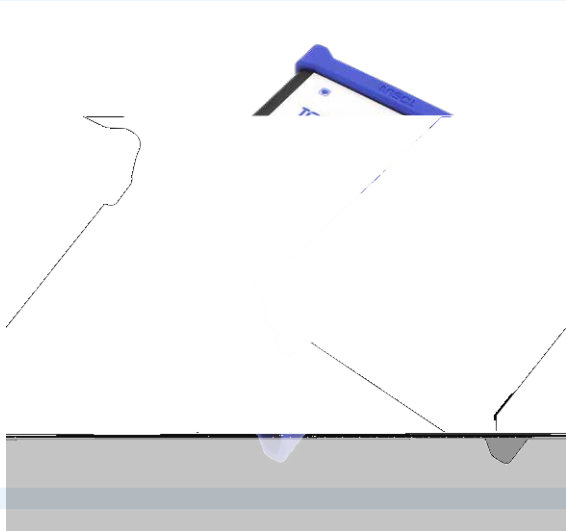




Scan the code to follow



Classic Application:

- ECU sampling point testing
- ECU bus-off behavior testing
- Frame disturbance and frame trigger output
- Bit tolerance testing

Feature Overview

The TH7012 is a versatile device for CAN/CAN FD bus disturbance, LIN bus disturbance, and ISO 16845 testing. It connects to a PC via an RJ45 Ethernet interface or USB interface, and the driver-free design for Windows ensures broad system compatibility. TH7012 supports three working modes: CAN/CAN FD disturbance mode, LIN disturbance mode, and ISO 16845 testing mode. The following describes each mode in detail.

LIN Disturbance Mode:

When configured with the PC software in LIN disturbance mode, TH7012 supports:

- Interfering with specific bits of a LIN frame
- Flipping specific bits of a LIN frame
- disturbance count statistics
- Sampling point testing
- Sending incomplete frame headers based on user configuration, where the header can include:
 - Sync break only
 - Sync break + sync field
 - Sync break + sync field + protected ID field
- Configurable data segments and inter-byte intervals in frame responses
- $\pm 14\%$ offset in transmit baud rate
- Bit-time measurement
- Trigger output for LIN frame disturbance



Characteristics

- Disturbance of specific bits in LIN frames
 - LIN disturbance count statistics
 - Full-bit disturbance, dominant/recessive bit inversion in LIN frames
 - Configurable LIN frame disturbance pulse width
 - CAN/CAN FD/LIN sampling point testing
 - Configurable LIN frame headers
 - $\pm 14\%$ LIN transmit baud rate offset
 - Measurement of LIN frame time slots
 - Trigger output for LIN disturbance
 - Disturbance of specific bits in CAN/CAN FD frames
 - Custom CAN/CAN FD disturbance sequences or message sequences (up to 65,536 points)
 - CAN/CAN FD disturbance count statistics
 - Full-bit disturbance, dominant/recessive bit inversion in CAN/CAN FD frames
 - CAN/CAN FD disturbance sequence configuration and transmission
- Configurable CAN/CAN FD frame disturbance pulse width
- ISO 16845 verification of IUT response to special identifiers and frame lengths
- ISO 16845 verification of IUT handling of CAN standard frames
- ISO 16845 verification of IUT handling of CAN extended frames
- ISO 16845 verification of IUT handling of CAN FD frames
- ISO 16845 verification of IUT handling of CAN

Specification

CAN/CAN FD Channel	1 x LIN / 1 x CAN/CAN FD / 1 x UART
PC Interface	USB 2.0 / RJ45 Ethernet
Driver	Driver-free for Windows
Power Supply	USB-powered or external DC input (9 to 32V)
Power Consumption	3 W
Case Material	Metal
Dimension	Approx. 191 x 118 x 38 mm
Weight	Net weight: approx. 420 g ; Gross weight: approx. 775 g
Operating Temperature	-40°C ~ 80°C
Operating Humidity	10% ~ 90% RH (non-condensing)
Operating Environment	Keep away from corrosive gases

Ordering information

Product Name	Model Number	Function Description
Network Device	TH7012	CAN FD/LIN Disturbance interface

Shipping list

- TH7012 device
- USB Cable
- 12 v 2 A power supply
- Category 6 Gigabit Ethernet cable



USB Cable

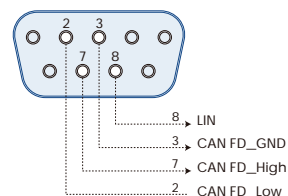


12 V 2 A power adapter



Cat 6 Gigabit Ethernet cable

Pin definition



I/O Pin	PIN	Definition	PIN	Definition
	PIN 1	TXD/16845-CAN-TXD	PIN 2	AIAO 0
	PIN 3	RXD/16845-CAN-RXD	PIN 4	AIAO 1
	PIN 5	GND	PIN 6	AIAO 2
	PIN 7	DI1/16845-UART_RX	PIN 8	AIAO 3
	PIN 9	DI2	PIN 10	AIAO 4
	PIN 11	DI3	PIN 12	AIAO 5
	PIN 13	GND	PIN 14	GND
	PIN 15	DO1/16845-UART_TX	PIN 16	GND
	PIN 17	DO1	PIN 18	VCC_5V
	PIN 19	DO2	PIN 20	VCC_5V