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## EFM32 Zero Gecko STK

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## Revision History

Rev.	Description
B00	Initial release for production.

STK

 SILICON LABS <sup>®</sup>		Schematic Title	
		EFM32 Zero Gecko Starter Kit	
Designed: ANB	Approved: JNO	Page Title	
Size A3		Title Page	
BOM Doc No:		Document number	Revision
Design Created Date: Wednesday, December 03, 2008		BRD2010A	B00
Sheet Created Date Saturday, March 21, 2009		Sheet Modified Date Thursday, September 26, 2013	Sheet 1 of 10



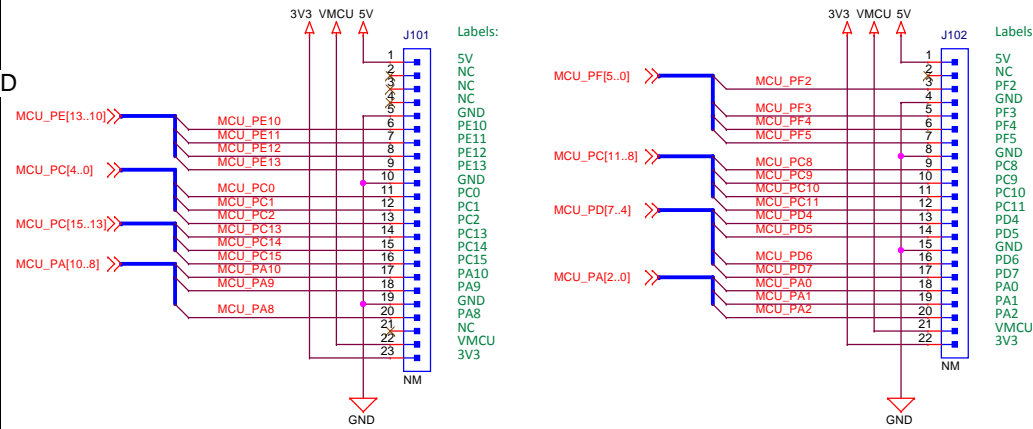
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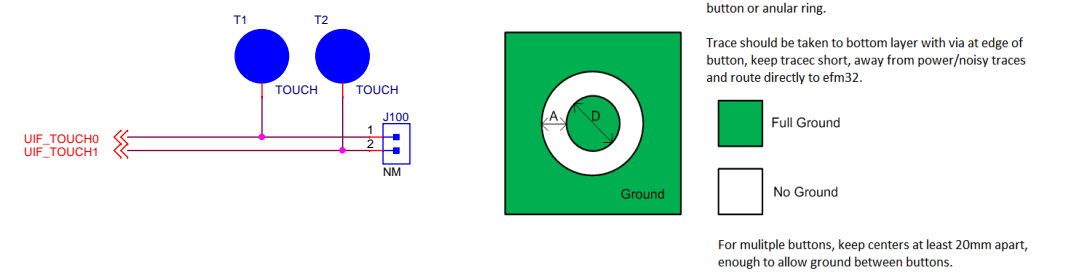
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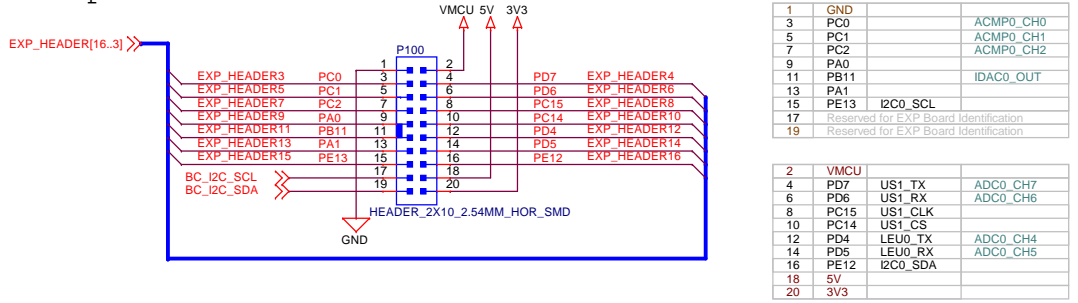
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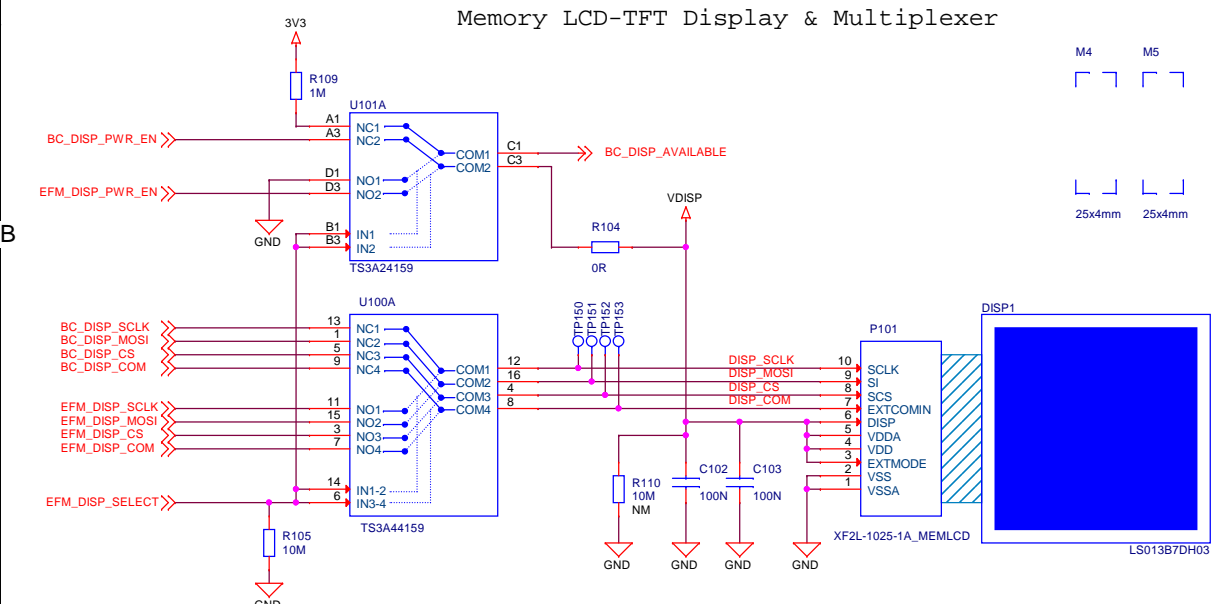
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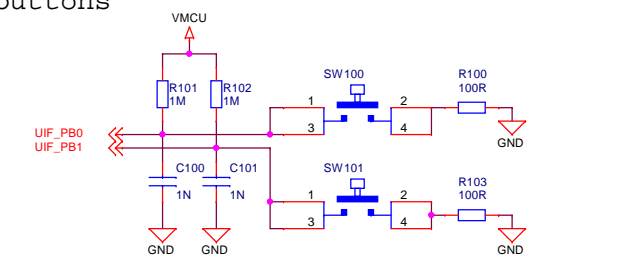
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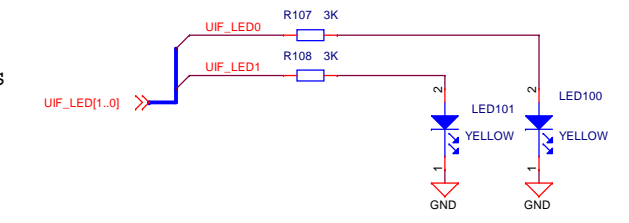
Memory LCD-TFT Display & Multiplexer



