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Orderable: LAUNCHXL-F28P55X	Designed for: Public Release	Mod. Date: 2/20/2024	 TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2024
TID #: N/A	Project Title: LAUNCHXL-F28P55X		
Number: MCU133	Rev: A	Sheet Title:	
SVN Rev: Unknown revision	Assembly Variant: [No Variations]	Sheet: 1 of 8	
Drawn By: Stevan Duraskovic	File: MCU133A_Block_Diagram.SchDoc	Size: B	
Engineer: Stevan Duraskovic	Contact: http://www.ti.com/support		

A

B

C

D

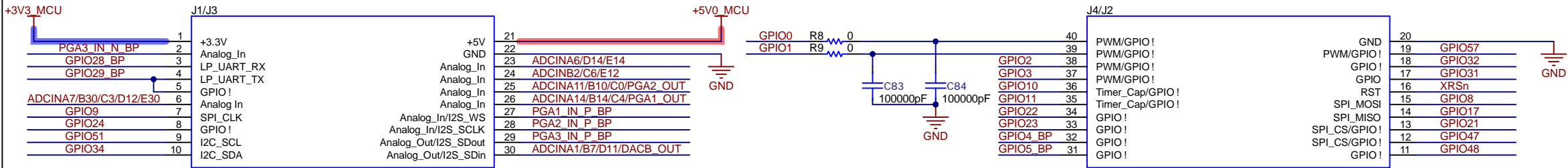
A

B

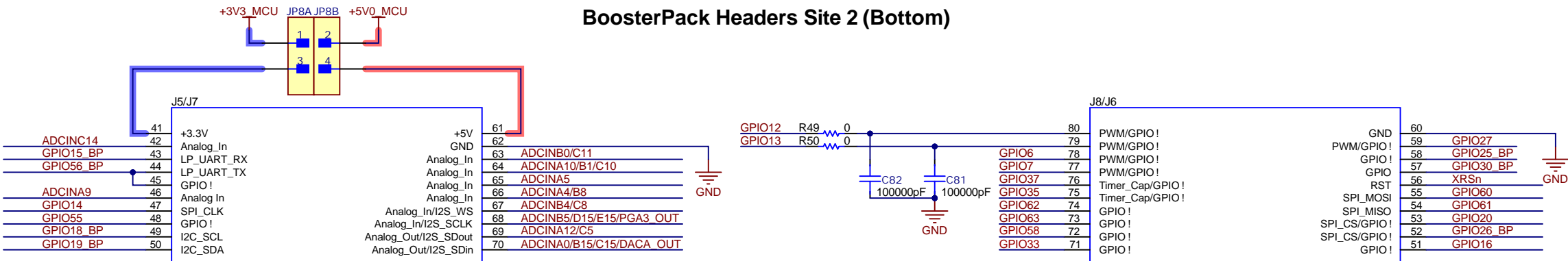
C

D

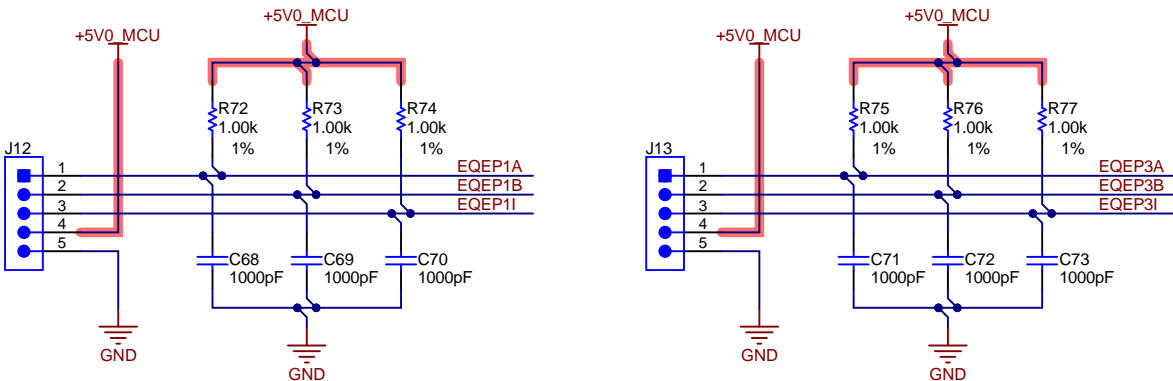
BoosterPack Headers Site 1 (Top)



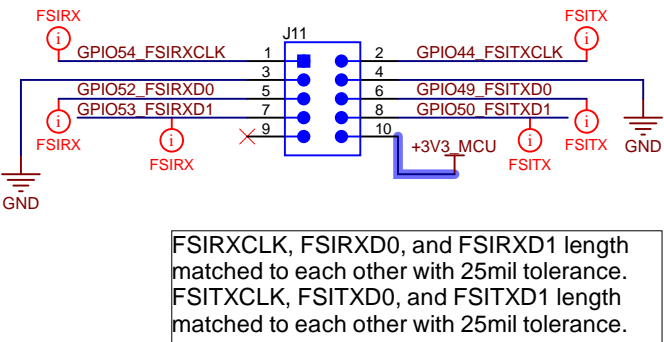
BoosterPack Headers Site 2 (Bottom)



