SparkFun Inventor's Kit for Arduino 101

KIT-13844 RoHS Open Source Hardware

Description: The SparkFun Inventor's Kit for the Arduino 101® board is a great way to get started with programming and hardware interaction with embedded electronics using the Intel® Curie-based Arduino 101 board.

This 101 SIK includes everything you need to complete 21 circuits that will teach you how to control and read the on-board and external sensors, control the Arduino 101 through your phone, detect and analyze different sounds, and much more. Don't worry; you won't need any previous programming or electronics experience to use this kit. The philosophy behind this kit is that anyone can (and should) play around with cutting-edge electronics. After using this 101 SIK, you'll have the know-how to start creating your own projects and experiments. From building robots and game controllers to IoT and data logging, the world will be your oyster.

The online Experiment Guide for the Arduino 101 board contains step-by-step instructions on how to connect each circuit with the included parts. Full example code is provided and explained, and troubleshooting tips are included in case something goes wrong.

The kit does not require any soldering and is recommended for anyone comfortable reading code libraries or anyone looking for an alternative to the original SparkFun Inventor's Kit.

Note: The Arduino 101 Inventor's Kit is only available for customers in the USA. If you are located in Canada, the EU, or other locations, be sure to check out the Genuino 101 or its SIK instead. Additionally, this product may be delayed by two to three business days to verify shipping address. We will contact you after you place your order if we need anything.

Note: The Real-Time Operating System (RTOS) and framework developed by Intel was scheduled to be open sourced in March 2016. It's not possible to interface with it directly; only the Arduino core can do it via static mailboxes

Circuit Experiments:

Experiment 1: Blinking an LED
Experiment 2: Reading a Potentiometer
Experiment 3: Driving and RGB LED
Experiment 4: Driving Multiple LEDs
Experiment 5: Reading a Button Press
Experiment 6: Reading an SPDT Switch
Experiment 7: Reading a Photoresistor
Experiment 8: Color Mixing with the RGB
Experiment 9: Reading a Temperature Sensor
Experiment 10: Driving a Servo Motor
Experiment 11: Using a Transistor
Experiment 12: Using the Motor Driver
Experiment 13: Motor Driver with Inputs
Experiment 14: Using a Piezo Buzzer
Experiment 15: Using the Sound Detector Board
Experiment 16: Using a Shift Register
Experiment 17: Using an LCD
Experiment 18: Reading the On-Board Accelerometer
Experiment 19: Tap Detection
Experiment 20: Using the On-Board Real Time Clock (RTC)
Experiment 21: Using the On-Board Bluetooth Low Energy (BLC)

Kit Includes:

Arduino 101
Arduino and Breadboard Holder
White Solderless Breadboard
Carrying Case
SparkFun Mini Screwdriver
16x2 White on Black LCD (with Headers)
SparkFun Sound Detector (with Headers)
SparkFun Motor Driver - Dual TB6612FNG (1A) (with Headers)
Hobby Gearmotor - 200 RPM (Pair)
Battery Holder - 4xAA to Barrel Jack Connector
74HC595 Shift Register
Transistor - NPN (BC337)
1N4148 Diodes
DC Motor with Gear
Small Servo
TMP36 Temp Sensor
USB Cable A to B - 6 Foot
Jumper Wires - Connected 6in. (M/M, 20 pack)
Photocell
Tri-color LED
Red, Blue, Yellow, and Green LEDs
Red, Blue, Yellow, and Green Tactile Buttons
10K Trimpot
Piezo Speaker
SPDT Mini Power Switch
100 Ohm and 10K Resistors
1500 mAh Alkaline Batteries - AA

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