



PG23 Pro Kit	
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Revision History	
Rev.	Description
A00	Initial version.
A01	Bump U1 revision.
A02	Not mount clamping diodes for ADC input.
A03	Remove AEM bypass, clamping diodes.

 SILICON LABS		Board Name	
		EFM32PG23 Pro Kit	
Designed MAH		Approved RGU	
Page Title	Board Number		Revision
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1

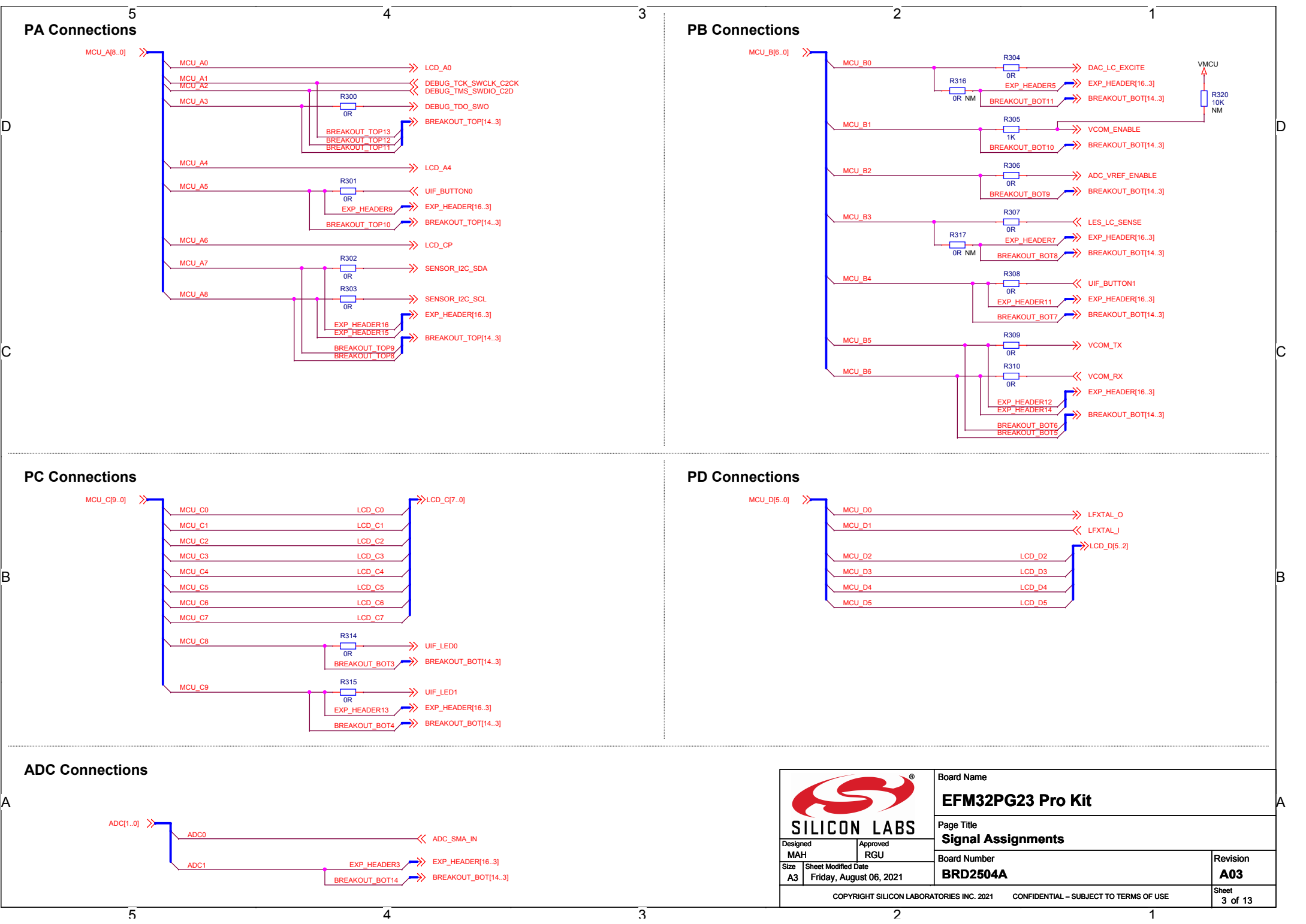



C



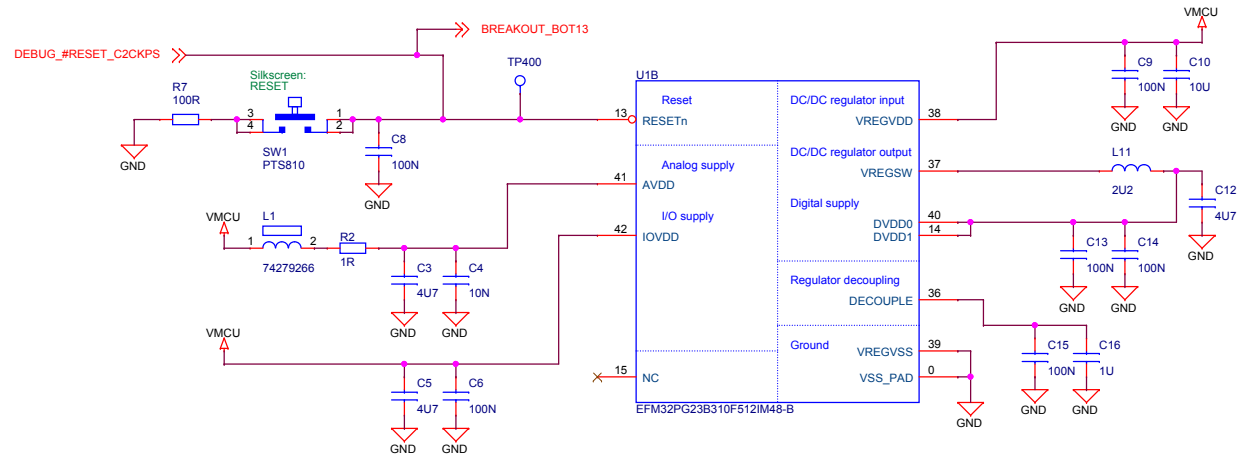
B





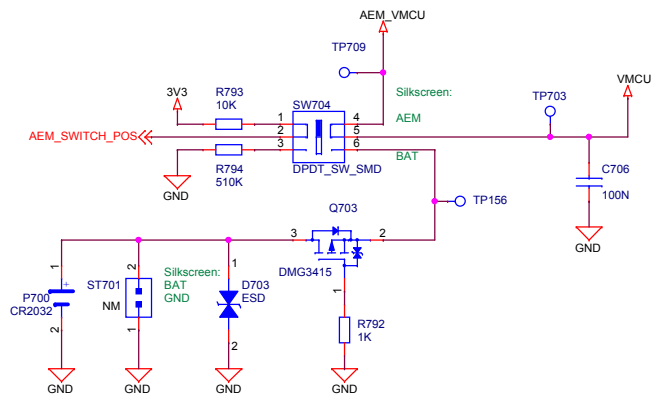