User pushbuttons



User LEDs



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**User Interfaces**

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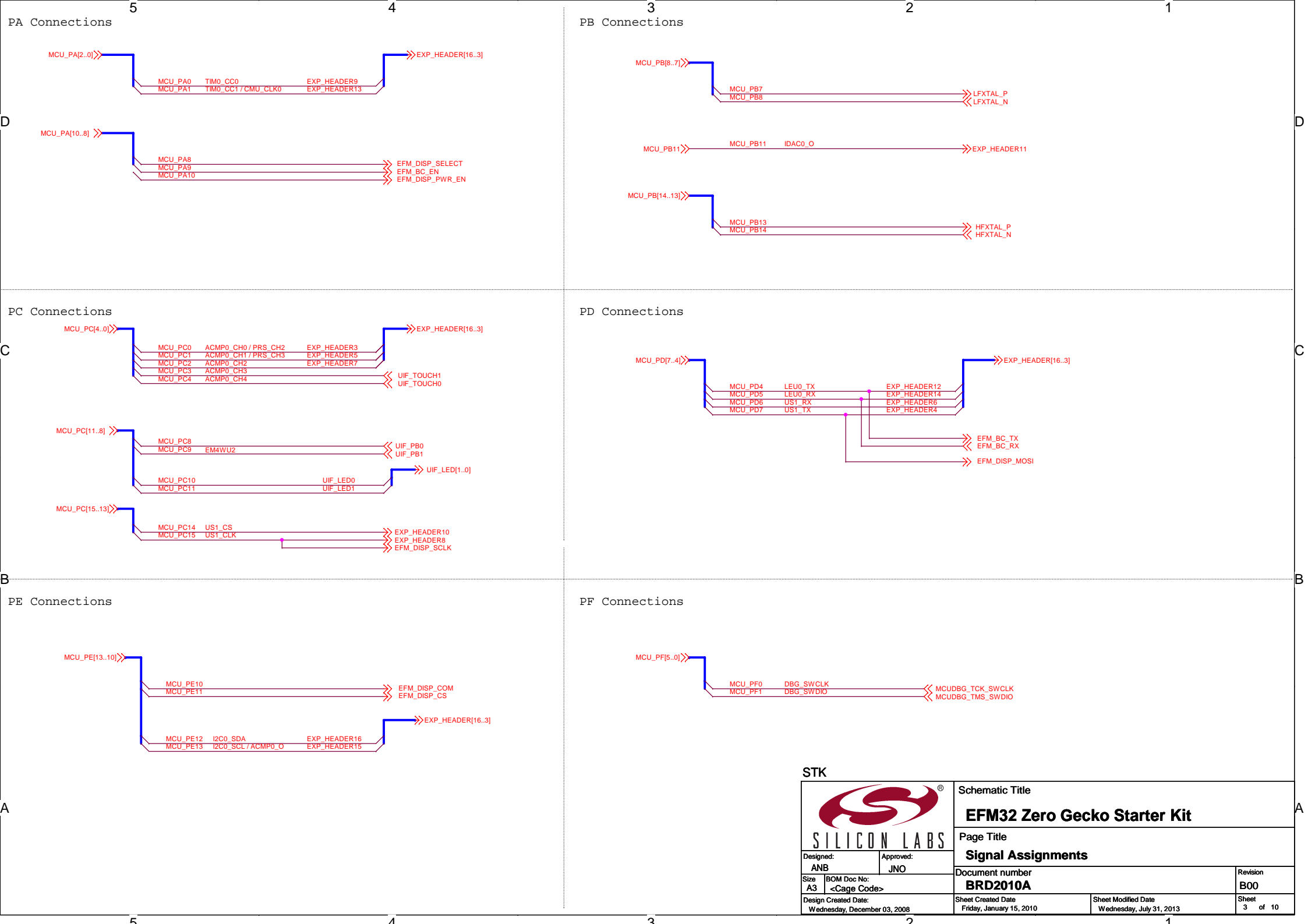
