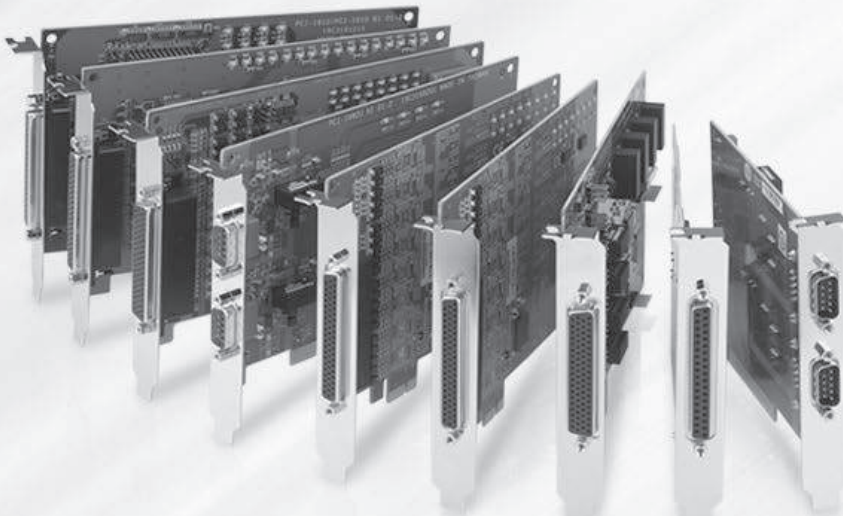


# Serial Communication Cards

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To view all of Advantech's Serial Communication Cards, please visit [www.advantech.com/products](http://www.advantech.com/products).



# Serial Communication Card Selection Guide

## Serial Communication Cards



Bus		Universal Low-Profile PCI			Universal PCI			
Model Name		PCI-1602UP	PCI-1604UP	PCI-1601A/B	PCI-1602	PCI-1603	PCI-1610A/B	PCI-1610C
Number of Ports		2	2	2	2	2	4	4
Communication Interfaces	Current Loop	-	-	-	-	V	-	-
	RS-232	-	V	-	-	V	V	V
	RS-422	V	-	V	V	-	-	-
	RS-485	V	-	V	V	-	-	-
Driver		32-bit/64-bit Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux, and QNX						
Protection	ESD	8KV (air), 4KV (contact)						
	Isolation	2,500 V <sub>DC</sub>	2,500 V <sub>DC</sub>	-	2,500 V <sub>DC</sub>	2,500 V <sub>DC</sub>	-	2,500 V <sub>DC</sub>
Cable Connector Type		DB9 Male	DB9 Male	-	-	-	DB9 Male	DB9 Male
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Bus		Universal PCI				
Model Name		PCI-1620A/B	PCI-1612C	PCI-1612A/B	PCI-1622B	PCI-1622C
Number of Ports		4	4	8	8	8
Communication Interfaces	Current Loop	-	-	-	-	-
	RS-232	V	V	V	-	-
	RS-422	V	V	-	V	V
	RS-485	V	V	-	V	V
Driver		32-bit/64-bit Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux, and QNX				
Protection	ESD	8KV (air), 4KV (contact)				
	Isolation	-	2,500 V <sub>DC</sub>	-	-	2,500 V <sub>DC</sub>
Cable Connector Type		DB9 Male	DB9 Male	-	-	-
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**NEW** **NEW** **NEW** **NEW** **NEW**



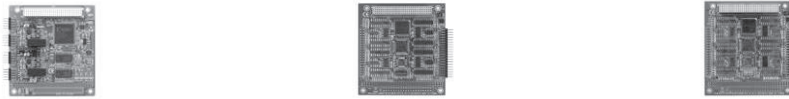
Bus		PCI Express							CAN-bus PCI	CAN-bus ISA
Model Name		PCIE-1602	PCIE-1604	PCIE-1610	PCIE-1612	PCIE-1620	PCIE-1622	PCIE-1680	PCI-1680U	PCL-841
Number of Ports		2	2	4	4	8	8	2	2	2
Communication Interfaces	RS-232	V	V	V	V	V	V	-	-	-
	RS-422	V	-	-	V	-	V	-	-	-
	RS-485	V	-	-	V	-	V	-	-	-
	CAN	-	-	-	-	-	-	V	V	V
Driver		Windows Xp, 7, 8, 8.1, 10, server 2008, server2012, Linux, Qnx and Vxworks							32-bit/64-bit Windows 2000/XP/Vista/7, Linux, and QNX	
Protection	ESD	15KV (air), 8KV (contact)							8KV (air), 4KV (contact)	
	Isolation	3,000 V <sub>DC</sub>	3,000 V <sub>DC</sub>	3,000 V <sub>DC</sub>	3,000 V <sub>DC</sub>	3,000 V <sub>DC</sub>	3,000 V <sub>DC</sub>	2,500 V <sub>DC</sub>	1,000 V <sub>DC</sub>	1,000 V <sub>DC</sub>
Cable Connector Type		-	-	-	-	-	-	-	-	-
Page		11-8	11-8	11-8	11-8	11-9	11-9	11-10	11-11	11-11

## PC/104 Communication Modules



Bus		PC/104						
Model Name		PCM-3680	PCM-3660	PCM-3610	PCM-3612	PCM-3614	PCM-3618	PCM-3640/3641
Ports		2	2	2	2	4	8	4
Communication Interfaces	Ethernet	-	V	-	-	-	-	-
	RS-232	-	-	V	-	-	-	V
	RS-422	-	-	V	V	V	V	-
	RS-485	-	-	V	V	V	V	-
	CAN	V	-	-	-	-	-	-
Protection	ESD	8KV (air), 4KV (contact)						
	Isolation	2,500 V <sub>dc</sub>	-	2,500 V <sub>dc</sub>	-	-	-	-
Cable Connector Type		-	-	-	-	-	-	-
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## PCI-104 Communication Modules



Bus		PCI-104		
Model Name		PCM-3680I	PCM-3614I	PCM-3641I
Ports		2	4	4
Communication Interfaces	Current Loop	-	-	-
	RS-232	-	V	V
	RS-422	-	V	-
	RS-485	-	V	-
	CAN	V	-	-
Protection	ESD	8KV (air), 4KV (contact)		
	Isolation	2,500 V <sub>dc</sub>	-	-
Cable Connector Type		-	-	-
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## Accessories



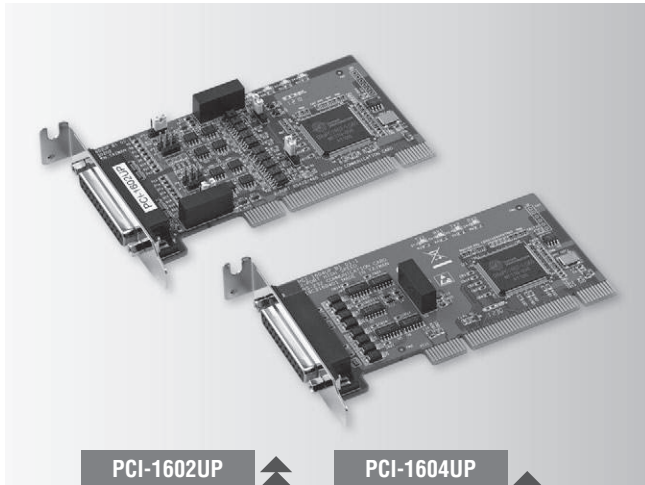
Model Name		1700018791	OPT4A	OPT8C	OPT8H	OPT8J
Length		30 cm	30 cm	1 m	1 m	1 m
Communication Interfaces	Connector Type	DB37 Male	DB37 Male	DB62 Male	DB62 Male	DB78
	Qty	1	1	1	1	1
	Connector Type	DB25 Male	DB9 Male	DB25 Male	DB9 Male	DB9 Male
	Qty	4	4	8	8	8
Where Used		PCI-1610, PCI-1610C, PCI-1612, PCI-1612C, PCIE-1610B, PCI-1612B, PCI-1612C	PCI-1610, PCI-1610C, PCI-1612, PCI-1612C, PCIE-1610B, PCI-1612B, PCI-1612C	PCI-1620, PCIE-1620A, PCIE-1622A, PCIE-1622B,	PCI-1620, PCIE-1620A, PCIE-1622A, PCIE-1622B	PCI-1622, PCI-1622C, PCIE-1622C
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# PCI-1602UP PCI-1604UP

