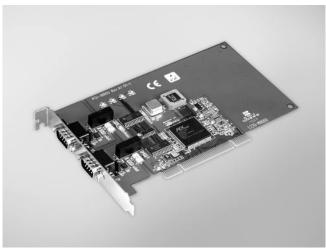
PCI-1680U

2-port CAN-bus Universal PCI Communication **Card with Isolation Protection**



Features

- PCI bus 2.2 compliant
- Operates two separate CAN networks at the same time
- High speed transmission up to 1 Mbps
- 16 MHz CAN controller frequency
- Optical isolation protection of 1000 V_{DC} ensures system reliability
- I/O address automatically assigned by PCI PnP
- LED indicated transmit/receive status on each port
- Windows® DLL library and examples included
- Universal PCI Universal PCI (Supports 3.3 V or 5 V PCI bus signal)
- Supports Windows® 2000/XP/Vista and Linux



Introduction

PCI-1680U is a special purpose communication card that offers the connectivity of the Controller Area Network (CAN) to your PC. With its built-in CAN controllers, the PCI-1680U provides bus arbitration and error detection with an automatic transmission repeat function. This drastically reduces the chance of data loss and ensures system reliability. The onboard CAN controllers are located at different positions in the memory, and you can run both CAN controllers independently at the same time. Besides, PCI-1680U has a universal PCI connector, which is compatible with both new 3.3 V signaling systems and traditional 5 V signaling systems. With high-compatibility, the PCI-1680U can be used in diverse systems.

Controller Area Network (CAN)

The CAN is a serial bus system especially suitable for networking "intelligent" I/O devices as well as sensors and actuators within a machine or plant. Characterized by its multi-master protocol, real-time capability, error correction, high noise immunity, and the existence of many different silicon components, the CAN serial bus system, originally developed by Bosch™ for use in automobiles, is increasingly being used in industrial automation.

Direct Memory Mapping Enables Direct Access to the CAN Controller

The PCI-1680U is assigned a memory address. This is the simplest method of integrating a board in a PC and provides the quickest access since the board is treated by the PC as being standard RAM.

Optical Isolation Protection

Onboard optical isolators protect your PC and equipment against damage from ground loops, which increases system reliability in harsh environments.

Specifications

General

 Card Interface Universal PCI V 2.2 CE. FCC class A Certifications 2 x DB9-M Connectors

185 x 100 mm (7.3" x 3.9") Dimensions

Ports

 Power Consumption 5 V @ 400 mA (Typical)

Communication

 CAN Controller SJA-1000 CAN Transceiver 82C250 Protocol CAN 2.0 A/B Signal Support CAN H, CAN L Speed 1 Mbps

Protection

 Isolation Protection $1,000 V_{DC}$

Environment

■ **Humidity (Operating)** 5 ~ 95% RH, non-condensing (refer to IEC 68-2-3) • Operating Temperature $0 \sim 65^{\circ}$ C (refer to IEC 68-2-1, 2) (32 \sim 149° F) ■ **Storage Temperature** -25 ~ 85° C (-13 ~ 185° F)

Ordering Information

 PCI-1680U 2-port CAN-bus Uni PCI COMM Card w/Iso