

SPSEPO

# AUTONÓMNY ROBOT ZÁCHRANÁR

**!focus()**



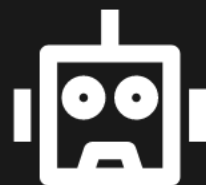
2023

# ÚVOD:



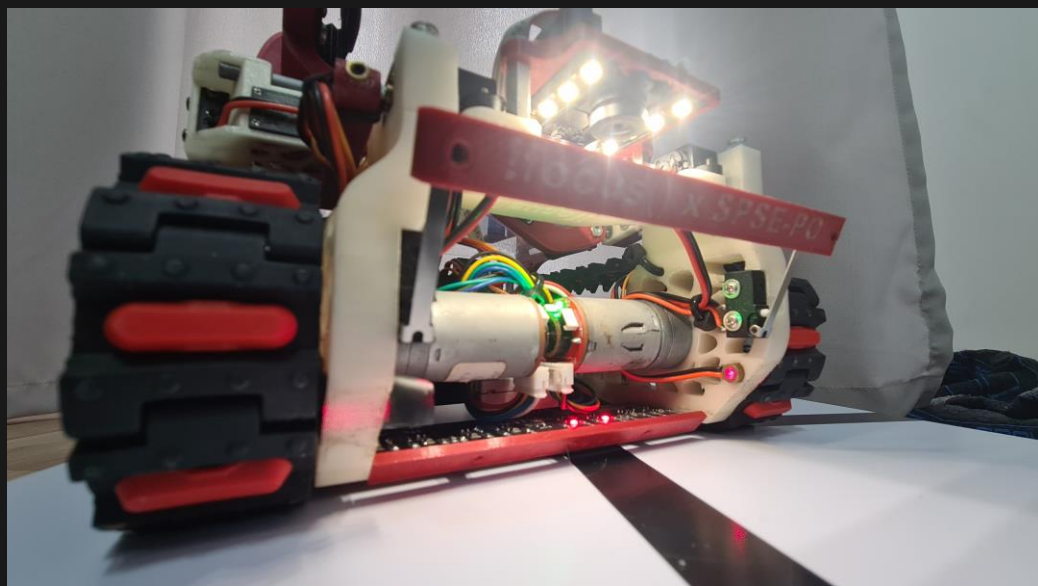
## Napredovanie

Napredovanie robotiky a robotizácie  
priemyslu



## Robotická súťaž ROBOCUP

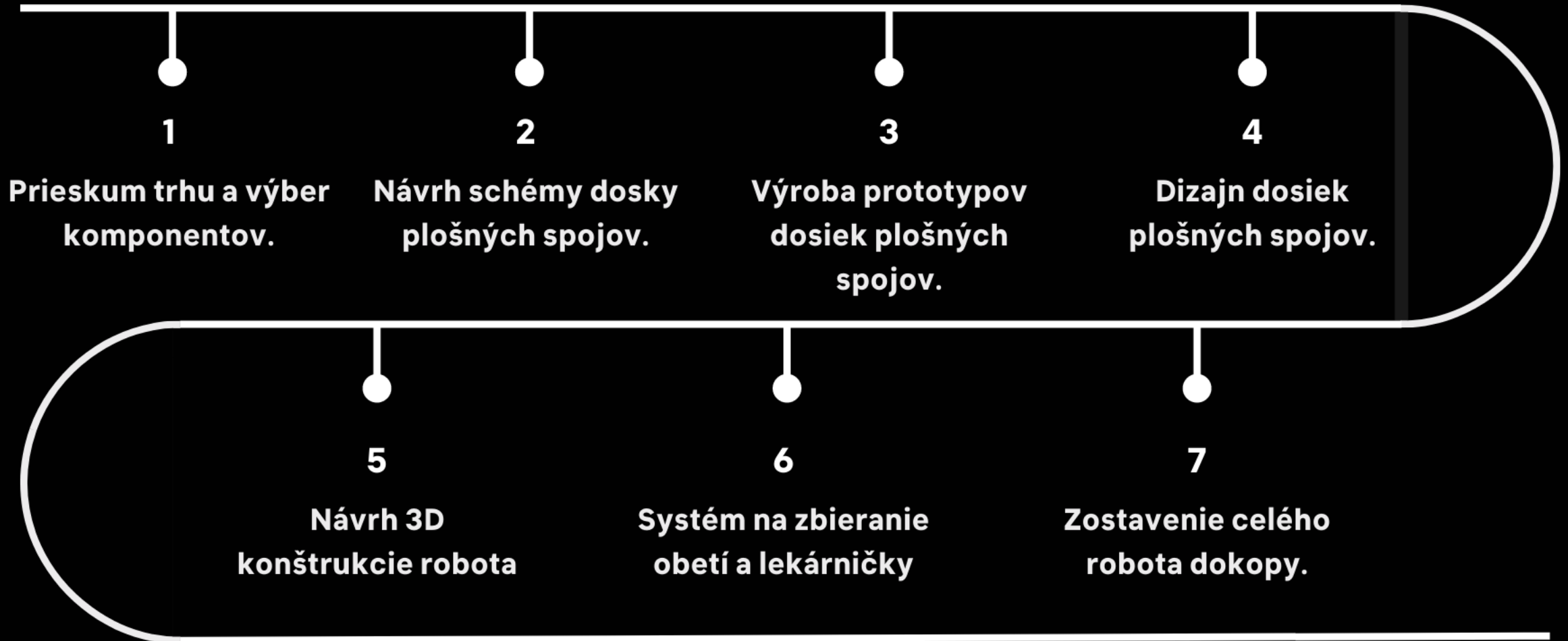
Účasť na celoslovensko,  
celoeurópskom ale aj celosvetovom  
kole



