

MCU

File: mcu.kicad\_sch

Sensors

File: sensors.kicad\_sch

Bluetooth

File: bluetooth.kicad\_sch

Outputs

File: outputs.kicad\_sch

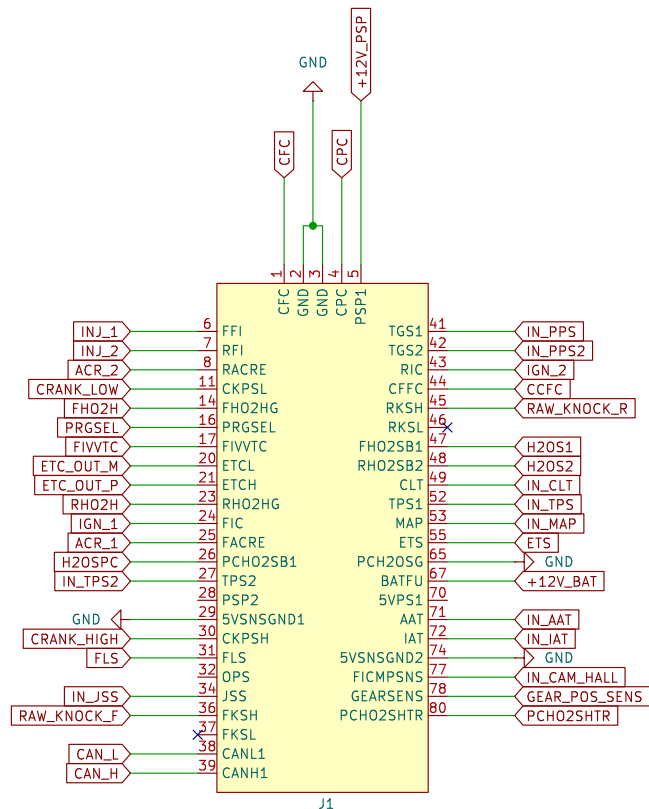
TODO:

Do we need to connect PSP2? Like connect it directly to PSP1 or sth? Measure at OEM ECU.

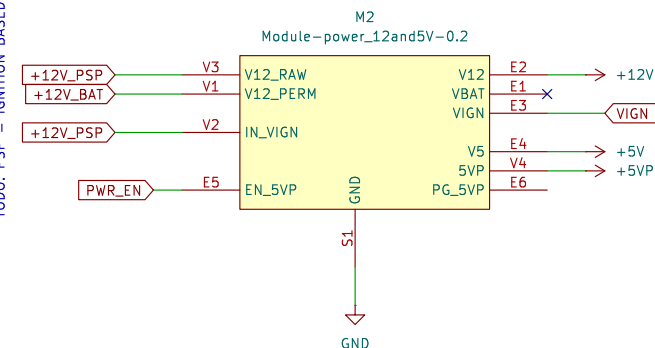
DONE: GEARSSENS analyze the signal -&gt; Kind of analog?

DONE: AM POSITION = FICMPSNS Hall effect or what is that?

Knock Sensor LOW signals not needed?



TODO: PSP = IGNITION BASED?



GND TestPoint\_Probe TP1  
 +3V3 TestPoint\_Probe TP2  
 +5V TestPoint\_Probe TP3  
 +12V TestPoint\_Probe TP4  
 +3V3SW TestPoint\_Probe TP5

