

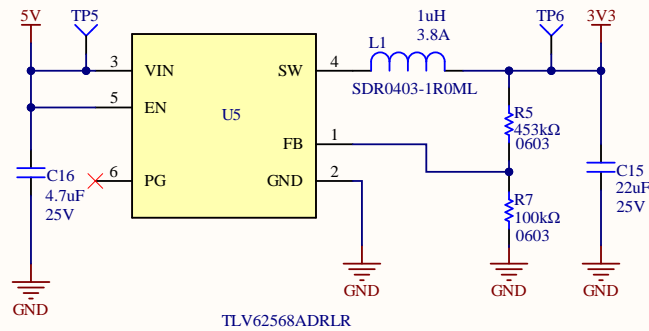
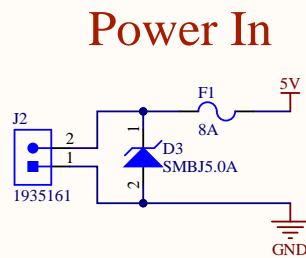
# 5V - 3.3V Buck Converter

Designed for 3.3V - 5V input

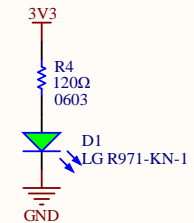
Route for 1A in

Inductor: SDR0403-1R0ML  
1uH, 20%, 33mOhm DCR (max)  
3.8A (rms), 5.5A (sat), 3.2mm tall

Route for 3A out



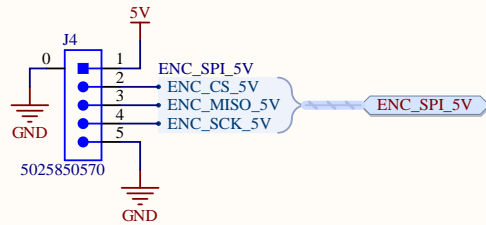
Maximum output current = 2A  
Maximum output power = 6.6W  
Expected efficiency at 1A = 94.3%



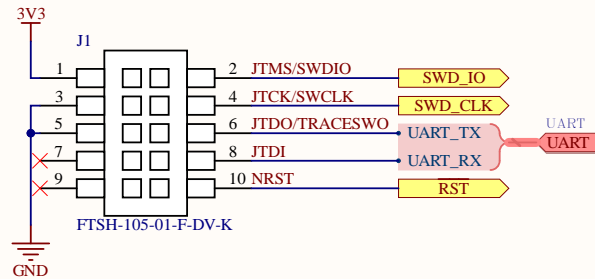
**Current Calculations**

Green LED voltage drop: 2.2V  
- I = (3.3-2.2V)/120 = 10.83mA

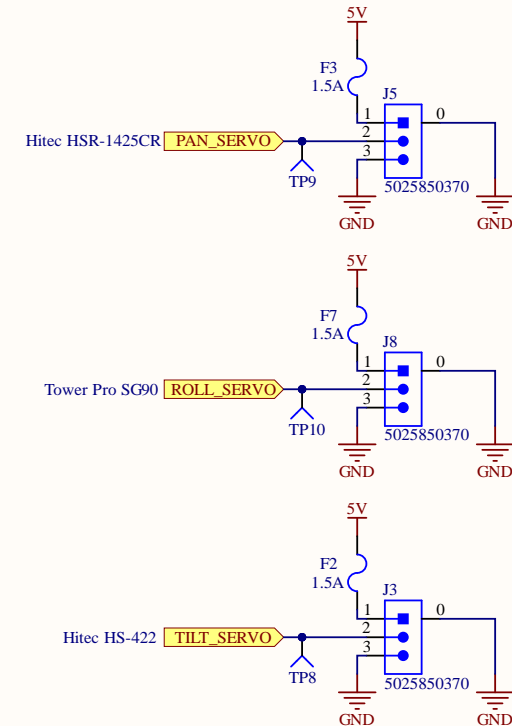
## Encoder



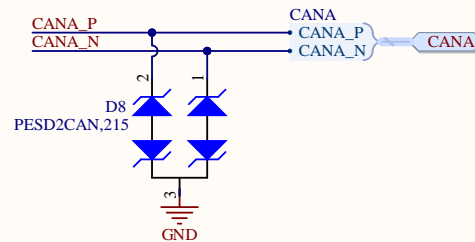
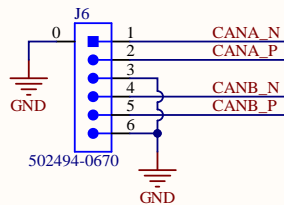
## Debug/Programming



