

## SparkFun mbed Starter Kit

KIT-14458 RoHS Open Source Hardware



## **DESCRIPTION**

The SparkFun mbed Starter Kit (mSK) is a great way to get into user-created projects created by ARM to assist with rapid prototyping on microcontrollers. The mSK, which utilizes the LPC1768 by ARM, includes everything you need to complete 10 circuits that will teach you how to create a USB host, draw text and shapes on an LCD, log temperature data and more. We recommend that you do have some previous programming or electronics experience before using this kit.

The online mSK Experiment Guide (in the Documents tab) contains step-by-step instructions for how to connect each circuit with the included parts. Full example code is provided and explained and even includes Fritzing diagrams and the required components.

The kit does not require any soldering and is recommended for anyone with an intermediate to advanced knowledge of programming. We've essentially designed this kit to be the next step up from the SparkFun Inventor's Kit (SIK). So if you are looking for a new challenge, check out the mbed Starter Kit!

## **INCLUDES**

mbed - LPC1768 (Cortex-M3) (with USB cable)
White Solderless Breadboards
Serial Miniature LCD Module – 1.44" (with Hookup cable)
TRRS 3.5mm Jack Breakout (with headers)
Triple-Axis Accelerometer Breakout – MMA8452Q (with headers)
microSD Transflash Breakout (with headers)
USB Type A Female Breakout (with headers)
USB Mini-B Breakout (with headers)
RJ45 Ethernet MagJack Breakout (with headers)
16GB microSD Card with SD Adapter (Class 10)
microSD USB Reader
Speaker – PCB Mount
TMP36 Temp Sensor
Transistor – NPN (2N3904)
Jumper Wires
CAT 6 Cable – 3ft
Tri-color LED
Big 12mm Buttons
330 and 10K Resistors

## **EXAMPLES**

•	Circuit 1: Blink an LED
•	Circuit 2: Buttons and PWM
•	Circuit 3: Graphic LCD
•	Circuit 4: Accelerometer
•	Circuit 5: Internet Clock
•	Circuit 6: USB Host and Threading
•	Circuit 7: USB Device
•	Circuit 8: Temperature Logging
•	Circuit 9: PWM Sounds
•	Circuit 10: Hardware Soundboard