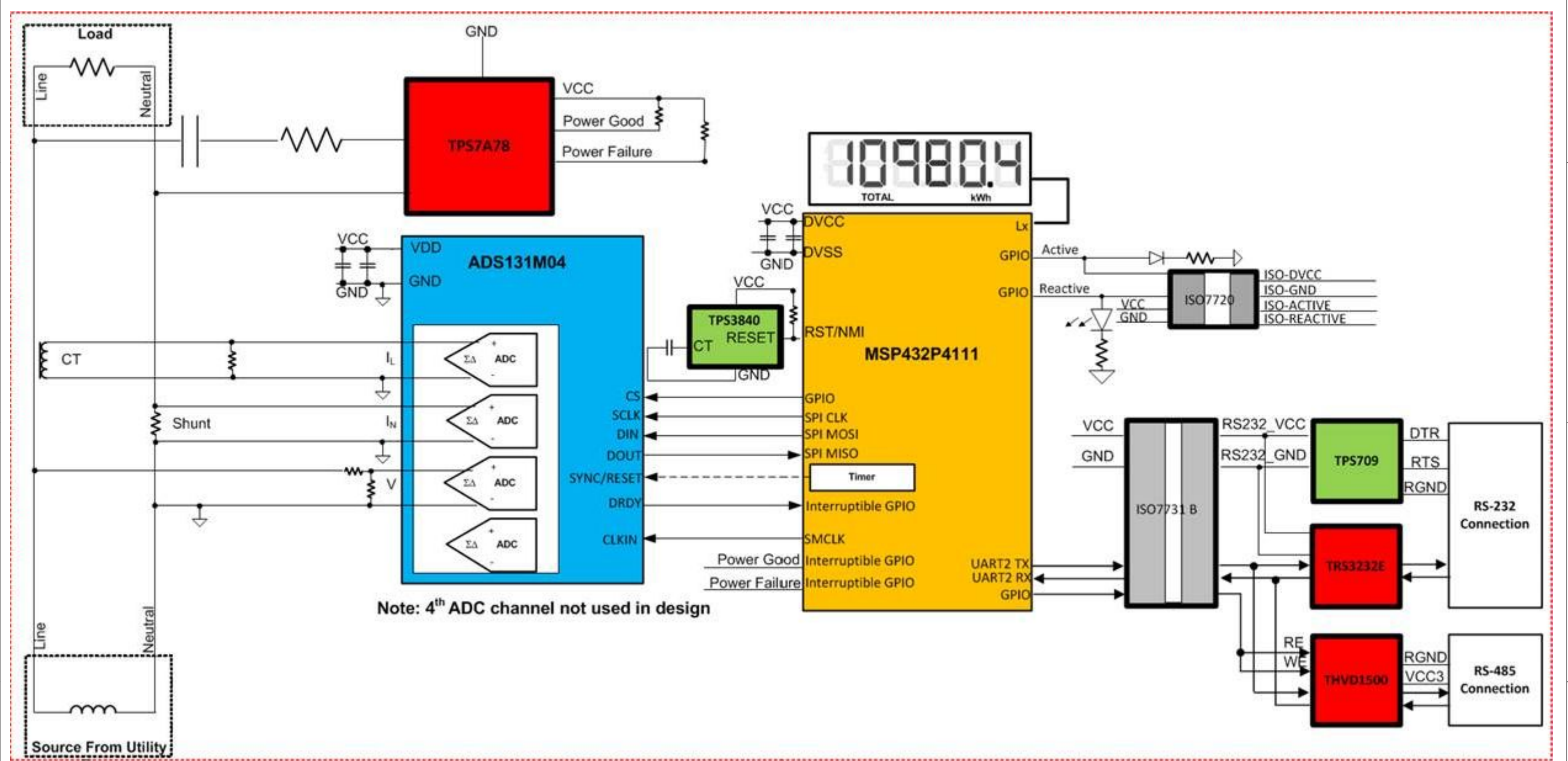
