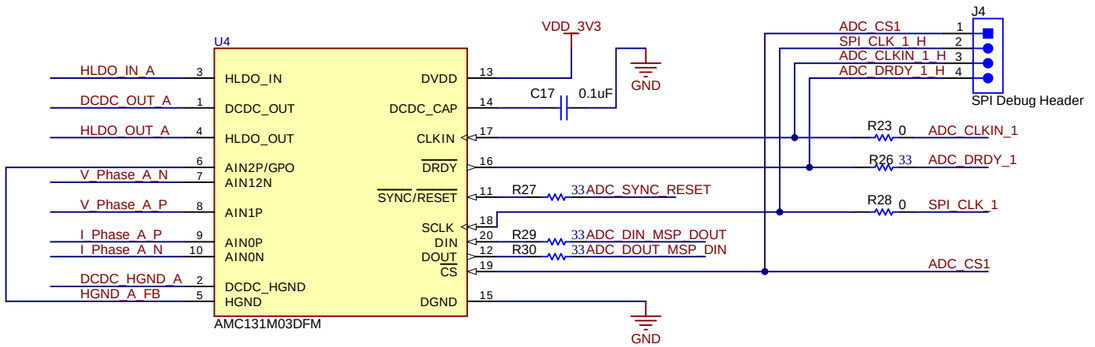

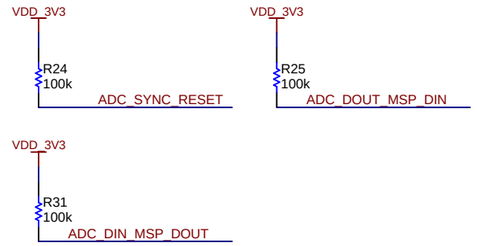

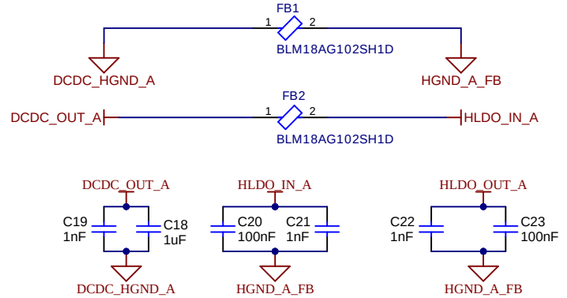

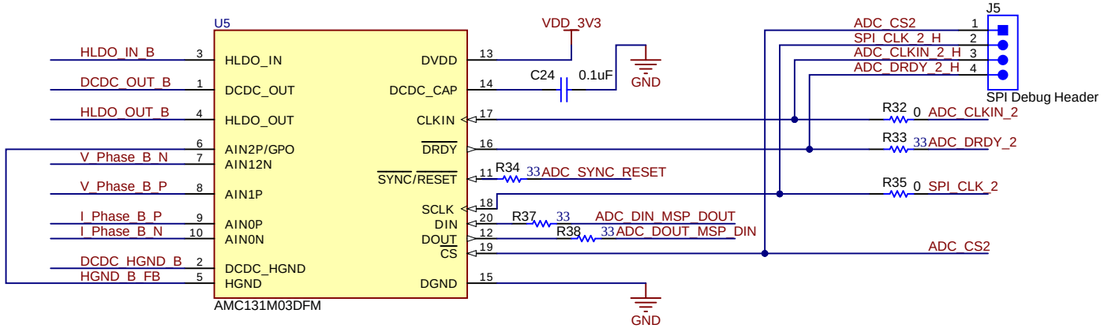

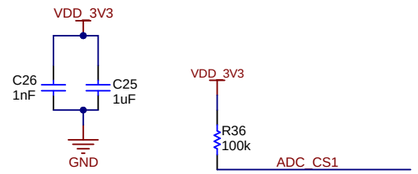

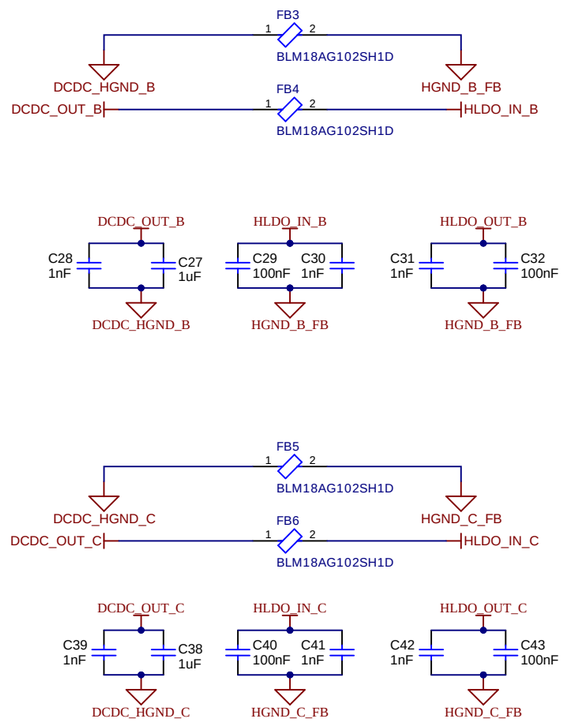

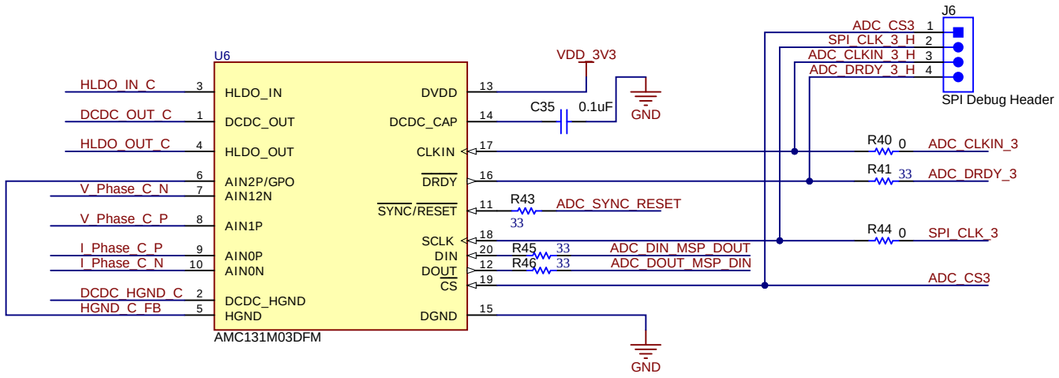

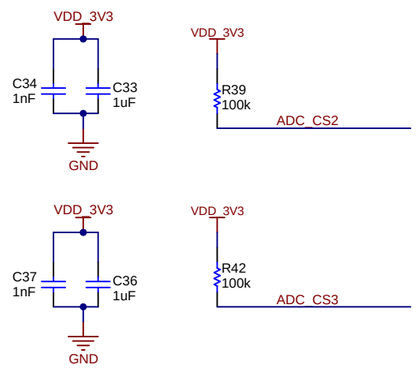

Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 9/18/2024
TID #: N/A	Project Title: 3-Phase SHUNT Metrology with ISO USB and BLE	
Number: TIDA-010244 Rev: E2	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 1 of 9
Drawn By:	File: TIDA-010244_3xISO_ADC_Rev2.SchDoc	Size: B
Engineer: MGS	Contact: http://www.ti.com/support	

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H1
5MM HOLE

H2
5MM HOLE

H3
5MM HOLE

H4
5MM HOLE

H5
RM3X6MM 2701

H6
RM3X6MM 2701

H7
RM3X6MM 2701

H8
RM3X6MM 2701

FID1

FID2

FID3

PCB Number: TIDA-010244
PCB Rev: E2

PCB
LOGO
Texas Instruments

CE Mark

PCB
LOGO
FCC disclaimer