## Využitie

zneškodňovanie bômb,  
vyhľadávanie obetí v  
horiacich/neprístupných budovách

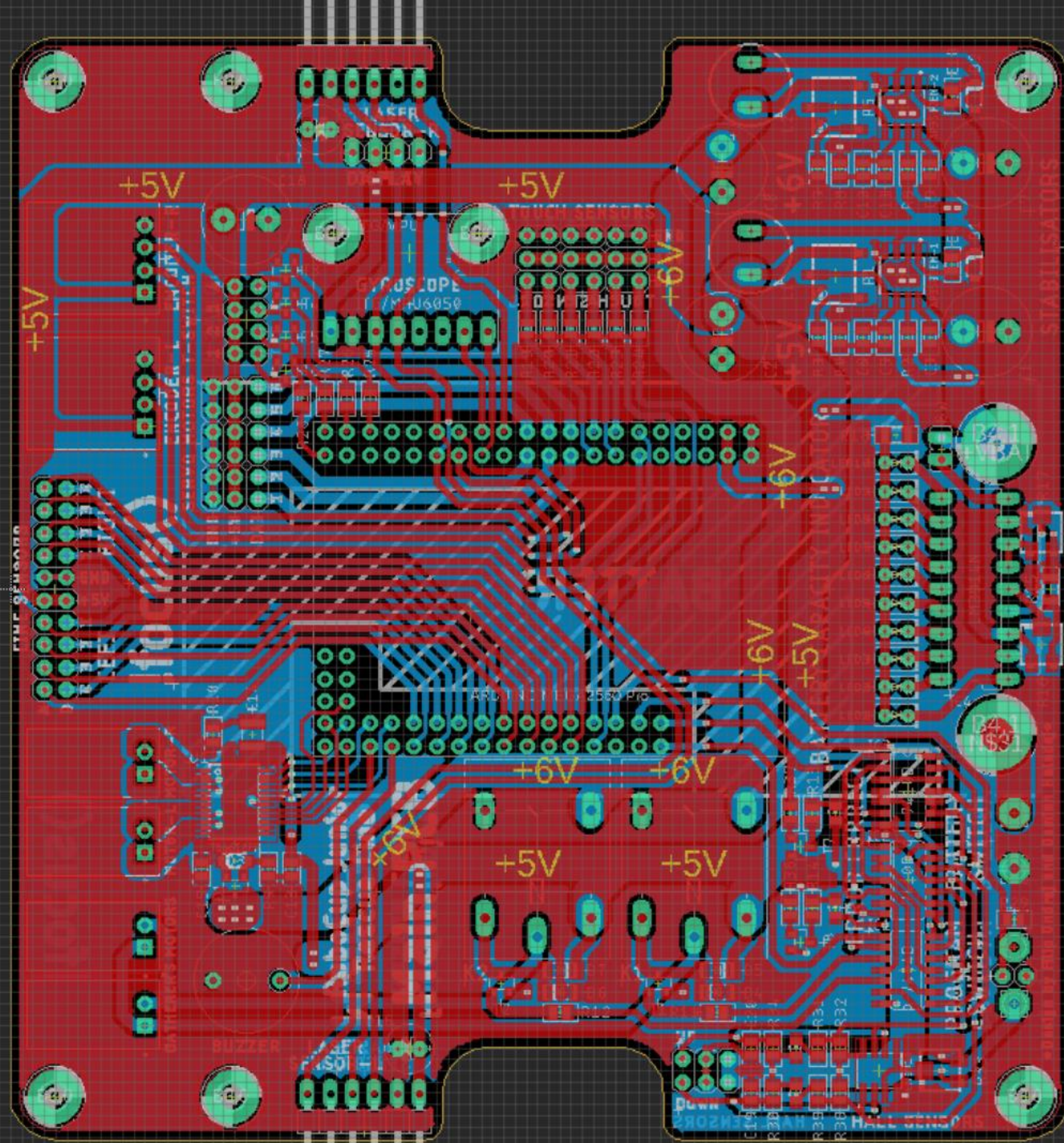
# CIELE PRÁČE:





# MAIN PCB

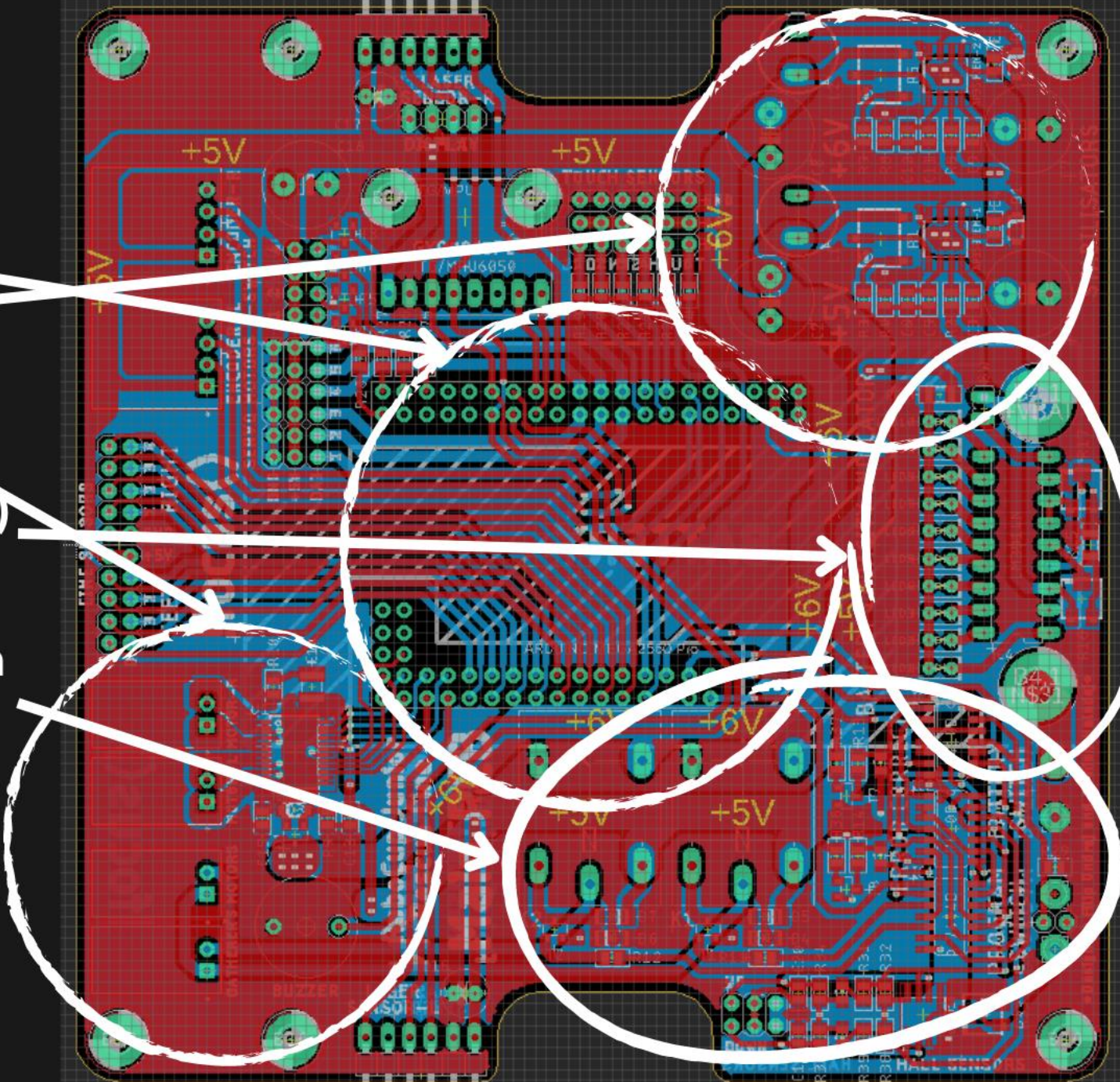
- Arduino MEGA PRO
- 2x Impulzný stabilizátor (AP3502)
- Motor driver (TB6612FNG)
- 2x DC 6V motory s encodermi
- Battery capacity indicator (LM3914)
- 6x Servo motory (SG90s)
- Logika na ovládanie polohy zberača
- 2x Hallove snímače
- Gyroskopický senzor (MPU6050)
- 2x Laserové senzory (VL53L0X)
- 6x Touch senzory





