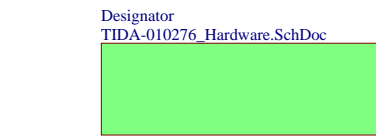
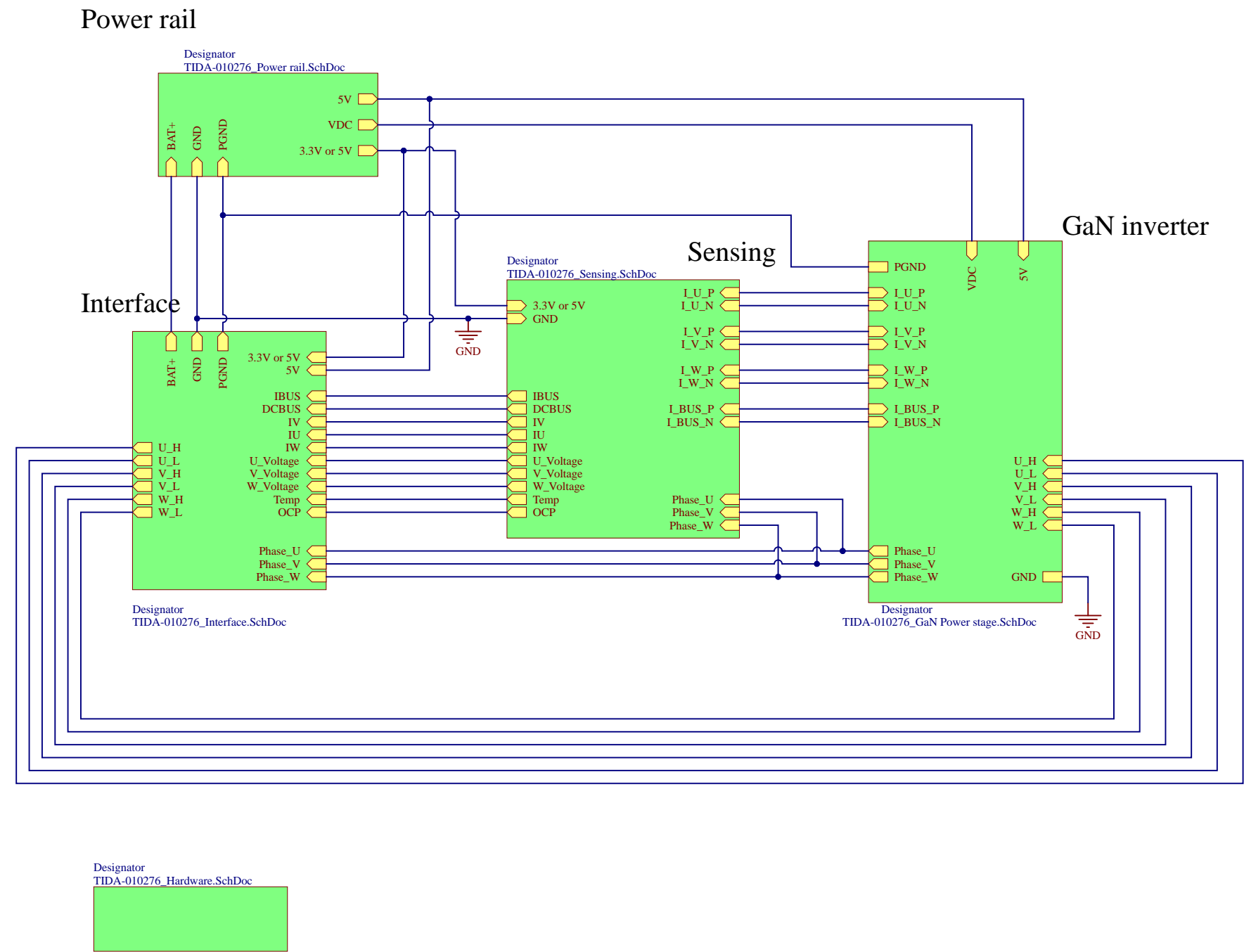


