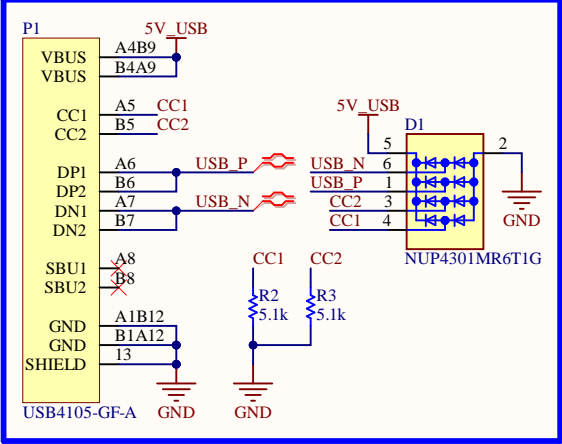


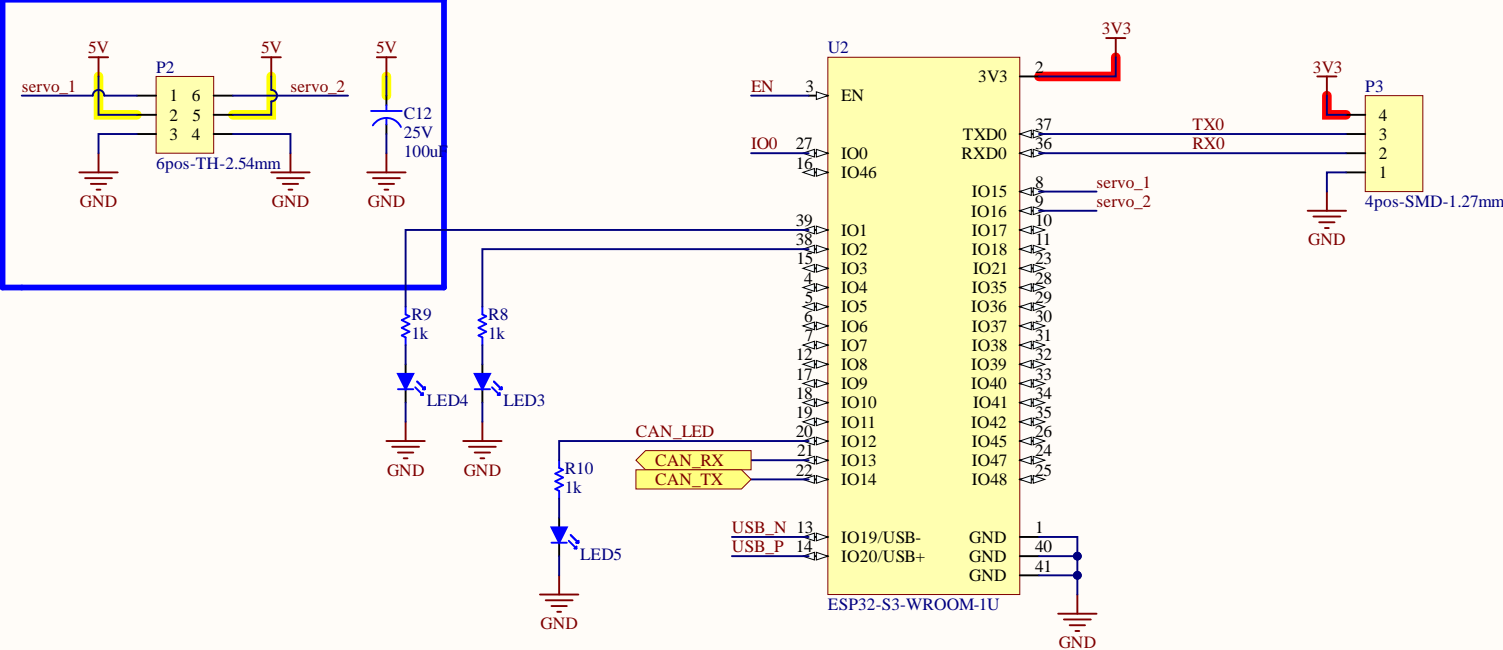
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Size: B	Drawn by: Emile Renaud	
Date: 2024-12-05	Checked by: *	
Sheet 1 of 3	Revision: V1.0	File: Overview.SchDoc



