




EFM32 Zero Gecko STK	
Board Function	Page
Title Page	1
User Interface	2
EFM32 Signal Assignments	3
EFM32 Power & USB	4
EFM32 I/O	5
Advanced Energy Monitor	6
Debug Interface	7
Power & Misc	8
Board Controller MCU	9
Board Controller Misc	10

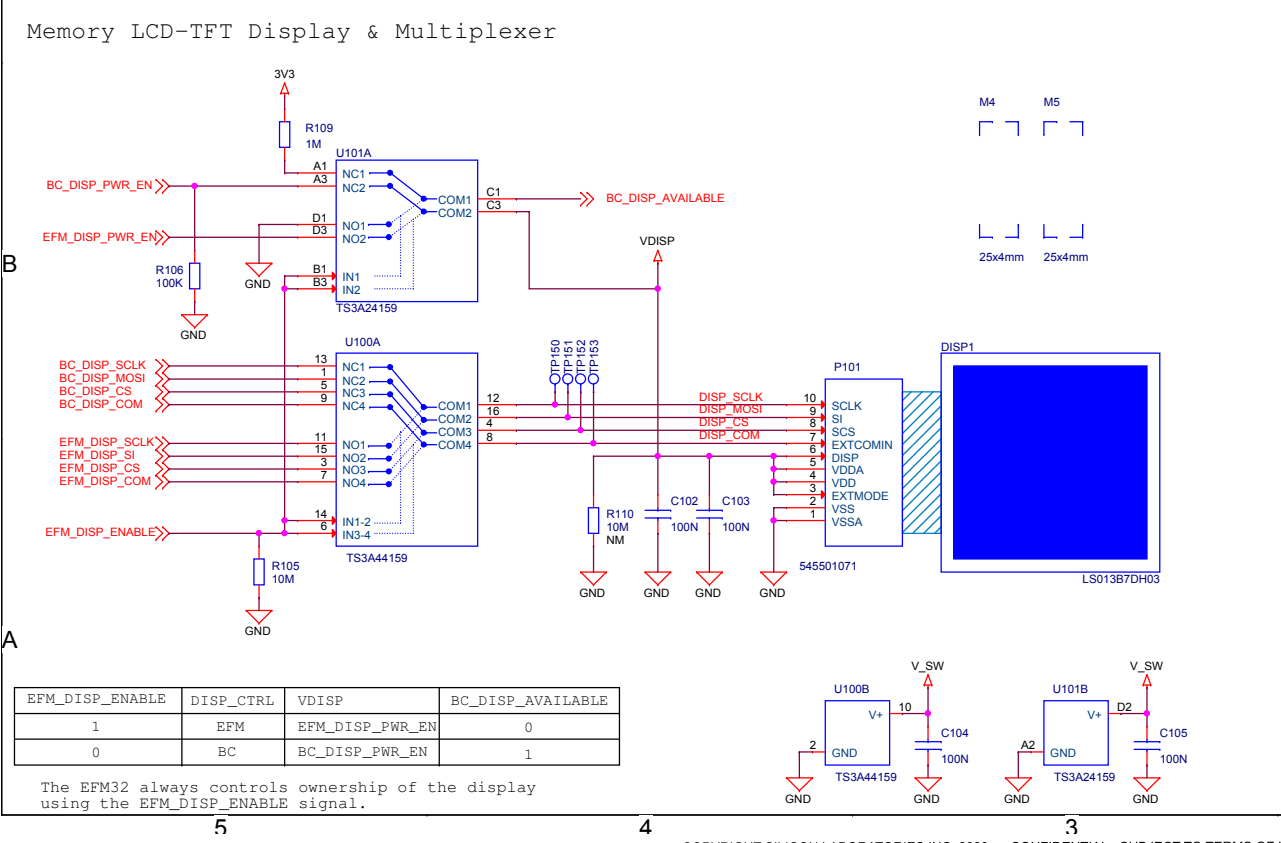
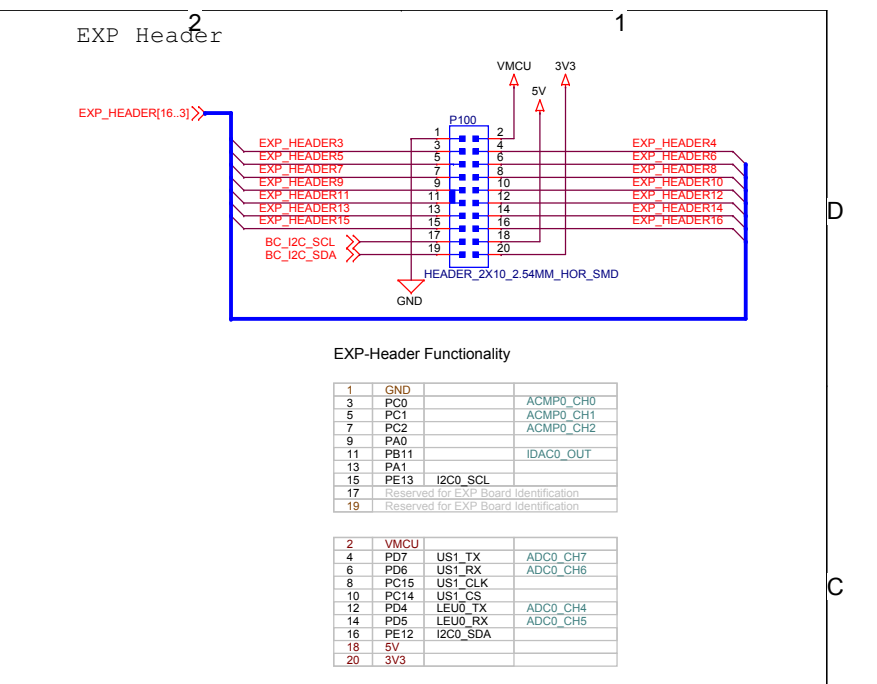
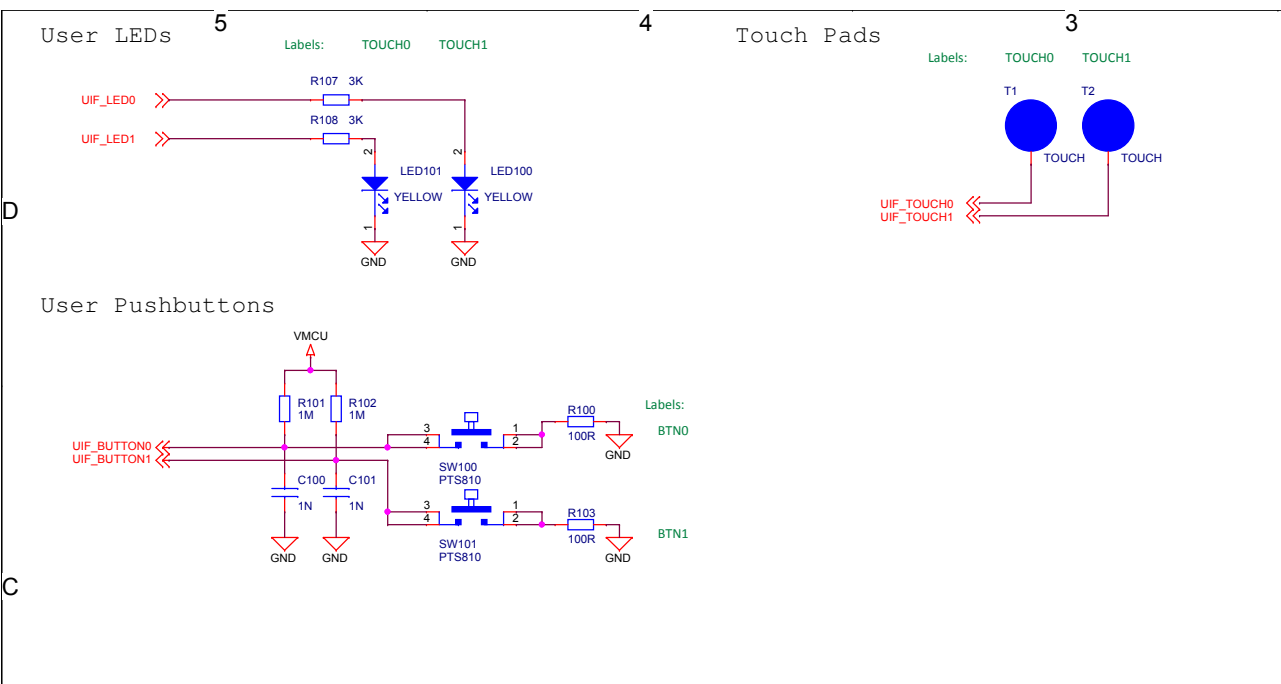
LEGAL NOTICE:
SILICON LABORATORIES INC. ("SILICON LABS") AND/OR ITS LICENSORS DO NOT WARRANT THE ACCURACY OR COMPLETENESS OF THIS SCHEMATIC OR ANY INFORMATION CONTAINED WITHIN THIS SCHEMATIC. IT IS PROVIDED "AS-IS" FOR REFERENCE ONLY. SILICON LABS DOES NOT WARRANT THAT THIS DESIGN WILL MEET THE SPECIFICATIONS, BE SUITABLE FOR YOUR APPLICATION OR FIT FOR ANY PARTICULAR PURPOSE, OR WILL OPERATE IN YOUR IMPLEMENTATION. SILICON LABS AND ITS LICENSORS DO NOT WARRANT THAT THE DESIGN IMPLIED IN THIS SCHEMATIC IS PRODUCTION-WORTHY. YOU SHOULD COMPLETELY VALIDATE AND TEST YOUR DESIGN IMPLEMENTATION TO CONFIRM SYSTEM FUNCTIONALITY FOR YOUR APPLICATION.