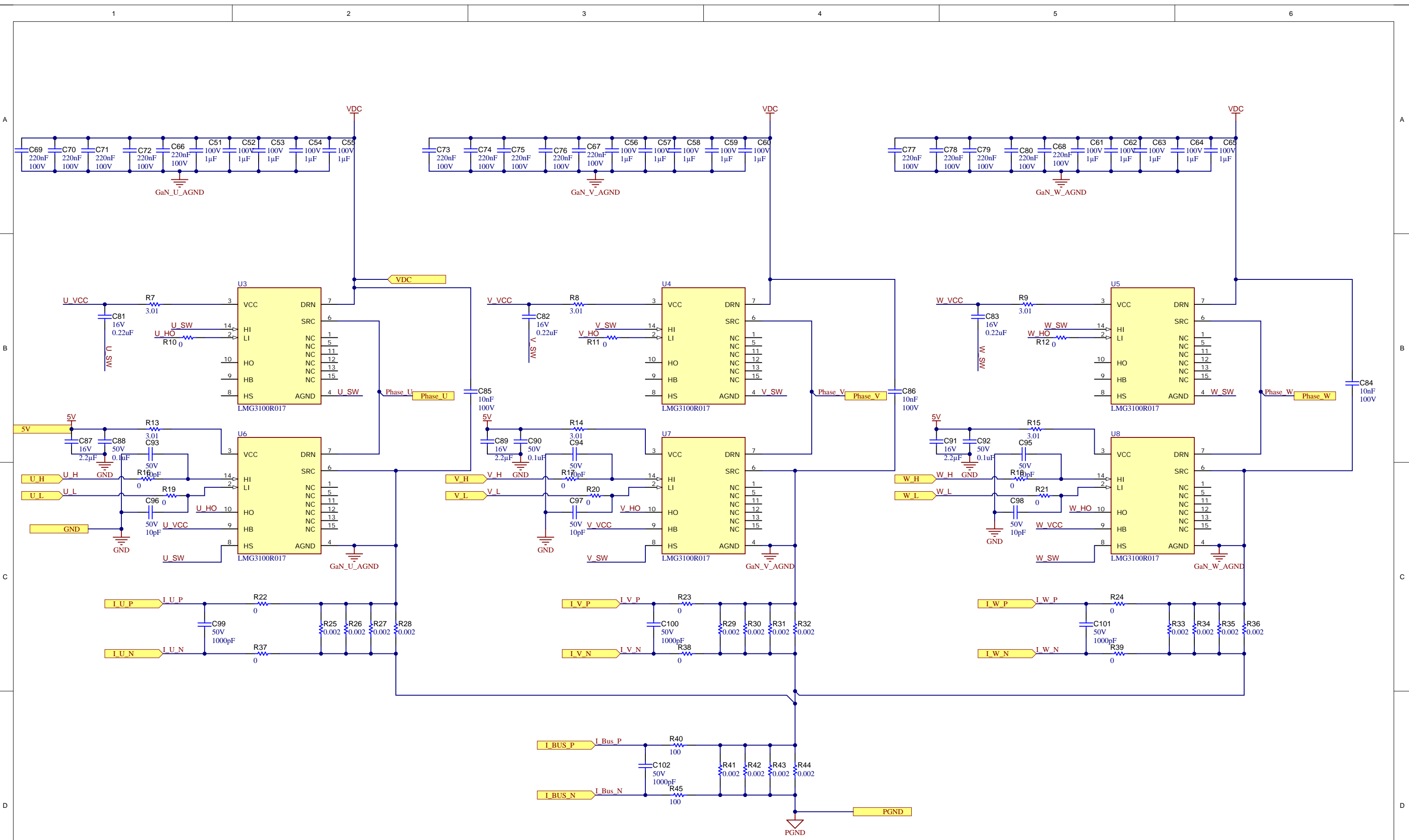
Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A



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TID #: TIDA-010276	Project Title: TIDA-010276	
Number: TIDA-010276 Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: TIDA-010276	Sheet: 1 of 6
Drawn By: Jensen Fang	File: TIDA-010276_Main.SchDoc	Size: B
Engineer: Jensen Fang	Contact: http://www.ti.com/support	