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		Page Title Signal Assignments	
Designed MAH	Approved RGU	Board Number BRD2504A	Revision A03
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EFM32 Power and Decoupling

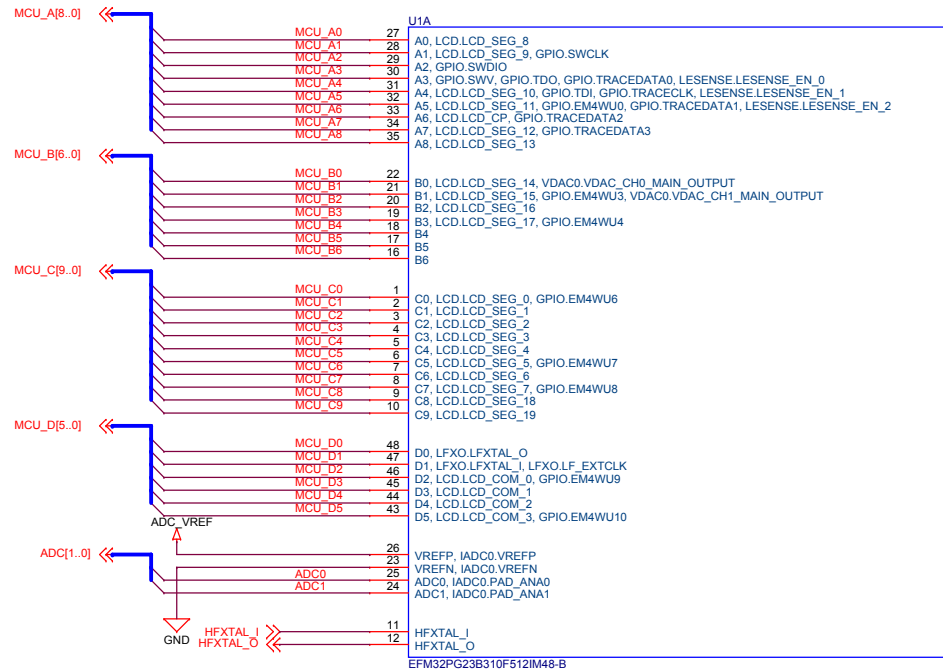


Power Select Switch: AEM/BAT

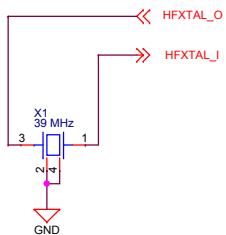
SWITCH POS	MODE DESCRIPTION
AEM	AEM Enabled, VMCU sourced from external 3.3V LDO powered by BC USB 5V supply
BAT	AEM Disabled, VMCU sourced from coin-cell battery or external power supply



