



DP RS422/485 PCI Adapter Card

Quick Installation Guide

Introduction

The *DP RS422/485 PCI Adapter Card* is a high-speed serial card that provides additional serial ports to your system.

Key Features and Benefits

- Supports serial port data transfer rates up to 921Kb/s
- Supports 3.3V & 5V PCI and PCI-X slots
- Built-in 15KVDC ESD serial interface protection
- Built in 128-byte FIFO buffer
- RS-422 & RS485 auto detect and switch
- Plug-n-Play, I/O address and IRQ assigned by BIOS

System Requirements

- PCI equipped system with an available PCI slot
- Windows® 7 (32-/64-bit) / Vista (32-/64-bit) / XP (32-/64-bit) / Server 2003 & 2008(32-/64-bit) / Server 2008 R2 / 2000

Package Contents

- *DP RS422/485 PCI Adapter Card*
- Spare enhanced low-profile bracket
- Fan Out Cable
- Jumper (8pcs)
- Quick installation guide
- Driver CD

Layout

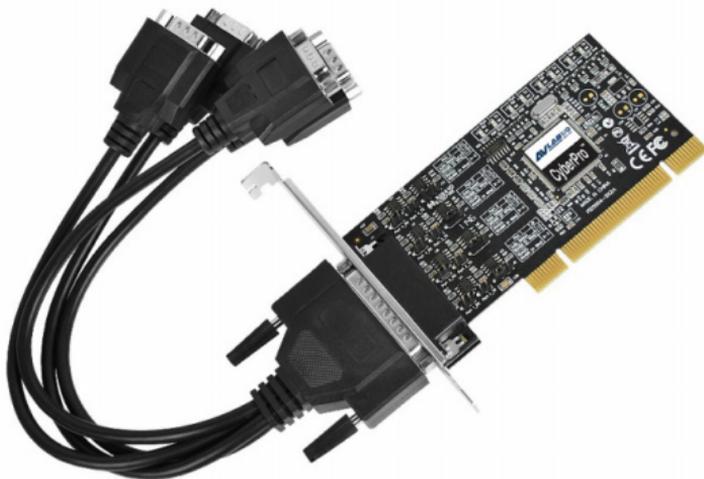
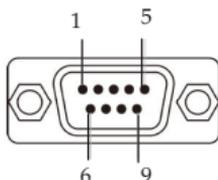


Figure1 : 4-Port RS422/485 PCI Adapter Card

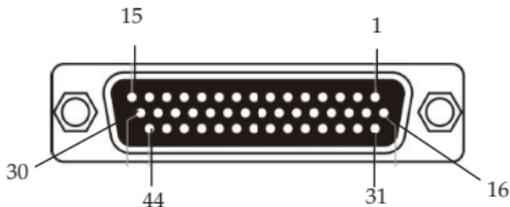
Pin Assignment

Male DB9 Connector:



Pin	Transmission Signals		
	RS-422	4-Wire RS-485	2-Wire RS-485
1	Tx-	Tx-	D-
2	Tx+	Tx+	D+
3	Rx+	Rx+	
4	Rx-	Rx-	
5	GND	GND	GND

Female DB44 Connector:



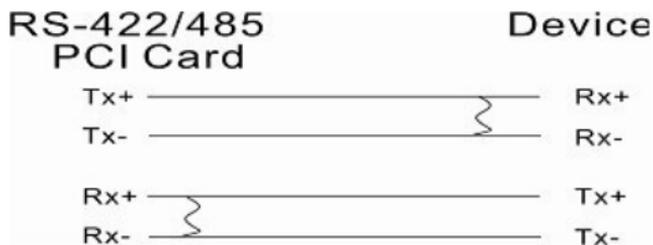
4-Port RS422/485 PCI Adapter Card:

RS-422 or 4-Wire RS-485				
Port \ Signal	1	2	3	4
Tx+	1	29	27	6
Tx-	2	30	23	20
Rx+	31	12	10	25
Rx-	32	28	26	7
GND	GND	GND	GND	GND

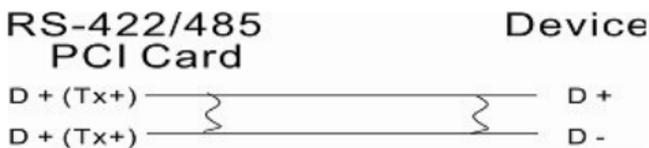
2-Wire RS-485				
Port \ Signal	1	2	3	4
D+	1	29	27	6
D-	2	30	23	20
GND	GND	GND	GND	GND

Jumper Settings

RS-422 or 4-wire RS-485 working model with termination resistor



2-wire RS-485 working model with termination resistor



This *DP RS-422/485 PCI Adapter Card* equips independent TX and RX termination resistors for each serial port. User can modify the jumper setting (short the pins) to avoid impedance mismatched problem when operate under Multi-drop transmission. Resistors should be added near the receiving side.



