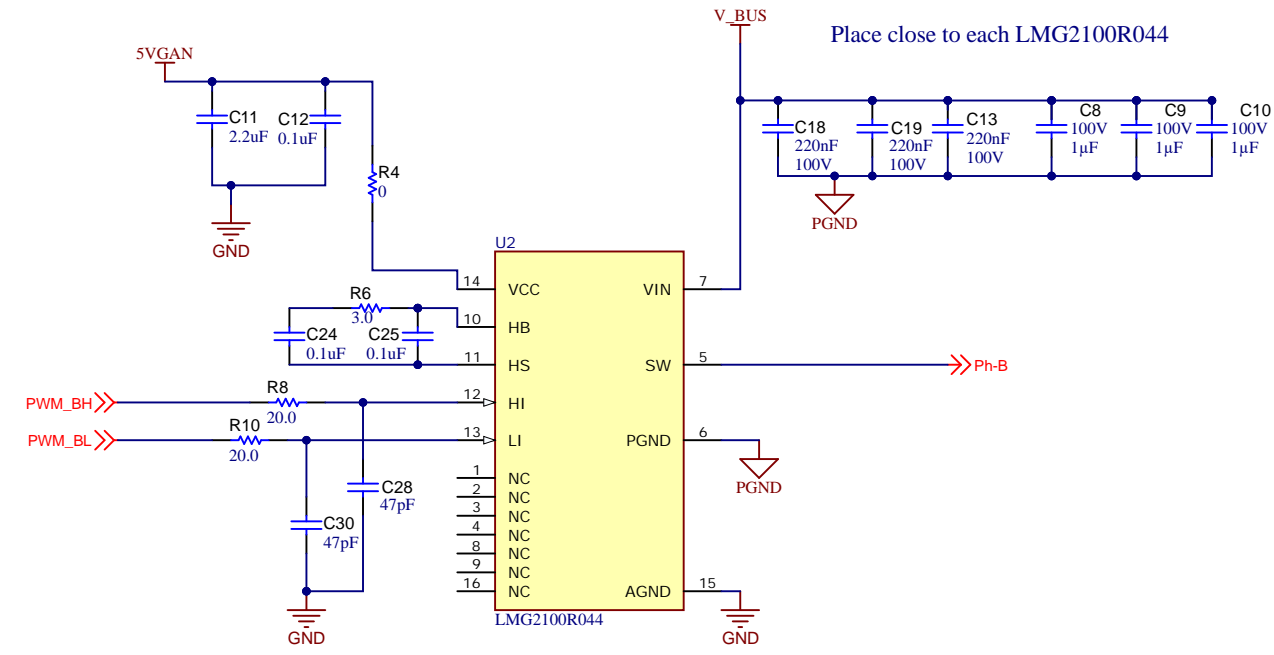
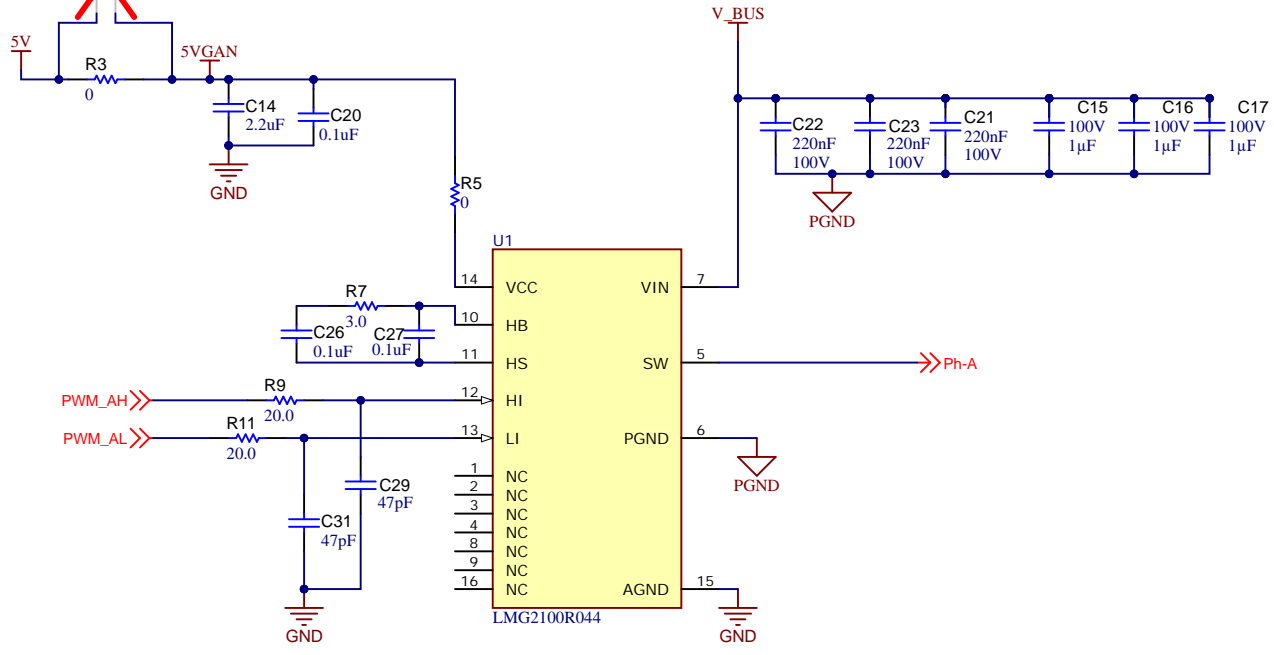


