

PCAN-PCI Express FD

CAN and CAN FD Interface for PCI Express

The plug-in card PCAN-PCI Express FD allows the connection of a PC with PCI Express slots to CAN FD and CAN networks. There is galvanic isolation of up to 500 Volts between the computer and CAN sides. The card is available as a single, dual, or four-channel version.

The monitor software PCAN-View and the programming interface PCAN-Basic for the development of applications with CAN connection are included in the scope of supply and support the standard CAN FD.

CAN FD is primarily characterized by higher bandwidth for data transfer. Further information about CAN FD can be found on page 10.



Specifications

- ___ PC plug-in card (PCIe x1) for PCI Express slots
- ___ 1, 2, or 4 High-speed CAN channels (ISO 11898-2)
- ___ Complies with CAN specifications 2.0 A/B and FD
- ___ CAN FD support for ISO and Non-ISO standards switchable
- ___ CAN FD bit rates for the data field (64 bytes max.) from 25 kbit/s up to 12 Mbit/s
- ___ CAN bit rates from 25 kbit/s up to 1 Mbit/s
- ___ CAN bus connection via D-Sub, 9-pin (in accordance with CiA® 106)
- ___ FPGA implementation of the CAN FD controller
- ___ NXP TJA1044GT CAN transceiver
- ___ Galvanic isolation on the CAN connection up to 500 V, separate for each CAN channel
- ___ CAN termination can be activated through solder jumpers, separately for each CAN channel
- ___ PCIe data transfer via bus master DMA
- ___ DMA memory access operations with 32- and 64-bit addresses
- ___ Measurement of bus load including error frames and overload frames on the physical bus
- ___ Induced error generation for incoming and outgoing CAN messages
- ___ 5-Volt supply to the CAN connection can be connected through a solder jumper, e.g., for external bus converter
- ___ Extended operating temperature range from -40 to +85 °C (-40 to +185 °F)

D-Sub	Pin	Pin assignment
	1	Not connected / optional +5V
	2	CAN-L
	3	GND
	4	Not connected
	5	Not connected
	6	GND
	7	CAN-H
	8	Not connected
	9	Not connected

Ordering information

Designation	Part No.
PCAN-PCI Express FD Single Channel	IPEH-004026
PCAN-PCI Express FD Dual Channel	IPEH-004027
PCAN-PCI Express FD Four Channel	IPEH-004040

Scope of supply

- ___ Plug-in card PCAN-PCI Express FD
- ___ Slot bracket with D-Sub connectors for the CAN bus (only four-channel version)
- ___ Device drivers for Windows 11 (x64), 10 (x64), and Linux
- ___ CAN monitor PCAN-View for Windows (details on page 94)
- ___ Programming interface PCAN-Basic for developing applications with CAN connection (details on page 80)
- ___ Programming interfaces for standardized protocols from the automotive sector
- ___ Manual in PDF format