

Top Silkscreen

ChargePoint, Inc (c) 2022  
MDS ISOMON PCBA FCT CIB

Bottom Copper

PCB FAB 27-010297-01


Assembly Drawing


ASY-010297-01


SCH1

PCB1

DWG1







26-010297-01

27-010297-01

ASY-010297-01

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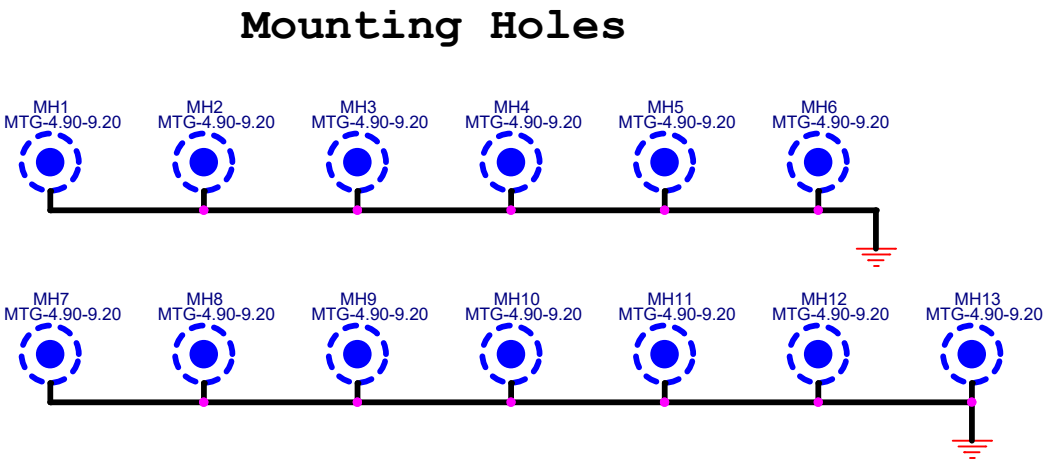
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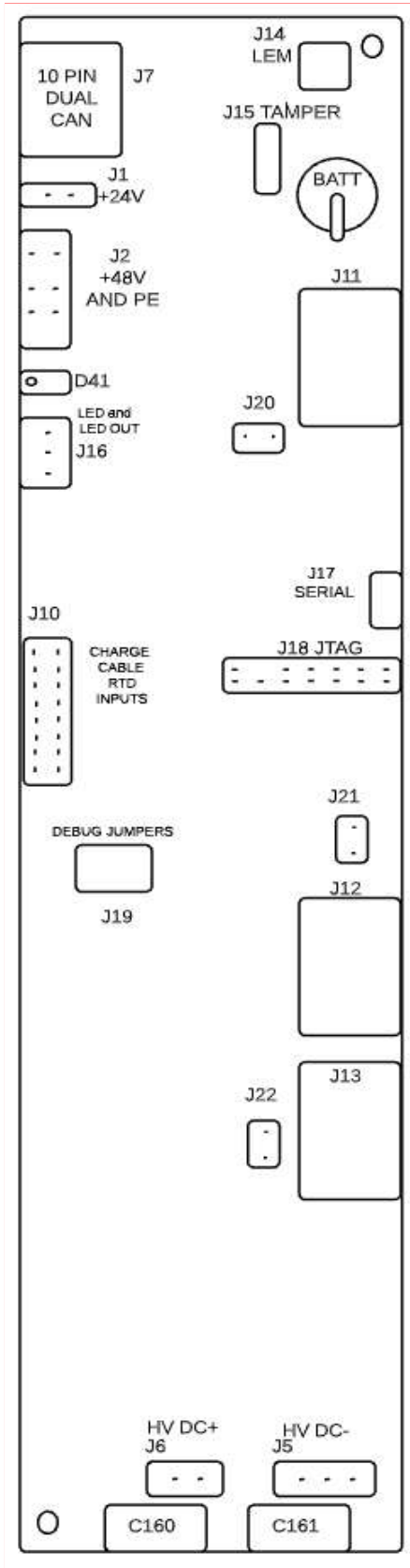


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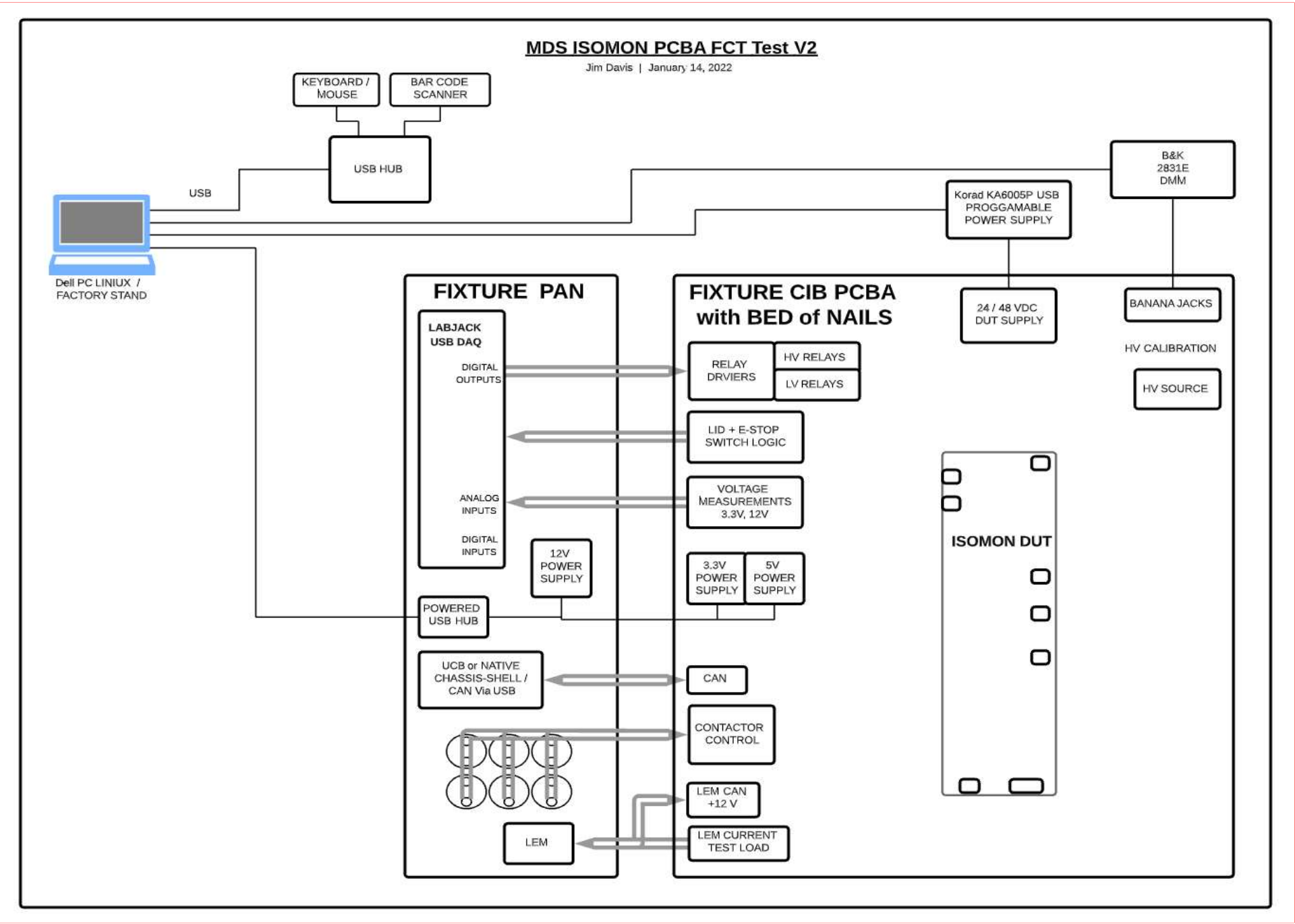
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26-010XXX-01 (1) ECO-00XXXX	JD	TENG-4697 HRD-XXXX	1/XX/22: Schematic created and reviewed by