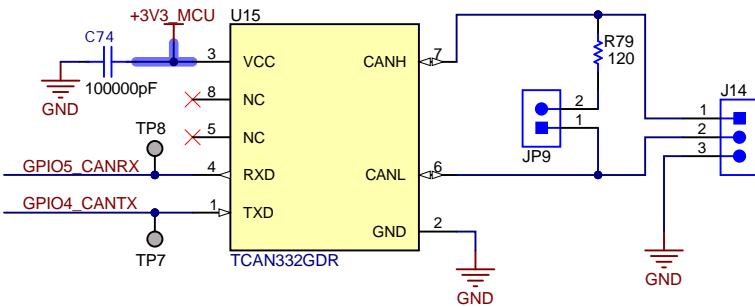
EQEP Connectors



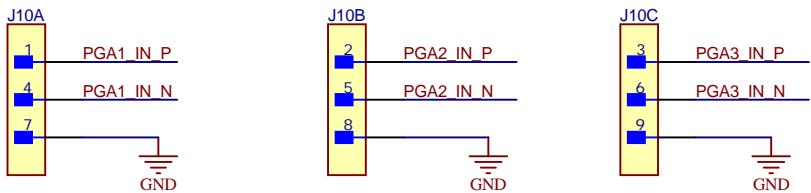
FSI Connector



CAN Transceiver & Connector

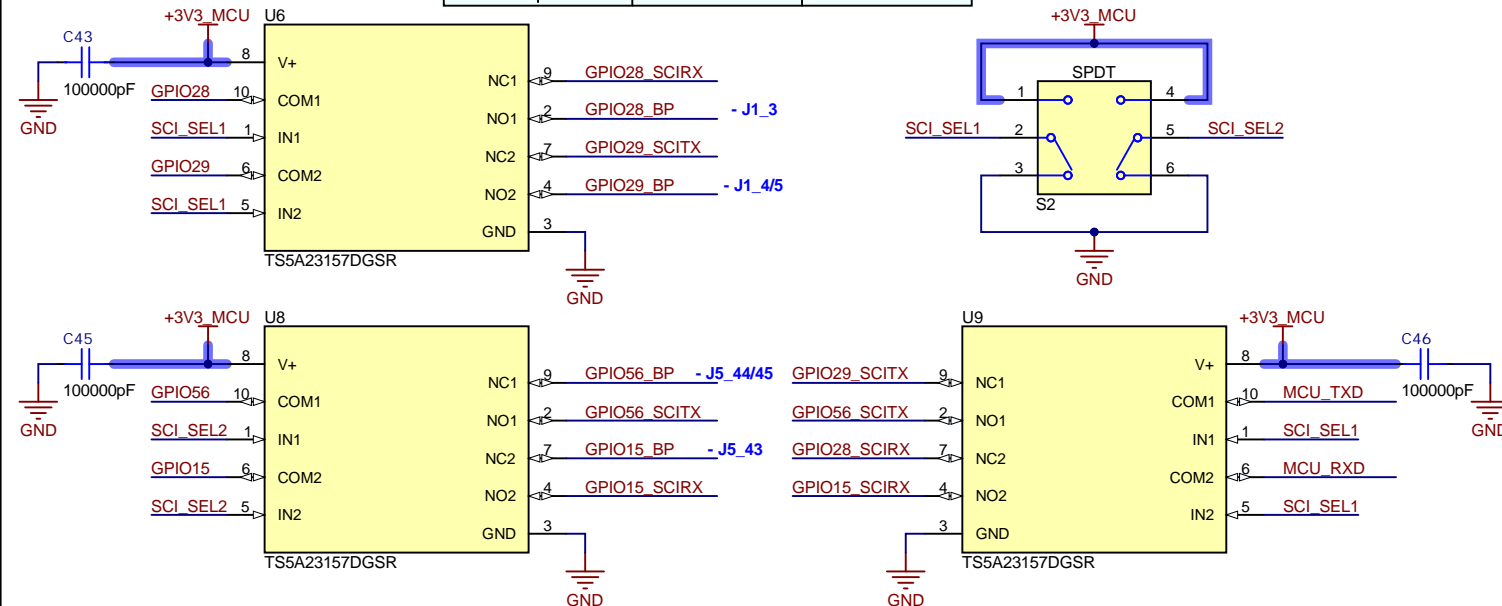


PGA Connector

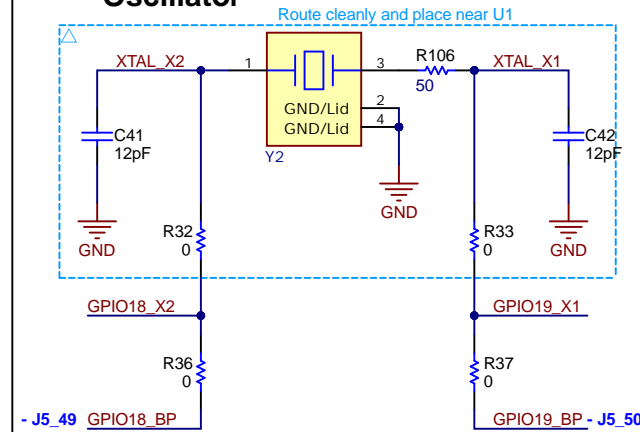


UART Routing

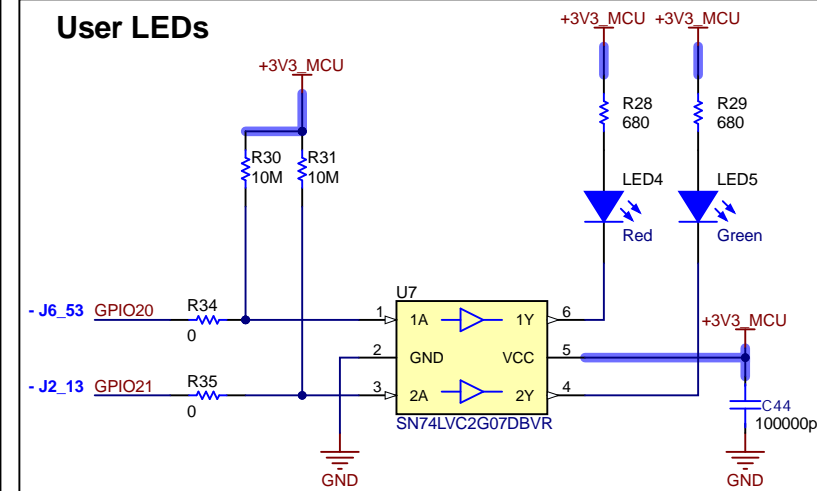
SCI_SEL1	SCI_SEL2	GPIO28/29 Route	GPIO15/56 Route
0	0	XDS110 COM Port	BP
0	1	XDS110 COM Port	NC
1	0	BP	BP
1	1	BP	XDS110 COM Port



