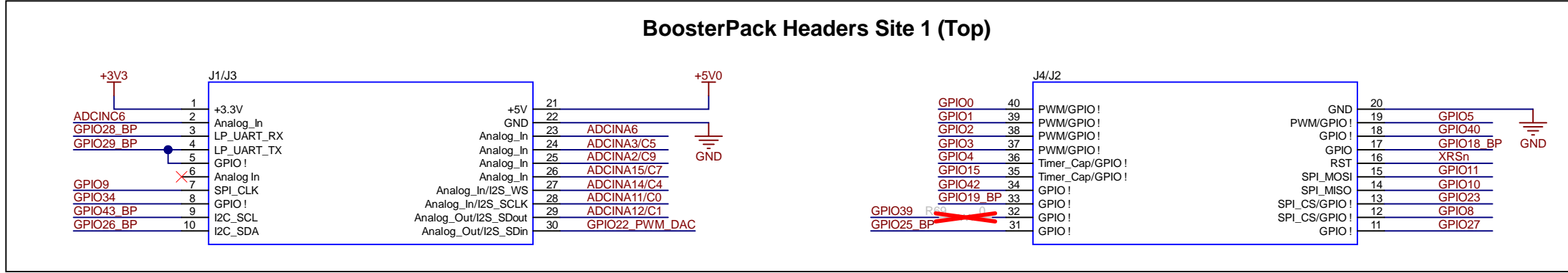


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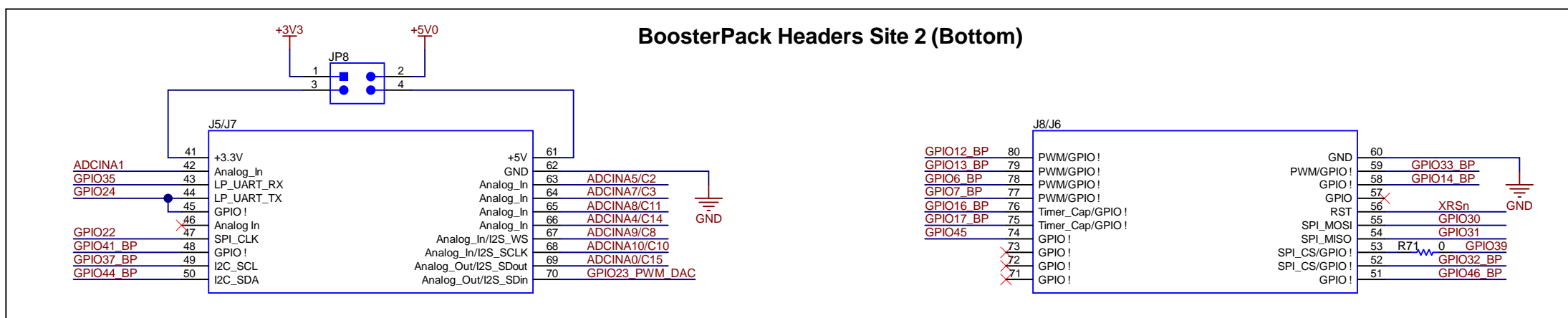
Orderable: LAUNCHXL-F280025C	Designed for: Public Release	Mod. Date: 2/2/2022
TID #: N/A	Project Title: LAUNCHXL-F280025C	
Number: MCU089	Rev: B	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 1 of 8
Drawn By:	File: MCU089B_Block_Diagram.SchDoc	Size: B
Engineer: Kevin Allen	Contact: http://www.ti.com/support	



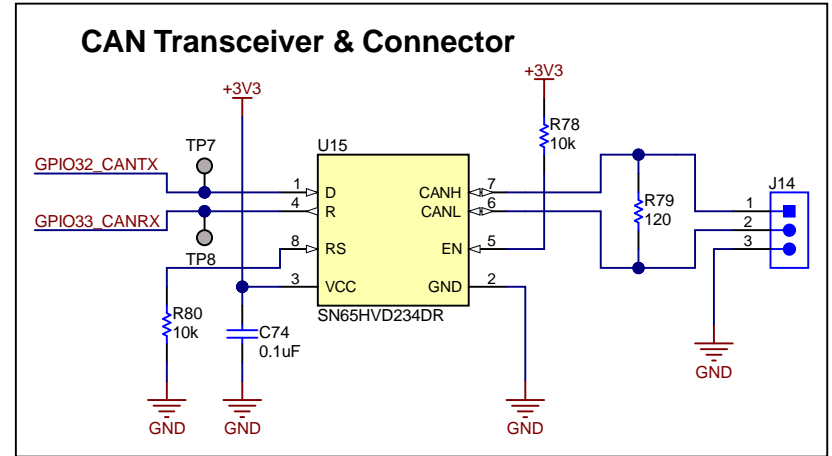
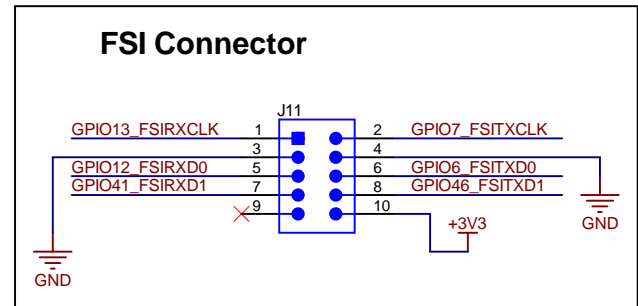
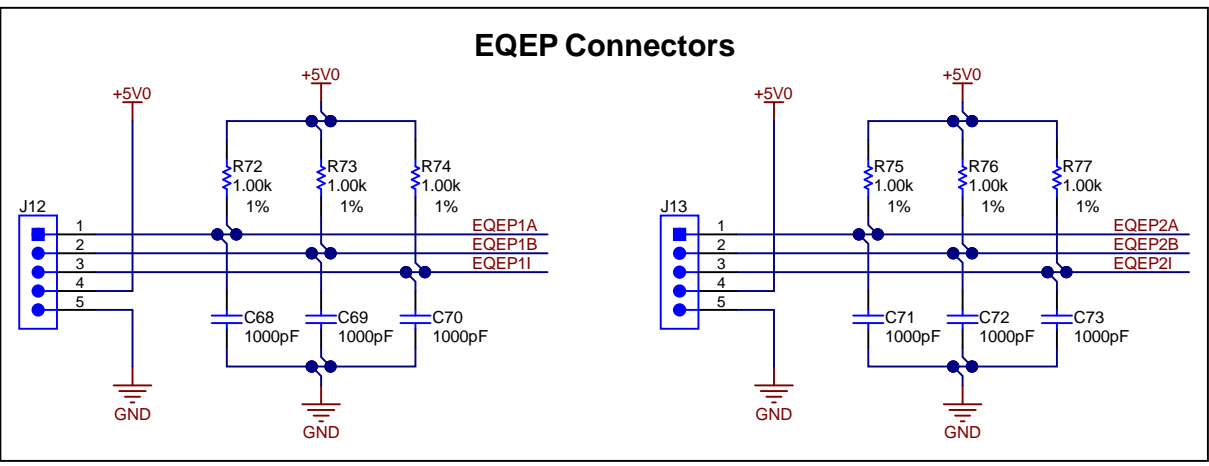
A



