PCIe 4-Port Serial Card

User Manual

Ver. 1.00

Contents:

Chapter 1: Introduction

1.1 Product Introduction

This PCIe 4-Port Serial Card is a reliable and easy-to-use add-on card that provides four additional RS-232 serial ports to a computer system. With PCIe technology, it delivers fast data transfer rates and is compatible with a wide range of operating systems. Its traditional way of driver installation makes it easy to set up and use, while its robust construction ensures long-term reliability. This card is ideal for use in industries such as industrial automation, telecommunications, POS systems, and medical equipment, where legacy devices still rely on serial connectivity. With its good legacy device support, this PCIe 4-Port Serial Card is a cost-effective solution for upgrading older systems and extending the life of legacy equipment with a maximum data transfer rate of 921.6Kbps.

1.2 Features

Features   ● Compliant with PCIe 2.0 Gen 1

- Add 4 x UART serial ports
- Support serial baud rate up to 921.6Kbps
- Low Profile support for SFF PC

Bus	● PCI-Express x1
Connectors	● 4 x DB9 male serial connectors

1.3 System Requirements

- Windows® 7/8.x/10/11 (32/64 bit),
- Linux 2.6.x or later
- One available PCI Express slot

1.4 Package Contents

- 1 x PCIe 4-Port Serial Card
- 1 x User Manual
- 1 x Fan Out Cable (model dependent)

Chapter 2: Getting Started

2.1 Hardware Installation

1. Turn off the power to your computer.

2. Unplug the power cord and remove your computer's cover.

3. Remove the slot bracket from an available PCIe slot.

4. To install the card, carefully align the card's bus connector with the selected PCIe slot on the motherboard. Push the board down firmly.

5. Replace the slot bracket's holding screw to secure the card.

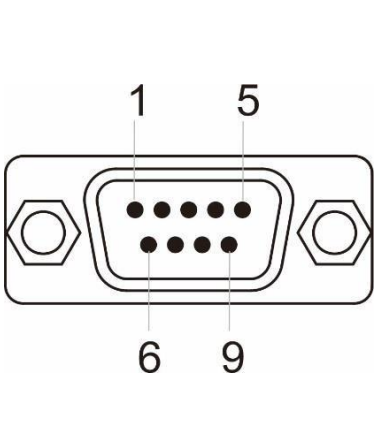6. Replace the computer cover and reconnect the power cord.
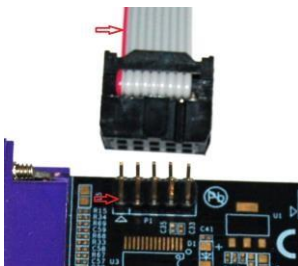
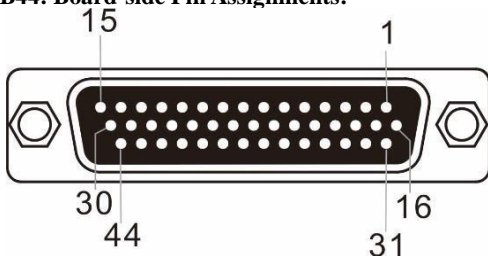* DB9 serial cable connection as shown (red cable is connected to pin 1)

2.2 Pin Assignment of PCIe 4S Serial Card w/ fan out cable

This PCIe 4-Port RS-232 Serial Card has a female DB44 connector on the board. In this section, we provide the on-board connector's pin assignments to facilitate making your own connection cable, and the male DB9 device-side pin assignments for the fan out cable.

Male DB9 Connector: Device-side Pin Assignments:

Pin	Description
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

Female DB44: Board-side Pin Assignments:

Serial Port 1		Serial Port 2	
2	DCD	30	DCD
1	RxD	29	RxD
31	TxD	12	TxD
32	DTR	28	DTR
33	GND	43	GND
18	DSR	15	DSR
16	RTS	13	RTS
3	CTS	44	CTS
17	RI	14	RI
Serial Port 3		Serial Port 4	
23	DCD	20	DCD
27	RxD	6	RxD

10	TxD	25	TxD
26	DTR	7	DTR
41	GND	39	GND
24	DSR	5	DSR
11	RTS	22	RTS
9	CTS	4	CTS
8	RI	21	RI

2.3 Driver Installation

2.3.1 Installation for Windows

1. Go to URL http://www.sunrichtech.com.hk/
2. Search "I-345/I-346", download the driver.
3. Follow the prompts to install the driver.
4. After the driver installation is complete, you must restart your computer.

2.3.2 Installation for Linux

1. Go to URL http://www.sunrichtech.com.hk/
2. Search "I-345/I-346", download the driver.
3. Extract the compressed driver source file to a certain directory by the following command: (Please copy the driver file from the download driver folder to a certain folder on hard drive)
   # tar xf AX99100_SP_PP_SPI_LINUX_Driver_v x.x_Source.tar
4. Now, the driver source files should be extracted under the current directory. Executing the following command to compile the driver:
   # make
5. If you want to use modprobe command to mount the driver, executing the following command to install the driver into your kernel:
   # make install
6. After the driver installation is complete, you must restart your computer.