PCAN-PCIe FD (IPEH-004026 / 004027 / 004040) – Detailed Data Sheet

Product Description

The PCAN-PCI Express FD plug-in card connects a PC with PCI Express slots to CAN FD and CAN networks. It offers galvanic isolation of up to 500 V between the PC and CAN sides and is available in single, dual, or four-channel versions. The card supports CAN FD (ISO and Non-ISO standards) and provides enhanced bandwidth for modern automotive and industrial applications. FPGA-based CAN FD controllers ensure reliable communication. The included PCAN-View software and PCAN-Basic programming interface support application development with CAN connectivity.

Technical Specifications

Feature	Specification
Interface Type	PCI Express x1 plug-in card
CAN Channels	1, 2, or 4 High-speed CAN channels (ISO 11898-2)
CAN Specification	Complies with CAN 2.0 A/B and CAN FD
CAN FD Standards	Supports ISO and Non-ISO, switchable
CAN FD Bit Rates	25 kbit/s to 12 Mbit/s (data field up to 64 bytes)
Classic CAN Bit Rates	25 kbit/s to 1 Mbit/s
CAN Transceiver	NXP TJA1044GT
CAN Bus Connector	D-Sub 9-pin (CiA® 106 compliant)
Galvanic Isolation	Up to 500 V, separate for each CAN channel
CAN Termination	Activatable via solder jumpers per channel
Controller Implementation	FPGA-based CAN FD controller
Data Transfer	Bus master DMA with 32- and 64-bit addressing
Bus Load Measurement	Includes error frames and overload frames

Error Generation	Induced error generation for CAN messages
5V Supply	Optional through solder jumper for external bus converters
Operating Temperature	-40 to +85 °C (-40 to +185 °F)

D-Sub Connector Pin Assignment

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

Scope of Supply

• PCAN-PCI Express FD plug-in card

• Slot bracket with D-Sub connectors (four-channel version only)

• Device drivers for Windows 11/10 and Linux

• PCAN-View CAN monitor software for Windows

• PCAN-Basic programming interface for application development

• Programming interfaces for automotive sector protocols

• PDF manual

Ordering Information

• PCAN-PCI Express FD Single Channel – Part No.: IPEH-004026

• PCAN-PCI Express FD Dual Channel – Part No.: IPEH-004027

• PCAN-PCI Express FD Four Channel – Part No.: IPEH-004040