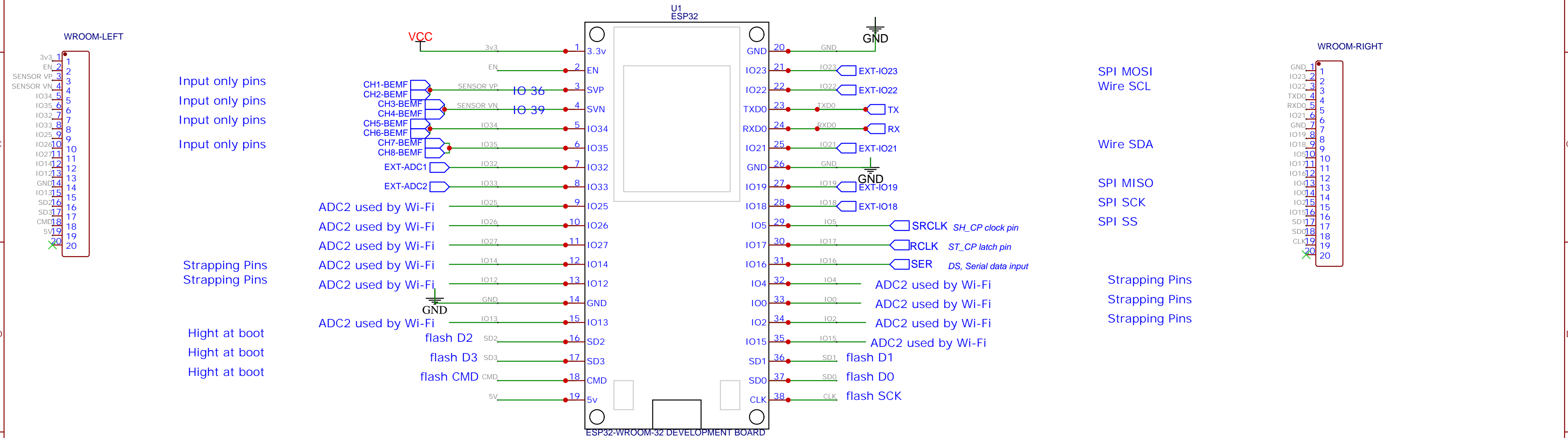


WIFI optimization : 5mm space each side of pcb antenna is recommended or use esp32-wroom 32U with external antenna