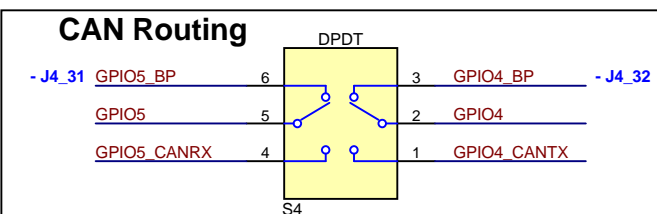
Oscillator



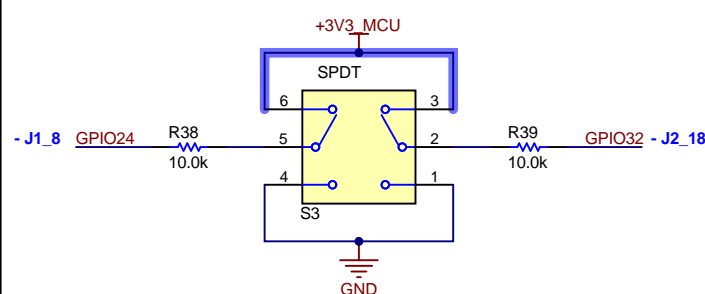
User LEDs



CAN Routing



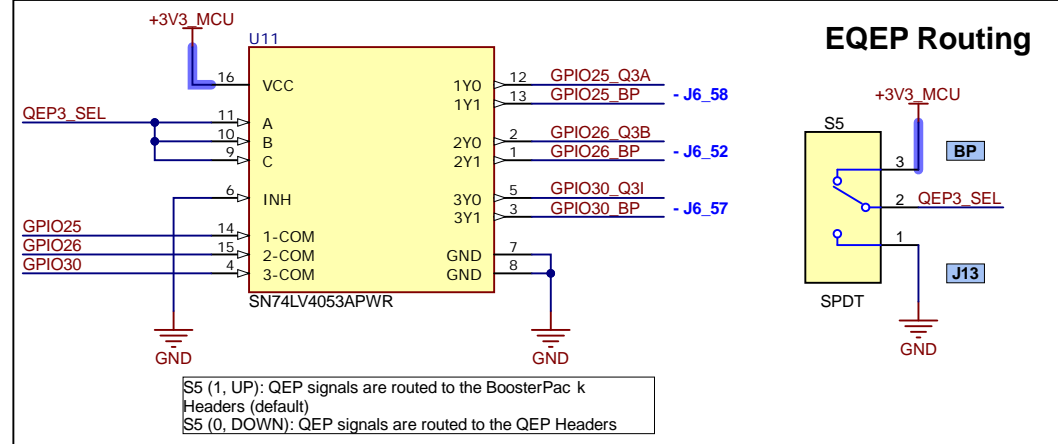
Boot Mode Select



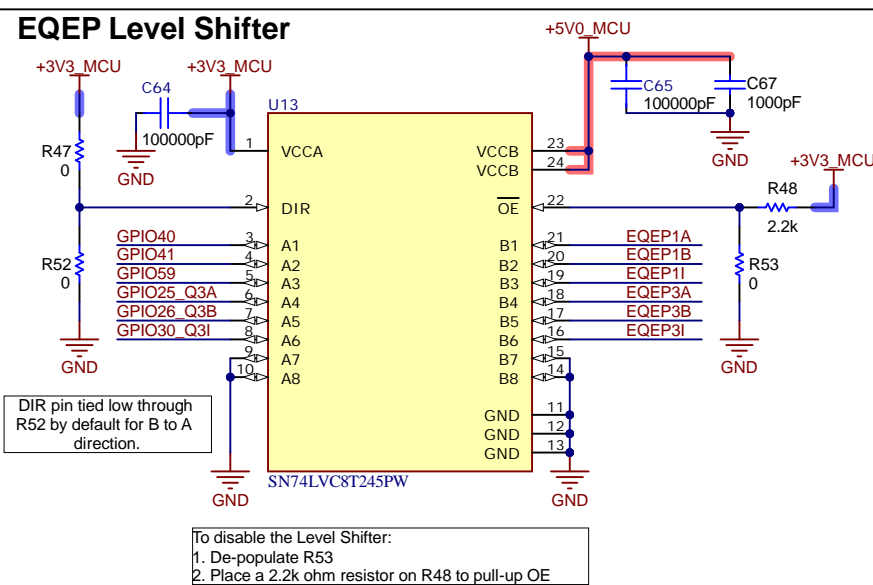
Selected Boot Mode Chart

Mode #	GPIO24	GPIO32	Boot Mode
00	0	0	Boot from Parallel GPIO
01	0	1	Boot from SCI / Wait Mode
02	1	0	Boot from CAN
03	1	1	Boot from Flash