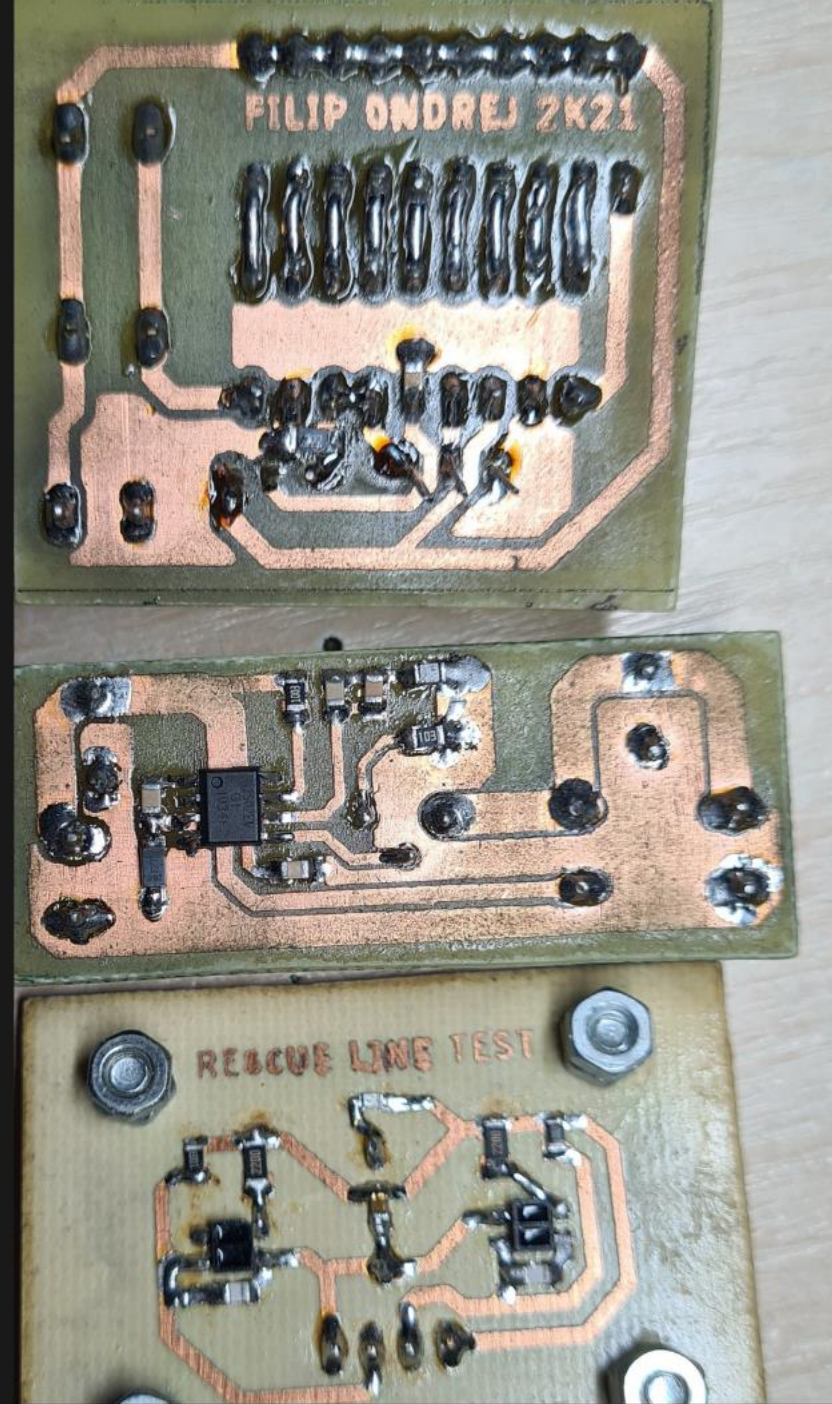
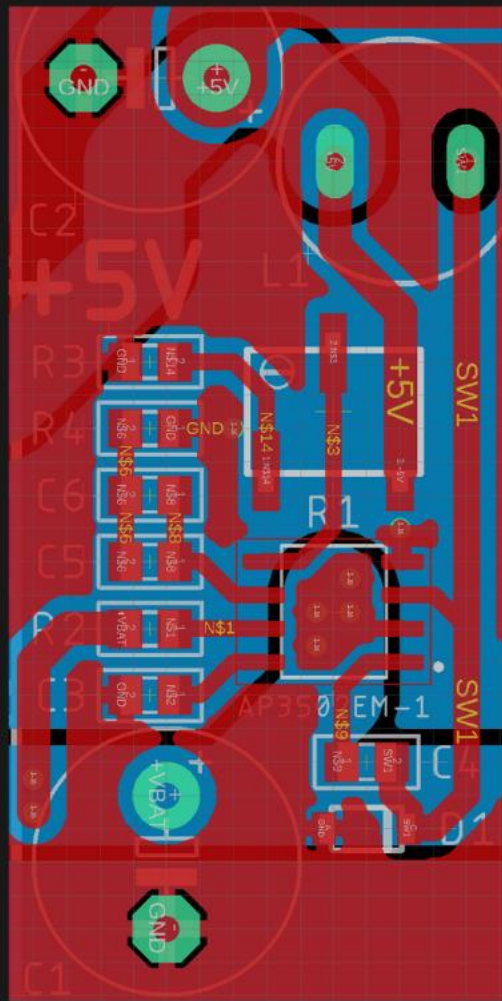
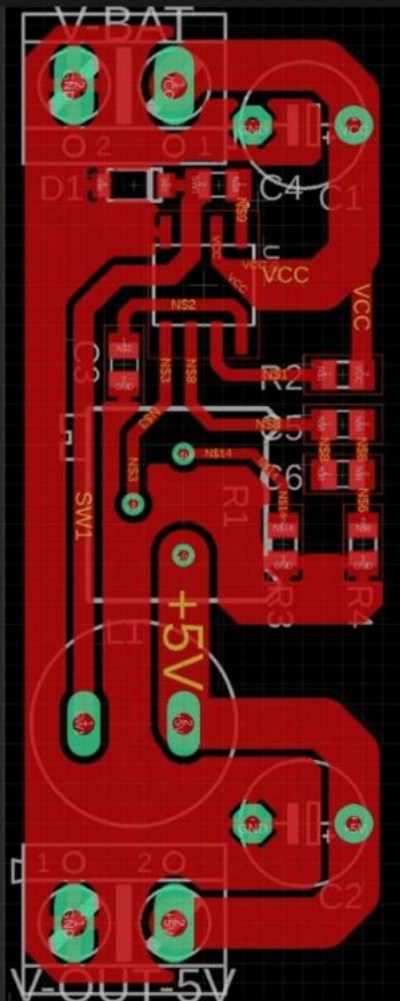
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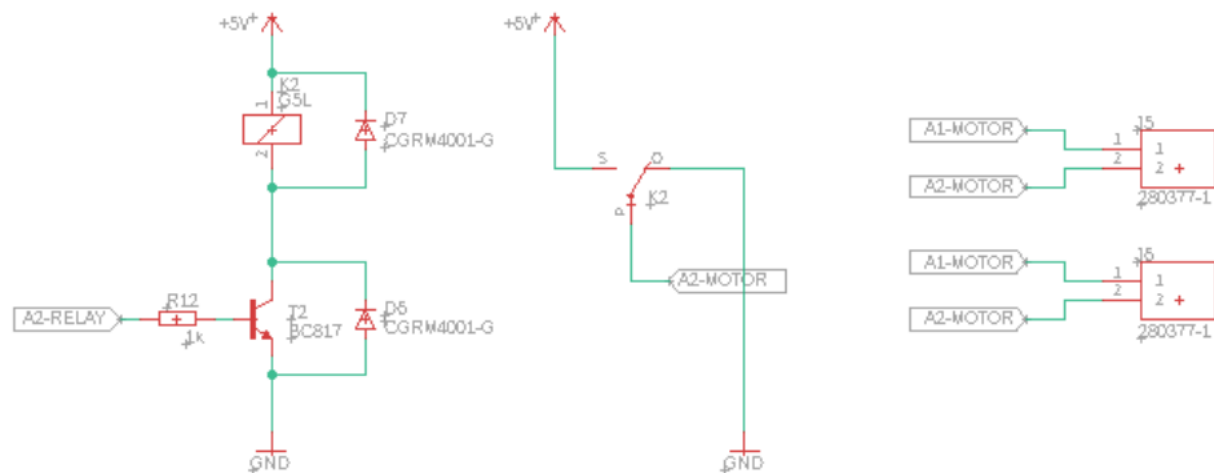
