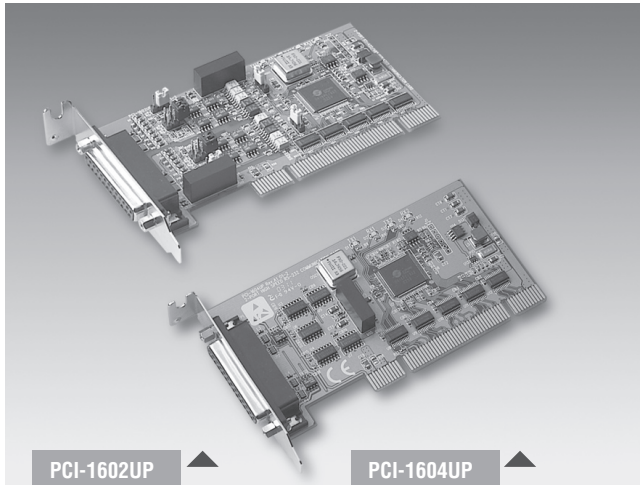# PCI-1602UP

2-port RS-422/485 Low-Profile PCI Communication Card, w/Isolation and Surge Protection

PCI-1604UP

2-port RS-232 Low-Profile PCI Communication Card, w/Surge Protection

Features

- PCI bus specification 2.2 compliant
- Speeds up to 921.6 kbps
- 2-port RS-232(PCI-1604UP); 2-port RS-422/485 (PCI-1602UP)
- I/O address automatically assigned by PCI Plug & Play
- OS support: Windows® 98/ME/2000/XP, Linux® (1602UP only)
- 2,500V_{DC} Surge protection
- 2,500V_{DC} Isolation protection for RS-422/485 (PCI1602UP)
- 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
- Low-profile PCI

PCI-1602UP

PCI-1604UP

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Introduction

PCI-1602UP and PCI-1604UP are 2 port RS-232/422/485 PCI communication cards that are compatible with the PCI 2.2 bus specification for universal connectivity and low profile PCI cards. PCI-1604UP provides two independent RS-232 ports, while PCI-1602UP has two RS-422/485 ports. To improve system performance, both cards allow transmission rates up to 921.6 kbps. To increase reliability, the cards offer surge protection, protecting your system from abrupt high voltages up to 2,500 V_{DC}. High-performance 16PCI952 UARTs with 128-byte FIFO, reduces the CPU load, making the cards especially suitable for multitasking environments.

PCI-1602UP and PCI-1604UP follows the Low Profile PCI MD1 standard. This standard has the same protocol and electronic definition as standard PCI, but the Low Profile PCI standard is smaller. Thus, PCI-1602UP and PCI-1604UP are suitable for embedded systems, and size-constrained environments. Moreover, both cards are equipped with an universal PCI connector, which allows support for traditional systems with 5 V signaling or newer systems with 3.3 V signaling.

Advantech also provides a convenient utility called ICOM Tools, to help test the PCI card's 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 communication data and monitor the signal status. ICOM Tools can be used with all series of Advantech ICOM cards.

Specifications

- **Bus Interface**   PCI bus spec. 2.2 compliant
- **All ports use the same IRQ assigned by PCI Plug & Play**
- **Data Bits**   5, 6, 7, 8
- **Stop Bits**   1, 1.5, 2
- **Parity**   None, even, odd
- **Communication**   16PCI952 (PCI-1602UP)
- **Controller**   16PCI952 (PCI-1604UP)
- **Speed**   50 bps ~ 921.6 kbps
- **Data Signals**   TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND, RI (for RS-232)

  Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS-, GND (for RS-422)

  Data+, Data-, GND (for RS-485)
- **Surge Protection**   2,500 V_{DC}
- **ESD Protection**   16 kV
- **Isolation Protection**   2,500 V_{DC} (PCI-1602UP)
- **Power Consumption**   5 V @ 300 mA (MAX)
- **Power Requirement**   5 V
- **Dimensions**   Low profile PCI MD11 (119.91 x 64.41 mm (4.7" x 2.5"))
- **Operating Temperature**   0 ~ 65° C (refer to IEC 68-2-1, 2) (32 ~ 149° F)
- **Operating Humidity**   5 ~ 95 % Relative Humidity, non-condensing (refer to IEC 68-2-3)
- **Storage Temperature**   -25 ~ 85° C (-13 ~ 185° F)

Ordering Information

- **PCI-1602UP**   2-port RS-422/485 Low-Profile Universal PCI COMM Card, w/Isolation and Surge Protection
- **PCI-1604UP**   2-port RS-232 Low-Profile Universal PCI COMM Card, w/Surge Protection

All product specifications are subject to change without notice

Last updated : 9-Mar-2005