B



C

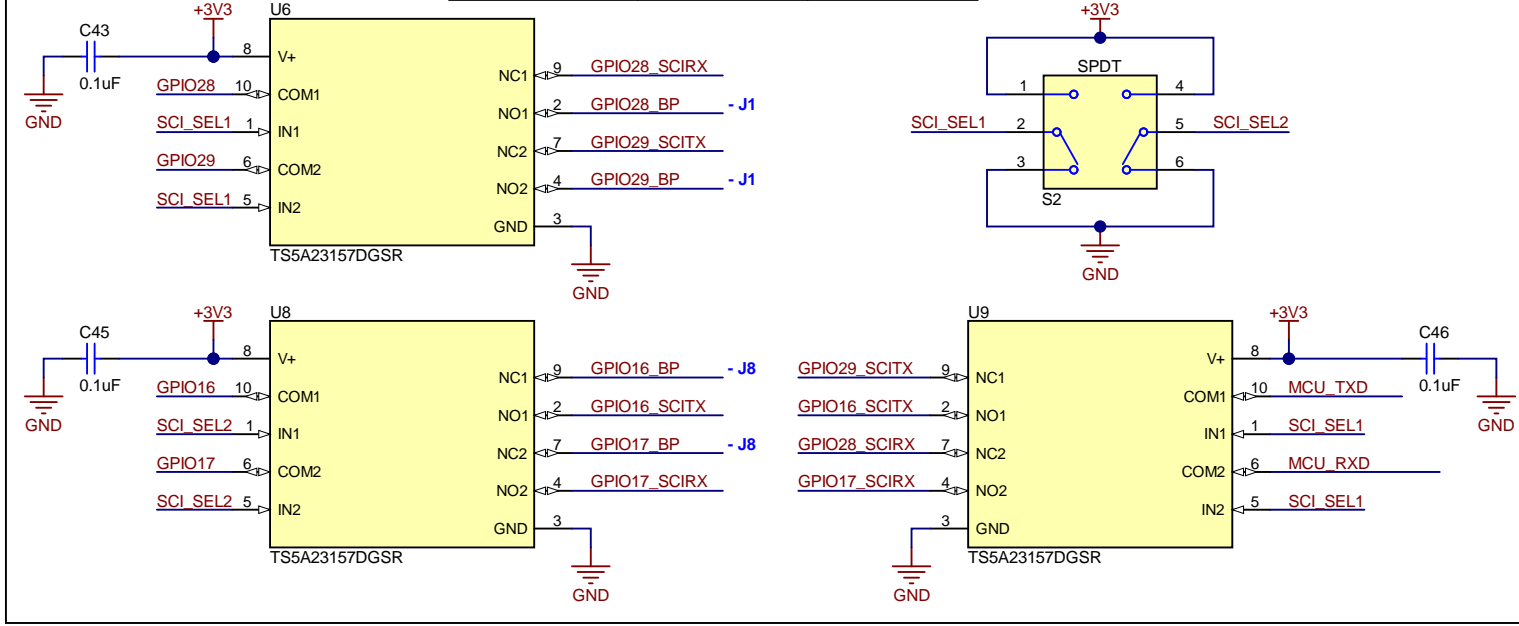


D

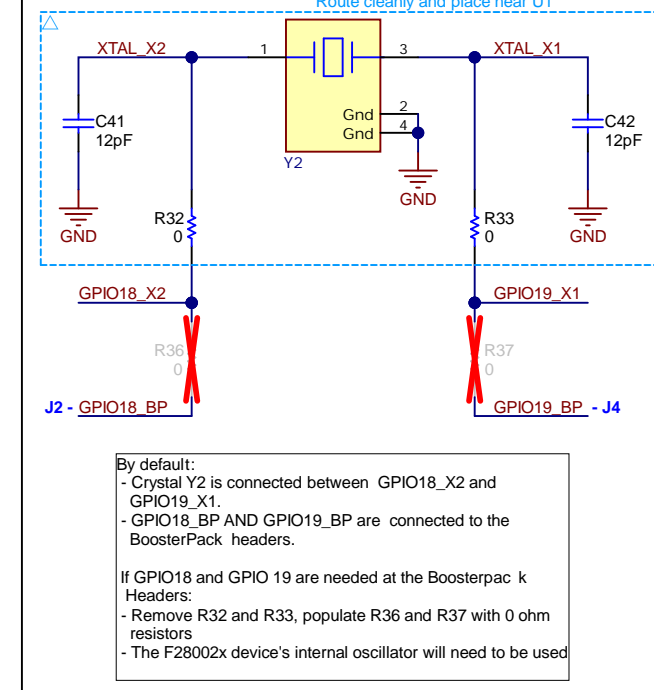
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UART Routing