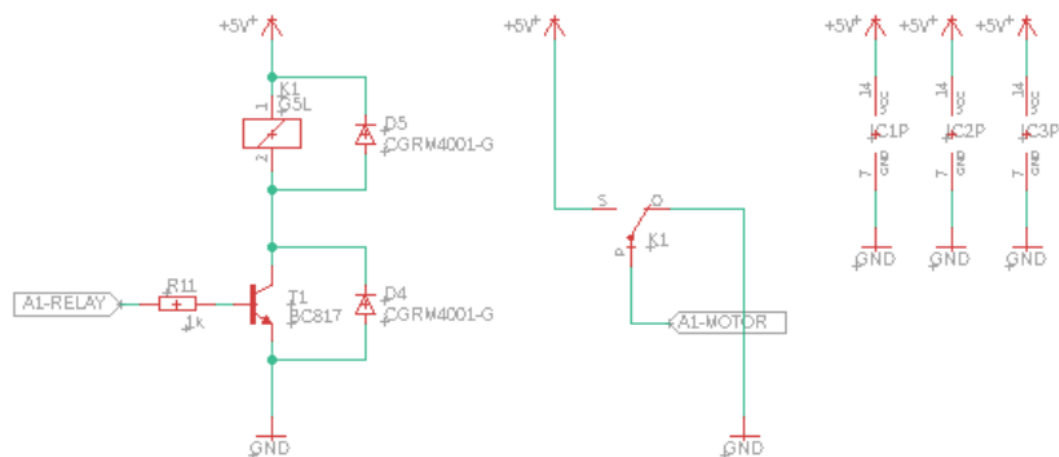
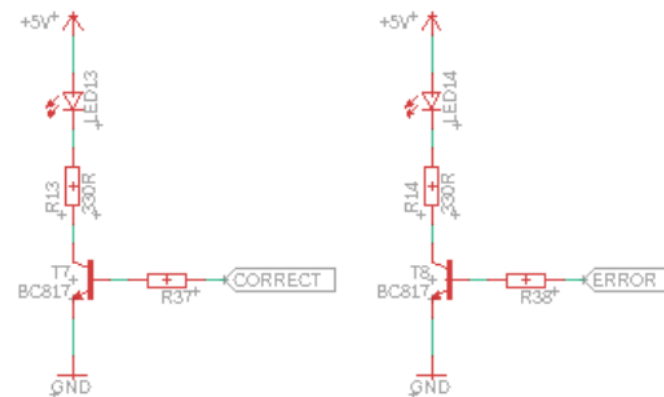
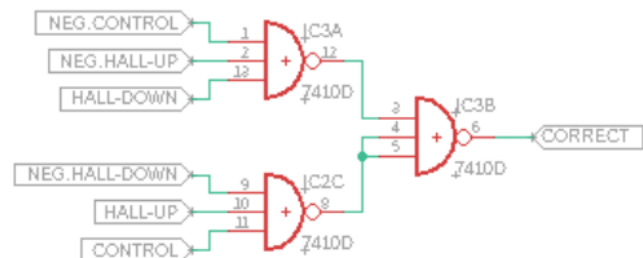
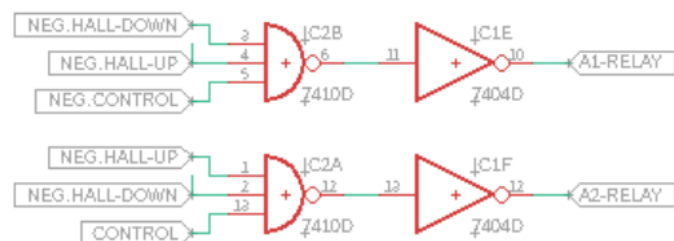
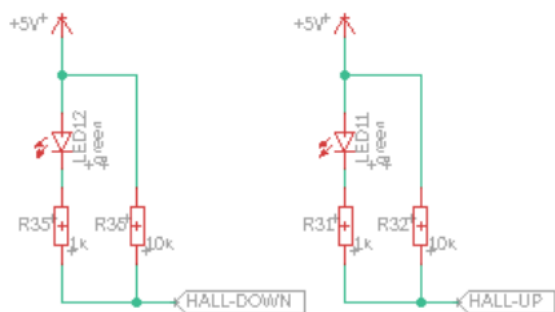
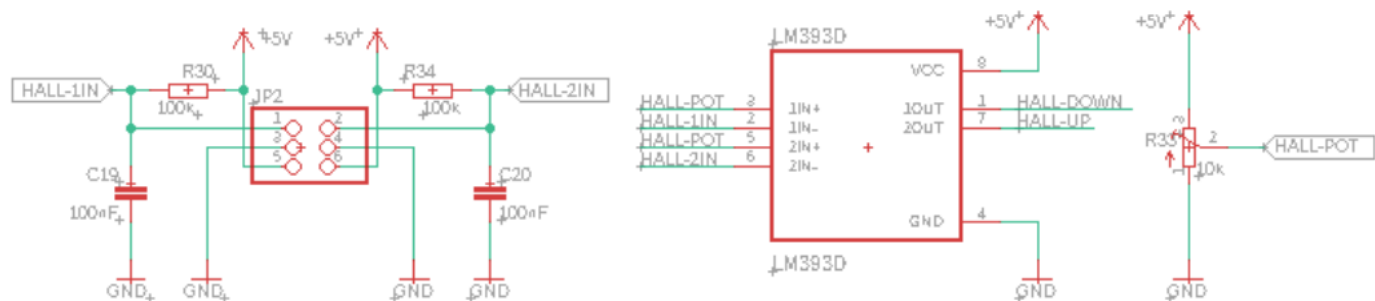


