CAN-AC2-PCI

CAN Bus PCI Interface for Vehicle Electronics

CAN communication interfaces are an inexpensive alternative to diagnostic interfaces. CAN-AC2-PCI 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 (MVCI). D-PDU API is also available as an option.

Scalability

The CAN-AC2-PCI interface supports two independent CAN bus channels. By combining several CAN-AC2-PCI 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.

Technial Data

Format	Short PCI card, 100x160mm
Power supply	5V (via PC)
Current consumption	Typ. 410 mA
Microcontroller	16-bit microcontroller Infineon C165
PC interface	PCI V2.1, 4kB DPRAM (16-bit)
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-AC2-PCI
	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-AC2-PCI N	PCI bus interface card for 2 x CAN high-speed

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