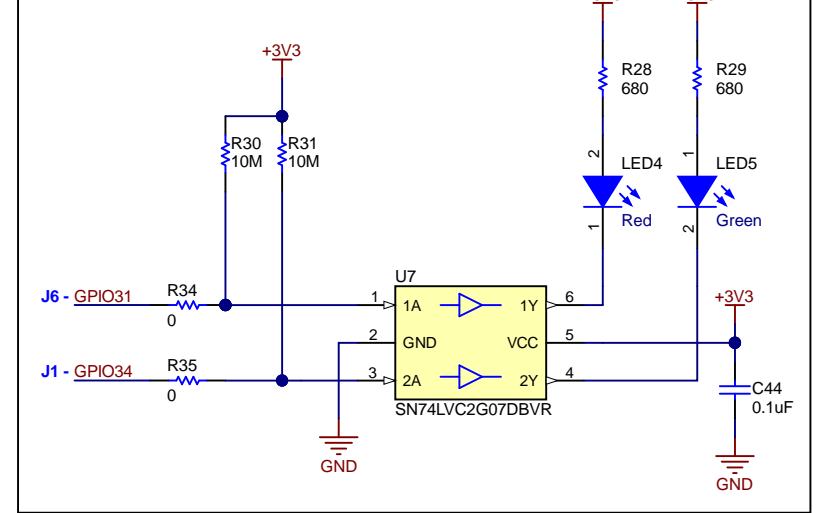
SCI_SEL1	SCI_SEL2	GPIO28/29 Route	GPIO16/17 Route	
0	0	XDS110 COM Port	BP	- DEFAULT
0	1	XDS110 COM Port	NC	
1	0	BP	BP	
1	1	BP	XDS110 COM Port	



