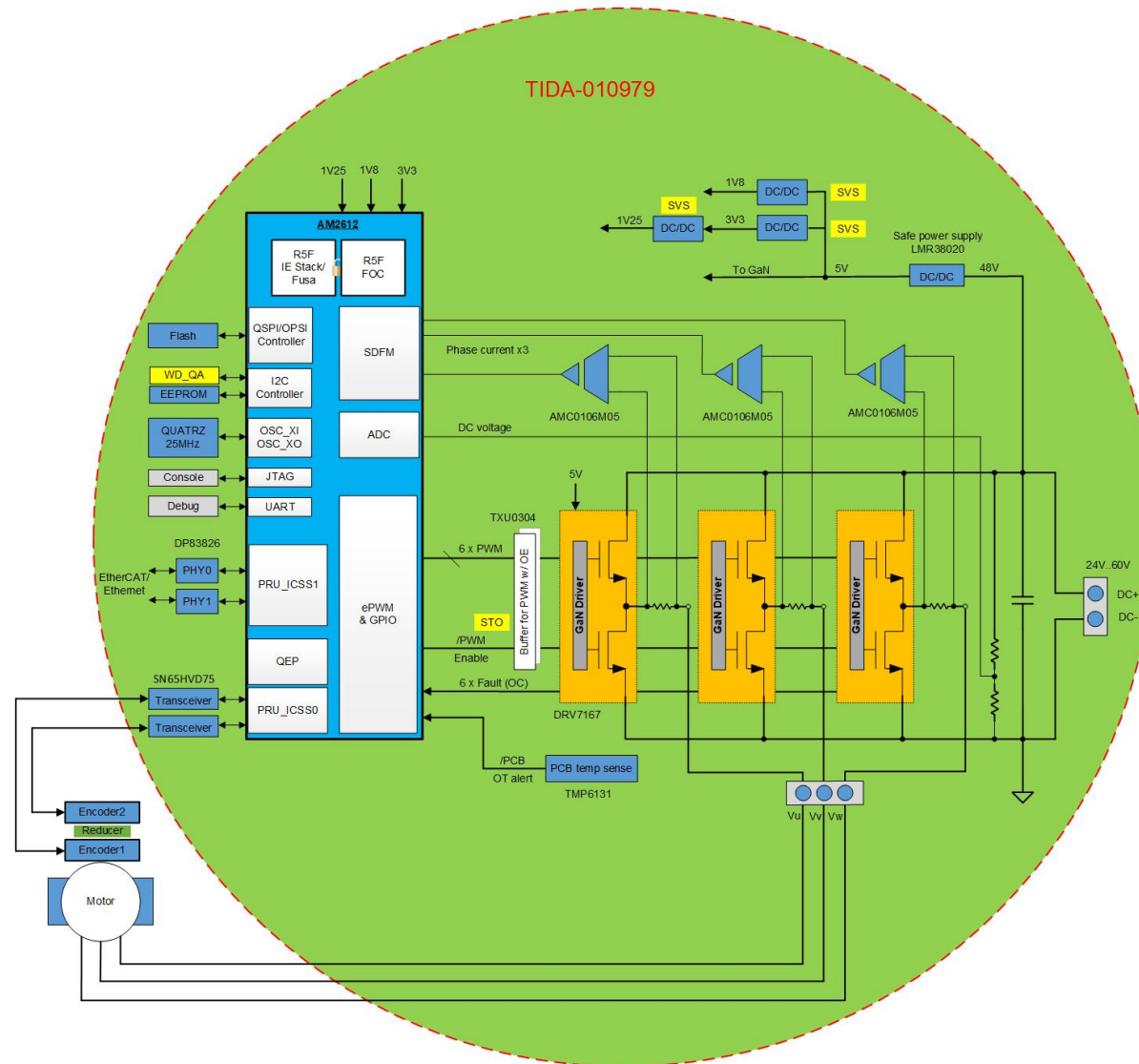


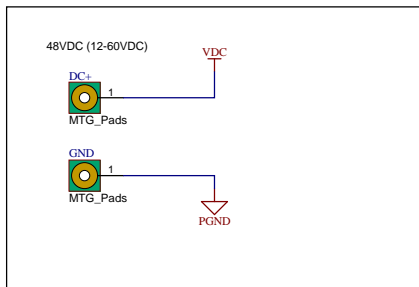
Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A



