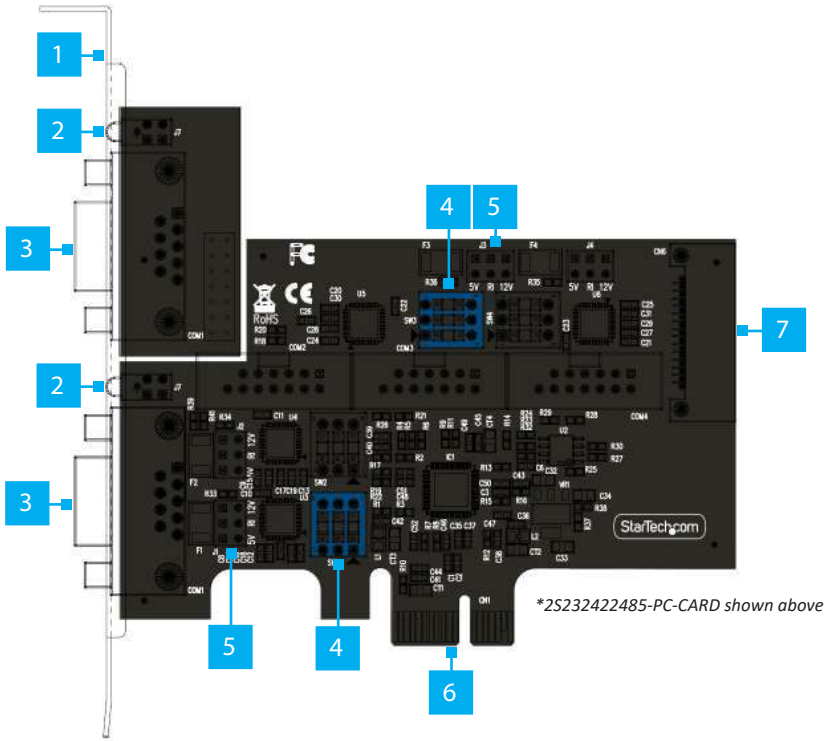


PCIe x1 RS232/422/485 Serial Card - Low-Profile Brackets Included

Product ID
2S232422485-PC-CARD
PS74ADF-SERIAL-CARD



*2S232422485-PC-CARD shown above

	Port/LED/Connector	Function
1	Bracket	• Secures the card to the Host Computer Case • The Full Profile Bracket comes pre-installed • The Low Profile Bracket is included
2	Activity LEDs	• Data Receive LED: Flash Green to show activity • Data Transmit LED: Flash Yellow to show activity
3	DB9 Serial Ports	• Connect Serial Peripheral Devices
4	Serial Mode Switch	• Change the DB9 Serial Ports between RS-232, RS-422, or RS-485

5	J1/J2/J3/J4 Jumper	• Optional: Used to change the Voltage Output of DB9 Pin 9 • RI disables power on DB9 Pin 9. This is the default setting. • 12V draws power from the SATA Power Connector (Outputs 12V) • 5V draws power from the SATA Power Connector (Outputs 5V)
6	PCIe x1 Connector	• Insert into a PCI Express Slot on the Host Computer
7	SATA Power Connector	• Optional: Connect an available SATA Power Connector from the Host Power Supply to provide power over DB9 Pin 9

Package Contents

2S232422485-PC-CARD:

- Serial Card x 1
- Low-Profile Bracket x 2
- Ribbon Cable x 1
- Quick-Start Guide x 1

PS74ADF-SERIAL-CARD:

- Serial Card x 1
- Low-Profile Bracket x 4
- Ribbon Cable x 3
- Quick-Start Guide x 1

Requirements

For the latest requirements, please visit: www.StarTech.com/2S232422485-PC-CARD

- Computer with an available PCI Express Slot (x1, x4, x8, or x16)

Installation

DIP Switch Settings

To change the DB9 Serial Ports between RS-232, RS-422, and RS-485, use the respective **Serial Mode Switch** located on the **Serial Card**. **Dip Switch 3** enables/disables a 120 Ω **Termination Resistor**, used for impedance matching between the Tx+/Tx- and Rx+/Rx- (RS-422/RS-485 4-wire) and D+/D- (RS-485 2-wire) lines. The purpose is to prevent reflections on the line that may cause signal errors.

