



FlexDevice-M

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BENEFITS

- PowerPC MPC5567 (120 MHz) with 2 MB SRAM
- 5 bus channels (4 via pluggable transceivers)
- Up to 5 CAN channels
- Up to 4 FR channels
- Up to 2 LIN channels
- Wakeup/Sleep mode support
- Startup <100 ms
- Complete development environment included
- PC connection via Ethernet
- IP67
- Temperature range -40°C to +85°C

FLEXDEVICE-M – OVERVIEW

FlexDevice-M is a robust electronic platform which is designed for the use in the automotive environment. Due to the fact that the FlexDevice-M supports many bus systems and has variable interfaces, it could be used in different application fields. This device makes it very easy for embedded software developers to realize gateway applications and prototyping functionality.

FlexDevice-M

TECHNICAL FEATURES

CPU

- Freescale μ C:
 - MPC5567
 - 32 Bit, 120 MHz
- Memory
 - 2 MB Flash
 - 80 kB RAM
 - 2 MB SRAM

Host interfaces

- 1 Ethernet
- PTP (Precision time protocol IEE1588) – available on request
- 1 USB slave
- 2 USB host

Bus interfaces

- 4 FlexRay (2 MFR4310, 2 E-Ray)
- 5 CAN
- 2 LIN or RS232
- 1 SPI
- 4 FlexTiny slots
- Available FlexTinys:
 - FlexRay TJA 1080 A
 - CAN HS TJA 1041
 - CAN LS TJA1054
 - LIN TH 8082
 - RS232 MAX 3227
 - K-Line L9637

I/O interfaces

- 4 Digital I/O
- 5 A/D inputs
- All interfaces are short-circuit proof
- Debugger can access the processor from the outside via JTAG programming interface
- The full NEXUS interface is still accessible in the device

HARDWARE

Electrical Characteristics

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

Table 1: Electrical characteristics of the FlexDevice-M

Environmental Conditions

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

Table 2: Environmental conditions for the FlexDevice-M

SOFTWARE SUPPORT

- The device is supported by FlexConfig RBS 4.0.
- The device can be programmed with the provided development environment

SCOPE OF DELIVERY:

- FlexDevice-M
- Documentation
- Complete development environment (IDE, Compiler, Examples)
- Power cable with banana connectors

ORDER INFORMATION FLEXDEVICE-M

Product	Description	Ordering number
FlexDevice-M Binder	The FlexDevice-M Binder is a multifunctional autonomous bus system platform with binder connectors	3-V0280N02
FlexDevice-M Lemo	The FlexDevice-M Lemo is a multifunctional autonomous bus system platform with Lemo connectors	3-V0280M01

ORDER INFORMATION ACCESSORY PARTS

Product	Ordering number
FlexTiny FlexRay TJA1080	3-00150D02
FlexTiny CAN-HS TJA1040	3-00150H01
FlexTiny CAN-LS TJA1054	3-00150L01
FlexTiny LIN TH8082	3-00150G01
FlexTiny RS232 MAX3227	3-00150F01
FlexTiny K-Line L9637	3-00150U01
CAN/FlexRay bus cable 1 m	3-00342J01
CAN/FlexRay bus cable 2 m	3-00341J02
Y-cable for CAN 5 on Con 4	3-00341L01
Ethernet cable	3-00341O02
Power cable with banana connectors 2 m	3-00341D02
Power supply 110/220 V	3-00400B03
2-pin Binder connector for custom power cable	please ask
DIO / wakeup cable for CAN wakeup and digital IN/OUT	3-00342G01
DIO cable for digital IN/OUT or AIO cable for analog IN	3-00341F02