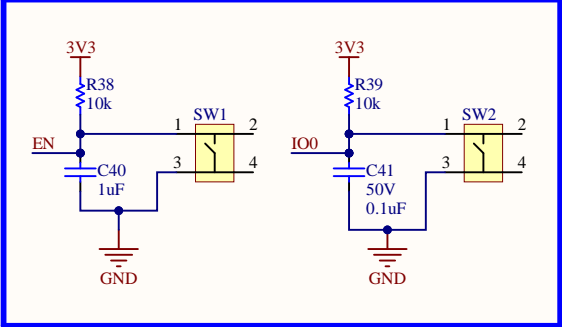
USB-C



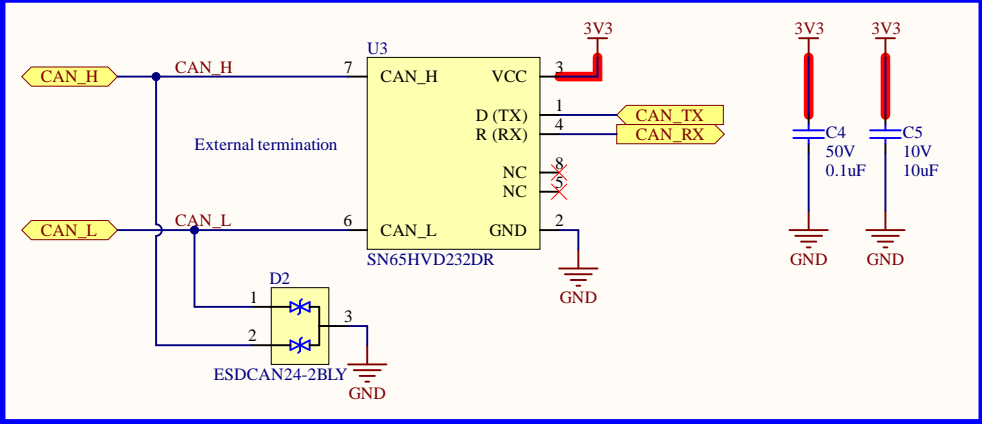
Servos



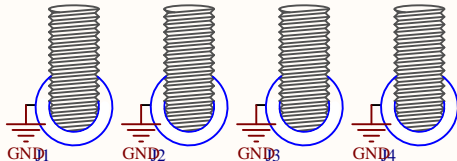
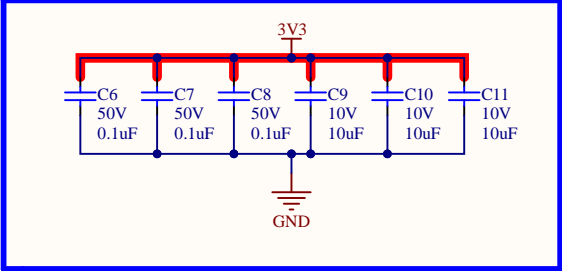
Buttons & Strapping



