

TC1034



Product Overview

The TC1034 is a device with a dual FlexRay and dual CAN FD bus to USB interface. It is designed for FlexRay network development, simulation, and testing.

Operated through TSMaster software, multiple TC1034 devices can be used in parallel or combined with other FlexRay products from the same company. When paired with CAN, LIN, or automotive Ethernet tools from the same manufacturer, TC1034 enables a single PC to perform high-performance multi-bus analysis and simulation. It is ideal for developers, testers, ECU production lines, and test engineers.

Key Features

- Flexible communication controller buffer configuration
- Detects empty frames
- Supports cycle multiplexing (composite communication modes)
- Supports frame payloads up to 254 bytes
- Supports PDUs (Protocol Data Units)
- Startup monitoring function
- Supports FlexRay message logging and playback
- Two FlexRay channels usable as independent nodes
- Automotive-grade design supporting dbc, a2l, blf, asc, and arxml files
- Recording in blf and asc formats with offline/online playback

- Supports UDS diagnostics and CCP/XCP calibration
- Supports UDS-based Flash Bootloader
- Auxiliary communication controller – no additional nodes needed during cold start
- Fully compatible with TSMaster for FlexRay, CAN, and CAN FD applications
- Secondary development APIs for Windows and Linux

Technical Specifications

- Network Device: 2 × FlexRay, 2 × CAN FD
- PC Interface: USB 2.0
- Bus Interface: DB9 connectors (FlexRay and CAN)
- Driver: Driver-free for Windows
- FlexRay: Channels A and B supported
- Cold Startup: Supported
- Buffer: Each channel supports up to 1000 CAN frames
- CAN: CAN 2.0A/B (ISO11898-1), baud 125 Kbps – 1 Mbps
- CAN FD: ISO and non-ISO, baud 125 Kbps – 8 Mbps
- Timestamp: 1 μs hardware timestamp
- Isolation: CAN/FlexRay channel DC 2500 V, ESD ±4 kV (contact), ±8 kV (air)
- CAN Terminal Resistor: Built-in 120-ohm, software configurable
- FlexRay Terminal Resistor: Built-in 100-ohm, software configurable
- Power Supply: USB powered
- Casing Material: Metal
- Operating Temperature: -40 °C to +80 °C
- Operating Humidity: 10% – 90% (non-condensing)
- Environment: Keep away from corrosive gases

Connector Pinout

- FlexRay DB9 (Pins 1–9: BM1, BP1, BM2, BP2, BM3, BP3, BM4, BP4, GND)
- CAN FD DB9 (Pins 2–8: Shield, Low, High, GND, CAN1_High, CAN1_Low)

Ordering Information

Product Name: TC1034

Model Number: 2-channel FlexRay + 2-channel CAN FD to USB interface

Scope of Supply:

- TC1034 device
- USB cable

- DB9 female to dual DB9 male cable (CAN)
- DB9 female to dual DB9 male cable (FlexRay)