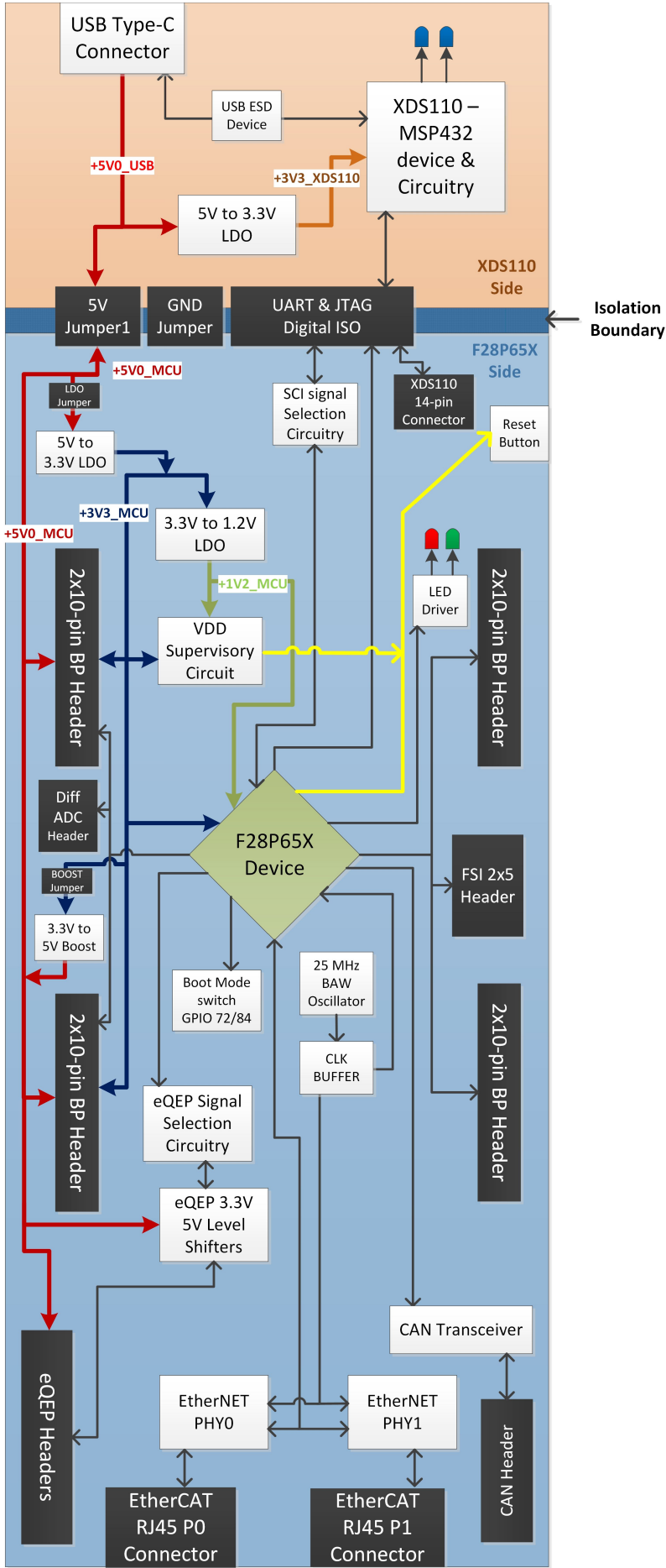



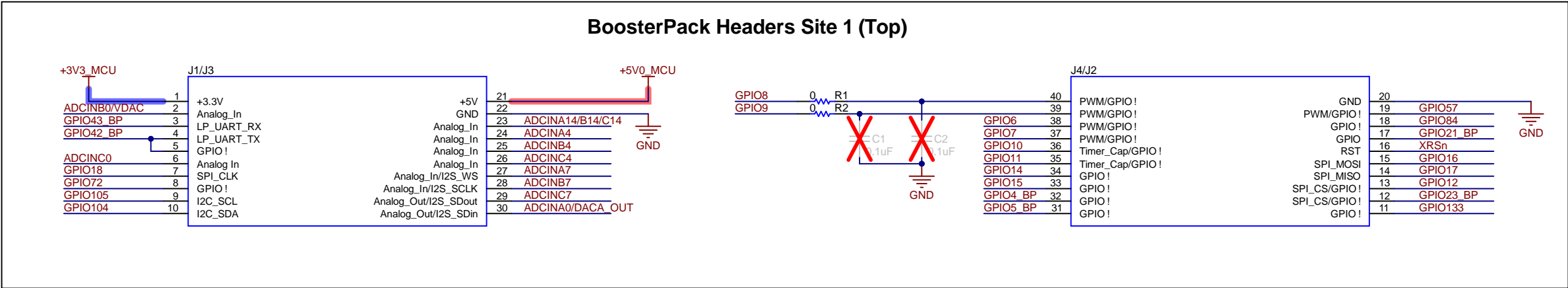
- 1) ETHERCAT Differential pairs - 100 Ohm
(A) TD_P and TD_N
(B) RD_P and RD_N
- 2) USB Differential Pairs - 90 Ohm
(A) USB_D_P and USB_D_N
- 3) ADC Differential pair Impedance Matching - 50 Ohm
(A) ADCINB8B9_P and ADCINB8B9_N
(B) ADCINC8C9_P and ADCINC8C9_N
(C) MCU_B8B9_P and MCU_B8B9_N
(D) MCU_C8C9_P and MCU_C8C9_N
- 4) CLK Paths - 50 Ohm
(A) X1
(B) PHY0_25MHZ_CLK and PHY1_25MHZ_CLK



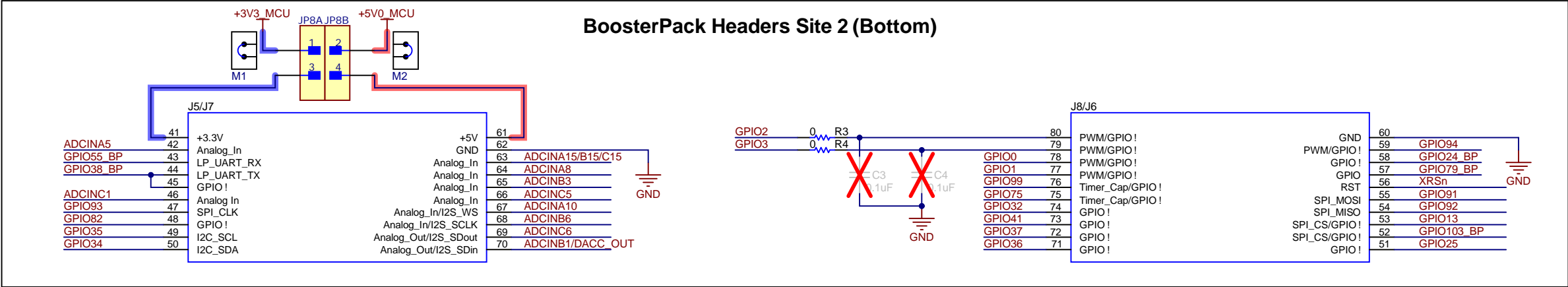
Orderable: LAUNCHXL-F28P65X	Designed for: Public Release	Mod. Date: 6/13/2023	 TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2023
TID #: N/A	Project Title: LAUNCHXL-F28P65X		
Number: MCU117	Rev: A	Sheet Title:	
SVN Rev: Unknown revision	Assembly Variant: 001	Sheet: 1 of 9	
Drawn By: Peter Luong	File: MCU117A_Block_Diagram_SchDoc	Size: B	
Engineer: Peter Luong	Contact: http://www.ti.com/support		

