ESP8266 Thing (WRL-13231)

Arduino add-on available
80MHz

Name	Arduino
Power	ADC
GND	Serial
Control	Misc

MicroB USB
for charging only

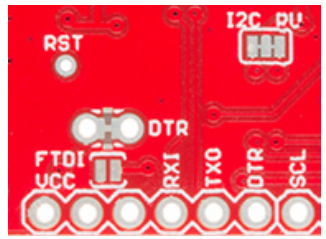
JST for single cell LiPo

Power switch

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

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

	GND	GND	GND	GND				
	3.3V	3V3	Vin	Vin				
SDA	D2	SDA	5	D5	LED			
SCL/SCLK	D14	SCL	0	D0	Used in reset			
	Auto-reset	DTR	4	D4				
TX	D7	TXO	13	D13	MOSI	SPID	MTCK	
RX	D8	RXI	12	D12	MISO	SPIQ	MTDI	
	Not Connected	3V3	XPO	D16	Reset to deep sleep			
	Not Connected	NC	ADC	A0	10-bit 1V			
	GND	GND	EN	Enable	Set to active High			



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)

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

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