

DP Industrial PCI Serial Adapter Card Quick Installation Guide

Introduction

The *DP Industrial PCI Serial Adapter Card* is a high-speed serial card that provides additional serial ports to your system.

Key Features and Benefits

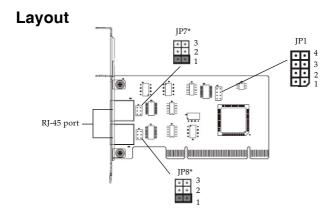
- Supports serial port data transfer rate up to 921.6Kb/s
- Supports 3.3V & 5V PCI and PCI-X slot
- Built-in 15KVDC ESD serial interface protection
- Built in 128-byte FIFO buffer
- Built in H/W, S/W data direction flow control

System Requirements

- Desktop PC with available PCI slot
- Windows[®] 8 (32-/64-bit) / 7 (32-/64-bit) / Vista (32-/64-bit) / XP (32-/64-bit) / Server 2003 & 2008 (32-/64-bit) / Server 2008 R2 / 2000

Package Contents

- DP Industrial PCI Serial Adapter Card
- Connector adapter cable: <u>For ID-P20011-S1</u>: 2x RJ-45 to DB9 (male) cable
 <u>For ID-P40011-S1</u>: 1x DB44 to 4-port DB9 (male) cable
 <u>For ID-P80011-S1</u>: 1x VHDI68 to 8-port DB9 (male) cable
- Spare low profile bracket
- Driver CD
- Quick installation guide

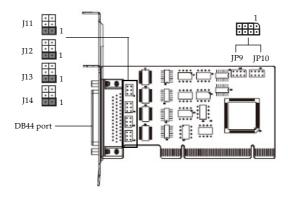


*NOTE: Short JP7 and JP8 for 120 ohm terminal resistance to get signal reflection elimination.

Figure 1: ID-P20011-S1 Layout

	RS	-232	RS-422/RS-	485 (4-wire)	RS-485 (2-wire)		
	JP1	JP7 / JP8	JP1	JP7 / JP8	JP1	JP7 / JP8	
Port 1	• • • • • • • •				• • • • • • • •	JP7	
Port 2	•••	JP8		JP8 ••• ••• 1		JP8	

Figure 2 ID-P20011-S1 Jumper Setting

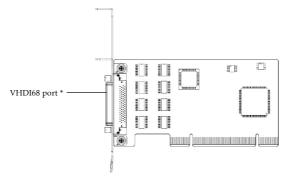


*NOTE: Short J11 to J14 for 120 ohm terminal resistance to get signal reflection elimination.

Figure	3:	ID-P40011-S1	Layout
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		RS-232		RS-422 / RS-	485 (4-Wire)	RS-485 (2-Wire)		
	JP9	JP10	J11~14	JP9/JP10	J11~14	JP9	JP10	J11~14
Port 1	1 • • • • • • • •	1 ••••	J11	1 ••••	J11 II II	1 ••••	1 ••• •••	J11 1
Port 2	1	1 • • • • •	J12	1	J12	1 ••••	1	J12 J1 J1
Port 3	1 • • • •	1 • • • • • • • • •	J13	1 ••••	J13	1 ••••	1 • • • •	J13
Port 4	1 ••••	1 • • • • •	J14	1 ••••	••J14 •• ••	1 ••••	1 • • • • • • • •	u J14 u 1 u 1

Figure 4: ID-P40011-S1 Jumper Setting



* Connect to VHDI68 to 8 port DB 9 cable to add eight DB9 serial ports to your system

Figure 5: ID-P80011-S1 Layout

Pin Assignment

ID-P20011-S1/ID-P40011-S1 Pin Assignment-DB9

	1	5	
0	(.:.)	0
	6	9	

Pin	RS-232	RS-422	RS-485 (4-wire)	RS-485 (2-wire)
1	DCD	TxD-(A)	TxD-(A)	Data-(A)
2	RxD			
3	TxD			
4	DTR	TxD+(B)	TxD+(B)	Data+(B)
5	GND	GND	GND	
6	DSR	RxD-(A)	RxD-(A)	
7	RTS	RxD+(B)	RxD+(B)	
8	CTS			
9				

Note: For RS-485 (2-wire), need to control input and output by controling RTS and DTR separately.