**2-port RS-422/485 Low-Profile Universal PCI Communication Card with Isolation Protection**

**2-port RS-232 Low-Profile Universal PCI Communication Card with Isolation Protection**



## Features

- PCI bus 2.2 compliant
- Speeds up to 921.6 kbps
- 2-port RS-422/485 (PCI-1602UP); 2-port RS-232 (PCI-1604UP)
- I/O address automatically assigned by PCI Plug & Play
- OS support: Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux
- 2,500 V<sub>DC</sub> EFT Protection
- 2,500 V<sub>DC</sub> Isolation protection for RS-422/485 (PCI-1602UP) or RS-232 (PCI-1604UP)
- Interrupt status register for increased performance
- Space reserved for termination resistors (PCI-1602UP)
- Automatic RS-485 data flow control (PCI-1602UP)
- Powerful and easy-to-use utility (ICOM Tools)
- Universal and low-profile PCI (Supports 3.3 V or 5 V PCI bus signal)

## Introduction

These RS-232/422/485 PCI communication cards are compatible with the PCI 2.2 bus specification for universal connectivity and low-profile PCI cards. The PCI-1604UP provides two independent RS-232 ports, while the PCI-1602UP has two RS-422/485 ports. To improve system performance, all cards allow transmission rates up to 921.6 kbps. To increase reliability, the cards offer EFT protection, protecting your system from abrupt high voltages up to 2,500 V<sub>DC</sub>. High-performance OXuPC1952 and OXuPC1954 UARTs with 128-byte FIFO, reduces the CPU load, making the cards especially suitable for multitasking environments.

The cards follow the Low Profile PCI MD1 standard. This standard has the same protocol and electronic definition as standard PCI, but the low-profile PCI standard is smaller. Thus, the cards are suitable for embedded systems, and size-constrained environments. Moreover, all cards are equipped with an universal PCI connector, which allows support for traditional systems with 5 V signaling or newer systems with 3.3 V signaling.

## Specifications

### General

- **Bus Type** Universal PCI V 2.2
- **Certification** CE, FCC class A
- **Connectors** 1 x Female DB25
- **Dimensions (L x W)** 119.91 x 64.41 mm (4.7" x 2.5") (low-profile MD1)
- **Power Consumption** 5 V @ 400 mA (Max.)

### Communications

- **Communication Controller** OXuPC1952
- **Data Bits** 5, 6, 7, 8
- **Data Signals** RS-232: Tx+, Rx-, RTS, CTS, DTR, DSR, DCD, RI, GND  
RS-422: Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS-, GND  
RS-485: Data+, Data-, GND
- **FIFO** 128 bytes
- **Flow Control** CTS/RTS, Xon/Xoff
- **IRQ** Assigned by Plug & Play
- **Parity** None, Even, Odd, Mark and Space
- **Speed** 50 bps ~ 921.6 kbps
- **Stop Bits** 1, 1.5, 2

### Protection

- **EFT Protection** 1 KV
- **Isolation Protection** 2,500 V<sub>DC</sub>
- **ESD Protection** 8KV (air), 4KV (contact)

### Software

- **Bundled Software** ICOM Tools
- **OS Support** Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux, and QNX

### Environment

- **Operating Humidity** 5 ~ 95 % RH, non-condensing
- **Operating Temperature** 0 ~ 65°C (32 ~ 149°F)
- **Storage Temperature** -25 ~ 85°C (-13 ~ 185°F)

## Ordering Information

- **PCI-1602UP** 2-port RS-422/485 Low-Profile Uni PCI Comm Card w/Iso
- **PCI-1604UP** 2-port RS-232 Low-Profile Uni PCI Comm Card w/Iso

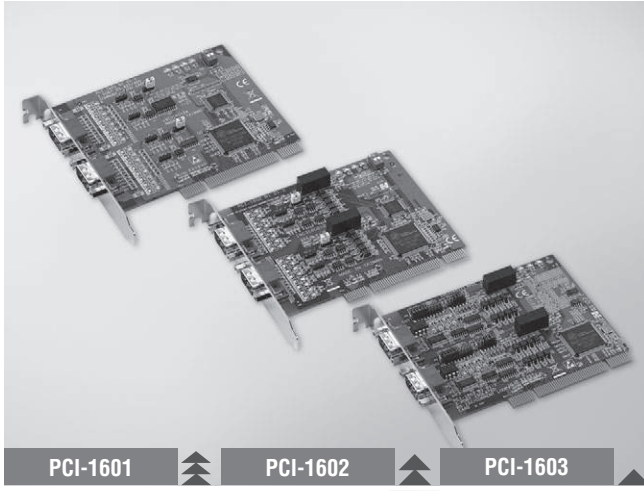
Note: PCI-1602UP and PCI-1604UP include one DB25 to 2 x DB9 cable

# PCI-1601 PCI-1602 PCI-1603

## 2-port RS-422/485 Universal PCI Communication Card

## 2-port RS-422/485 Universal PCI Communication Card with Isolation Protection

## 2-port RS-232/Current-loop Universal PCI Communication Card with Isolation Protection



### Features

- PCI bus 2.2 compliant
- Supports serial speed up to 921.6 kbps, and any baud rate setting
- 2-port RS-422/485 interface (PCI-1601/PCI-1602)
- 2 independent RS-232 or Current-loop serial ports (PCI-1603)
- I/O address automatically assigned by PCI Plug & Play
- OS supported: Windows 2K/XP/Vista/7, Windows CE 5.0/6.0, Linux, and QNX
- Interrupt status register for increased performance

### Introduction

The PCI-1601 and PCI-1602 are two RS-422/485 PCI communication cards that are compatible with the PCI 2.2 bus specification. Both cards provide EFT protected RS-422/485 ports, and come with features such as: high transmission speed of 921.6 kbps, optional isolation protection, windows utility software and more. The cards also come with high-performance OXuPCI952 UART with a 128-byte FIFO to reduce CPU load. This makes the PCI-1601 and PCI-1602 especially suitable for multitasking environments.

The PCI-1603 offers a versatile range of high-speed interfacing options. You can switch its ports between the popular RS-232 or noise-resistant current-loop. The card utilizes OXuPCI952 UART with 128-byte FIFO buffer for faster and more reliable communication, especially under multi-tasking environments such as Windows operating systems. The card utilizes OXuPCI952 UART that buffers data into packets before sending it to the bus. This drastically reduces CPU load and avoids data loss when the system is busy and cannot process an interrupt quickly. These FIFO buffers make the PCI-1603 especially suitable for high speed serial I/O under Windows.

### Specifications

#### General

- **Bus Type** Universal PCI v2.2
- **Certification** CE, FCC class A
- **Connectors** 2 x Male DB9
- **Dimensions (L x W)** 123 x 92 mm (4.8" x 3.6")
- **Power Consumption** 300 mA @ +5V

#### Current-loop Interface (PCI-1603)

- **Baud-rate** 50 ~ 57600 bps
- **Current Value** 20 mA (Standard)
- **Mode** Asynchronous, full duplex
- **Signal Driver/Receiver** 6N136
- **Signals** TxD+, TxD-, RxD+, RxD-
- **Transmission Distance** 1,000 m (RS-422/485 mode only)

#### Communications

- **Communications Controller** OXuPCI952
- **Data Bits** 5, 6, 7, 8
- **Data Signals** RS-422: Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS-, GND  
RS-485: Data+, Data-, GND  
RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND
- **FIFO** 128 bytes
- **Flow Control** RTS/CTS. Xon/Xoff
- **IRQ** Assigned by Plug & Play
- **Parity** None, Even, Odd, Mark and Space
- **Speed** 50 bps ~ 921.6 kbps, any baud rate setting  
230.4 kbps (PCI-1601B, PCI-1602 and PCI-1603 in Current-loop mode only)
- **Stop Bits** 1, 1.5, 2

#### Protection

- **ESD Protection** 8 KV (air), 4 KV (contact)
- **EFT Protection** 1 KV

Model Name	Surge Protection	Isolation Protection
PCI-1601A	-	-
PCI-1601B	1000 V <sub>DC</sub>	-
PCI-1602	1000 V <sub>DC</sub>	2500 V <sub>DC</sub>
PCI-1603	1000 V <sub>DC</sub>	2500 V <sub>DC</sub>

