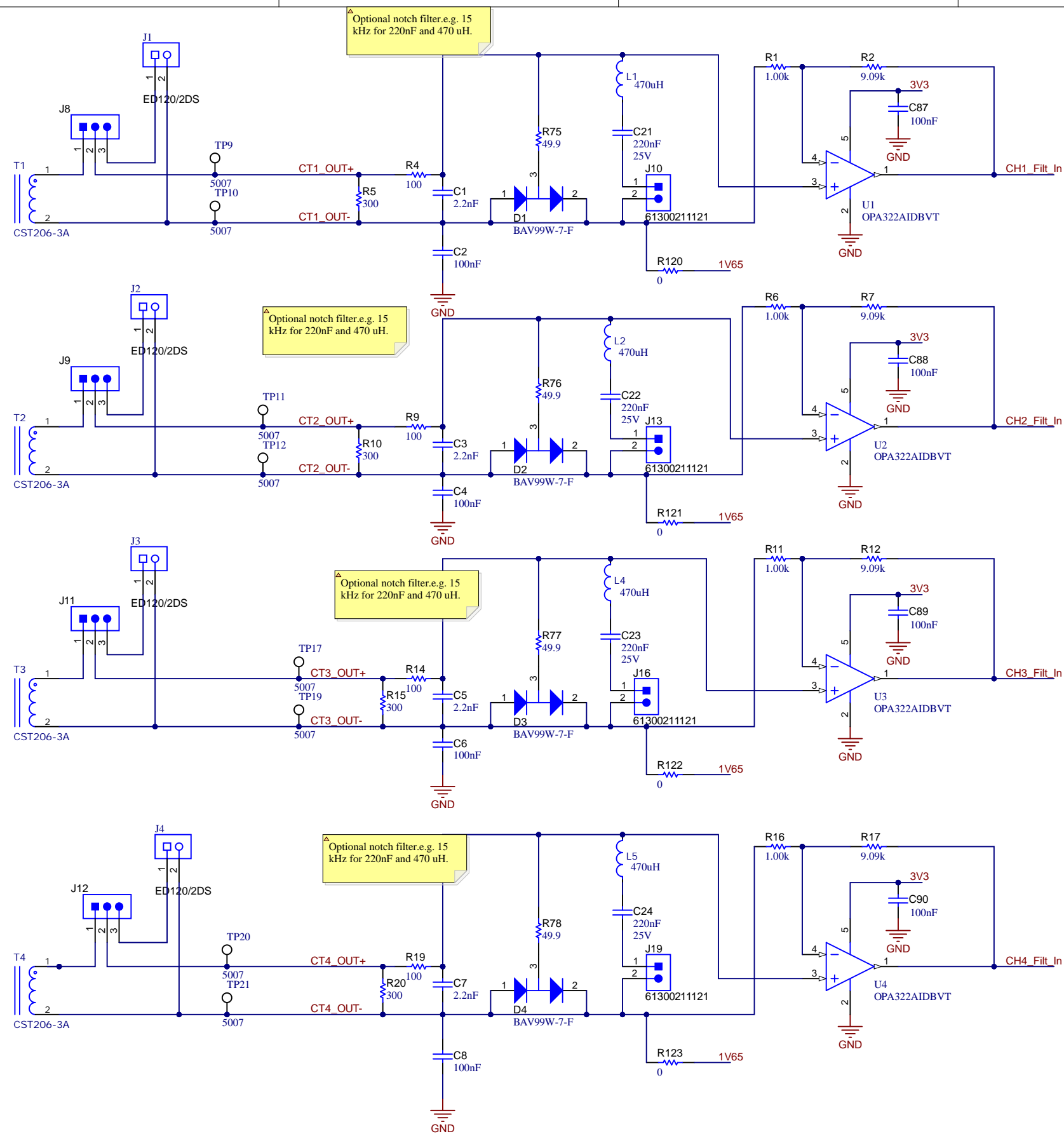


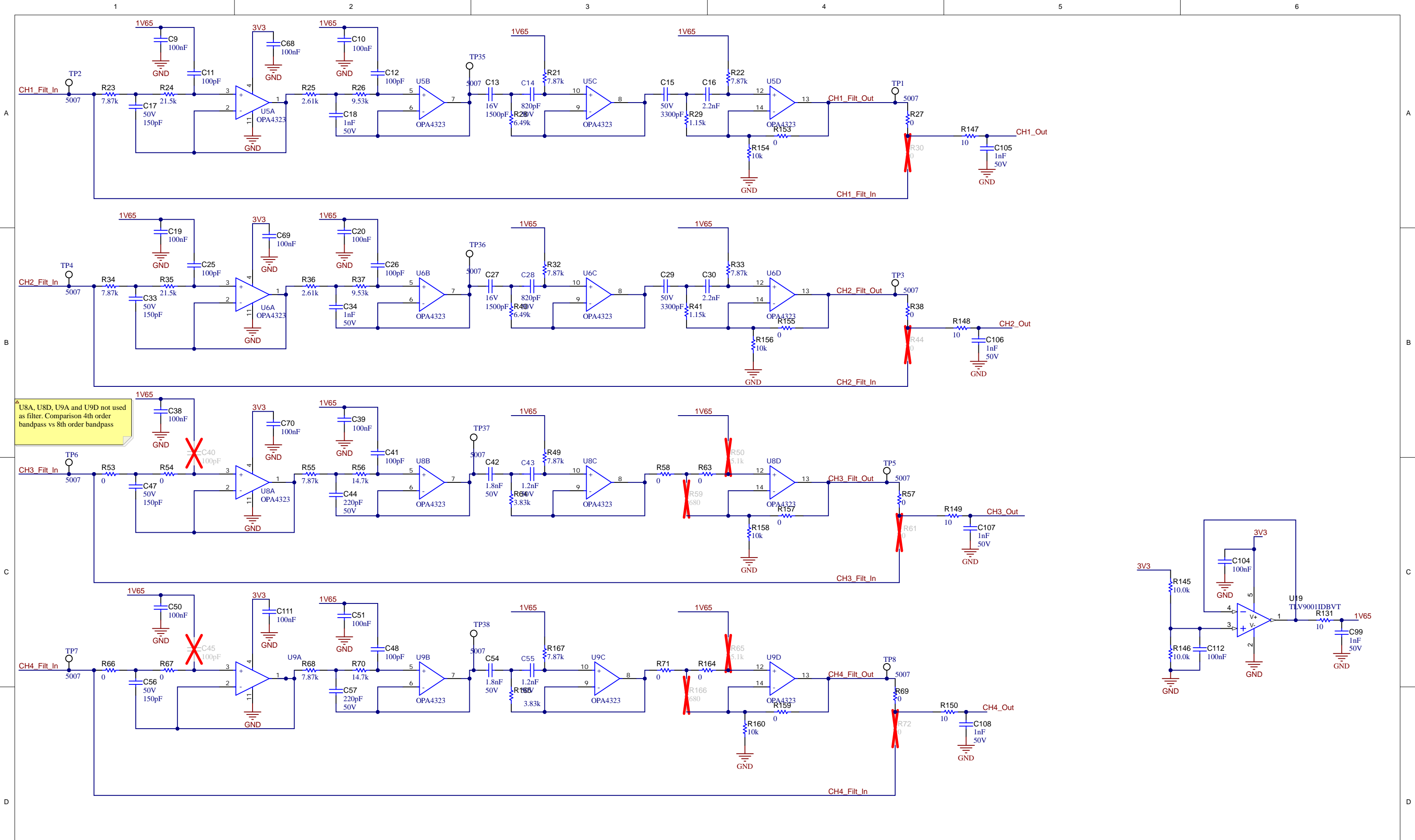
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Orderable: N/A	Designed for: Public Release	Mod. Date: 28-Jun-24	
TID #: TIDA-010955	Project Title: AFE for AI Arc Detection in solar applications	Sheet Title: Block diagram	
Number: TIDA-010955 Rev: E1	Assembly Variant: 001	Sheet 1 of 7	http://www.ti.com
SVN Rev: 4147 [Locally Modified]	File: TIDA-010955_Block_Diagram.SchDoc	Size: B	© Texas Instruments 2024
Drawn By: Andreas Lechner	Contact: http://www.ti.com/support		



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TID #: TIDA-010955	Project Title: AFE for AI Arc Detection in solar applications	
Number: TIDA-010955 Rev: E1	Sheet Title: CT circuit + gain	
SVN Rev:	Assembly Variant: 001	Sheet 2 of 7
Drawn By: Andreas Lechner	File: TIDA-010955_Current_Transformer.SchDoc	Size: B
Engineer: Andreas Lechner	Contact: http://www.ti.com/support	



