FL3X System-M

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BENEFITS

- Intel® Core™ i3 CPU, 8 GB RAM and 128 GB NVMe SSD
- Maximum performance and variability
- CAN-HS/FD (SIC), FlexRay, 10BASE-T1S*1, 100BASE-T1, 1000BASE-T1, 1000BASE-T, 2,5/5/10GBASE-T, LIN and SENT supported
- Up to 2 FL3X Interface-PCIe or 2 FL3X Interface-PMC with up to 10 FL3X Tiny Slots*2 (also possible in combination)
- Up to 11 SFP ports
- One 1000BASE-T connectors for configuration and measuring
- Fully supported by FL3X Config
  - remaining bus simulation
  - gateway
  - analyzing / measurement
  - logging
- USB ports for mass storage, cameras or other equipment*3
- Integrated WiFi module
- Temperature range -40°C to +70°C
- Remote power on/off

*1 coming soon

*2 currently available configurations can be found in the data sheets of the FL3X interface products or contact sales

*3 STAR certified accessories only

THE FL3X SYSTEM FAMILY

The FL3X System family is a universal tool for mastering all common challenges in dealing with bus systems. Whether recording, routing, simulation or manipulation of bus data, the devices of the FL3X System family are configured and ready for use within a very short time. This means that use cases such as remaining bus simulation, gateway or logging can be implemented without any problems both in the vehicle and in the laboratory. The devices of the FL3X System series are based on a Linux real-time operating system and are characterized in particular by the sovereign handling of very large amounts of data in the multi-gigabit range for the use cases mentioned upon. The devices of the FL3X System family are configured with the intuitive FL3X Config development environment, which can be used without programming knowledge.

THE FL3X SYSTEM-M - THE VARIABLE BUS CONTROL UNIT

The FL3X System-M is the mid-range variant of the FL3X System family and is characterized by high performance, optimized for the multi-gigabit range and high flexibility with regard to the equipment with bus systems. Due to the flexible expandability and the modular platform, the FL3X System-M can be perfectly adapted to your needs. The freely configurable assembly, enables a large selection of channel configurations with e.g. CAN, FlexRay and Automotive Ethernet. The external interfaces such as 1000BASE-T, USB and WiFi allow you to transfer data and connect accessories in a variety of ways. Even large data storage devices can be connected without any problems in order to log high data streams. Thus, gateways with high data throughputs, remaining bus simulations with a large number of ECUs or the logging of several data streams, can be implemented with the FL3X System-M without any problems.

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FL3X System-M

TECHNICAL FEATURES OF ALL VARIANTS

- Intel® Core™ i3 CPU
- 8 GByte RAM
- 128 GByte NVMe SSD
- 1 Gbit/s Ethernet configuration and measurement interface via RJ45
- USB 3.2 ports for mass storage, cameras and other components*1
- Wide operating temperature range from -40°C up to +70°C
- WiFi connector

*1 STAR certified accessories only

SOFTWARE SUPPORT

- FL3X Config 1.2 (or later)
- FL3X Config SDK 1.5 (or later)
- FL3X Config mobile 1.1 (or later)

SCOPE OF DELIVERY

- FL3X System-M
- Powercable (DC)

Product	Description	Order number
FL3X System-M	The FL3X System-M is a multifunctional autonomous bus system platform with flexible channel configuration	3-V1050A01

ORDER INFORMATION ACCESSORIES (PCIE SLOT 1 + 2)

Product	Description	Order number
FL3X Interface-PMC	The FL3X Interface-PMC is a PMC bus interface card.	3-V0550A01
PMC-to-PCIe-Adapter	Adapter for using the FL3X Interface-PMC with PCIe slots	10016484
FL3X Tiny2 2*FlexRay	Pluggable transceiver module with two FlexRay transceivers (TJA1080ATS, NXP)	3-V0550M01
FL3X Tiny2 2*CAN-FD	Pluggable transceiver module with two CAN-FD/HS transceivers (TJA1044GT, NXP)	3-V0550H01
Many more Physical layer module available		please contact STAR
FL3X Interface-PCIe	The FL3X Interface-PCIe is a bus interface card.	3-V0952A01
FL3X Tiny3 2*FlexRay	FL3X Tiny3 physical layer module for two FlexRay channels	3-00880A01
FL3X Tiny3 2*CAN-FD	FL3X Tiny3 Physical layer module for two CAN-HS/FD channels	3-00881E01
Many more Physical layer module available		please contact STAR
PCIe SFP Quad*	PCIe card for up to four SFP modules. Only for Slot 1 and 2 . (LRE-C9714HF-4SFP) Operating: 0°C to +55°C	10022269

HARDWARE

Electrical characteristics

Supply voltage	9-48 VDC
Supply current	up to 4 A (@ 12 V)
Boot time	aprox 60 sec*

*up to 200ms possible with hardware extensions

Physical characteristics

Ethernet	3 x RJ45 - 8 pin
Weight approx.	ca. 5 kg
Dimensions (L x W x H)	227 x 261 x 128 mm

Environmental conditions

Temperature operating:	-40°C to +70°C (depends on accessories)
Temperature storage:	-40°C to +85°C
IP-Code	IP20
Relative humidity	Operating / Storage: 0% to 95% RH, condensing

ORDER INFORMATION ACCESSORIES (MINI PCIE SLOT 4 +

Product	Description	Order number
Mini PCIe SFP Single Slot4/5*	mini PCIe card for one SFP module for Slot 4 and 5. (DeLOCK 95267) Operating: 0°C to +55°C	3-01059A01

Product	Description	Order number
CMI 10G Dual Port 10GBASE-T	CMI module with two 10GBASE-T RJ45 connectors for Slot 6. (CMI-10GLAN03)	3-V1059C01
CMI 8xDI 8xDO	CMI module with 8 digital inputs and 8 digital outputs for Slot 6. (CMI DIO02/UB1018)	3-V1059D01

Product	Description	Order number
Mini PCIe SFP Single Slot 7*	mini PCIe card for one SFP module for Slot 7. (DeLOCK 95267) Operating: 0°C to 55°C	3-01059H01
CMI 8xDI 8xDO	CMI module with 8 digital inputs and 8 digital outputs for Slot 7. (CMI DIO02/UB1018)	3-V1059D01

Product	Description	Order number
FL3X Config Standard Runtime	Needed for RBS with CAN-FD, FlexRay or Automotive Ethernet	please contact STAR
FL3X Config Extended Runtime	Needed for Gateway with CAN-FD, FlexRay or Automotive Ethernet	please contact STAR
FL3X SFP 1000BASE-T1	SFP module for 100/1000BASE-T1 connection	3-01100A01
FL3X System-M 230V Power Adapter DE	AC-DC power supply unit 230V DE	3-V01059E01
BusCable 500 8RJ45 8RJ45 ETH	RJ45 cable	3-00344D01
PowerCable 200 3SKBf 1BANm2	Power cable DC incl. Screw terminal block	3-00343R01
WiFi Antenne - FL3X System-M	WiFi antenna	10022913

* Separate FL3X SFP 1000BASE-T1 Module on each SFP-Port necessery

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