PCAN_Router Pro FD

With six channels, the PCAN-Router Pro FD links the data traffic of modern CAN FD and classic CAN buses. Pluggable CAN transceiver modules allow flexible adaptation of each CAN channel to the respective requirements. In addition, the router is equipped with an analog input and four digital I/Os. The CAN messages can be recorded on the internal memory or on an inserted memory card and later read out via the USB connection. With the PCAN-Router Pro FD the data flow of test benches and production plants can be managed, monitored, and controlled. The conversion from CAN to CAN FD or vice versa enables the integration of new CAN FD applications into existing CAN 2.0 networks.

The behavior of the PCAN-Router Pro FD can be programmed freely for specific applications. 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, such as message forwarding or recording, facilitate the implementation of own solutions.

Specifications

- 6 High-speed CAN channels (ISO 11898-2)
    - o Comply with CAN specifications 2.0 A/B and FD
    - o CAN FD support for ISO and Non-ISO standards
    - o CAN FD bit rates for the data field (64 bytes max.) from 40 kbit/s up to 12 Mbit/s
    - o CAN bit rates from 40 kbit/s up to 1 Mbit/s
    - o NXP TJA1043 CAN transceiver with wake-up
    - o Alternative plugable transceiver modules on request
- CAN connections are D-Sub, 9-pin
- CAN termination switchable, separately for each CAN channel
- Wake-up function using separate input, CAN bus, or real-time clock
- 2 digital I/Os, each usable as digital input or output with High-side switch
- 2 digital I/Os, each usable as digital input or output with Low-side switch
- 1 analog input (0 - 33 V)
- Recording of CAN data and error frames
- Internal memory: 16 GByte eMMC
- SD card slot for additional memory
- USB connection for accessing the data memory (e.g. recorded log data)
- Conversion of logging data to various output formats using the Windows software PEAK-Converter
- Battery-buffered real-time clock (RTC), can also be used for wake-up
- Status LEDs for CAN channels, memory cards, and power supply
- Microcontroller STM32F765NIH6 (based on Arm® Cortex® M7)
- 32 MByte SDRAM in addition to microcontroller RAM
- Aluminum casing with flange
- 8 - 32 V power supply, protection against overvoltage and reverse polarity
- Slot for a backup battery for defined switch-off behavior (e.g. for log data saving)
- Optional on request: Ethernet interface via RJ-45 socket or BroadR-Reach® interface via D-Sub connector
- Extended operating temperature range from -40 to 85 °C (-40 to 185 °F)