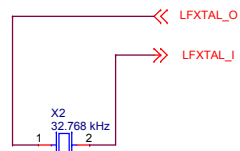
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		Page Title EFM32 Power	
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High Frequency Clock

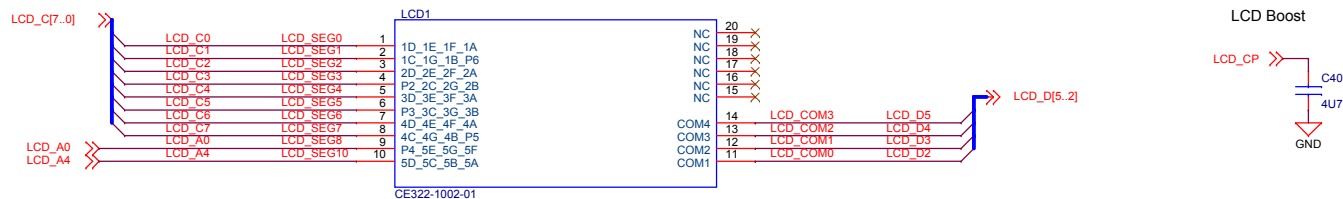


Low Frequency Clock



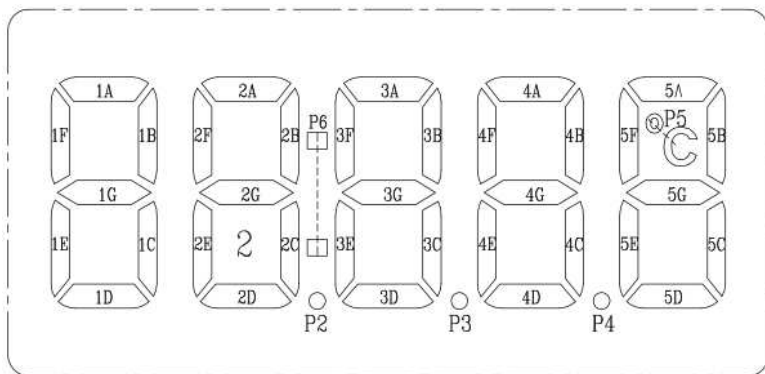
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		EFM32PG23 Pro Kit	
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Segment LCD Signal Connections



Segment Names

PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
COM1	1D	1C	2D	P2	3D	P3	4D	4C	P4	5D	COM1	--	--	--	--	--	--	--	--	--
COM2	1E	1G	2E	2C	3E	3C	4E	4G	5E	5C	--	COM2	--	--	--	--	--	--	--	--
COM3	1F	1B	2F	2G	3F	3G	4F	4B	5G	5B	--	--	COM3	--	--	--	--	--	--	--
COM4	1A	P6	2A	2B	3A	3B	4A	P5	5F	5A	--	--	--	COM4	--	--	--	--	--	--



