

# FL3X System-XS

# www.flex-product.com

### BENEFITS

- ARM Cortex-A72 64 bit Quad Core CPU with 1GHz, 1GByte RAM and 8GByte eMMC
- Maximum performance and variability at an optimal price-performance ratio
- CAN-HS, CAN-FD, LIN, SENT and 100BASE-T1 supported
- Fully supported by FL3X Config - remaining bus simulation
- gateway
- analyzing / measurement
- logging
- 25pin D-sub connector for automotive bus systems
- Wake-up/sleep mode support
- 1000BASE-T connector for configuration and measuring
- USB port for mass storage, cameras or other equipment\*
- Integrated WiFi module and optional LTE module
- Temperature range -20°C to +60°C
- \* STAR certified accessories only

### USE CASES

- gateways between different automotive bus systems
- bus interfaces
- remaining bus simulation
- signal manipulation
- data logging
- rapid prototyping

### THE FL3X SYSTEM FAMILY

ETH

AN, LIN, CANZ LINZ

em-XS2

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 up to multi-gigabit range for the use cases mentioned above. 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-XS

The FL3X System-XS is the entry-level version of the FL3X System family and is characterized by an extremely good price/performance ratio and very compact dimensions. In the basic configuration, the FL3X System-XS is equipped with a CAN-HS or CAN-FD channel as well as a LIN and SENT channel. It is therefore very well suited as a bus interface, mini logger and for remaining bus simulations. With the XS<sup>2</sup> variant, you have two CAN, two LIN and two SENT channels available, which means that it is also very well suited as a gateway or bus manipulator for these bus systems. The Automotive Ethernet variant XS<sup>3</sup> also offers you a 100BASE-T1 channel.

### STAR COOPERATION GmbH

# TECHNICAL FEATURES OF ALL VARIANTS

- ARM Cortex-A72 64 bit Quad Core CPU with 1GHz
- 1 GByte DDR4 RAM
- 8 GByte eMMC flash
- Wakeup / sleep mode support für CAN-HS and CAN-FD
- 1 Gbit/s Ethernet configuration and measurement interface via RJ45
- 25pin D-sub connector for power, bus and DO/ADIO
- USB 2.0 port for mass storage, cameras and other components
- 4 digital outputs (DO) and 2 analog inputs/outputs (ADIO)
- Integrated WiFi module with 2.4 GHz, 5.0 GHz IEEE 802.11 b/g/n/ac support
- Optional LTE Cat 4 module<sup>\*</sup>, supports LTE-TDD, LTE-FDD, HSPA+, GSM, GPRS and EDGe with datarates up to 150 Mbit/s download and 50 Mbit/s upload rate

# VARIANTS

FL3X System-XS	FL3X System-XS <sup>2</sup>	FL3X System-XS <sup>3</sup>
1 x CAN-FD	2 x CAN-FD	2 x CAN-FD
1 x LIN	2 x LIN	2 x LIN
1 x SENT	2 x SENT	2 x SENT
		1 x 100BASE-T1

# SOFTWARE SUPPORT

- FL3X Config 1.0 (or later)
- FL3X Config SDK (coming soon)

# SCOPE OF DELIVERY

• FL3X System-XS

# HARDWARE

Electrical characteristics		
Supply voltage	8-36 VDC	
Supply current (Sleep Mode)	<20 mA (@ 12 V)	
Supply current (Operation Mode)	typ. <350mA, max. depends on DO/ADIO usage	
Boot time:	aprox. 35 sec	
Physical characteristics		
Ethernet	RJ45 - 8 pin	
Bus / Power / ADIO	D-Sub male – 25 pin	
Weight approx.	220 g (plus LTE module)	
Dimensions (L x W x H)	110 x 105 x 35 mm	
Environmental conditions		
-		

Temperature	Operating / Storage: -20°C to +60°C	
IP-Code	IP20	
Relative humidity	Operating / Storage: 0% to 90% RH, condensing	

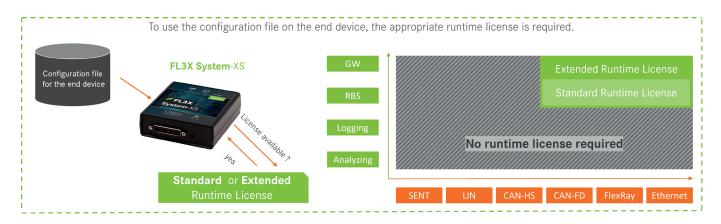
### ORDER INFORMATION FL3X SYSTEM-XS

Product	Description	Order number
FL3X System-XS	The FL3X System-XS is a multifunctional autonomous bus system platform with 1 CAN-FD, 1 LIN and 1 SENT channel	3-01040A01
FL3X System-XS <sup>2</sup>	The FL3X System-XS <sup>2</sup> is a multifunctional autonomous bus system platform with 2 CAN-FD, 2 LIN and 2 SENT channel	3-01040C01
FL3X System-XS <sup>3</sup>	The FL3X System-XS <sup>3</sup> is a multifunctional autonomous bus system platform with 2 CAN-FD, 2 LIN, 2 SENT and 1 100BASE-T1 channel	coming soon

# ORDER INFORMATION ACCESSORIES

Product		
LTE Module	LTE module to communicate via cell connection	10022372
FL3X Config	Needed for RBS with CAN-FD,	please contact
Standard Runtime	FlexRay or Automotive Ethernet	STAR COOPERATION
FL3X Config	Needed for Gateway with CAN-FD,	please contact
Extended Runtime	FlexRay or Automotive Ethernet	STAR COOPERATION

# RUNTIME LICENSE OVERVIEW



STAR COOPERATION is certified according to the standards DIN EN ISO 50001:2011, ISO 9001:2015 and ISO 14001:2015. All information is for product information purposes only and does not constitute a claim for warranty regarding the correctness or completeness of the contents. Subject to change without notice.