#### Software

- **Bundled Software** ICOM Tools
- **OS Support** 32-bit/64-bit Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux, and QNX

#### Environment

- **Humidity (Operating)** 5 ~ 95 % RH, non-condensing
- **Operating Temperature** -10 ~ 60°C (14 ~ 144°F)
- **Storage Temperature** -25 ~ 85°C (-13 ~ 185°F)

#### Regulatory Approvals

- **EMC** EN 55011: 2009 + A1:2010, Group 1, Class A  
EN 55022: 2010, Class A  
EN 61000-6-4: 2007  
EN 55024: 2010  
EN 61000-6-2: 2005  
IEC 61000-4-2: 2008  
IEC 61000-4-3: 2006 +A1: 2007 +A2: 2010  
IEC 61000-4-4: 2010  
IEC 61000-4-6: 2008  
IEC 61000-4-8: 2009  
FCC 47 CFR Part 15 Subpart B (Class B), IC ICES-003 (2004)

### Ordering Information

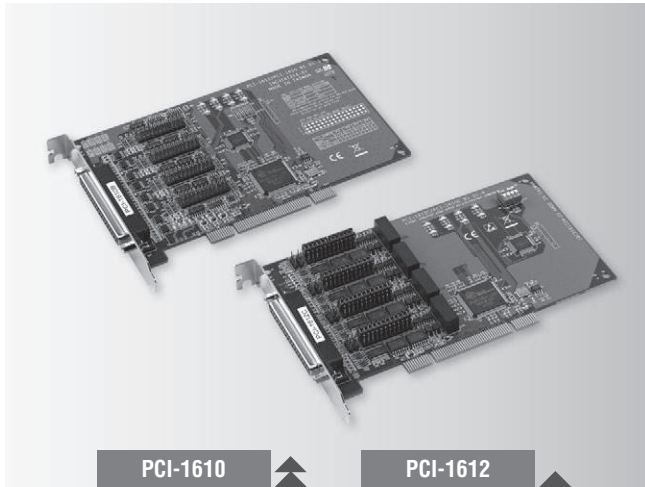
- **PCI-1601A** 2-port RS-422/485 PCI Comm. Card
- **PCI-1601B** 2-port RS-422/485 PCI Comm. Card w/Surge
- **PCI-1602** 2-port RS-422/485 PCI Comm. Card w/Surge-Iso
- **PCI-1603** 2-port RS-232/Current Loop PCI Comm. Card w/Surge-Iso

1	WebAccess+ Solutions
2	Motion Control
3	Power & Energy Automation
4	Automation Software
5	Intelligent Operator Panel
6	Automation Panels
7	Panel PCs
8	Industrial Wireless Solutions
9	Industrial Ethernet Solutions
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16	IoT Ethernet I/O Modules
17	RS-485 I/O Modules
18	Data Acquisition Boards

# PCI-1610 PCI-1612

## 4-port RS-232 Universal PCI Communication Card

## 4-port RS-232/422/485 Universal PCI Communication Card



### Features

- PCI bus 2.2 compliant
- Supports serial speed up to 921.6 kbps, and any baud rate setting
- 4-port RS-232 (PCI-1610), 4-port RS-232/422/485 (PCI-1612)
- OXuPCI954 UART with 128-byte FIFO standard
- I/O address automatically assigned by PCI Plug & Play
- OS supported: Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux, and QNX
- Interrupt status register for increased performance
- Powerful and easy to use utility (ICOM Tools)
- Universal PCI, supports 3.3 V or 5 V PCI bus signal
- 1,000 V<sub>DC</sub> surge protection
- 2,500 V<sub>DC</sub> isolation protection (PCI-1610C and PCI-1612C only)

### Introduction

The PCI-1610 is a four port RS-232, and PCI-1612 is a four port RS-232/422/485 PCI communication card that are compatible with the PCI 2.2 bus specification, and offer transmission speeds up to 921.6 kbps. They also support any baud rate setting, for example 500 kbps is acceptable. The PCI-1610 and PCI-1612 also come with high-performance OXuPCI954 UART with 128-byte FIFO to reduce CPU load. These components make your system more stable and reliable. Thus, the PCI-1610 and PCI-1612 are especially suitable for multitasking environments.

Both the PCI-1610 and PCI-1612 have an universal PCI connector that is compatible with both the latest 3.3 V signaling systems and the traditional 5V signaling system. This gives high compatibility and allows usage in diverse systems. To further increase reliability, the cards can protect your system from abrupt high voltages up to 2,000 voltage thanks to EFT protection technology. PCI-1610C and PCI-1612C also provide 2,500 voltage optical isolation to protect your PC and equipment against damages from ground loops in harsh environments.

### Specifications

#### General

- **Bus Type** Universal PCI v2.2
- **Certification** CE, FCC class A
- **Connectors** 1 x Female DB37
- **Dimensions (L x W)** 185 x 100 mm (7.3" x 3.9")
- **Power Consumption** 180 mA @ +5 V

#### Communications

- **Communication Controller** OXuPCI954
- **Data Bits** 5, 6, 7, 8
- **Data Signals** RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND (PCI-1610, PCI-1612)  
RS-422: Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS- (PCI-1612)  
RS-485: Data+, Data- (PCI-1612)
- **FIFO** 128 bytes
- **Flow Control** RTS/CTS, Xon/Xoff
- **IRQ** Assigned by Plug & Play
- **Parity** None, Even, Odd, Mark and Space
- **Stop Bits** 1, 1.5, 2
- **Speed** 50 bps ~ 921.6 kbps, any baud rate setting  
230.4 kbps (PCI-1610B/C and PCI-1612B/C only)

#### Protection

- **ESD Protection** 8KV (air), 4KV (contact)
- **EFT Protection** 1 KV

Model Name	Surge Protection	Isolation Protection
PCI-1610A	-	-
PCI-1610B	1000 V <sub>DC</sub>	-
PCI-1610C	1000 V <sub>DC</sub>	2500 V <sub>DC</sub>
PCI-1612A	-	-
PCI-1612B	1000 V <sub>DC</sub>	-
PCI-1612C	1000 V <sub>DC</sub>	2500 V <sub>DC</sub>

#### Software

- **Bundled Software** ICOM Tools
- **OS Support** 32-bit/64-bit Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux, and QNX

#### Environment

- **Operating Humidity** 5 ~ 95% RH, non-condensing
- **Operating Temperature** -10 ~ 60°C (14 ~ 144°F)
- **Storage Temperature** -25 ~ 85°C (-13 ~ 185°F)

#### Regulatory Approvals

- **EMC** EN 55011: 2009 + A1:2010, Group 1, Class A  
EN 55022: 2010, Class A  
EN 61000-6-4: 2007  
EN 55024: 2010  
EN 61000-6-2: 2005  
IEC 61000-4-2: 2008  
IEC 61000-4-3: 2006 +A1: 2007 +A2: 2010  
IEC 61000-4-4: 2010  
IEC 61000-4-6: 2008  
IEC 61000-4-8: 2009  
FCC 47 CFR Part 15 Subpart B (Class B), IC ICES-003

### Ordering Information

- **PCI-1610A** 4-port RS-232 PCI Comm. Card
- **PCI-1610B** 4-port RS-232 PCI Comm. Card w/Surge
- **PCI-1610C** 4-port RS-232 PCI Comm. Card w/Surge+Iso
- **PCI-1612A** 4-port RS-232/422/485 PCI Comm. Card
- **PCI-1612B** 4-port RS-232/422/485 PCI Comm. Card w/Surge
- **PCI-1612C** 4-port RS-232/422/485 PCI Comm. Card w/Surge+Iso

Note: this series includes cable OPT4A.