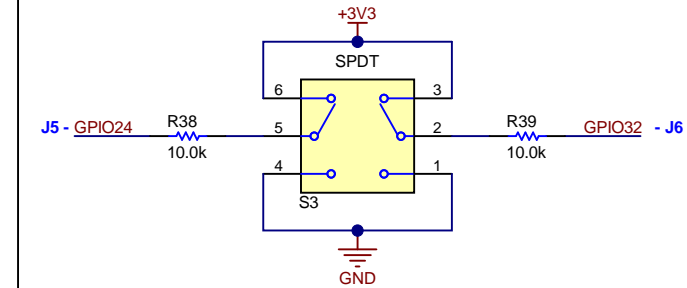
Oscillator



User LEDs



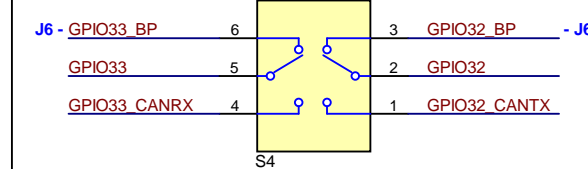
Boot Mode Select



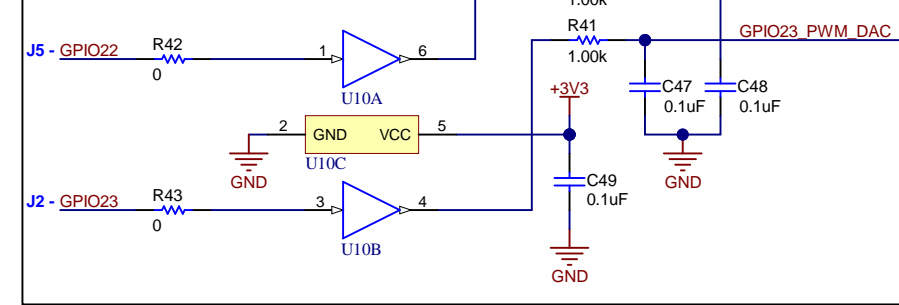
Selected Boot Mode Chart

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

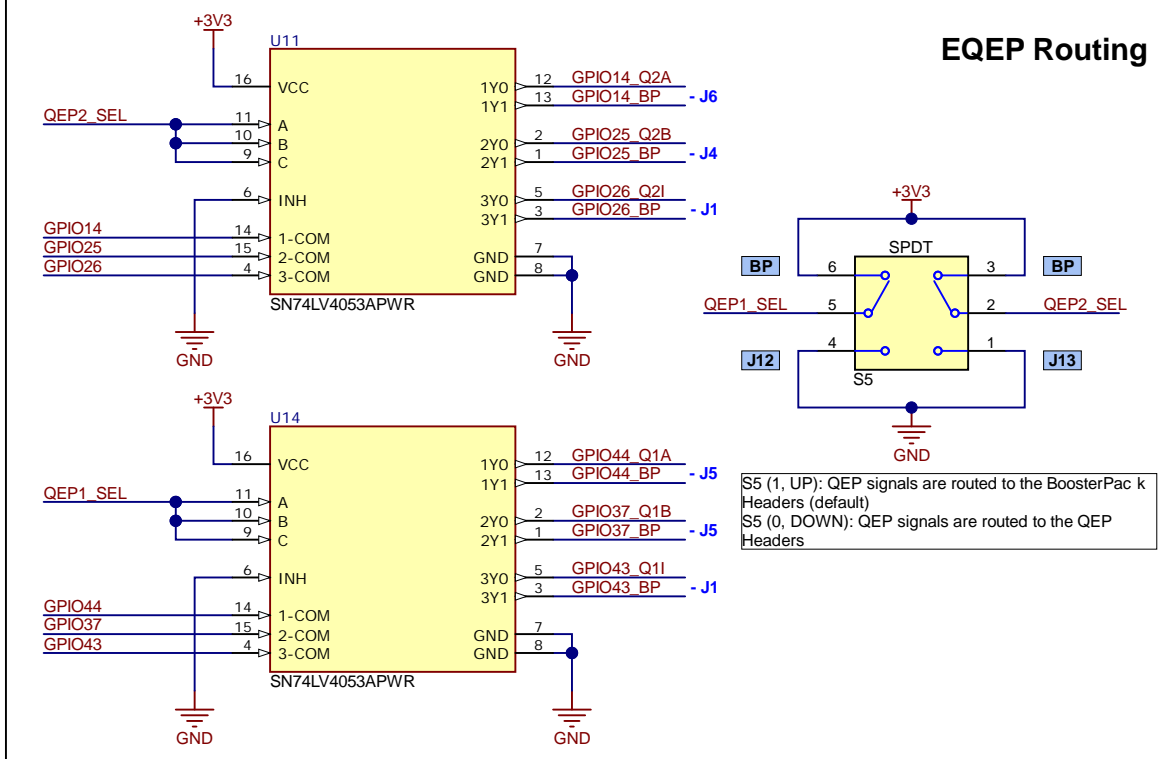
CAN Routing



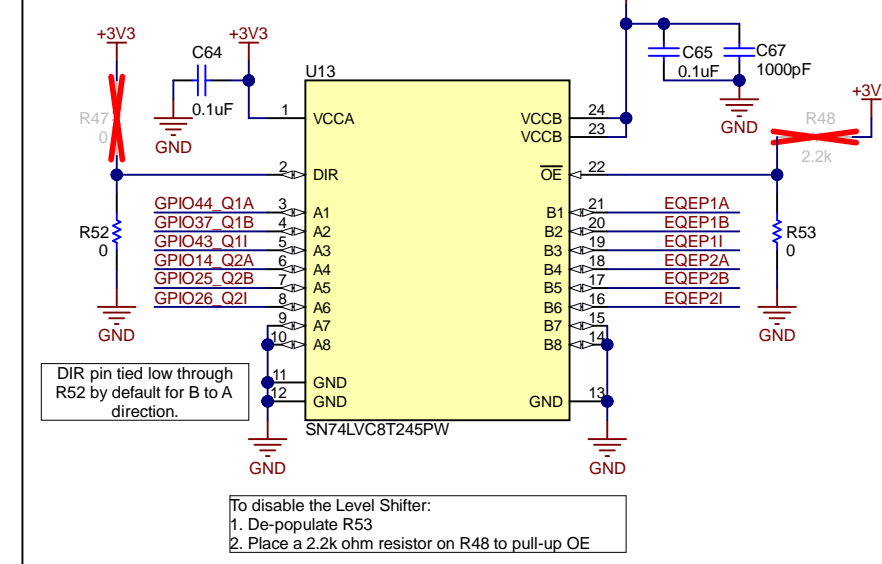
PWM DAC



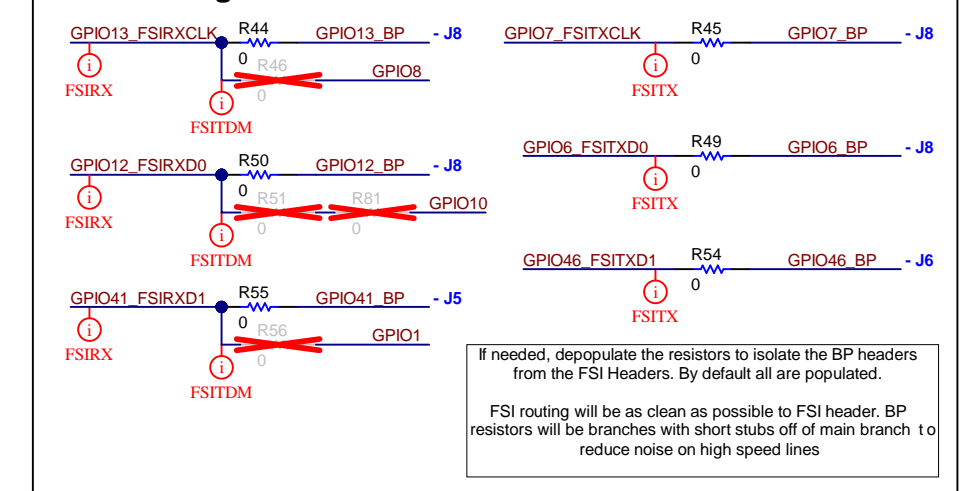
EQEP Routing



EQEP Level Shifter

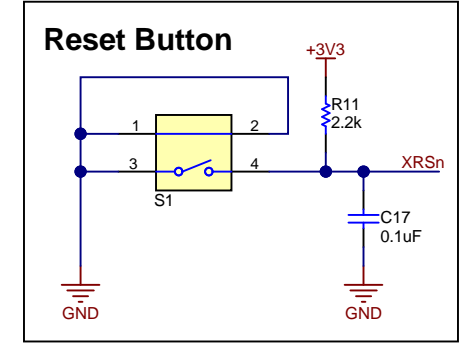
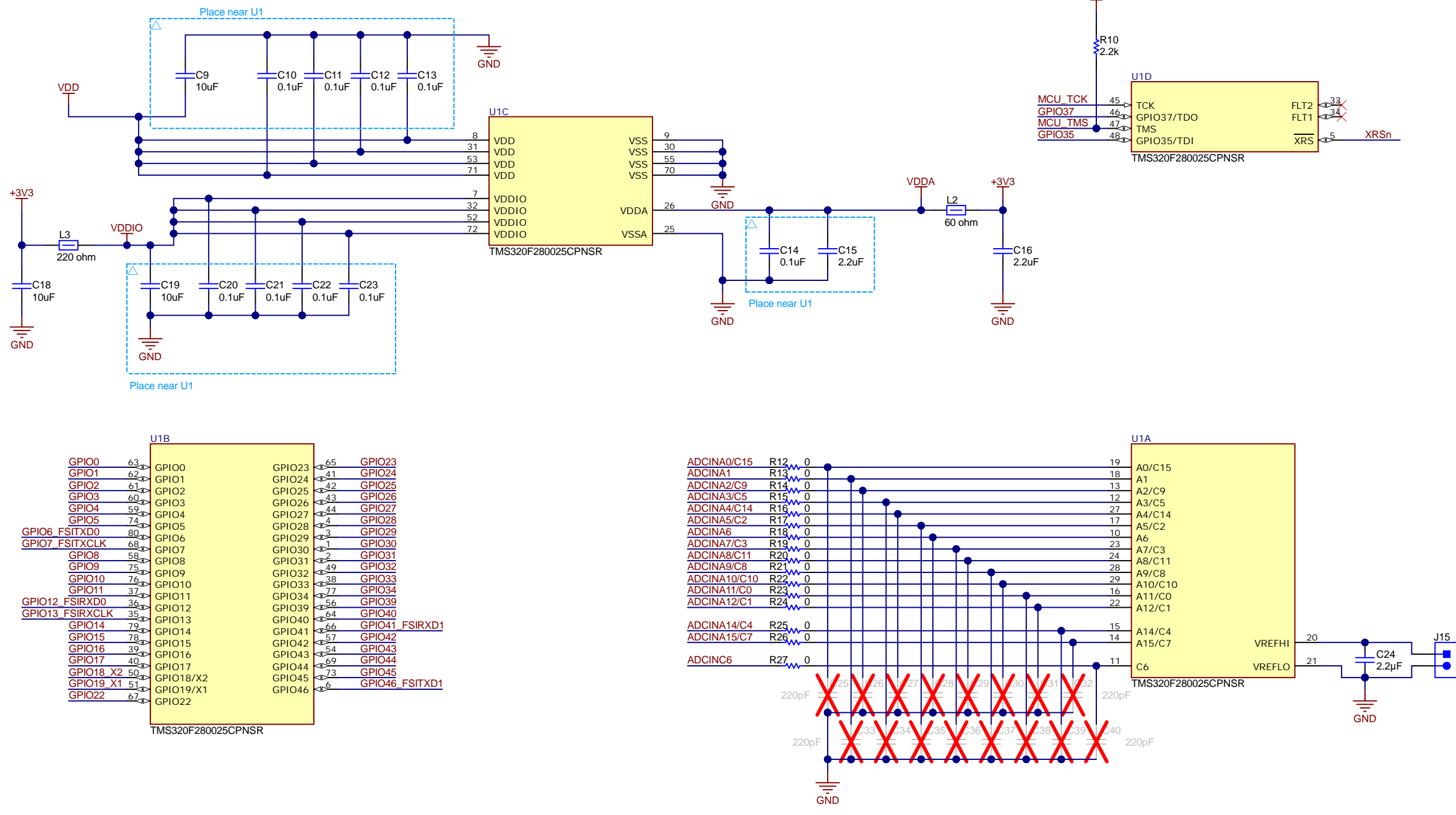


FSI Routing



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F28002x Device