RS-232	RS-485 (Half-Duplex)	RS-422/485 (Full-Duplex)
ON	ON	ON
1 2 3	1 2 3	1 2 3

To view manuals, FAQs, videos, drivers, downloads, technical drawings, and more, visit www.startech.com/support.

Install the Card

Note: If the **PCIe Card** is to be installed into a **Small Form Factor** or **Low-Profile Desktop**, it's required to replace the pre-installed **Full-Profile Bracket** with the included **Low-Profile Brackets**. The **DB9 Serial Ports** that use **Ribbon Cables** will need to be installed on the separate **Low-Profile Brackets**.

1. Turn off the **Computer** and disconnect the **Power Cable** and any **Peripheral Devices** that are connected (e.g. printers, external hard drives, etc.).
2. Remove the **Cover** from the **Computer Case**.
Note: Consult the documentation that came with the computer for details about how to do this safely.
3. Locate an open **PCIe Slot** and remove the corresponding **Metal Cover Plate(s)** from the rear of the **Computer Case**. In most instances, the **Metal Cover Plate** is attached to the rear of the **Computer Case** with a single **Phillips Head Screw**. Save this **Phillips Head Screw** for the next step.
4. Gently insert the **Serial Card** into the open **PCIe Slot** and fasten the **Bracket(s)** to the rear of the **Computer Case**, using the **Phillips Head Screw** from **Step 4**.
5. (Optional) Connect **SATA Power** from the **Computer Power Supply** to the **SATA Power Connector**, located on the rear of the **Serial Card**.
6. Replace the **Cover** from the **Computer** that was removed in **Step 2**.
7. Reconnect all of the **Peripheral Devices** that were disconnected in **Step 1**.
8. Reconnect the **Power Cable** to the rear of the **Computer**.

Install the Driver

Windows

1. Navigate to: www.StarTech.com/2S232422485-PC-CARD
2. Click the **Drivers/Downloads** tab.
3. Under **Driver(s)**, download the **Driver Package** for **Windows Operating System**.
4. Open the **Driver Package** and locate the corresponding folder for the **Windows Version**.
5. Execute the **Setup File** to install the driver.

Regulatory Compliance

FCC - Part 15

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:

- 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.

Warranty Information

This product is backed by a two-year warranty.

For further information on product warranty terms and conditions, please refer to www.startech.com/warranty.

Linux

1. Navigate to: www.StarTech.com/2S232422485-PC-CARD
2. Click the **Drivers/Downloads** tab.
3. Under **Driver(s)**, download the **Driver Package** for the **Linux Operating System**.
4. Follow the **Linux Driver Installation Guide** that was extracted.

Verify Driver Installation

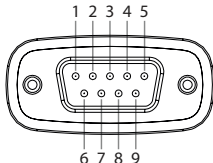
Windows

1. Navigate to the **Device Manager**.
2. Under **Ports (COM & LPT)**, right-click **AX99100 PCIe to High Speed Serial Port** and click **Properties**.
3. Confirm that the **Driver** is installed and working as expected.

Verify Driver Installation (Linux)

1. Run `lsmod | grep r8125` from the command line.
2. Verify that the **Driver** is present in the command line.

DB9 Pin Out

Pin	RS-232	RS-422/RS-485 (4 Wire)	RS-485 (2 Wire)
1	DCD	TXD-	-(485)
2	RXD	TXD+	+(485)
3	TXD	RXD+	X
4	DTR	RXD-	X
5	GND	GND	GND
6	DSR		
7	RTS		
8	CTS		
9	RI/PWR		

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.

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. 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. PHILLIPS® is a registered trademark of Phillips Screw Company in the United States or other countries.



Points de collecte sur www.quefairedesdechets.fr
Privilégiez la réparation ou le don de votre appareil !

StarTech.com Ltd.
45 Artisans Crescent
London, Ontario
N5V 5E9
Canada

StarTech.com LLP
4490 South Hamilton
Road
Groveport, Ohio
43125
U.S.A.

StarTech.com Ltd.
Unit B, Pinnacle 15
Gowerton Road
Brackmills,
Northampton
NN4 7BW
United Kingdom

StarTech.com Ltd.
Siriusdreef 17-27
2132 WT Hoofddorp
The Netherlands

FR: startech.com/fr
DE: startech.com/de
ES: startech.com/es
NL: startech.com/nl
IT: startech.com/it
JP: startech.com/jp