

## External Interface

ExternalInterface.sch

## Power

Power.sch

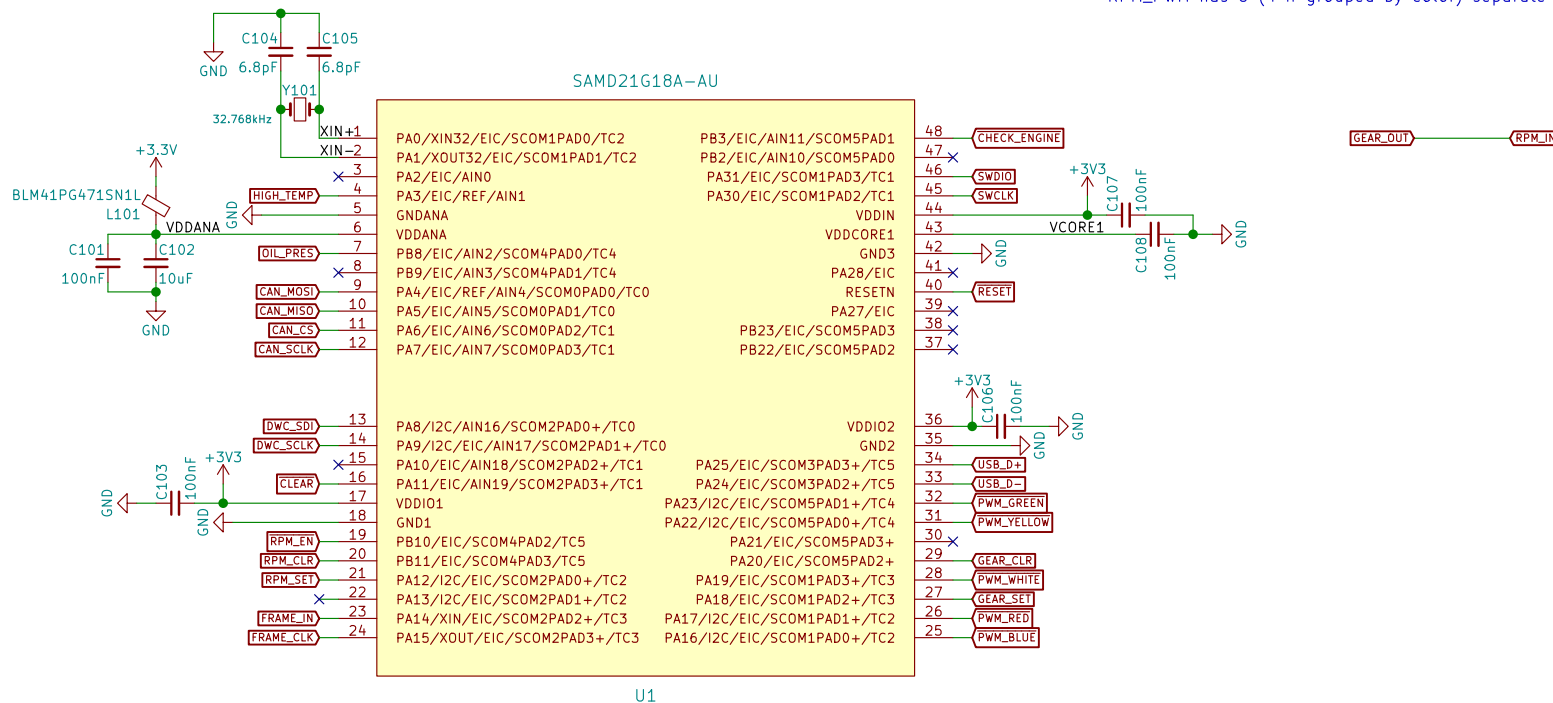
## CAN

CAN.sch

## Display

Display.sch

Pins that support I2C: PA8, PA9, PA12, PA13, PA16, PA17, PA22, PA23  
 PA8 and PA9 (13+14) for I2C connection with Warning Panel  
 PA4 through PA7 (9-12) for SPI connection with CAN  
 PA27 RX LED  
 PB3 TX LED  
 RPM\_PWM has 6 (4 if grouped by color) separate inputs



