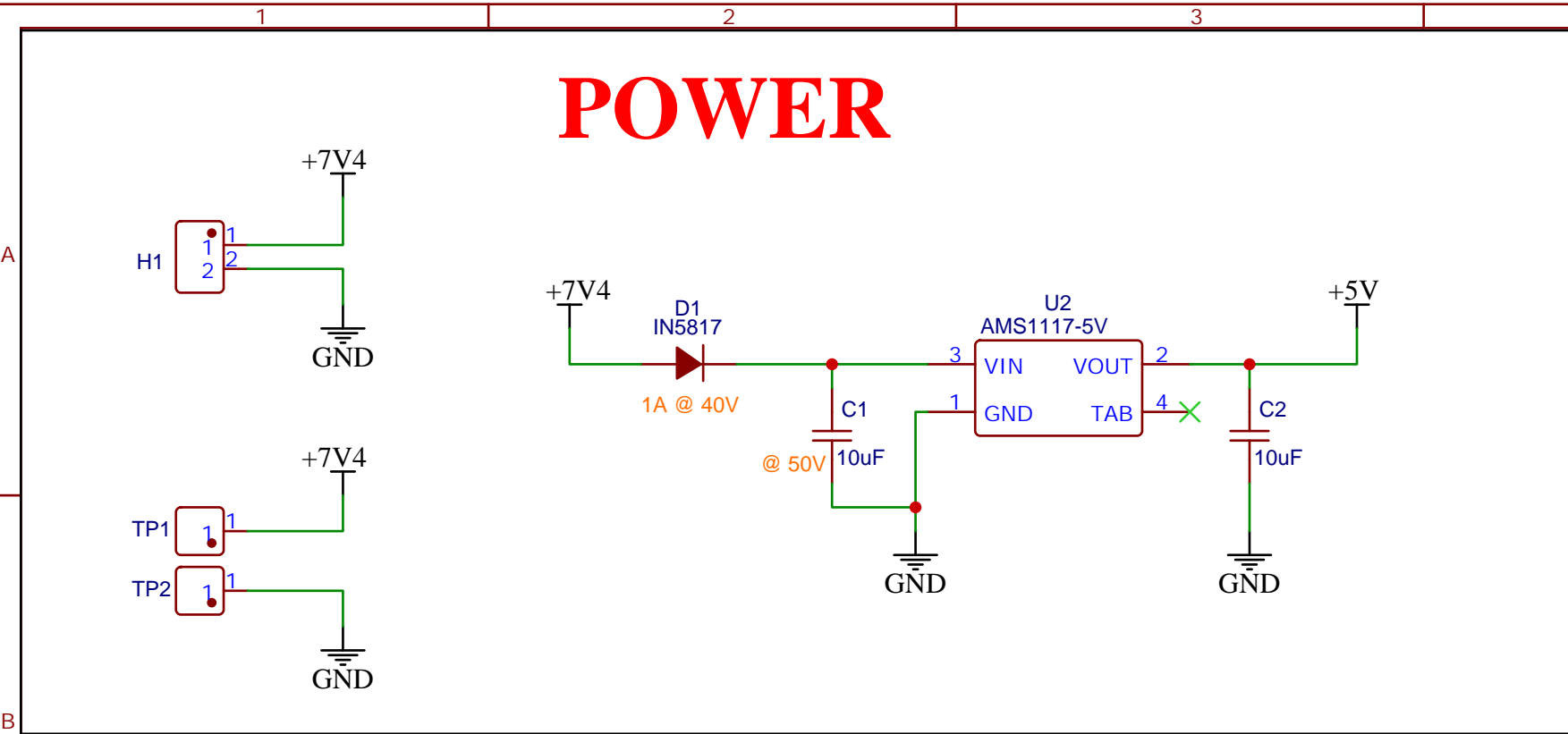


POWER

The diagram illustrates a power supply circuit. It starts with a +7V4 input connected to a diode D1 (IN5817) and a capacitor C1 (10uF). The output of the diode is connected to the VIN pin of a voltage regulator U2 (AMS1117-5V). The GND pin of the regulator is connected to the negative terminal of capacitor C1. The VOUT pin of the regulator is connected to a +5V output and the positive terminal of capacitor C2 (10uF). The negative terminal of C2 is connected to GND. There are also two test points, TP1 and TP2, connected to the +7V4 input and GND respectively.

