

TC1016P

Multi channel CAN FD/LIN bus interface



Scan the code to follow



Classic Application:

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

Feature Overview

TC1016P is a multi channel CAN FD and LIN bus interface device launched by TOSUN Technology. The CAN FD bus rate supports up to 8 Mbps, and the LIN bus rates supports from 0 to 20 Kbps. The product uses a USB 2.0 interface to connect with the PC and features a driverless design for Windows and Linux systems, ensuring excellent system compatibility.

With the powerful TSMaster software, it supports loading DBC and ARXML database files, making it very convenient to monitor, analyze, and simulate CAN FD/LIN bus data, and it also supports functions such as UDS diagnostics, ECU flashing, CCP/XCP calibration, etc.

The secondary development APIs for Windows and Linux can support various development environments such as C++, C#, LabView, Python, etc., making it highly efficient and easy to use, and is convenient to integrate into various testing systems.

Characteristics

- μ s (microsecond) level hardware message timestamps to meet advanced requirements
- CAN channel DC 2500 V isolation
- CAN channel baud rate adjustable from 125 Kbps to 1 Mbps, and CAN FD supports a maximum of 8 Mbps
- The LIN bus primary and secondary nodes can be configured via software
- Supports blf and asc format data recording and offline/online playback
- Supports UDS diagnostics and CCP/XCP calibration
- Supports UDS based Bootloader flashing
- Supports LIN bus based UDS diagnostics
- Supports information security testing
- Supports secondary development interfaces for Windows and Linux systems
- Capable of loading all paid licenses for TSMaster

Specification

Channel	4 x CAN FD / 2 x LIN
PC Interface	USB 2.0
CAN Interface	DB9
Driver	Driver-free design for Windows and Linux systems, ensuring system compatibility
Buffer	Each channel supports a transmit buffer of up to 1000 CAN frames
CAN	Supports CAN 2.0 A and B protocols, compliant with the ISO 11898 1 standard, with baud rates from 125 Kbps to 1 Mbps
CAN FD	Supports CAN FD that complies with both ISO and non ISO standards, with baud rates from 125 Kbps to 8 Mbps
LIN	Supports LIN 1.3/2.0/2.1/J2602, with baud rates from 0 to 20 Kbps
Schedule Table	Supports LDF files and running schedule tables, and also allows for self configuration of schedule tables
Timestamp Accuracy	1 μ s, hardware message timestamp
Terminal Resistor	Built in 120 ohm terminal resistor, software configurable
Messages Sent per Second*	Up to 20,000 frames per second
Messages Received per Second*	Up to 20,000 frames per second
Isolation	CAN channel DC 2500 V isolation, with an electrostatic discharge level of ± 4 KV for contact discharge and ± 8 KV for air discharge
Power Supply	USB power supply, external power supply is needed for LIN communication
Power Consumption	4 W
Case Material	Metal
Dimension	Approx. 108 x 91 x 35 mm
Weight	Approx. 248 g (without packaging)/Approx. 692 g (with packaging)
Operating Temperature	-40°C ~ 70°C
Operating Humidity	10% ~ 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	TC1016P	4 channel CAN FD, 2 channel LIN to USB interface

Shipping list

- TC1016P device
- USB Cable
- DB9 female to dual male signal cable (CAN) x 2
- DB9 to 5 banana plugs LIN cable



USB Cable



DB9 adapter cable(CAN)



DB9 to 5 LIN adapter cable

Pin definition

- Left: CAN FD 1/3
- Right: CAN FD 2/4
- Bottom: LIN 1/2