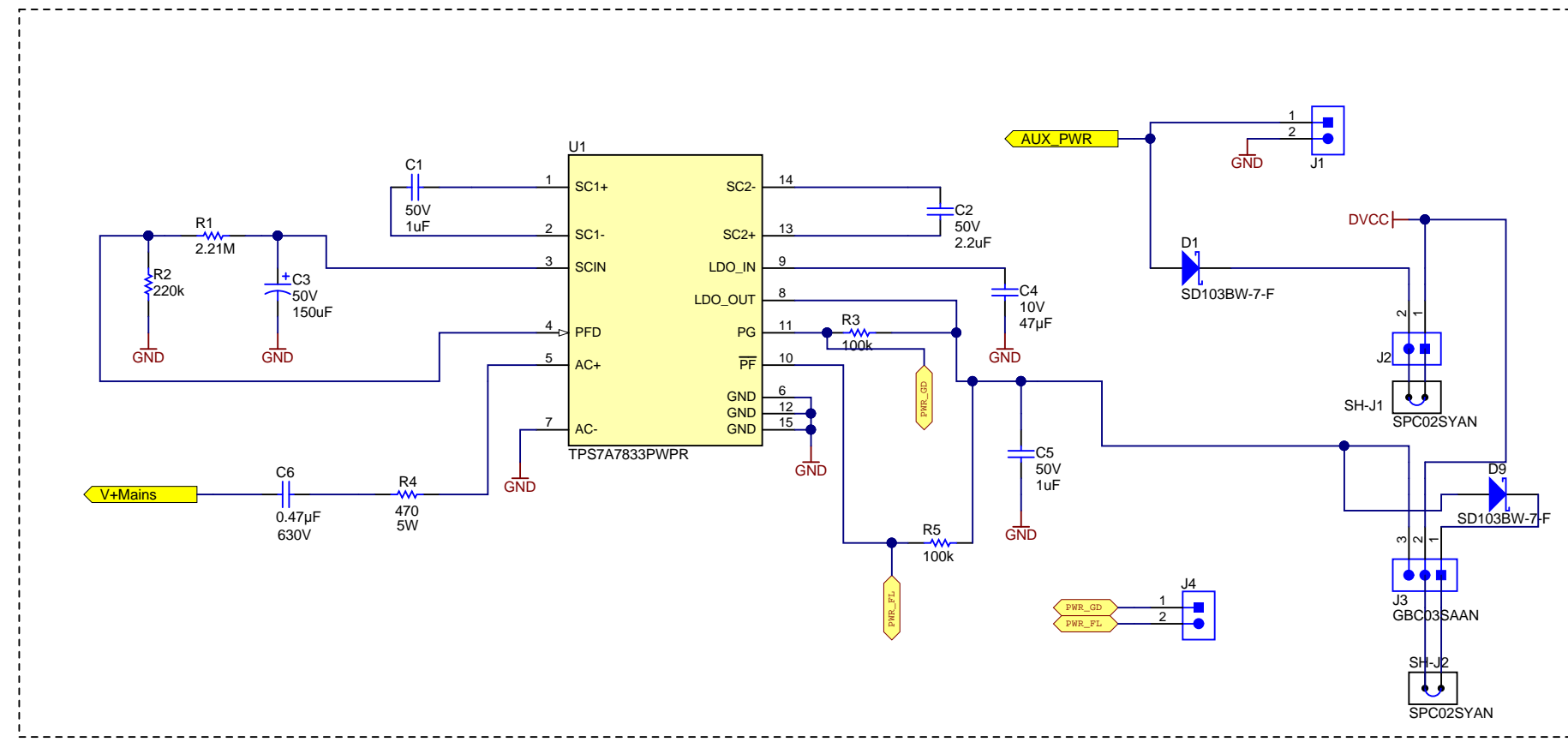


Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A



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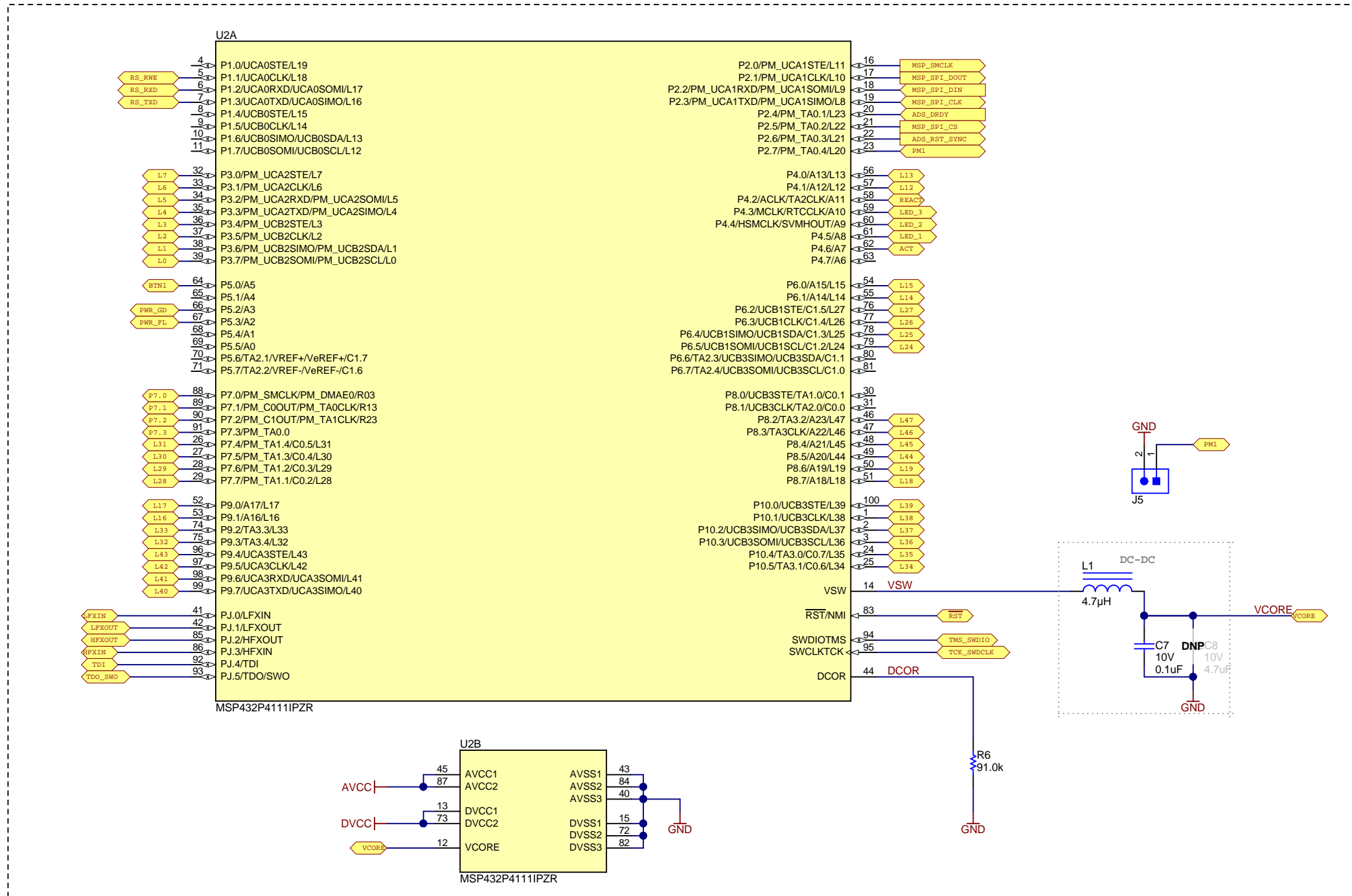
Cap-drop Power supply



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TID #: TIDA-010036	Project Title: 1-phase shunt e-meter reference design using stand		
Number: TIDA-010036 Rev: E1	Sheet Title: Power Supply		
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 2 of 7	
Drawn By: Mekre Mesganaw	File: Cap-Drop Power Supply.SchDoc	Size: B	
Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support		

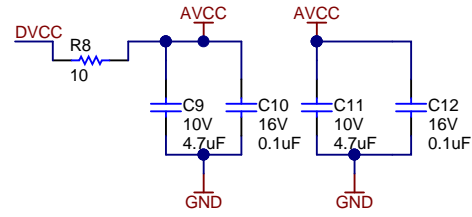
HOST IC



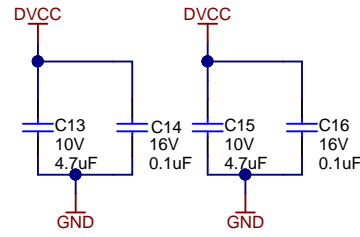
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Orderable: N/A	Designed for: Public Release	Mod. Date: 10/27/2018	TEXAS INSTRUMENTS
TID #: TIDA-010036	Project Title: 1-phase shunt e-meter reference design using stand	Sheet Title: MSP432 IC	
Number: TIDA-010036	Rev: E1	Assembly Variant: 001	Sheet: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

