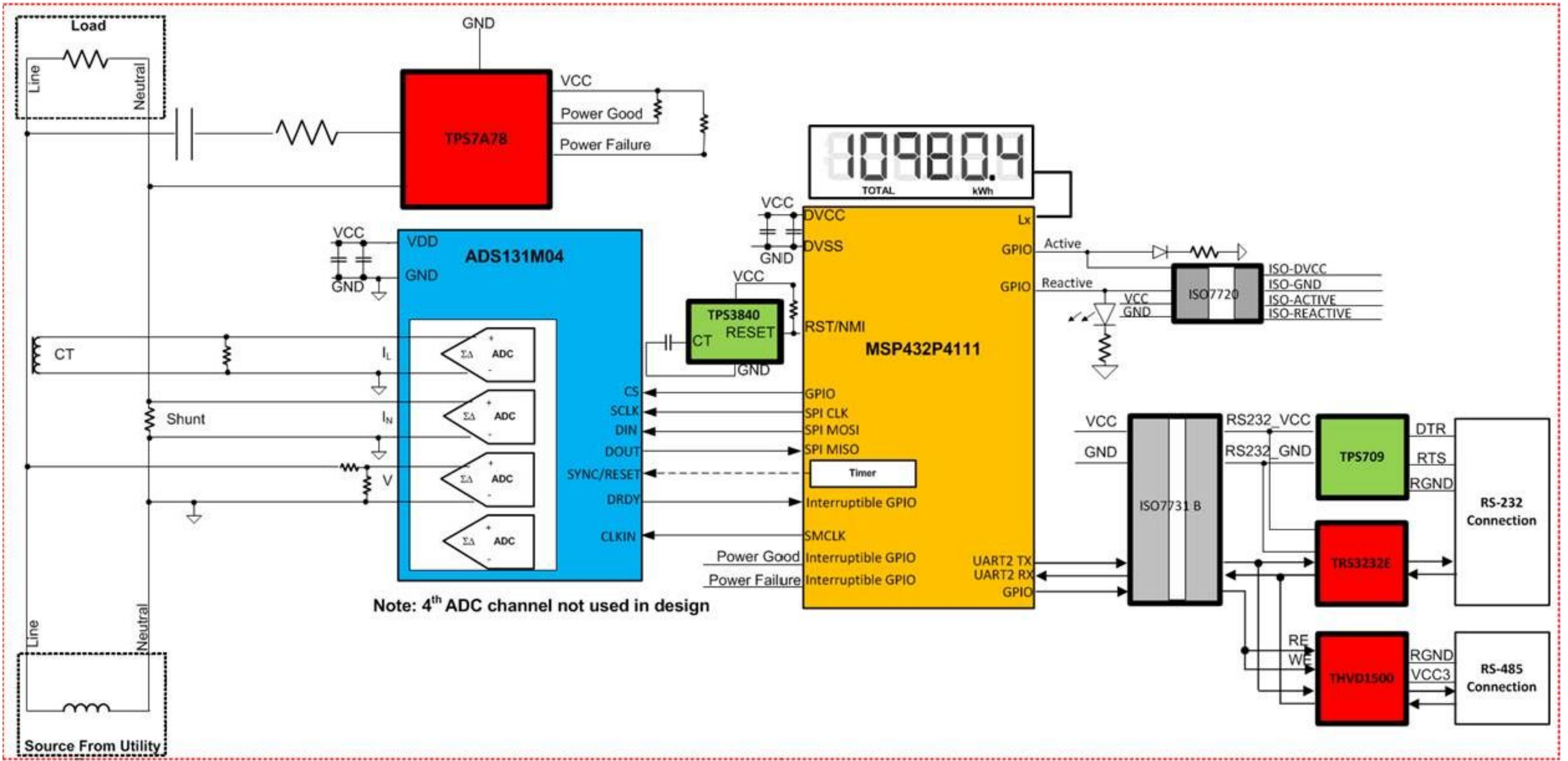



Revision History

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

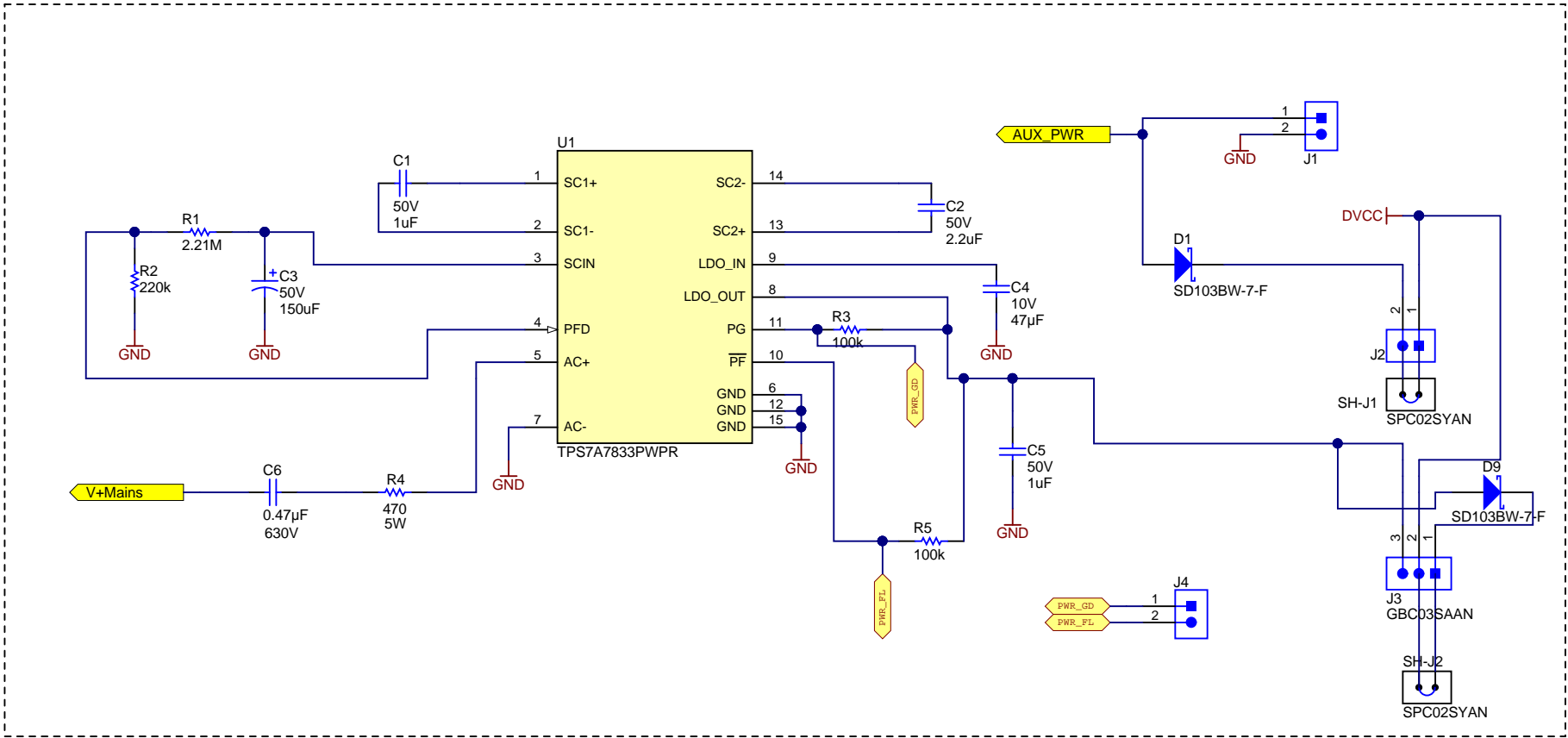


Note: 4th ADC channel not used in design

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Orderable: N/A	Designed for: Public Release	Mod. Date: 4/12/2019	
TID #: TIDA-010036	Project Title: 1-phase shunt e-meter reference design using stand	Sheet Title: Block Diagram	
Number: TIDA-010036 Rev: E1	Assembly Variant: 001	Sheet: 1 of 7	
Drawn By: Mekre Mesganaw	File: CoverSheet.SchDoc	Size: B	
Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support		

