

Revision History

Rev 1.0 9/8/2015

1. Initial design.


Rev 2.0 9/29/2015

1. Remove soldermask to expose battery terminal
2. Change light sensor to Si1133
3. Change magnetic sensor to SL353HT
4. Change I2C interrupt pullups to 5k
5. Add manufacturing test points
6. Add a mounting hole
7. Silk screen on buttons should be "BTN0 // (~PA3)"
7. Make "hacker" pads larger
8. Add device descriptions to silk screen
9. Remove bumpons and bumpon silk
10. Replace "U2" silk with "RH/T" (for all sensors)
11. Add board name
12. Find nicer buttons (same footprint)
13. Add debounce to switches

Rev 2.1-2.3

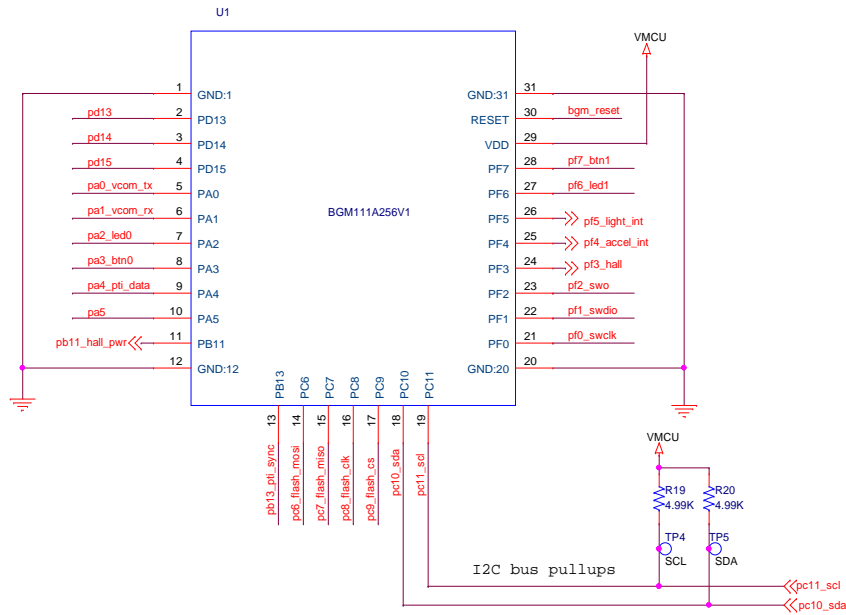
BOM optimization

1. New reverse battery FET (lower Ron)
2. Hall Effect sensor changed to SiLabs part

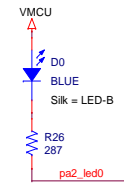
		400 W Cesar Chavez Austin, TX 78701	
SILICON LABS			
Title ThunderBoard BGM111 Sensor Module			
Size B	Document Number IST-A0057		Rev 2.3
Date: Wednesday, March 16, 2016		Sheet	1 of 4

User IO

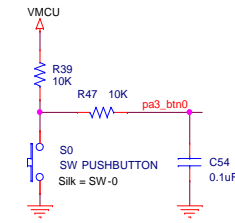
Blue Gecko Module



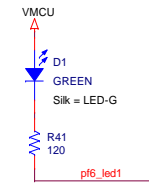
LED 0



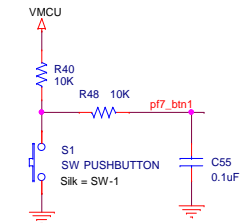
Switch 0



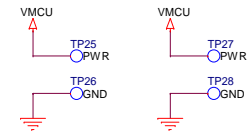
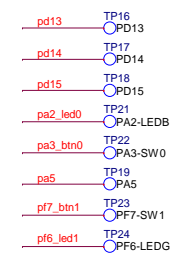
LED 1



