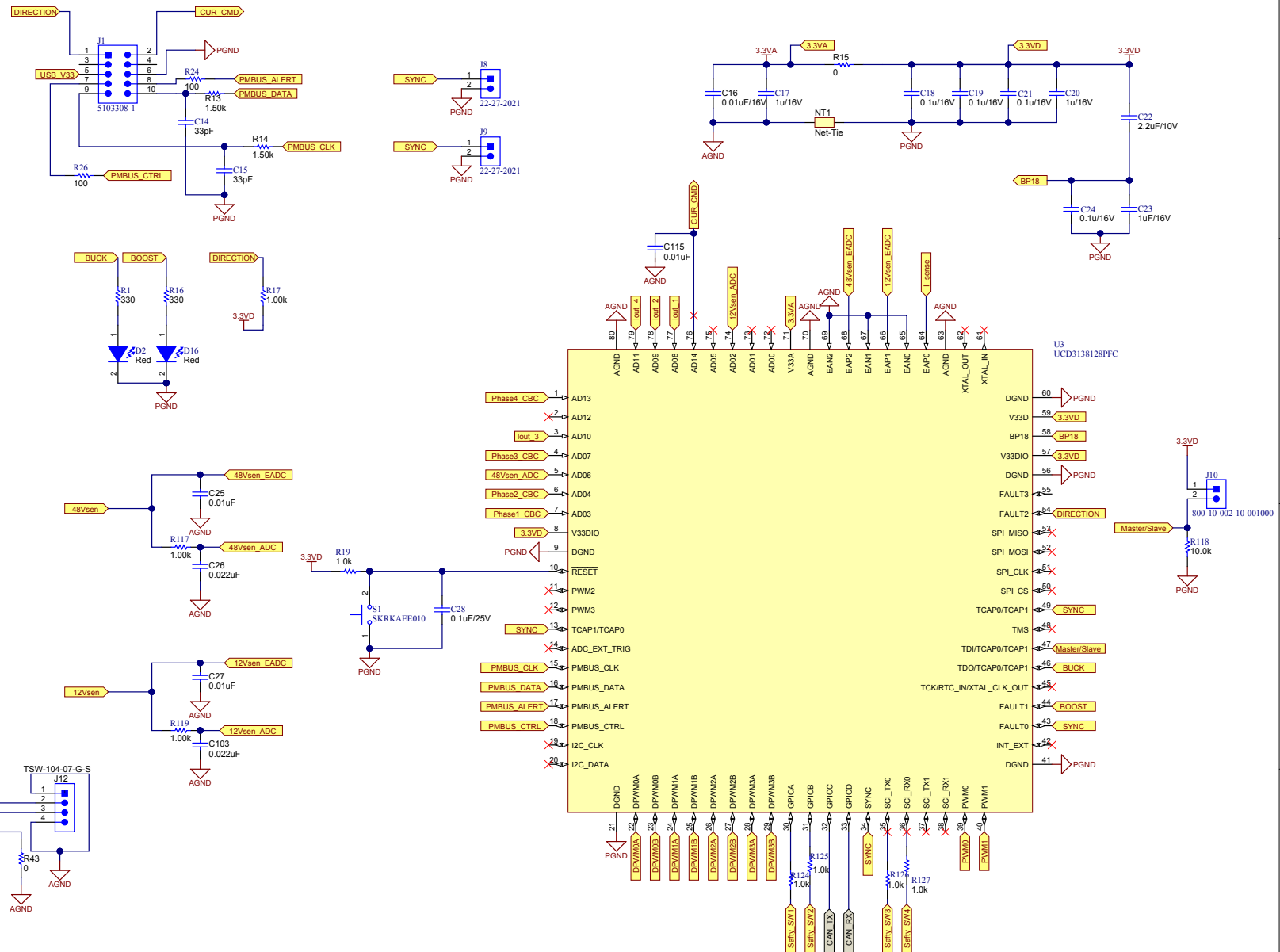


MCU signal list

1. EADC1 --> 12V feedback
2. EADC2 --> 48V feedback
3. AD08 --> Phase 1 current measure
4. AD09 --> Phase 2 current measure
5. AD10 --> Phase 3 current measure
6. AD11 --> Phase 4 current measure
7. EADC0 --> Current feedback
8. AD02 --> phase 1 cycle by cycle limit
9. AD04 --> phase 2 cycle by cycle limit
10. AD07 --> phase 3 cycle by cycle limit
11. AD13 --> phase 4 cycle by cycle limit
12. TMS --> Save the standby power
13. TDI --> Phase1 Fast turn off oring
14. TDO --> Phase2 Fast turn off oring
15. TCK --> Phase3 Fast turn off oring
16. TCAP --> Phase4 Fast turn off oring
17. DPWM0A --> Phase 1 low side gate
18. DPWM0B --> Phase 1 high side gate
19. DPWM1A --> Phase 2 low side gate
20. DPWM1B --> Phase 2 high side gate
21. DPWM2A --> Phase 3 low side gate
22. DPWM2B --> Phase 3 high side gate
23. DPWM3A --> Phase 4 low side gate
24. DPWM3B --> Phase 4 high side gate



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H1 1 NY PMS 440 0025 PH
 H2 1 NY PMS 440 0025 PH
 H3 1 NY PMS 440 0025 PH
 H4 1 NY PMS 440 0025 PH

H5 1 NY PMS 440 0025 PH
 H6 1 NY PMS 440 0025 PH
 H7 1 NY PMS 440 0025 PH

FID1 FID2 FID3

PCB Number: TIDA-00653
 PCB Rev: E1

PCB LOGO Texas Instruments
 PCB LOGO Pb-Free Symbol
 PCB LOGO FCC disclaimer



You should delete the nylon screws/standoffs and/or the bumpoms as needed for your design (or substitute other parts from Hardware.IntLib). Bumpoms are cheaper, but provide less clearance.

Deleting anything else from this page may result in your EVM submission being rejected (until you add them back).

Update the Label Text in the Label Table as needed for each Assembly Variant.

You can delete this note too.

Variant	Label Text
001	ChangeMe!
002	ChangeMe!

LBL1
 PCB Label
 Size: 0.65" x 0.20"

ZZ1
 Label Assembly Note
 This Assembly Note is for PCB labels only

ZZ2
 Assembly Note
 These assemblies are ESD sensitive, ESD precautions shall be observed.