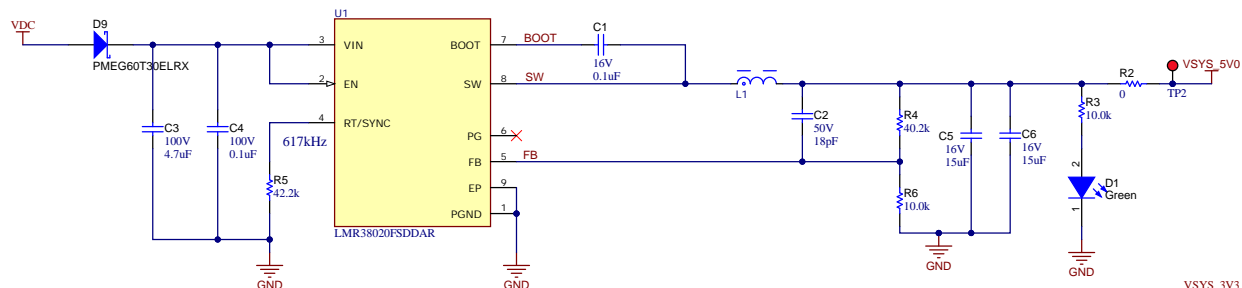
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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 3/12/2026	 http://www.ti.com © Texas Instruments 2025
TID #: TIDA-010979	Project Title: TIDA-010979	Sheet: 1 of 11	
Number: TIDA-010979 Rev: E2	Assembly Variant: 001	Size: B	
SVN Rev: Not in version control	File: TIDA-010979_E2_01_CoverSheet.SchDoc		
Drawn By: Chen Gao	Engineer: Chen Gao	Contact: http://www.ti.com/support	

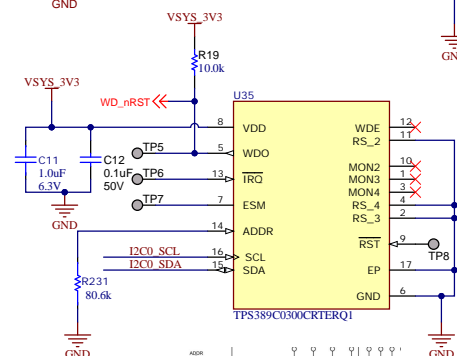
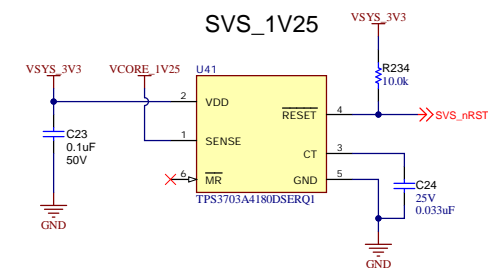
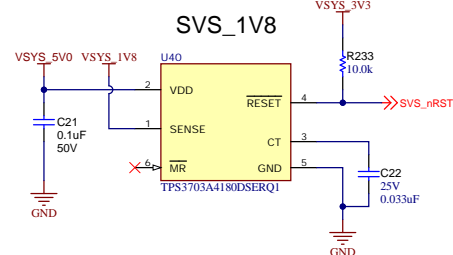
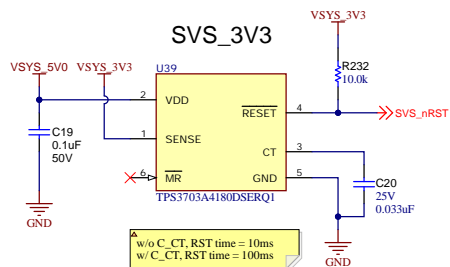
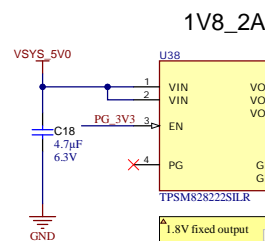
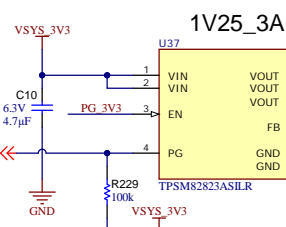
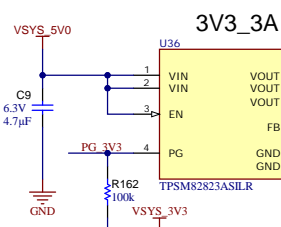
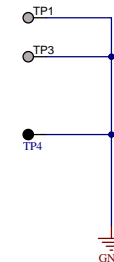
VIN Connector



12 to 60V input

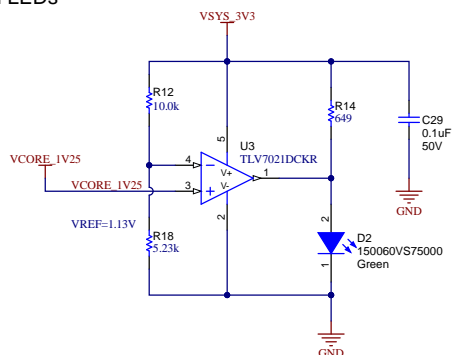
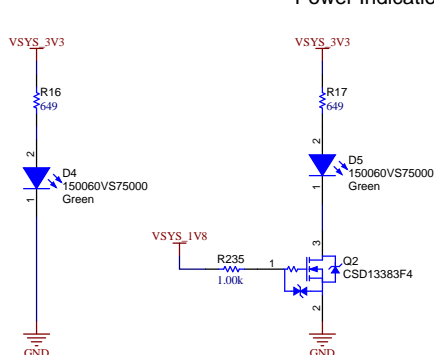


GND Test Points



TPS389C0300CRTERQ1 w/o PEC
TPS389C03A26RTERQ1 w/ PEC
ADDR Resistor = 80.6k for I2C addr = 07H
nRST to trigger STO_B

