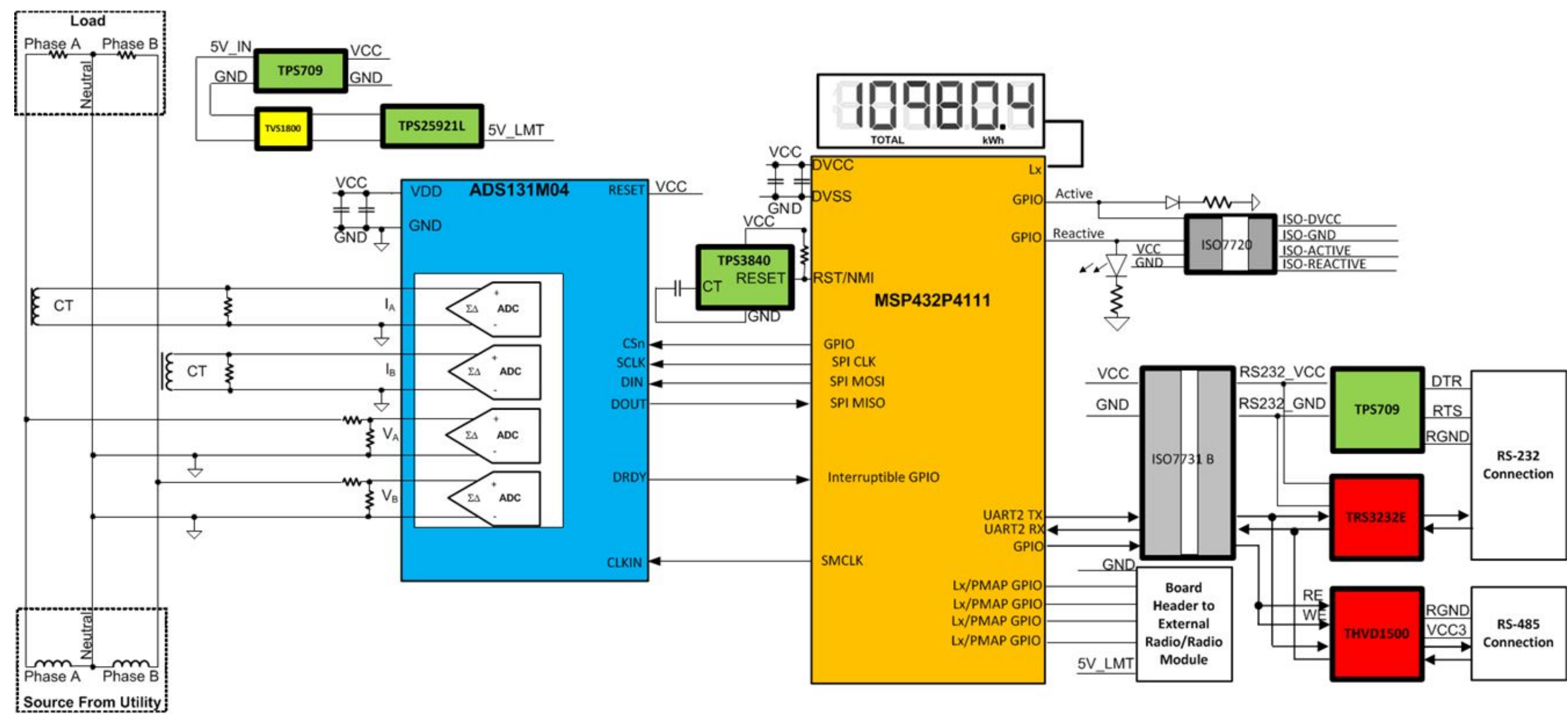


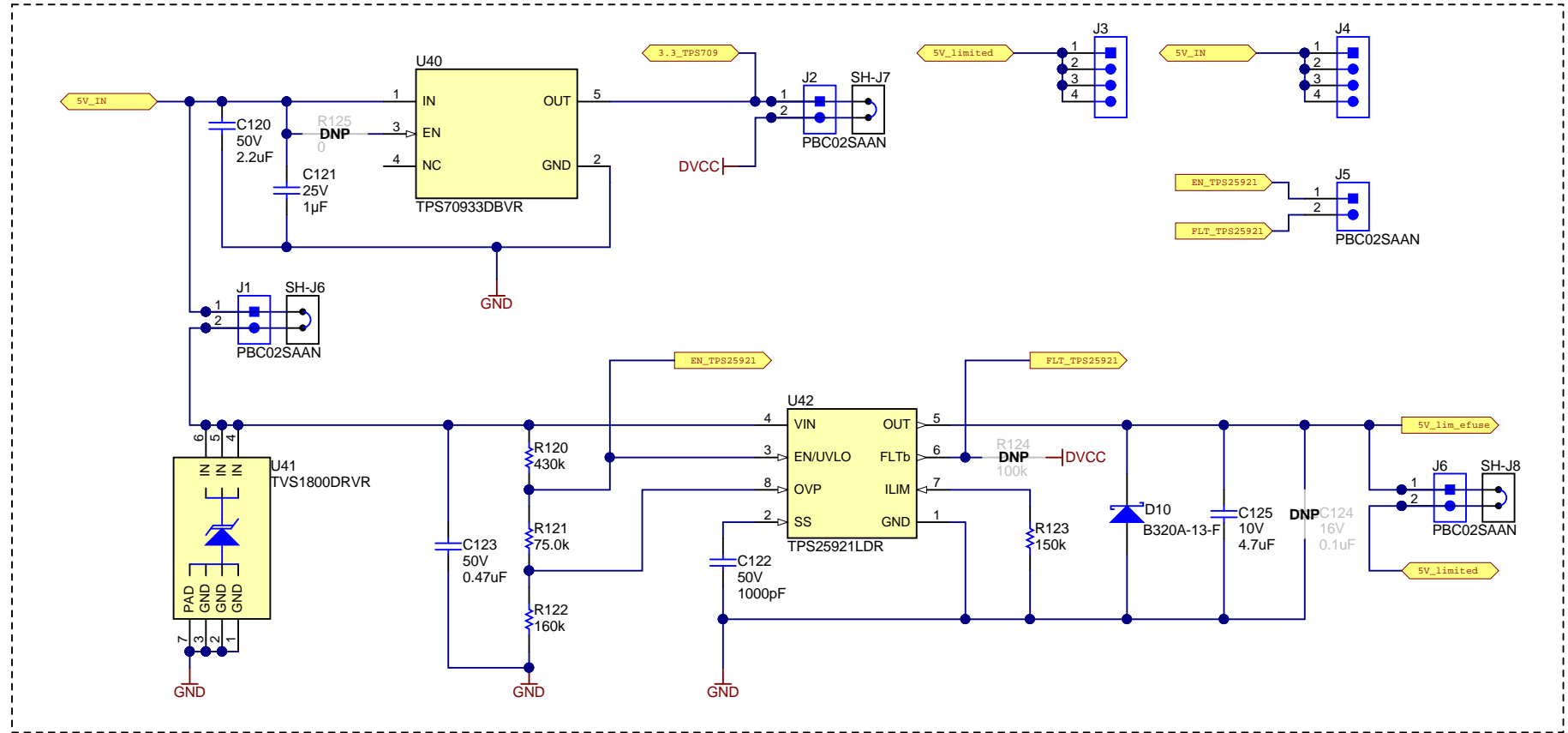
Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A



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Orderable: N/A	Designed for: Public Release	Mod. Date: 2/1/2019	 http://www.ti.com
TID #: TIDA-010037	Project Title: High Accuracy Split-Phase CT Electricity Meter Reference Design	Sheet Title: Block Diagram	
Number: TIDA-010037 Rev: E1	Assembly Variant: 001	Sheet: 1 of 7	
SVN Rev: Version control disabled	File: CoverSheet.SchDoc	Size: B	
Drawn By: Mekre Mesganaw	Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support	

3.3 VCC & Current Limit



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Orderable: N/A	Designed for: Public Release	Mod. Date: 2/1/2019	
TID #: TIDA-010037	Project Title: High Accuracy Split-Phase CT Electricity Meter Refe	Sheet: 2 of 7	
Number: TIDA-010037	Rev: E1	Assembly Variant: 001	Size: B
SVN Rev: Version control disabled	File: Radio Header Power.SchDoc	Contact: http://www.ti.com/support	© Texas Instruments 2018
Drawn By: Mickael Chouteau	Engineer: Mekre Mesganaw		