FID1 Fiducial  
 FID2 Fiducial  
 FID3 Fiducial  
 FID4 Fiducial

Hellen-Bremen

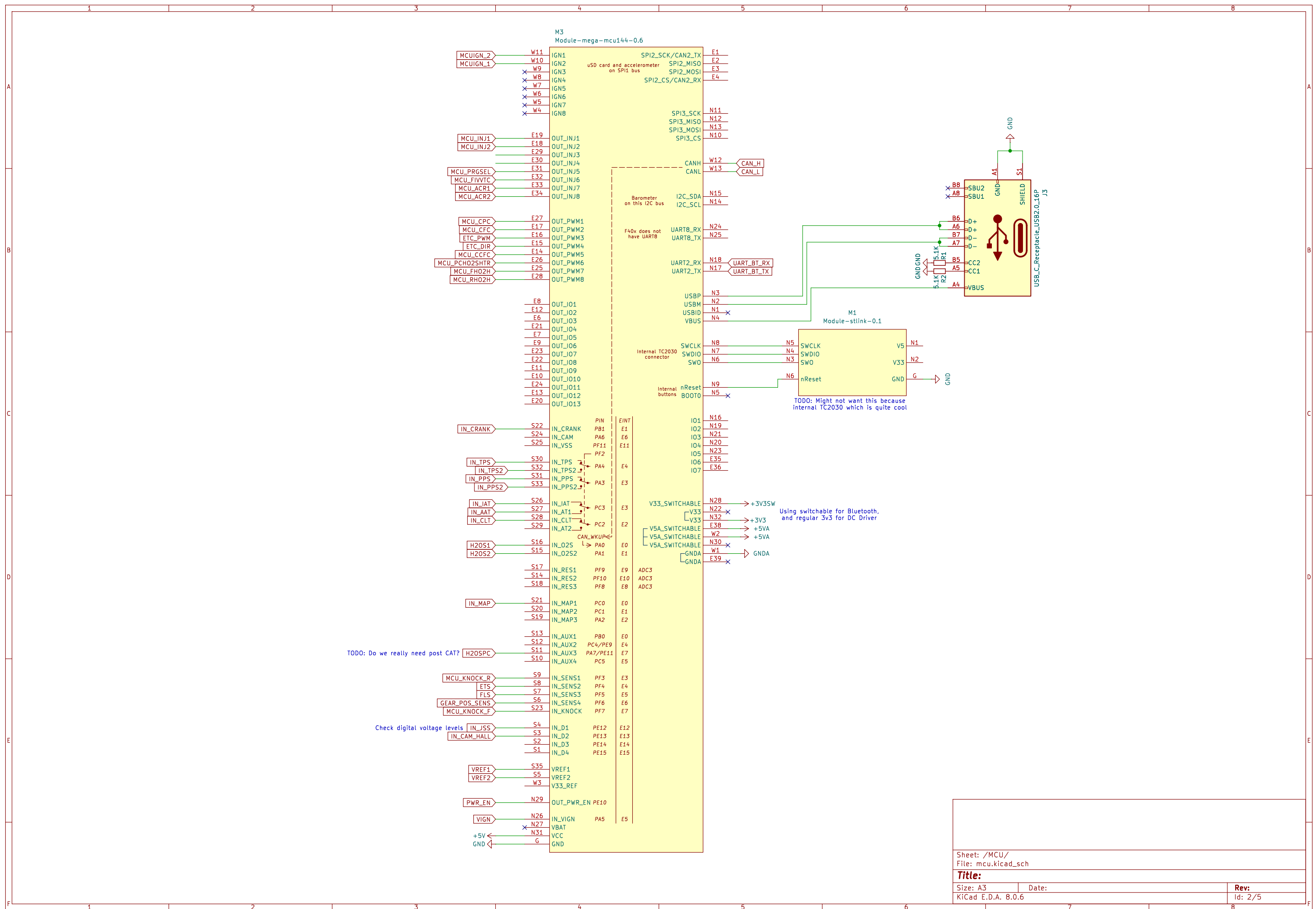