Power Indication LEDs

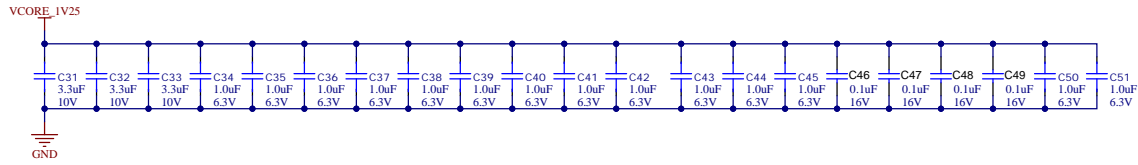


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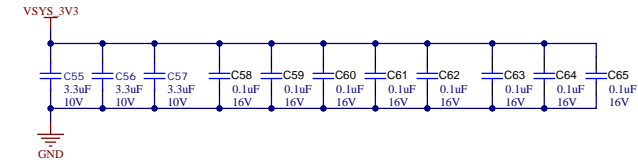
Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 12/12/2025	
Title #: TIDA-010979	Project Title: TIDA-010979		
Number: TIDA-010979 [Rev: E2]	Sheet Title:		
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 2 of 11	
Drawn by: Chen Gao	File: TIDA-010979_E2_02_Power_discrete_SchDoc	Size: B	
Engineer: Chen Gao	Contact: http://www.ti.com/support	http://www.ti.com © Texas Instruments 2025	



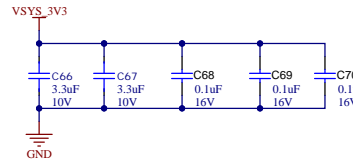
VDD 1V25 Core Digital



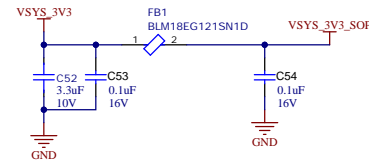
VDDSHV 3V3 Digital



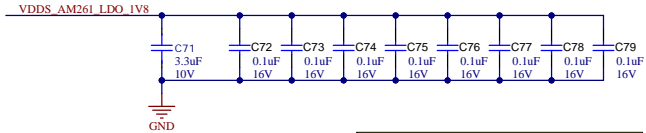
VDDSHV 3V3_D/E Flash



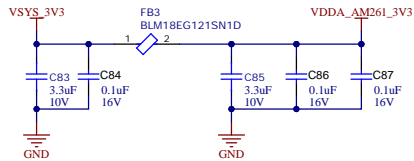
VSYS_3V3_SOP



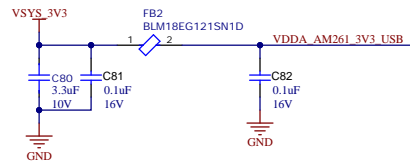
VDDDS 1V8 Digital



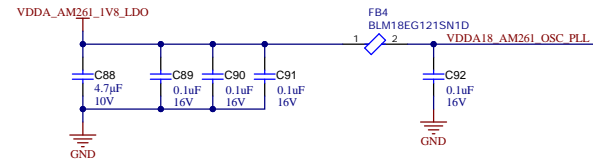
VDDA 3V3 Analog



VDDA 3V3 USB

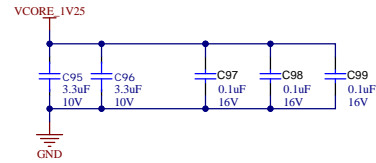


VDDA 1V8 Analog

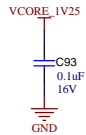


Notes VDDA1V8:
- May not need ferrite filtering, but will keep this for experimenting

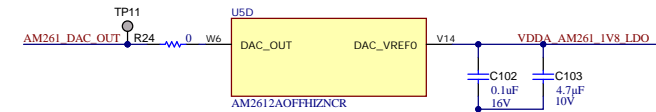
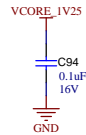
VDDAR[3:2] 1V25 SRAM Array



