



EFM8SB2 Sleepy Bee STK

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Revision History

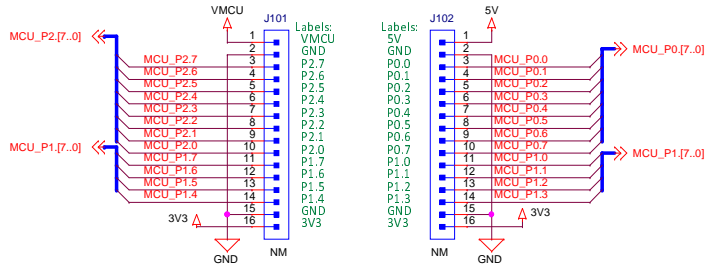
Rev.	Description
A00	Initial release for production.

STK

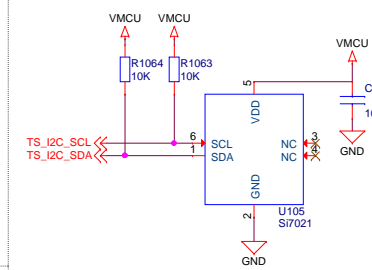


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		EFM8SB2 Sleepy Bee Starter Kit	
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Title Page		A00	
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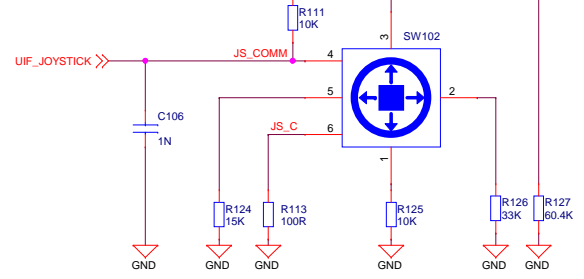
Breakout Connections



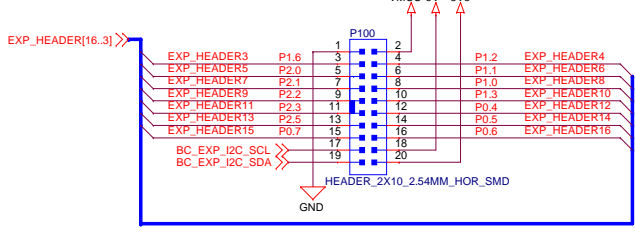
Temperature & Relative Humidity Sensor



Analog Joystick



EXP port



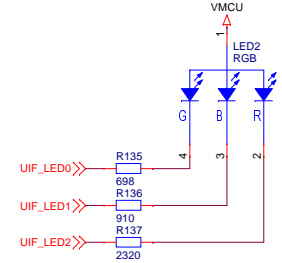
EXP-Header Functionality

** Indicates potential STK hardware conflicts

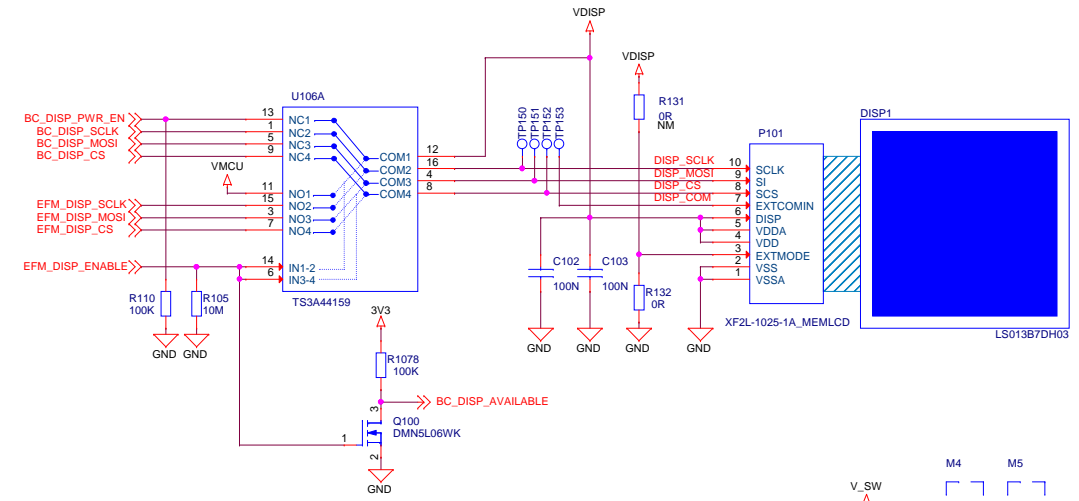
1	GND			
3	P1.6	CMPP.7/ADC0.14		STK LED0
5	P2.0	CMPP.8/ADC0.16		STK LED1
7	P2.1	CMPN.8/ADC0.17		STK LED2
9	P2.2	CMPP.9/ADC0.18		
11	P2.3	CMPN.9/ADC0.19		
13	P2.5	CMPN.10/ADC0.21		
15	P0.7	I2C0_SCL	CMPN.3/ADC0.7	
17		Reserved for EXP Board Identification		
19		Reserved for EXP Board Identification		

2	VMCU			
4	P1.2	SPI0_MOSI	CMPP.5/ADC0.10	
6	P1.1	SPI0_MISO	CMPN.4/ADC0.9	
8	P1.0	SPI0_SCK	CMPP.4/ADC0.8	
10	P1.3	SPI0_NSS	CMPP.5/ADC0.11	
12	P0.4	UART0_TX	CMPP.2/ADC0.4	
14	P0.5	UART0_RX	CMPP.2/ADC0.5	
16	P0.6	I2C0_SDA	CMPN.3/ADC0.6	
18	5V			
20	3V3			