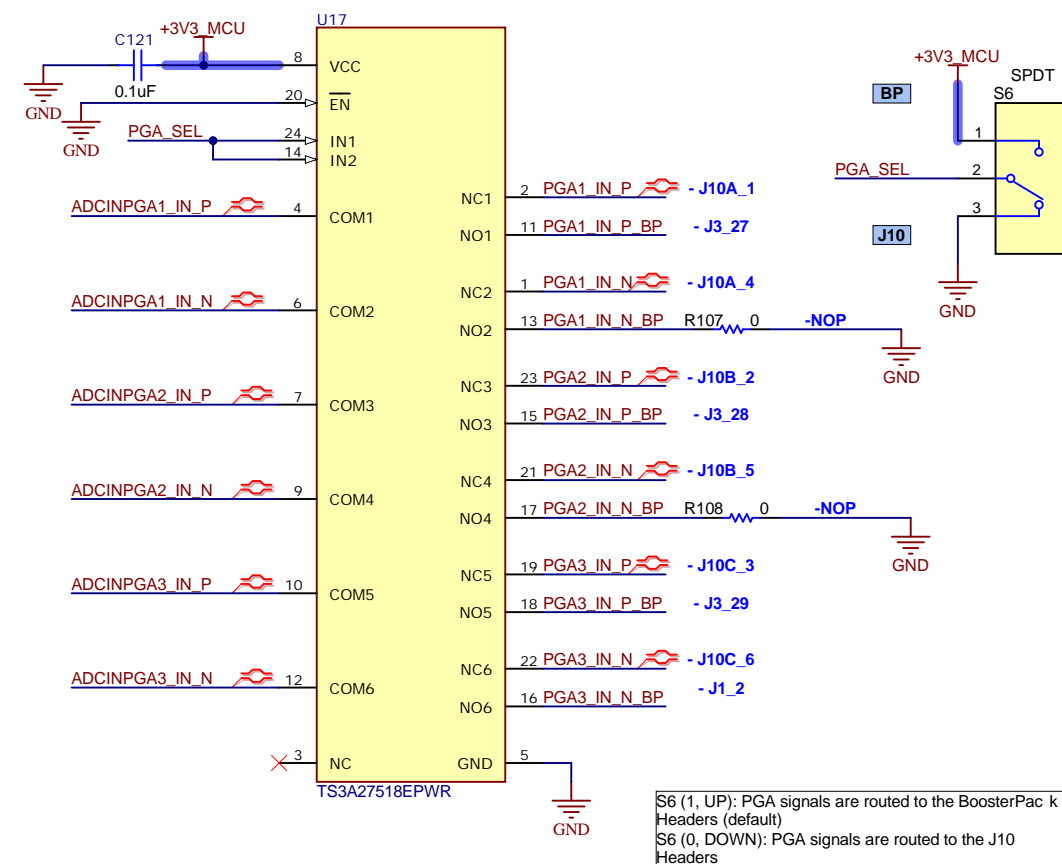
EQEP Routing



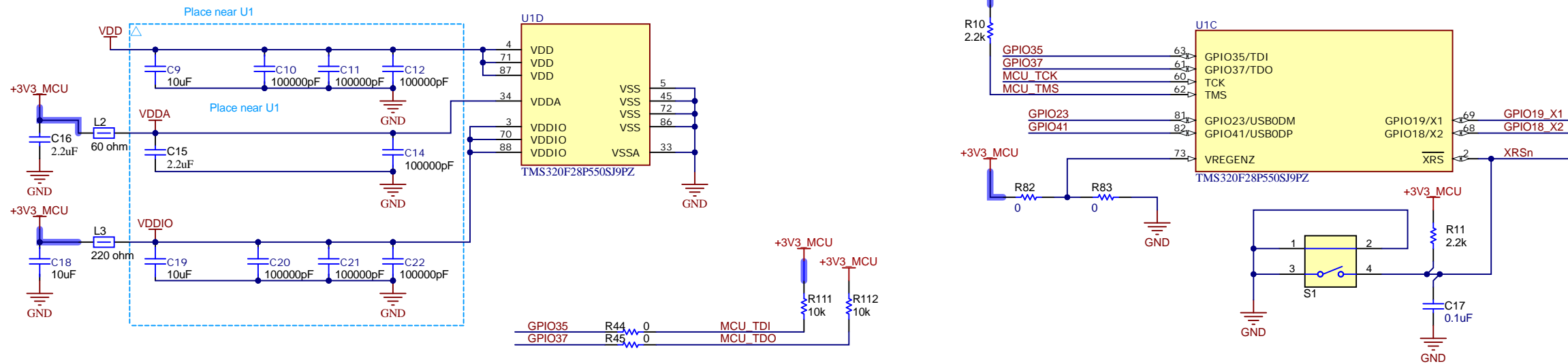
EQEP Level Shifter



PGA Routing



F28P55x Device



		U1B	
EPWM1A	J4_40	GPIO0	79
EPWM1B	J4_39	GPIO1	78
EPWM2A	J4_38	GPIO2	77
EPWM2B	J4_37	GPIO3	76
CANA_TX	J4_32	GPIO4	75
CANA_RX	J4_31	GPIO5	74
EPWM4A	J8_78	GPIO6	73
EPWM4B	J8_77	GPIO7	72
SPIA_PICO	J2_15	GPIO8	71
SPIA_CLK	J1_7	GPIO9	70
EPWM6A	J4_36	GPIO10	69
EPWM6B	J4_35	GPIO11	68
EPWM7A	J8_80	GPIO12	67
EPWM7B	J8_79	GPIO13	66
SPIB_CLK	J5_47	GPIO14	65
SCIB_RX	J5_43	GPIO15	64
	J6_51	GPIO16	63
SPIA_POCI	J2_14	GPIO17	62
LED4	J6_53	GPIO18	61
LED5	J2_13	GPIO19	60
LINA_TX	J4_34	GPIO20	59
BOOT1	J1_8	GPIO21	58
	J6_58	GPIO22	57
	J6_52	GPIO23	56
SPIB_PTE	J6_59	GPIO24	55
SCIA_RX	J1_3	GPIO25	54
SCIA_TX	J1_4/5	GPIO26	53
	J6_57	GPIO27	52
	J2_17	GPIO28	51
BOOT2	J2_18	GPIO29	50
CANB_RX	J8_71	GPIO30	49
I2CB_SDA	J1_10	GPIO31	48
EQEP1A	N/A	GPIO32	47
FSITXA_CLK	J11_2	GPIO33	46
	J2_12	GPIO34	45
	J2_11	GPIO35	44
FSITXA_D0	J11_6	GPIO36	43
FSITXA_D1	J11_8	GPIO37	42
I2CB_SCL	J1_9	GPIO38	41
FSIRXA_D0	J11_5	GPIO39	40
FSIRXA_D1	J11_7	GPIO40	39
FSIRXA_CLK	J11_1	GPIO41	38
	J5_48	GPIO42	37
SCIA_TX	J5_44/45	GPIO43	36
SPIA_PTE	J2_19	GPIO44	35
CANB_TX	J8_72	GPIO45	34
EQEP1I	N/A	GPIO46	33
SPIB_PICO	J6_55	GPIO47	32
SPIB_POCI	J6_54	GPIO48	31
	J8_74	GPIO49	30
	J8_73	GPIO50	29
		GPIO51	28
		GPIO52	27
		GPIO53	26
		GPIO54	25
		GPIO55	24
		GPIO56	23
		GPIO57	22
		GPIO58	21
		GPIO59	20
		GPIO60	19
		GPIO61	18
		GPIO62	17
		GPIO63	16

