



Eat – Sleep – Code – Repeat –

NXP

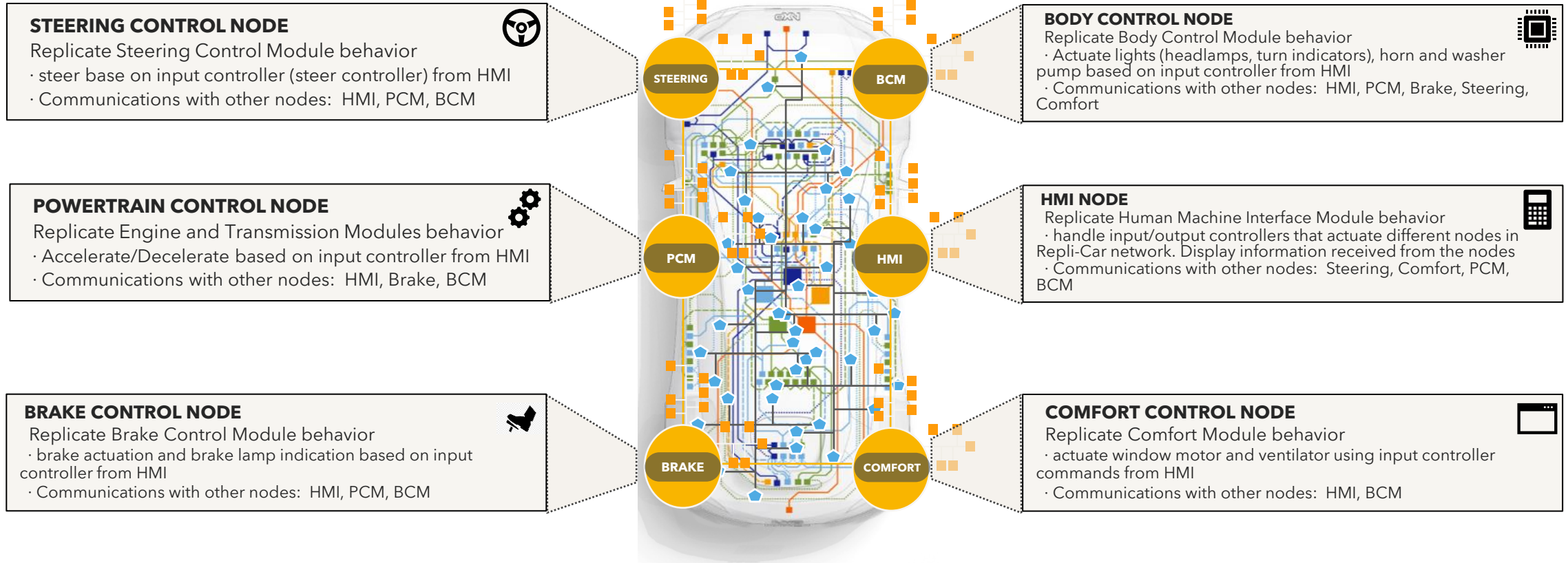
University Course

Course Contents

General topics, Courses & Labs

1. General Presentation of the Course
2. V-Model, Requirements Engineering, Process | Understand and Create Requirements
3. Architecture (UML) | Virtual Machine Environment Setup
4. Process | Git, IDE Setup, Compile and Flash the Hello World Project
5. How Hardware and Software are Linked | From Compiling to Electrical Signals and Debugging
6. Microcontroller Features (I/O, PWM, ADC, DAC, Timer, Interrupts) | Hands-on Lab (no module – just the dev board)
7. Node 1: Lights (BCM)
8. Node 2: Steering
9. Node 3: Transmission
10. Node 4: Brakes
11. Node 5: Door Control + HVAC
12. Node 6: HMI and CAN Communication

