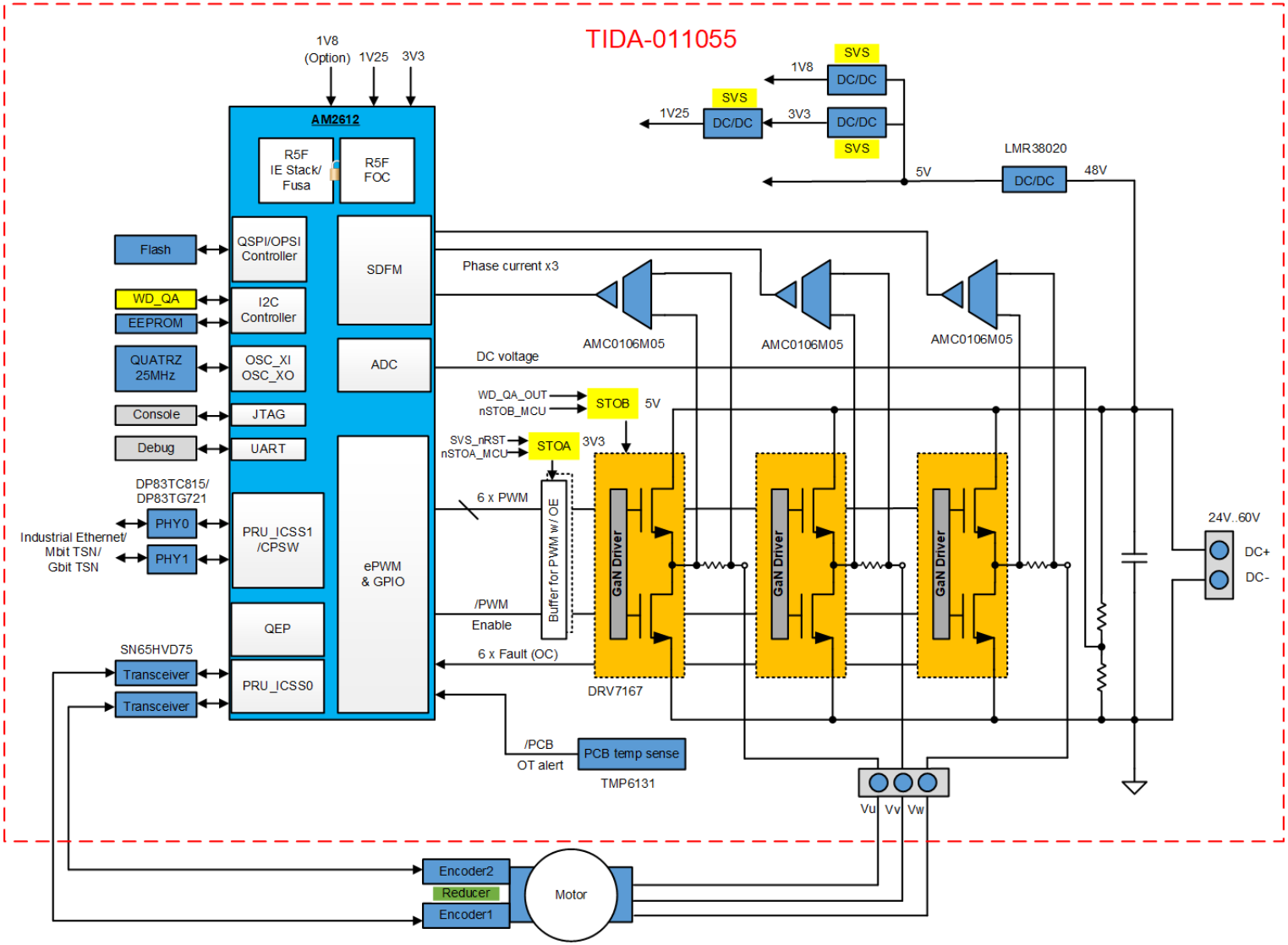
Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A



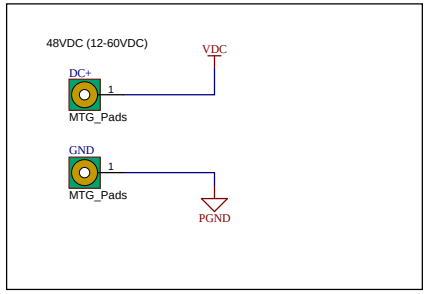
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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 9/24/2026
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Number: TIDA-011055 Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001_100baseT1	Sheet: 1 of 11
Drawn By: Chen Gao	File: TIDA-011055_E1_01_CoverSheet.SchDoc	Size: B
Engineer: Chen Gao	Contact: http://www.ti.com/support	

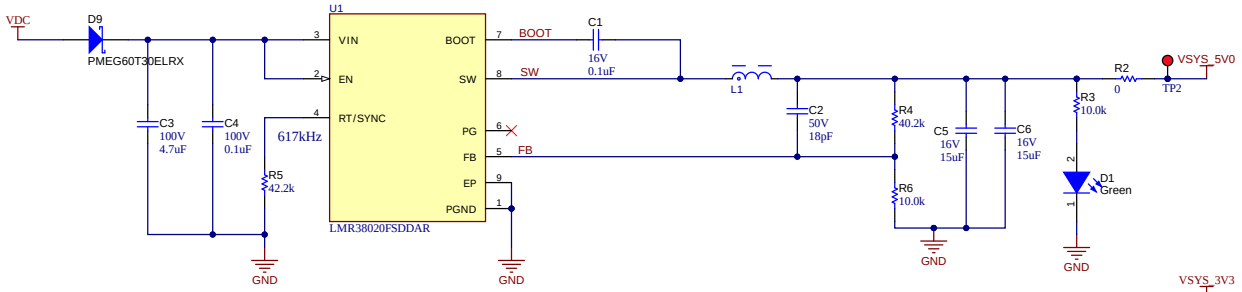
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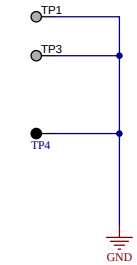
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VIN Connector



