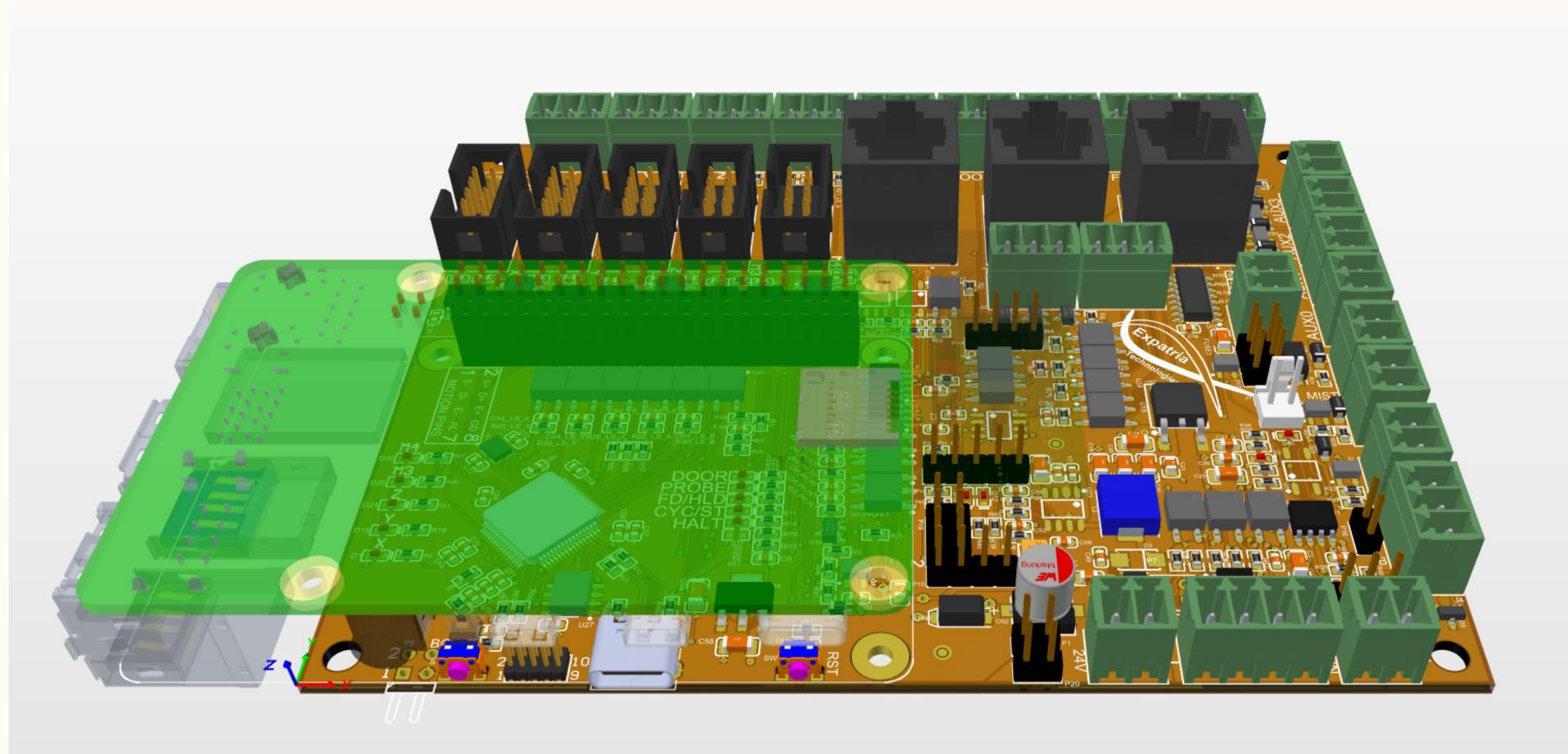


# Flexi-HAL 2000 CNC Controller

STM32F446 CNC Controller  
STM32F446RE\_board.SchDoc



## Mechanical

PCB  
LOGO  
Expatria Technologies

PCB  
LOGO  
Expatria Technologies



### ZZ1 Assembly Note

These assemblies are ESD sensitive, ESD precautions shall be observed.

### ZZ2 Assembly Note

These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

### ZZ3 Assembly Note

These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

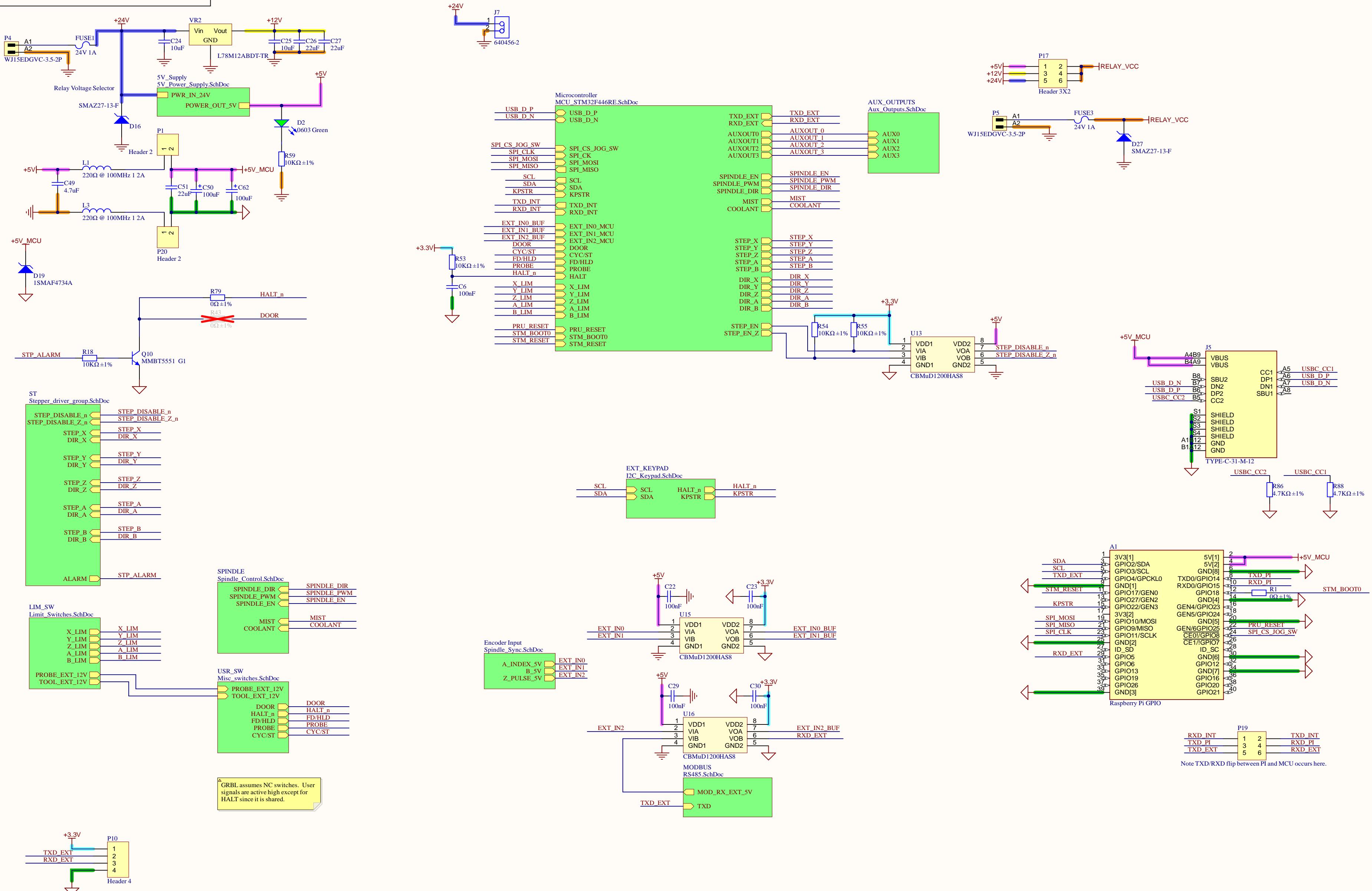
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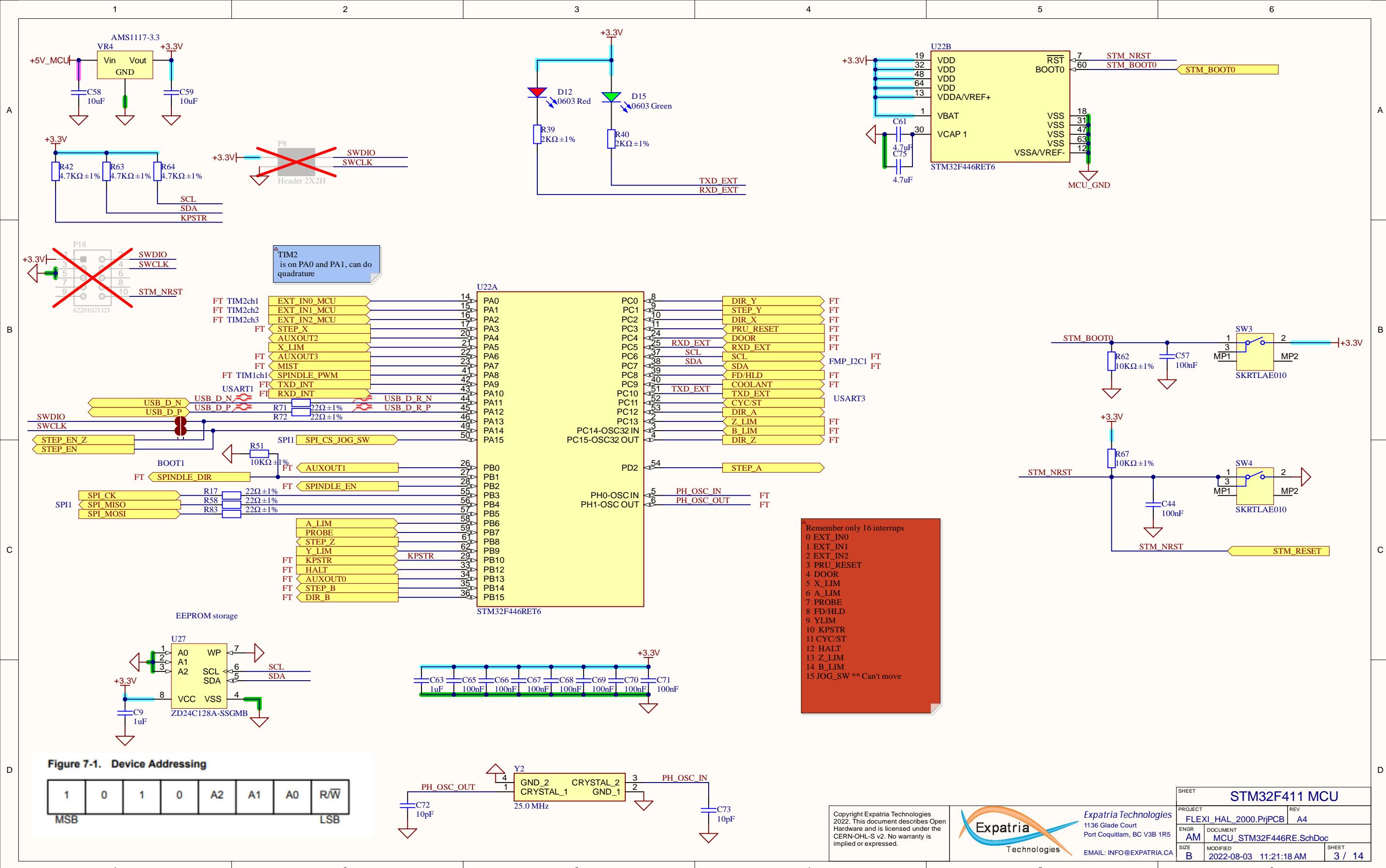