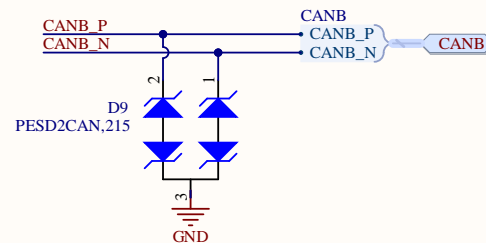
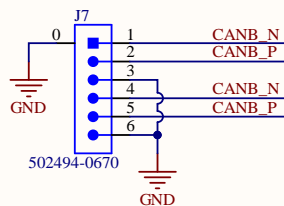
## 3-Axis Servos



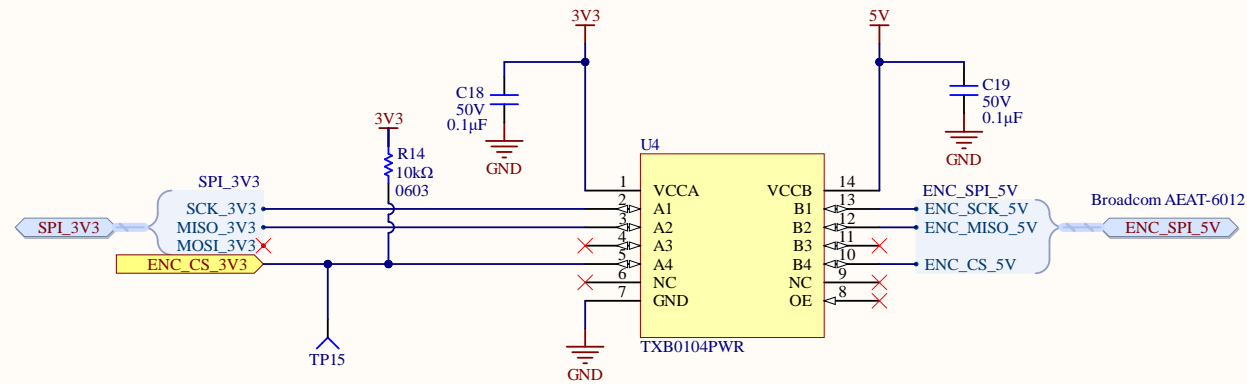
## CAN BUS A

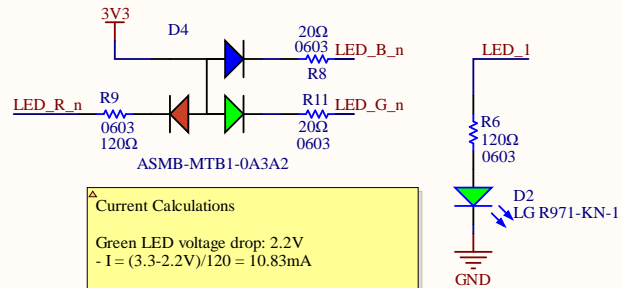


## CAN BUS B



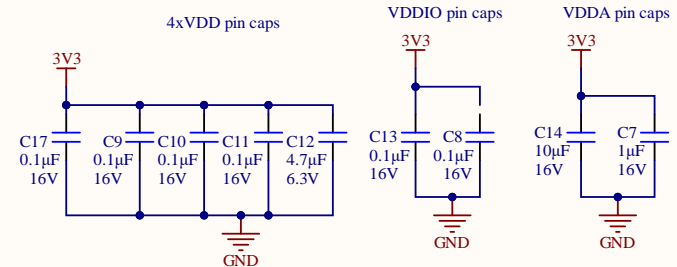
