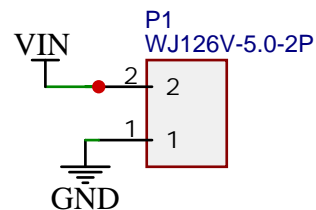
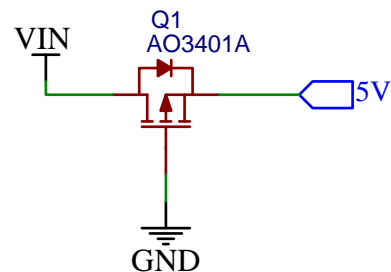


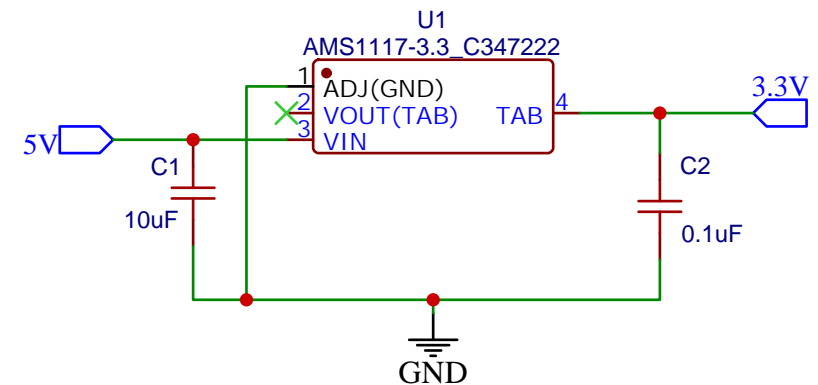
POWER INPUT



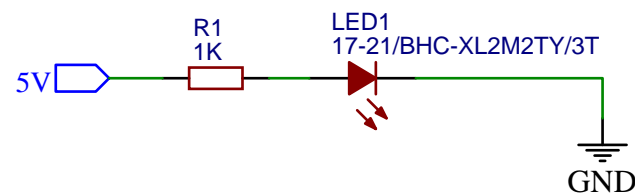
REVERSE POLARITY PROTECTION



