

TC1017

12-channel CAN FD to USB interface



Classic Application:

- Whole vehicle multi-channel CAN FD/CAN/LIN bus data acquisition
- Domain controller testing
- Various automated testing systems

Feature Overview

TC1017 is a device featuring an 8 channel CAN FD bus to USB interface, adeptly handling tasks related to CAN FD/CAN network development, simulation, and testing.

Paired with the robust TSMaster software, it supports the loading of DBC and ARXML data base files, facilitating convenient monitoring, analysis, and simulation of CAN FD bus data. Additionally, it supports functionalities such as UDS diagnostics, ECU flashing, CCP/XCP calibration, among others.

This device provides secondary development APIs for Windows and Linux systems, supporting various development environments like C++, C#, LabView, Python, etc. This versatility allows for easy integration into diverse testing systems, ensuring efficiency and user-friendliness.

Characteristics

- Microsecond-level hardware message timestamp, meeting advanced requirements
- Driverless design for Windows system, boasting exceptional system compatibility
- Channel count: 8 channel isolated CAN FD interface (USB-powered for 4 channel transmission and reception; 8-channel functionality is limited to reception only with USB power; under external power, complete functionality for 8 channels is supported). Standard DB-9 connectors provided via adapter cables
- CAN channel isolation up to DC2500V
- Automotive-grade design, supporting DBC, A2L, ASC, and ARXML file formats
- Support for recording data in BLF and ASC formats, enabling offline/online playback
- Capable of UDS diagnostics and CCP/XCP calibration
- Supports UDS-based Flash Bootloader
- Supplementary secondary development API interfaces for Windows and Linux systems
- Capable of loading all paid licenses for TSMaster
- Potential future support for offline gateway usage (currently not supported, a feature for future expansion)

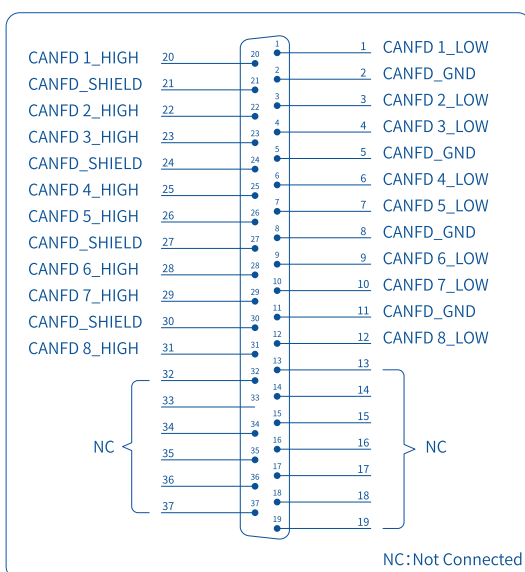
Specification

| | |
|------------------------------|---|
| Channel | 8 x CAN FD |
| PC interface | USB 2.0 |
| CAN interface | DB37, with a cable that converts DB37 to 8 DB9 interfaces |
| Driver | Driverless design for Windows and Linux systems, ensuring system compatibility |
| Buffer | Each channel supports a transmit buffer of up to 700 CAN FD@64 bytes |
| CAN | Supports CAN 2.0A, B protocols, compliant with ISO11898-1 standard, baud rate from 5Kbps to 1Mbps |
| CAN FD | Supports both ISO and non-ISO standard CAN FD, baud rates from 100Kbps to 8Mbps |
| Timestamp Precision | 1µs hardware message timestamp |
| Termination Resistor | Built-in 120 ohm termination resistor configurable via software |
| Messages sent per second | Maximum of 17,000 frames/second |
| Messages received per second | Maximum of 17,000 frames/second |
| Isolation | CAN channel DC2500V isolation, electrostatic discharge level of ±8KV for contact discharge |
| Power Supply | DC 7-18V |
| Operating Temperature | 40°C to 85°C |
| Enclosure Material | Aluminum |
| Size | 106mm*84mm*32mm |

Ordering Information

| Product Name | Model Number | Function Description |
|----------------|--------------|-----------------------------------|
| Network Device | TC1017 | 8 channel CAN FD to USB interface |

Pin definition



Shipping list

- TC1017 device
- USB cable
- DB37 to 8 DB9 adapter cable
- DC 12V power supply



DB37 adapter cable