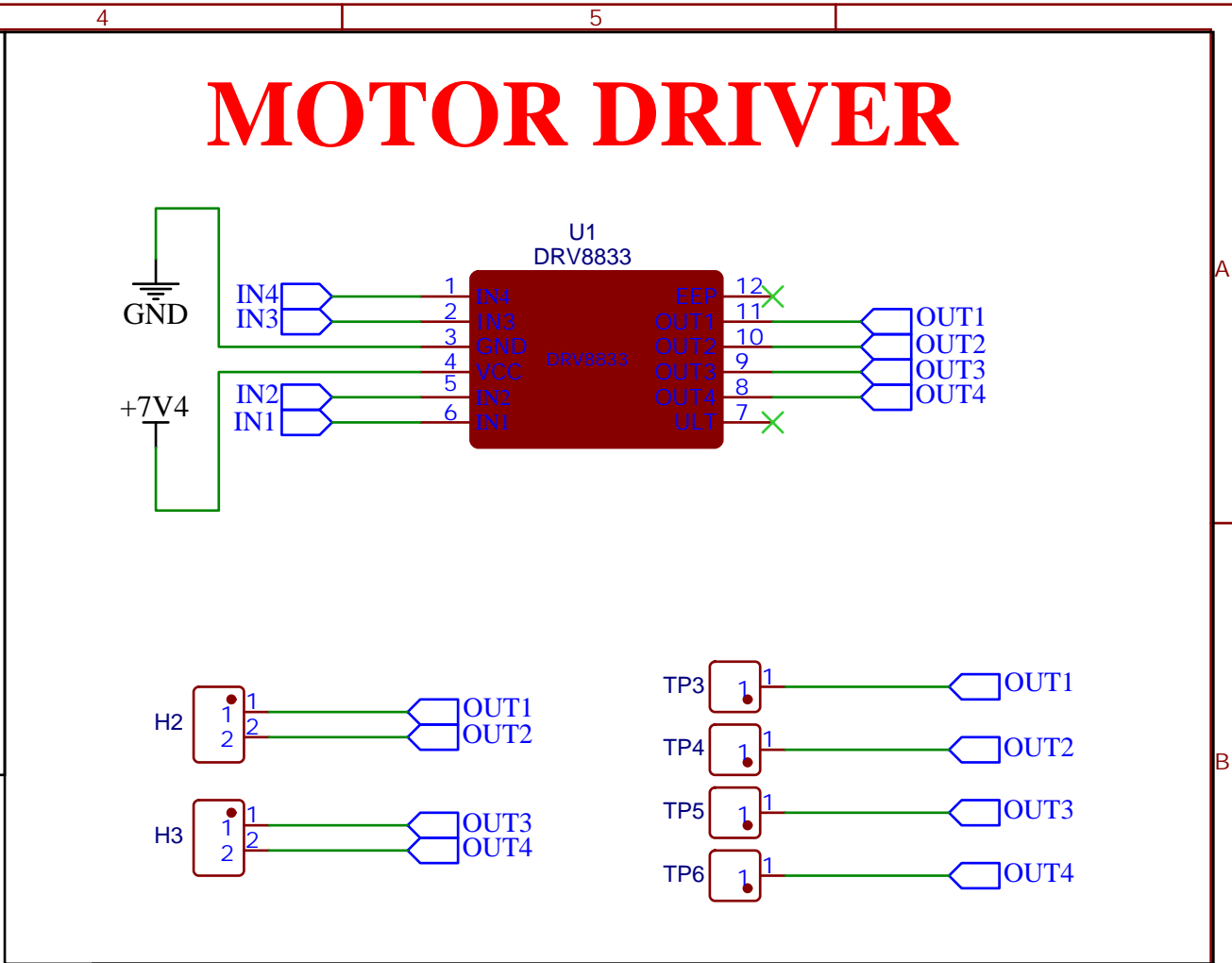


MOTOR DRIVER

The diagram shows a DRV8833 motor driver chip (U1) with the following connections:

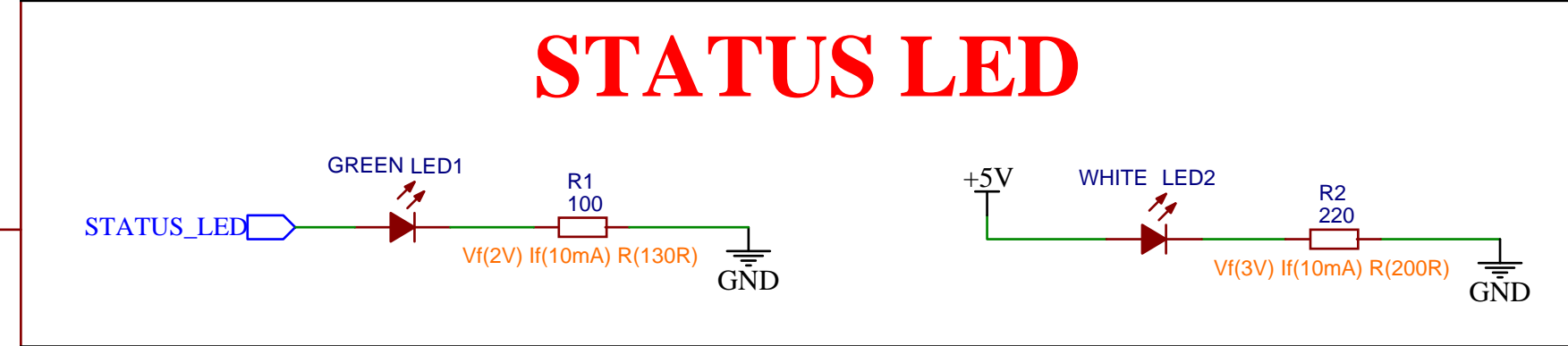
- Inputs:** IN4 and IN3 are connected to GND. IN2 and IN1 are connected to +7V4.
- Outputs:** OUT1 is connected to H2. OUT2 is connected to H3. OUT3 is connected to TP3. OUT4 is connected to TP4.

The motor terminals are labeled H2, H3, TP3, TP4, TP5, and TP6. The connections for TP5 and TP6 are not shown in the diagram.