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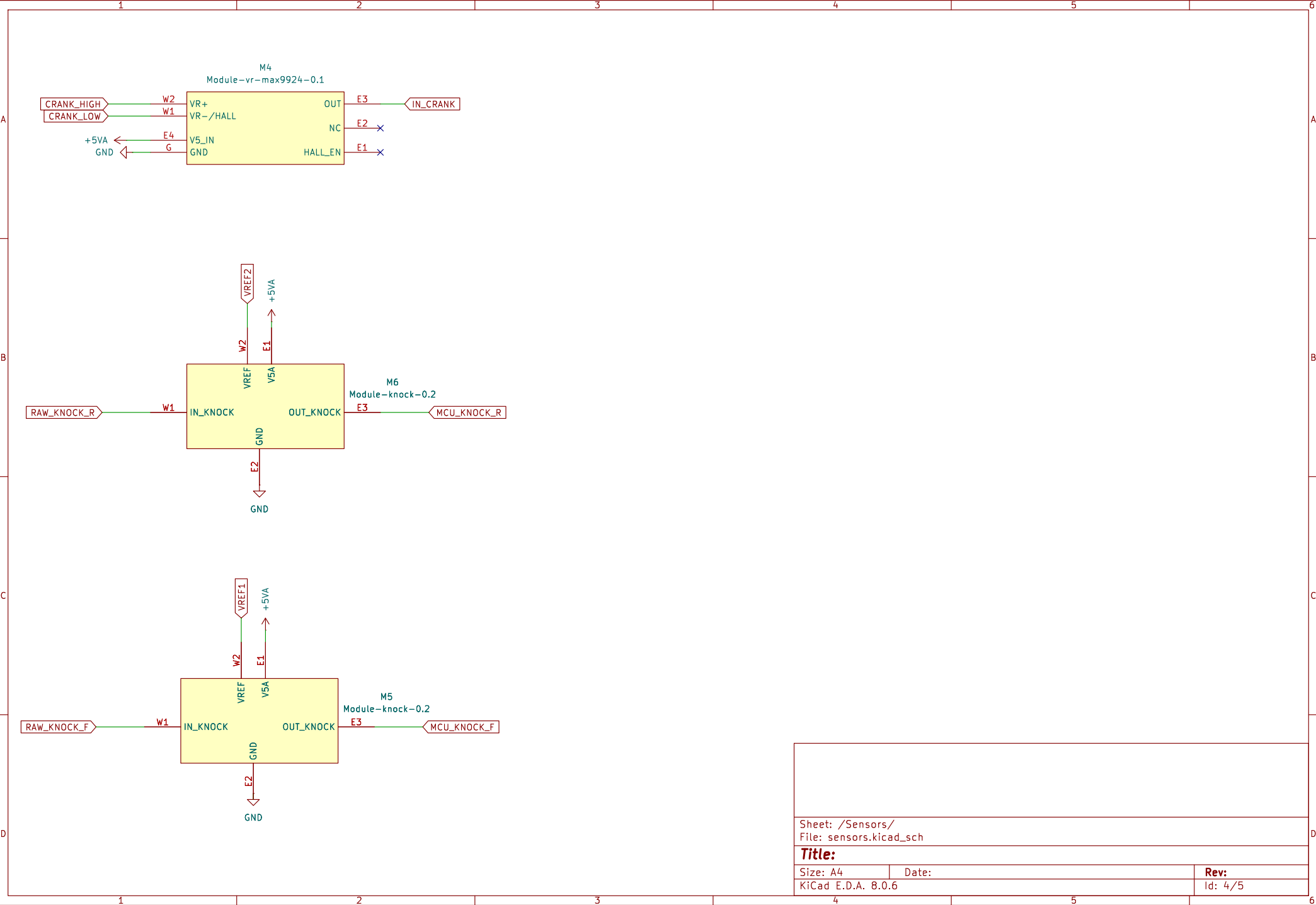
Title:

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 KiCad E.D.A. 8.0.6

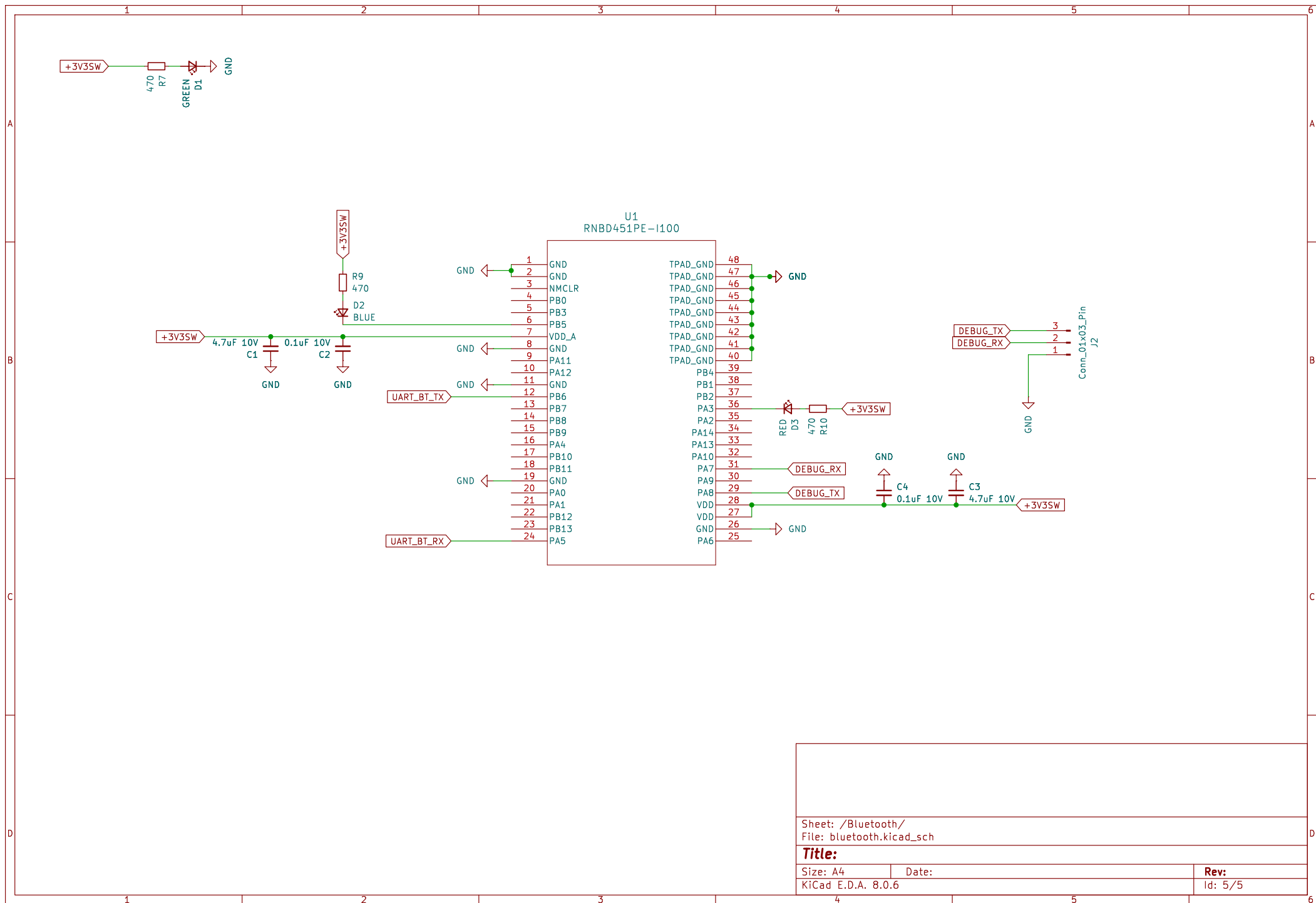
Date:

Rev: A  
 Id: 1/5





Sheet: /Sensors/ File: sensors.kicad_sch		
Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. 8.0.6	Id: 4/5	



