SparkFun Blynk Board - ESP8266 (WRL-13794)

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

### 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)
- **Button**: pin 0 (active low)
- **Blue LED**: pin S / WS2812 LED pin 4
- **Si7021 Temperature and Humidity Sensor (Address: 0x40)**
- **I2C headers (0.1 and JST)**

### 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

### Si7021 Sensor
- **Address**: 0x40
- SJ4 can be cleared to remove pullup resistors
- **SI7021 Sensor**
  - **Address**: 0x40
  - SJ4 can be cleared to remove pullup resistors

### 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)
   d. Press ‘b’ to enter 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)

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

### Jumper Options
- I2CPU
- WS2812VCC
- CHG RES/ R5
- PWR LED

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