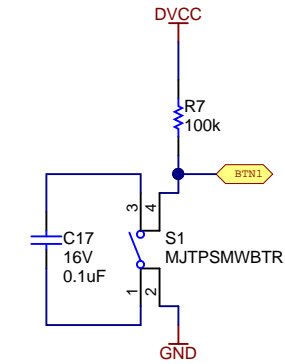
HOST Analog Power



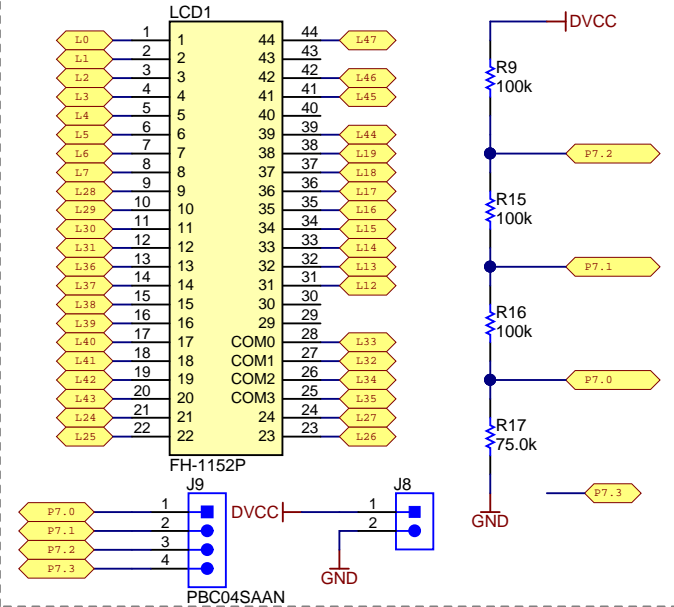
HOST Digital Power



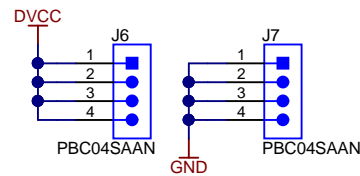
User Button



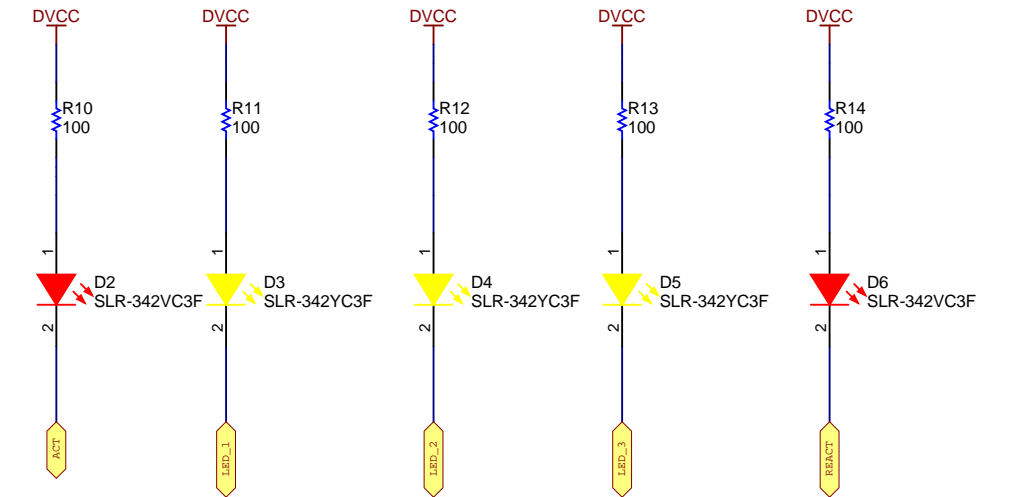
LCD



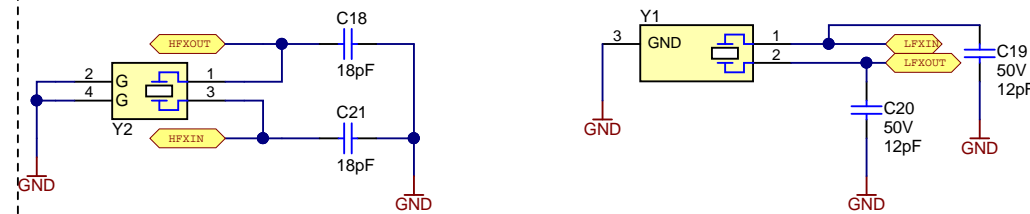
HOST DVCC / DGND Headers



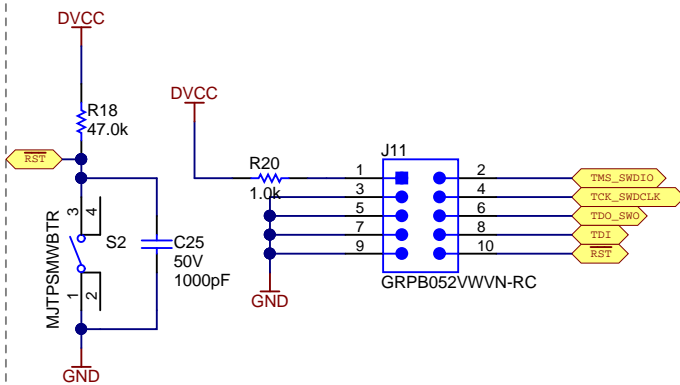
ACT/Phase LEDs