STATUS LED

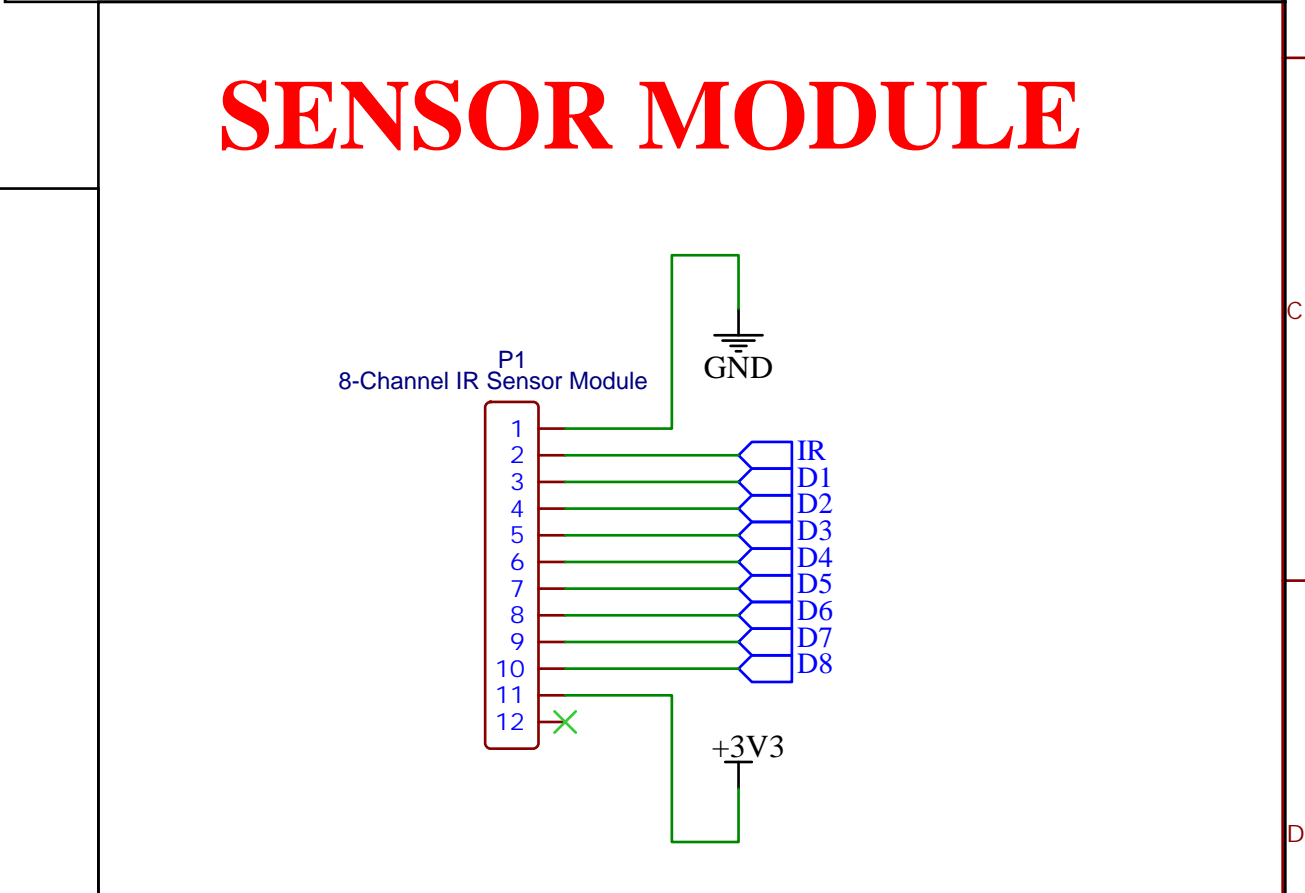
The image displays two circuit diagrams for STATUS LEDs. The left diagram shows a GREEN LED1 connected to a STATUS_LED pin, with a resistor R1 (100 ohms) and forward voltage Vf(2V), forward current If(10mA), and resistance R(130R). The right diagram shows a WHITE LED2 connected to a +5V supply, with a resistor R2 (220 ohms) and forward voltage Vf(3V), forward current If(10mA), and resistance R(200R).



SENSOR MODULE

The diagram illustrates the wiring for an 8-Channel IR Sensor Module (P1). The module's 12 pins are connected as follows:

- Pin 1: Connected to GND.
- Pins 2-10: Connected to digital pins D1 through D8.
- Pin 11: Marked with a green 'X', indicating it is not connected.
- Pin 12: Connected to the +3V3 power supply.