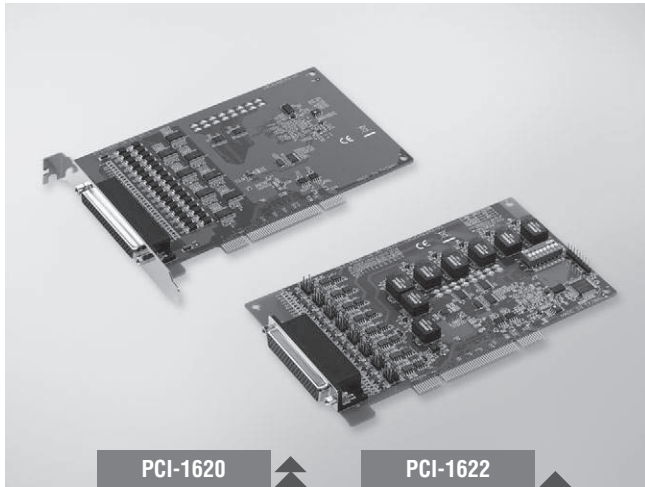
#### Accessories

- **OPT4A** DB37 x1 to DB9 x4 Cable, 30cm
- **1700018791** DB37 x1 to DB25 x4 Cable, 30cm

# PCI-1620 PCI-1622

## 8-port RS-232 Universal PCI Communication Card

## 8-port RS-422/485 Universal PCI Communication Card



PCI-1620

PCI-1622



### Introduction

The PCI-1620 is an eight port RS-232, and PCI-1622 is an eight port RS-422/485 PCI communication card that are compatible with the PCI 2.2 bus specification, and offer transmission speeds up to 921.6 kbps. They also support any baud rate setting, for example 500 kbps is acceptable. PCI-1620 and PCI-1622 also come with high-performance OXuPC1954 UART with 128-byte FIFO to reduce CPU load. These components make your system more stable and reliable. Thus, the PCI-1620 and PCI-1622 are especially suitable for multitasking environments.

The PCI-1620 and PCI-1622 have an universal PCI connector that is compatible with both the latest 3.3 V signaling systems and the traditional 5V signaling system. This gives high compatibility and allows usage in diverse systems. To further increase reliability, the PCI-1620 and PCI-1622 offer EFT protection technology, protecting your system from electrical surges up to 2,500 volts. The PCI-1622C also provides 2,500 voltage optical isolation to protect your PC and equipment against damages from ground loops in harsh environments.

### Specifications

#### General

- **Bus Type** Universal PCI v2.2
- **Certification** CE, FCC class A
- **Connectors** PCI-1620: 1 x Female DB62  
PCI-1622: 1 x Female DB78
- **Dimensions (L x W)** 185 x 100 mm (7.3" x 3.9")
- **Power Consumption** 600 mA @ +5 V

#### Communications

- **Communication Controller** OXPC1e958
- **Data Bits** 5, 6, 7, 8
- **Data Signals** RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND (PCI-1620)  
RS-422: Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS- (PCI-1622)  
RS-485: Data+, Data- (PCI-1622)
- **FIFO** 128 bytes
- **Flow Control** RTS/CTS, Xon/Xoff
- **IRQ** Assigned by Plug & Play
- **Parity** None, Even, Odd
- **Speed** 50 bps ~ 921.6 kbps, any baud rate setting  
230.4 kbps (PCI-1622C only)
- **Stop Bits** 1, 1.5, 2

#### Protection

- **ESD Protection** 8KV (air), 4KV (contact)
- **EFT Protection** 1 KV

Model Name	Surge Protection	Isolation Protection
PCI-1620A	-	-
PCI-1620B	1000 V <sub>DC</sub>	-
PCI-1622B	1000 V <sub>DC</sub>	-
PCI-1622C	1000 V <sub>DC</sub>	2500 V <sub>DC</sub>

### Features

- PCI bus 2.2 compliant
- Supports serial speed up to 921.6 kbps, and any baud rate setting
- 8-port RS-232, or 8-port RS-422/485
- OXPC1e958 UARTs with 128-byte FIFOs standard
- I/O address automatically assigned by PCI Plug & Play
- OS supported: Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux, and QNX
- Interrupt status register for increased performance
- Space reserved for termination resistors
- Automatic RS-422 data flow control
- Powerful and easy to use utility (ICOM Tools)
- Universal PCI, supports 3.3 V or 5 V PCI bus signal
- 1,000 V<sub>DC</sub> surge protection and 2,500 V<sub>DC</sub> isolation protection (PCI-1622C only)

#### Software

- **Bundled Software** ICOM Tools
- **OS Support** Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux and QNX

#### Environment

- **Operating Humidity** 5 ~ 95% RH, non-condensing
- **Operating Temperature** -10 ~ 60°C (14 ~ 144°F)
- **Storage Temperature** -25 ~ 85°C (-13 ~ 185°F)

#### Regulatory Approvals

- **EMC** EN 55022, EN 61000-3-2, EN 61000-3-3, EN 55044 including (IEC 61000-4-2/3/4/5/6/8/11), FCC Part 15 Subpart B

### Ordering Information

- **PCI-1620A** 8-port RS-232 PCI Comm. Card w/Surge
- **PCI-1620B** 8-port RS-232 PCI Comm. Card w/Surge
- **PCI-1622B** 8-port RS-422/485 PCI Comm. Card w/Surge
- **PCI-1622C** 8-port RS-422/485 PCI Comm. Card w/Surge+Iso

#### Accessories

- **OPT8C** DB62 x1 to DB25 x8 Cable, 1m
- **OPT8H** DB62 x1 to DB9 x8 Cable, 1m
- **OPT8J** DB78 x1 to DB9 x8 Cable, 1m

- 1 WebAccess+ Solutions
- 2 Motion Control
- 3 Power & Energy Automation
- 4 Automation Software
- 5 Intelligent Operator Panel
- 6 Automation Panels
- 7 Panel PCs
- 8 Industrial Wireless Solutions
- 9 Industrial Ethernet Solutions
- 10 Industrial Gateway Solutions
- 11 Serial communication cards
- 12 Embedded Automation PCs
- 13 DIN-Rail IPCs
- 14 CompactPCI Systems
- 15 IoT Wireless I/O Modules
- 16 IoT Ethernet I/O Modules
- 17 RS-485 I/O Modules
- 18 Data Acquisition Boards

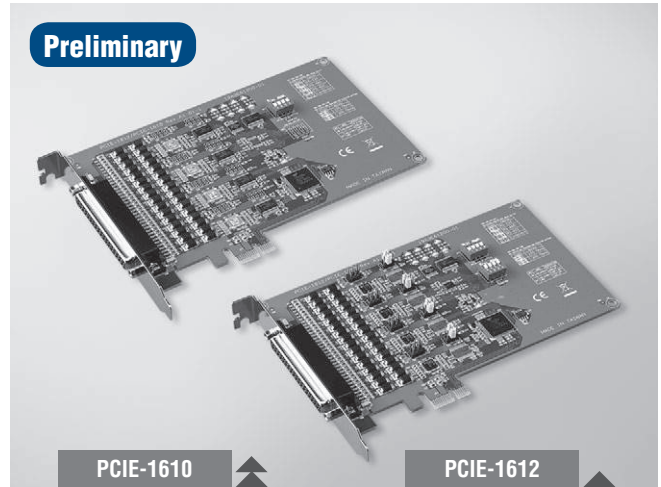
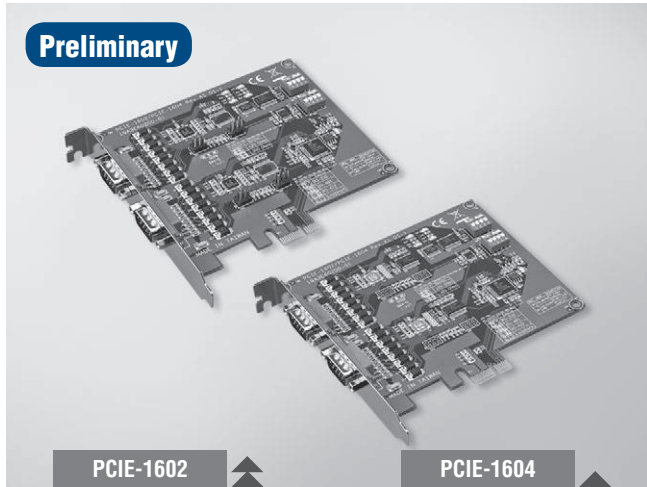
# PCIE-1602 PCIE-1604 PCIE-1610 PCIE-1612

2-port RS-232/422/485 PCI Express Communication Card

2-port RS-232 PCI Express Communication Card

4-port RS-232 PCI Express Communication Card

4-port RS-232/422/485 PCI Express Communication Card



## Features

- PCI Express bus 2.0 compliant
- Speeds up to 921.6 kbps for extremely fast data transmission
- Supports any baud rate setting
- 2 x RS-232 or RS-232/422/485 ports
- Operating systems supported: Windows 2000/XP/Vista/7, and Linux 2.4/2.6
- XR17V352 with 256-byte FIFOs standard