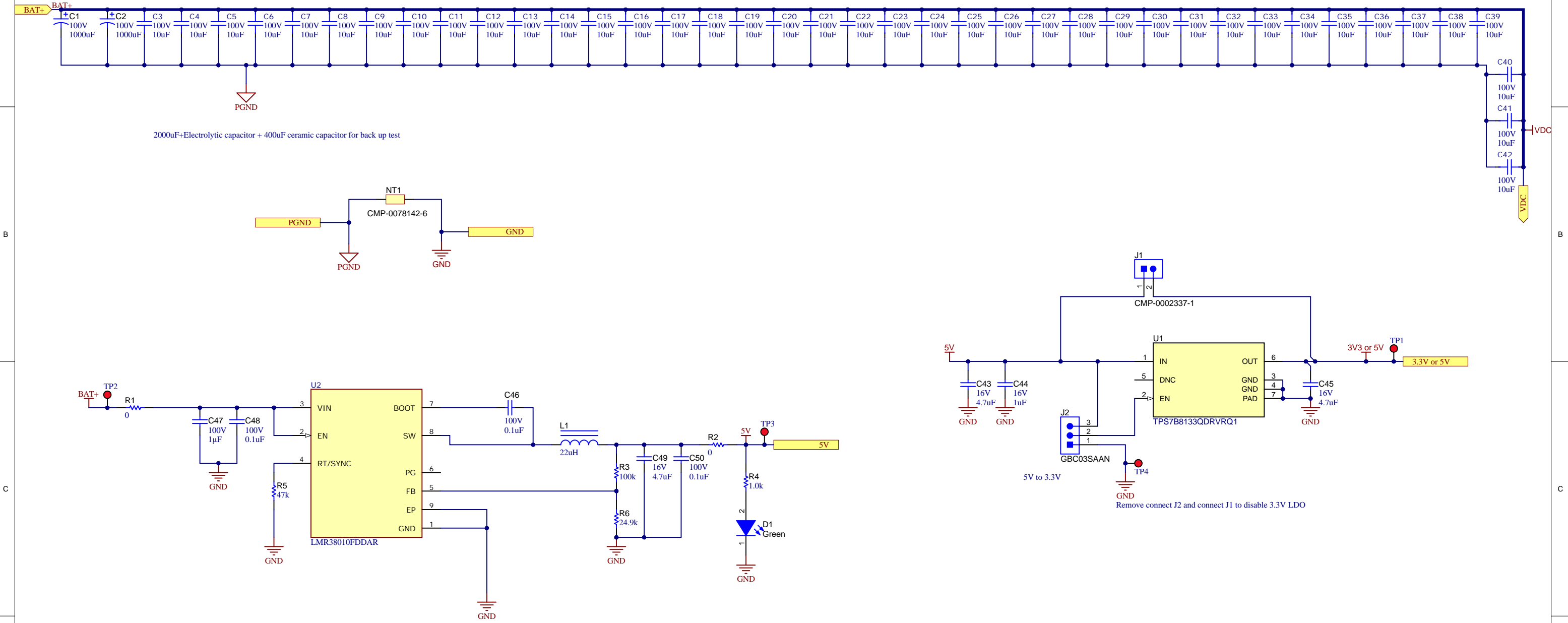




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TID #: TIDA-010276	Project Title: TIDA-010276	
Number: TIDA-010276 Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: TIDA-010276	Sheet: 2 of 6
Drawn By: Jensen Fang	File: TIDA-010276_GaN power stage_SchDoc	Size: B
Engineer: Jensen Fang	Contact: http://www.ti.com/support	





