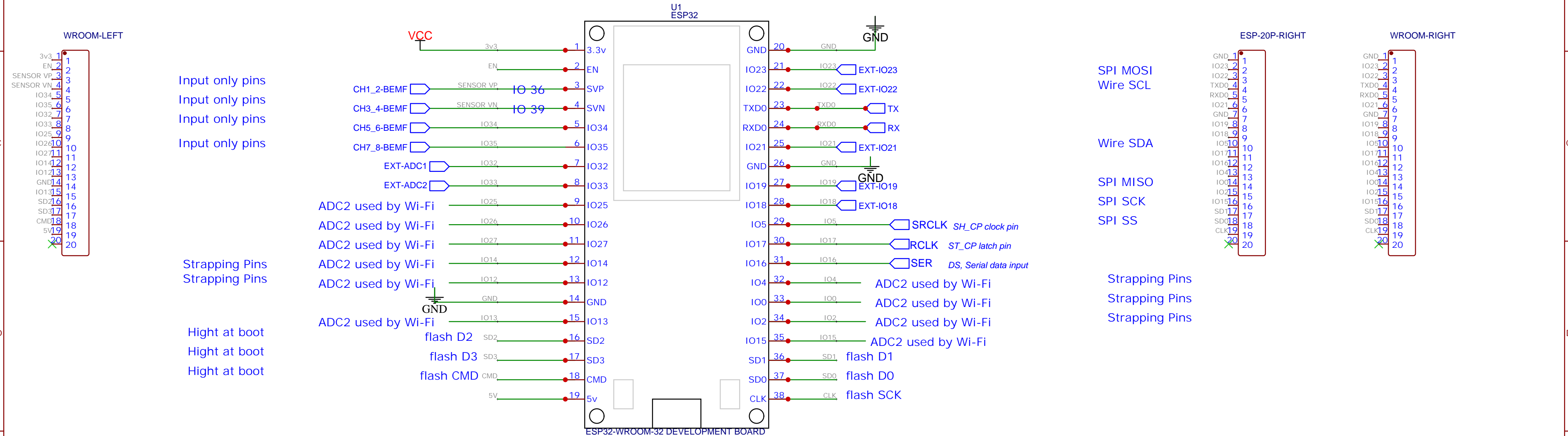
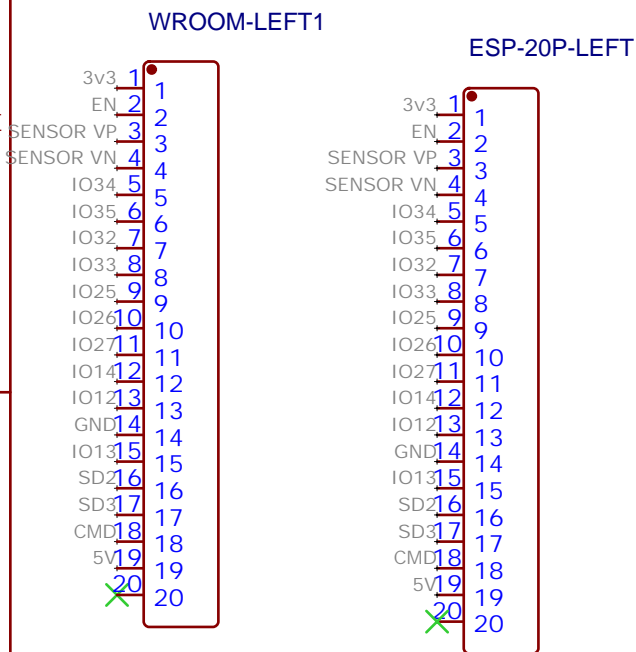


WIFI optimization : 5mm space each side of pcb antenna is recommended or use esp32-wroom 32U with external antenna



WROOM-LEFT v2 for larger board



L9110 driver chips supports DC voltages from 2.5 to 12 V, caters continuous current of 800 mA, and has a maximum peak current of 1.5 to 2 A

L9110 as single VCC for both control logic and motor driver circuits

we can run the module from a 3-V DC supply for 3-V DC motors and from 5 V for 5-V DC motors

IA = PWM (or not) for speed control

IB = direction (forward / reverse) control.

