

12345

A

B

POWER

Diagram of the Power section circuit:

- Input: +3V7
- Connector: CN1 JST_2PIN-THM-RA
- Regulator: REG1 AMS1117-3.3V
- Capacitors: C2 10uF, C1 10uF
- Resistor: R1 100
- LED: LED1
- Output: +3V3
- Ground: GND

IMU

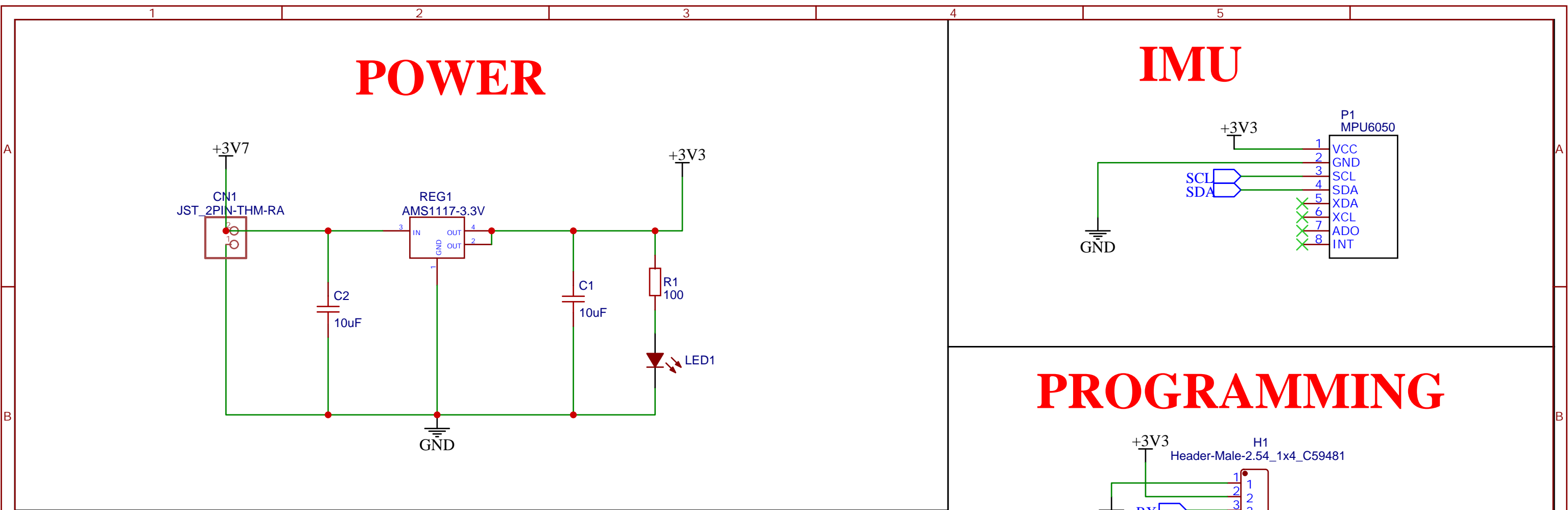
Diagram of the IMU section circuit:

- Connector: P1 MPU6050
- Wires: +3V3, GND, SCL, SDA, XDA, XCL, ADO, INT

PROGRAMMING

Diagram of the Programming section circuit:

