




EFM32 Giant Gecko STK	
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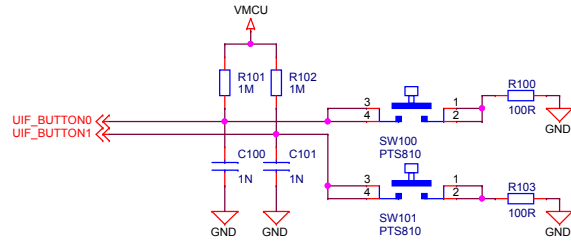
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Revision History	
Rev.	Description
C00	updated to new STK platform

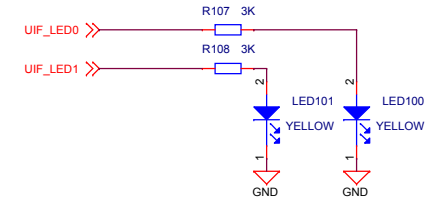
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Designed: HEL		Approved: JSH	
Size A3	BOM Doc No:		Revision C01
Design Created Date: Tuesday, December 06, 2016		Document number BRD2201A	Sheet 1 of 12
		Sheet Created Date Tuesday, December 06, 2016	Sheet Modified Date Thursday, April 23, 2020

User Pushbuttons



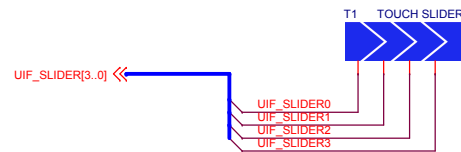
User LEDs

User LEDs

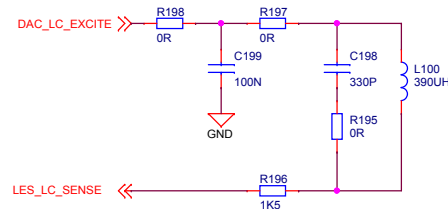


Touch Pads