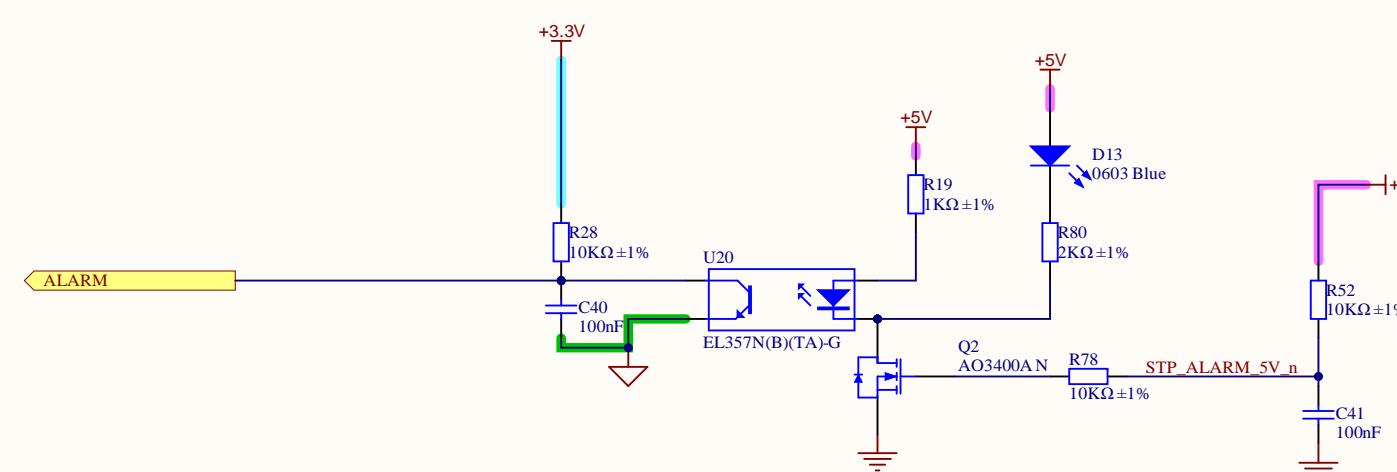
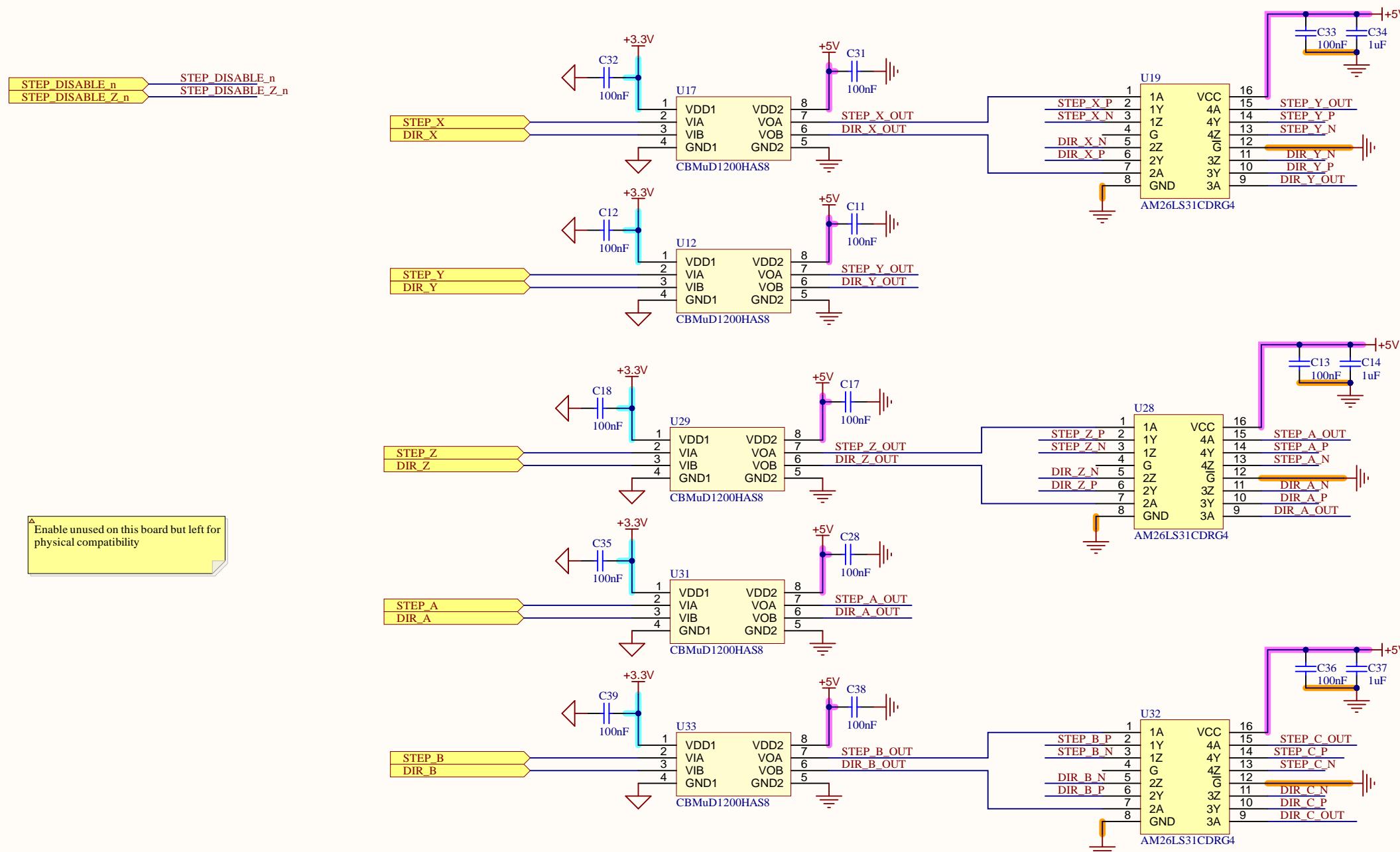
Expatria Technologies  
1136 Glade Court  
Port Coquitlam, BC V3B 1R5  
EMAIL: INFO@EXPATRIA.CA

