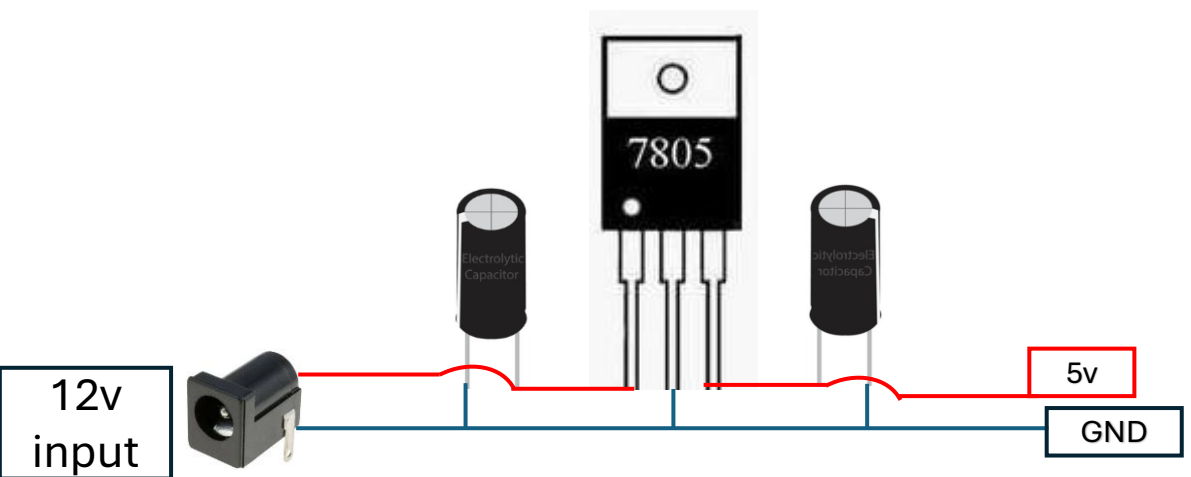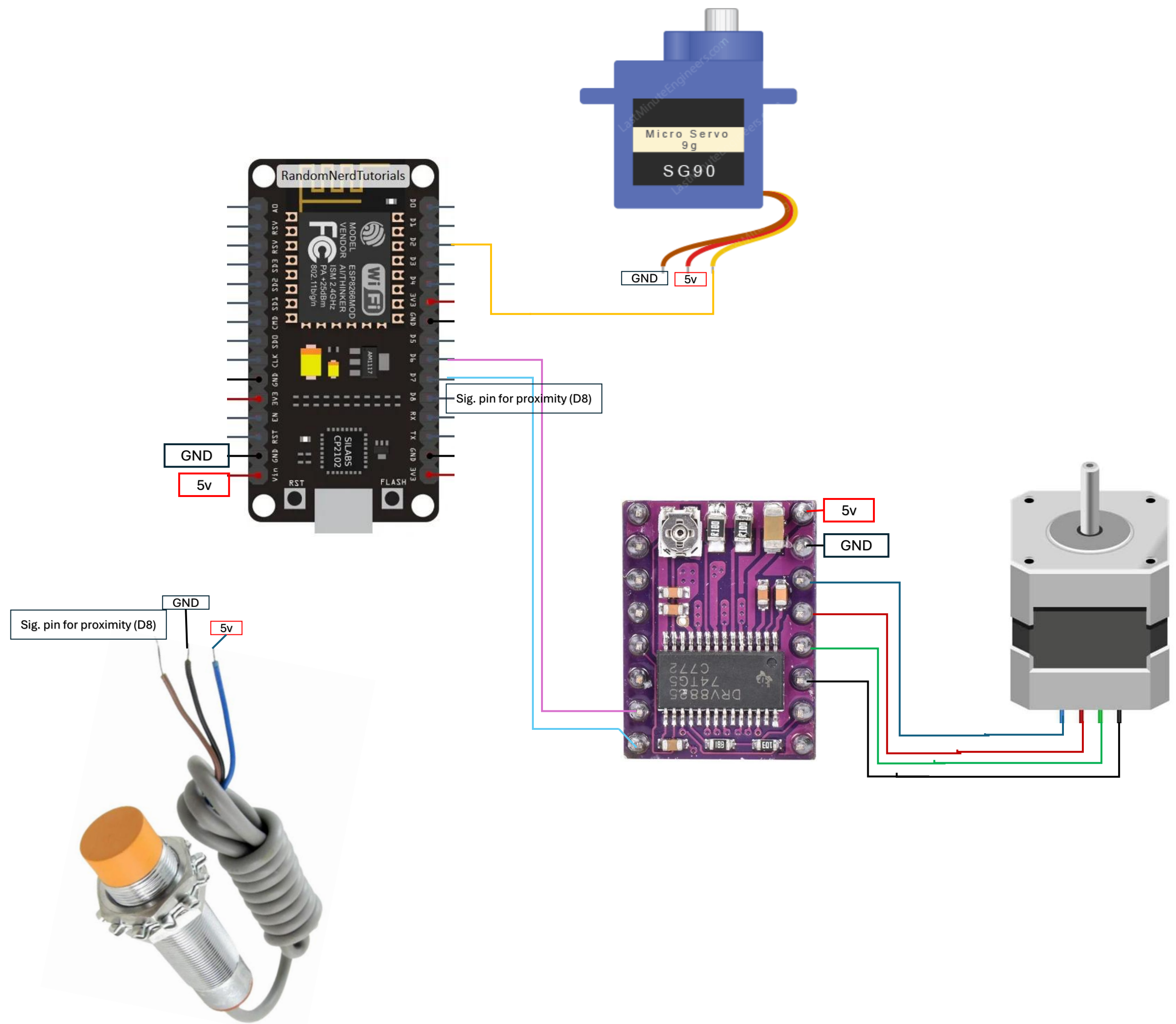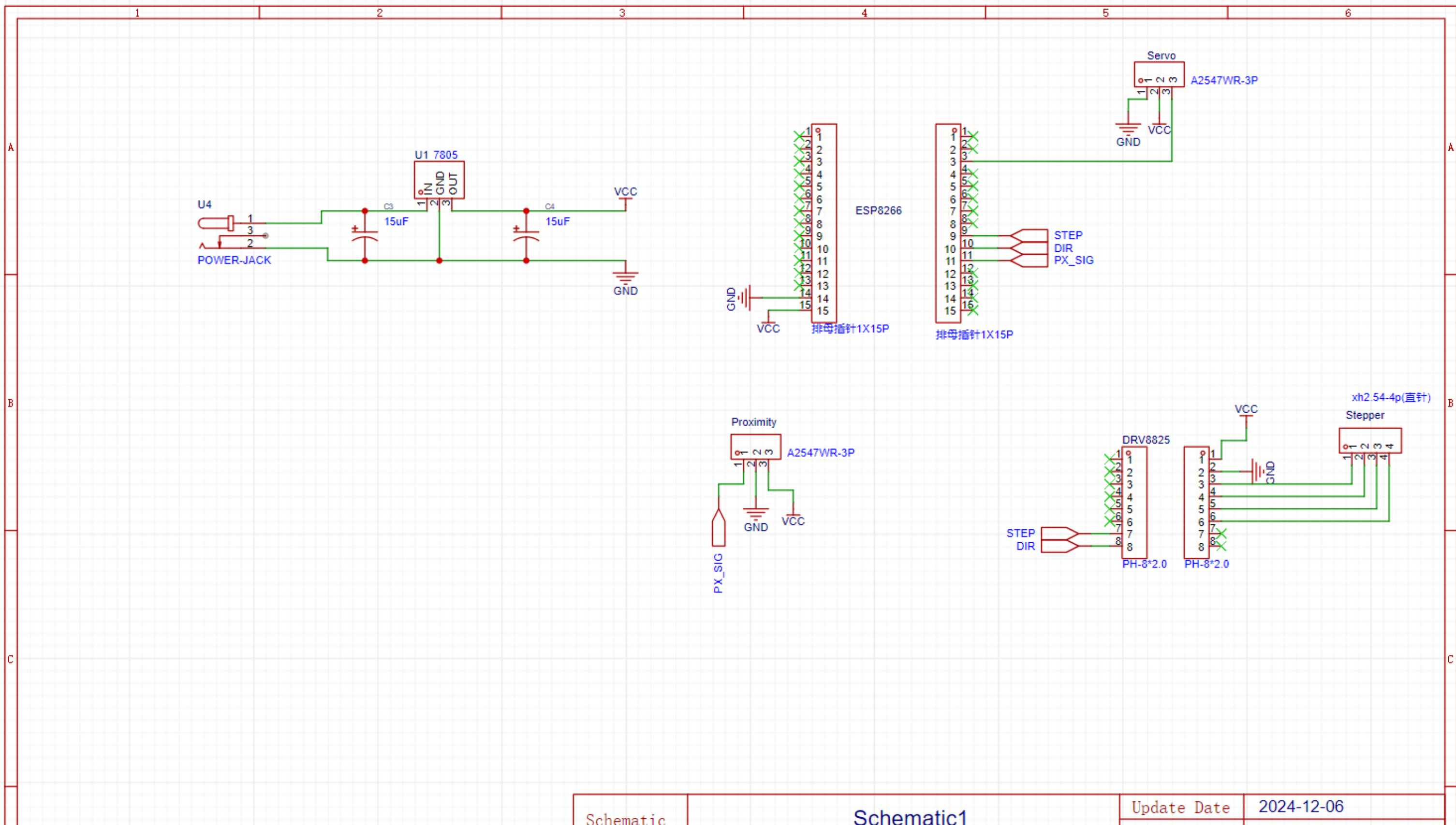1. Stepper Motor
2. Base Cheses
3. Proximity Sensor
4. Conveyer belt
5. Servo Motor
6. Bucket
7. Lever
8. Object