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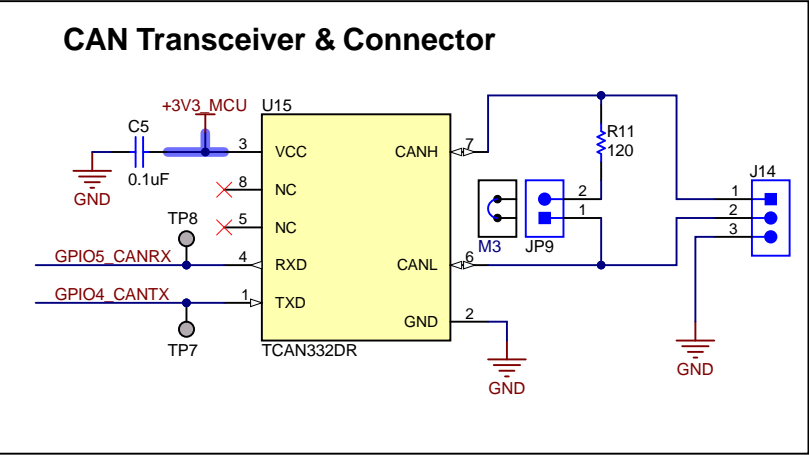
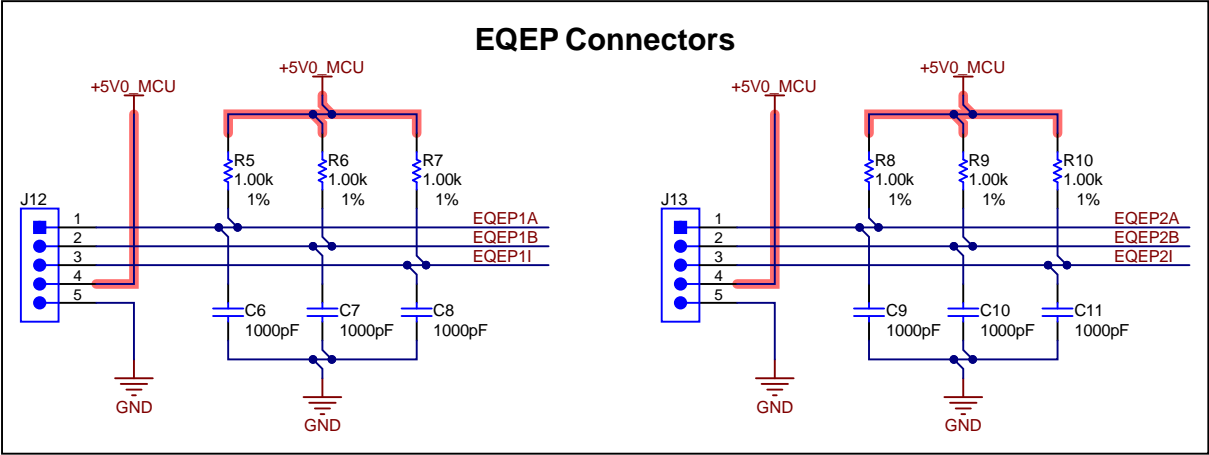
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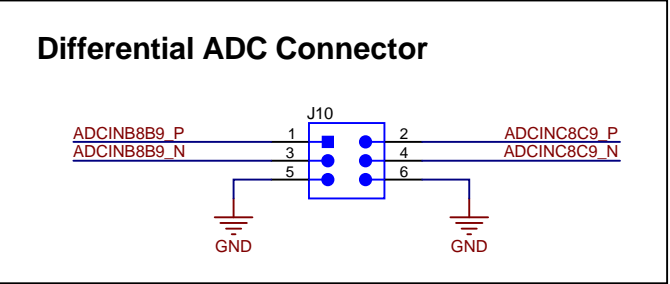
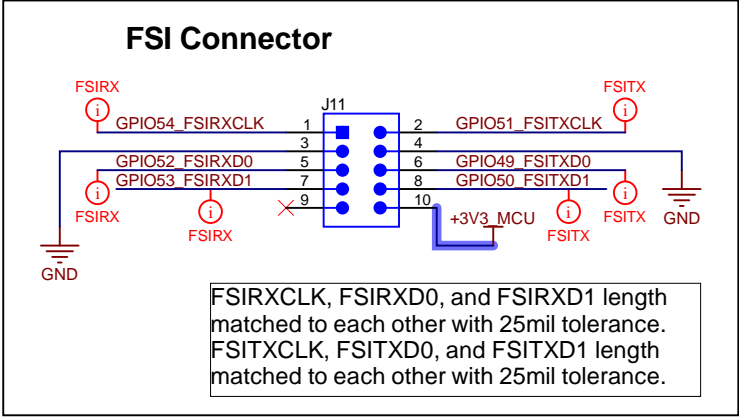
B