Cap-drop Power supply



A

A

B

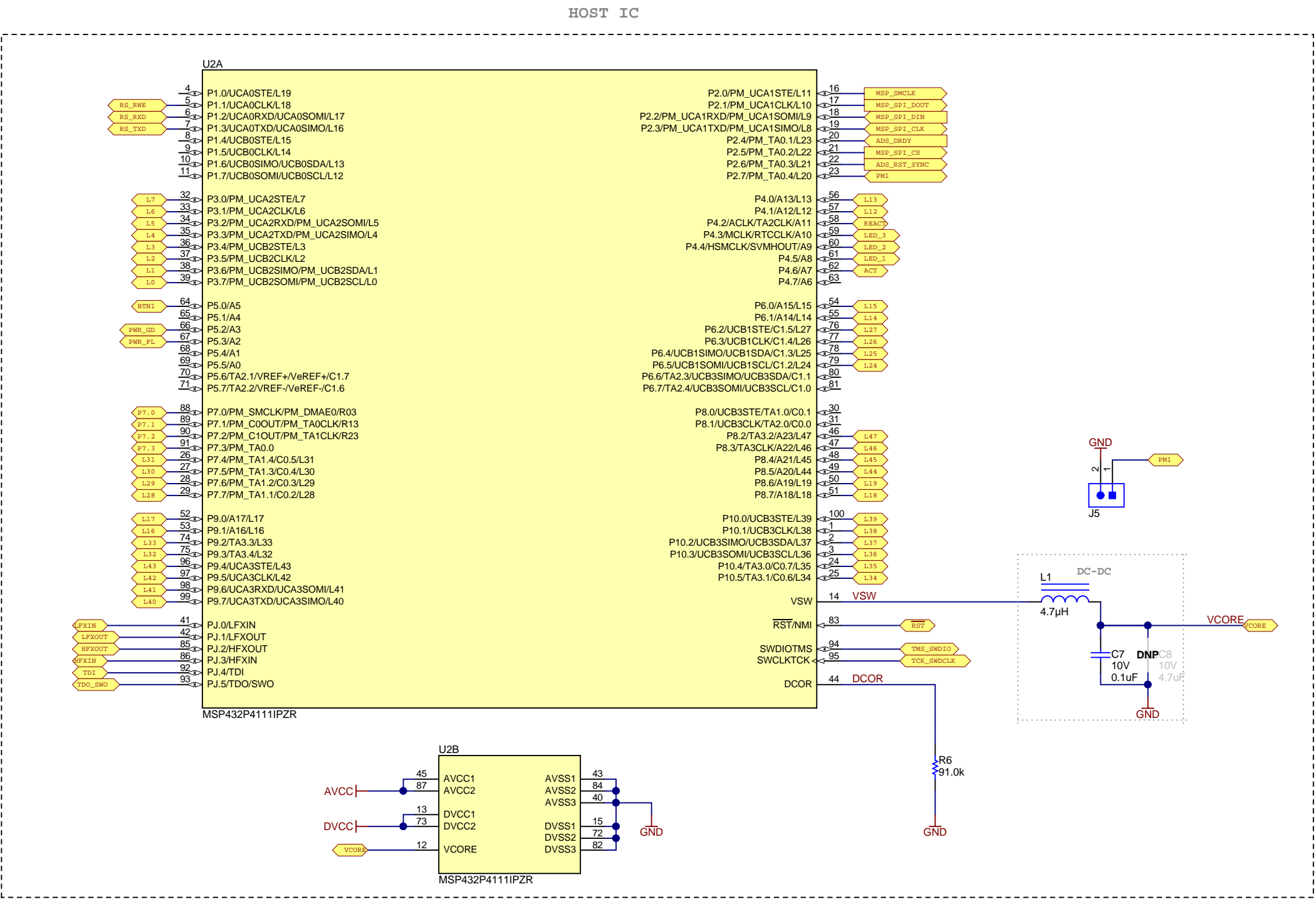
B

C

C

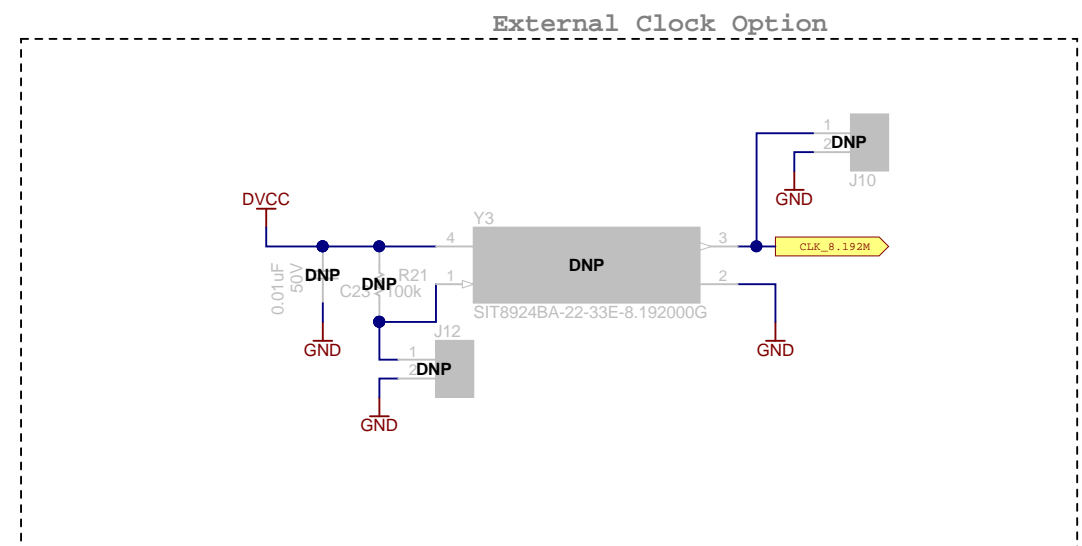
