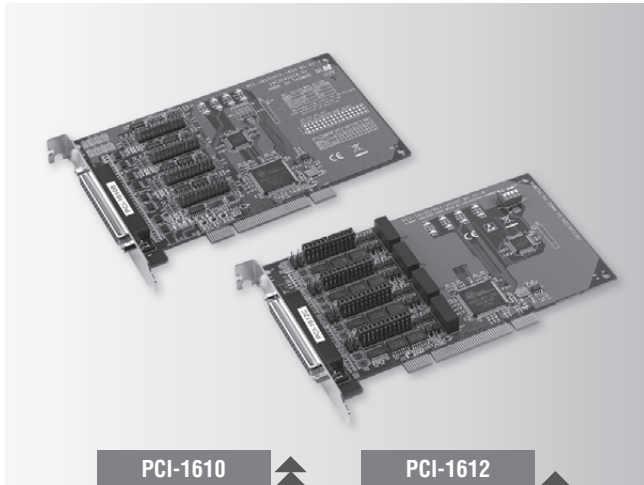# PCI-1610
PCI-1612

4-port RS-232 Universal PCI Communication Card

4-port RS-232/422/485 Universal PCI Communication Card

PCI-1610 ▲   PCI-1612 ▲

Features

- PCI bus 2.2 compliant
- Supports serial speed up to 921.6 kbps, and any baud rate setting
- 4-port RS-232 (PCI-1610), 4-port RS-232/422/485 (PCI-1612)
- OXuPCI954 UART with 128-byte FIFO standard
- I/O address automatically assigned by PCI Plug & Play
- OS supported: Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux, and QNX
- 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
- 1,000 V_{DC} surge protection
- 2,500 V_{DC} isolation protection (PCI-1610C and PCI-1612C only)

Introduction

The PCI-1610 is a four port RS-232, and PCI-1612 is a four port RS-232/422/485 PCI communication card that are compatible with the PCI 2.2 bus specification, and offer transmission speeds up to 921.6 kbps. They also support any baud rate setting, for example 500 kbps is acceptable. The PCI-1610 and PCI-1612 also come with high-performance OXuPCI954 UART with 128-byte FIFO to reduce CPU load. These components make your system more stable and reliable. Thus, the PCI-1610 and PCI-1612 are especially suitable for multitasking environments.

Both the PCI-1610 and PCI-1612 have an 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 cards can protect your system from abrupt high voltages up to 2,000 voltage thanks to EFT protection technology. PCI-1610C and PCI-1612C also provide 2,500 voltage optical isolation to protect your PC and equipment against damages from ground loops in harsh environments.

Specifications

General

- **Bus Type**   Universal PCI v2.2
- **Certification**   CE, FCC class A
- **Connectors**   1 x Female DB37
- **Dimensions (L x W)**   185 x 100 mm (7.3" x 3.9")
- **Power Consumption**   180 mA @ +5 V

Communications

- **Communication Controller**   OXuPCI954
- **Data Bits**   5, 6, 7, 8
- **Data Signals**   RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND (PCI-1610, PCI-1612)
  RS-422: Tx+, Tx-, Rx+, Rx-, RTS+, RTS-, CTS+, CTS- (PCI-1612)
  RS-485: Data+, Data- (PCI-1612)
- **FIFO**   128 bytes
- **Flow Control**   RTS/CTS, Xon/Xoff
- **IRQ**   Assigned by Plug & Play
- **Parity**   None, Even, Odd, Mark and Space
- **Stop Bits**   1, 1.5, 2
- **Speed**   50 bps ~ 921.6 kbps, any baud rate setting
  230.4 kbps (PCI-1610B/C and PCI-1612B/C only)

Protection

- **ESD Protection**   15KV
- **EFT Protection**   2,000 V

Model Name	Surge Protection	Isolation Protection
PCI-1610A	-	-
PCI-1610B	1000 V_{DC}	-
PCI-1610C	1000 V_{DC}	2500 V_{DC}
PCI-1612A	-	-
PCI-1612B	1000 V_{DC}	-
PCI-1612C	1000 V_{DC}	2500 V_{DC}

Software

- **Bundled Software**   ICOM Tools
- **OS Support**   32-bit/64-bit Windows 2000/XP/Vista/7, Windows CE 5.0/6.0, Linux, and QNX

Environment

- **Operating Humidity**   5 ~ 95% RH, non-condensing
- **Operating Temperature**   -10 ~ 60°C (14 ~ 144°F)
- **Storage Temperature**   -25 ~ 85°C (-13 ~ 185°F)

Regulatory Approvals

- **EMC**   EN 55011: 2009 + A1:2010, Group 1, Class A
  EN 55022: 2010, Class A
  EN 61000-6-4: 2007
  EN 55024: 2010
  EN 61000-6-2: 2005
  IEC 61000-4-2: 2008
  IEC 61000-4-3: 2006 +A1: 2007 +A2: 2010
  IEC 61000-4-4: 2010
  IEC 61000-4-6: 2008
  IEC 61000-4-8: 2009
  FCC 47 CFR Part 15 Subpart B (Class B), IC ICES-003

Ordering Information

- **PCI-1610A**   4-port RS-232 PCI Comm. Card
- **PCI-1610B**   4-port RS-232 PCI Comm. Card w/Surge
- **PCI-1610C**   4-port RS-232 PCI Comm. Card w/Surge+Iso
- **PCI-1612A**   4-port RS-232/422/485 PCI Comm. Card
- **PCI-1612B**   4-port RS-232/422/485 PCI Comm. Card w/Surge
- **PCI-1612C**   4-port RS-232/422/485 PCI Comm. Card w/Surge+Iso

Note: this series includes cable OPT4A.

Accessories

- **OPT4A**   DB37 x1 to DB9 x4 Cable, 30cm
- **1700018791**   DB37 x1 to DB25 x4 Cable, 30cm

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