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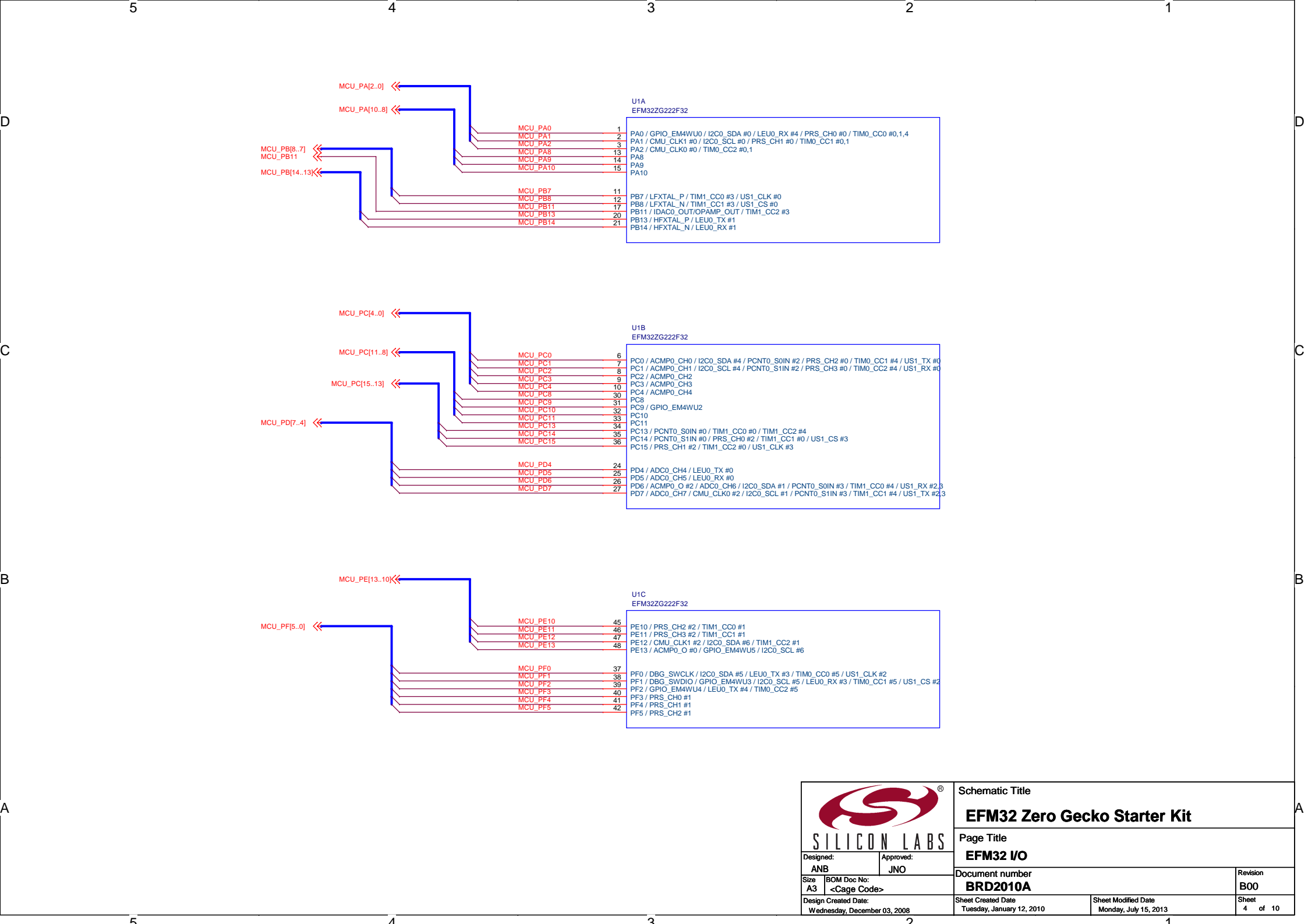
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Schematic Title  
**EFM32 Zero Gecko Starter Kit**

