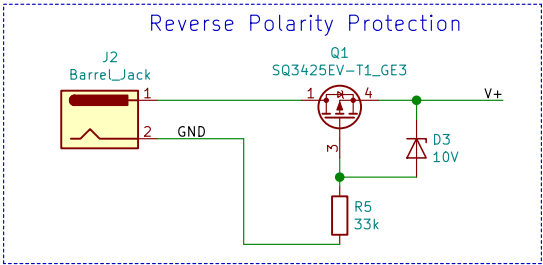
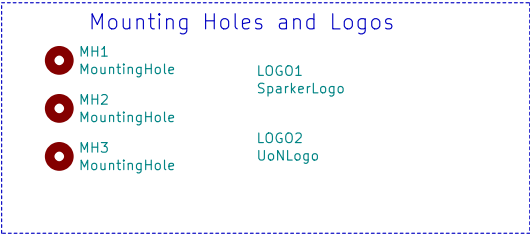
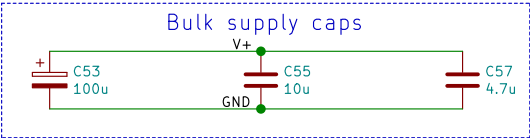
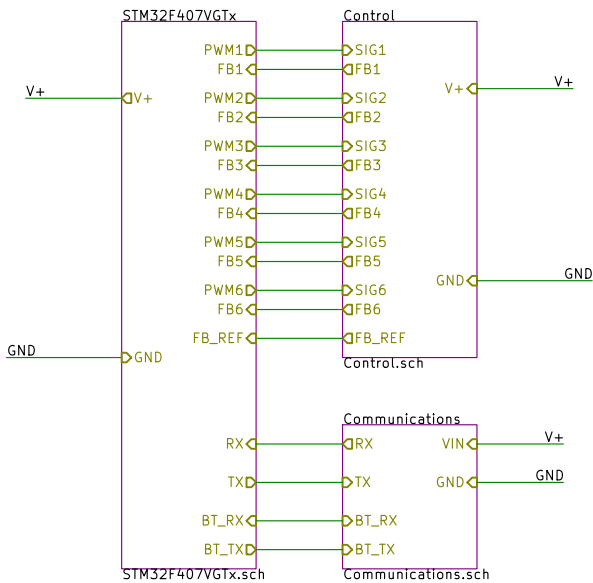
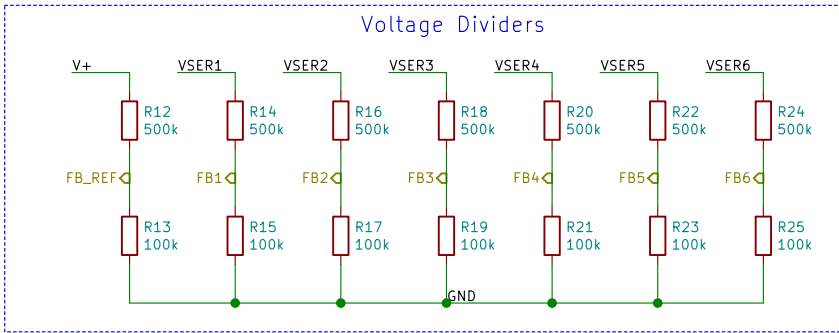
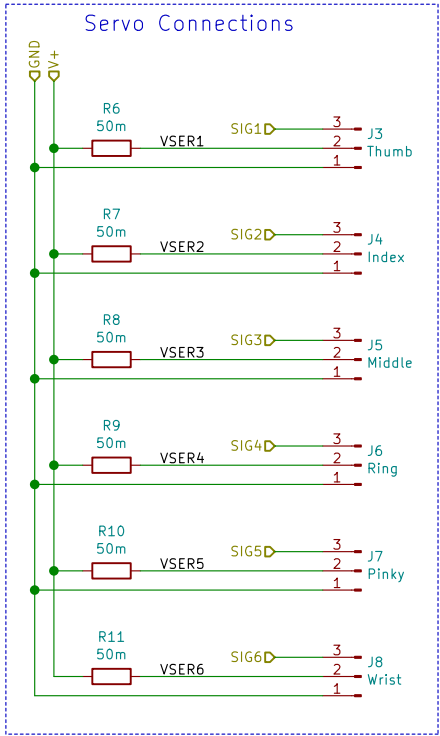