Revision History	
Rev.	Description
B00	Initial release for series production.
C01	Updated EFM32ZG chip revision + major updates to debugger

EFM32 ZG STK

 SILICON LABS		Schematic Title EFM32ZG Zero Gecko STK	
Designed: HEL		Approved: JNO	
Size A3		BOM Doc No: <Cage Code>	
Design Created Date: Wednesday, December 03, 2008		Sheet Created Date Saturday, March 21, 2009	
		Sheet Modified Date Tuesday, June 25, 2019	
		Revision C01	
		Sheet 1 of 10	



EFM32 ZG STK

Schematic Title: EFM32ZG Zero Gecko STK

Page Title: User Interfaces

Document number: BRD2010A

Revision: C01

Design Created Date: Wednesday, December 03, 2008

Sheet Created Date: Friday, October 31, 2014

Sheet Modified Date: Tuesday, June 25, 2019

Sheet 2 of 10

5



5V	5V
GND	GND
F0	D4
F1	D5
F2	D6
F3	D7
F4	NC
F5	E10
NC	E11
NC	E12
RST	E13
NC	NC
NC	NC
NC	NC
GND	GND
3V3	3V3



B



5



3



D

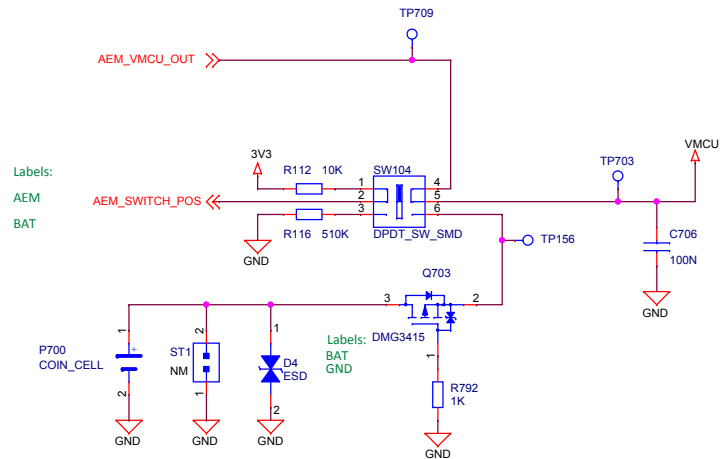


B



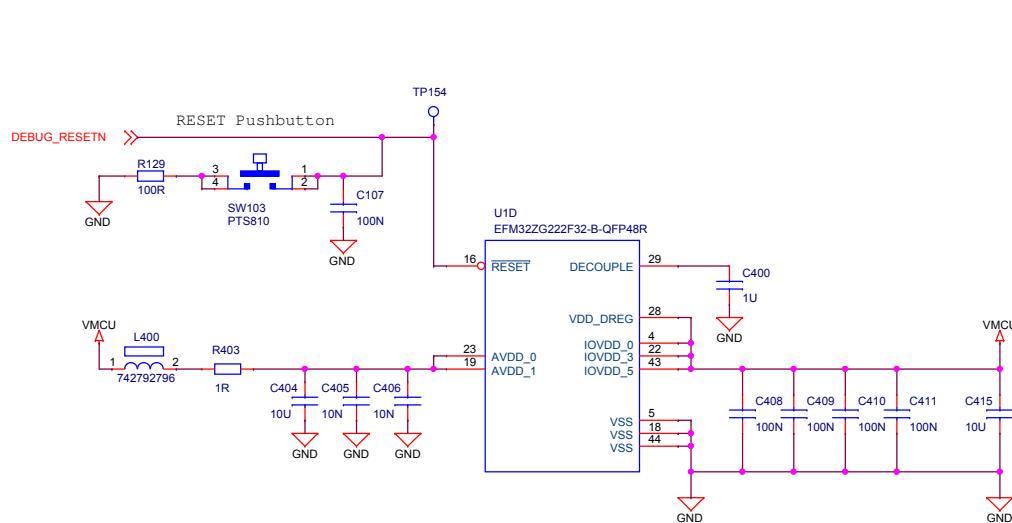
Sheet
3 of 10

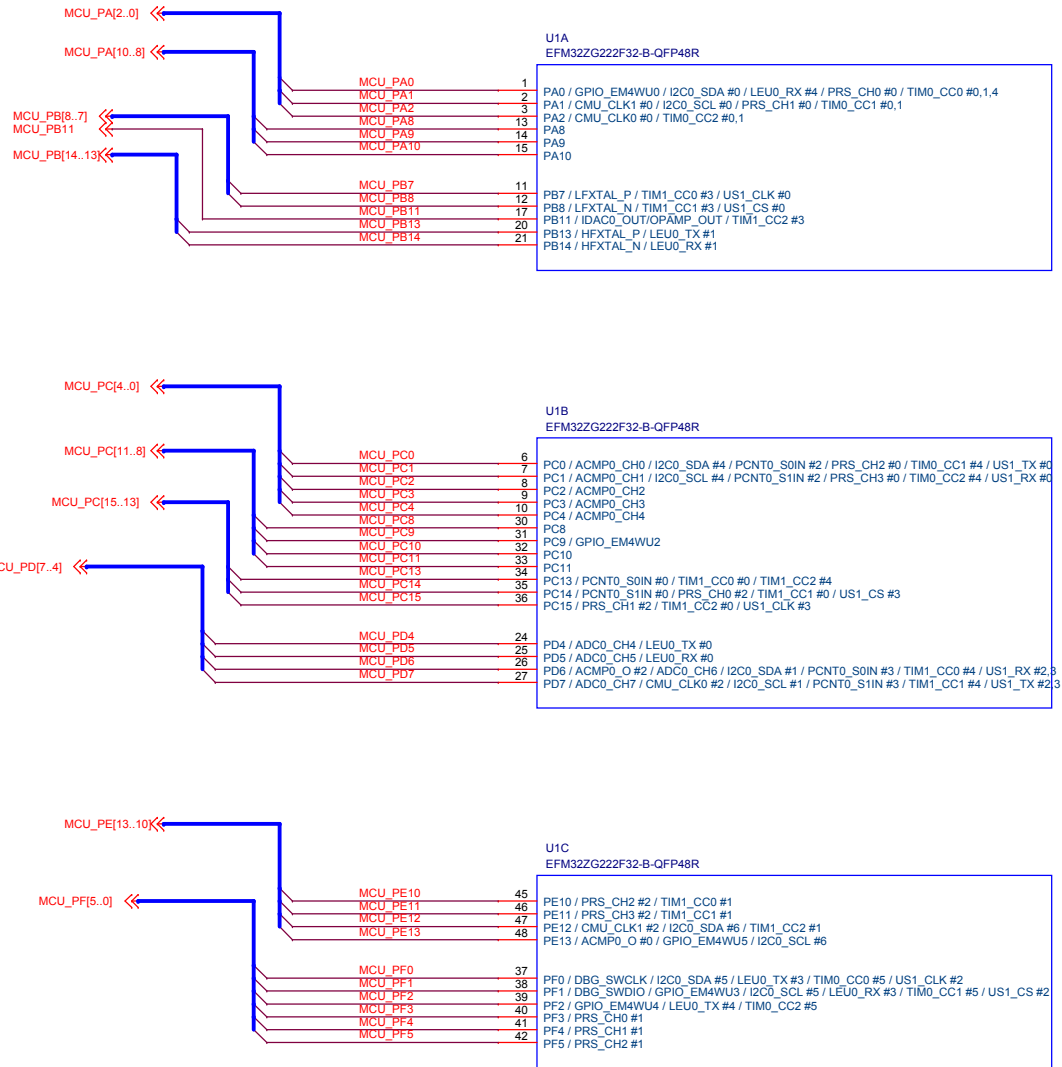
Power Select Switch: AEM/BAT



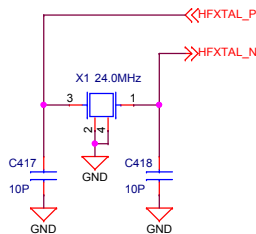
SWITCH POS	MODE DESCRIPTION
AEM	AEM Enabled, VMCU sourced from external 3.3v LDO powered by BC USB 5V supply
BAT	AEM Disabled, VMCU sourced from coin-cell battery or external power supply