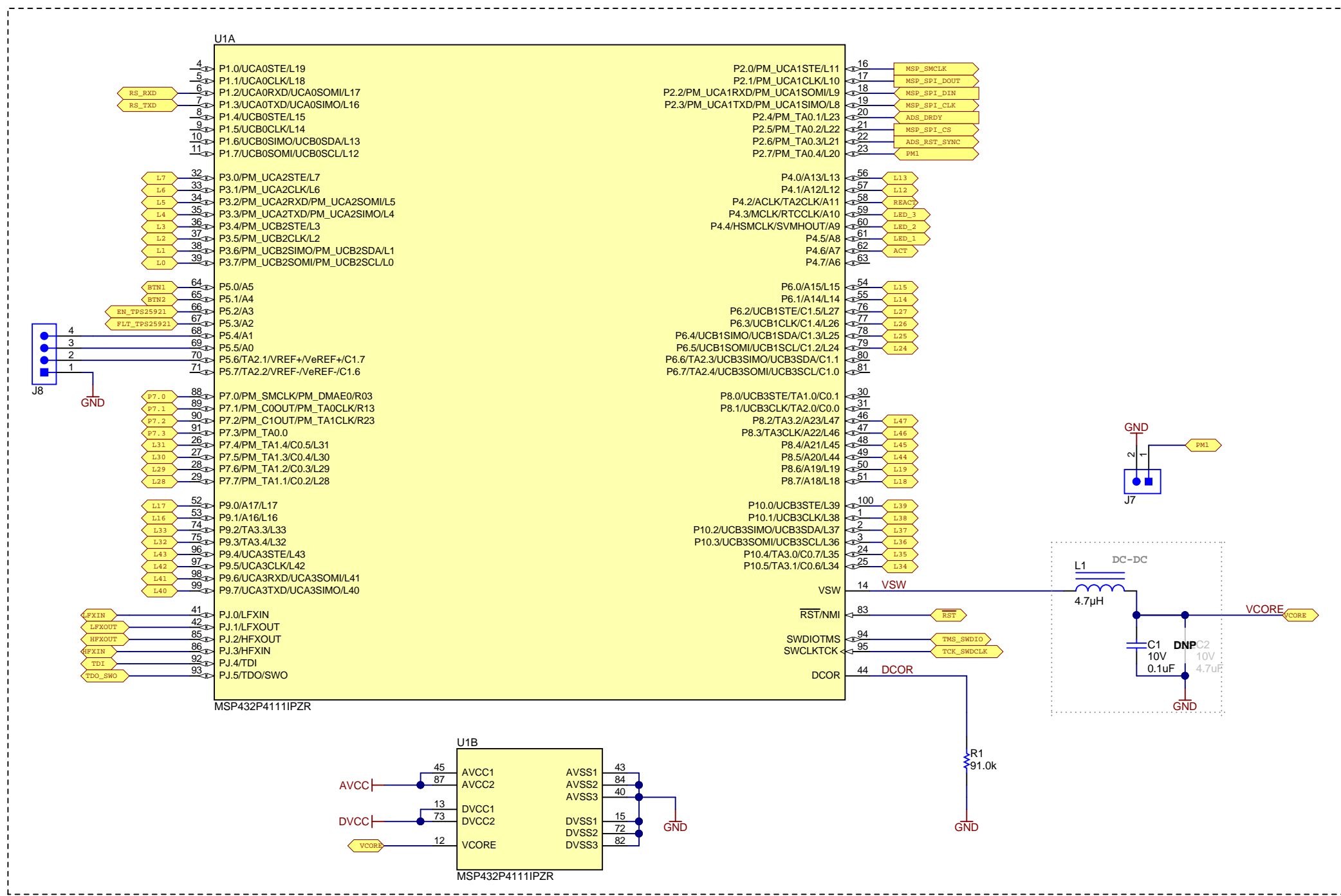
A

B

C

D

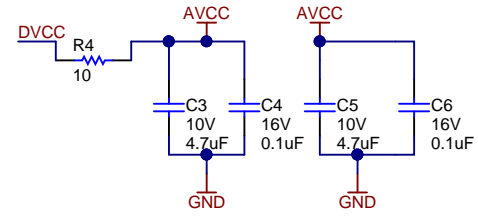
HOST IC



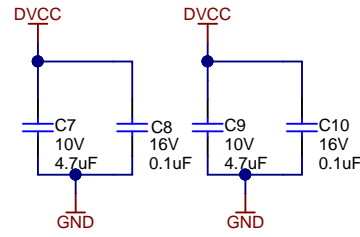
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Orderable: N/A	Designed for: Public Release	Mod. Date: 2/1/2019	
TID #: TIDA-010037	Project Title: High Accuracy Split-Phase CT Electricity Meter Reference Design	Sheet Title: MSP432 IC	
Number: TIDA-010037	Rev: E1	Assembly Variant: 001	Sheet: 3 of 7
SVN Rev: Version control disabled	File: Host IC.SchDoc	Size: B	http://www.ti.com
Drawn By: Mickael Chouteau	Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support	© Texas Instruments 2018

