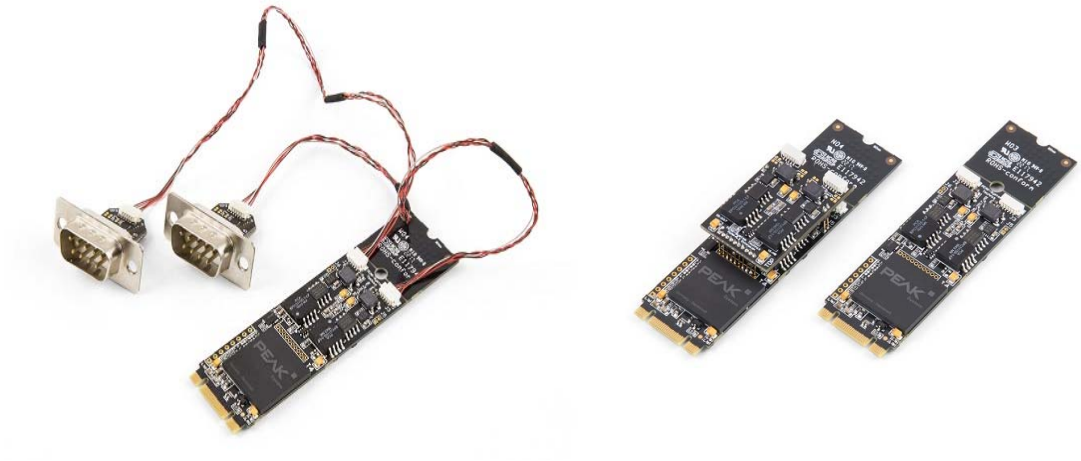
PCAN-M.2 (IPEH-004083 / 84 / 85) – Detailed Data Sheet



Product Description

The PCAN-M.2 from PEAK-System is a CAN and CAN FD interface card designed for the M.2 (PCIe) slot in modern computer boards. With its compact format, it is ideal for embedded PCs, SBCs, and compact industrial applications. The card is available in single, dual, and four-channel versions and supports galvanic isolation up to 300 V per channel. Included in the package are the PCAN-View monitor software and the PCAN-Basic programming API for custom CAN application development.

Technical Specifications

Feature	Details
Interface	CAN interface for M.2 slot using PCIe lane
Form Factor	M.2 type 2280/2260-B-M
Card Height	Single/Dual Channel: 4.6 mm, Four Channel: 10.2 mm
CAN Channels	1, 2, or 4 High-speed CAN channels (ISO 11898-2)
CAN Specification	Complies with CAN 2.0 A/B and FD (ISO and Non-ISO switchable)
CAN FD Bit Rates	20 kbit/s to 12 Mbit/s (data field, 64 bytes max.)
CAN Bit Rates	20 kbit/s to 1 Mbit/s

Bus Connection	D-Sub 9-pin via connection cable (CiA® 106 compliant)
CAN Controller	FPGA implementation
CAN Transceiver	Microchip MCP2558FD
Galvanic Isolation	Up to 300 V per CAN channel
CAN Termination	Via 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-M.2 card (Single, Dual, or Four Channel)

- Connection cables including D-Sub connector (20 cm or 40 cm standard, other lengths on request)

- Device drivers for Windows 11 (x64), Windows 10 (x64), and Linux

- CAN monitor software PCAN-View for Windows
- Programming interface PCAN-Basic for Windows
- Interfaces for automotive protocol development
- Manual in PDF format