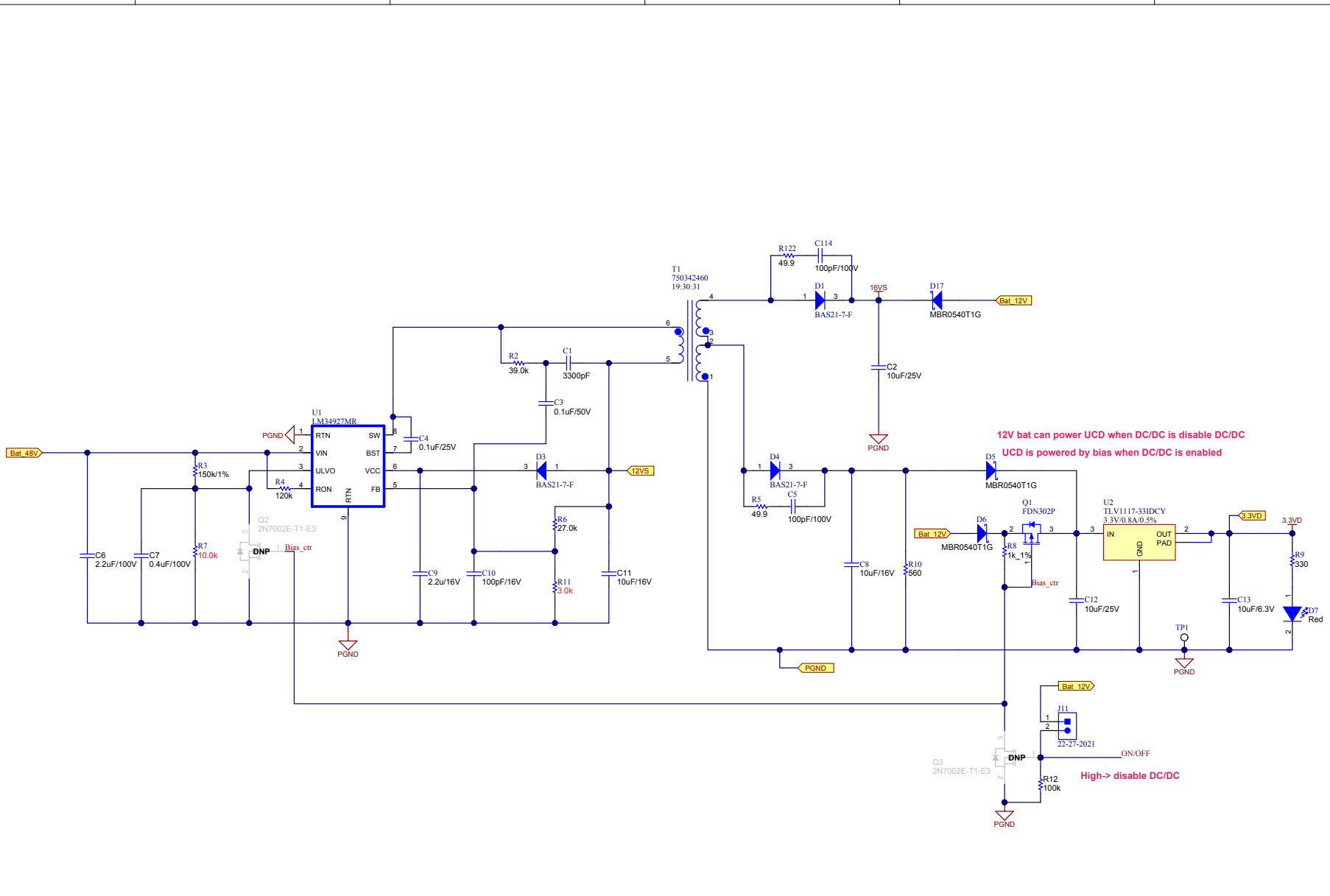
ZZ3
 Assembly Note
 These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

ZZ4
 Assembly Note
 These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.



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Orderable: EVM_orderable	Designed for: Automotive	Mod. Date: 3/17/2016
TID #: TID	Project Title: Bidirectional DCDC converter	
Number: TIDA-00653	Rev: AA1	Sheet Title: Hardware_ANSI-B
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 3 of 3
Drawn By:	File: Hardware_ANSI-B_SchDoc	Size: B
Engineer: Ray Chang	Contact: http://www.ti.com/support	