PCB
LOGO
WEEE logo


DANGER HIGH VOLTAGE


DANGER HIGH VOLTAGE


DANGER HIGH VOLTAGE


DANGER HIGH VOLTAGE

LBL1
PCB Label
THT-14-423-10
Size: 0.65" x 0.20 "

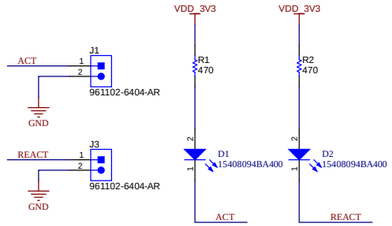
ZZ1
Label Assembly Note
This Assembly Note is for PCB labels only

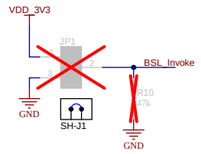
Variant/Label Table	
Variant	Label Text
001	E1
002	NA

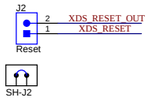
ZZ2
Assembly Note
These assemblies are ESD sensitive, ESD precautions shall be observed.

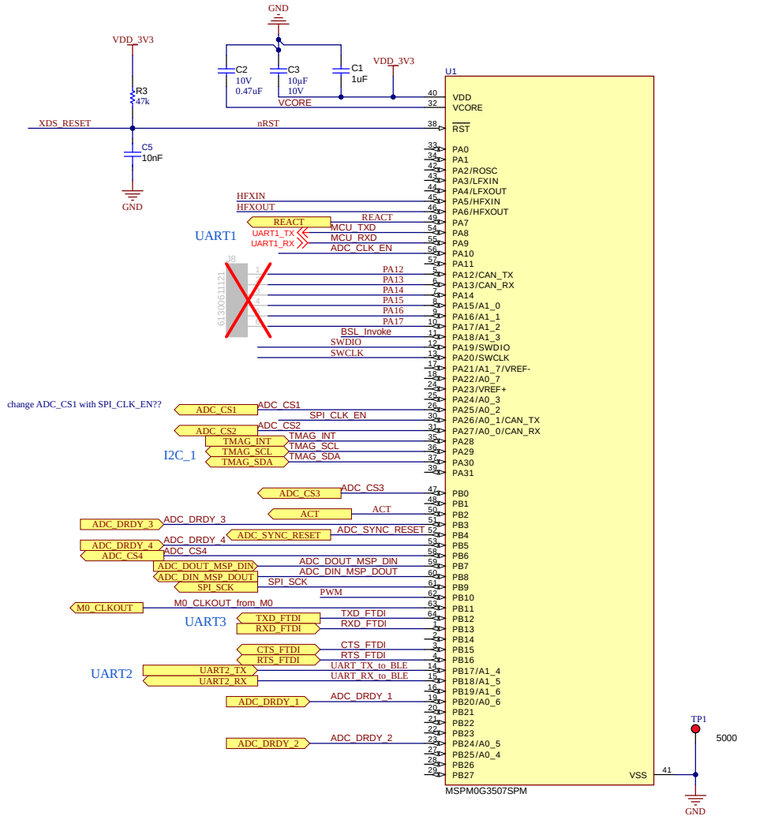
ZZ3
Assembly Note
These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

ZZ4
Assembly Note
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.



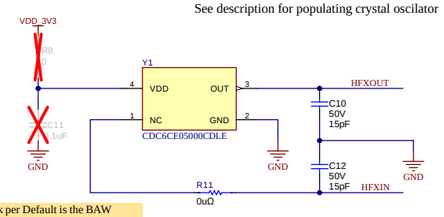






BAW oscilator — DEFAULT

See description for populating crystal oscilator

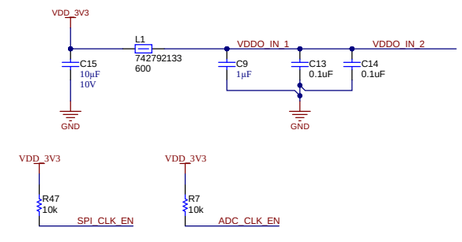


Clock per Default is the BAW oscilator
Default:
- Populate: R8, R9, C11
- Remove: R11, R16, R19, C10, C12