WROOM-LEFT v2 for larger board



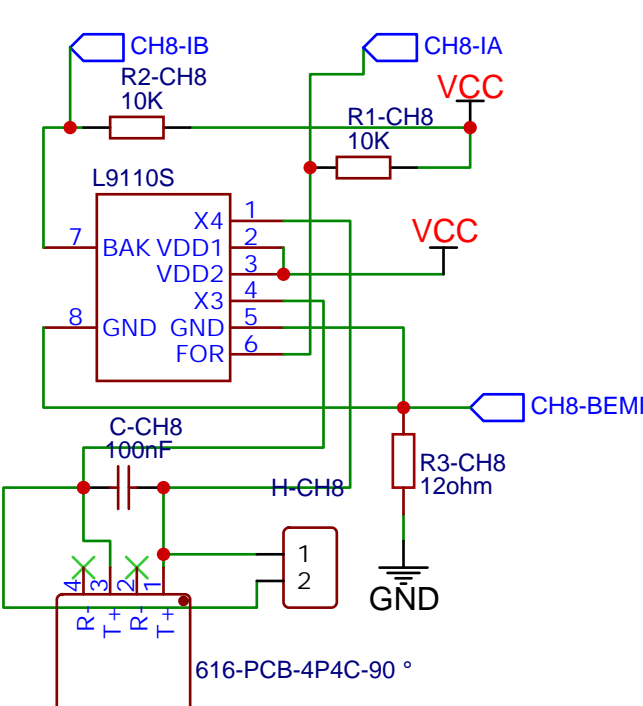
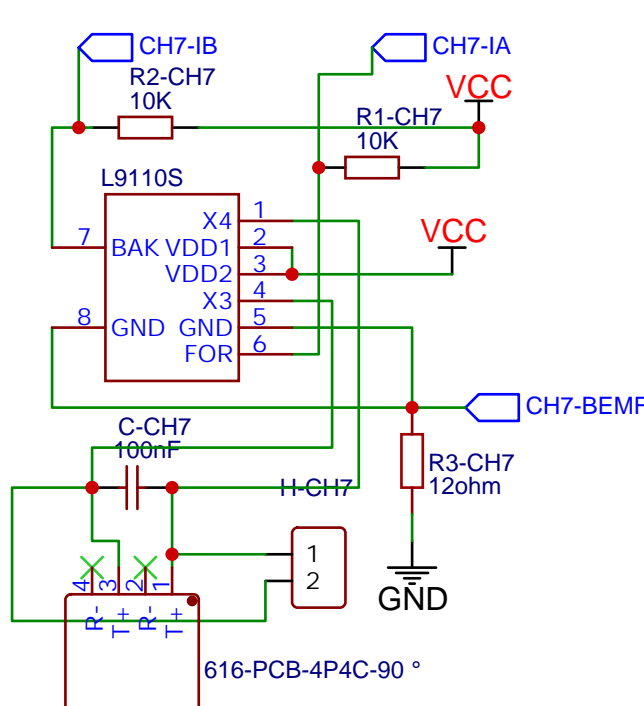
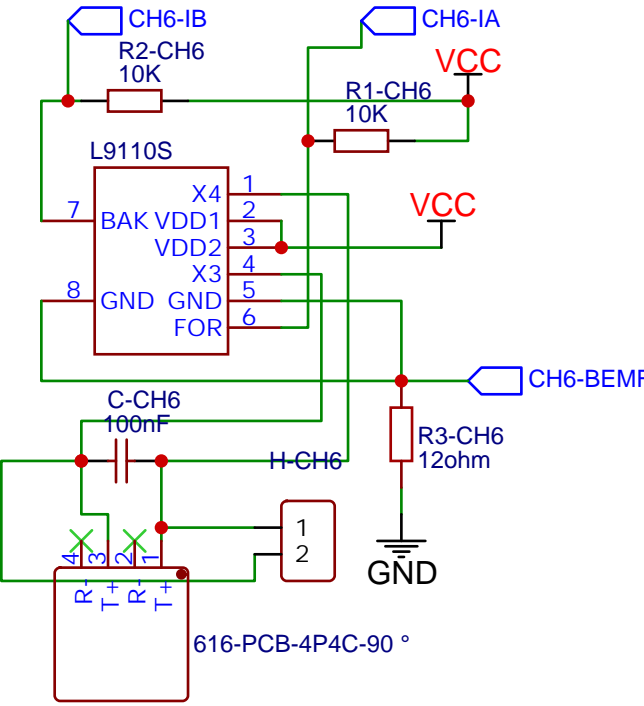
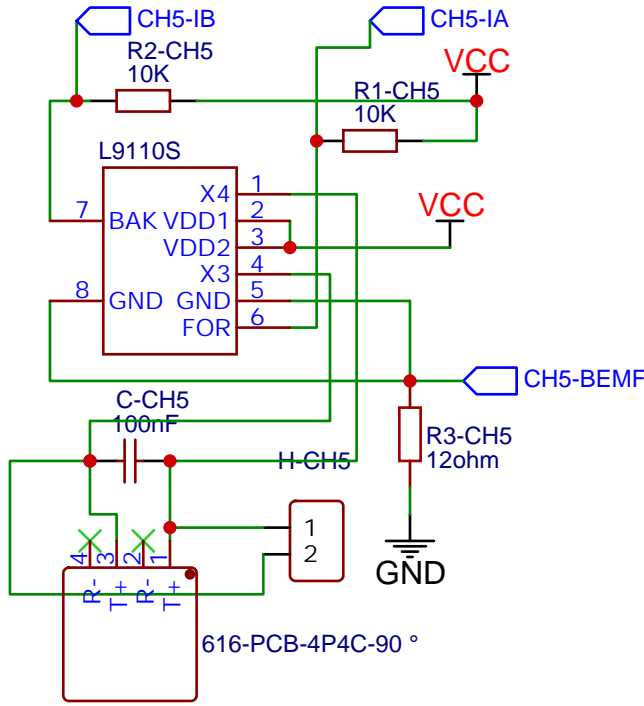
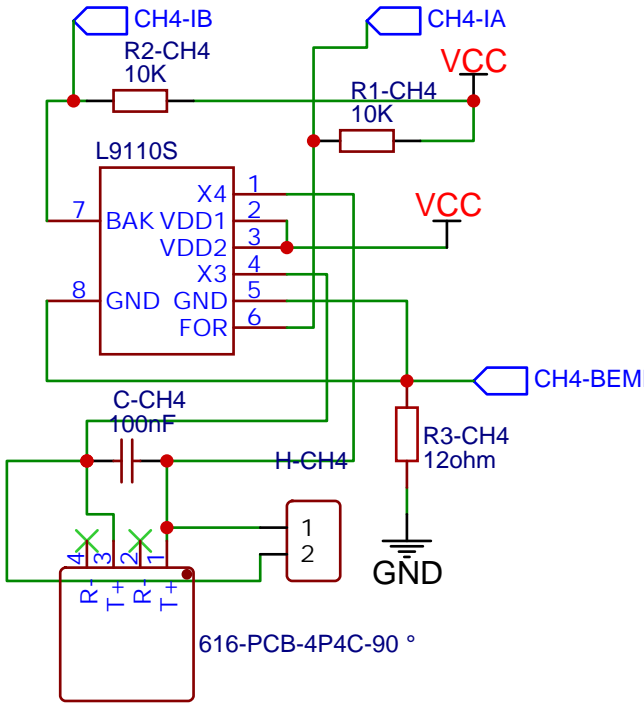
