



FlexDevel

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BENEFITS

- Complete solution for beginners in automotive bus systems
- FlexRay / CAN / LIN / Ethernet interfaces on the micro controller platform available
- Functional C-code examples for all interfaces included
- Development toolchain (IDE, Compiler, Debugger) included
- C-code library for all interfaces included
- FlexConfig Developer Demo to configure the FlexRay bus system included

FLEXDEVEL - OVERVIEW

The FlexDevel is a low cost solution for beginners in automotive bus systems. It consists of a universal micro controller development platform with FlexRay, CAN, LIN and Ethernet interfaces. C-code examples and binaries for all interfaces are included, so all the interfaces can be used without programming C-code. This is an ideal base for own C-code projects and allows a step by step introduction to get in touch with programming and understanding automotive bus systems.

FlexDevel

TECHNICAL DATA

- Freescale PowerPC with integrated FlexRay Controller (MPC5567)
- 2 FlexRay channels (channel A and B)
- 2 CAN HS bus interfaces
- 2 H-bridges for control of actuators
- Switchable termination resistors (via DIP switches) for CAN and FlexRay
- Wake-up/sleep mode support (wake-up possible via CAN/FlexRay, push button or permanent on)
- 1 LIN
- 1 RS232
- 2 SPI
- 100 Mbit/s Ethernet
- 8 digital inputs, 8 digital outputs (also usable as PWM)
- 8 analog inputs
- 8 PWM outputs
- 8 individual usable LEDs
- 2 individual usable push buttons
- 1 slot for a LCD module

HARDWARE

Physical characteristics

1 x Power supply	round DC jack 2pol.
1 x Power supply	Screw block 2pol.
1 x Ethernet	RJ45 8pol.
1 x RS232	Sub-D 9pol.
2 x FlexRay	2 x 5 pin 2.54mm 10pol.
2 x CAN	2 x 5 pin 2.54mm 10pol.
1 x LIN	2 x 5 pin 2.54mm 10pol.
2 x SPI	2 x 5 pin 2.54mm 10pol.
1 x Analog in	2 x 5 pin 2.54mm 10pol.
1 x Digital out	2 x 5 pin 2.54mm 10pol.
1 x Digital in	2 x 5 pin 2.54mm 10pol.
1 x PWM out	2 x 5 pin 2.54mm 10pol.
Weight approx.	150 g
Dimensions approx. L x W x H	177 x 110 x 20 mm ³

Electrical characteristics

Supply voltage			
	Min.	Typ.	Max.
Operating	9 V	12 V	16 V
Absolute maximum	- 18	–	18 V
Supply current in operating mode	150 mA (@ 12V)		

Environmental conditions

Temperature	Operation: 0°C to 55°C Storage: 0°C to 70 °C
Relative humidity	0% to 90% RH, non-condensing

FLEXDEVEL KIT

The FlexDevel Kit is the ideal entry package for the FlexRay bus system. In addition to two versatile FlexDevel communication nodes that can be used to build up a FlexRay network, it includes all the programming software and hardware. With the FlexConfig Developer demo software, which is also included, you can use this system to build up your own FlexRay communication system without additional hardware or software.

Scope of delivery

- 2 FlexDevel
- FlexRay network configuration software FlexConfig Developer (demo version)
- USB PowerPC Nexus Multilink programming adapter, including flash software and debugger (limited to 64k)
- two FlexRay connecting cables
- Documentation in PDF format

ORDER INFORMATION FLEXDEVEL

Product	Description	Order number
FlexDevel	The FlexDevel is an evaluation board for the FlexRay bus system.	3-V0420B01
FlexDevel Kit	FlexDevel Kit includes the following components: <ul style="list-style-type: none">• 2 FlexDevel• FlexRay network configuration software FlexConfig Developer (demo version)• USB PowerPC Nexus Multilink programming adapter, including flash software and debugger (limited to 64k)• two FlexRay connecting cables• Documentation in PDF format	3-V0420K01