

TC1026

Multi channel CAN FD/LIN Bus Interface



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Classic Application:

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

Feature Overview

TC1026 is a multi channel CAN FD and LIN bus interface device introduced by TOSUN. It supports a maximum CAN FD bus rate of 8 Mbps and LIN support at rates from 0 to 20 Kbps. The product utilizes a high-speed USB 2.0 interface for connection to a PC, and its Windows plug-and-play design ensures system compatibility.

Combined with the powerful TSMaster software, TC1026 supports the loading of DBC, LDF, and ARXML data base files. This facilitates convenient monitoring, analysis, and simulation of CAN FD/LIN bus data. Additionally, it supports functionalities such as UDS diagnostics, ECU flashing, CCP/XCP calibration, and more.

It is suitable for secondary development with APIs available for both Windows and Linux systems, supporting various programming environments such as C++, C#, LabView, Python, among others. This versatility enables easy integration into diverse testing systems, ensuring high efficiency and usability.

Characteristics

- Automotive-grade design, supports LDF, dbc files, a2l files, blf files, asc files, and arxml files
- Adjustable CAN channel baud rate from 125Kbps to 1Mbps, CAN FD supports up to 8Mbps
- LIN bus master and slave nodes are software configurable
- Supports data logging and offline/online playback in blf and asc formats
- Supports UDS diagnostics and CCP/XCP calibration
- Supports UDS-based Flash Bootloader
- Supports UDS diagnostics over LIN bus
- Supports information security testing
- Supports secondary development interfaces for Windows and Linux systems
- Supports all paid licenses for TSMaster software

Specification

Channel	1 x CAN FD 6 x LIN
PC End	High-speed USB 2.0 interface
CAN/LIN End	DB9 interface
Drivers	Driver-free design for Windows and Linux systems, ensuring system compatibility
Buffer	Each channel supports a transmit buffer of up to 1000 CAN/CAN FD frames
CAN	Support for CAN 2.0A, B protocols, compliant with ISO11898-1 standard, with baud rate 125Kbps-1Mbps
CAN FD	Supports CAN FD that complies with both ISO and non-ISO standards, with baud rates from 125Kbps to 8Mbps
LIN	Support for LIN 1.3 and 2.0, baud rate from 0-20Kbps
Schedule Table	Supports LDF files and can run schedule tables; also allows custom schedule table configuration
Timestamp	1 μ s hardware message timestamp
Termination Resistor	Built-in 120-ohm termination resistor, software configurable
Messages Sent per Second*	Maximum 20,000 frames/second
Messages Received per Second*	Maximum 20,000 frames/second
Isolation	CAN channel isolated at DC 2500V, with ESD protection of \pm 4KV (contact discharge) and \pm 8KV (air discharge)
Power Supply	USB powered; external power supply required for LIN communication
Casing Material	Aluminum
Dimensions	100 x 80 x 30mm
Weight	Approximately 252g (without packaging) / approximately 699g (with packaging)
Operating Temperature	-40°C to 80°C
Operating Humidity	10% to 90% relative humidity (non-condensing)
Operating Environment	Keep away from corrosive gases

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

Ordering information

Product Name	Model Number	Function Description
Network Device	TC1026P	1 channel CAN FD, 6 channel LIN

Shipping list

- TC1026 device
- USB Cable*1
- DB9 female connector to 9 banana plugs LIN bus cable*2

Pin definition

Left: LIN1/2/3 Middle: LIN4/5/6 Right: CANFD

