PCAN-Router

Universal Programmable CAN Converter

The PCAN-Router is a dual-channel CAN module whose NXP LPC21 series programmable microcontroller provides the option of using the CAN messages on both channels on a flexible basis. This gives a whole range of options for manipulation, evaluation, filtering, and routing of CAN messages.

Using the programming library and the GNU compiler for C and C++, a firmware is created and then transferred to the module via CAN. At delivery, the PCAN-Router is equipped with a standard firmware that forwards CAN messages 1:1 between both channels at 500 kbit/s. The corresponding source code is included as example in the scope of supply.

The module is installed in an aluminum profile casing, and is shipped in versions with two D-Sub connectors or a screw-terminal strip.

Specifications

- NXP LPC21 series microcontroller (16/32-bit ARM CPU)
- 32 kbyte EEPROM
- Two High-speed CAN channels (ISO 11898-2)
  - Comply with CAN specifications 2.0 A/B
  - Bit rates from 40 kbit/s up to 1 Mbit/s
- Connections via two 9-pin D-Sub connectors or one 10-pole screw-terminal strip (Phoenix)
- Galvanic isolation of the D-Sub connector CAN 2 (only for IPEH-002211)
- Additional digital input (only for IPEH-002210 and IPEH-002211)
- Status signaling with two 2-color LEDs
- Aluminum casing, optional with DIN rail fixing option available
- Voltage supply from 8 to 30 V
- Extended operating temperature range from -40 to +85 °C (-40 to +185 °F)
- New firmware can be loaded via CAN interface

Ordering information

Designation	Part No.
PCAN-Router with D-Sub connectors	IPEH-002210
PCAN-Router with Phoenix connector	IPEH-002210-P
PCAN-Router with D-Sub connectors opto-decoupled	IPEH-002211

Scope of supply

- PCAN-Router in aluminum casing
- IPEH-002210-P: mating connector (Phoenix)
- Windows development package with GCC ARM Embedded, flash program, and programming examples
- Manual in PDF format

Requirements

- The transfer of the firmware via CAN requires a PEAK CAN interface