SparkFun Blynk Board - ESP8266 (WRL-13794)
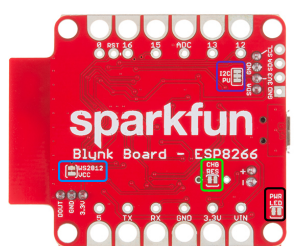
Legend:
- Name
- Power
- Ground
- Control
- Arduino
- ADC
- Serial
- Pullup/down
- Misc

Status LEDs
Yellow: Charging
Red: Power
Blue: D5 User LED

Jumpers
- I2CPU
- WS2812VCC
- CHG RES/ R5
- PWR LED

GND 3.3V SDA SCL
SDA 3.3V GND SCL

| 3.3V | SDA | D2 | SDA |
| GND | SCL | D14 | SCL |

VIN	VIN
3.3V	3.3V
GND	GND
RX	D8	RX
TX	D7	TX
LED	D5	5
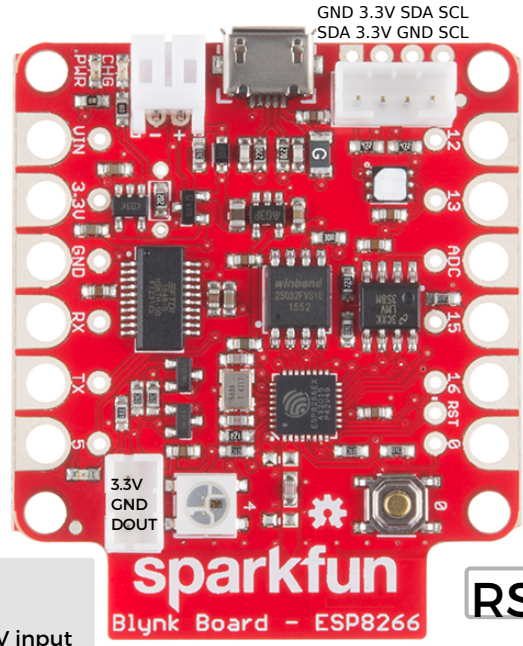
12	D12	MISO
13	D13	MOSI
ADC	A0	ADC
15	D15	10k pulldown
16	D16	XPD
0	D0	10k pullup	Button

3.3V
GND
DOUT

PCB Antenna

| RST | Reset |

| Button | D0 | 10k pullup | Button |

Si7021 Sensor
Address: 0x40
SJ4 can be cleared to remove pullup resistors

WS2812
on pin 4
SJ3 can be cut to avoid powering a WS2812 string (on 3-pin JST connector)

ADC
0-3.3V input
10-bit

Power
USB, Lipo battery on 2 pin JST or Vin
Vin: 3V-6V
VCC: 3.3V at 600mA
SJ2 can be cut to disable the power LED
Max 12mA per I/O pin

Charging Circuit
SJ1 can be cut and R5 populated to change charge rate
Preprogrammed charge rate: 500mA
Single Cell Lipo charging
Yellow LED when charging

Connectors
2-pin JST: battery connector
3-pin JST: to attach a string of WS2812 LEDs
4-pin JST: to connect a cable to various I2C sensor boards
4-pin I2C 0.1 header: to connect various I2C sensors
MicroB USB: programming and charging
I/O pins with 2 sized holes (for soldering or alligator clips)

I/O
Button: pin 0 (active low)
Blue LED: pin 5 / WS2812 LED:pin4
Si7021 Temperature and Humidity Sensor (Address: 0x40)
I2C headers (0.1 and JST)

Provisioning your Blynk board without a QR code
1. Create a Blynk Project
2. Select "SparkFun Blynk Board" and name project
3. Tap to copy or email authentication token
4. Create project
5a. Provisioning using a computer or phone browser
a. Connect computer or phone to Blynk Wifi network
b. Point browser to 192.168.4.1
c. Select Wifi Network and Blynk token (from step 3)
5b. Provisioning over USB
a. Open a serial terminal window (9600 baud)
b. Press 'h' for help
c. Press 's' to scan network, select number/letter for network and enter password
d. Press 'b' to enter Blynk token (from step 3)

Blynk.cc (available for Android and iOS)
Sparkfun.com/blynk for tutorials and getting started info

sparkfun ELECTRONICS