PCAN-USB Pro FD (IPEH-004061) — Detailed Data Sheet



Overview

The PCAN-USB Pro FD enables easy connection between a PC and CAN FD and LIN networks via High-Speed USB 2.0. The adapter supports two field buses simultaneously—two CAN FD or two LIN channels—with complete electrical isolation and optional +5V power output. Housed in a durable aluminum casing, it is ideal for mobile or industrial applications.

Technical Specifications

USB Interface:

- High-Speed USB 2.0 (compatible with USB 1.1 and 3.0)
- Power supply through USB

Operating Temperature:

--40 °C to +85 °C (-40 °F to +185 °F)

Time Stamp Resolution:

- 1 μs

Enclosure:

- Aluminum case (robust, mobile-ready)

CAN FD Operation

- Standards: Supports CAN 2.0 A/B and CAN FD (ISO & non-ISO)
- Bit Rate (CAN): 25 kbit/s to 1 Mbit/s
- Bit Rate (CAN FD): 25 kbit/s to 12 Mbit/s (64 bytes max per data field)
- Transceiver: NXP TJA1044GT
- Isolation: Opto-decoupled from USB and LIN, up to 500 V
- Termination: CAN termination switchable via solder jumpers (per channel)
- Controller: FPGA-based CAN FD controller
- Error Support: Detection of error/overload frames; induced error generation
- Bus Load Measurement: Includes error and overload frames

LIN Operation

- Bit Rates: 1 kbit/s to 20 kbit/s
- Transceiver: TJA1028
- LIN Specs: Compliant up to version 2.2
- Isolation: Both LIN channels opto-decoupled from USB and CAN FD
- Modes: LIN Master or Slave (1 ms master task resolution)
- Auto Recognition: Bit rate, frame length, checksum type
- Scheduler: Autonomous support for unconditional, event, sporadic frames
- Schedule Tables: Up to 8 tables with 256 slots total

Software & Drivers

Included Software:

- PCAN-View: CAN monitor for Windows
- PLIN-View Pro: LIN monitor for Windows
- PCAN-Basic: API for CAN programming
- PLIN-API: API for LIN programming

- Standard Protocol APIs: Automotive sector protocols
- Manual: PDF format

Driver Support:

- Windows 11 (x64/ARM64)
- Windows 10 (x64)
- Linux