The fastest way to realize your design potential

Kinetis KwikStik Development Tool
Cost-effective, all-in-one solution for Kinetis ARM® Cortex™-M4 MCUs
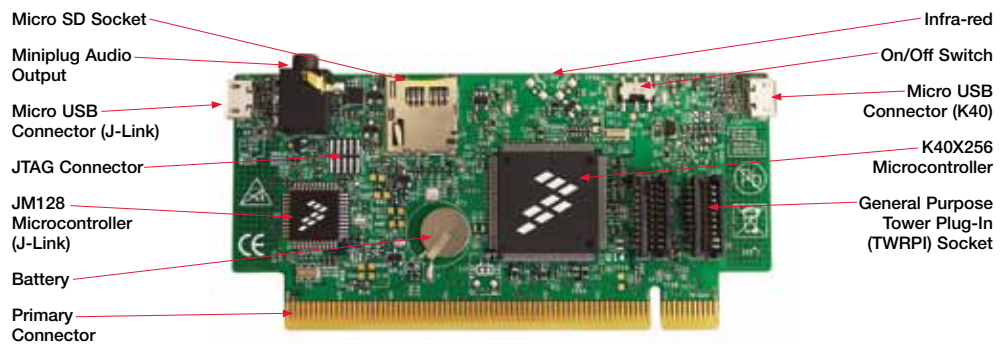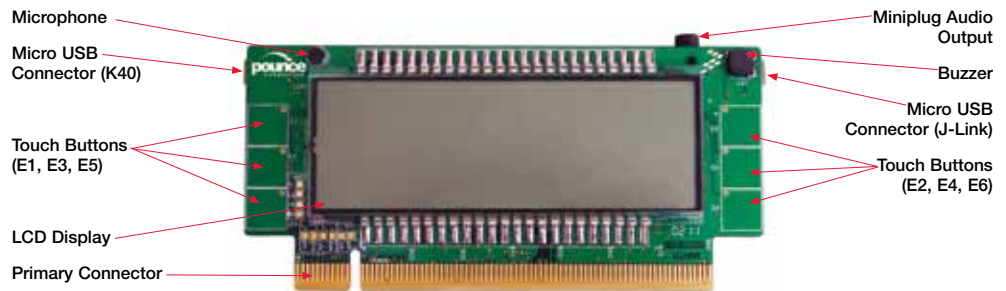
Energy Efficient Solutions
by Freescale
™

Overview

The KwikStik development tool is a cost-effective, all-in-one solution for evaluating, developing and debugging with Kinetis ARM® Cortex™-M4 MCUs. It features the K40X256VLQ100 (144LQFP) MCU with USB, capacitive touch sensing and segment LCD functionality, and combines powerful silicon and software technology within its sleek, small enclosure. The KwikStik development tool offers the following options for embedded system development:

Stand-Alone: Evaluate the on-board Kinetis K40X256 (144LQFP) MCU using the touch-sensing interface, 306 segment LCD display, audio, infra-red and SD card interfaces.

With the Freescale Tower System: Offers multiple system expansion options from Freescale and third-party peripheral modules, including sensing, Wi-Fi® and industrial connectivity.

As a J-Link Debugger: Interface direct to the user's target hardware for evaluating, developing and debugging with any external Kinetis MCU.

KwikStik K40

Microphone
Micro USB Connector (K40)
Touch Buttons (E1, E3, E5)
LCD Display
Primary Connector
Miniplug Audio Output
Buzzer
Micro USB Connector (J-Link)
Touch Buttons (E2, E4, E6)

Micro SD Socket
Miniplug Audio Output
Micro USB Connector (J-Link)
JTAG Connector
JM128 Microcontroller (J-Link)
Battery
Primary Connector
Infra-red
On/Off Switch
Micro USB Connector (K40)
K40X256 Microcontroller
General Purpose Tower Plug-In (TWRPI) Socket

*Silicone enclosure not shown

freescale™
semiconductor

The KwikStik development tool is housed in a flexible silicone enclosure and comes loaded with simple demos for exploring the functionality of the on-board K40 MCU. The DVD included contains software and resources from Freescale and third-party partners IAR Systems, Keil and Green Hills Software.

Key Features

Hardware

- K40X256VLQ100 MCU (144LQFP)
  - ARM Cortex-M4 core with DSP
  - 100 MHz core operating frequency
  - 1.71V–3.6V operating voltage
  - 256 KB flash memory, 256 KB FlexMemory (supports up to 4 KB high-speed, high-endurance EEPROM)
  - USB On-the-Go (full speed)
  - Segment LCD controller
  - Ultra low power
  - Precision mixed-signal
- 306 segment LCD display
- Capacitive touch-sensing interface
- On-board J-Link USB programmer
- Infrared communications
- Micro SD card slot
- 3.5 mm audio output jack
- Omni-directional microphone and buzzer
- Tower plug-in (TWRPI) socket
- Two micro USB connectors
- Manganese lithium rechargeable battery
- Flexible silicone enclosure
- Interactive DVD with software installers and documentation

Software

- Freescale MQX™ real-time operating system (v3.6.2)
- IAR Embedded Workbench (30-day unlimited version and 32 KB limited version)
- Keil MDK (32 KB limited version)

- Green Hills Software MULTI IDE (evaluation version)
- *Freescale CodeWarrior 10.1 IDE with Processor Expert auto-code generator. Special Edition includes complimentary C compiler supporting up to 128 KB of object code
- *CodeSourcery Sourcery G++ IDE

*Item not installed. Link included to website

NOTE: Detailed information of the available hardware interfaces, modules and the demonstration software included on the KwikStik development tool can be found in the user manual and schematics, available at freescale.com/KwikStik.

Orderable Part Number	Price ($USD Suggested Resale)
KWIKSTIK-K40	$29

KWIKSTIK-K40

KWIKSTIK-K40 with Freescale Tower System

Learn More: To learn more about KwikStik or Kinetis products, please visit **freescale.com/KwikStik** and **freescale.com/Kinetis**.

freescale ™
semiconductor