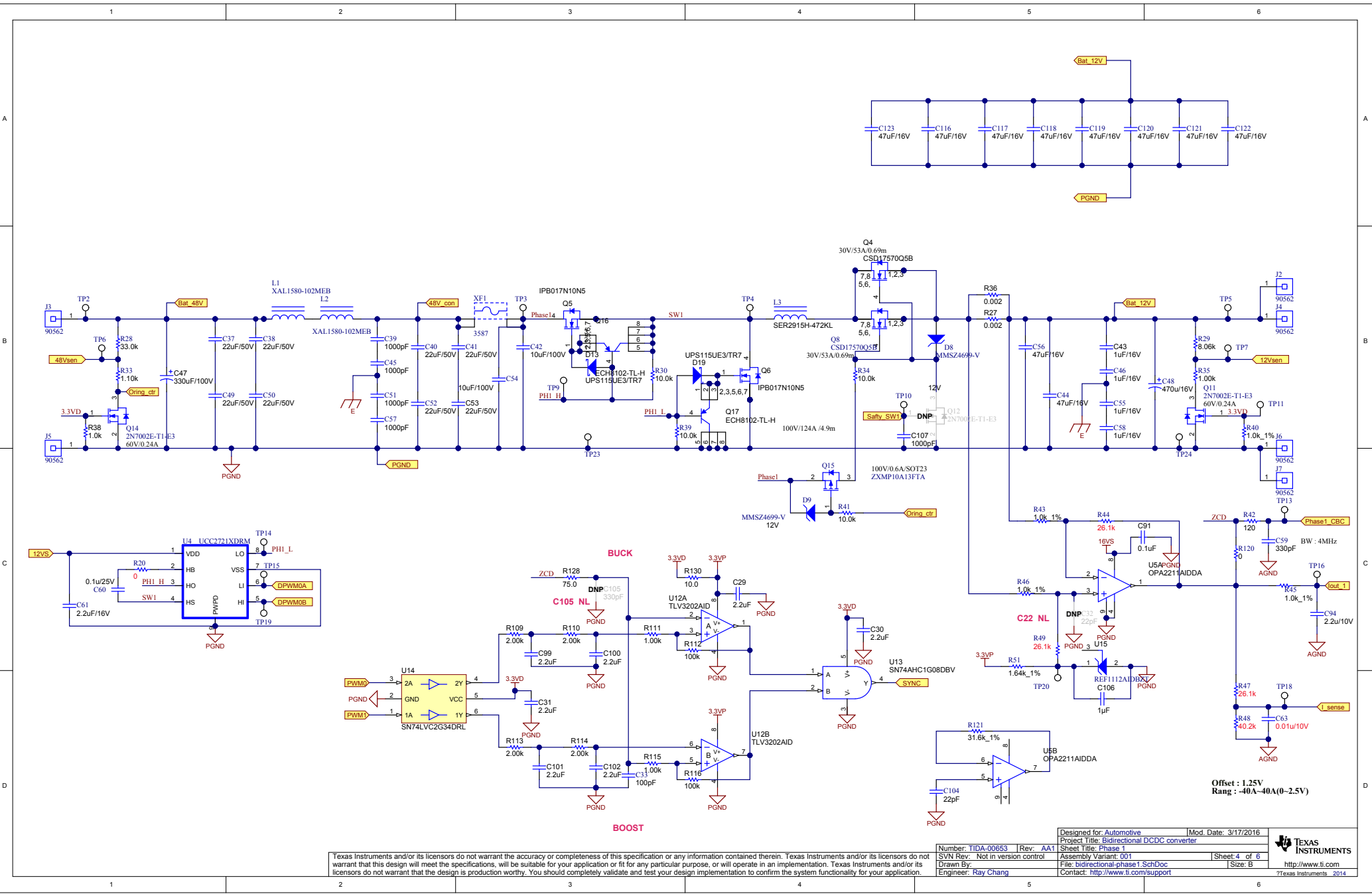
12V bat can power UCD when DC/DC is disable DC/DC
UCD is powered by bias when DC/DC is enabled

High -> disable DC/DC

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Number: TIDA-00653	Rev: AA1	Designed for: Automotive	Mod. Date: 3/17/2016
SVN Rev: Not in version control	Assembly Variant: 001	Project Title: Bidirectional DCDC converter	Sheet Title: Aux Power Supply
Drawn By:	Engineer: Ray Chang	File: Aux Power Supply_SchDoc	Sheet: 3 of 6
		Contact: http://www.ti.com/support	Size: B