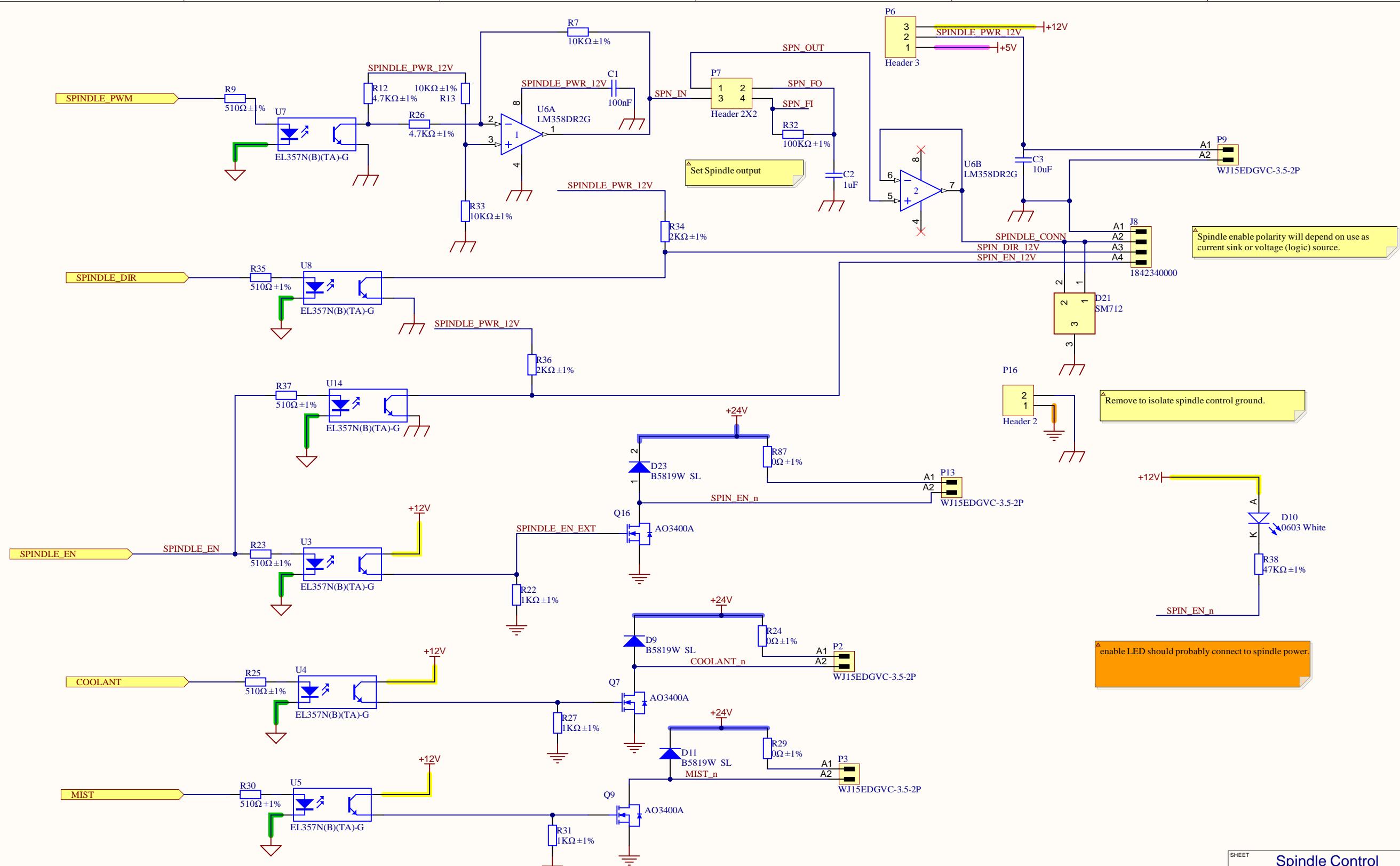
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FLEXI_HAL_2000.PjPCB	A4	
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SIZE	MODIFIED	SHEET
B	2022-08-03 11:21:17 AM	1 / 14

# dUEL CNC Controller









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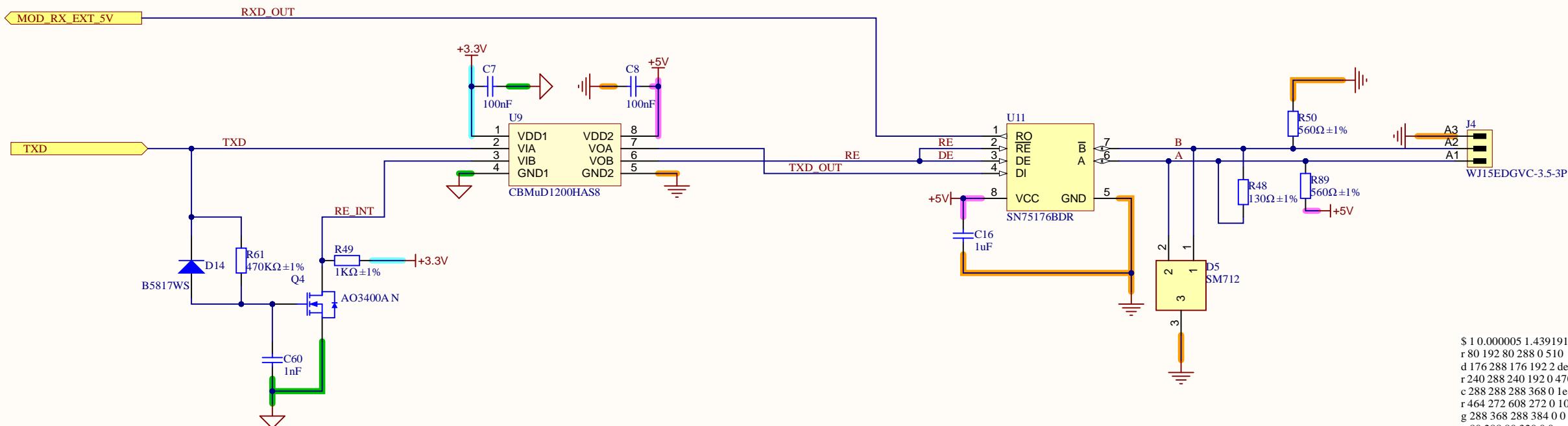


Spindle Control  
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EMAIL: INFO@EXPATRIA.CA

