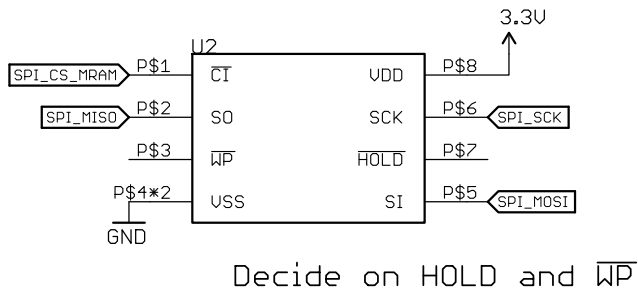
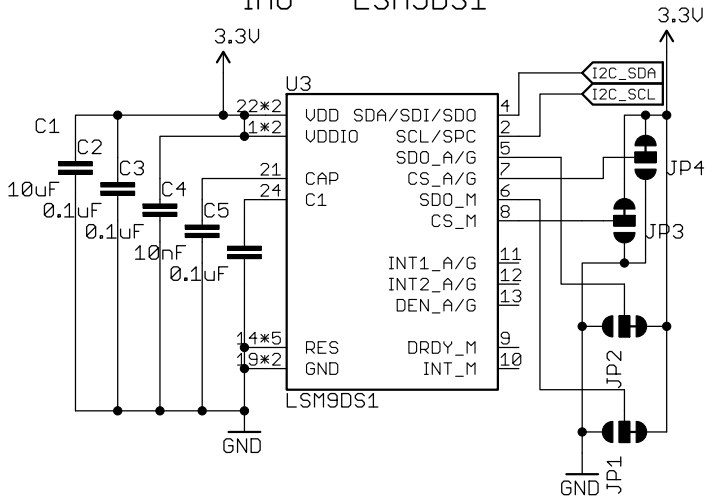


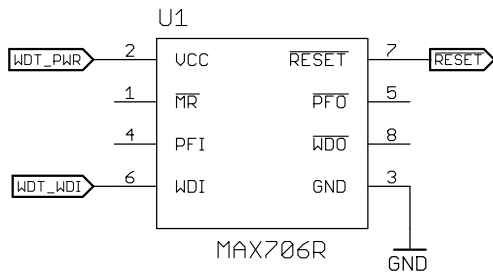
MRAM - Nonvolatile Memory (4MB storage)