## Specifications

### General

- **Bus Type** PCI Express bus 2.0 compliant
- **Bus Interface** PCI Express x1
- **Certification** CE, FCC class A
- **Connectors** 2x male DB9
- **Dimensions (L x W)** 119.63 x 100 mm (4.71" x 3.9")
- **Power Consumption** 260 mA @ +3.3 V

### Communications

- **Comm. Controller** XR17V352
- **Data Bits** 5, 6, 7, 8
- **FIFO** 256 bytes
- **Parity** None, Odd, Even, Mark and Space
- **Speed** 50 bps ~ 921.6 kbps and any other baud rate setting 230.4 kbps
- **Stop Bits** 1, 1.5, 2

### Software

- **Bundled Software** ICOM Tools
- **OS Support** Windows Xp, win7, win8, win8.1, win10, server 2008, server2012, Linux 2.6.x, 3.x.x, Qnx 6.3, 6.5, Vxworks 6.9

### Environment

- **Operating Humidity** 5 ~ 95 % RH, non-condensing
- **Operating Temperature** -10 ~ 60°C (14 ~ 140°F)
- **Storage Temperature** -25 ~ 85°C (-13 ~ 185°F)

### Protection

Model Name	ESD Protection	EFT Protection	Surge Protection	Isolation Protection
PCIE-1602B	15KV (air), 8KV (contact)	2500 V	1000 V <sub>DC</sub>	
PCIE-1602C	15KV (air), 8KV (contact)	2500 V	1000 V <sub>DC</sub>	3000 V <sub>DC</sub>
PCIE-1604B	15KV (air), 8KV (contact)	2500 V	1000 V <sub>DC</sub>	
PCIE-1604C	15KV (air), 8KV (contact)	2500 V	1000 V <sub>DC</sub>	3000 V <sub>DC</sub>

## Ordering Information

- **PCIE-1602B** 2-port RS-232/422/485 PCI Express Comm. Card w/Surge
- **PCIE-1602C** 2-port RS-232/422/485 PCI Express Comm. Card w/Surge & Isolation
- **PCIE-1604B** 2-port RS-232 PCI Express Comm. Card w/Surge
- **PCIE-1604C** 2-port RS-232 PCI Express Comm. Card w/Surge & Isolation

## Features

- PCI Express bus 2.0 compliant
- Speeds up to 921.6 kbps for extremely fast data transmission
- Supports any baud rate setting
- 4 x RS-232 or RS-232/422/485 ports
- Operating systems supported: Windows 2000/XP/Vista/7, and Linux 2.4/2.6
- XR17V354 with 256-byte FIFOs standard

## Specifications

### General

- **Bus Type** PCI Express bus 2.0 compliant
- **Bus Interface** PCI Express x1
- **Certification** CE, FCC class A
- **Connectors** 1x Female DB37
- **Dimensions (L x W)** 185 x 100 mm (7.3" x 3.9")
- **Power Consumption** 260 mA @ +3.3 V

### Communications

- **Comm. Controller** XR17V354
- **Data Bits** 5, 6, 7, 8
- **FIFO** 256 bytes
- **Parity** None, Odd, Even, Mark and Space
- **Speed** 50 bps ~ 921.6 kbps and any other baud rate setting 230.4 kbps
- **Stop Bits** 1, 1.5, 2

### Software

- **Bundled Software** ICOM Tools
- **OS Support** Windows Xp, win7, win8, win8.1, win10, server 2008, server2012, Linux 2.6.x, 3.x.x, Qnx 6.3, 6.5, Vxworks 6.9

### Environment

- **Operating Humidity** 5 ~ 95 % RH, non-condensing
- **Operating Temperature** -10 ~ 60°C (14 ~ 140°F)
- **Storage Temperature** -25 ~ 85°C (-13 ~ 185°F)

### Protection

Model Name	ESD Protection	EFT Protection	Surge Protection	Isolation Protection
PCIE-1610B	15KV (air), 8KV (contact)	2500 V	1000 V <sub>DC</sub>	
PCIE-1612B	15KV (air), 8KV (contact)	2500 V	1000 V <sub>DC</sub>	
PCIE-1612C	15KV (air), 8KV (contact)	2500 V	1000 V <sub>DC</sub>	3000 V <sub>DC</sub>

## Ordering Information

- **PCIE-1610B** 4-port RS-232 PCI Express Comm. Card w/Surge
- **PCIE-1612B** 4-port RS-232/422/485 PCI Express Comm. Card w/Surge
- **PCIE-1612C** 4-port RS-232/422/485 PCI Express Comm. Card w/Surge & Isolation

Note: this series includes cable OPT4A.

### Accessories

- **OPT4A** DB37 x1 to DB9 x4 Cable, 30cm
- **1700018791** DB37 x1 to DB25 x4 Cable, 30cm



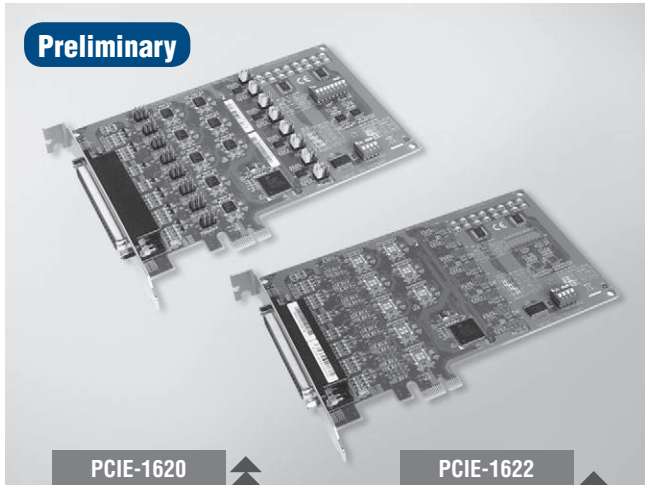
# PCIE-1620

# PCIE-1622

## 8-port RS-232 PCI Express Communication Card

## 8-port RS-232/422/485 PCI Express Communication Card

Preliminary



PCIE-1620

PCIE-1622



### Features

- PCI Express bus 2.0 compliant
- Speeds up to 921.6 kbps for extremely fast data transmission
- Supports any baud rate setting
- 8 x RS-232 or RS-232/422/485 ports
- XR17V358 UART with 256-byte FIFOs

### Introduction

PCIE-1620 is an 8-port RS-232, and PCIE-1622 is an 8-port RS-232/422/485 PCI Express communication cards that are compatible with the PCI Express x1 specification. The cards provide eight EFT protected ports up to 2,500 V, and have many functions such as high transmission speed of 921.6 kbps; The cards utilizes high-performance XR17V358 UARTs with 256-byte FIFOs to reduce CPU load. Thus, the PCIE-1620 and PCIE-1622 are especially suitable for making reliable systems in multitasking environments.

### Specifications

#### General

- **Bus Type** PCI Express bus 2.0 compliant
- **Bus Interface** PCI Express x1
- **Certification** CE, FCC class A
- **Connectors** 1x Female DB62 (PCIE-1620A/22A/22B)  
1x Female DB78 (PCIE-1622C)
- **Dimensions (L x W)** 168 x 111 mm (6.6" x 4.4")
- **Power Consumption** 260 mA @ +3.3 V

#### Communications

- **Comm. Controller** XR17V358
- **Data Bits** 5, 6, 7, 8
- **Data Signals** RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI  
RS-422: Tx+, Tx-, Rx+, Rx- (PCIE-1622)  
RS-485: Data+, Data- (PCIE-1622)
- **FIFO** 256 bytes
- **Flow Control** RTS/CTS, Xon/Xoff
- **Parity** None, Odd, Even, Mark, or Space
- **Speed** 50 bps ~ 921.6 kbps and any other baud rate setting  
230.4 kbps (PCIE-1622B only)
- **Stop Bits** 1, 1.5, 2

#### Protection

Model Name	ESD Protection	EFT Protection	Surge Protection	Isolation Protection
PCIE-1620A	15KV (air), 8KV (contact)	2500 V		
PCIE-1622A	15KV (air), 8KV (contact)	2500 V		
PCIE-1622B	15KV (air), 8KV (contact)	2500 V	1000 V	
PCIE-1622C	15KV (air), 8KV (contact)	2500 V	1000 V	3000 V <sub>DC</sub>

