

# PCAN-MicroMod FD Digital 1 & 2

## Configurable CAN FD Modules with Focus on Digital I/Os

The PCAN-MicroMod FD plug-in board can be purchased together with ready-to-use motherboards that provide peripherals for specific requirements. For the connection of CAN, I/O, and power supply, spring terminal connectors are used. The motherboards PCAN-MicroMod FD Digital 1 and 2 put the emphasis on digital inputs and outputs, which are provided with appropriate protective circuitry. The digital outputs of Digital 1 are equipped with low-side switches and those of Digital 2 with high-side switches.

PCAN-MicroMod FD products are configured with a free Windows software. In addition to simply mapping I/Os to CAN IDs, function blocks for processing the data are also available. The configuration created on the computer is transferred via the CAN bus to the PCAN-MicroMod FD which then runs as an autonomous CAN node.

The PCAN-MicroMod FD Digital can alternatively be operated with firmware for CANopen (FD). Furthermore, the use with a custom firmware is also possible. Licenses for the CANopen firmware are available from our partner Embedded Systems Academy. You can find detailed information about the operation modes and the configuration of PCAN-MicroMod FD products on page 42.



### Specifications

- Board with plugged on PCAN-MicroMod FD
- High-speed CAN connection (ISO 11898-2)
  - Complies with CAN specifications 2.0 A/B and FD
  - CAN FD bit rates for the data field (64 bytes max.) from 20 kbit/s up to 10 Mbit/s
  - CAN bit rates from 20 kbit/s up to 1 Mbit/s
- Switchable CAN termination
- 2 frequency outputs
  - Low-side switches
  - Adjustable frequency range from 0 to 20 kHz
- 1 analog input for voltage monitoring up to 30 V, resolution 12 bit
- 8 digital inputs
  - Pull-up or pull-down configurable
- 8 digital outputs
  - Digital 1: Low-side switches
  - Digital 2: High-side switches
  - PWM mode: resolution duty cycle 16 bit, adjustable frequency range from 0 to 20 kHz
- 3 analog inputs
  - Resolution 12 bit
  - Measuring range 0 to 10 V
- 4-bit rotary coding switch for setting the module ID
- 3 status LED

- Aluminum casing with spring terminal connectors
- Operating voltage 8 to 30 V
- Extended operating temperature range from -40 to +85 °C (-40 to +185 °F)

### Ordering information

Designation	Part No.
PCAN-MicroMod FD Digital 1	IPEH-003083
PCAN-MicroMod FD Digital 2	IPEH-003084

### Scope of supply

- PCAN-MicroMod FD
- PCAN-MicroMod FD motherboard in aluminum casing including mating connectors
- PCAN-MicroMod FD Configuration for Windows (details on page 109)
- Windows development package with GCC ARM Embedded, flash program, and programming examples
- Manual in PDF format

### Requirements

- The configuration requires a PEAK CAN interface