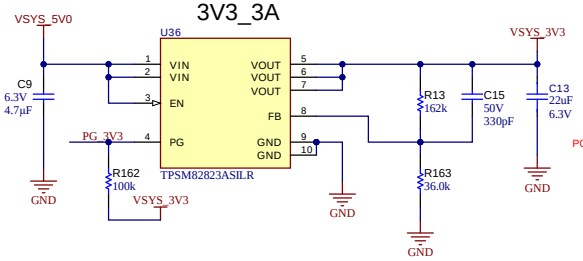
12 to 60V input



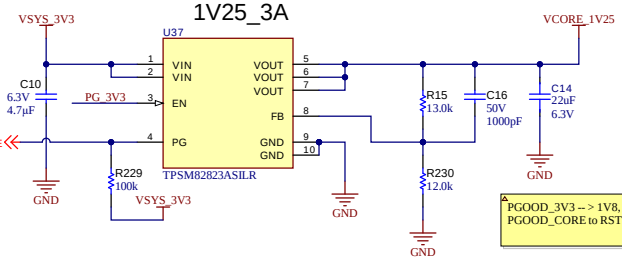


GND Test Points

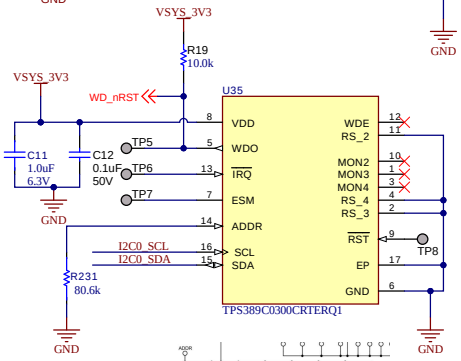
3V3_3A

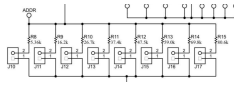


1V25_3A



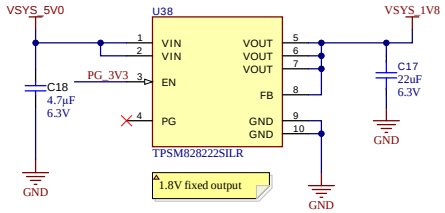
PGOOD_3V3 -- > 1V8, 1V25 rail
PGOOD_CORE to RST MCU





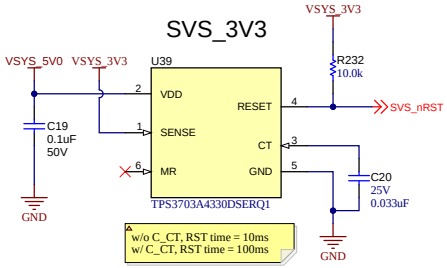
TPS389C0300CRTERQ1 w/o PEC
TPS389C03A26RTERQ1 w/ PEC
ADDR Resistor = 80.6k for I2C addr = 07H
nRST to trigger STO_B

1V8_2A



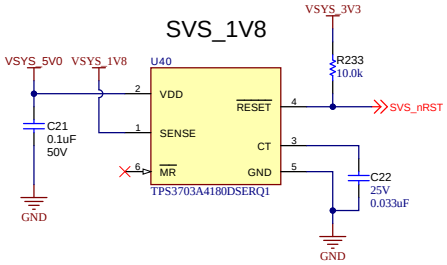
1.8V fixed output

SVS_3V3

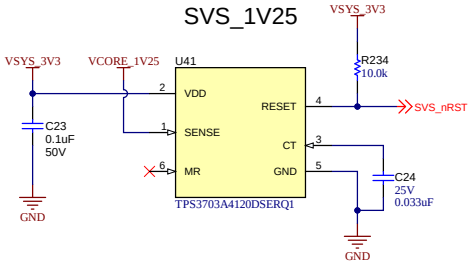


w/o C_CT, RST time = 10ms
w/ C_CT, RST time = 100ms

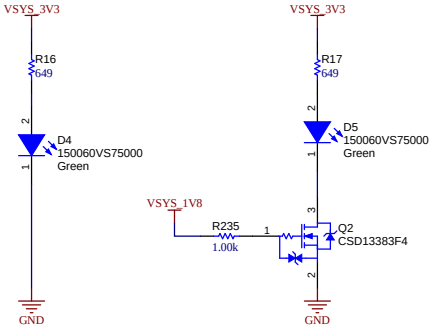
SVS_1V8

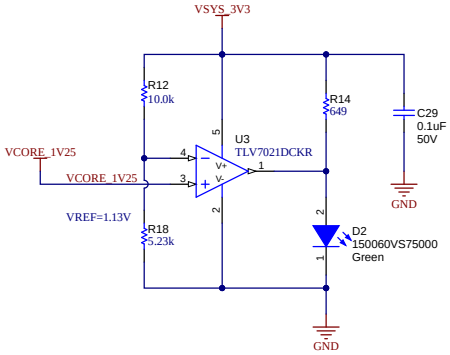


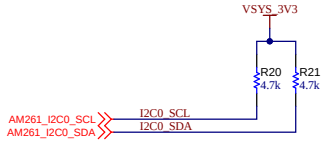
SVS_1V25



Power Indication LEDs







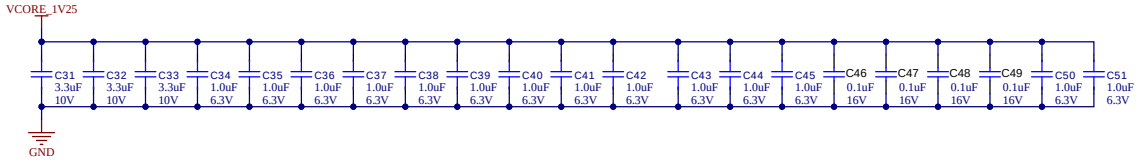
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Number: TIDA-011055 Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001_100baseT1	Sheet: 2 of 11
Drawn By: Chen Gao	File: TIDA-011055_E1_02_Power_discrete.SchDoc	Size: B
Engineer: Chen Gao	Contact: http://www.ti.com/support	

