

Diamond Key Mezz - PCB-000270-01




Table of Contents		REVISION HISTORY			
01 02	This Page, Cover Sheet Sensors	MAJOR REV	DESCRIPTION	DATE	APPROVED
		1	First Release	July 2018	Cortopassi
		2	Updates Per Diamond Key	October 2018	Missele

Rev. 2 Changes

-- Added U1, U6, J3, J7, and D4 for Isolated tamper sensor.
-- Separated AGND for isloated ground plane for new isolated design.
-- All pins replicated on REPJP3 for use with JTAG, 3 to 4 and 4 to 3.

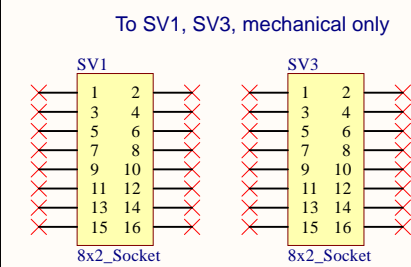
Ongoing Notes

PCA-000152-02, BOM Assembly, Rev 2

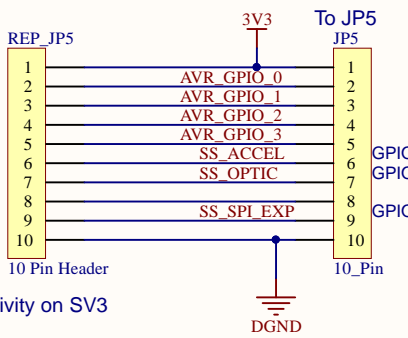
Customer: Diamond Key			
Project: DKey_Mezz Rev2			
Title: Cover Sheet			
Drawn By: Cortopassi		CAGE Code:3D5W6	<div>3820 Ventura Drive Arlington Heights, IL 60004 847-359-3828 www.digidescorp.com</div>
Size: B	Document: PCB-000270-02		
Date: 11/5/2018	Revision:1	Sheet 1 of 2	
Proprietary and Confidential			

Sensors and Connectivity

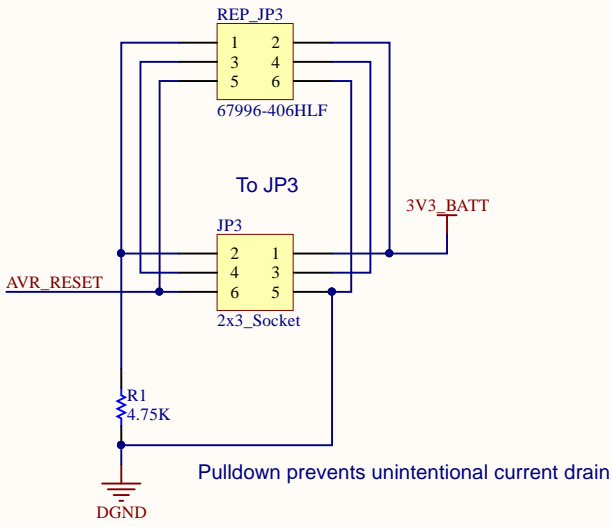
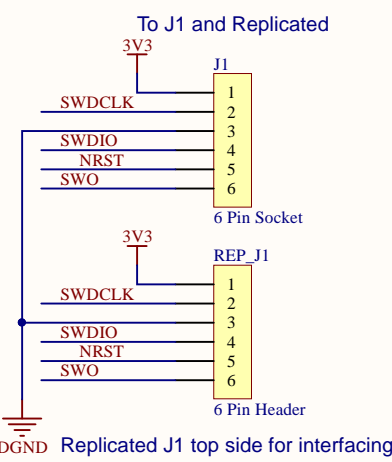
Bottom Side female sockets for connection to main board



