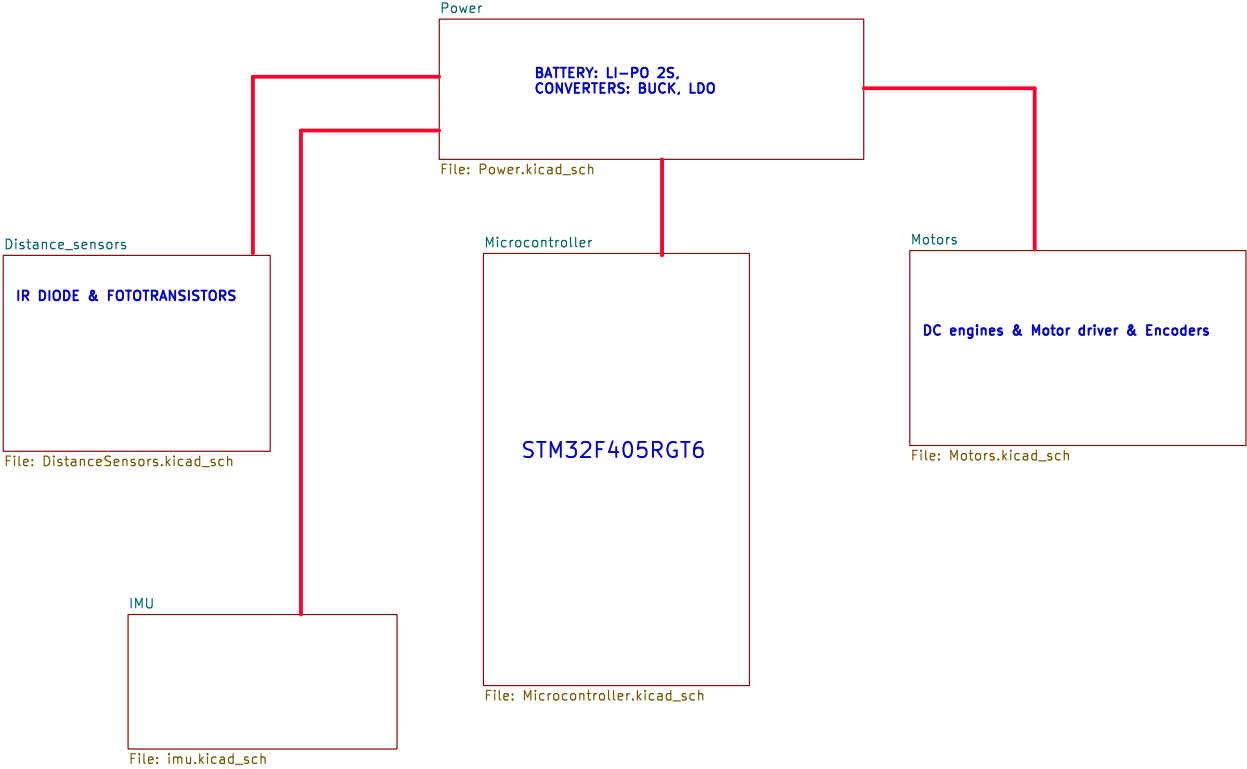


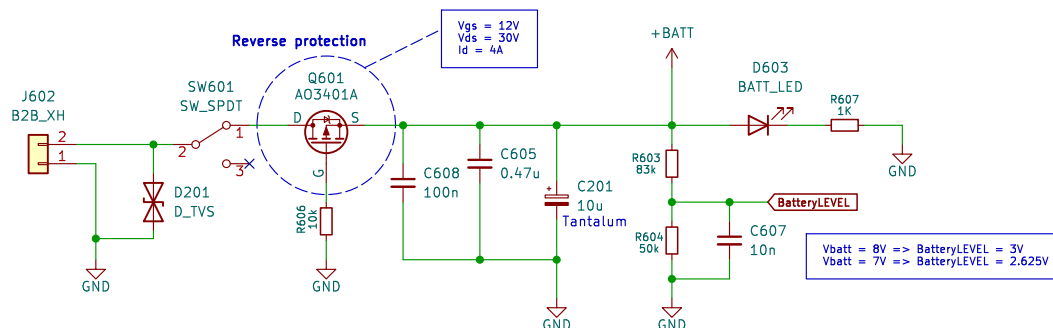
[1] Micromouse – Top level Schematic



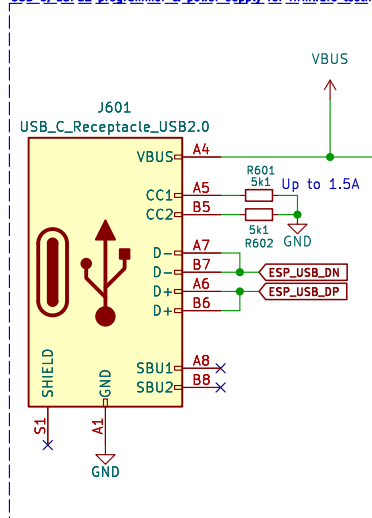
Hierarchical Sheet

Sheet: /		
File: Micromouse.kicad_sch		
Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad 7.0.8		Id: 1/6