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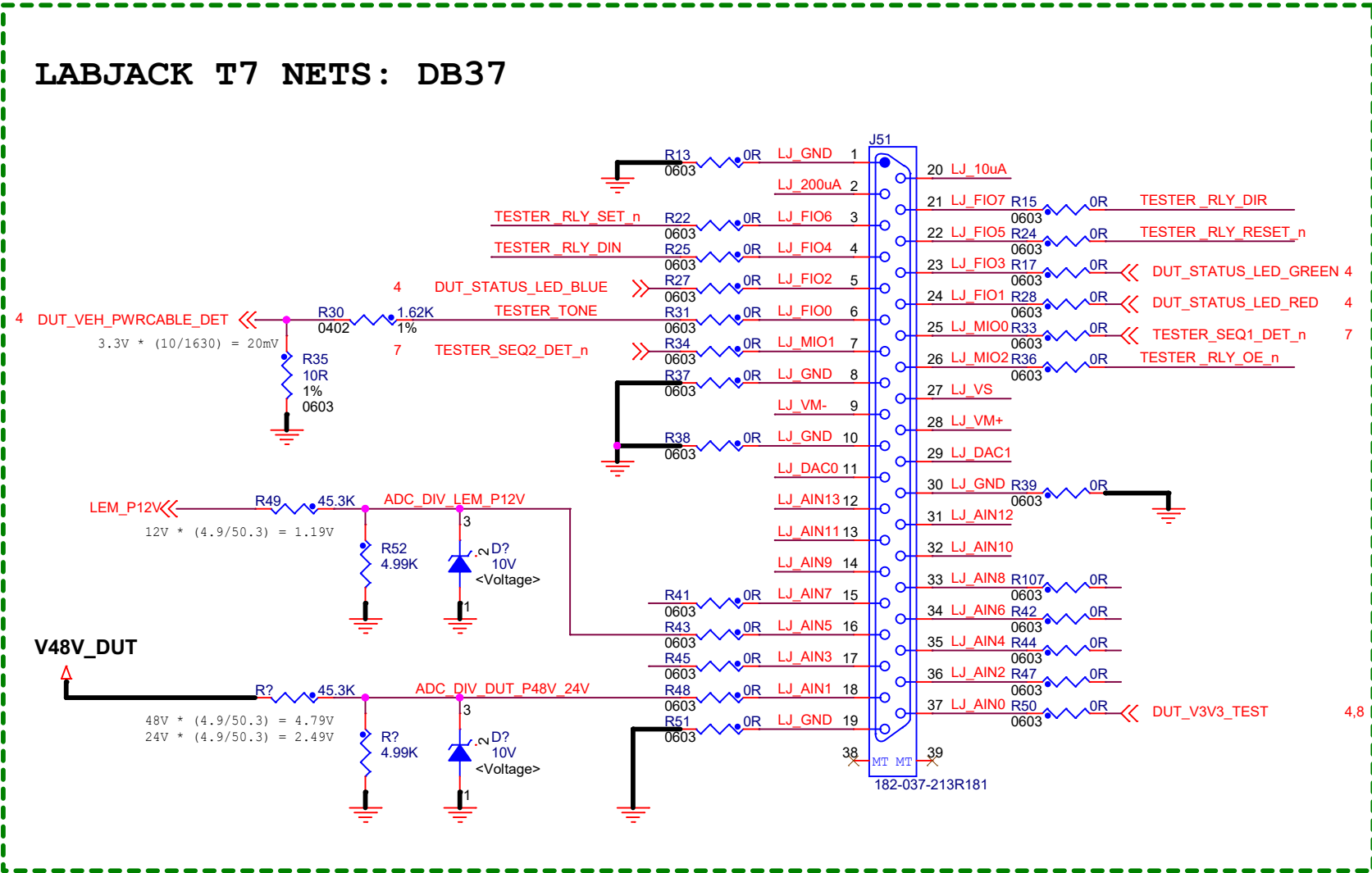
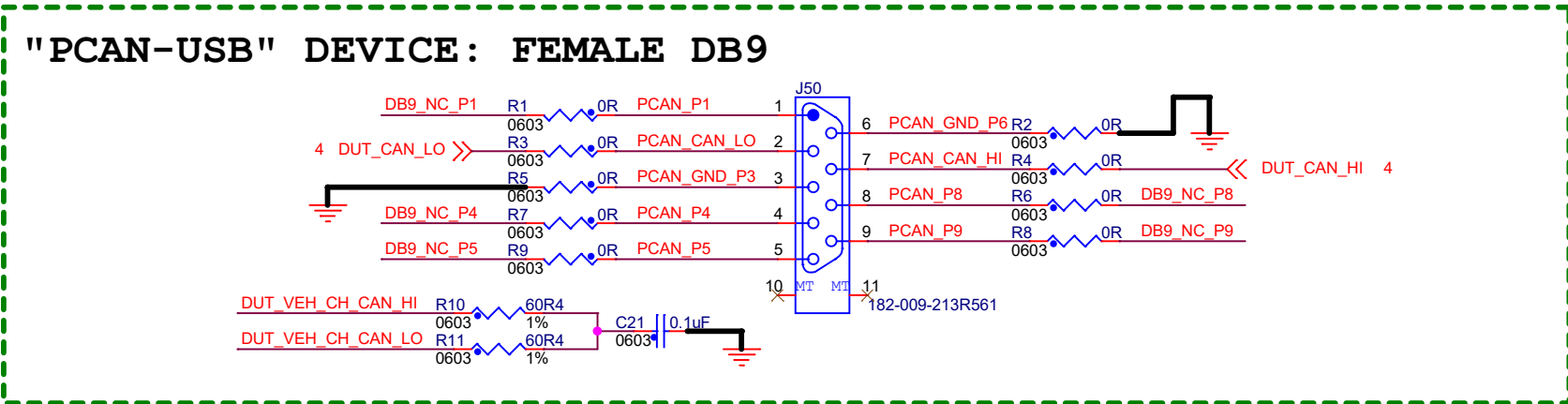
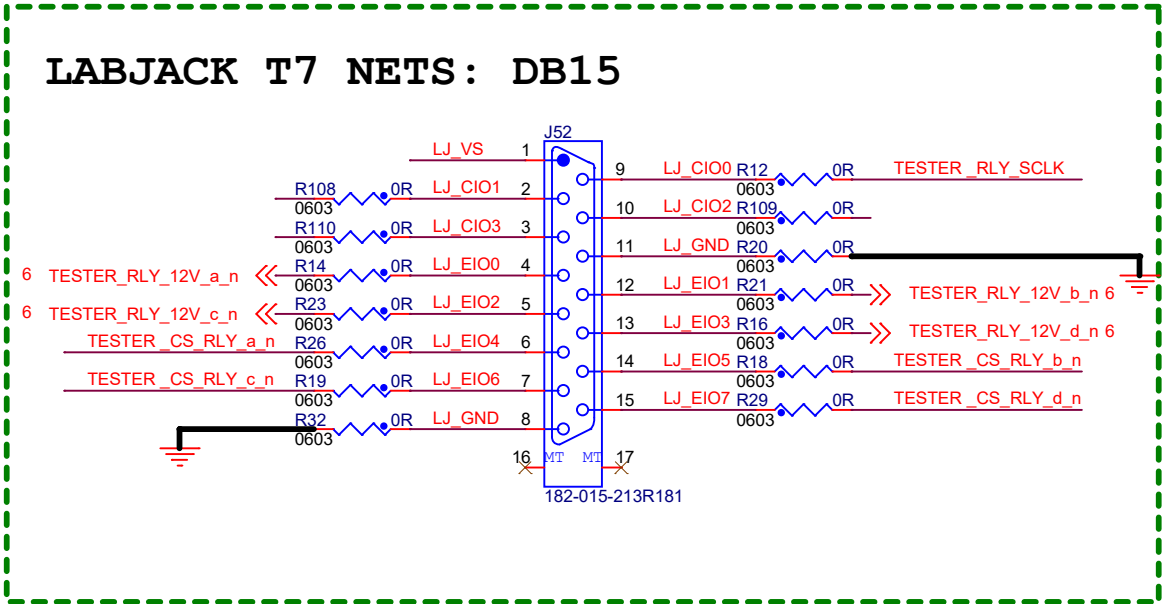
DUT CONNECTORS