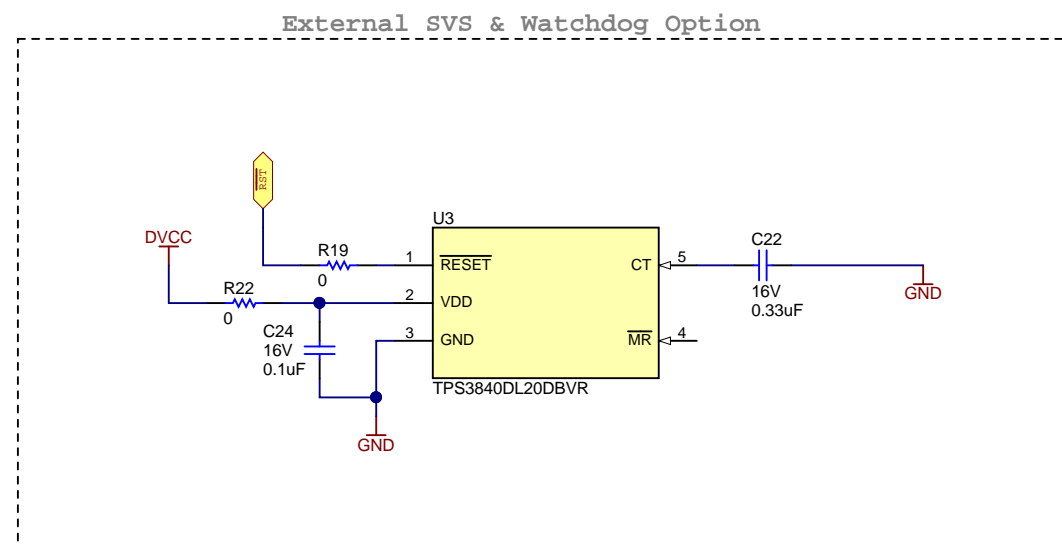
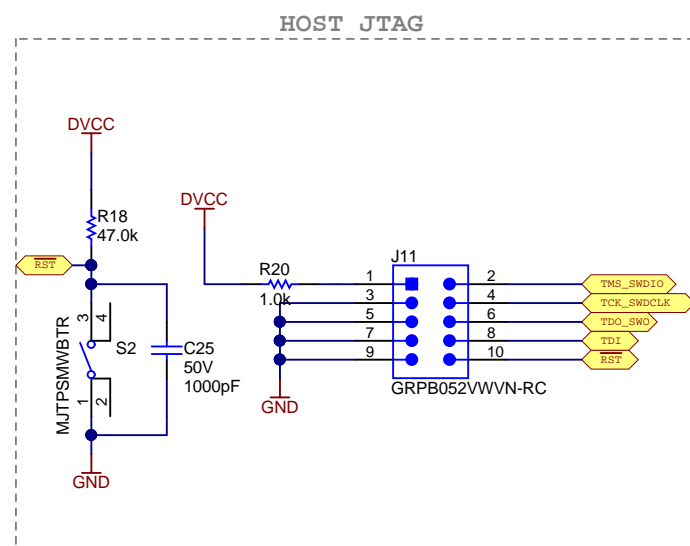
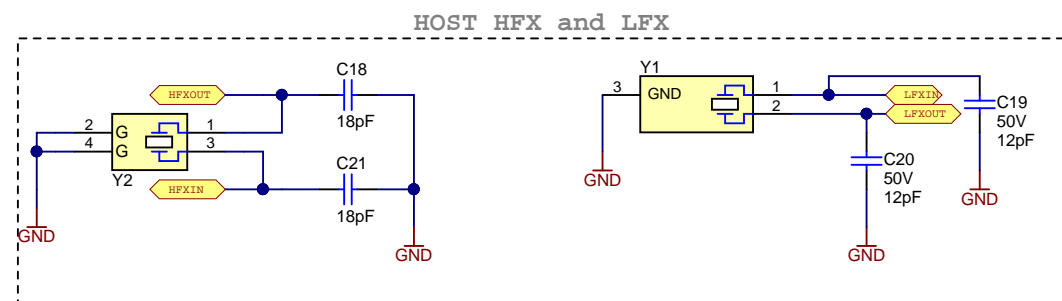