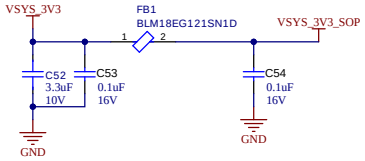
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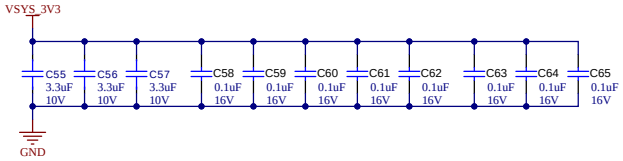
VDD 1V25 Core Digital



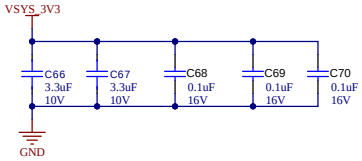
VSYS_3V3_SOP



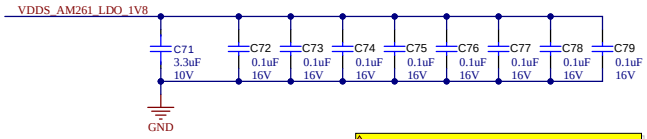
VDDSHV 3V3 Digital



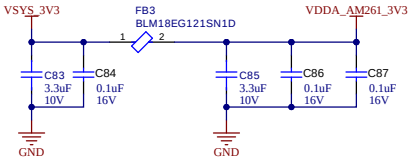
VDDSHV 3V3_D/E Flash



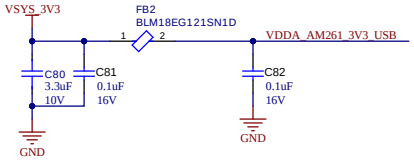
VDDS 1V8 Digital



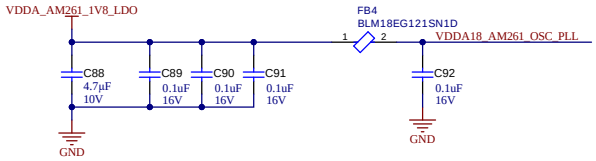
VDDA 3V3 Analog



VDDA 3V3 USB

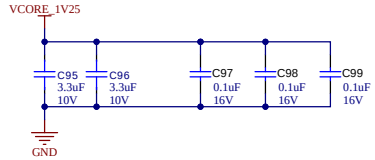


VDDA 1V8 Analog

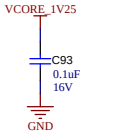


Notes VDDA1V8:
- May not need ferrite filtering, but will keep this for experimenting

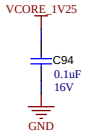
VDDAR[3:2] 1V25 SRAM Array

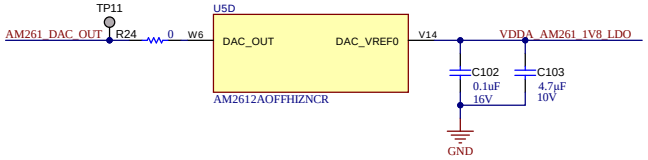


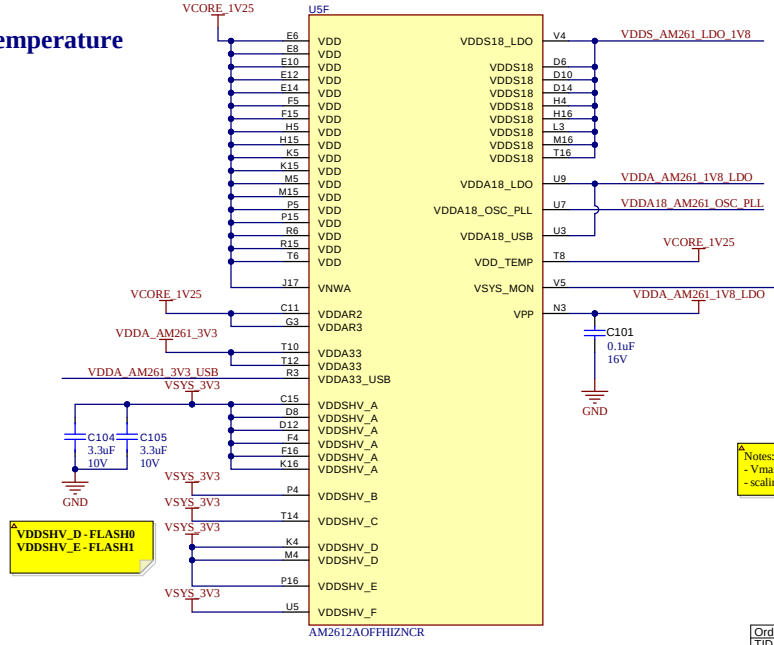
VNWA 1V2



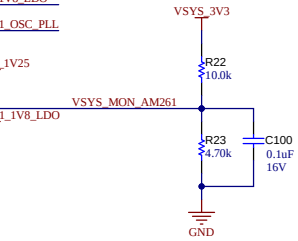
VDD 1V2 Temperature



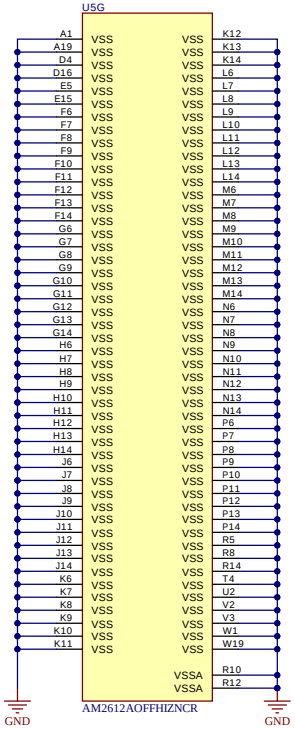




VDDSHV_D - FLASH0
VDDSHV_E - FLASH1



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



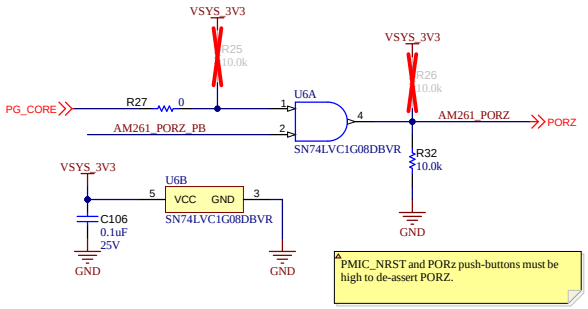
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Number: TIDA-011055 Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001_100baseT1	Sheet: 3 of 11
Drawn By: Chen Gao	File: TIDA-011055_E1_03_SoC_Power.SchDoc	Size: B
Engineer: Chen Gao	Contact: http://www.ti.com/support	