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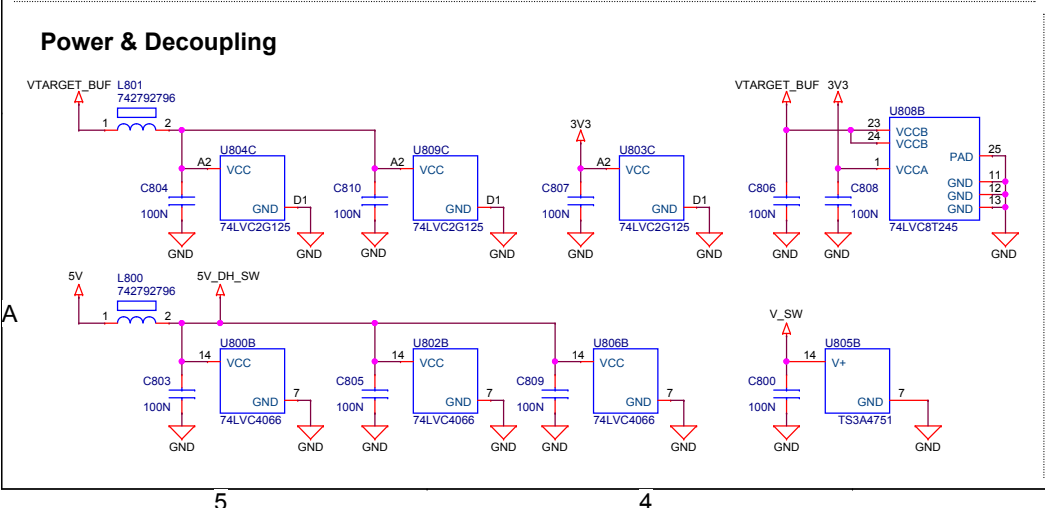
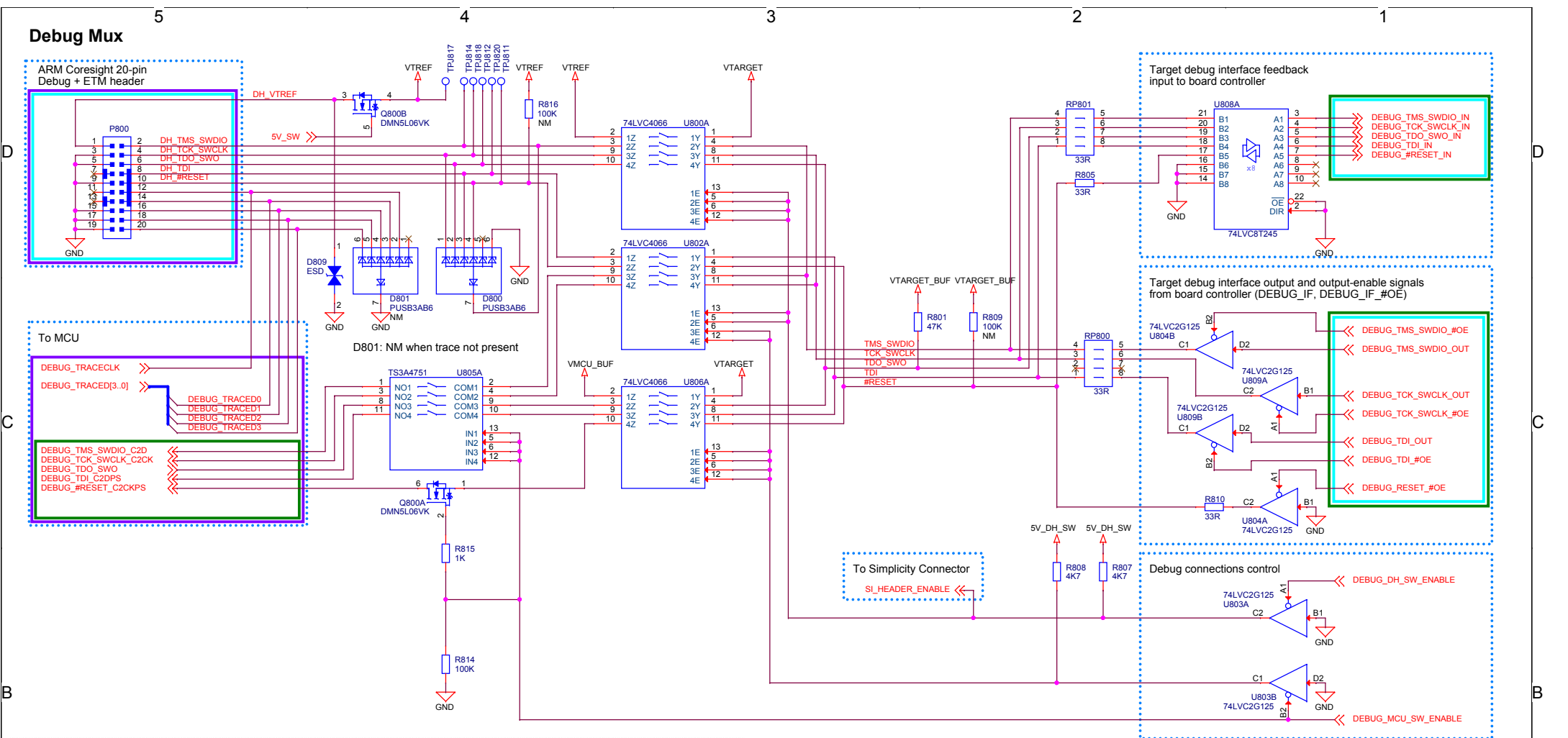