U8A, U8D, U9A and U9D not used as filter. Comparison 4th order bandpass vs 8th order bandpass

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TID #: TIDA-010955	Project Title: AFE for AI Arc Detection in solar applications	
Number: TIDA-010955 Rev: E1	Sheet Title: Filter Stage	
SVN Rev:	Assembly Variant: 001	Sheet 3 of 7
Drawn By: Andreas Lechner	File: TIDA-010955_Filter.SchDoc	Size: B
Engineer: Andreas Lechner	Contact: http://www.ti.com/support	

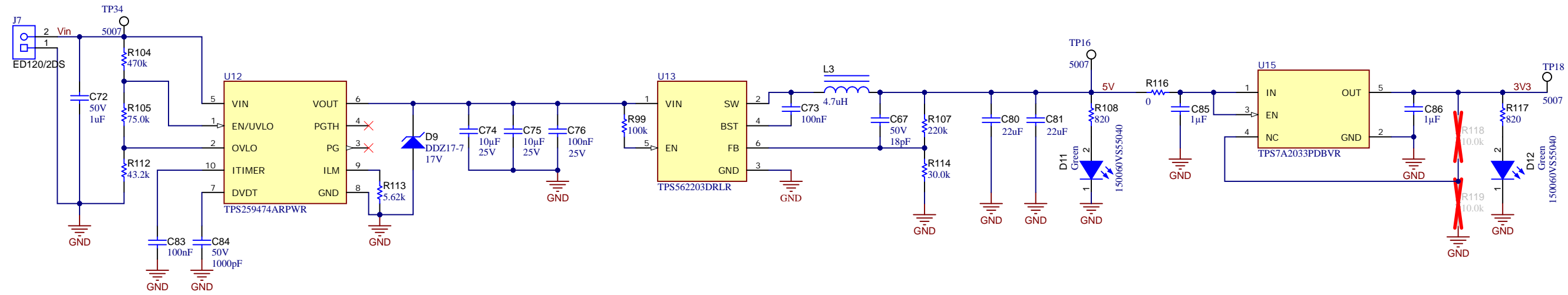
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Vin: 8V to 16V

EFuse for overvoltage and reverse polarity protection



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TID #: TIDA-010955	Project Title: AFE for AI Arc Detection in solar applications	
Number: TIDA-010955 Rev: E1	Sheet Title: Power tree	
SVN Rev:	Assembly Variant: 001	Sheet 5 of 7
Drawn By: Andreas Lechner	File: TIDA-010955_Power.SchDoc	Size: B
Engineer: Andreas Lechner	Contact: http://www.ti.com/support	

