

CANcard2-CAR

CAN Bus PC Card Interface for Vehicle Electronics

CAN communication interfaces are an inexpensive alternative to diagnostic interfaces. CANcard2-CAR 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
- Various bus adapter cables available with different CAN transceivers

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 CANcard2-CAR supports two independent CAN bus channels. By combining several CANcard2-CAR interfaces (or even other CAN/EDIC® interfaces), the number of communication channels available on the PC can quickly be adapted to the relevant application.

Flexibility

Combining CANcard-CAR with appropriate API software enables compact solutions for all kinds of communication applications. The standardized Softing CAN-L2-API thus supports reliable CAN communication on Layer2 in a simple way. The optional D-PDU API software makes communication channels with higher diagnostic protocols available to applications via the standardized API and thus relieves the application of standard tasks.

Technical Data

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| Format | PC Card Type II (PCMCIA) |
| Power supply | 5V (via PC) |
| Current consumption | Typ. 300 mA |
| Microcontroller | 16-bit microcontroller Infineon C165 |
| PC interface | PCMCIA V2.1, 4kB DPRAM (16-bit) |
| Vehicle interfaces | 2 x CAN (transceiver package depending on the bus adapter cables) |
| CAN controller | SJA1000 |
| Temperature range | Operation: 0 ... +55 °C, storage: -20 ... +70 °C |
| EMC conformity | Noise emission: EN 55022, EN 55011 Class A and EN 61000-6-4 (industrial environment) Interference immunity: EN 61000-6-2 (industrial environment) FCC part 15 subpart B limit A (industrial environment) |
| Software interface | CAN L2 API from Softing |
| Delivery scope | CANcard2-CAR Bus adapter cable depending on the order 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

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|---------------|--|
| CANcard2-CAR | PC card interface card for 2 x CAN 2.0B |
| CANcard2/DHSC | Bus adapter cable (double high-speed cable) 2 CAN channels: CAN high-speed in acc. with ISO 11898-2 2 D-SUB 9 connectors in acc. with CiA standard, without galvanic isolation |
| CANcard2/HLSC | Bus adapter cable (high-speed/low-speed cable) 1 CAN channel: CAN high-speed in acc. with ISO 11898-2 1 CAN channel: CAN low-speed (transceiver TJA1053 or compatible) 2 D-SUB 9 connectors in acc. with CiA standard, without galvanic isolation |
| CANcard2/DLSC | Bus adapter cable (double low-speed cable) 2 CAN channels: CAN low-speed (transceiver TJA1053 or compatible) 2 D-SUB 9 connectors in acc. with CiA standard, without galvanic isolation |

Supplementary Products and Services

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| PCcard2-PFX | Assembly kit and strain relief for the PC card interface connector, increases mechanical stability |
| PDUAPI-EC | Upgrade D-PDU API software for EDIC and CAN hardware from Softing on data carrier |