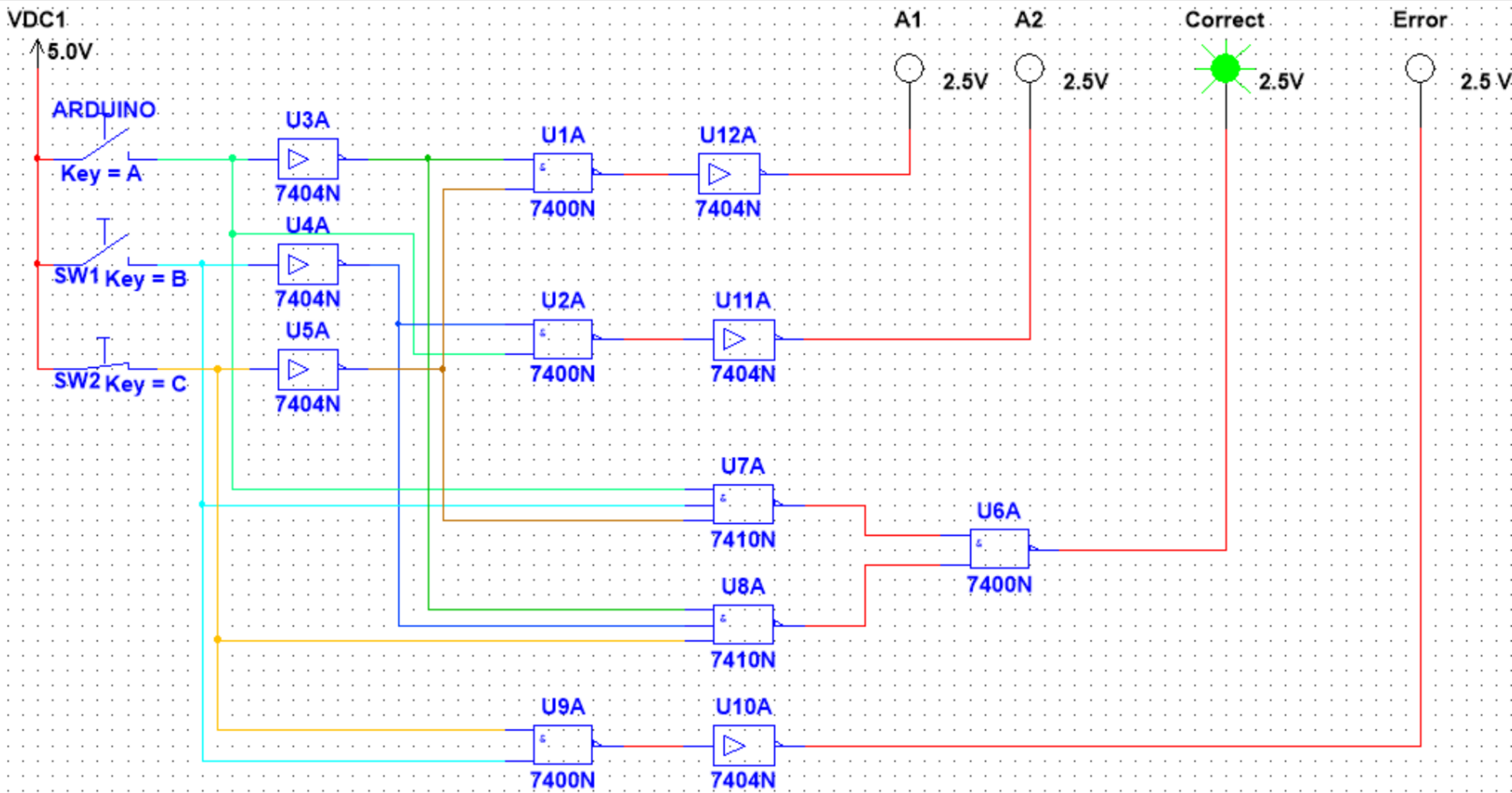


# PROTOTYPE:



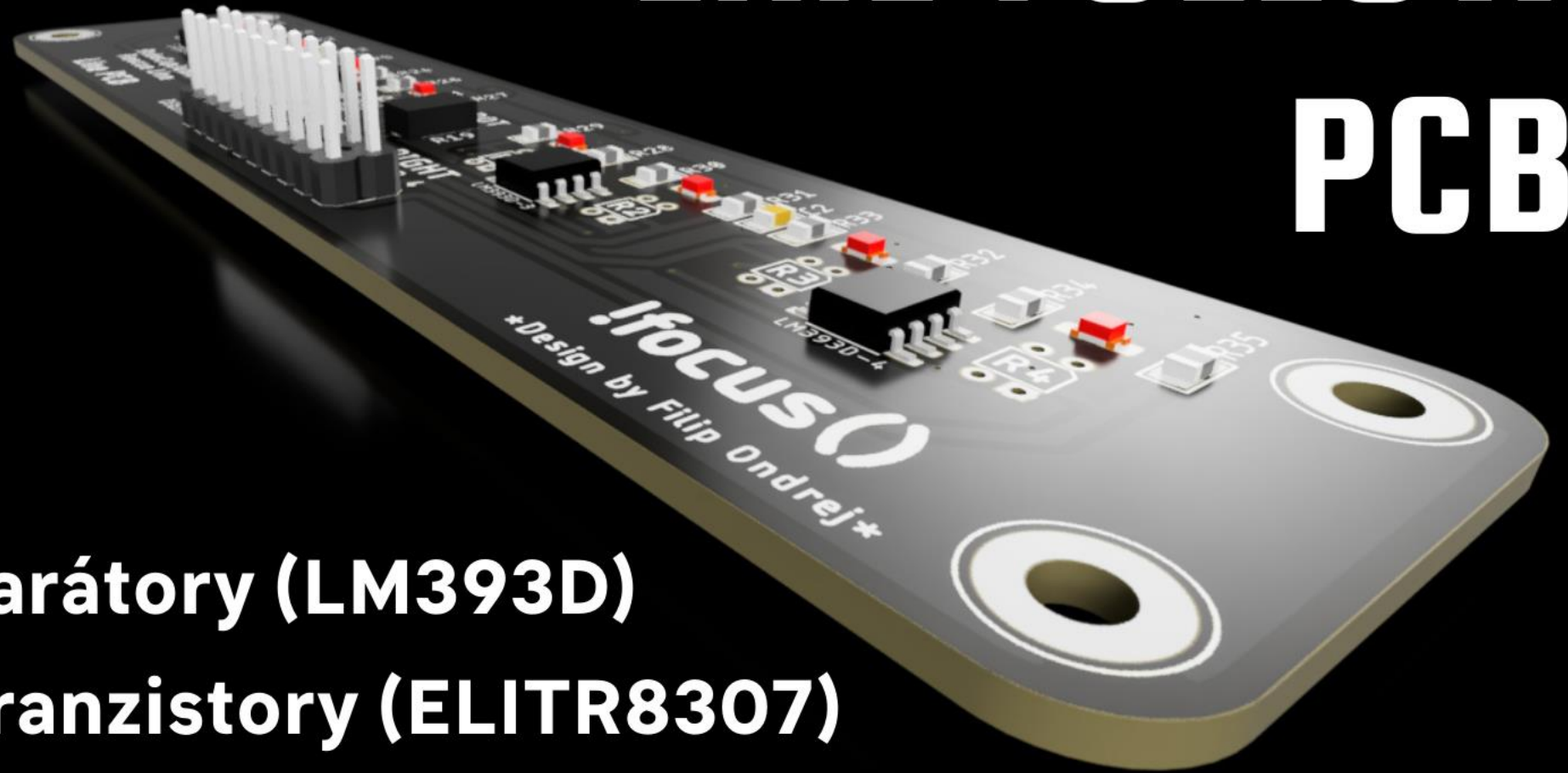
# OVLÁDANIE MOTOROV NA