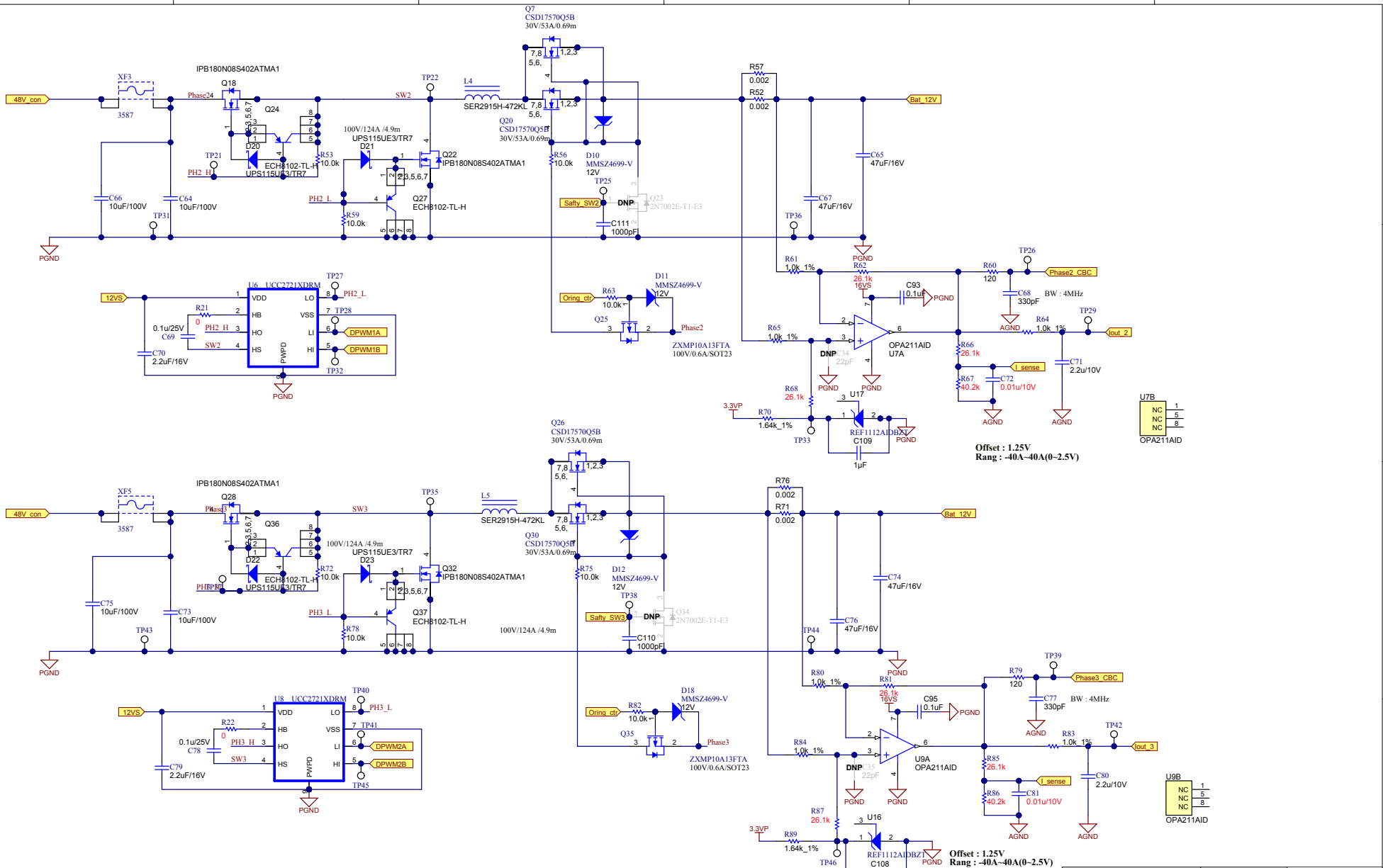




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Designed for: Automotive	Mod. Date: 3/17/2016	 TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2014
Project Title: Bidirectional DCDC converter	Sheet Title: Phase 1	
Number: TIDA-00653 Rev: AA1	Assembly Variant: 001	
SVN Rev: Not in version control	File: bidirectional-phase1_SchDoc	
Drawn By:	Sheet: 4 of 6	Size: B
Engineer: Ray Chang	Contact: http://www.ti.com/support	

