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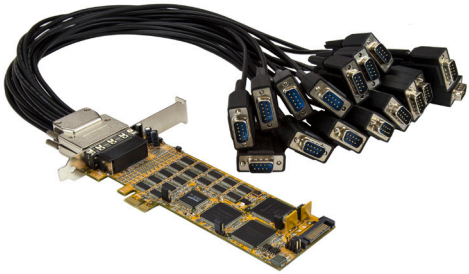
16-Port Serial Card

PEX16S550LP



*actual product may vary from photos

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For the latest information, technical specifications, and support for this product, please visit www.StarTech.com/PEX16S550LP.

Manual Revision: 11/03/2017

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

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by StarTech.com could void the user's authority to operate the equipment.

Industry Canada Statement

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

CAN ICES-3 (B)/NMB-3(B)

This device complies with Industry Canada licence-exempt RSS standard(s).
Operation is subject to the following two conditions:
(1) This device may not cause interference, and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.
L'exploitation est autorisée aux deux conditions suivantes:
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC Compliance Statement

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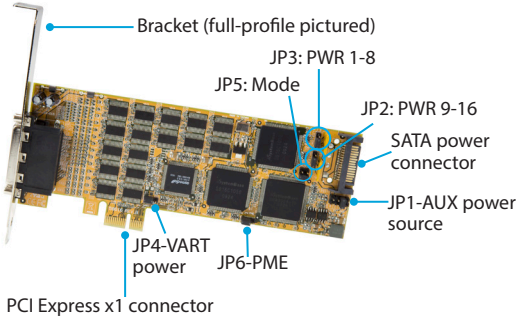
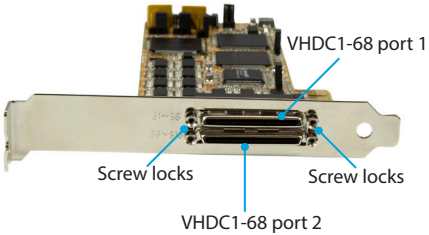
Product diagram

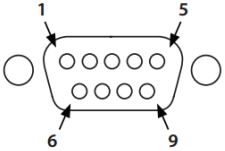
Top view



Front view



DB9 RS232 connector pinout - male



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 or power

Introduction

This serial card lets you add 16 RS232 serial ports to your full or small form-factor computer through a PCI Express expansion slot. It's a convenient solution for connecting modern or legacy serial devices to your computer, with support for data transfer rates up to 921.6Kbps. It includes two 8-port breakout cables so you can connect up to 16 serial devices to this single card, even in low-profile computer systems.

Packaging contents

- 1 x serial card
- 1 x low-profile bracket
- 2 x breakout cables
- 1 x driver CD
- 1 x quick-start guide

Requirements

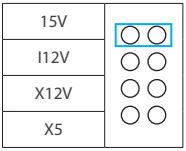
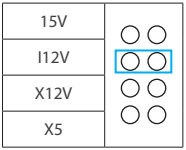
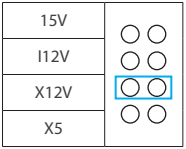
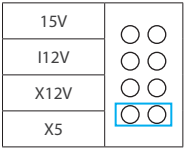
- A host computer with a PCI Express x1 slot
- A CD-ROM, DVD-ROM, or other compatible optical drive (for driver CD installation)
- RS232 serial cables (DB9)
- Any of the following operating systems:
- Windows® 10
- Windows 8.1
- Windows 8
- Windows 7
- Windows Server® 2012
- Linux® 2.4.x and later (tested up to 4.04)

Requirements are subject to change. For the latest requirements, please visit www.StarTech.com/PEX16S550LP.

About the jumpers

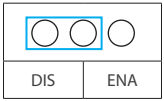
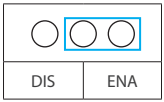
JP1 – Power selector

This jumper is used to provide pin number nine of the serial port connector(s) with DC5V or DC12V power. There are four sources depending on the jumper's position.