C



D



A

B

C

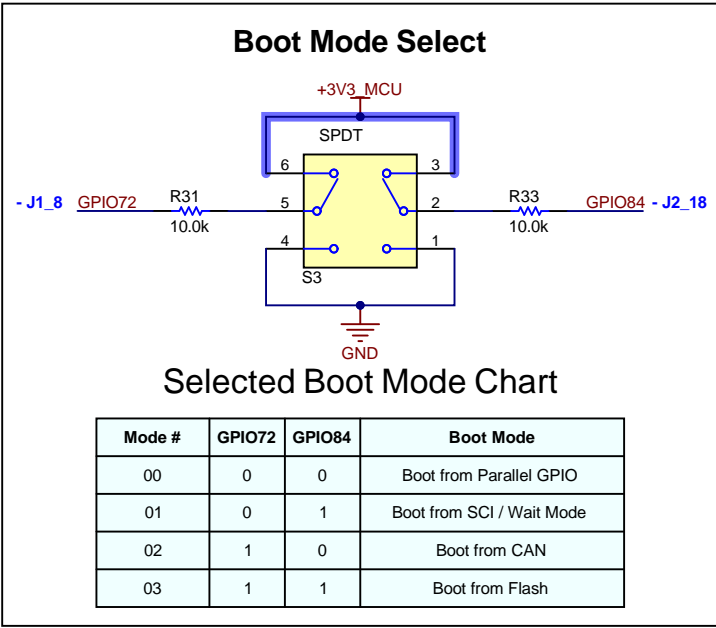
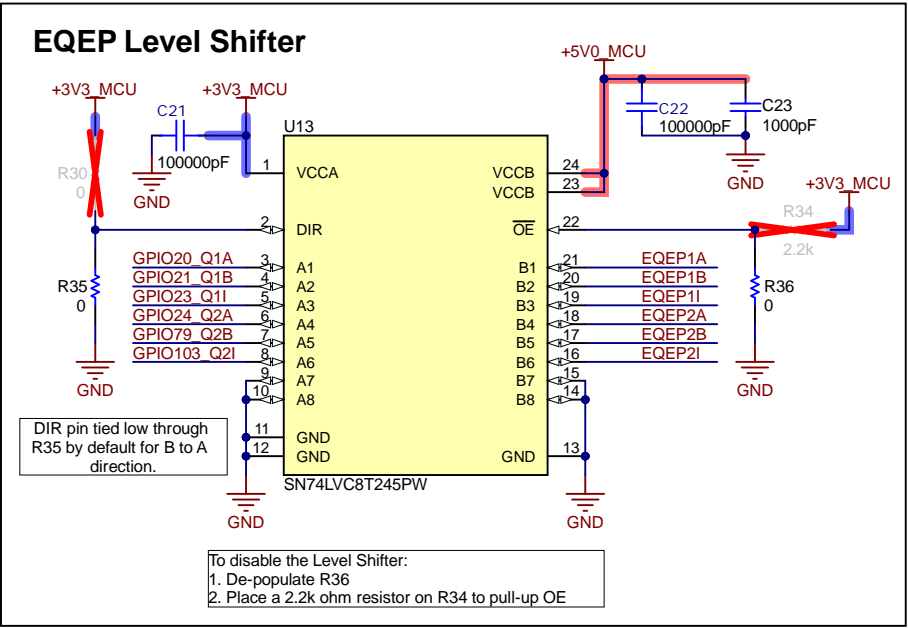
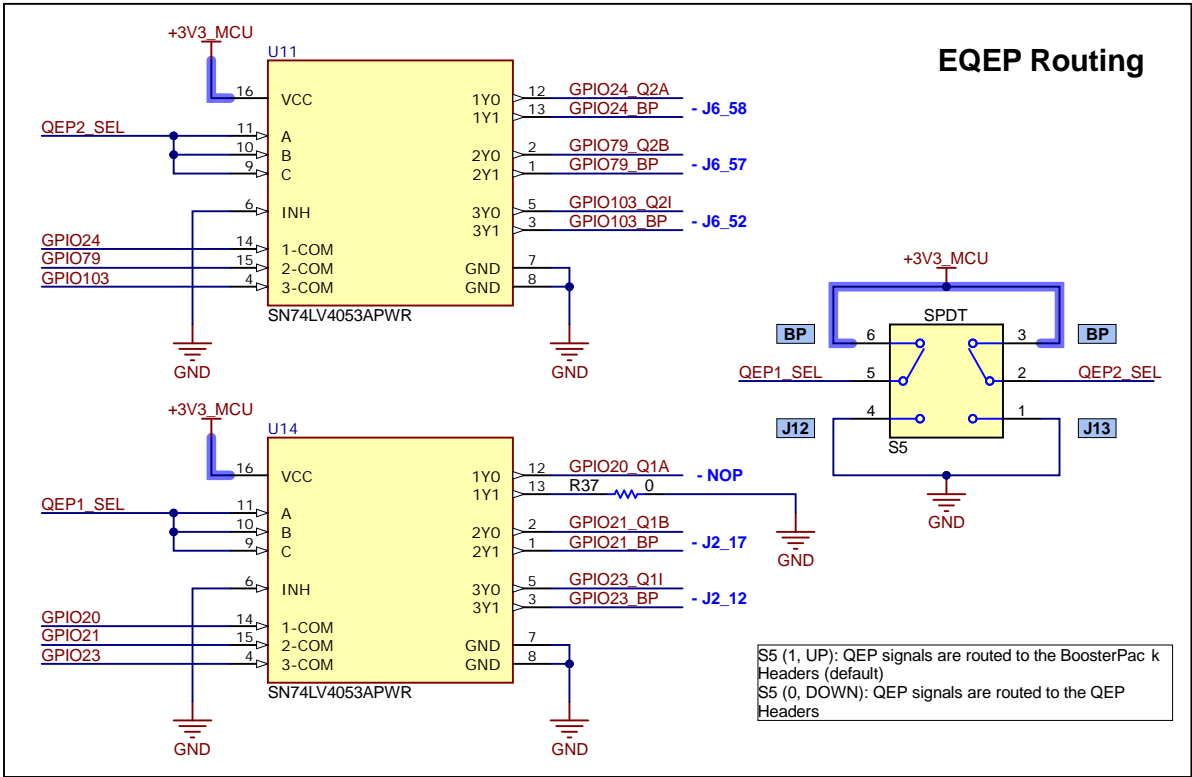
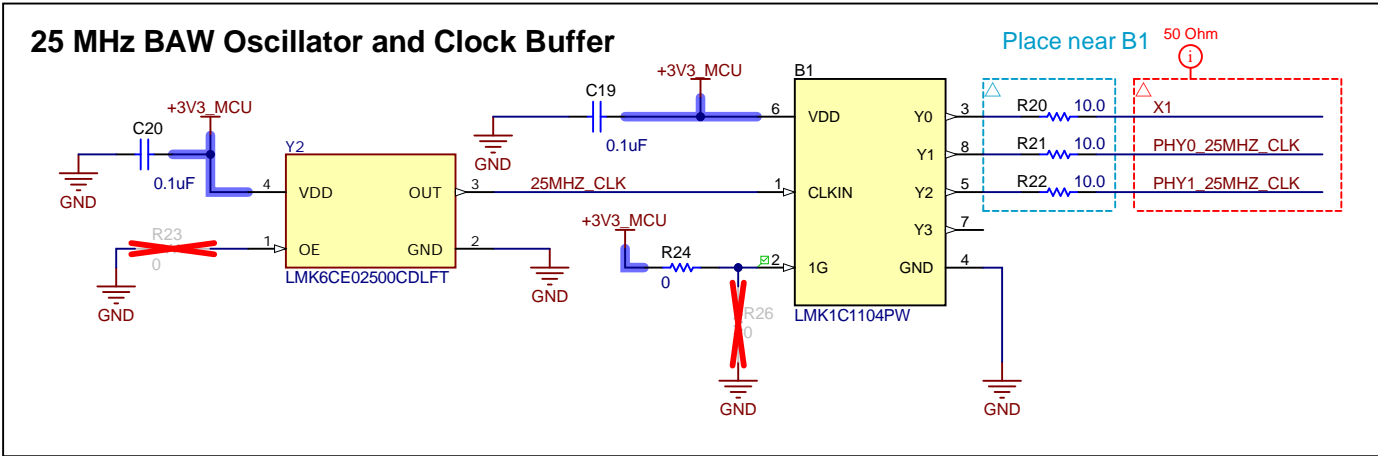
