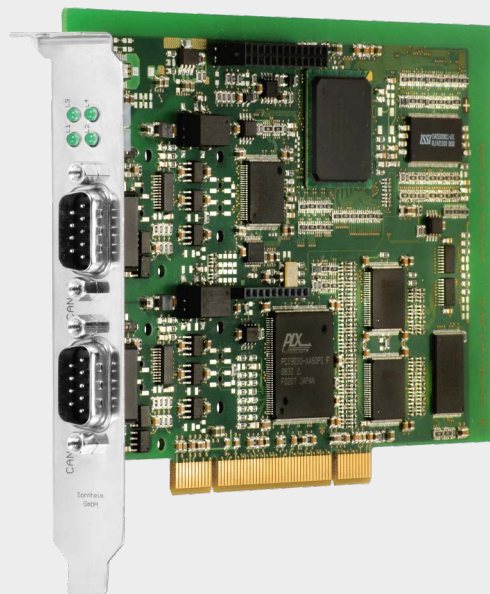
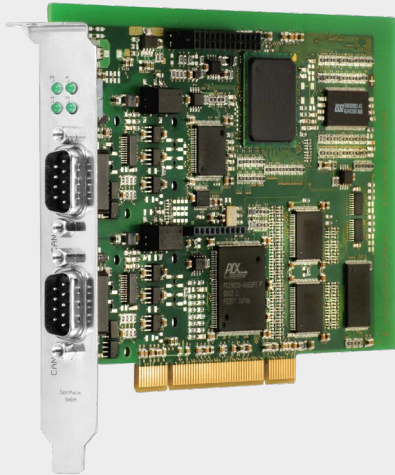


# PowerCAN-PCI

Ultra-fast CAN controller card





# PowerCAN-PCI

**PowerCAN-PCI V2 is a highly advanced und ultra-fast CAN controller card for the connection of PCs with PCI-slot to the CAN bus. It is able to handle the full control, regulation and parametrisation of small to complex CAN networks.**

## Key Features



**PC assumes the function of a CANopen manager**



**Control of other CANopen devices, e.g. motor controls**



**Transmission performance of 1 Mbit/s at 90% bus load**



**Freescale Coldfire with 32 MHz clock frequency**



**2× galvanically isolated CAN channels**



**Equipment with high or low speed interface**



**LEDs for bus status display on the front bracket**

## Compatibility

The device is a PCI-card with two galvanically isolated CAN interfaces according to ISO 11898. Being fully compatible to PCI-specification 2.2, it can be used with any PC-system that has an unoccupied PCI-slot. Both active CAN controllers offer 15 message objects each and comply with FullCAN.

## CPU

The Coldfire from Freescale is used as a powerful micro-controller. The controller is operated in 16-bit demultiplexed mode, which guarantees an optimal connection to the PCI controller. The implemented bootstrap loader makes it easy to load the firmware. Two “on-chip” CAN controllers realize the CAN connection in 2.0 B active mode.

## Memory

Even complex fieldbus-controlling tasks can easily be handled with 8 MB RAM and 2 MB flash memory. There is no need for an external programming power supply, the flash memory is supplied with 5 V for writing and deleting. The flash also contains the firmware which can be updated via bootstrap-loader.

## Technical Data

CPU	Freescale Coldfire
RAM	8 MB
Memory	2 MB
CAN	2× CAN interface acc. to ISO 11898, galv. isolated
CAN controller	2× FullCAN according to CiA (DIN41652)
CAN transceiver	Philips 82C251
CAN protocol	2.0 A and 2.0 B
CAN connectors	2× D-Sub9
Bus system	PCI
PCI controller	acc. to PCI 2.2 specification 16k Dual-Port-RAM
LED	4× LED (green)
Dimensions (l×w×h)	164 mm × 102 mm × 13 mm
Operating temperature	0°C up to +60°C
Storage temperature	-20°C up to +75°C
Rel. Humidity	20 % – 90 % non-condensing
Power supply	5 V
Power consumption	500 mA
CANopen driver	for Windows NT
Layer 2 driver	for Windows 98, ME, NT, 2000, XP, Vista, 7; 32- and 64-bit

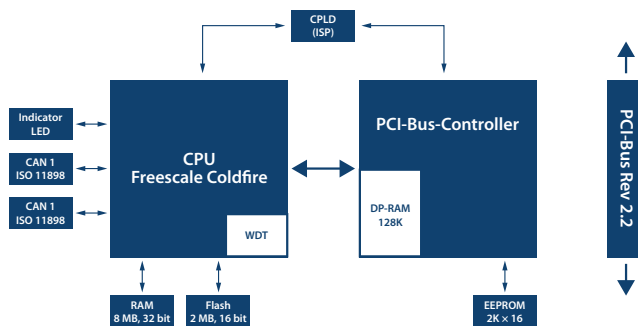
## CAN interface

Two galvanically isolated CAN channels with a transfer rate of up to 1 Mbit/s provide the necessary controlling power. In addition to that there are two active 2.0 B CAN controller implemented that allow a mixed mode with 11-Bit and 29-Bit identifiers. The CAN interface complies with ISO 11898 standard as well as DS 301 and 401.

## Error frame detection

This feature allows surveillance and monitoring of a CAN network. The PowerCAN card possesses an own logic for detecting error frames and counting them up in a specific internal memory area. That is used for finding intermittent errors like falsified messages of a CAN participant.

## Blockschaltbild



## Pin assignment



### CAN

2	CAN low
3	CAN Ground
7	CAN high

## Order information

V930154000	PowerCAN-PC
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**Mobile Automation**



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**We are looking forward to your enquiry!**

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