#### Software

- **Bundled Software** ICOM Tools
- **OS Support** Windows Xp, win7, win8, win8.1, win10, server 2008, server2012  
Linux 2.6.x, 3.x.x  
Qnx 6.3, 6.5  
Vxworks 6.9

#### Environment

- **Operating Humidity** 5 ~ 95 % RH, non-condensing
- **Operating Temperature** -10 ~ 60°C (14 ~ 140°F)
- **Storage Temperature** -25 ~ 85°C (-13 ~ 185°F)

### Ordering Information

- **PCIE-1620A** 8-port RS-232 PCI-express Comm. Card
- **PCIE-1622A** 8-port RS-232/422/485 PCI-express Comm. Card
- **PCIE-1622B** 8-port RS-232/422/485 PCI-express Comm. Card w/ Surge Protection
- **PCIE-1622C** 8-port RS-232/422/485 PCI-express Comm. Card w/ Surge & Isolation Protection

### Accessories

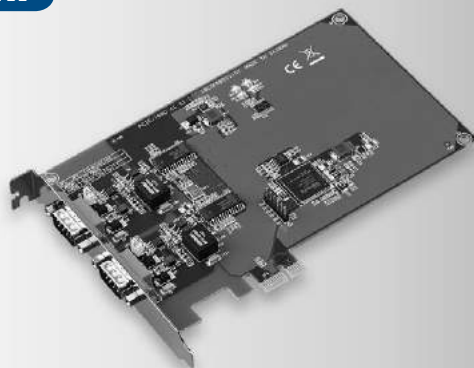
- **OPT8C** DB62 x1 to DB25 x8 Cable, 1m
- **OPT8H** DB62 x1 to DB9 x8 Cable, 1m
- **OPT8J** DB78 x1 to DB9 x8 Cable, 1m

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- 18 Data Acquisition Boards

# PCIE-1680

## 2-Port CAN-Bus PCIE card with Isolation Protection

NEW



FCC CE

### Features

- PCIe bus specification 1.1 compliant
- Two independent CAN ports
- High speed transmission up to 1 Mbps
- 16 MHz CAN controller frequency
- Optical isolation protection of 2,500 V<sub>DC</sub>
- I/O address automatically assigned by PCI PnP
- Transmit/Receive status LED indicators
- Windows DLL library and examples included
- Supports Windows CE5/CE6/XP/7
- Supports Linux 2.4.xx / 2.6.xx; Intel x86 architecture

### Introduction

The PCIE-1680 is a special purpose communication card that offers connectivity to Controller Area Networks (CAN) on your PC. With its built-in CAN controllers, the PCIE-1680 provides bus arbitration and error detection with an automatic transmission repetition. This drastically reduces the chance of data loss and ensures system reliability. Both CAN controllers operate independently. The PCIE-1680 operates at baud rates up to 1 Mbps.

### Specifications

#### General

- **Bus Type** PCI Express 1.1
- **Certification** CE, FCC
- **Connectors** 2 x DB9 male connectors  
2 x 10 pin box wafer (optional)
- **Ports** 2
- **Power Consumption** 3.3 V @ 600 mA (Typical)

#### Communication

- **CAN Controller** NXP SJA-1000
- **CAN Transceiver** NXP TJA1051T
- **Signal Support** CAN\_H, CAN\_L
- **Protocol** CAN 2.0 A/B
- **Data Transfer Rate(bps)** Programmable up to 1 Mbps
- **CAN Frequency** 16MHz

#### Protection

- **Isolation Protection** 2,500 V<sub>DC</sub>

#### Mechanical and Environmental

- **Operating Temperature** 0 ~ 70°C (32 ~ 158°F)  
(refer to IEC 60068-2-1, 2)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Operating Humidity** 5 ~ 95% Relative Humidity, non-condensing
- **Dimensions (L x W)** 168 x 111 mm(6.6" x 4.4")

### Ordering Information

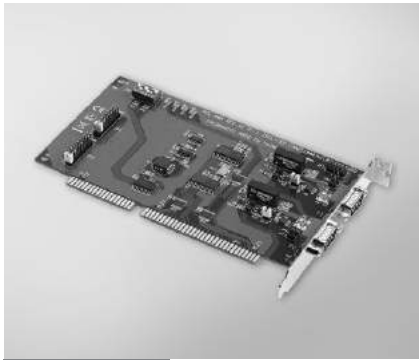
- **PCIE-1680-AE** 2-Port CAN-Bus PCIE card with Isolation Protection

# PCL-841 PCI-1680U PCM-3680/I

## 2-port CAN-bus ISA Card with Isolation Protection

## 2-port CAN-bus Universal PCI Card with Isolation Protection

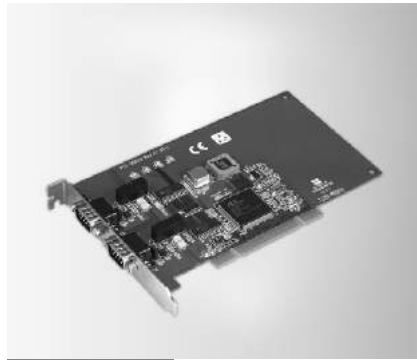
## 2-port CAN-bus PC/104 / PCI-104 Module with Isolation Protection



PCL-841



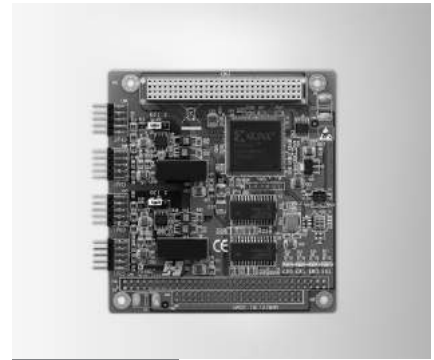
CE FCC



PCI-1680U



CE FCC



PCM-3680I



CE FCC

### Features

- Operates two separate CAN networks simultaneously
- High speed transmission up to 500 kbps
- Optical isolation protection of 1000 V<sub>DC</sub>
- Windows DLL library and examples included
- Wide IRQ selection for each port: IRQ 3, 4, 5, 6, 7, 9, 10, 11, 12, 15
- Supports 32-bit/64-bit Windows 2000/XP/Vista/7 and Linux

### Specifications

#### General

- Card Interface** ISA
- Certification** CE, FCC
- Connectors** 2 x DB9-M
- Dimensions** 185 x 100 mm (7.3" x 3.9")
- Ports** 2
- Power Consumption** 5 V @ 400 mA typical

#### Communications

- CAN Controller** SJA-1000
- CAN Transceiver** 82C250
- Protocol** CAN2.0 A/B
- Speed** 500 kbps
- IRQ** 3, 4, 5, 6, 7, 9, 10, 11, 12, or 15
- Memory Segment Base Address** From C800H to EF00H
- Signal Support** CAN\_H, CAN\_L

#### Protection

- Isolation Protection** 1,000 V<sub>DC</sub>

#### Environment

- Operating Temp.** 0 ~ 50°C (32 ~ 122°F)

### Ordering Information

- PCL-841** 2-port CAN-bus ISA Comm. Card w/ Iso

### Features

- Operates two separate CAN networks simultaneously
- High speed transmission up to 1 Mbps
- Optical isolation protection of 1000 V<sub>DC</sub>
- Windows DLL library and examples included
- I/O address automatically assigned by PCI PnP
- Supports 32-bit/64-bit Windows 2000/XP/Vista/7 and Linux

### Specifications

#### General

- Card Interface** Universal PCI
- Certification** CE, FCC
- Connectors** 2 x DB9-M
- Dimensions** 175 x 107 mm (6.9" x 4.2")
- Ports** 2
- Power Consumption** 5 V @ 400 mA typical

#### Communications

- CAN Controller** SJA-1000
- CAN Transceiver** 82C250
- Protocol** CAN2.0 A/B
- Speed** 1 Mbps
- CAN Frequency** 16 MHz
- Signal Support** CAN\_H, CAN\_L

#### Protection

- Isolation Protection** 1,000 V<sub>DC</sub>

#### Environment

- Operating Temp.** 0 ~ 65°C (32 ~ 149°F)