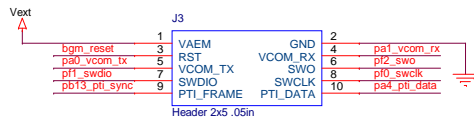
Switch 1



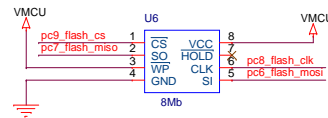
User accessible pads on top and bottom



Mini Simplicity Header

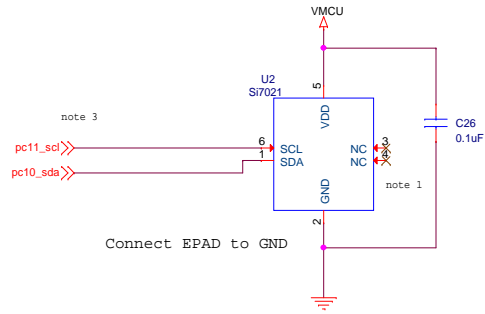


External Flash

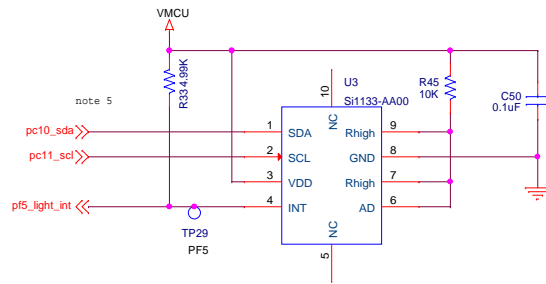


		400 W Cesar Chavez Austin, TX 78701	
SILICON LABS			
Title: BGM111 and user IO			
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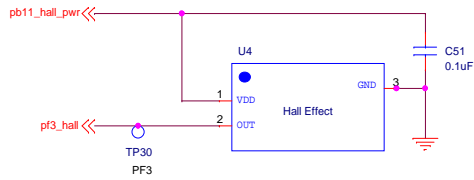
Si7021 precision temperature + humidity sensor



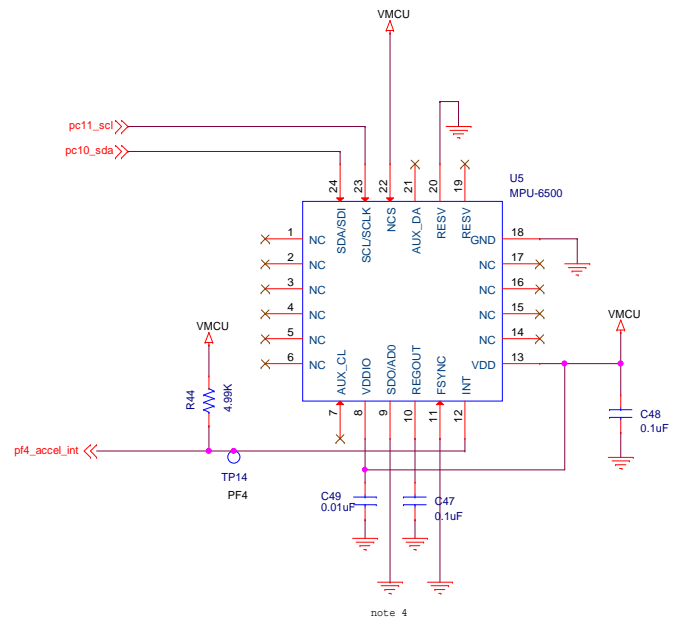
1133 ambient light and UV light sensor




Hall Effect Sensor



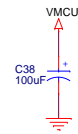
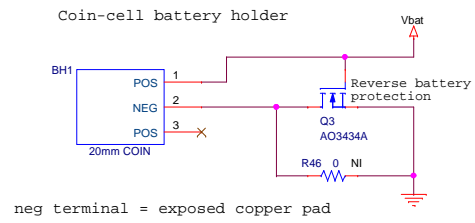
Inertial Sensor (6-axis)



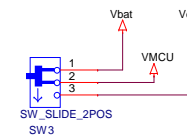
note 1: do not tie pins 3,4 to GND
 note 3: rh/t i2c address = 0x40
 note 4: accel i2c slave address = 0b1101000 when AD0 = 0.
 note 5: light sensor i2c slave address = 0x60

 400 W Cesar Chavez Austin, TX 78701 SILICON LABS		Title	
		Sensors	
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Power



Silk screen for switch: "Vbat" or "Vext"



Plastic battery isolator



CR2032 coin cell battery



Title		
Battery		
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