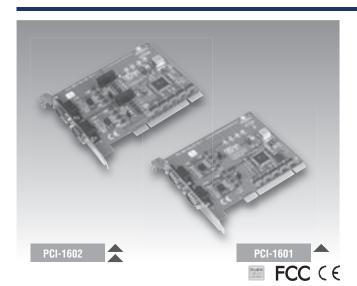
PCI-1601 PCI-1602

2-port RS-422/485 PCI Communication Card

2-port RS-422/485 PCI Communication Card, w/Isolation Protection



Features

- PCI bus specification 2.2 compliant
- Speeds up to 921.6 kbps
- 2-port RS-422/485 interface
- I/O address automatically assigned by PCI Plug & Play
- OS support: Windows® 98/ME/2000/XP/XP Embedded, Linux
- Optional EFT Surge protection
- Optional isolation protection for RS-422/485
- 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)

Introduction

PCI-1601 and PCI-1602 are 2 port RS-422/485 PCI communication cards that are compatible with the PCI 2.1 bus specification. Both cards provide two optional isolated and EFT surge protected RS-422/485 ports, and comes with features such as: high transmission speed of 921.6 kbps, optional EFT Surge & isolation protection, windows utility software and more. The cards also come with high-performance 16PCI952 UART with a 128-byte FIFO to reduce CPU load. This makes the PCI-1601 and PCI-1602 especially suitable for multitasking environments.

PCI-1602 is available with 3,000 V_{DC} optical isolation to protect your PC and equipment against damages from ground loops in harsh environments. To further increase reliability, both boards has EFT surge protection technology, protecting your system from abrupt high voltages up to 2,500 V_{DC} (PCI-1601B and PCI-1602B). Besides, Advantech also provides a convenient utility program called ICOM Tools, to help test the PCI card performance by analyzing the port status. Controlled by easy-to-use 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 monitors the signal status. In addition, ICOM Tools is applicable to all series of Advantech ICOM cards.

Specifications

General

Bus Type PCI V 2.2
 Certifications CE, FCC class A
 Connectors 2 x DB9-M

Dimensions
 Power Consumption
 123 x 92 mm (4.8" x 3.6")
 Typical

 PCI-1601
 220 mA (+5 V)
 270 mA (+5 V)

 PCI-1602
 250 mA (+5 V)
 300 mA (+5 V)

Communications

Communications 16PCI952
 Controller

Data Bits 5, 6, 7, 8

Data Signals
 Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS-, GND

(RS-422) Data+, Data-, GND (RS-485)

• **FIFO** 128 bytes

Flow Control
 IRQ
 Parity
 Speed
 Flow Control
 Assigned by Plug & Play
 None, even, odd
 50 bps ~ 921.6 kbps

Stop Bits 1, 1.5, 2

Protection

ESD Protection 16 kV

Isolation Protection 3,000 V_{DC} (PCI-1602A/B only)
 EFT Surge Protection 2,500 V_{DC} (PCI-1601B/PCI-1602B 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 $-25 \sim 85^{\circ} \text{ C } (-13 \sim 185^{\circ} \text{ F})$

Ordering Information

PCI-1601A
 2-port RS-422/485 PCI COMM Card

PCI-1601B
 2-port RS-422/485 PCI COMM Card, w/EFT Surge

Protection

• PCI-1602A 2-port RS-422/485 PCI COMM Card, w/Isolation

Protection

• PCI-1602B 2-port RS-422/485 PCI COMM Card, w/Isolation and

EFT Surge Protection