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Revision History

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

A

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TID #: <a href="#">TIDA-00779</a>	Project Title: <a href="#">High Efficiency and Cost Competitive 3k5 PFC</a>		
Number: <a href="#">TIDA-00779</a>	Rev: <a href="#">E1</a>	Sheet Title:	
SVN Rev: <a href="#">Version control disabled</a>	Assembly Variant: <a href="#">[No Variations]</a>	Sheet: <a href="#">1</a> of <a href="#">3</a>	
Drawn By: <a href="#">Jason Tao</a>	File: <a href="#">CoverSheet RevB.SchDoc</a>	Size: <a href="#">B</a>	
Engineer: <a href="#">Jason Tao</a>	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>		

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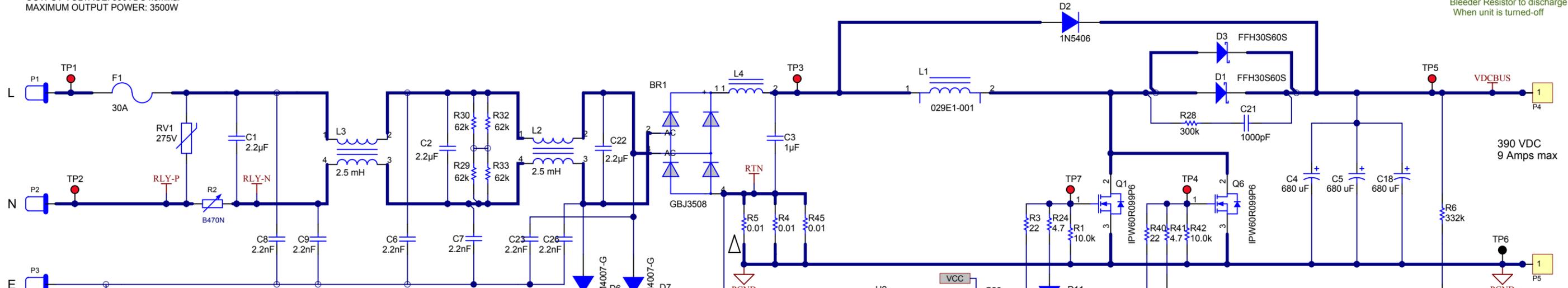
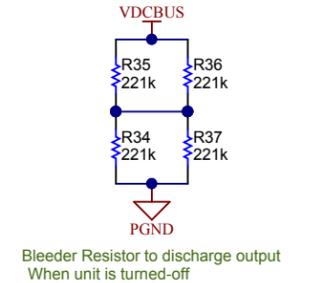
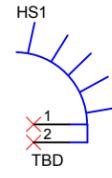
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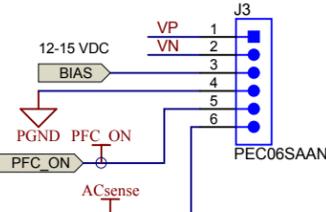
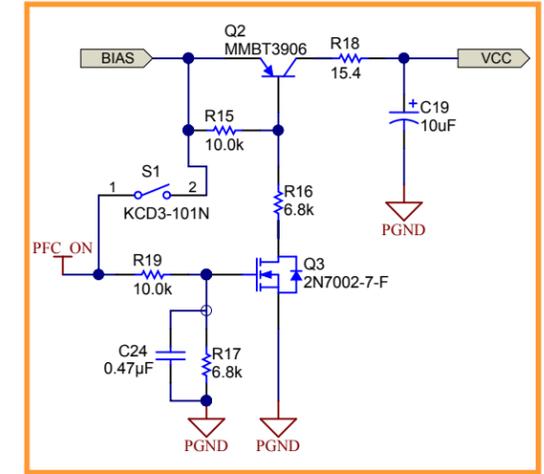
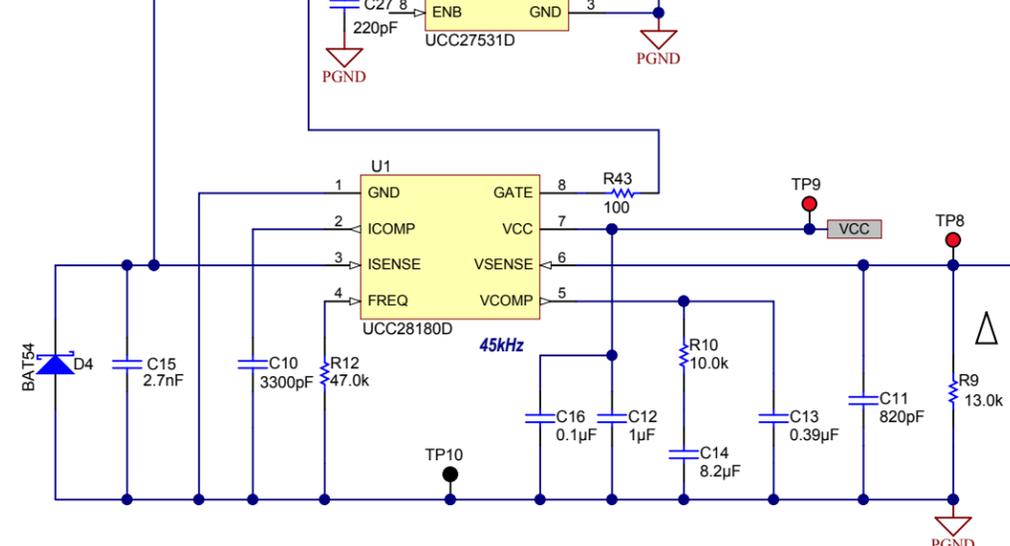
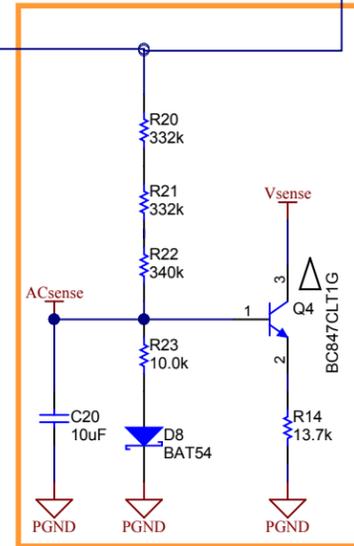
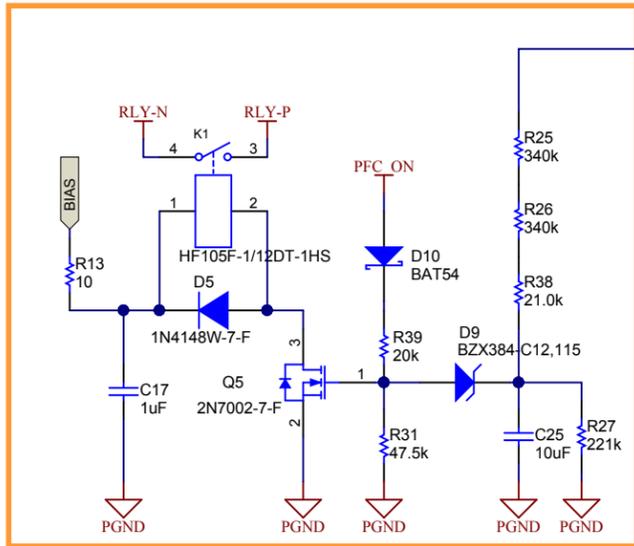
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NOTES:  
 LINE INPUT VOLTAGE: 156VRMS - 265VRMS, 47Hz - 63Hz  
 PEAK INPUT CURRENT: 30.0A  
 OUTPUT VOLTAGE: 390VDC nominal  
 MAXIMUM OUTPUT POWER: 3500W