A

B

C

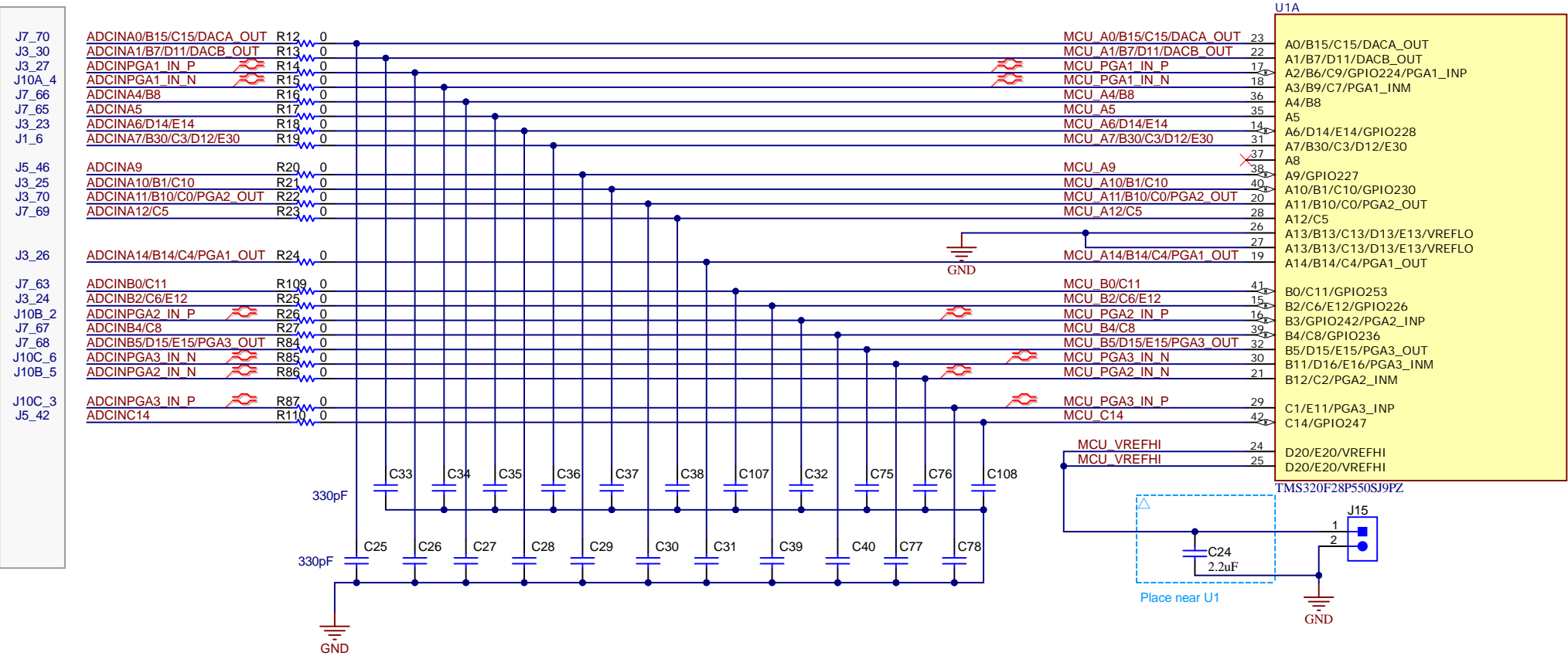
D

A

B

C

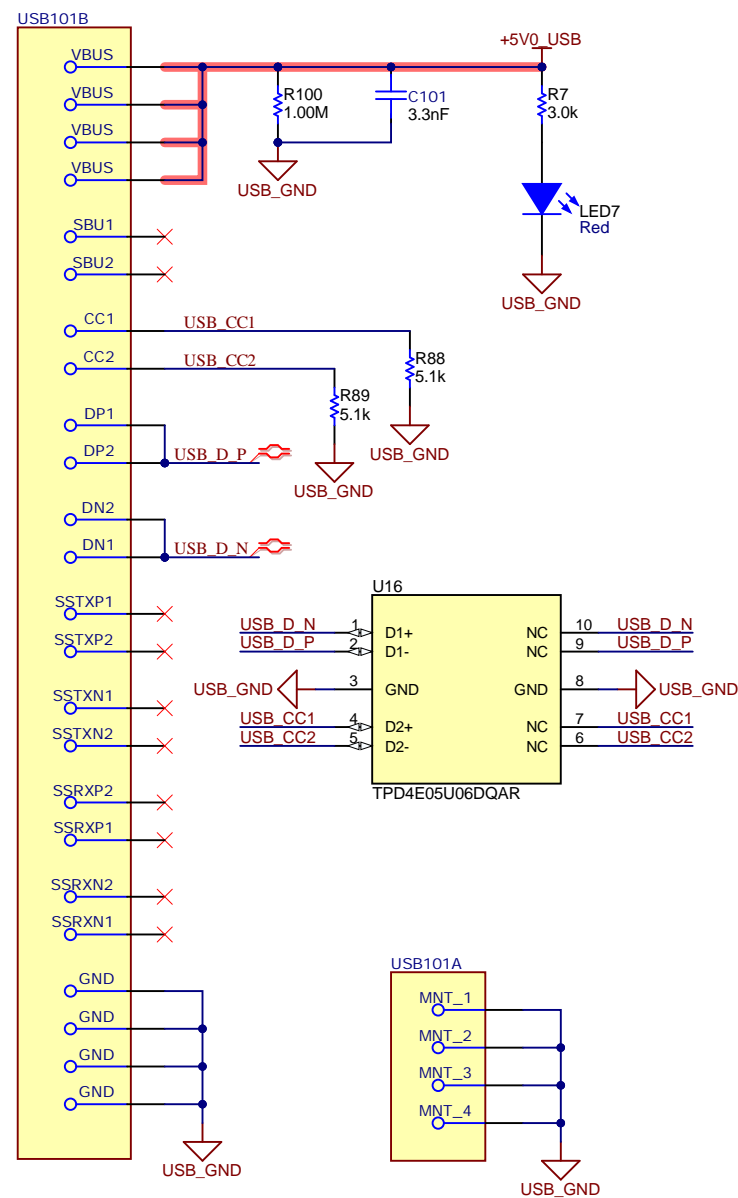
D



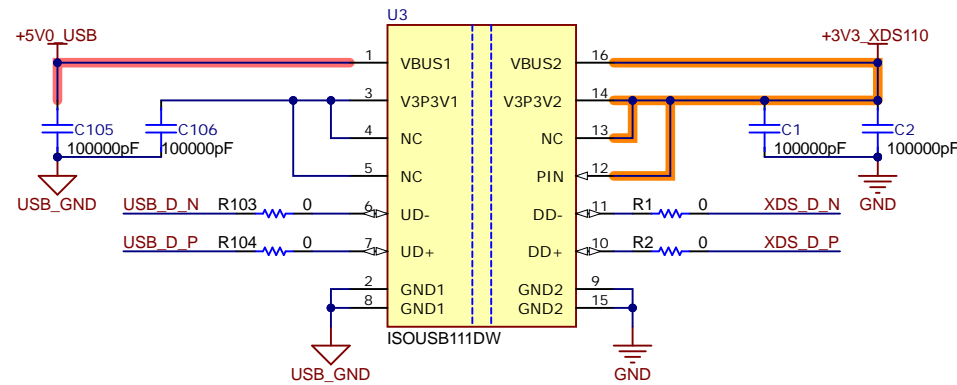