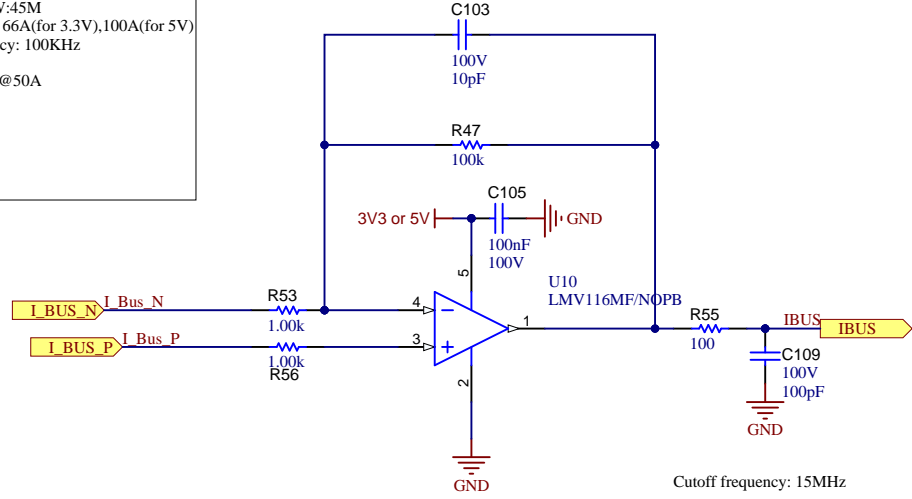
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TID #: TIDA-010276	Project Title: TIDA-010276	
Number: TIDA-010276	Rev: E1	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: TIDA-010276	Sheet: 3 of 6
Drawn By: Jensen Fang	File: TIDA-010276_Power rail.SchDoc	Size: B
Engineer: Jensen Fang	Contact: http://www.ti.com/support	http://www.ti.com



Bus current sensing

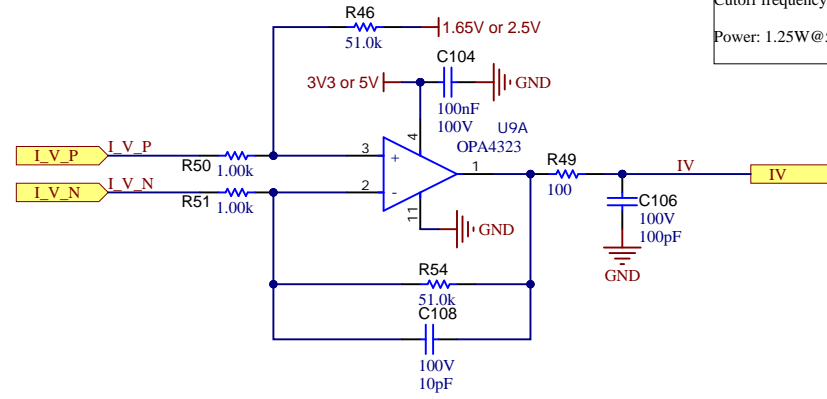
Shunt: 0.5mΩ
 Gain:100,GBW:45M
 Current range: 66A(for 3.3V),100A(for 5V)
 Cutoff frequency: 100KHz
 Power: 1.25W@50A



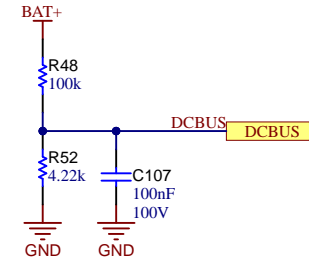
Cutoff frequency: 15MHz

Phase Current sensing

Shunt: 0.5mΩ
 Gain:51
 Current range:
 ±64.7A(for 3.3V,0.5mohm),
 ±98A(for 3.3V,0.5mohm),
 Cutoff frequency: 100KHz
 Power: 1.25W@50A