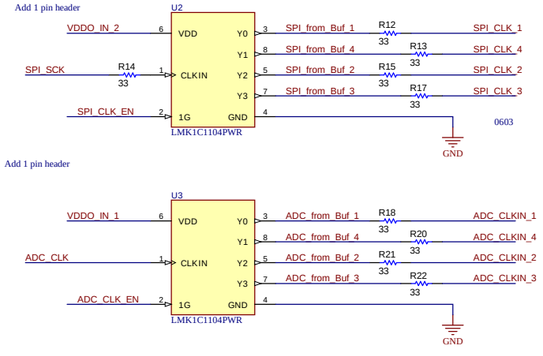
Clock per crystal oscilator
- Populate: R11, R16, C10, C12
- Remove: R8, R9, R19, C11 replace with 0Ohm

a) XTAL: FA-238 16.384 MHz, 50 ppm, 10 pF, SMD

b) XTAL: FA-128 32.768 MHz, 50 ppm, 10 pF, SMD



Clock buffers



Clock selection resistors

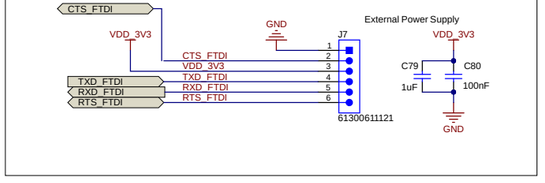
Default: Clock from the BAW oscilator

Clock from the MSPM0 Clkout

Clock from the MSPM0 PWM generators

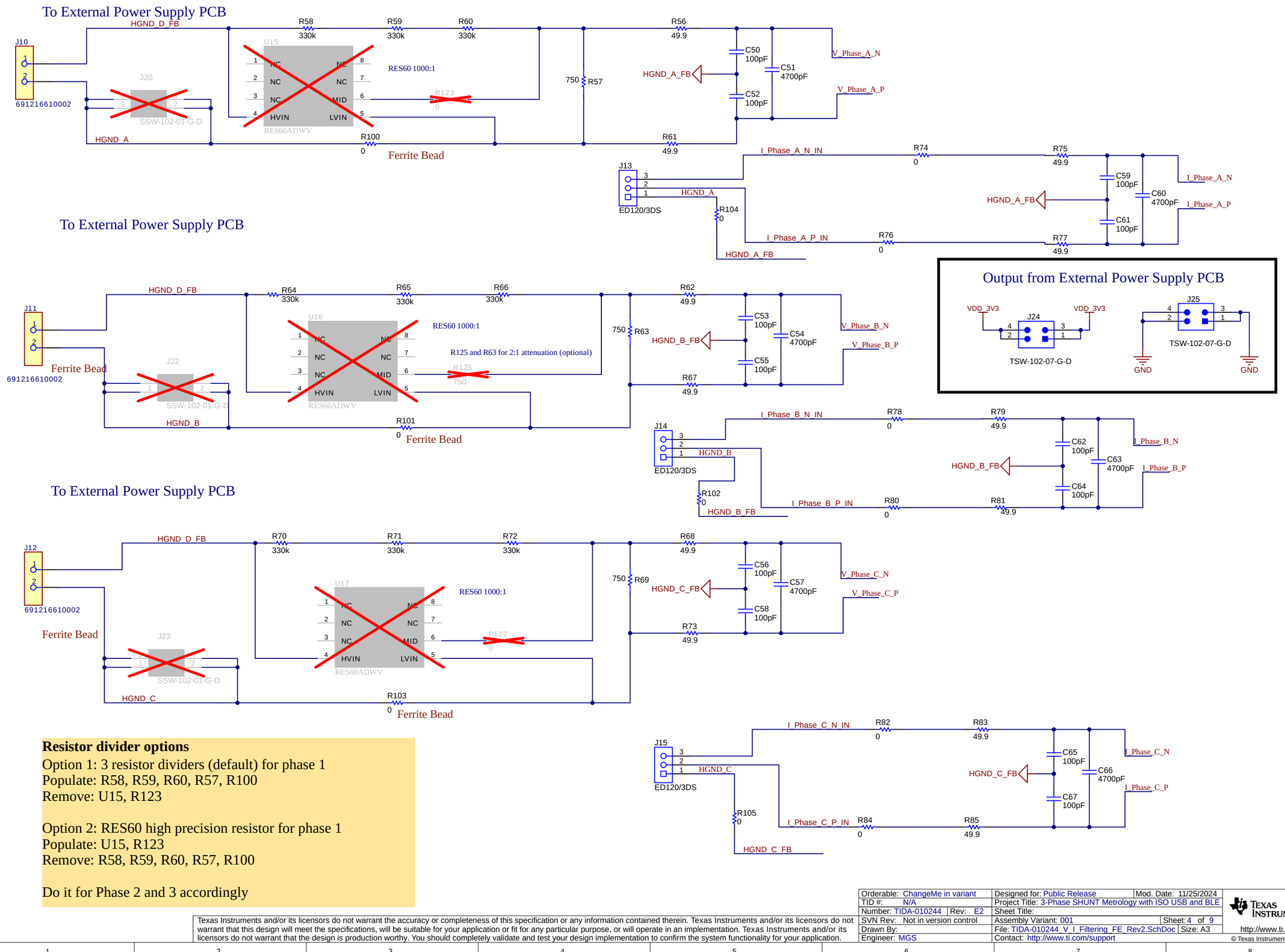
Clock per PWM (just for evaluation)
Place all parts as for the oscilator
Additional Place: R19
Remove: R16

External UART Connector



Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/29/2025
TID #: N/A	Project Title: 3-Phase SHUNT Metrology with ISO USB and BLE	
Number: TIDA-010244 Rev: E2	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet 3 of 9
Drawn By:	File: TIDA-010244_MSPM0G_Rev2.SchDoc	Size: A2
Engineer: MGS	Contact: http://www.ti.com/support	

http://www.ti.com



Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 11/25/2024
TID #: N/A	Project Title: 3-Phase SHUNT Metrology with ISO USB and BLE	
Number: TIDA-010244 Rev: E2	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 4 of 9
Drawn By:	File: TIDA-010244_V_I_Filtering_FE_Rev2.SchDoc	Size: A3
Engineer: MGS	Contact: http://www.ti.com/support	