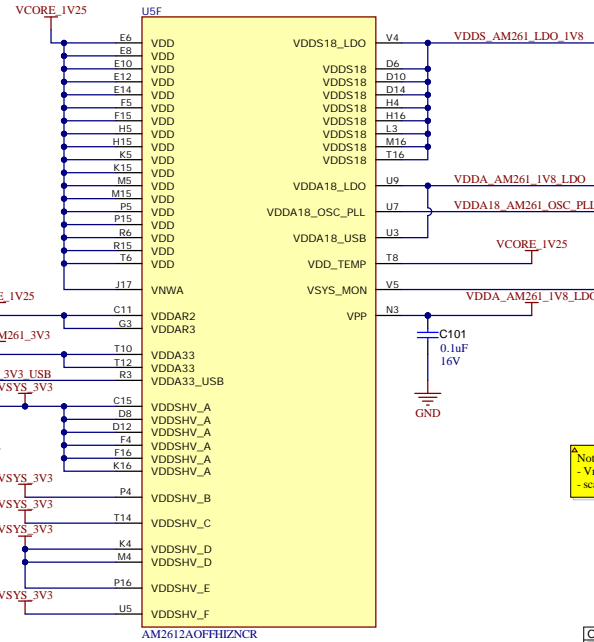
VNWA 1V2



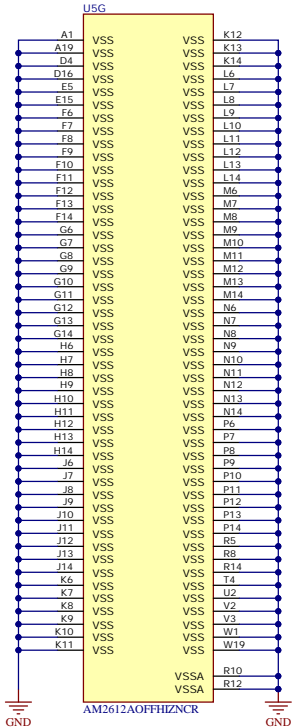
VDD 1V2 Temperature



Notes VDDSHV_D-FLASH0
VDDSHV_E-FLASH1



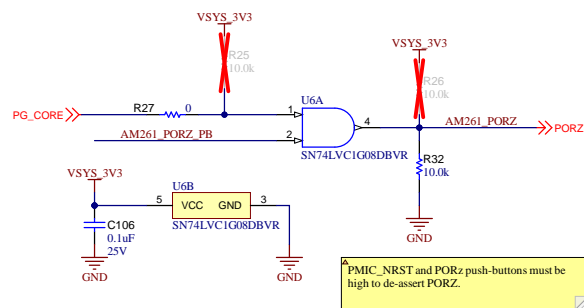
Notes: VSYS_MON
- Vmax 1.8V
- scaling 2.805V (3.3V -15%) to 0.895V for 0.9V Vmin comparator



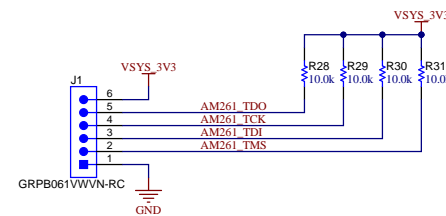
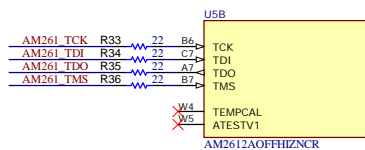
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AM261x Clock, Reset, JTAG, EEPROM

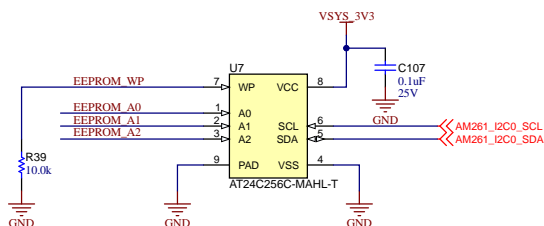
POR Generation



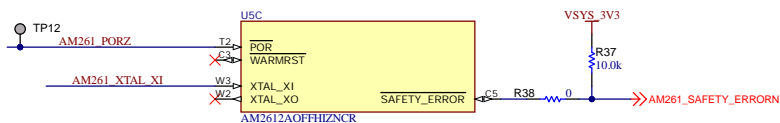
JTAG



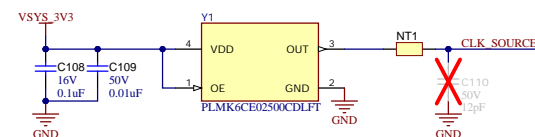
Board ID EEPROM



CLOCK INPUT

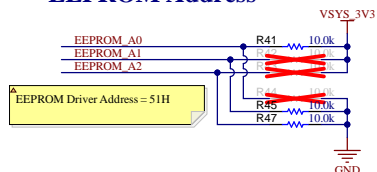


25 MHz Oscillator

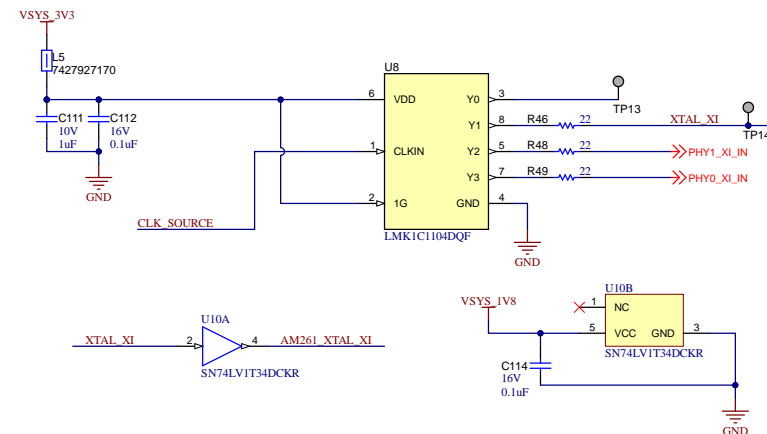
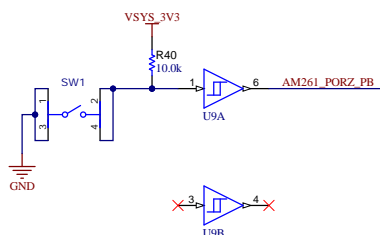


p2p: CAT24M01HU5I-GT3

EEPROM Address



PORZ & RST Push-Button



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 12/1/2025
TID #: TIDA-010979	Project Title: TIDA-010979	
Number: TIDA-010979	Rev: E2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet 4 of 11
Drawn By: Chen Gao	File: TIDA-010979_E2_04_CLK_RST_Boot_JTAG_Schematic B	http://www.ti.com
Engineer: Chen Gao	Contact: http://www.ti.com/support	© Texas Instruments 2025