Sheet: /Bluetooth/  
File: bluetooth.kicad\_sch

**Title:**

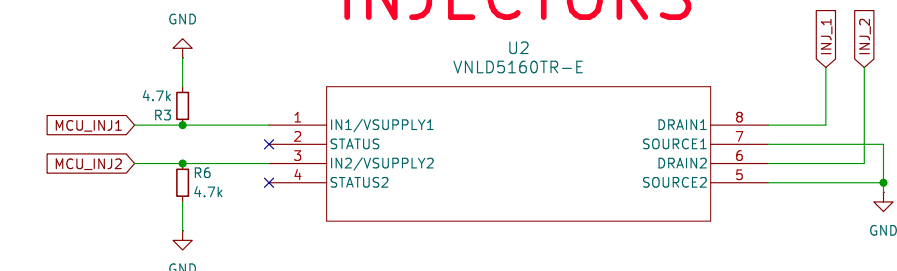
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KiCad E.D.A. 8.0.6

**Rev:**

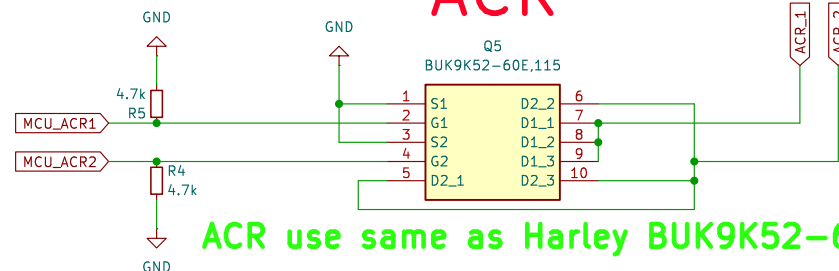
Id: 5/5

# INJECTORS



INJECTORS MEASURED TO TAKE MAX 1A EACH WHEN OPEN

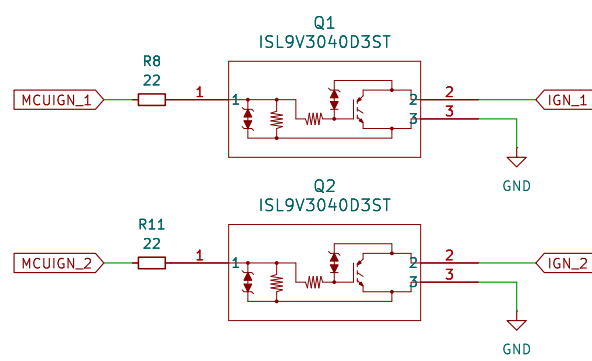
# ACR



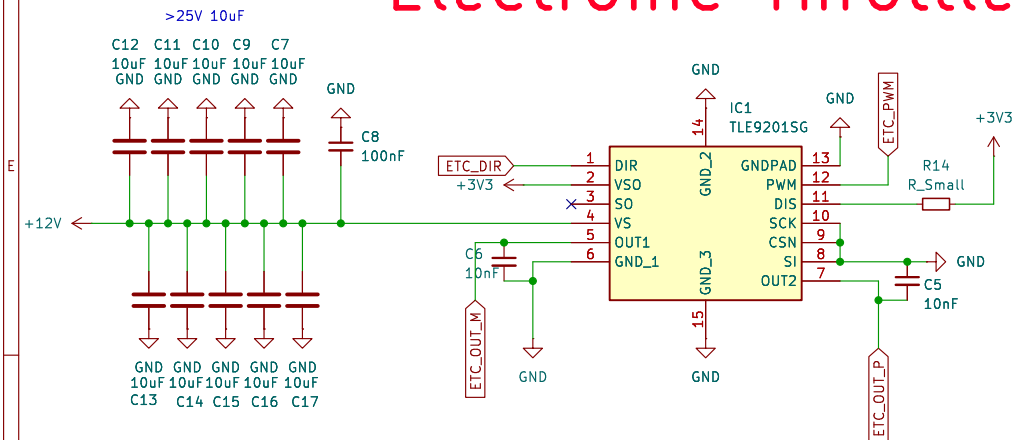
ACR use same as Harley BUK9K52-60E

Harley Uses:  
<https://www.mouser.de/ProductDetail/onsemi/FGB3040G2-F085C?qs=2WXlatMagcHzMRj1hscbYQ%3D%3D>

