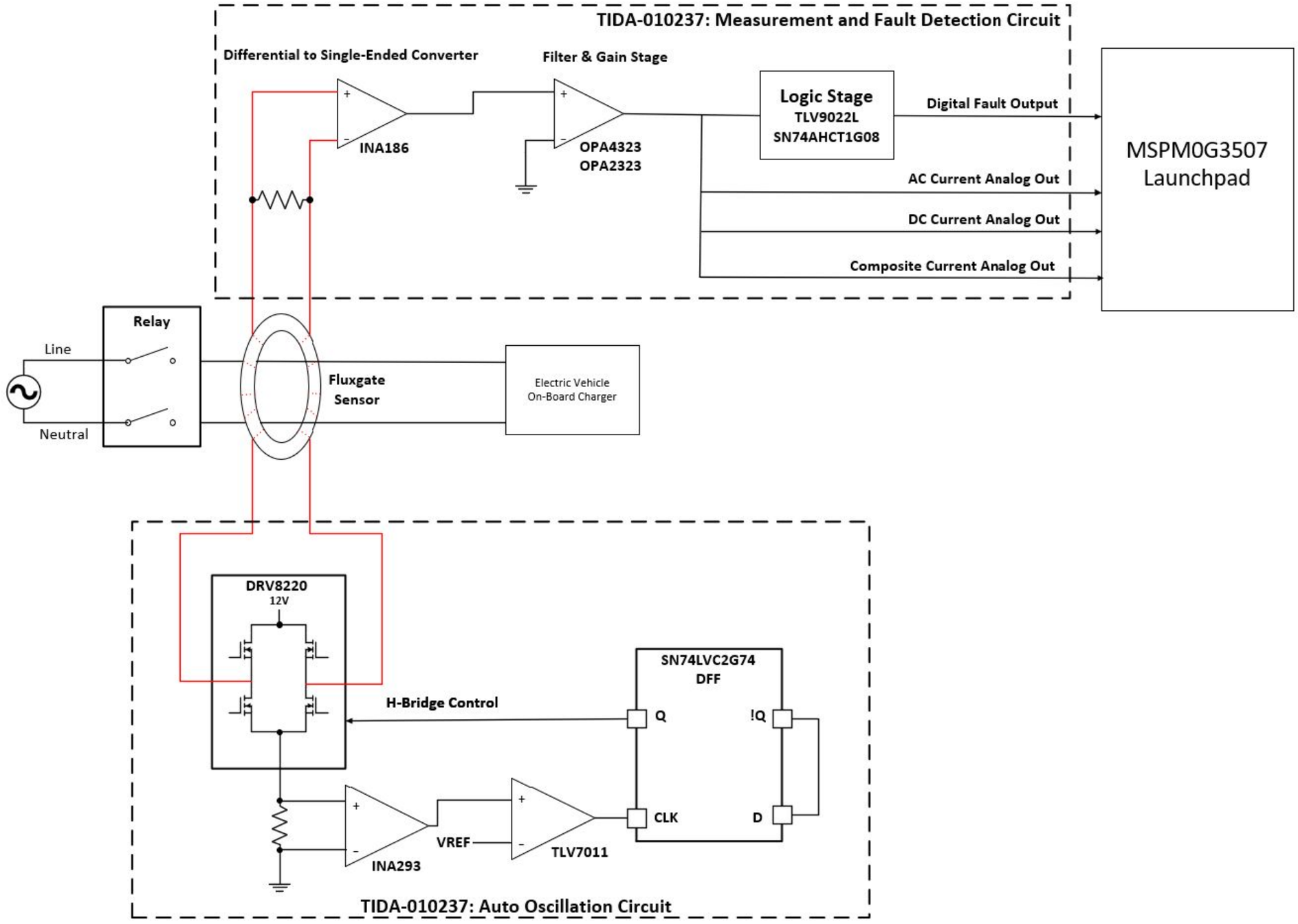


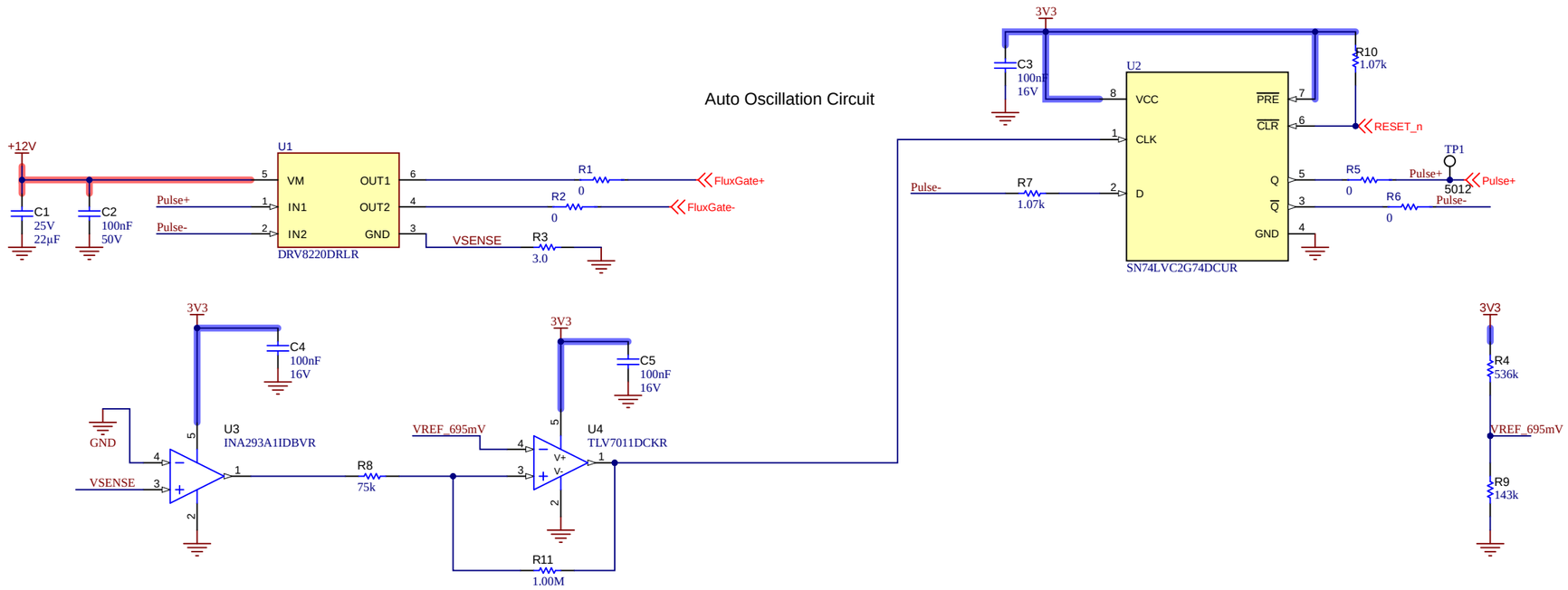
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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 10/8/2026
TID #: TIDA-010237	Project Title: AC and DC Current Fault Detection Reference Desi	
Number: TIDA-010237 Rev: E3	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 1 of 6
Drawn By:	File: TIDA-010237_Block_Diagram.SchDoc	Size: B