U1B

GPIO0	63	GPIO0	65	GPIO23
GPIO1	62	GPIO1	41	GPIO24
GPIO2	61	GPIO2	42	GPIO25
GPIO3	60	GPIO3	43	GPIO26
GPIO4	59	GPIO4	44	GPIO27
GPIO5	74	GPIO5	4	GPIO28
GPIO6 FSITXD0	80	GPIO6	3	GPIO29
GPIO7 FSITXCLK	68	GPIO7	1	GPIO30
GPIO8	58	GPIO8	2	GPIO31
GPIO9	75	GPIO9	49	GPIO32
GPIO10	76	GPIO10	38	GPIO33
GPIO11	37	GPIO11	77	GPIO34
GPIO12 FSIRXD0	36	GPIO12	56	GPIO39
GPIO13 FSIRXCLK	35	GPIO13	64	GPIO40
GPIO14	79	GPIO14	66	GPIO41 FSIRXD1
GPIO15	78	GPIO15	57	GPIO42
GPIO16	39	GPIO16	54	GPIO43
GPIO17	40	GPIO17	69	GPIO44
GPIO18_X2	50	GPIO18/X2	73	GPIO45
GPIO19_X1	51	GPIO19/X1	6	GPIO46 FSITXD1
GPIO22	67	GPIO22		