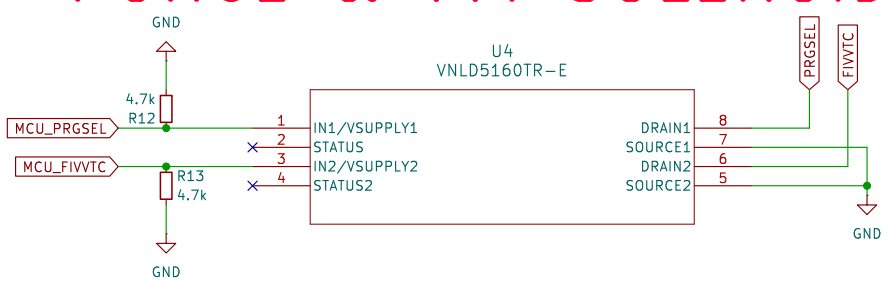
# IGNITION



# Electronic Throttle



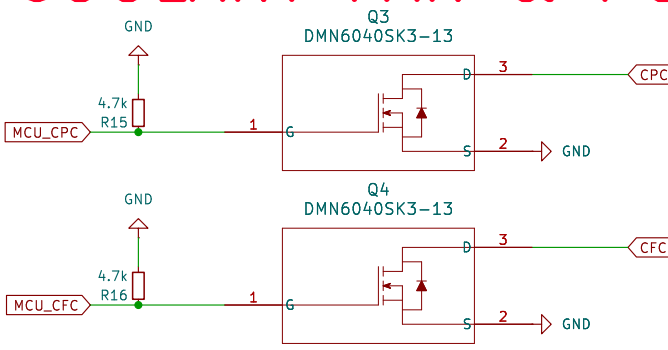
# PURGE & VVT SOLENOIDS



COOLANT FAN PULLS AROUND 4A WHEN CONSTANT 100%,  
INITIALLY PULLING UP TO 8A FOR GETTING SPINNING  
HARLEY USES: HUF76429D3

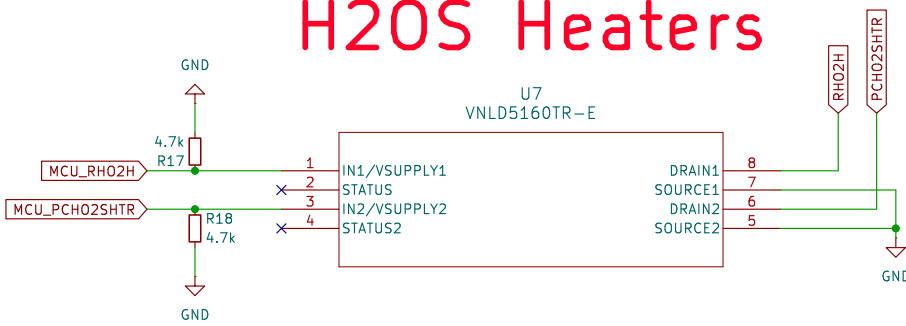
POSSIBLE: <https://www.digikey.de/de/products/detail/onsemi/HUF76629D3ST/4553106>  
AND: <https://www.digikey.de/de/products/detail/diodes-incorporated/DMN6040SK3-13/8545933>

# COOLANT FAN & PUMP



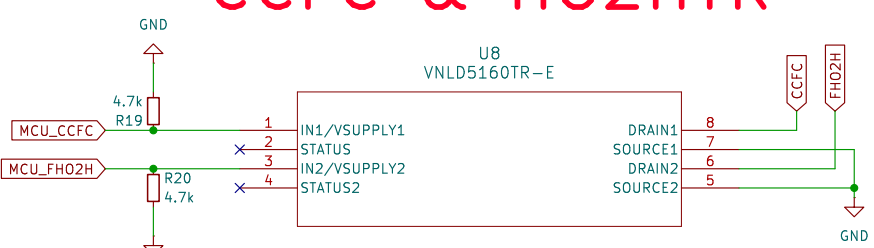
H2OS Heaters are PWM Controlled and max out at about 0.9 Amps  
at room temperature, then reducing with coming heat