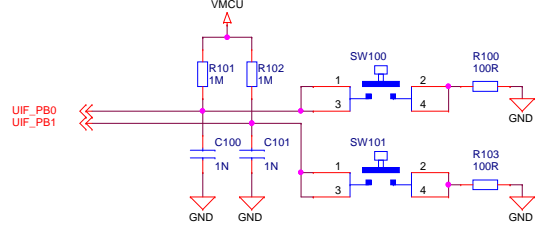
RGB LED



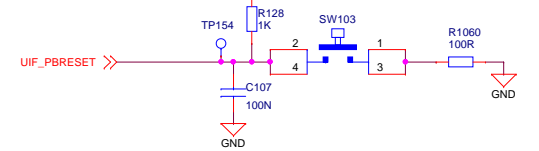
Memory LCD-TFT Display & Multiplexer



User pushbuttons



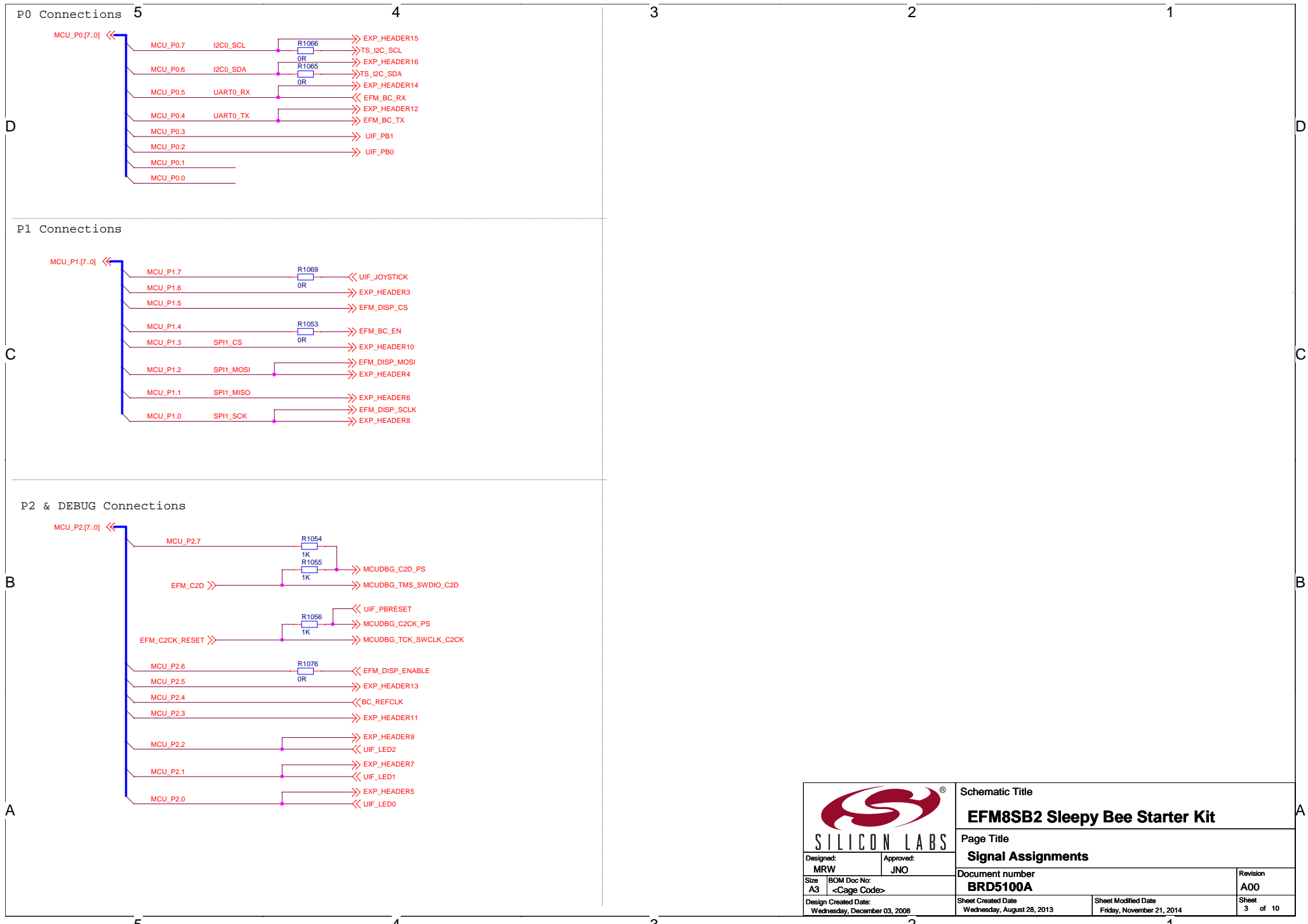
RESET Pushbutton




The EFM8 always controls ownership of the display using the EFM_DISP_ENABLE signal.

EFM_DISP_ENABLE	DISP_CTRL	VDISP
0	BC	BC_DISP_PWR_EN
1	EFM	VMCU

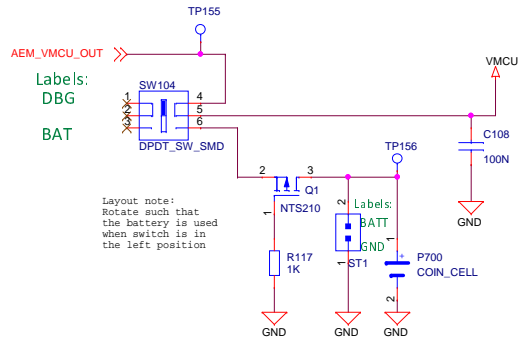
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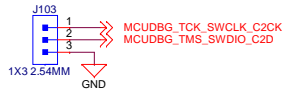
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Power Switch

