

PCAN-Chip USB

Stamp Module for the Implementation of CAN FD to USB Connections

For custom hardware designs a CAN connection can be implemented with the Stamp module, which communicates via USB 2.0 with the hardware. The integrated CAN controller supports the protocols CAN 2.0 A/B as well as CAN FD. The physical CAN connection is determined by external wiring. The Stamp module with its single-sided mounting and plated half-holes is suitable for automatic assembly.

The optional PCAN-Chip USB Eval board simplifies the development of a custom board based on the Stamp module.

In addition to the documentation for the integration of the Stamp module, the scope of supply of the PCAN-Chip USB includes licenses for the Windows and Linux device drivers, for the CAN monitor PCAN-View, and for the PCAN-Basic API.



PCAN-Chip USB

Specifications

- ☐ High-speed USB 2.0 (compatible to USB 1.1 & 3.0)
- ☐ FPGA implementation of the CAN FD controller
- ☐ Complies with CAN specifications 2.0 A/B and FD
- ☐ CAN FD support for ISO and Non-ISO standard switchable
- ☐ Measurement of bus load including error frames on the physical bus
- ☐ Induced error generation for incoming and outgoing CAN messages
- ☐ 100-percent compatible with the USB device drivers and the software from PEAK-System
- ☐ Connections for 2 status LEDs
- ☐ 5 digital inputs/outputs and 1 analog input (access via PCAN-Basic API)
- ☐ Power supply 3.3 V DC
- ☐ Firmware update via USB
- ☐ Dimensions: 25 x 20 mm
- ☐ Extended operating temperature range from -40 to +85 °C (-40 to +185 °F)

PCAN-Chip USB Eval

Specifications

- ☐ CAN bus connection via D-Sub, 9-pin (in accordance with CiA® 106)
- ☐ CAN transceiver NXP TJA1044GT
- ☐ USB connector type B, standard ESD protection
- ☐ Dual-color LED for CAN status and power supply
- ☐ Power supply via USB
- ☐ Extended operating temperature range from -40 to +85 °C (-40 to +185 °F)

Ordering information

Designation	Part No.
PCAN-Chip USB	IPEH-004025
PCAN-Chip USB Eval	IPEH-004025-EVAL

Scope of supply PCAN-Chip USB

- ☐ Stamp module PCAN-Chip USB; delivery, depending on quantity, as cut tape or reel for automatic placement machines
- ☐ Documentation for wiring and integration including a sample circuit diagram
- ☐ One license per chip for:
 - Device drivers for Windows 11 (x64/ARM64), 10 (x64), and Linux
 - CAN monitor PCAN-View for Windows (details on page 94)
 - Programming interface PCAN-Basic for developing applications with CAN connection (details on page 80)
 - Programming interfaces for standardized protocols from the automotive sector

Scope of supply PCAN-Chip USB Eval

- ☐ PCAN-Chip USB Eval
- ☐ PCAN-Chip USB incl. scope of supply
- ☐ USB connector cable

The license fees for CAN FD to Robert Bosch GmbH are included. If you are interested and for more information, please contact info.peak@hms-networks.com.