TMS320F280025CPNSR

U1A

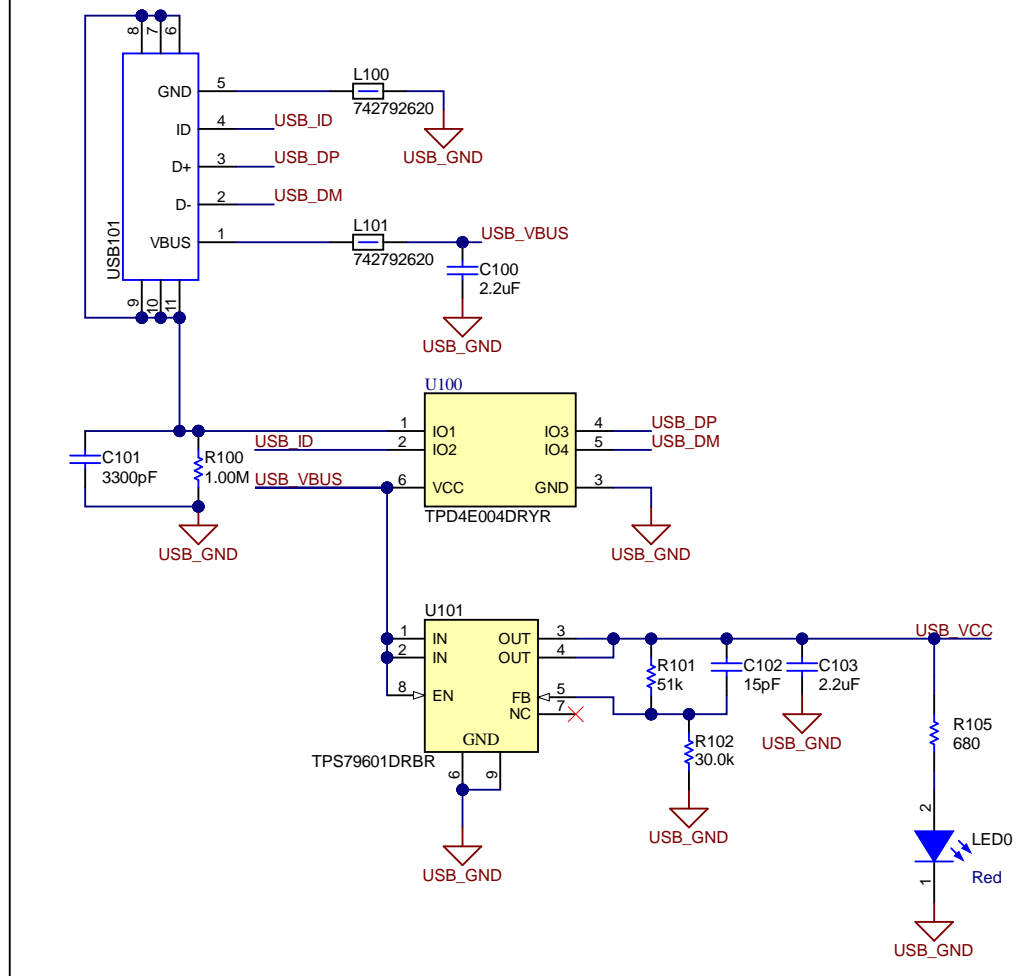
ADCINA0/C15	R12	0	19	A0/C15
ADCINA1	R13	0	18	A1
ADCINA2/C9	R14	0	13	A2/C9
ADCINA3/C5	R15	0	12	A3/C5
ADCINA4/C14	R16	0	27	A4/C14
ADCINA5/C2	R17	0	17	A5/C2
ADCINA6	R18	0	10	A6
ADCINA7/C3	R19	0	23	A7/C3
ADCINA8/C11	R20	0	24	A8/C11
ADCINA9/C8	R21	0	28	A9/C8