Figure 6

ID-P20011-S1 Pin Assignment- RJ45

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

Figure 7

ID-P40011-S1 Pin Assignment- DB44



		00					
Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	TxD3	12		23		34	
2	RxD3	13	TxD0	24	CTS1	35	DCD2
3	RTS3	14	RxD0	25	DTR1	36	
4		15	RTS0	26	DSR1	37	GND
5	TxD2	16	CTS3	27		38	
6	RxD2	17	DTR3	28	CTS0	39	DCD1
7	RTS2	18	DSR3	29	DTR0	40	
8		19		30	DSR0	41	GND
9	TxD1	20	CTS2	31	DCD3	42	DCD0
10	RxD1	21	DTR2	32		43	
11	RTS1	22	DSR2	33	GND	44	GND

Figure 8

ID-P80011-S1 Pin Assignment- DB9



Pin	RS-232
1	DCD
2	RxD
3	ТхD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	

Figure 9

ID-P80011-S1 Pin Assignment- VHDI68



Pin	Signal										
1	RxD0	14	RTS2	27	TxD6	40	DTR1	53	CTS5	66	RI7
2	CTS0	15	RI2	28	DSR6	41	DSR1	54	RI5	67	CTS7
3	RI0	16	CTS2	29	DTR6	42	TxD1	55	RTS5	68	RxD7
4	RTS0	17	RxD2	30	DCD6	43	GND	56	DCD5		
5	DCD0	18	RxD4	31	RTS6	44	TxD3	57	DTR5		
6	DTR0	19	CTS4	32	RI6	45	DSR3	58	DSR5		
7	DSR0	20	RI4	33	CTS6	46	DTR3	59	TxD5		
8	TxD0	21	RTS4	34	RxD6	47	DCD3	60	GND		
9	GND	22	DCD4	35	RxD1	48	RTS3	61	TxD7		
10	TxD2	23	DTR4	36	CTS1	49	RI3	62	DSR7		
11	DSR2	24	DSR4	37	RI1	50	CTS3	63	DTR7		
12	DTR2	25	TxD4	38	RTS1	51	RxD3	64	DCD7		
13	DCD2	26	GND	39	DCD1	52	RxD5	65	RTS7		

Figure 10

Hardware Installation

General instructions for installing the card are provided below. The design of computer cases and motherboards vary, refer to your computer's reference manual for further information, if needed.

Static Electricity Discharge may permanently damage your system. Discharge any static electricity build up in your body by touching your computer's case for a few seconds. Avoid any contact with internal parts and handle cards only by their external edges.

Note: For low profile chassis, remove the standard height bracket and install the enhanced low-profile bracket now.

- 1. Turn OFF the power to your computer and any other connected peripheral devices.
- 2. Unplug the power cord and remove the cover from the computer.
- 3. Remove the slot bracket from an available PCI slot.
- 4. To install the card, carefully align the card's bus connector with the selected PCI slot on the motherboard. Push the board down firmly, but gently, until it is well seated.
- 5. Replace the slot bracket's holding screw to secure the card.
- 6. Replace the computer cover and reconnect the power cord.

Driver Installation

This section provide instructions to install the driver of *DP Industrial PCI Serial Adapter Card*. Make sure the card is installed before beginning the driver installation.

Windows 8 (32-/64-bit) / Windows 7 (32-/ 64-bit) / Server 2008 R2

- 1. Install the board and boot up Windows.
- 2. Insert the driver CD. Close the **AutoPlay** box if prompted.
- 3. Go to **Device Manager**, then right click **PCI Serial Port** under **Other devices**.
- 4. Click **Update Driver Software**, then click **Browse my computer for driver software**.
- 5. Type **D:\PCI\32bit** or **D:\PCI\64bit**, then click **Next**. (Change **D:** to match your CD/ DVD-ROM drive letter)
- 6. Click **Close**.
- Go back to Device Manager, right click Other PCI Bridge Device under Other devices.
- 8. Repeat steps 4-6 to complete the installation.

Windows (Vista 32-bit) / Server 2008 (32bit)

- 1. Install the board and boot up Windows.
- 2. At Found New Hardware, click Cancel.
- 3. Insert the driver CD, close **AutoPlay** box if prompted.
- 4. Go to **Device Manager**, right click **PCI Serial Port** under **Other devices**.
- 5. Click **Update Driver Software**, then click **Browse my computer for driver software**.
- 6. Type **D:\PCI\32bit**, and click **Next**. (Change **D:** to match your CD/DVD-ROM drive letter)
- 7. Click **Close**.
- 8. Go back to **Device Manager**, right click **Other PCI Bridge Device** under **Other devices**.
- 9. Repeat steps 5-7 to complete the installation.

Windows Vista (64-bit) / Server 2008 (64bit)

- 1. Install the board and boot up Windows.
- 2. At Found New Hardware, click Locate and install driver (recommended)
- 3. <u>For Windows Vista</u>: Click **Continue**, and click **Don't search online**.

For Server 2008 : Click **Don't search online**.

- 4. Insert the driver CD.
- 5. Click Close.

