

TC1014

Multi channel CAN FD bus interface







Classic Application:

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

Feature Overview

TC1014 features a 4 channel CAN FD bus to USB interface with a maximum speed of 8 Mbps. It connects to a PC through a high-speed USB 2.0 interface and is designed with driverless compatibility for Windows systems, ensuring system compatibility.

Paired with the powerful TSMaster software, it supports loading DBC and ARXML database files, facilitating convenient monitoring, analysis, and simulation of CAN FD bus data. Additionally, it supports functional capabilities 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 such as C++, C#, LabView, Python, etc. This flexibility allows for easy integration into diverse testing systems, ensuring efficiency and user-friendliness.

Characteristics

- Microsecond (µs) level hardware message timestamping, meeting high-level requirements
- High-speed USB 2.0 interface with driverless design for Windows and Linux systems, ensuring system compatibility
- · CAN channel isolation up to DC2500V
- Automotive-grade design, supporting dbc, a2l, blf, asc, and arxml files
- · Adjustable CAN baud rate from 125Kbps to 8Mbps
- Supports recording data in BLF and ASC formats for both offline and online playback
- Supports UDS diagnostics and CCP/XCP calibration
- · Supports UDS-based Flash Bootloader
- · Supports information security testing
- Supports secondary development interfaces for Windows and Linux systems
- · Built-in 120-ohm terminal resistor, software-configurable
- · Capable of loading all paid licenses for TSMaster



Specification

| Channel | 4 x CAN FD | |
|-------------------------------|---|--|
| PC End | High-speed USB 2.0 interface | |
| CAN End | 2 x DB9 interface | |
| Driver | Driver-free for Windows and Linux systems, ensuring system compatibility | |
| Buffer | Each channel supports a transmit buffer of up to 1000 CAN/CAN FD frames | |
| CAN | Supports CAN 2.0A, B protocols, compliant with ISO11898-1 standard, | |
| | baud rate from 125Kbps to 1Mbps | |
| CAN FD | Supports ISO and non-ISO standard CAN FD, baud rate from 125Kbps to 8Mbps | |
| Timestamp | lµs hardware message timestamp | |
| Terminal Resistor | Built-in 120-ohm terminal resistor, software configurable | |
| Messages Sent per Second* | Maximum of 20,000 frames/second | |
| Messages Received per Second* | Maximum of 20,000 frames/second | |
| Isolation | CAN channel isolation up to DC2500V, electrostatic discharge level ±8KV | |
| Power Supply | USB-powered | |
| Casing Material | Aluminum | |
| Dimensions | 100 x 80 x 30mm | |
| Operating Temperature | -40°C to 80°C | |
| Operating Humidity | 10% to 90% (non-condensing) | |
| Operating Environment | Keep away from corrosive gases | |

^{*}Single channel at 1 Mbps with a 0-byte data field

Ordering Information

| Product Name | Model Number | Function Description |
|----------------|--------------|-----------------------------------|
| Network Device | TC1014 | 4 channel CAN FD to USB interface |

Shipping list

- · TC1014 device
- USB cable *1
- DB9 female to two DB9 male CAN cable *2

Pin definition

- · Left: CANFD 1/3
- Right: CANFD 2/4

