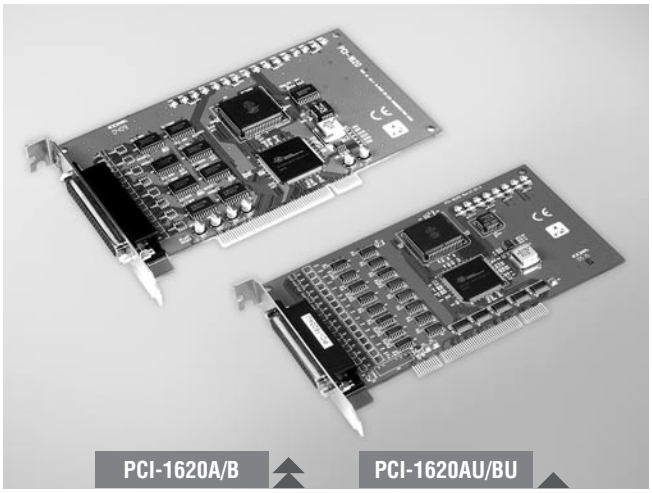
PCI-1620 Series

8-port RS-232 PCI Communication Cards



Features

- PCI bus 2.1, 2.2 (PCI-1620U, PCI-1620AU) compliant
- Speeds up to 921.6 kbps
- 8-port RS-232
- I/O address automatically assigned by PCI Plug & Play
- OS supported: Windows® 98/ME/2000/XP/XP Embedded/Vista, Windows CE 5.0/6.0, 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-1620AU, PCI-1620U)

Introduction

PCI-1620 is an 8-port RS-232 PCI communication card that is compatible with the PCI 2.1 bus specification. The card provides eight optional EFT protected RS-232 ports, and has many functions such as high transmission speed of 921.6 kbps, eight independent RS-232 ports and also comes with high-performance 16PCI954 UARTs with 128-byte FIFO and a 16C954 UART to reduce CPU load. Thus, the PCI-1620 is especially suitable for making your system reliable in multitasking environments. PCI-1620AU and PCI-1620BU have an universal PCI connector that is compatible with both 3.3 V signaling and 5 V signaling. This means that PCI-1610AU and PCI-1620BU can not only be used in traditional systems with 5 V signaling but also newer systems with 3.3 V signaling.

To further increase reliability, PCI-1620B and PCI-1620BU offer EFT protection technology, protecting your system from abrupt high voltages of up to 3,000 V_{DC}. Advantech also provides a convenient utility program called ICOM Tools, to help you test the PCI card's performance by analyzing the port status. ICOM Tools is easy to use with its menu commands and toolbar buttons, and 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-1620A, PCI-1620B: PCI V2.1
  PCI-1620AU, PCI-1620BU: Universal PCI V2.2
- **Certifications** CE, FCC class A
- **Connectors** 1 x DB62-F
- **Dimensions** 185 x 100 mm (7.3" x 3.9")
- **Power Consumption**

Typical	Max
+12 V: 120 mA	+5 V: 180 mA
+12 V: 150 mA	+5 V: 220 mA

- **Power Requirement** ±12 V

Communications

- **Communication Controller** 16PCI954+16C954
- **Data Bits** 5, 6, 7, 8
- **Data Signals** RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
- **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

- **ESD Protection** 16 kV
- **EFT Protection** 3,000 V_{DC} (PCI-1620B)
  2,500 V_{DC} (PCI-1620U)

Software

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

Environment

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

Ordering Information

- **PCI-1620A** 8-port RS-232 PCI Comm Card
- **PCI-1620B** 8-port RS-232 PCI Comm Card w/ EFT
- **PCI-1620AU** 8-port RS-232 Uni PCI Comm Card
- **PCI-1620BU** 8-port RS-232 Uni PCI Comm w/EFT
- **Opt8C** 8-port RS-232 cable w/ male DB62 to DB25
- **Opt8H** 8-port RS-232 cable w/ male DB62 to DB9
- **OPT8AP** 8-port RS-232 (DCE) connection box w/ female DB25
- **OPT8BP** 8-port RS-232 (DTE) connection box w/ male DB25

Note: Cable not included.
For most applications the PCI-1620 requires different cable.