Engineer: Nathan Nohr	Contact: http://www.ti.com/support	

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Auto Oscillation Circuit



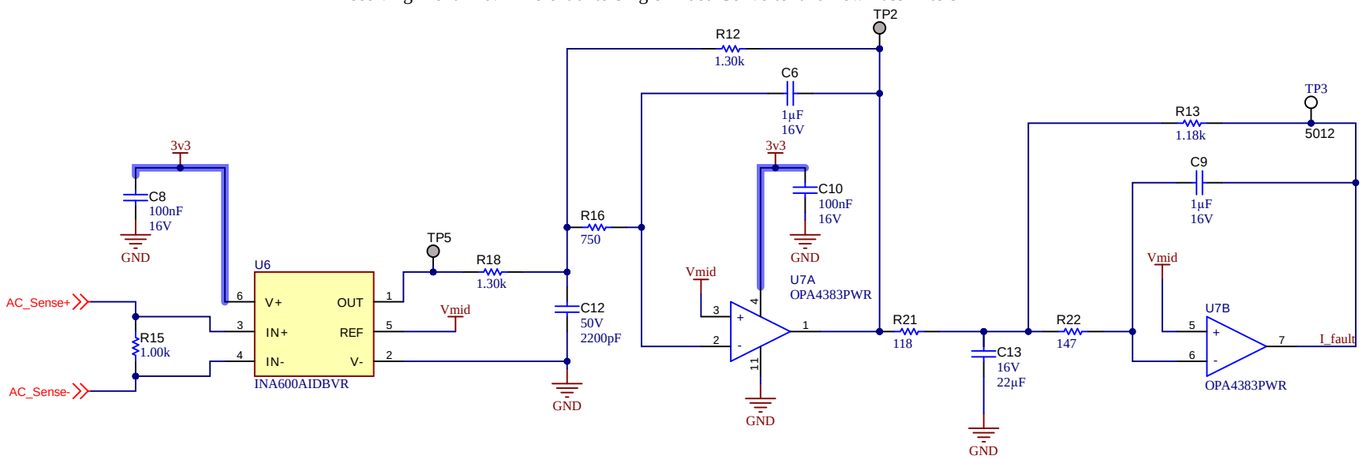
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Number: TIDA-010237	Rev: E3	Sheet Title:	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 2 of 6
Drawn By:		File: TIDA-010237_Driver_Circuit.SchDoc	Size: B
Engineer: Nathan Nohr		Contact: http://www.ti.com/support	