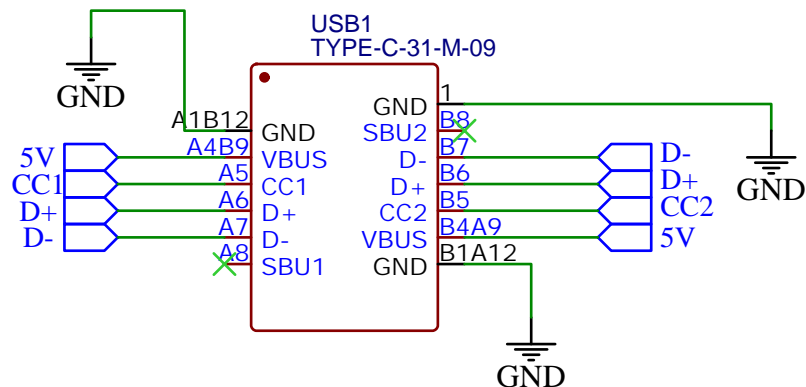
VOLTAGE REGULATOR



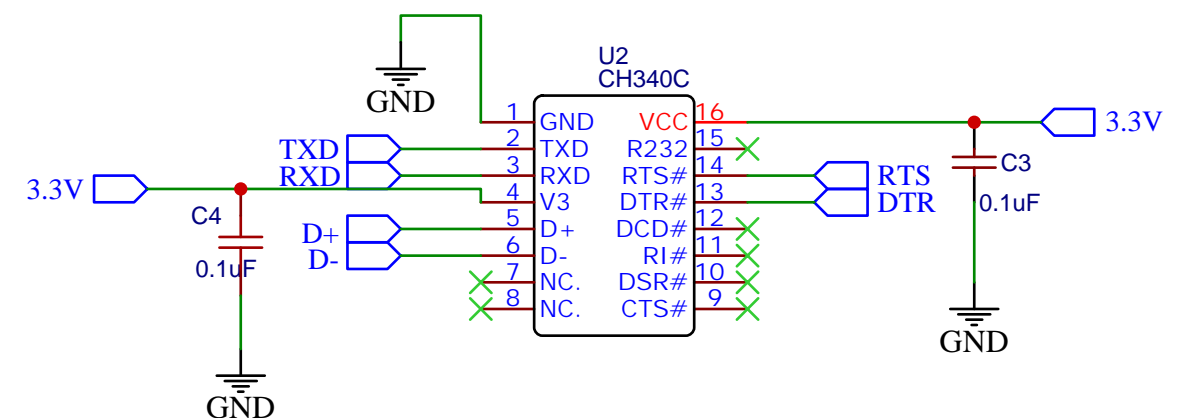
POWER LED



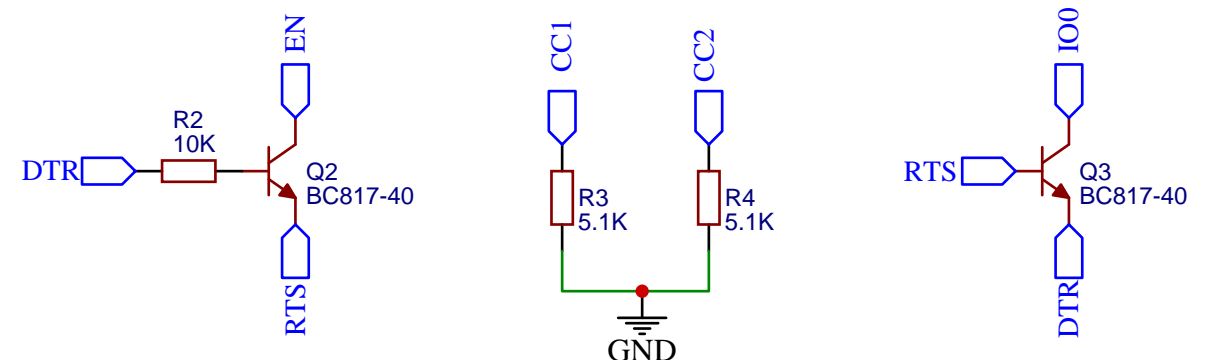
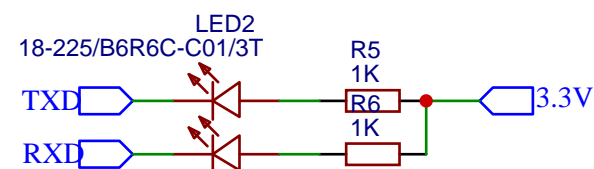
USB C CONNECTOR



PROGRAMMING



UART LEDS



TITLE:

Flight Control

REV: 1.0

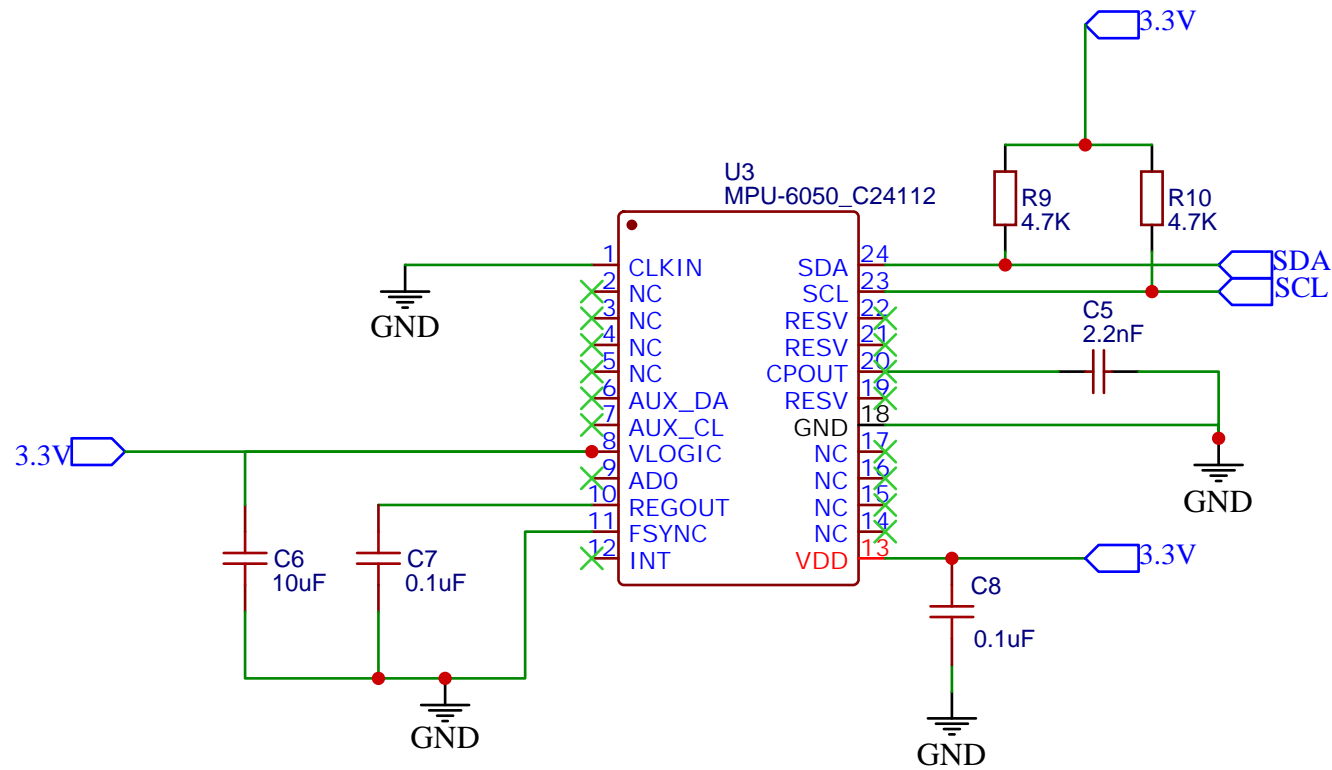