- Connector: H1 Header-Male-2.54_1x4_C59481
- Wires: +3V3, GND, RX



12345

A

B

POWER

+3V7

CN1
JST_2PIN-THM-RA

REG1
AMS1117-3.3V

C2
10uF

C1
10uF

R1
100

LED1

GND

+3V3

IMU

+3V3

GND

SCL

SDA

P1
MPU6050

1 VCC

2 GND

3 SCL

4 SDA

5 XDA

6 XCL

7 ADO

8 INT

PROGRAMMING

+3V3

GND

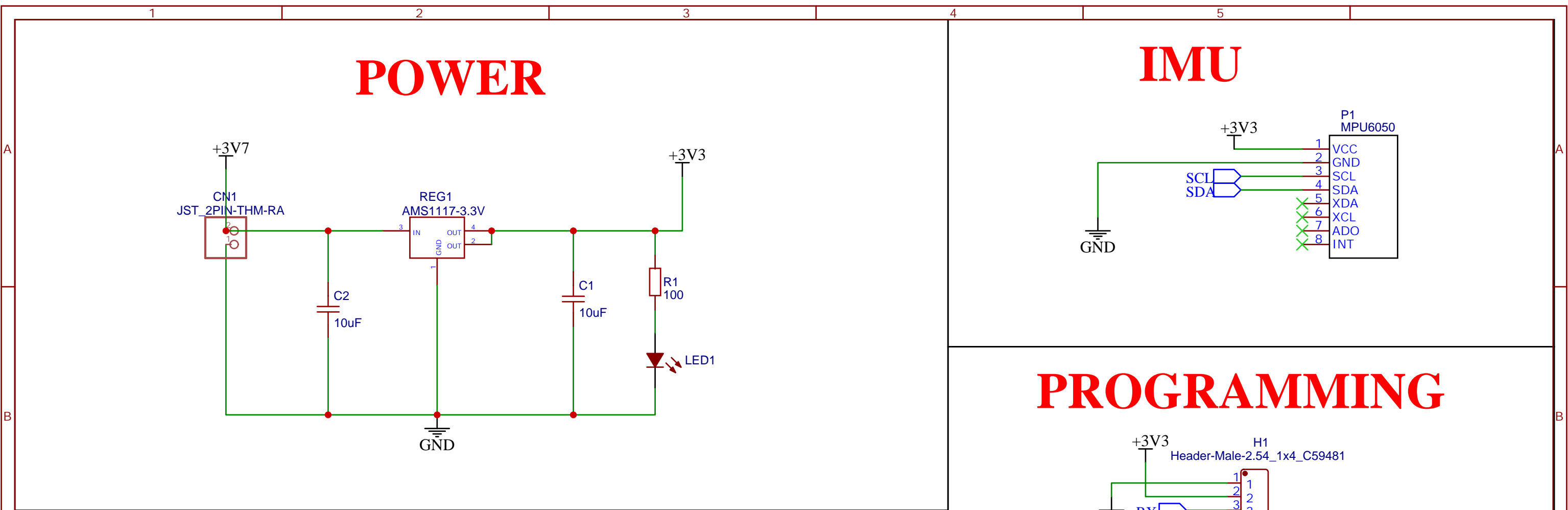
RX

H1
Header-Male-2.54_1x4_C59481

1

2

3



12345

A

B

POWER

+3V7

CN1
JST_2PIN-THM-RA

REG1
AMS1117-3.3V

C2
10uF

C1
10uF

R1
100

LED1

GND

+3V3

IMU

+3V3

GND

SCL

SDA

P1
MPU6050

1 VCC

2 GND

3 SCL

4 SDA