Windows XP (32-/64-bit) / Server 2003 (32-/64-bit)

- 1. Install the board and boot up Windows.
- At Found New Hardware Wizard, click No, not this time, and click Next. Skip this step if not prompted.
- 3. Click Install from a list or a specific location (Advanced) and click Next.
- 4. Insert the driver CD, close the driver window if prompted.

- Check Include this location in the search, uncheck another box, type D:\PCI\32bit or D:\PCI\64bit, then click Next. (Change D: to match your CD/DVD-ROM drive letter)
- 6. Click **Finish**.
- 7. Repeat steps 2-6 to complete the installation.

Windows 2000

- 1. At Found New Hardware Wizard, click Next.
- 2. Select Search for a suitable driver for my device (recommended), and click Next.
- 3. Check **Specify a location**, uncheck the other boxes, then click **Next**.
- 4. Insert the driver CD, type D:\PCI\32bit, then click OK. (Change D: to match your CD/DVD-ROM drive letter)
- 5. Click **Next** and **Finish**.
- 6. Repeat steps **1-5** to complete the installation.

To Verify Windows Installation

1. Check in Device Manager to verify installation.

For Windows 8 / 7 / XP / Server 2008 R2 & 2003 / 2000: Right click **Computer** or **My Computer**, click **Manage**, click **Device Manager**.

For Windows Vista: Right click **Computer**, click **Manage**, click **Continue**, then click **Device Manager**.

For Server 2008: Right click **Computer**, click **Manage**, v double click **Diagnostics**, then click **Device Manager**.

2. Serial Bus Adapter should be displayed under Muti-port serial adapters. And double click Ports (COM & LPT), Enhanced Communication Port... should be displayed.

Changing Serial Port Number

Some serial port devices need a specific communication port in order to function properly. If your serial port device works, do not make any changes.

- 1. Right click **My Computer**, click **Manage**, then click **Device Manager**.
- 2. Double click **Ports (COM & LPT)**, and double click the **PCI Express UART Port**.
- 3. Click the **Settings** tab.
- 4. Click the down arrow next to the **COM Port Number to Use** box. Select a communication port that is not in use, then click **OK**.
- 5. Restart your system to save your changes.

Technical Support and Warranty

QUESTIONS? SIIG's Online Support has answers! Simply visit our web site at *www.siig.com* and click Support. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and a technical support analyst will promptly respond.

SIIG offers a lifetime manufacturer warranty with this product. This warranty covers the original purchaser and guarantees the product to be free of any defects in materials or workmanship for the life of the product.

SIIG will, at our discretion, repair or replace (with an identical product or product having similar features and functionality) the product if defective in materials or workmanship. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Please see our web site for more warranty details.

If you encounter any problems with this product, please follow the procedures below.

A) If it is within the store's return policy period, please return the product to the store where you purchased from.

B) If your purchase has passed the store's return policy period, please follow the steps below to have the product repaired or replaced.

Step 1: Submit your RMA request.

Go to www.siig.com, click Support, then REQUEST A PRODUCT REPLACEMENT to submit a request to <u>SIIG RMA</u> or fax a request to 510-657-5962. Your RMA request will be processed, if the product is determined to be defective, an RMA number will be issued.

Step 2: After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All accessories that came with the
 original package must be included.
- Clearly write your RMA number on the top of the returned package. SIIG will
 refuse to accept any shipping package, and will not be responsible for a product
 returned without an RMA number posted on the outside of the shipping
 carton.
- You are responsible for the cost of shipping to SIIG. Ship the product to the following address:

```
SIIG, Inc.
6078 Stewart Avenue
Fremont, CA 94538-3152, USA
RMA #:
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 SIIG will ship the repaired or replaced product via Ground in the U.S. and International Economy outside of the U.S. at no cost to the customer.

About SIIG, Inc.

Founded in 1985, SIIG, Inc. is a leading manufacturer of IT connectivity solutions (including Serial ATA and Ultra ATA Controllers, FireWire, USB, and legacy I/O adapters) that bridge the connection between Desktop/Notebook systems and external peripherals. SIIG continues to grow by adding A/V and Digital Signage connectivity solutions to our extensive portfolio. SIIG products offer comprehensive user manuals, many user-friendly features, and are backed by an extensive manufacturer warranty. High quality control standards are evident by the overall ease of installation and compatibility of our products, as well as one of the lowest defective return rates in the industry. SIIG products can be found in computer retail stores, mail order catalogs, through major distributors, system integrators, and VARs in the Americas and the UK, and through e-commerce sites.

PRODUCT NAME

DP Industrial PCI Serial Adapter Card

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

FCC COMPLIANCE STATEMENT:

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.

THE PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE SIIG, Inc. 6078 Stewart Avenue Fremont, CA 94538-3152, USA Phone: 510-657-8688

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