B

A


A



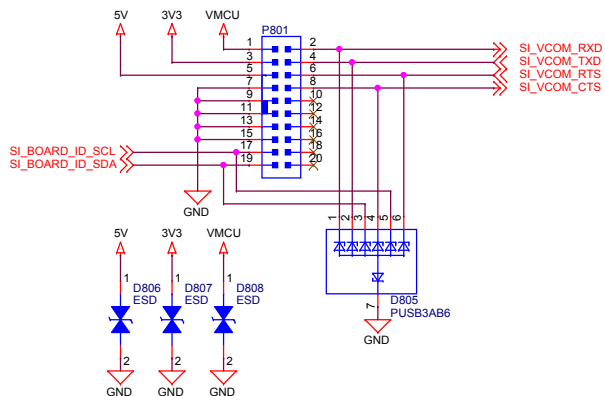


Mode	DEBUG_DH_SW_ENABLE	DEBUG_MCU_SW_ENABLE	DEBUG_IF_#OE	VREF	VTARGET
Debug Out	1	0	0/1	External voltage	External voltage
MCU Debug	0	1	0/1	Disconnected	VMCU
Debug In	1	1	1	VMCU	VMCU
Debug Off	0	0	1	-	-

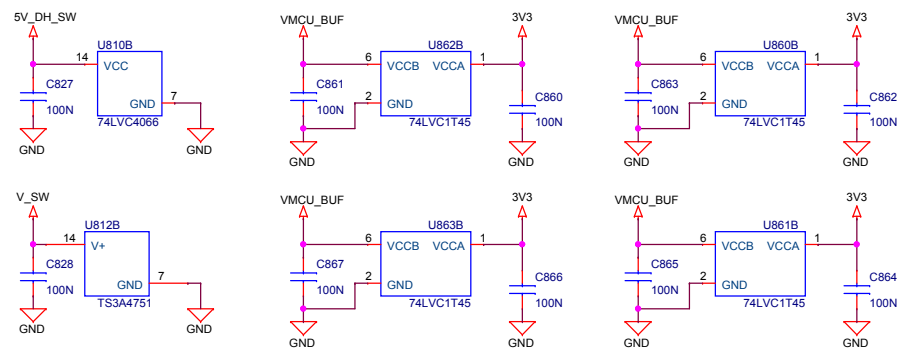
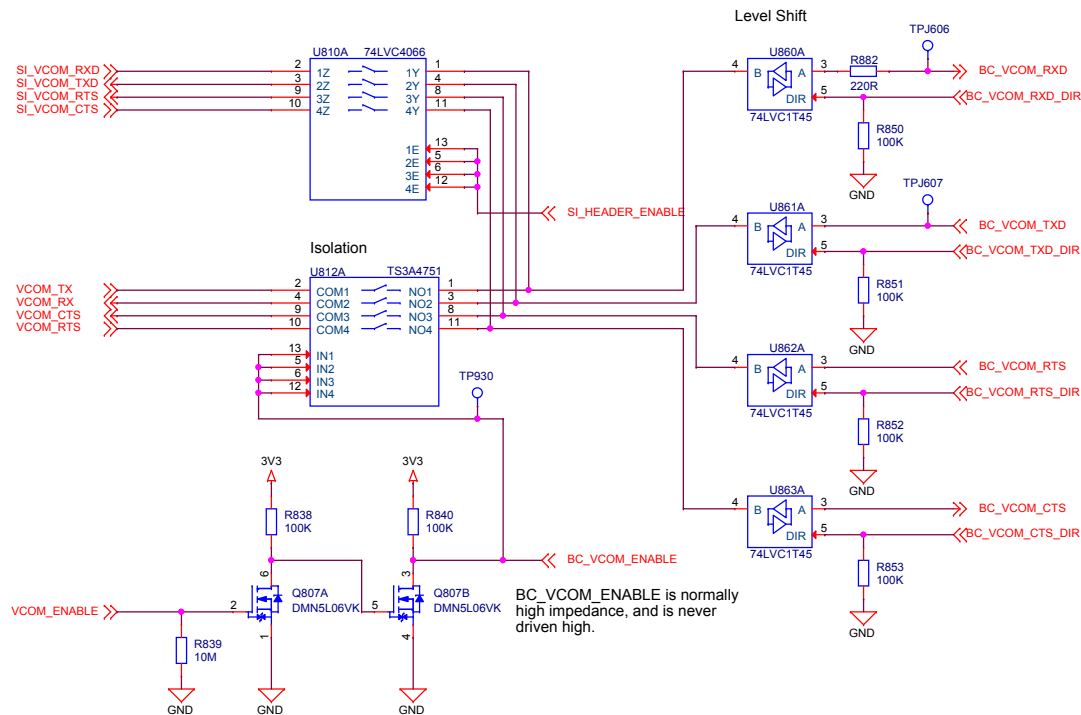
Color coded frames indicates which groups of signal nodes that are active in a given debug mode