AM261x Debug console, Boot, IOs

AM261x SOP[3:0]

UART

PWM

SDFM/SDM CLK (EPWM8A/B)

Table 6-2. BOOTMODE Pin Mapping				
Boot Mode	SOP1 (SOP1)	SOP2 (SOP2)	SOP3 (SOP3)	SOP4 (SOP4)
QSPI (4S) - Quad Read Mode	0	0	0	0
UART	0	0	0	1
QSPI (TS) - Single Read Mode	0	0	1	0
QSPI (BS) - Octal Read Mode	0	0	1	1
QSPI Serial NAND (TS) - Single Read Mode	0	1	1	0
QSPI Serial NAND (BS) - Octal Read Mode	0	1	1	1
DebugBoot	1	0	1	1
QSPI RD (SFDP)	1	1	0	0
QSPI Serial NAND (BS) - Octal Read Mode	1	1	0	1
USB DFU	1	1	1	0
Unsupported Boot Mode				

All other combinations not defined above

Encoder/RS485

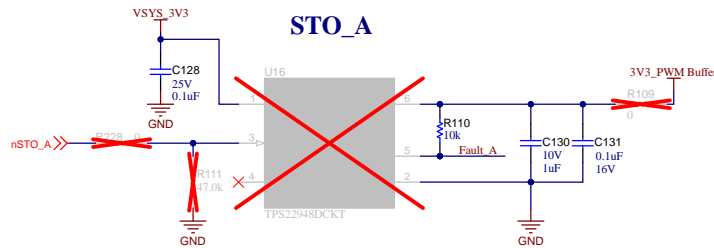
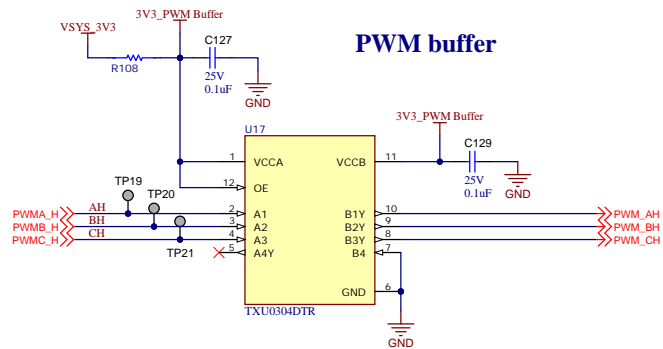
MII/RMII/RGMII

DIP Switch SOP Select

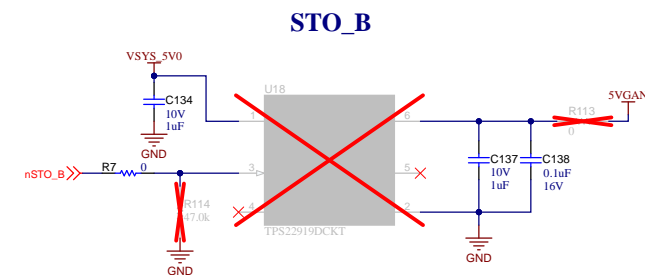
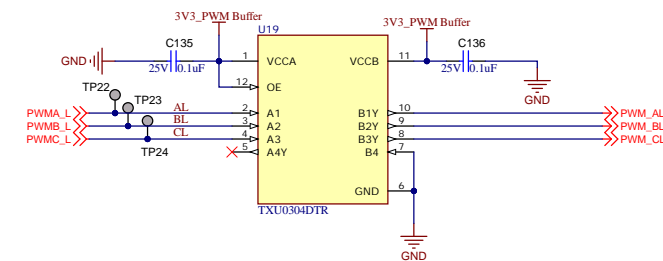
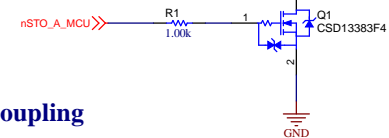
2MB QSPI Flash

