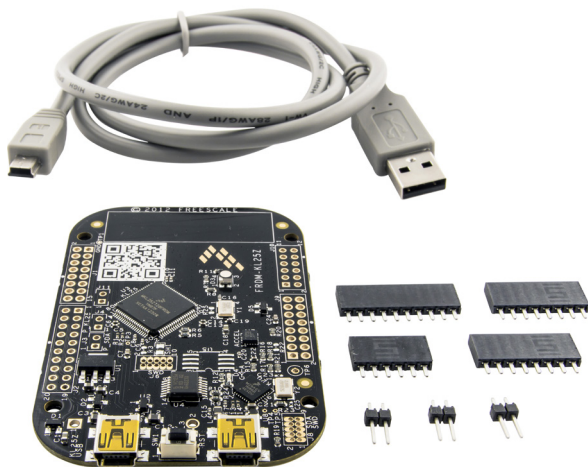


Eval Basic Kit

Kinetis KL25Z Freedom Platform



Description:

The Freescale Freedom development platform is a low-cost evaluation and development platform featuring Freescale's newest ARM® Cortex™-M0+ based Kinetis KL25Z MCUs

Specifications:

Silicon Manufacturer	: Freescale
Core Architecture	: ARM
Core Sub-Architecture	: Cortex - M0+
Silicon Core Number	: MKL2
Silicon Family Name	: Kinetis - KL2

Features:

- KL25Z128VLK4-Cortex-M0+ MCU with:
 - 128kB flash, 16kB SRAM
 - Up to 48MHz operation
 - USB full-speed controller
- OpenSDA-sophisticated USB debug interface
- Tri-color LED
- Capacitive touch "slider"
- Freescale MMA8451Q accelerometer
- Flexible power supply options
 - Power from either on-board USB connector
 - Coin cell battery holder (optional population option)
 - 5V to 9V_{VIN} from optional IO header
 - 5V provided to optional IO header
 - 3.3V to or from optional IO header
- Reset button
- Expansion IO form factor accepts peripherals designed for Arduino™-compatible hardware

Kit Contents:

Description	Qty	Part Number
Samtec Socket, 2.54mm, 1 × 6 Pos	1	SSW-106-01-T-S
Samtec Socket, 2.54mm, 1 × 8 Pos	2	SSW-108-01-T-S
Samtec Socket, 2.54mm, 1 × 10 Pos	1	SSW-110-01-T-S
Samtec Header, 2.54mm, THT VERT, 2 Pos	3	TSW-102-07-T-S
Multicomp Mini USB cable	1	SPC20060
Freescale Freedom Platform	1	FRDM-KL25Z

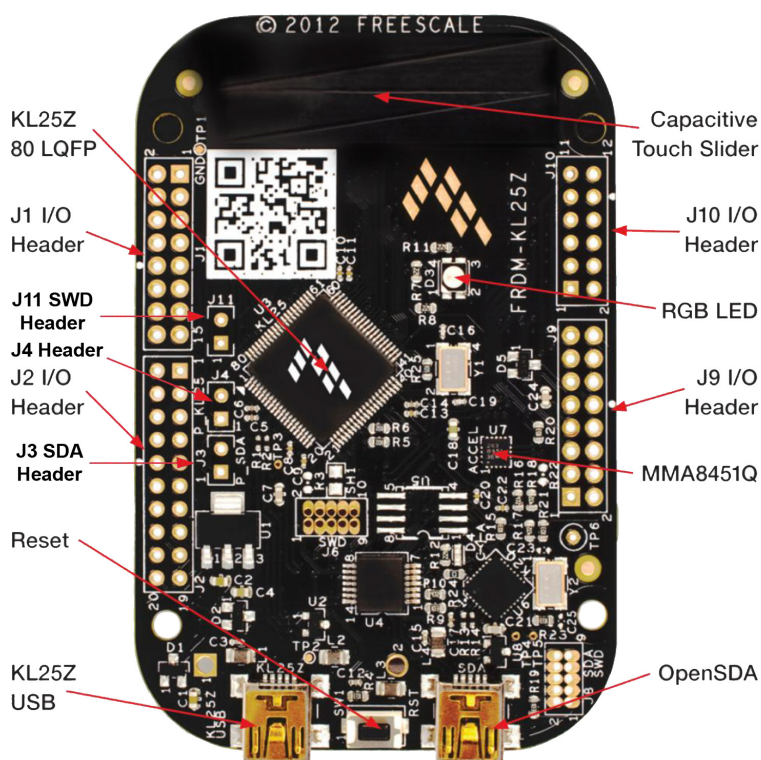
Ordering Information

Description	Part Number
Eval Basic Kit, Kinetis KL25Z Freescale Freedom Platform	FRDMKL25Z BASIC BUNDLE