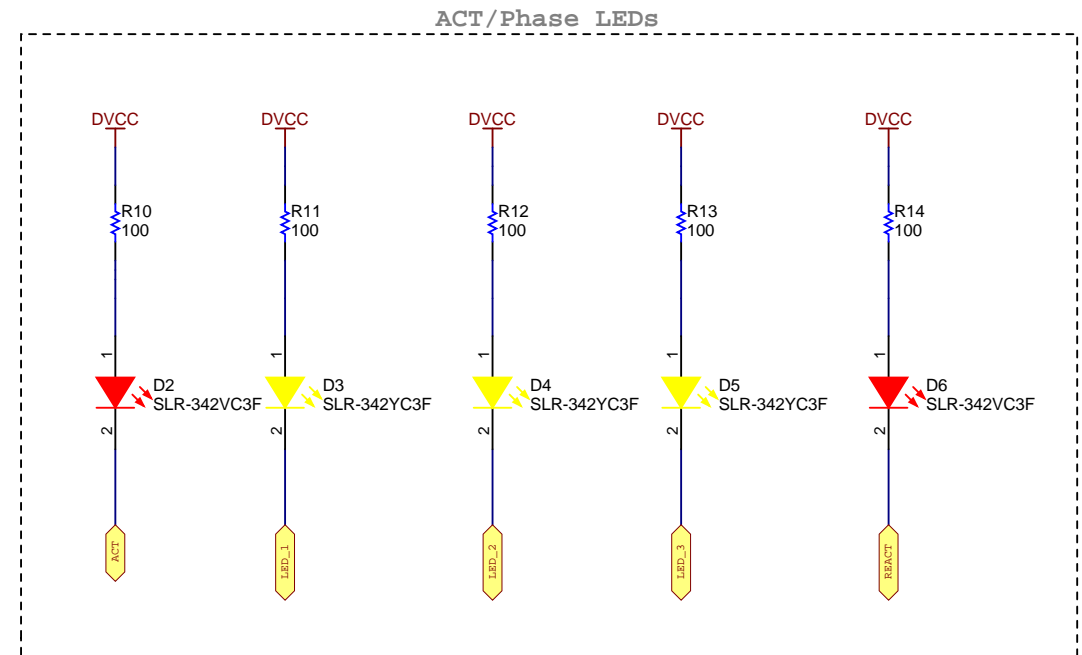
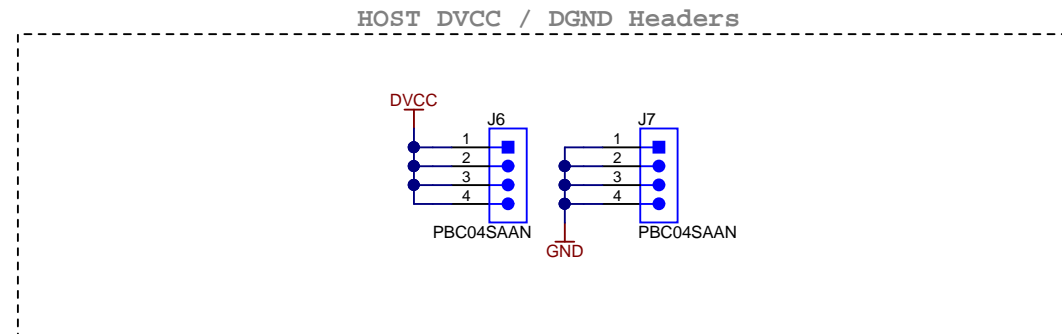
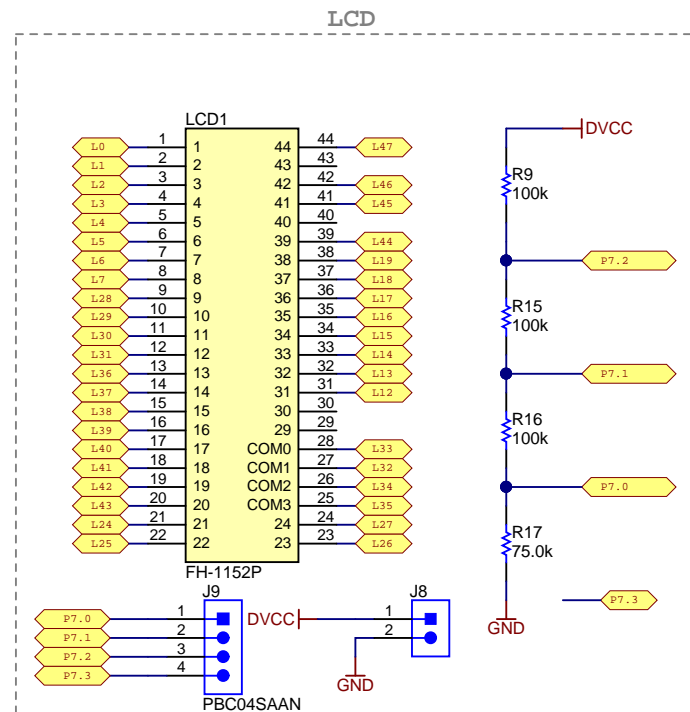
