

mSaint3-FD Dual CAN-FD, LIN and SD Card



The Xylanta SAINT3 family are the latest generation of products derived from the highly successful SAINT serial communications analysis tools originally developed by Delphi/Aptiv. These new products enhance the SAINT2 design by adding support for CAN-FD in addition to CAN 2.0B, whilst maintaining a high level of software and hardware compatibility with the older product.

The mSAINT3-FD is a flexible, costeffective multi-protocol bus monitoring and logging tool designed with the needs of software developers and system testers in mind. USB based and highly portable, it suits a wide range of situations. The various interfaces can act as silent, packet monitors or have the ability to actively inject packets into the data streams. In addition, it is capable of performing standalone reflash and emulation.

It is supported by the included SAINT Bus Engine (SBE) and Bus Monitor. In addition an API is available allowing custom SBE plugins to be developed.

Key Features

Flexible Multi-Bus Tool

- Supports multiple simultaneously active buses
- All interfaces support non-intrusive monitor only mode
- Consistent time-stamping across all interfaces
- Standalone reflash and emulation capable
- Extensible via plugin module option
- Drop in replacement for the SAINT2

CAN Bus Features

- Two independent ISO CAN-FD controllers
- Software selectable between dual wire and single wire transceivers
- Detects and reports a wide range of message/bus errors

Other Interfaces

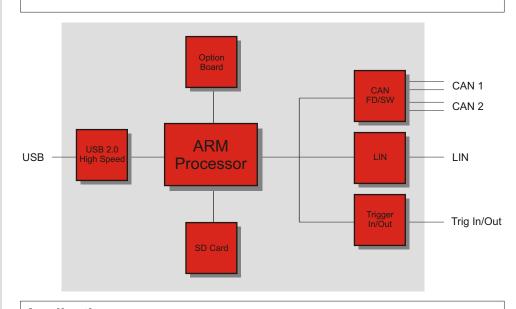
• LIN, Trigger I/O

Host Connection

• USB 2.0 High Speed Device and RS-232

Application Software

- Integrates with the SAINT Bus Engine (SBE)
- SBE provides an open API for software plugins
- Includes Bus Monitor plugin
- Software supports Windows 7, 10 and 11



Applications

- Network diagnostics
- Logging
- Software download and firmware updates
- Gateway between buses
- Node simulation
- Automation of message testing
- And many others...



Product Specification

General Features

- Onboard 32-bit ARM processor
- High Speed USB 2.0 interface (480mbps)
- 16-bit timestamp giving 1millisecond resolution
- SD card for standalone operation (emulation, reflash)
- Supports add-in option board for functionality expansion
- Field upgradeable firmware design (flash firmware)
- SAINT2 compatible 25 way female D-Type connector for interface wiring
- Powered via D-Type for easy integration with external system

CAN Bus Support

- Two independent ISO CAN-FD controllers with hardware filters
- Complies with CAN specifications 2.0 A/B and FD
- Selectable between FD (MCP2544FD) and SW (MC33897) transceivers
- Support for ISO and non-ISO CAN-FD messaging
- Single wire interface supports high voltage wakeup and high speed mode
- CAN bit rates from 25 kbit/s up to transceiver limit with non-standard speeds supported
- Detects and reports a wide range of message/bus errors
- CAN/CAN-FD termination resistors software controllable

LIN Bus Support

- One LIN channel (MCP2003 transceiver)
- Full support for LIN 1.x/2.x and J2602
- Software selectable as master or slave
- Flexible baud rate selection

Trigger Support

• A single SAINT2 compatible trigger in/out pair

Other

- Ships with USB cable and 25-way breakout board
- Requires external power (10-36V DC, 250mA typ @ 12V)
- Operating temperature -10C to +80C, 85% RH (non condensing)
- Compact, robust metal case (125mm x 83mm x 30mm)
- Weight 250g
- FCC and CE compliant
- One year limited warranty

Host Software Support

General Features

• Fully compatible with existing SAINT2 applications

CAN SAINT Bus Engine (SBE)

- Allow detection of all SAINT compatible devices
- Provides an interface for selection and connection

Bus Monitor Plugin

- Provides a scrolling message monitor
- Enhanced to support CAN-FD messages
- · Supports message filtering, scripting, emulation and logging

J2534

• Enhanced J2534 interface with CAN-FD support

SDK

Allows development of SBE plugins

Othe

• Requires Windows 7, 10 or 11

Order Codes

S3M-001 mSAINT3-FD with breakout board and 1m USB cable S3M-002 mSAINT3-FD without accessories