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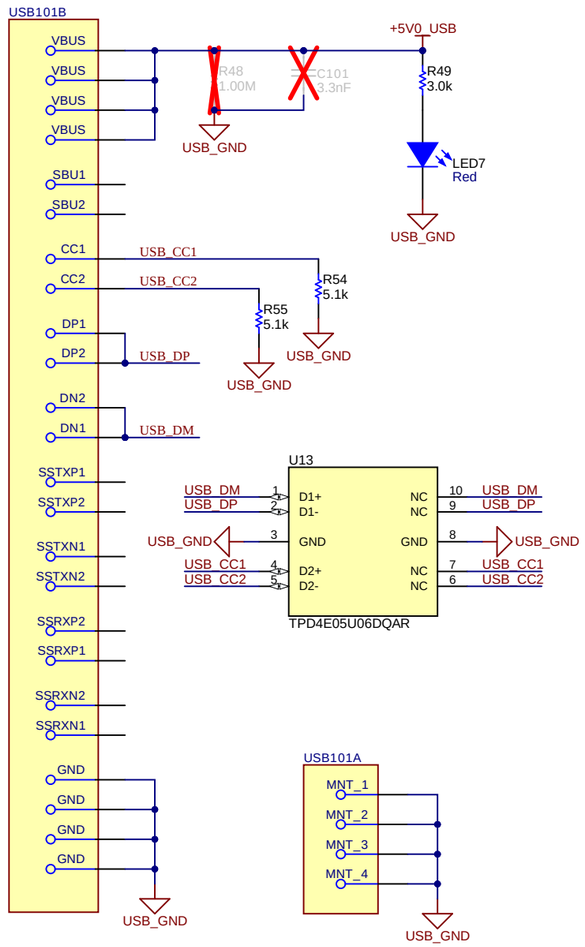
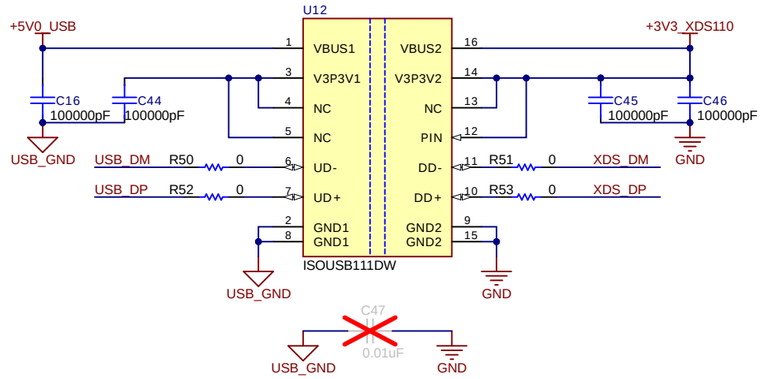
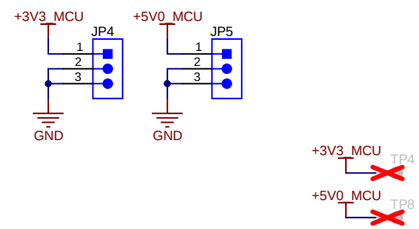
USB-C Connector



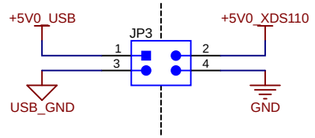
USB Isolation



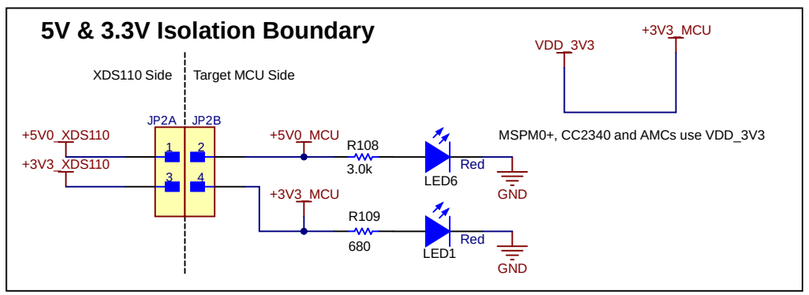
Power Headers and Test Points



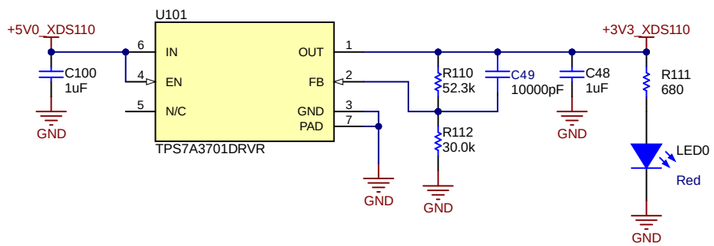
PWR & GND Isolation Boundary



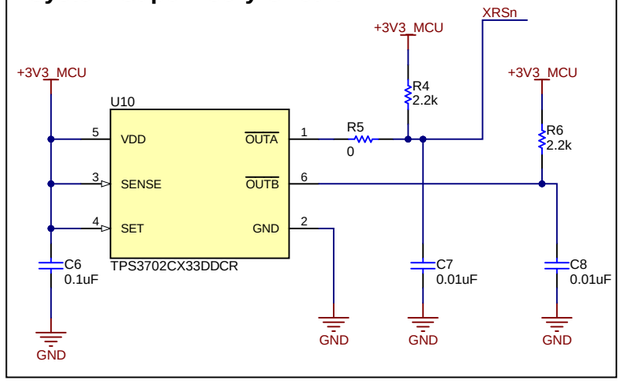
5V & 3.3V Isolation Boundary



5V to 3.3V



System Supervisory Circuit



Orderable: ChangeMe in variant		Designed for: Public Release	Mod. Date: 11/25/2024
TID #: N/A		Project Title: 3-Phase SHUNT Metrology with ISO USB and BLE	
Number: TIDA-010244	Rev: E2	Sheet Title:	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 5 of 9
Drawn By:		File: TIDA-010244_USB_and_Power.SchDoc	Size: B
Engineer: MGS		Contact: http://www.ti.com/support	

