NXP FRDM-KEAZ128: KEAZ128 Freedom Evaluation Board

Features

Supports KEA MCUs

Potentiometer and RBG LED

CAN/LIN/Ethernet Connectivity Ultra-Reliable MCUs

Product One-Pager

Order FRDM-KEAZ128

Get Started

Overview

The FRDM-KEAZ128 is a small, cost-effective evaluation and development system for quick application prototyping and demonstration of ultra-reliable industrial and automotive microcontrollers.

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

FRDM-KEAZ128 Features:

- ▶ Kinetis EA microcontroller based on ARM® Cortex® -M0+, up to 48 MHz
- Cost-effective
- ▶ Small form factor size
- ▶ Arduino™ UNO footprint-compatible with expansion "shield" support
- ▶ Easy access to the MCU I/O pins
- Integrated open-standard serial and debug adapter (OpenSDA) with support for several industry-standard debug interfaces.
- ▶ On-chip connectivity for CAN, LIN and Ethernet
- ▶ Potentiometer for voltage and analog measurement
- ▶ Tri-color RGB LED
- ▶ Flexible power supply options—microUSB or external 12V power supply
- ▶ Similar hardware platform across Kinetis, S12 and Power Architecture MCU products

FRDM-KEAZ128 options:

Part Number	Flash	Arm Core	Communication	Package
FRDM-KEAZ128Q80	128 KB	Cortex M0+	CAN and LIN/UART	80-LQFP
FRDM-KEAZ64Q64	64 KB	Cortex M0+	CAN and LIN/UART	64-LQFP
FRDM-KEAZN32Q64	32 KB	Cortex M0+	LIN/UART	64-LQFP

Support ▶ Full-featured, complimentary S32 Design

Software Enablement and

- Studio IDF
- ▶ Support in Kinetis Design Studio, CodeWarrior, ARM Keil® tool and IAR
- ▶ NXP Software Development Kit (SDK) including bare metal drivers for CAN, LIN, Flash, PWM, and peripherals
- ▶ P&E Multilink enabled through the builtin USB flash programming interface (OpenSDA).
- ▶ Step-by-step guide with many demo code examples
- Just plug it in, drop on a binary program, and it's up and running

OpenSDA: Open-Standard Serial And Debug Adapter

- ▶ Bridges serial and debug communications between a USB host and an embedded target processor
- Features a mass storage device bootloader that provides a quick and easy mechanism for loading OpenSDA enabled applications:
 - Flash programmers
 - Run-control debug interfaces Serialto-USB converters
 - SEGGER OpenSDA firmware (makes OpenSDA compatible to J-Link Lite)



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