Page Title  
**EFM32 I/O**

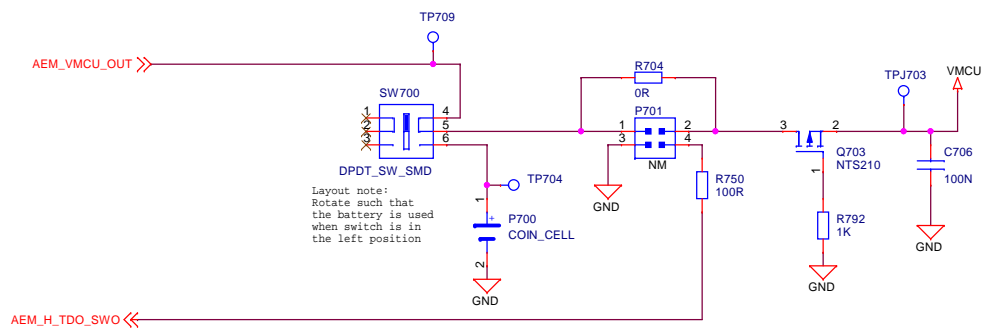
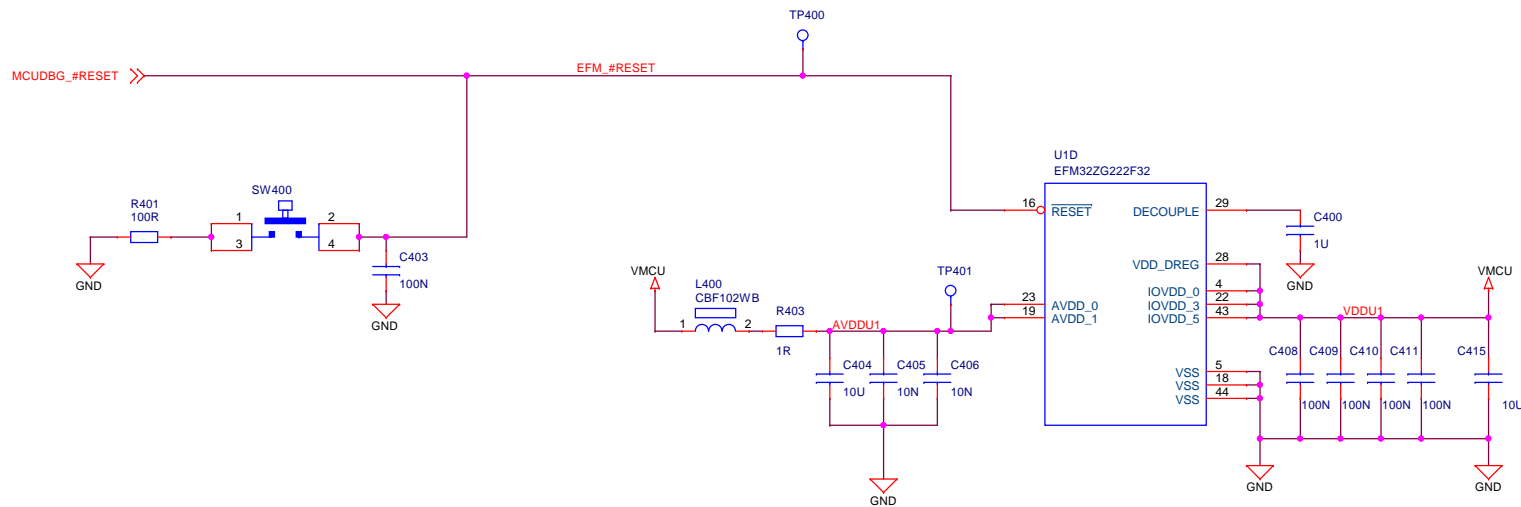
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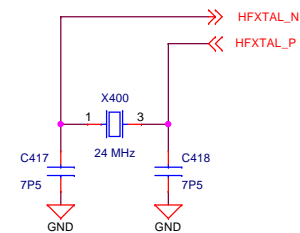
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Revision  
**B00**

