



U8
JST-PH2.0-5PINS

- 1 SET
- 2 VCC
- 3 33TX
- 4 32RX
- 5 GND

J4
ARM Switch

- 1 GND
- 2

U1
ESP32-WROOM

- | | |
|-------------|--------------|
| 1 3.3V | 38 GND |
| 2 EN | 37 IO23/MOSI |
| 3 A0/IO36 | 36 IO22 |
| 4 A3/IO39 | 35 IO1/TX |
| 5 A6/IO34 | 34 IO3/RX |
| 6 A7/IO35 | 33 IO21 |
| 7 A4/IO32 | 32 GND |
| 8 A5/IO33 | 31 IO19/MISO |
| 9 A18/IO25 | 30 IO18/CLK |
| 10 A19/IO26 | 29 IO5/SS |
| 11 A17/IO27 | 28 IO17 |
| 12 A16/IO14 | 27 IO16 |
| 13 A15/IO12 | 26 IO4/A10 |
| 14 GND | 25 IO0/A11 |
| 15 A14/IO13 | 24 IO2/A12 |
| 16 IO9 | 23 IO15/A13 |
| 17 IO10 | 22 IO8 |
| 18 IO11 | 21 IO7 |
| 19 5V | 20 106 |

R6
500K

J3
STATUS LED

- 2
- 1 GND

Change switch to a 2p jst
Change arm switch to use IO13 so can internal pullup
Reduce R6 - output is 3.3v

R9
30K

R8
10K

GND

C3
.1 uf

REG2
LD1117DT50CTR 5V REG 800ma

- 1 GND
- 2 Vout
- 3 Vin

GND

C4
10uf

J1
PWR LED

- 2
- 1 GND

C6
.1uf

REG1
LD1117DT50CTR 5V REG 800ma

- 1 GND
- 2 Vout
- 3 Vin

C9
10 uf

J2
Switch

- 3 S
- 2 VCC
- 1 GND

BAT1
Battery

- 1 +
- 2 -

GND

Undervoltage protection circuit

R2
1M

U3
TPS3700DDCR

- | | |
|---------------|--------|
| 4 INB-
VDD | 3 INA+ |
| 5 OUTB | 2 GND |
| 6 | 1 OUTA |

R1
1K

GND

R4
1M

C2
.1uf

R5
61.9k

GND

C1
.1uf

R7
100K

D1
1N4148W-G

Q1
AOD417-MS