

4 / 8 Port (4 x RS232, 4 x RS422/485) PCI Express Serial Combo Card

PEX4S232485

PEX8S232485



*actual product may vary from photos

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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.

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Introduction

The PEXxS232485 PCI Express RS232/422/485 Serial Card adds 4 / 8 DB9 serial ports to your PC through a single PCI Express slot.

PEX4S232485: 2 x RS232 2 x RS422 / RS485

PEX8S232485: 4 x RS232 4 x RS422 / RS485

This PCI express serial card is a single card solution that is compatible with nearly any serial communication protocol, supporting RS-232, RS-422, RS-485 2-wire or RS-485 4-wire operating modes.

A flexible solution for adding serial ports to full-sized, or small form factor systems, the serial card includes both low and full profile brackets while the included breakout cable helps to avoid cluttered connections.

Backed by a StarTech.com lifetime warranty and free lifetime technical support.

Packaging Contents

PEX4S232485

- 1 x PCI Express Serial Combo Card
- 1 x 4 Port DB9 Breakout Cable
- 1 x Low Profile Bracket
- 1 x Driver CD
- 1 x Instruction Manual

PEX8S232485

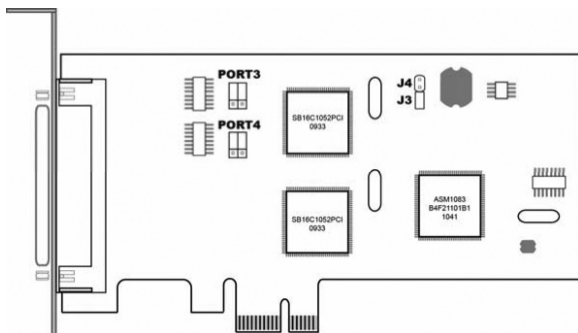
- 1 x PCI Express Serial Combo Card
- 1 x 8 Port DB9 Breakout Cable
- 1 x Low Profile Bracket
- 1 x Driver CD
- 1 x Instruction Manual

System Requirements

- PCI Express enabled computer system with available expansion slot
- Microsoft® Windows® 8 (32/64bit), 7 (32/64), Vista(32/64), XP(32/64), 2000, Windows® Server 2008 R2, 2003(32/64) or Linux Kernel 2.6.x

Product Overview

PEX4S232485



422 Mode

Port 3,4



485 Mode (4 Wire)

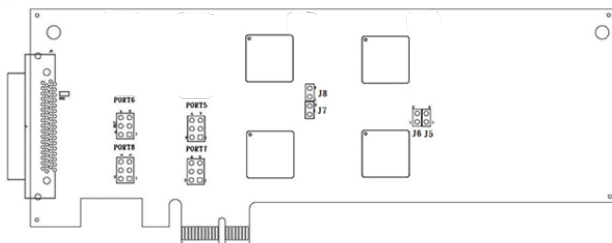
Port 3,4



485 Mode (2 Wire)

Port 3,4





422 Mode

Port 5-8



485 Mode (4 Wire)

Port 5-8



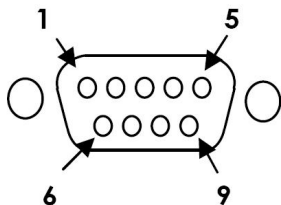
485 Mode (2 Wire)

Port 5-8



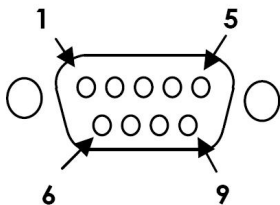
Pinout

RS232



Pin 1	DCD
Pin 2	RXD
Pin 3	TXD
Pin 4	DTR
Pin 5	GND
Pin 6	DSR
Pin 7	RTS
Pin 8	CTS
Pin 9	RI

RS422/485



	422/485	485
	4 Wires	2 Wires
1	TXD+	RXD+ (485)
2	TXD-	RXD- (485)
3	RXD+	X
4	RXD-	X
5	GND	GND

Installation

WARNING! PCI Express cards, like all computer equipment, can be severely damaged by static electricity. Be sure that you are properly grounded before opening your computer case or touching your PCI card. StarTech.com recommends that you wear an anti-static strap when installing any computer component. If an anti-static strap is unavailable, discharge yourself of any static electricity build-up by touching a large grounded metal surface (such as the computer case) for several seconds. Also be careful to handle the card by its edges and not the gold connectors.

Hardware Installation

1. Turn your computer off and any peripherals connected to the computer (i.e. Printers, external hard drives, etc.). Unplug the power cable from the rear of the power supply on the back of the computer and disconnect all peripheral devices.
2. Remove the cover from the computer case. Refer to documentation for your computer system for details.
3. Locate an open PCI Express slot and remove the metal cover plate on the rear of the computer case.
4. Gently insert the card into the open PCI Express slot and fasten the card's bracket to the rear of the case.

NOTE: If installing the card into a small form factor/low profile system, replacing the pre-installed full profile bracket with the included low profile installation bracket may be necessary.

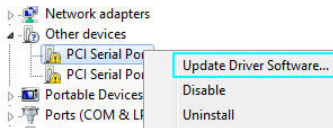
5. Place the cover back onto the computer case.
6. Connect the breakout cable to the large connector on the card.
7. Insert the power cable into the socket on the power supply and reconnect all other connectors removed in Step 1.

Driver Installation

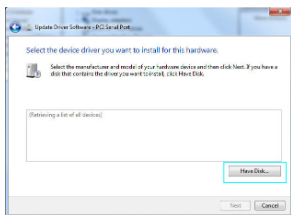
Windows 8 / 7 / Vista / Server 2008 R2

1. Upon starting Windows, if the Found New Hardware dialog appears on the screen, cancel/close the window and insert the included Driver CD into the computer's CD/DVD drive.
2. Open the Device Manager by right-clicking on **Computer**, and then select **Manage**. In the new Computer Management window, select **Device Manager** from the left window panel.