Net ties and 0ohm to connect PGND and GND

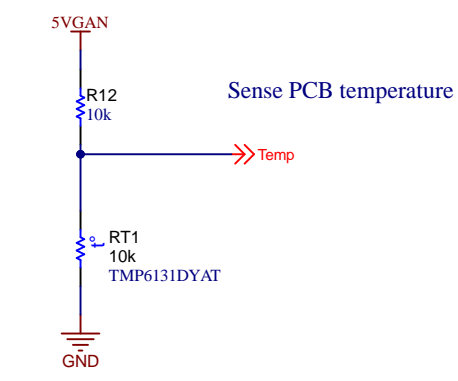
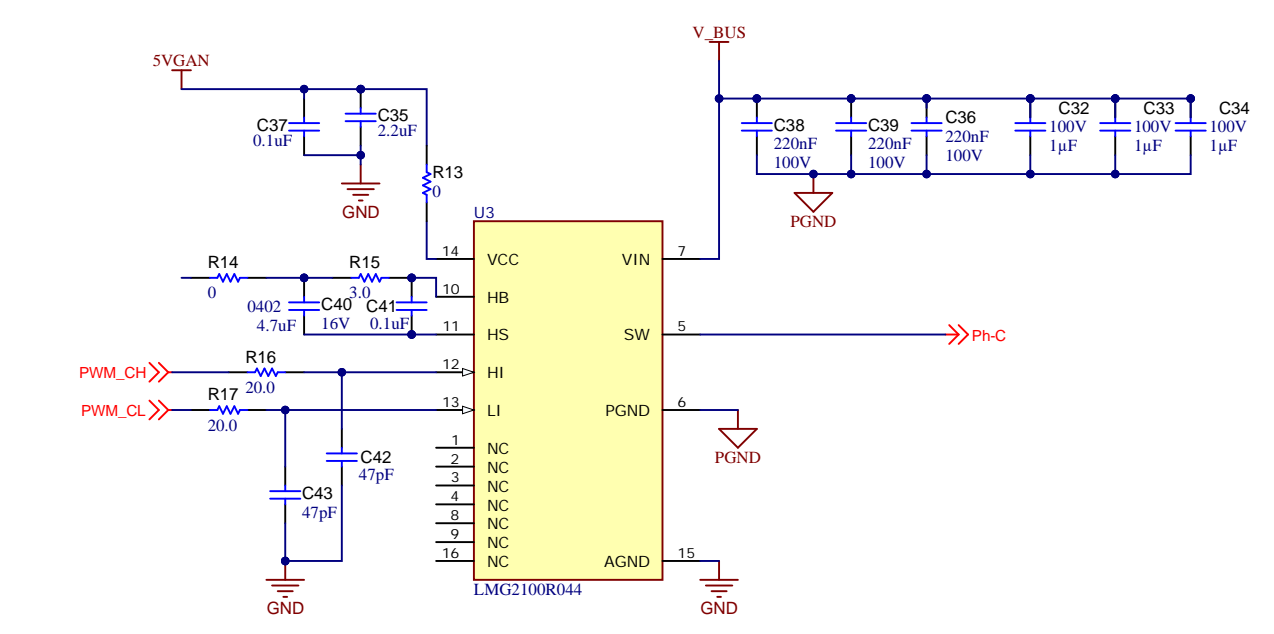
60uF total DC-bus capacitance after current sense shunt