ADCINA10/C10	R22	0	29	A10/C10
ADCINA11/C0	R23	0	16	A11/C0
ADCINA12/C1	R24	0	22	A12/C1
ADCINA14/C4	R25	0	15	A14/C4
ADCINA15/C7	R26	0	14	A15/C7
ADCINC6	R27	0	11	C6

TMS320F280025CPNSR

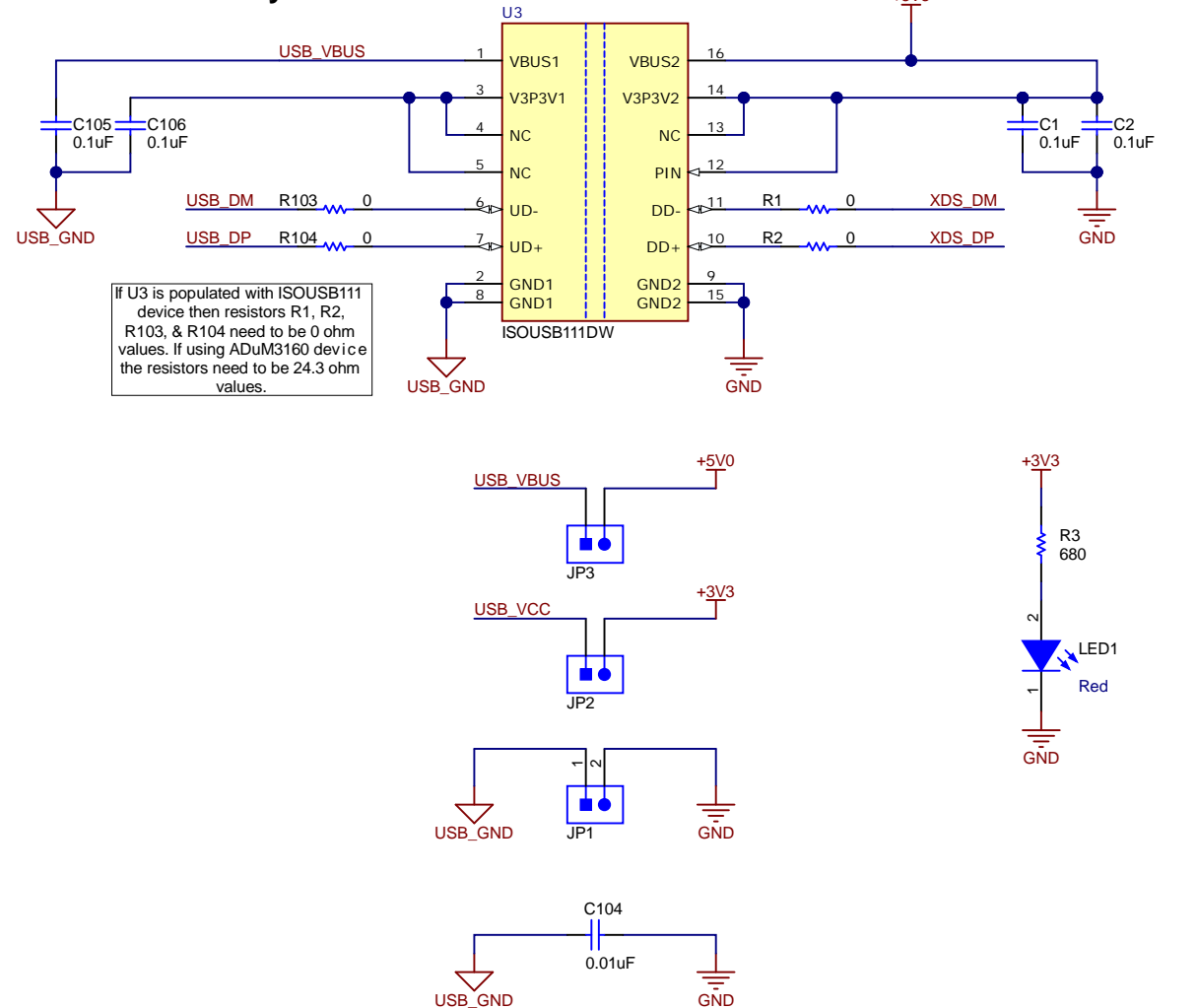
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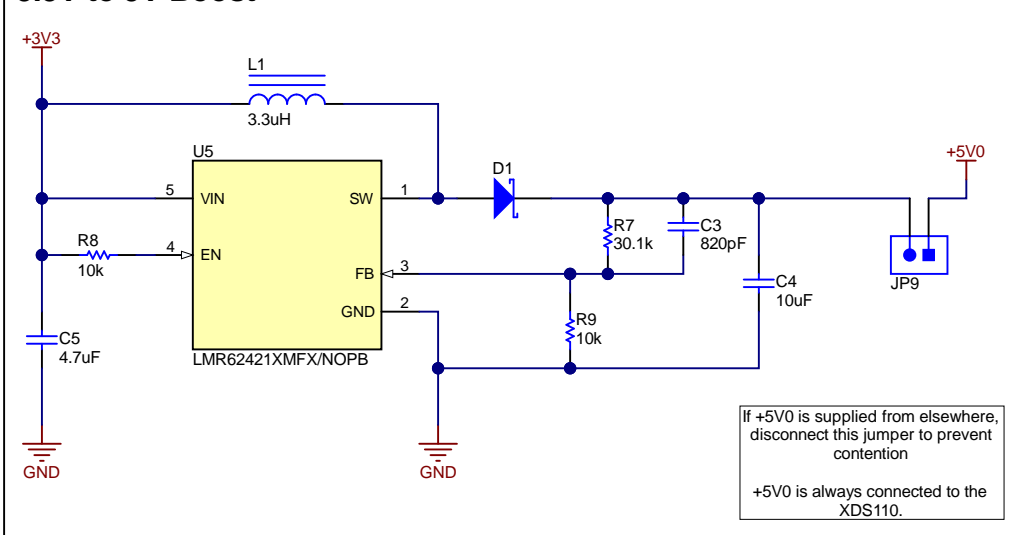
USB & XDS Power