BLOCK DIAGRAM

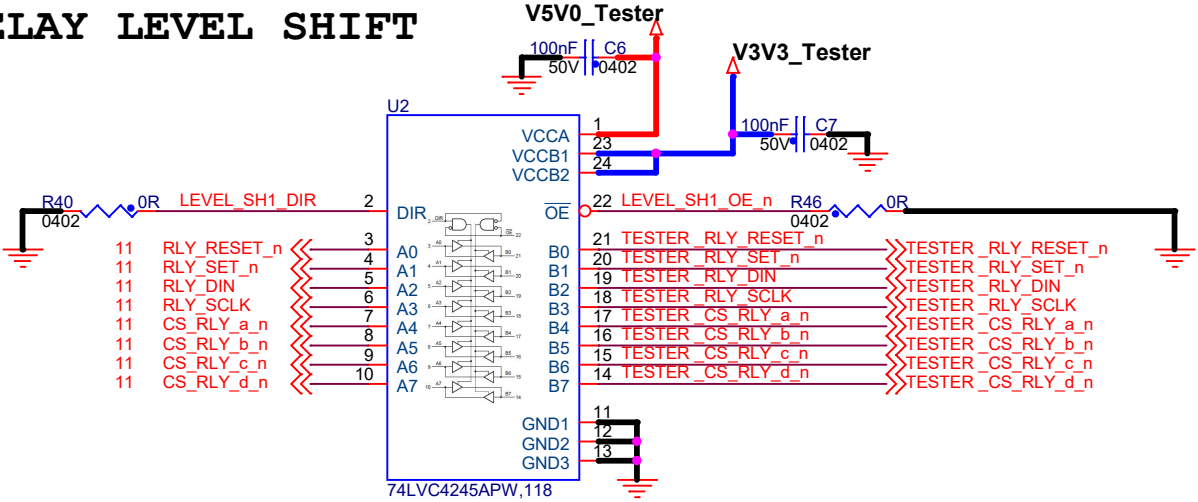


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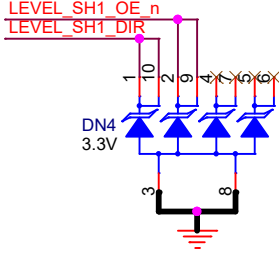
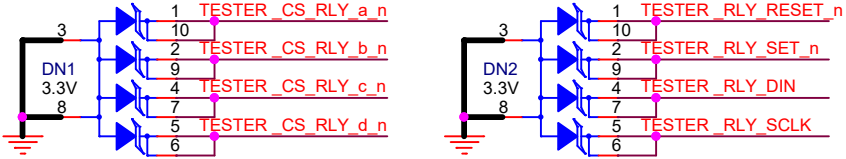