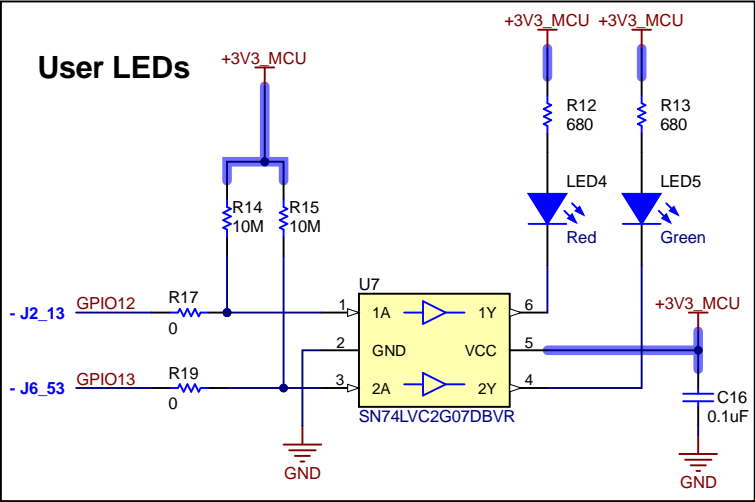
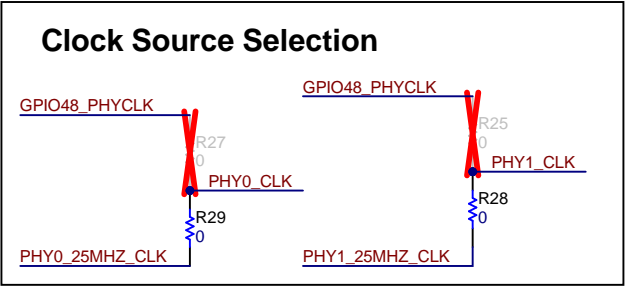
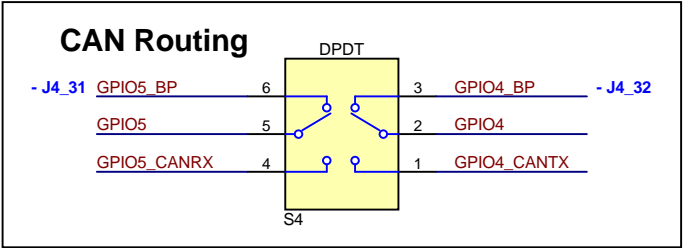
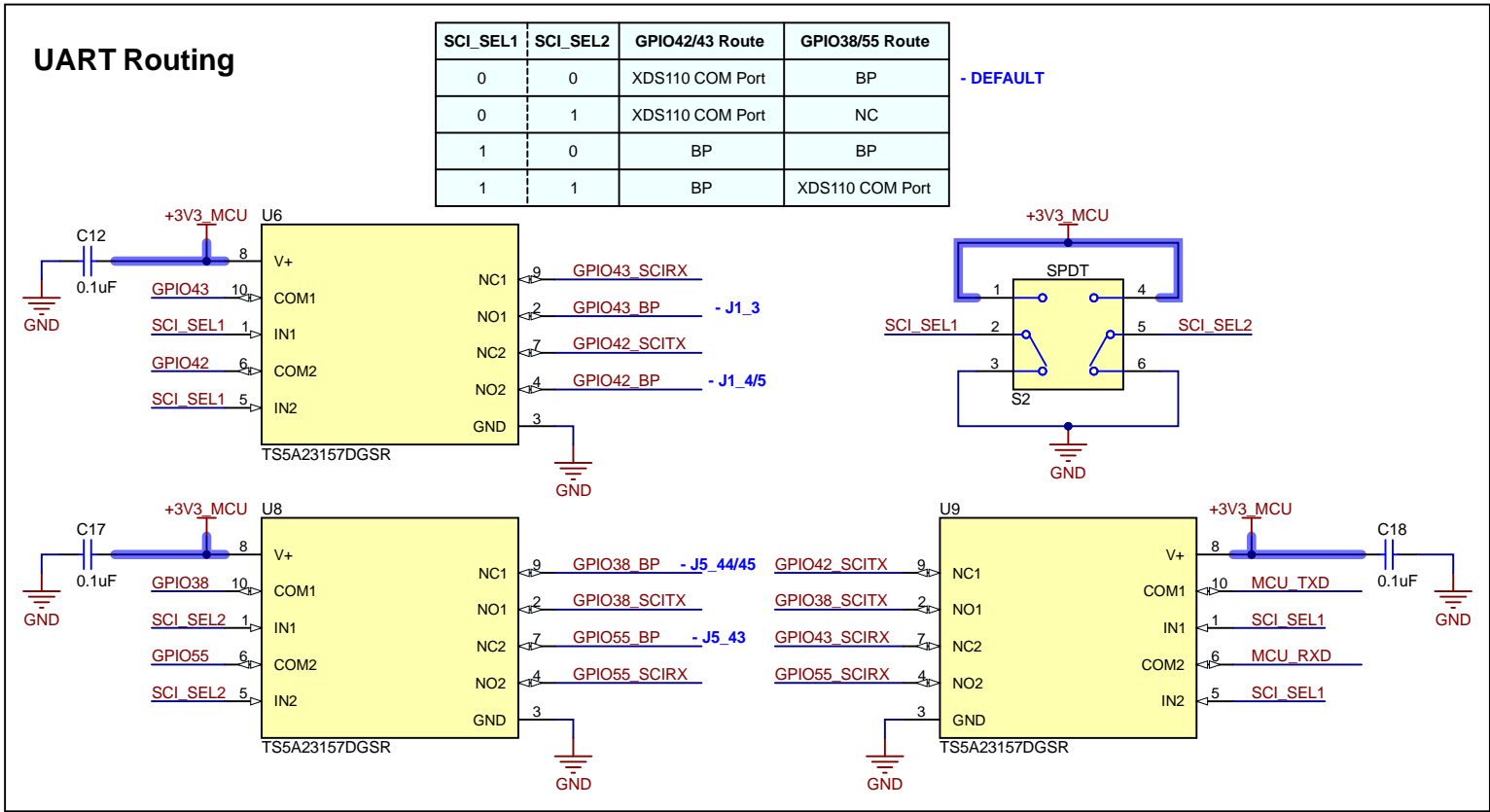
D