Sheet: /  
 File: FSAE Main Panel.sch

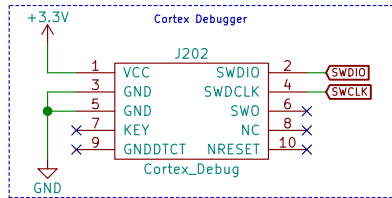
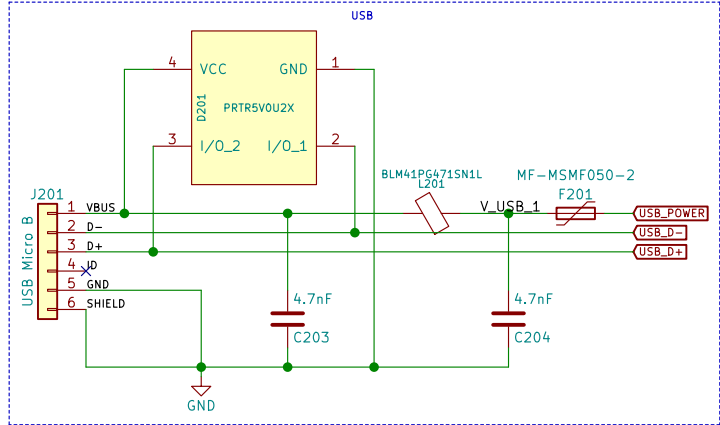
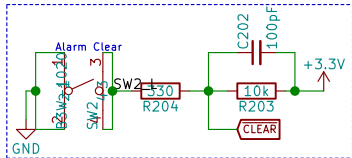
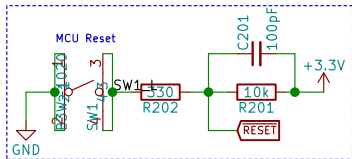
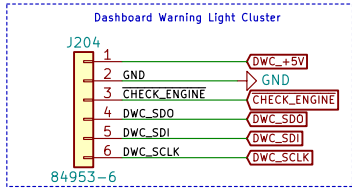
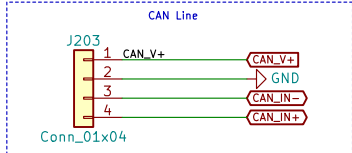
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File: ExternalInterface.sch