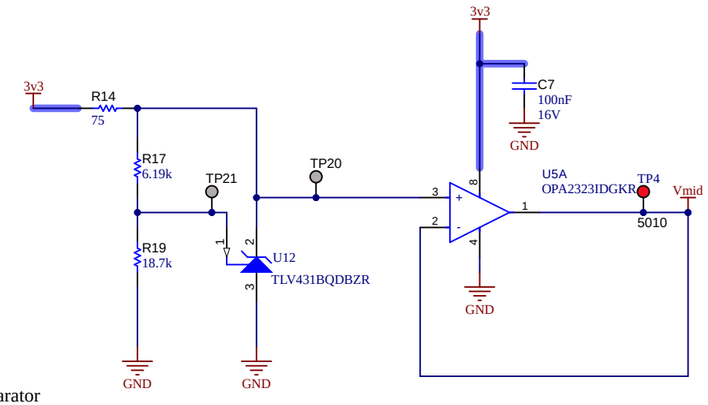
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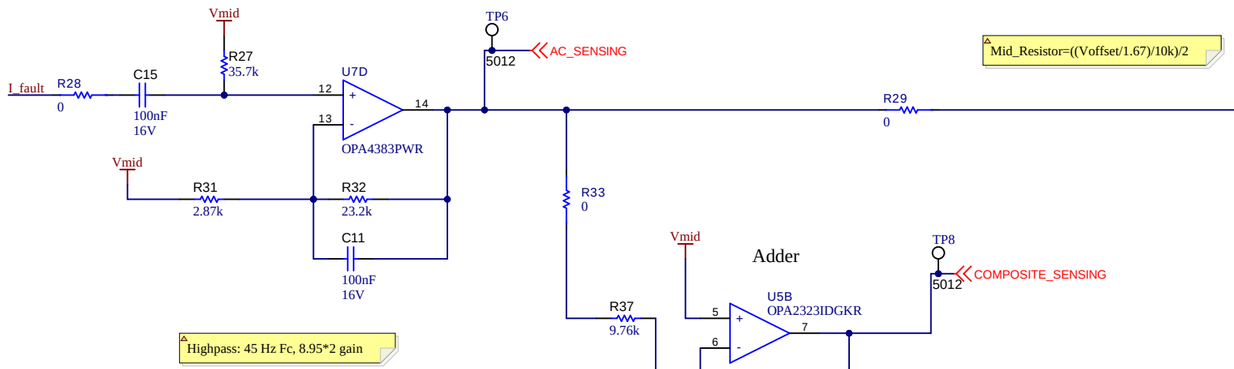
Receiving Front End: Differential to Single Ended Converter and Low-Pass Filters



