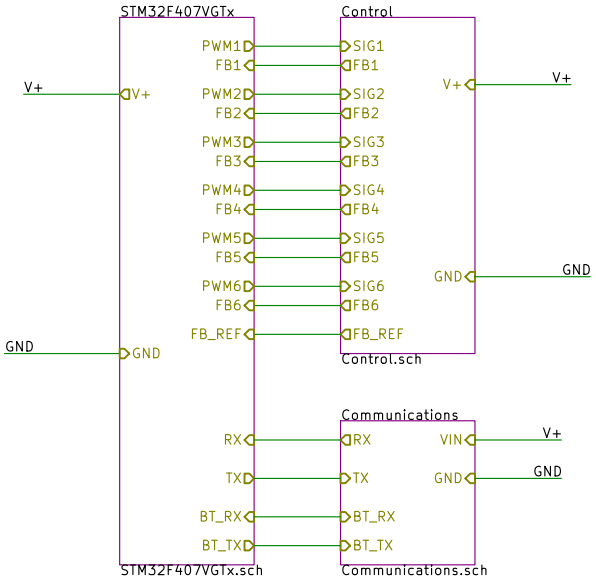
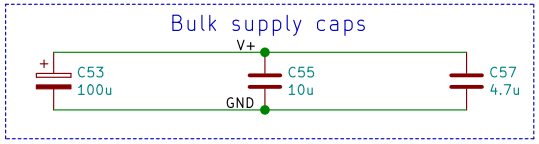
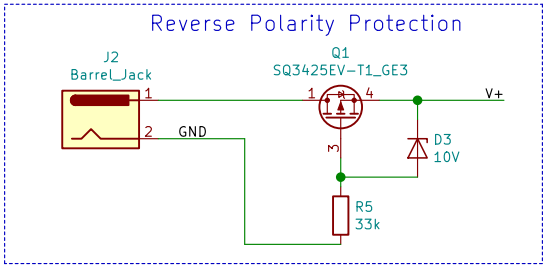
Classification and Control Board







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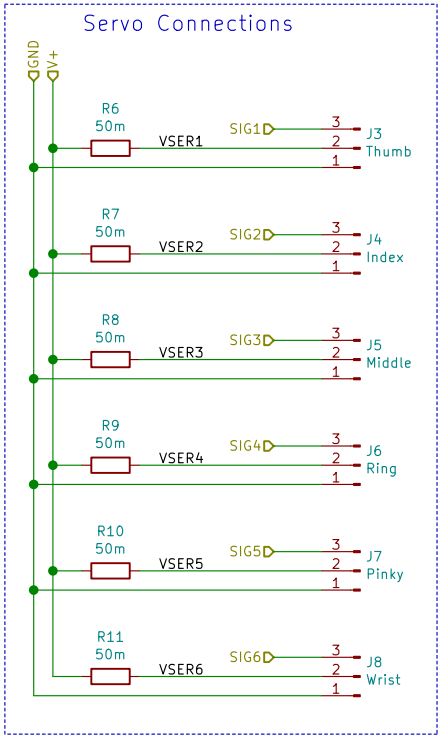
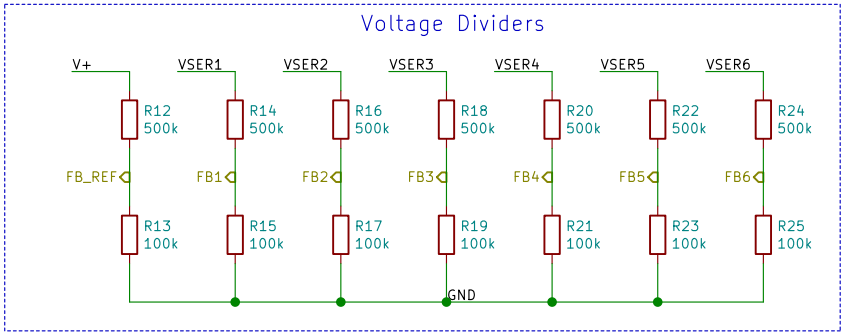
Control





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 * 5 / (50 x10^-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)