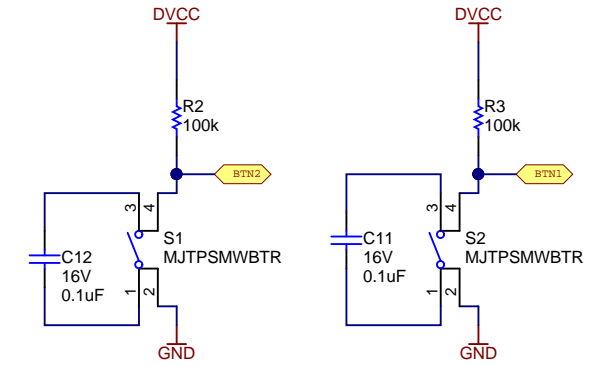
HOST Analog Power



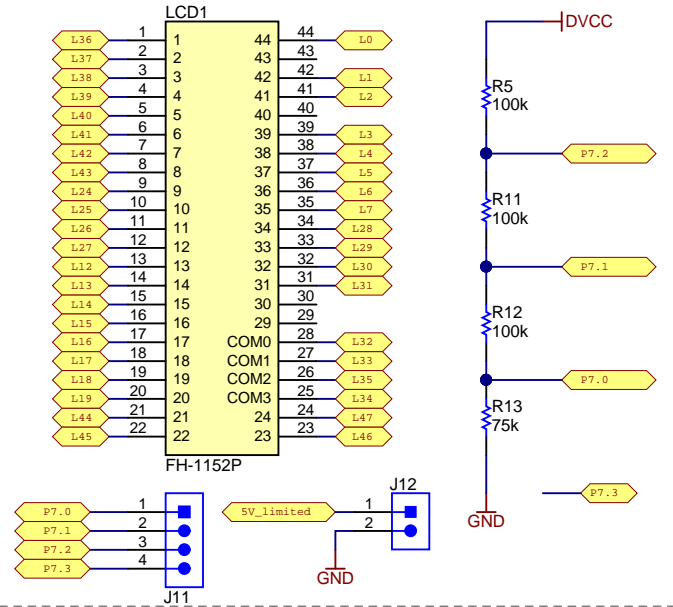
HOST Digital Power



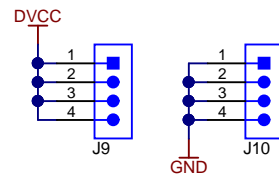
User Button



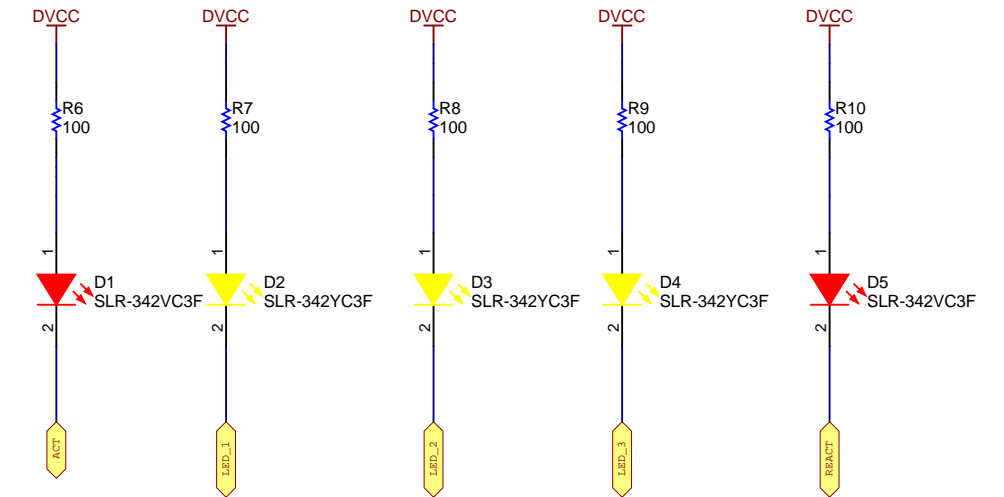
LCD



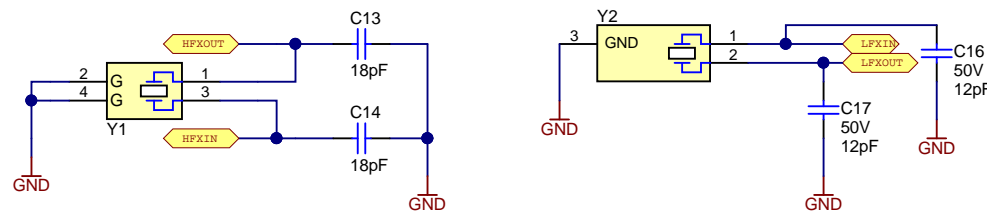
HOST DVCC / DGND Headers



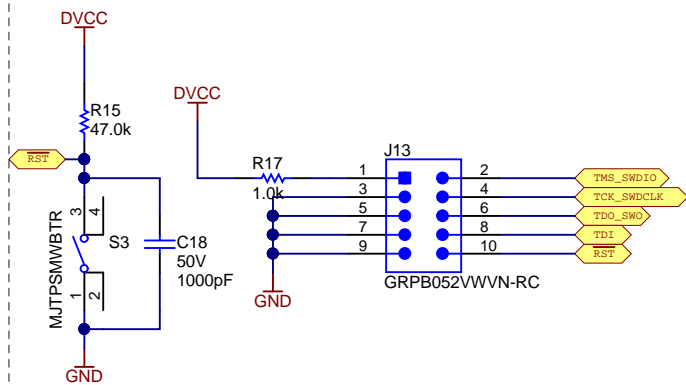
ACT/Phase LEDs