## SPI Encoder Level Shifter



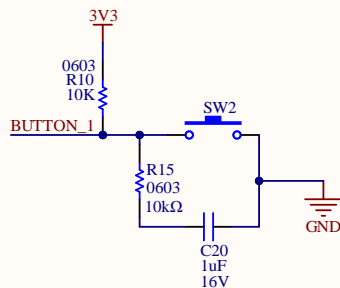
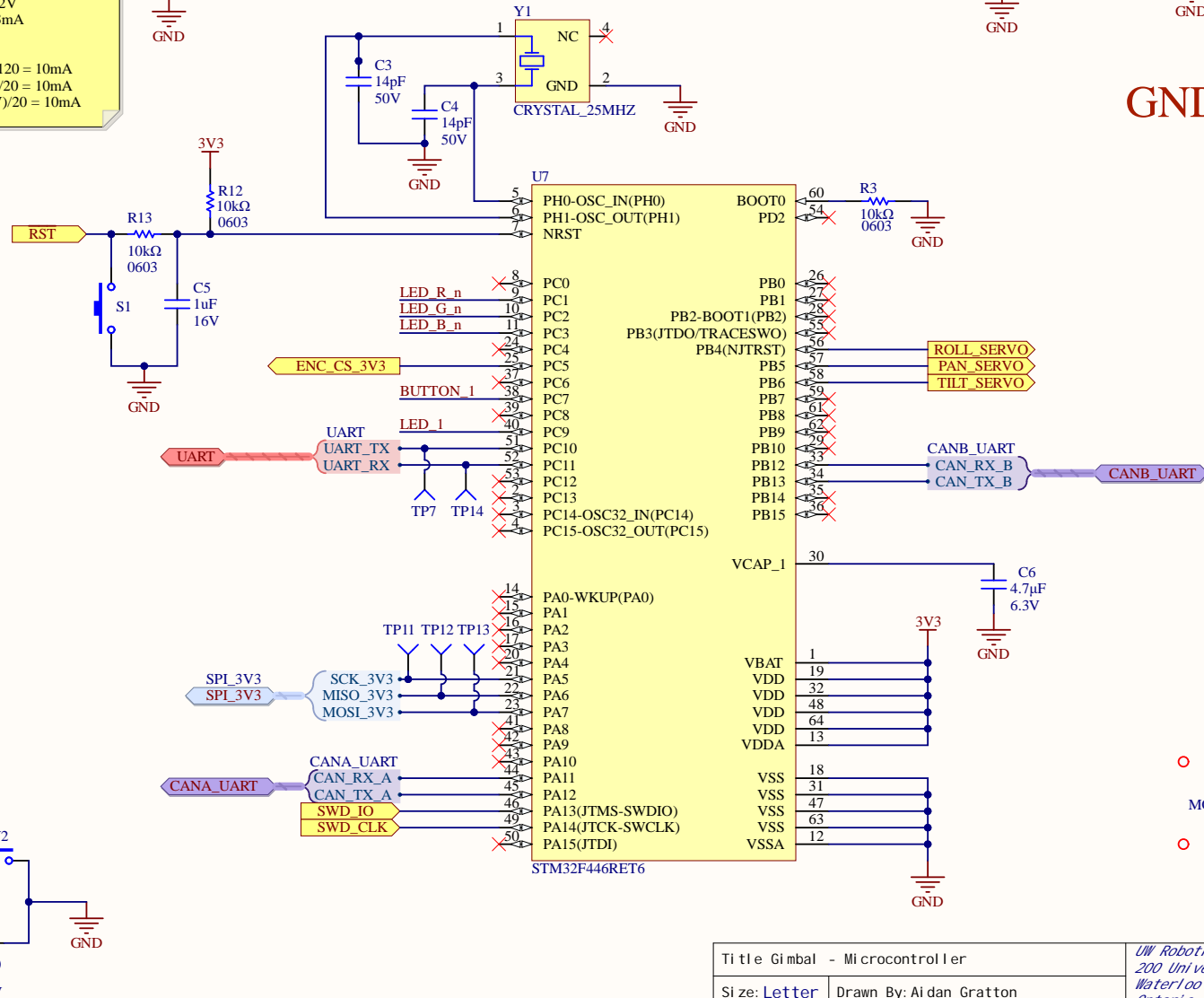
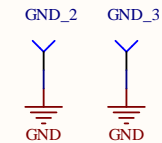


## STM32F446RET6

## Decoupling Caps



## GND Test Points



# CAN Transceivers