F28P55X ADC Pins

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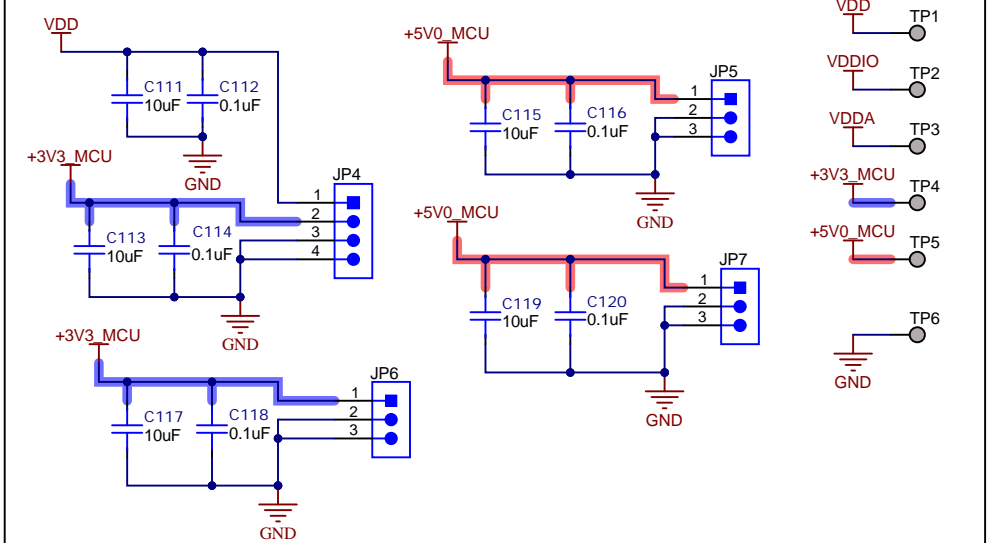
USB-C Connector