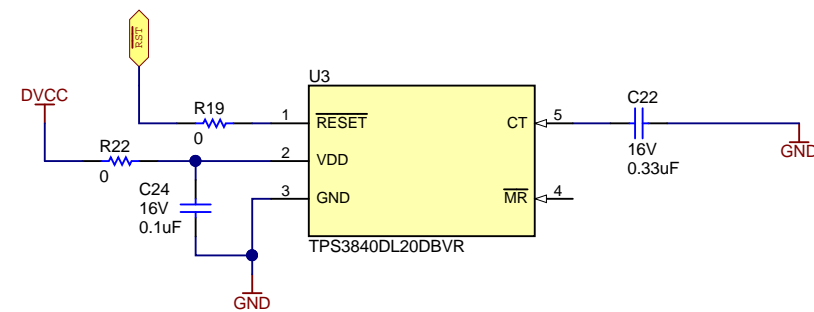
HOST HFX and LFX



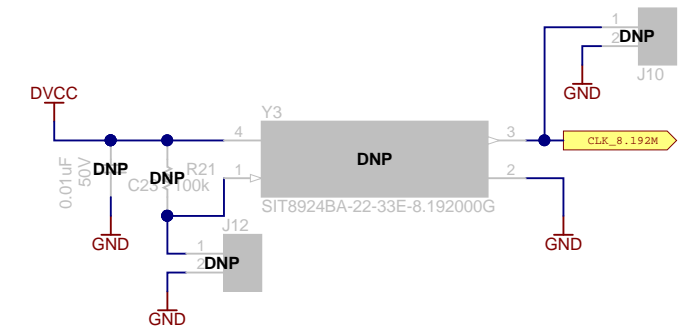
HOST JTAG



External SVS & Watchdog Option



External Clock Option

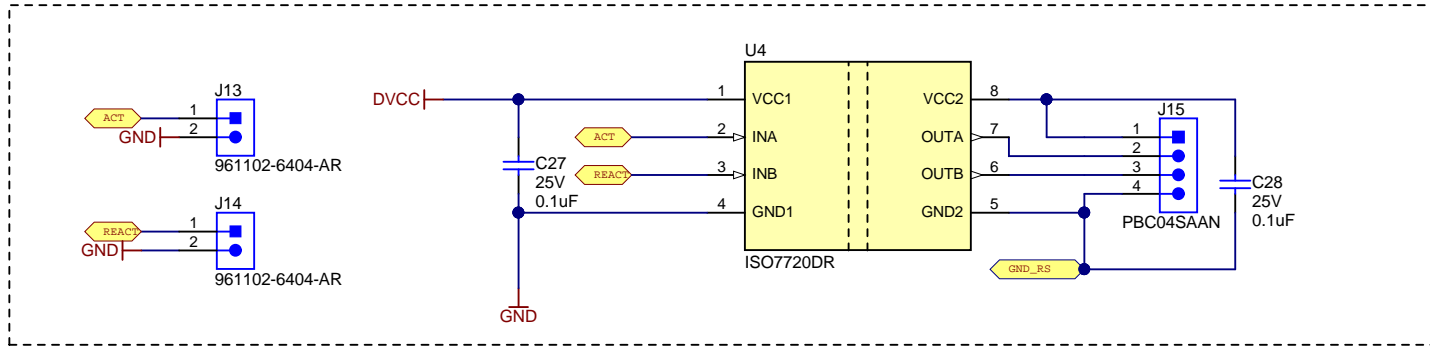


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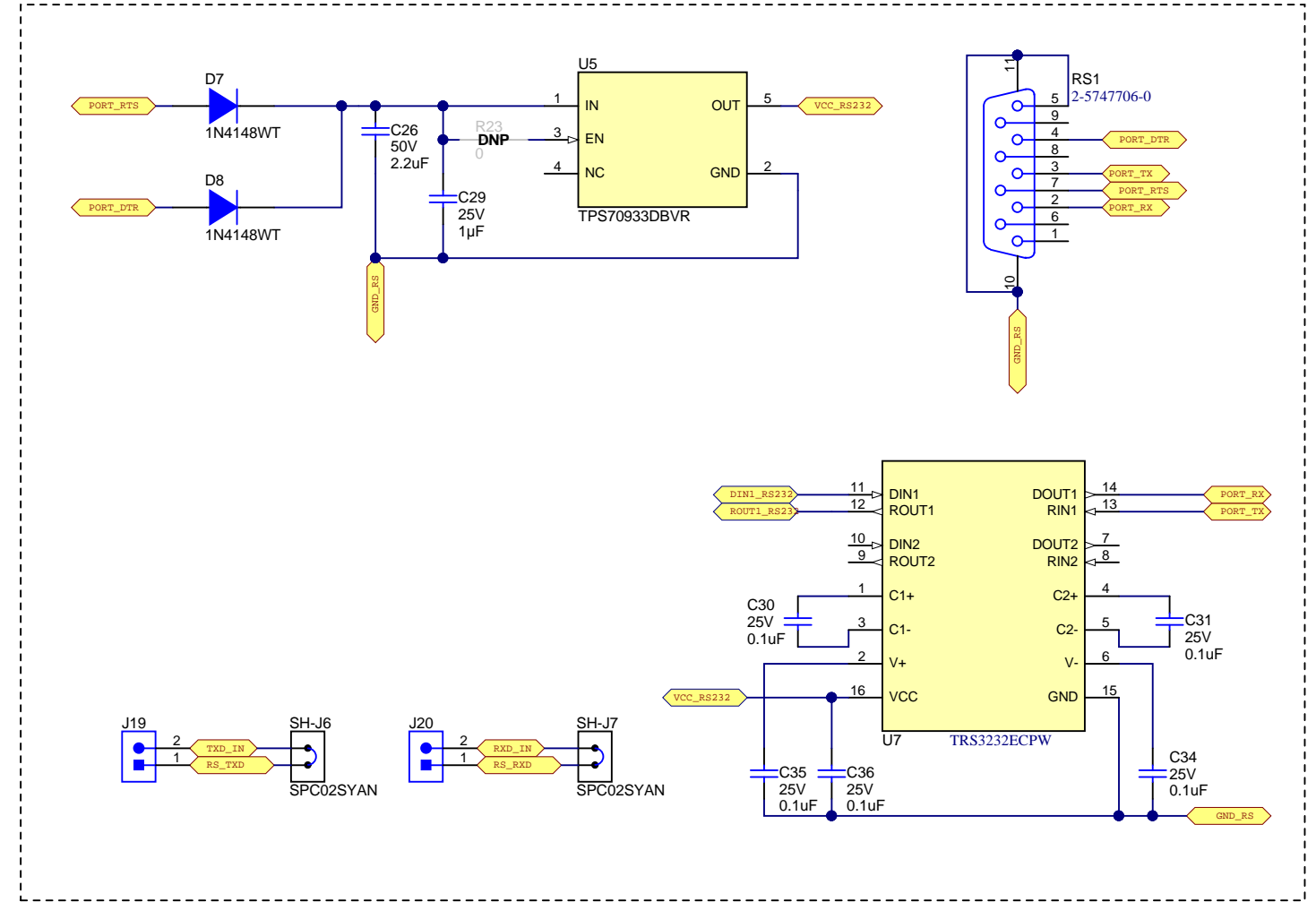
Orderable: N/A	Designed for: Public Release	Mod. Date: 2/19/2019
TID #: TIDA-010036	Project Title: 1-phase shunt e-meter reference design using stand	
Number: TIDA-010036	Rev: E1	Sheet Title: Host Components
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 4 of 7
Drawn By: Mekre Mesganaw	File: Host Components.SchDoc	Size: B
Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support	



