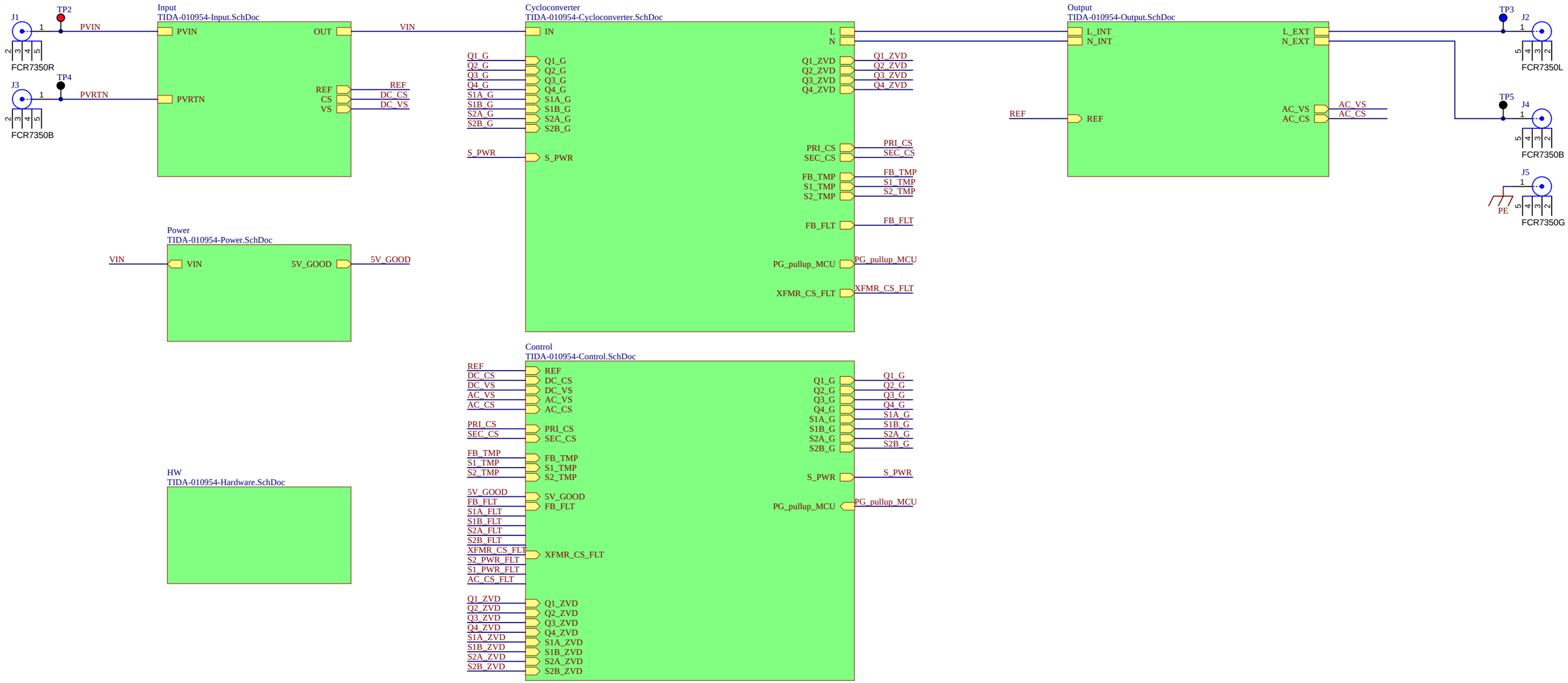


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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 9/29/2026
TID #: 010954	Project Title: Cycloconverter based solar microinverter	
Number: TIDA-010954 Rev: E4	Sheet Title:	
SVN Rev: Version control disabled	Assembly Variant: 001_Bourns_new	Sheet: 1 of 9
Drawn By:	File: TIDA-010954-Top.SchDoc	Size: B
Engineer: Kelvin Le	Contact: http://www.ti.com/support	

