manager**, select the PCI Serial Port you want to configure (located under **Ports (COM & LPT)**). Using the right mouse button, click on the port and select **Properties**.
2. Open the **Port Settings** tab, to configure the Bits per second, Data bits, Parity, Stop bits and Flow control. For further information on the appropriate settings in these fields, please consult the documentation that was included with the purchase of the serial device.
3. To set advanced features on the newly installed port, click on the **Advanced** button. From here, select from **Enable Auto CTS/RTS Flow Control**, **16/32/64 bytes FIFO length** and **Receive/Transmit Buffer** trigger levels. Please note, the FIFO length can only be modified from within Windows XP/2000/2003.

## Pin Assignments

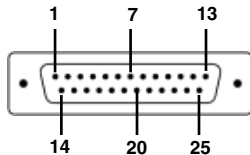
RS-232:

DB9 Male



| PIN | Signal |
|-----|--------|
| 1   | DCD    |
| 2   | RD     |
| 3   | TD     |
| 4   | DTR    |
| 5   | GROUND |
| 6   | DSR    |
| 7   | RTS    |
| 8   | CTS    |
| 9   | RI     |

DB25 Male



| PIN | Signal        | PIN | Signal        |
|-----|---------------|-----|---------------|
| 1   | NC            | 14  | Not Connected |
| 2   | TD            | 15  | Not Connected |
| 3   | RD            | 16  | Not Connected |
| 4   | RTS           | 17  | Not Connected |
| 5   | CTS           | 18  | Not Connected |
| 6   | DSR           | 19  | Not Connected |
| 7   | GROUND        | 20  | DTR           |
| 8   | CD            | 21  | Not Connected |
| 9   | Not Connected | 22  | RI            |
| 10  | Not Connected | 23  | Not Connected |
| 11  | Not Connected | 24  | Not Connected |
| 12  | Not Connected | 25  | Not Connected |
| 13  | Not Connected |     |               |

## Troubleshooting Guide

If you're having difficulty using the Serial Card, try the following solutions based on the nature of the problem.

### The Operating System is not recognizing the serial card:

- 1) Ensure that the card is properly seated within the assigned PCI slot. Try removing the card and re-seating.
- 2) Re-install the necessary drivers by uninstalling the card from within the **Device Manager**, and rebooting the computer. Upon rebooting, the computer should detect the card and ask that the necessary drivers be installed. Follow the installation steps outlined in **Installation**.

### The peripheral device(s) that are connected to the serial card are functioning very slowly/poorly:

From within the **Device Manager**, browse through the settings for the installed port. Under **Advanced Port Settings**, set the Receive/Transmit Buffer to a higher value.

**Note:** If the CPU is not capable of handling the buffer, the system may become unstable. Please lower the value of each buffer until the system resumes stability.

## Specifications

|                                       |                                              |
|---------------------------------------|----------------------------------------------|
| Baud                                  | 920 Kbps                                     |
| Serial Support                        | DB9M                                         |
| Interface                             | High-Speed RS 232 Standard Serial            |
| Bus Type                              | 64-bit & 32-bit PCI                          |
| Operating Temperature                 | 0°C - 57°C                                   |
| Operating Humidity                    | 5-95% RH                                     |
| Storage Temperature                   | -20°C - 85°C                                 |
| OS Compatibility                      | Windows 95/98SE/NT/ME/2000/XP/2003/Linux/DOS |
| Certifications (Regulatory and other) | WHQL, CE, FCC                                |

## Accessory Products from StarTech.com

Contact your local StarTech.com dealer or visit [www.startech.com](http://www.startech.com) for cables or other accessories that will help you get the best performance out of your new product.

### **MXT100MM**

6 ft. 9-pin Straight Through Cable (male to male)

### **MXT100**

6 ft. 9-pin Straight Through Cable (male to female)

### **MXT100\_25**

25 ft. 9-pin Straight Through Cable (male to female)

### **MXT10010**

10 ft. 9-pin Straight Through Cable (male to female)

### **MXT10050**

50 ft. 9-pin Straight Through Cable (male to female) (Special Order)

## **Technical Support**

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit [www.startech.com/support](http://www.startech.com/support) and access our comprehensive selection of online tools, documentation, and downloads.

## **Warranty Information**

This product is backed by a lifetime warranty. In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

### **Limitation of Liability**

In no event shall the liability of StarTech.com Ltd. and StarTech.com USA LLP (or their officers, directors, employees or agents) for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of business, or any pecuniary loss, arising out of or related to the use of the product exceed the actual price paid for the product.

Some states do not allow the exclusion or limitation of incidental or consequential damages. If such laws apply, the limitations or exclusions contained in this statement may not apply to you.

## **About StarTech.com**

StarTech.com is “The Professionals’ Source for Hard-to-Find Computer Parts”. Since 1985, we have been providing IT professionals with the quality products they need to complete their solutions. We offer an unmatched selection of computer parts, cables, server management solutions and A/V products and serve a worldwide market through our locations in the United States, Canada, the United Kingdom and Taiwan.

Visit **[www.startech.com](http://www.startech.com)** for complete information about all our products and to access exclusive interactive tools such as the Parts Finder and the KVM Reference Guide. StarTech.com makes it easy to complete almost any IT solution. Find out for yourself why our products lead the industry in performance, support, and value.