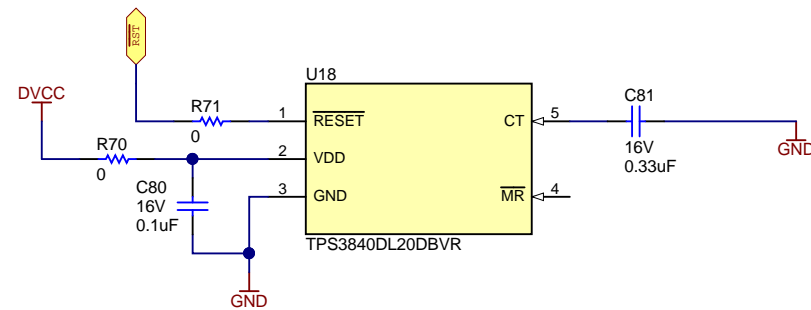
HOST HFX and LFX



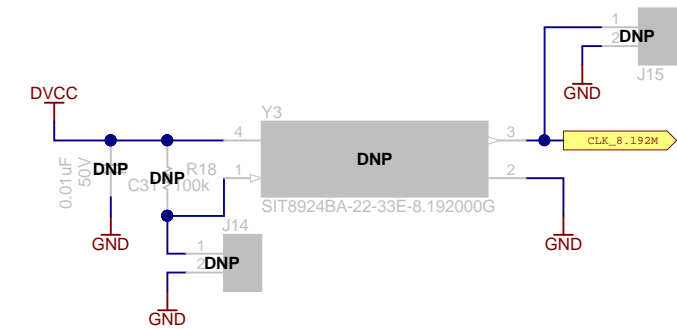
HOST JTAG



External SVS & Watchdog Option



External Clock Option

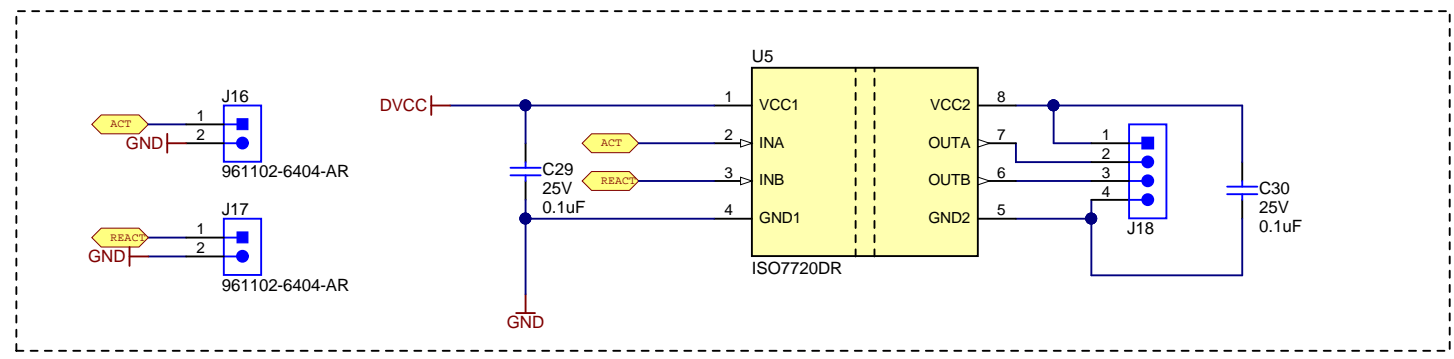


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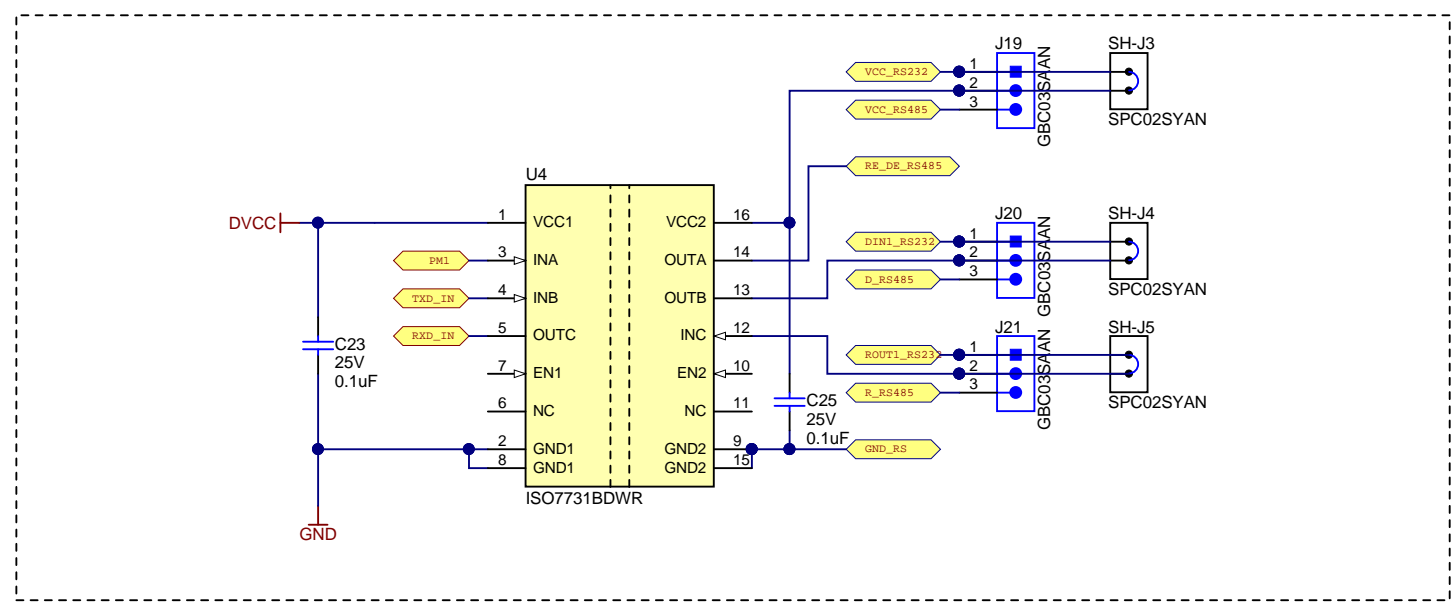
Orderable: N/A	Designed for: Public Release	Mod. Date: 11/19/2018
TID #: TIDA-010037	Project Title: High Accuracy Split-Phase CT Electricity Meter Refe	
Number: TIDA-010037	Rev: E1	Sheet Title: Host Components
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 4 of 7
Drawn By: Mickael Chouteau	File: Host Components.SchDoc	Size: B
Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support	



