

Garnet Tanner

Andromeda

**SOAR**

Sheet: /

File: STM32\_SOAR\_Reference\_Board.sch

**Title: SOAR Avionics Development Board**

Size: USLetter    Date: 2017-12-03

KiCad E.D.A.    kicad 4.0.7

**Rev: 1**

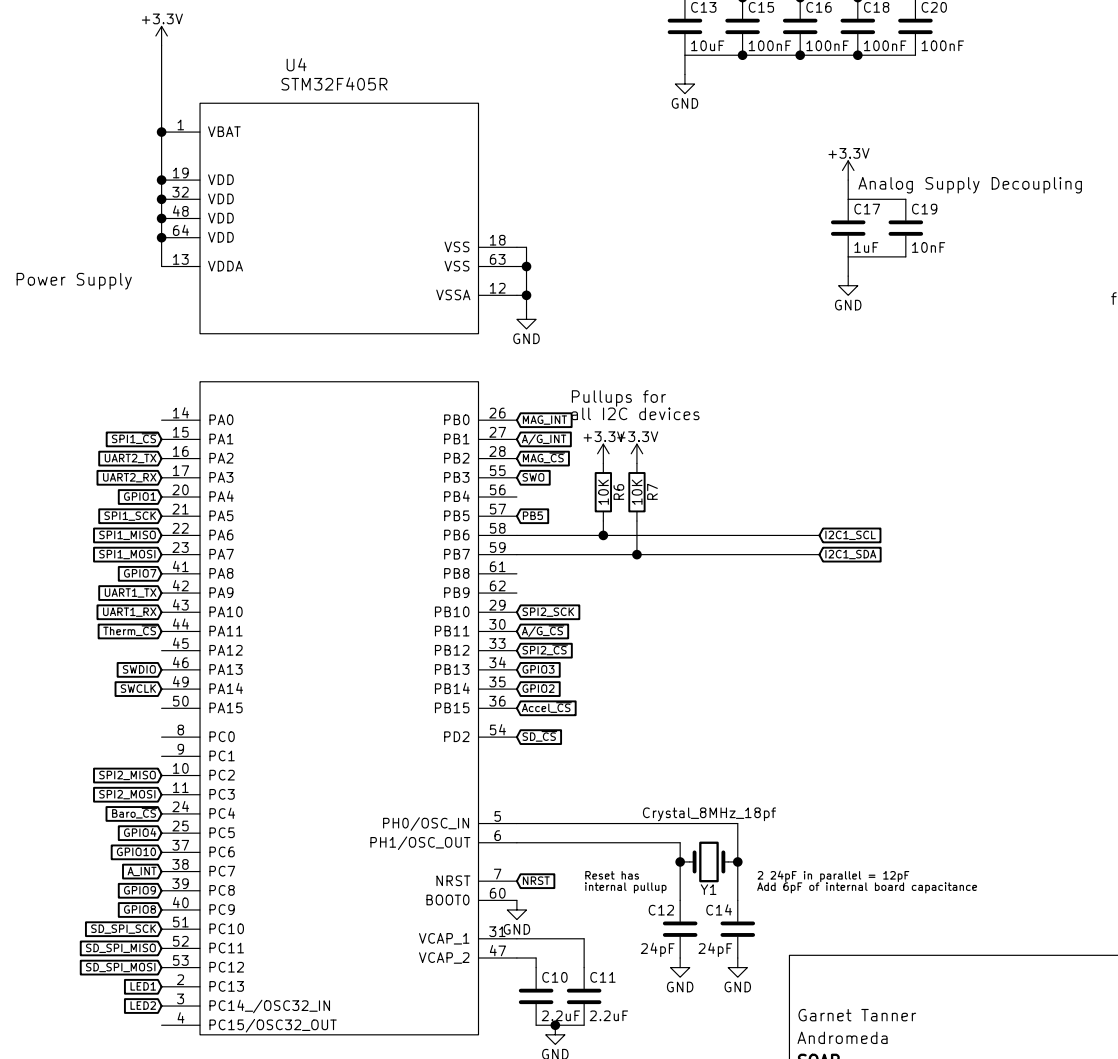
Id: 1/5



See STM32 Hardware Design Guide for schematic example

## STM32F405

Same family as F407 on Discovery boards



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Sheet: /MCU/  
File: MCU.sch