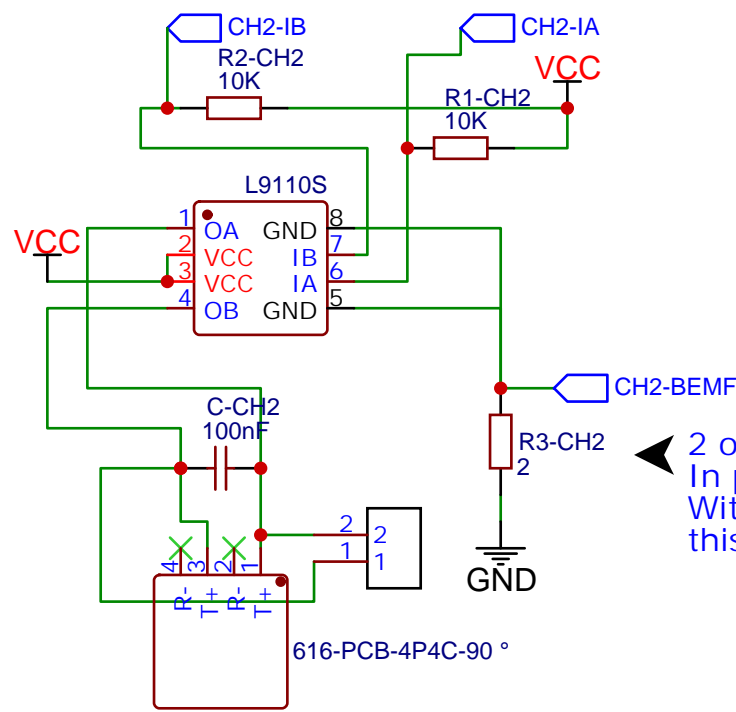
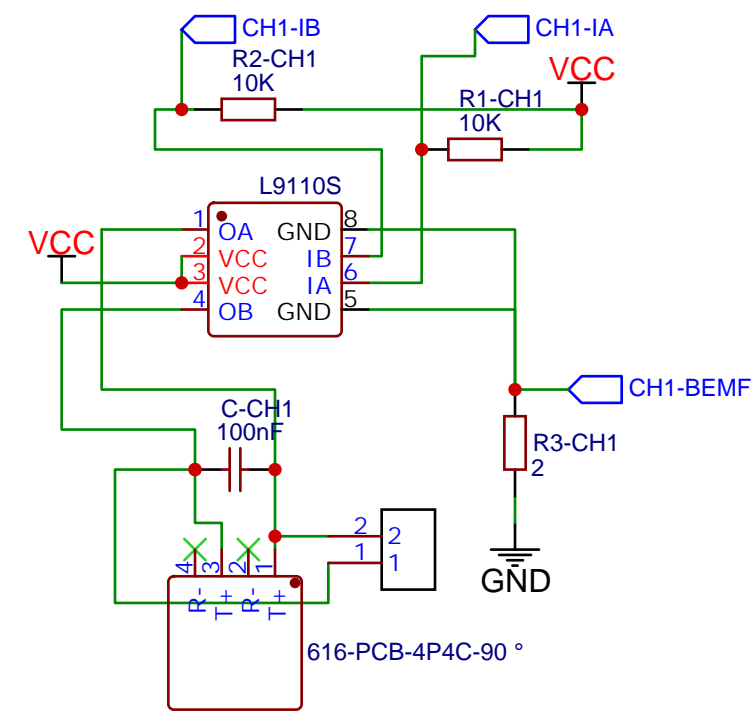
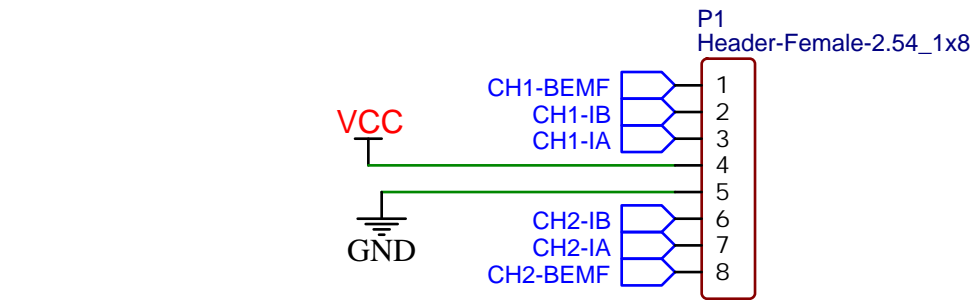
BEMF = back electromotive force (used as endstop sensor)