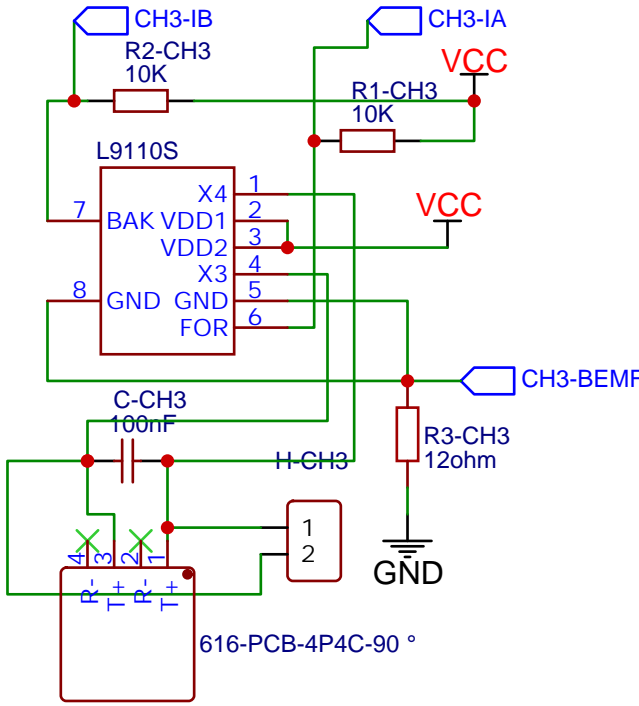
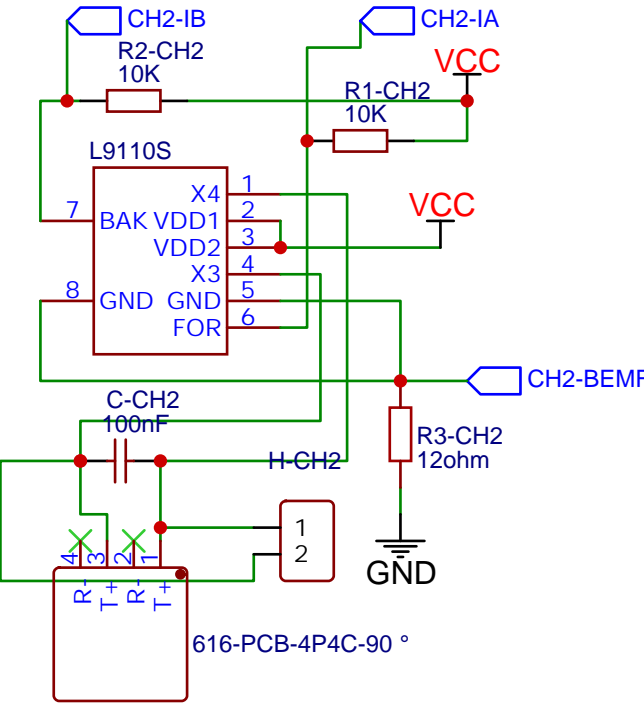
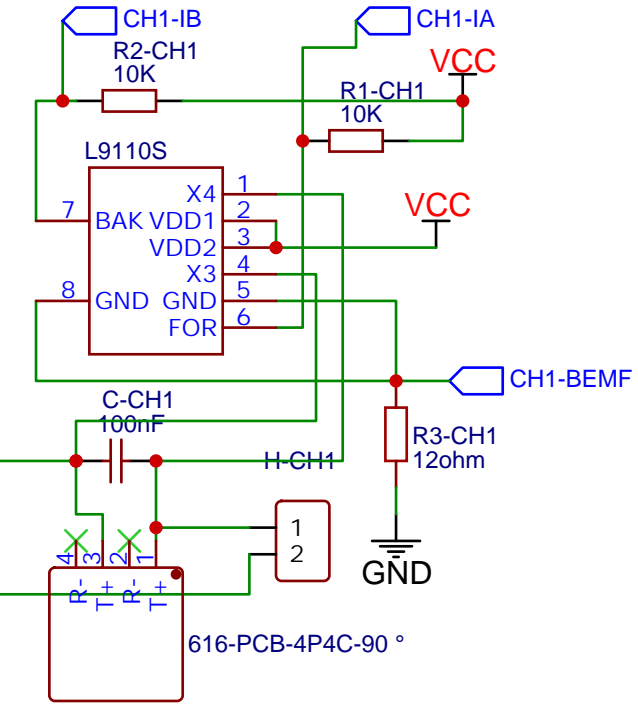
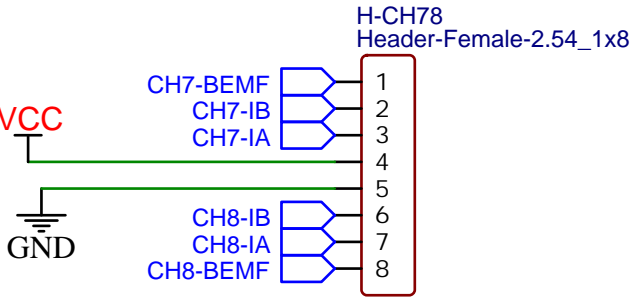
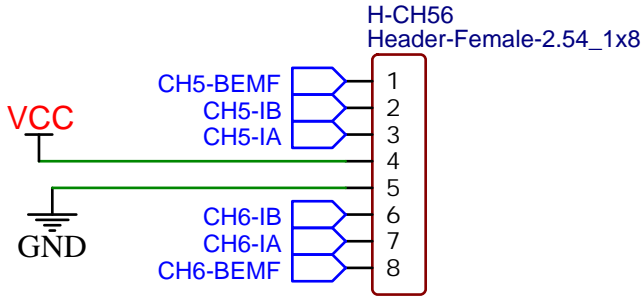