J1: Test option, not used in this design

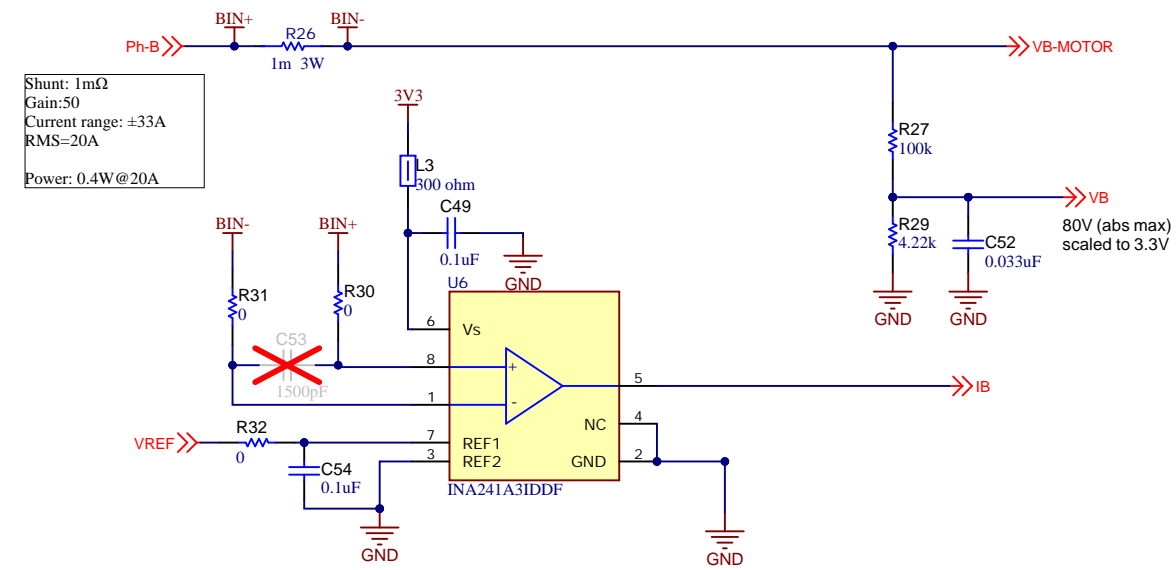
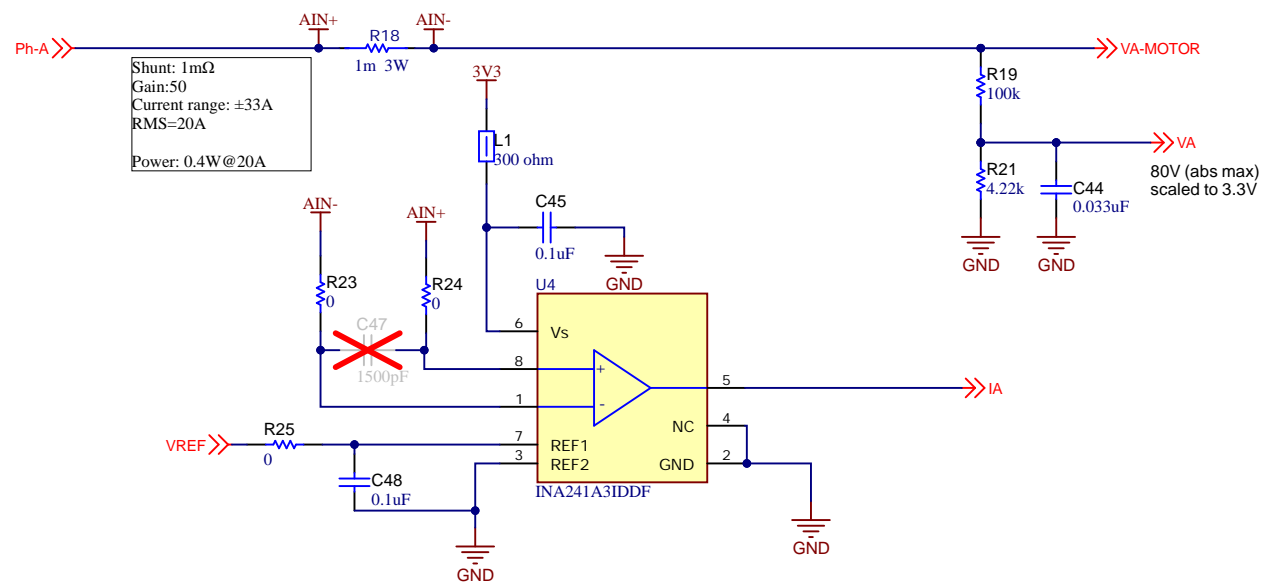