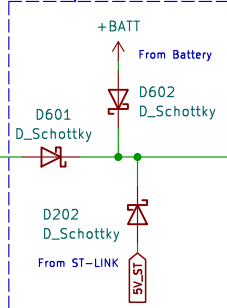
BATTERY LI_PO_2S_(?)



USB C. ESP32 programmer & power supply for firmware testing



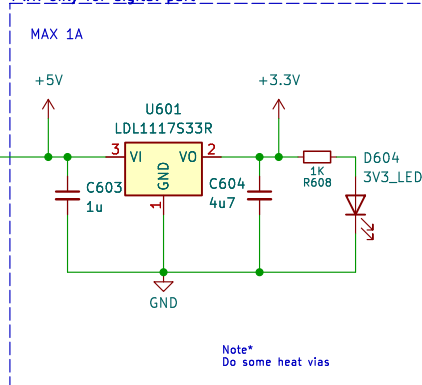
Reverse protection



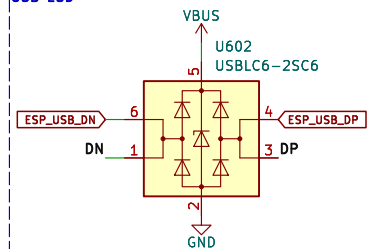
If USB is plugged in and Batt or ST-LINK, Vbus is blocked