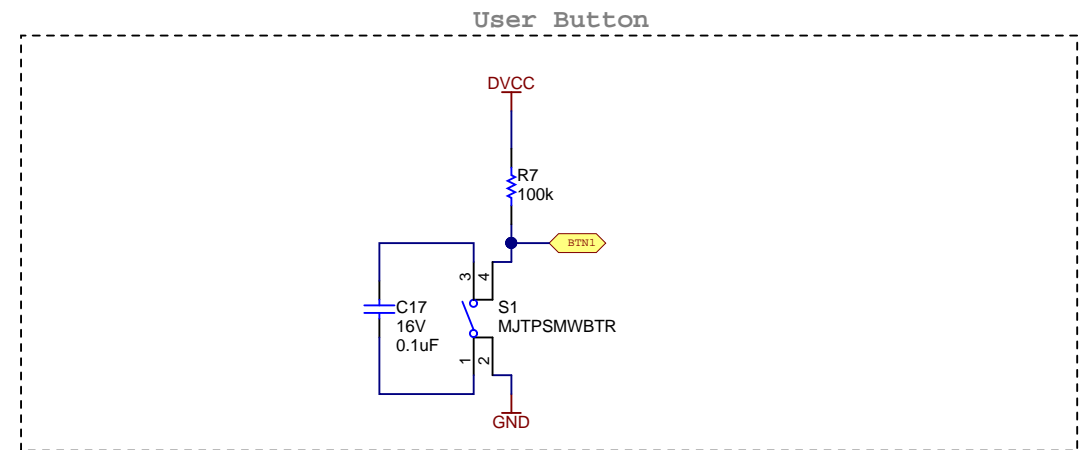
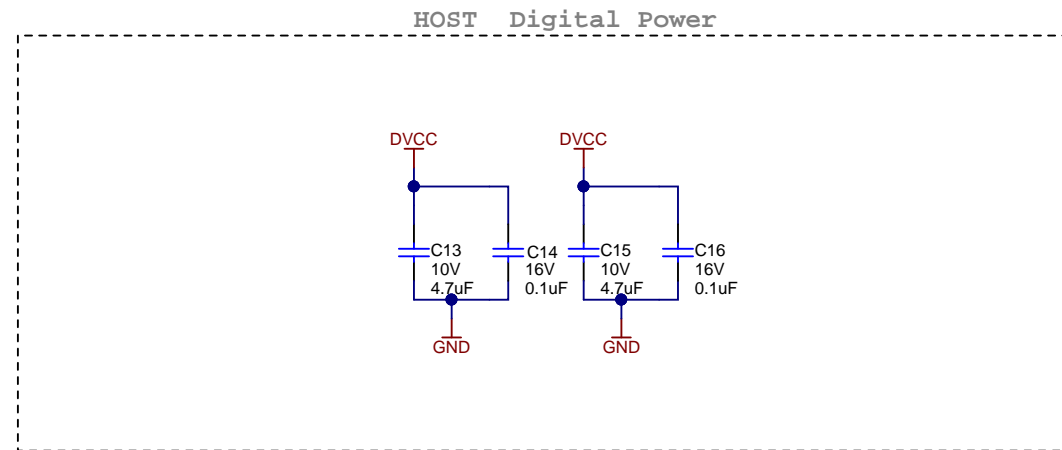
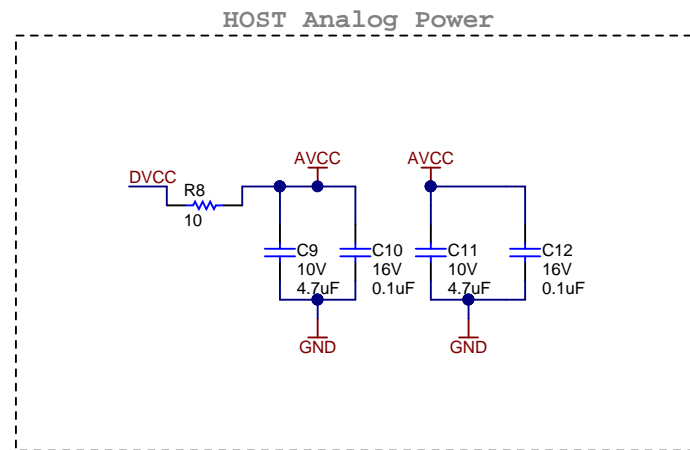
D

