

## Power Input

Battery Connector  
10V - 30V

Reverse Polarity Protection

12V Supply  
-Input: DC 10V-30V  
-Output: 12V at 1A

<https://webench.ti.com/appinfo/webench/scripts/SDP.cgi?ID=054F6F9B41D36834>

+3.3V Supply  
-Input: DC 12V 100mA  
-Output: 3.3V at 100mA

H1 MountingHole H3 MountingHole  
H2 MountingHole H4 MountingHole

FID1 Fiducial FID3 Fiducial  
FID2 Fiducial

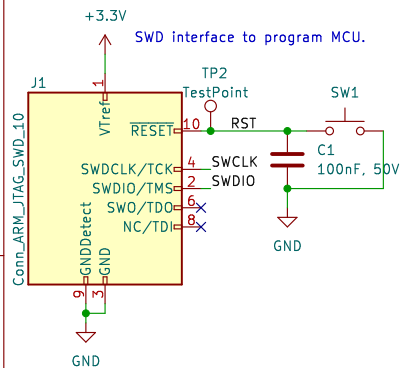
Restrict output to 15mA using series resistors.

## LED Driver

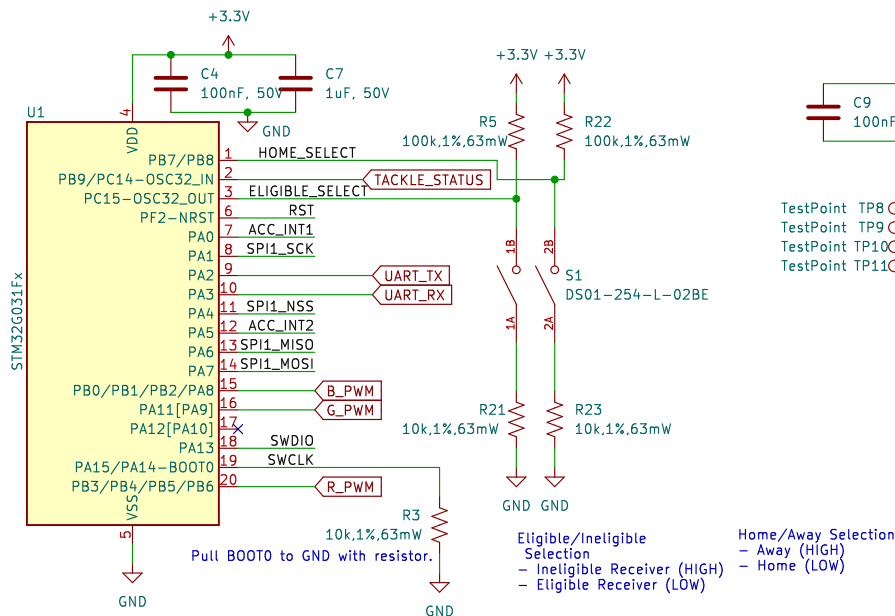
Tackle Status  
1 -> UART TX  
2 -> UART RX  
3 -> Status  
4 -> Home/Away  
5 -> Eligible/Ineligible  
6 -> GND

Status is HIGH when "okay".  
Status is LOW when "tackled".

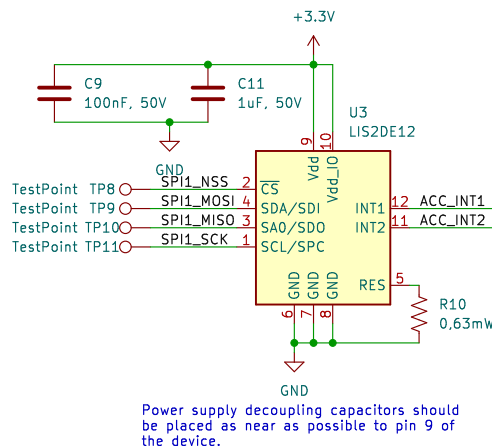
## Programming Header



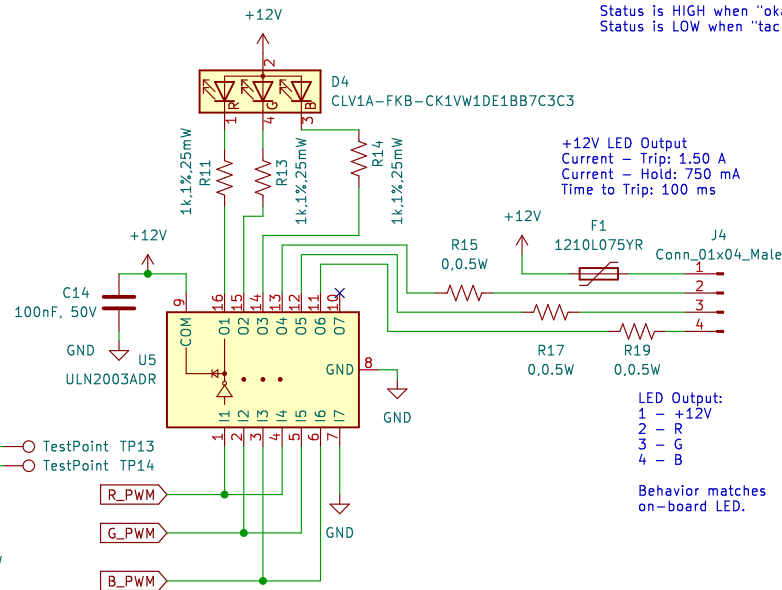
## MCU



## Accelerometer



Power supply decoupling capacitors should be placed as near as possible to pin 9 of the device.



LED Output:  
1 - +12V  
2 - R  
3 - G  
4 - B

Behavior matches on-board LED.

Sheet: /  
File: tackle\_sensor\_hardware.kicad\_sch

**Title: Tackle Sensor**

Size: USLegal Date: 2023-08-31  
KiCad E.D.A. kicad (6.0.1-0)

Rev: 1  
Id: 1/1