VCC = 3.3V or 5V (must be the same as logic controller)

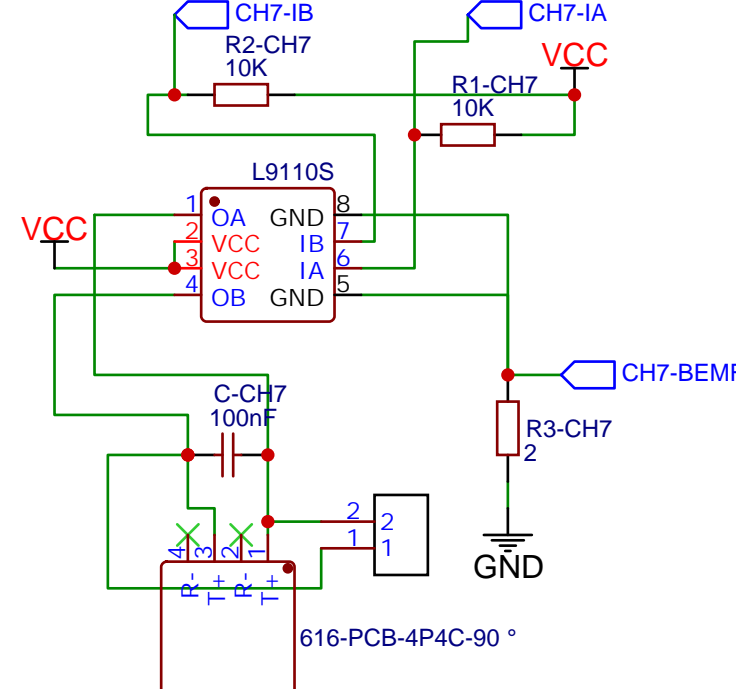
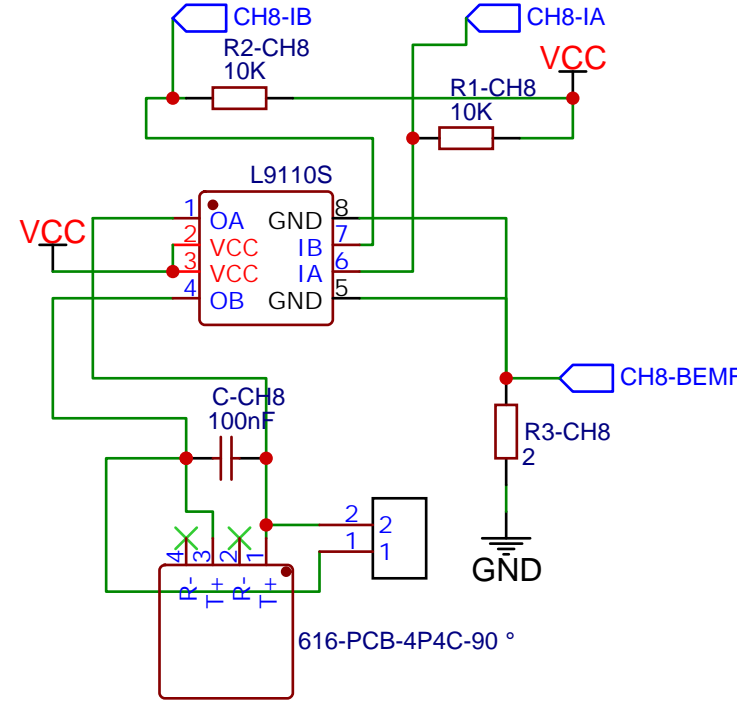
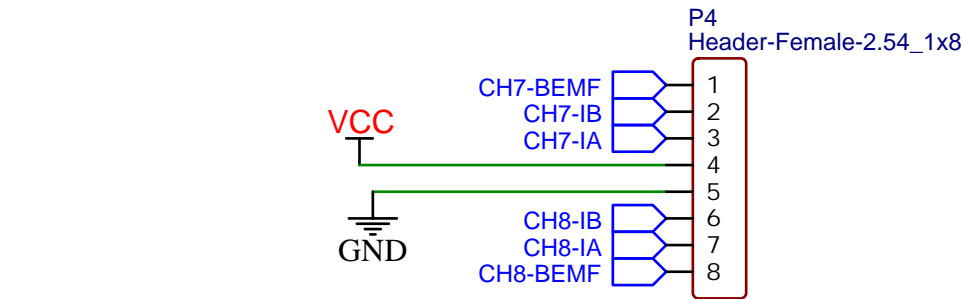
