

NXP Development Kits for Ultra-Reliable MCUs

For rapid prototyping and development of Automotive and Industrial Applications

Features

-  Supports multiple architectures
-  Motor Control expansion
-  CAN/ LIN/ Ethernet/ FlexRay™ Communication options
-  Ease-Of-Use

Product One-Sheet

Overview

The development kit is a small, cost effective evaluation and development system for quick application prototyping and demonstration with Automotive Microcontroller and Processor products.

Each platform offers an easy-to-use mass-storage device mode flash programmer, virtual serial port and classic programming and run-control capabilities.

It's easy, so get started today.

Features

Cost Effective and Easy to Use

- ▶ Development kits starting at \$29.00 suggested resale
- ▶ Full support within S32 Design Studio (for ARM® or PPC based MCUs) and CodeWarrior IDE's (S12/S12Z)
- ▶ All kits come with Quick Start Guide and demo code examples

Small Form Factor

- ▶ PCB sizes less than 150mm x 100mm

Compatibility

- ▶ Arduino™ pin-compatibility
- ▶ Expand CAN and LIN/SCI ports by adding DEVKIT-COMM communication shield adapter
- ▶ Add BLDC and PMSM motor control using DEVKIT-MOTORGD shield adapter

Debug Simplicity

- ▶ Integrated USB based open-standard serial and debug adapter (OpenSDA)
- ▶ Integrated USB based serial background debug mode (OpenBDM) on all S12 and S12Z based products

Capability

- ▶ Easy access to the MCU GPIO pins using available headers
- ▶ Communication support for CAN, LIN, Flexray, USB and Ethernet
- ▶ Potentiometer for precise voltage and analog measurement
- ▶ Flexible power supply options—microUSB or external 12V power supply

Example: DEVKIT-MPC5748G Development Kit



Shield Adapter Example: DEVKIT-COMM Expansion Board



Software Enablement and Support

- ▶ Full featured S32 Design Studio IDE (S32DS)
- ▶ Support for Keil®, IAR, SEGGER, CodeWarrior IDE, ARM mbed™ platform and more
- ▶ Integrated Software Development Kit S32 SDK (SDK)
- ▶ These are mbed and P&E Multilink enabled through the built-in USB flash programming interface (OpenSDA and OpenBDM)
- ▶ Look for one of the many lab code examples integrated into S32DS IDE and available on tool webpages

Portfolio

MCU

- ▶ DEVKIT-MPC5748G
- ▶ DEVKIT-MPC5744P
- ▶ DEVKIT-S12ZVL
- ▶ DEVKIT-ZVL128
- ▶ DEVKIT-S12VR64
- ▶ DEVKIT-S12ZVC
- ▶ DEVKIT-S12XE
- ▶ DEVKIT-S12G128

Expansion Boards

- ▶ DEVKIT-COMM (CAN/LIN communication)
- ▶ DEVKIT-MOTORGD (motor control)
- ▶ DEVKIT-TRANSLATE (translate FRDM pinout)

www.nxp.com/DEVKIT

NXP, the NXP logo and CodeWarrior are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The Power Architecture and Power.org word marks and the Power and Power.org logos and related marks are trademarks and service marks licensed by Power.org. © 2016 NXP B.V.

Document Number: AUTOMCUDEVKITFS REV 0