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LOW VOLTAGE

HIGH VOLTAGE

IN
L3
DAB_POWER
C35 10uF 100V
C36 10uF 100V
C37 10uF 100V
C25 10uF 100V
C42 10uF 100V
C43 10uF 100V
C44 10uF 100V
C26 10uF 100V
PGND

TP9
R37 300
C16 50V 300pF
GND
PRI_CS
SEC_CS
R36 300
C17 50V 300pF
TP8
XFMR_CS_FLT
U7 TMCS1133B1QDVGR
U8 TMCS1133B3QDVGR
VOUT OC FAULT NC GND VS VS IN+ IN- VOC
3V3
C19 100nF 25V
R39 5.60k
R40 1.00k
C22 100nF 25V
R41 5.60k
R42 1.00k
NT1 Net-Tie

FB
TIDA-010954-FullBridge.SchDoc
Q1_G Q2_G Q3_G Q4_G
Q1_ZVD Q2_ZVD Q3_ZVD Q4_ZVD
FB_FLT
POWER SW_L1 SW_L2
DAB_POWER
SW_L1
TP10
TP13
C47 C48 C49 C50 C51 C52 C55 C56 C59 C60 10uF 100V
T1_1 T1_2 T1_4 T1_3
T2 B181134_X11
L5_2
D1 SMCJ180CA
TP27
TP26
PGND

U_TIDA-010954-ACSwitch-Bidir
TIDA-010954-ACSwitch-Bidir.SchDoc
L SN N
S1A_G S2A_G S1B_G S2B_G ENABLE_SIGNAL PG_pullup S1_TMP S2_TMP
S_PWR PG_pullup_MCU S1_TMP S2_TMP

TP12
MidHV
C54 C58 C62 C64 C66 C68 C53 C57 C61 C63 C65 C67 1uF 250V
R2 499k
R3 499k
L
N

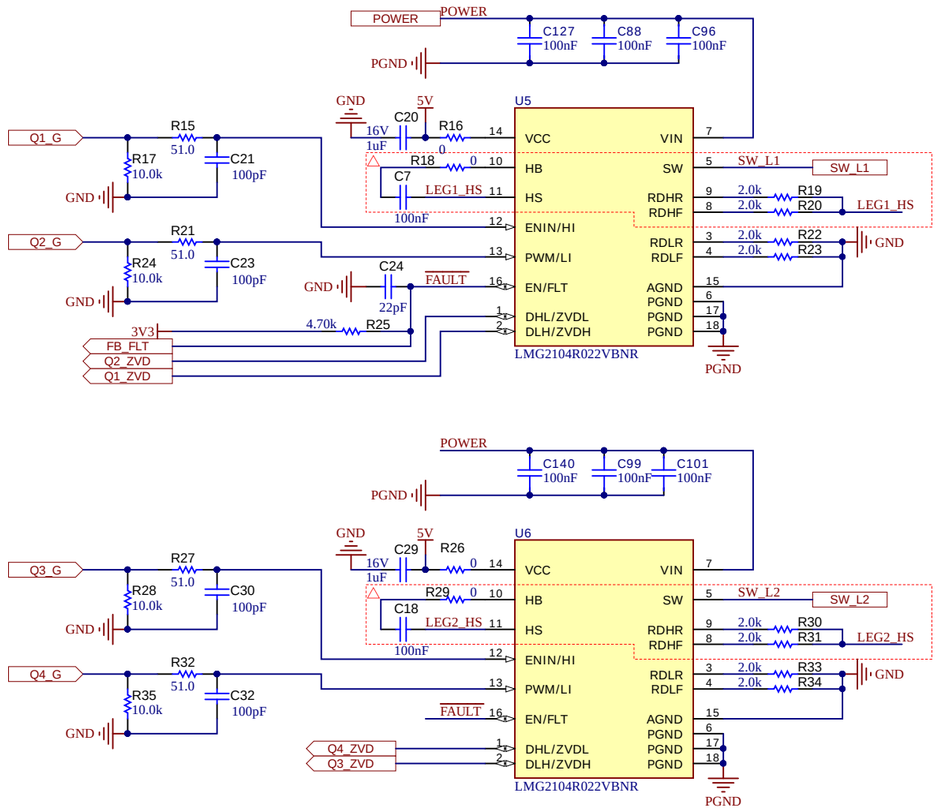
U9
TMP235A2DCKR
VDD VOUT NC NC GND
C27 100nF 25V
3V3
GND
300 R43
FB_TMP
C75 50V 300pF

