

Sheet: /MCU/  
File: MCU.kicad\_sch

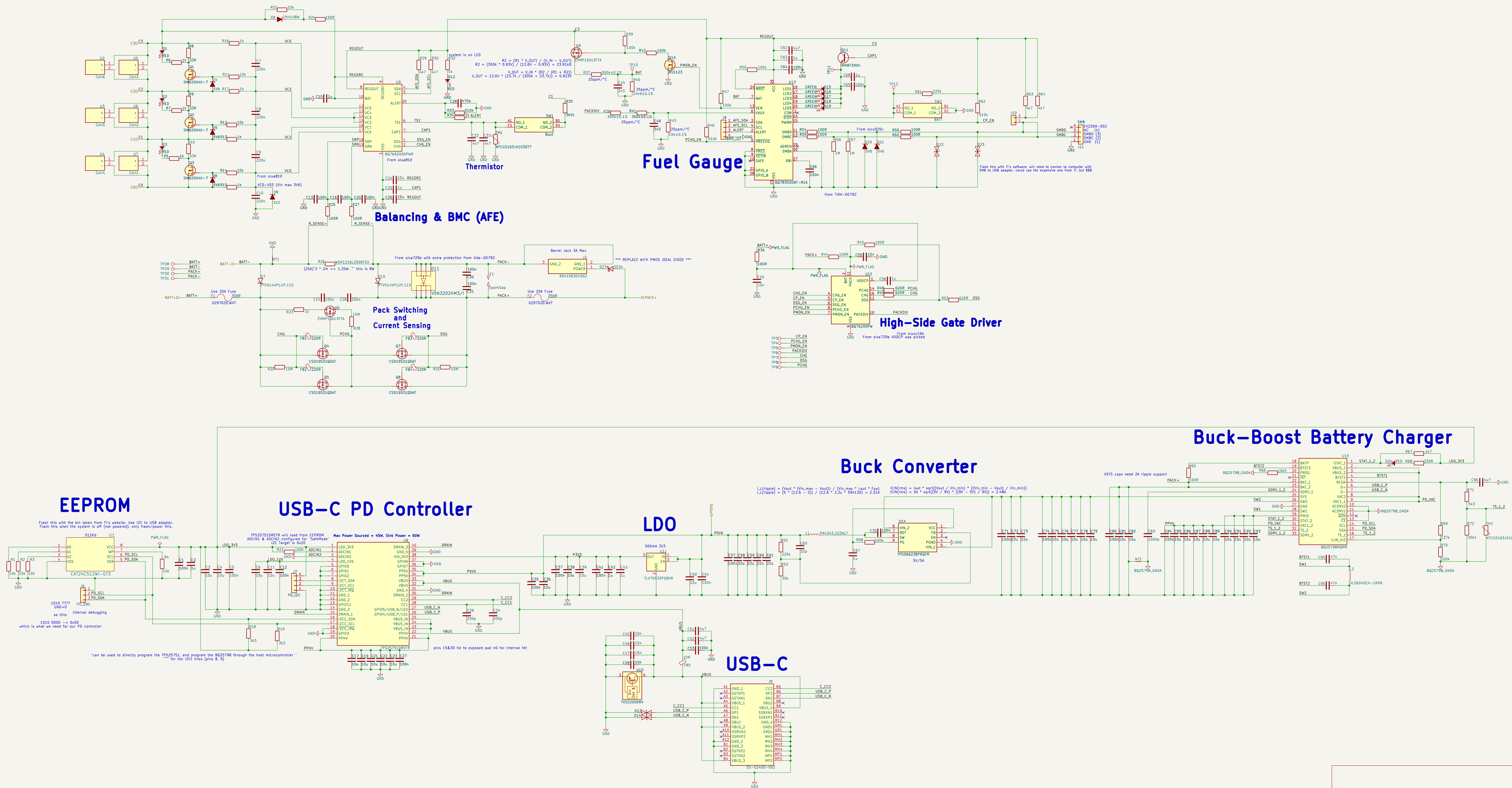
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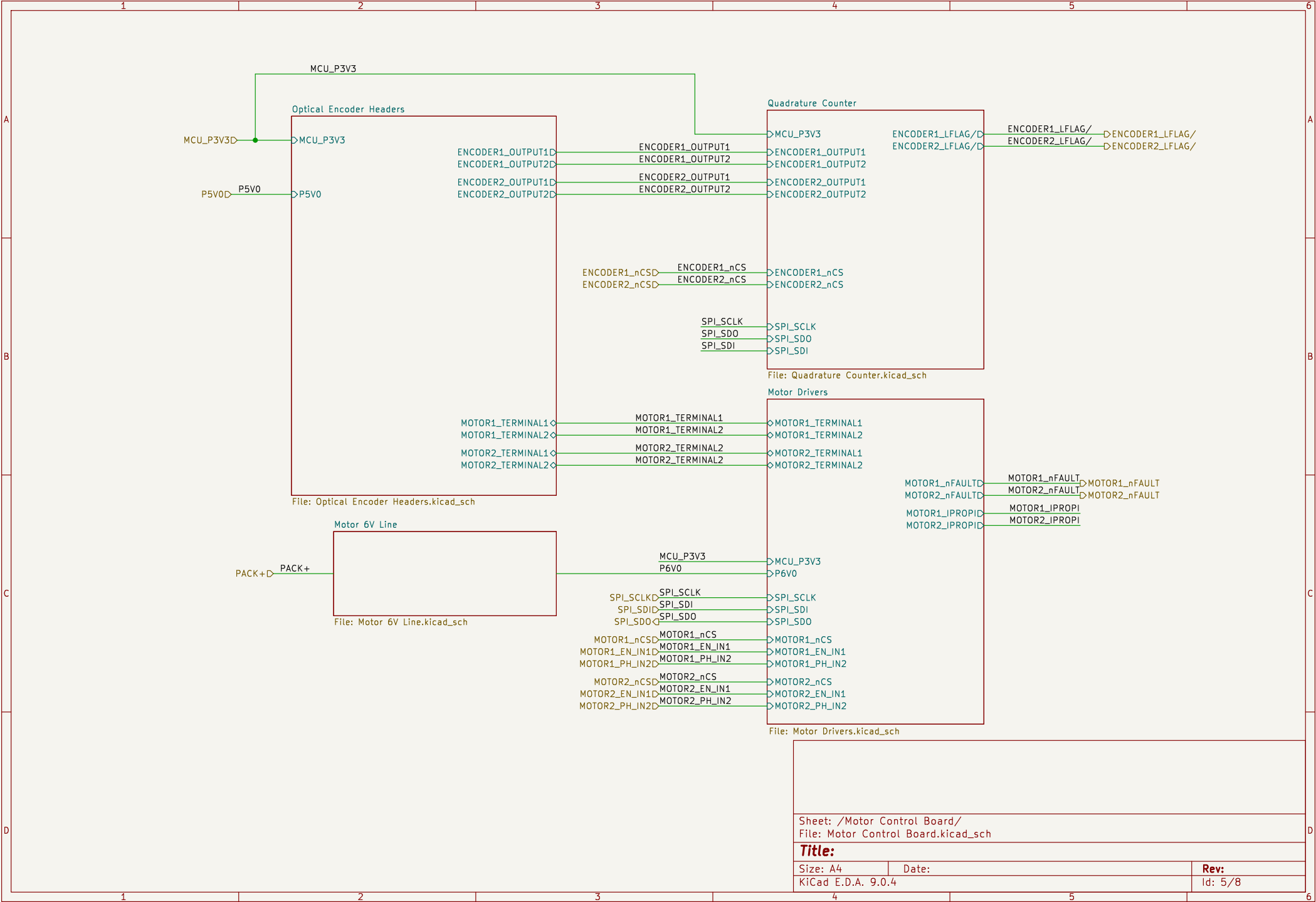
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**Rev:**  
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**BMS Protection Board for 3S Battery Pack**  
**In/Out: min voltage: 9.6 V, nominal voltage: 11.1 V, max voltage: 12.6 V**  
**Output: 20A continuous discharge current**  
**Min Each Cell set to 3.2 V, Max Each Cell set to 4.2 V**