# H2OS Heaters

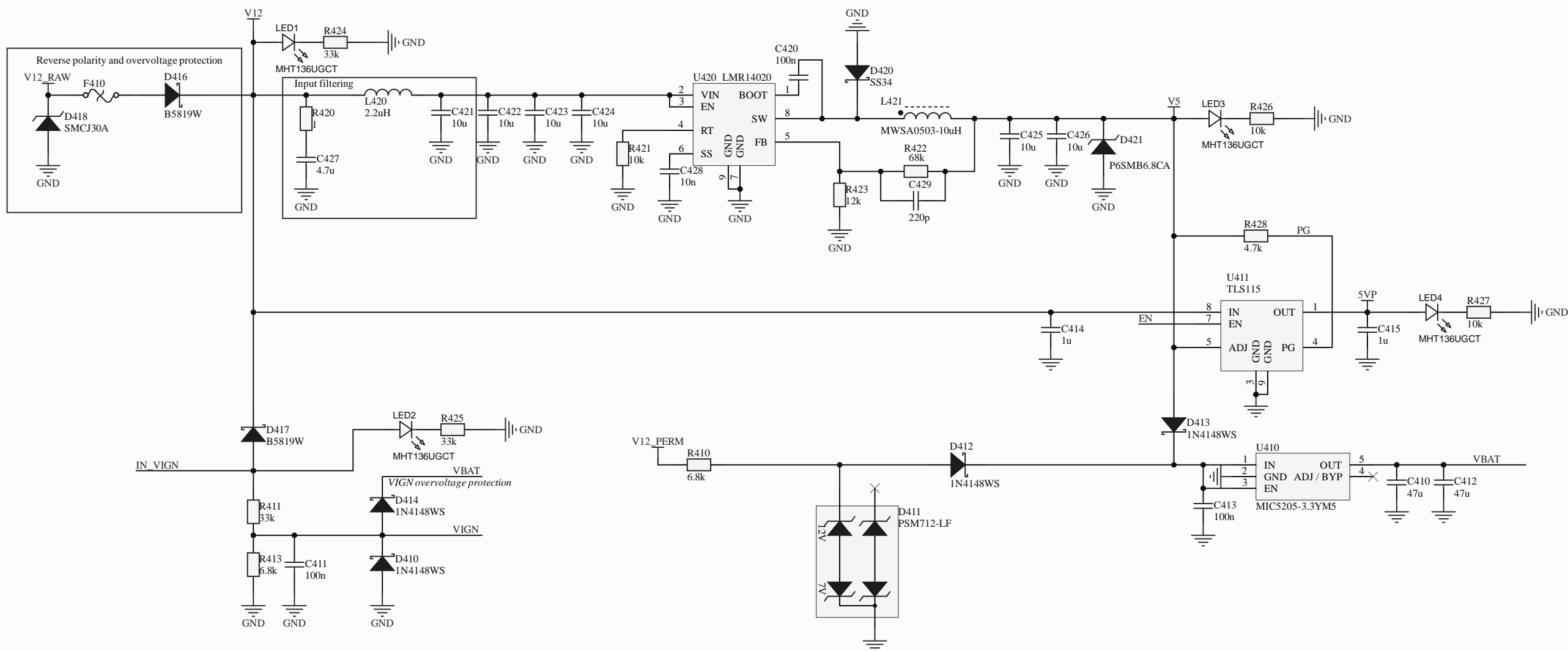


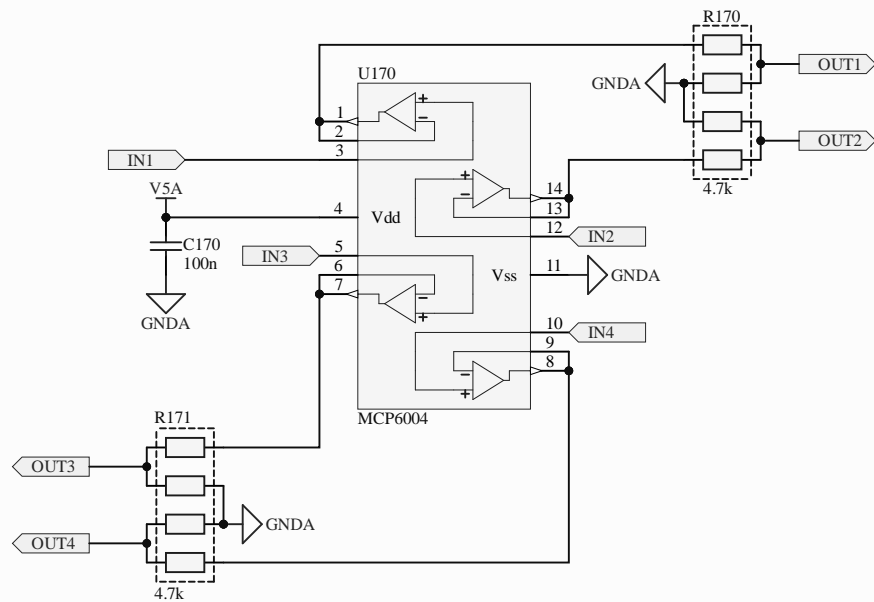
CCFC: Harley uses 2N06L35 TODO!