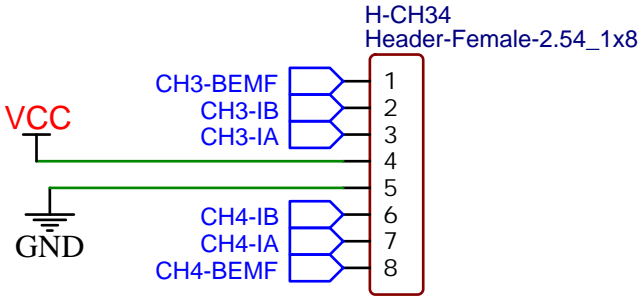
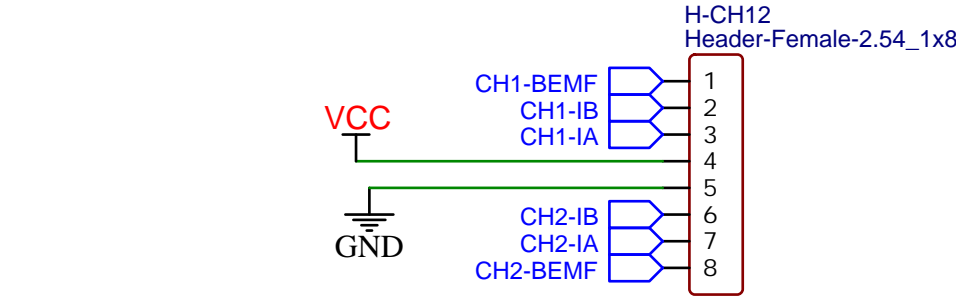
L9110 driver chips supports DC voltages from 2.5 to 12 V, caters continuous current of 800 mA, and has a maximum peak current of 1.5 to 2 A

