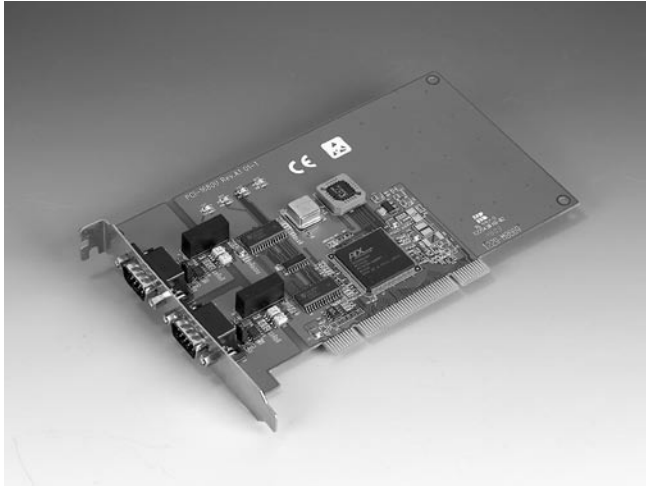


# PCI-1680U

## 2-Port CAN Interface Universal PCI Communication Card w/ Isolation



FCC CE

### Features

- PCI bus specification 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<sub>DC</sub> 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
- Supports Windows® 95/98/2000/XP driver and utility

### 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 on-board 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

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

### Specifications

- **Bus Interface** PCI bus spec. 2.2 compliant
- **Port** 2
- **Protocol** CAN 2.0 A/B
- **CAN Controller** SJA-1000
- **CAN Transceiver** 82C250
- **Signal Support** CAN\_H, CAN\_L
- **Speed** 1 Mbps
- **Isolation** 1000 V<sub>DC</sub>
- **Power Consumption** 5 V @ 400 mA (Typical)
- **Connectors** Two standard DB9(M) connectors
- **Board Dimension** 185 x 100 mm (7.3" x 3.9")
- **Operating Temperature** 0 ~ 65° C (refer to IEC 68-2-1, 2) (32 ~ 149° F)
- **Storage Temperature** -25 ~ 85° C (-13 ~ 185° F)
- **Operating Humidity** 5 ~ 95% Relative humidity, non-condensing (refer to IEC 68-2-3)

### Ordering Information

- **PCI-1680U-A** 2-Port CAN Interface Universal PCI Communication Card w/ Isolation