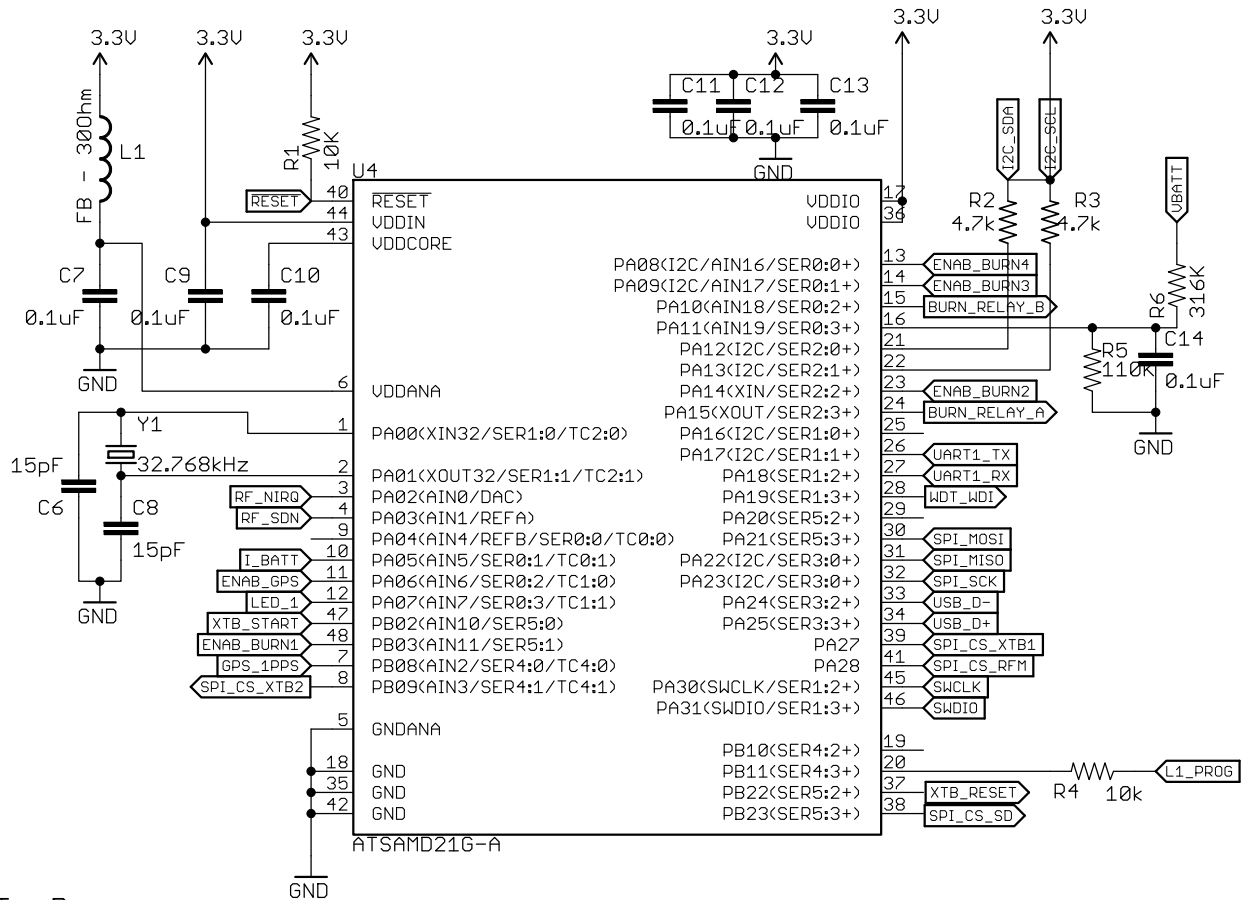
IMU - LSM9DS1



External WDT



ATSAMD21G18 32-bit ARM Microprocessor



To Do:
Characterize power consumption
Validate SPI pinout of SAMD21

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TITLE: KMB-21

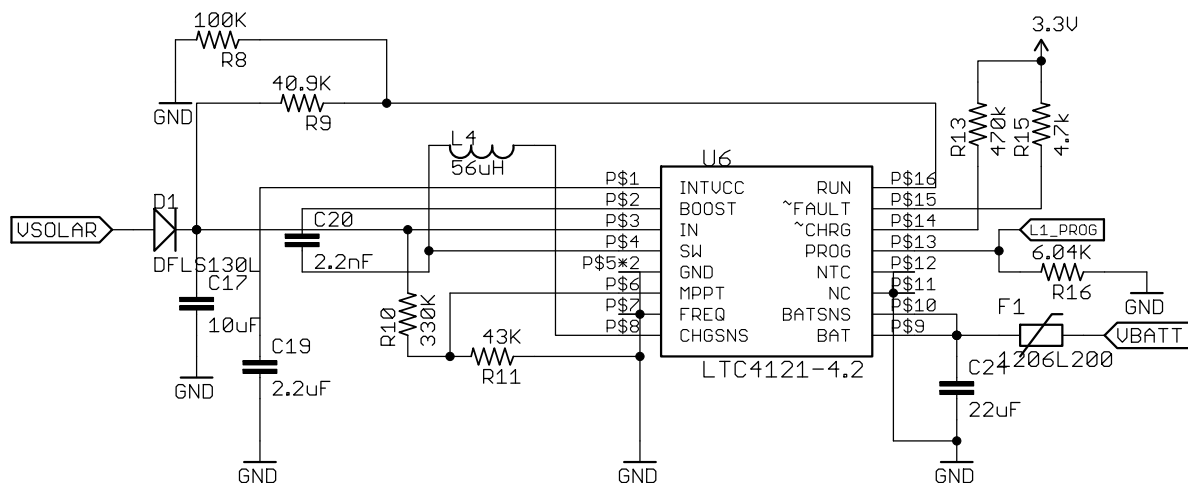
Design by:
Zac Manchester, Max Holliday

REV:
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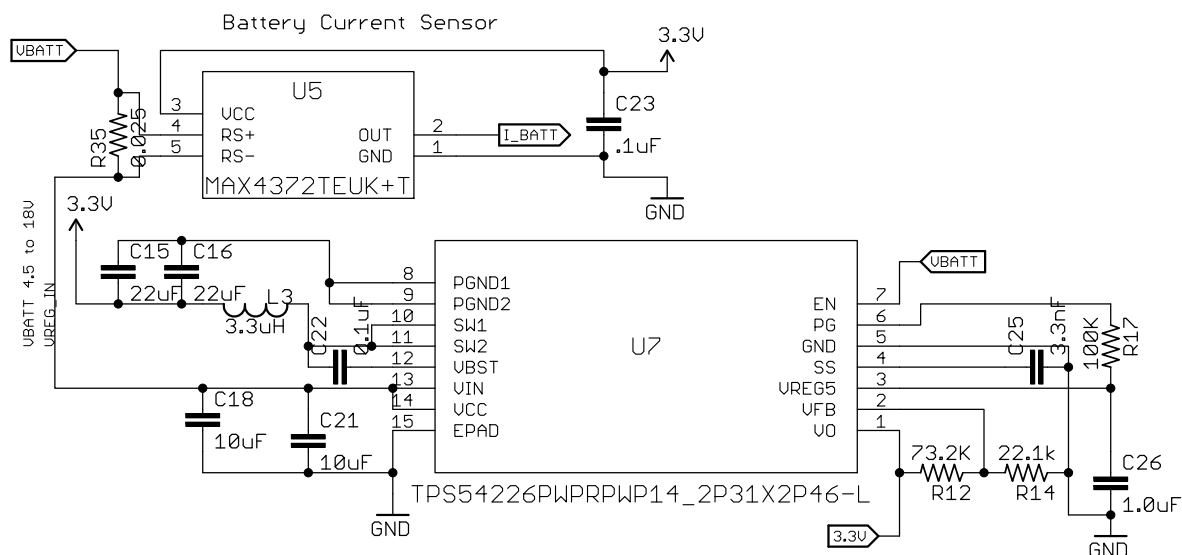
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Sheet: 1/4