MCU

U3
ESP32-S2-mini

IR

D3

D1

D4

D2

D5

D6

STATUS_LED

D7

D8

IN1

IN2

+3V3

EN

1

2

3

4

5

6

7

8

9

10

11

12

13

14

3.3V

40

39

38

37

36

35

34

33

21

18

17

16

15

GND

GND

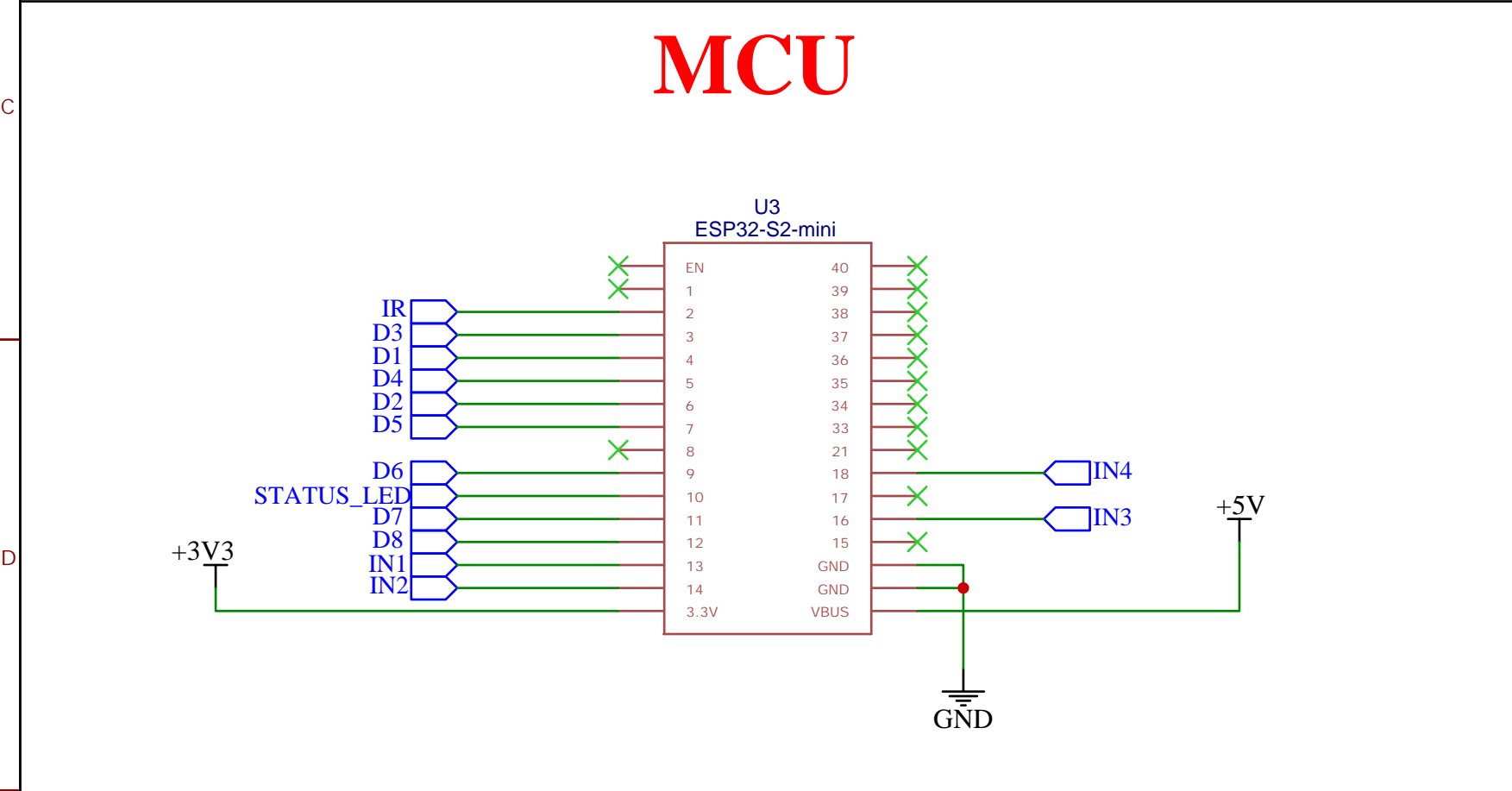
VBUS

IN4

IN3

+5V

GND



4	5	
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