5 XDA

6 XCL

7 ADO

8 INT

PROGRAMMING

+3V3

GND

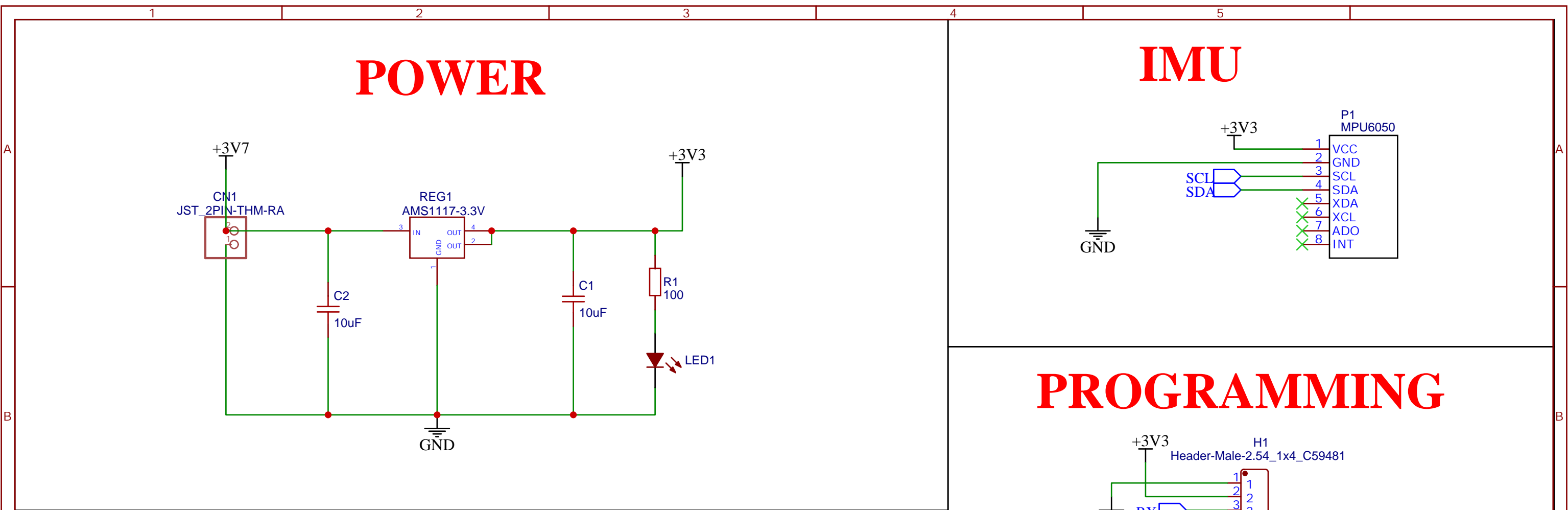
RX

H1
Header-Male-2.54_1x4_C59481

1

2

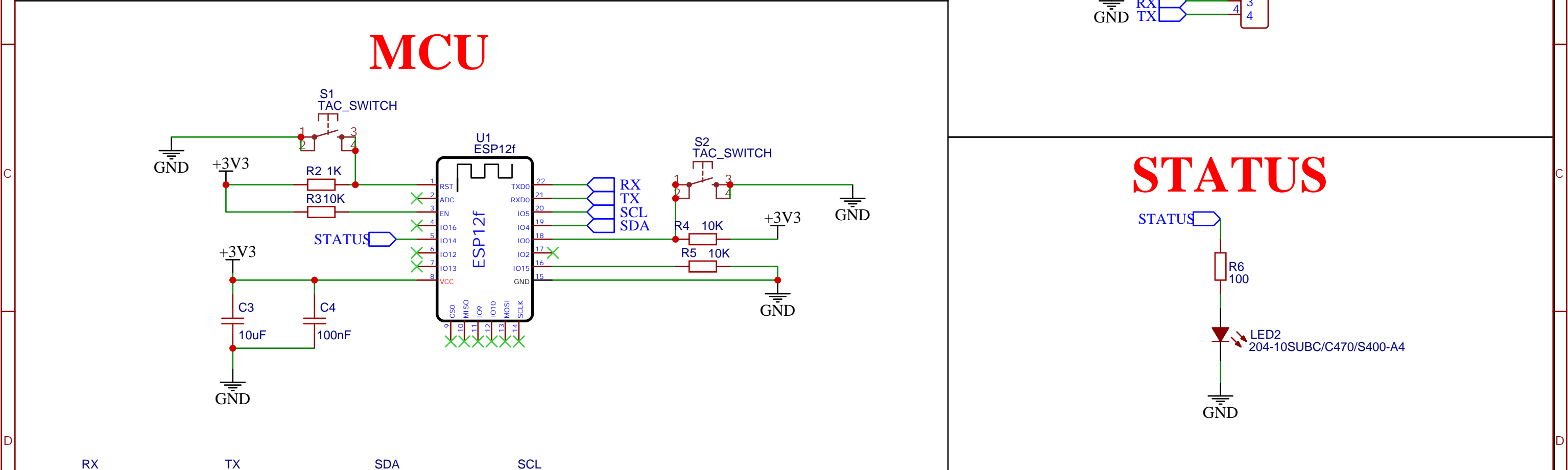
3



The diagram illustrates the hardware connections for an ESP12f module. The MCU section shows the ESP12f (U1) connected to an MCU. Key connections include:

- Power:** +3V3 and GND pins are connected to the MCU's power supply.
- Reset:** RST pin is connected to the MCU's RST pin.
- IO Pins:** IO16, IO14, IO12, IO13, and VCC are connected to the MCU's corresponding pins.