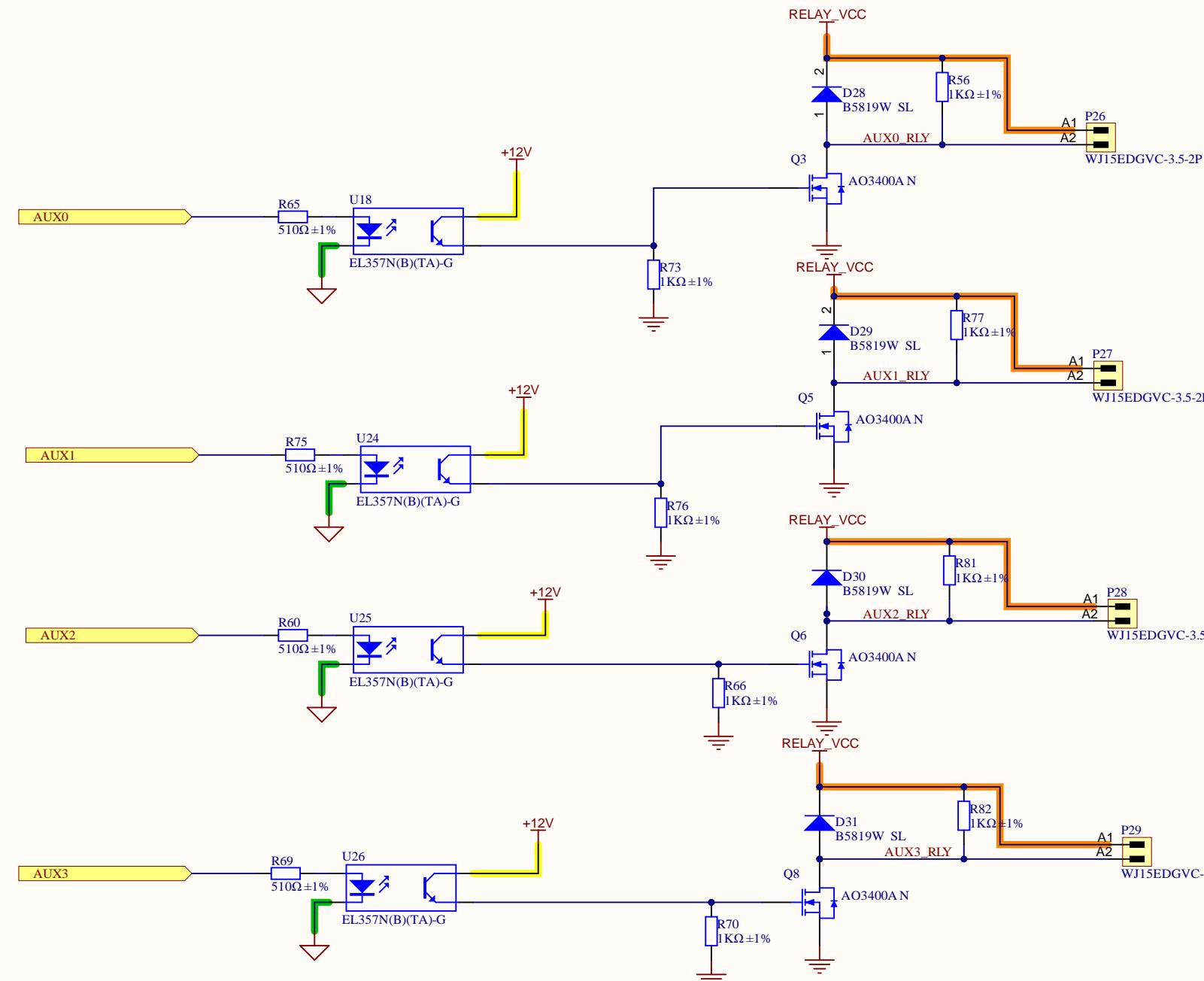
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1136 Glade Court  
Port Coquitlam, BC V3B 1R5  
SIZE B MODIFIED 2022-08-03 11:21:19 AM

555 version

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 R 432 160 432 96 0 0 40 5 0 0 0.5  
 368 656 192 656 16 0 0  
 x -64 166 -16 169 4 24 TXD  
 w 608 192 656 192 0  
 368 80 192 0 192 0 0  
 165 368 240 592 240 14 0  
 g 464 400 464 448 0 0  
 R 64 64 -32 64 0 0 40 5 0 0 0.5  
 c 304 272 224 272 0 1e-8 0.012789433753451459 0.001  
 g 224 272 160 272 0 0  
 w 496 304 608 304 0



\$ 1.000005 1.4391916095149893 18 5 43 5e-11  
 r 80 192 80 288 0 510  
 d 176 288 176 192 2 default  
 r 240 288 240 192 0 470000  
 c 288 288 368 0 1e-8 4.491582898305804 0.001  
 r 464 272 608 272 0 1000  
 g 288 368 288 384 0 0  
 g 80 288 80 320 0 0  
 R 80 112 80 48 0 0 40 5 0 0 0.5  
 R 608 272 608 208 0 0 40 5 0 0 0.5  
 w 80 192 176 192 0  
 w 176 192 240 192 0  
 368 464 272 464 96 0 0  
 x -64 166 -16 169 4 24 TXD  
 f 352 288 416 288 32 1.5 0.02  
 w 176 288 240 288 0  
 w 240 288 288 288 0  
 w 288 288 352 288 0  
 w 288 368 416 368 0  
 w 416 304 416 368 0  
 w 416 272 464 272 0  
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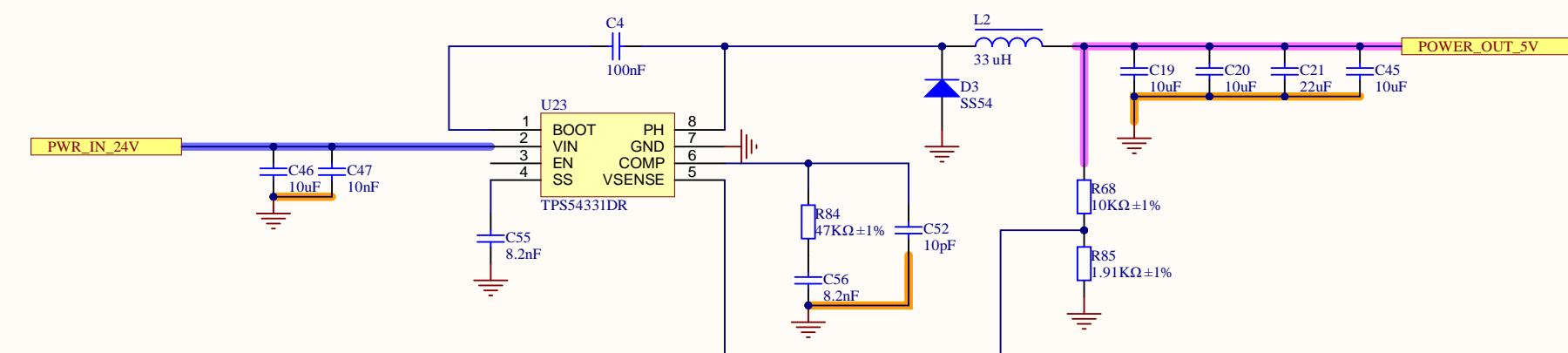
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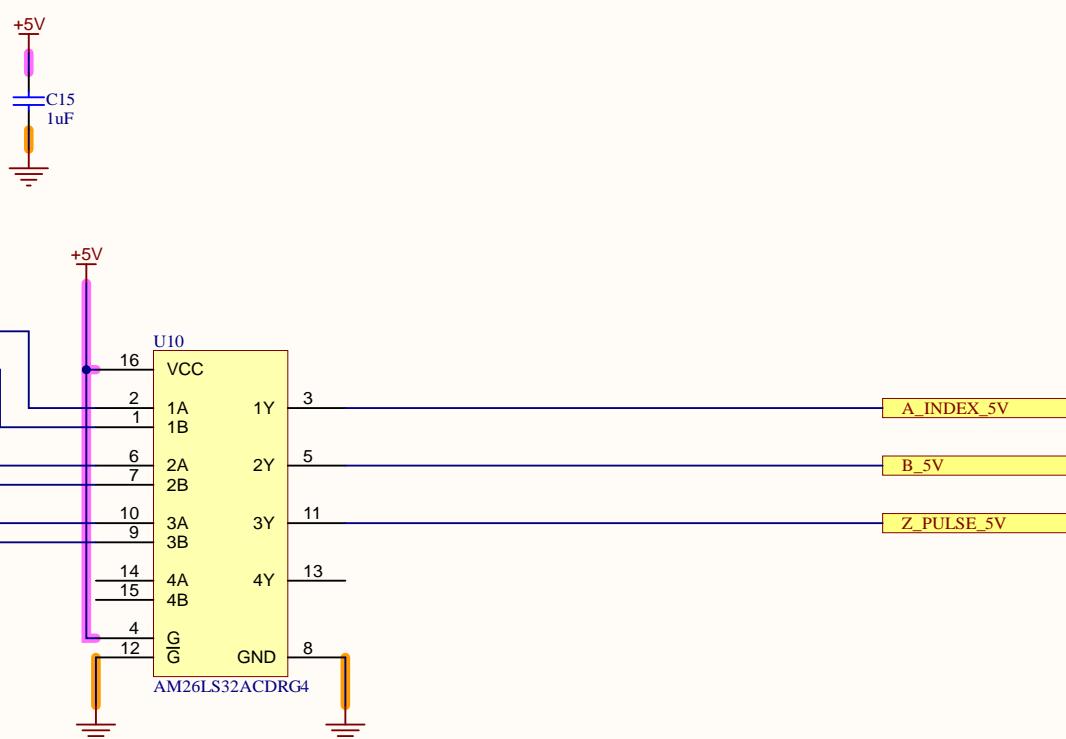
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REV A4  
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EMAIL: INFO@EXPATRIA.CA