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5V RELAY LEVEL SHIFT

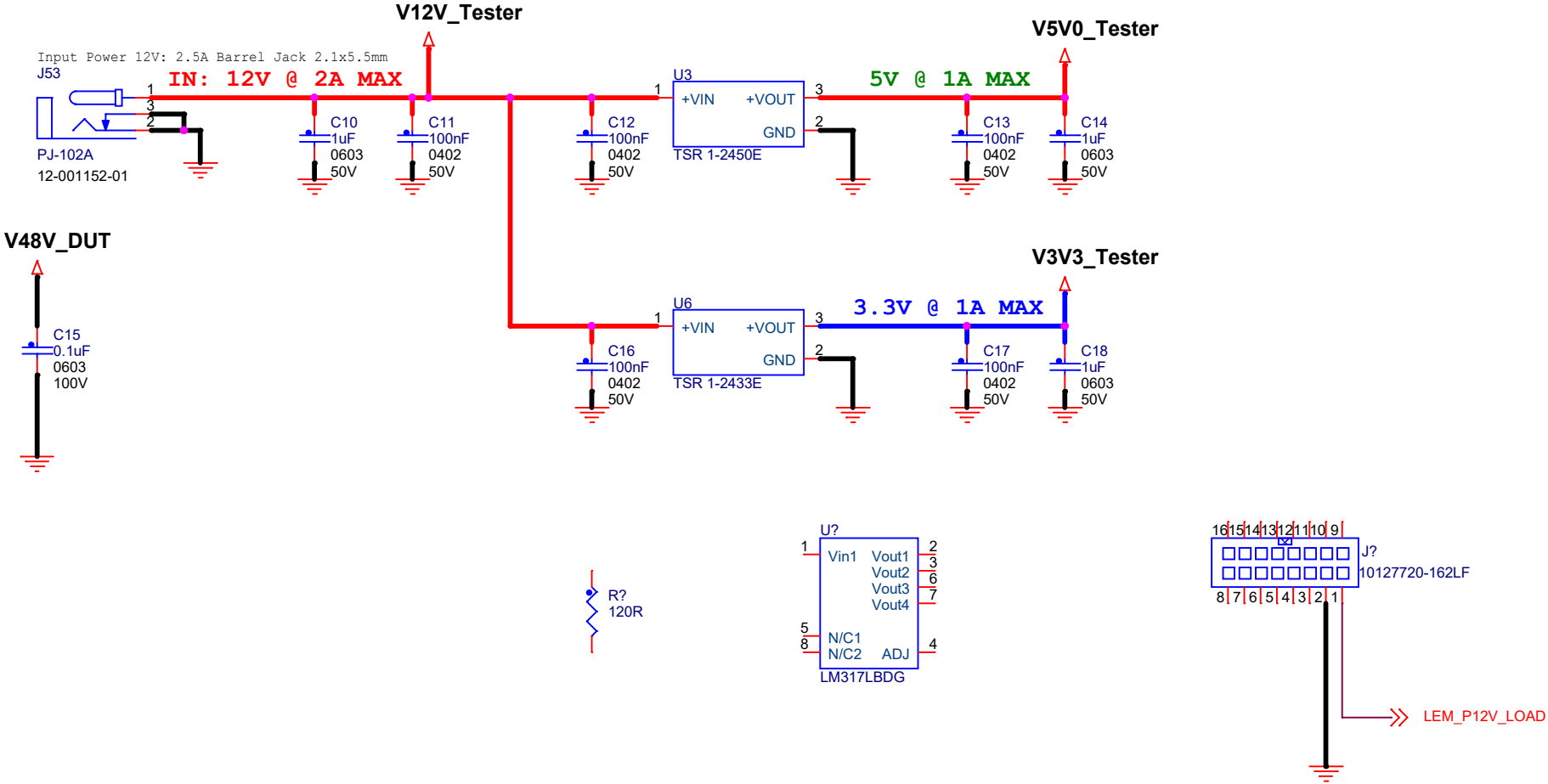



TESTER_RLY_OE_n	TESTER_RLY_DIR	Ax	Bx
0	0	A=B	input
0	1	input	B=A
1	X	Z	Z



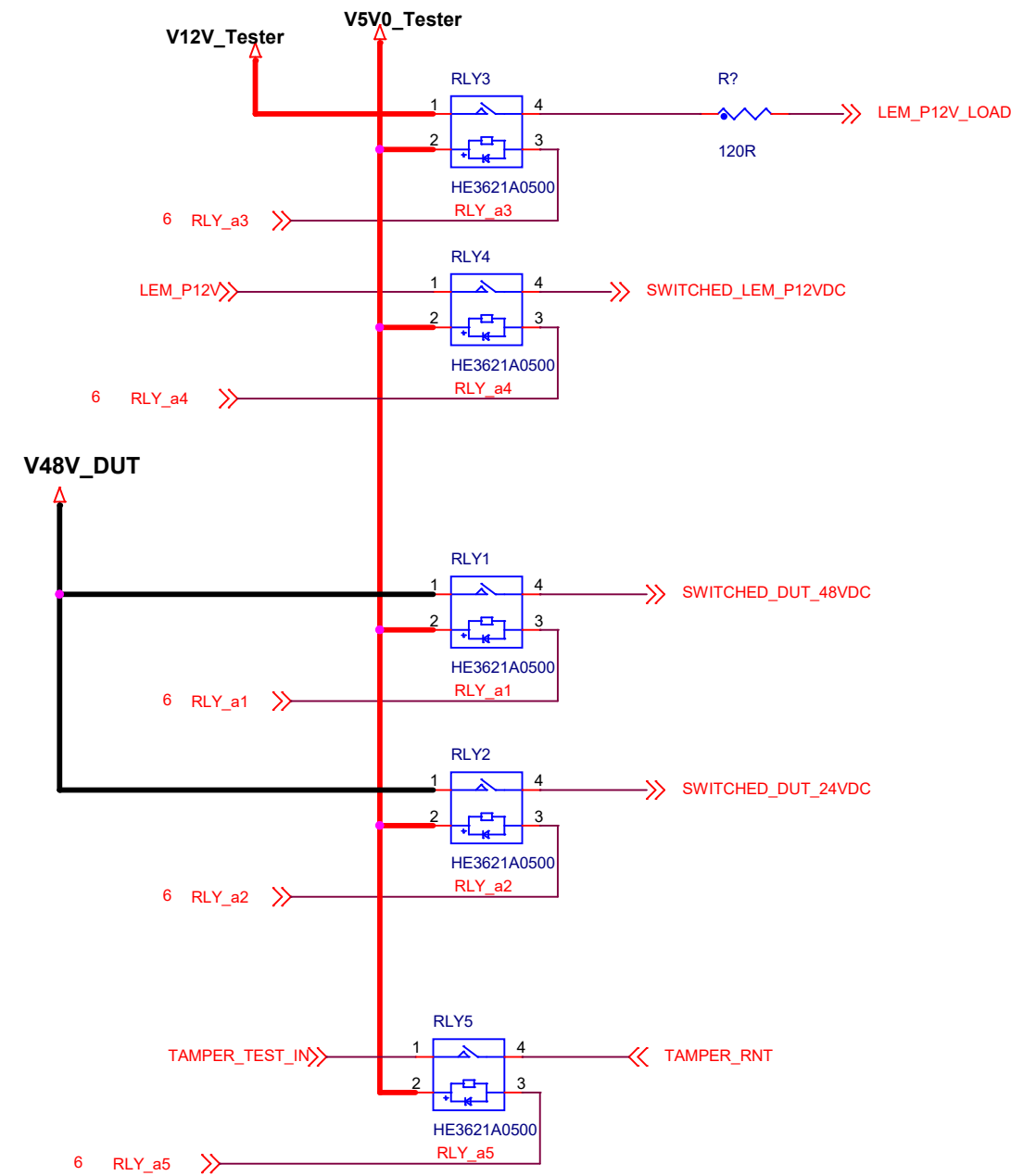
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5V Level Shifters				
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TESTER POWER RAILS: 12V, 5V, 3.3V AND DUT 48V

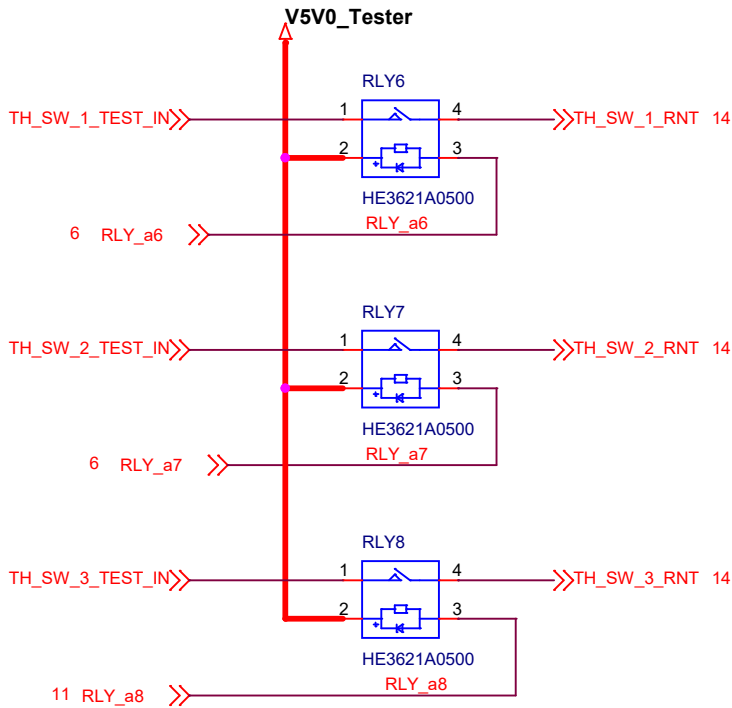


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Power Supplies				
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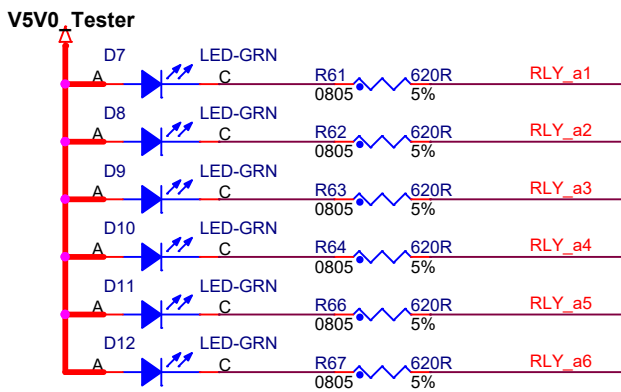
DUT POWER INPUT AND DUT OUTPUT TESTS, 5V RELAYS




