![Chipsmall logo]

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Rapidly prototype ARM® Cortex®-M4 and Cortex-M0+ processors
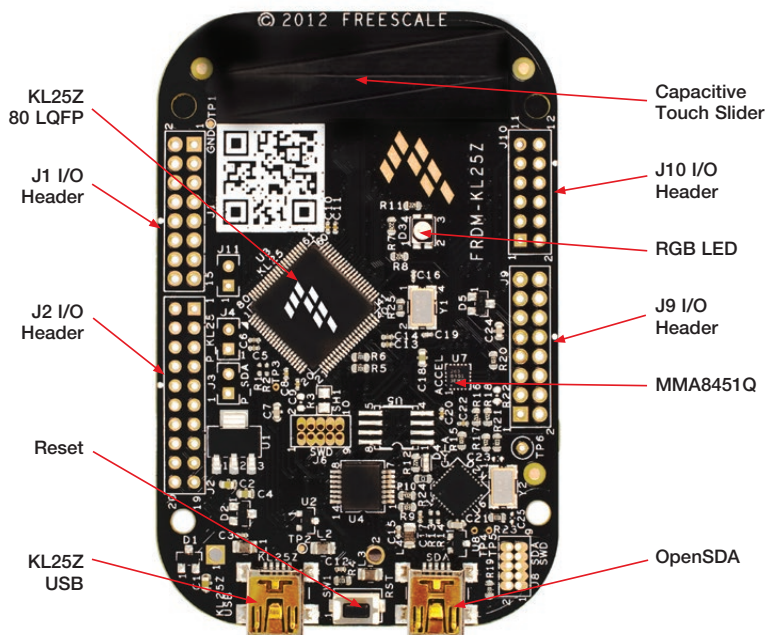
Freescale Freedom Development Platform

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

KL25Z 80 LQFP
J1 I/O Header
J2 I/O Header
Reset
KL25Z USB
Capacitive Touch Slider
J10 I/O Header
RGB LED
J9 I/O Header
MMA8451Q
OpenSDA

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

Software Enablement and Support

- Rich ARM ecosystem includes ARM Keil® tool, IAR, SEGGER, CodeWarrior IDE, ARM mbed™ platform 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 configuration tool 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