# STAR COOPERATION®

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# **FlexDevel**

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#### **BENEFITS**

- Complete solution for beginners in automotive bus systems
- FlexRay / CAN / LIN / Ethernet interfaces on the mirco 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 binarys for all interfaces are included, so all the interfaces can be used without programing C-code. This is an ideal base for own C-code projects and allows a step by step introduction to get in touch with programing 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
- Wakeup/Sleep-support (wakeup possible via CAN/FlexRay, push button or permanent on)
- 1 LIN
- 1 RS232
- 2 SPI
- 100 MB 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

#### PHYSICAL CHARACTERISTICS

round DC jack 2pol.
Screw block 2pol.
RJ45 8pol.
Sub-D 9pol.
2 x 5 pin 2,54mm 10pol.
150 g
177 x 110 x 20 mm3

## **ELECTRICAL CHARACTERISTICS**

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

#### **ENVIRONMENTAL CONDITIONS**

Environmental conditions	
Temperature	Operating / Non-operating: 0 - 55°C Storage: 0 - 70 °C
Relative Humidity	0% to 90% r.H., 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 as described above
- 1 FlexRay FlexConfig Developer demo configuration software package
- 1 USB PowerPC Nexus Multilink programming adapter, including flash software and debugger (limited to 64k)
- 2 FlexRay connecting cables
- Documentation in PDF format
  1 FlexRay network designer software FlexConfig Developer (demo version)

#### ORDER INFORMATION FLEXDEVEL

Product	Description	Ordering number
FlexDevel	Development platform	3-V042-0B01
FlexDevel Kit	Entry package including 2x FlexDevel and all necessary hard- and software for programming.	3-V042-0K01