BUS BAR THERMAL SW TEST

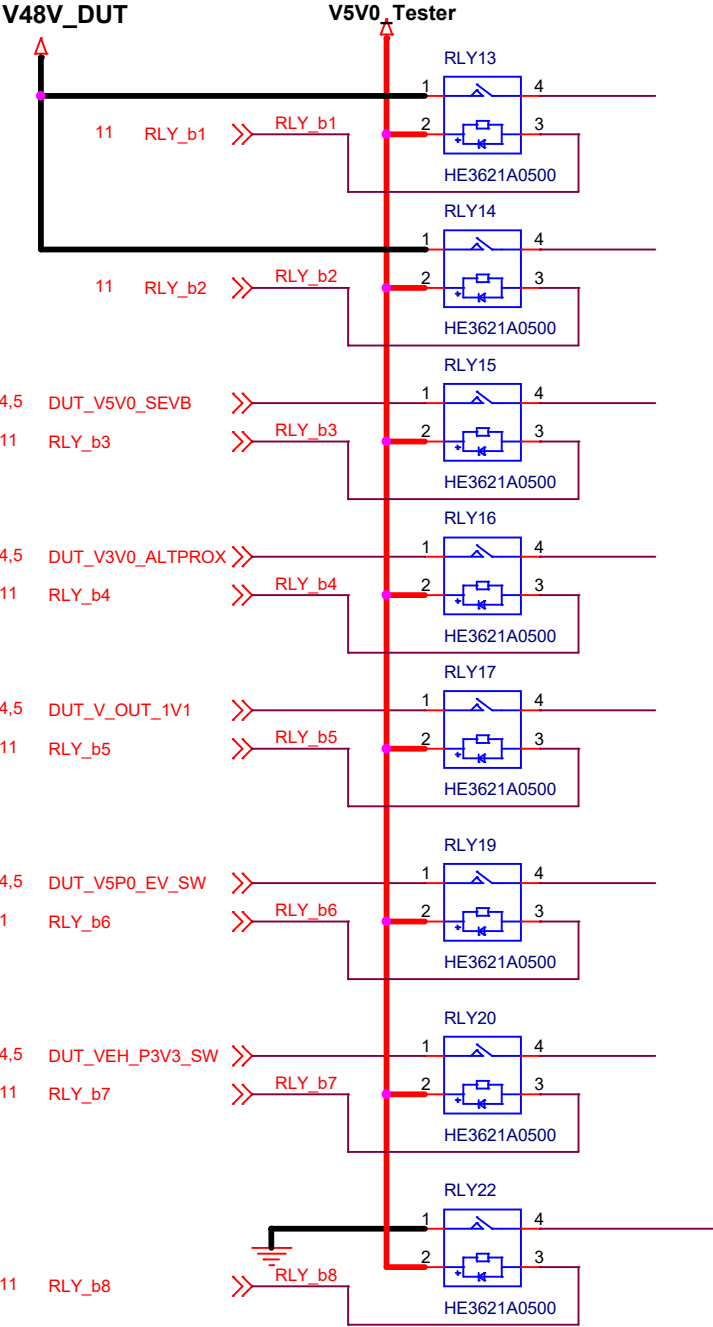


RELAY LEDS

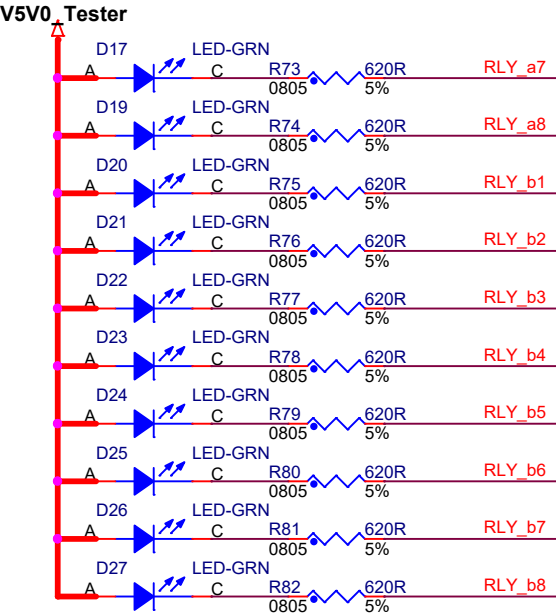



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DUT POWER RAILS TO DC LOAD



RELAY LEDS



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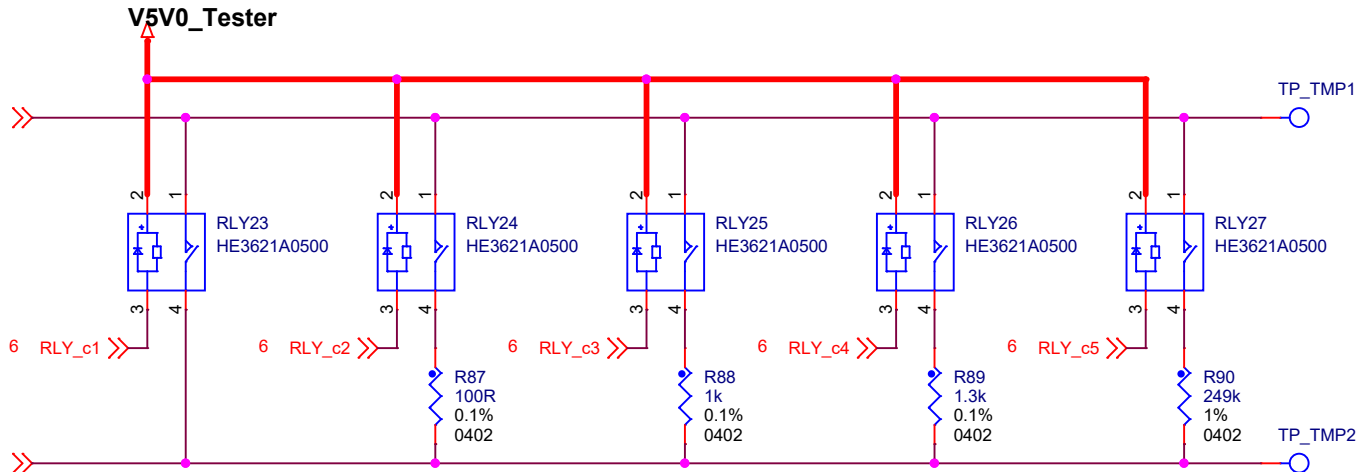


# TMP0

4 DUT\_VEH\_TMP\_0

Test:  
1. Open/short circuit detection for both NTC and PTC circuits  
2. 100R -> PT100 accuracy for 0C  
3. 1k-> PT1000 accuracy for 0C  
4. 1.3k -> NTC accuracy at 88.7C  
5. 249k -> NTC open circuit detection  
should NOT raise fault flag for ~40C condition

4 DUT\_VEH\_TMP\_RTN\_0

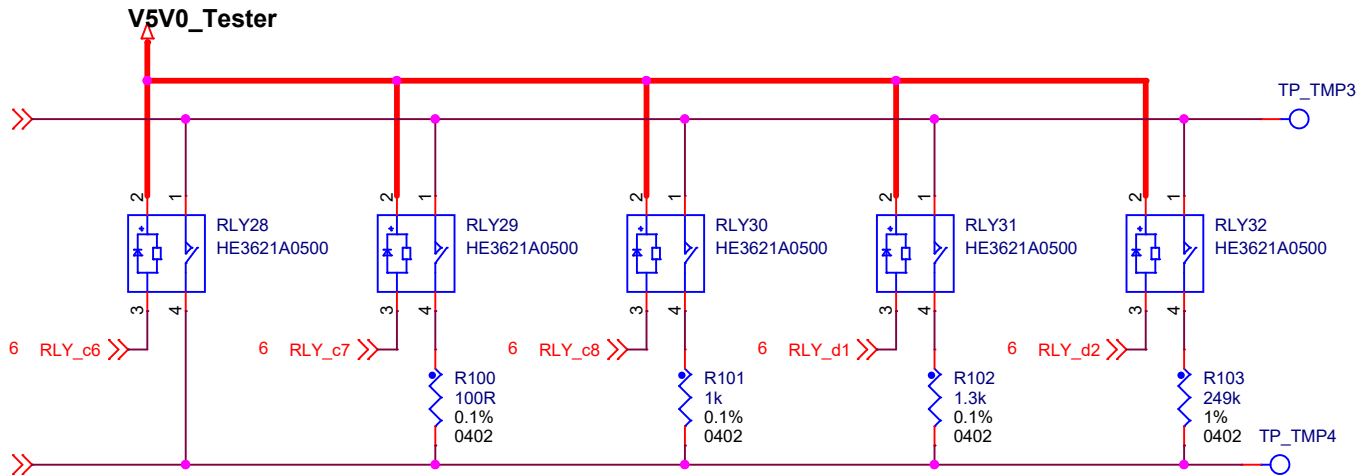


# TMP1

4 DUT\_VEH\_TMP\_1

Test:  
1. Open/short circuit detection for both NTC and PTC circuits  
2. 100R -> PT100 accuracy for 0C  
3. 1k-> PT1000 accuracy for 0C  
4. 1.3k -> NTC accuracy at 88.7C  
5. 249k -> NTC open circuit detection  
should NOT raise fault flag for ~40C condition