Put this to bottom
C70 C71 C72 C74 C76 C77 C78 C79 10uF 100V
DAB_POWER
PGND

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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 9/29/2026
TID #: 010954	Project Title: Cycloconverter based solar microinverter	
Number: TIDA-010954 Rev: E4	Sheet Title:	
SVN Rev: Version control disabled	Assembly Variant: 001_Bourns_new	Sheet: 2 of 9
Drawn By:	File: TIDA-010954-Cycloconverter.SchDoc	Size: B
Engineer: Kelvin Le	Contact: http://www.ti.com/support	

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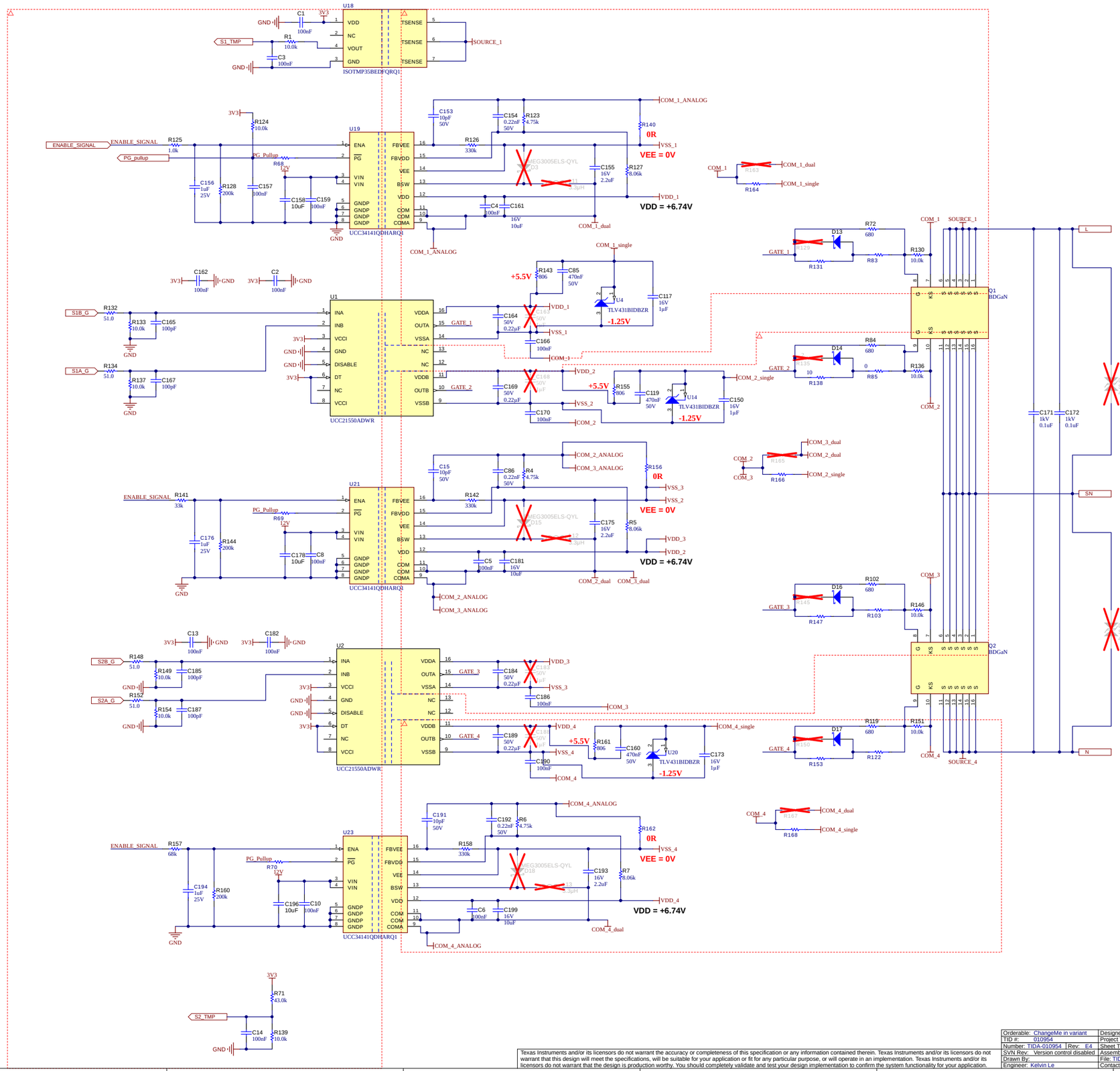


