V_BATT should be a single-cell LiPo battery.

Charge currents:
- I_CHG = 1000 mA
- I_PROG = 50mA

**Voltage Regulator and Battery Charger**

- V_USB - 6V MAX
- V_BATT - Single Cell (4.2V MAX)

**Lithium-Polymer Battery Charger (1-cell)**

- V_BATT should be a single-cell LiPo battery.

**CP2102N (USB-to-Serial Converter)**

- GND

**Expressif ESP32**

- 3.3V

**OHIC Connector**

- GND

**Auto-Reset**

- Boot Mode Configuration
  - Boot / Default
  - Boot / Download

- GPIO0: 1 / 1 / 0
- GPIO1: 0 / 1 / 0
- GPIO2: 0 / 0 / 0
- GPIO3: 0 / 0 / 0
- GPIO4: 0 / 0 / 0
- GPIO5: 0 / 0 / 0

- 0: Low, 1: High
- *: Floating

- If DTR is LOW, toggling RTS from IDLE to LSU reverts to run mode.
- If RTS is LOW, toggling DTR from IDLE to LSU reverts to bootloader.

- GPIO0 Button

- Headers

- Reset Button

- GPIO13 LED

**THIS IS A FOUR-LAYER BOARD!**

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**Sparkfun**

Design by: Mike Hord
Revised by: Alex Wende

- Original ESP32 Thing by Jim Lindblom
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**ESP32_Thing_Plus**

- Design by: Mike Hord
- Revised by: Alex Wende

- Dates: 2/25/2019 1:42 PM
- Sheets: 1/1