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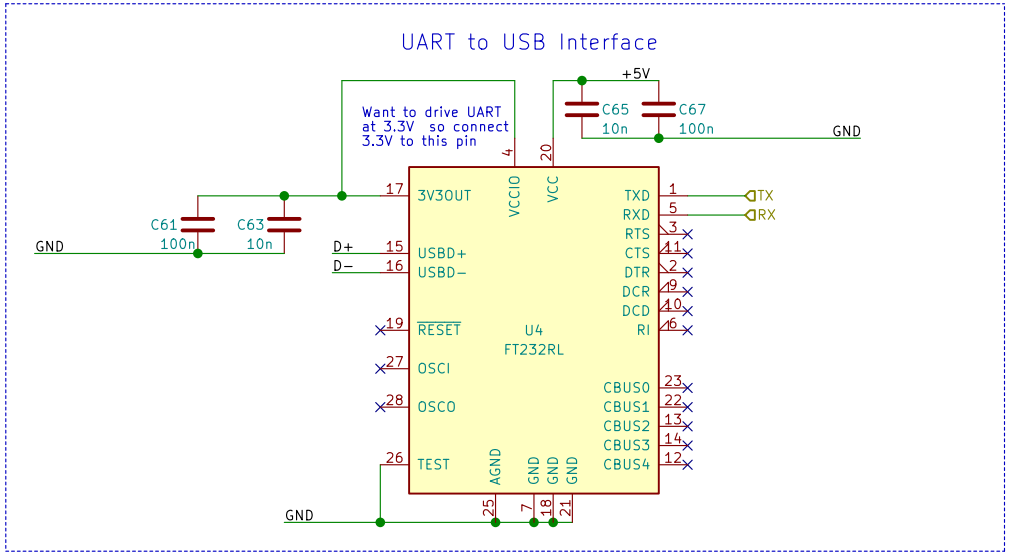
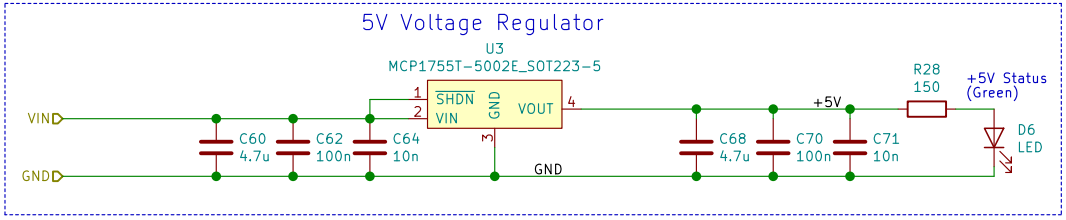
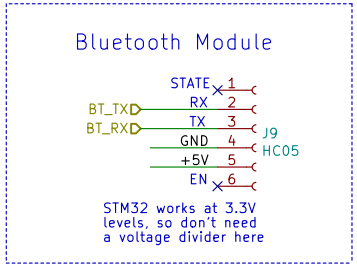
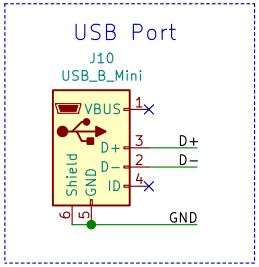
Communications









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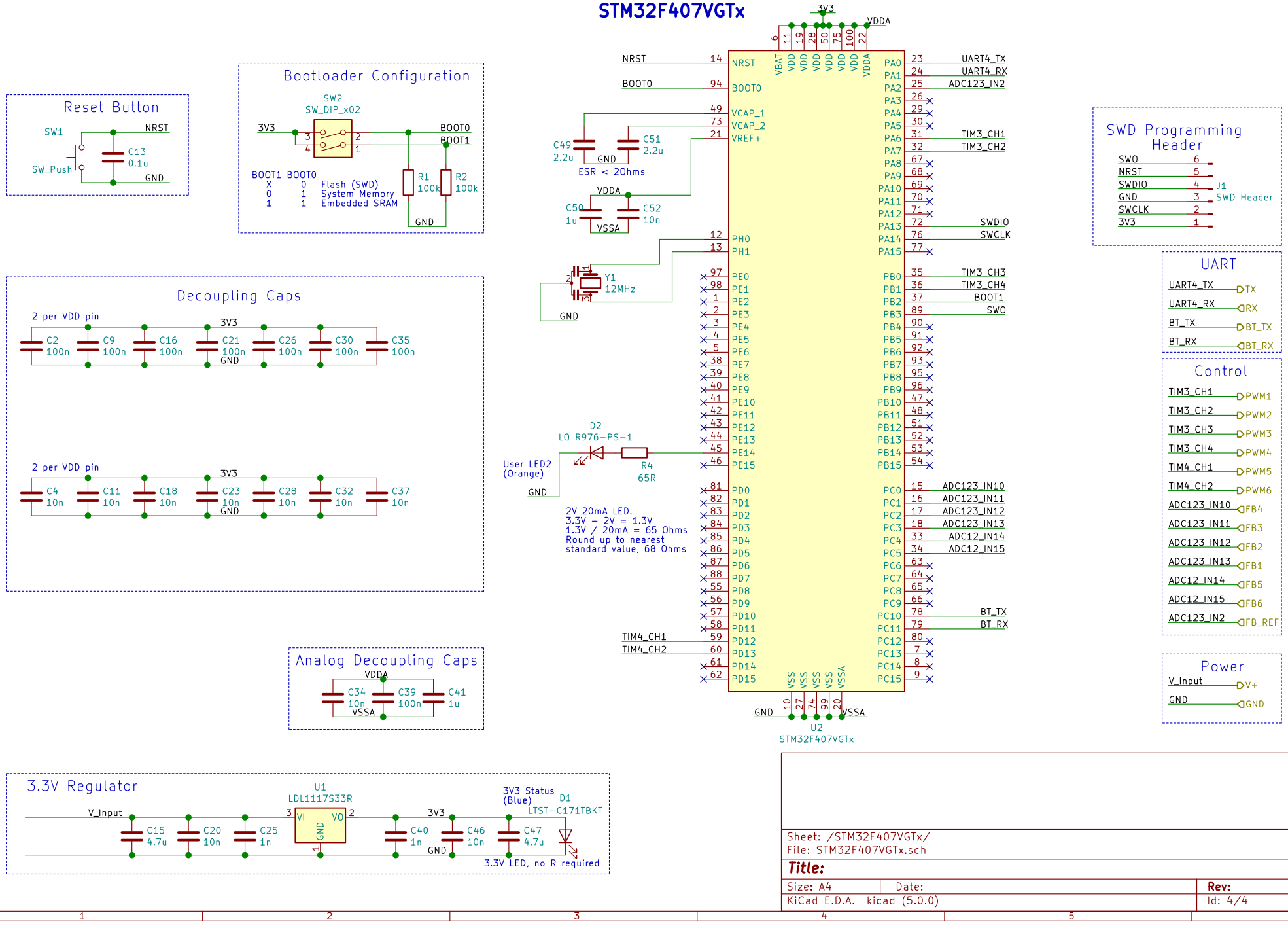
STM32F407VGTx



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