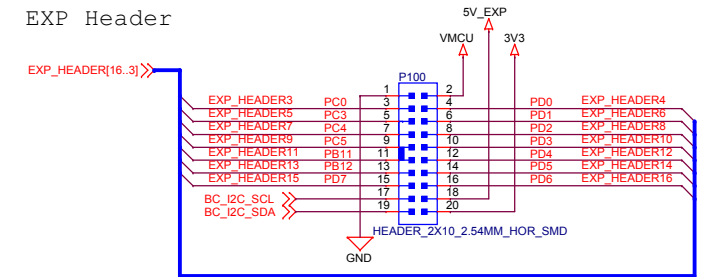
Touch slider



LESENSE LC-Sensor

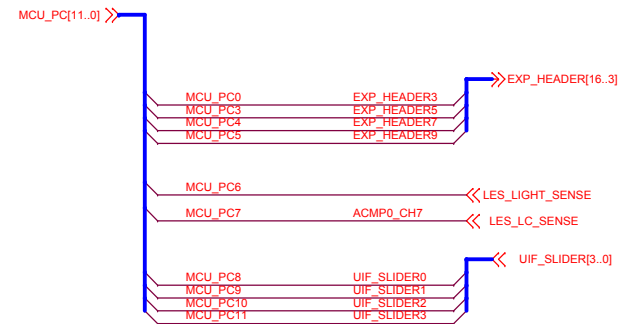
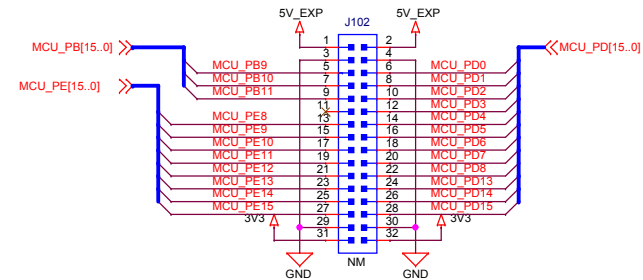
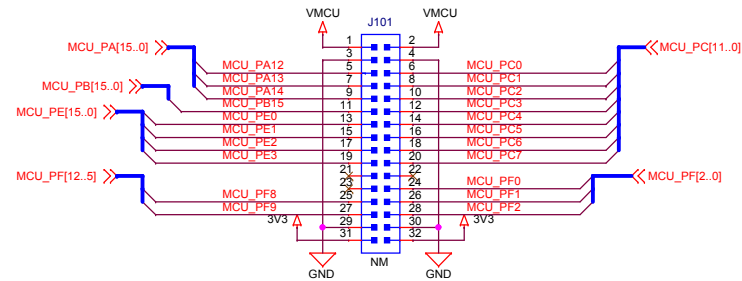
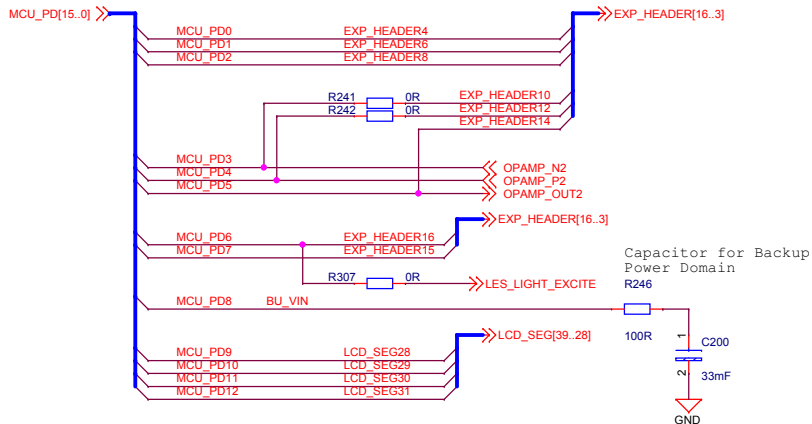
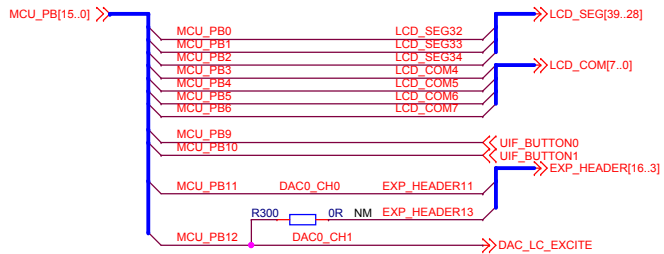
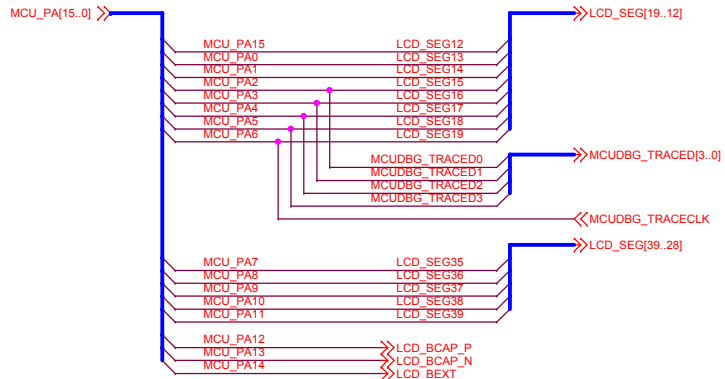


EXP Header



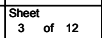
EXP-Header Functionality

ACMP0_CH4		GND	1		
ACMP0_CH5		PC0	3	2	VMCU
ACMP1_CH4		PC3	5	4	PD0
ACMP0_O		PC4	7	6	PD1
DAC0_OUT0		PC5	9	8	US1_TX
DAC0_OUT1		PB11	11	10	US1_RX
		PB12	13	9	US1_CLK
		PB12	13	12	US1_CS
		PB12	13	14	LEU0_TX
		PB12	13	14	LEU0_RX
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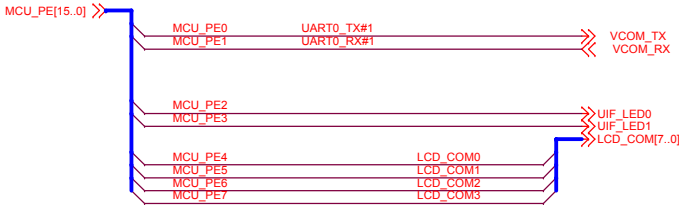