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Simplicity Connector

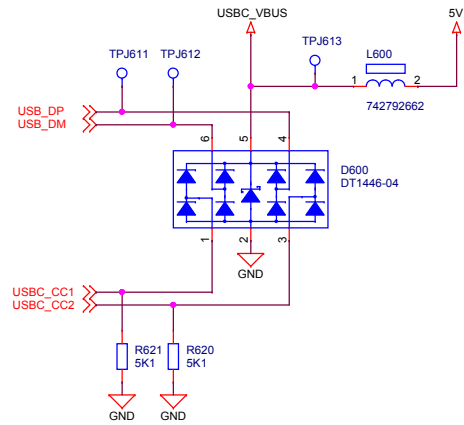
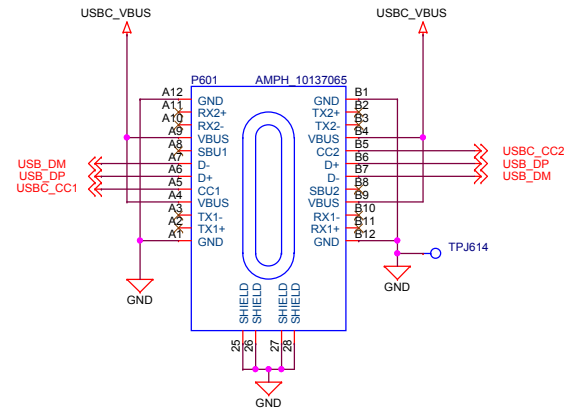


VCOM Interface

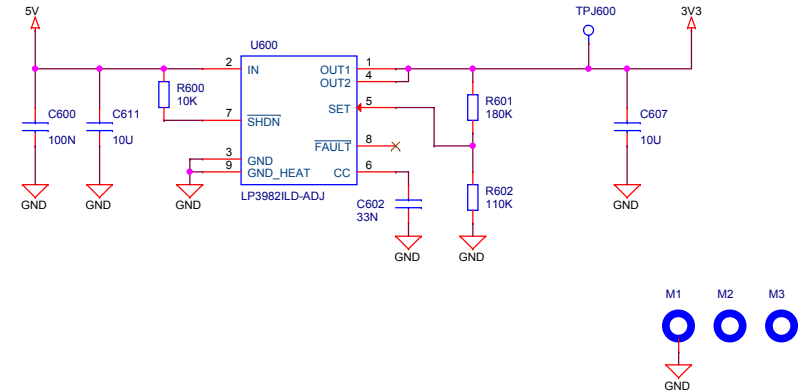


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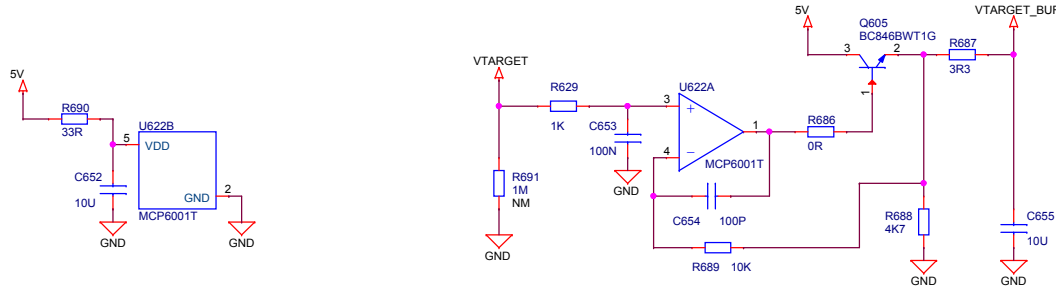
J-Link USB Port



3V3 Regulator



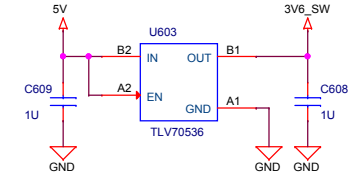
VTarget Voltage Mirror



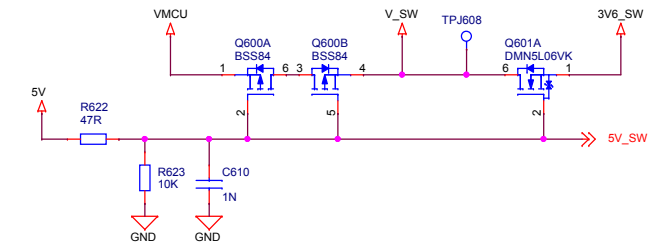
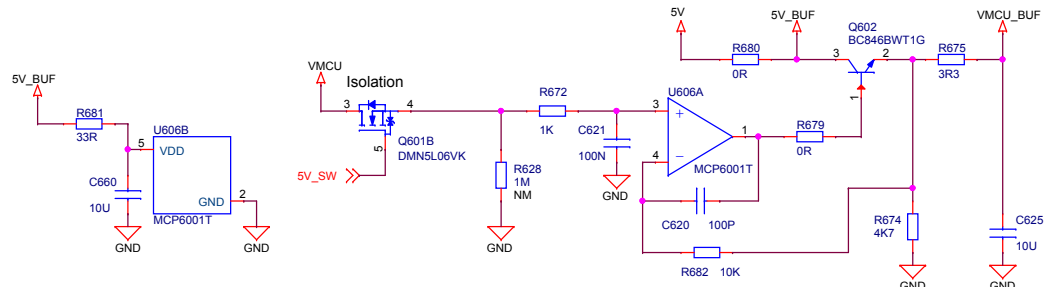
Power Supply for Analog Switches

Analog switches used for isolation are powered by 3V6_SW when the USB cable is connected, otherwise by VMCU.

