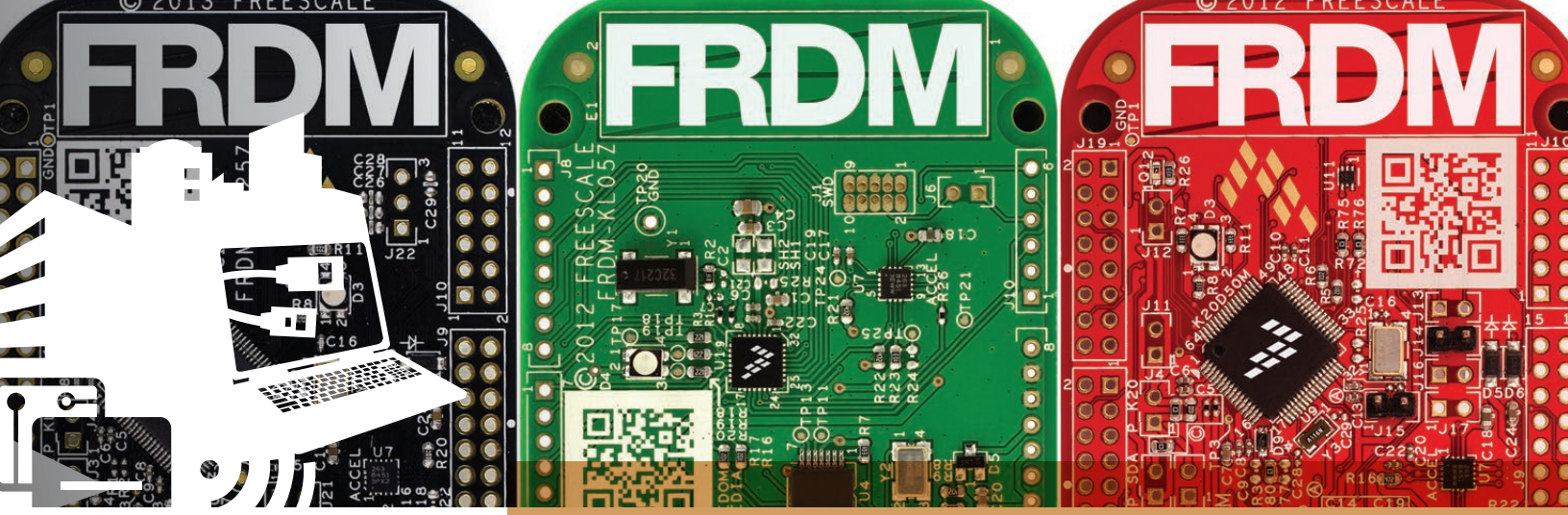


Rapidly prototype ARM® Cortex®-M4 and Cortex-M0+ processors

Freescale Freedom Development Platform

mbed Enabled

Features

- Cost-effective (starting at $12.95)
- Small size (approximately 3.25" x 2"), fits within a mint tin
- Arduino™ footprint-compatible with support for a rich set of third-party expansion boards (“shields”)
- Kinetis MCUs based on ARM technology
- Easy access to the MCU I/O pins
- Integrated open-standard serial and debug adapter (OpenSDA) with support for several industry-standard debug interfaces
- Capacitive touch slider and tri-color LED
- Flexible power supply options—coin cell battery, external source
- Easy access to MCU I/O

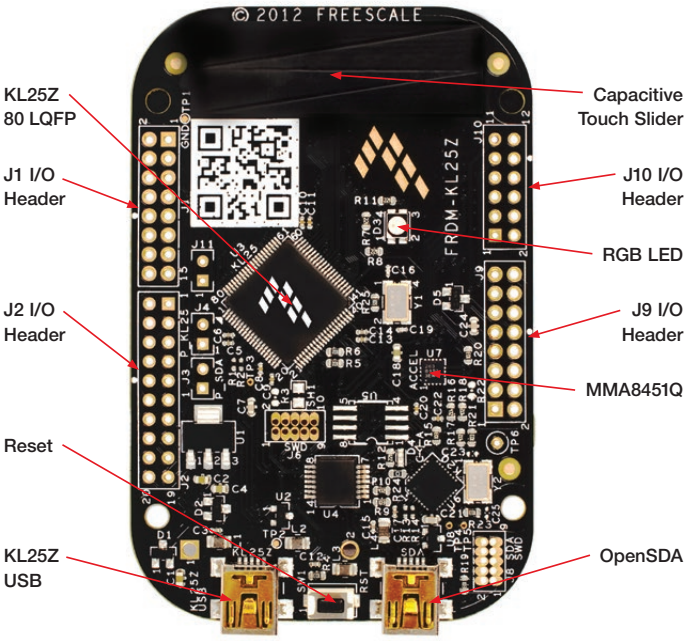
Overview

The Freescale Freedom development platform is a small, low-power, cost-effective evaluation and development system for quick application prototyping and demonstration of Kinetis MCU families.

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 to get started. Simply choose your preferred Freescale Freedom development hardware, select compatible software, connect with the community and go.

Example Freescale Freedom Development Platform: FRDM-KL25Z



freescale™

Software Enablement and Support

- Rich ARM ecosystem includes ARM Keil®, IAR, SEGGER, CodeWarrior, ARM mbed™ and more
- Freescale MQX™ Lite RTOS: Very light MQX kernel for resource-limited MCUs that allows applications to run with less than 4 KB RAM
- Processor Expert software and embedded components
- FRDM-KL25Z is mbed-enabled through the built-in USB flash programming interface (OpenSDA). Simply plug it in, drop on an "mbed interface" program binary and it's up and running

OpenSDA: Open-Standard Serial And Debug Adapter

The integrated debug circuit, OpenSDA, bridges serial and debug communications between a USB host and an embedded target processor. OpenSDA features a mass storage device bootloader that provides a quick and easy mechanism for loading different OpenSDA applications such as flash programmers, run-control debug interfaces, serial-to-USB converters and more, including:

- Freescale mass storage device flash programming interface that eliminates tool installation for quick evaluation of demonstration applications
- P&E Multilink interface that provides run-control debugging and compatibility with IDE tools
- SEGGER OpenSDA firmware makes OpenSDA compatible to J-Link Lite
- mbed interface application that provides connection to mbed online tools and supports a virtual serial port, CMSIS-DAP and a mass-storage programming interface
- CMSIS-DAP interface (standalone): new ARM standard for embedded debug interface

Get Started

Learn more at **freescale.com/freedom**
Get your FRDM-KL25Z mbed-enabled from **mbed.org /handbook/mbed-FRDM-KL25Z**.
Enable your OpenSDA as a Segger J-Link Lite at **segger.com/opensda.html**.

Get Connected

Join the Freescale community **freescale.com/community**.

Visit Freescale on Facebook
facebook.com/freescale

Follow Freescale on Twitter
twitter.com/freescale

For a complete list of boards offered as part of the Freescale Freedom development platform, please visit freescale.com/Freedom

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