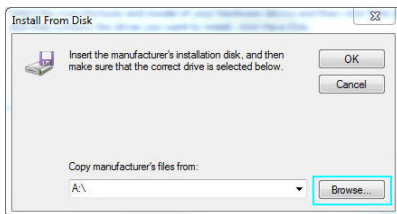
3. Right-click on one of the newly detected “PCI Serial Port” devices and select **Update Driver Software**, which will start the **Update Driver Software Wizard**.



4. On the *How do you want to search for driver software?* window, click **Browse my computer for driver software**, then **Let me pick from a list of device drivers on my computer**.
5. From the next screen labeled *Select your device's type from the list below*, select **Show All Devices** (should be highlighted by default), and then click **Next**.
6. On the *Select the Device Driver you want to install for this hardware* screen, click the **Have Disk** button.



7. Click **Browse** from the *Install from Disk* dialog box that pops up.



8. From the *Locate File* dialog window that opens, navigate to your CD/DVD drive, then double-click the appropriate 32 or 64-bit OS folder for the system you are using and select the **sbmp.inf** (x86), or the **sbmdm.inf** (x64) file, and then click the **Open** button.
9. Click the **OK** button on the *Install From Disk* dialog box which will close the window.
10. Once back at the *Select the Device Driver you want to install for this hardware* screen, click **Next** and then **Close** once the driver has installed.

NOTE: At this point of the install, you may receive a message pop-up stating *Windows can't verify the publisher of this driver software*, click **Install this driver software anyway**



11. Repeat Steps 3-10 for the remaining "PCI Serial Port" devices before closing the *Device Manager* window

Windows XP

1. Upon starting Windows, if the *Found New Hardware* dialog appears on the screen, cancel/close the window and insert the included Driver CD into the computer's CD/DVD drive.
2. Open the *Device Manager* by right-clicking on **My Computer**, and then select **Manage**. In the new *Computer Management* window, select **Device Manager** from the left window panel.
3. Right-click on one of the newly detected "PCI Serial Port" devices and select **Update Driver**, which will start the *Hardware Update Wizard*.



4. On the *Hardware Update Wizard* window, click **Install the software automatically**, then click **Next**.

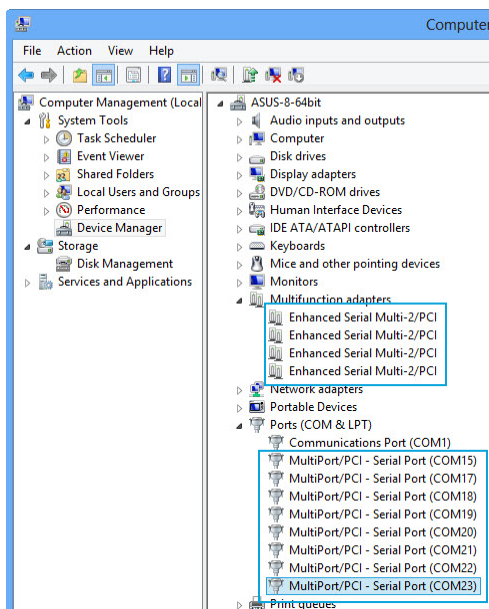
5. If you receive a message regarding *Windows Logo testing*, click **Continue Anyway**



6. Click the **Finish** button once the wizard completes the install.
7. Repeat Steps 3-6 for the remaining "PCI Serial Port" devices before closing the *Device Manager* window

Verifying Installation

1. Open the Device Manager by right-clicking on Computer, and then select Manage. In the new Computer Management window, select Device Manager from the left window panel (For Windows 8, open the Control Panel and select Device Manager).
2. Expand the Multifunction Adapters and Ports (COM & LPT) sections. On a successful install, you should see 2 (PEX45232485) or 4 (PEX85232485) "Enhanced Serial Multi-2/PCI" devices in the Multifunction adapters section, and 4 or 8 "MultiPort/PCI – Serial Port (COMx)" devices in the Ports section with no exclamation points or question marks.



Specifications

	PEX4S232485	PEX8S232485
Number of Ports	4	8
Host Interface	PCI Express	
Form Factor	Standard Profile (Low Profile bracket incl.)	
Chipset ID	SystemBase - SB16C1052PCI	
External Connectors	4 x DB-9 (9 pin; D-Sub)	8 x DB-9 (9 pin; D-Sub)
Supported Protocols	RS-232, RS-485, RS-422	
Maximum Baud Rate	460.8 Kbps	
Data Bits	5, 6, 7, 8	
FIFO	256 Bytes	
Parity	Even, Odd, Mark, Space, None	
Stop Bits	1, 1.5, 2	
Flow Control	None, Xon/Xoff, RTS/CTS	
Operating Temperature	-0°C to 100°C (32°F to 212°F)	
Storage Temperature	0°C to 150°C (32°F to 302°F)	
Humidity	20~80% RH	
Dimensions	134 x 14 x 69 mm	170 x 14 x 68 mm
Weight	67.4 g	83 g
Compatible Operating Systems	Windows® 8 (32/64bit), 7 (32/64), Vista(32/64), XP(32/64), 2000	
	Windows® Server 2008 R2, 2003(32/64)	
	Linux Kernel 2.6.x	

Technical Support

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For the latest drivers/software, please visit **www.startech.com/downloads**

Warranty Information

This product is backed by a lifetime warranty.

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