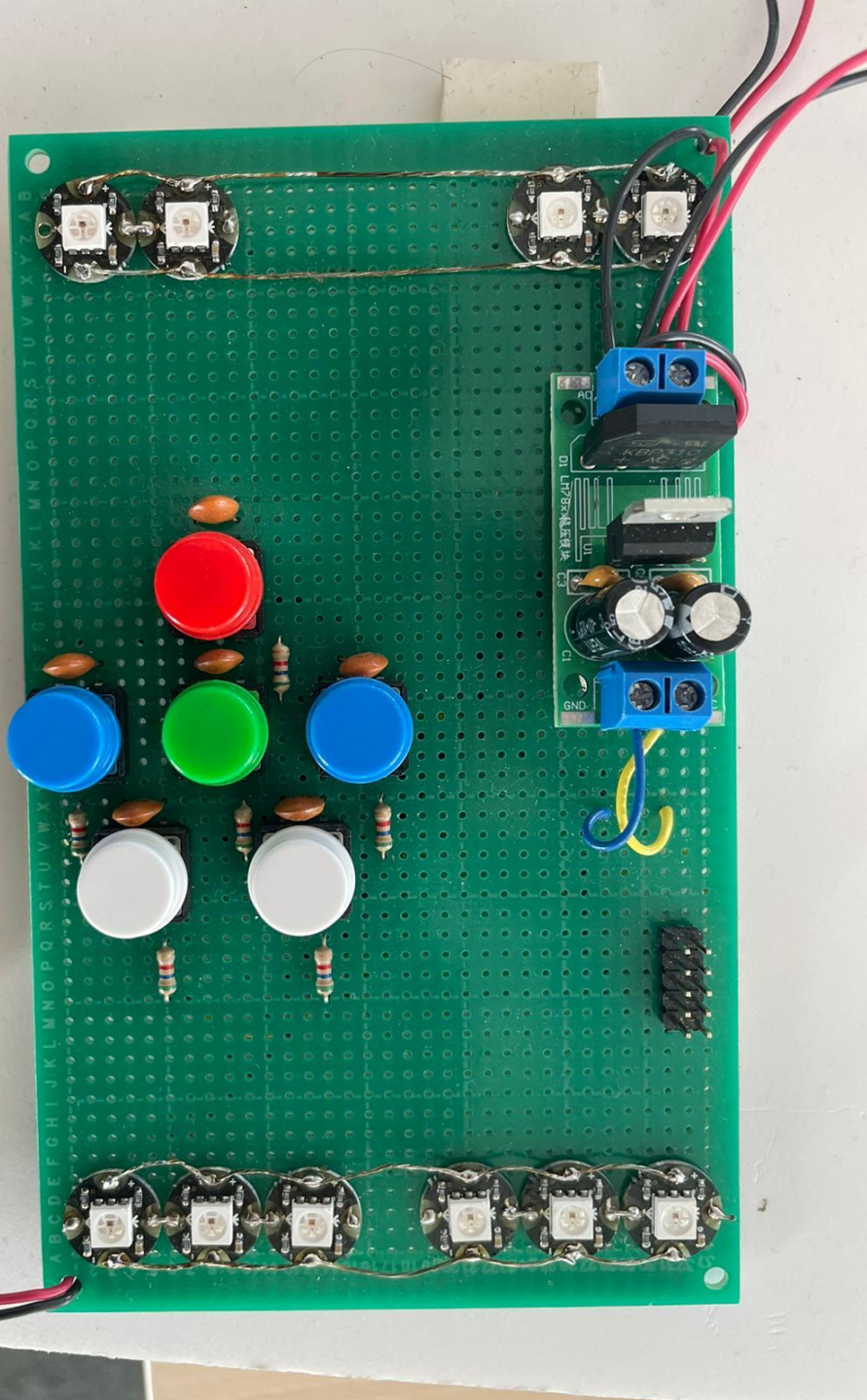
REPLI-CAR NETWORK



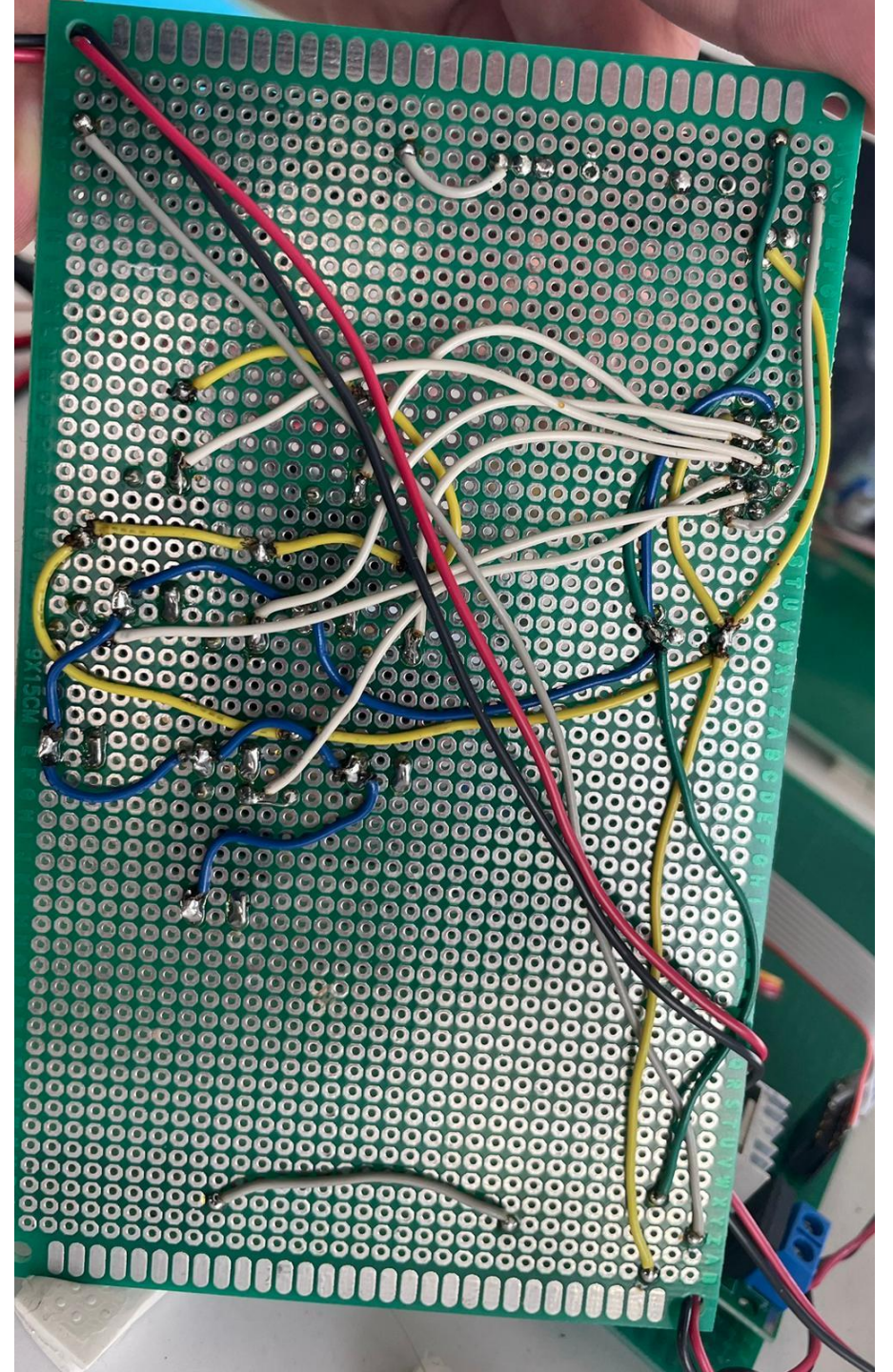
01

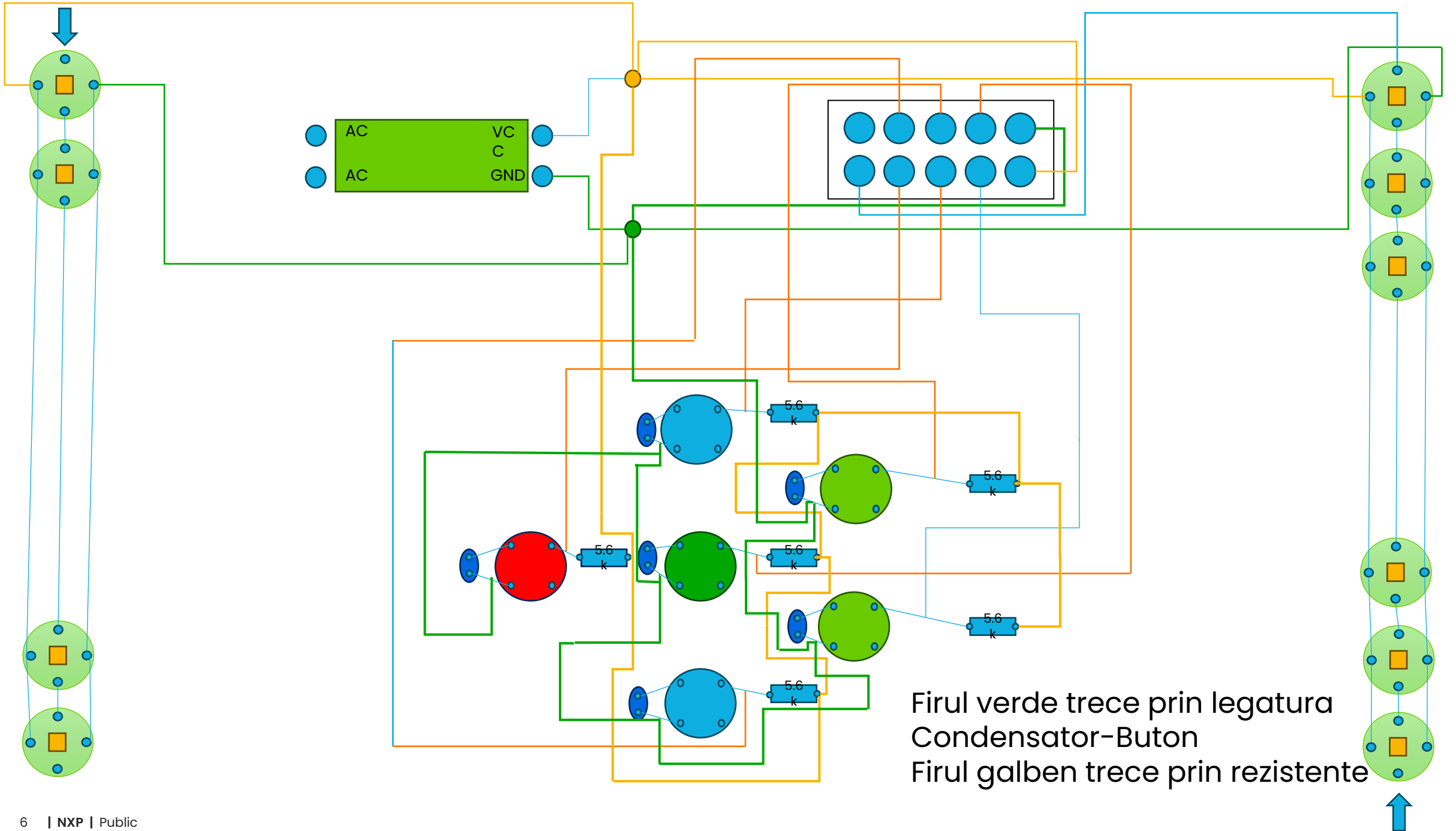
Lights (BCM)