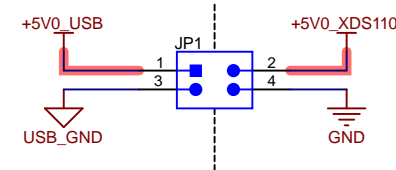
USB Isolation



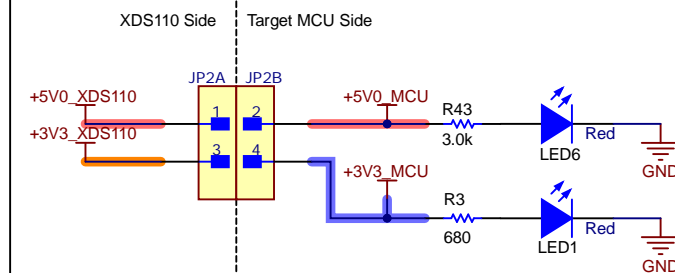
Power Headers and Test Points



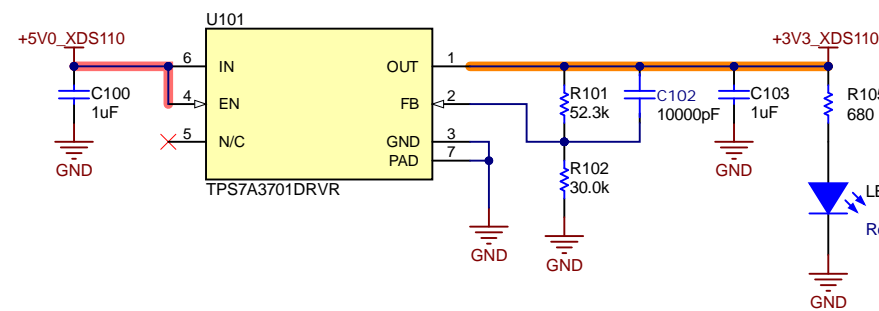
PWR & GND Isolation Boundary



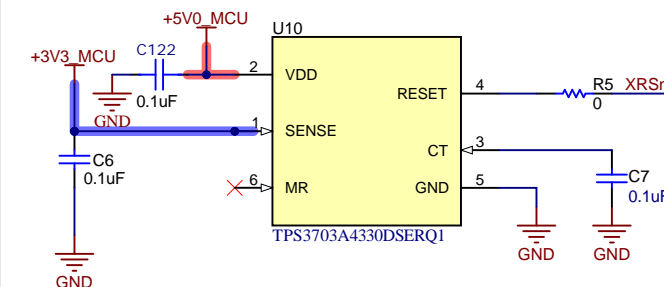
5V & 3.3V Isolation Boundary