PHY RST

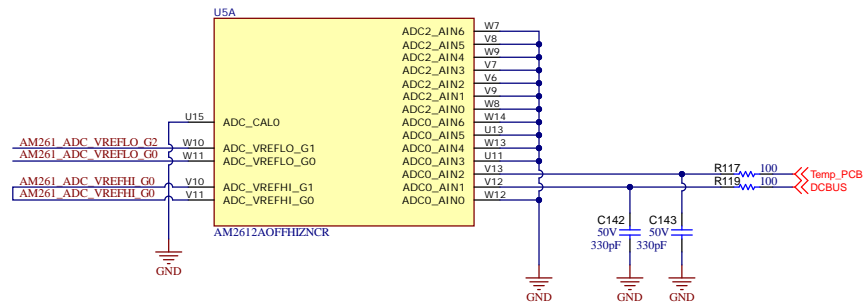
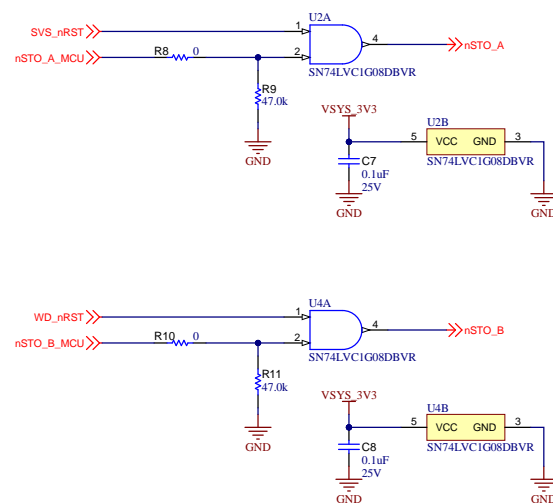
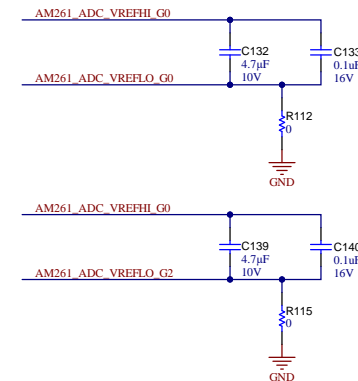
Option for SOP pin re-used as functional pin



A nSTO_A_MCU GPO is re-used as indication of GaN fault

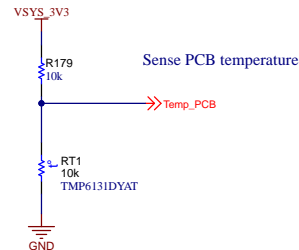
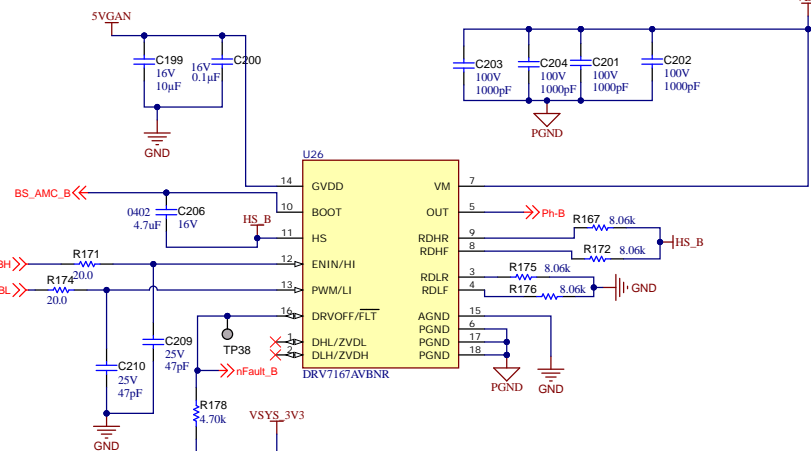
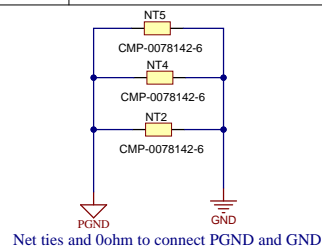