A

B

C

D



A

B

C

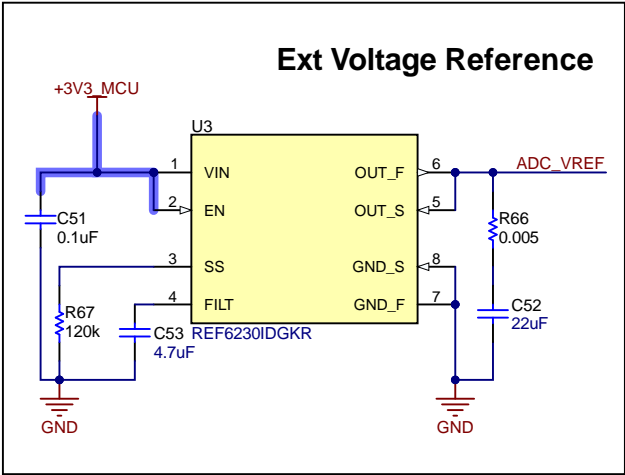
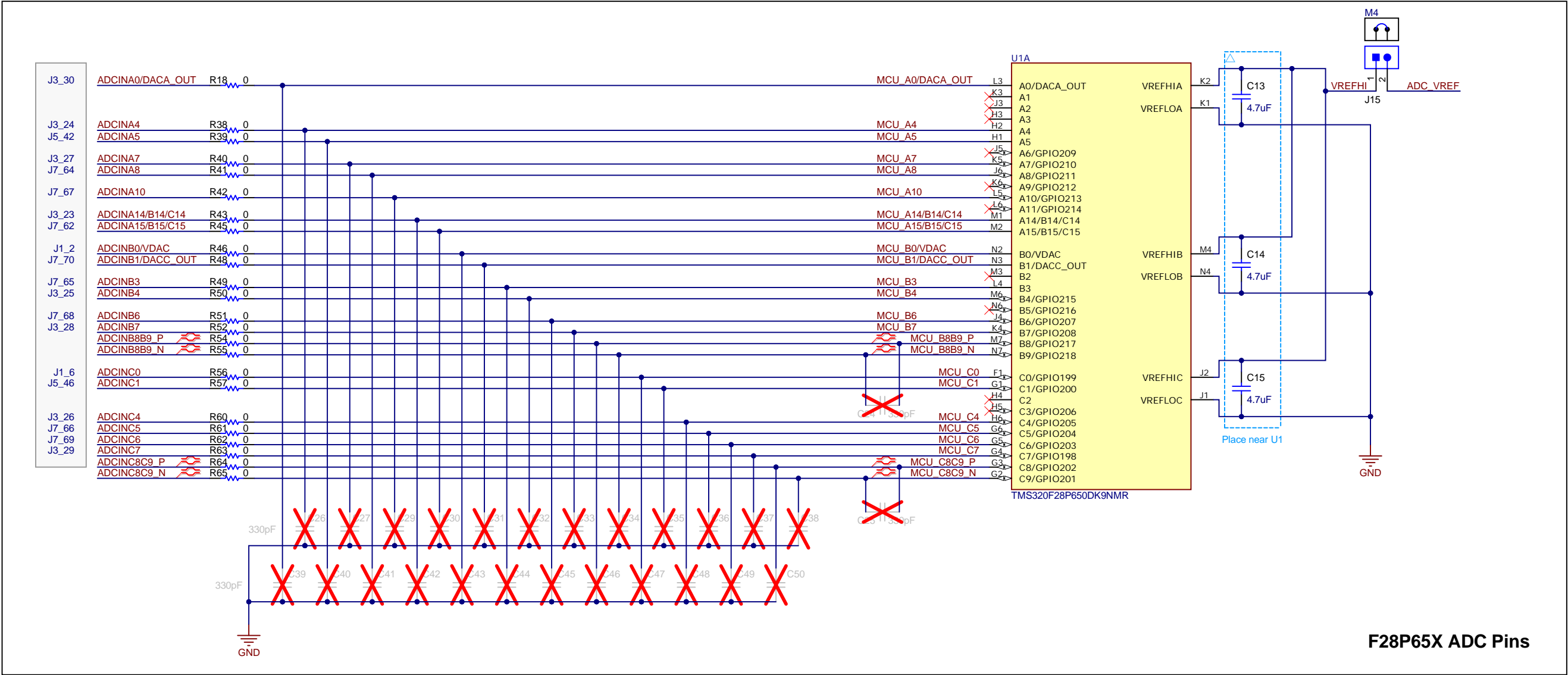
D

A

B

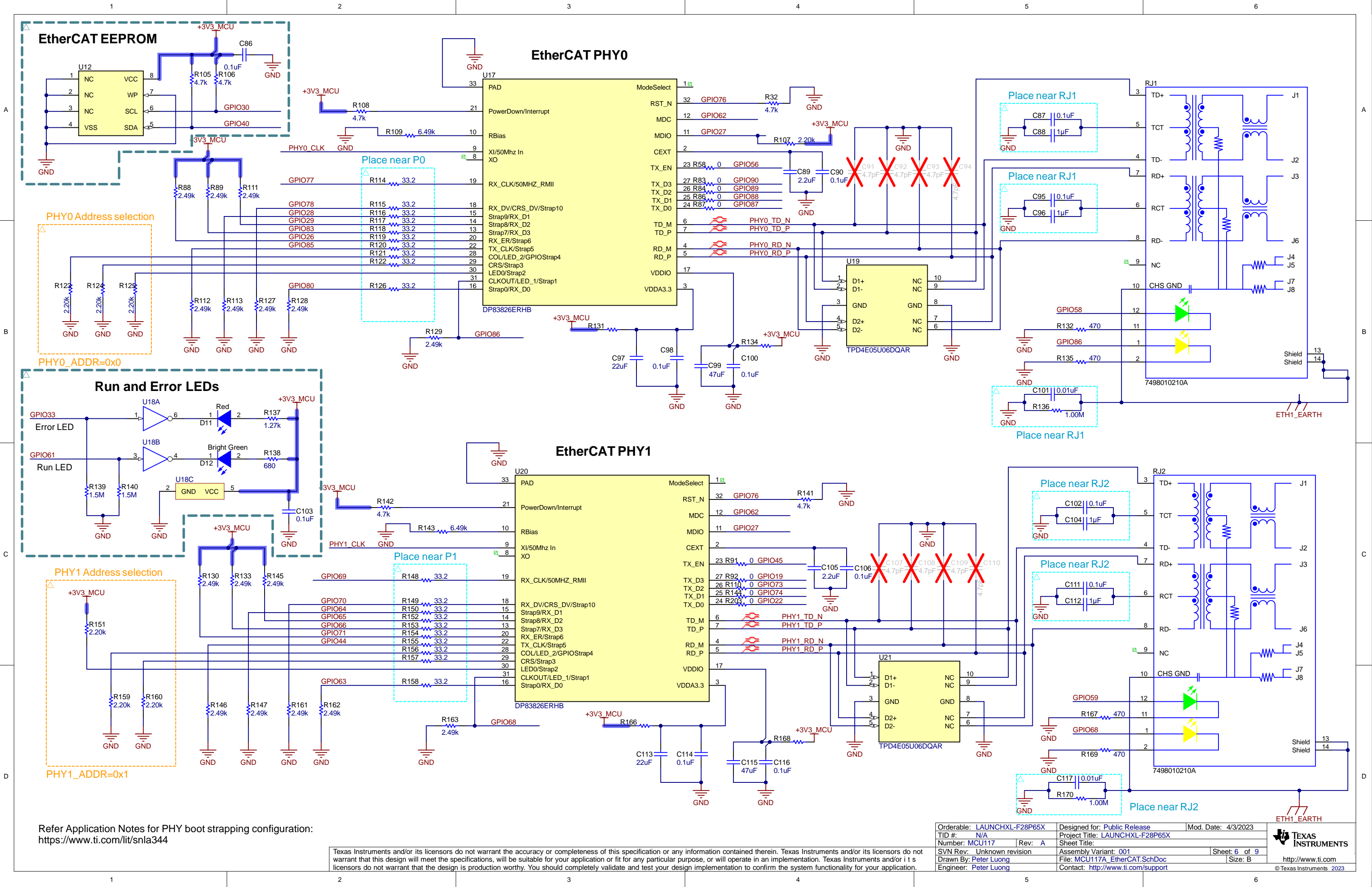
C

D



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TID #: N/A	Project Title: LAUNCHXL-F28P65X	
Number: MCU117	Rev: A	Sheet Title:
SVN Rev: Unknown revision	Assembly Variant: 001	Sheet: 5 of 9
Drawn By: Peter Luong	File: MCU117A_ADC_SchDoc	Size: B
Engineer: Peter Luong	Contact: http://www.ti.com/support	



