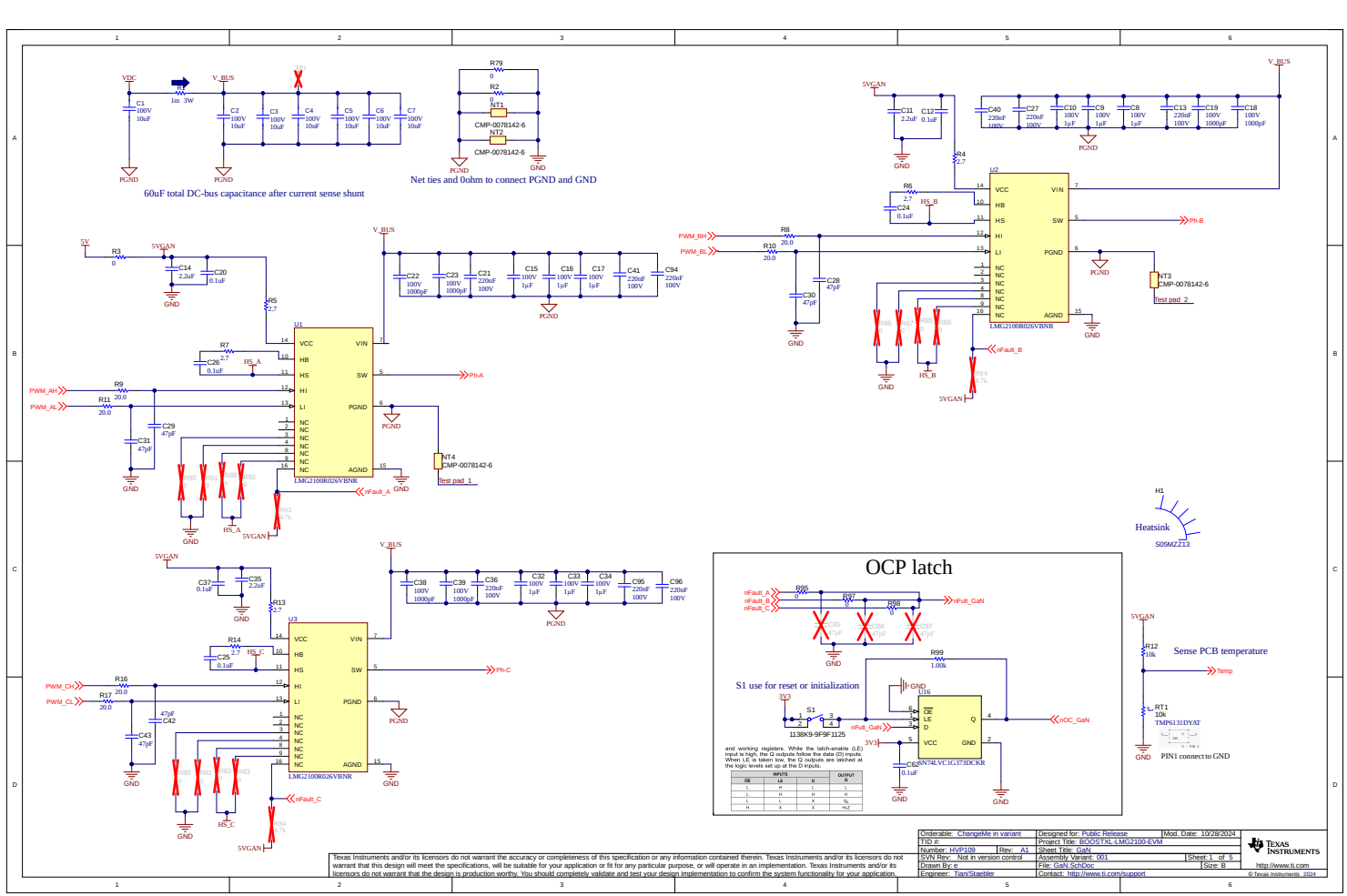
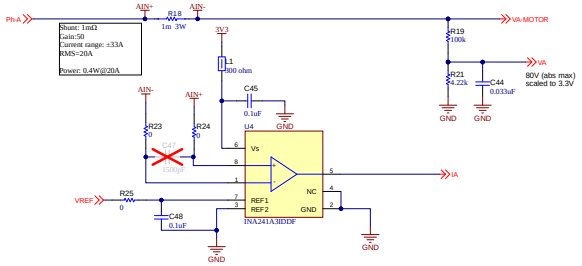
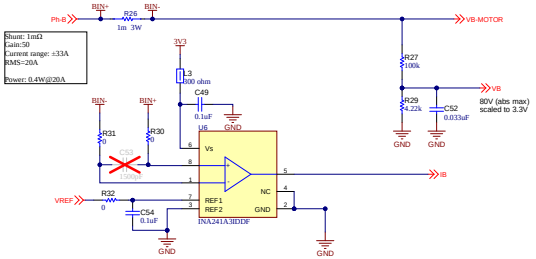