VMCU GND	VMCU GND
A12	C0
A13	C1
A14	C2
B15	C3
E0	C4
E1	C5
E2	C6
E3	C7
NC	NC
NC	F0
F8	F1
F9	F2
GND	GND
3V3	3V3

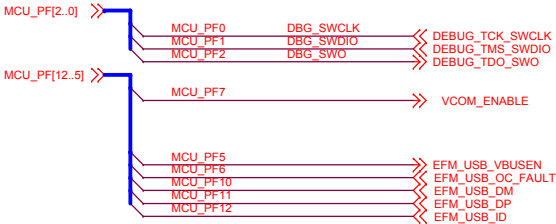
5V	5V
GND	GND
B9	D0
B10	D1
B11	D2
NC	D3
E8	D4
E9	D5
E10	D6
E11	D7
E12	D8
E13	D13
E14	D14
E15	D15
GND	GND
3V3	3V3




PE Connections

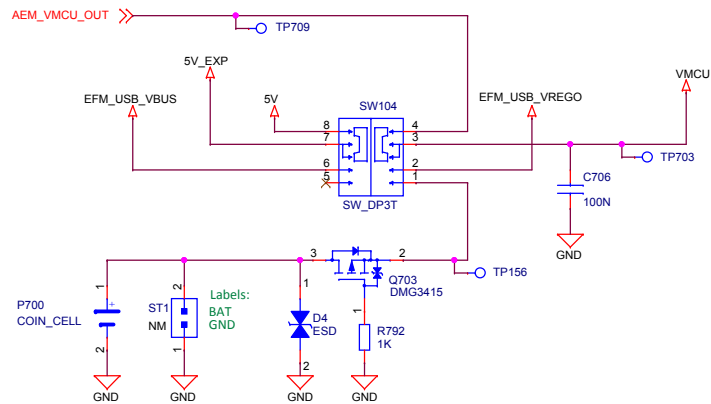


PF Connections



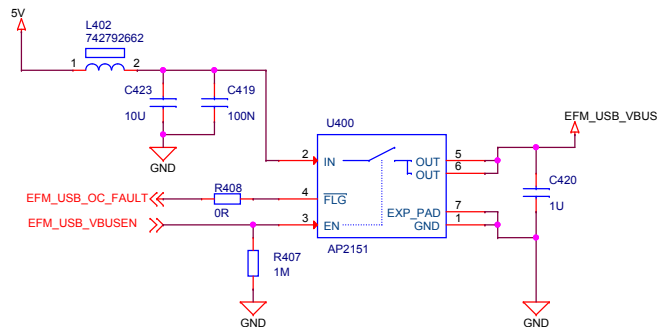
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Designed: HEL		Approved: JSH	
Size A3	BOM Doc No:		Revision C01
Design Created Date: Tuesday, December 06, 2016		Document number BRD2201A	Sheet 4 of 12
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Power Select Switch: AEM/USB/BAT