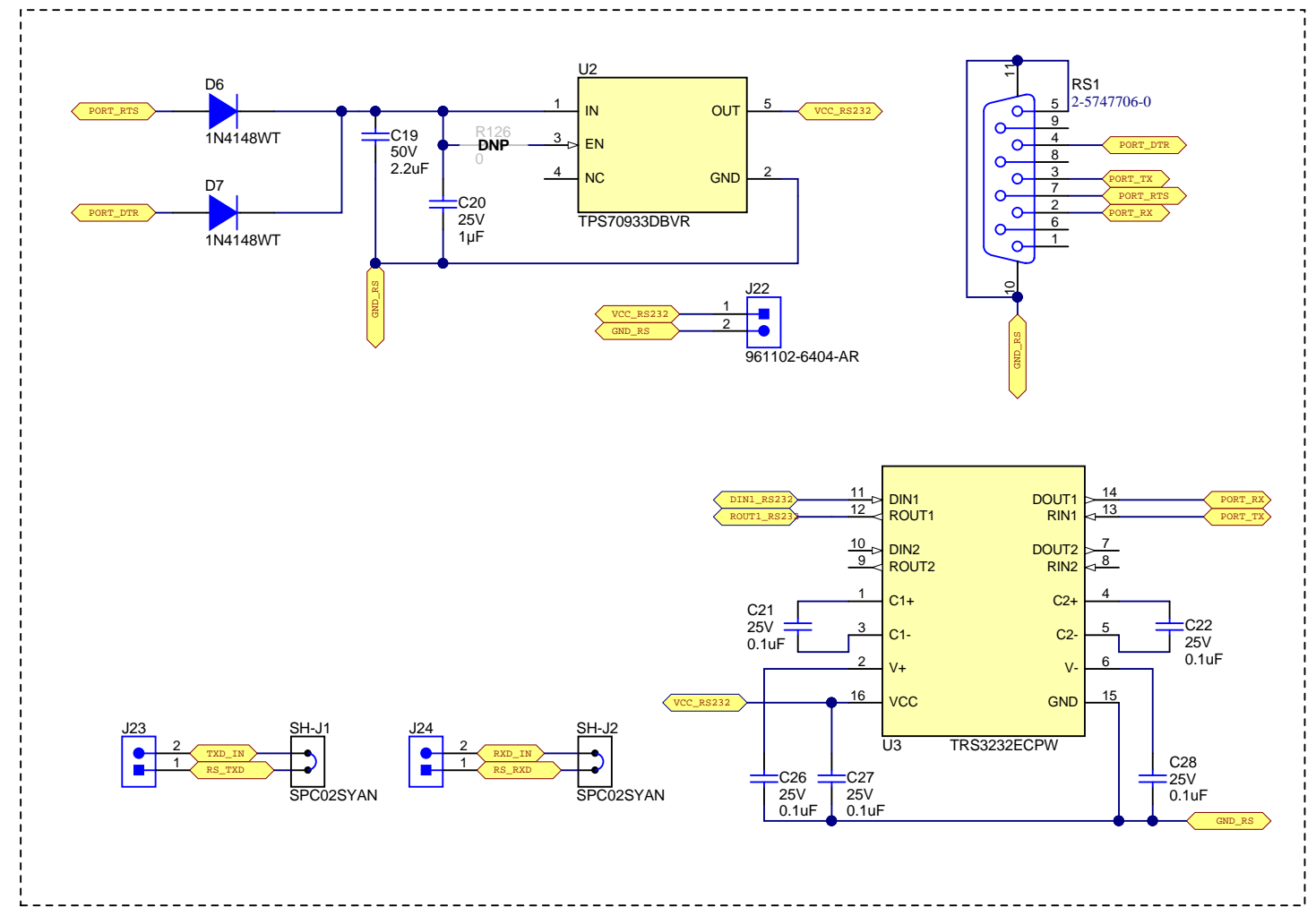
Act / React



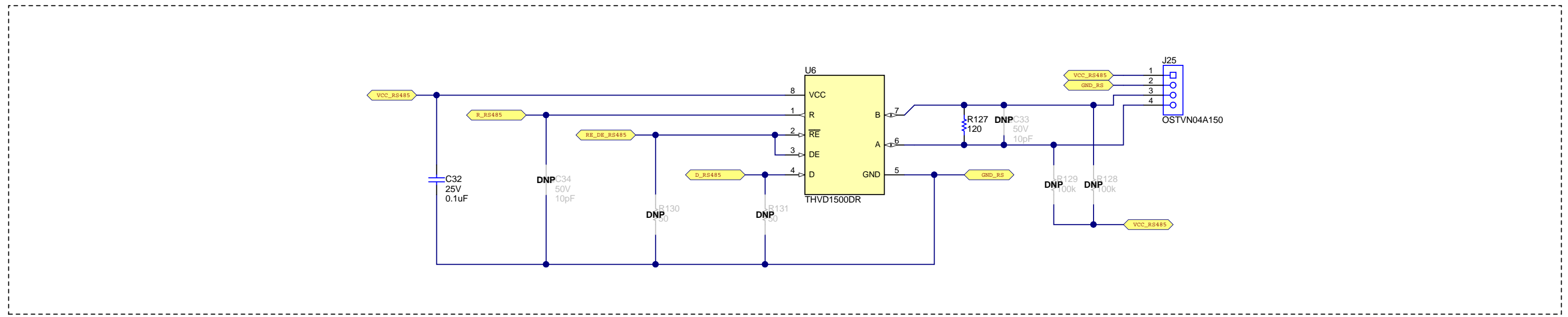
Isolation



RS232 Communication



RS485 Communication

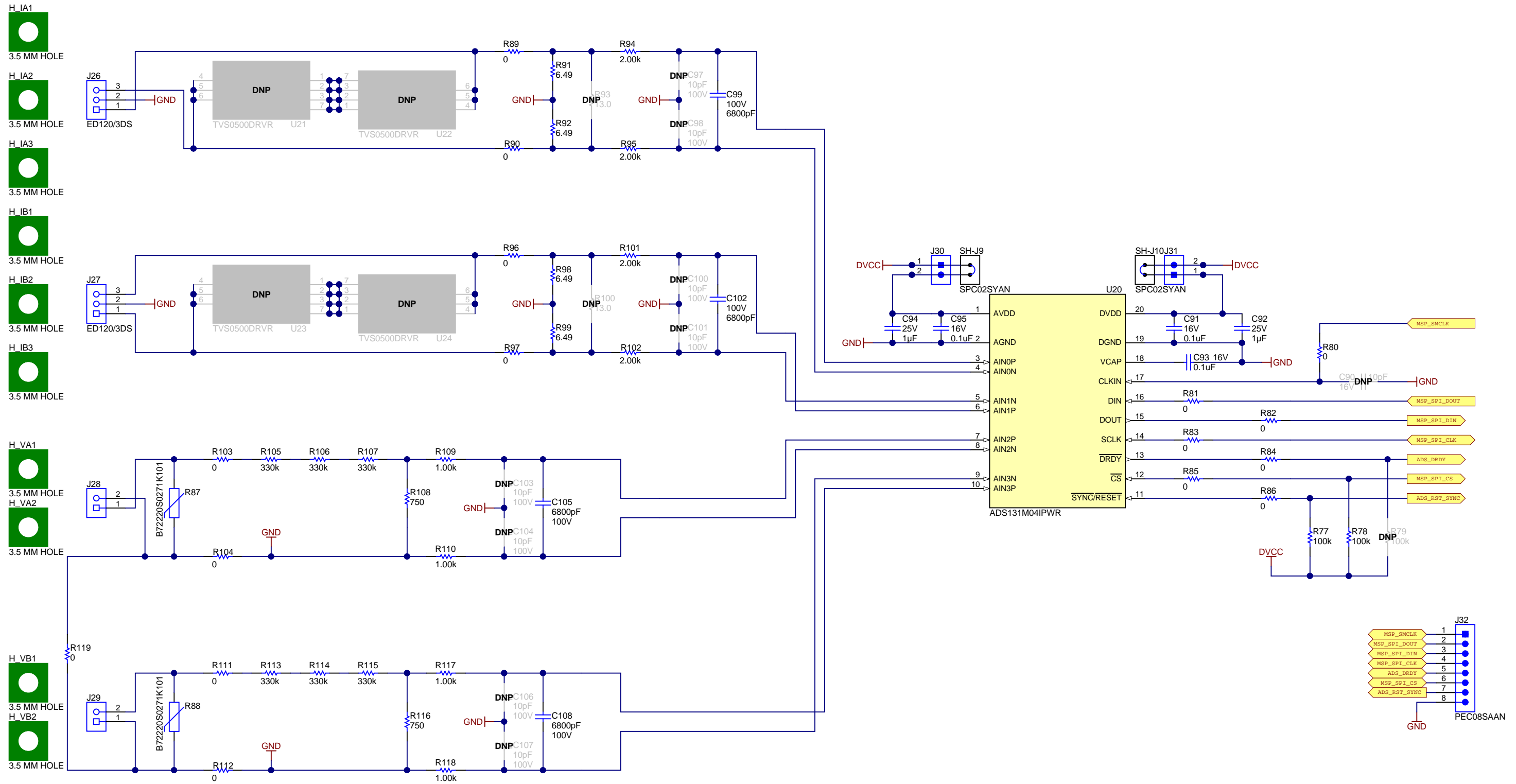


Orderable: N/A	Designed for: Public Release	Mod. Date: 2/1/2019
TID #: TIDA-010037	Project Title: High Accuracy Split-Phase CT Electricity Meter Refe	
Number: TIDA-010037	Rev: E1	Sheet Title: Isolated RS232 and RS485 and Isolated Pulses
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 5 of 7
Drawn By: Mickael Chouteau	File: Host Isolation.SchDoc	Size: B
Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support	

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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
- H VA1
3.5 MM HOLE
- H VA2
3.5 MM HOLE
- H VB1
3.5 MM HOLE
- H VB2
3.5 MM HOLE

Orderable: N/A	Designed for: Public Release	Mod. Date: 1/22/2019
TID #: TIDA-010037	Project Title: High Accuracy Split-Phase CT Electricity Meter Refe	
Number: TIDA-010037 Rev: E1	Sheet Title: Voltage and Current Front End Circuitry	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 6 of 7
Drawn By: Mickael Chouteau	File: Metrology_SchDoc	Size: B
Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support	

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A

A



PCB Number: TIDA-010037
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: 2/1/2019	<p>TEXAS INSTRUMENTS</p> <p>http://www.ti.com</p> <p>© Texas Instruments 2018</p>
TID #: TIDA-010037	Project Title: High Accuracy Split-Phase CT Electricity Meter Refe		
Number: TIDA-010037 Rev: E1	Sheet Title: Hardware		
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 7 of 7	
Drawn By: Mickael Chouteau	File: TIDA-010037_Hardware.SchDoc	Size: B	
Engineer: Mekre Mesganaw	Contact: http://www.ti.com/support		

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