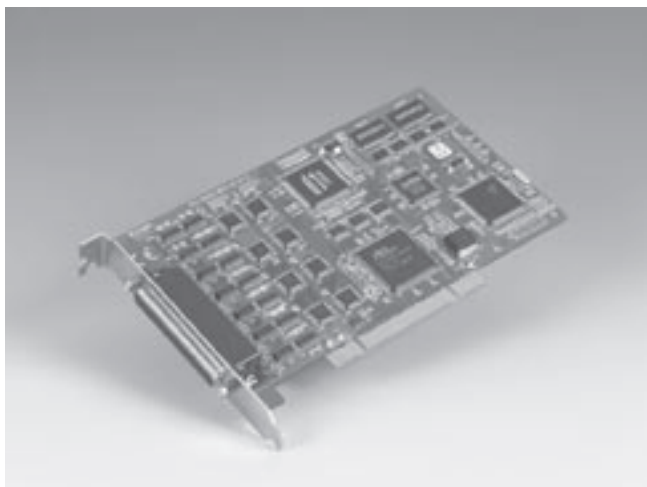# PCI-1625U

8-port Intelligent RS-232 Universal PCI Communication Card

Features

- RISC processor (TMS320)
- 1 MB SRAM
- PCI Specification 2.2 compliant
- Speed up to 921.6 kbps
- 8-port RS-232
- I/O address automatically assigned by PCI Plug &Play
- OS supported: Windows 2000/XP
- Powerful and easy to use utility (ICOM tools)
- Link with OPT8FP peripherals up to 1200m (4000ft) from controller (RS-422)
- Universal PCI (Supports 3.3 V or 5 V PCI bus signal)

FCC CE

Introduction

The intelligent PCI-1625U is virtually a self contained computer. The card has an onboard DSP processor that takes over the processing load from the host PC. When you are transferring large amounts of data from multiple ports, servicing the interrupts alone consumes a large percentage of the capacity of your computer's CPU. PCI-1625U serves as a high-speed dedicated interrupt processor. PCI-1625U also has 1 MB of SRAM which can store serial data and reduce host CPU loading effectively. When PCI-1625U initializes, it downloads the driver software (which functions like a PC's BIOS) into its onboard DSP. This improves performance and makes version upgrading easy so there is no hardware redundancy.

PCI-1625U has a universal PCI connector that is compatible with both newer 3.3 V PCI bus and the traditional 5 V PCI bus. It 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.

The intelligent PCI-1625U 8-port RS-232 or RS-422 interface card is designed for industrial applications where a PC needs to communicate with terminals, modems, or other instruments. RS-422 applications have to use the optional OPT8FP, 8-port RS-232 to RS-422 converter with 2,500 V$_{DC}$ isolation protection. You can install up to four PCI-1625U cards for total of 32 ports in any PCI bus-based PC.

Specifications

General

- **Card Interface**   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**   504 mA, max 558 mA @ 5 V

Communications

- **Controller**   8 x 16c550
- **Processor**   TMS320c5402
- **Memory**   1 MB
- **Data Bits**   5, 6, 7, 8
- **Stop Bits**   1, 1.5, 2
- **Data Signals**   TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND(RS-232)
- **Flow Control**   RTS/CTS, Xon/Xoff
- **IRQ**   Assigned by Plug & Play
- **Parity**   None, even, odd
- **Speed**   50 bps ~ 921.6 kbps

Protection

- **ESD Protection**   16 kV

Software

- **Bundled Software**   ICOM Tools
- **Driver Support**   Windows 2000/XP

Environment

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

Ordering Information

- **PCI-1625U**   8-port Intelligent RS-232 Universal PCI Communication Card (cables not included)
- **OPT8AP**   8-port RS-232 (DCE) connection box with female DB25 connectors
- **OPT8BP**   8-port RS-232 (DTE) connection box with male DB25 connectors
- **OPT8C**   8-port RS-232 cable with male DB25 connector (1 m)
- **OPT8H**   8-port RS-232 cable with male DB9 connector (1 m)
- **OPT8FP**   8-port RS-422 to RS-232 converter connection box w/ Isolation Protection