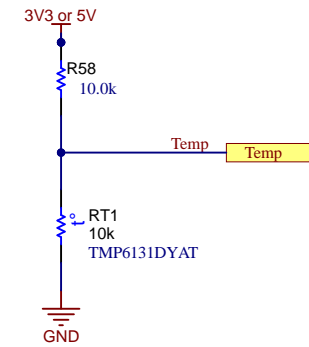


Bus voltage sensing



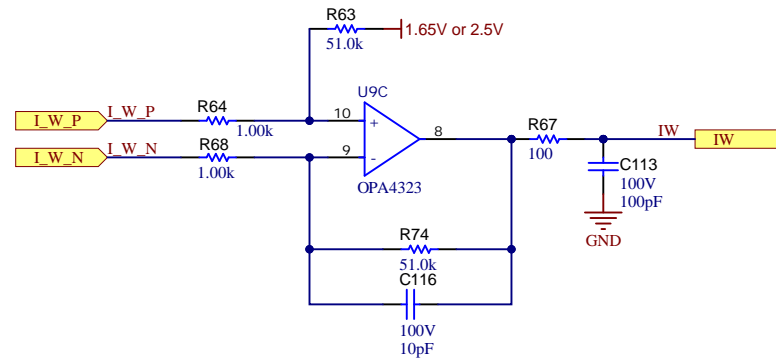
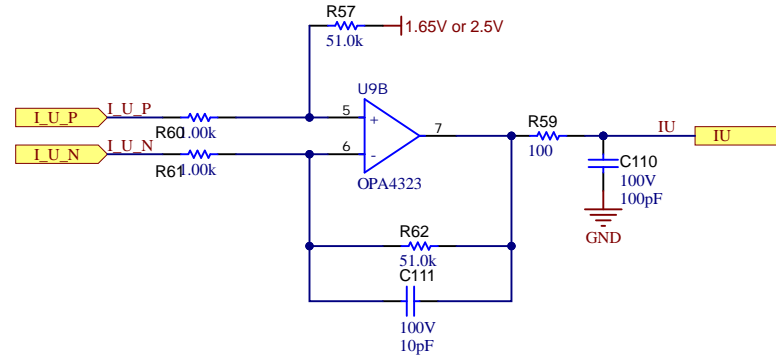
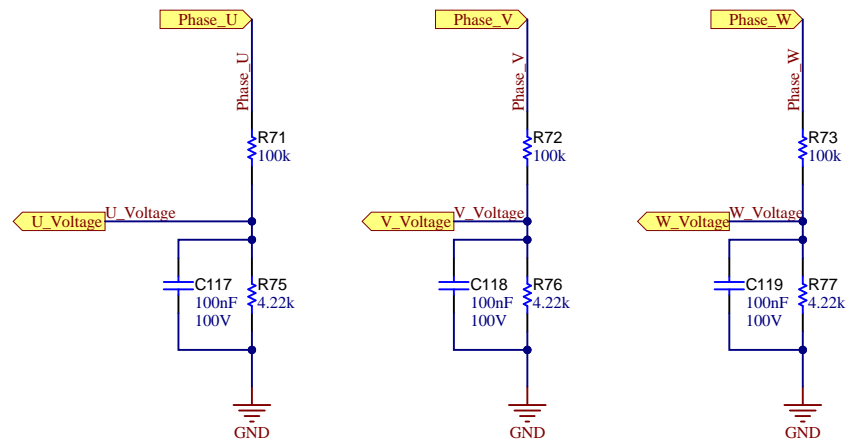
80V (abs max) scaled to 3.3V
 80V->3.23V, 48V->1.94V
 .36V->1.45V
 Cutoff frequency: 397Hz