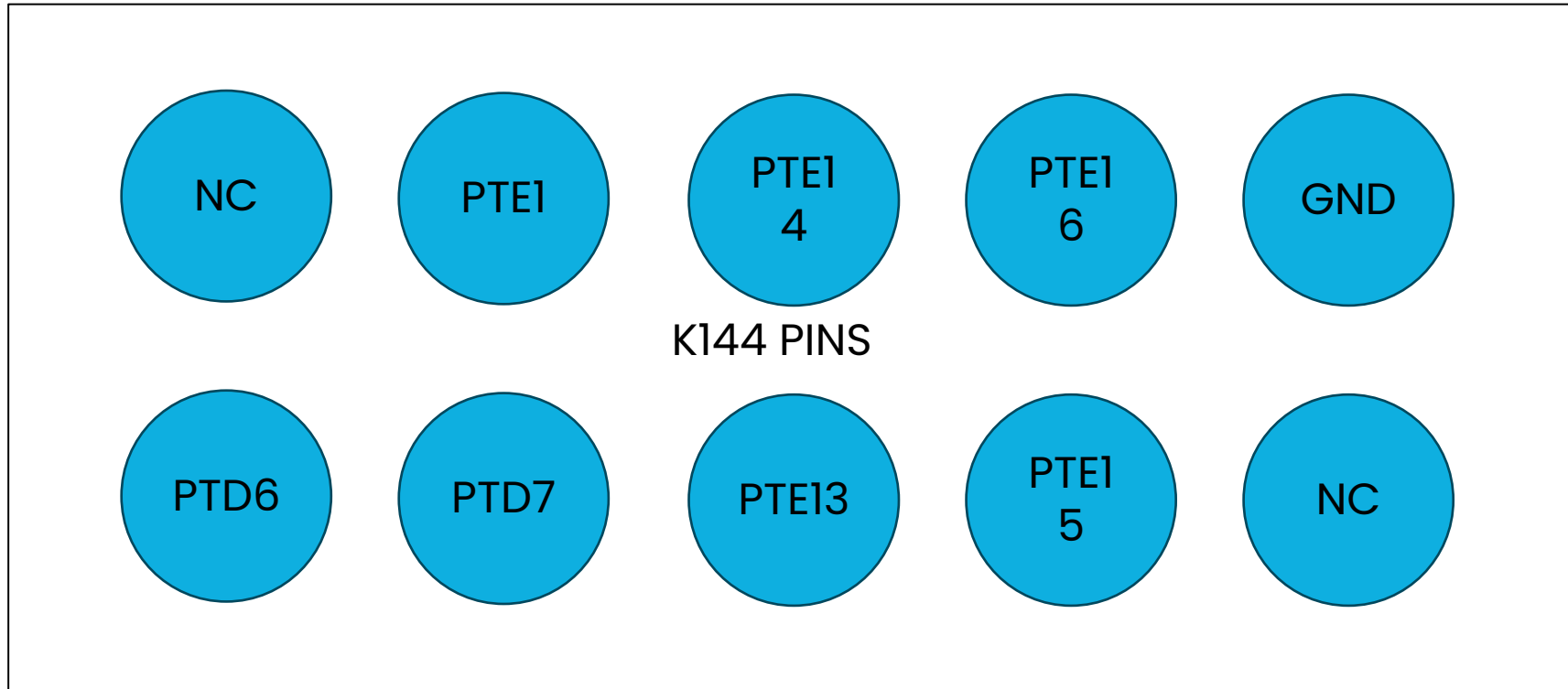




LIGHTS





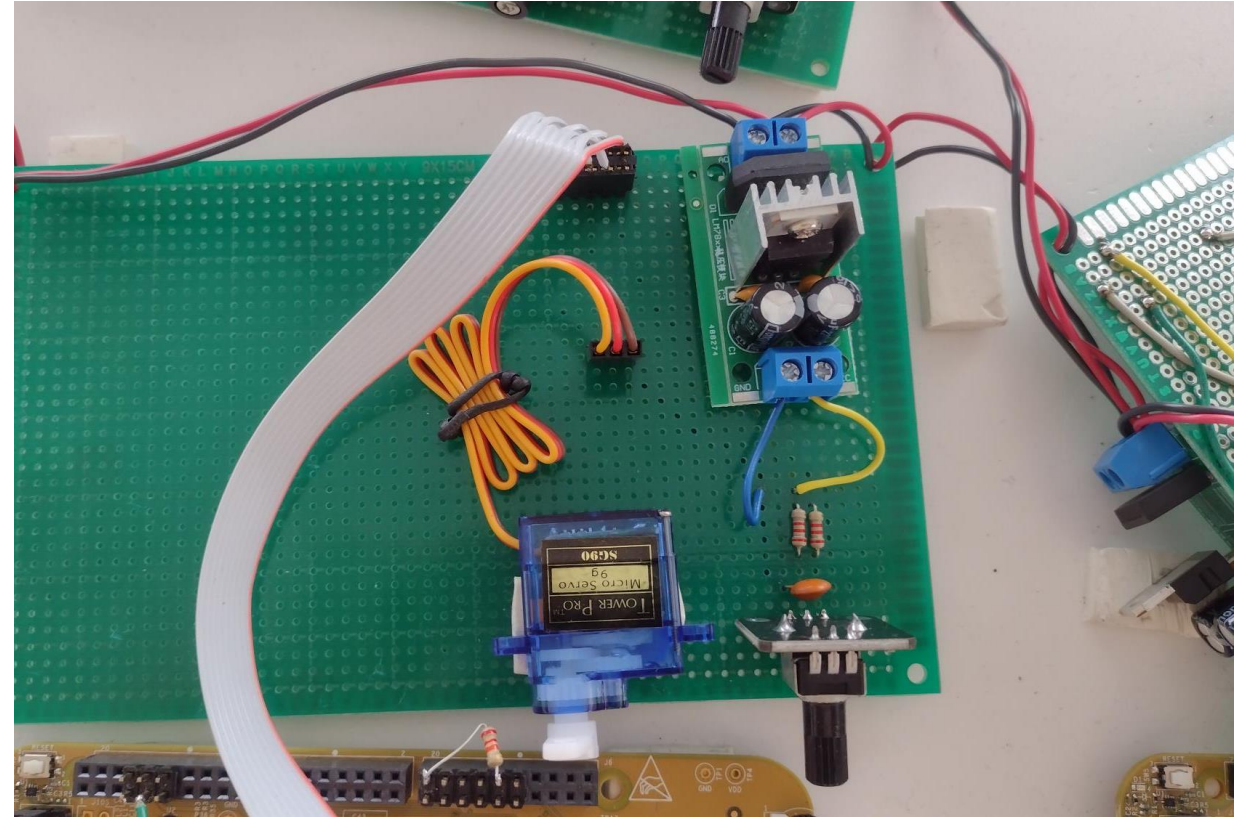
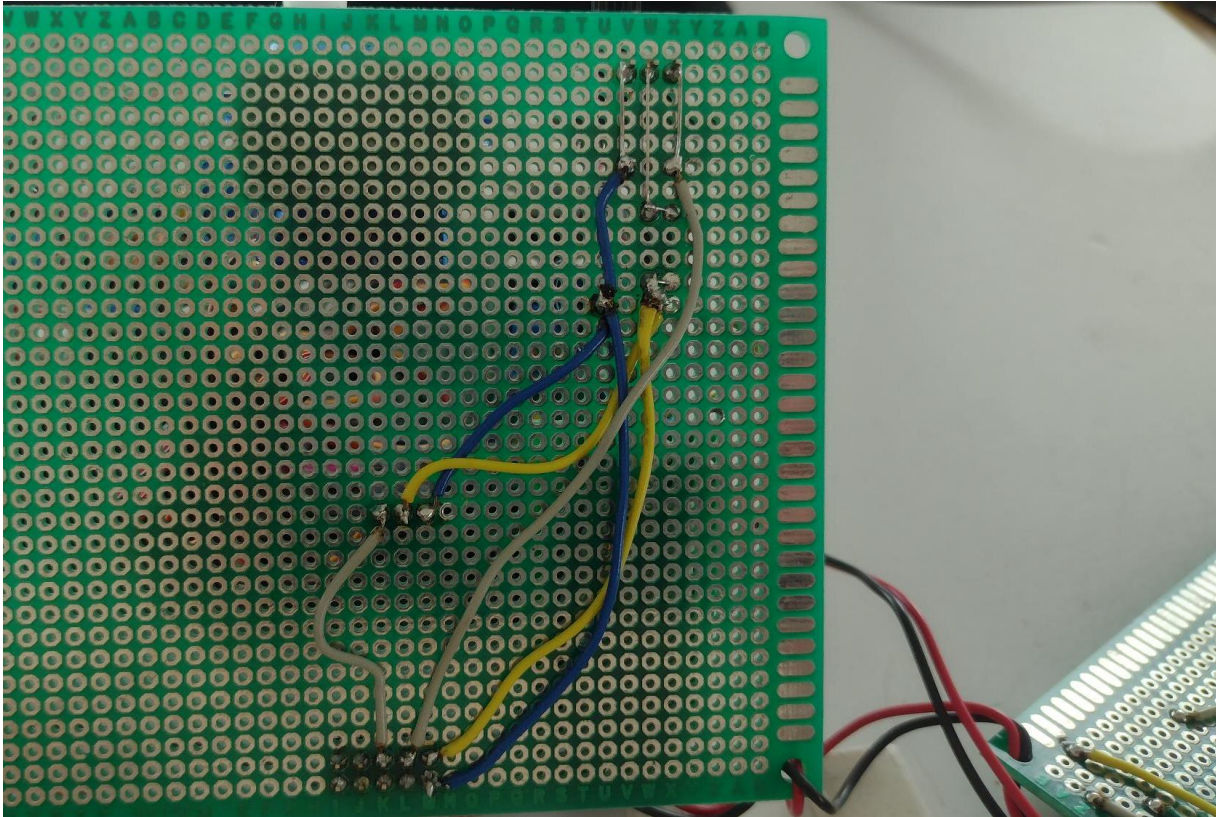