ADC VREF Decoupling

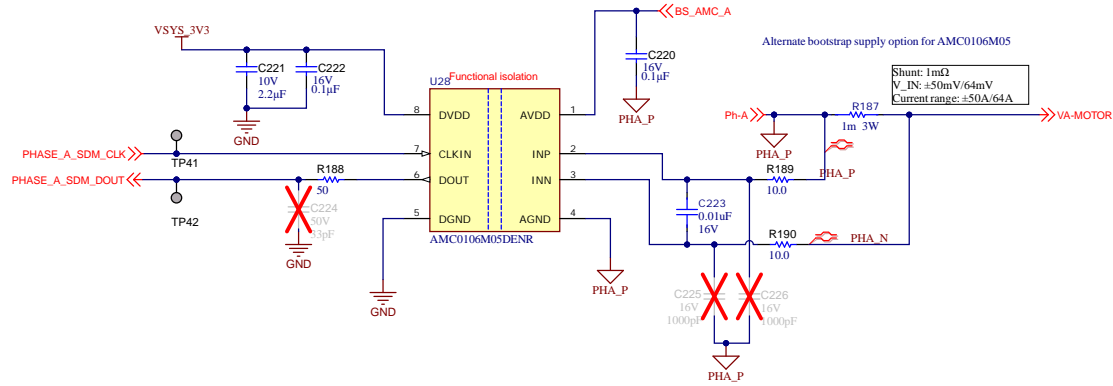


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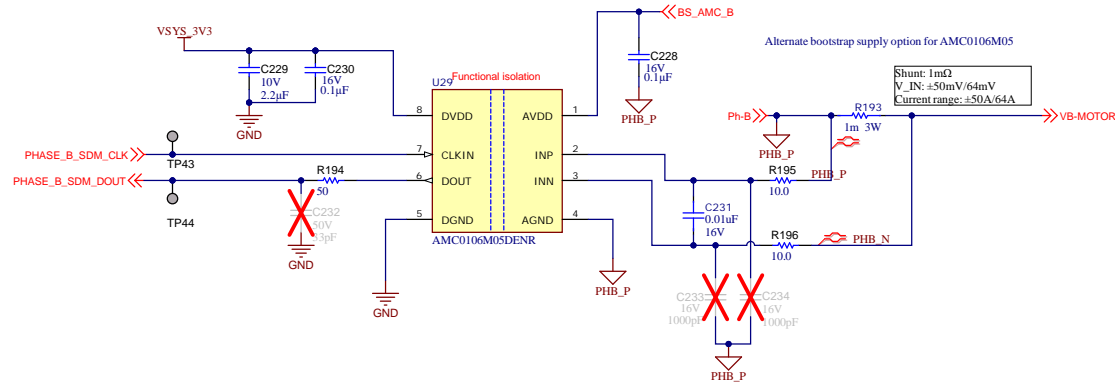
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TID #: TIDA-010979	Project Title: TIDA-010979	
Number: TIDA-010979 Rev: E2	Sheet Title:	
SVN Rev.: Not in version control	Assembly Variant: 001	Sheet 6 of 11
Drawn By: Chen Gao	File: TIDA-010979 E2 06 PWM Buffer ADC_Sch.Dwg	Size: B
Engineer: Chen Gao	Contact: http://www.ti.com/support	