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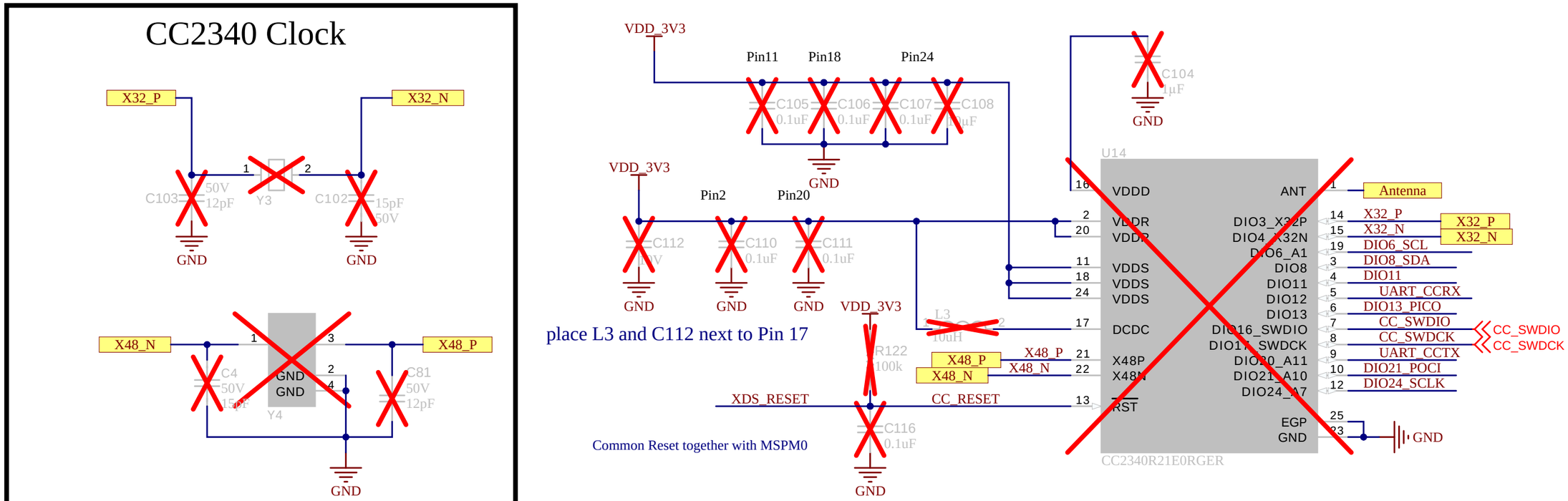

