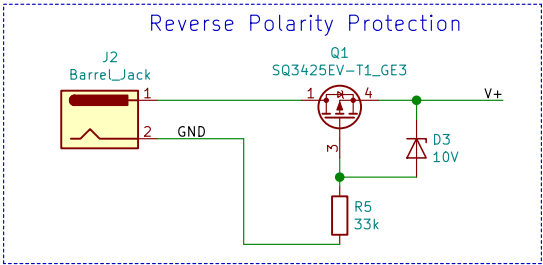
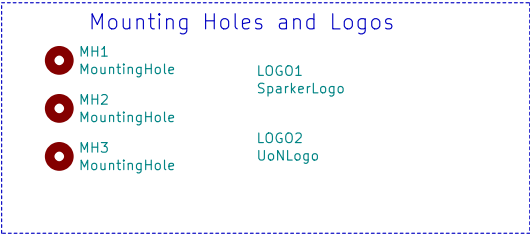
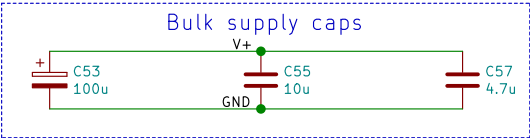
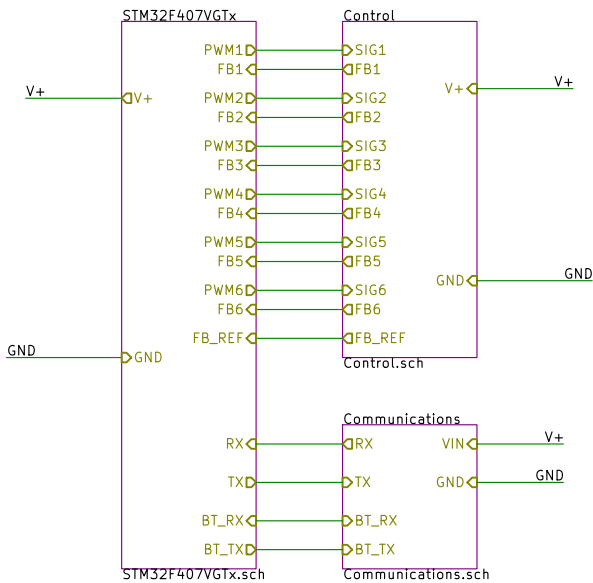
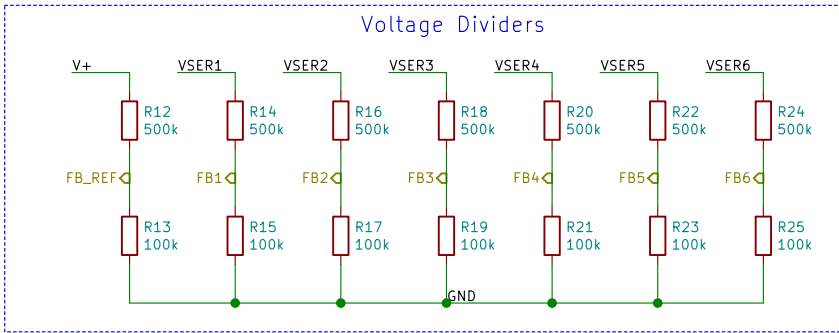
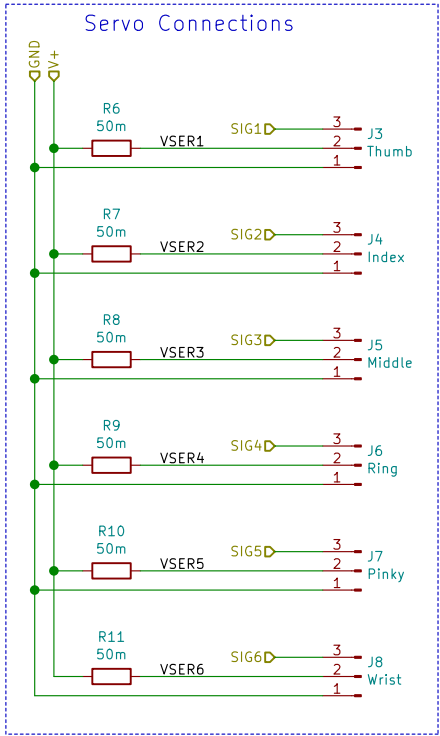