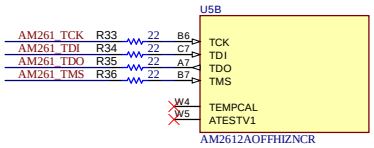
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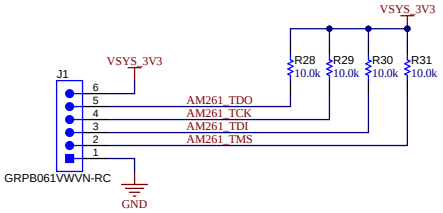
AM261x Clock, Reset, JTAG, EEPROM

POR Generation

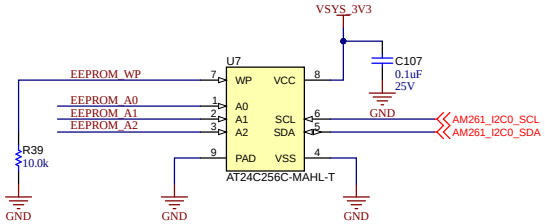


JTAG



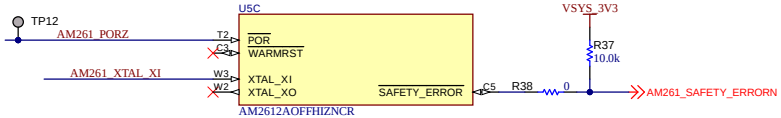


Board ID EEPROM

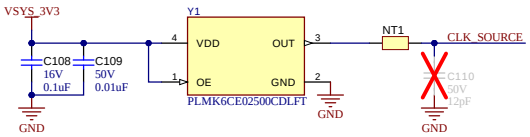


p2p: CAT24M01HU5I−GT3

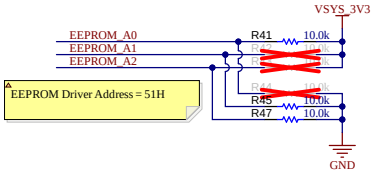
CLOCK INPUT



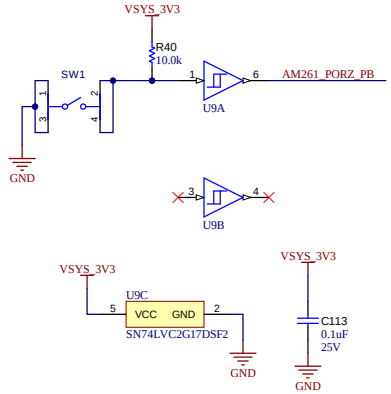
25 MHz Osicillator

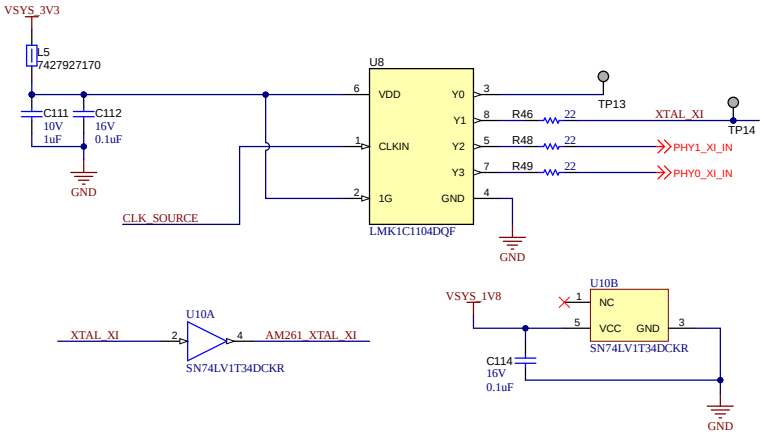


EEPROM Address



PORZ & RST Push-Button





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SVN Rev: Not in version control	Assembly Variant: 001_100baseT1	Sheet: 4 of 11
Drawn By: Chen Gao	File: TIDA-011055_E1_04_CLK_RST_Boot_JTAG.SchDoc	Size: B
Engineer: Chen Gao	Contact: http://www.ti.com/support	

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AM261x Debug console, Boot, IOs

AM261x SOP[3:0]

UART

PWM

SDFM/SDM CLK (EPWM8A/B)

Encoder/RS485

MII/RMII/RGMII

SDFM

2MB QSPI Flash

PHY RST

DIP Switch SOP Select

Table 5-2. BOOTMODE Pin Mapping

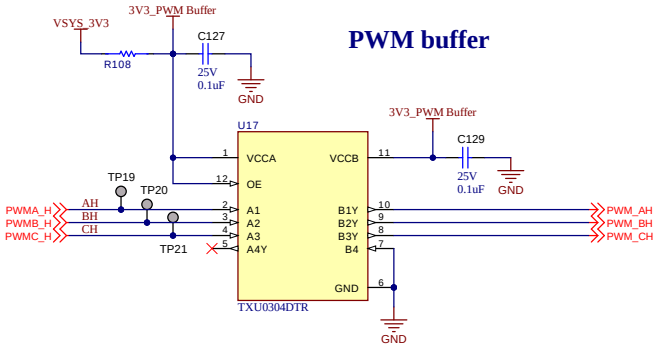
Boot Mode	SPI0_D0_pad (SOP3)	SPI0_CLK_pad (SOP2)	QSPI_D1 (SOP1)	QSPI_D0 (SOP0)
OSPI (4S) - Quad Read Mode	0	0	0	0
UART	0	0	0	1
OSPI (1S) - Single Read Mode	0	0	1	0
OSPI (8S) - Octal Read Mode	0	0	1	1
OSPI Serial NAND (1S) - Single Read Mode	0	1	1	0
OSPI Serial NAND (4S) - Quad Read Mode	0	1	1	1
DevBoot	1	0	1	1
xSPI 8D (SFDP)	1	1	0	0
OSPI Serial NAND (8S) - Octal Read Mode	1	1	0	1
USB DFU	1	1	1	0
Unsupported Boot Mode	All other combinations not defined above			