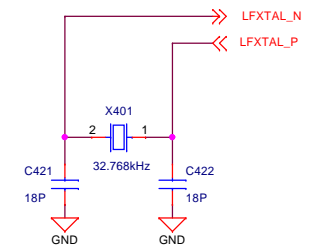
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High Frequency Clock

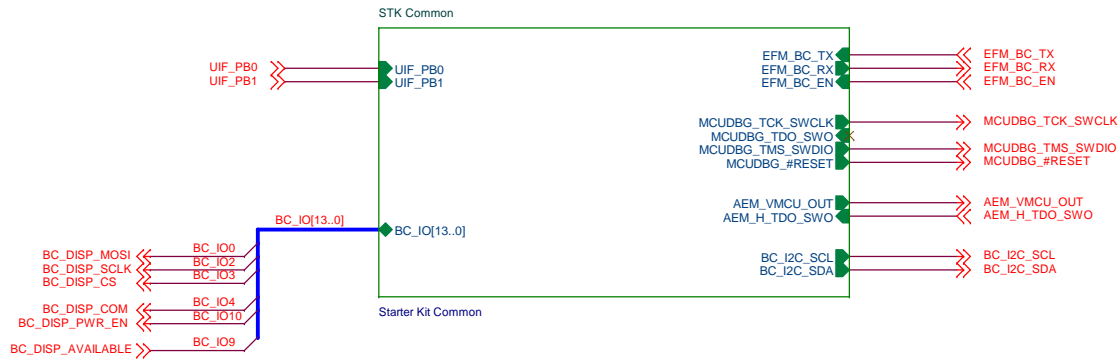


Low Frequency Clock




STK

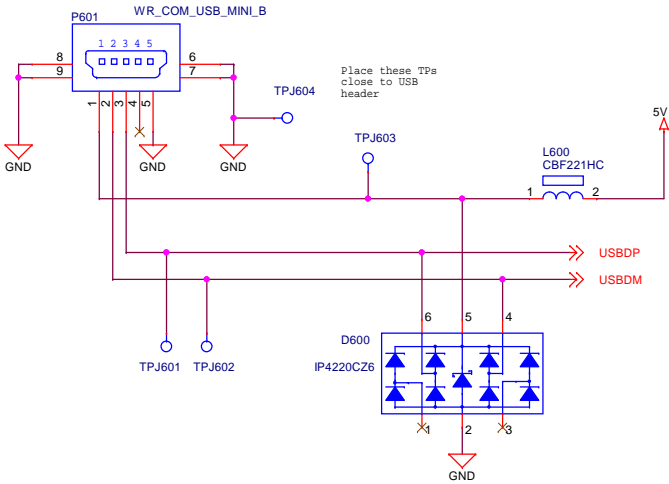
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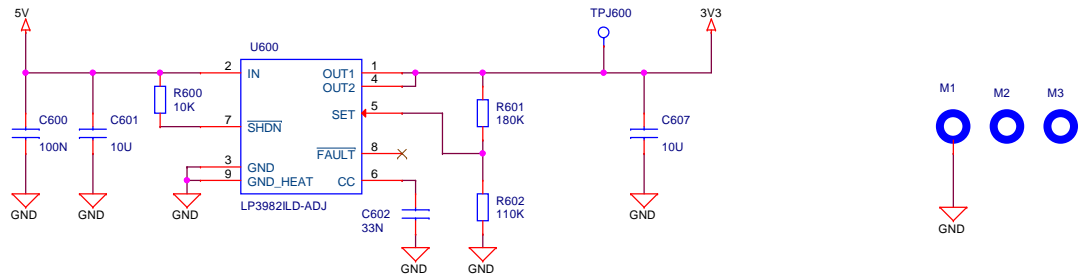
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STK