- Communication:** TXD0, RXD0, IO5, IO4, IO0, IO2, IO15, and GND are connected to the MCU's TX, RX, SCL, and SDA pins.
- Switches:** S1 (TAC_SWITCH) and S2 (TAC_SWITCH) are connected to the MCU's TX and RX pins, respectively.
- Capacitors:** C3 (10uF) and C4 (100nF) are connected to the MCU's power pins.

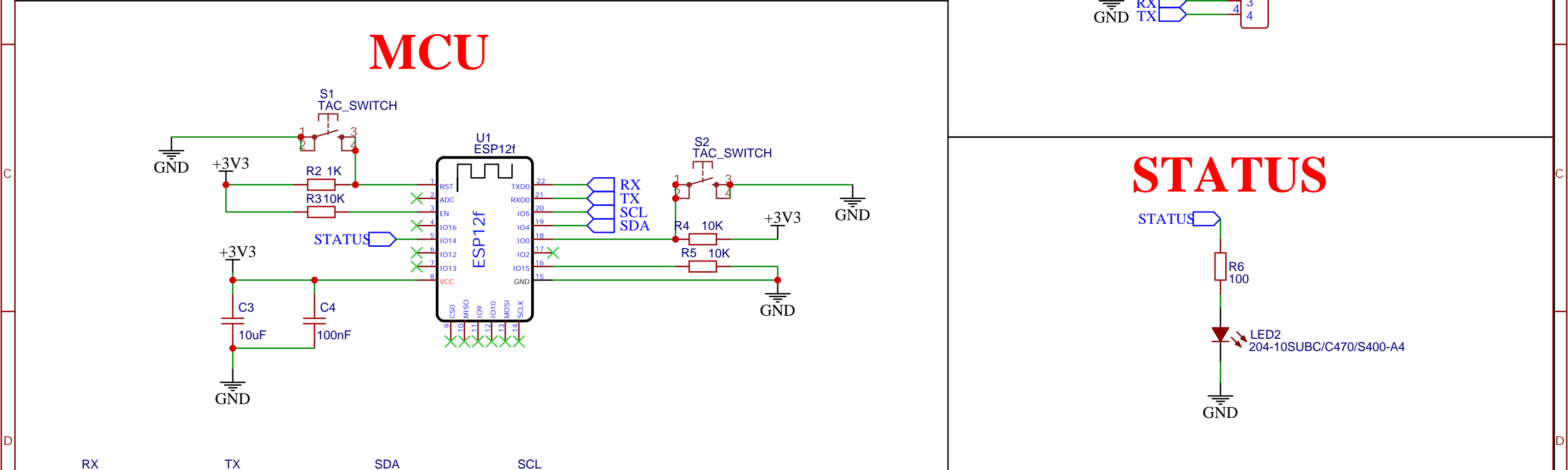
 The STATUS section shows a STATUS LED (LED2) connected to the MCU's STATUS pin through a 100 ohm resistor (R6). The LED is labeled as 204-10SUBC/C470/S400-A4.





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