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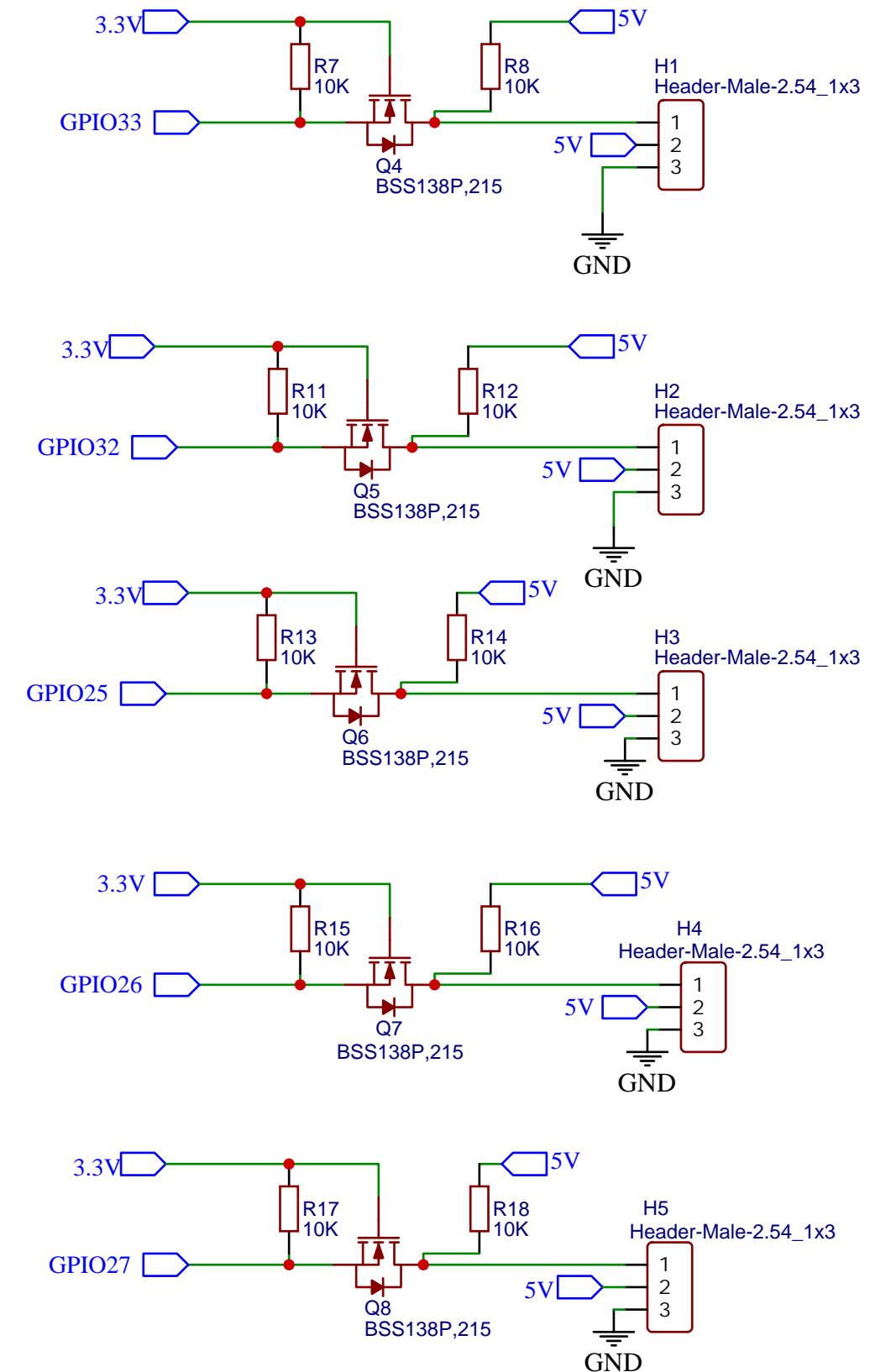
Sheet: 1/1

