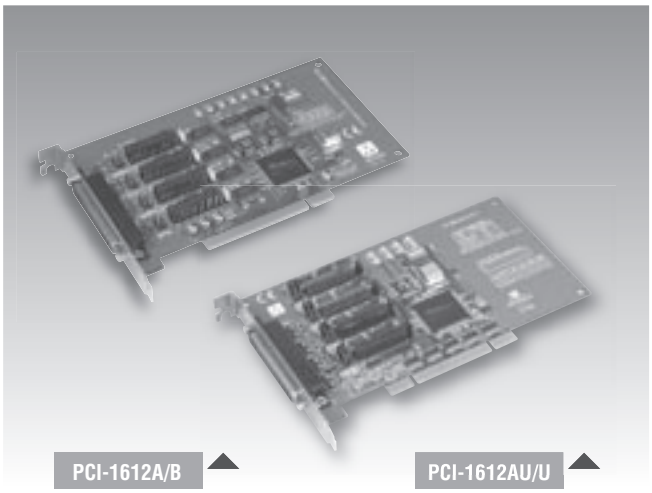
PCI-1612 Series

4-port RS-232/422/485 PCI Communication Cards



Features

- PCI bus specification 2.1(PCI-1612A/1612B), 2.2 (PCI-1612AU/1612BU/1612CU) compliant
- Speeds up to 921.6 kbps
- 4-port RS-232/422/485
- 16PCI954 UARTs with 128-byte FIFOs standard
- I/O address automatically assigned by PCI Plug & Play
- OS supported: Windows® 98/ME/2000/XP/XP Embedded, Linux
- Interrupt status register for increased performance
- Space reserved for termination resistors
- Automatic RS-485 data flow control
- Powerful and easy to use utility (ICOM Tools)
- Universal PCI (Supports 3.3 V or 5 V PCI bus signal) (PCI-1612AU,PCI-1612BU, PCI-1612CU)
- 2,500 V_{DC} EFT Surge Protection (PCI-1612B/1612BU/1612CU)
- 2,500 V_{DC} Isolation Protection (PCI-1612CU only)

Introduction

PCI-1612 is a 4-port RS-232/422/485 PCI communication card that is compatible with the PCI 2.1/2.2 bus specification and offer transmission rates up to 921.6 kbps. PCI-1612 comes with high-performance 16PCI954 UARTs with a 128-byte FIFO to reduce CPU load. These components make your system more stable and reliable. Thus, the PCI-1612 is especially suitable for multitasking environments.

PCI-1612AU, PCI-1612BU and PCI-1612CU have universal PCI connectors that are compatible with both newer 3.3 V signaling systems and the traditional 5 V signaling system. This gives highly-compatibility and allows usage in diverse systems. To further increase reliability, PCI-1612B, PCI-1612BU and PCI-1612CU offers EFT surge protection for high voltages up to 2,500 V_{DC}. Meanwhile, PCI-1612CU provides 2,500 V_{DC} isolation to protect your PC and equipment against damages from ground loops in harsh environments. Advantech also provides a convenient utility program called ICOM Tools to help test the PCI card performance by analyzing the port status. The menu commands and toolbar buttons of ICOM Tools acts as a PC-based data scope that lets you set a trigger condition, capture the communications data and monitor the signal status. ICOM Tools is applicable to all series of Advantech ICOM cards.

Specifications

General

Card Interface	PCI V 2.1 (PCI-1612A, PCI-1612B) Universal PCI V2.2 (PCI-1612BU, PCI-1612AU, 1612CU)	
Certifications	CE, FCC class A	
Connectors	1 x DB37-F	
Dimensions	185 x 100 mm (7.3" x 3.9")	
Power Consumption	Typical +12 V: 60 mA +5 V: 270 mA	Max +12 V: 80 mA +5 V: 338 mA

Communications

Communication Controller	16PCI954
Data Bits	5, 6, 7, 8
Data Signals	TxD, RxD, RTS, CTS, DTR, DSR, DCD,RI,GND(RS-232) Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS- (RS-422) Data+, Data- (RS-485)
FIFO	128 bytes
Flow Control	RTS/CTS, Xon/Xoff
IRQ	Assigned by Plug & Play
Parity	None, even, odd
Speed	50 bps ~ 921.6 kbps
Stop Bits	1, 1.5, 2

Protection

EFT Surge Protection	2,500 V_{DC} (PCI-1612B/1612BU/1612CU only)
ESD Protection	16 kV
Isolation Protection	2,500 V_{DC} (PCI-1612CU only)

Software

Bundled Software	ICOM Tools
Driver Support	Windows 98/ME/2000/XP/XP Embedded, Linux

Environment

Humidity (Operating)	5 ~ 95% RH, non-condensing (refer to IEC 68-2-3)
Operating Temperature	0 ~ 65° C (refer to IEC 68-2-1, 2), (32 ~ 149° F)
Storage Temperature	-25 ~ 85° C (-13 ~ 185° F)

Ordering Information

PCI-1612A	4-port RS-232/422/485 PCI COMM Card (30 cm DB37 to 4 DB25 cable included)
PCI-1612A/9	4-port RS-232/422/485 PCI COMM Card (30 cm DB37 to 4 DB9 cable included)
PCI-1612B	4-port RS-232/422/485 PCI COMM Card w/EFT Surge Protection (30 cm DB37 to 4 DB25 cable included)
PCI-1612B/9	4-port RS-232/422/485 PCI COMM Card w/EFT Surge Protection (30 cm DB37 to 4 DB9 cable included)
PCI-1612AU	4-port RS-232/422/485 Universal Comm. Card (30 cm DB37 to 4 DB25 cable included)
PCI-1612AU/9	4-port RS-232/422/485 Universal Comm. Card (30 cm DB37 to 4 DB9 cable included)
PCI-1612BU	4-port RS-232/422/485 Universal PCI COMM Card w/EFT Surge Protection (30 cm DB37 to 4 DB25 cable included)
PCI-1612BU/9	4-port RS-232/422/485 Universal PCI COMM Card w/EFT Surge Protection (30 cm DB37 to 4 DB9 cable included)
PCI-1612CU	4-port RS-232/422/485 Universal PCI COMM Card w/Isolation & EFT Surge Protection (30 cm DB37 to 4 DB25 cable included)
PCI-1612CU/9	4-port RS-232/422/485 Universal PCI COMM Card w/Isolation & EFT Surge Protection (30 cm DB37 to 4 DB9 cable included)