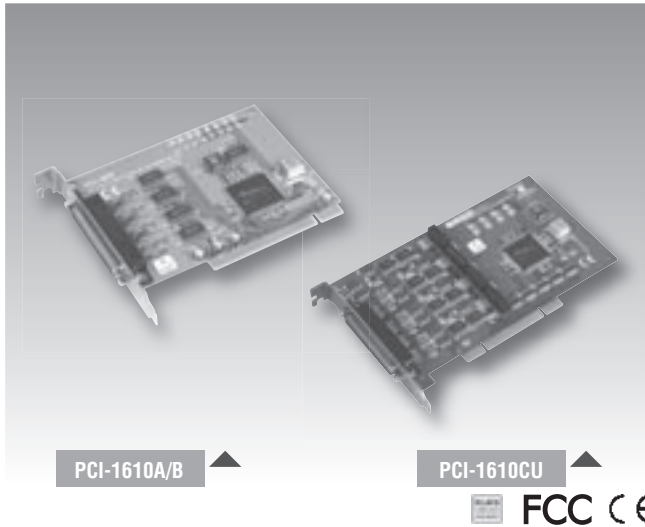


PCI-1610 Series

4-port RS-232 PCI
Communication Cards



Features

- PCI bus specification 2.1(PCI-1610A/1610B), 2.2 (PCI-1610CU) compliant
- Speeds up to 921.6 kbps
- 4-port RS-232
- 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
- Powerful and easy to use Utility (ICOM Tools)
- Universal PCI (Supports 3.3 V or 5 V PCI bus signal) (PCI-1610CU only)
- 2,500 V_{DC} EFT Surge Protection (PCI-1610B/1610CU)
- 2,500 V_{DC} Isolation Protection (PCI-1610CU only)

Introduction

PCI-1610 is a 4-port RS-232 PCI communication card that is compatible with the PCI 2.1 bus specification. (PCI-1610CU is also compliant with 2.2) and offer transmission speeds up to 921.6 kbps. PCI-1610 also comes with high-performance 16PCI954 UART with a 128-byte FIFO to reduce CPU load. These components make your system more stable and reliable. Thus, the PCI-1610 is especially suitable for multitasking environments.

PCI-1610CU has a 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-1610B and PCI-1610CU offers EFT surge protection technology, protecting your system from abrupt high voltages up to 2,500 V_{DC}. PCI-1610CU also 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, ICOM Tools, to help test the PCI card performance by analyzing the port status. With menu commands and toolbar buttons, 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

- **Bus Type** PCI V 2.1 (PCI-1610A/1610B)
Universal PCI V 2.2 (PCI-1610CU)
- **Certifications** CE, FCC class A
- **Connectors** 1 x DB37-F
- **Dimensions (L x W)** 123 x 92 mm (4.8" x 3.6") (for 1610A and PCI-1610B)
185 x 100 mm (7.3" x 3.9") (for PCI-1610CU)
- **Power Consumption**

Typical	Max
+12 V: 60 mA	+12 V: 80 mA
+5 V: 150 mA	+5 V: 180 mA

Communications

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

Protection

- **ESD Protection** 16 kV
- **Isolation Protection** 2,500 V_{DC} (PCI-1610CU only)
- **EFT Surge Protection** 2,500 V_{DC} (PCI-1610B/1610CU 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-1610A** 4-port RS-232 PCI COMM Card (30 cm DB37 to 4 DB25 cable included)
- **PCI-1610A/9** 4-port RS-232 PCI COMM Card (30 cm DB37 to 4 DB9 cable included)
- **PCI-1610B** 4-port RS-232 PCI COMM Card w/EFT Surge Protection (30 cm DB37 to 4 DB25 cable included)
- **PCI-1610B/9** 4-port RS-232 PCI COMM Card w/ EFT Surge Protection (30cm DB37 to 4 DB9 cable included)
- **PCI-1610CU** 4-port RS-232 Universal PCI COMM Card w/Isolation & EFT Surge Protection (30 cm DB37 to 4 DB25 cable included)
- **PCI-1610CU/9** 4-port RS-232 Universal PCI COMM Card w/Isolation & EFT Surge Protection (30 cm DB37 to 4 DB9 cable included)