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Number: TIDA-010954 Rev: E4	Sheet Title:	
SVN Rev: Version control disabled	Assembly Variant: 001_Bourns_new	Sheet: 4 of 9
Drawn By:	File: TIDA-010954-FullBridge.SchDoc	Size: B
Engineer: Kelvin Le	Contact: http://www.ti.com/support	

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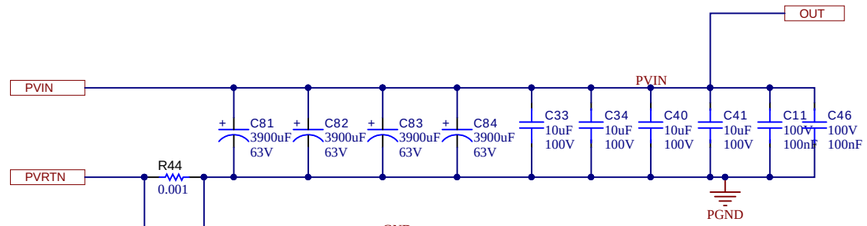


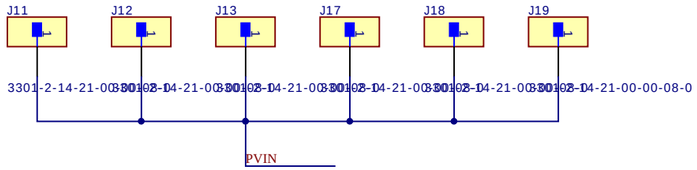
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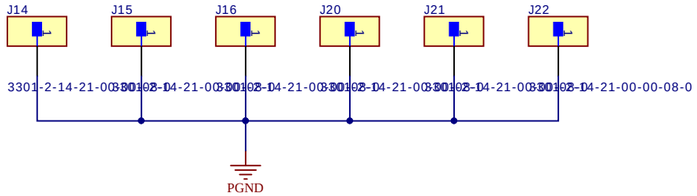
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Number: TIDA-010954 Rev: E4	Sheet Title:
SVN Rev: Version control disabled	Assembly Variant: 001_Bourns_new — Sheet: 4 of 9
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Engineer: Kelvin Le	Contact: http://www.ti.com/support

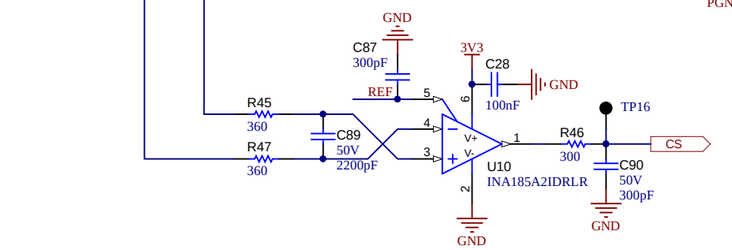
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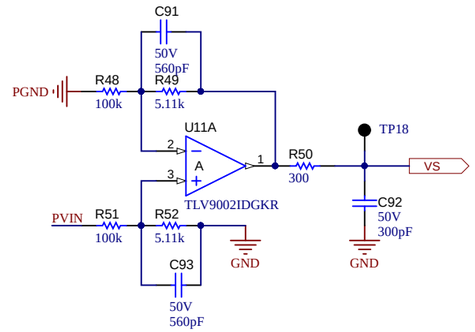
http://www.ti.com

