

# XORAYA Minilogger Z7



The XORAYA Minilogger Z7, based on the Xilinx Zynq®-7000 All Programmable SoC, is an automotive data logger capable of taking data records of several automotive bus systems simultaneously. This is currently implemented for LS-CAN, HS-CAN, CAN FD, FlexRay, RS232, LIN, MOST25, MOST150, Ethernet, BroadR-Reach® (OABR), PSI5 and analog signals; support of further bus systems is possible. In addition, Harman-Becker's GNLog protocol and the DLT protocol can be recorded via Ethernet and RS232. The data is logged based on a precise, central timestamp with a resolution of 100 ns and either saved on the internal SSD or transferred to an external computer system via Ethernet interface. Optionally, the log data can also be stored on the additional device *XORAYA external storage unit*.

A built-in supercapacitor unit is able to bridge power fluctuations and to shut the data logger down safely in case of power failures.

The operational control elements are located on the front of the XORAYA Minilogger Z7: connectors, buttons, SD card slot (optional) and several LEDs as visual indicators of logger/bus activity and operation modes. A 4-port Gigabit Ethernet switch is used for configuration and to download the log traces with a speed up to 800 Mbit/s.

The recording interfaces are located on the back of the data logger. All interfaces are implemented as plug-in cards, allowing a flexible configuration according to customer requirements. The pictures show a configuration example.

## Specifications

- Central 100 ns timestamp for all interfaces
- Supercap unit, able to bridge 5 s guaranteed (at 12 V)
- Battery-buffered real-time clock
- Download 800 Mbit/s
- Dimensions (H x W x D) 55 x 165 x 165 mm
- Temperature range -40 °C to +60 °C
- External operating voltage 8 V to 32 V
- Current consumption (standard configuration) max. 1 A (at 12 V)
- Current consumption (standby) max. 0.9 mA (at 12 V)
- Automatic sleep mode wake up by CAN, Flexray, RS232, LIN, MOST, wakeline or trigger

## Record Modes

- On internal SSD or on XORAYA external storage unit
- Via Ethernet to PC

## Software

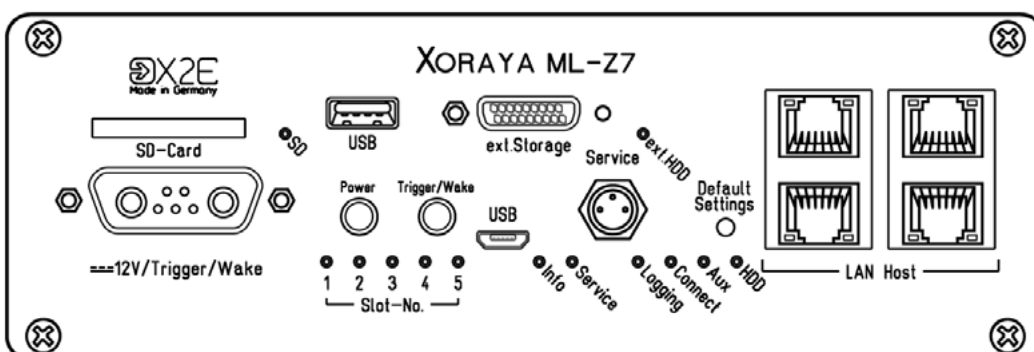
- Logger OS: Embedded Linux
- XORAYASuite and XORAYASDK for Microsoft Windows

## Delivery Contents

- XORAYA Minilogger Z7
- Power supply cable
- Software
- Manual
- XORAYA external storage unit (optional)
- Cable set (optional)
- Impact protection (optional)

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Front view (configuration example)

# XORAYA Minilogger Z7



Back view (configuration example)

### Available Extensions

#### CAN Interface

- LS-CAN: 1 channel
- HS-CAN: 1, 2 or 4 channels per slot
- CAN FD: 4 or 6 channels per slot

#### FlexRay Interface

- 1 single or 1 dual channel

#### RS232 Interface

- 3, 5 or 8 channels
- GPS via RS232

#### LIN Interface

- 4 or 7 channels

#### MOST25/150 Interface

- Status and control messages
- MOST data packets
- MOST Ethernet packets
- Streaming data (optional)

#### Ethernet Logging Interface

- Gigabit Ethernet

#### OABR Interface

- 12 channels
- Usable as a media converter to standard Ethernet

#### PSI5 Interface

- 4 channels

#### Analog Interface

- 6 channels
- 100 kHz, 12 bit

#### USB Host and Device Interface

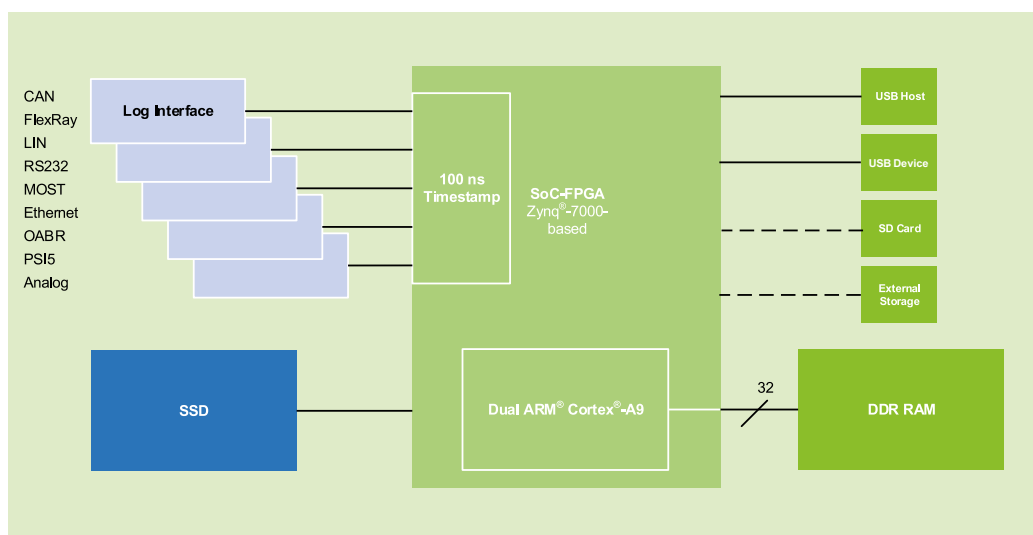
- Alternative to the Ethernet interface

#### Wi-Fi Module

- IEEE 802.11a/b/g/n

#### GSM/UMTS Module

- Sends status reports



Block diagram



Pictures may differ from actual device.



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