Heatsink HS1 for BR1,  
 Q1,Q6,D1,D3



NOTES:  
 For UCC27531D Configuration:  
 Populate R44=0 Ohm  
 For UCC27524A Configuration  
 Do not populate R44



NOTES:  
 For MOSFET Configuration:  
 Bias Power input by 12 VDC  
 For IGBT Configuration:  
 Bias Power input by 15 VDC

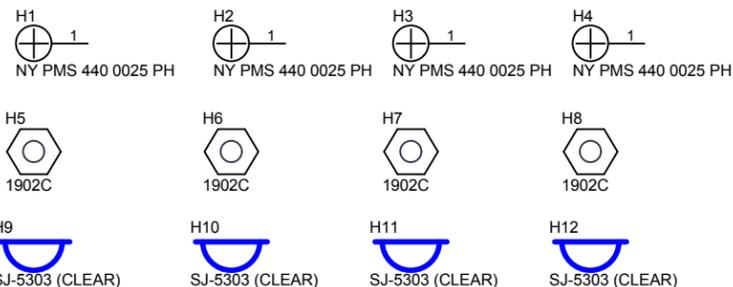
NOTES:  
 For Boost Follower Configuration:  
 Populate R14 and Q4 and set R9 = 21.5k  
 Populate R5 = 0.2 Ohm  
 For Fixed Output Boost PFC configuration  
 Do not populate R14 and Q4 and Set R9 = 13k  
 Do not populate R5

Recommended to use TIDA-00473 Design for Bias Supply Needs

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Orderable: TIDA-00779	Designed for: Public Release	Mod. Date: 1/9/2016
TID #: TIDA-00779	Project Title: High Efficiency and Cost Competitive 3k5 PFC	
Number: TIDA-00779	Rev: E1	Sheet Title:
SVN Rev: Version control disabled	Assembly Variant: [No Variations]	
Drawn By: Jason Tao	File: TIDA-00779-RevB01.SchDoc	Sheet: 2 of 3
Engineer: Jason Tao	Contact: http://www.ti.com/support	Size: B

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PCB Number: TIDA-00779  
PCB Rev: E1

PCB  
LOGO  
Pb-Free Symbol

**A** You should delete the nylon screws/standoffs and/or the bumpons as needed for your design (or substitute other parts from Hardware.IntLib). Bumpons 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.

Label Table	
Variant	Label Text
001	TIDA-00779 Rev A
002	TIDA-00779 Rev B

**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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TID #: <a href="#">TIDA-00779</a>	Project Title: <a href="#">High Efficiency and Cost Competitive 3k5 PFC</a>	
Number: <a href="#">TIDA-00779</a>	Rev: <a href="#">E1</a>	Sheet: 3 of 3
SVN Rev: <a href="#">Version control disabled</a>	Assembly Variant: <a href="#">[No Variations]</a>	Sheet: 3 of 3
Drawn By: <a href="#">Jason Tao</a>	File: <a href="#">TID_Hardware_RevB.SchDoc</a>	Size: B
Engineer: <a href="#">Jason Tao</a>	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	



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