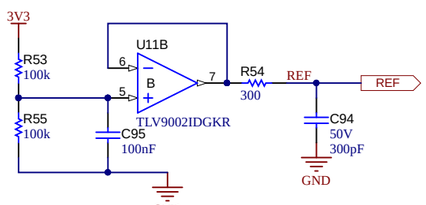


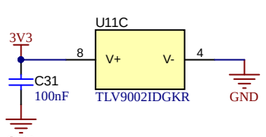










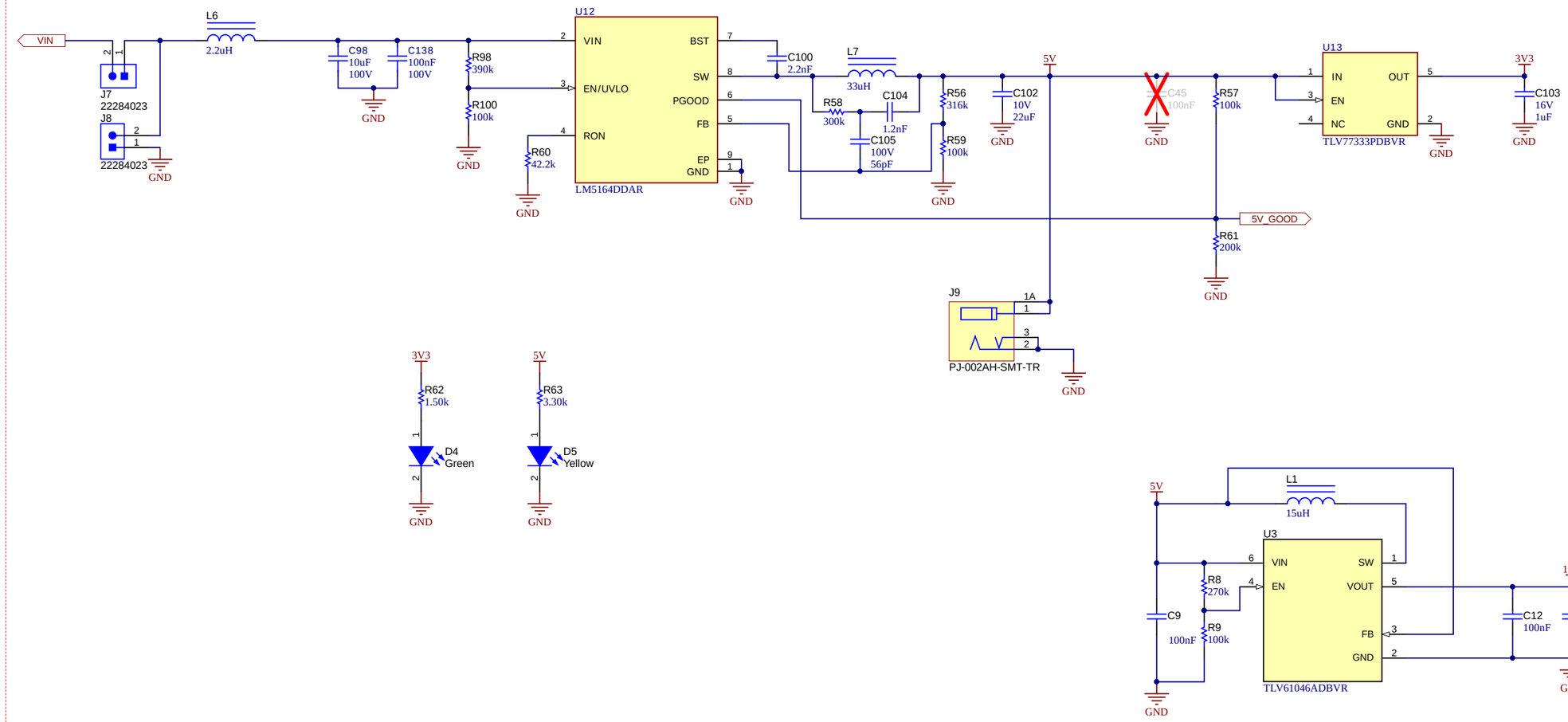


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Orderable: ChangeMe in variant		Designed for: Public Release	Mod. Date: 9/29/2026
TID #: 010954		Project Title: Cycloconverter based solar microinverter	