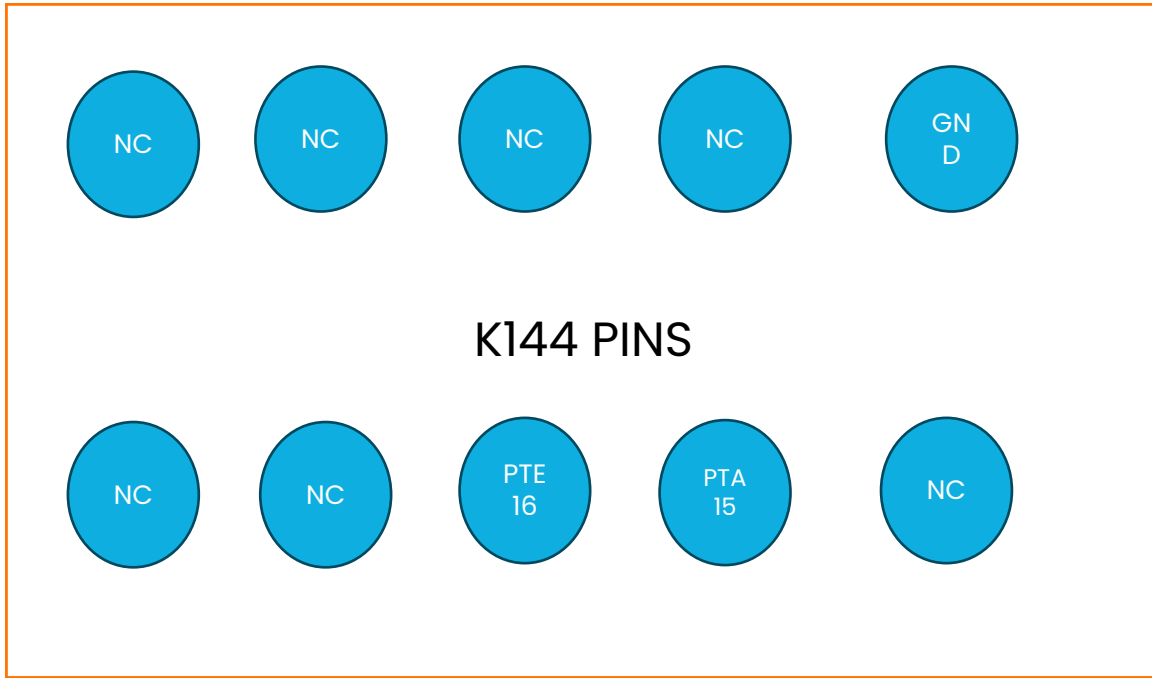
02

Steering

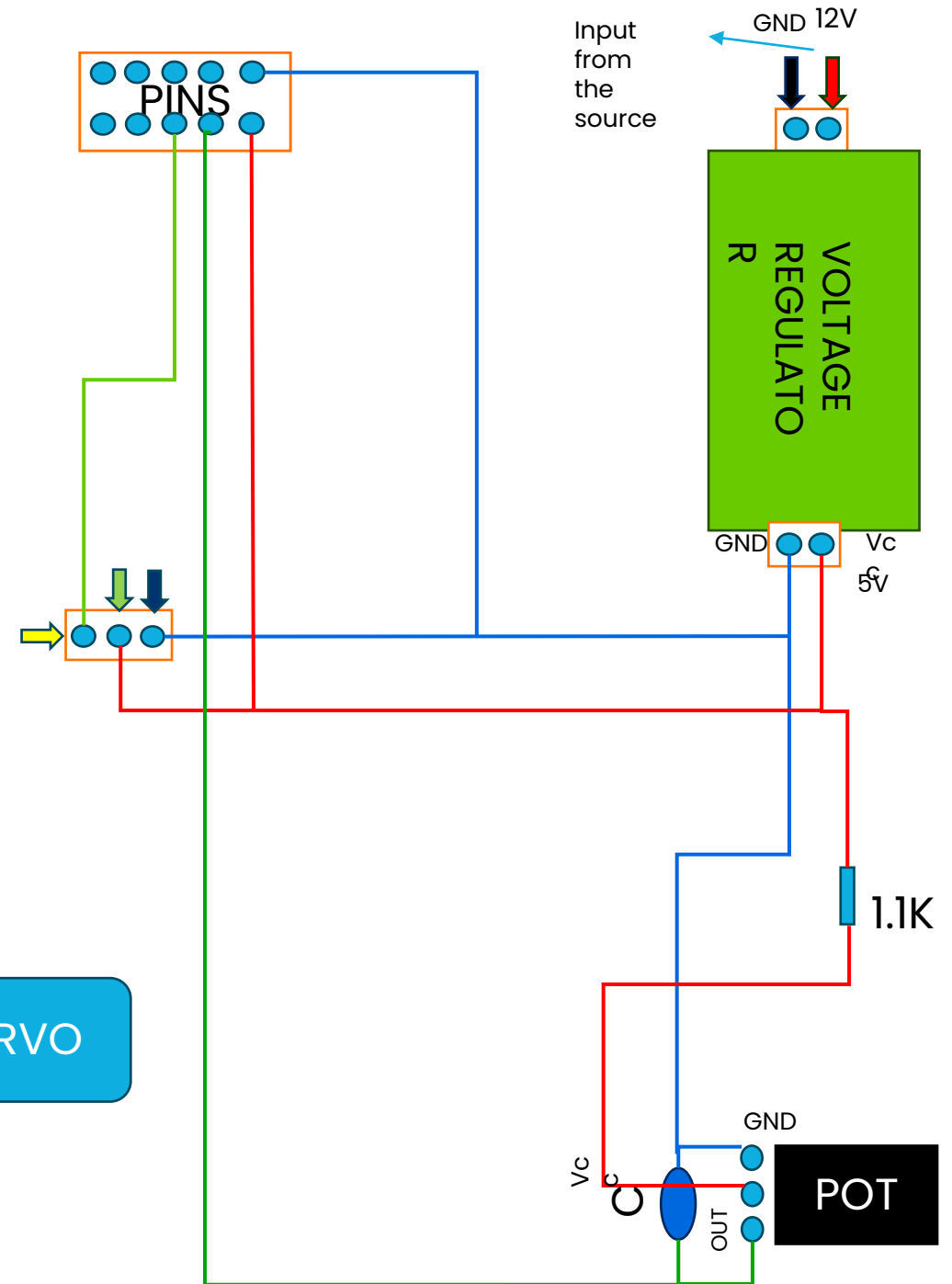


SERVO