Classification and Control Board



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Control



50mOhm current sense resistors.
Voltage before and after resistor passed through 1/6th voltage divider.
Voltage measured at FBx points by 16-bit ADC.
Voltage drop across resistor given by $FB_Ref - Value$.
Voltage drop across resistor $\times 6 / (50 \times 10^{-3})$ 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

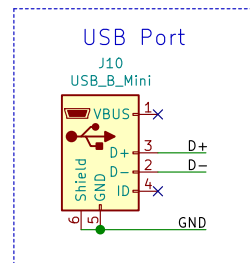
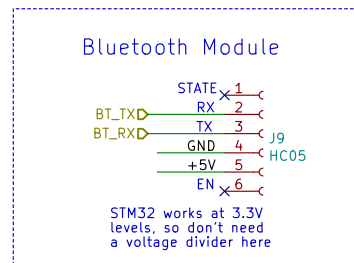
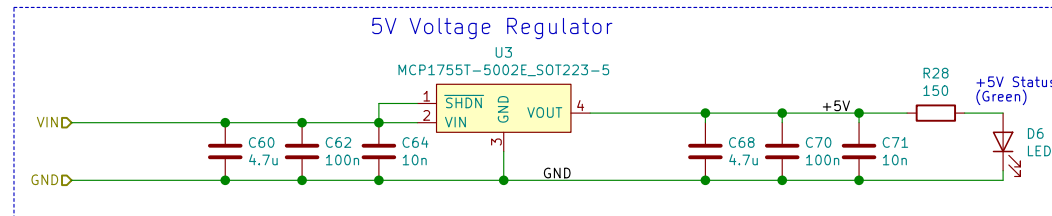
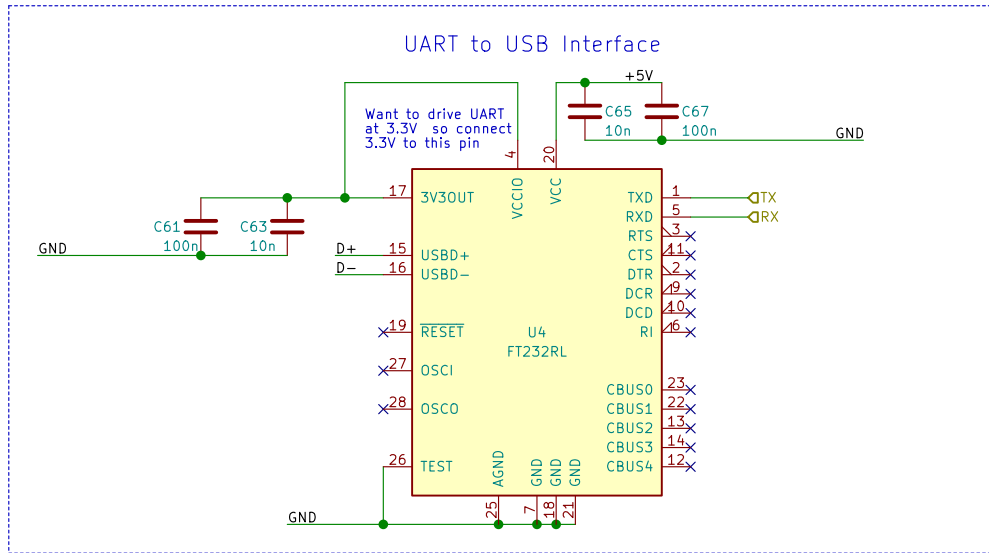
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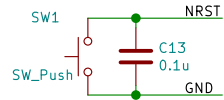
Communications



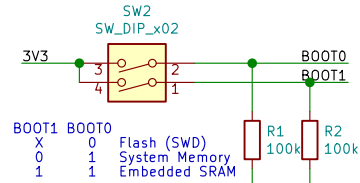
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STM32F407VGTx

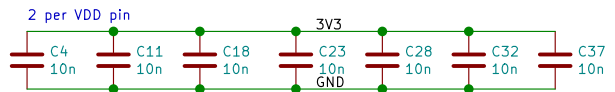
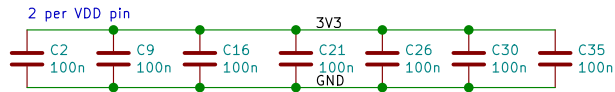
Reset Button