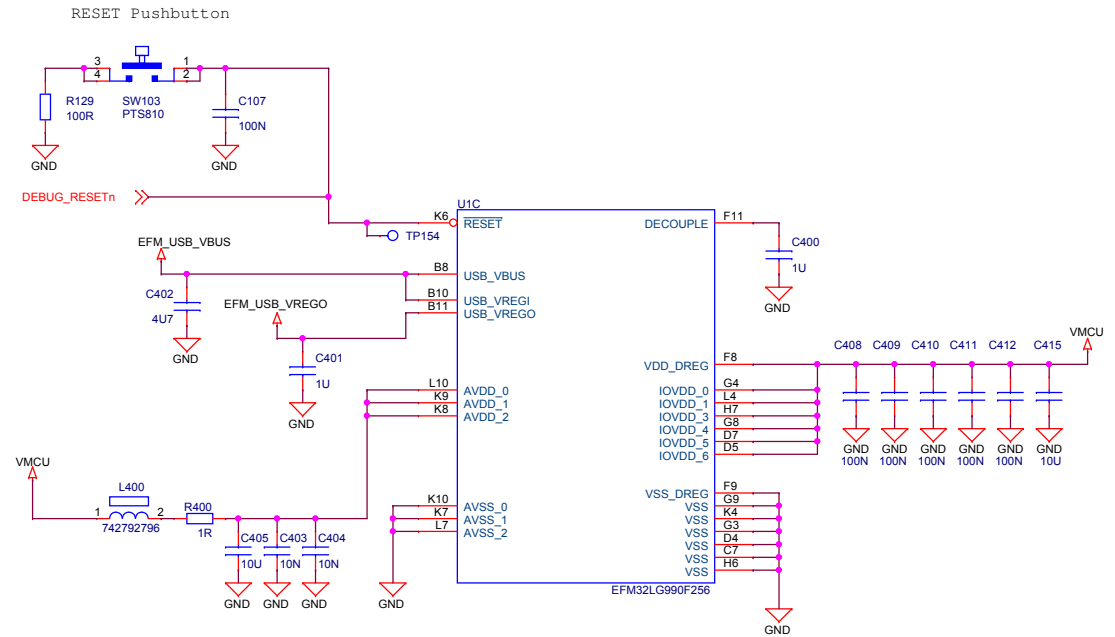


SWITCH POS	MODE DESCRIPTION
AEM	AEM Enabled, VMCU sourced from external 3.3V LDO powered by BC USB 5V supply, EXP header and breakout 5V sourced from BC USB 5V supply
USB	AEM Disabled, VMCU sourced from internal 3.3V LDO powered by MCU USB 5V supply, EXP header and breakout 5V sourced from MCU USB 5V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

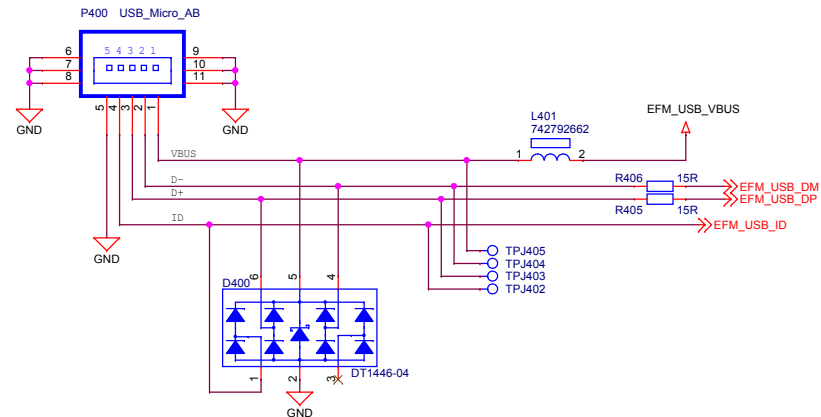
USB Host Power enable




EFM32 Power & Reset



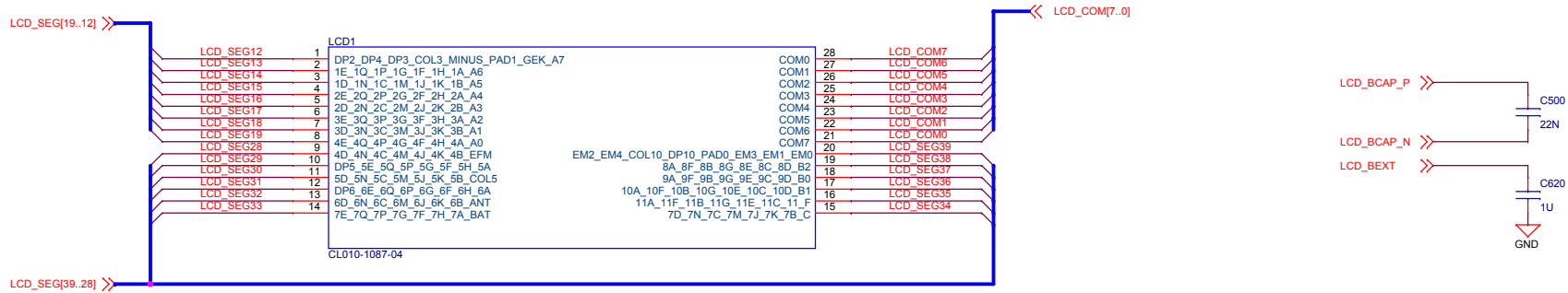
USB Connection and ESD protection



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		EFM32 Leopard Gecko Starter Kit	
Designed: HEL		Page Title	
Size A3		EFM32 Power	
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LCD signal connections