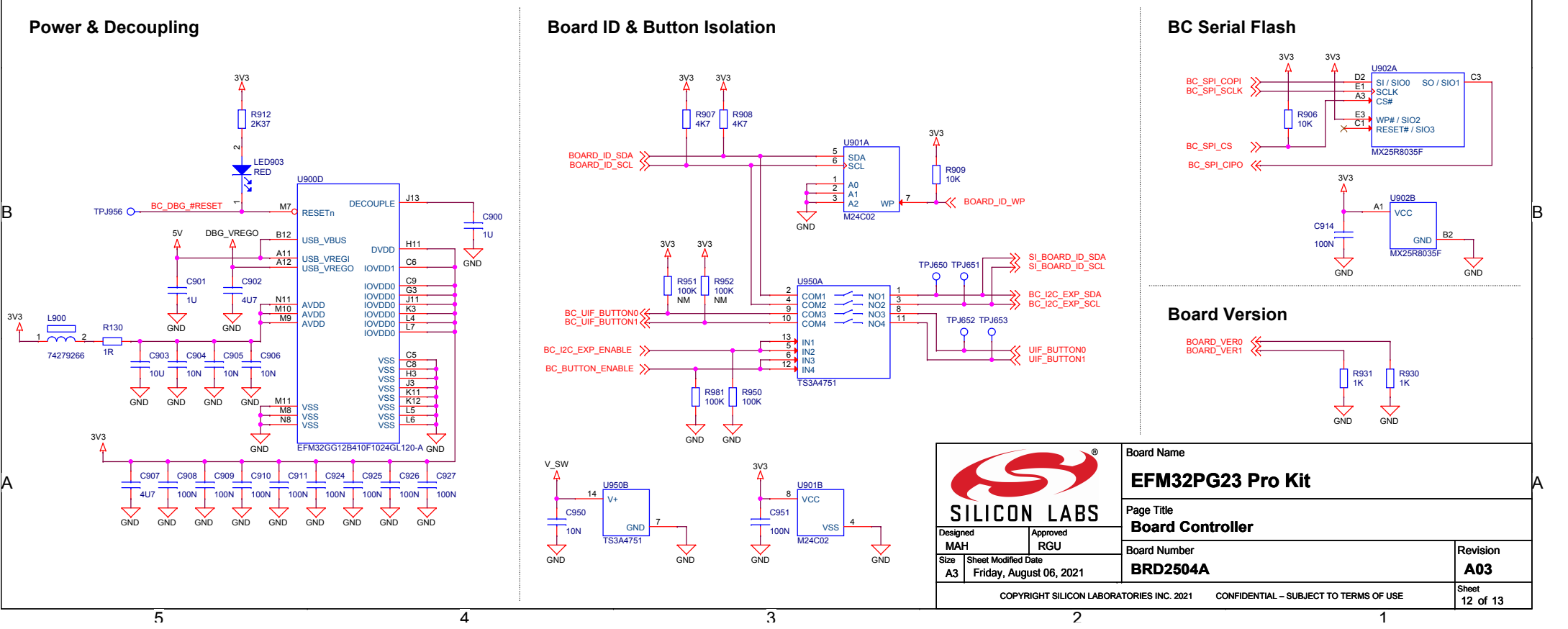
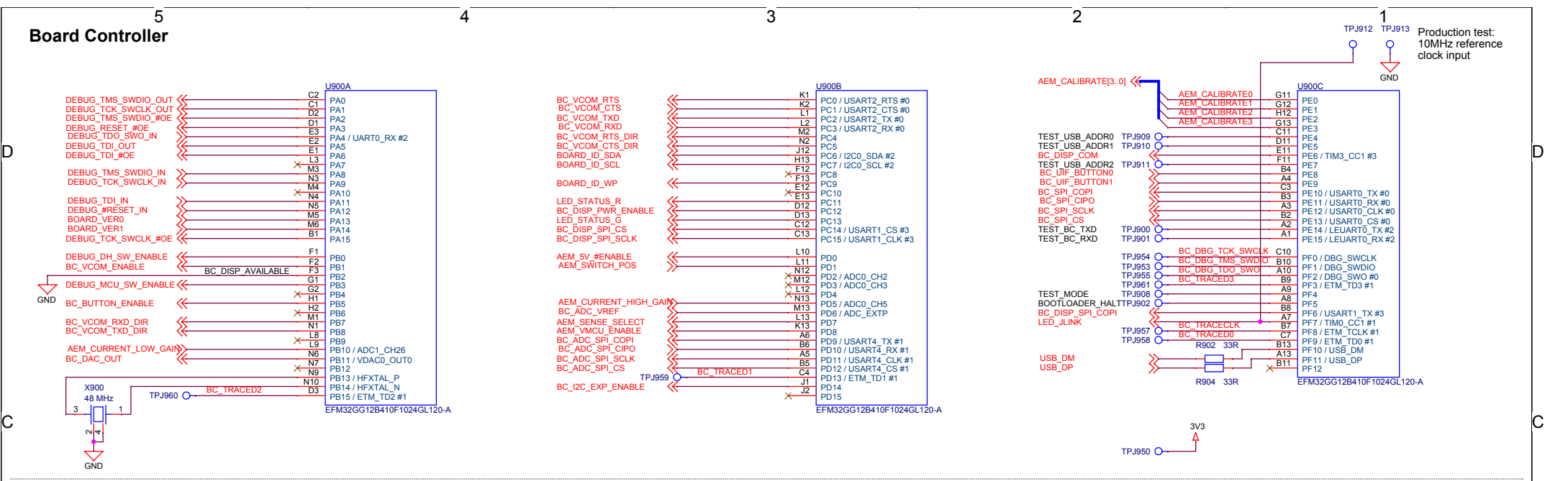
J-Link USB Cable	PMOS State	NMOS State	V_SW	VMCU_SENSE
Connected	Off	On	3.6V	VMCU
Disconnected	On	Off	VMCU	Isolated