CAN



Decoupling



Title: roverServoController.PrjPcb

Size: B Drawn by: Emile Renaud

Date: 2024-12-07 Checked by: *

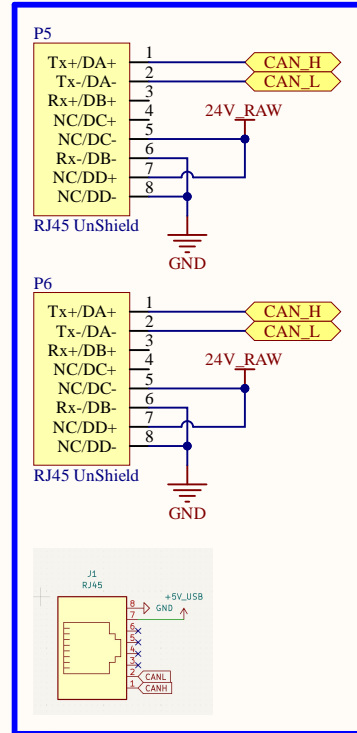
Sheet 2 of 3

Revision: V1.0

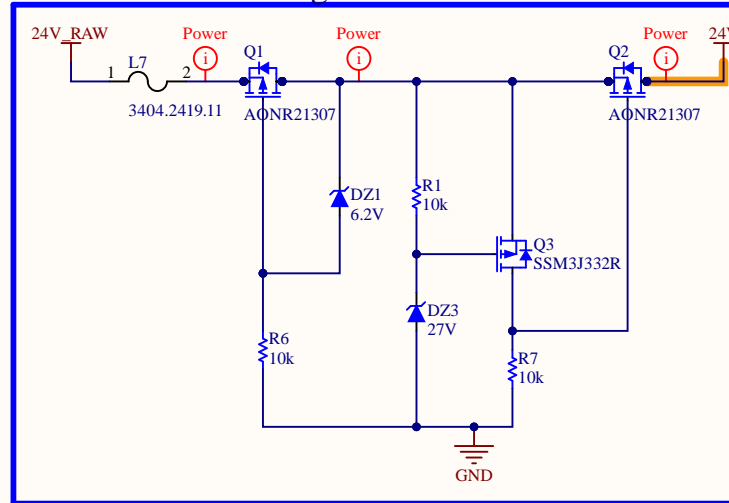
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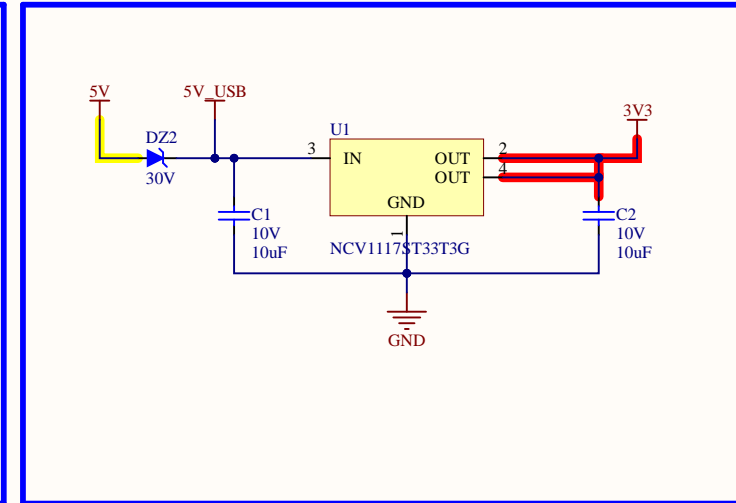
CAN + Raw PWR Rover



Reverse & OverVoltage Protection



LDO 3V3



DCDC 12V

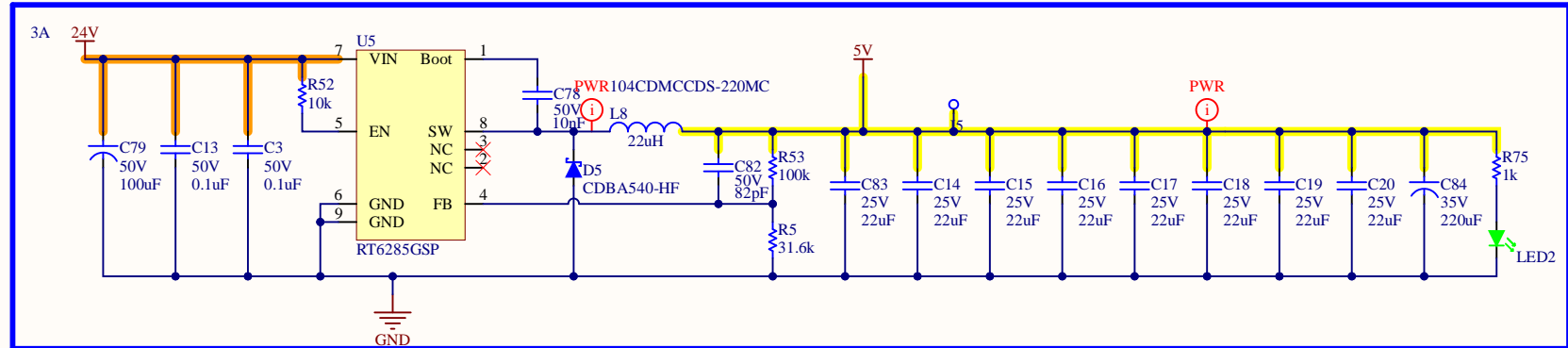


Table 1. Recommended Component Selection

V _{OUT} (V)	R1 (k Ω)	R2 (k Ω)	C _{FF} (pF)	L (μ H)	C _{OUT} (μ F)
2.5	100	100	82	6.8	22 x 2
3.3	100	58.6	82	10	22 x 2
5	100	31.6	82	15	22 x 2
8	100	18	82	22	22 x 2

Note: D4 and OEE should be fixed (400bC and 69aC) to have the optimized compensation rate.



The output voltage is set by an external resistive divider according to the following equation :

$$V_{OUT} = V_{REF} \left(1 + \frac{R_1}{R_2} \right)$$

Where V_{REF} is the reference voltage (1.222V typ.)
Where $R1 = 100k\Omega$.