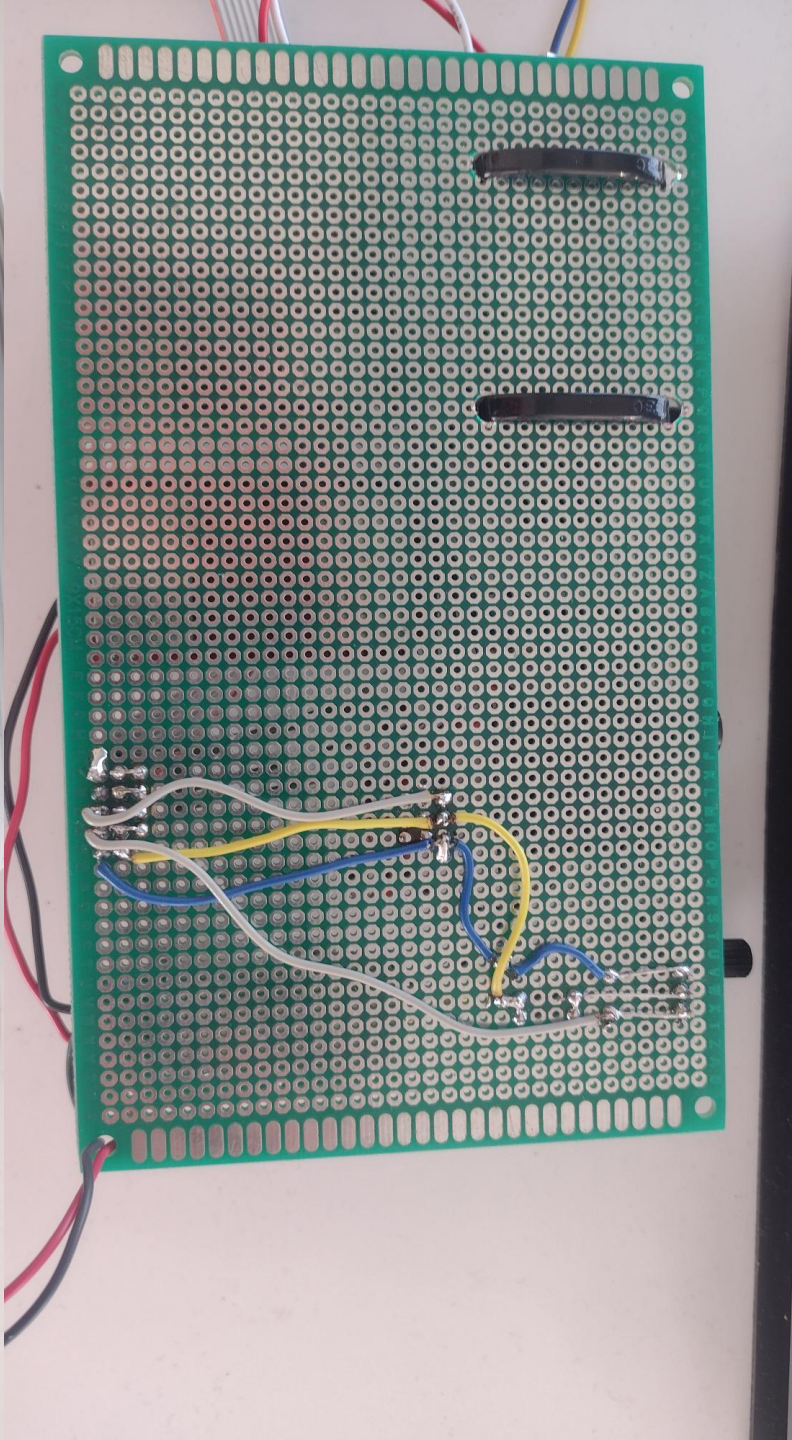
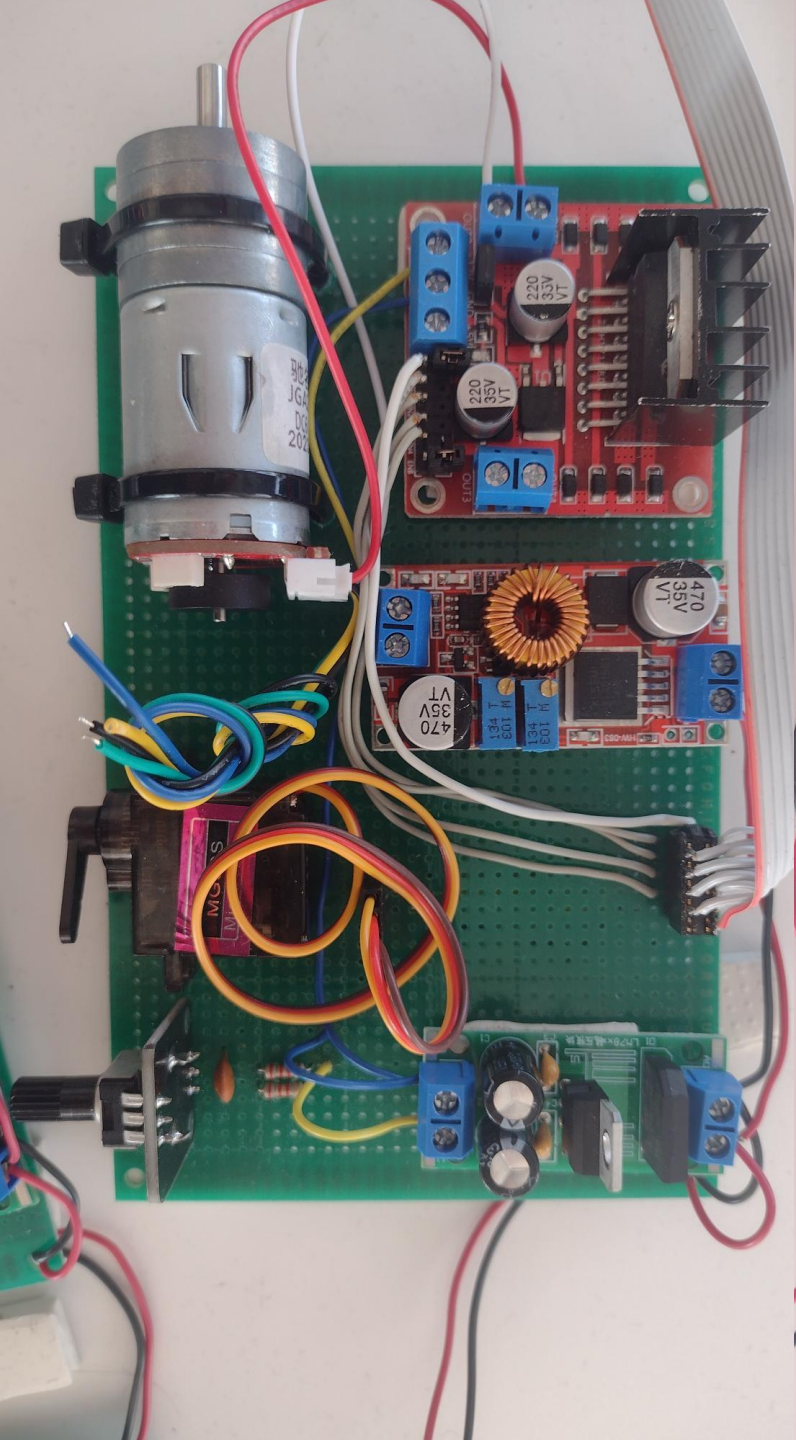
Matching arrow colors means a wire connection