TMP sensing

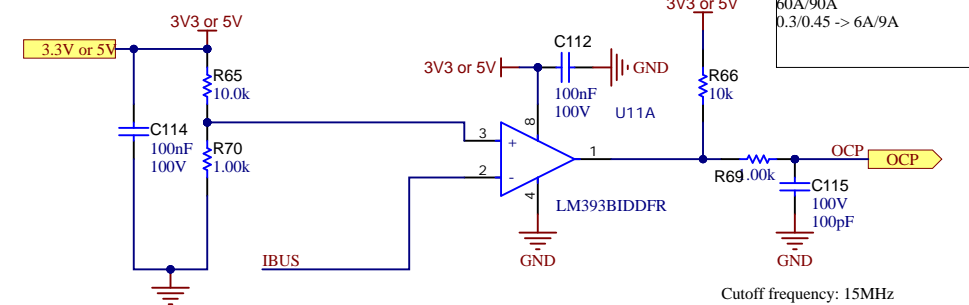


Phase Voltage sensing

80V (abs max) scaled to 3.3V
 80V->3.23V, 48V->1.94V, .36V

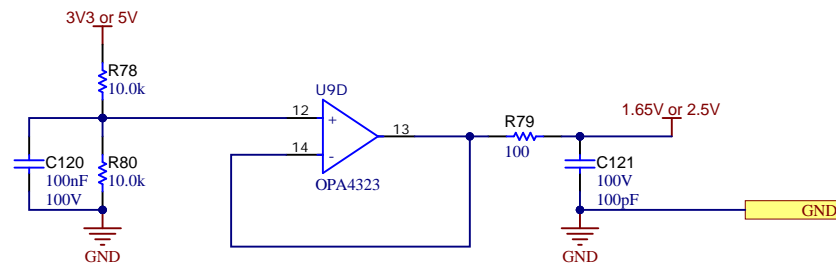


Overcurrent Protection



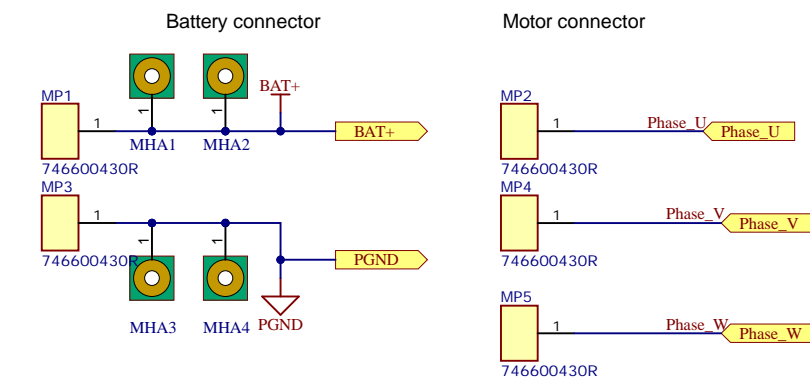