Short



Open (Default)

Default jumper setting is Open (disconnect 120 ohms termination resistor across the two wires)

DP 4-Port RS422/485 PCI Adapter Card

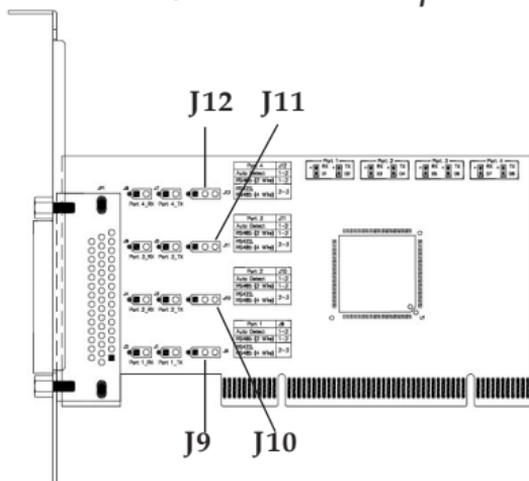


Figure 2: ID-P40311-S1 Pin Layout

	Auto Detect RS-485 (2 Wire) 1-2	RS-422 / RS-485 (4 Wire) 2-3
Port 4	1 ● ● ○ J12	1 ○ ● ● J12
Port 3	1 ● ● ○ J11	1 ○ ● ● J11
Port 2	1 ● ● ○ J10	1 ○ ● ● J10
Port 1	1 ● ● ○ J9	1 ○ ● ● J9

Figure 3: ID-P40311-S1 Pin Assignment

1. Pin 1-2 jumper setting is short by default, **Auto Detect / RS-485(2-Wire)**
This COM port can automatically detect the state of RS-422 full duplex or RS-485 half duplex and control the data transmitting and receiving wires at the same port.
2. Pin 2-3 jumper setting is short for **RS-422/RS-485(4-Wire)**
This COM port forces to run RS-422 full duplex mode.

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.

Note: For low profile chassis, remove the standard height bracket and install the enhanced low-profile bracket now.

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. 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.
5. Replace the slot bracket's holding screw to secure the card.
6. Replace the computer cover and reconnect the power cord.

Driver Installation

This section provide the steps to install the driver of *DP RS422/485 PCI Adapter Card*.

Windows 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 to complete. Do not interrupt this process.

2. Insert the driver CD. Close **AutoPlay** if prompted.
3. Click **Start**. In the **Search programs and files** box, type **D:\setup.exe**, press **Enter**. (Change **D:** to match your CD/DVD-ROM drive letter)
4. Click **Yes** at the **User Account Control** window if prompted. For 2008R2, skip this step.
5. At the **Welcome to the PLX OXuPCI952/OXuPCI954 RS-422/485 Serial PCI Card Setup** window, click **Install**.

6. At the **Completing the PLX OXuPCI952/OXuPCI954 RS-422/485 Serial PCI Card Setup** window, select **Reboot now**, then click **Finish** to complete the installation.

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

1. Install the board and boot up Windows.
2. At the **Found New Hardware** window, click **Cancel** for two times..
3. Insert the driver CD. Close **AutoPlay** if prompted.
4. Click **Start**. In the **Start Search** box, type **D:\setup.exe**, press **Enter**. (Change **D:** to match your CD/DVD-ROM drive letter)
5. Click **Allow** at the **User Account Control** window if prompted. For 2008, skip this step.
6. At the **Welcome to the PLX OXuPCI952/OXuPCI954 RS-422/485 Serial PCI Card Setup** window, click **Install**.

7. At the **Completing the PLX OXuPCI952/OXuPCI954 RS-422/485 Serial PCI Card Setup** window, select **Reboot now**, then click **Finish** to complete the installation.

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

1. Install the board and boot up Windows.
2. At the **Found New Hardware Wizard**, click **Cancel** for two times.
3. Insert the driver CD. Close **AutoPlay** if prompted.
4. Click **Start, Run**. Type **D:\setup.exe**, click **OK**. (Change **D:** to match your CD/DVD ROM drive letter)
5. **Welcome to the PLX OXuPCI952/OXuPCI954 RS-422/485 Serial PCI Card Setup** window, click **Install**.
6. At the **Completing the PLX OXuPCI952/OXuPCI954 RS-422/485 Serial PCI Card Setup** window, select **Reboot now**, then click **Finish** to complete the installation.

Windows 2000

1. At the **Welcome to the Found New Hardware Wizard**, click **Next**.
2. Select **Search for a suitable driver for my device (recommended)**, and click **Next**.
3. Check **Specify a location**, uncheck the other boxes, then click **Next**.
4. Insert the driver CD, type **D:\x86**, then click **OK**. (Change **D:** to match your CD/DVD-ROM drive letter)
5. Click **Next** and **Finish**.
6. Repeat steps **1-5** for two times to complete the installation.

To Verify Windows Installation

1. Check in Device Manager to verify installation.

For Windows 7: Right click **Computer**, click **Manage**, then click **Device Manager**.

For Windows Vista: Right click **Computer**, click **Manage**, click **Continue**, then click **Device Manager**.

For Windows XP / Server 2003 / 2000: Right click **My Computer**, click **Manage**, click **Device Manager**.

For Windows Server 2008 / Server 2008 R2: Right click **Computer**, click **Manage**, double click **Diagnostics**, then click **Device Manager**.

2. Double click **Ports (COM & LPT)**, and a **Enhanced Communication Port...** should be displayed.

Changing Serial Port Number

Some serial port devices need a specific communication port in order to function properly. If your communication port device works, do not make any changes.

1. Right click **My Computer**, click **Manage**, then click **Device Manager**.
2. Double click **Ports (COM & LPT)**, and double click the **Enhanced Communication Port**.
3. Click the **Settings** tab.
4. Click the down arrow next to the **Port Number to Use** box. Select a communication port that is not in use, then click **OK**.
5. Restart your system to take effect.