

## Feafures

- 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
 5.0/6.0, 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 $_{\text {DC }}$ EFT Protection (PCI-1612B/1612BU/1612CU)
- $2,500 \mathrm{~V}_{\text {DC }}$ Isolation Protection (PCI-1612CU only)


## Introduction

$\mathrm{PCI}-1612$ is a 4-port RS-232/422/485 PCI communication card that is compatible with the $\mathrm{PCI} 2.1 / 2.2$ bus specification and offer transmission rates up to 921.6 kbps . $\mathrm{PCI}-1612$ 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. $\mathrm{PCI}-1612 \mathrm{AU}, \mathrm{PCI}-1612 \mathrm{BU}$ and $\mathrm{PCI}-1612 \mathrm{CU}$ 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, $\mathrm{PCI}-1612 \mathrm{~B}, \mathrm{PCI}-1612 \mathrm{BU}$ and $\mathrm{PCI}-1612 \mathrm{CU}$ offers EFT protection for high voltages up to $2,500 \mathrm{~V}_{D C}$. Meanwhile, $\mathrm{PCI}-1612 \mathrm{CU}$ provides $2,500 \mathrm{~V}_{\mathrm{DC}}$ 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
- Certifications
- Connectors
- Dimensions
- Power Consumption


## Communications

- Communication Controller
- Data Bits
- Data Signals
- FIFO
- Flow Control
- IRQ
- Parity
- Speed
- Stop Bits

PCI V 2.1 (PCl-1612A, PCI-1612B)
Universal PCI V2.2 (PCI-1612BU, PCI-1612AU, 1612CU)
CE, FCC class A
$1 \times$ DB37-F
$185 \times 100 \mathrm{~mm}$ ( $7.3^{\prime \prime} \times 3.9^{\prime \prime}$ )
Typical Max
$+12 \mathrm{~V}: 60 \mathrm{~mA} \quad+12 \mathrm{~V}: 80 \mathrm{~mA}$
$+5 \mathrm{~V}: 270 \mathrm{~mA} \quad+5 \mathrm{~V}: 338 \mathrm{~mA}$

16 PCI954
5, 6, 7, 8
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-
128 bytes
RTS/CTS, Xon/Xoff
Assigned by Plug \& Play
None, even, odd
50 bps $\sim 921.6$ kbps
1, 1.5, 2

## Protection

- ESD Protection 8 kV
- EFT Protection $\quad 2,500 \mathrm{~V}_{\text {DC }}$ (PCI-1612B/1612BU/1612CU only)
- Isolation Protection $2,500 \mathrm{~V}_{\text {DC }}$ (PCI-1612CU only)


## Software

- Bundled Software ICOM Tools
- OS Support Windows 98/ME/2000/XP/XP Embedded, Windows CE 5.0/6.0, Linux


## Environment

- Humidity (Operating) 5 ~ 95\% RH, non-condensing (refer to IEC 68-2-3)
- Operating Temperature $0 \sim 65^{\circ} \mathrm{C}$ (refer to IEC 68-2-1, 2), ( $32 \sim 149^{\circ} \mathrm{F}$ )
- Storage Temperature $-25 \sim 85^{\circ} \mathrm{C}\left(-13 \sim 185^{\circ} \mathrm{F}\right)$


## Ordering Information

- PCI-1612A
- PCI-1612A/9
- PCI-1612B
- PCI-1612B/9
- PCI-1612AU
- PCI-1612AU/9
- PCI-1612BU
- PCI-1612BU/9
- PCI-1612CU
- PCl-1612CU/9

Note: 30 cm DB37 to $4 \times$ DB25 or DB37 to $4 \times$ DB9 cable included