D

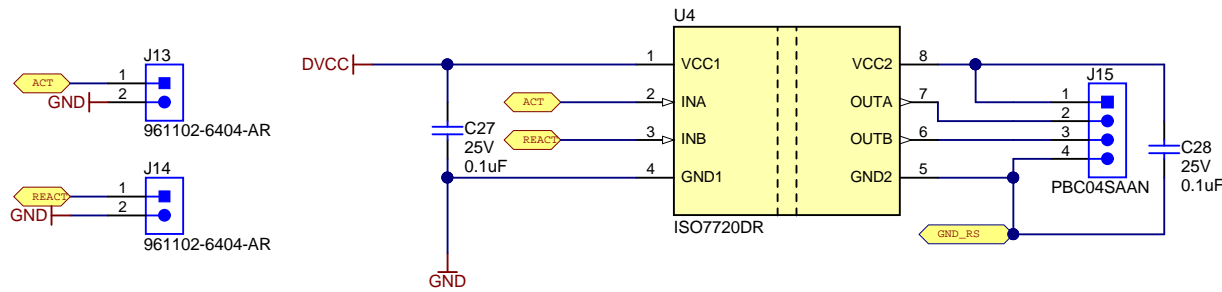


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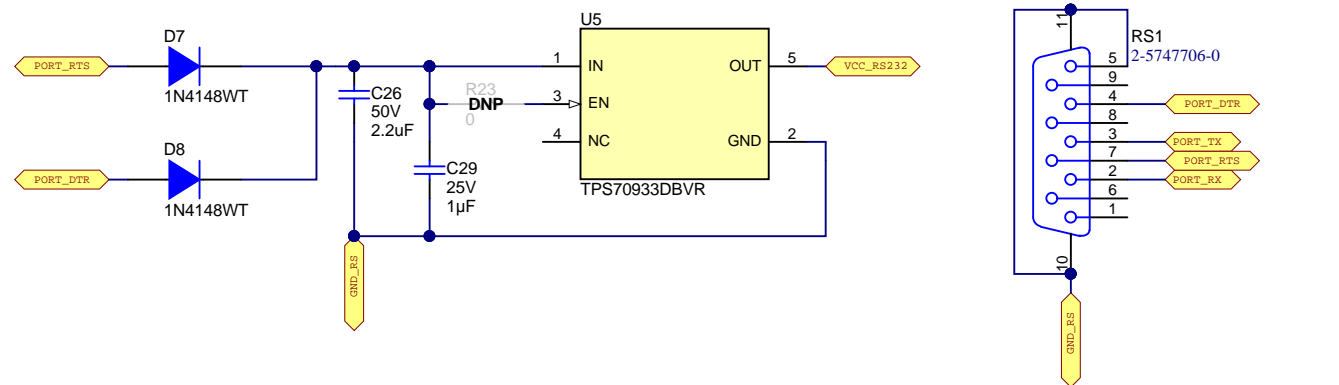
Orderable: N/A	Designed for: Public Release	Mod. Date: 10/27/2018
TID #: TIDA-010036	Project Title: 1-phase shunt e-meter reference design using stand	
Number: TIDA-010036	Rev: E1	Sheet Title: MSP432 IC
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 3 of 7
Drawn By: Mekre Mesganaw	File: Host IC.SchDoc	Size: B
Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support	