A

B

C

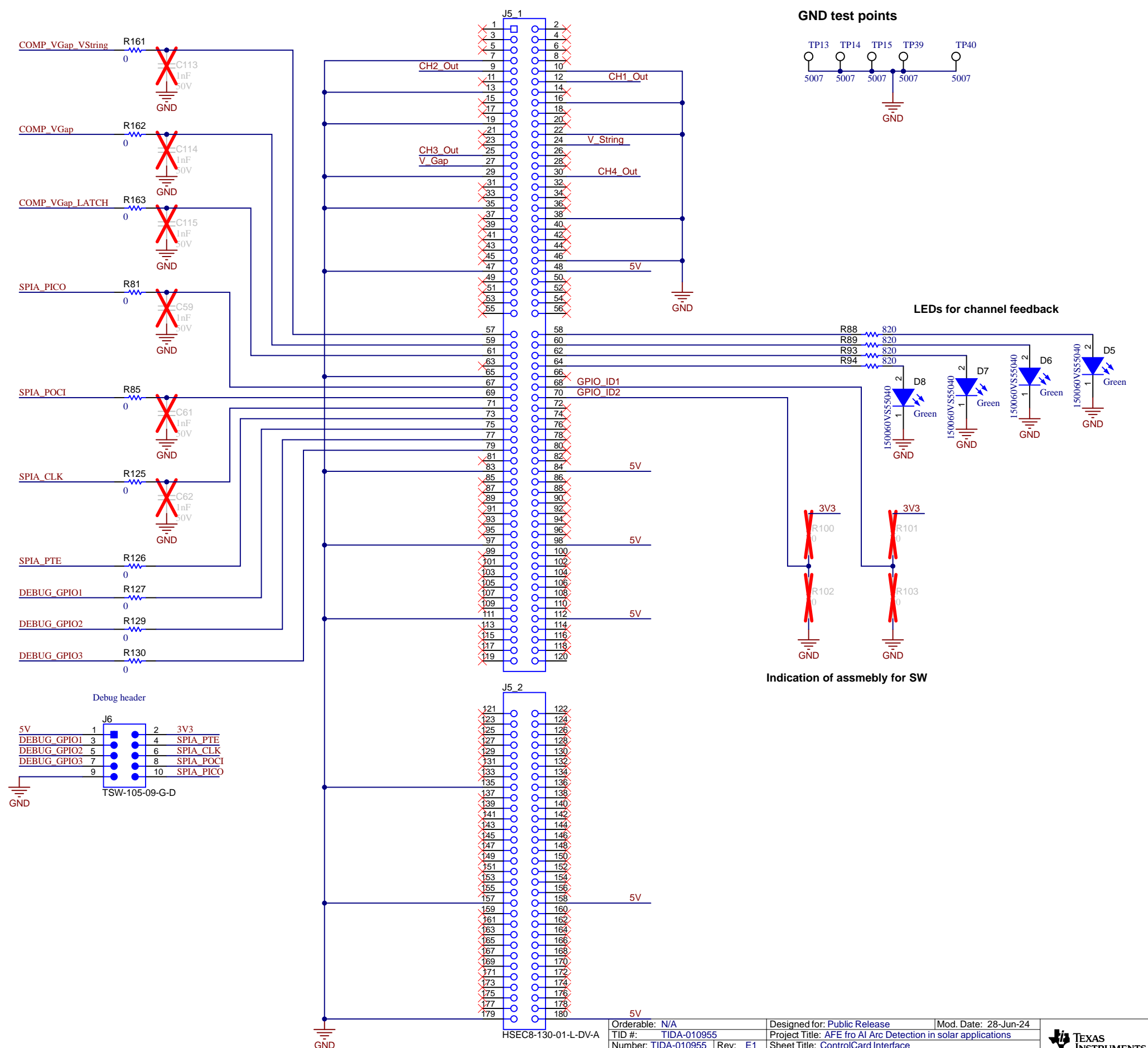
D

A

B

C

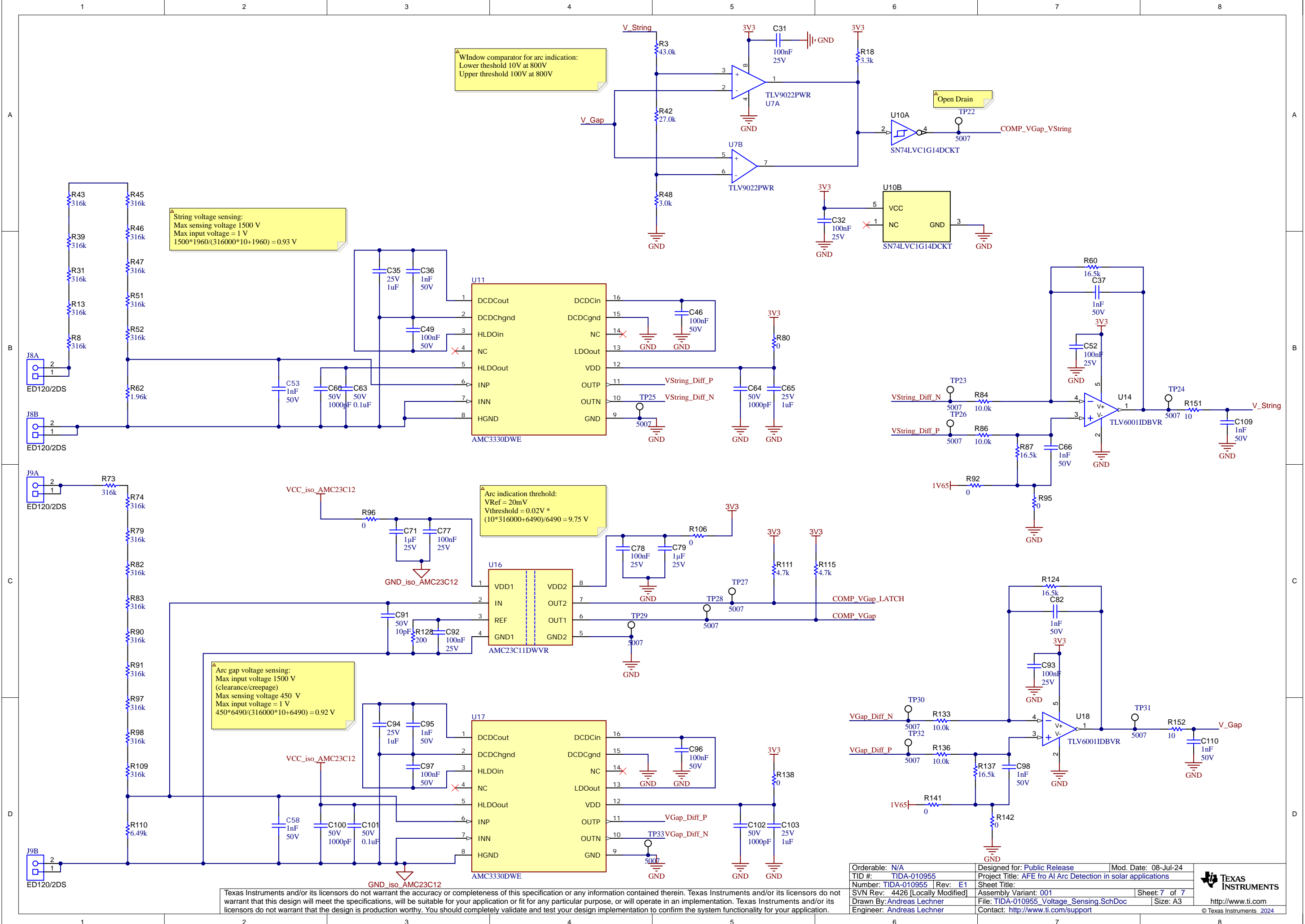
D



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TID #: TIDA-010955	Project Title: AFE for AI Arc Detection in solar applications	
Number: TIDA-010955 Rev: E1	Sheet Title: ControlCard Interface	
SVN Rev:	Assembly Variant: 001	Sheet: 6 of 7
Drawn By: Andreas Lechner	File: TIDA-010955_Interface.SchDoc	Size: B
Engineer: Andreas Lechner	Contact: http://www.ti.com/support	

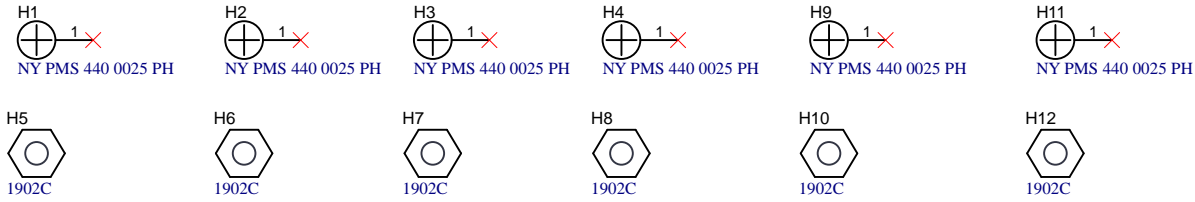




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TID #: TIDA-010955	Project Title: AFE for AI Arc Detection in solar applications	
Number: TIDA-010955 Rev: E1	Sheet Title:	
SVN Rev: 4426 [Locally Modified]	Assembly Variant: 001	Sheet: 7 of 7
Drawn By: Andreas Lechner	File: TIDA-010955_Voltage_Sensing.SchDoc	Size: A3
Engineer: Andreas Lechner	Contact: http://www.ti.com/support	





PCB Number: TIDA-010955
PCB Rev: E1

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FCC disclaimer

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WEEE logo



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

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.

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

Orderable: N/A	Designed for: Public Release	Mod. Date: 02-Jul-24
TID #: TIDA-010955	Project Title: AFE for AI Arc Detection in solar applications	
Number: TIDA-010955 Rev: E1	Sheet Title: Hardware	
SVN Rev:	Assembly Variant: 001	Sheet: 7 of 7
Drawn By: Andreas Lechner	File: TIDA-010955_Hardware.SchDoc	Size: B
Engineer: Andreas Lechner	Contact: http://www.ti.com/support	

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