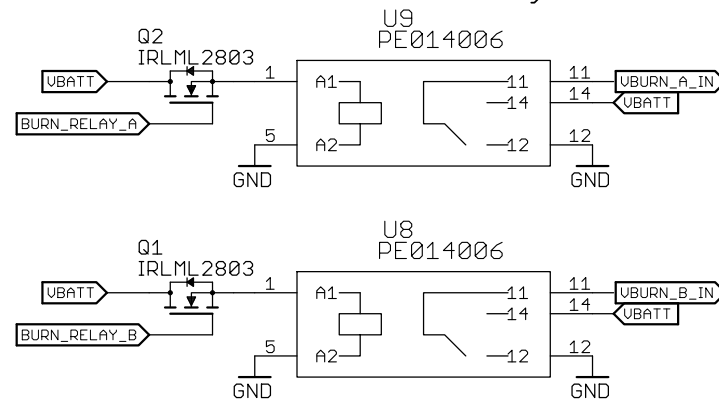
2s2P Li-Ion Battery Charging Circuit



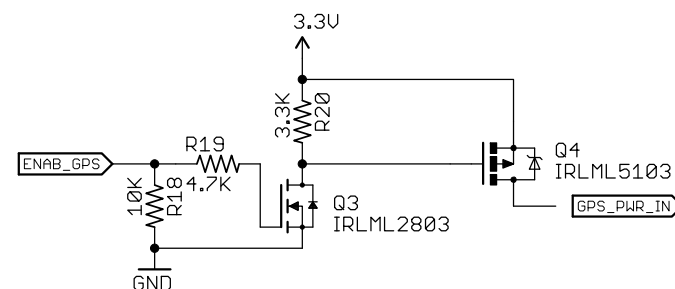
Regulator - 3.3V OUT



Power Relays



GPS Power



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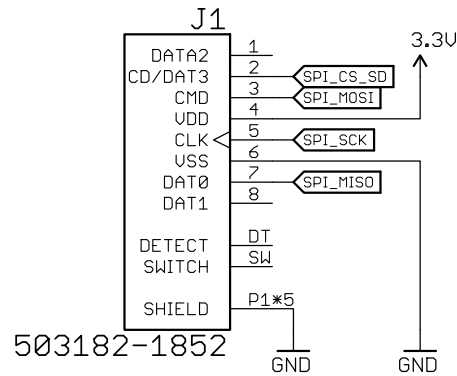
Design by: Zac Manchester, Max Holliday
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REV:
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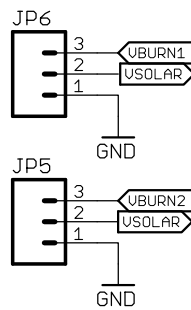
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MicroSD Card