Sheet: /Motor Control Board/  
File: Motor Control Board.kicad\_sch

**Title:**

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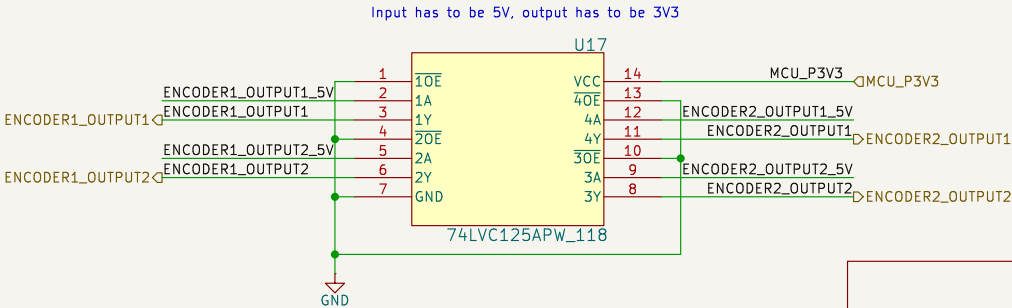
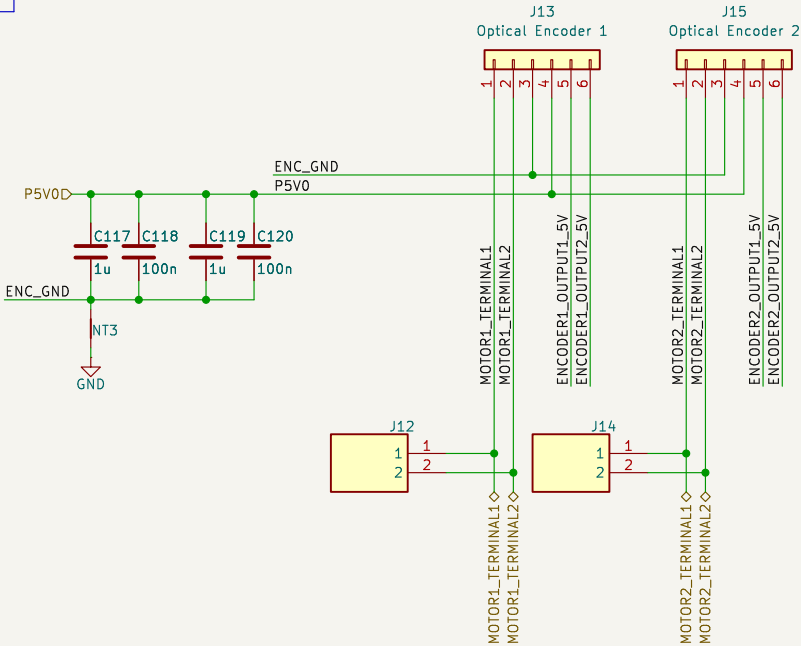
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	1	2	3	4	5	6
A						
B						
C						
D						
	1	2	3	4	5	6

Sheet: /Motor Control Board/Motor 6V Line/ File: Motor 6V Line.kicad_sch		
<b>Title:</b>		
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(1) Red	motor power (connects to one motor terminal)
(2) Black	motor power (connects to the other motor terminal)
(3) Green	encoder GND
(4) Blue	encoder Vcc (3.5 – 20 V)
(5) Yellow	encoder A output
(6) White	encoder B output

- TP13○ ENC\_GND
- TP14○ MOTOR1\_TERMINAL1
- TP15○ MOTOR1\_TERMINAL2
- TP16○ ENCODER1\_OUTPUT1\_5V
- TP17○ ENCODER1\_OUTPUT2\_5V
- TP18○ MOTOR2\_TERMINAL1
- TP19○ MOTOR2\_TERMINAL2
- TP20○ ENCODER2\_OUTPUT1\_5V
- TP21○ ENCODER2\_OUTPUT2\_5V
- TP22○ ENCODER1\_OUTPUT1
- TP23○ ENCODER1\_OUTPUT2
- TP24○ ENCODER2\_OUTPUT1
- TP25○ ENCODER2\_OUTPUT2



Sheet: /Motor Control Board/Optical Encoder Headers/  
File: Optical Encoder Headers.kicad\_sch

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1	2	3	4	5	6
A					A
B					B
C					C
D					D
1	2	3	4	5	6

Sheet: /Motor Control Board/Motor Drivers/ File: Motor Drivers.kicad_sch		
Title:		
Size: A4	Date:	Rev:
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1	2	3	4	5	6
A					A
B					B
C					C
D					D
1	2	3	4	5	6

Sheet: /Motor Control Board/Quadrature Counter/ File: Quadrature Counter.kicad_sch		
Title:		
Size: A4	Date:	Rev:
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