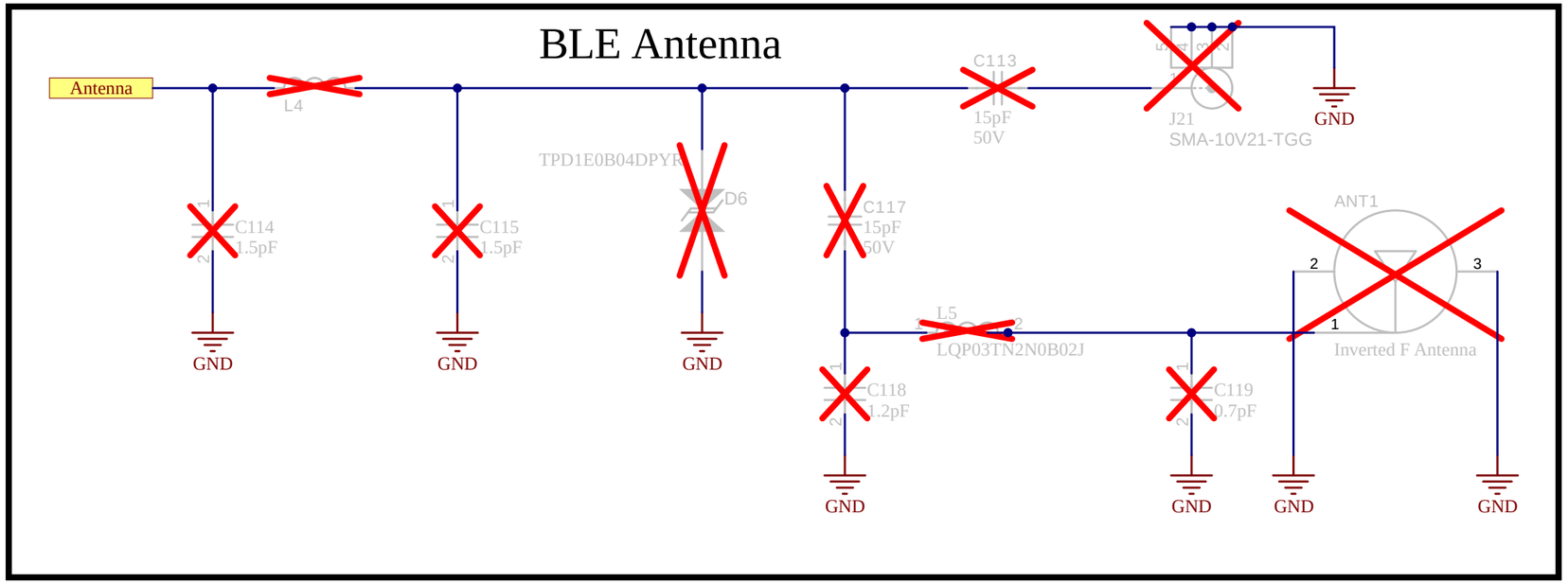

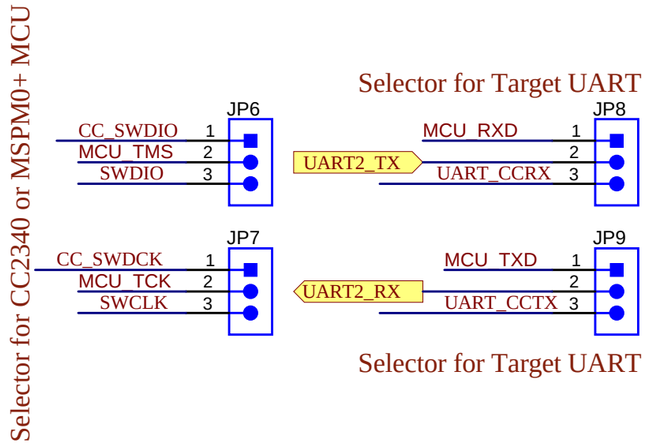

Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/29/2025
TID #: N/A	Project Title: 3-Phase SHUNT Metrology with ISO USB and BLE	
Number: TIDA-010244 Rev: E2	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 6 of 9
Drawn By:	File: TIDA-010244_BLE_Wireless.SchDoc	Size: A4
Engineer: MGS	Contact: http://www.ti.com/support	

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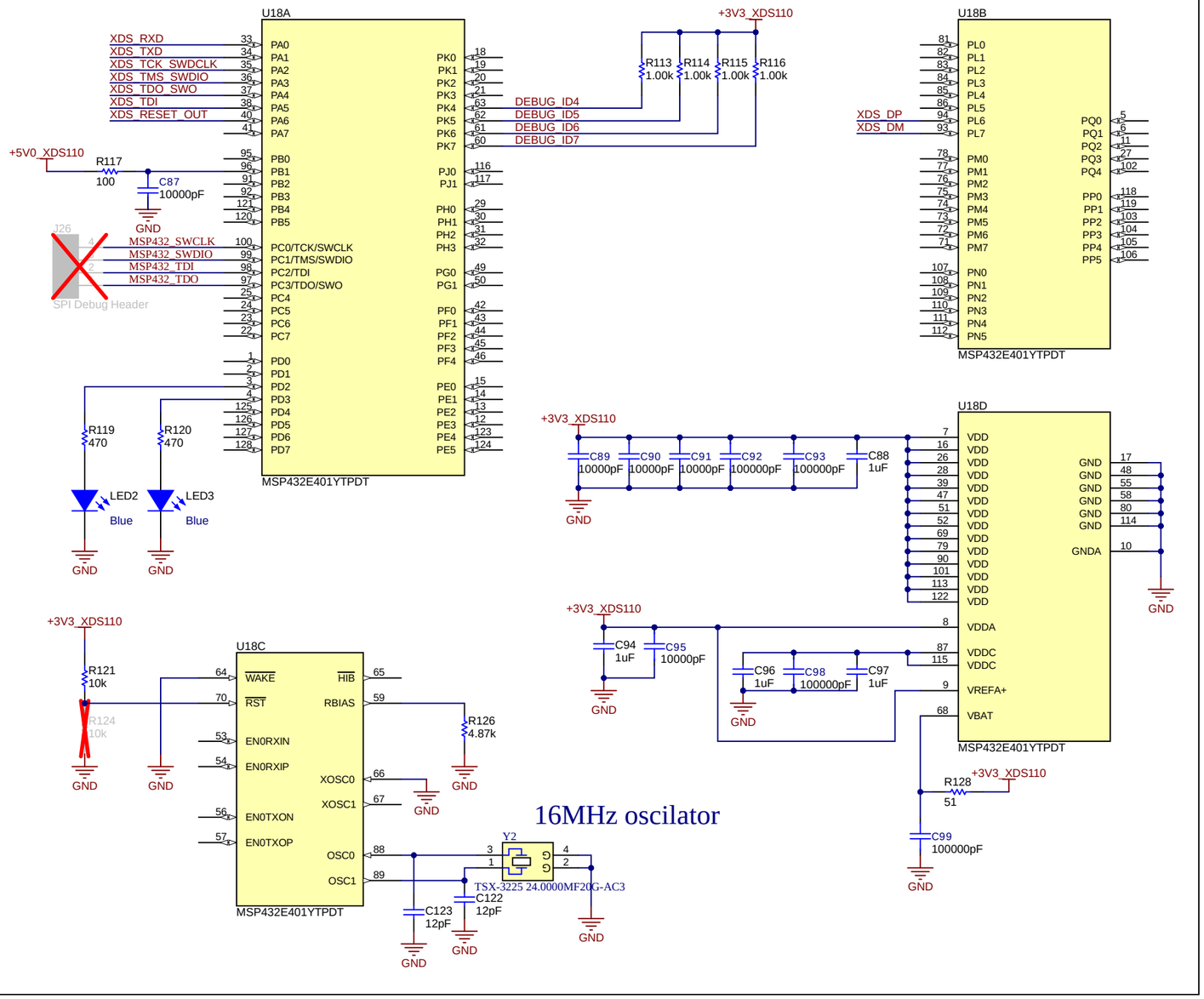
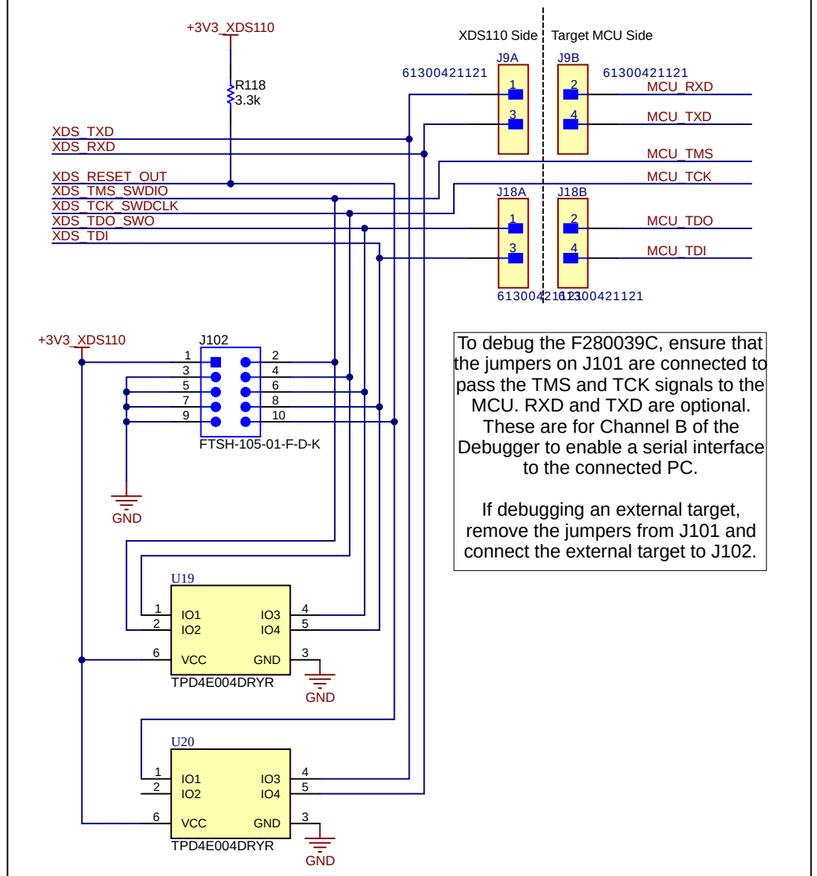
XDS110 Device



