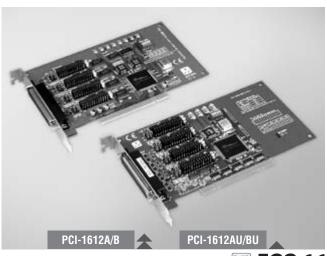
# PCI-1612 Series

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



## **Features**

- PCI bus 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 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux
- Interrupt status register for increased performance
- Space reserved for termination resistors
- Automatic RS-485 data flow control
- Supports any baud rate with high precision
- 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 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-1612BU and PCI-1612CU offers EFT 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-1612AU, PCI-1612BU,

1612CU)

Certifications
Ce, FCC class A
Connectors
1 x DB37-F

Dimensions
Power Consumption
185 x 100 mm (7.3" x 3.9")
Typical Max

+12 V: 60 mA +5 V: 270 mA +5 V: 338 mA

### **Communications**

Communication 16PCI954
Controller

**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, Odd, Even

Speed
50 bps ~ 921.6 kbps (Supports any baud rate)

■ **Stop Bits** 1, 1.5, 2

#### **Protection**

**ESD Protection** 8 kV

■ **EFT Protection** 2,500 V<sub>DC</sub> (PCI-1612B/1612BU/1612CU only)

■ Isolation Protection 2,500 V<sub>DC</sub> (PCI-1612CU only)

Software

Bundled Software ICOM Tools

• **OS Support** Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux

**Environment** 

• Operating Humidity  $5 \sim 95\%$  RH, non-condensing (refer to IEC 68-2-3) • Operating Temperature  $0 \sim 65^\circ$  C (refer to IEC 68-2-1, 2), (32  $\sim$  149 $^\circ$  F)

• Storage Temperature  $-25 \sim 85^{\circ} \text{ C } (-13 \sim 185^{\circ} \text{ F})$ 

## **Ordering Information**

 PCI-1612A 4-port RS-232/422/485 PCI Comm, 4 x DB25 PCI-1612A/9 4-port RS-232/422/485 PCI Comm. 4 x DB9 PCI-1612B 4-port RS-232/422/485 PCI Comm w/EFT, 4 x DB25 PCI-1612B/9 4-port RS-232/422/485 PCI Comm w/EFT, 4 x DB9 PCI-1612AU 4-port RS-232/422/485 Uni PCI Comm, 4 x DB25 PCI-1612AU/9 4-port RS-232/422/485 Uni PCI Comm, 4 x DB9 PCI-1612BU 4-port RS-232/422/485 Uni PCI Comm w/EFT, 4 x DB25 PCI-1612BU/9 4-port RS-232/422/485 Uni PCI Comm w/EFT, 4 x DB9 PCI-1612CU 4-port RS-232/422/485 Uni PCI, Iso/EFT, 4 x DB25 PCI-1612CU/9 4-port RS-232/422/485 Uni PCI, Iso/EFT, 4 x DB9

Note: 30 cm DB37 to 4 x DB25 or DB37 to 4 x DB9 cable included