Classification and Control Board



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Title:		
Size: A4	Date:	Rev:
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Control



50mOhm current sense resistors.
Voltage before and after resistor passed through 1/5th voltage divider.
Voltage measured at FBx points by 16-bit ADC.
Voltage drop across resistor given by $FB_Ref - Value$.
Voltage drop across resistor $\times 5 / (50 \times 10^{-3})$ gives current consumed by each servo.
Voltage supply drop to servo should be minimal (and we are supplying near maximum end of rated voltage)

Sheet: /Control/
File: Control.sch

Title:

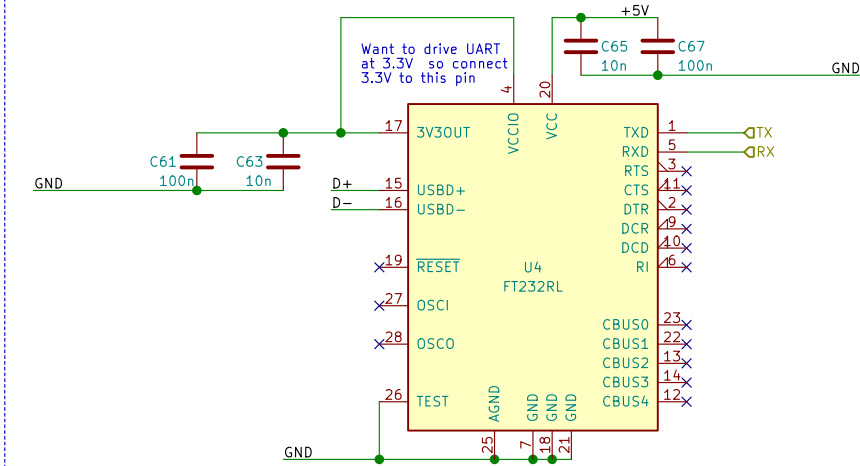
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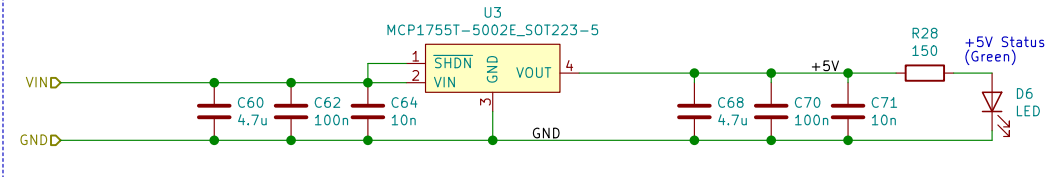
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Id: 2/4

Communications

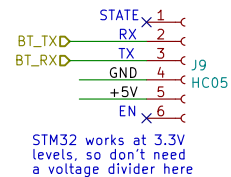
UART to USB Interface



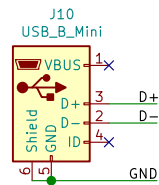
5V Voltage Regulator



Bluetooth Module



USB Port



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File: Communications.sch

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Date:

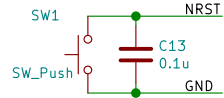
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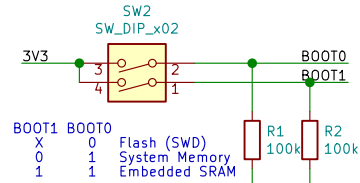
Id: 3/4

STM32F407VGTx

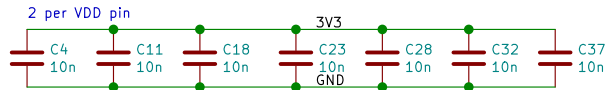
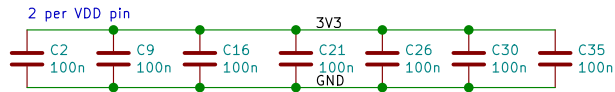
Reset Button



