

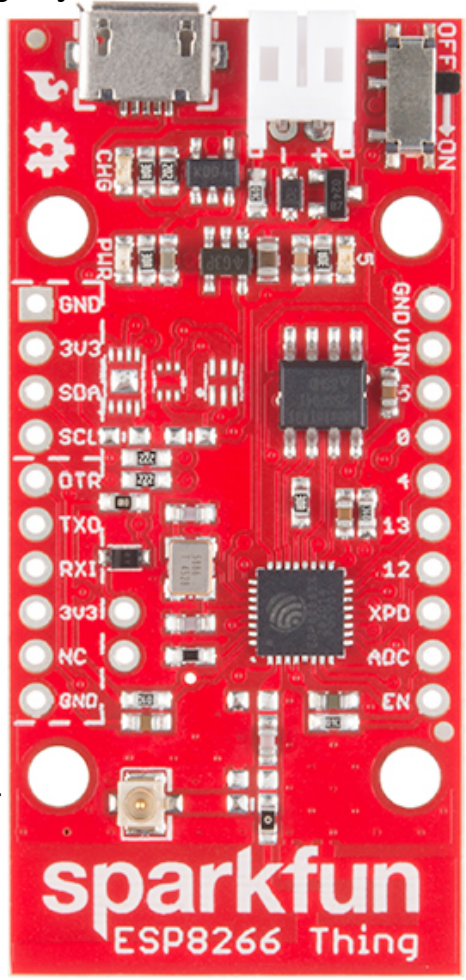
ESP8266 Thing (WRL-13231)

Arduino add-on available
80MHz

Name	Arduino
Power	ADC
GND	Serial
Control	Misc

Unpopulated Ics
ATECC108A full turnkey ECSDA engine
TMP102 12-bit digital temperature sensor
TSL2561 luminosity/light sensor

MicroB USB for charging only
JST for single cell LiPo



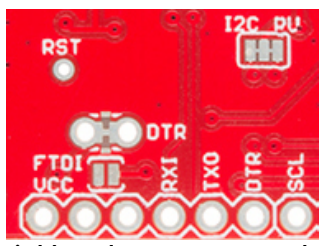
Power switch

GPIO0
On bootup will run program if high and bootloader if low
Tied to DTR to run bootloader when reset

	GND	GND
	3.3V	3V3
SDA	D2	SDA
SCL/SCLK	D14	SCL
	Auto-reset	DTR
TX	D7	TXO
RX	D8	RXI
	Not Connected	3V3
	Not Connected	NC
	GND	GND

GND	GND	
Vin	Vin	
5	D5	LED
0	D0	Used in reset
4	D4	
13	D13	MOSI
12	D12	MISO
XPO	D16	Reset to deep sleep
ADC	A0	10-bit TV
EN	Enable	Set to active High
		SPID
		MTCK
		SPIQ
		MTDI

u.fl antenna connector
Not Connected
To use rotate 0ohm resistor 90deg



Jumpers/test points on back
DTR Jumper clear for serial debugging
FTDI VCC Jumper close to connect 3V3 pin on serial header to 3.3V supply
I2C Pullups 10kohm resistors clear to remove
RST pin connected through a 0.1uF cap to DTR for auto reset
Test points (SPI pins for the flash memory)

sparkfun
ESP8266 Thing

PCB Antenna

Power (ESP8266 Thing)
Vin:3.3-5.5
Vbatt: Single cell Lipo (charged via USB)
VCC (as input): 1.7V-3.6V
VCC: 3.3V @ 500mA
Max 12mA per I/O pin

Typical Power (ESP8266 module)
Transmit 135-215mA
Receive 60-62mA
Standby 0.9mA
Deep sleep 10uA

LEDs
Power: Red
Charge: Yellow
User (pin 5): Green

Wi-Fi
802.11 b/g/n
Wi-Fi Direct (P2P) soft AP