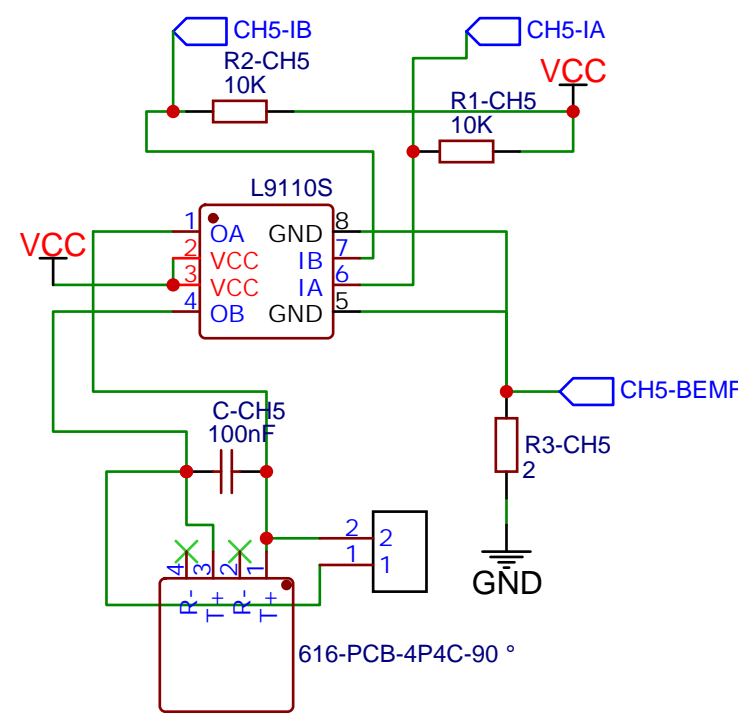
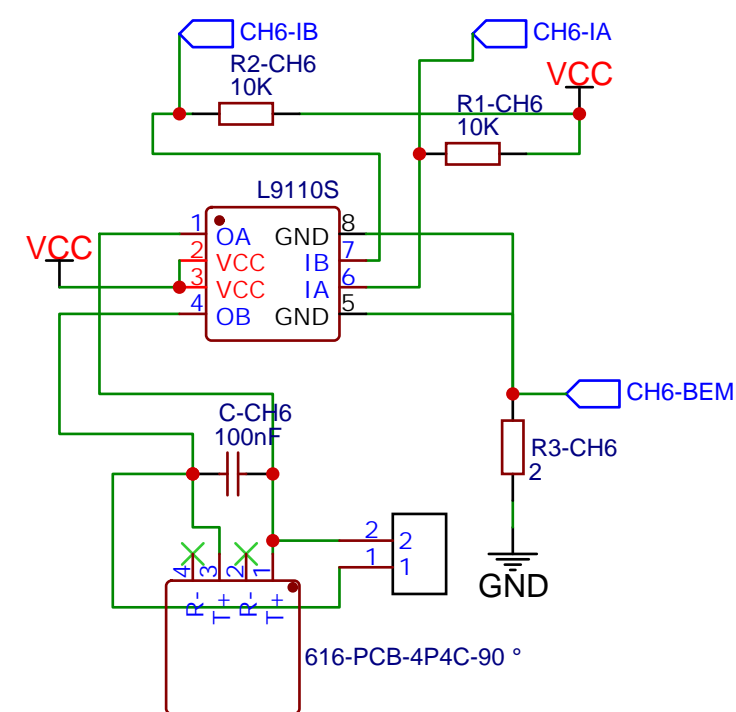
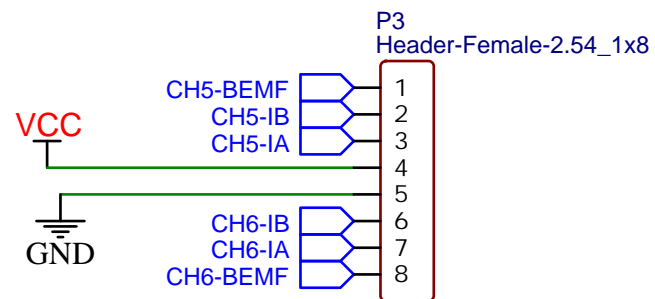
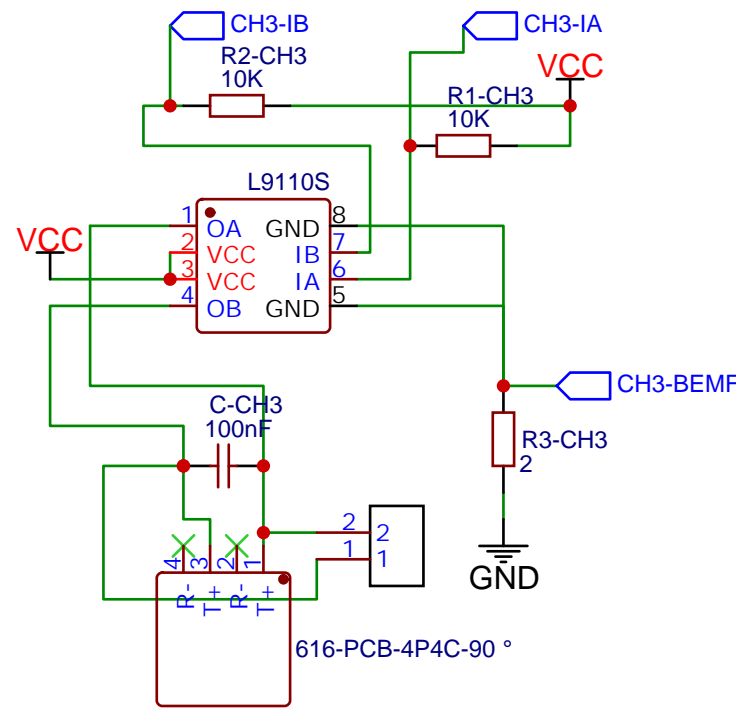