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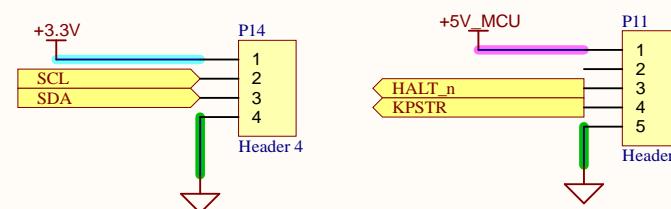
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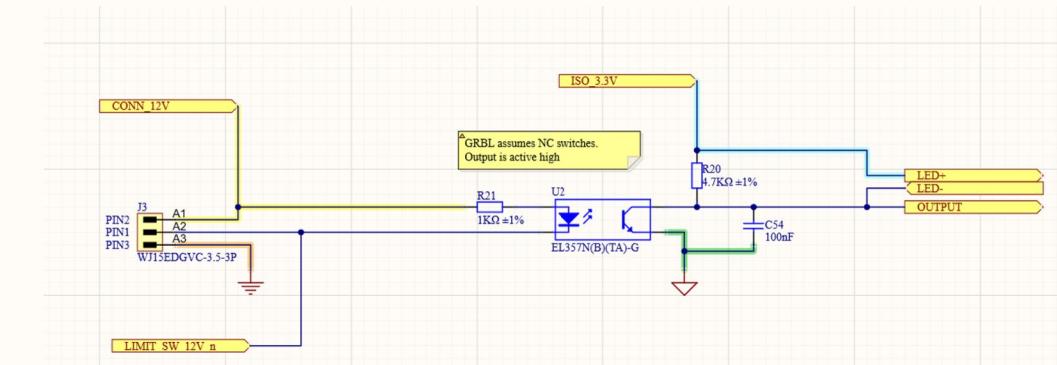
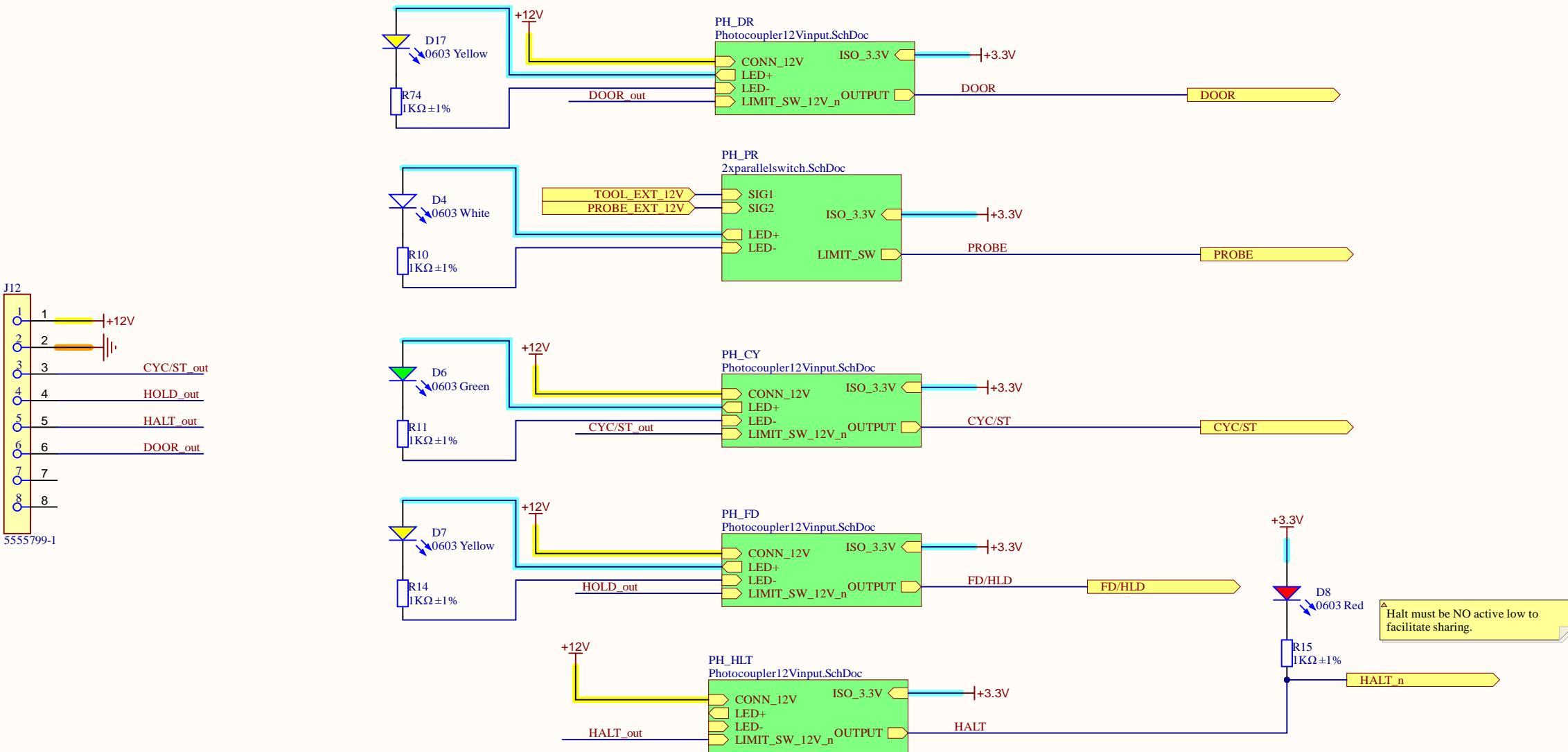
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△ Pendant is in MCU domain  
HALT is active low.