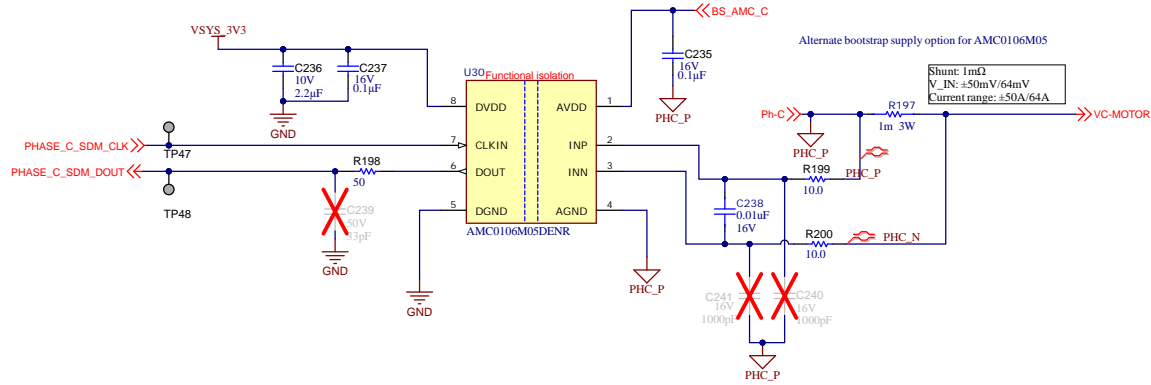
Phase A current sensing



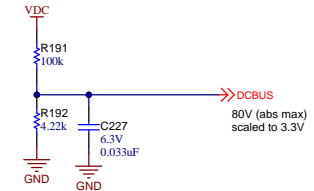
Phase B current sensing



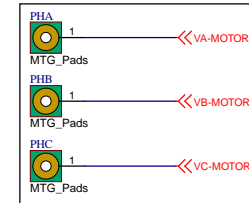
Phase C current sensing



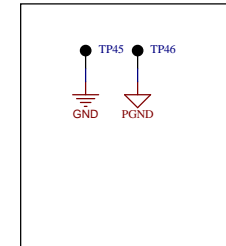
DC bus voltage sensing



Motor Connector



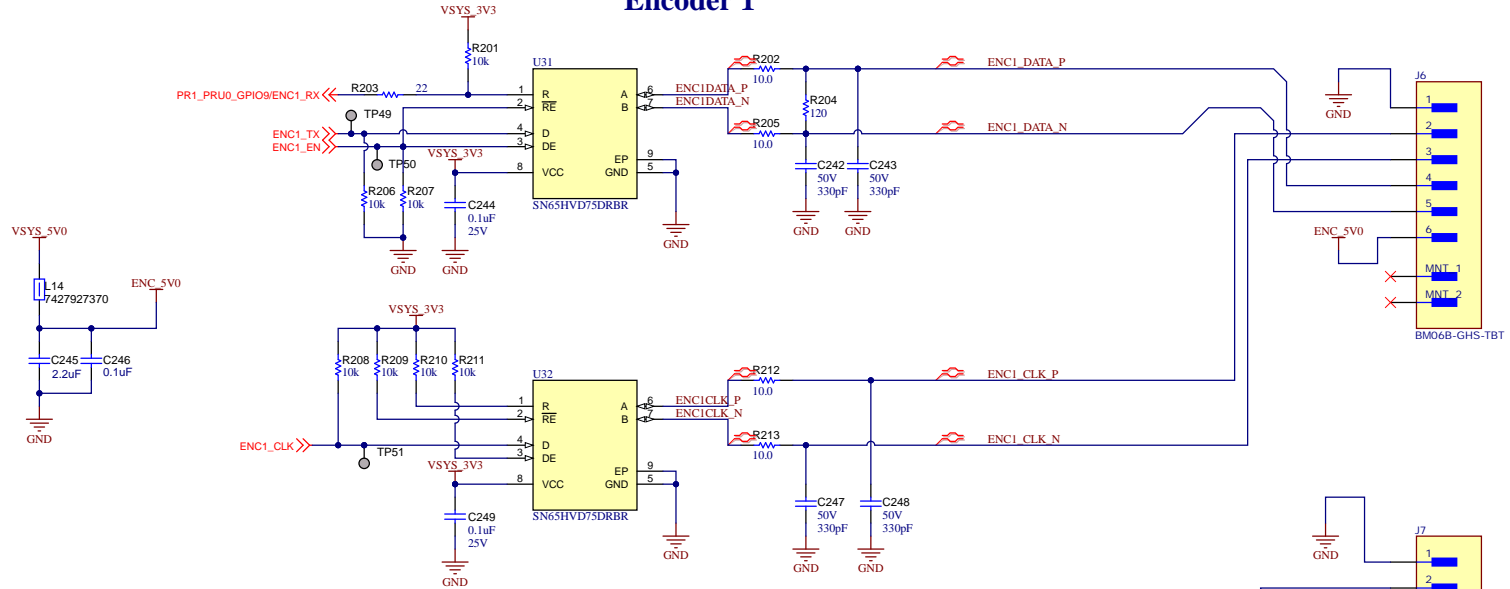
Test Points



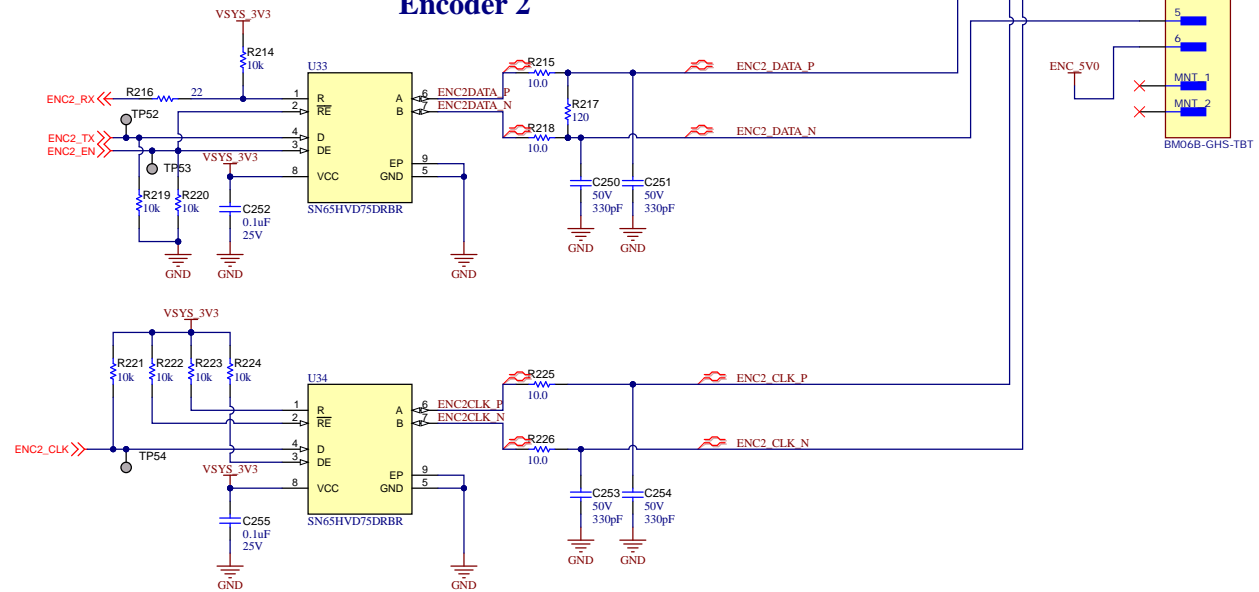
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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 12/17/2025
TID #: TIDA-010979	Project Title: TIDA-010979	
Number: TIDA-010979 Rev: E2	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 9 of 11
Drawn By: Chen Gao	File: TIDA-010979 E2 09 Current Sense.SchDoc	Size: B
Engineer: Chen Gao	Contact: http://www.ti.com/support	

Encoder 1



Encoder 2



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TID #: TIDA-010979	Project Title: TIDA-010979	
Number: TIDA-010979	Rev: E2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet 10 of 11
Drawn By: Chen Gao	File: TIDA-010979 E2 10 Encoder interface GH1250000	
Engineer: Chen Gao	Contact: http://www.ti.com/support	



PCB Number: TIDA-010979
PCB Rev: E2

PCB
LOGO
Texas Instruments



PCB
LOGO
FCC disclaimer

PCB
LOGO
WEEE logo



CAUTION HOT SURFACE

Variant/Label Table	
Variant	Label Text
001	TIDA-010979E2

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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