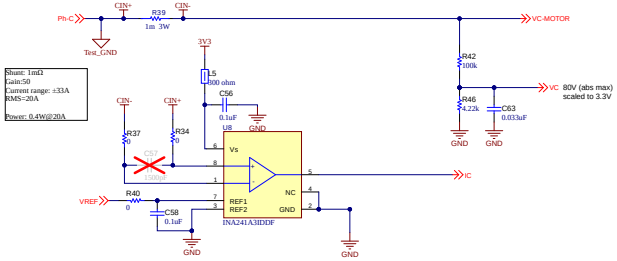
Orderable: ChangeMe in variant		Designed for: Public Release	Mod. Date: 10/28/2024
TID #:		Project Title: BOOSTXL-LMG2100-EVM	
Number: HVP109	Rev: A1	Sheet Title: GaN	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 1 of 5
Drawn By: e		File: GaN.SchDoc	Size: B
Engineer: Tian/Staebler		Contact: http://www.ti.com/support	

Phase A, B current sensing sensing

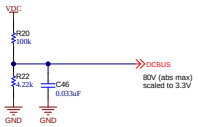




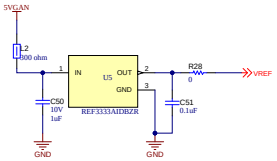
Phase C current sensing (not populated)



DC bus voltage sensing



Reference voltage



Overcurrent protection

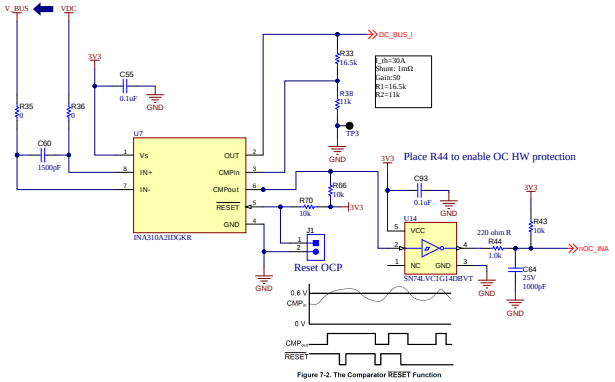


Figure 7-2. The Comparator RESET Function

Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 9/17/2024
TID #:	Project Title: BOOSTXL-LMG2100-EVM	
Number: HVP109 Rev: A1	Sheet Title: GaN	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 2 of 5
Drawn By: Eason Tian	File: Current_Sense.SchDoc	Size: B
Engineer: Tian/Staebler	Contact: http://www.ti.com/support	

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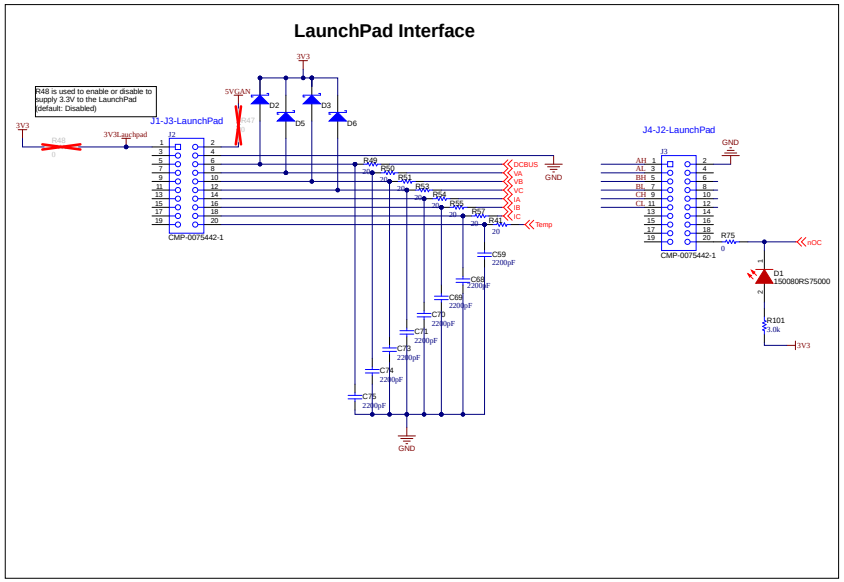
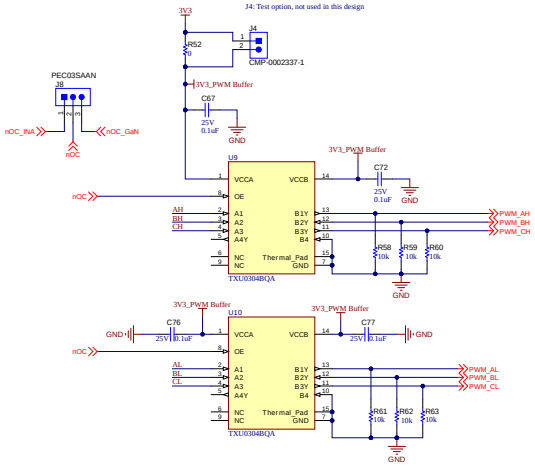
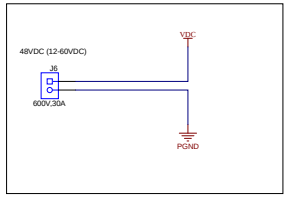
LaunchPad Interface