POLOHOVANIE PREDNEJ NÁPRAVY (ZBERAČA)





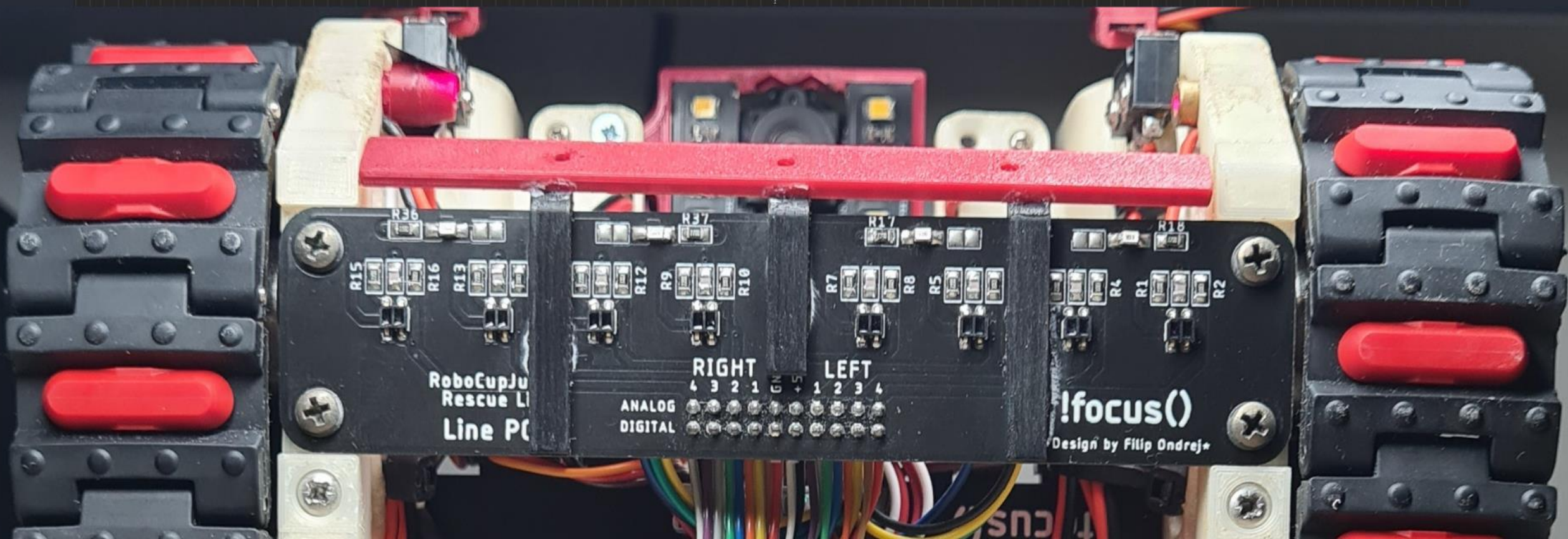
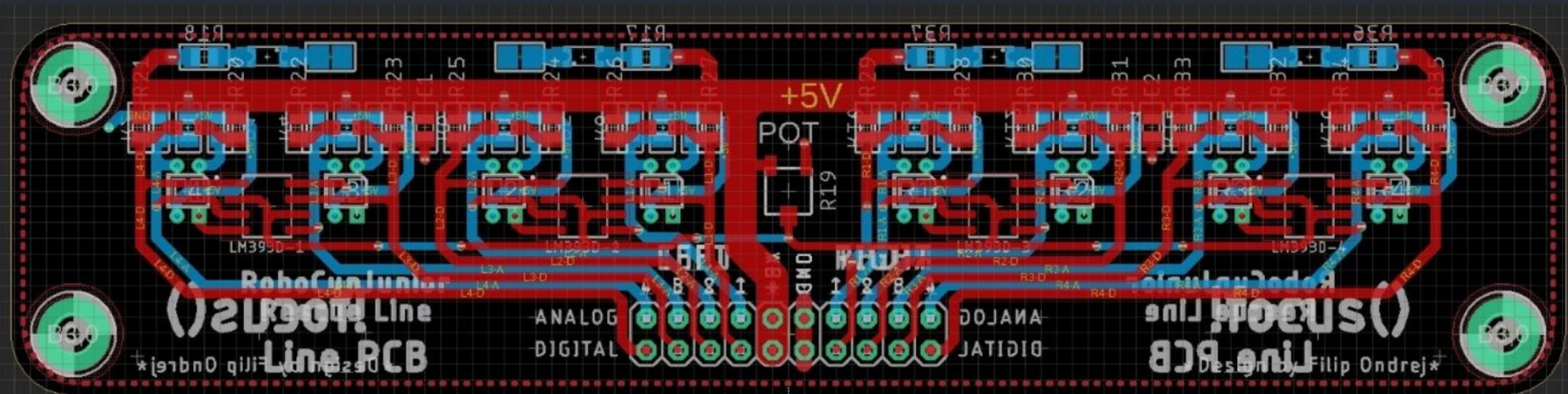