NOTE: Dual row connector pin connectivity unimportant, no connectivity on SV3

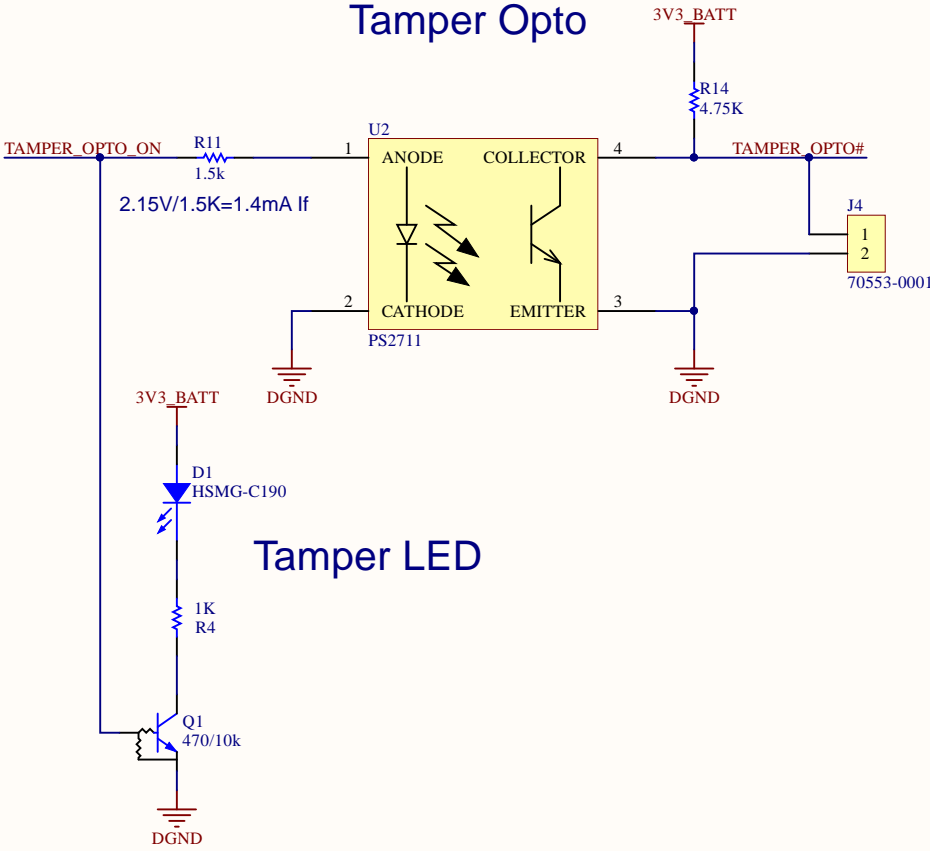


Functions
-GPIO_0=SCLK
-GPIO_1=SPI_Exp_Interrupt
-GPIO_2=MISO
-GPIO_3=MOSI
-GPIO_4=Chip Select for Accelerometer
-GPIO_5=Chip Select for Light Sensor
-GPIO_6=Not Connected
-GPIO_7=Chip Select for SPI Expander



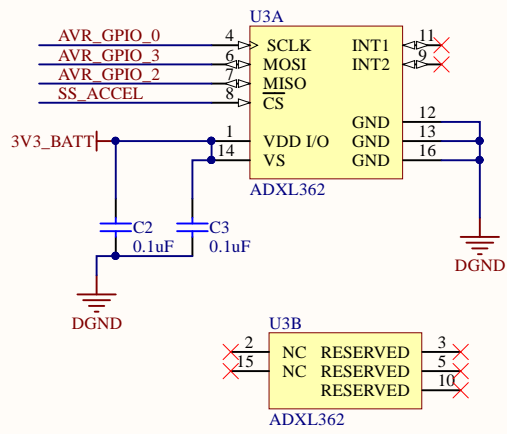
NOTE: Dual row connector pin connectivity
Flips odd/even because on bottom side
1-2, 3-4, 5-6

