GND

IC8
U_MIC803-31D3VC3

C15
100nF

+3V3

1 GND	VCC 3
2 RESET	

Reset ←

10k
R31

+3V3
1 Vcc
boot ← 2 DTR_Boot
RX ← 3 RXD_MCU

TXD_MCU 4 → TX   J4
GND 5
RTS/Reset 6 → Reset
GND

+3V3
1 Vcc
boot ← 2 DTR_Boot
RX ← 3 RXD_MCU

TXD_MCU 4 → TX   J5
GND 5
RTS/Reset 6 → Reset
GND

R1
10k
← LED

LED1
LED-OSTW2020C1E
WS2812B2020

3 DI	GND 2
4 VDD	DO 1

+3V3

+3V3

C16
10uF

C12
100nF

C19
C_220uF_SMD

GND

IC1
ESP32-S

+3V3   GND

1	GND_1	SD0	21
2	3V3	SD1	22
3	EN	IO15	23 → DBG_RX
4	SENSOR_VP	IO2	24
5	SENSOR_VN	IO0	25 ← boot
6	IO34	IO4	26 → DBG_TX
7	IO35	IO16	27
8	IO32	IO17	28 ← H1
9	IO33	IO5	29 ← H2
10	IO25	IO18	30 ← H3
11	IO26	IO19	31
12	IO27	NC	32
13	IO14	IO21	33
14	IO12	RXD0	34 ← RX
15	GND_2	TXD0	35 ← TX
16	IO13	IO22	36 → EnBat
17	SD2	IO23	37 → LED
18	SD3	GND_3	38
19	CMD	GND_4	39
20	CLK		

Reset →
V_BATT →
I_MOT →
IN2 →
PWM_U →
PWM_V →
PWM_W →
GND

GND

PL2
KMR411NG

GND