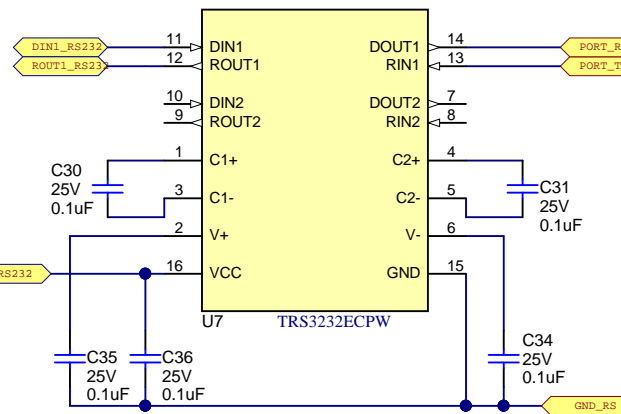
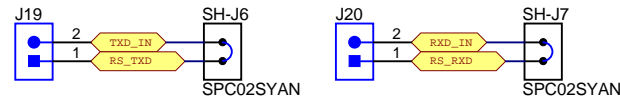
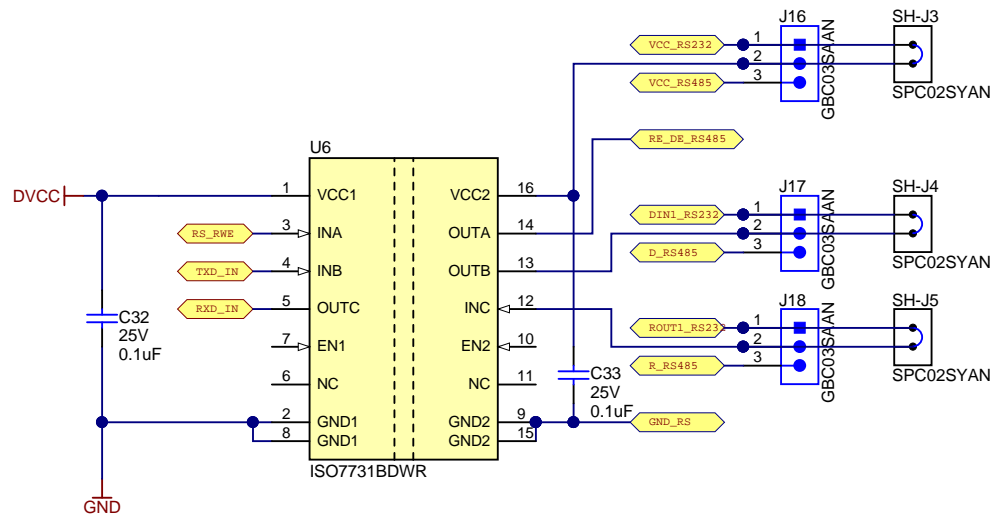
Act / React Pulses Isoaltion