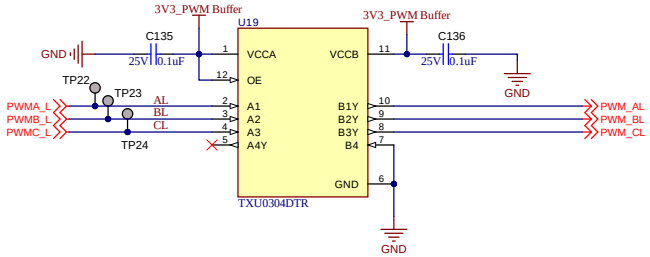
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Number: TIDA-011055	Rev: E1	Sheet Title:	
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Drawn By: Chen Gao		File: TIDA-011055_E1_05_Debug_Console_IOs.SchDoc	Size: B
Engineer: Chen Gao		Contact: http://www.ti.com/support	

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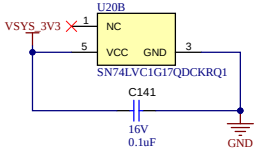
PWM buffer



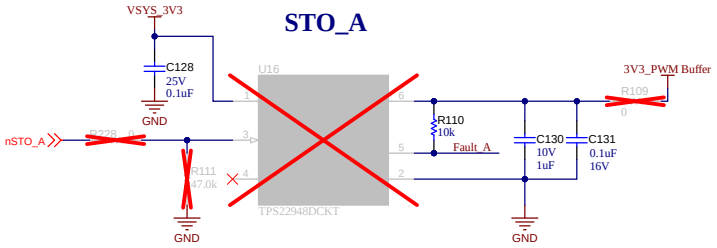


SDM CLOCK

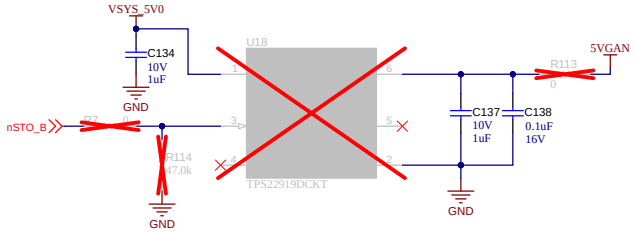


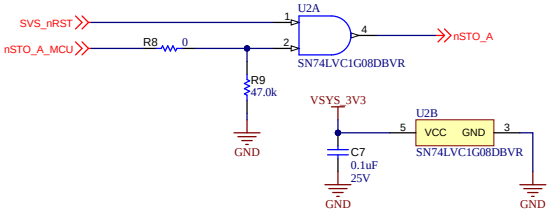


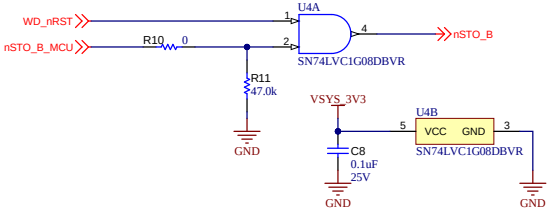
STO_A

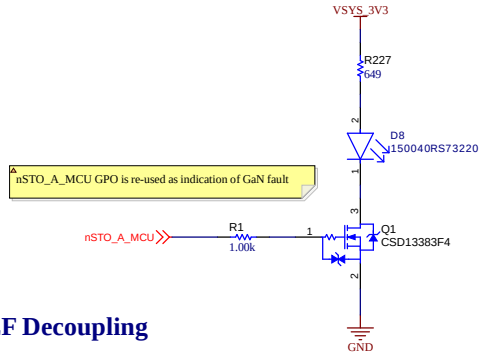


STO_B

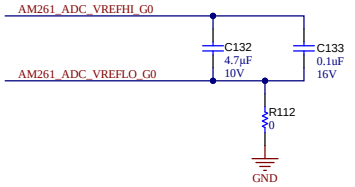


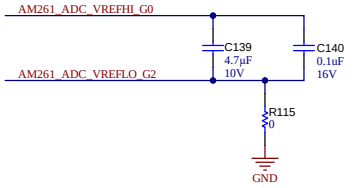


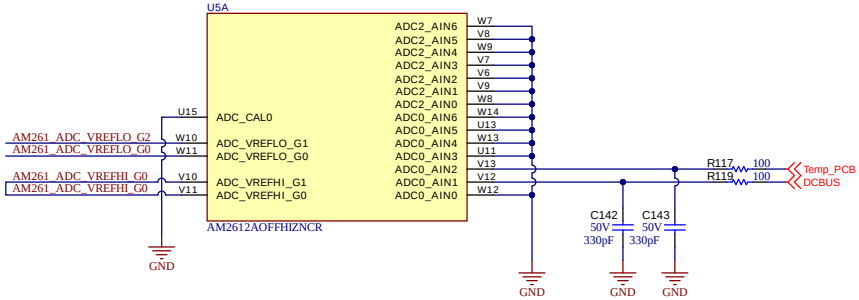




ADC VREF Decoupling







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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 12/11/2025
TID #: TIDA-011055	Project Title: TIDA-011055	
Number: TIDA-011055 Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001_100baseT1	Sheet: 6 of 11
Drawn By: Chen Gao	File: TIDA-011055_E1_06_PWM_Buffer_ADC.SchDoc	Size: B
Engineer: Chen Gao	Contact: http://www.ti.com/support	

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Ethernet PHY

100BASE-T1: DP83TC815RHARQ1
R133, R134, R154, R155, L9, L13 DNP (MII mode)
R82, C256, R91, C257 DNP (Pin17 float)
U42 DNP (Use internal 1V0 LDO)

1000BASE-T1:DP83TG721S-Q1
R131, R153 DNP (RGMII TX/RX Shift mode)