Number: TIDA-010954	Rev: E4	Sheet Title:	
SVN Rev: Version control disabled		Assembly Variant: 001_Bourns_new	Sheet: 5 of 9
Drawn By:		File: TIDA-010954-Input.SchDoc	Size: B
Engineer: Kelvin Le		Contact: http://www.ti.com/support	

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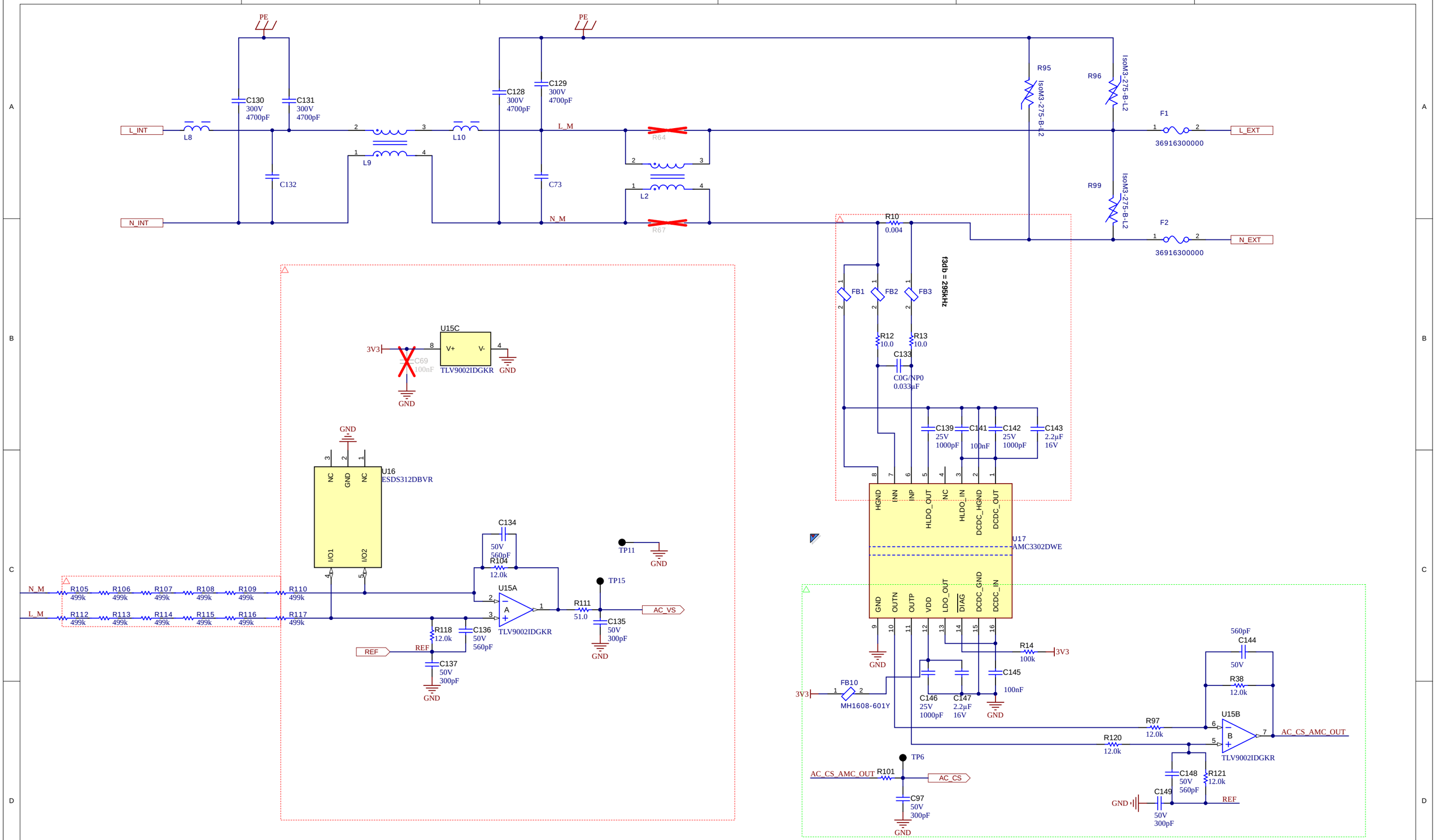