EFM32 Power and Decoupling

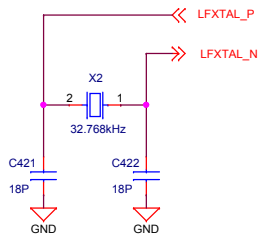




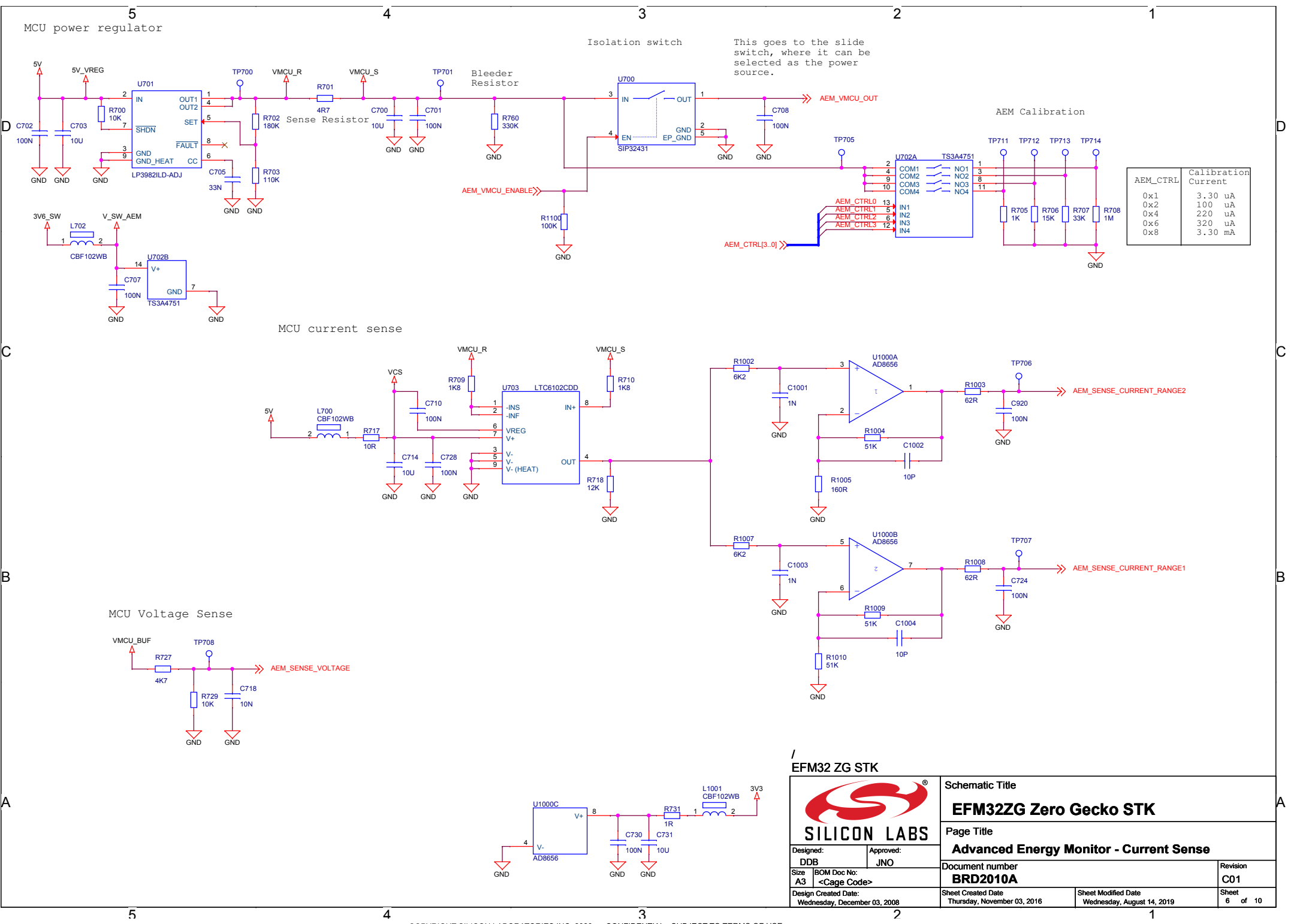
High Frequency Clock

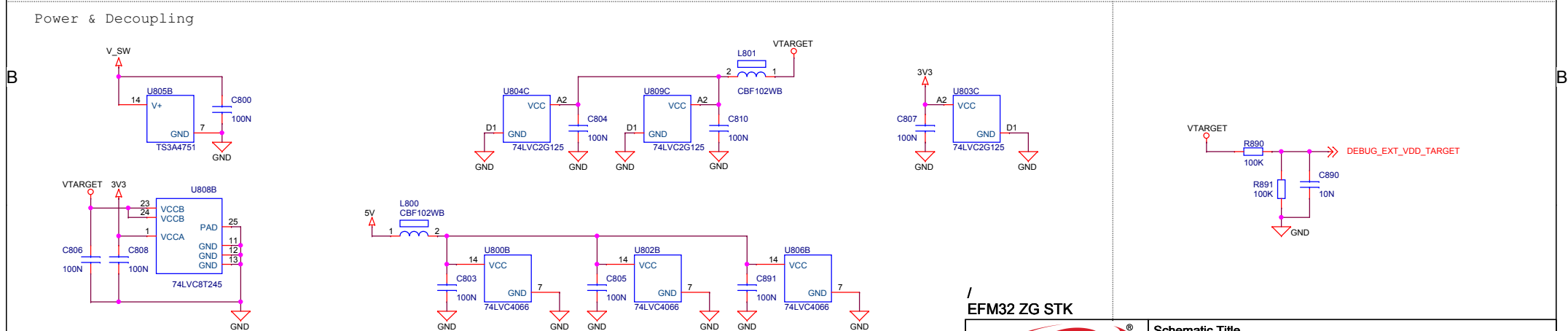
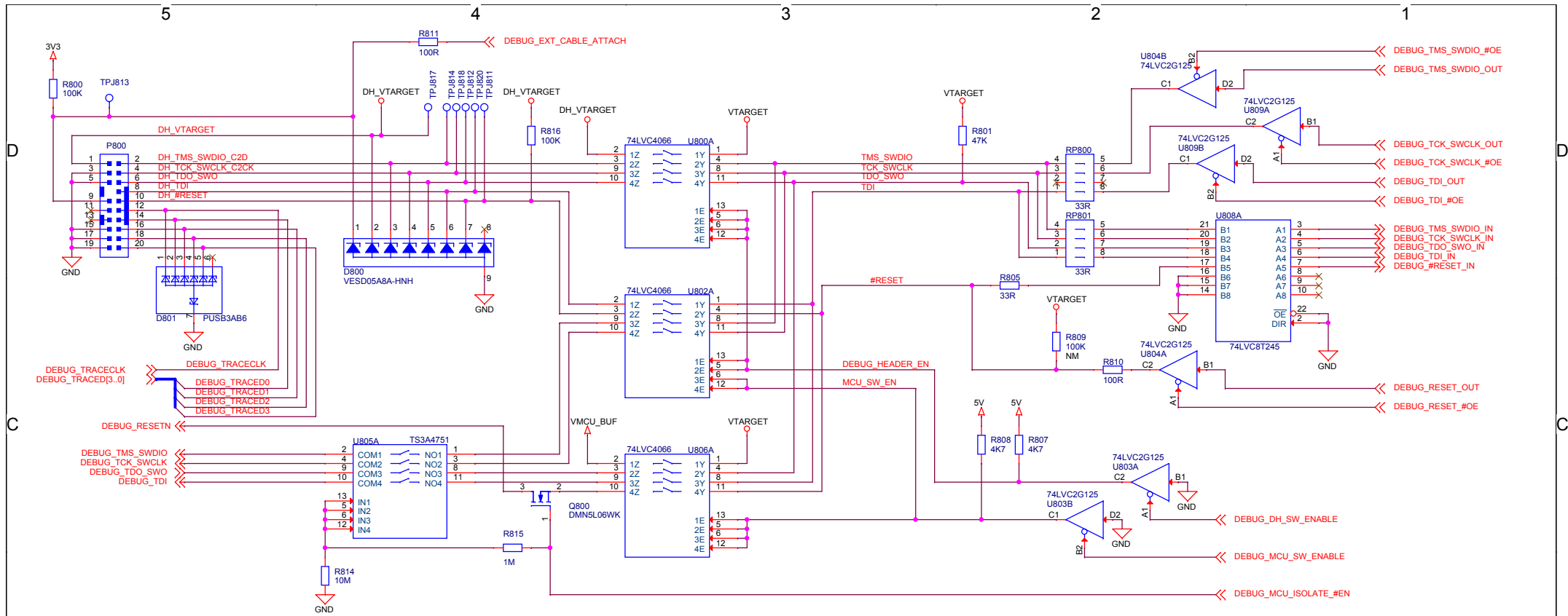


Low Frequency Clock



Designed: HEL		Approved: JNO	
Size: A3	BOM Doc No: <Cage Code>		Revision: C01
Design Created Date: Wednesday, December 03, 2008		Document number: BRD2010A	
Sheet Created Date: Monday, November 17, 2014		Sheet Modified Date: Wednesday, August 14, 2019	Sheet 5 of 10