PHY0

DP83TC815RHARQ1

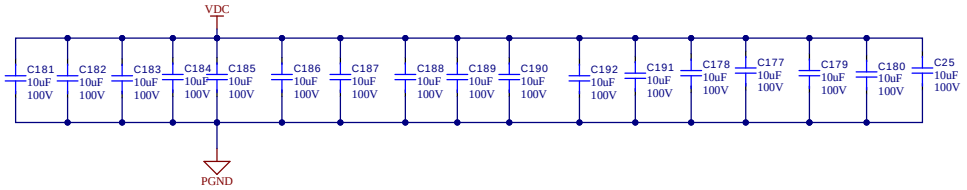
PHY1

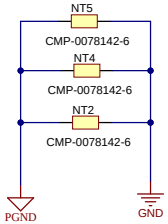
DP83TC815RHARQ1

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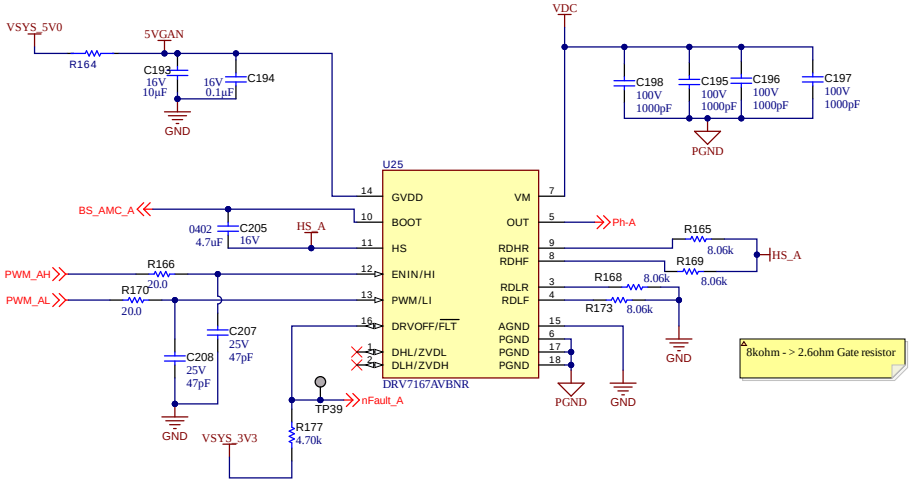
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Number: TIDA-011055 Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001_100baseT1	Sheet: 7 of 11
Drawn By: Chen Gao	File: TIDA-011055_E1_07_ETH_PHY_T1.SchDoc	Size: B
Engineer: Chen Gao	Contact: http://www.ti.com/support	

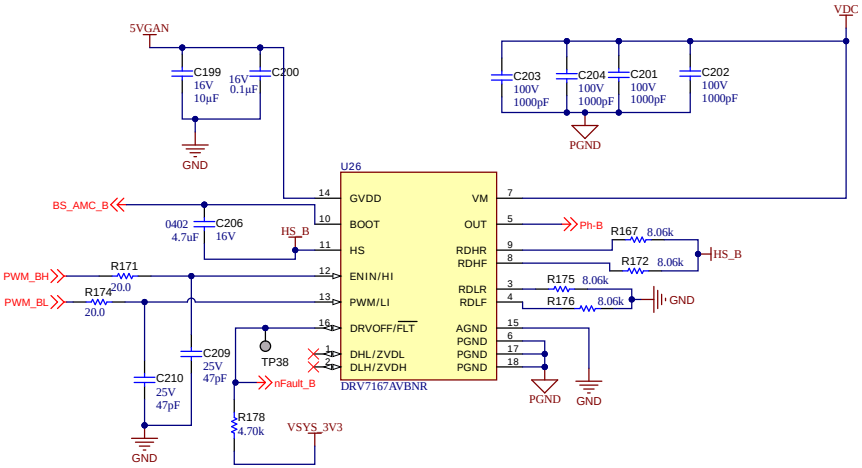
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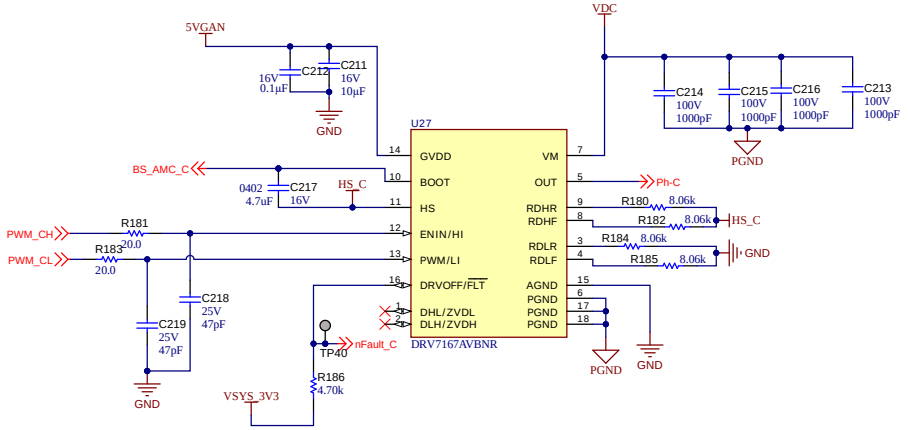


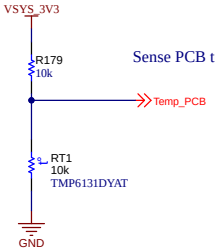


Net ties and 0ohm to connect PGND and GND









Sense PCB temperature

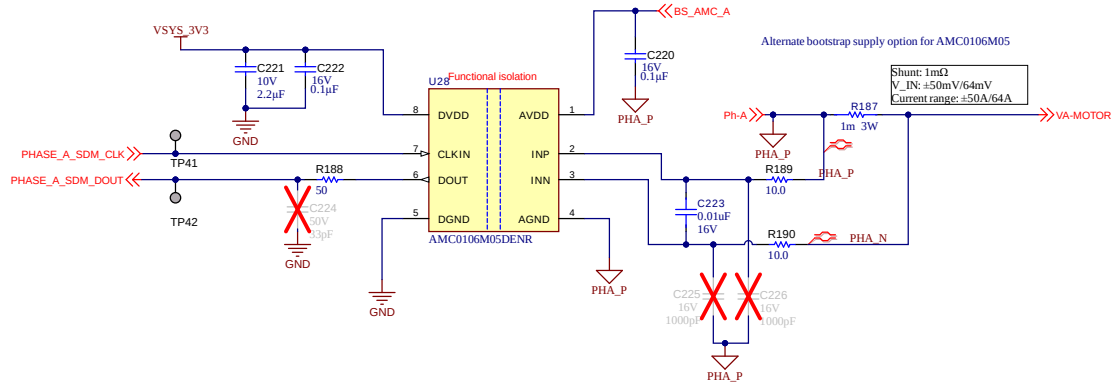
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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 3/6/2026
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Number: TIDA-011055 Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001_100baseT1	Sheet: 8 of 11
Drawn By: Chen Gao	File: TIDA-011055_E1_08_GaN.SchDoc	Size: B
Engineer: Chen Gao	Contact: http://www.ti.com/support	