Place close to each LMG2100R044

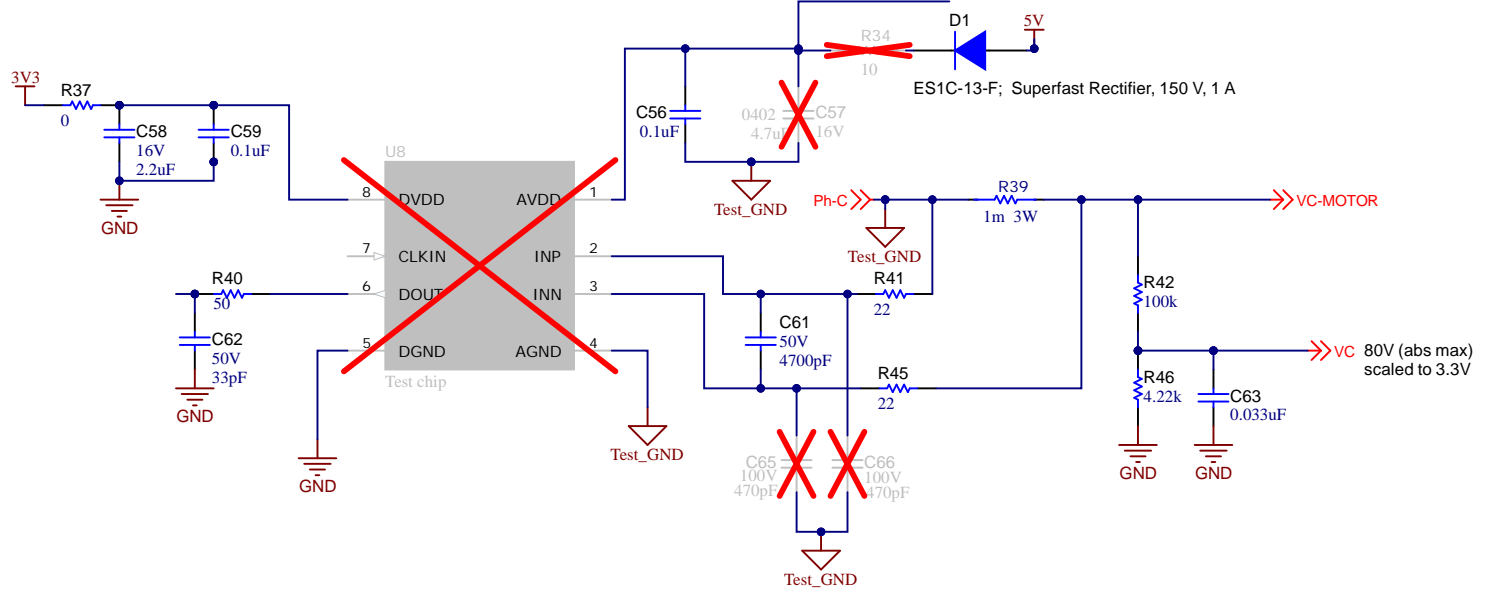


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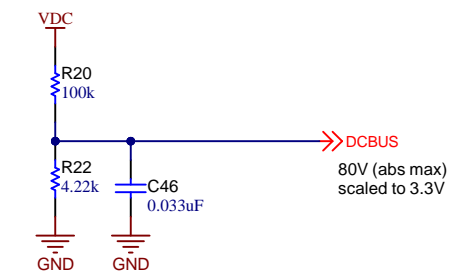
Phase A, B current sensing



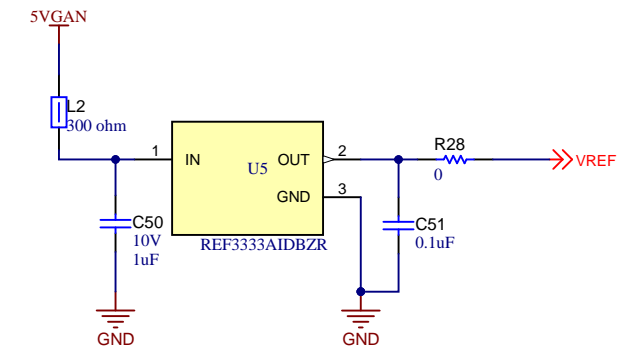
Phase C current sensing (not populated)