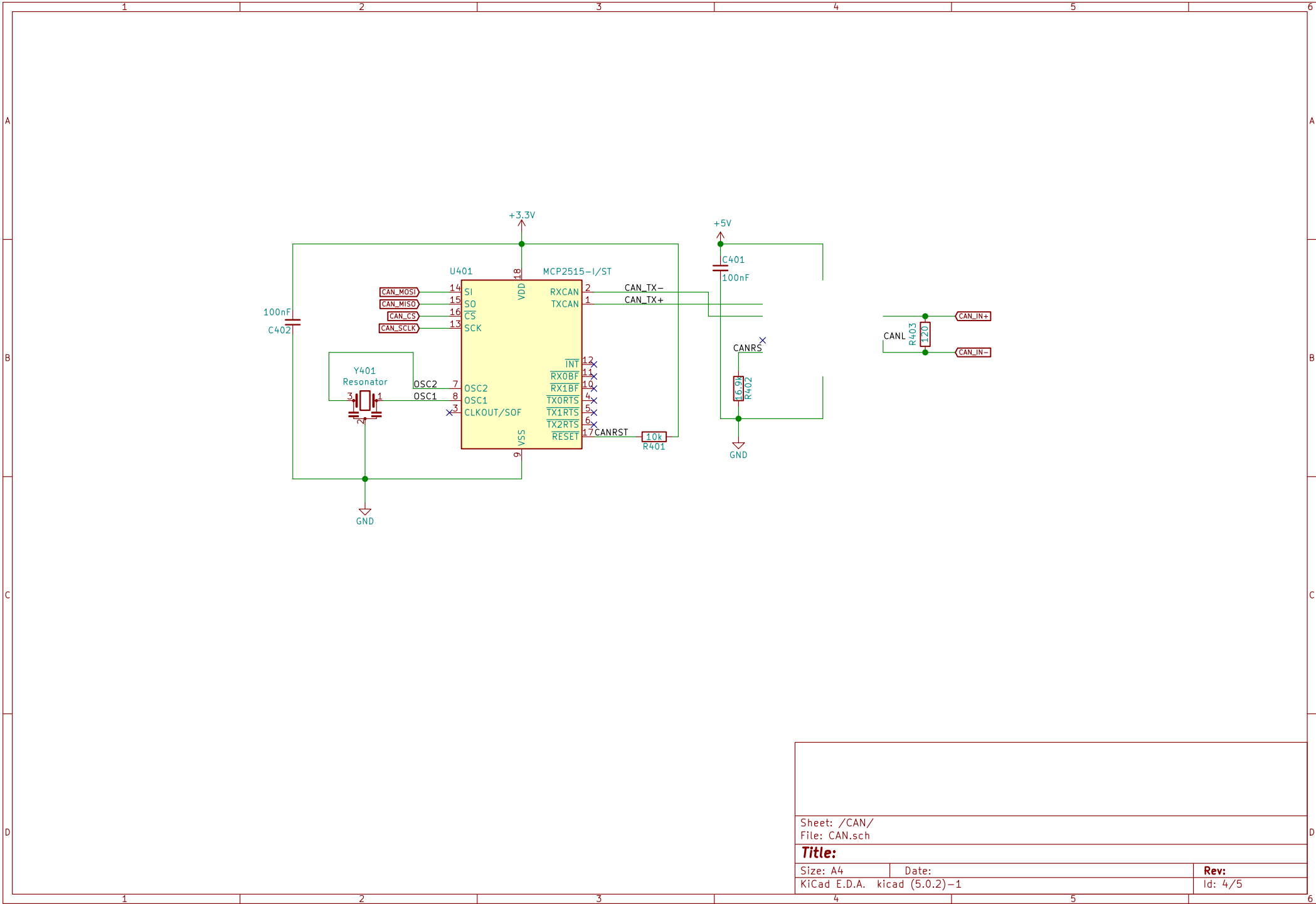
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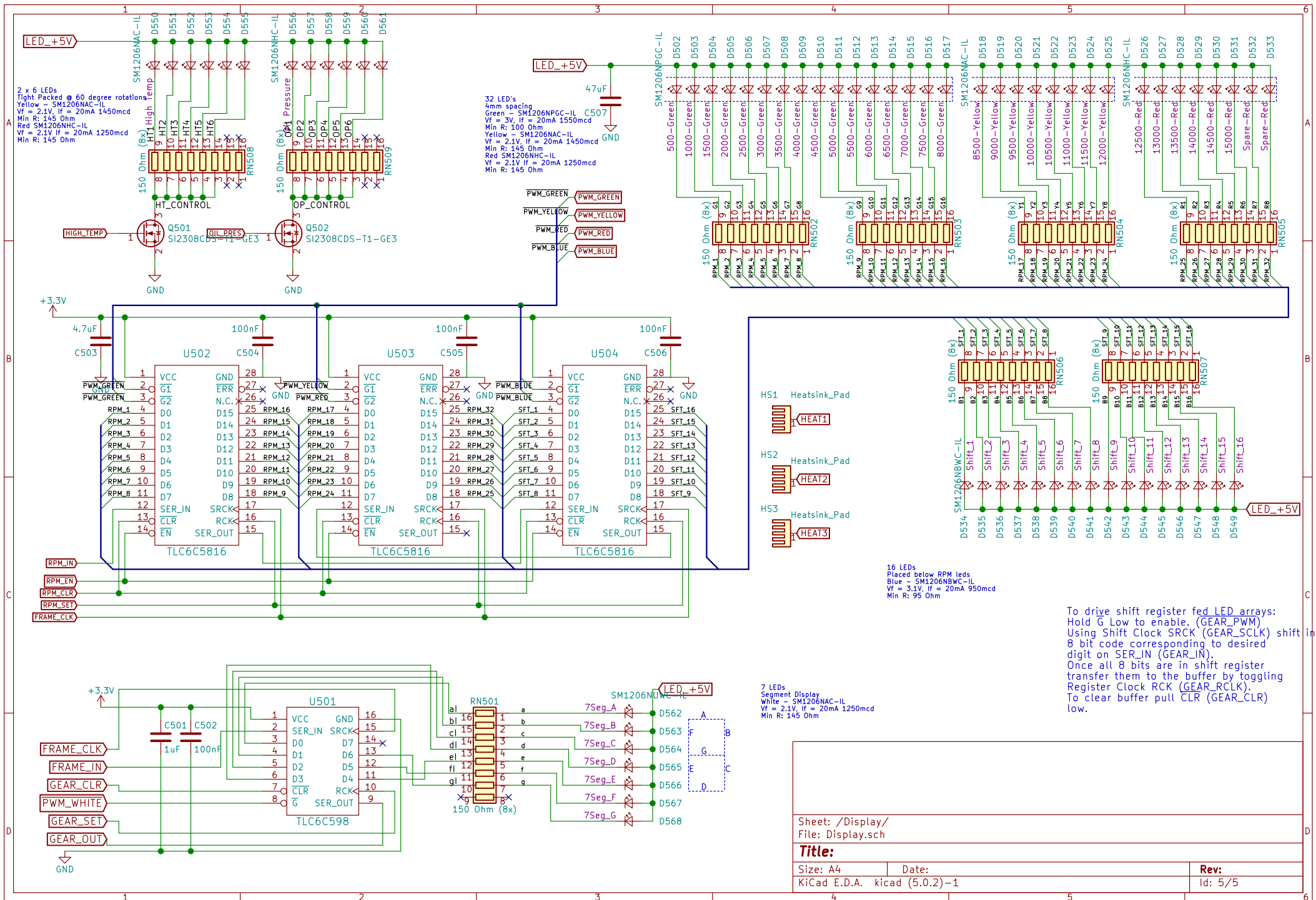
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Id: 2/5







To drive shift register fed LED arrays:  
Hold G Low to enable. (GEAR\_PWM)  
Using Shift Clock SRCK (GEAR\_SCLK) shift in  
8 bit code corresponding to desired  
digit on SER\_IN (GEAR\_IN).  
Once all 8 bits are in shift register  
transfer them to the buffer by toggling  
Register Clock RCK (GEAR\_RCLK).  
To clear buffer pull CLR (GEAR\_CLR)  
low.

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