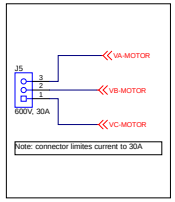




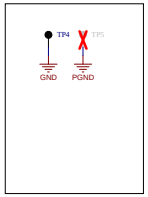
VIN Connector



Motor Connector



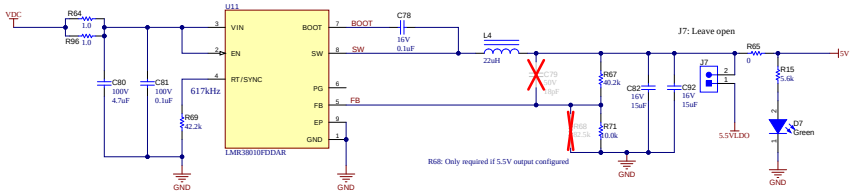
Test Points



Orderable: ChangeMe in variant		Designed for: Public Release	Mod. Date: 9/13/2024
TID #:		Project Title: BOOSTXL-LMG2100-EVM	
Number: HVP109	Rev: A1	Sheet Title: GaN	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 3 of 5
Drawn By: Eason Tian		File: Interface.SchDoc	Size: B
Engineer: Tian/Staebler		Contact: http://www.ti.com/support	

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

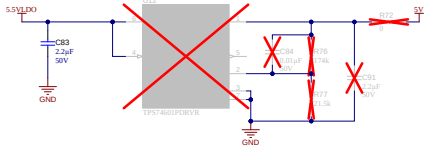
12 to 60V input



J7: Leave open

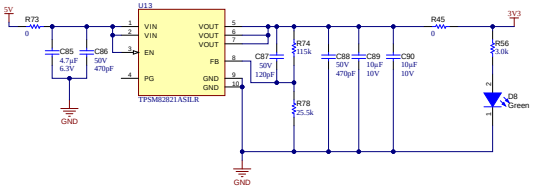
R68: Only required if 5.5V output configured

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



Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 9/13/2024
TID #:	Project Title: BOOSTXL-LMG2100-EVM	
Number: HVP109 Rev: A1	Sheet Title: GaN	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 4 of 5
Drawn By: Eason Tian	File: Power.SchDoc	Size: B
Engineer: Tian/Staebler	Contact: http://www.ti.com/support	

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PCB Number: HVP109
PCB Rev: A1

Logo1
PCB
LOGO
Texas Instruments


CE Mark

Logo2
PCB
LOGO
FCC disclaimer

Logo3
PCB
LOGO
WEEE logo


CAUTION HOT SURFACE


CAUTION HOT SURFACE


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Variant/Label Table	
Variant	Label Text
1.0	initial version
2.0	Layout improved, pre-version of EVM

LBL1
PCB Label
THT-14-423-10
Size: 0.65 " x 0.20 "

Label Assembly Note
This Assembly Note is for PCB labels only

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

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

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: 11/5/2024
TID #:	Project Title: BOOSTXL-LMG2100-EVM	
Number: HVP109 Rev: A1	Sheet Title: GaN	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet 5 of 5
Drawn By: e	File: Hardware.SchDoc	Size: B
Engineer: Tian/Staebler	Contact: http://www.ti.com/support	

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