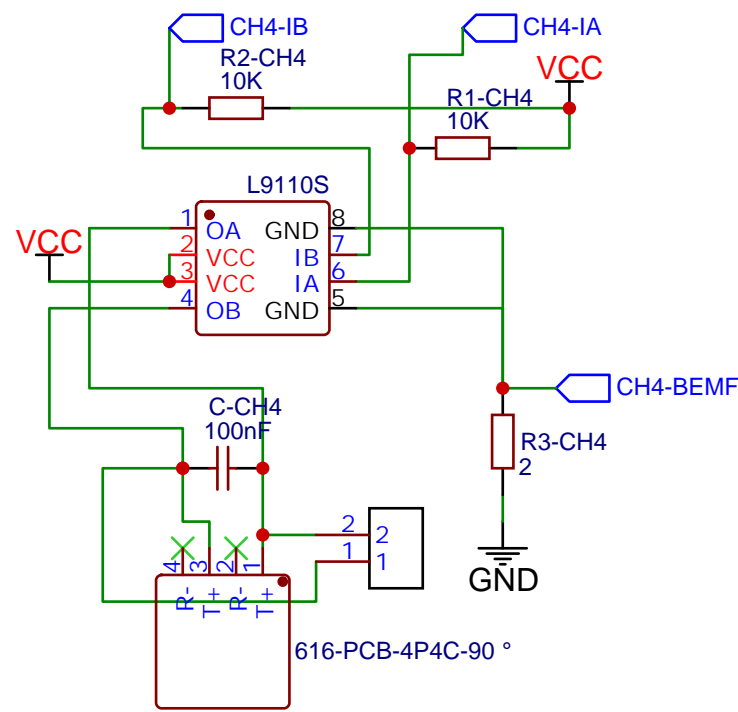
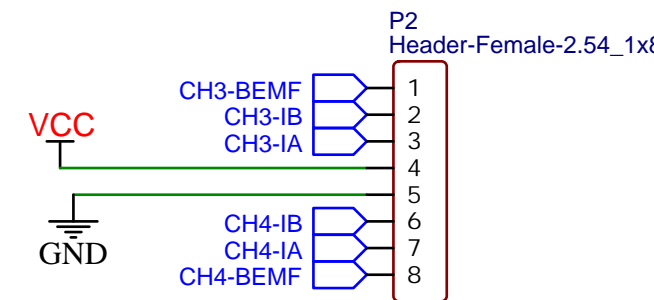
L9110 as single VCC for both control logic and motor driver circuits