Tamper Opto



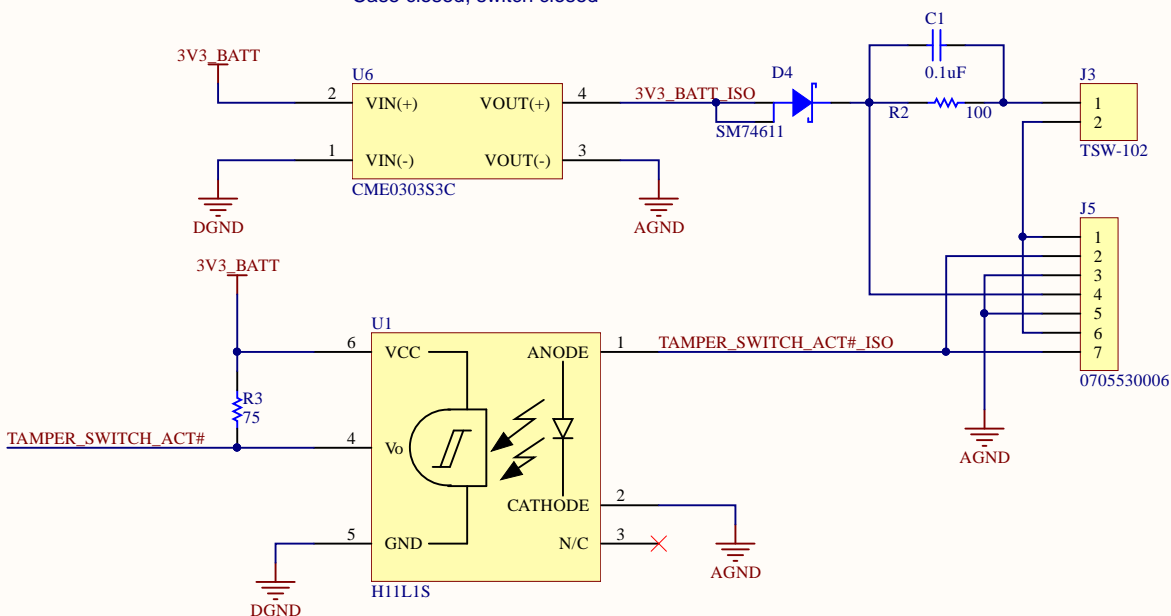
Tamper LED

Accelerometer

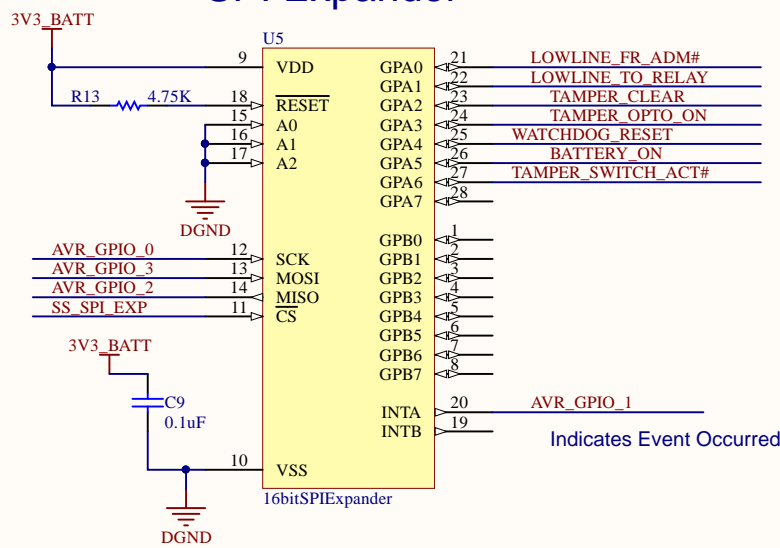


Case Tamper Switch(es)