### Ordering Information

- PCI-1680U** 2-port CAN Uni-PCI COMM Card w/Iso

### Features

- Operates two separate CAN networks simultaneously
- High speed transmission up to 1 Mbps
- 16 MHz CAN controller frequency
- Optical isolation protection
- Transmit/receive status LED indicators on each port
- Supports wide operating temperature
- Supports 32/64-bit WinXP/Vista/7 and Linux
- Supports WinCE 5.0/6.0

### Specifications

#### General

- Card Interface** PCM-3680: PC/104  
PCM-3680I: PCI-104
- Certification** CE, FCC
- Connectors** 2 x DB9-M with cable
- Dimensions** 90 x 96 mm (3.6" x 3.8")
- Ports** 2
- Power Consumption** 5 V @ 400 mA

#### Communications

- CAN Controller** SJA-1000
- CAN Transceiver** 82C250
- Protocol** CAN2.0 A/B
- Speed** Up to 1 Mbps programmable transfer rate
- CAN Frequency** 16 MHz
- Signal Support** CAN\_H, CAN\_L

#### Protection

- Isolation Protection** 2,500 V<sub>DC</sub>

#### Environment

- Operating Temp.** -40 ~ 85°C (-40 ~ 185°F)

### Ordering Information

- PCM-3680** Dual-port Iso CAN-bus PC/104 Module
- PCM-3680I** Dual-port Iso CAN-bus PCI-104 Module

- 1 WebAccess+ Solutions
- 2 Motion Control
- 3 Power & Energy Automation
- 4 Automation Software
- 5 Intelligent Operator Panel
- 6 Automation Panels
- 7 Panel PCs
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- 10 Industrial Gateway Solutions
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- 12 Embedded Automation PCs
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# PCM-3610

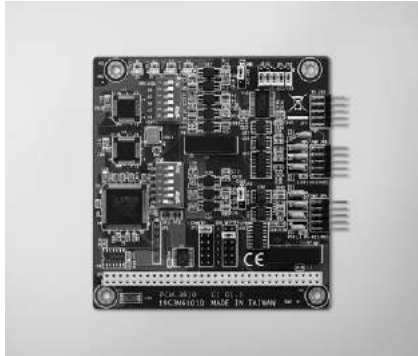
# PCM-3612

# PCM-3614

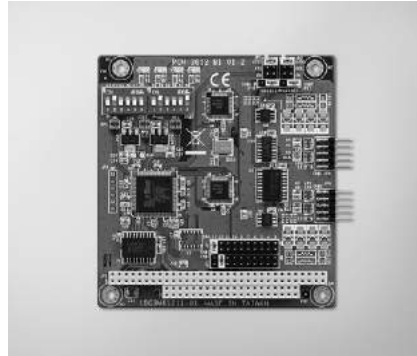
## 2-port RS-232/422/485 PC/104 Module with Isolation Protection

## 2-port RS-422/485 PC/104 Module

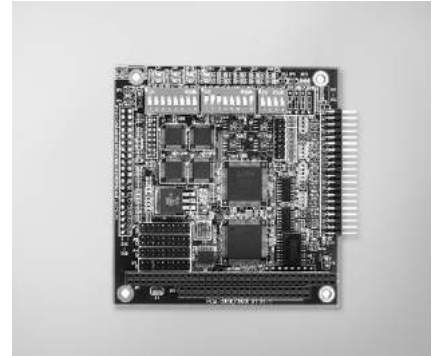
## 4-port RS-422/485 High-speed PC/104 Module



PCM-3610



PCM-3612



PCM-3614



### Features

- High speed transmission rate
- Automatic RS-485 data flow control
- Jumper selectable interrupt level
- Supports Windows 2000/XP/Vista/7
- Supports WinCE 4.2, 5.0
- Powerful and easy-to-use utility (ICOM Tools)

### Specifications

#### General

- **Card Interface** PC/104
- **Certification** CE, FCC
- **Connectors** 2 x DB9-M
- **Ports** 2
- **Power Consumption** +5V @ 400mA (Typical)

#### Communications

- **Channel 1** RS-232, 422, or 485
- **Channel 2** RS-422, or RS-485
- **Character Length** 5, 6, 7, or 8 bits
- **IRQ** 3, 4, 5, 6, 7, 9
- **Parity** Even, Odd, or None
- **Speed** 50 bps ~ 115.2 kbps
- **Stop Bit** 1, 1.5, or 2

#### Protection

- **Isolation Protection** 2,500 V<sub>DC</sub>

#### Environment

- **Operating Humidity** 0 ~ 90 % RH
- **Operating Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)

### Ordering Information

- **PCM-3610** Isolated RS-232/422/485 Module

### Features

- Long distance communication
- Automatic RS-485 data flow control
- Jumper selectable interrupt level
- Supports Windows 2000/XP/Vista/7
- Supports WinCE 4.2, 5.0
- Powerful and easy-to-use utility (ICOM Tools)

### Specifications

#### General

- **Card Interface** PC/104
- **Certification** CE, FCC
- **Connectors** 2 x DB9-M
- **Indicators** Red LED for TX  
Green LED for RX
- **Ports** 2
- **Power Consumption** +5V @ 400mA (Typical)

#### Communications

- **Channel 1 and 2** RS-422, or RS-485
- **Character Length** 5,6,7, or 8 bits
- **IRQ** 3, 4, 5, 6, 7, 9, 10, 11, 12 or 15
- **Parity** Even, Odd, or None
- **Speed** 50 bps ~ 115.2 kbps
- **Stop Bit** 1, 1.5, or 2

#### Environment

- **Operating Humidity** 0 ~ 90 % RH
- **Operating Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)

### Ordering Information

- **PCM-3612** Dual Port RS-422/485 Module

### Features

- Automatic RS-485 data flow control
- Shared IRQ settings for each ports
- LED indicators: TX, RX
- Standard PC ports: COM1, COM2, COM3, COM4 compatible
- Supports Windows 2000/XP/Vista/7
- Supports WinCE 4.2, 5.0
- Powerful and easy-to-use utility (ICOM Tools)

### Specifications

#### General

- **Card Interface** PC/104
- **Certification** CE, FCC
- **Connectors** 4 x DB9-M
- **Ports** 4
- **Power Consumption** +5V @ 450mA (Typical)

#### Communications

- **Data Bits** 5, 6, 7, 8
- **I/O Address Range** 0 x 000 ~ 0 x 3F8
- **IRQ** 3, 4, 5, 6, 7, 9, 10, 11, 12, or 15
- **Parity** Even, Odd, or None
- **Data Signals** RS-422: TxD+, TxD-, RxD+, RxD-, CTS+, CTS-, RTS+, and RTS-  
RS-485: DATA+, DATA-  
50 bps ~ 921.6 kbps
- **Speed**
- **Stop Bits** 1, 1.5, 2
- **Termination Resistor** 120 Ω

#### Environment

- **Operating Humidity** 0 ~ 90 % RH
- **Operating Temperature** 0~65°C (32~149°C)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)

### Ordering Information

- **PCM-3614** 4-port RS-422/485 High-speed Module

# PCM-3618

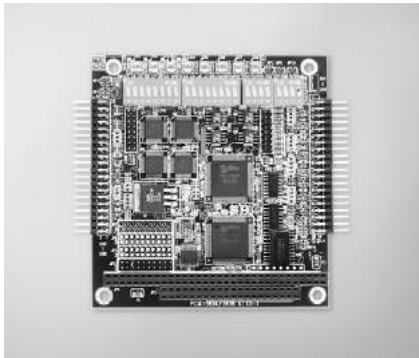
# PCM-3640/3641

# PCM-3660

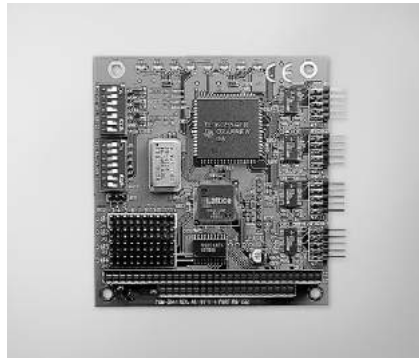
8-port RS-422/485 High-speed PC/104 Module