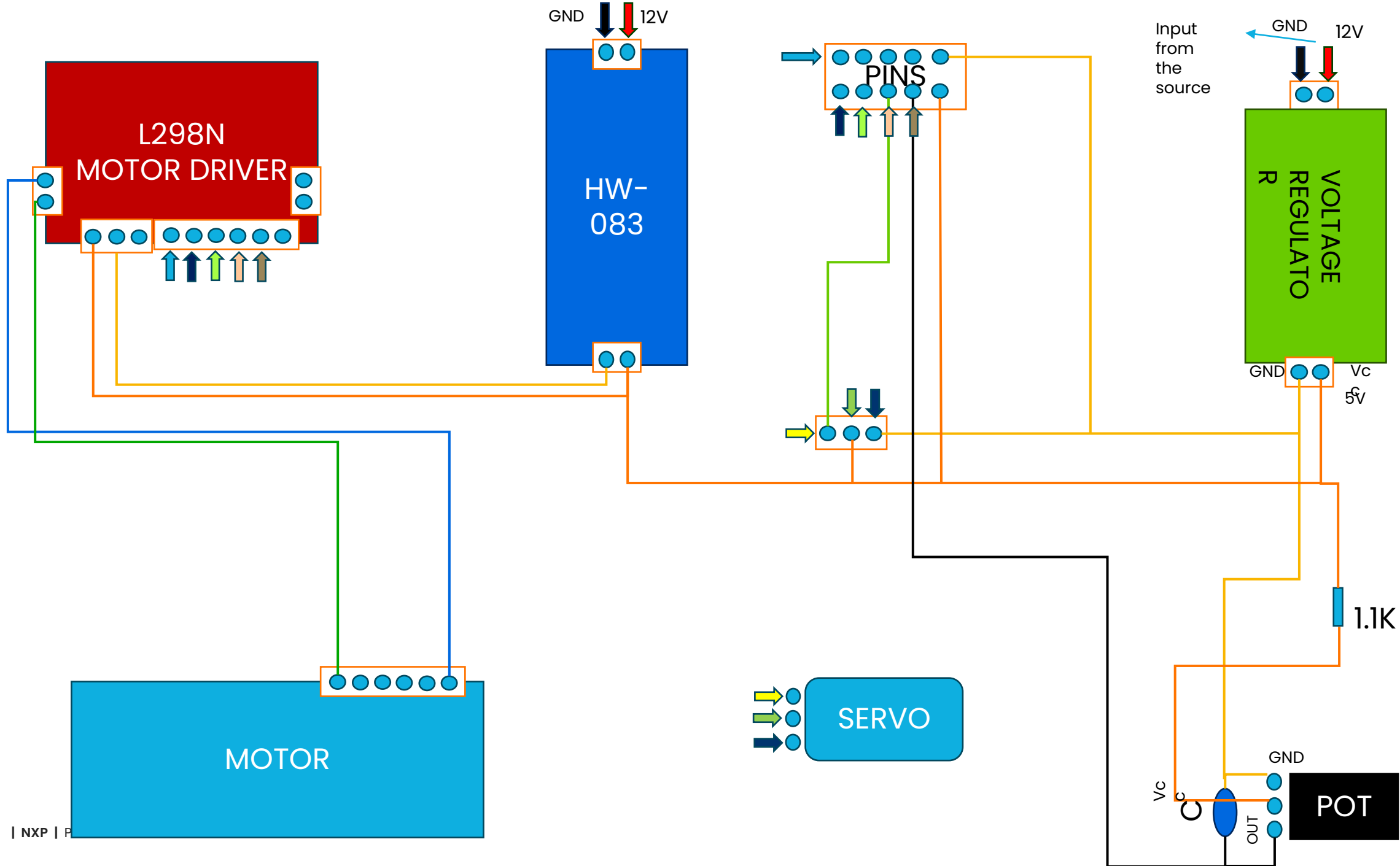
03

Transmission





MOTOR



PTE14

NC

PTE16

PTD11

GND

K144 PINS

PTE1

PTE15

NC

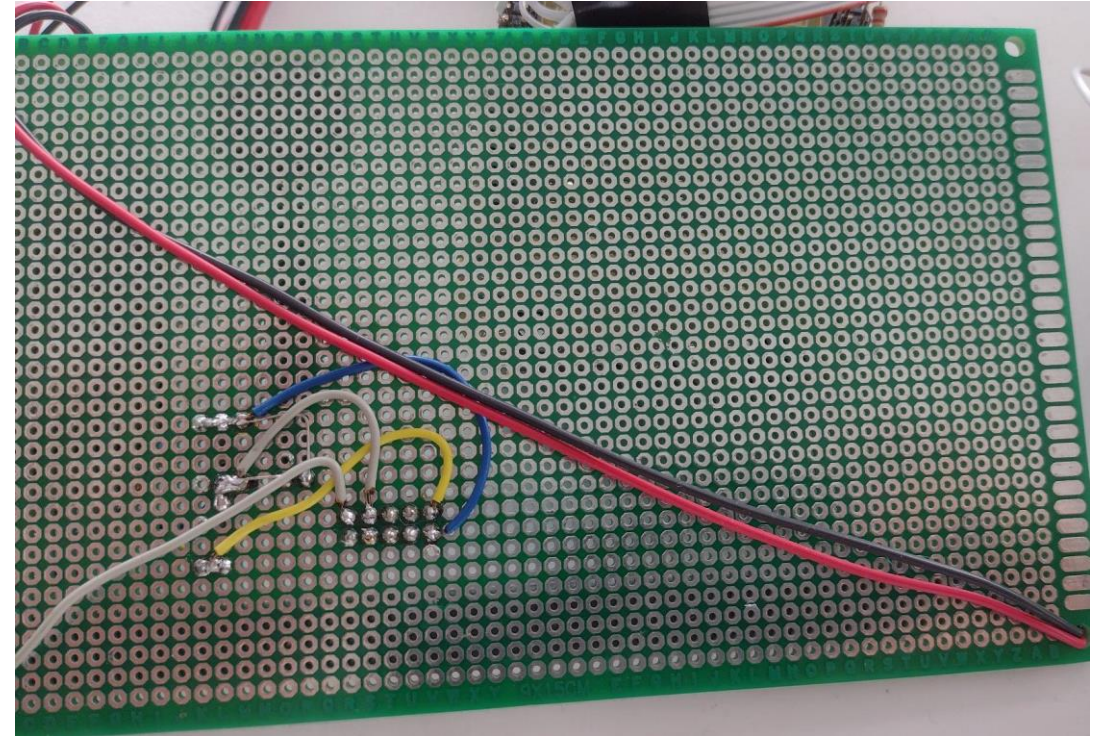
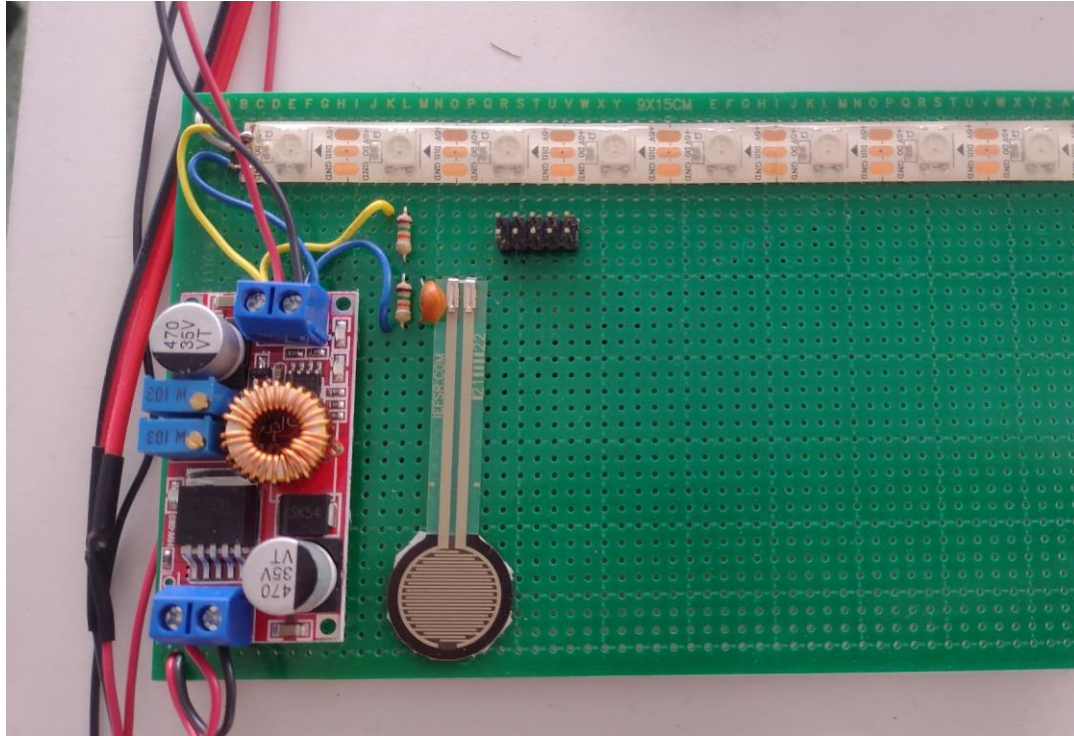
NC

