

CAN-PRO2-PCIE

CAN Bus PCIe Interface for Vehicle Electronics

CAN communication interfaces are an inexpensive alternative to diagnostic interfaces. CAN-PRO2-PCIE and Softing's standard CAN-API form a powerful hardware interface for communication tasks. Alternatively, the VCI can be operated with the D-PDU API.



AREAS OF APPLICATION

- ECU engineering
- Simulation
- Test/validation

ADVANTAGES

- Active card with its own microcontroller
- Local data buffering and preprocessing
- 2 independent CAN bus channels
- Additional CAN transceivers via piggybacks
- Galvanic isolation

CAN APIs

The CAN-API, which is standard for all CAN interfaces from Softing, provides powerful communication mechanisms for CAN applications. Local buffering and preprocessing on the VCI result in high performance and a reduction of time-critical tasks for the PC. Special automation APIs, such as CANopen and DeviceNET-API, are also available.

D-PDU API

The standardized programming interface provides applications with powerful multi-channel communication mechanisms with vehicle protocols, such as Diagnostics on CAN (ISO 15765) and UDS (ISO 14229). It also allows integration into diagnostic systems in accordance with ISO 22900 (MVIC). D-PDU API is also available as an option.

Scalability

The CAN-PRO2-PCIE interface supports two independent CAN bus channels. By combining several CAN-PRO2-PCIE boards (or even other CAN/EDIC® interfaces), the number of communication channels available on the PC system can quickly be adapted to the relevant application.

Environment

The galvanic isolation of PC and vehicle interfaces enables trouble-free operation even in harsh manufacturing environments.

Technical Data

Format	Short PCIeexpress card
Power supply	Via PCIe interface
Current consumption	Typ. 500 mA (3,3V) and typ. 90 mA (12V)
Microcontroller	16-bit microcontroller Infineon C161
PC interface	PCI Express card (PCIe specifications r1.0a and CEM 1.1)
Vehicle interfaces	2 x D-Sub 9-pin, CAN bus signals galvanically isolated from the PC interface
CAN	2 CAN channels in acc. with ISO 11898-2 and CAN 2.0B with 11-/29-bit identifier Slot per channel for optional piggyback with additional CAN bus transceiver (switchable via software)
Temperature range	Operation: 0 ... +55 °C, storage: -20 ... +70 °C
EMC conformity	Noise emission: EN 55022 Class B Interference immunity: EN 61000-6-2 (industrial environment) FCC part 15 subpart B Class B (industrial environment)
Software interface	CAN L2 API from Softing
Delivery scope	CAN-PRO2-PCIE CD with CAN-API software, manual as PDF file
System requirements	4 kB free addressable storage in the upper memory area and one free interrupt Operating system: Windows 7, Vista, XP

Order Numbers

CAN-PRO2-PCIE	PCIexpress bus interface card for 2 x CAN high-speed
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Supplementary Products and Services

CAN-AC2-PCI-LS	Piggyback for CAN low-speed with transceiver TJA1053 (or compatible); one piggyback is required per CAN channel
PDUAPI-EC	Upgrade D-PDU API software for EDIC and CAN hardware from Softing on data carrier