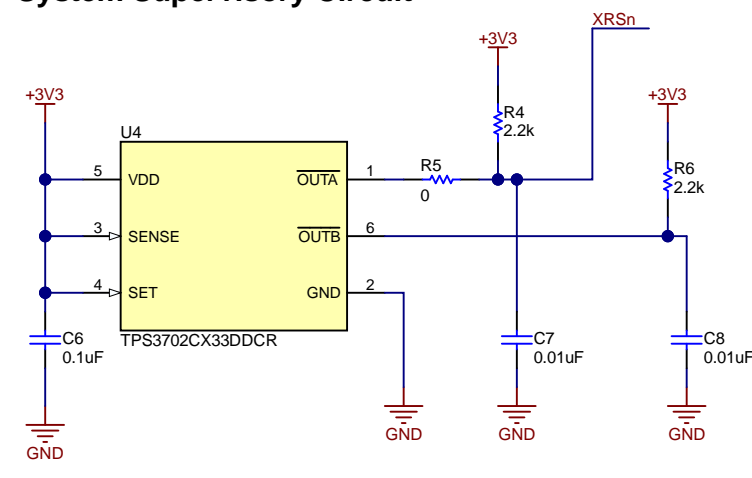
Isolation Boundary



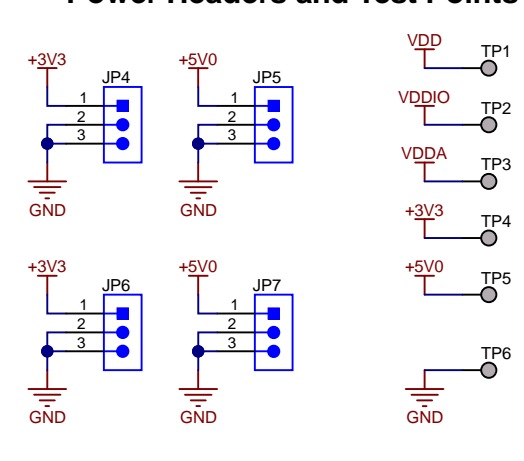
3.3V to 5V Boost

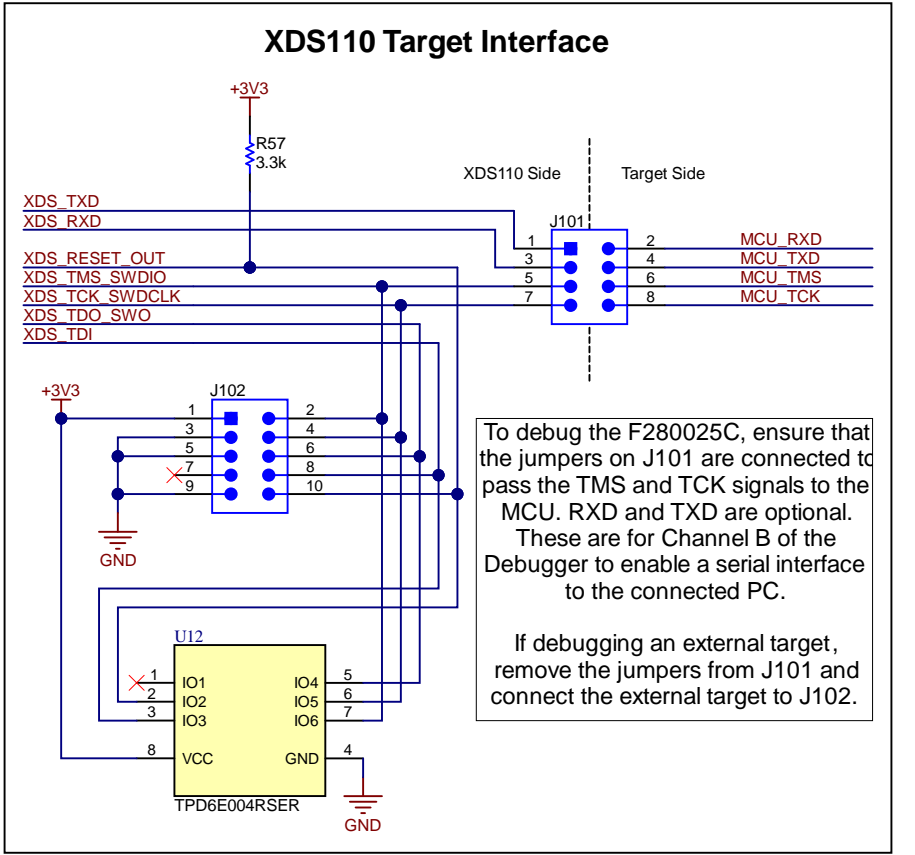
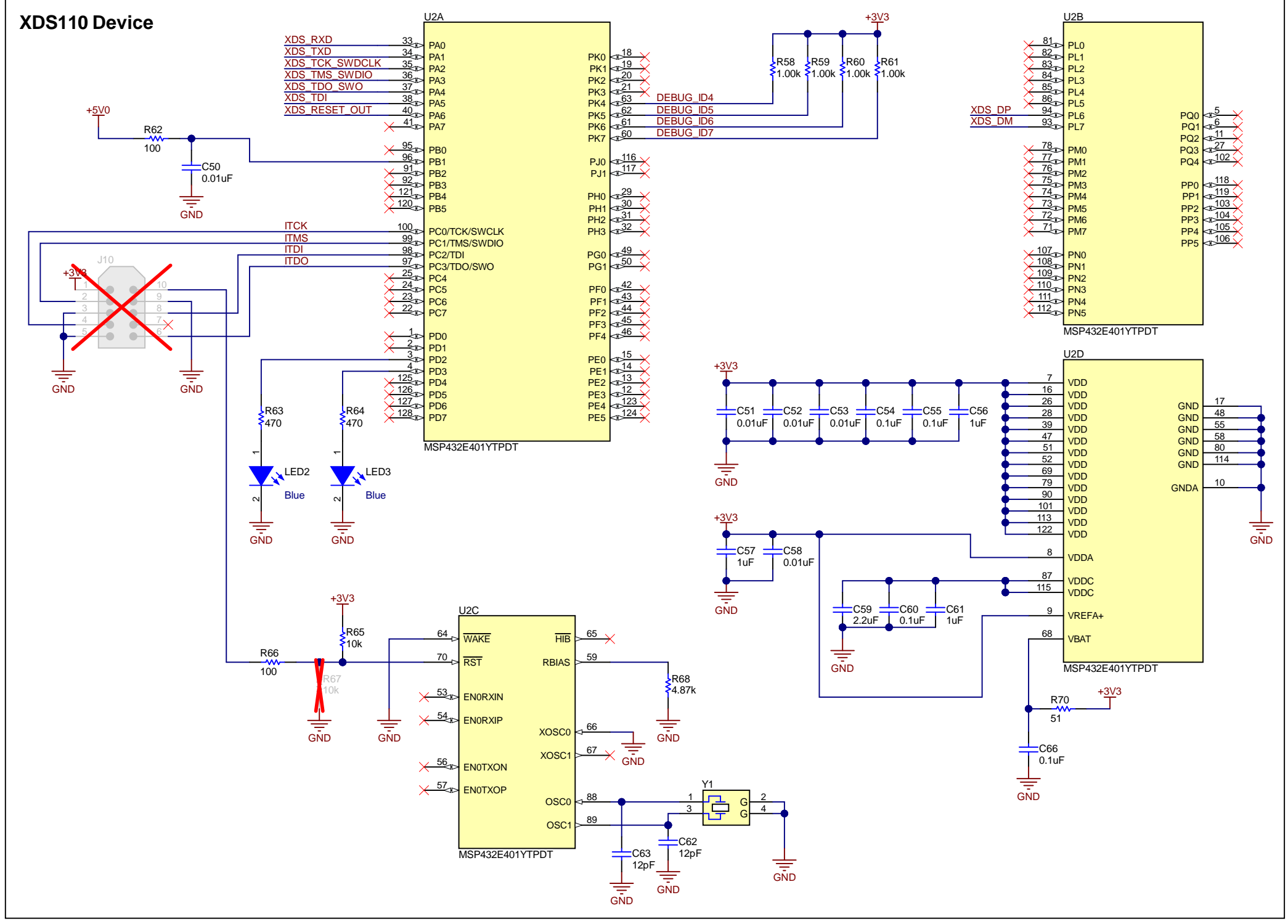


System Supervisory Circuit



Power Headers and Test Points

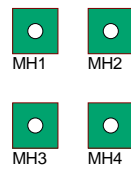




To debug the F280025C, ensure that the jumpers on J101 are connected to pass the TMS and TCK signals to the MCU. RXD and TXD are optional. These are for Channel B of the Debugger to enable a serial interface to the connected PC.

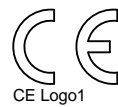
If debugging an external target, remove the jumpers from J101 and connect the external target to J102.

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PCB Number: MCU089
PCB Rev: B

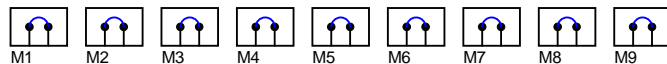
Logo1
PCB
LOGO
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Logo3
PCB
LOGO
FCC disclaimer

Logo4
PCB
LOGO
WEEE logo

Logo5
PCB
LOGO
Texas Instruments



ZZ1
Assembly Note
These assemblies are ESD sensitive, ESD precautions shall be observed.

ZZ2
Assembly Note
These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

ZZ3
Assembly Note
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

Orderable: LAUNCHXL-F280025C	Designed for: Public Release	Mod. Date: 2/3/2022
TID #: N/A	Project Title: LAUNCHXL-F280025C	
Number: MCU089	Rev: B	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 8 of 8
Drawn By:	File: MCU089B_Hardware.SchDoc	Size: B
Engineer: Kevin Allen	Contact: http://www.ti.com/support	

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