4 DUT\_VEH\_TMP\_RTN\_1

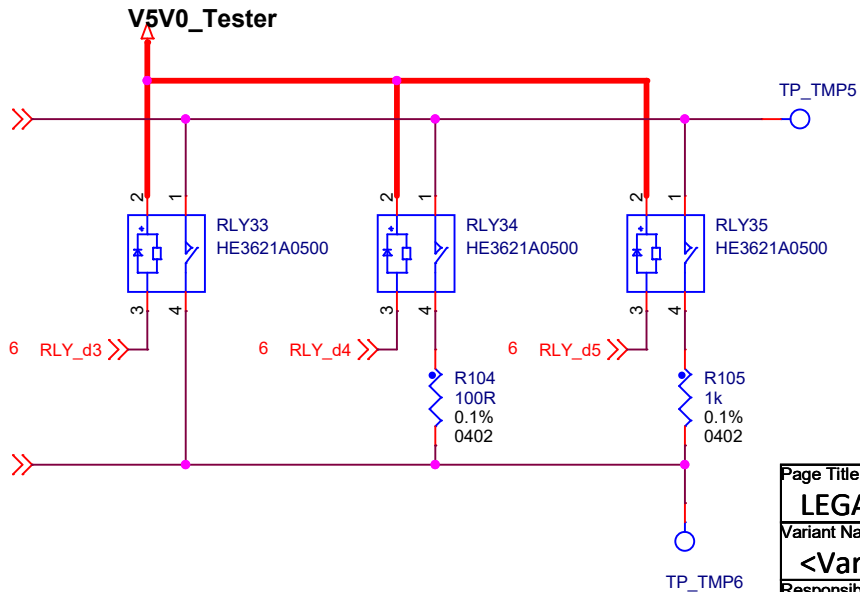


# TMP2

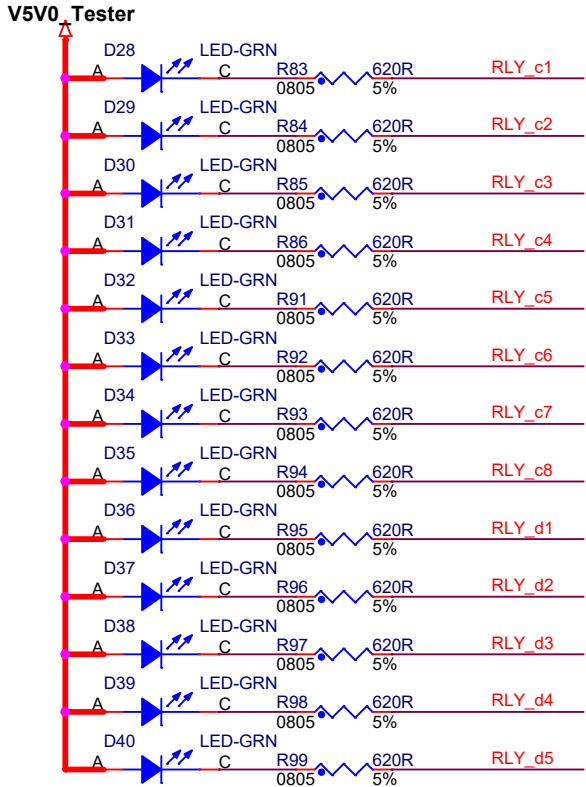
4 DUT\_VEH\_TMP\_2


Test:  
1. Open/short circuit detection for both NTC and PTC circuits  
2. 100R -> PT100 accuracy for 0C  
3. 1k-> PT1000 accuracy for 0C

4 DUT\_VEH\_TMP\_RTN\_2

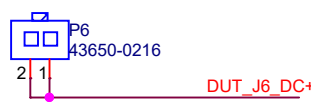


# RELAY LEDS



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LEGACY NTC/PTC Temp Sensing				
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DUT HV DC+ CONNECTOR



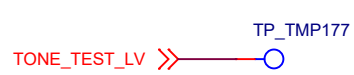
PLACE P6 ON SOLDER SIDE, ALIGNED TO DUT J6

DUT HV DC- CONNECTOR

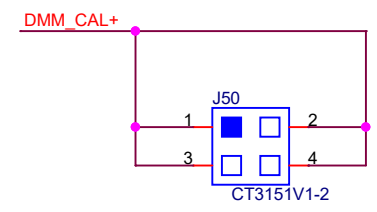
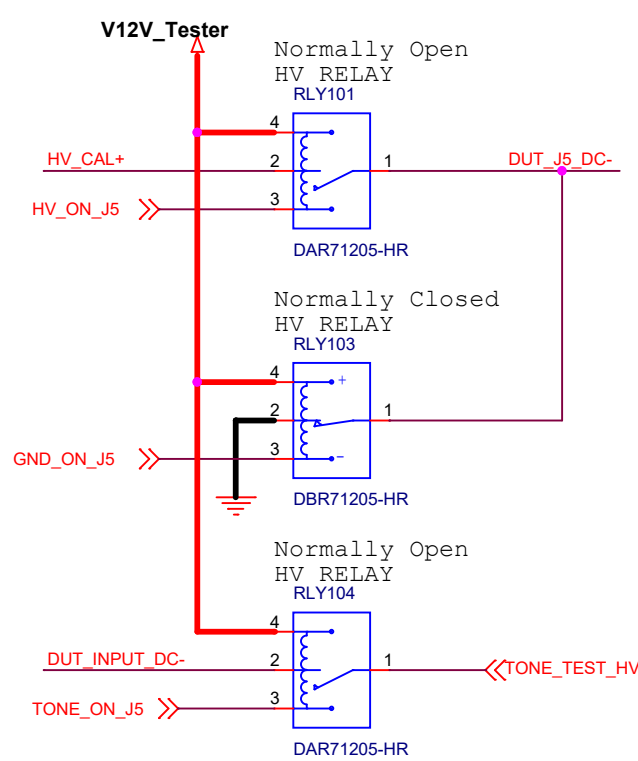
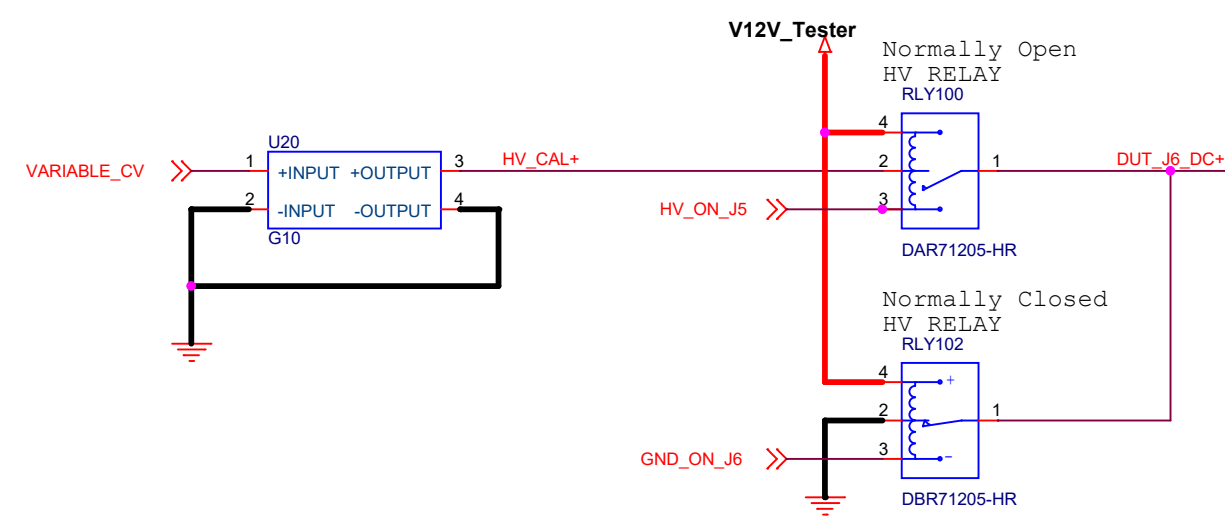