LCD Boost

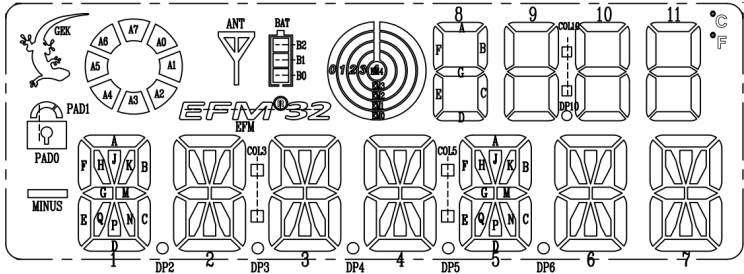



Segment names

PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14
---	S0	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13
COM0	DP2	1 E	1 D	2 E	2 D	3 E	3 D	4 E	4 D	DP5	5 D	DP6	6 D	7 E
COM1	DP4	1 Q	1 N	2 Q	2 N	3 Q	3 N	4 Q	4 N	5 E	5 N	6 E	6 N	7 Q
COM2	DP3	1 P	1 C	2 P	2 C	3 P	3 C	4 P	4 C	5 Q	5 C	6 Q	6 C	7 P
COM3	COL3	1 G	1 M	2 G	2 M	3 G	3 M	4 G	4 M	5 P	5 M	6 P	6 M	7 G
COM4	MINUS	1 F	1 J	2 F	2 J	3 F	3 J	4 F	4 J	5 G	5 J	6 G	6 J	7 F
COM5	PAD1	1 H	1 K	2 H	2 K	3 H	3 K	4 H	4 K	5 F	5 K	6 F	6 K	7 H
COM6	GEK	1 A	1 B	2 A	2 B	3 A	3 B	4 A	4 B	5 H	5 B	6 H	6 B	7 A
COM7	A7	A6	A5	A4	A3	A2	A1	A0	EFM	5 A	COL5	6 A	ANT	BAT

PIN	15	16	17	18	19	20	21	22	23	24	25	26	27	28
---	S14	S15	S16	S17	S18	S19	COM7	COM6	COM5	COM4	COM3	COM2	COM1	COM0
COM0	7 D	11 A	10 A	9 A	8 A	EM2							COM1	COM0
COM1	7 N	11 F	10 F	9 F	8 F	EM4								
COM2	7 C	11 B	10 B	9 B	8 B	COL10						COM2		
COM3	7 M	11 G	10 G	9 G	8 G	DP10					COM3			
COM4	7 J	11 E	10 E	9 E	8 E	PAD0				COM4				
COM5	7 K	11 C	10 C	9 C	8 C	EM3			COM5					
COM6	7 B	11 D	10 D	9 D	8 D	EM1		COM6						
COM7	*C	*F	B1	B0	B2	EM0	COM7							

Segment placement





SILICON LABS

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EFM32 Leopard Gecko Starter Kit

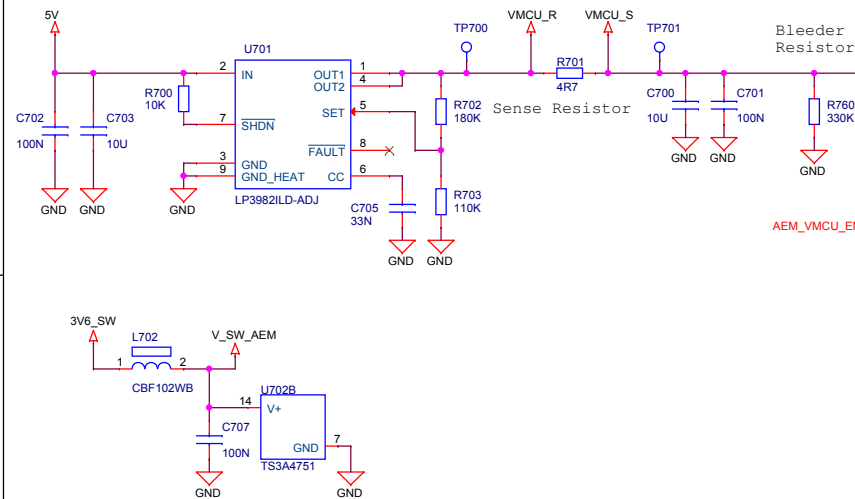
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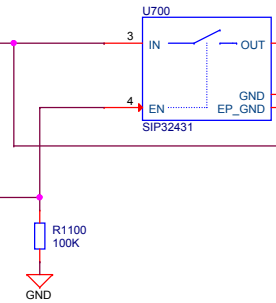
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MCU power regulator