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		EFM32 Zero Gecko Starter Kit	
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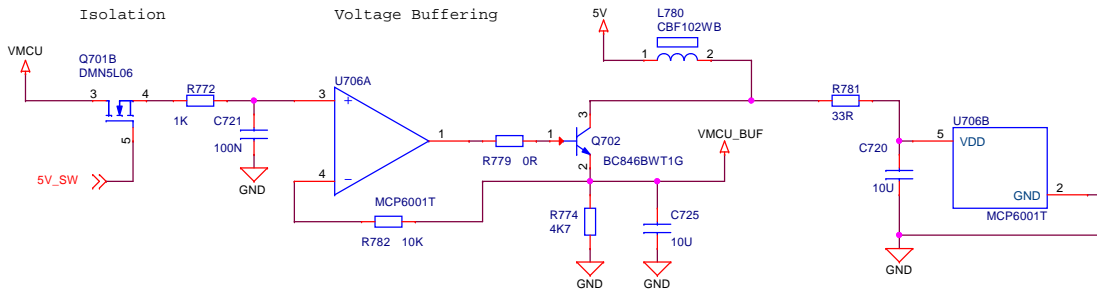
Power input



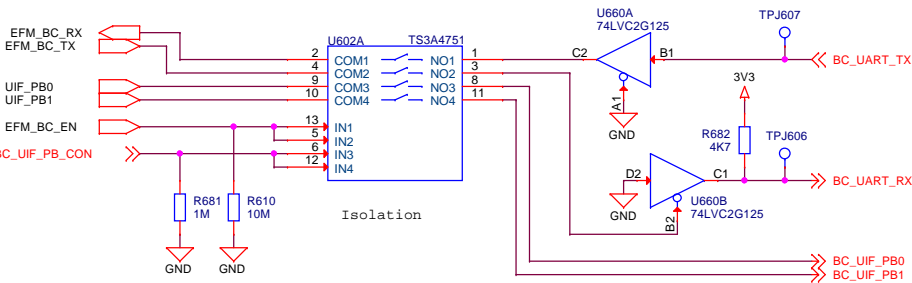
3V3 Regulator



VMCU\_DBG power



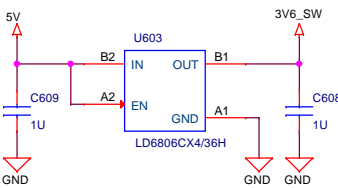
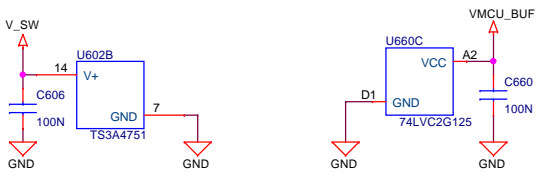
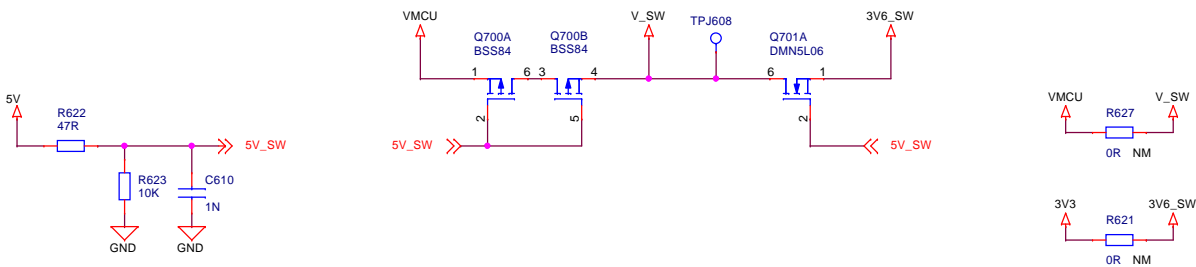
Board Controller Communication  
User input to board controller




Power Supply for Analog Switches

The USB VBUS voltage is used to bias these transistors, turning the P-Channel MOSFETs (Q700) off, and the N-Channel MOSFETs (Q701) on.

