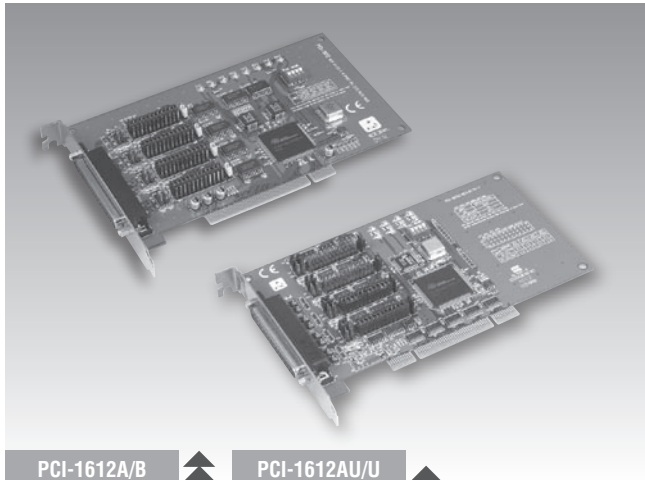


# PCI-1612 Series

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



PCI-1612A/B

PCI-1612AU/U



## 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<sub>DC</sub> EFT Surge Protection (PCI-1612B/1612BU/1612CU)
- 2,500 V<sub>DC</sub> 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<sub>DC</sub>. Meanwhile, PCI-1612CU provides 2,500 V<sub>DC</sub> 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	Max
+12 V:	60 mA	+12 V: 80 mA
+5 V:	270 mA	+5 V: 338 mA

### Communications

- **Communication Controller** 16PCI954
- **Data Bits** 5, 6, 7, 8
- **Data Signals** RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND  
RS-422: Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS-  
RS-485: Data+, Data-
- **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<sub>DC</sub> (PCI-1612B/1612BU/1612CU only)
- **ESD Protection** 16 kV
- **Isolation Protection** 2,500 V<sub>DC</sub> (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)