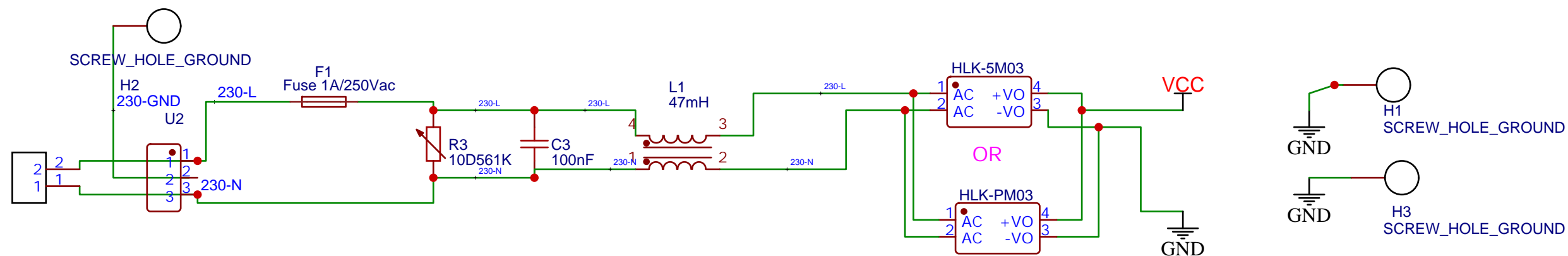
So we can run the module from 3.3V controller (ESP) for 3-V DC motors and from 5 V (Arduino) for 5-V DC motors

