



CAN Plug-In Board CPC-PCI/CC770

Special Features

- Passive CAN Interface for PCI slots
- One, two or four CAN channels with Controller Bosch CC770
- Optional galvanic separation of CAN controller to PC
- Optional galvanic separation between CAN channels
- Supports 11 bit frames and 29 bit frames

Description

CPC-PCI/CC770 is a passive CAN plug-in board for PCI slots. CPC-PCI/CC770 was designed for industrial series application and has a robust and cost efficient construction. CPC-PCI/CC770 supports either one, two or four CAN channels that can be operated independently with different data rates. The interface comes with the Bosch CAN controller CC770, which is compatible to the well known Intel AN82527.

CPC-PCI maps the CAN controller(s) directly in the address space of the PC and allows access of the CAN messages with low latencies. Existing software for the supported CAN controller can easily be adapted. The CAN communication with CPC-PCI may be handled either in interrupt controlled mode or in polled mode, interrupt channels are assigned automatically (Plug & Play).

Optionally, CPC-PCI is available with galvanic separation between PC and CAN bus. A galvanic separation between the CAN channels is also possible by separate DC/DC converters.

Technical Data

Bus Interface

Pin assignment	Connector D-Sub 9, complying CiA DS-102
Type of physical connection	ISO 11898 / Transceiver PCA82C251
Maximum voltage on bus pins	±30V referring to bus ground
Isolation voltage with galvanic separation	±1000V DC

Configuration

Ressource	Parameter
PC address space	Automatic assignment (Plug & Play)
Interrupt	Automatic assignment (Plug & Play)

Programming Interface

Configuration and CAN communication with CPC-PCI/CC770 are done by accesses to the memory address area of the PC. The appropriate data areas are mapped by CPC-PCI/CC770 and "plug & play" software into the memory address space. Due to the memory mapping of the CAN controllers the CAN communication takes place with low latency time.

The access to the CAN controllers occurs via a separate memory space for each interface. In these memory spaces, the sending and receiving buffers as well as the control registers of the CAN controllers are accessible.

A specification describing the access to the CAN controllers can be obtained.

Scope of Delivery

- Plug-In board CPC-PCI/CC770
- User Manual