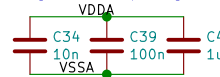
Bootloader Configuration



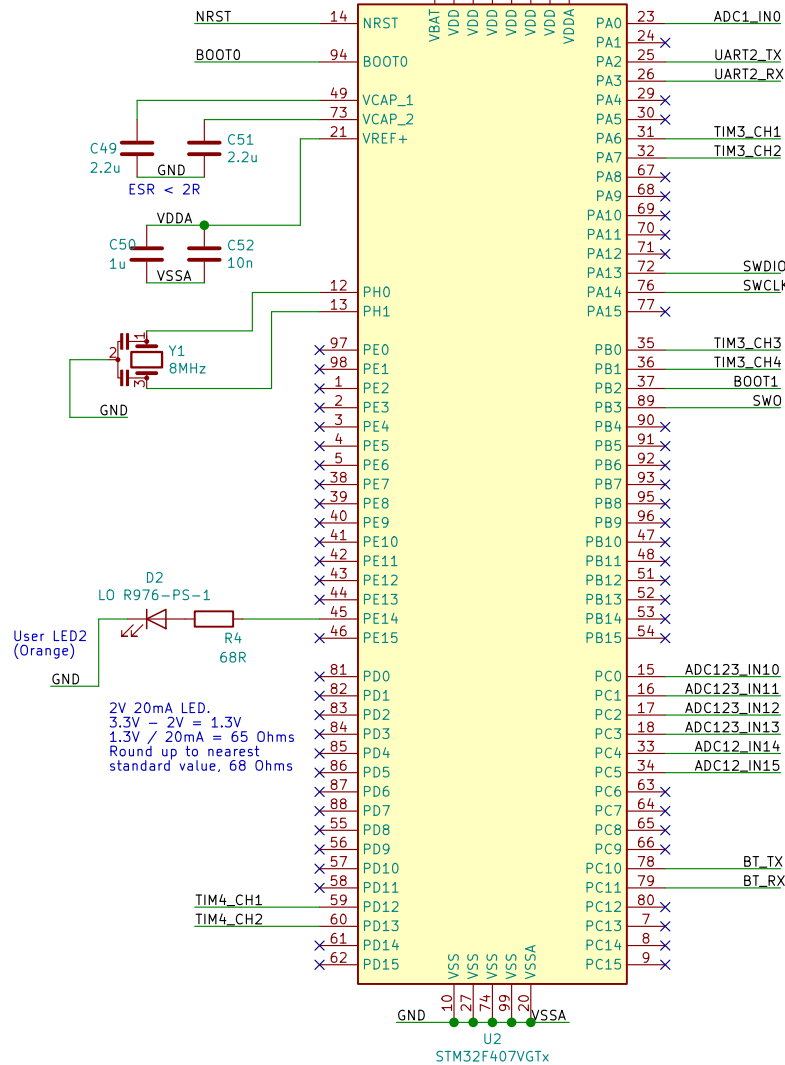
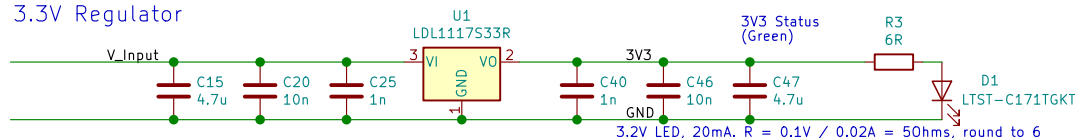
Decoupling Caps



Analog Decoupling Caps



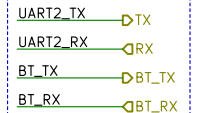
3.3V Regulator



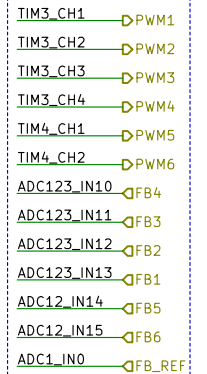
SWD Programming Header



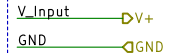
UART



Control



Power



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