XDS110 Target Interface



Orderable: ChangeMe in variant		Designed for: Public Release	Mod. Date: 1/29/2025
TID #: N/A		Project Title: 3-Phase SHUNT Metrology with ISO USB and BLE	
Number: TIDA-010244	Rev: E2	Sheet Title:	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 7 of 9
Drawn By:		File: TIDA-010244_XDS110_MCU.SchDoc	Size: B
Engineer: MGS		Contact: http://www.ti.com/support	

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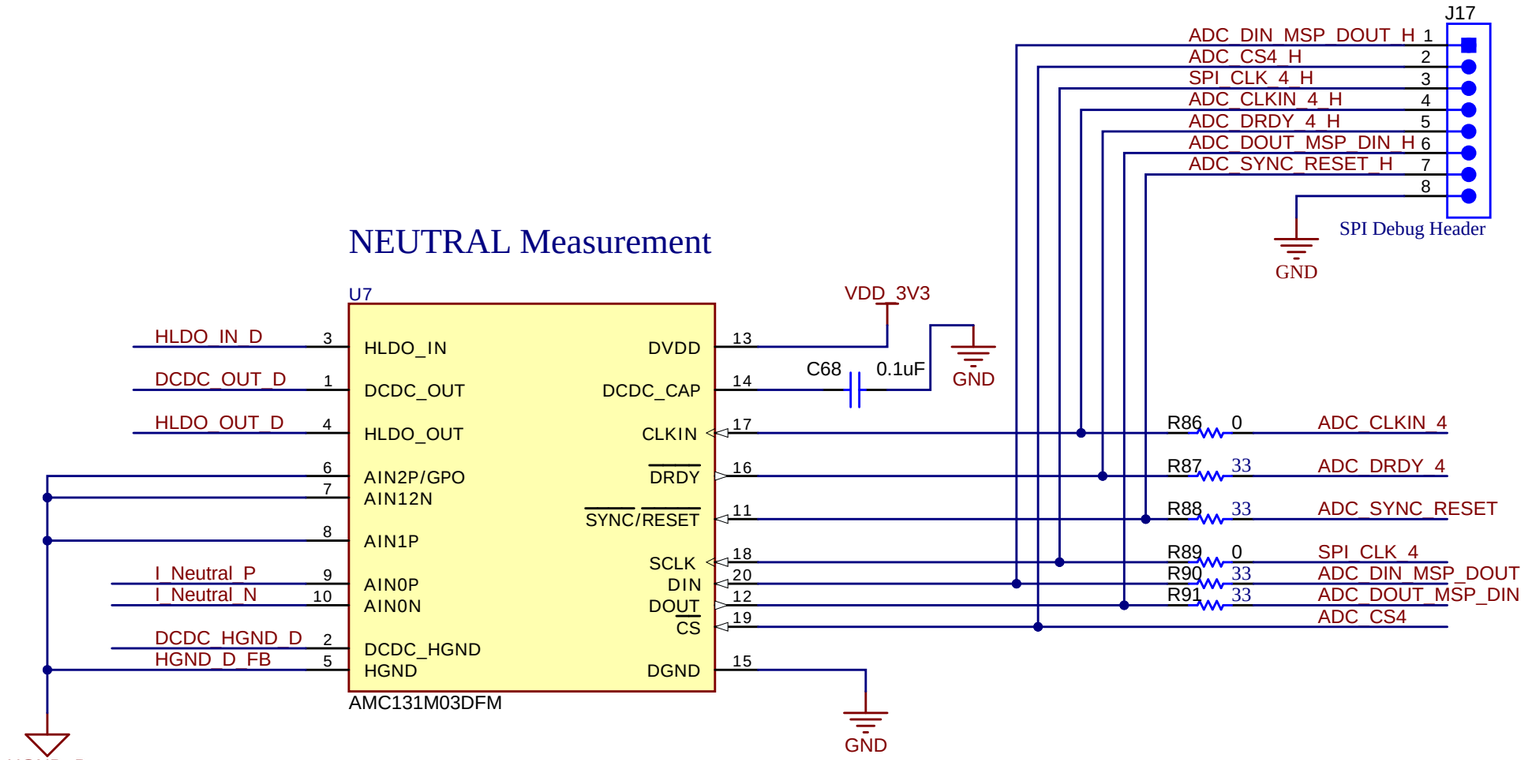
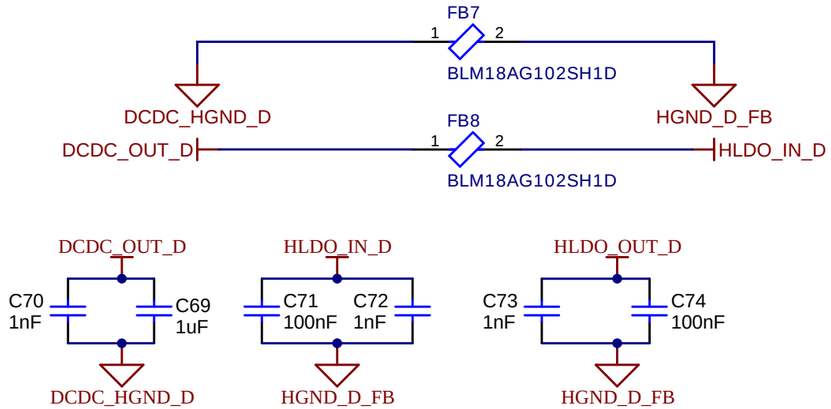
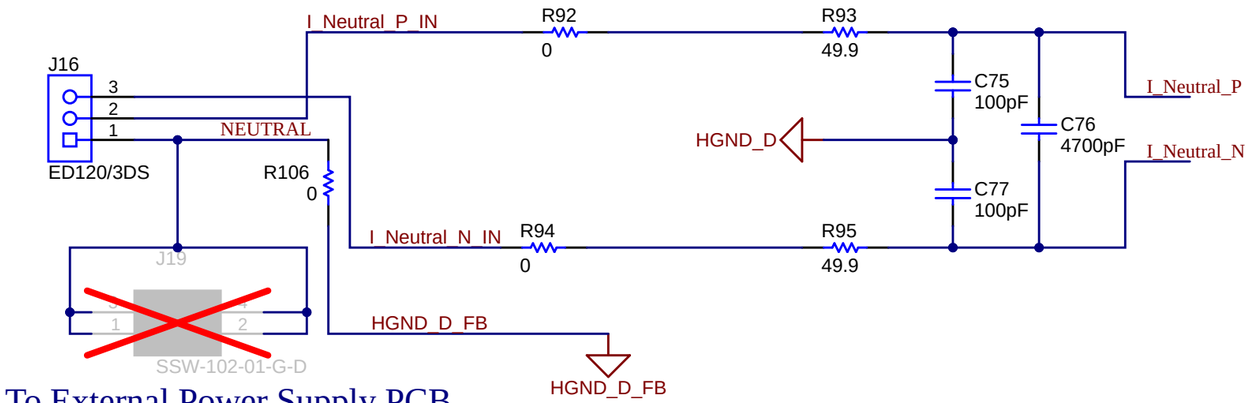
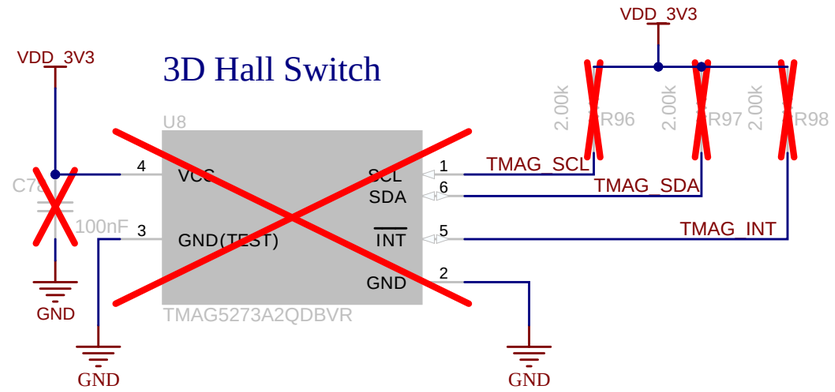
NEUTRAL Measurement