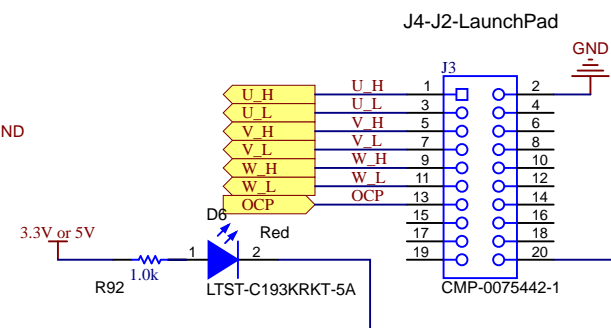
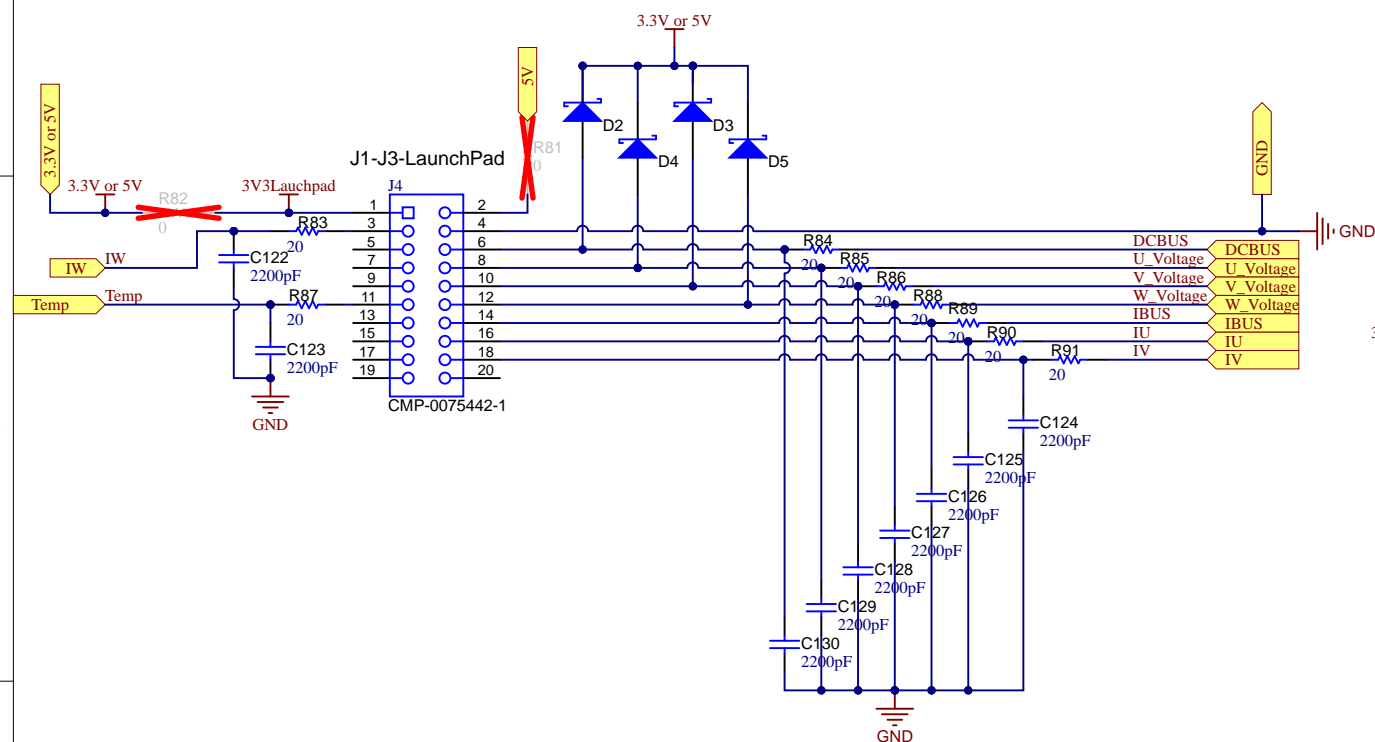
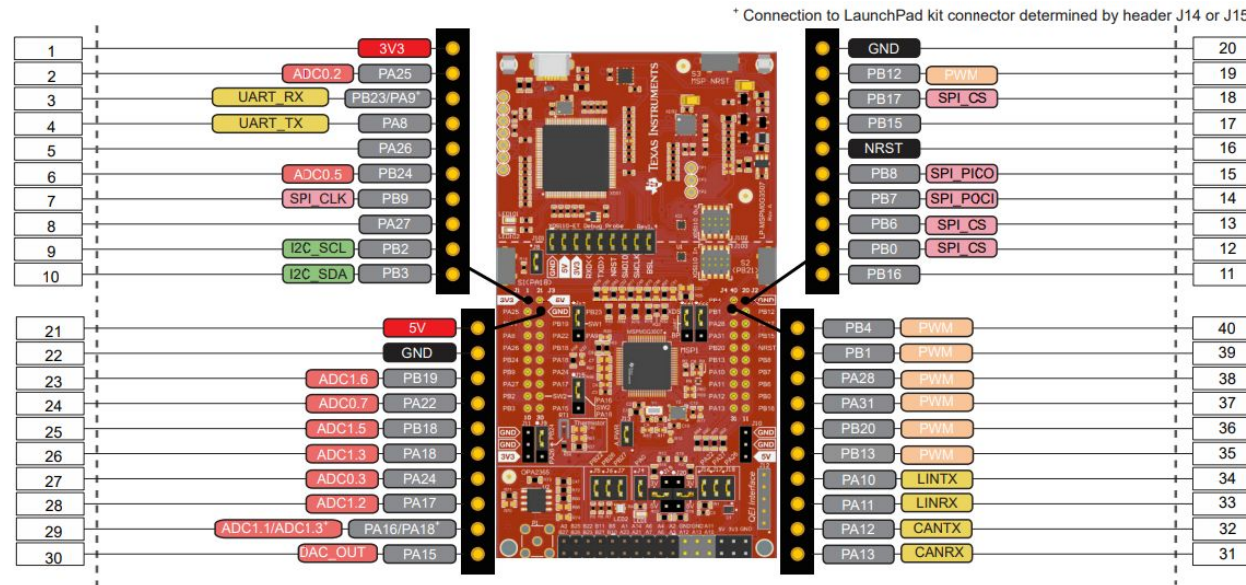
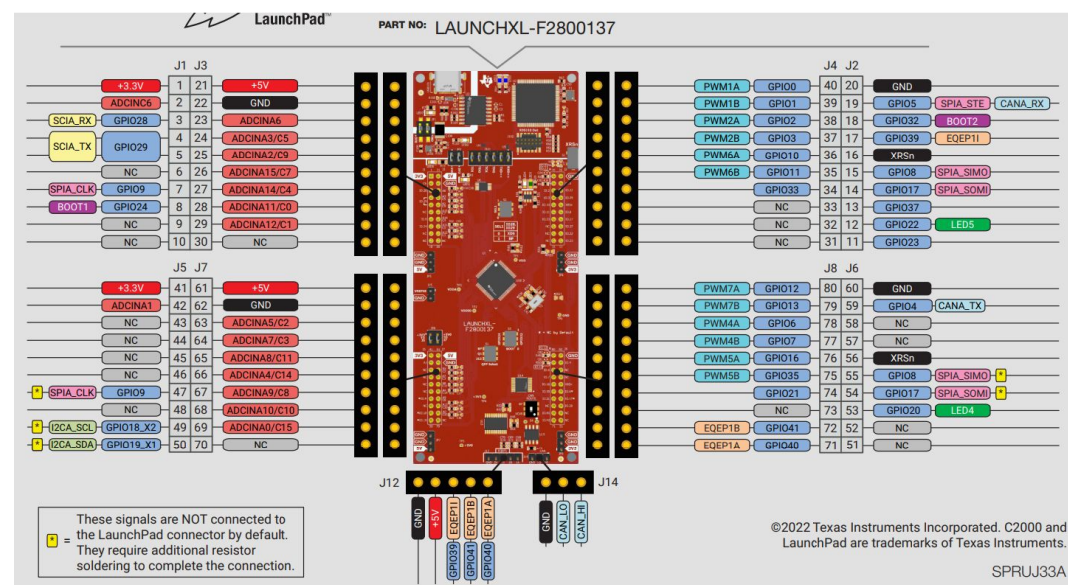
Setting in 6A/9A OCP only for functional check, Please set to 60A if the OCP function is normal