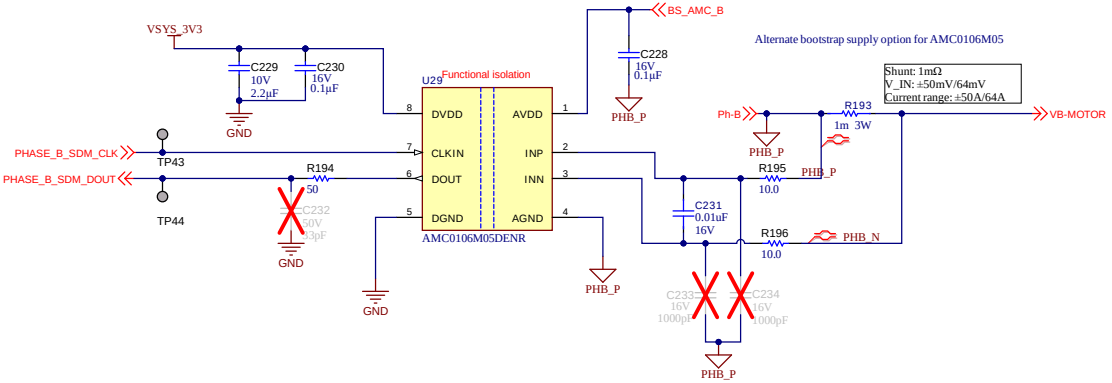
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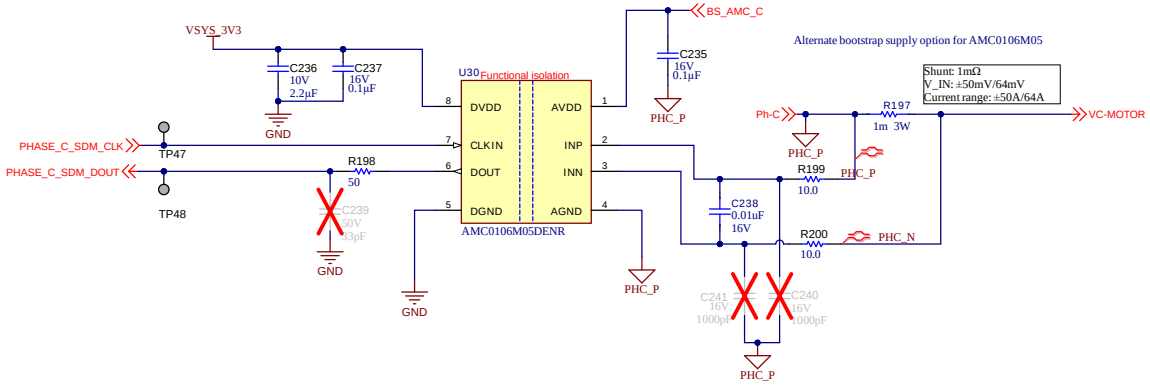
Phase A current sensing



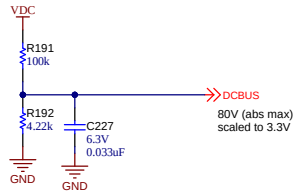
Phase B current sensing



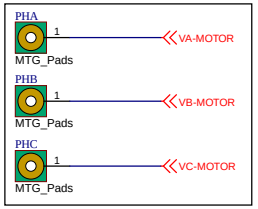
Phase C current sensing



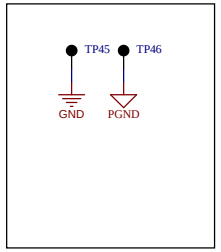
DC bus voltage sensing



Motor Connector



Test Points



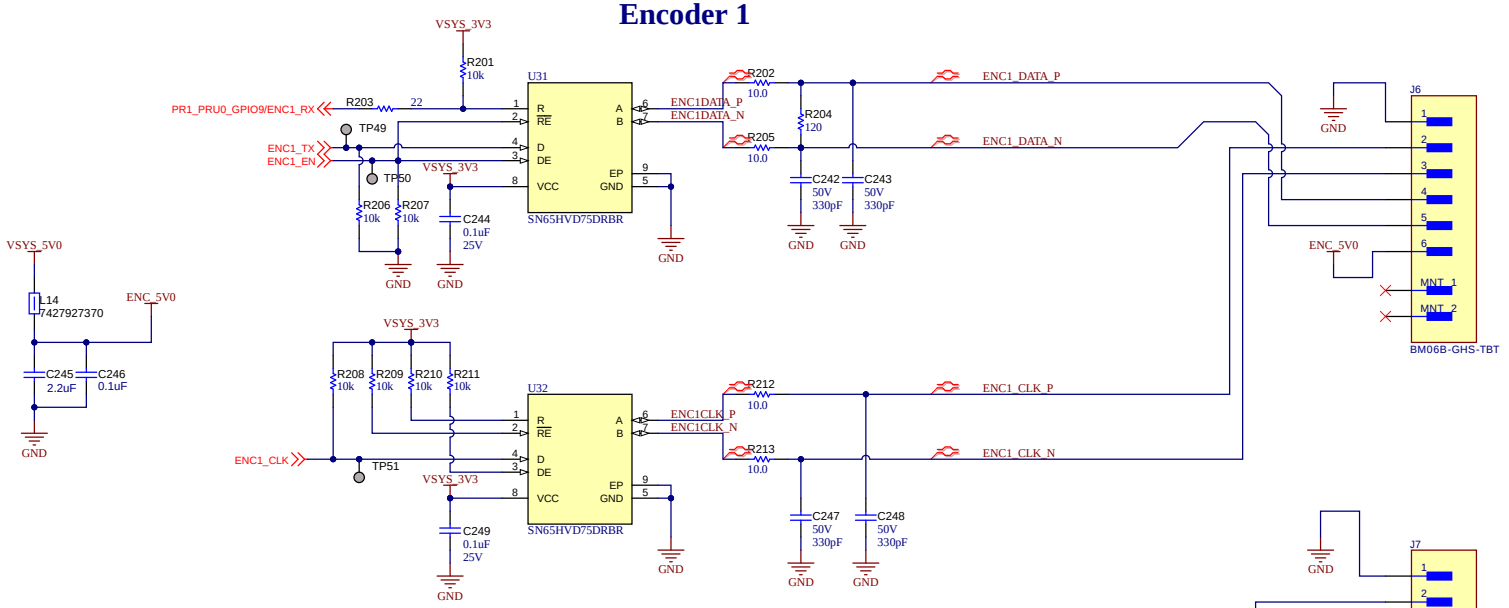
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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 12/17/2025
TID #: TIDA-011055	Project Title: TIDA-011055	
Number: TIDA-011055 Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001_100baseT1	Sheet: 9 of 11
Drawn By: Chen Gao	File: TIDA-011055_E1_09_Current_Sense.SchDoc	Size: B
Engineer: Chen Gao	Contact: http://www.ti.com/support	