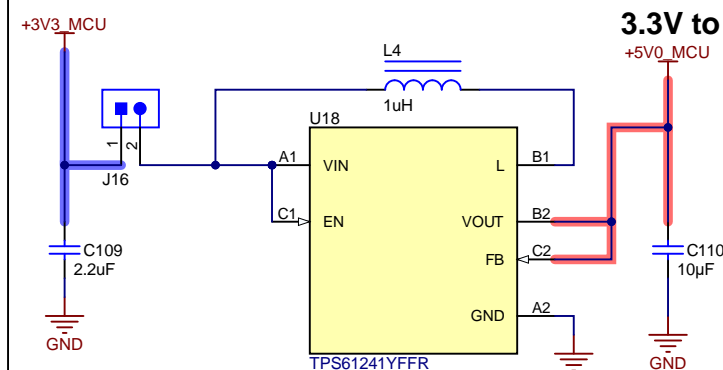
5V to 3.3V



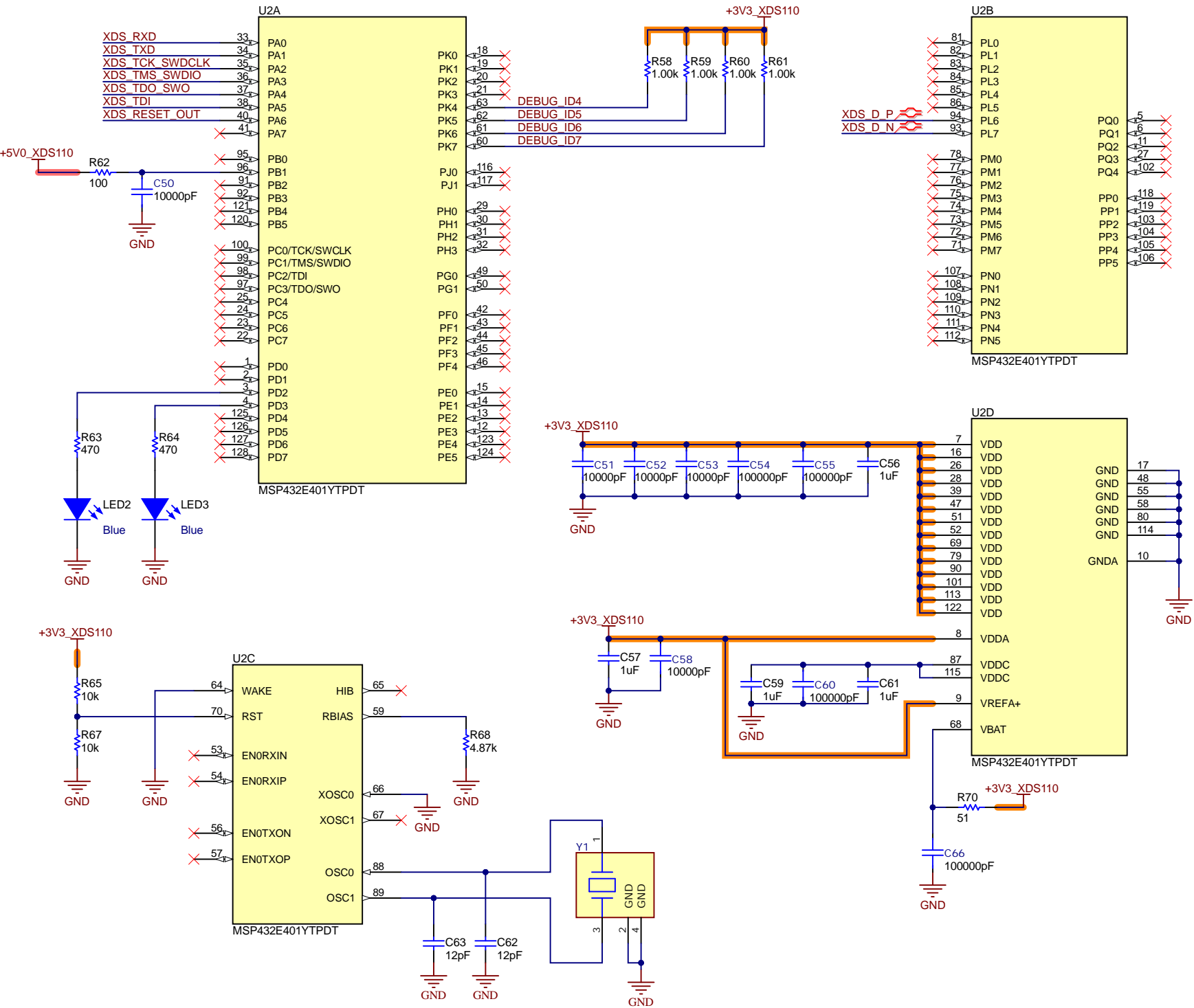
System Supervisory Circuit



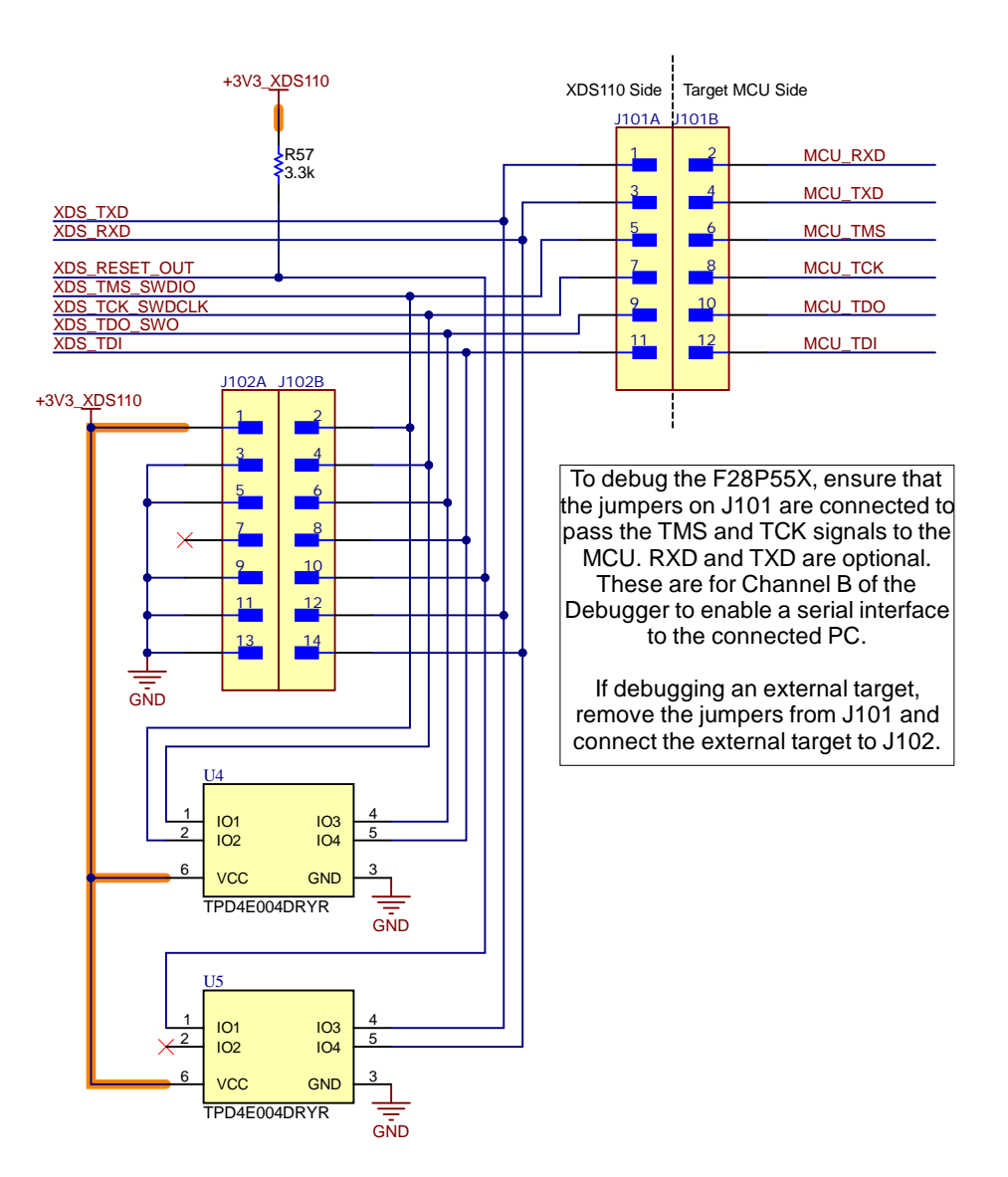
3.3V to 5V BOOST



XDS110 Device



XDS110 Target Interface



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