To External Power Supply PCB



Orderable: ChangeMe in variant		Designed for: Public Release	Mod. Date: 9/18/2024
TID #: N/A		Project Title: 3-Phase SHUNT Metrology with ISO USB and BLE	
Number: TIDA-010244	Rev: E2	Sheet Title:	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 8 of 9
Drawn By:		File: TIDA-010244_Neutral_3DHall_Rev2.SchDoc	Size: A4
Engineer: MGS		Contact: http://www.ti.com/support	

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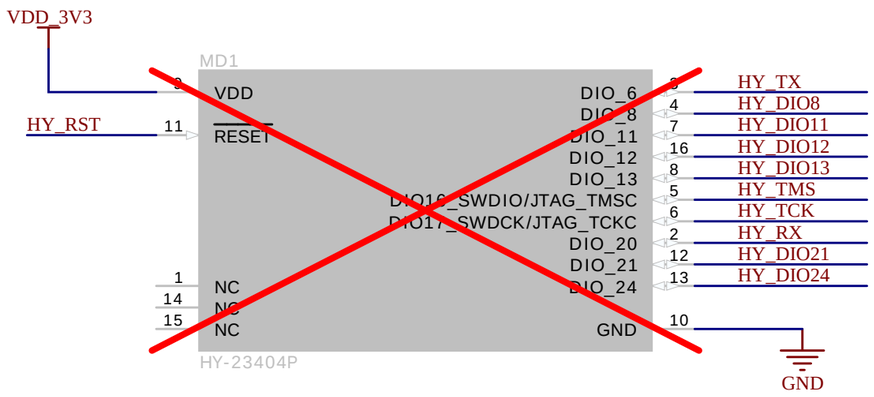
http://www.ti.com

HY_RST	CC_RESET
HY_DIO12	DIO6_SCL
HY_DIO8	DIO8_SDA
HY_DIO11	DIO11
HY_RX	UART_CCRX
HY_DIO13	DIO13_PICO
HY_TMS	CC_SWDIO
HY_TCK	CC_SWDCK
HY_TX	UART_CCTX
HY_DIO21	DIO21_POCI
HY_DIO24	DIO24_SCLK



Orderable: ChangeMe in variant		Designed for: Public Release	Mod. Date: 11/25/2024
TID #: N/A		Project Title: 3-Phase SHUNT Metrology with ISO USB and BLE	
Number: TIDA-010244	Rev: E2	Sheet Title:	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 9 of 9
Drawn By:		File: TIDA-010244_BLE_Module_HY-2340.SchDoc	Size: A4
Engineer: MGS		Contact: http://www.ti.com/support	

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