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



Starter Kit Common



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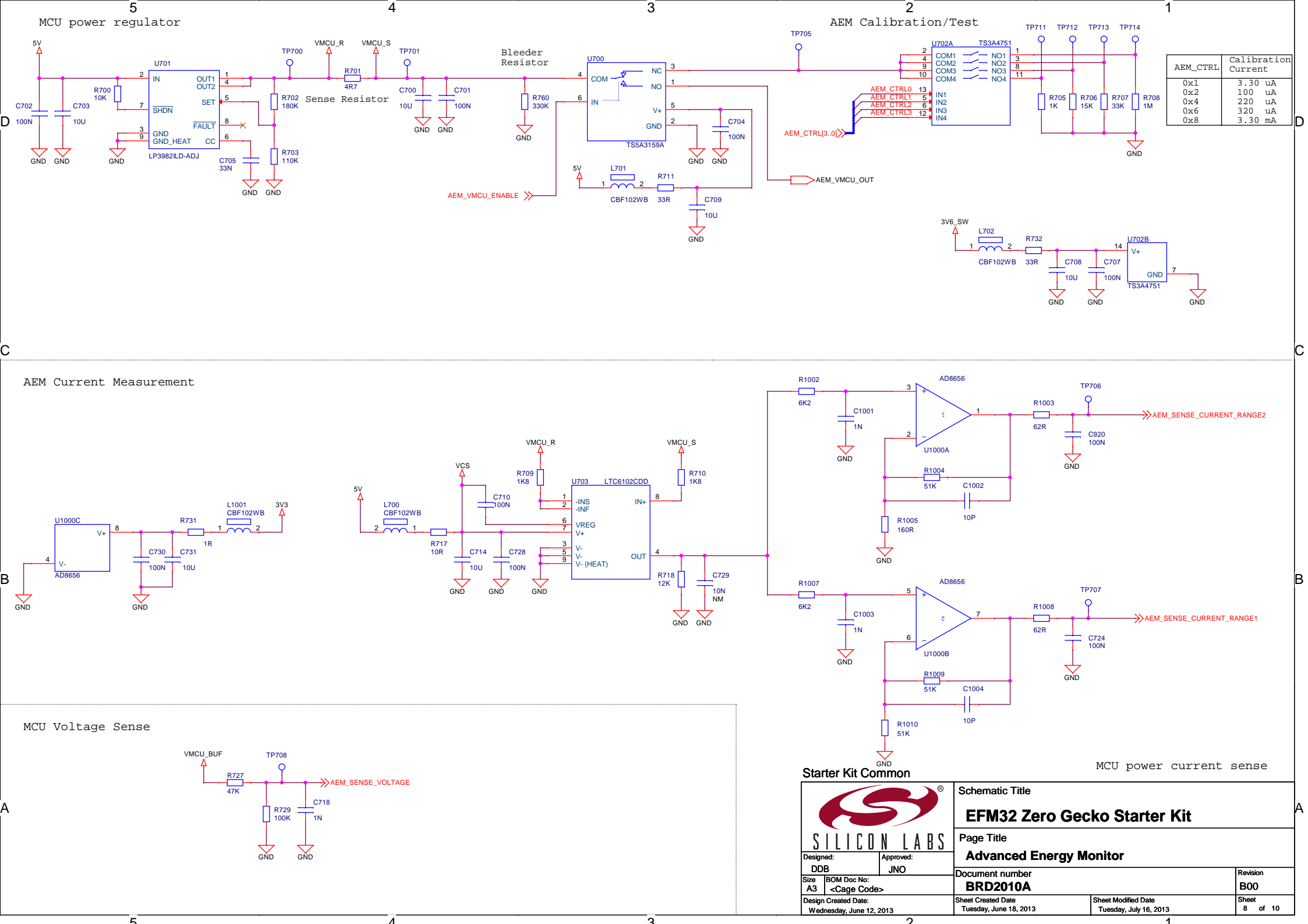
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**EFM32 Zero Gecko Starter Kit**

