

## 4 Port PCI Express RS232 Serial Card with Power Output and 15kV ESD Protection

PEX4S553S



\*actual product may vary from photos

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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 PEX4S553S 4-Port PCI Express Serial Card lets you add four ESD-Protected (15kV) RS232 ports, with 5V or 12V selectable power output through a PCI Express slot.

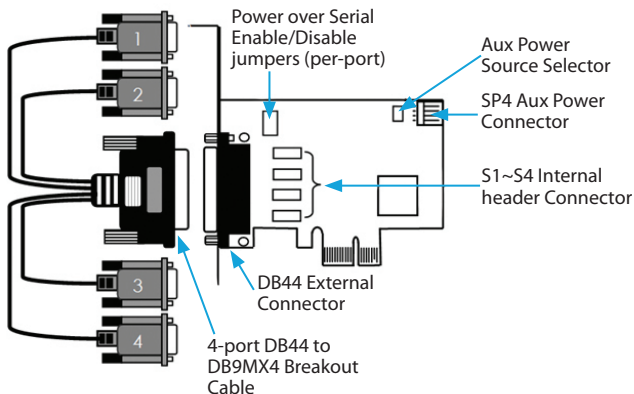
## Packaging Contents

- 1 x Serial Card
- 1 x Breakout Cable
- 1 x Low Profile Bracket
- 1 x Driver CD
- 1 x Instruction Manual

## System Requirements













- Available PCI Express slot
- Available SP4 power connector (if additional power is required that can't be supplied through the PCI Express slot)
- Windows® 8 (32/64bit), 7 (32/64), Vista(32/64), XP(32/64), 2000, Windows® Server 2008 R2, 2003(32/64), Linux

# Product Overview



## Jumper Settings

### Power over serial Enable/Disable (per-port):







	PWR		DIS
S1			
S2			
S3			
S4			

Each port can be individually configured to provide power over Pin 9, or not.







"DIS" (far right – factory default) position: Pin 9 will not provide power.

"PWR" (far left) position: Pin 9 will provide the auxiliary power specified using the Aux Power Source Selector jumpers (outlined below)







## Aux power source selection:

X5V		
X12V		
I12V		

X5V: DC5V, from SP4, an SP4 power connection is required

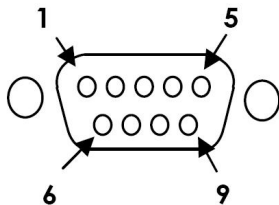
X5V		
X12V		
I12V		

X12V: DC12V, from SP4, an SP4 power connection is required

X5V		
X12V		
I12V		

I12V (factory default): DC12V, from PCI Express slot,

## RS232 Pinout

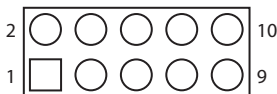


<b>Pin 1</b>	DCD
<b>Pin 2</b>	RXD
<b>Pin 3</b>	TXD
<b>Pin 4</b>	DTR
<b>Pin 5</b>	GND
<b>Pin 6</b>	DSR
<b>Pin 7</b>	RTS
<b>Pin 8</b>	CTS
<b>Pin 9</b>	RI

**NOTE:** Pin 9 of the DB9 connector will output DC power if the corresponding jumper was enabled.

## IDC Header Pinout

The internal IDC header connectors can be used in place of some / all external ports on this card. They are labeled S1 – S4 and each corresponds to the external port of the same number (marked on the breakout cable). Do not connect the internal and external port of the same number simultaneously.



Pin#	Signal	Pin#	Signal
1	DCD	6	DSR
2	RXD	7	RTS
3	TXD	8	CTS
4	DTR	9	RI (*)
5	GND	10	NC

## 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 low profile system, replacing the pre-installed standard profile bracket with the included low profile bracket may be necessary.