# LINE FOLLOW PCB



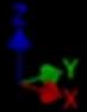
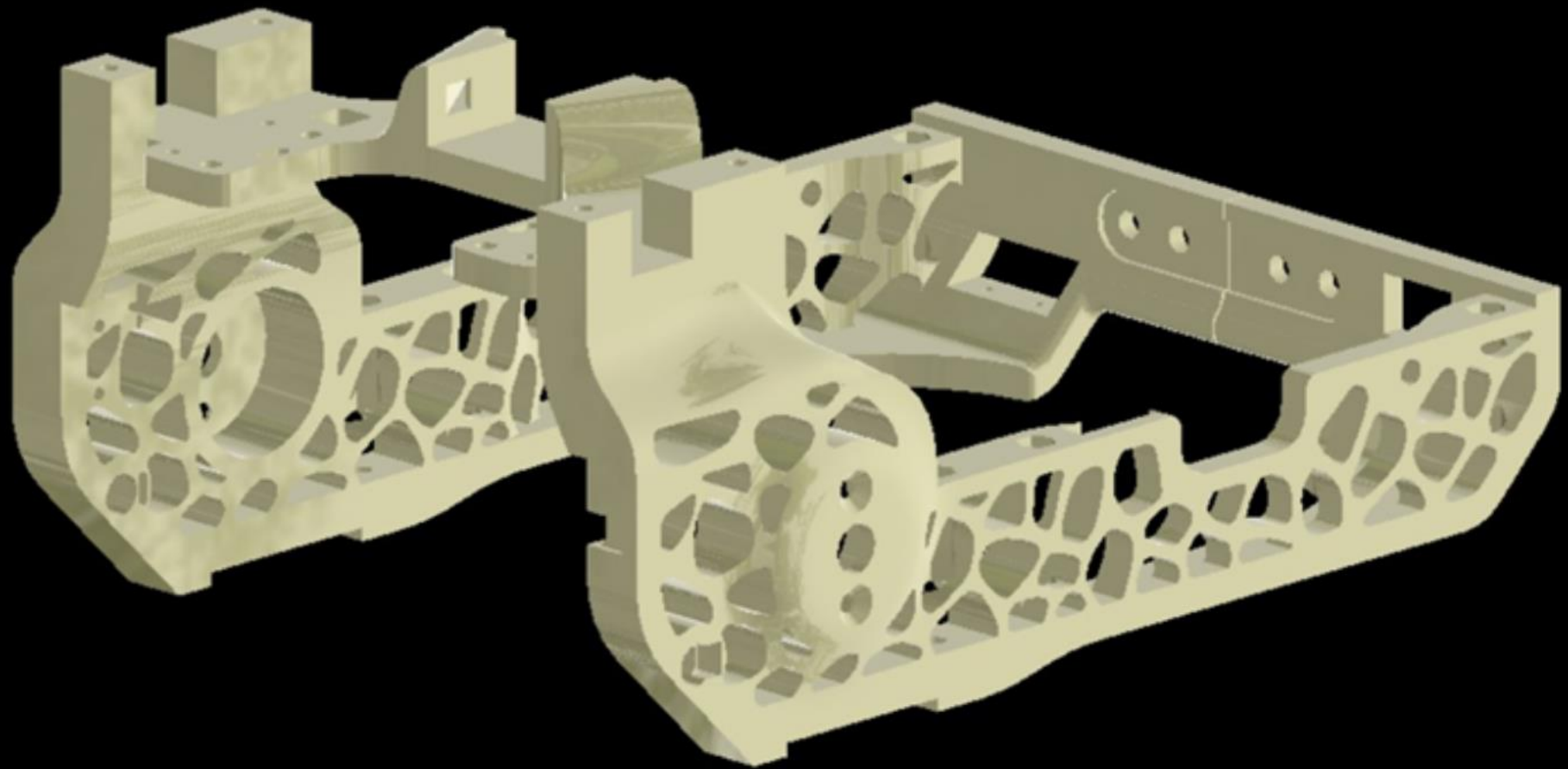
- **4x Komparátory (LM393D)**
- **8x Foto tranzistory (ELITR8307)**
- **8x Analógový/Digitálny výstup**