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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 9/28/2026
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Number: TIDA-010954 Rev: E4	Sheet Title:	
SVN Rev: Version control disabled	Assembly Variant: 001_Bourns_new	Sheet: 6 of 9
Drawn By:	File: TIDA-010954-Power.SchDoc	Size: B
Engineer: Kelvin Le	Contact: http://www.ti.com/support	

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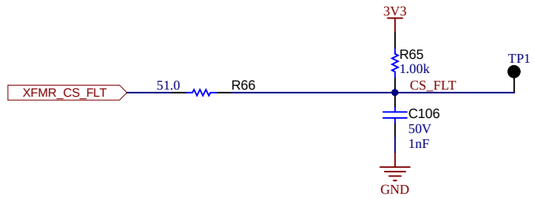


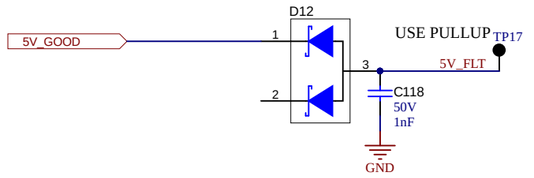
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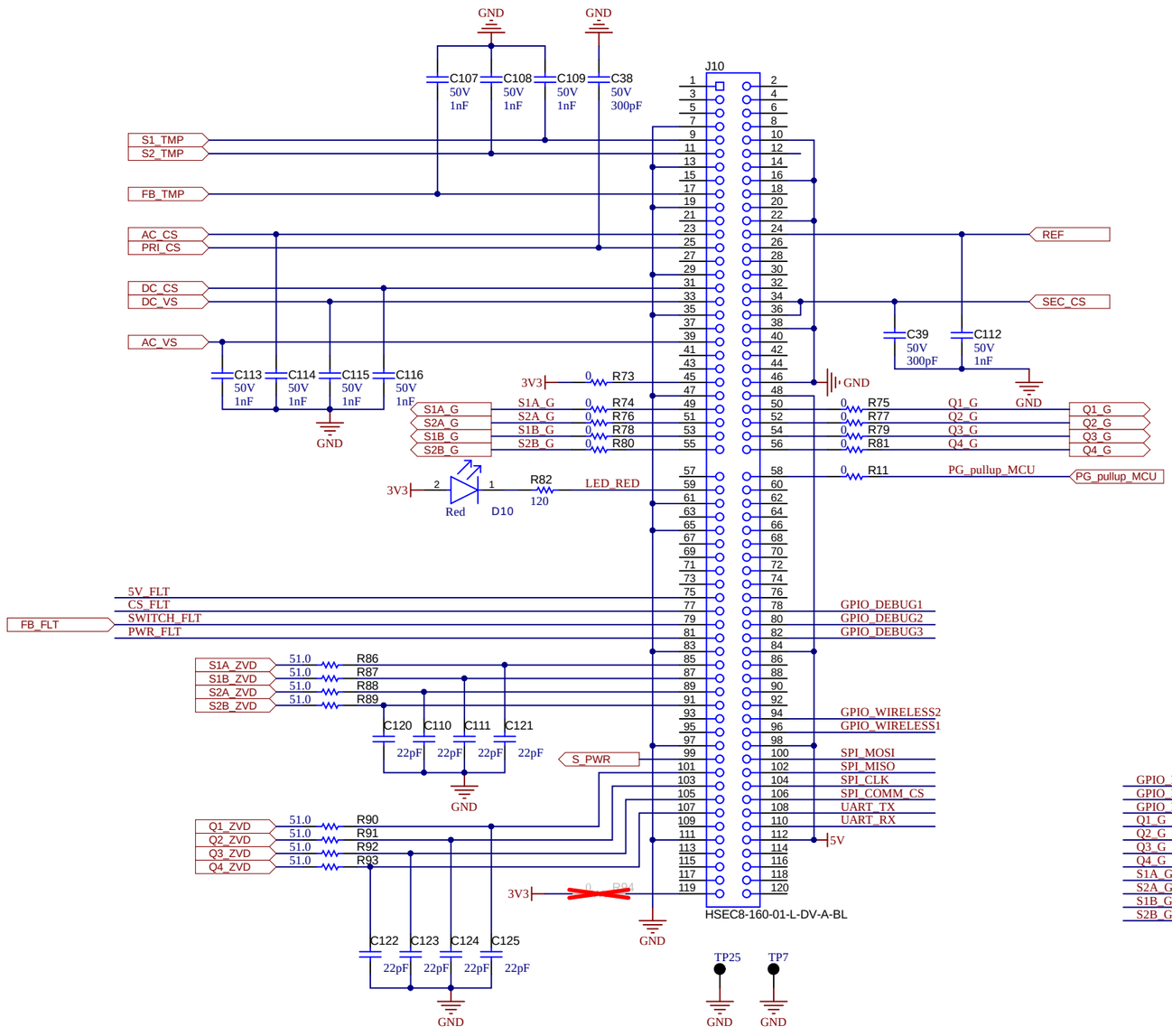
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Number: TIDA-010954 Rev: E4	Sheet Title:	
SVN Rev: Version control disabled	Assembly Variant: 001_Bourns_new	Sheet: 7 of 9
Drawn By:	File: TIDA-010954-Output.SchDoc	Size: B
Engineer: Kelvin Le	Contact: http://www.ti.com/support	