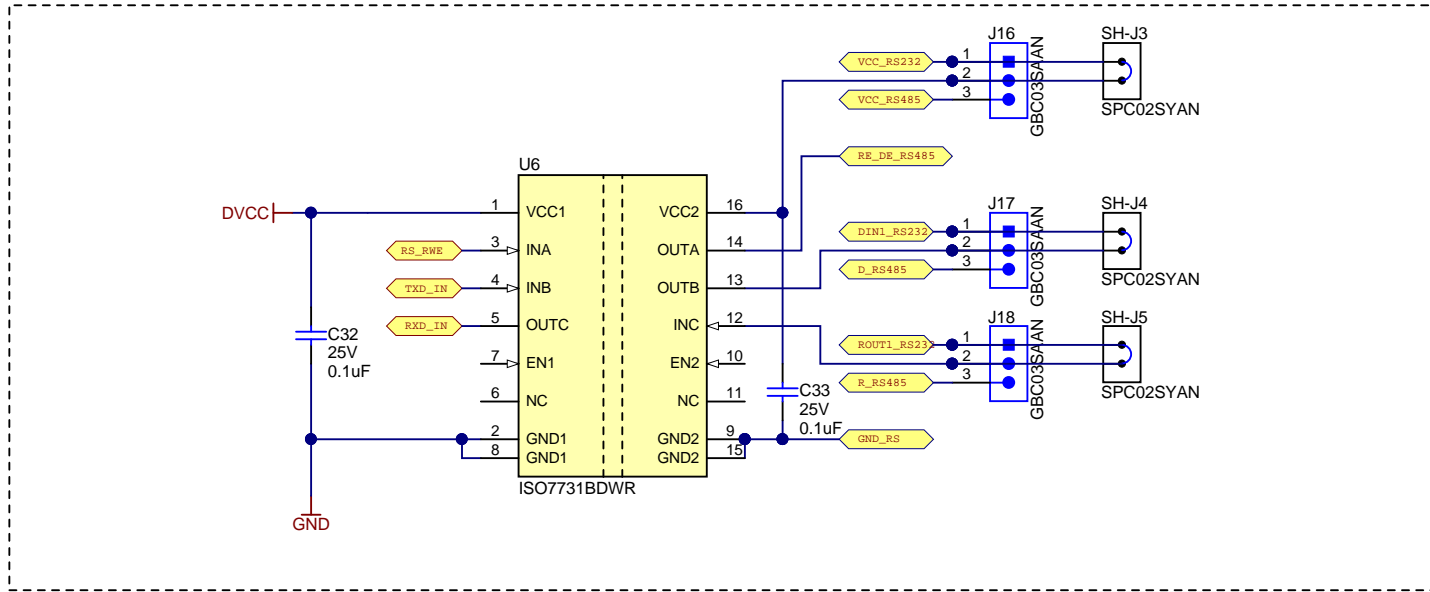
Act / React Pulses Isoaltion



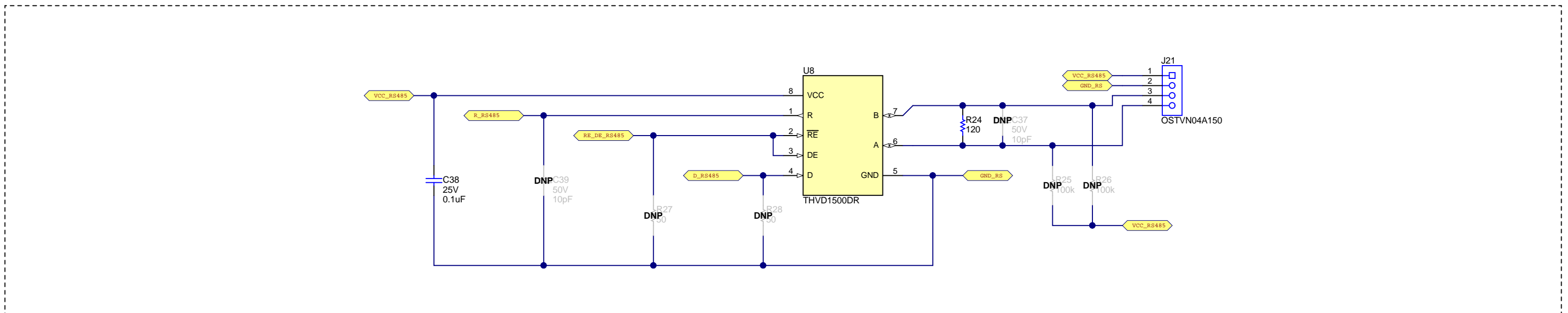
RS232 Communication



RS-232/RS-485 Isolation



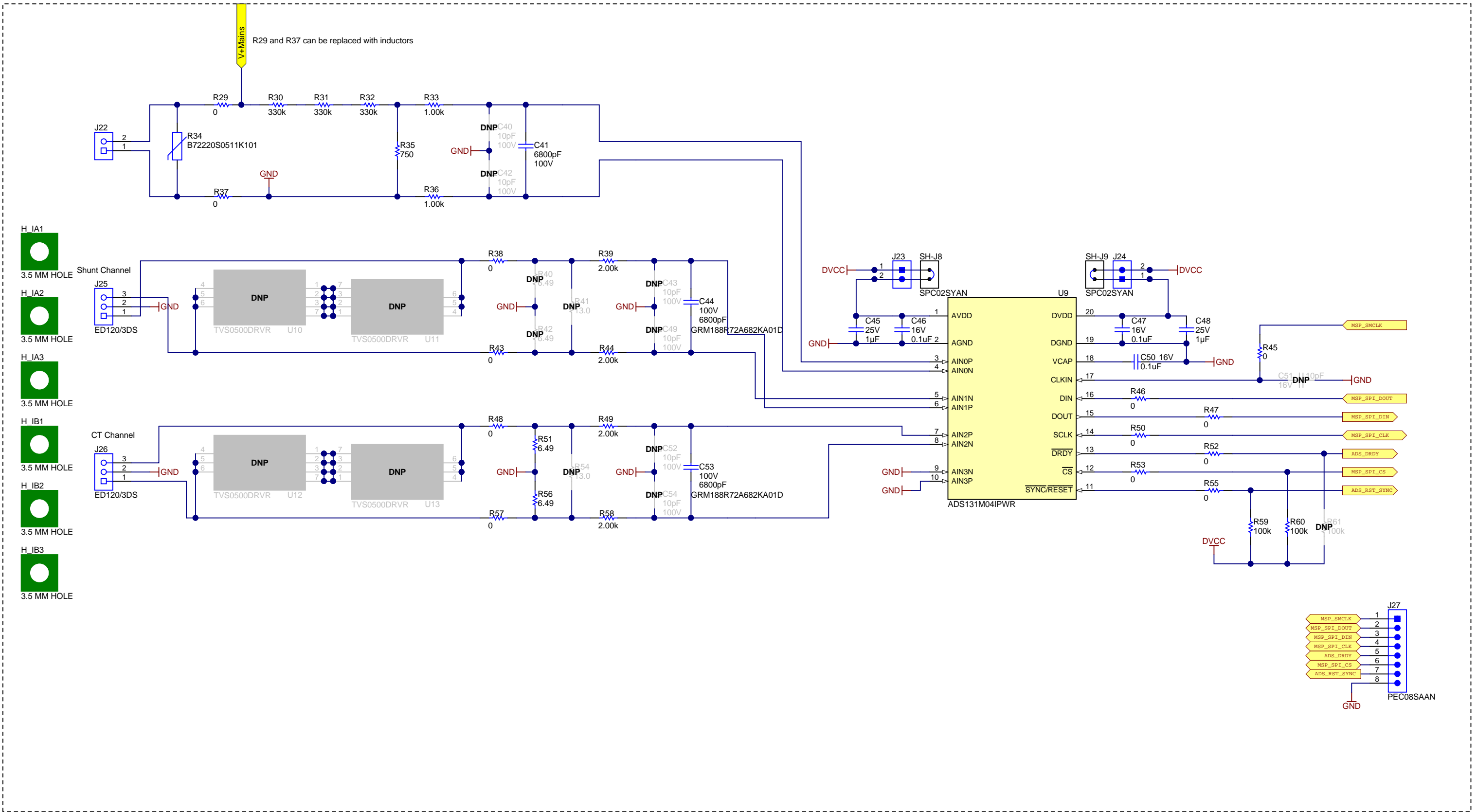
RS485 Communication



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TID #: TIDA-010036	Project Title: 1-phase shunt e-meter reference design using stand		
Number: TIDA-010036 Rev: E1	Sheet Title: Isolated RS232 and RS485 and Isolated Pulses		
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 5 of 7	
Drawn By: Mekre Mesganaw	File: Host Isolation.SchDoc	Size: B	
Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support		

METROLOGY



- H IA1
3.5 MM HOLE
- H IA2
3.5 MM HOLE
- H IA3
3.5 MM HOLE
- H IB1
3.5 MM HOLE
- H IB2
3.5 MM HOLE
- H IB3
3.5 MM HOLE

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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		

A

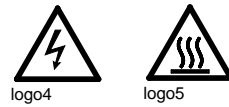
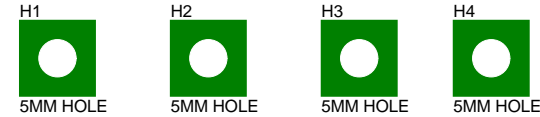
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PCB Number: TIDA-010036
PCB Rev: E1

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.

D

D

Orderable: N/A	Designed for: Public Release	Mod. Date: 4/12/2019	<p>TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2018</p>
TID #: TIDA-010036	Project Title: 1-phase shunt e-meter reference design using stand		
Number: TIDA-010036 Rev: E1	Sheet Title: Hardware		
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 7 of 7	
Drawn By: Mekre Mesganaw	File: TIDA-010036_Hardware.SchDoc	Size: B	
Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support		

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