Refer Application Notes for PHY boot strapping configuration:
<https://www.ti.com/lit/snla344>

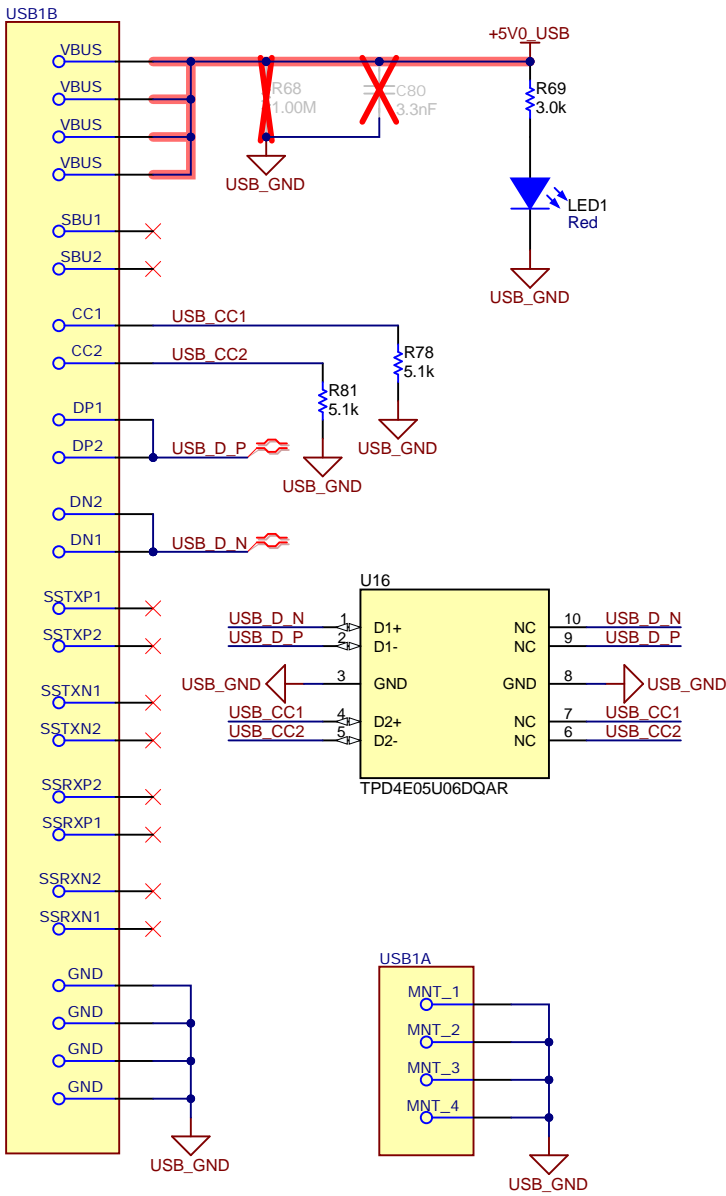
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Engineer: Peter Luong	Contact: http://www.ti.com/support	http://www.ti.com

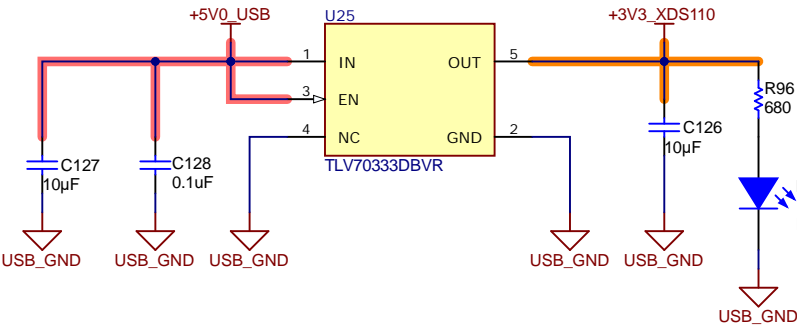


Emulation Side

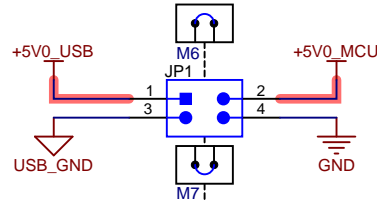
USB-C Connector



5V to 3.3V (XDS)