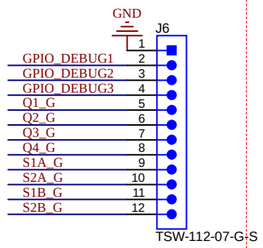
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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 9/29/2026
TID #: 010954	Project Title: Cycloconverter based solar microinverter	
Number: TIDA-010954 Rev: E4	Sheet Title:	
SVN Rev: Version control disabled	Assembly Variant: 001_Bourns_new	Sheet: 8 of 9
Drawn By:	File: TIDA-010954-Control.SchDoc	Size: B
Engineer: Kelvin Le	Contact: http://www.ti.com/support	

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H1 1 NY PMS 440 0025 PH

H2 1 NY PMS 440 0025 PH

H3 1 NY PMS 440 0025 PH

H4 1 NY PMS 440 0025 PH

H9 1 NY PMS 440 0025 PH

H5 1902C

H6 1902C

H7 1902C

H8 1902C

H10 1902C

FID1 FID2 FID3



CAUTION HOT SURFACE



DANGER HIGH VOLTAGE

You should delete the nylon screws/standoffs and/or the bumpons as needed for your design (or substitute other parts from Hardware.IntLib). Bumpons are cheaper, but provide less clearance.

Deleting anything else from this page may result in your EVM submission being rejected (until you add them back).

Update the Label Text in the Label Table as needed for each Assembly Variant.

You should delete this note too.

MP1 SKV585811-AL

MP2 ATS-CPX040040025-116-C1-R0

PCB Number: TIDA-010954
PCB Rev: E4

PCB LOGO
Texas Instruments



CE Mark

PCB LOGO
FCC disclaimer

PCB LOGO
WEEE logo

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

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.

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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 9/24/2025
TID #: 010954	Project Title: Cycloconverter based solar microinverter	
Number: TIDA-010954 Rev: E4	Sheet Title:	
SVN Rev: Version control disabled	Assembly Variant: 001_Bourns_new	Sheet: 9 of 9
Drawn By:	File: TIDA-010954-Hardware.SchDoc	Size: B
Engineer: Kelvin Le	Contact: http://www.ti.com/support	

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