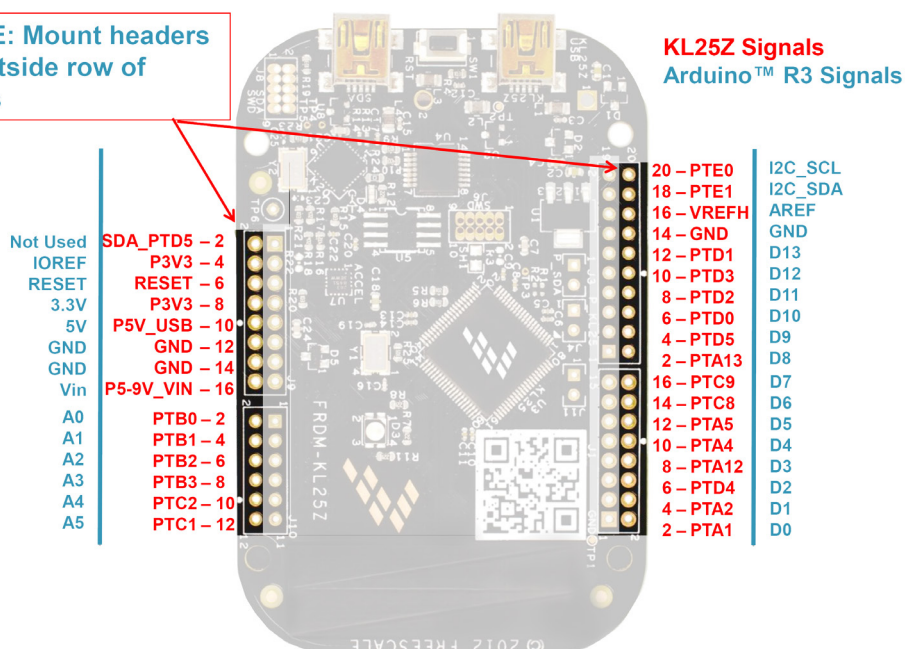
Eval Basic Kit

Kinetis KL25Z Freedom Platform



FRDM-KL25Z Single Row/Arduino Header Layout

NOTE: Mount headers to outside row of holes



Eval Basic Kit

Kinetis KL25Z Freedom Platform



Attaching Single Row Headers to the Freedom Platform

This special bundle includes headers that can be soldered to the board to give you access to additional Arduino™-compatible hardware – commonly referred to as “Shields”.

To attach the single row headers to the Freedom Platform, please reference the “FRDM-KL25Z Single Row/Arduino Header Layout” diagram. Attaching these headers to the outside row of I/O holes on the board give you access to the unlimited potential of access to peripherals designed for Arduino™-compatible hardware. Using optional dual row headers are also acceptable, but are not needed to use Arduino™-compatible hardware/ shields.

Header	Positions on Board
SAMTEC SSW-106-01-T-S	J10
SAMTEC SSW-108-01-T-S	J1,J9
SAMTEC SSW-110-01-T-S	J2
SAMTEC TSW-102-07-T-S	J3, J4, J11 *

* Three of these headers have been included for additional/ advanced features that are available on positions J3, J4, and J11 and are not necessary for use with Arduino™-compatible hardware/ shields . Details of their functionality can be found in the Freedom Platform documentation.

Shield – WiFi



The Arduino WiFi Shield connects your Arduino to the internet wirelessly. Connect it to your wireless network by following a few simple instructions to start controlling your world through the internet. As always with Arduino, every element of the platform – hardware, software and documentation – is freely available and open-source. This means you can learn exactly how it's made and use its design as the starting point for your own circuits.

Check out the reference page of the [WiFi library](#) to understand how the shield can easily provide an internet connection to your Arduino board.

Technical Specifications

- Requires an Arduino board (not included)
- Operating voltage 5V (supplied from the Arduino Board)
- Connection via: 802.11b/g networks
- Encryption types: WEP and WPA2 Personal
- Connection with Arduino on SPI port
- on-board micro SD slot
- ICSP headers
- FTDI connection for serial debugging of WiFi shield
- Micro-USB for updating WiFi shield firmware

The WiFi Shield communicates with Arduino using the SPI bus (through the ICSP header), so is compatible with any of the boards that have this type of bus.

This version of WiFi shield has an **integrated antenna** on the PCB, what you have to do is just connect the shield to the Arduino.