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)

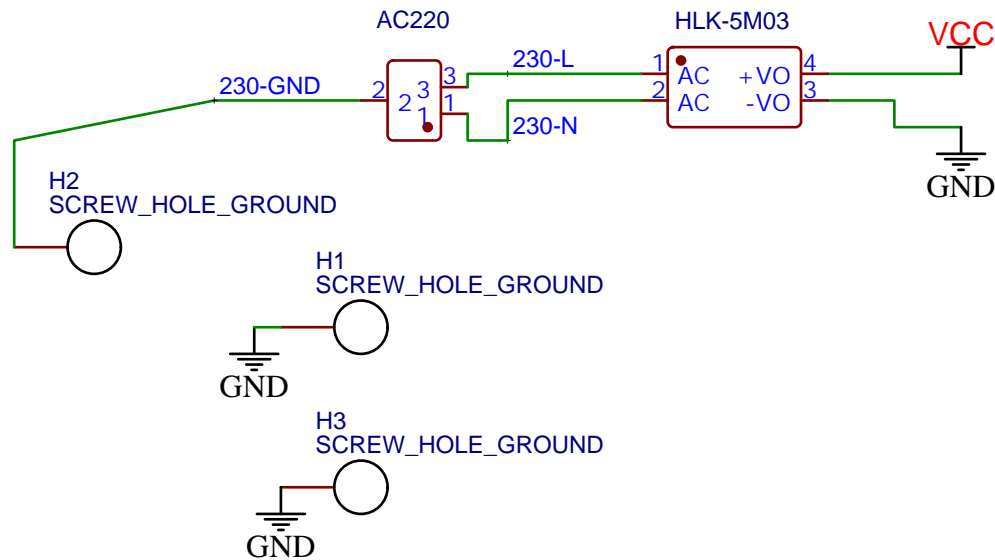
8x 12 ohm resistors (2 per channel)
vary voltage from 0.55 to 1.1 v depending
the number of BEMF (1.6v) activated
at the same time (max 1 per channel) :
4 BEMF = 0.57v ; 3=0.8; 2=0.9; 1=1.1

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

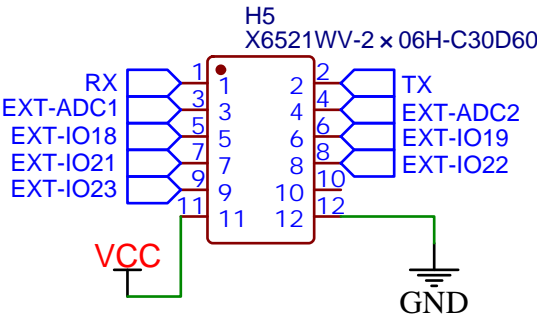


TITLE: L9110 modules		REV: 1.2
EasyEDA	Company: Barbarossa	Sheet: 1/1
	Date: 2021-01-25 Drawn By: nliaudat	

Note :
need to protect, fuse, etc



Extension board 2



Note :
Up to 4 shift register linkable