If ST-LINK and batt is plugged, ST-LINK 5V ST is blocked

PWR only for digital part



USB ESD



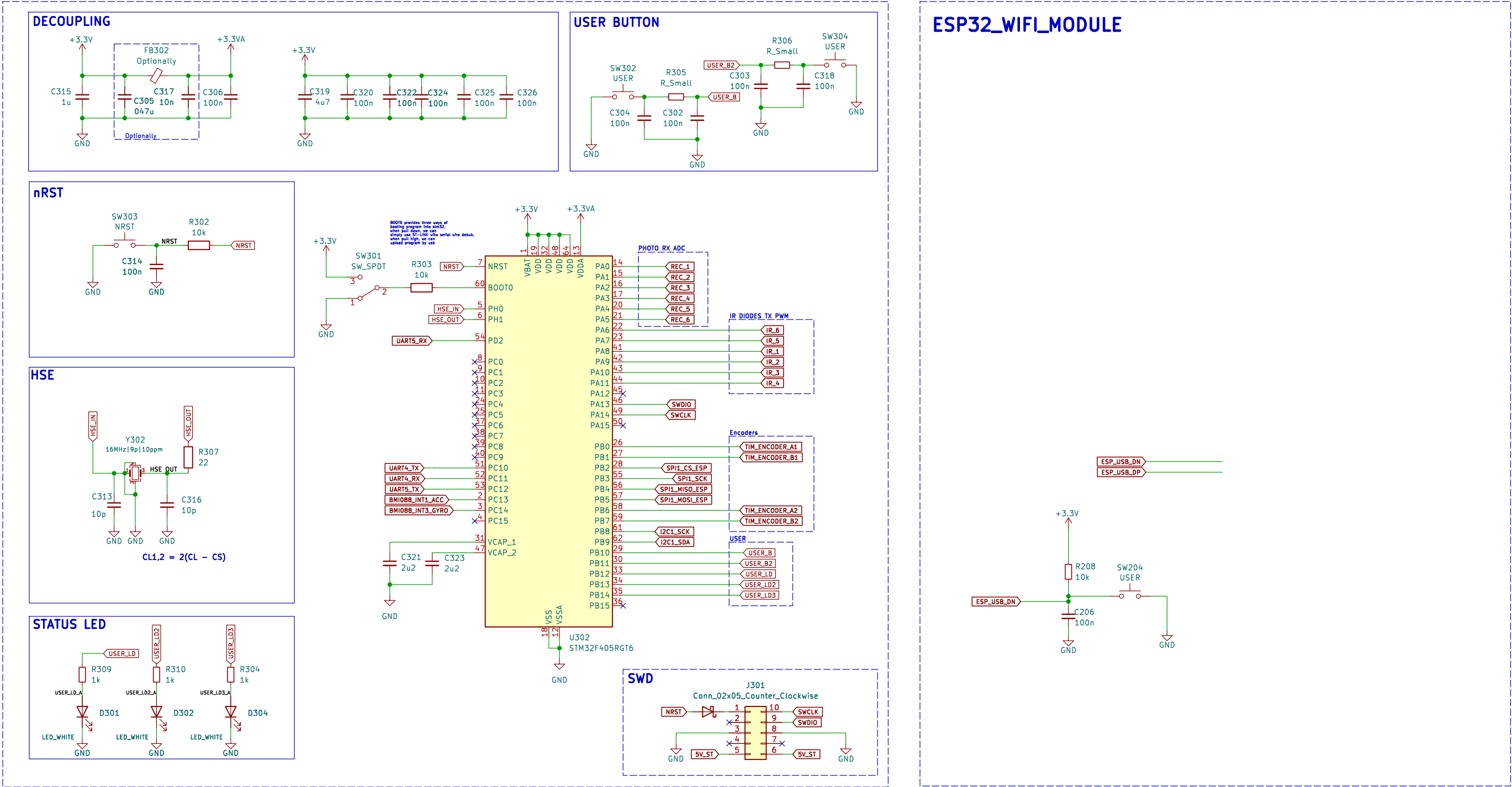
Sheet: /Power/
File: Power.kicad_sch

Title:

