

## SparkFun ESP8266 Thing Dev Starter Kit

KIT-15259

The SparkFun ESP8266 Thing Dev Starter Kit is a great place to start learning about the Internet of Things (IoT) and programming in Arduino. Inside this kit you will find a SparkFun ESP8266 Thing Dev (and USB cable), jumper wires, breadboard, LEDs, and plenty of headers. We've also included a pair of stackable 10-pin headers as well as 40 regular headers to connect your Serial Basic Breakout to the Thing or breadboard. If you have ever been interested in learning about IoT, Arduino, and wireless solutions, the SparkFun ESP8266 Thing Starter Kit is a perfect place to start!

The SparkFun ESP8266 Thing Dev is a development board that has been solely designed around the ESP8266, with an integrated FTDI USB-to-Serial chip. The ESP8266 is a cost-effective, and very capable WiFi-enabled microcontroller. Like any microcontroller, it can be programmed to blink LEDs, trigger relays, monitor sensors, or automate coffee makers, and with an integrated WiFi controller, the ESP8266 is a one-stop shop for almost any Internet-connected project. To top it all off, the ESP8266 is incredibly easy-to-use: firmware can be developed in Arduino, and uploaded over a simple, serial interface. The ESP8266 Thing Development Board breaks out all of the module's pins, and the USB-to-serial converter means you don't need any peripheral components to program the chip. Just plug in a USB cable, download the Arduino board definitions, and start IoT-ing.

Why the name? We lovingly call it the “Thing” due to it being the perfect foundation for your Internet of Things project. The Thing does everything from turning on an LED to posting data, and can be programmed just like any microcontroller. You can even program the Thing through the Arduino IDE by installing the ESP8266 Arduino add-on.

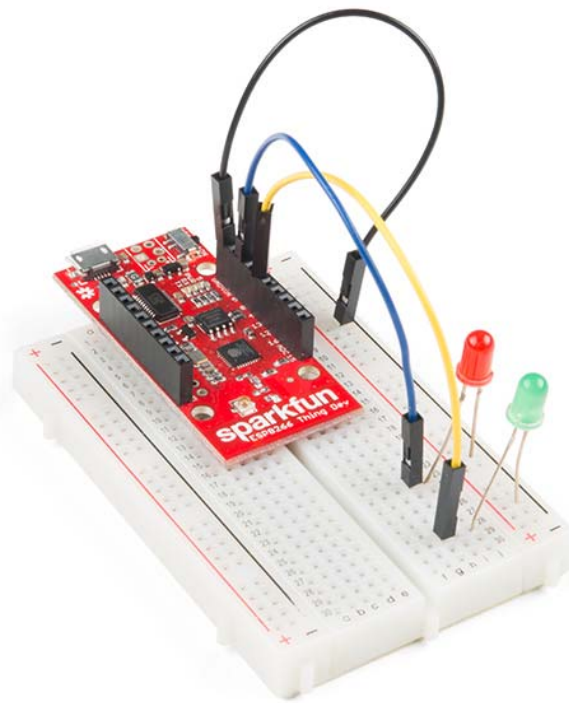
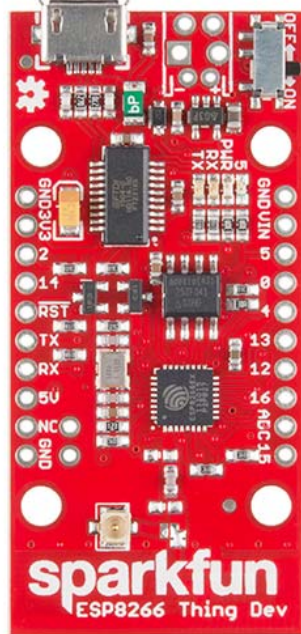
The Thing Dev Board even includes a PCB trace antenna as a default WiFi antenna, it's cost-effective and actually works really well! If you need to connect a more sensitive antenna, or need to route outside an enclosure, a U.FL connector is also available on the board. Some soldering will be required to get the U.FL connector functioning but instructions can be found in the Hookup Guide we have written for the dev board.

## INCLUDES

- SparkFun ESP8266 Thing Dev
- Jumper Wires 4in M/M (30 pack)
- MicroB USB Cable - 6in
- Breadboard
- Stackable Headers - 10 pin x2
- LED - Basic Green 5mm
- LED - Basic Red 5mm
- Jumper 2 pin
- Break Away Headers - Straight (40 pins)

## FEATURES

- All module pins broken out
- On-board FTDI USB-to-Serial
- 802.11 b/g/n
- Wi-Fi Direct (P2P), soft-AP
- Integrated TCP/IP protocol stack
- Integrated TR switch, balun, LNA, power amplifier and matching network
- Integrated PLLs, regulators, DCXO and power management units
- Integrated low power 32-bit CPU could be used as application processor
- +19.5dBm output power in 802.11b mode



<https://www.sparkfun.com/products/15259/5-6-19>