

Power Input

Battery Connector
10V - 30V

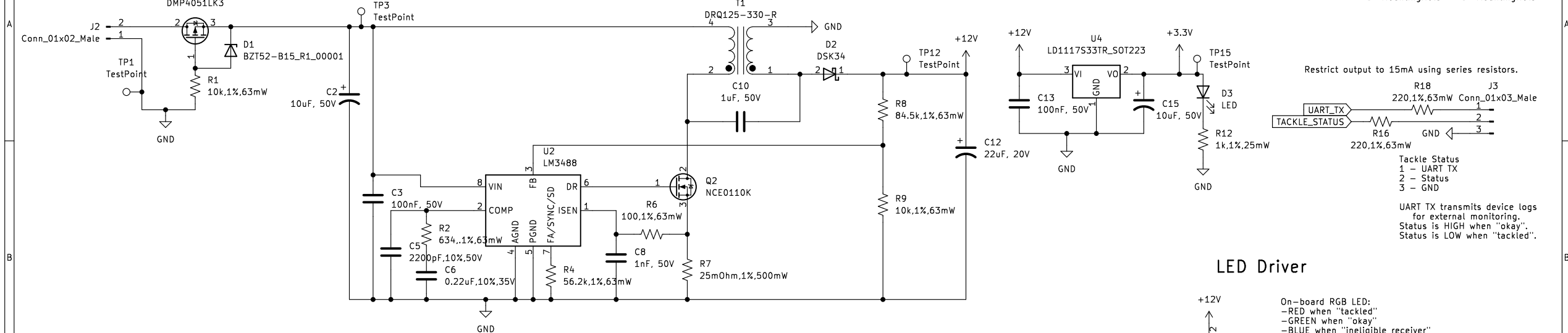
Reverse Polarity Protection

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



Restrict output to 15mA using series resistors.

UART TX transmits device logs
for external monitoring.
Status is HIGH when "okay".
Status is LOW when "tackled".

LED Driver

On-board RGB LED:
-RED when "tackled"
-GREEN when "okay"
-BLUE when "ineligible receiver"

+12V LED Output
Current - Trip: 1.50 A
Current - Hold: 750 mA
Time to Trip: 100 ms

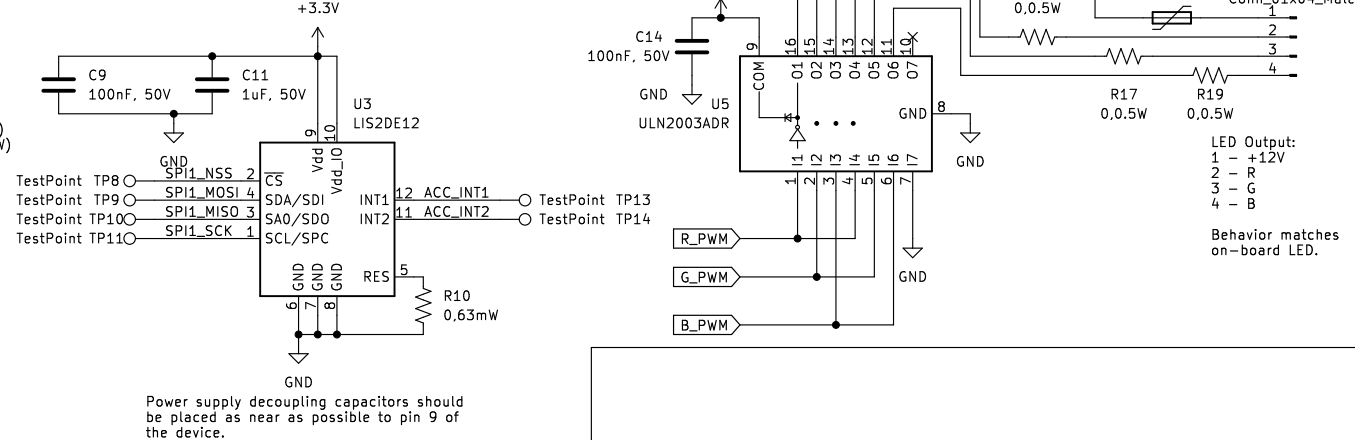
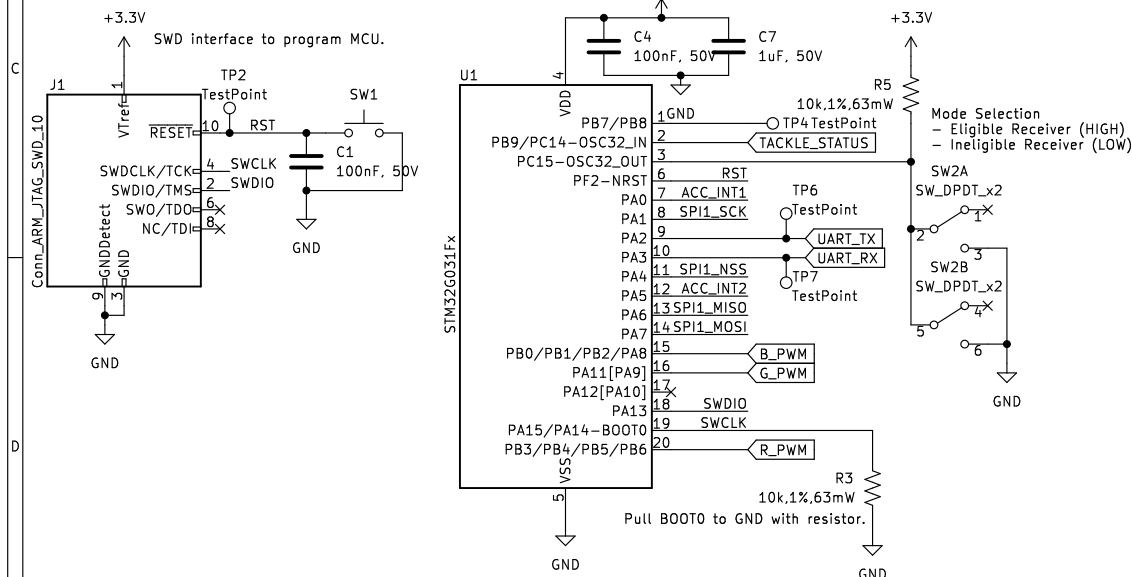
LED Output:
1 - +12V
2 - R
3 - G
4 - B

Behavior matches
on-board LED.

Programming Header

MCU

Accelerometer



Sheet: /		File: tackle_sensor_hardware.kicad_sch	
Title: Tackle Sensor			
Size: USLegal	Date: 2022-12-01	Rev: v0.1	
KiCad E.D.A.	kicad (6.0.1-0)	Id: 1/1	