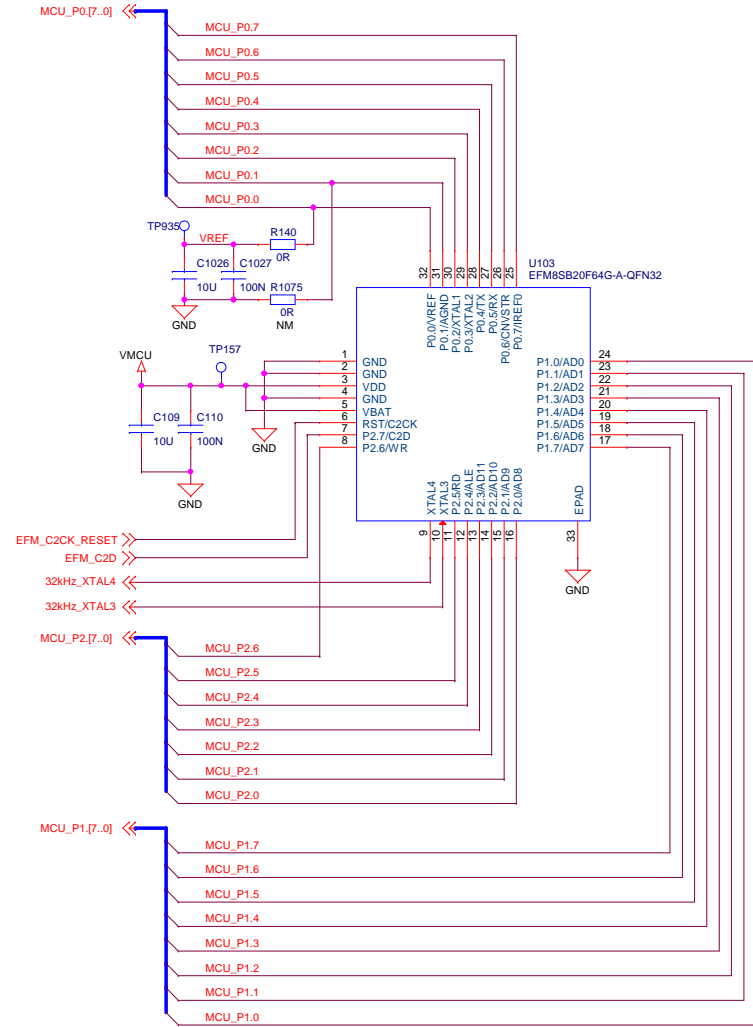
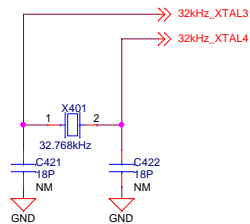
SWITCH POS	MODE DESCRIPTION
DBG	AEM Enabled, VMCU sourced from external 3.3V LDO powered by BC USB 5V supply
BAT	AEM Disabled, VMCU sourced from external coin-cell battery or external power supply