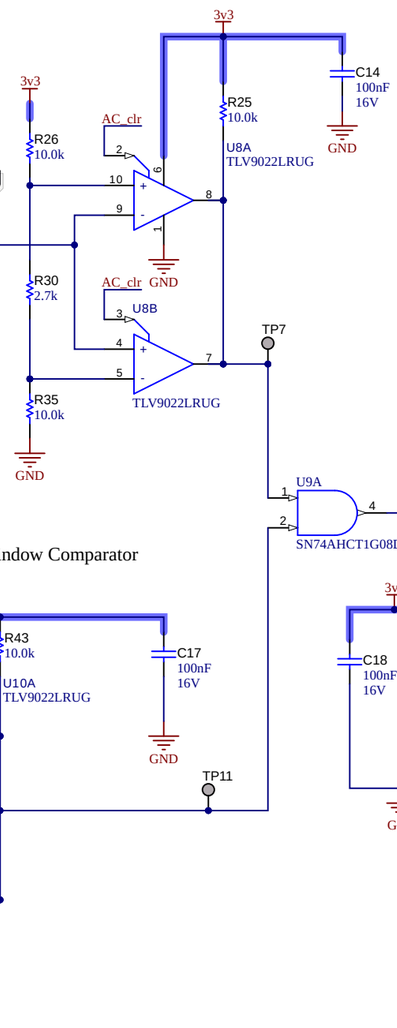
Mid-Supply Buffer



High-Pass Filter and Gain Stage

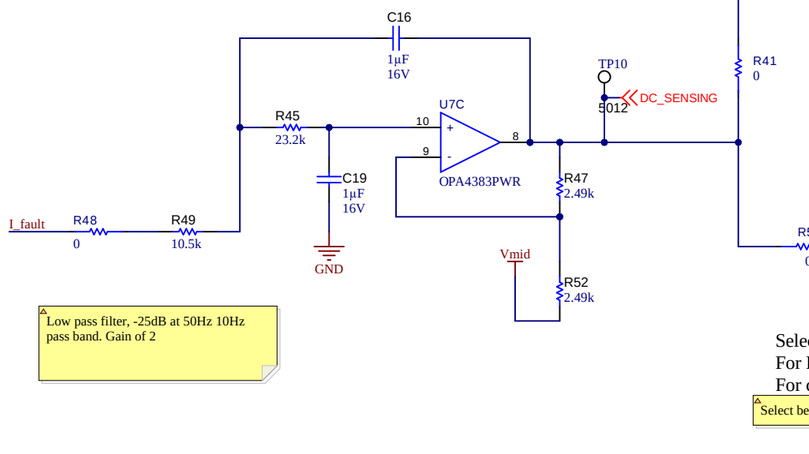


AC Sense Window Comparator



Adder

Low-Pass Filter and Gain Stage

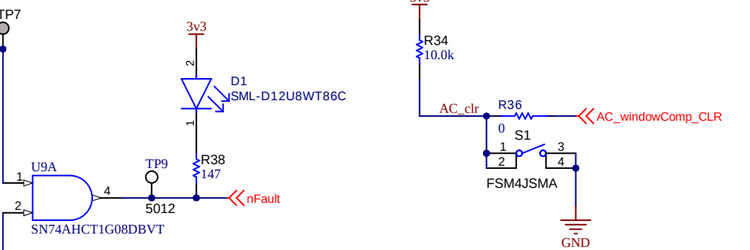


DC/Composite Sense Window Comparator

Selection Connector:
For DC sensing, connect pins 1 and 2
For composite sensing, connect pins 2 and 3

Select between sensing DC only or the composite (18*AC + DC)

Mid_Resistor=((Voffset/1.67)/10k)/2



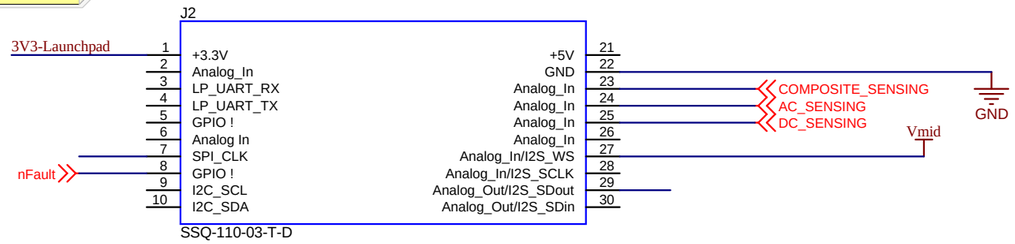
Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 10/8/2026
TID #: TIDA-010237	Project Title: AC and DC Current Fault Detection Reference Desi	
Number: TIDA-010237 Rev: E3	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 3 of 6
Drawn By:	File: TIDA-010237_Receiver_Circuit.SchDoc	Size: B
Engineer: Nathan Nohr	Contact: http://www.ti.com/support	