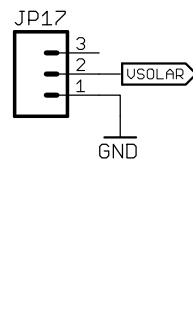
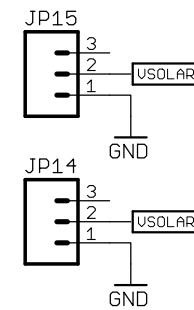
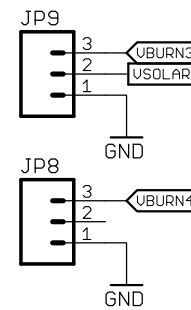


Solar Panel Connectors

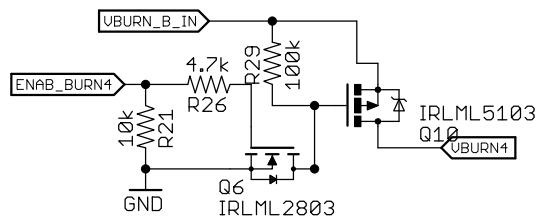
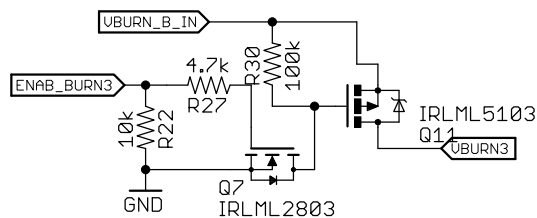
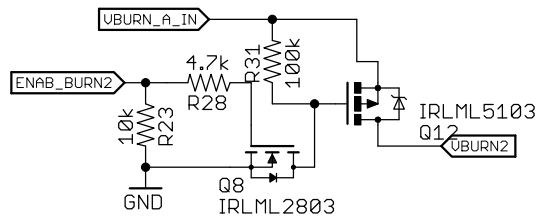
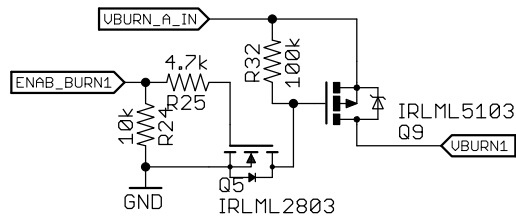
Antenna