Case closed, switch closed

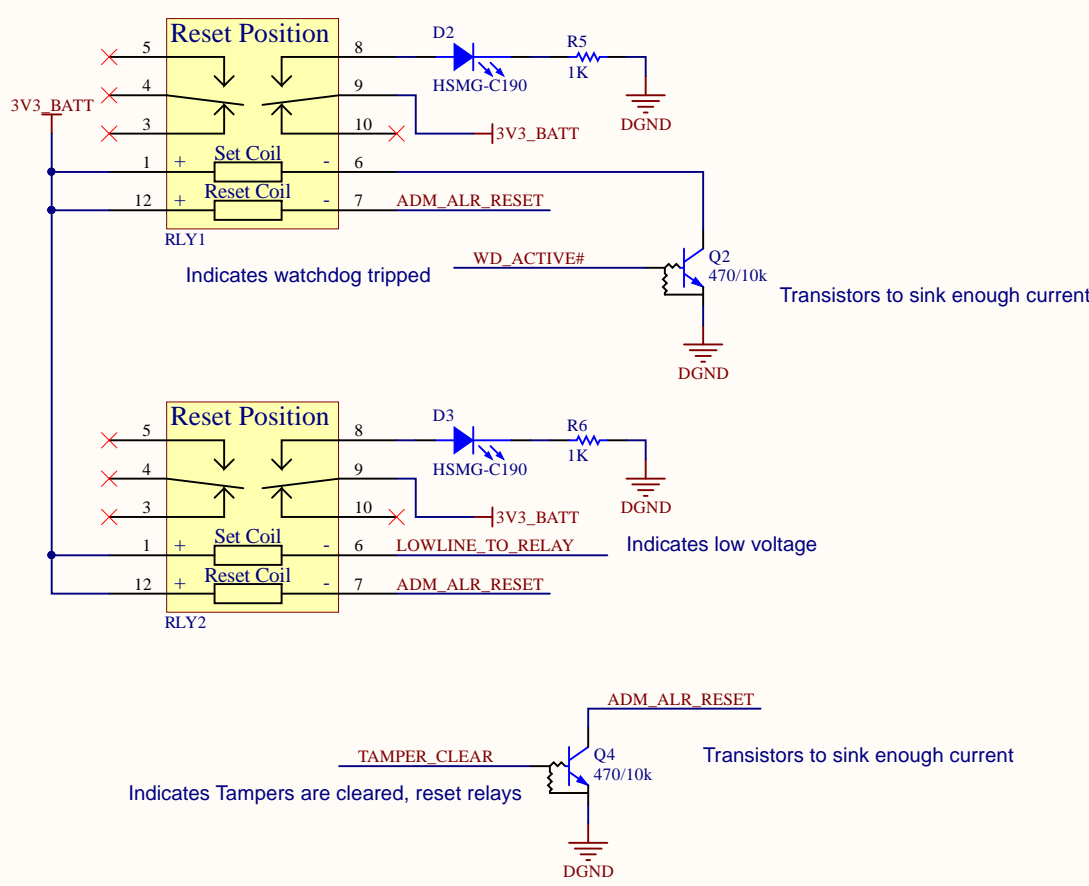


SPI Expander

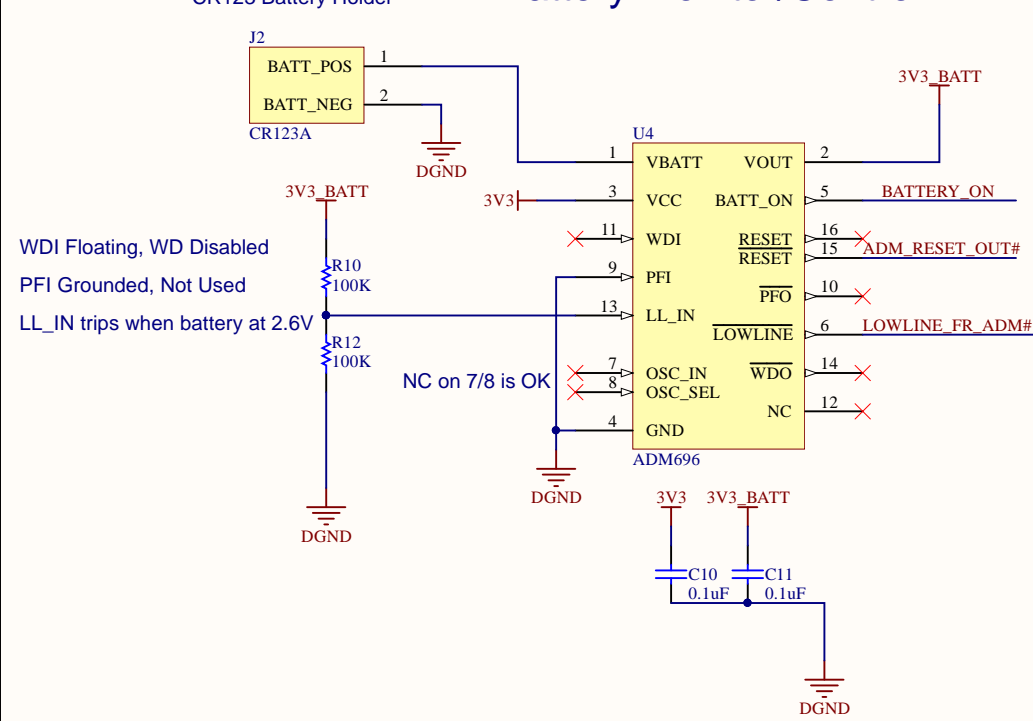


Latching Relays

Require 23.3mA @ 3V to Set or Reset