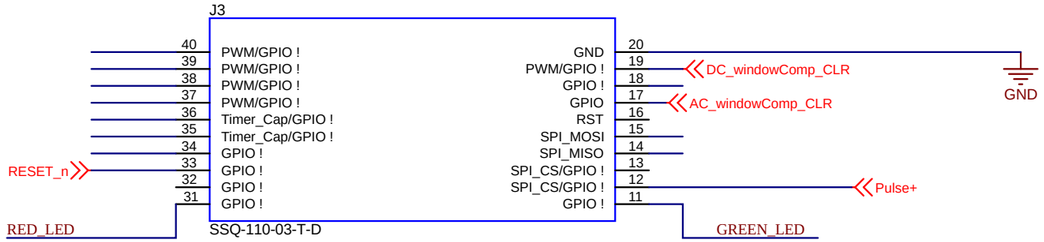
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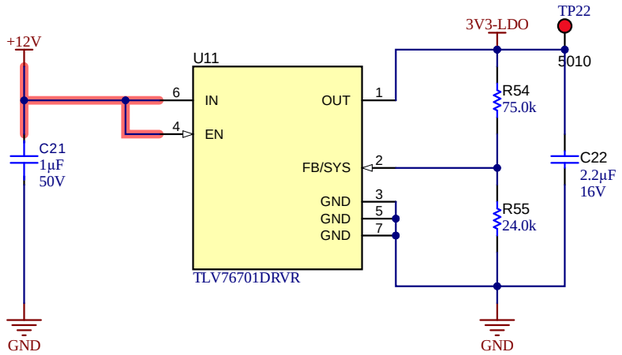
BoosterPack Connectors

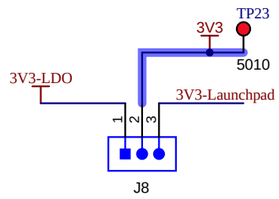
Remove diode and/or add jumper





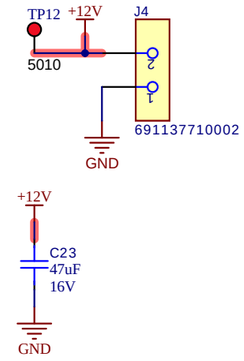
3.3V LDO



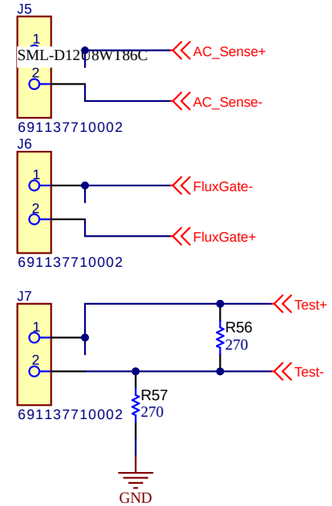


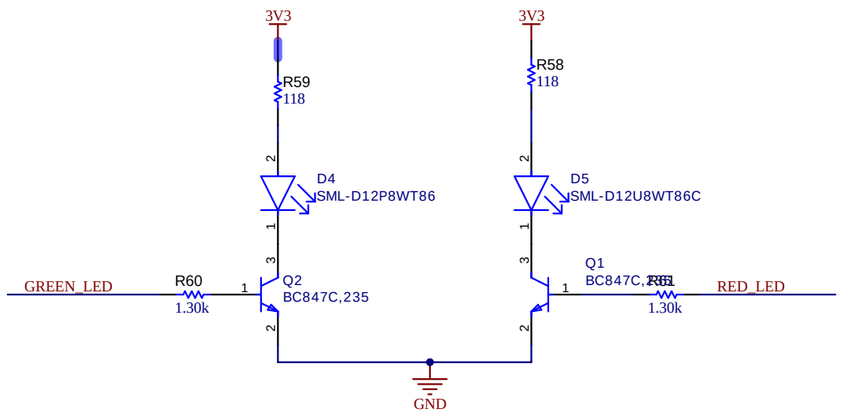
3V3 Selection Connector

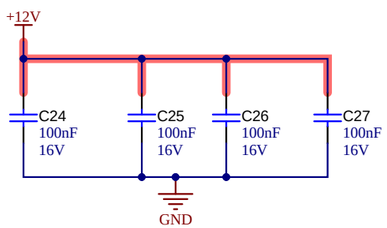
12 Volt Connector

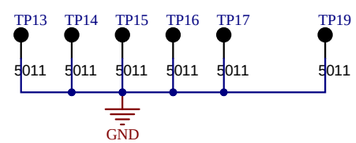


Core Terminal









FID1 FID2 FID3

PCB Number: TIDA-010237
PCB Rev: E3

PCB LOGO
FCC disclaimer

PCB LOGO
WEEE logo

CE Mark

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

ZZ4
Label Assembly Note
This Assembly Note is for PCB labels only

ZZ1
Assembly Note
These assemblies are ESD sensitive, ESD precautions shall be observed.

ZZ2
Assembly Note
These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

ZZ3
Assembly Note
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 3/5/2026
TID #: TIDA-010237	Project Title: AC and DC Current Fault Detection Reference Desi	
Number: TIDA-010237 Rev: E3	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 6 of 6
Drawn By:	File: TIDA-010237_Hardware.SchDoc	Size: B
Engineer: Nathan Nohr	Contact: http://www.ti.com/support	

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