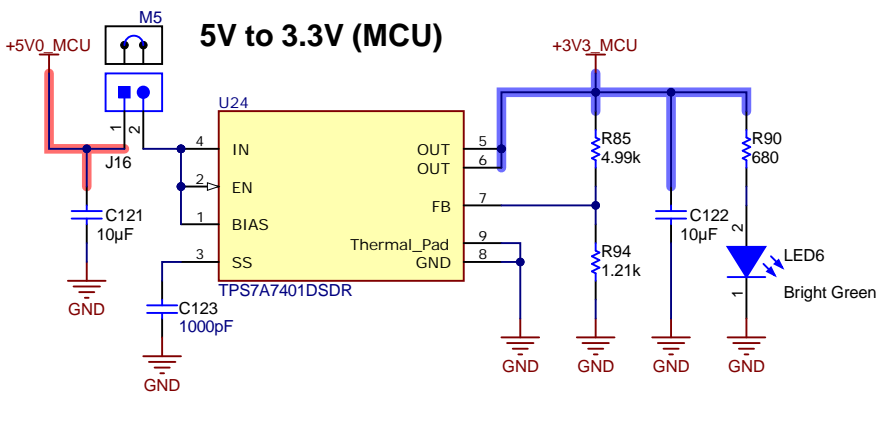


PWR & GND Isolation Boundary

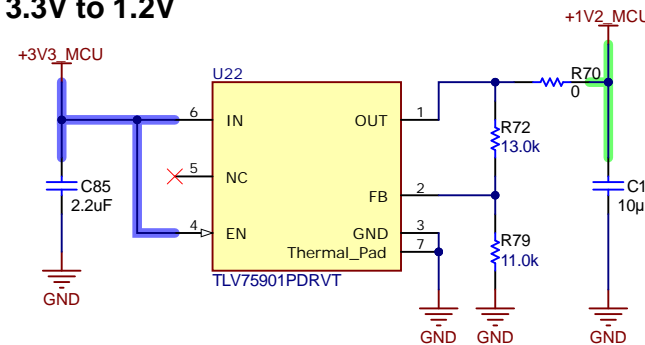


C2000 Side

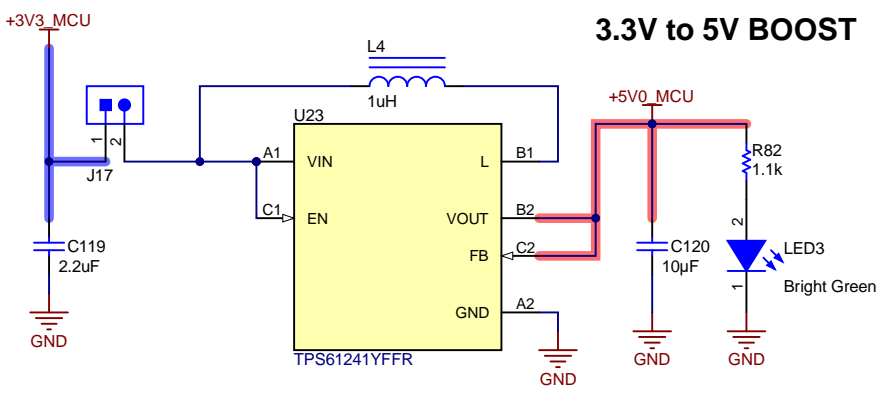
5V to 3.3V (MCU)