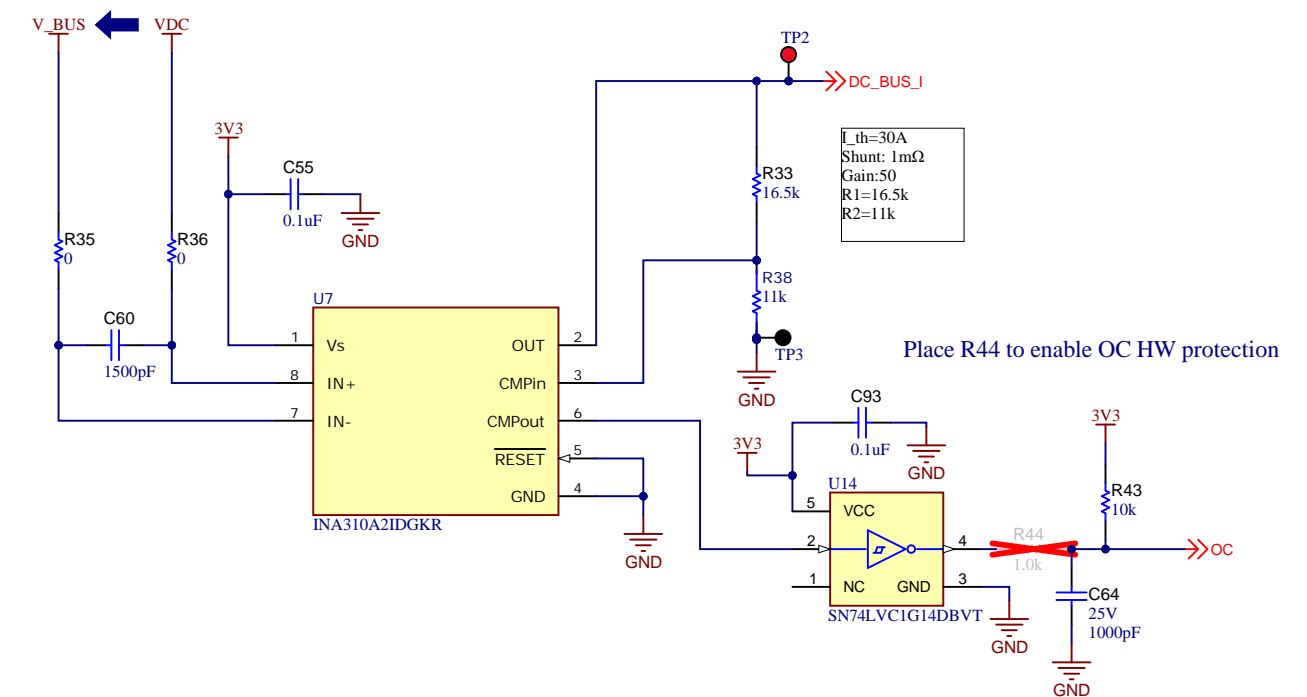
DC bus voltage sensing



Reference voltage



Overcurrent protection (not validated)