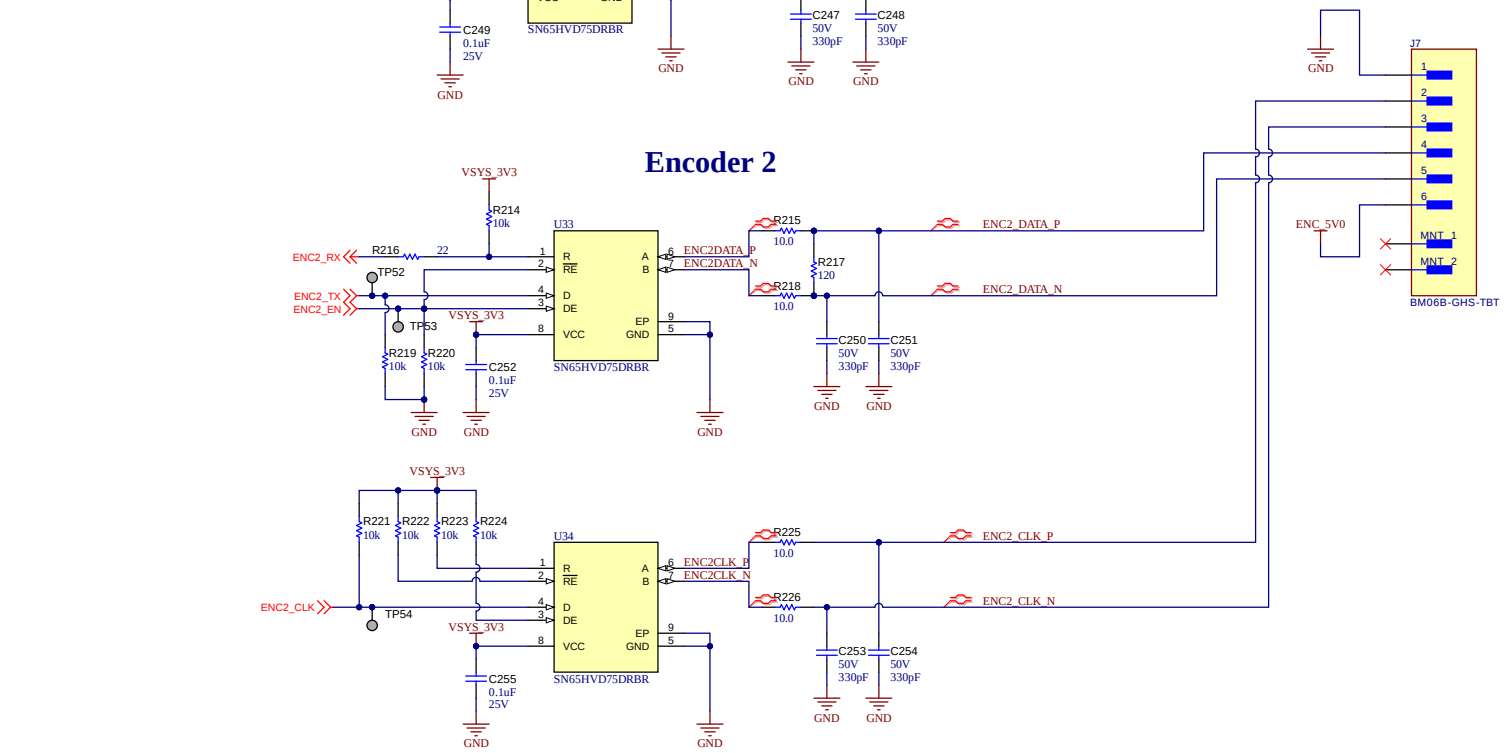
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Encoder 1



Encoder 2



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 12/1/2025
TID #: TIDA-011055	Project Title: TIDA-011055	
Number: TIDA-011055 Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001_100baseT1	Sheet: 10 of 11
Drawn By: Chen Gao	File: TIDA-011055_E1_10_Encoder_interface_GH125SchDoc	
Engineer: Chen Gao	Contact: http://www.ti.com/support	

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FID1 FID2 FID3

PCB Number: TIDA-011055
PCB Rev: E1

PCB LOGO
Texas Instruments

CE Mark

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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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 12/1/2025
TID #: TIDA-011055	Project Title: TIDA-011055	
Number: TIDA-011055 Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001_100baseT1	Sheet: 11 of 11
Drawn By: Chen Gao	File: TIDA-011055_E1_Hardware.SchDoc	Size: B
Engineer: Chen Gao	Contact: http://www.ti.com/support	

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