4-port RS-232 High-speed PC/104 Module

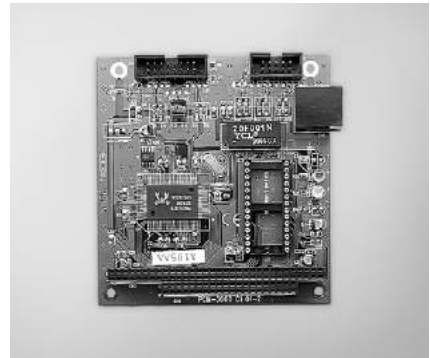
Jumperless Ethernet PC/104 Module



PCM-3618



PCM-3641



PCM-3660



## Features

- Automatic RS-485 data flow control
- Shared IRQ settings for each ports
- LED indicators: TX, RX
- Supports Windows 2000/XP/Vista/7
- Supports WinCE 5.0/6.0
- Powerful and easy-to-use utility (ICOM Tools)

## Specifications

### General

- Card Interface** PC/104
- Certification** CE, FCC
- Connectors** 8 x DB9-M
- Ports** 8
- Power Consumption** +5V @ 650 mA

### Communications

- Data Bits** 5, 6, 7, 8
- I/O Address Range** 0 x 000 ~ 0 x 3F8
- IRQ** 3, 4, 5, 6, 7, 9, 10, 11, 12, 15
- Parity** None, Even, or Odd
- Data Signals** RS-422: TxD+, TxD-, RxD+, RxD-, CTS+, CTS-, RTS+, and RTS-  
RS-485: DATA+, DATA-  
50 bps ~ 921.6 kbps
- Speed** 1, 1.5, 2
- Termination Resistor** 120 Ω

### Environment

- Operating Humidity** 0 ~ 90 % RH
- Operating Temperature** 0 ~ 65°C (32 ~ 149°F)
- Storage Temperature** -25 ~ 80°C (-13 ~ 176°F)

## Ordering Information

- PCM-3618** 8-port RS-422/485 High-Speed Module

## Features

- Transmission speeds up to 460 kbps (PCM-3641)
- Shared IRQ settings for each of 4 RS-232 ports (PCM-3641)
- Standard PC ports: COM1, COM2, COM3, COM4 compatible
- Supports Windows 2000/XP/Vista/7
- Supports WinCE 5.0/6.0
- Powerful and easy-to-use utility (ICOM Tools)

## Specifications

### General

- Card Interface** PC/104
- Certification** CE, FCC
- Connectors** 4 x DB9-M
- Ports** 4
- Power Consumption** +5V @ 200 mA (Typical)  
+5V @ 250 mA (Max)

### Communications

- Data Bits** 5, 6, 7, 8
- Data Signals** RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI  
0 x 0200 ~ 0 x 03F8
- I/O Address Range** 3, 4, 5, 6, 7, 9, 10, 11, 12, 15
- IRQ** 3, 4, 5, 6, 7, 9, 10, 11, 12, 15
- Parity** None, Even, or Odd
- Speed** 50 bps ~ 460.3 kbps (PCM-3641)  
50 bps ~ 115.2 kbps (PCM-3640)
- Stop Bits** 1, 1.5, 2

### Environment

- Operating Humidity** 0 ~ 90 % RH
- Operating Temperature** 0 ~ 65°C (32 ~ 149°F)
- Storage Temperature** -25 ~ 80°C (-13 ~ 176°F)

## Ordering Information

- PCM-3640** 4-port RS-232 Module
- PCM-3641** 4-port RS-232 High-speed Module

## Features

- Automatically detects 8-bit or 16-bit
- AUI connector supports external MAUs
- Onboard 32 KB buffer for multi-packages

## Specifications

### General

- Boot ROM Address** C0000, C8000, D0000, or D8000H
- Card Interface** PC/104
- Certification** CE, FCC
- Connectors** 1 x PC/104 stackthrough  
1 x 10Base-T (RJ-45)  
1 x 16-pin insulation displacement connector for AU1

### Power Consumption

- Power Consumption** +5V @ 400 mA max

### Communications

- Data Bus** 8-bit, 16-bit, or auto-sending
- I/O Address** 200, 220, 240, 260, 280, 2A0, 2C0, 300, 320, 340, 380, 3A0
- IRQ** 3,4,5,9, 10, 11, 12 or 15
- Standard** IEEE 802.3 10 Mbps CSMA/CD 10Base-T Transceiver

### Environment

- Operating Humidity** 10 ~ 90% RH
- Operating Temperature** 0 ~ 70°C (32 ~ 158°F)
- Storage Temperature** -15 ~ 80°C (5 ~ 176°F)

## Ordering Information

- PCM-3660** Jumperless Ethernet Module

1  
WebAccess+ Solutions

2  
Motion Control

3  
Power & Energy Automation

4  
Automation Software

5  
Intelligent Operator Panel

6  
Automation Panels

7  
Panel PCs

8  
Industrial Wireless Solutions

9  
Industrial Ethernet Solutions

10  
Industrial Gateway Solutions

11  
Serial communication cards

12  
Embedded Automation PCs

13  
DIN-Rail IPCs

14  
CompactPCI Systems

15  
IoT Wireless I/O Modules

16  
IoT Ethernet I/O Modules

17  
RS-485 I/O Modules

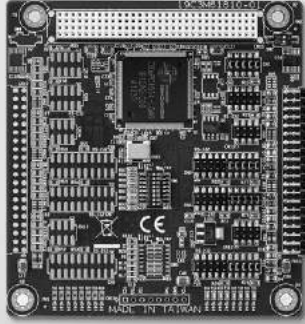
18  
Data Acquisition Boards

# PCM-3614I

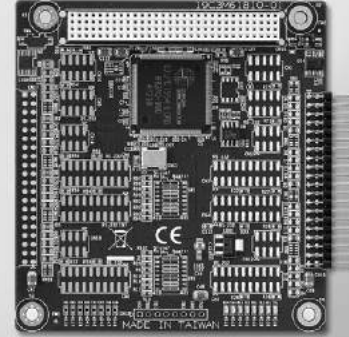
# PCM-3641I

## 4-port RS-232/422/485 PCI-104 Module

## 4-port RS-232 PCI-104 Module



PCM-3614I



PCM-3641I



### Features

- Automatic RS-485 data flow control
- Shared IRQ settings for each port
- LED indicators: TX, RX
- Standard PC ports: COM1, COM2, COM3, COM4 compatible
- Supports Windows 2000/XP/Vista/7 and Linux
- Supports WinCE 5.0/6.0
- Powerful and easy-to-use utility (ICOM Tools)

### Specifications

#### General

- **Card Interface** PCI-104
- **Connectors** 1 x 40-pin header
- **Ports** 4
- **Power Consumption** +5V @ 450 mA

#### Communications

- **Data Bits** 5, 6, 7, 8
- **Data Signals** RS-422: TxD+, TxD-, RxD+, RxD-  
RS-485: DATA+, DATA-  
RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI
- **IRQ** 3, 4, 5, 6, 7, 9, 10, 11, 12, 15
- **Parity** None, Even, or Odd
- **Speed** 50 bps ~ 921.6 kbps
- **Stop Bits** 1, 1.5, 2
- **Termination Resistor** 120 Ω

#### Environment

- **Operating Humidity** 0 ~ 90 % RH
- **Operating Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)

### Ordering Information

- **PCM-3614I** 4-port RS-232/422/485 PCI-104 Module
- **PCM-3618I** 8-port RS-232/422/485 PCI-104 Module

### Features

- Transmission speeds up to 460 kbps
- Shared IRQ settings for each port
- Standard PC ports: COM1, COM2, COM3, COM4 compatible
- Supports Windows 2000/XP/Vista/7 and Linux
- Supports WinCE 5.0/6.0
- Powerful and easy-to-use utility (ICOM Tools)

### Specifications

#### General

- **Card Interface** PCI-104
- **Connectors** 1 x 40-pin header
- **Ports** 4
- **Power Consumption** +5V @ 250 mA (max.)

#### Communications

- **Data Bits** 5, 6, 7, 8
- **Data Signals** TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI
- **IRQ** 3, 4, 5, 6, 7, 9, 10, 11, 12, 15
- **Parity** None, Even, or Odd
- **Speed** 50 bps ~ 460.3 kbps
- **Stop Bits** 1, 1.5, 2
- **Termination Resistor** 120 Ω

#### Environment

- **Operating Humidity** 0 ~ 90 % RH
- **Operating Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)

### Ordering Information

- **PCM-3641I** 4-port RS-232 PCI-104 Module