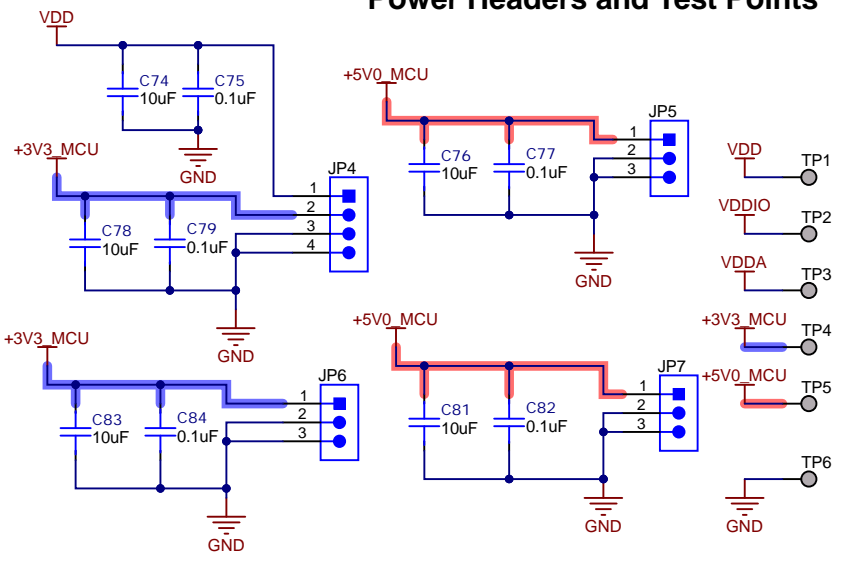
3.3V to 1.2V



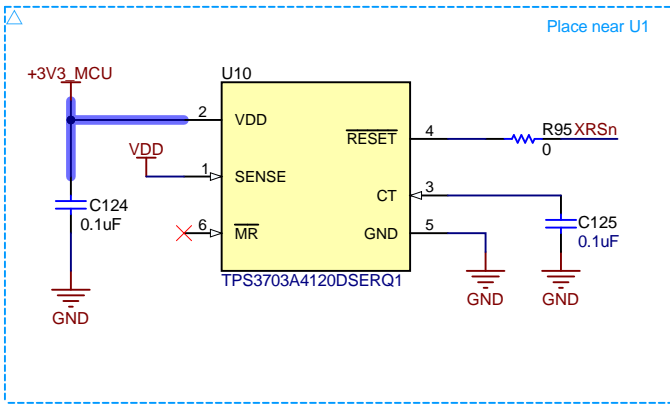
3.3V to 5V BOOST



Power Headers and Test Points



System Supervisory Circuit



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A

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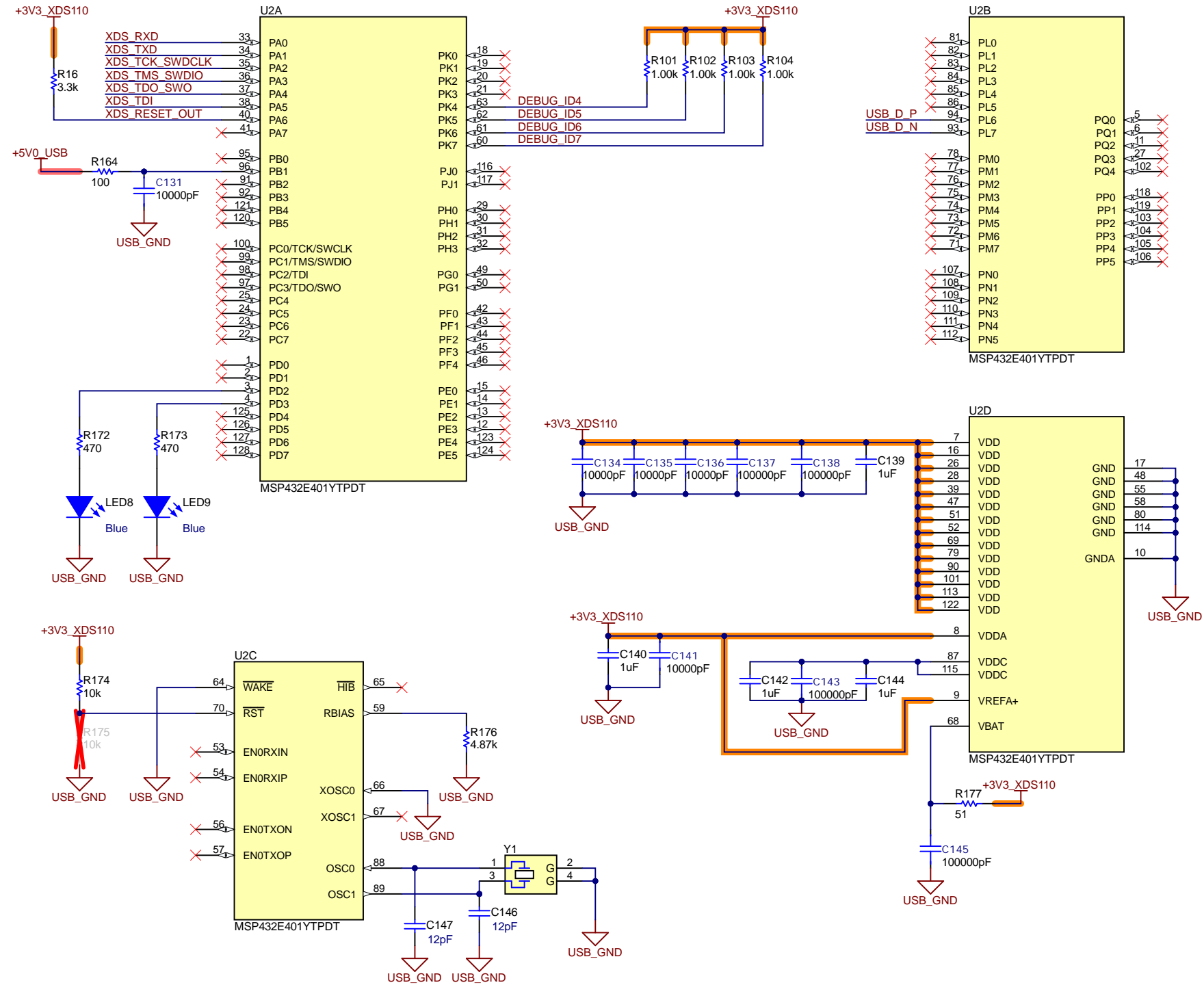
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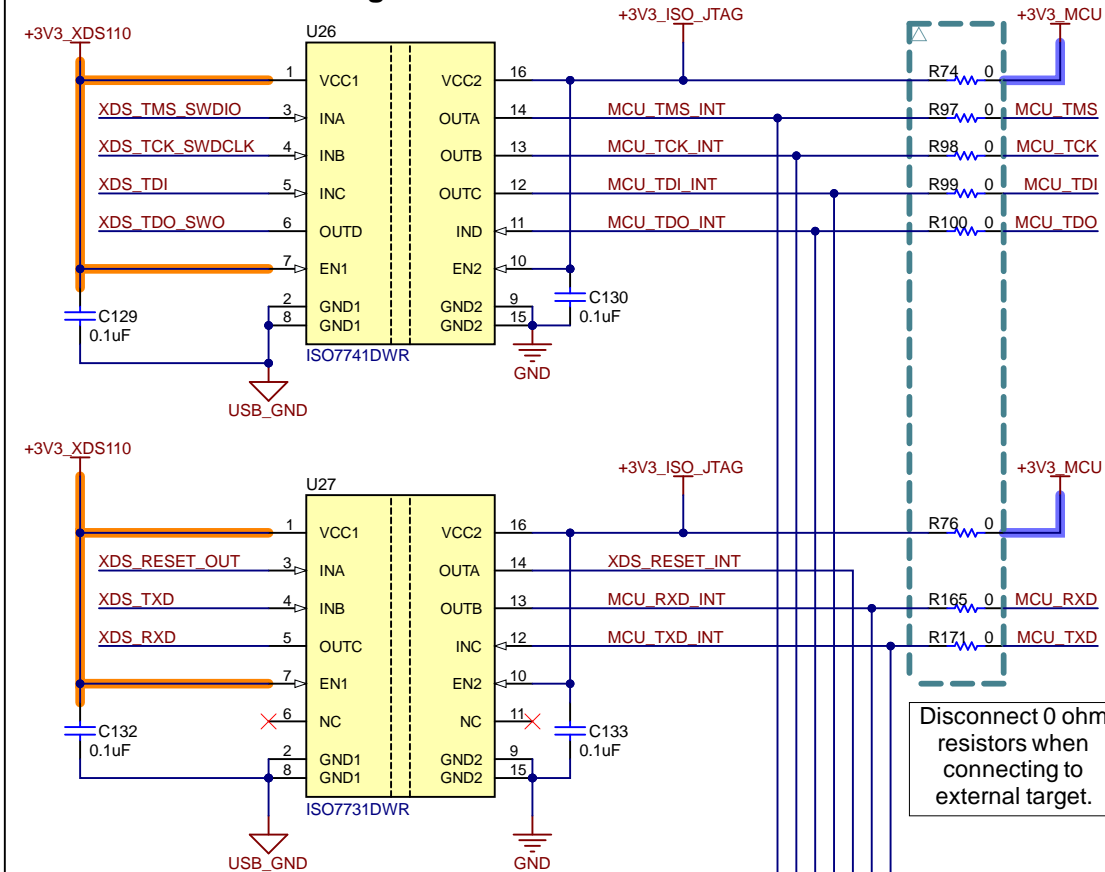
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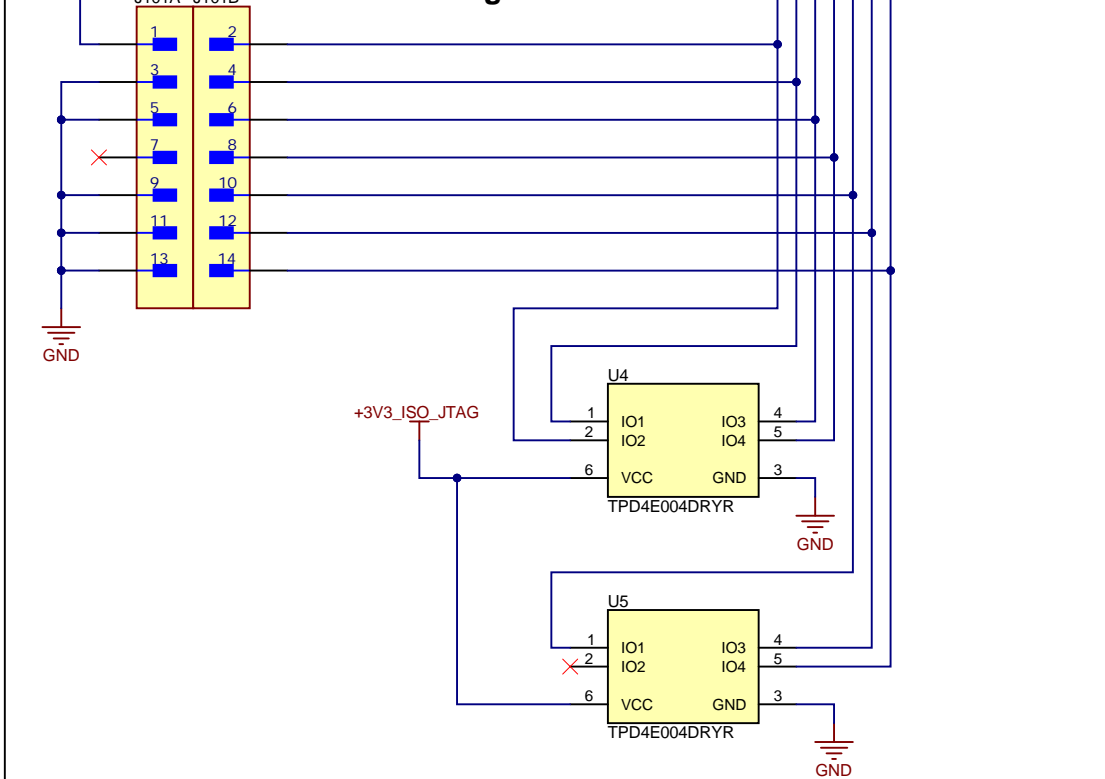
XDS110 Device



JTAG & UART Digital Isolation



XDS110 Target Interface



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