PLACE P5 ON SOLDER SIDE, ALIGNED TO DUT J5

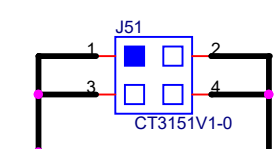
DUT HV DC- CONNECTOR




PLACE PAD ON SOLDER SIDE, ALIGNED TO DUT C160, THE PIN THAT IS CONNECTED TO THE DRIVER / TP177



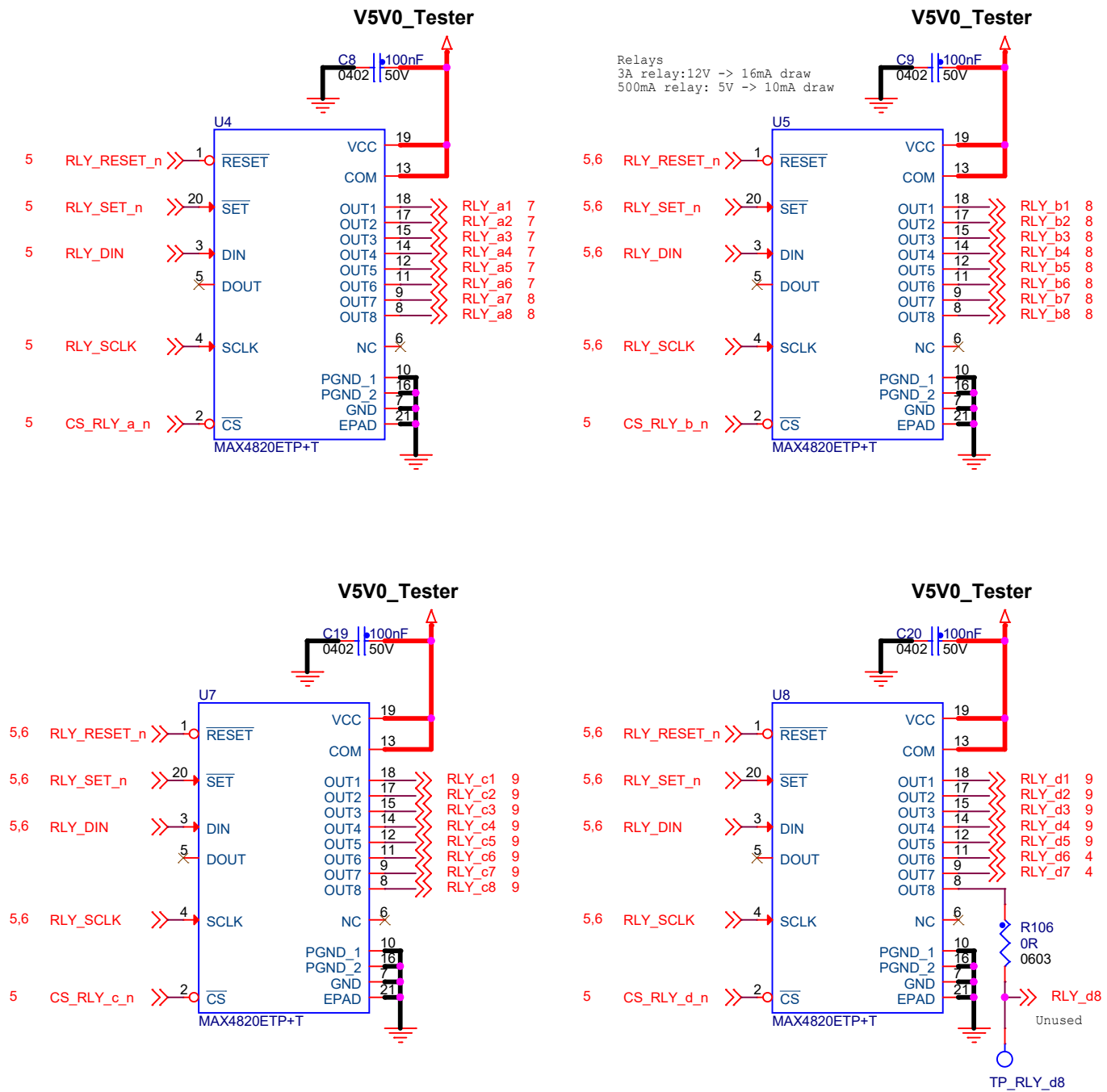
RED BANANA JACK




BLACK BANANA JACK

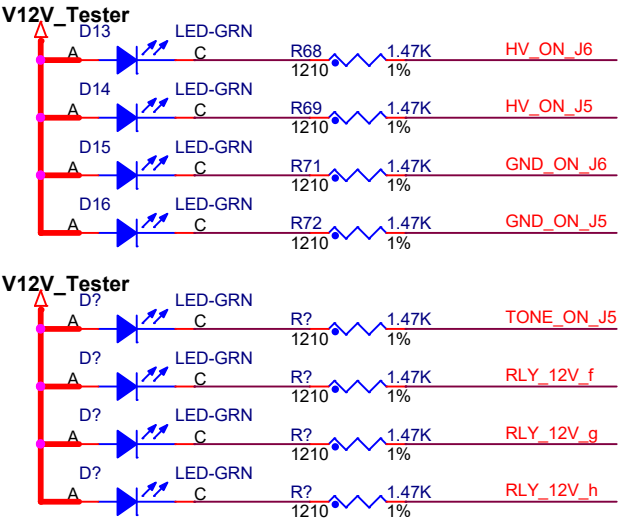
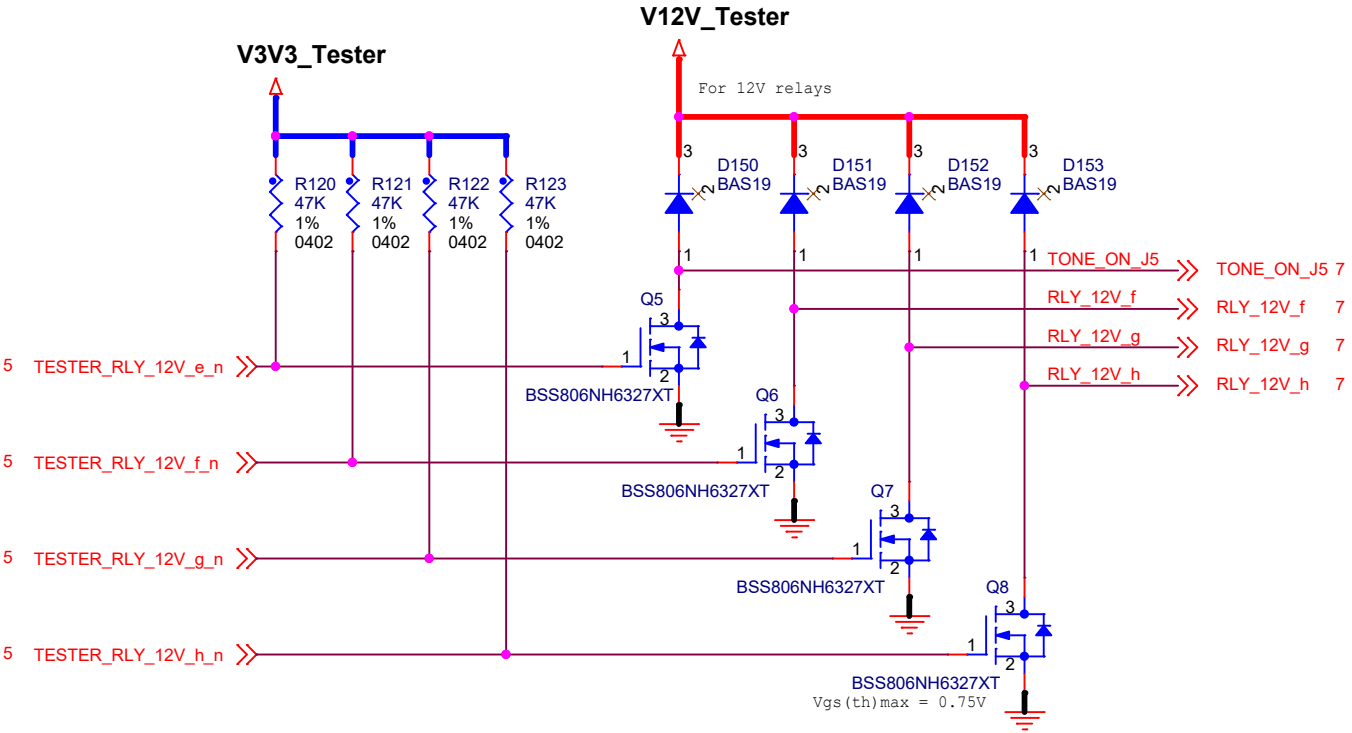
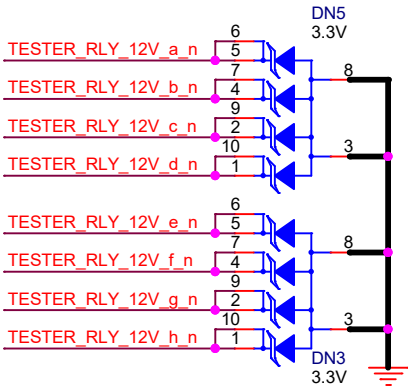
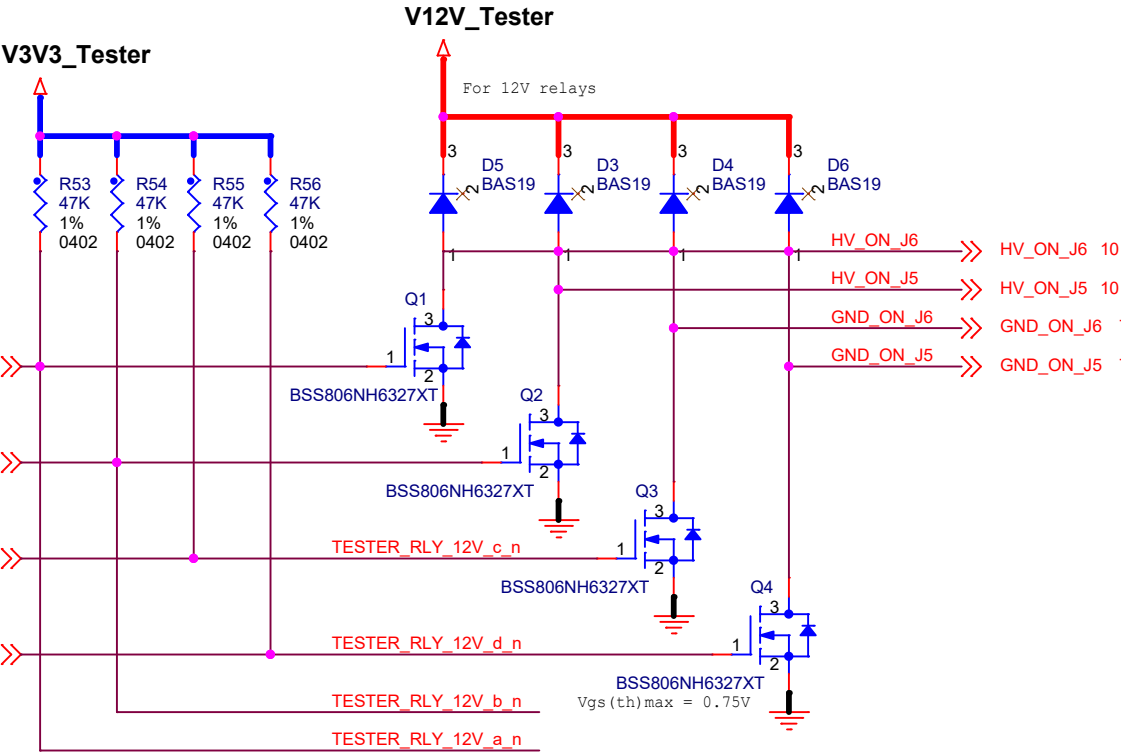
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5V, 0.5A RELAY DRIVERS