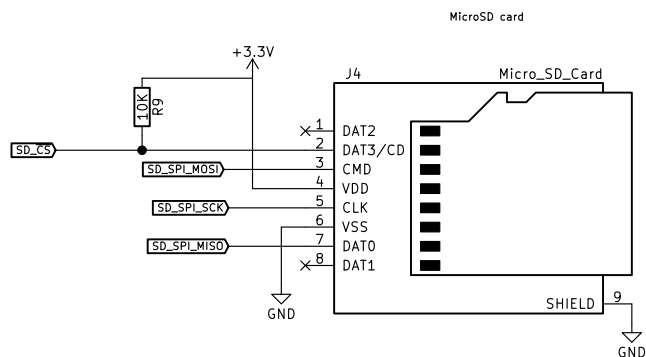
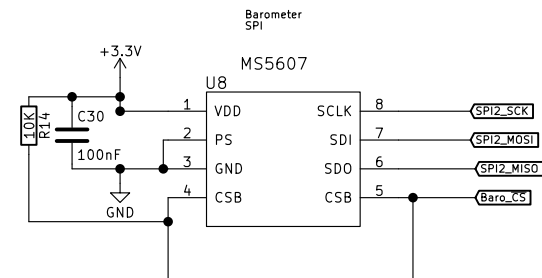
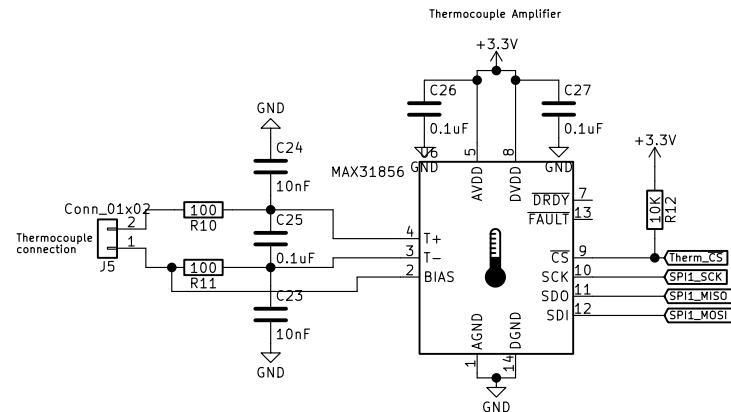
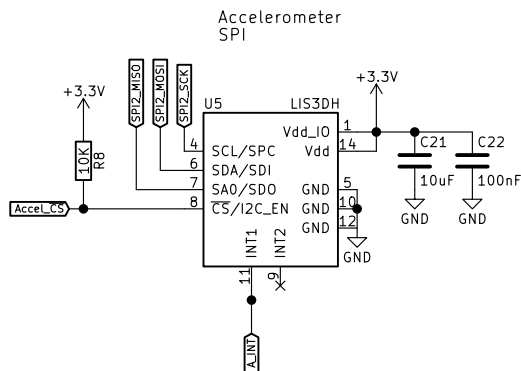
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Size: A4 Date: 2017-12-03

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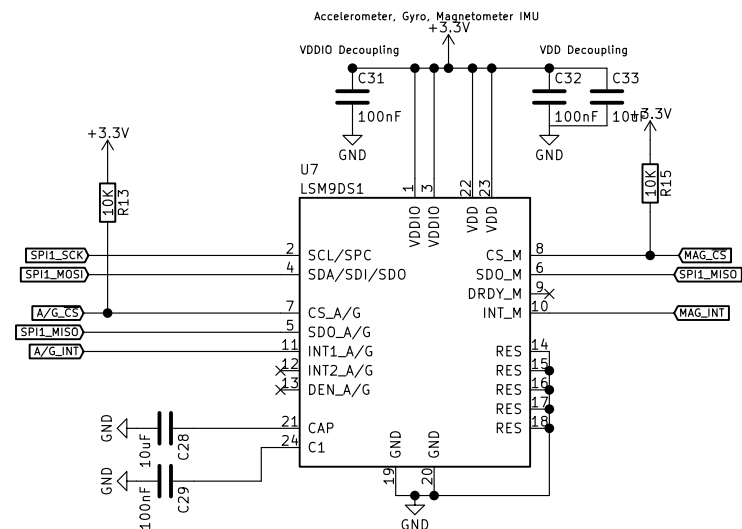
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SD card uses a lot of power. (100mA)  
Consider turning off SPI clock when not using to save power

SD card placed on its own SPI channel (SPI3)



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Sheet: /Peripherals/  
File: Peripherals.sch

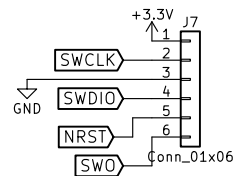
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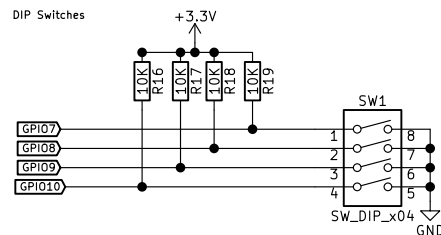
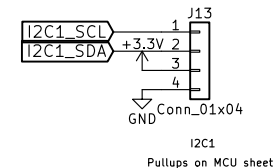
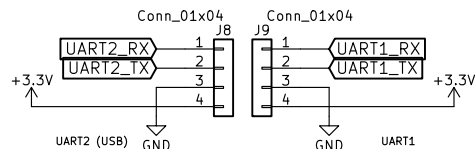
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**Rev: 1**

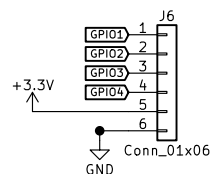
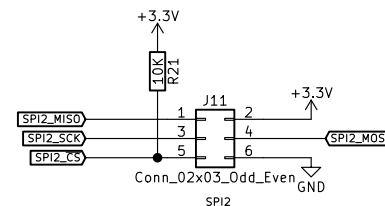
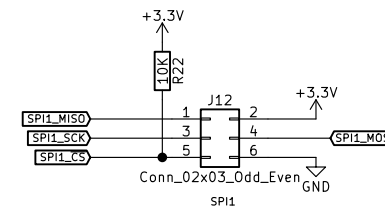
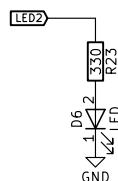
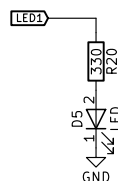
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SWD Programming  
For use with ST-Link V2 programmer  
or discovery board

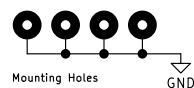


Debugging LED



Debug GPIO

MK1 MK2 MK3 MK4



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Sheet: /Headers and Debug/  
File: Headerssch.sch

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