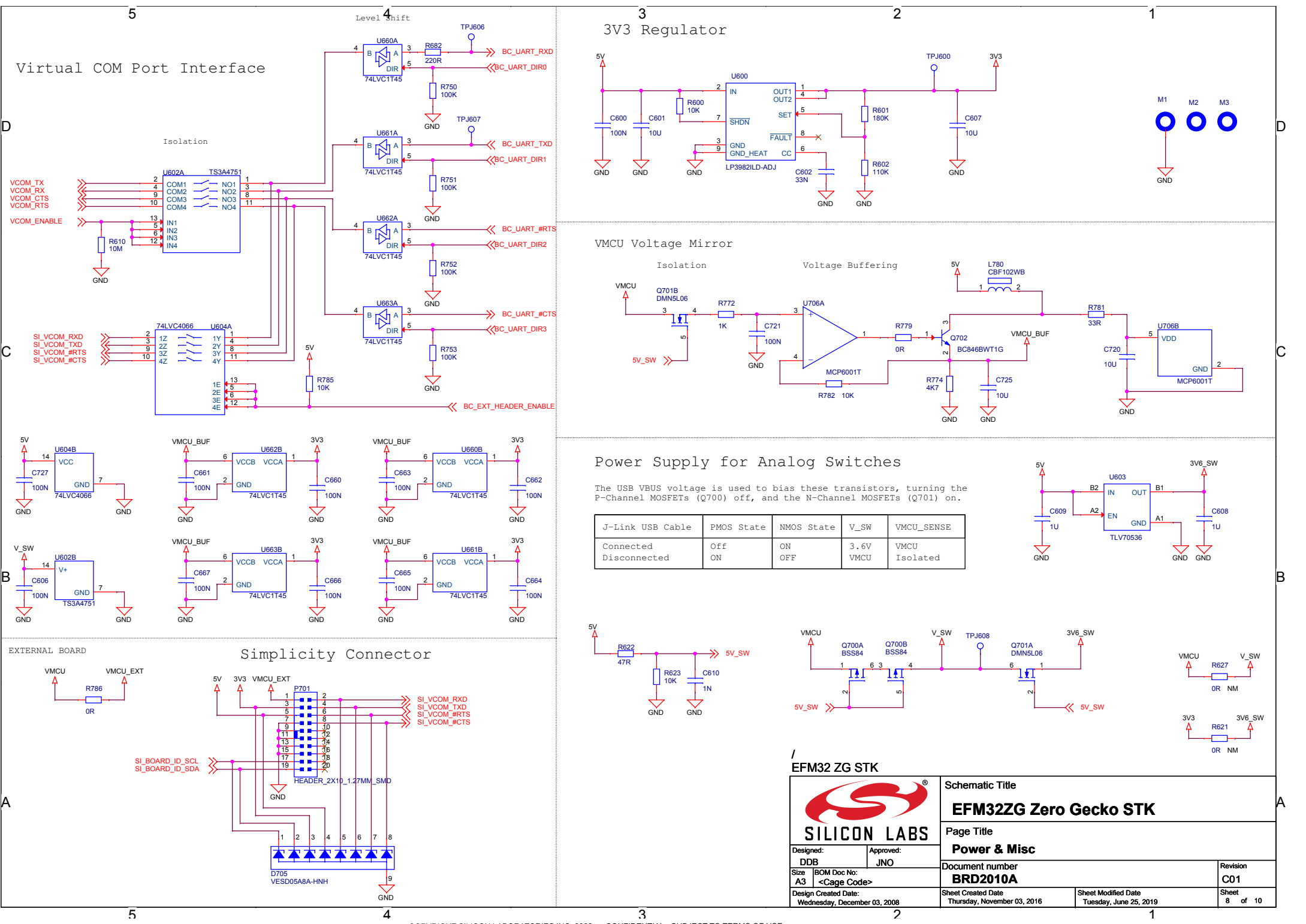


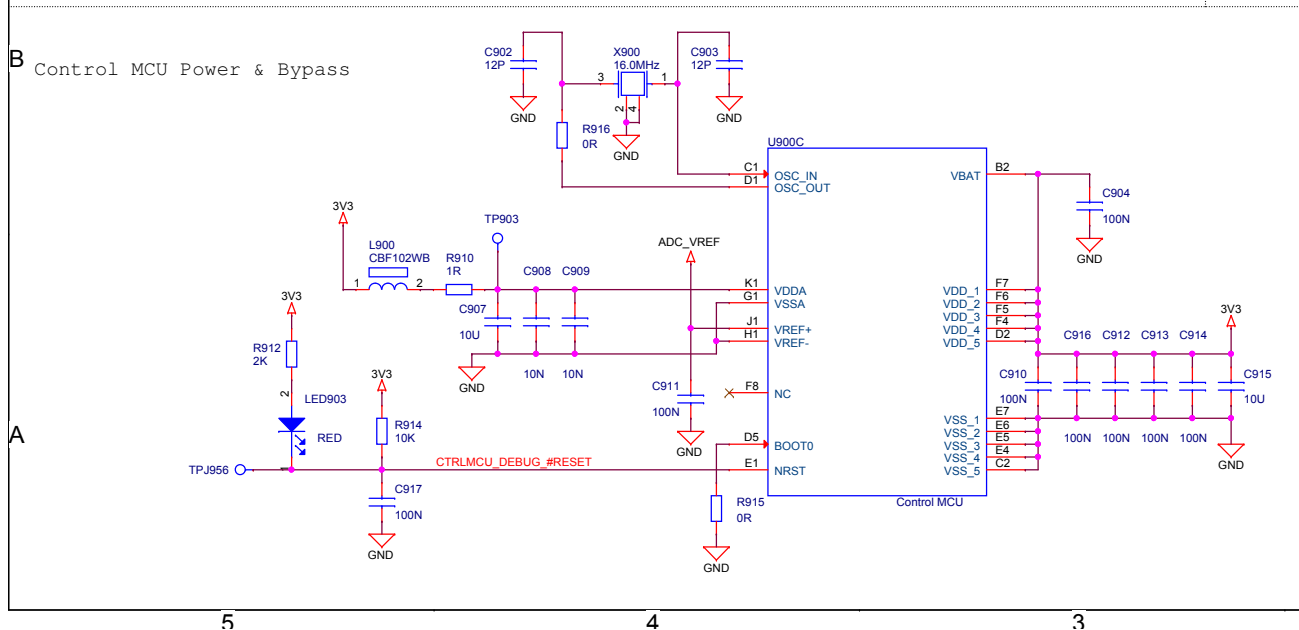
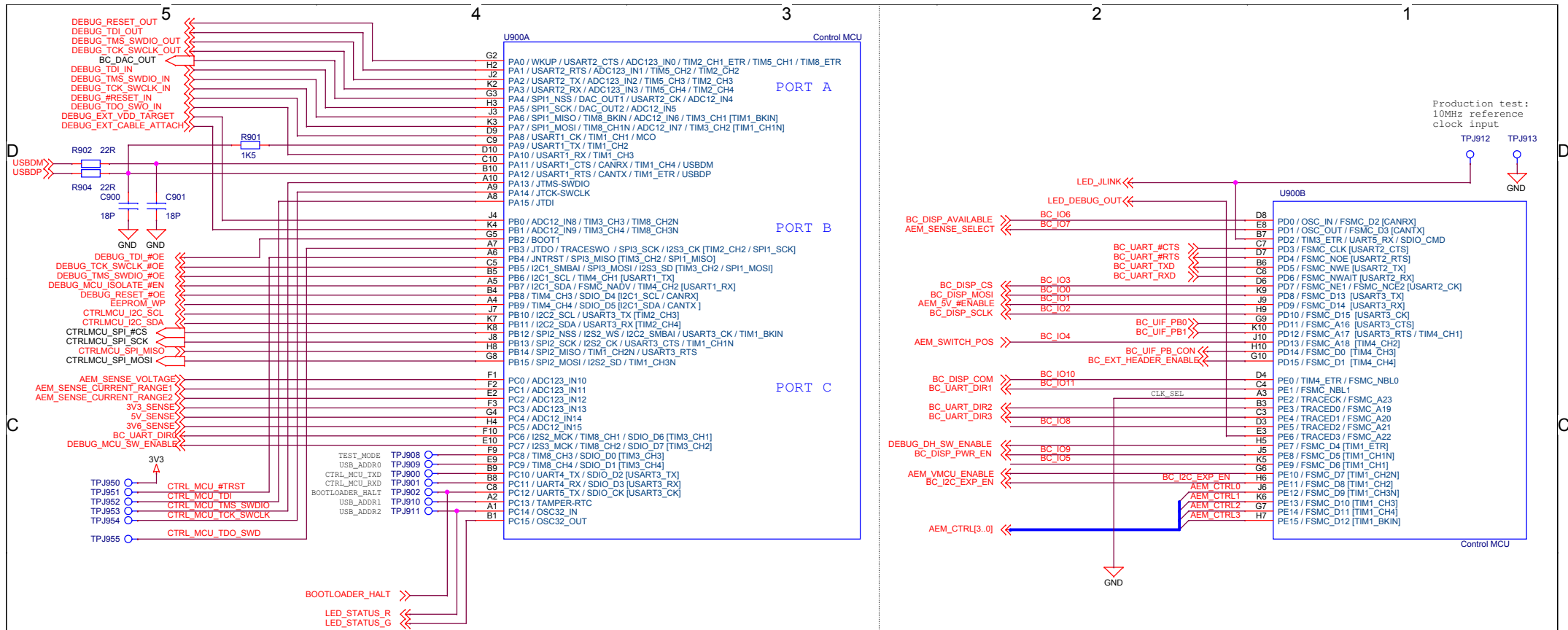


Mode	DEBUG_MCU_SW_ENABLE	DEBUG_DH_SW_ENABLE	DEBUG_BUF_#OE	ISOLATE_#EN	DH_VTARGET	VTARGET
Debug Out	0	1	0	0	External voltage	External voltage
MCU Debug	1	0	0	1	Disconnected	VMCU
Debug In	1	1	1	1	VMCU	VMCU
Debug Off	1	1	1	0	-	-

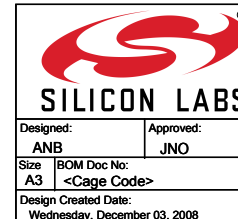
EFM32 ZG STK

Schematic Title		EFM32ZG Zero Gecko STK	
Page Title		Debug Interface	
Document number		BRD2010A	
Designed: DDB	Approved: JNO	Sheet Created Date	Sheet Modified Date
Size A3	BOM Doc No: <Cage Code>	Thursday, November 03, 2016	Tuesday, June 25, 2019
Design Created Date: Wednesday, December 03, 2008		Sheet 7 of 10	





EFM32ZG STK



Schematic Title			
EFM32ZG Zero Gecko STK			
Page Title			
Control MCU			
Document number			Revision
BRD2010A			C01
Sheet Created Date	Sheet Modified Date	Sheet	
Thursday, November 03, 2016	Tuesday, June 25, 2019	9 of 10	

D



3



1



B



POWER SENSE



Board Controller Misc

Revision
C01

Sheet
10 of 10