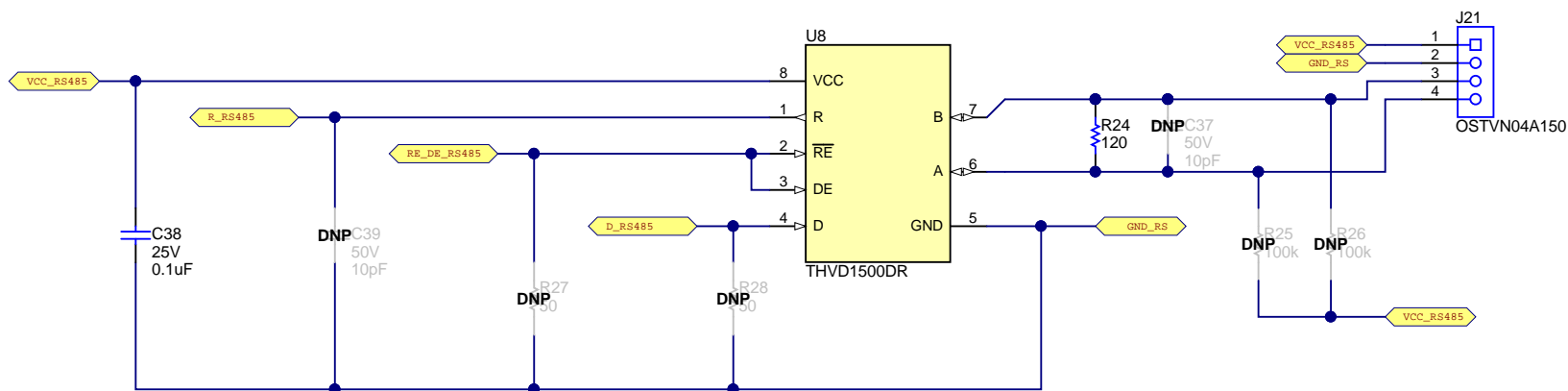
RS232 Communication



RS-232/RS-485 Isolation



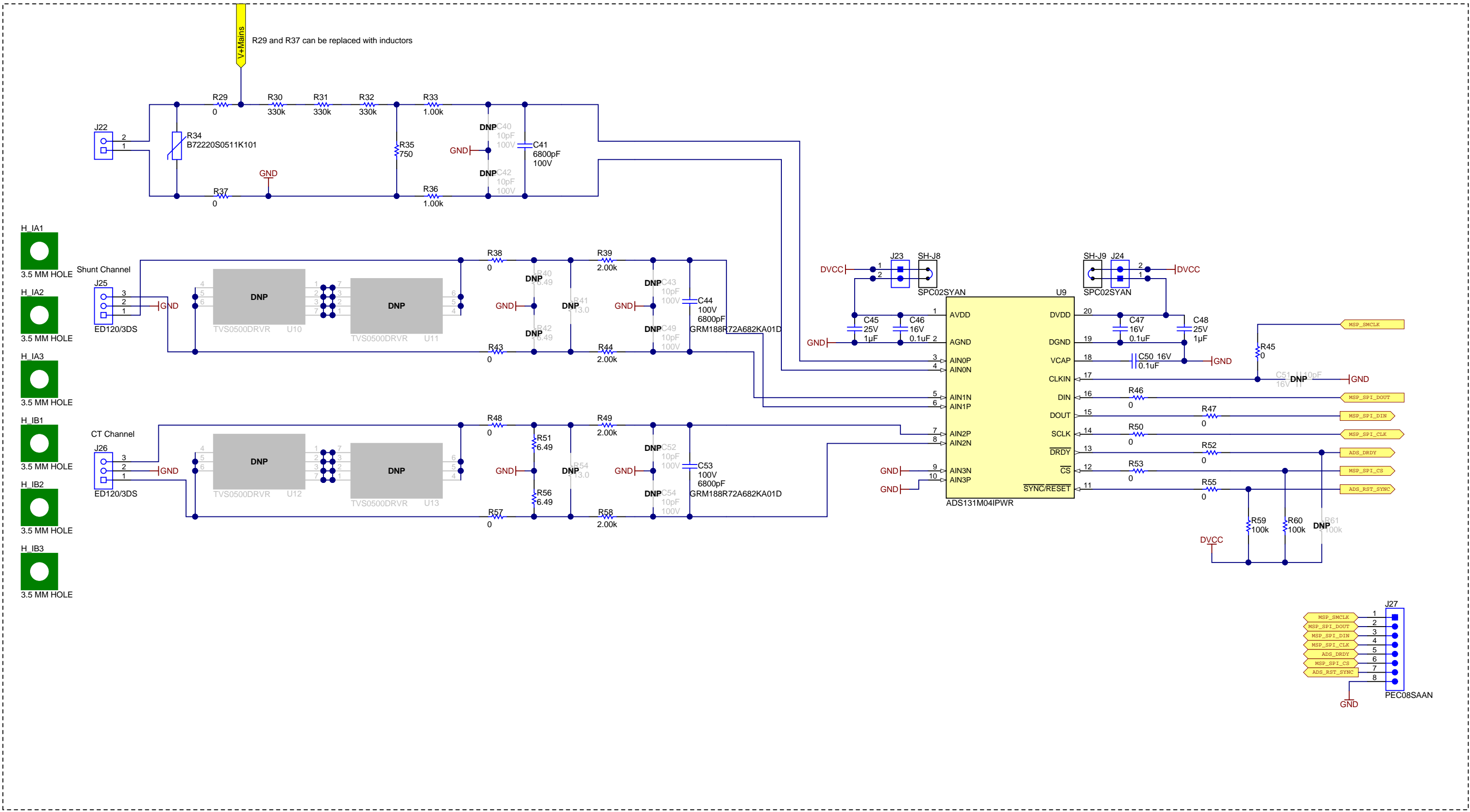
RS485 Communication



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Orderable: N/A	Designed for: Public Release	Mod. Date: 2/19/2019	
TID #: TIDA-010036	Project Title: 1-phase shunt e-meter reference design using stand	Sheet Title: Isolated RS232 and RS485 and Isolated Pulses	
Number: TIDA-010036 Rev: E1	SVN Rev: Version control disabled	Assembly Variant: 001	
Drawn By: Mekre Mesganaw	File: Host Isolation.SchDoc	Size: B	
Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support		

METROLOGY



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Orderable: N/A	Designed for: Public Release	Mod. Date: 4/10/2019
TID #: TIDA-010036	Project Title: 1-phase shunt e-meter reference design using stand	
Number: TIDA-010036	Rev: E1	Sheet Title: Voltage and Current Front End Circuitry
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 6 of 7
Drawn By: Mekre Mesganaw	File: Metrology.SchDoc	Size: B
Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support	



PCB Number: TIDA-010036

PCB Rev: E1

PCB

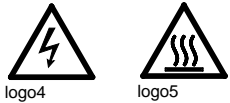
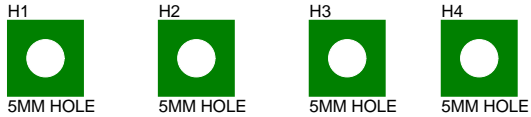
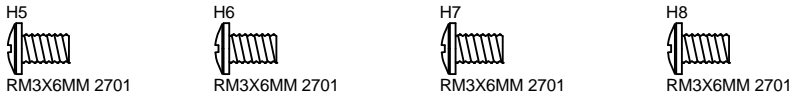
LOGO

Pb-Free Symbol

PCB

LOGO

FCC disclaimer



LBL1

PCB Label

THT-14-423-10

Size: 0.65" x 0.20 "

ZZ1

Label Assembly Note

This Assembly Note is for PCB labels only

Variant/Label Table	
Variant	Label Text
001	Default Variant

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.