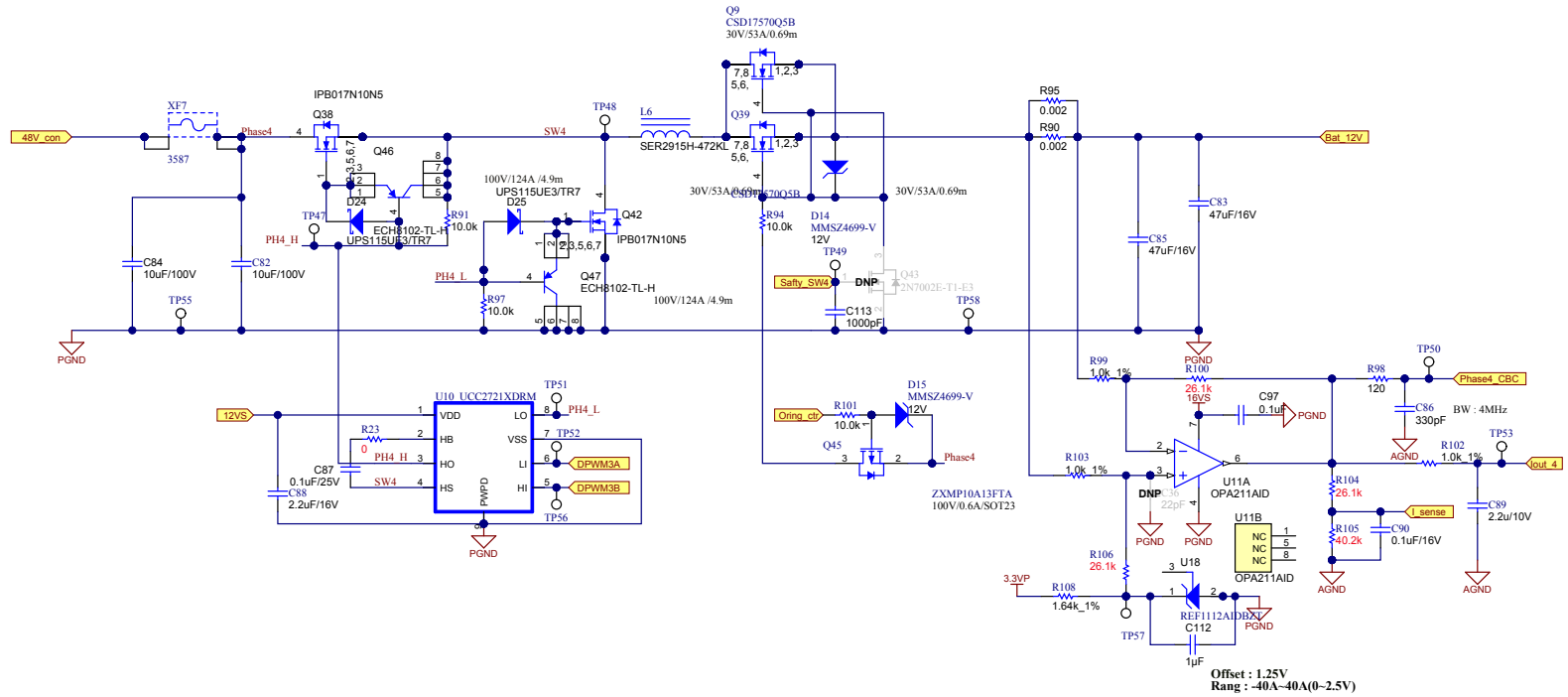
Offset : 1.25V
 Rang : -40A-40A(0-2.5V)



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Number: TIDA-00653	Rev: AA1	Designed for: Automotive	Mod. Date: 3/17/2016
SVN Rev: Not in version control	Project Title: Bidirectional DCDC converter	Sheet Title: Phase 2 and 3	
Drawn By:	Assembly Variant: 001	File: Bidirectional-Phase2&3_SchDoc	Sheet 5 of 6
Engineer: Ray Chang	Size: B	Contact: http://www.ti.com/support	





Offset : 1.25V
Rang : -40A-40A(0-2.5V)

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Number: TIDA-00653	Rev: AA1	Designed for: Automotive	Mod. Date: 3/17/2016
SVN Rev: Not in version control		Project Title: Bidirectional DCDC converter	
Drawn By:		Sheet Title: Phase 4	
Engineer: Ray Chang		Assembly Variant: 001	Sheet: 6 of 6
		File: bidirectional-Phase4_SchDoc	Size: B
		Contact: http://www.ti.com/support	http://www.ti.com
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