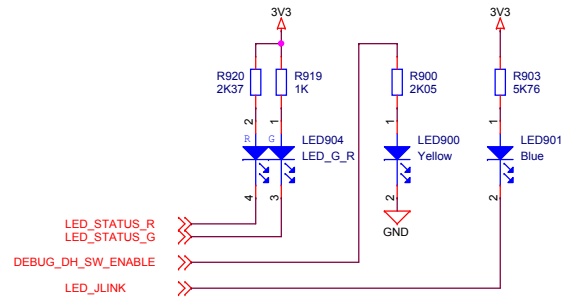
VMCU Voltage Mirror



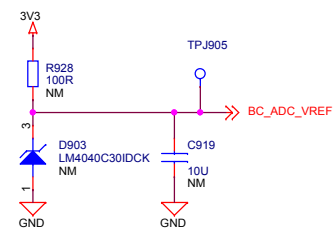
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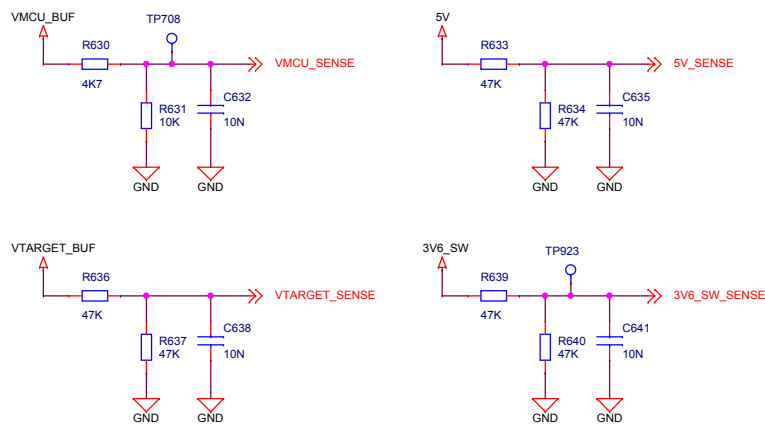
Indicator LEDs



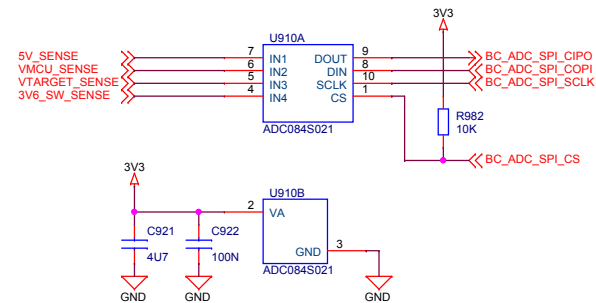
BC ADC Reference



BC Voltage Sense



BC Voltage Sense ADC



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