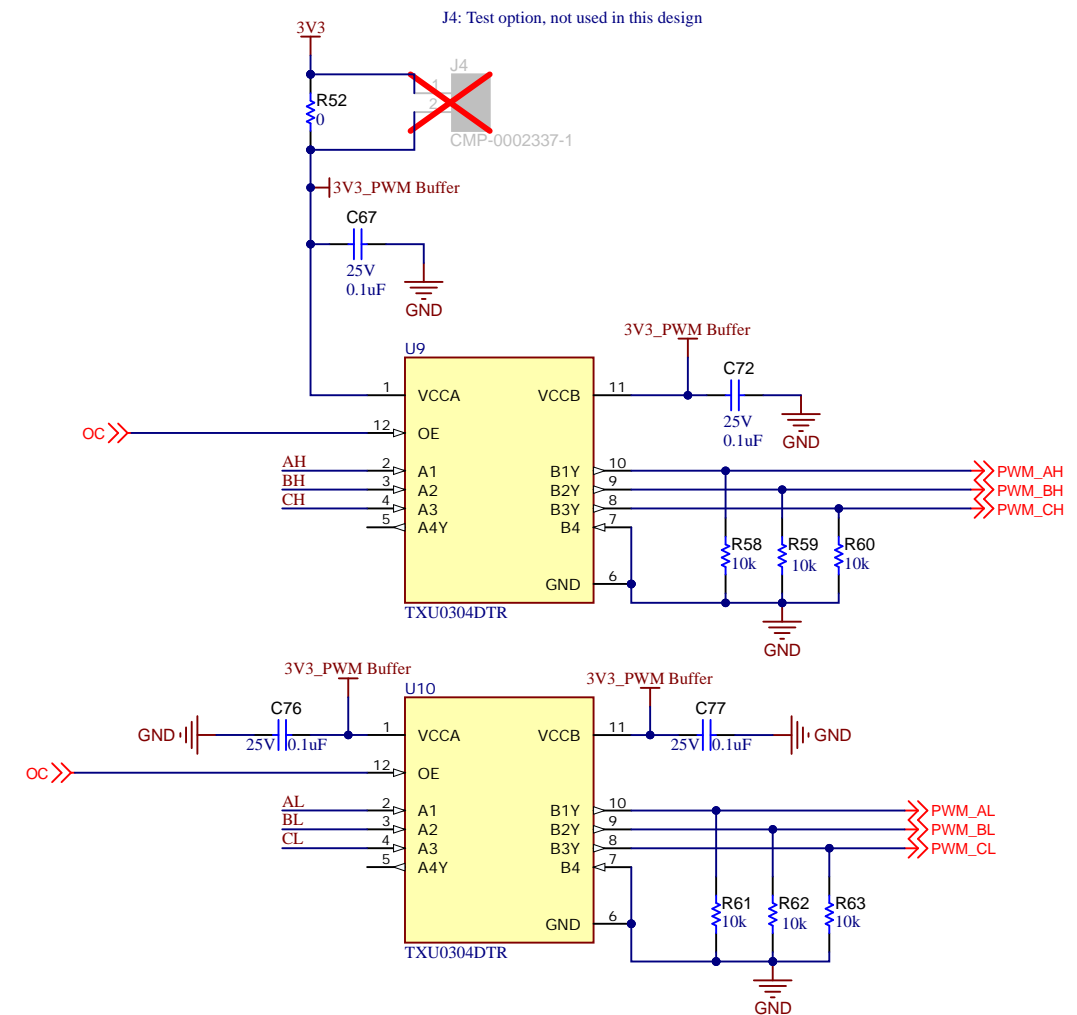
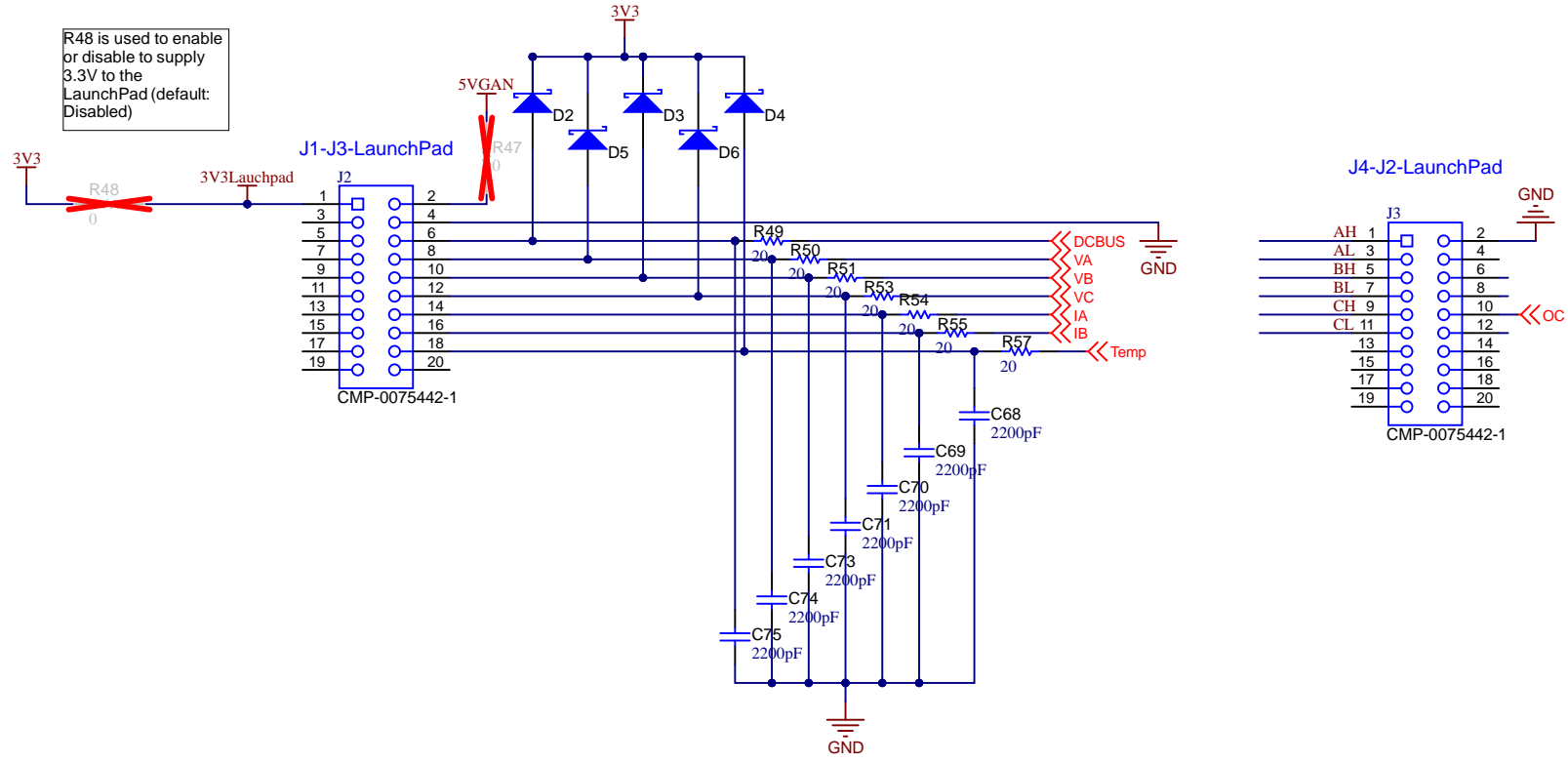