3V/4.5V trigger ->+
 60A/90A
 0.3/0.45 -> 6A/9A



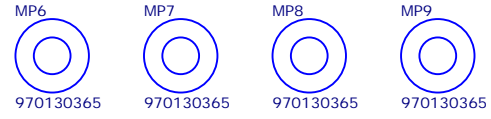
Orderable: N/A	Designed for: Public Release	Mod. Date: 11/29/2024
TID #: TIDA-010276	Project Title: TIDA-010276	
Number: TIDA-010276 Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: TIDA-010276	Sheet 4 of 6
Drawn By: Jenson Fang	File: TIDA-010276_Sensing_SchDoc	Size: B
Engineer: Jenson Fang	Contact: http://www.ti.com/support	

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TID #: TIDA-010276	Project Title: TIDA-010276	
Number: TIDA-010276	Rev: E1	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: TIDA-010276	Sheet: 5 of 6
Drawn By: Jenson Fang	File: TIDA-010276_Interface.SchDoc	Size: B
Engineer: Jenson Fang	Contact: http://www.ti.com/support	



PCB Number: TIDA-010276
PCB Rev: E1

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CAUTION HOT SURFACE

Variant/Label Table	
Variant	Label Text
001	ChangeMe!
002	ChangeMe!

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TID #: TIDA-010276	Project Title: TIDA-010276	
Number: TIDA-010276	Rev: E1	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: TIDA-010276	Sheet: 6 of 6
Drawn By: Jenson Fang	File: TIDA-010276_Hardware.SchDoc	Size: B
Engineer: Jenson Fang	Contact: http://www.ti.com/support	



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