Size: User	Date:
KiCad E.D.A. kicad 7.0.8	

Rev:
Id: 2/6

[3] Microcontroller & WIFI module



A



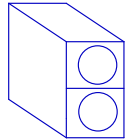
C

D

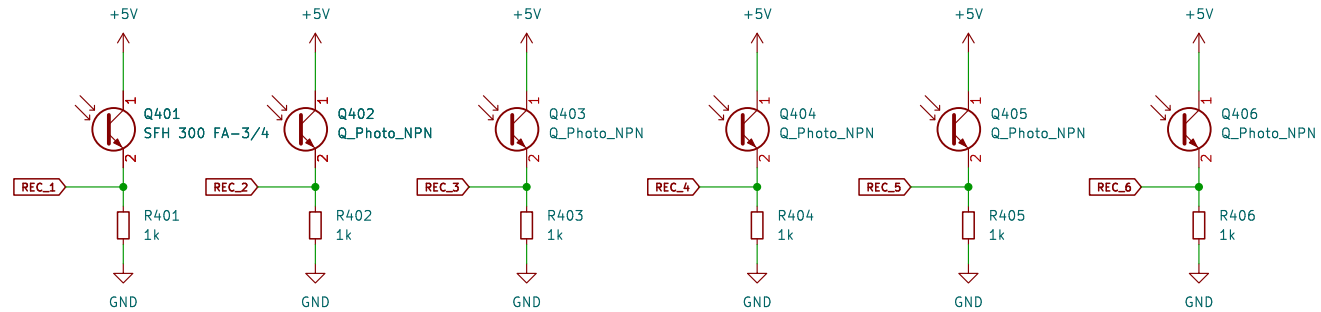
D

Rev:
Id: 4/6

[5] IR RECEIVERS & EMITTERS

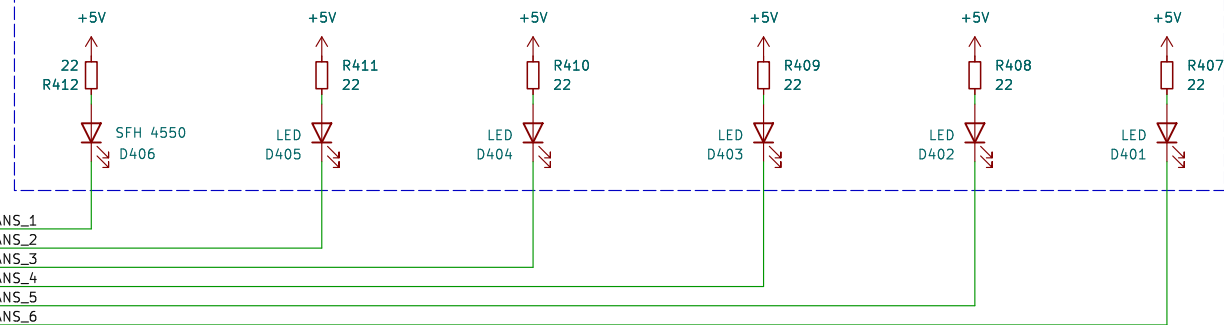


IR & Photo placed
in one case

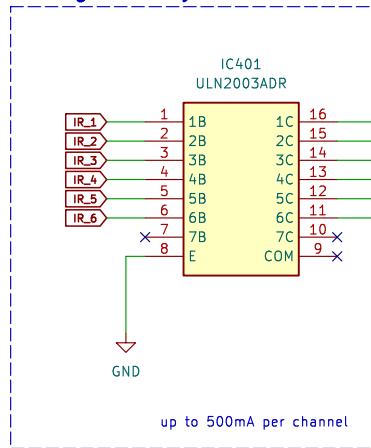


Diode max dc current = 100mA
 $I_d = 3.5V / 220\Omega = 0.16A$

Power diodes only by PWM < 60%



Darlington array



Sheet: /Distance_sensors/
File: DistanceSensors.kicad_sch

Title:

Size: A4

Date:

KiCad E.D.A. kicad 7.0.8

Rev:

Id: 5/6

[6] Accelerometer & gyroscope

I2C addr.
 Acc: 0011000 << 1
 Gyro: 1101000 << 1

BMI088

***Note**
 BMI088 komunikuje się
 przez I2C lub SPI,
 wada spi w tym sensorze jest taka,
 że potrzebne są dwa piny cs
 jeden dla akcelerometru,
 drugi dla żyroskopu

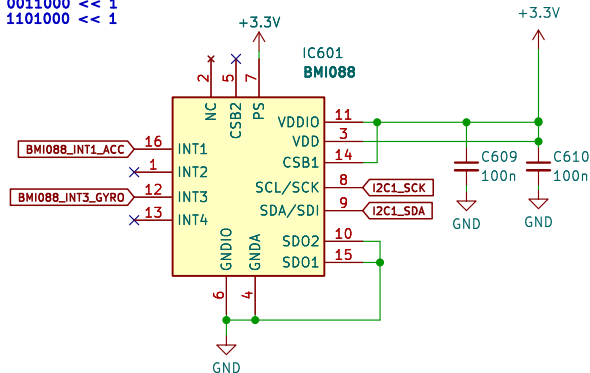
Sheet: /IMU/
 File: imu.kicad_sch

Title:

Size: A5	Date:
KiCad E.D.A. kicad 7.0.8	

Rev:	Id: 6/6
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```
I2C addr.  
Acc: 0011000 << 1  
Gyro: 1101000 << 1
```



***Note**
BMI088 komunikuje się
przez I2C lub SPI,
wada spi w tym sensorze jest taka,
że potrzebne są dwa piny cs,
jeden dla akcelerometru,
drugi dla żyroskopu

BMI088

Sheet: /IMU/
File: imu.kicad_sch

Title:

Size: A5	Date:
KiCad E.D.A.	kiCad 7.0.8

Rev:
Id: 6/6