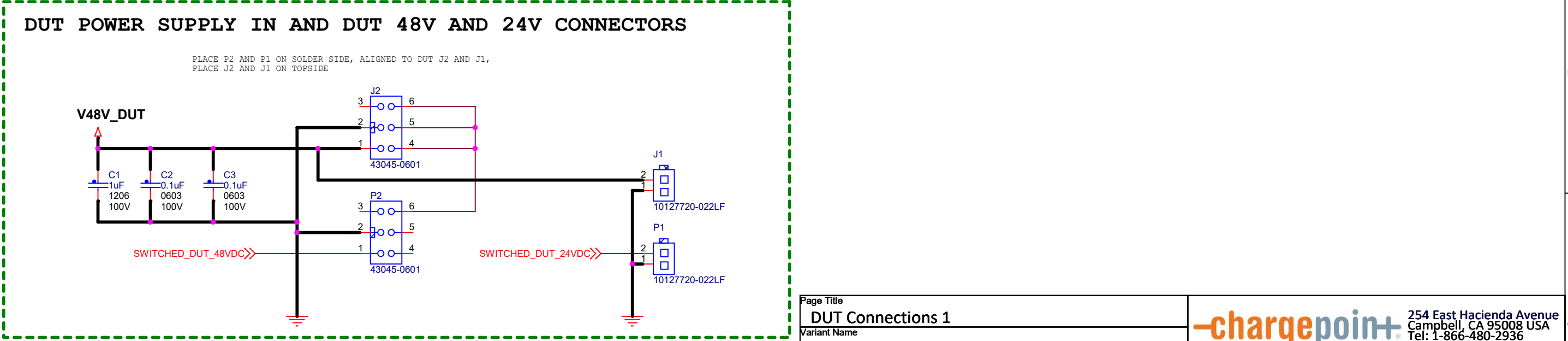
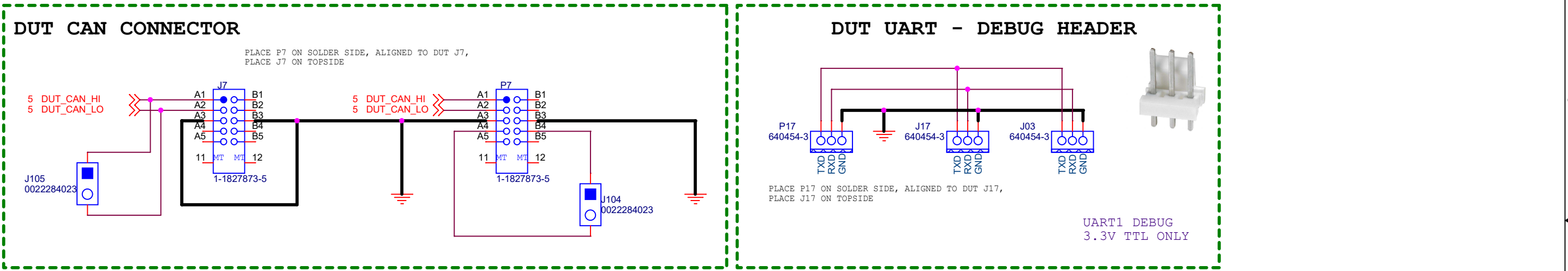
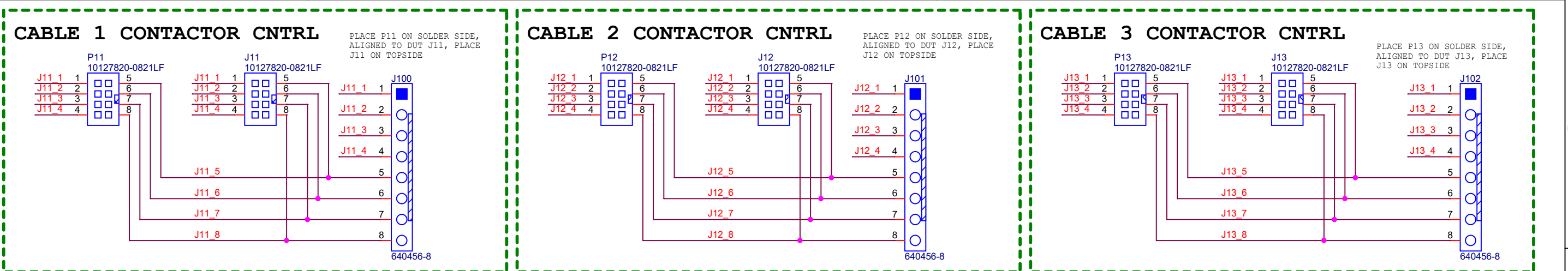


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12V, 3A RELAY DRIVERS



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