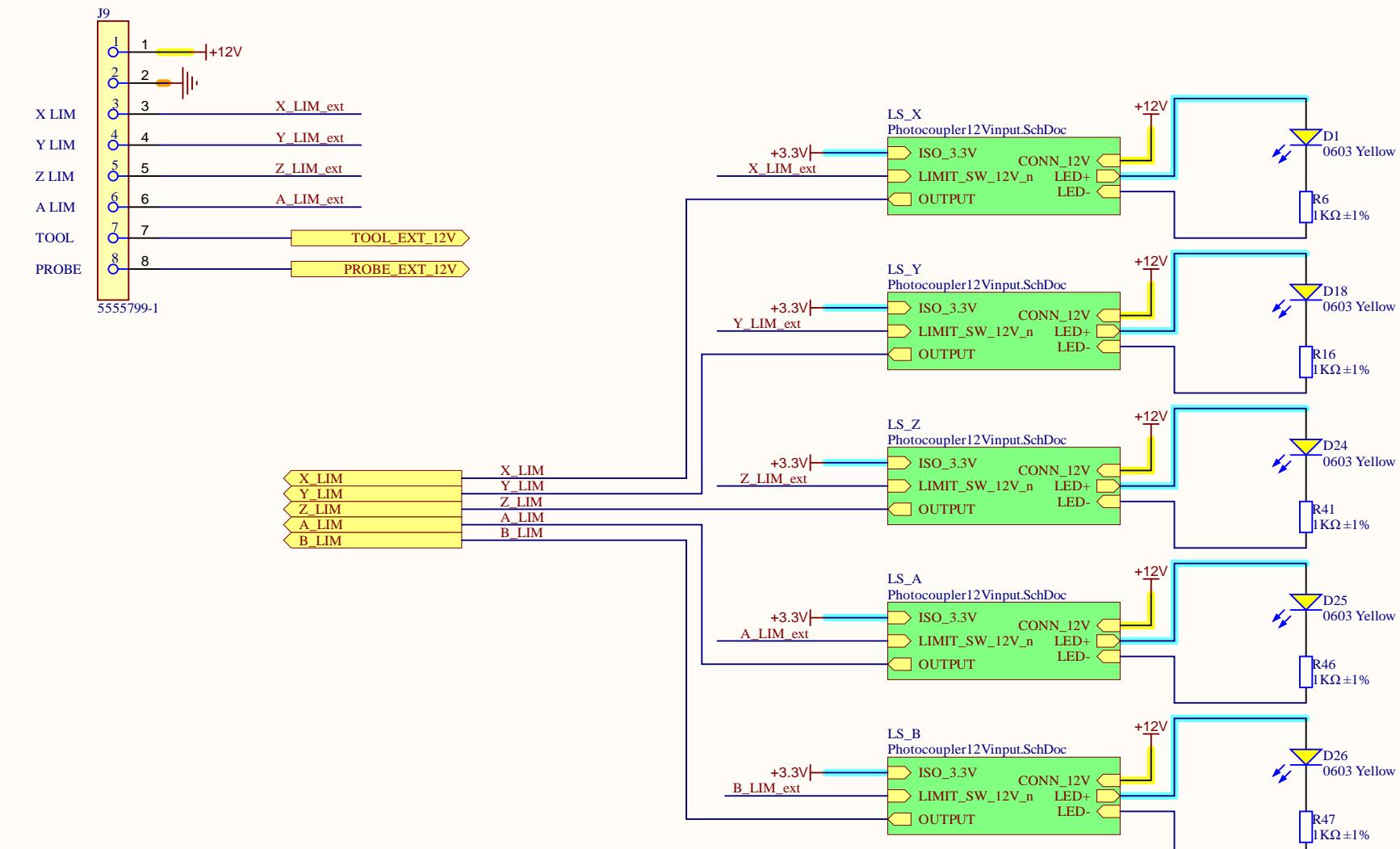
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Misc Switches	
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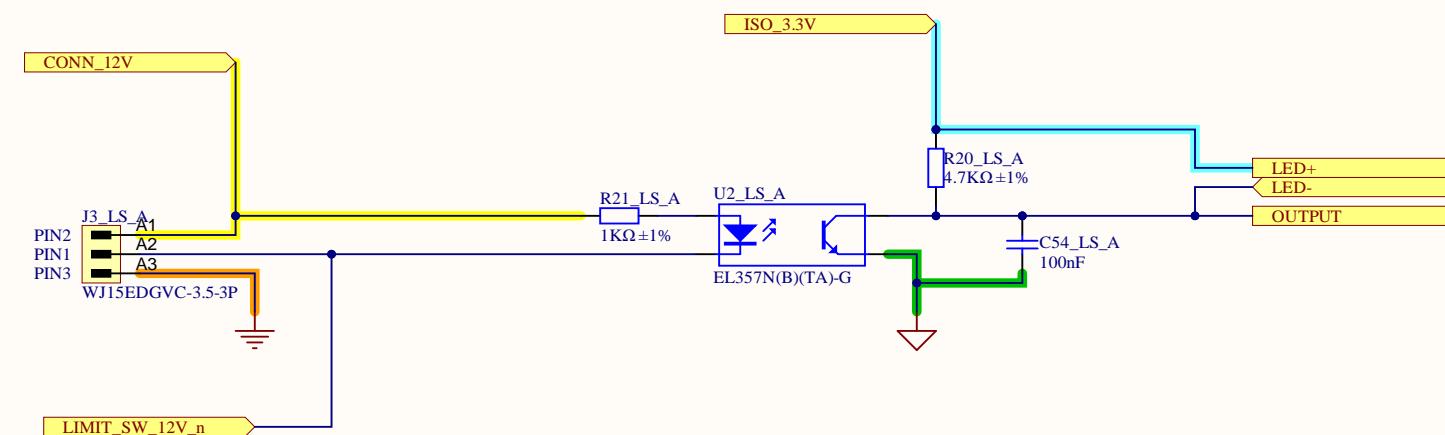
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Photocoupler12Vinput.SchDoc  
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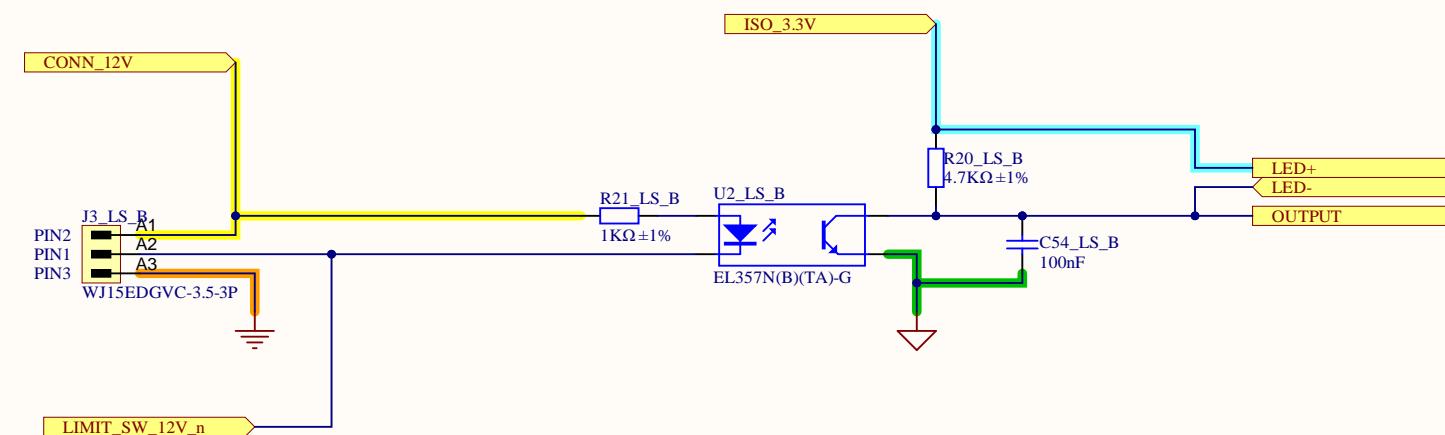
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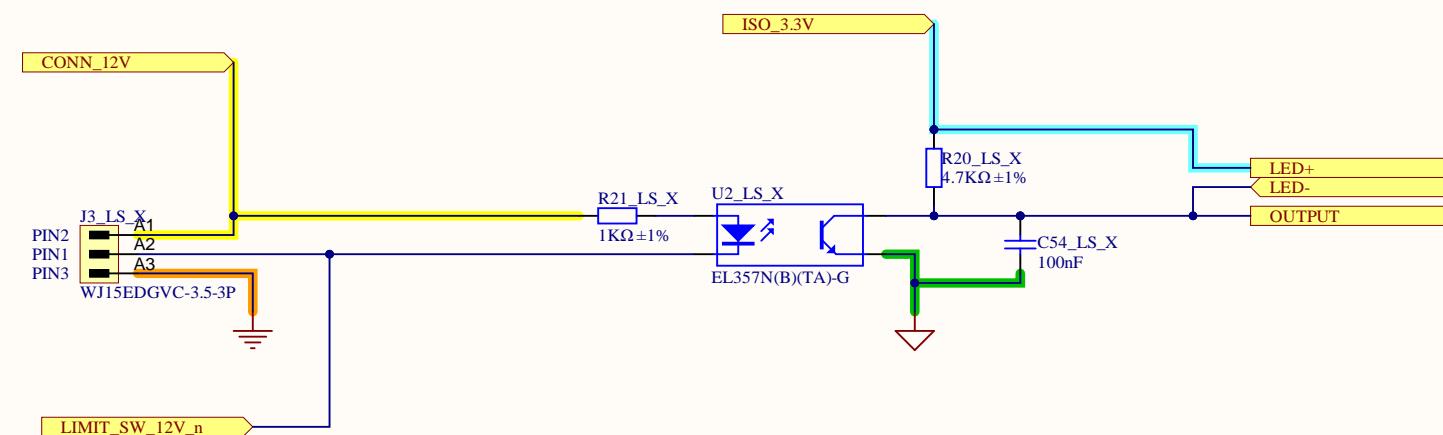
