

PCAN-Router Pro

4-Channel CAN Router with Data Logger



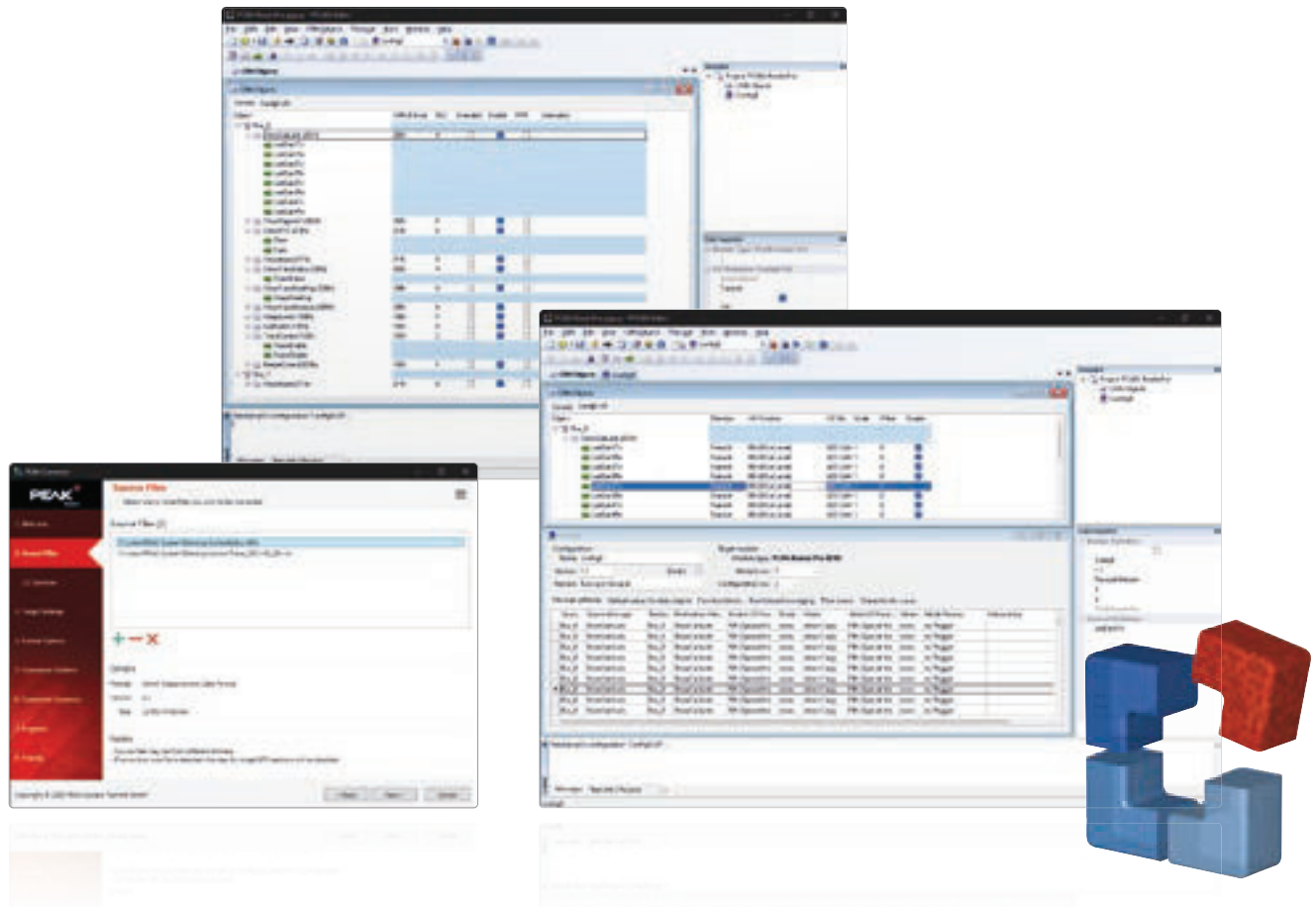
The PCAN-Router Pro allows to join the data traffic from four High-speed CAN buses. The behavior of the router is configured via the CAN bus with the provided Windows program PPCAN-Editor. As well as pure forwarding, the CAN data can be processed, manipulated, and for example, filtered in a number of different ways. There are a variety of function blocks and other settings available to the user for configuration setup. Furthermore, there is a virtual fifth CAN channel which is used for recording all data traffic to a CompactFlash card.

As an alternative to the standard firmware which the PCAN-Router Pro is equipped with at delivery, custom firmware based on the ARM microcontroller NXP LPC2294 can be created and implemented. The firmware is created using the included development package with GNU compiler for C and C++ and is then transferred to the module via CAN. Various programming examples facilitate the implementation of own solutions.

CAN transceiver modules in the PCAN-Router Pro allow a flexible adaptation of each CAN channel to the requirements. For example, Low-speed and Single-wire CAN transceivers are also available on request.

Specifications

- ___ 4 High-speed CAN channels (ISO 11898-2)
 - Comply with CAN specifications 2.0 A/B
 - CAN bit rates from 40 kbit/s up to 1 Mbit/s
 - NXP TJA1041 CAN transceiver with wake-up
 - Alternative pluggable transceiver modules on request (details on page 9)
- ___ CAN connections are D-Sub, 9-pin (in accordance with CiA® 106)
- ___ CAN termination switchable, separately for each CAN channel
- ___ Wake-up function using separate input, CAN bus, or real-time clock
- ___ CompactFlash card slot
- ___ Battery-buffered real-time clock (RTC), can also be used for wake-up
- ___ Beeper
- ___ Status LEDs for CAN channels, CompactFlash card, microcontroller, and power supply
- ___ NXP microcontroller LPC2294
- ___ Aluminum casing with flange. DIN rail fixing option available on request
- ___ 8 to 27 V power supply, protection against overvoltage and reverse polarity
- ___ Extended operating temperature range from -40 to +85 °C (-40 to +185 °F)



Properties of the standard firmware:

- ___ Detailed configuration with the software PPCAN-Editor 2 for Windows
- ___ Various function blocks for data processing and manipulation
- ___ Configurable beeper
- ___ Configurable CAN channel status LEDs
- ___ Recording of CAN data and error frames to a CompactFlash card
- ___ Conversion of logging data to various output formats using the Windows software PEAK-Converter

Note about the programmability:

Since March 2013, a toolchain and a library are available for programming custom firmware for the PCAN-Router Pro. Please note that due to various hardware extensions only devices with a serial number from 100 can be equipped with custom firmware.

Ordering information

Designation	Part No.
PCAN-Router Pro	IPEH-002212

Scope of supply

- ___ PCAN-Router Pro in aluminum casing including mating connector for power supply
- ___ Configuration software PPCAN-Editor 2 for Windows (details on page 97)
- ___ Conversion software PEAK-Converter for Windows 11 (x64/ARM64), 10 (x64)
- ___ Industrial CompactFlash card (min. 1 GB)
- ___ Windows development package with GCC ARM Embedded, flash program, and programming examples
- ___ Manual in PDF format

Requirements

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

Customization and customer-specific firmware available on request.