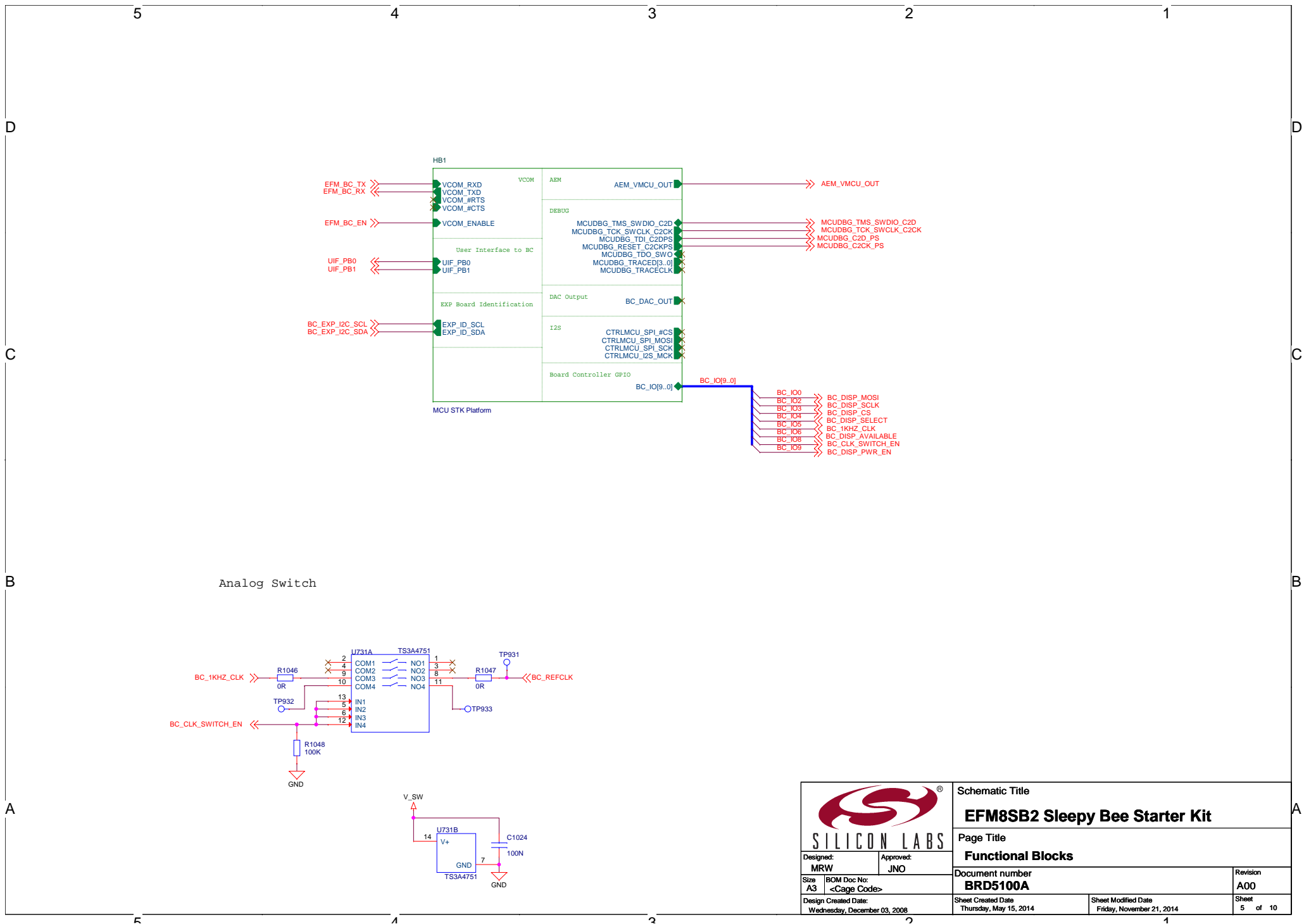
C2 Debug Header

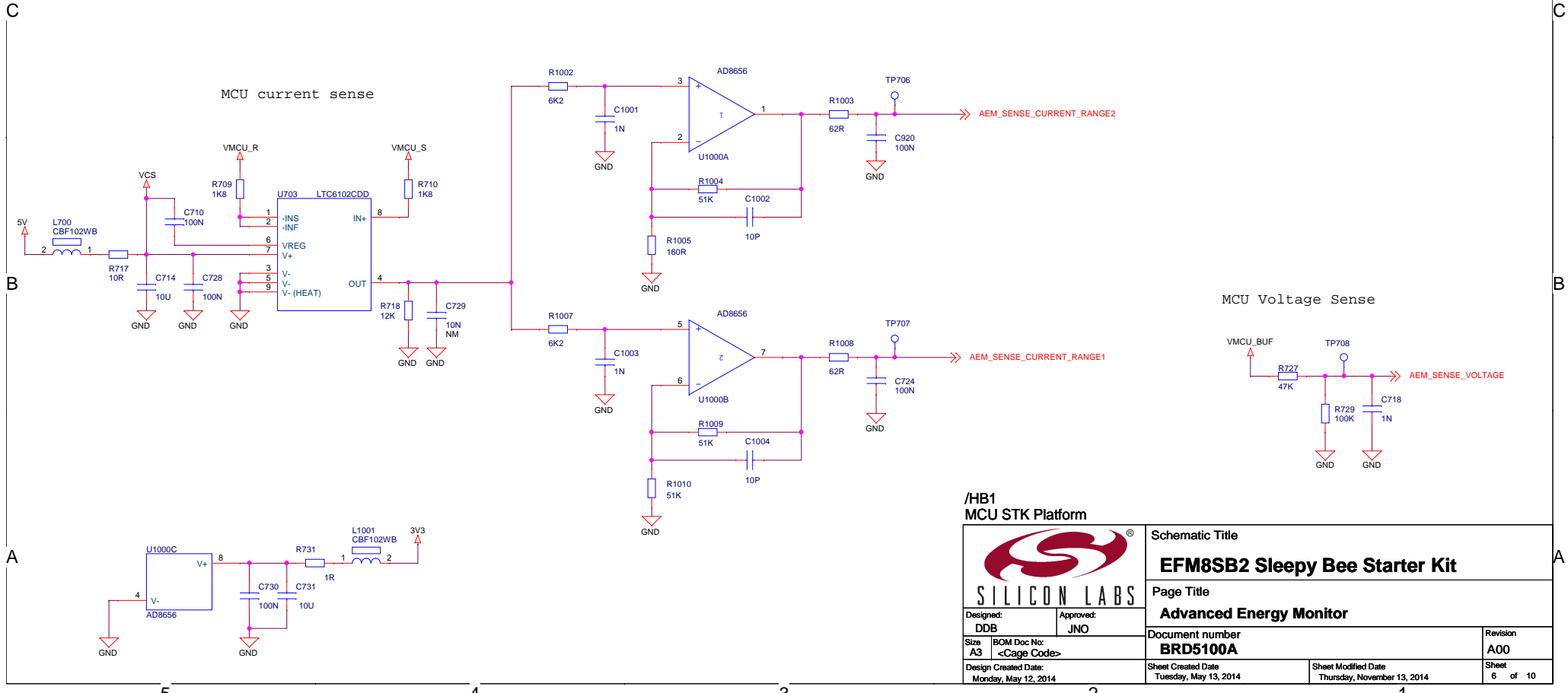
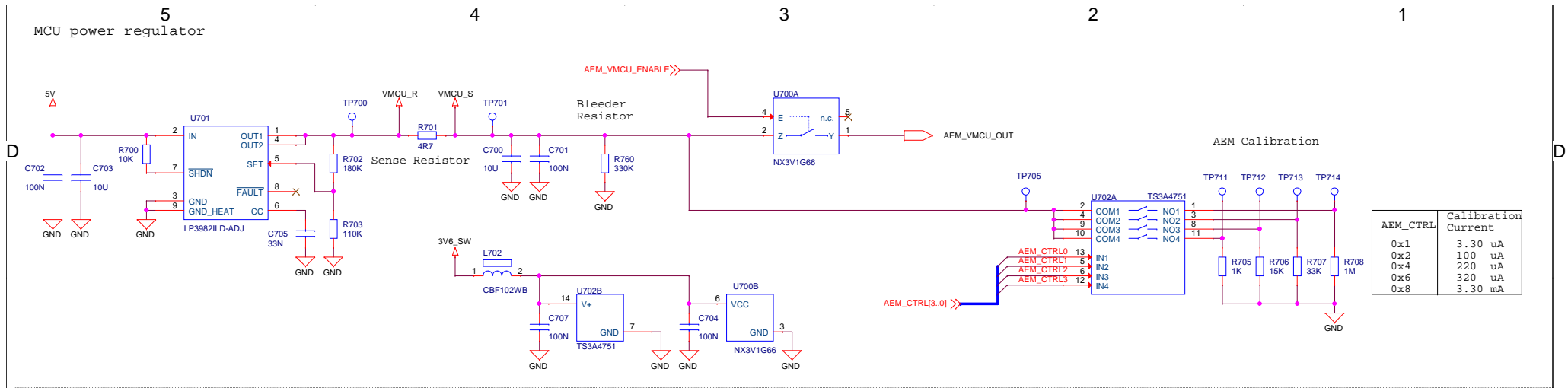