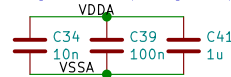
Bootloader Configuration



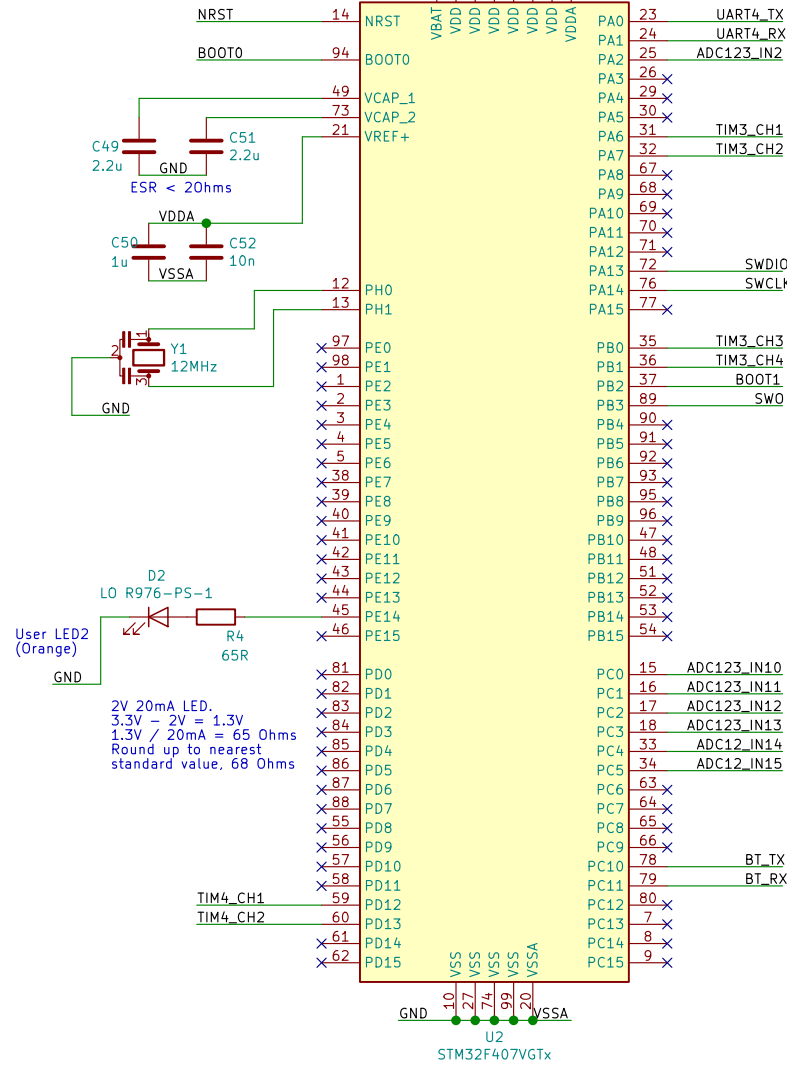
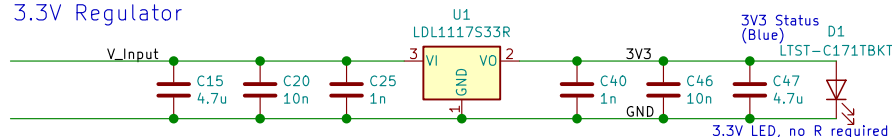
Decoupling Caps



Analog Decoupling Caps



3.3V Regulator



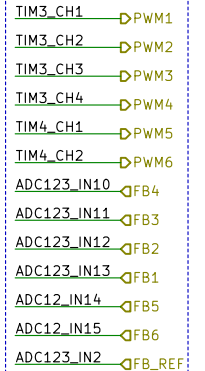
SWD Programming Header



UART



Control



Power



Sheet: /STM32F407VGTx/
File: STM32F407VGTx.sch

Title:

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