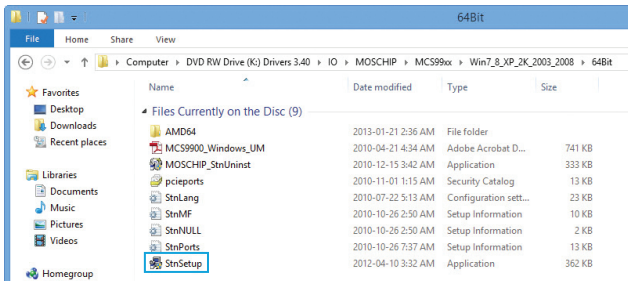
5. **(Optional)** Connect an available SP4 power connection from your system power supply to the card if additional power is required.
6. Place the cover back onto the computer case.
7. Connect the 4 Port breakout cable to the large connector on the card.
8. **(Optional)** If using the IDC header connections instead of some / all of the external ports, connect them to the appropriate header(s), noting proper orientation of the cable using the pinout provided above

**NOTE:** Do not connect the matching internal and external port simultaneously. The IDC headers are labeled S1 – S4 and correspond with the numbered ports on the breakout cable.

9. Insert the power cable into the socket on the power supply and reconnect all other peripherals removed in Step 1.

## Driver Installation

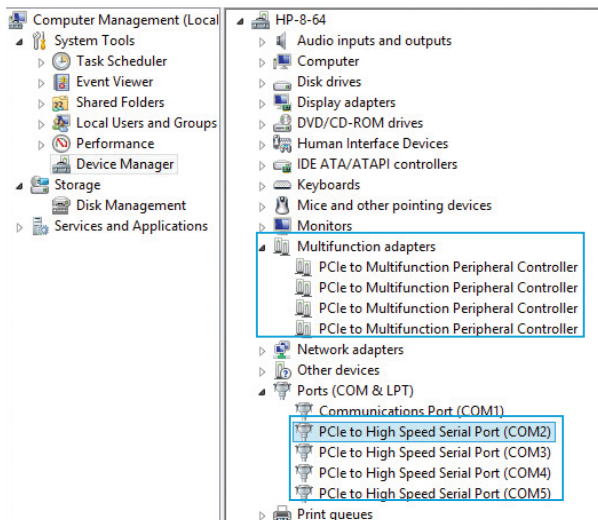
1. Upon starting Windows, if the Found New Hardware wizard appears on the screen, cancel/close the window and insert the included Driver CD into the computer's CD/DVD drive.
2. AutoPlay should automatically launch and display all of the folders on the CD. If not, open the Computer (My Computer in Windows XP/Server 2003) and double-click on the CD/DVD drive.
3. Navigate to **X:\IO\MOSCHIP\MCS99xx** (where X:\ is your CD/DVD drive letter) and then choose the appropriate folder for the operating system you are installing on.
4. Where applicable, choose 32bit or 64bit depending on your operating system
5. Double-click the file **StnSetup.exe** application and the drivers will automatically install.





# 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 4 *PCIe to Multifunction Peripheral Controller* devices in the Multifunction Adapters section, and 4 *PCIe to High Speed Serial Port (COMx)* devices installed with no exclamation points or question marks.



# Specifications

<b>Host Interface</b>	PCI Express
<b>Form Factor</b>	Standard Profile (Low Profile bracket incl.)
<b>Chipset ID</b>	ASIX/MOschip - MCS9904
<b>External Connectors</b>	4x DB-9 (9 pin; D-Sub)
<b>Supported Protocols</b>	RS-232
<b>Maximum Baud Rate</b>	921.6 Kbps
<b>ESD Protection</b>	15kV
<b>Data Bits</b>	5, 6, 7, 8, 9
<b>Parity</b>	Even, Odd, Mark, Space, None
<b>Stop Bits</b>	1, 1.5, 2
<b>Flow Control</b>	None, Xon/Xoff, RTS/CTS
<b>Operating Temperature</b>	0°C to 55°C (32°F to 131°F)
<b>Storage Temperature</b>	-20°C to 85°C (-4°F to 185°F)
<b>Humidity</b>	5~95% RH
<b>Dimensions</b>	66 x 18 x 87 mm
<b>Weight</b>	350 g
<b>Compatible Operating Systems</b>	Windows® 8 (32/64bit), 7 (32/64), Vista(32/64), XP(32/64), 2000, Windows® Server 2008 R2, 2003(32/64), Linux

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