NC

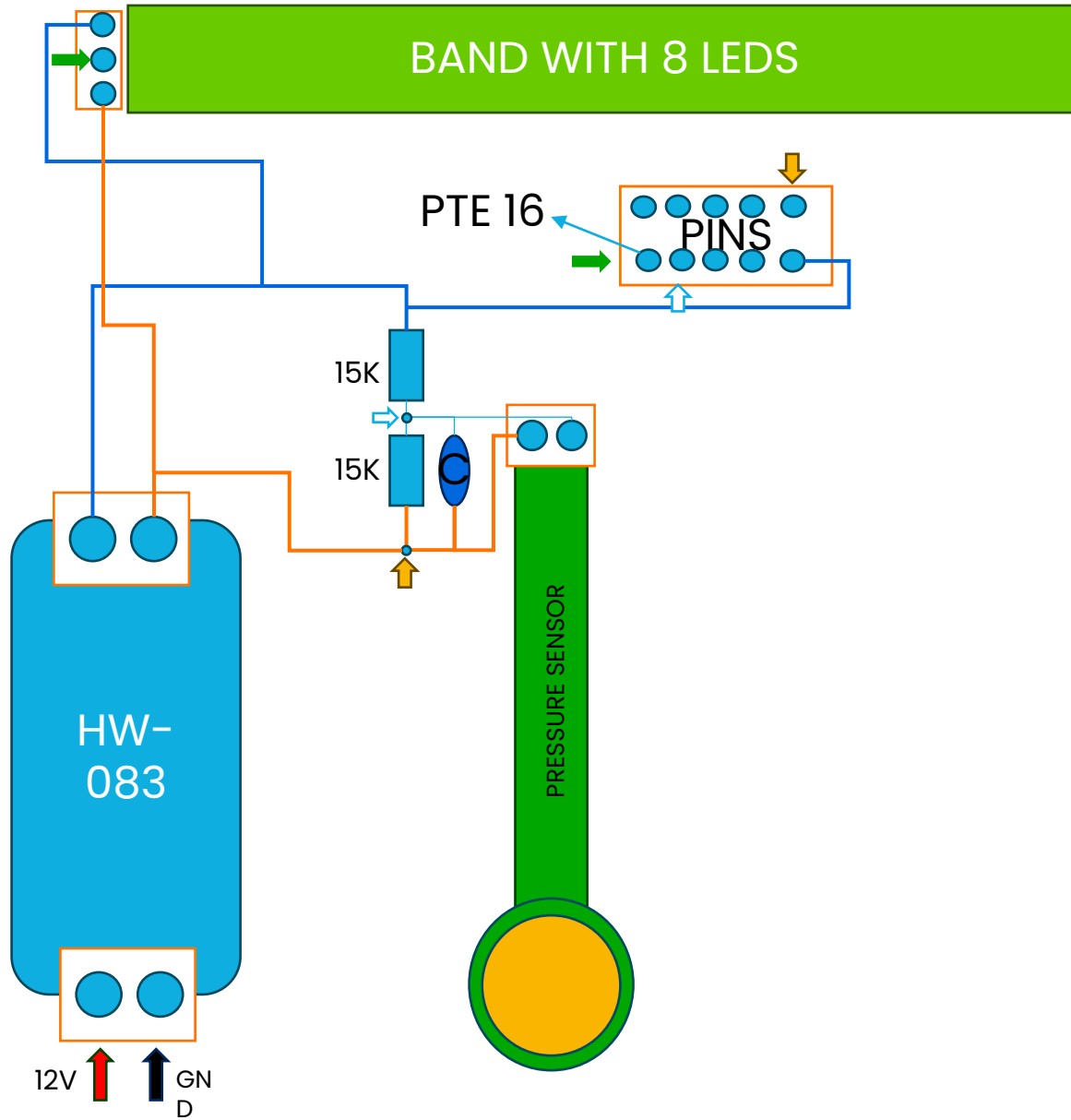
04

Brake





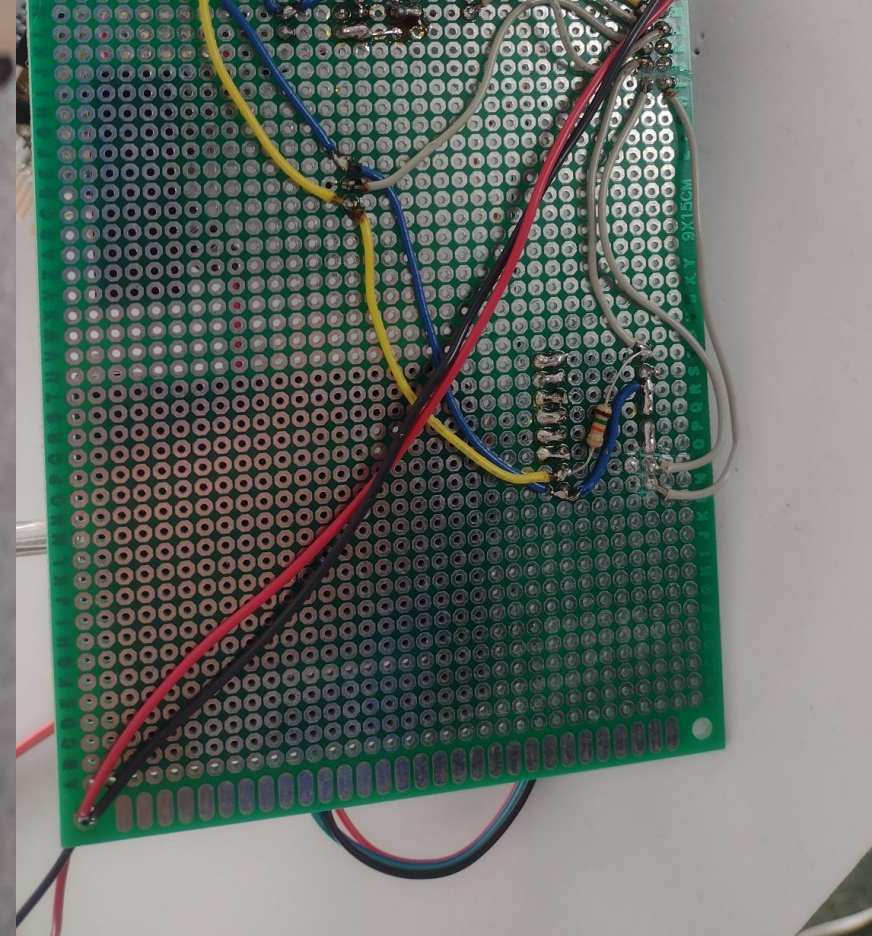
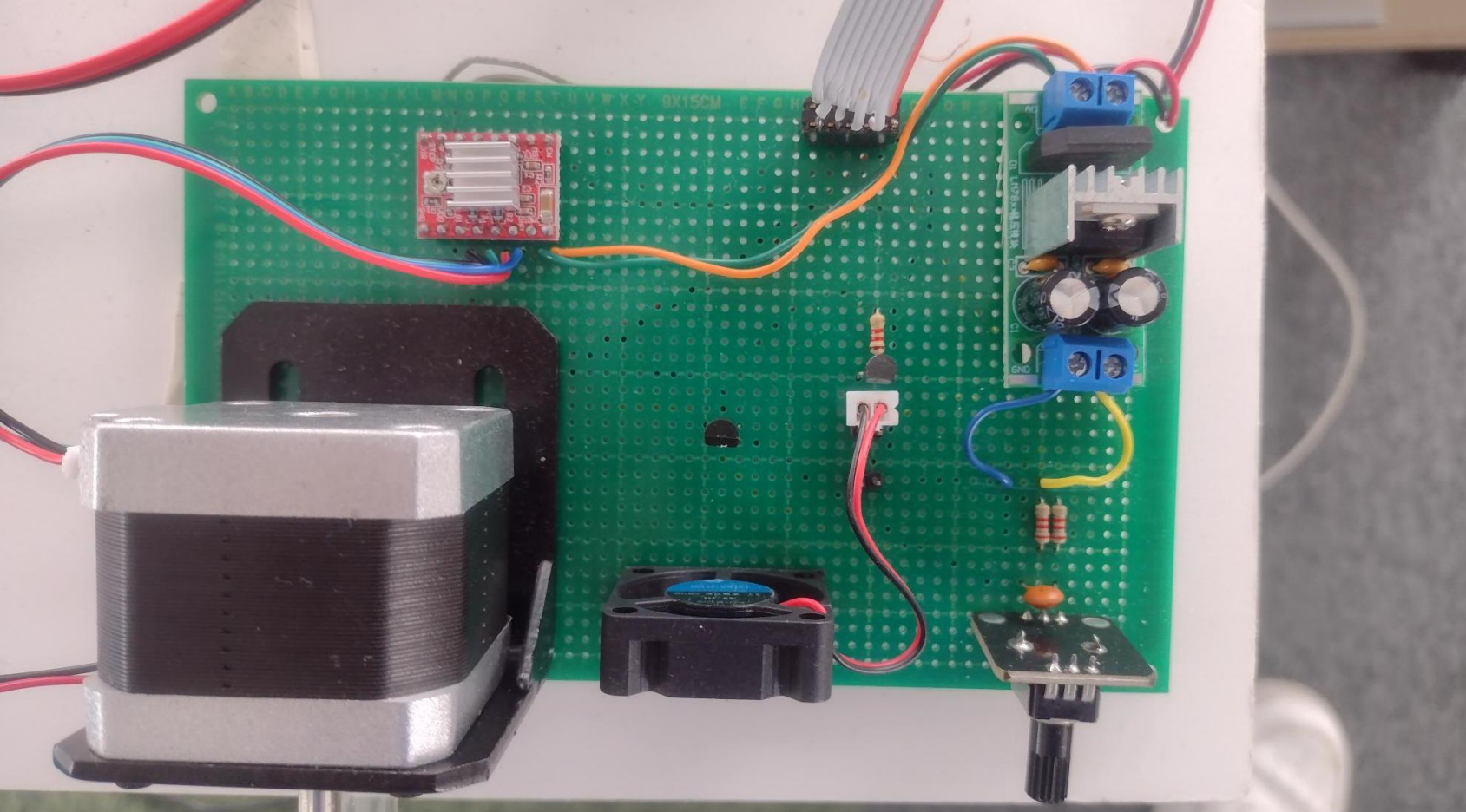
BRAKE