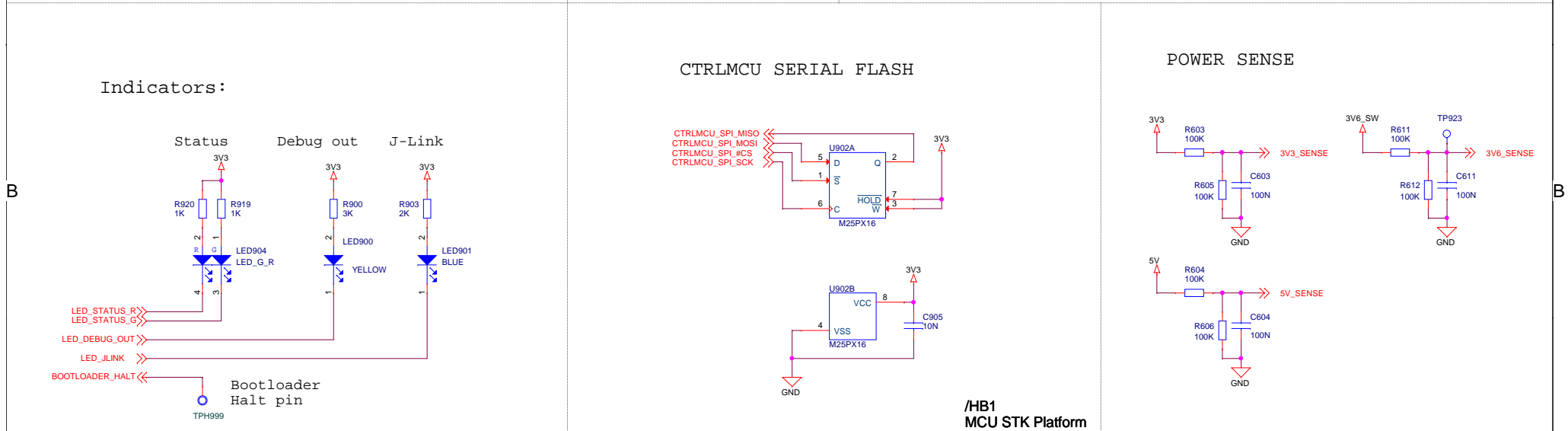
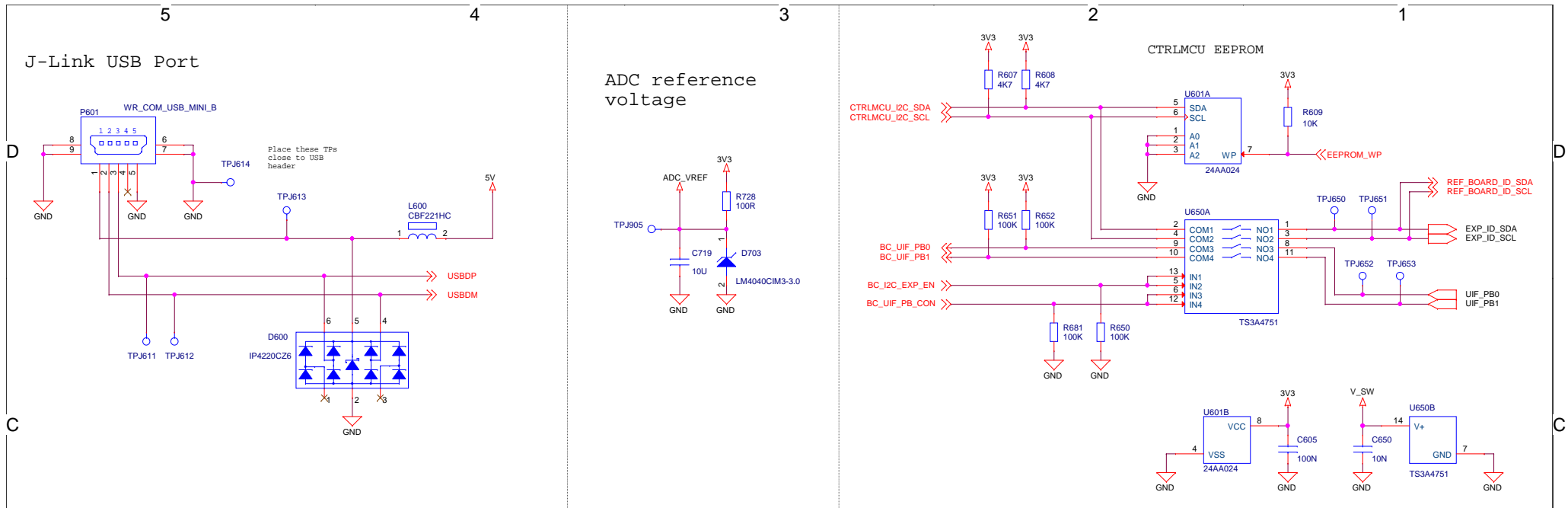
Low Frequency Clock



