



DATASHEET

CAN-IB100/PCIe

The Ixxat CAN-IB100/PCIe is a passive PCI Express interface card with one CAN channel and galvanic isolation. It is an easy and very cost-efficient way to connect computers to a CAN bus network.

This passive card has a modular design and can be expanded by a fieldbus expansion board to add an additional low-speed CAN channel. Additionally, the high-speed CAN channel can be switched to low-speed CAN through software, providing highest flexibility for future requirements.

Galvanic isolation reliably enhances the protection of the device against damage to electronics caused by voltage peaks.

FEATURES AND BENEFITS

- Cost-effective, passive CAN interface card for PCI Express
- Easy expandable via field bus expansion board for additional low-speed CAN channel
- 1 x CAN high-speed channel
- Standard slot bracket
- Single Lane (x1) PCI Express Interface
- Galvanic isolation
- Common driver interface for easy exchange of the PC interface type
- Powerful programming interface for Windows (VCI) as well as for Linux (socketCAN or ECI), QNX and VxWorks (ECI)

ORDER NUMBER	1.01.0231.12001
CAN channels (high-speed)	1
CAN bus interface	1 x D-Sub 9, CiA standard pinning according to CiA 303-1
CAN bit rates	10 kBit/s to 1 Mbit/s (high-speed), 10 kBit/s to 125 kBit/s (low-speed, via optional fieldbus expansion)
CAN bus termination resistors	None
CAN controller	Internal; CAN 2.0 A/B
CAN high-speed transceiver	SN65HVD251
CAN low-speed transceiver	TJA1054, via optional fieldbus expansion

ORDER NUMBER	1.01.0231.12001
Galvanic isolation	1 kV DC for 1 sec.
CAN propagation delay (typical)	With galvanic isolation typical 6 ns, max. 10 ns
PC bus interface	PCI express (V1.1), single lane port (x1)
PC address range/interrupts	Plug & Play
Power supply	3.3 V DC (via PCIe socket)
Power consumption	Typ. 350 mA
Dimensions	68.9 x 105 mm
Weight	Approx. 55 g
Operating temperature	0 °C to +70 °C
Storage temperature	-40 °C to +85 °C
Relative humidity	10 % to 95 %, non-condensing
Certification	CE, FCC
Operating systems	Windows 11, Windows 10 (32/64), Windows 8 (32/64), Windows 7 (32/64), Linux



ACCESSORIES	ORDER NUMBER
Termination adapter for CAN/CAN FD (D-Sub male to female)	1.04.0075.03000
CAN cable 2.0 m (D-Sub male to female)	1.04.0076.00180
CAN Y cable 0.22 m	1.04.0076.00001
CAN Y cable 2.1 m	1.04.0076.00002

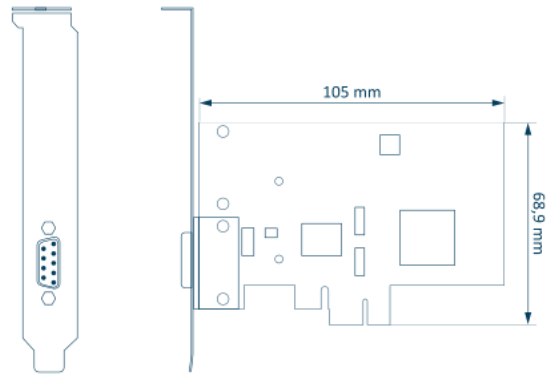
PIN ALLOCATION

CAN CONNECTOR D-Sub 9



Pin no.	Signal
7	CAN-High
2	CAN-Low
3	CAN-GND

TECHNICAL DRAWING



SOFTWARE SUPPORT

Drivers and programming interfaces

Comprehensive and powerful driver and software packages for the CAN-IB100/PCIe series are available for free at ixxat.com/support. The driver packages can be downloaded for Windows (VCI - Virtual Communication Interface) and Linux (ECI), and are available on request for various real-time operating systems (INtime, RTX, Vxworks, QNX).

Using the Ixxat driver packages, customers can easily switch between the different PC interfaces offered by HMS. This would allow them to use USB, PCIe, Ethernet or other PC connections without changes to their application. The drivers support all protocols available on the interface with one API, so customers can easily access CAN, CAN FD and LIN simultaneously and get the data with a common time stamp.

Software tools

The software tool canAnalyser3 Mini is included in the VCI V4 download package and enables the first analysis steps and monitoring in CAN networks. Further information about the tools as well as Demo/Trial versions are available on the Ixxat webpage.