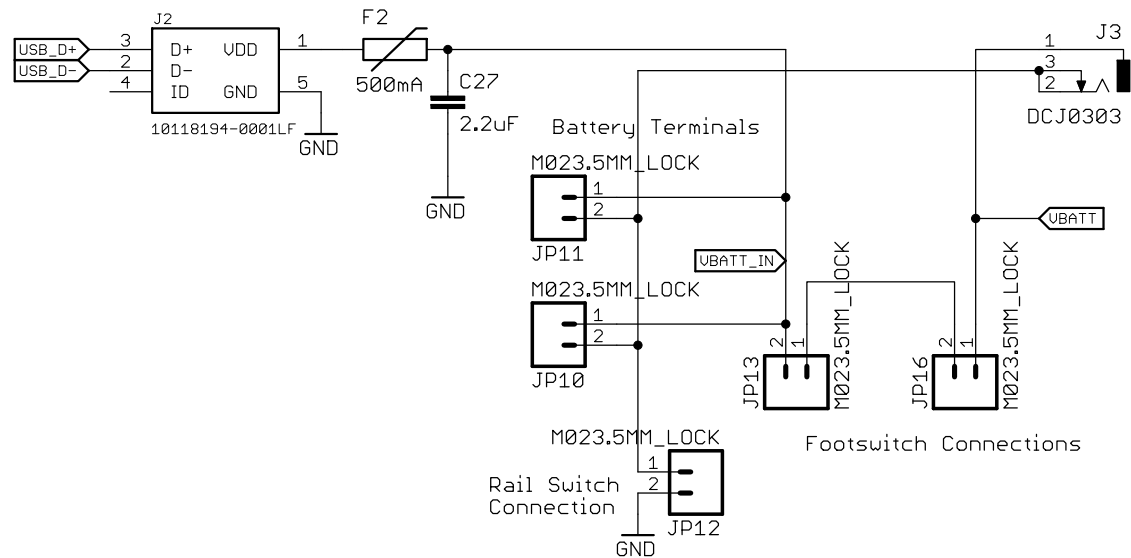
Sprite deployment



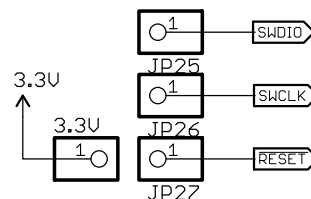
Burn Wire Control



Power Connectors: USB, Barrel Plug, Battery



JTAG



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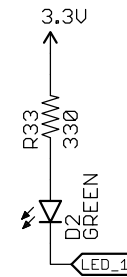
Design by:
 Zac Manchester, Max Holliday

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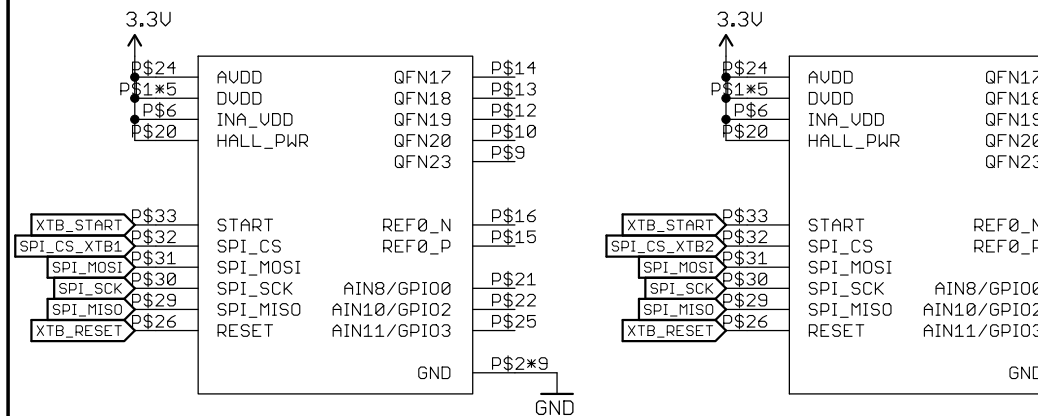
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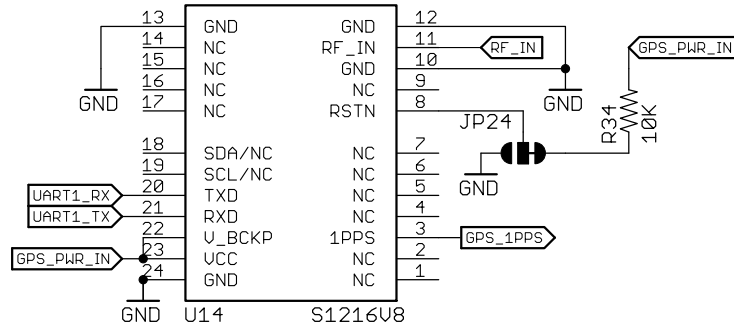
Spare IO breakout



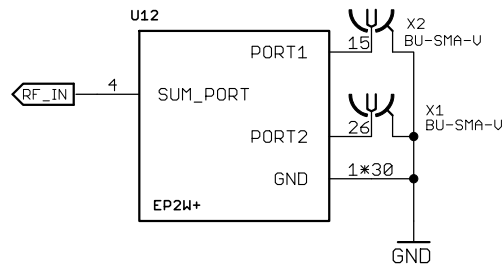
Xlab Test Boards (XTB)



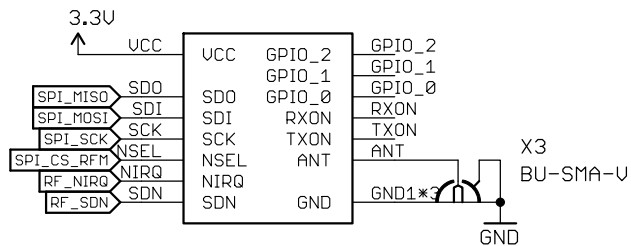
GPS Module



RF Splitter (2 Way, 0deg DC-Pass)



HopeRF RFM23B module at 3.3V
Modifications are currently needed
to the module for radiation tolerance



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