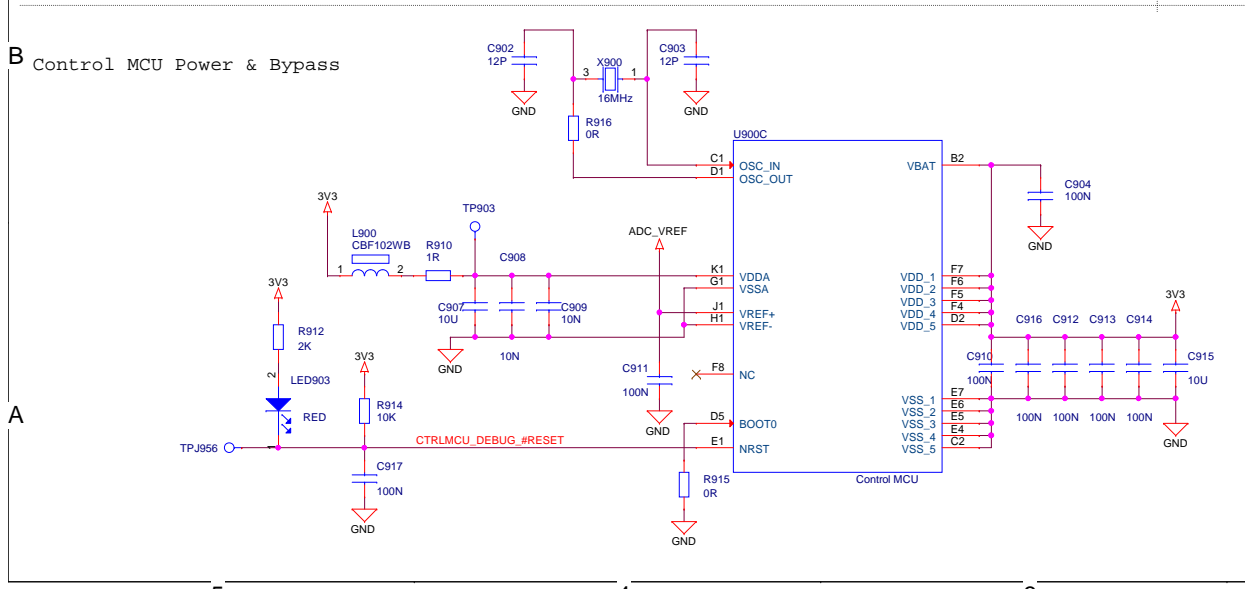
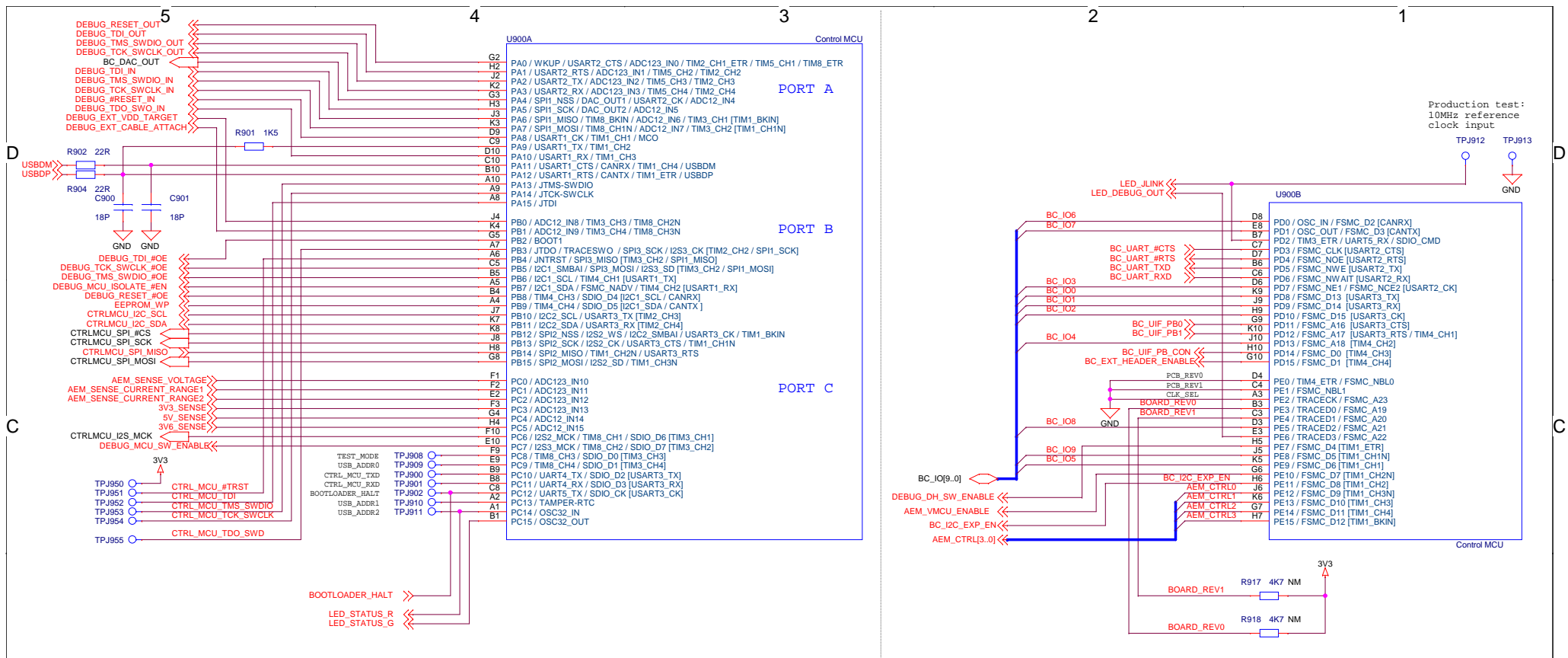
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		Board Controller Misc	
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/HB1 MCU STK Platform