7805

12v input

5v

GND

RandomNerdTutorials

Micro Servo 9g

SG90

GND

5v

GND

5v

Sig. pin for proximity (D8)

GND

5v

Sig. pin for proximity (D8)

GND

5v

5v

GND

Component List:
1. Power jack
2. 7805 Voltage regulator
3. Capacitor
4. ESP8266 Microcontroller
5. Servo Motor
6. Proximity Sensor
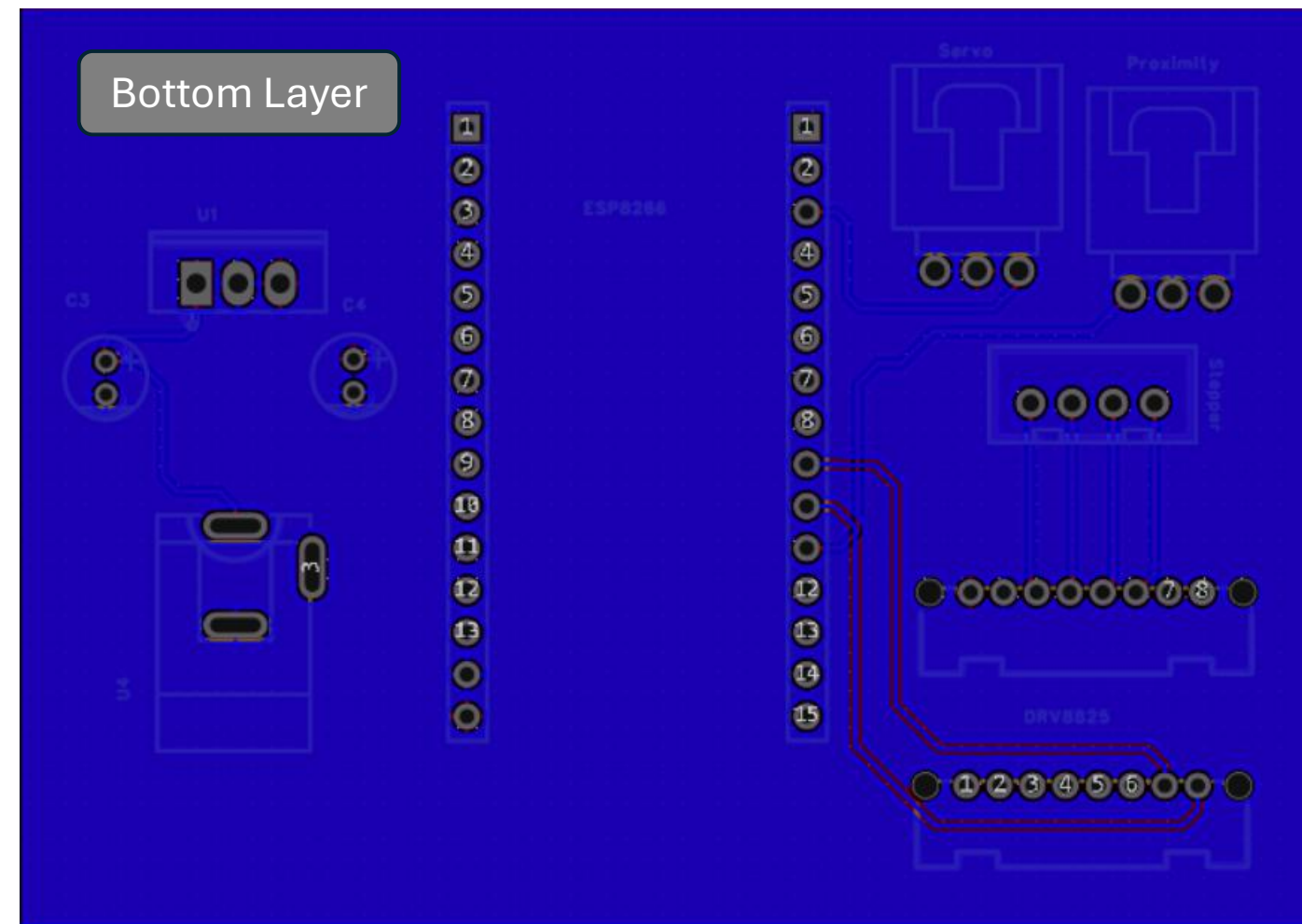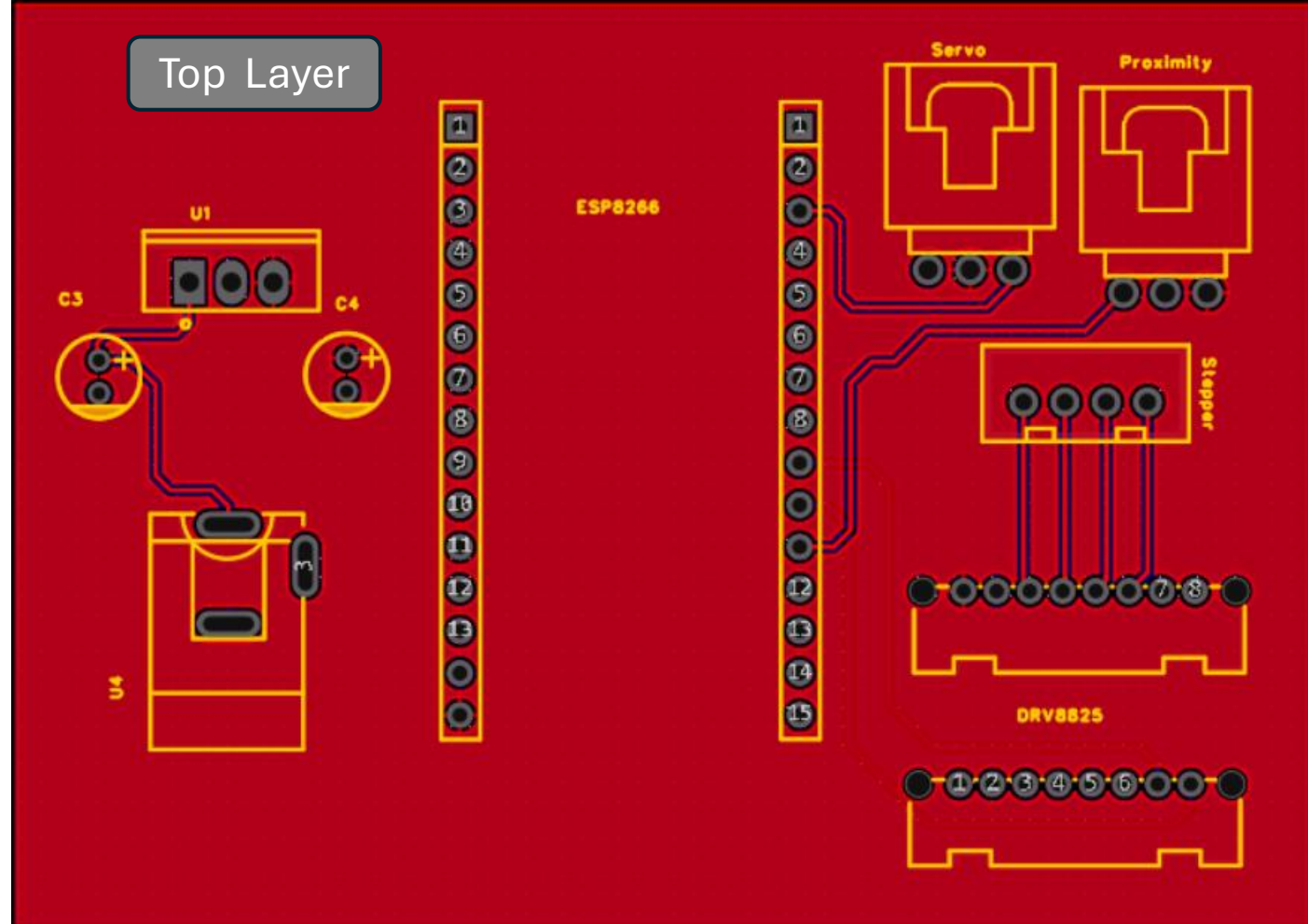7. DRV8825
8. Stepper Motor

Servo
A2547WR-3P
GND   VCC

U1 7805
IN GND OUT

U4
POWER-JACK

C3
15uF

C4
15uF

VCC

GND

ESP8266

排母插针1X15P

GND

VCC

排母插针1X15P

STEP
DIR
PX_SIG

Proximity
A2547WR-3P
GND   VCC

PX_SIG

VCC

xh2.54-4p(直针)
Stepper

DRV8825

STEP
DIR

PH-8*2.0

GND

PH-8*2.0

Schematic

Schematic1

Update Date   2024-12-06

Top Layer

Servo

Proximity

ESP8266

Stepper

DRV8825

Bottom Layer

I user 16 pin header in parallel to place ESP8266

But I was unable to find 8 pin Header for DRV8825 so I used some different connector with 2.54mm pitch so that can place 8 pin header in original PCB