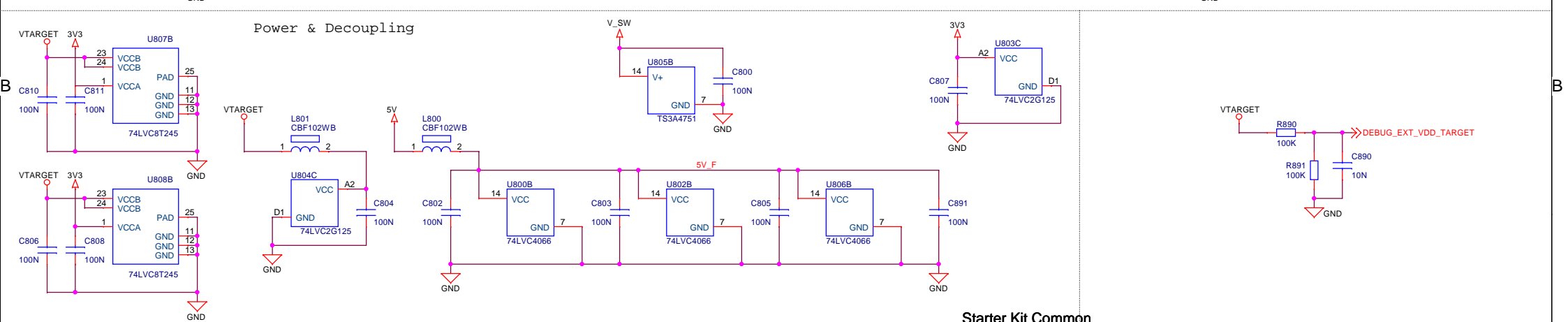
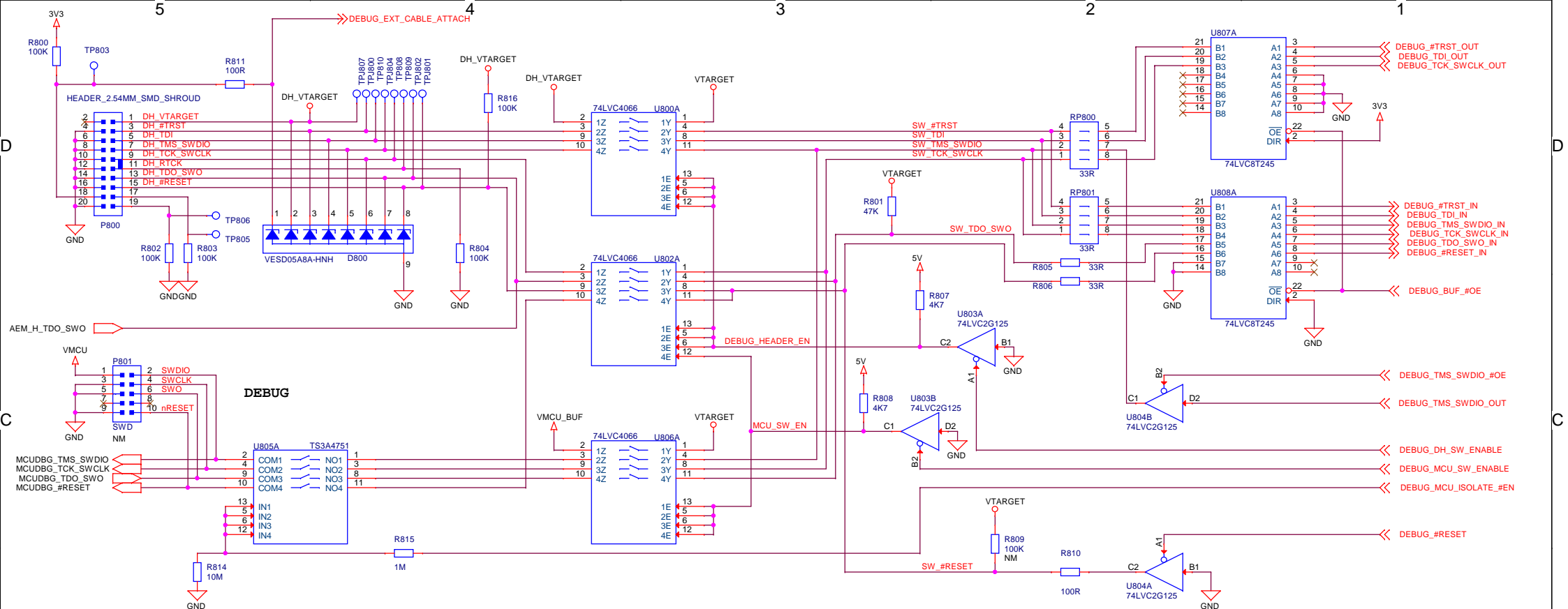
Page Title  
**Power & Misc**

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Starter Kit Common						
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	-	-

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DDB

Approved:

JNO

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A3

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EFM32 Zero Gecko Starter Kit

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Debug Interface

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