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Page Title
Control MCU

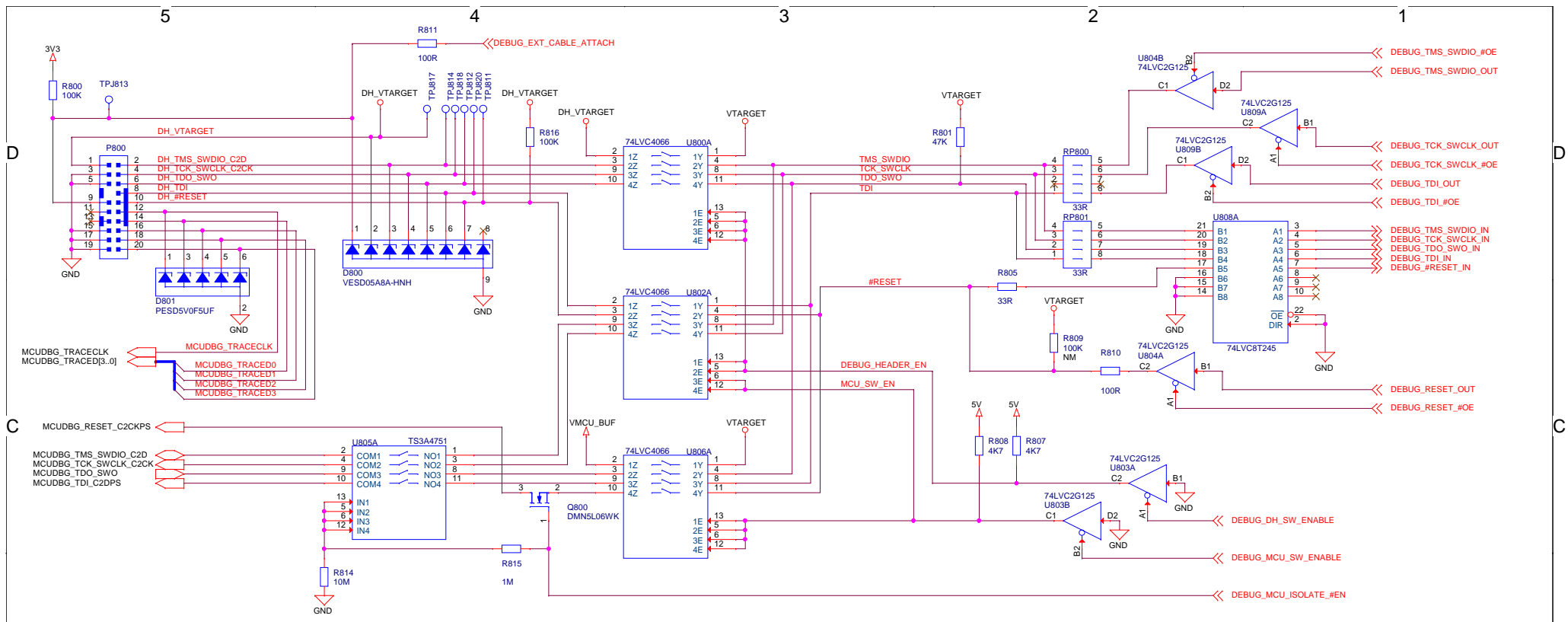
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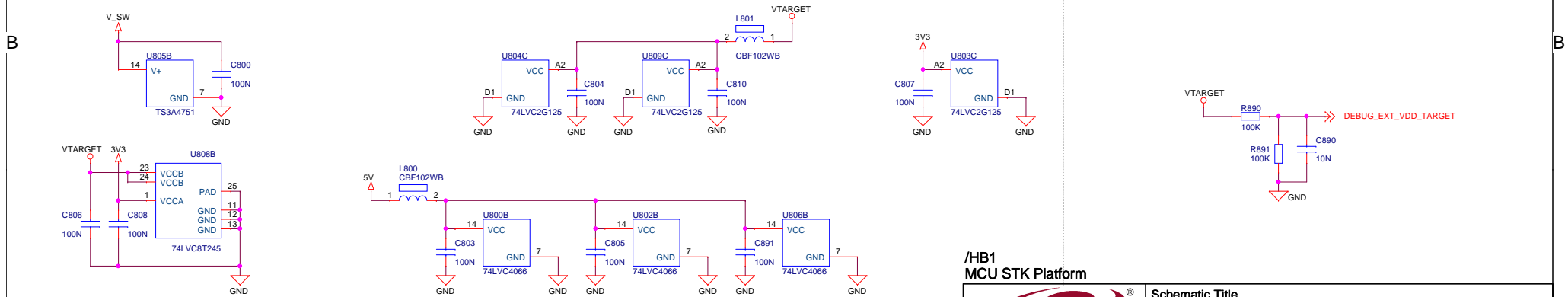
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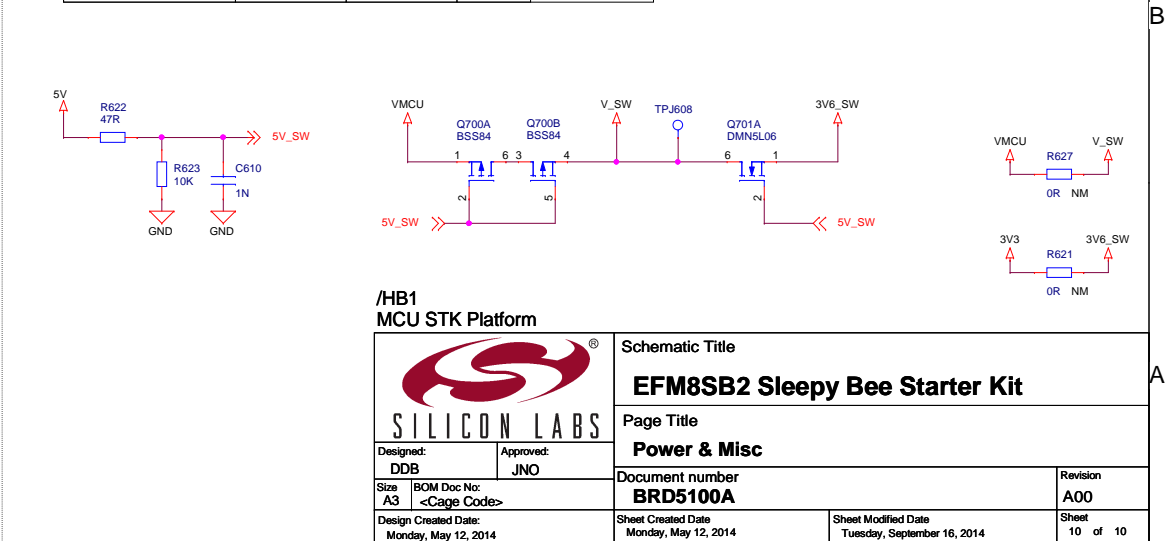
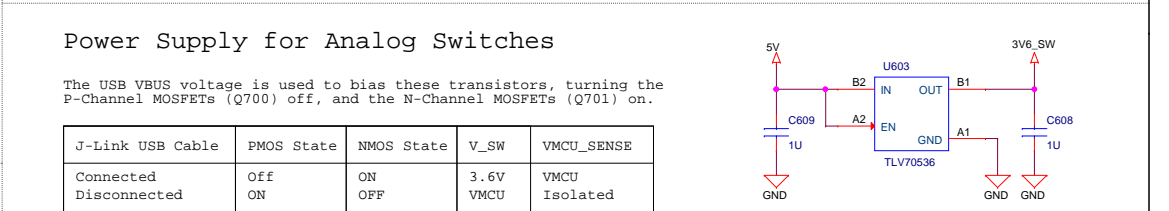
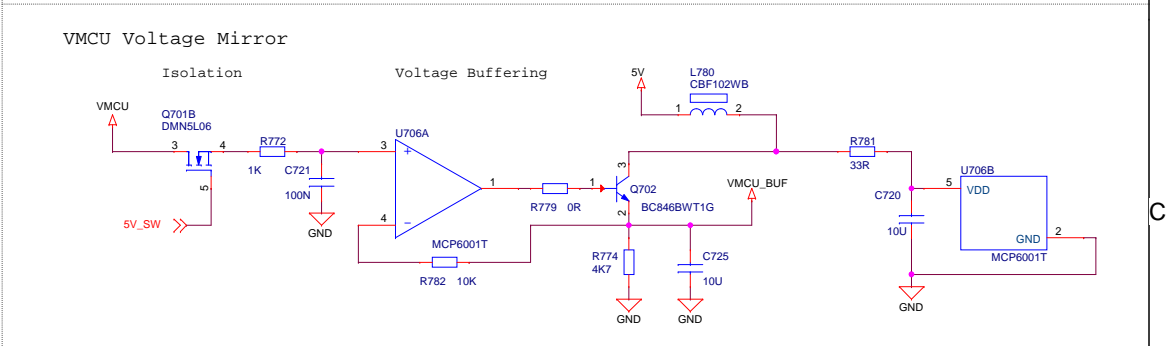
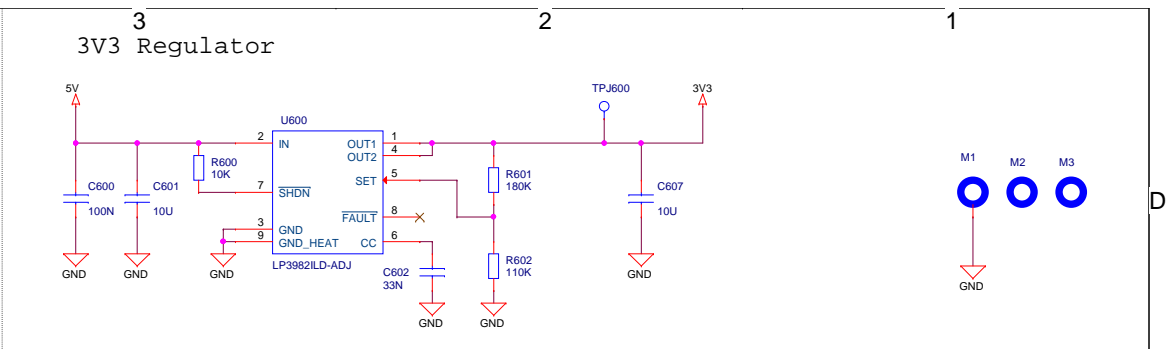
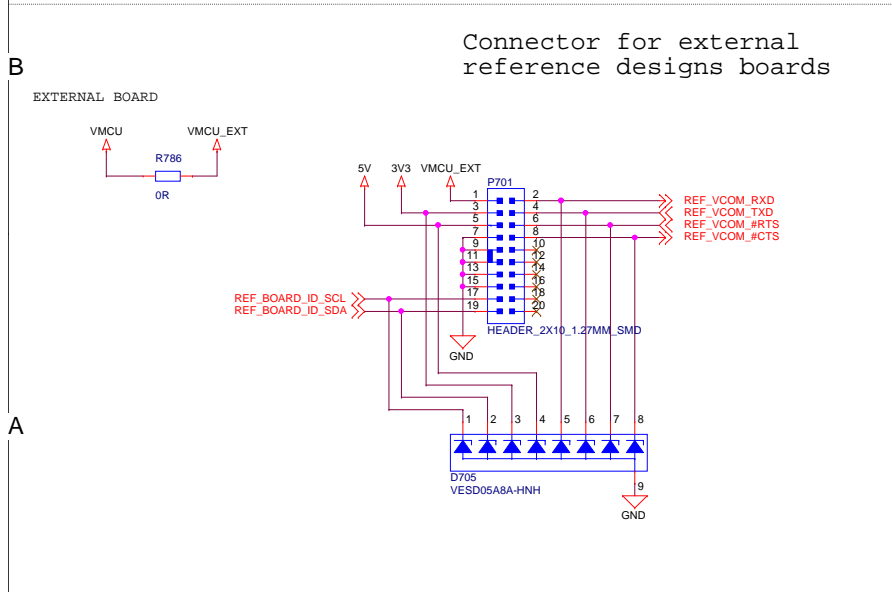