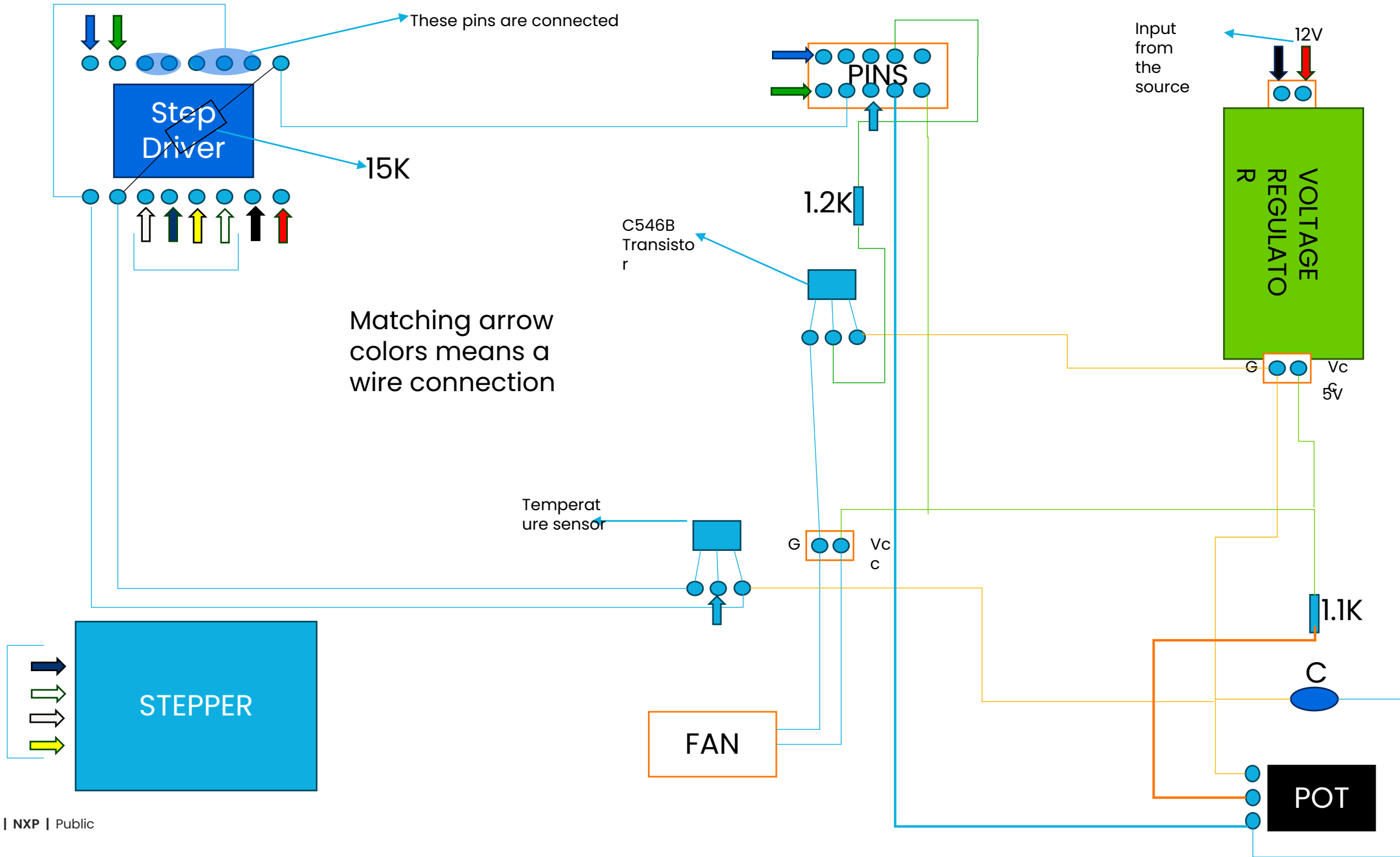


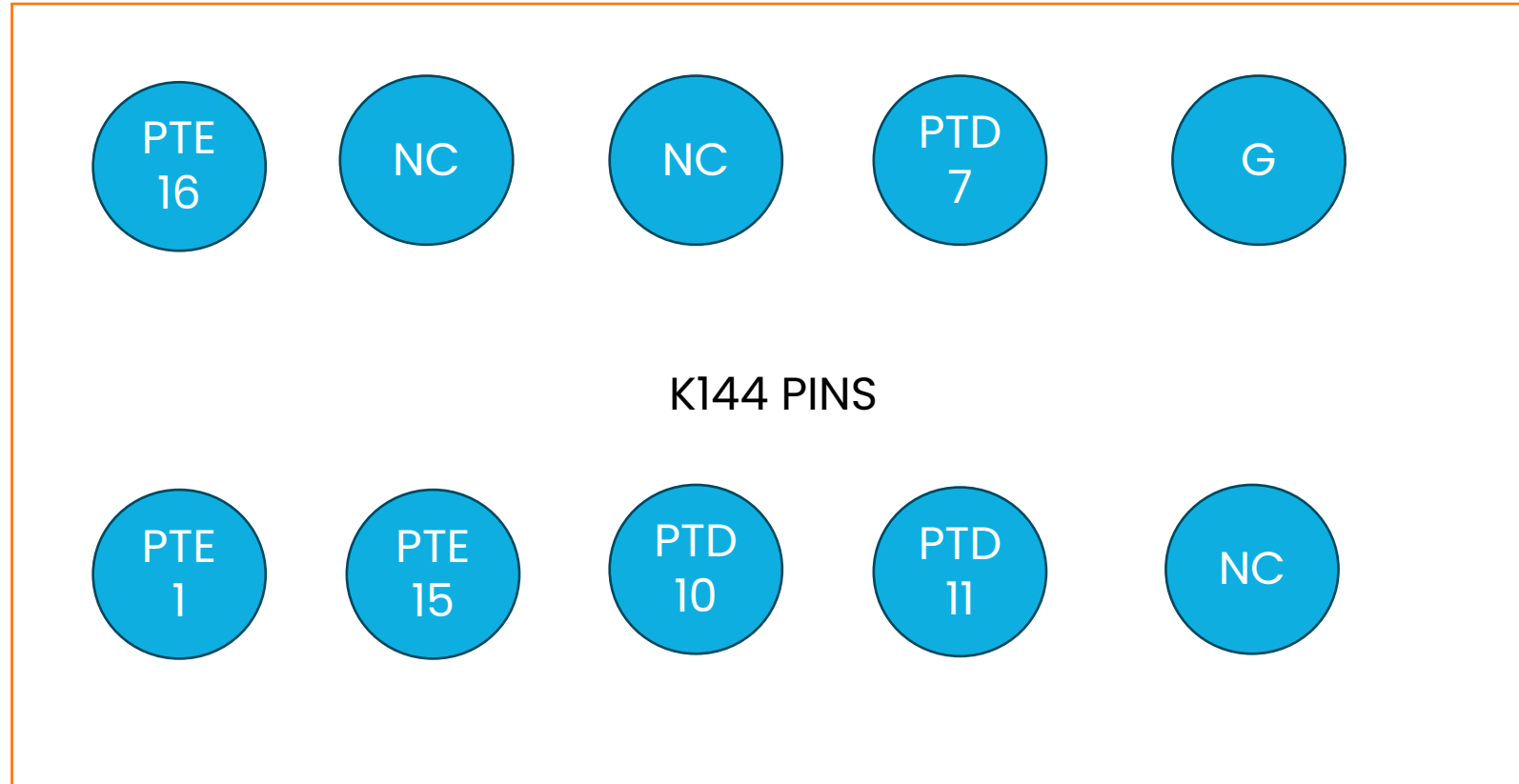
05

Door Control + HVAC











Brighter
Together

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