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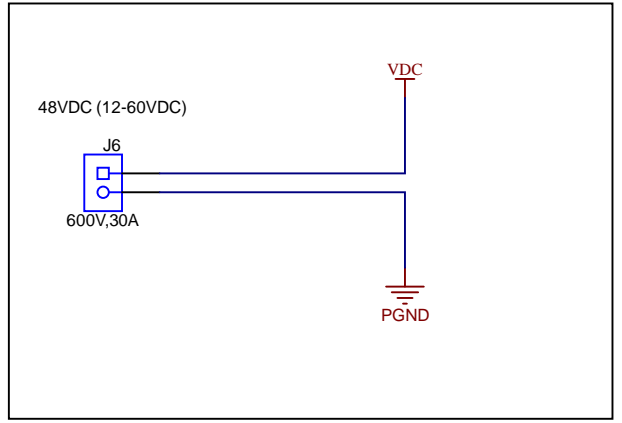
Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/14/2024
TID #: TIDA-010936	Project Title: GaN 3-phase inverter	
Number: TIDA-010936 Rev: E1	Sheet Title:	
SVN Rev: Unknown revision	Assembly Variant: 001	Sheet: 2 of 5
Drawn By:	File: TIDA010936_Current_Sense_E1.SchDoc	Size: B
Engineer: Tian/Staebler	Contact: http://www.ti.com/support	



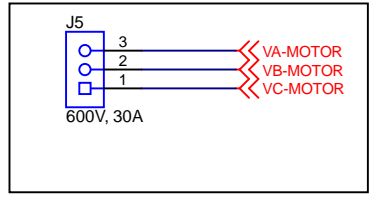
LaunchPad Interface



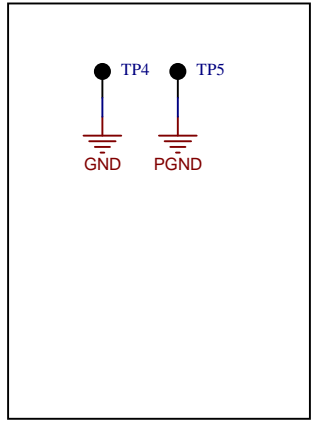
VIN Connector



Motor Connector



Test Points



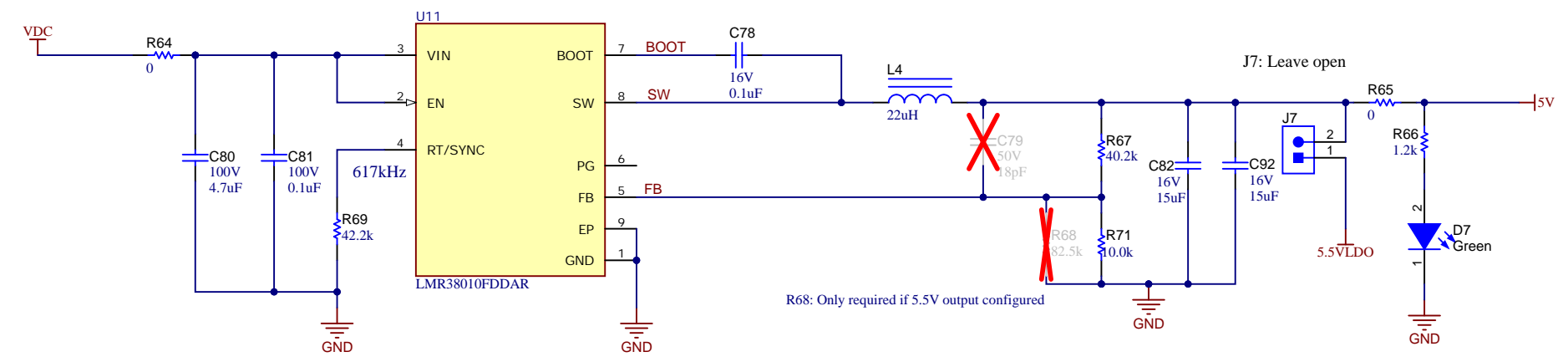
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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/14/2024
TID #: TIDA-010936	Project Title: GaN 3-phase inverter	
Number: TIDA-010936	Rev: E1	Sheet Title:
SVN Rev: Unknown revision	Assembly Variant: 001	Sheet: 3 of 5
Drawn By:	File: TIDA010936_Interface_E1.SchDoc	Size: B
Engineer: Tian/Staebler	Contact: http://www.ti.com/support	