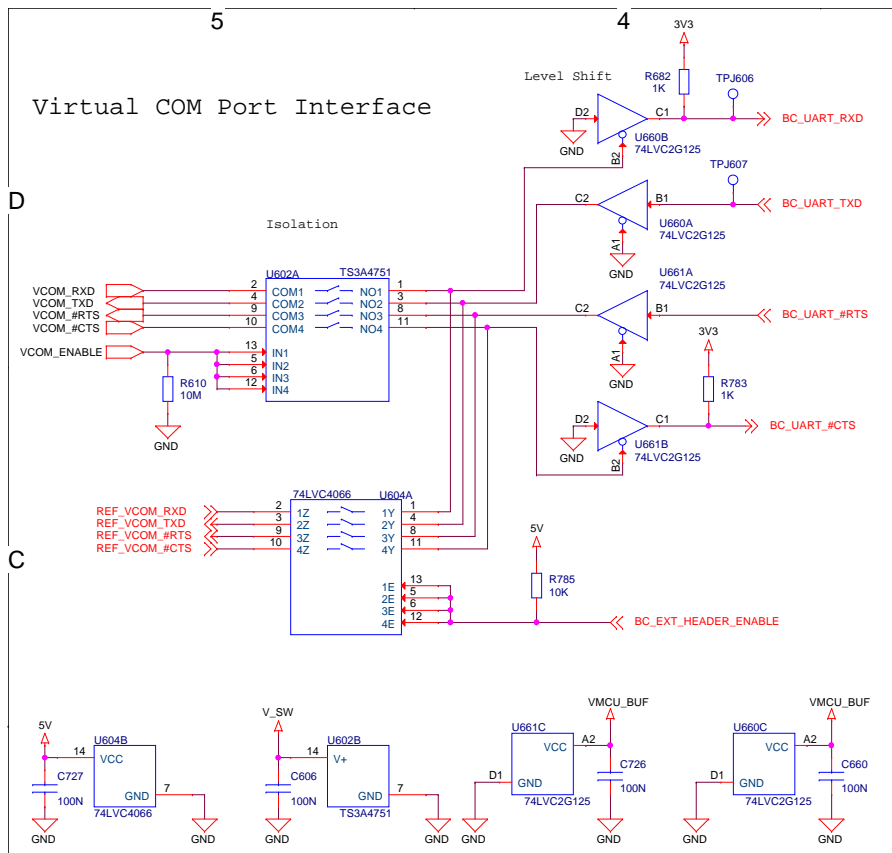
Power & Decoupling



Mode	DEBUG_MCU_SW_ENABLE	DEBUG_DH_SW_ENABLE	DEBUG_BUF_OE	ISOLATE_EN	DH_VTARGET	VTARGET
Debug Out	0	1	0	0	External voltage	External voltage
MCU Debug	1	0	0	1	Disconnected	VMCU
Debug In	1	1	1	1	VMCU	VMCU
Debug Off	1	1	1	0	-	-

/HB1
MCU STK Platform

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MCU STK Platform

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