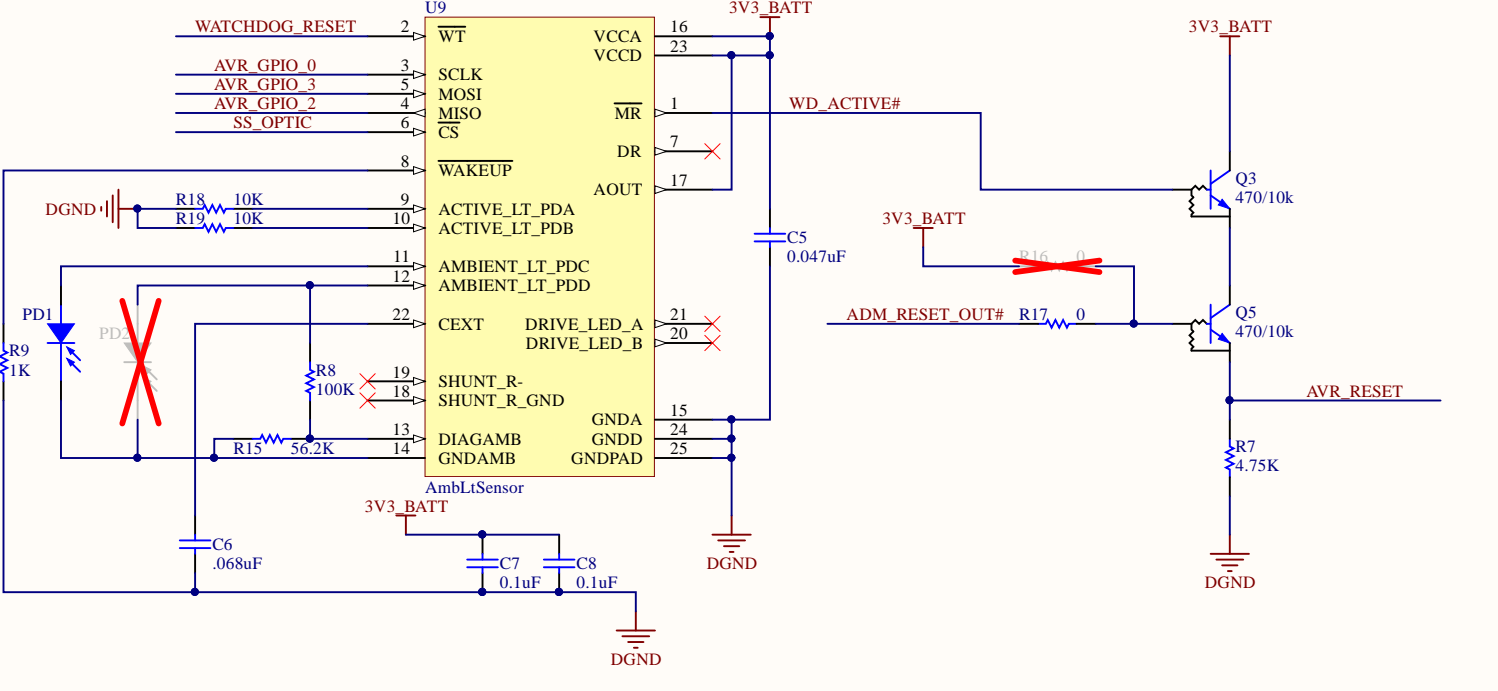


Battery Monitor/Control



Ambient Light Sensor & Watchdog

Need to disable unused inputs in register



AVR Reset AND

Either watchdog or low voltage will trigger AVR Reset

