

PCAN-miniPCIe FD (IPEH-004045 / 46 / 47) – Detailed Data Sheet



Product Description

The PCAN-miniPCIe FD from PEAK-System is a CAN and CAN FD interface card designed for PCI Express Mini (PCIe) slots. Its compact design makes it ideal for embedded systems that require connectivity to up to four CAN FD and CAN networks. The card offers galvanic isolation of up to 300 V between the CAN side and the host computer. Available in single, dual, and four-channel variants, it comes with PCAN-View monitoring software and the PCAN-Basic API for application development.

Technical Specifications

Feature	Details
Interface	CAN interface for PCI Express Mini slot (PCIe lane)
Form Factor	PCI Express Mini (four-channel not supported due to height)
CAN Channels	1, 2, or 4 High-speed CAN channels (ISO 11898-2)
CAN Compliance	CAN 2.0 A/B and FD (ISO and Non-ISO switchable)
CAN FD Bit Rates	25 kbit/s to 12 Mbit/s (64-byte data field max.)

CAN Bit Rates	25 kbit/s to 1 Mbit/s
CAN Connection	Via D-Sub 9-pin cable (CiA® 106 compliant)
CAN Controller	FPGA implementation
CAN Transceiver	NXP TJA1044GT
Galvanic Isolation	Up to 300 V, per CAN channel
CAN Termination	Solder jumpers per channel
PCIe Communication	Bus master DMA
DMA Support	32- and 64-bit address memory access
Bus Load Measurement	Includes error and overload frames
Error Injection	For both incoming and outgoing messages
Operating Temperature	-40 to +85 °C (-40 to +185 °F)

D-Sub 9-Pin Connector Pin Assignment

Pin	Assignment
1	Not connected
2	CAN-L
3	GND
4	Not connected
5	Not connected
6	GND
7	CAN-H
8	Not connected
9	Not connected

Scope of Supply

- PCAN-miniPCIe FD card (Single, Dual, or Four Channel)
- Connection cables incl. D-Sub connector (20 or 40 cm, other lengths on request)

- Device drivers for Windows 11 (x64), Windows 10 (x64), and Linux
- CAN monitor software PCAN-View for Windows
- PCAN-Basic programming interface
- Programming interfaces for standardized automotive protocols
- Manual in PDF format