EDICcard2

Multibus PC Card Interface for Vehicle Electronics

Diagnostic interfaces from Softing are based on the tried and tested EDIC® hardware and software platform. EDICcard2 is a tried and tested, powerful interface that is particularly noted for its compact design making it perfect for use with all kinds of vehicle adapter.

AREAS OF APPLICATION

- Engineering
- Test and validation
- Manufacturing
- Service
- Fast and reliable flash programming

ADVANTAGES

- Reliable time response due to protocol handling in the interface
- Flexibility due to lots of available vehicle protocols
- 2 independent channels: 1 x CAN and 1 x ISO 9141 or 2 x CAN (depending on the vehicle interface or bus adapter cable)
- Intelligent data buffering for parallel communication channels

Protocol Handling in the Interface

The vehicle protocols are handled directly in the interface. This ensures fast response times and reliable real-time behavior regardless of the PC operating system. Extensive buffer mechanisms make parallel operation of several communication channels possible.

Software Interfaces

The communication protocols UDS (ISO 14229) and KWP 2000 (ISO 14230, ISO 15765) as well as many OEM-specific protocols are supported via the standardized D-PDU API (ISO 22900-2). With a software layer based on the D-PDU API, the VCI can also be used as a PassThru device in accordance with SAE J2534. Together with the Diagnostic Tool Set DTS from Softing, a total solution in accordance with the MCD-3D standard ISO 22900-3 and ODX technology can be realized.

Scalability

By combining several EDICcard2 interfaces (or even other EDIC® interfaces), the number of communication channels available on the PC system can quickly be adapted to the relevant application.

Flexibility

Software upgrades are also available for EDICcard2 ensuring it is always perfectly equipped for future applications. This is also the way to realize customer-specific software solutions. The CAN bus physics can be varied by using different vehicle adapters.

Technical Data

Format	PC Card Type II (PCMCIA)
Power supply	5 V (via PC)
Current consumption	Typ. 600 mA (with vehicle interface)
Microcontroller	16-bit microcontroller Infineon C165
PC interface	PCMCIA V2.1, 4kB DPRAM (16-bit)
Vehicle interfaces	1 x CAN and 1 x K-line ISO 9141-2 or 2 x CAN (depending on the vehicle interface or bus adapter cable)
Temperature range	Operation: 0 ... +50 °C, storage: -25 ... +65 °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	D-PDU API from Softing
System requirements	4 kB free addressable storage in the upper memory area and one free interrupt Operating system depends on the operating software used

Order Numbers

EDICcard2	EDIC PC Card interface card for ISO 9141-2 and CAN 2.0B including D-PDU API software on data carrier Combi vehicle interface EDIC-FZIF-C2/HW: - Vehicle voltage 8 ... 32V - K/L-line in acc. with ISO9141-2 - 1 CAN channel: CAN high-speed (acc. to ISO11898) / CAN low-speed (TJA1053 or compatible), switchable - With galvanic isolation between PC and vehicle interface KAB01-ED15-J1962: connecting cable to CARB connector (SAE J1962 / ISO 15031-3), cable length ca. 3 m
EDICcard2-PTD	EDIC PC Card interface card for ISO 9141-2 and CAN 2.0B including PassThru software interface on data carrier Combi vehicle interface EDIC-FZIF-C2/HW: - Vehicle voltage 8 ... 32V - K/L-line in acc. with ISO9141-2 - 1 CAN channel: CAN high-speed (acc. to ISO11898) / CAN low-speed (TJA1053 or compatible), switchable - With galvanic isolation between PC and vehicle interface KAB01-ED15-J1962: connecting cable to CARB connector (SAE J1962 / ISO 15031-3), cable length ca. 3 m

Supplementary Products and Services

CANcard2/DHSC	Bus adapter cable (double high-speed cable) - 2 CAN channels: CAN high-speed in acc. with ISO11898 - 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 (acc. to ISO11898); 1 CAN channel: CAN low-speed (TJA1053 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
KAB04-ED15-LAB	Adapter box for connecting vehicle signals via lab connector, cable length approx. 2 m
PCcard2-PFX	Assembly kit and strain relief for the PC card interface connector, increases mechanical stability

Softing
Automotive Electronics GmbH
Richard-Reitzner-Allee 6
85540 Haar / Germany
T +49 89 456 56-420
F +49 89 456 56-499
info.automotive@softing.com
www.softing.com