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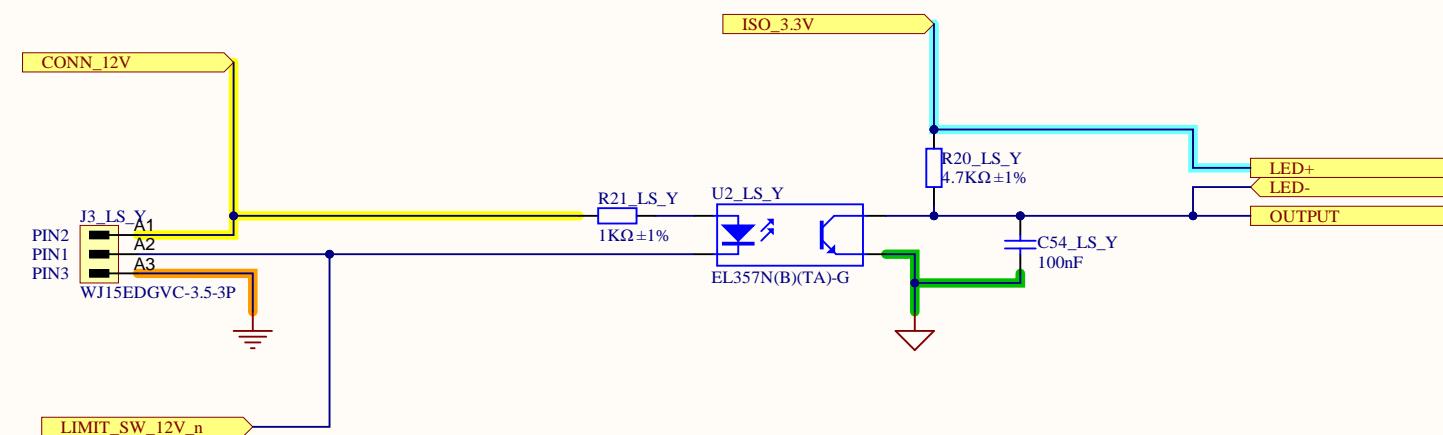
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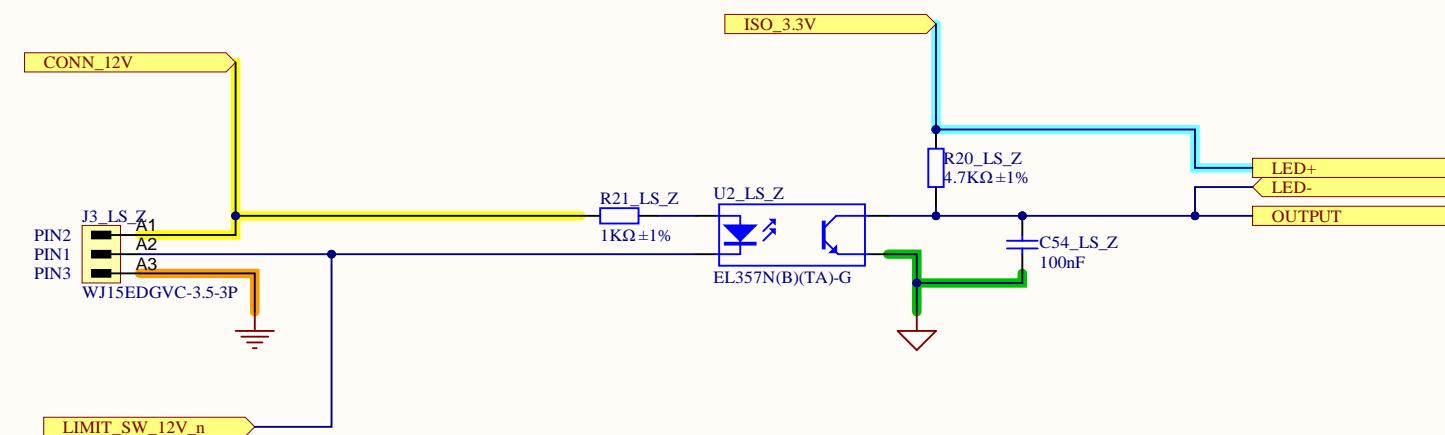
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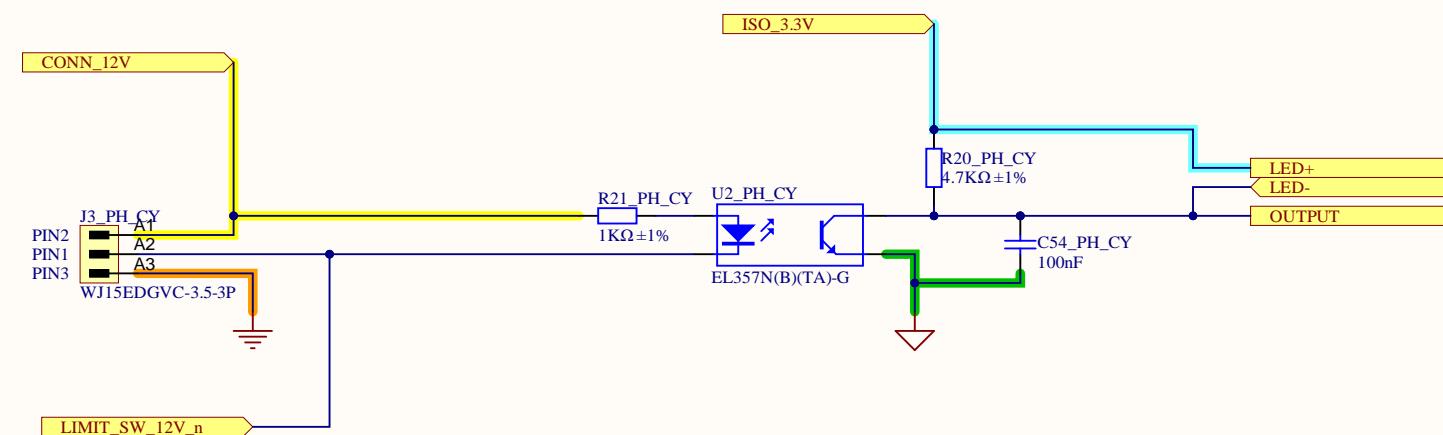
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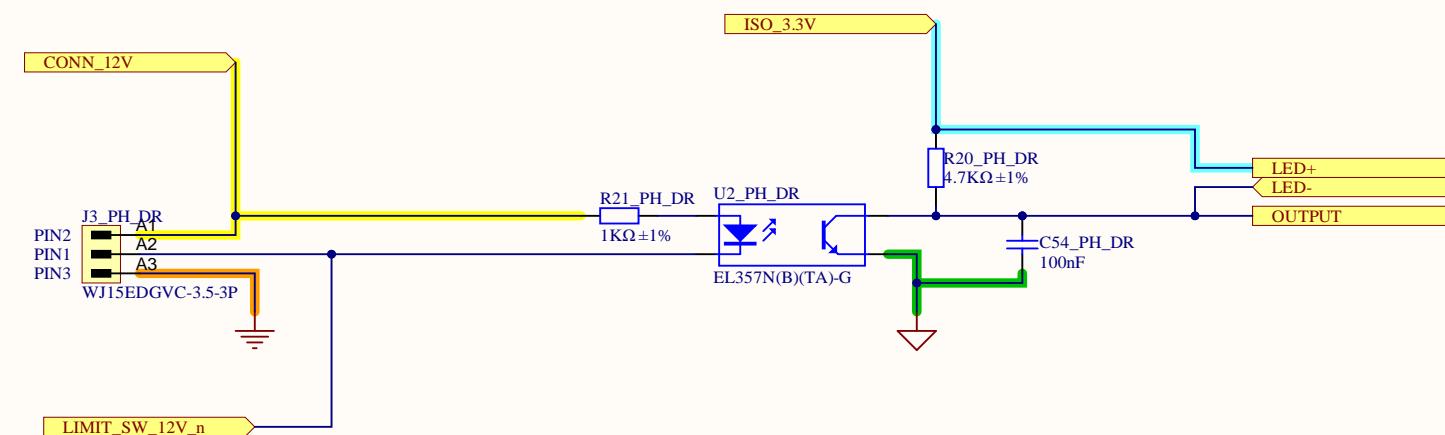
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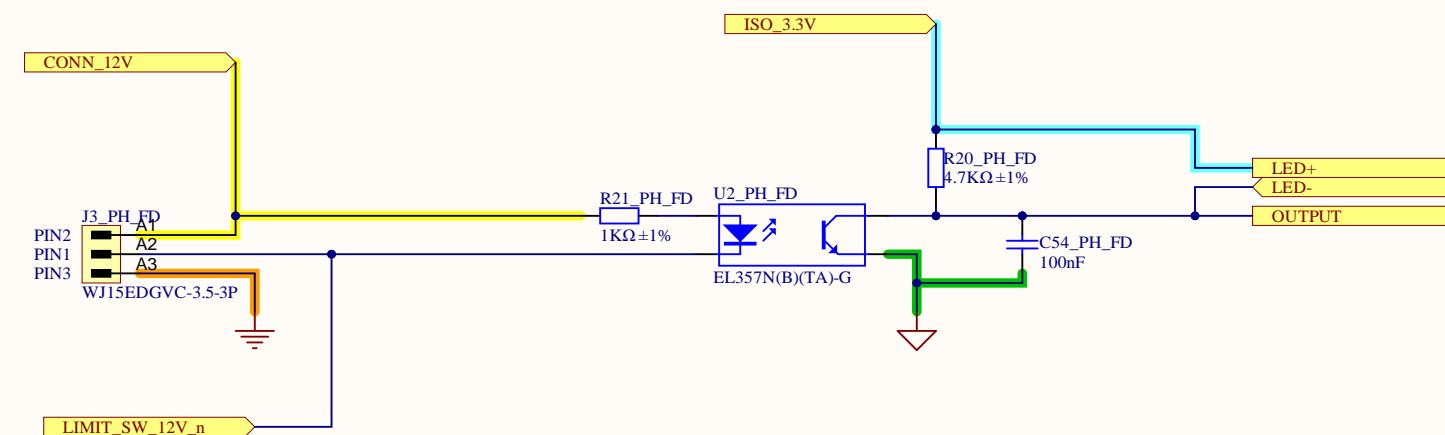
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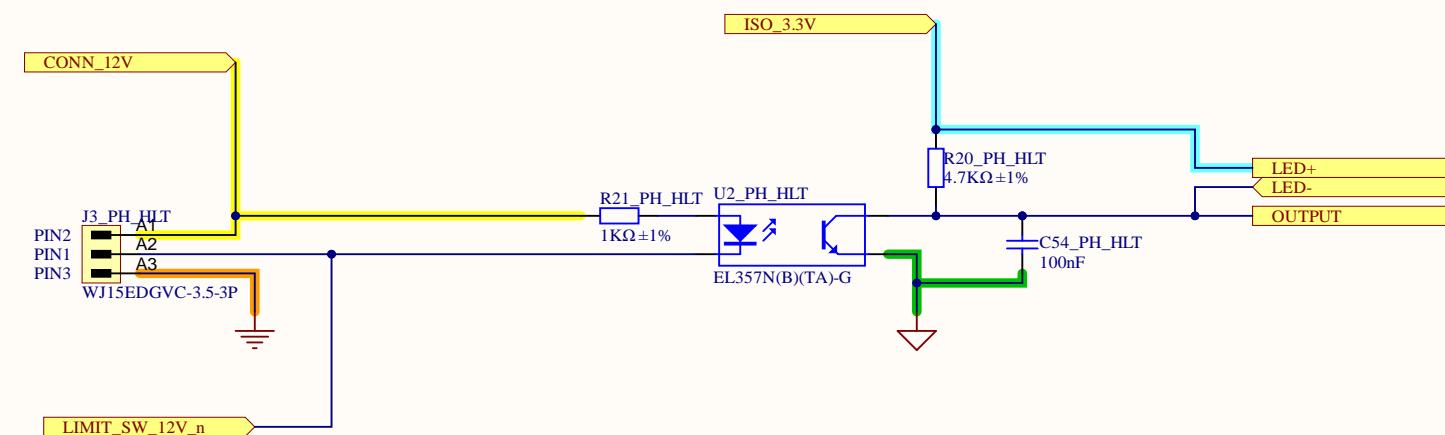