Caters continuous current of 800 mA, and has a maximum peak current of 1.5 to 2 A

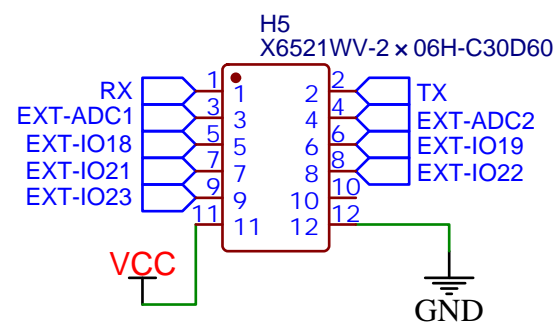


2 ohm resistors (2 per channel)
In parallel it's 1 ohm.
With the gain of the op-amp (6)
this gives blocking voltages at 25mA / 1 Ohm * 6 = 0.150V



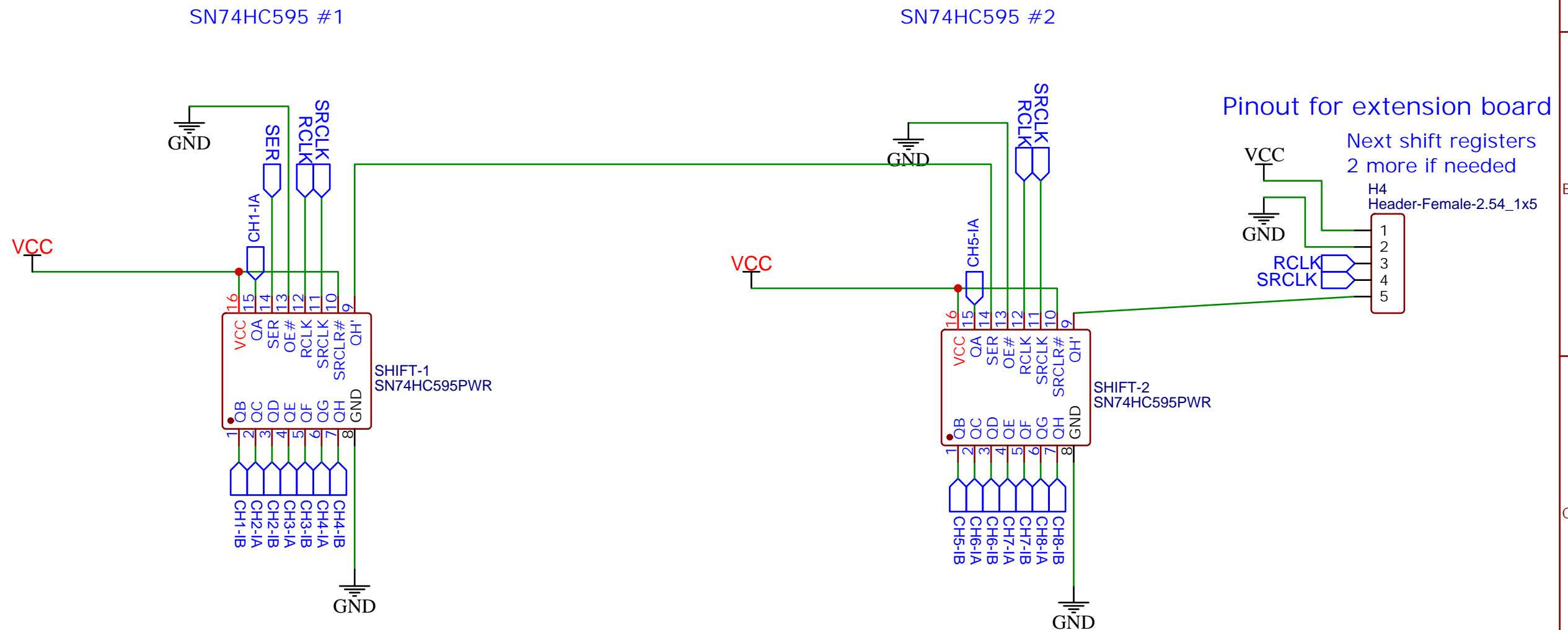


Extension board 2



TITLE: Power & coms		REV: 1.2
	Company: Barbarossa	Sheet: 1/1
	Date: 2021-01-25 Drawn By: nliaudat	

Note :
Up to 4 shift register linkable



TITLE: Shift registers		REV: 1.2
	Company: Barbarossa	Sheet: 1/1
	Date: 2021-01-25 Drawn By: nliaudat	