JP1: Power selector	Setting
Internal 5V: Power source is +5VDC, from the motherboard's PCI Express slot	
Internal 12V: Power source is +12VDC, from the motherboard's PCI Express slot	
Internal 12V: Power source is +12VDC, from the motherboard's PCI Express slot	
Internal 5V: Power source is +5VDC, from the motherboard's PCI Express slot	

JP3 and JP2 - Serial port power

These two jumpers are used to provide external power to the two breakout cables or the 16 serial ports. JP3 enables or disables power over ports 1 to 8, and JP2 enables or disables power over ports 9 to 16. When enabled, the card connects DC power to pin 9 of the DB9 port(s).

JP1: Power selector	Setting
No power is supplied to pin nine on the serial ports	
Power is supplied to pin nine on the serial ports and the power source is determined by what is selected at JP1	

JP4 – UART power selector

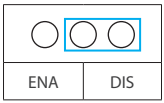
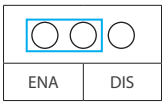
Leave at the default setting (3.3V).

JP5 - Mode setting

This is for factory test purposes only. The jumper must be fixed at SB.

JP6 - PME setting

This jumper enables or disables wake from sleep.

JP1: Power selector	Setting
PME is disabled	 (default)
PME is enabled	

Hardware installation

Install the low-profile bracket

The serial card can be installed in a low-profile (half-height) or a full-profile computer. The full-profile bracket comes preinstalled on the card, but if you have a small form-factor computer, you can install the low-profile bracket instead.

1. Remove the four screw locks that are securing the two VHDCI-68 ports to the full-profile bracket.
2. Remove the full-profile bracket from the card.
3. Align the low-profile bracket's VHDCI-68 port hole with the card's VHDCI-68 ports.
4. Insert the VHDCI-68 ports into the VHDCI-68 port hole on the low-profile bracket using the four screw locks from step 1.
5. Insert the four screw locks from step 1 and tighten them into place on the low-profile bracket.

Install the PCIe Card

Warning! PCIe cards can be severely damaged by static electricity. If an anti-static strap isn't available, discharge any built-up static electricity by touching a large grounded metal surface for several seconds.

1. Turn off your computer and any devices or peripherals that are connected to it, such as printers or external storage devices.
2. Unplug the power cable from the back of your computer.
3. Disconnect any peripheral devices that are connected to your computer.
4. Remove the cover from your computer case. Consult the documentation that came with your computer for details about how to do this safely.
5. Locate an open PCIe slot and remove the corresponding metal cover plate from the back of your computer case. Consult the documentation that came with your computer for details about how to do this safely. This card works in PCIe slots of x1, x4, x8, or x16 lanes.
6. Gently insert the card into the open PCIe slot and fasten the bracket to the back of the case.

Note: If you install the card into a low-profile (small form-factor) desktop system, it might be necessary to replace the preinstalled full-profile bracket with the included low-profile bracket. See "Install the low-profile bracket" for instructions on how to do this.

7. (Optional) Connect a SATA power cable from your computer's power supply to the card's SATA power connector.
8. Place the cover back onto your computer case.
9. Reconnect the power cable to the back of your computer.
10. Reconnect all of the peripheral devices that you disconnected in step 3.
11. Turn on your computer.

Software installation

Install the driver – Windows

1. Insert the provided driver CD into your computer's CD-ROM or DVD-ROM drive.
2. Navigate to and open **Device Manager**.
3. Under **Other devices**, right-click on the **PCI Serial Port device** then click **Update Driver Software**.
4. Click the **Browse my computer for driver software** button.
5. Click the **Browse** button.
6. Navigate to your CD-ROM or DVD-ROM location.
7. Navigate through the following folder directories: **IO\SYSTEMBASE\DRIVERS\PCI(PCIe Bridge)**.
8. Select the Windows folder that's applicable to the operating system running on the computer. For 32-bit versions of Windows select the 32bit_Win10_8.x_7_Vista_XP_2008_2003_2000 folder. For 64-bit versions of Windows select the 64bit_Win10_8.x_7_Vista_XP_2008_2003_2000 folder, then click the OK button.
9. Click the **Next** button to complete the installation process.

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 two-year warranty.

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.

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