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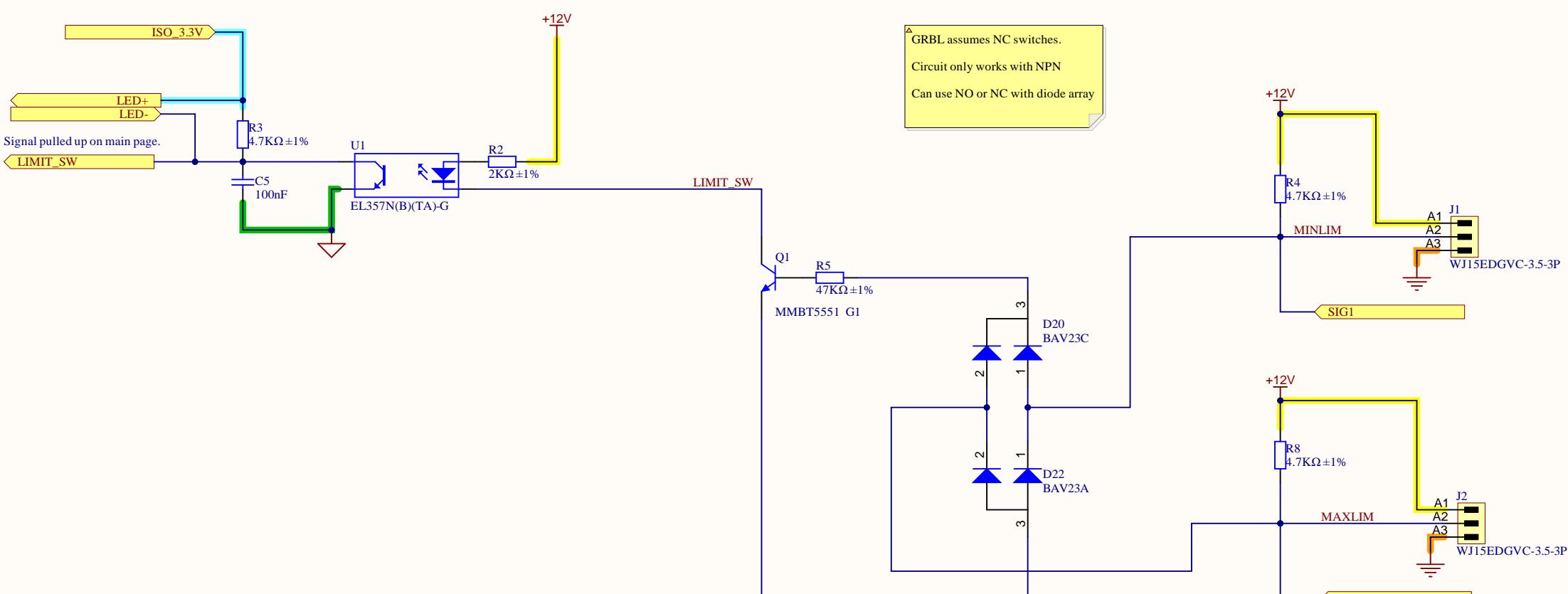
D

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t 80 160 128 160 0 1 -4.99999971946758
2.4687242029037016e-8 100 default
r 128 48 128 96 0 330
R 128 48 128 0 0 40 5 0 0 0.5
R -288 64 -288 16 0 0 40 12 0 0 0.5

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DOCUMENT 2xparallelswitch.SchDoc  
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