FlexDevice–L

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BENEFITS

- ARM Cortex A9 dual core (800 MHz) with 1 GByte DDR3 RAM
- 10 bus channels (via pluggable transceivers)
- Up to 7 Ethernet channels
- Up to 10 CAN channels
- Up to 8 FlexRay channels (4 channel A and 4 channel B)
- Wi-Fi and Bluetooth extension available
- Wake-up/sleep mode support
- Startup <200ms possible
- IP67
- Temperature range –40°C to +85°C

FLEXDEVICE-L — THE MULTIFUNCTIONAL BUS CONTROL UNIT

FlexDevice–L is the flagship of the FlexDevice product range, which is used and recognized by many car manufacturers and component suppliers in their automotive electronics development. The FlexDevice family provides manifold solutions for

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

The multifunctional bus control unit FlexDevice-L supports the current and upcoming bus systems and has numerous variable interfaces, thus covering most of the application fields where bus interfaces are required. This device is appreciated by embedded software developers since it facilitates the implementation and testing of even very tricky gateway applications and prototyping functionalities.

Together with the comprehensive FlexDevice–L software family, the developers are enabled to set up and control their bus systems and ECU environment in a smart way.

FlexDevice–L

TECHNICAL FEATURES
- Altera Cyclone V SOC (integrated ARM Cortex A9 Dual Core CPU)
- 1 GByte DDR3 RAM
- 5 bus connectors that can be allocated flexibly via pluggable transceivers
- 2 bus interfaces are available on each bus connector
- Up to 4 FlexRay controllers (4 Bosch E-Ray Cores)
- Up to 8 FlexRay channels (4 channel A and 4 channel B) available on the bus connectors
- In any case, 2 FlexRay cores can be connected internally (self-synchronization)
- Up to 10 CAN-HS bus interfaces
- Up to 10 CAN-FD bus interfaces
- Wake-up/sleep support (wake-up possible via FlexRay or CAN)
- Up to 7 100 Mbit/s Ethernet bus interfaces
- Up to 7 BroadR-Reach bus interfaces
- 1 Gbit/s Ethernet configuration interface
- Integrated 1 Gbit/s Ethernet switch
- Micro SD card slot
- 1 USB 2.0 interface
- 4 digital inputs or outputs (DIO)
- 5 analog or digital inputs (ADI)

SOFTWARE SUPPORT
- The device is supported by FlexConfig RBS starting with version 4.0.

HARDWARE
Electrical Characteristics

Supply voltage	8-42 VDC
Supply current (Sleep Mode)	<5 mA (@ 12 V)
Supply current (Operation Mode)	<600 mA (@ 12 V)

Environmental Conditions

Temperature	Operating/Storage: -40°C to +85°C
IP-Code	IP67
Relative Humidity	Operating/Storage: 0 % to 90 % rH, condensing

SCOPE OF DELIVERY
- FlexDevice–L
- Documentation

ORDER INFORMATION FLEXDEVICE–L

Product	Description	Order number
FlexDevice-L	The FlexDevice-L is a multifunctional autonomous bus system platform.	3-V087-0A01

ORDER INFORMATION ACCESSORY PARTS

Product	Description	Order number
FlexTiny3 FlexRay	Pluggable transceiver module with 2 FlexRay transceivers	3-0088-0A01
FlexTiny3 CAN-FD/HS	Pluggable transceiver module with 2 CAN-FD/HS transceivers	3-0088-1E01
FlexTiny3 Ethernet	Pluggable transceiver module with an Ethernet switch	3-0088-2B01
FlexTiny3 BroadR-Reach	Pluggable transceiver module with 2 BroadR-Reach transceivers	3-0088-2C01
CAN/FlexRay bus cable (1 m)	Bus cable (Binder connector to D-Sub)	3-00342J01
CAN/FlexRay bus cable (2 m)	Bus cable (Binder connector to D-Sub)	3-00341J02
CAN/FlexRay Y-bus cable (2 m)	Bus cable (1*Binder connector to 2*D-Sub)	3-00341L01
Ethernet cable (2 m)	Bus cable (Binder connector to RJ-45)	3-00341O02
Power cable (2 m)	Power cable (Binder to 2*banana)	3-00341D02
DIO cable for digital IN/OUT or ADI cable for analog IN (2 m)	IO cable (Binder connector to D-Sub)	3-00341F02
FlexConfig RBS runtime	Runtime license for RBS execution. Required once per FlexDevice-M/-L.	3-00700J01
FlexConfig Gateway runtime	Runtime license for gateway execution. Required once per FlexDevice-M/-L. Requires "FlexConfig RBS runtime".	3-00701E01
FlexConfig Control runtime	Runtime license for signal manipulation. Required once per FlexDevice-M/-L. Requires "FlexConfig RBS runtime".	3-00701G01
FlexConfig Analyzing runtime	Runtime license for analyzing execution. Required once per FlexDevice-M/-L	3-00701J01-01