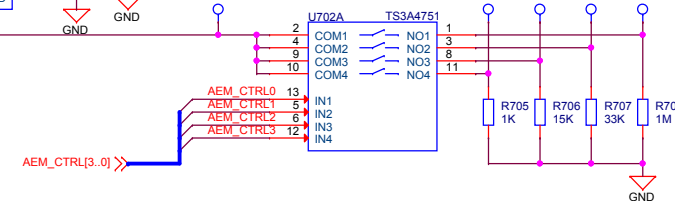


Isolation switch

This goes to the slide switch, where it can be selected as the power source.

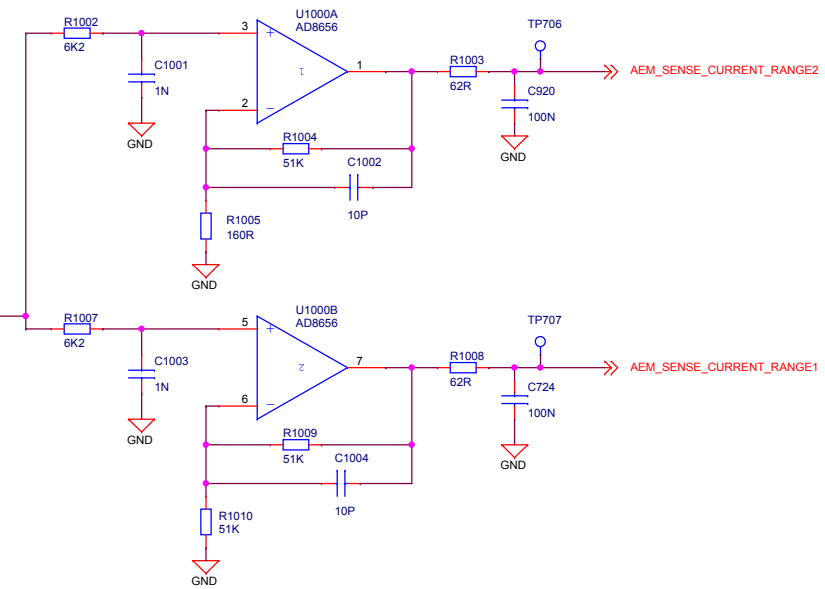
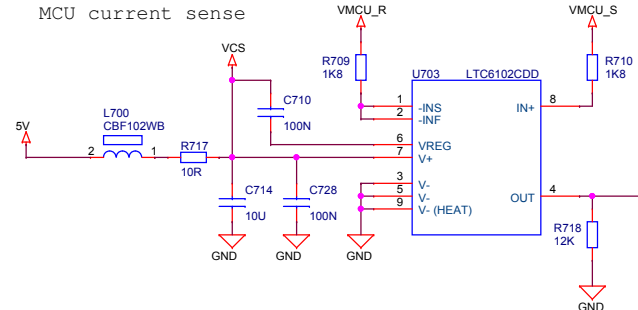


AEM Calibration

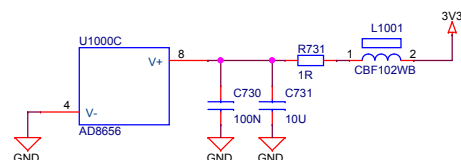
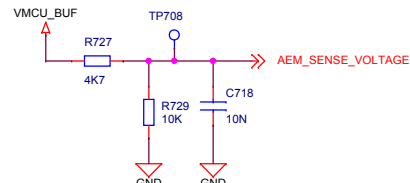


AEM_CTRL	Calibration Current
0x1	3.30 uA
0x2	100 uA
0x4	220 uA
0x6	320 uA
0x8	3.30 mA

MCU current sense



MCU Voltage Sense



SILICON LABS

Schematic Title

EFM32 Leopard Gecko Starter Kit

Page Title

Advanced Energy Monitor

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