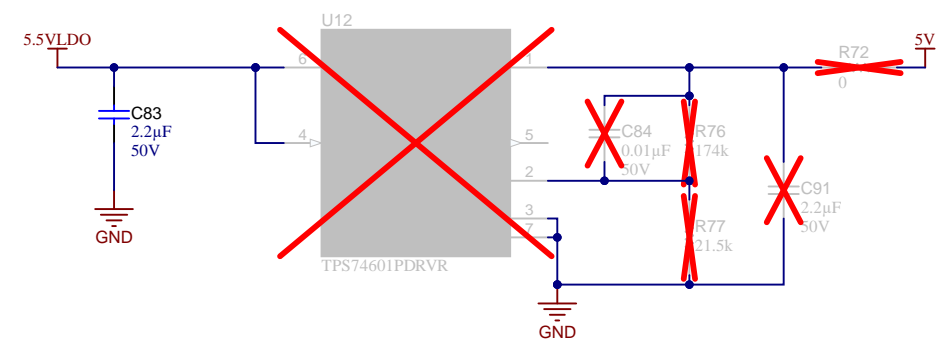
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12 to 60V input

Output:
5V (default)
5.5V (test and debug only)

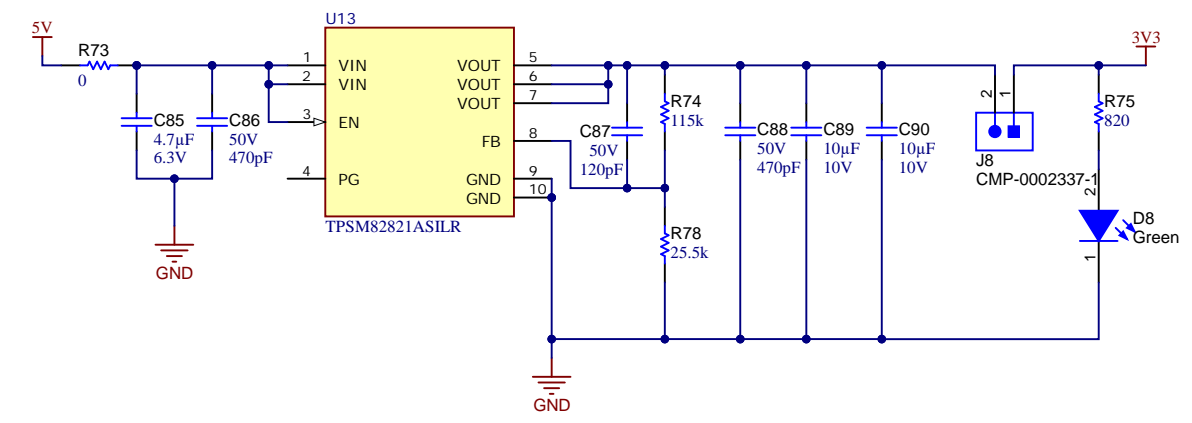


Test option only, not used: 5.5V to 5V



5V to 3.3V

J8: Set closed to enable 3.3V. Use to measure current consumption



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/14/2024
TID #: TIDA-010936	Project Title: GaN 3-phase inverter	
Number: TIDA-010936 Rev: E1	Sheet Title:	
SVN Rev: Unknown revision	Assembly Variant: 001	Sheet: 4 of 5
Drawn By:	File: TIDA010936_PoL_E1SchDoc.SchDoc	Size: B
Engineer: Tian/Staebler	Contact: http://www.ti.com/support	

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PCB Number: TIDA-010936
PCB Rev: E1



PCB
LOGO
FCC disclaimer

PCB
LOGO
WEEE logo



CAUTION HOT SURFACE



CAUTION HOT SURFACE



CAUTION HOT SURFACE

Variant/Label Table

Variant	Label Text
1.0	initial version

LBL1

PCB Label

THT-14-423-10
Size: 0.65" x 0.20 "

9

Label Assembly Note

This Assembly Note is for PCB labels only

10

Assembly Note

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

11

Assembly Note

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

12

Assembly Note

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

Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/14/2024	<p>TEXAS INSTRUMENTS</p> <p>http://www.ti.com</p> <p>© Texas Instruments 2024</p>
TID #: TIDA-010936	Project Title: GaN 3-phase inverter		
Number: TIDA-010936 Rev: E1	Sheet Title:		
SVN Rev: Unknown revision	Assembly Variant: 001	Sheet: 5 of 5	
Drawn By: e	File: TIDA010936_Hardware_E1.SchDoc	Size: B	
Engineer: Tian/Staebler	Contact: http://www.ti.com/support		

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