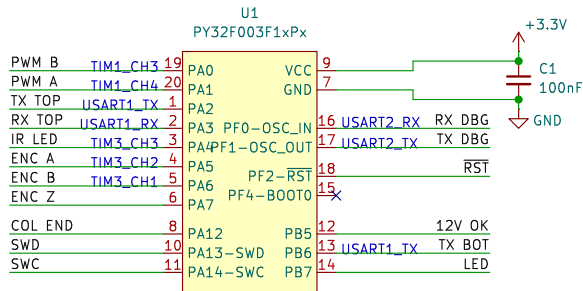
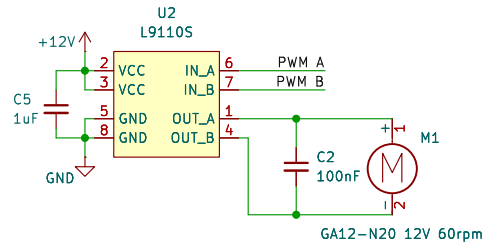


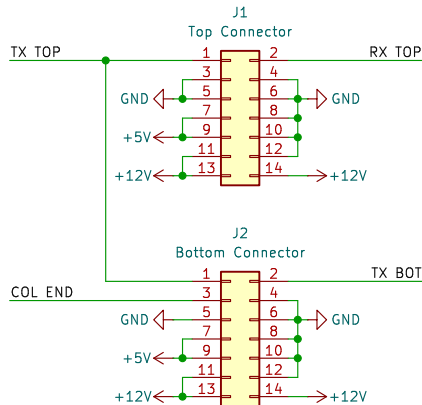
## Microcontroller



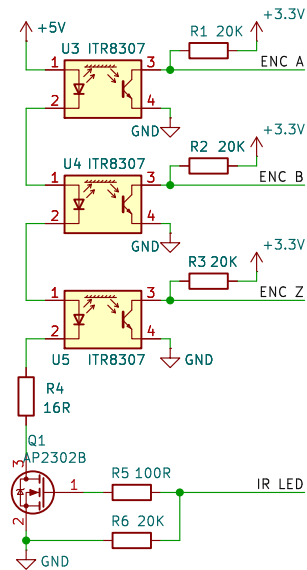
## Motor Controller



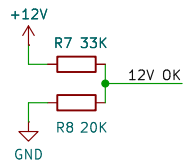
## Top & Bottom Connector



## IR Optical Encoder



## 12V ok



## LED



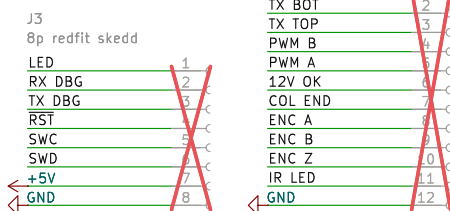
$$V_s = 5V$$

$$V_f = 1.275V$$

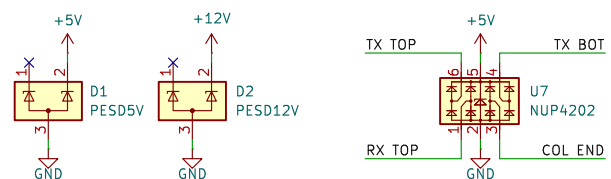
$$I_f = 75mA$$

$$R_4 = [ V_s - ( 3 \times V_f ) ] / I_f = 16 \text{ Ohm}$$

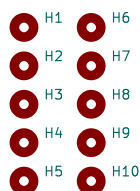
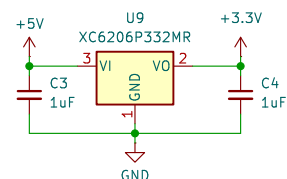
## Debug



## ESD



## Power



Designer: Toon Van Eyck  
Repo: [github.com/ToonVanEyck/OpenFlap](https://github.com/ToonVanEyck/OpenFlap)  
Commit: v0.0.0-unstable-169-g15f8176-dirty  
**OpenFlap**  
Sheet: /  
File: side\_panel.kicad\_sch  
**Title: Side Panel**  
Size: A4 Date: 2025-09-01  
KiCad E.D.A. 8.0.6



**Rev: 7.2.0**  
Id: 1/1