Date: 2021-09-09 Drawn By: Michael Kimani & sg

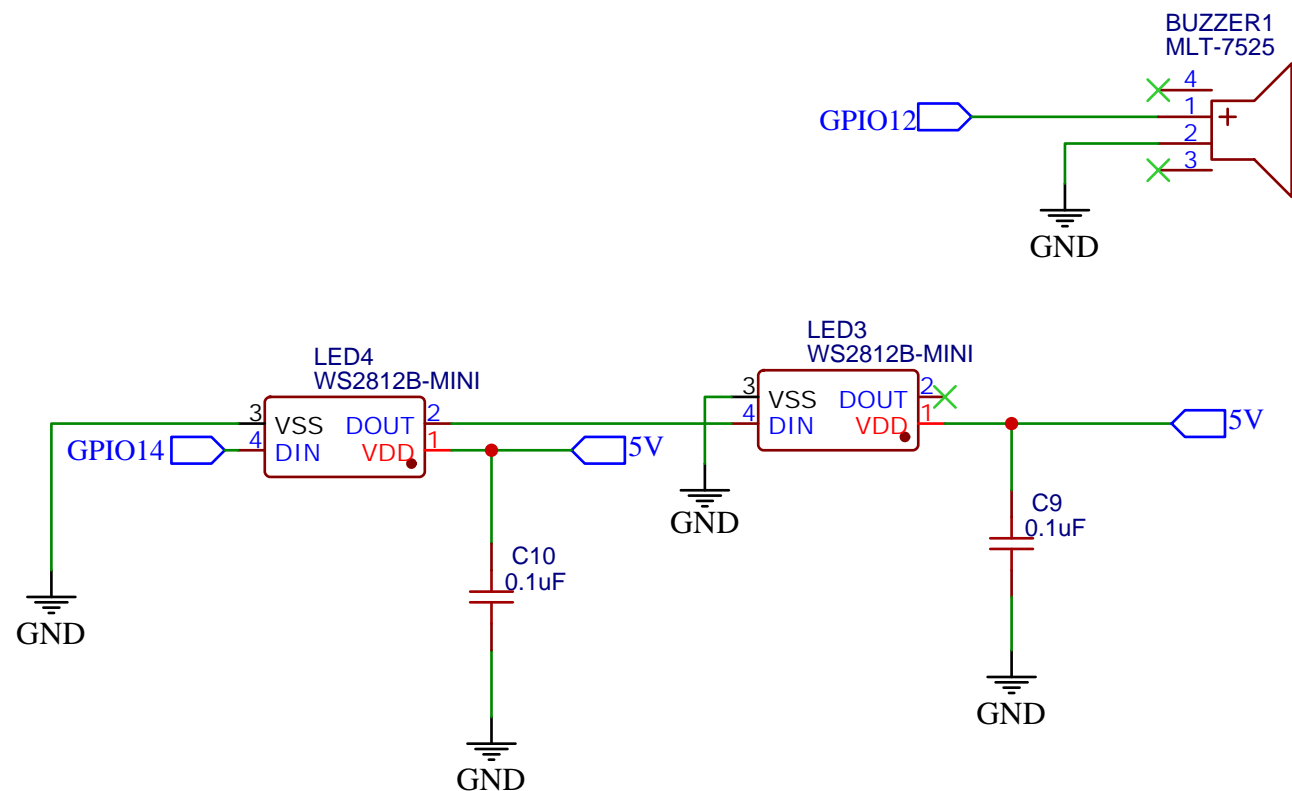
MPU-6050



LEVEL SHIFTED PWM PINS

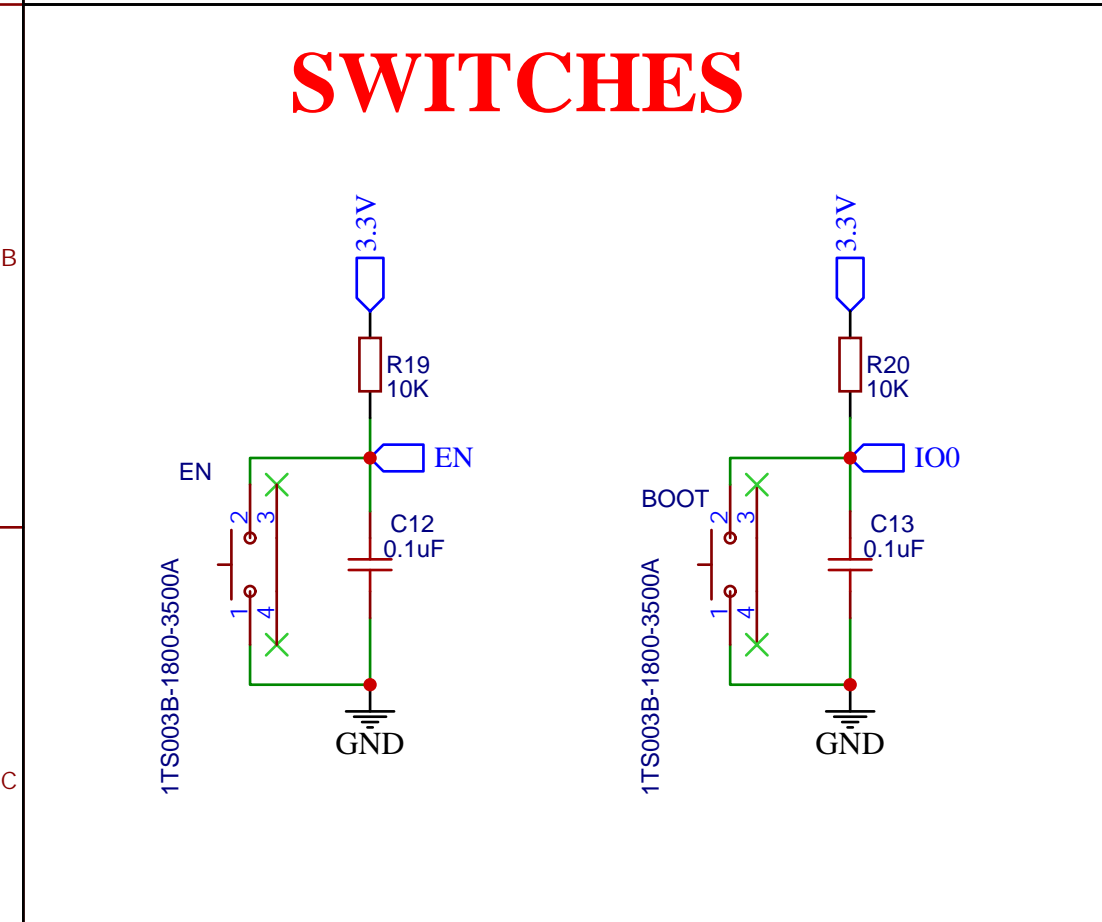


INDICATORS

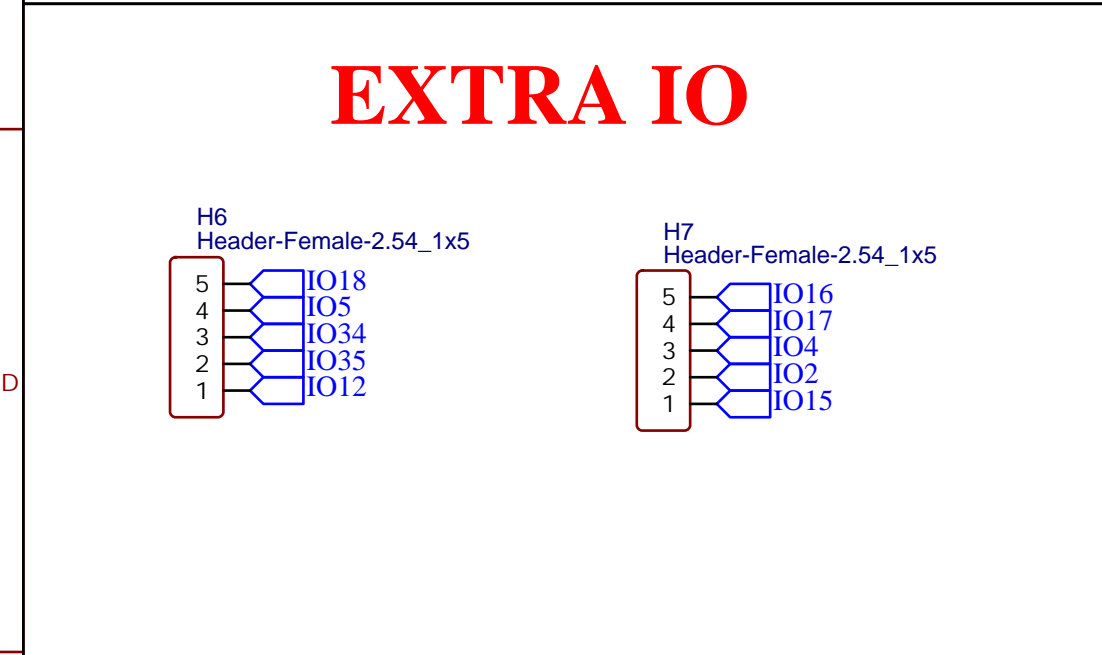


TELEMETRY

The diagram illustrates a telemetry circuit. It features two 3-pin headers, P2 and P3, both labeled 'Header-Female-2.54_1x3'. P2 has pins 1, 2, and 3. P3 also has pins 1, 2, and 3. Pin 1 of P2 is connected to Pin 1 of P3. Pin 2 of P2 is connected to Pin 2 of P3. Pin 3 of P2 is connected to Pin 3 of P3. All three pins of P3 are connected to a common ground symbol labeled 'GND'.



SWITCHES



EXTRA IO

H6
Header-Female-2.54_1x5

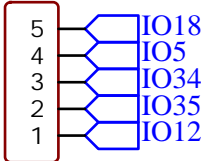


Diagram showing the pin connections for the H6 header. The header is a 5-pin female connector. The pins are numbered 1 to 5 from bottom to top. The connections are as follows:

Pin	Signal
5	IO18
4	IO5
3	IO34
2	IO35
1	IO12

H7
Header-Female-2.54_1x5

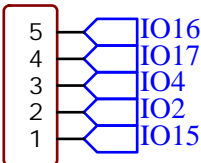
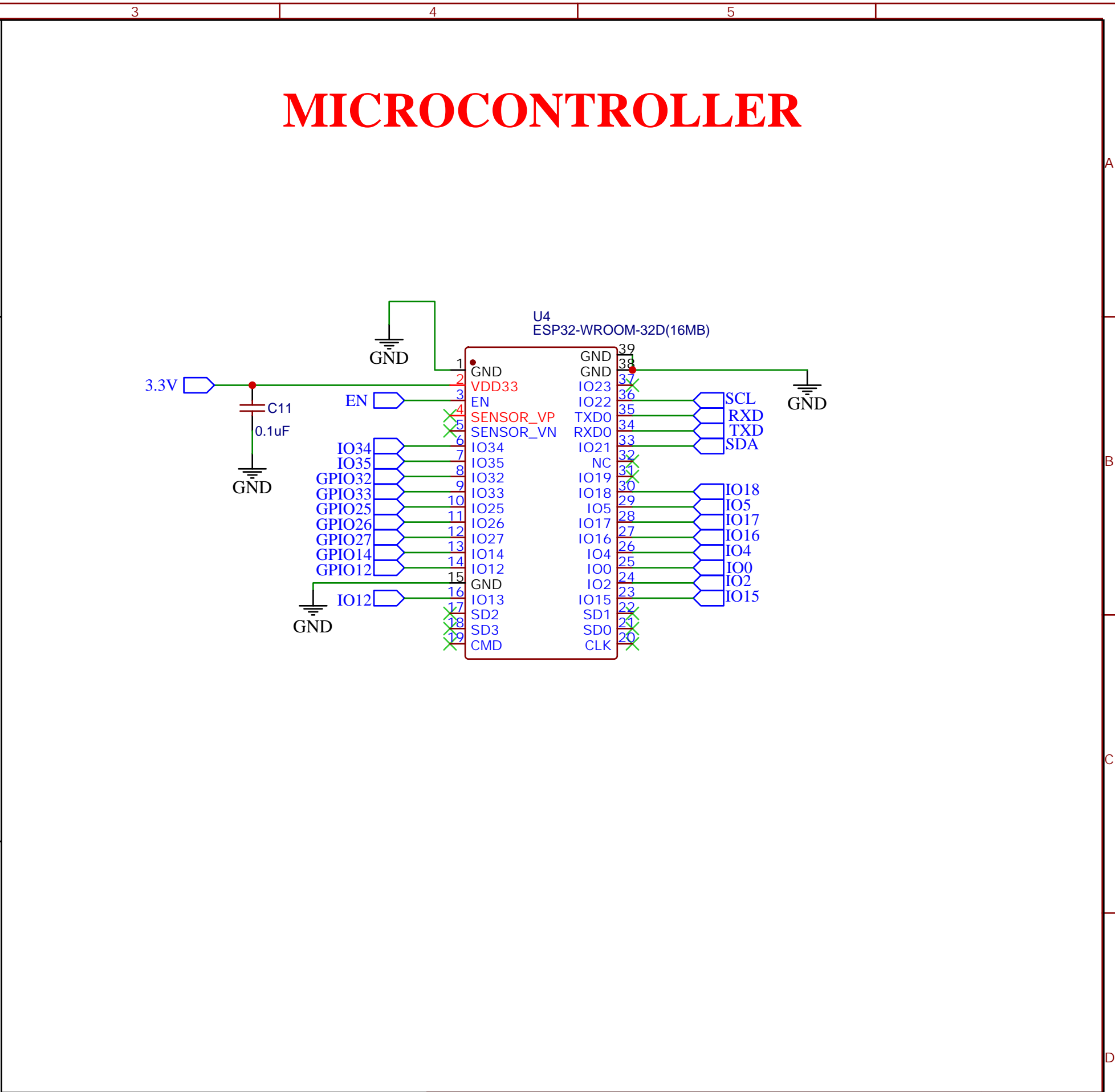


Diagram showing the pin connections for the H7 header. The header is a 5-pin female connector. The pins are numbered 1 to 5 from bottom to top. The connections are as follows:

Pin	Signal
5	IO16
4	IO17
3	IO4
2	IO2
1	IO15





MICROCONTROLLER


The diagram illustrates the electrical connections for an ESP32-WROOM-32D microcontroller (U4). The power supply section includes a 3.3V source connected to pin 2 (VDD33) and a 0.1µF capacitor connected to the 3.3V line and ground. The ground connections are shown at pins 1, 15, and 38. The I2C interface is connected to pins 36 (SCL) and 37 (SDA). The TXD0 and RXD0 pins (34 and 35) are also shown. The diagram includes a detailed pin list for the microcontroller, with pins 1 through 39 labeled. Pins 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, and 39 are marked with a red 'X', indicating they are not connected or are reserved.


Pin	Label	Color
1	GND	Red
2	VDD33	Red
3	EN	Blue
4	SENSOR_VP	Red
5	SENSOR_VN	Blue
6	IO34	Blue
7	IO35	Blue
8	IO32	Blue
9	IO33	Blue
10	IO25	Blue
11	IO26	Blue
12	IO27	Blue
13	IO14	Blue
14	IO12	Blue
15	GND	Red
16	IO13	Blue
17	SD2	Blue
18	SD3	Blue
19	CMD	Blue
20	CLK	Blue
21	IO15	Blue
22	SD1	Blue
23	IO2	Blue
24	IO0	Blue
25	IO4	Blue
26	IO16	Blue
27	IO17	Blue
28	IO5	Blue
29	IO18	Blue
30	IO19	Blue
31	NC	Blue
32	IO21	Blue
33	RXD0	Blue
34	TXD0	Blue
35	IO22	Blue
36	IO23	Blue
37	GND	Red
38	GND	Red
39	GND	Red





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