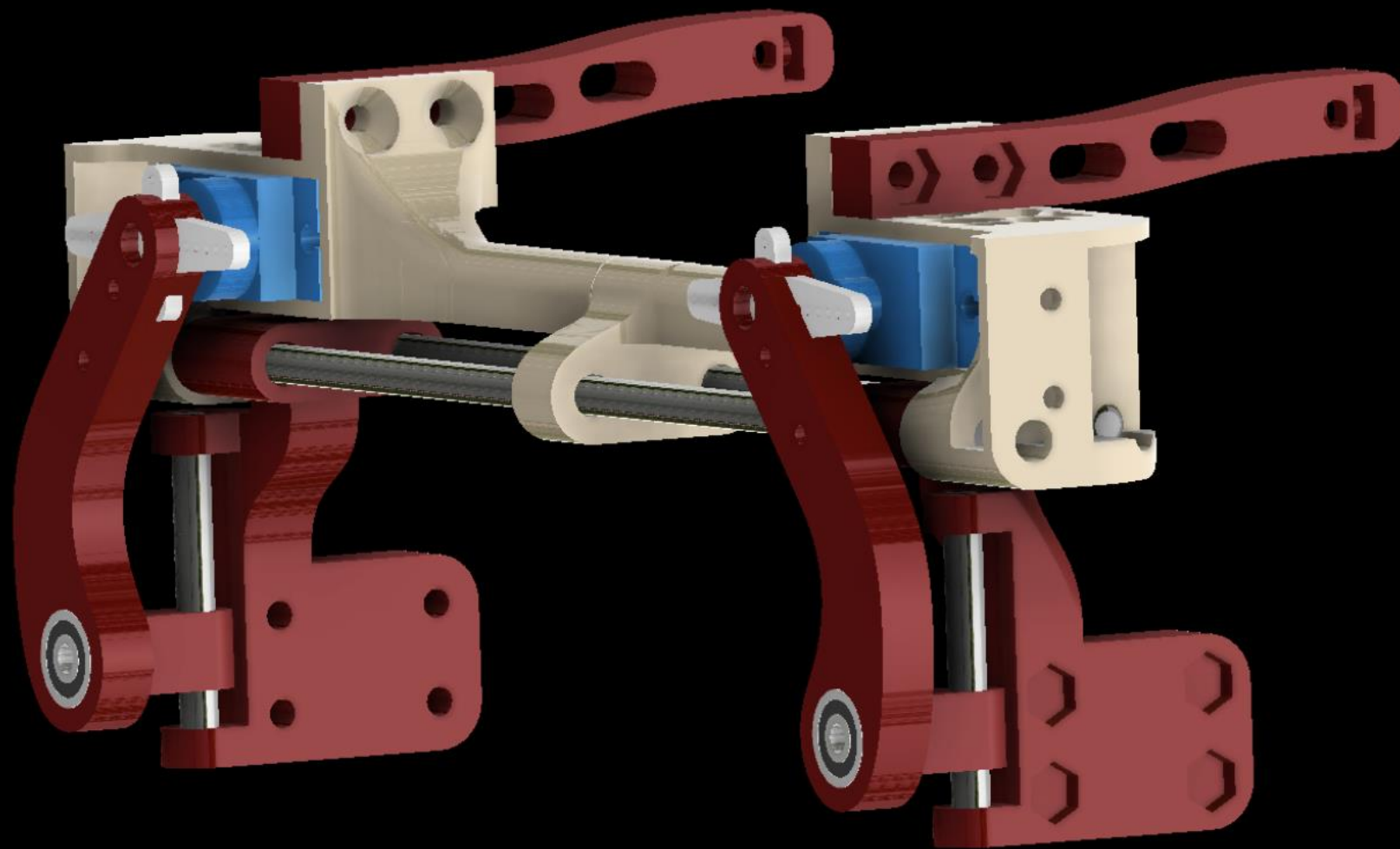




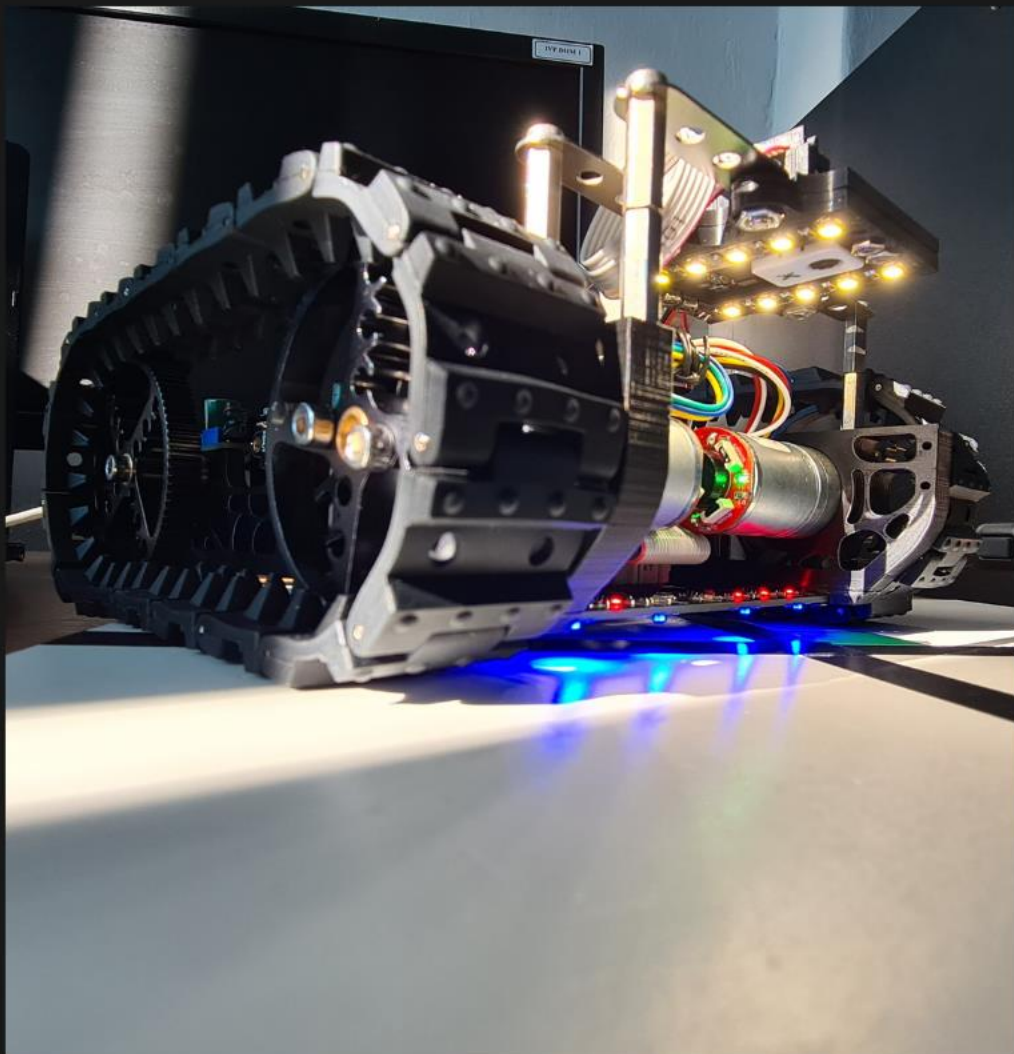
# 3D MODEL



# PREDNÁ NÁPRAVA







**BETA**



**FINAL**



# SPLNENIE CIELOV