# CCFC & HO2HTR

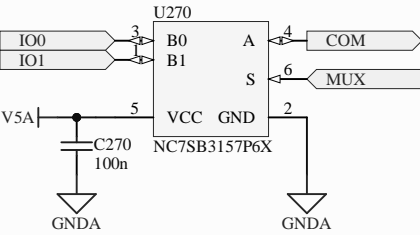


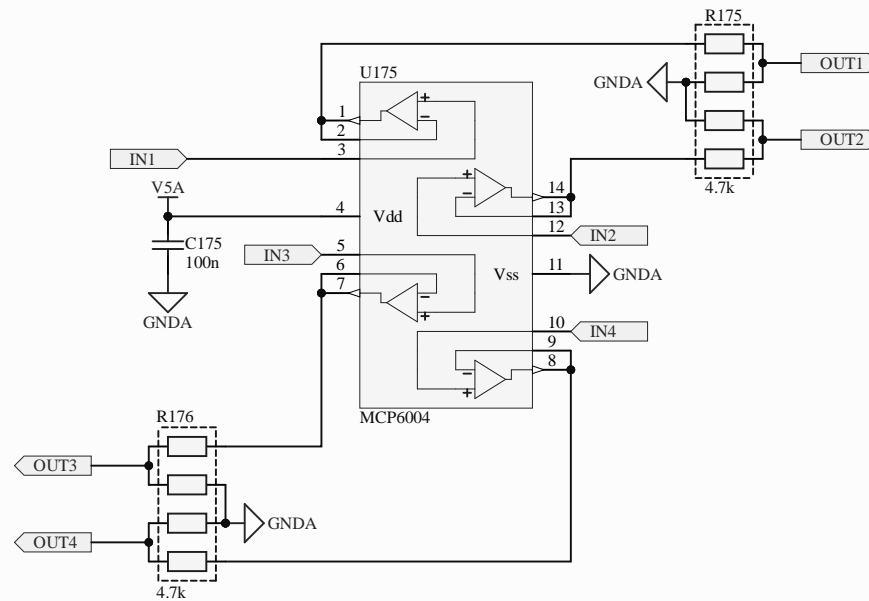


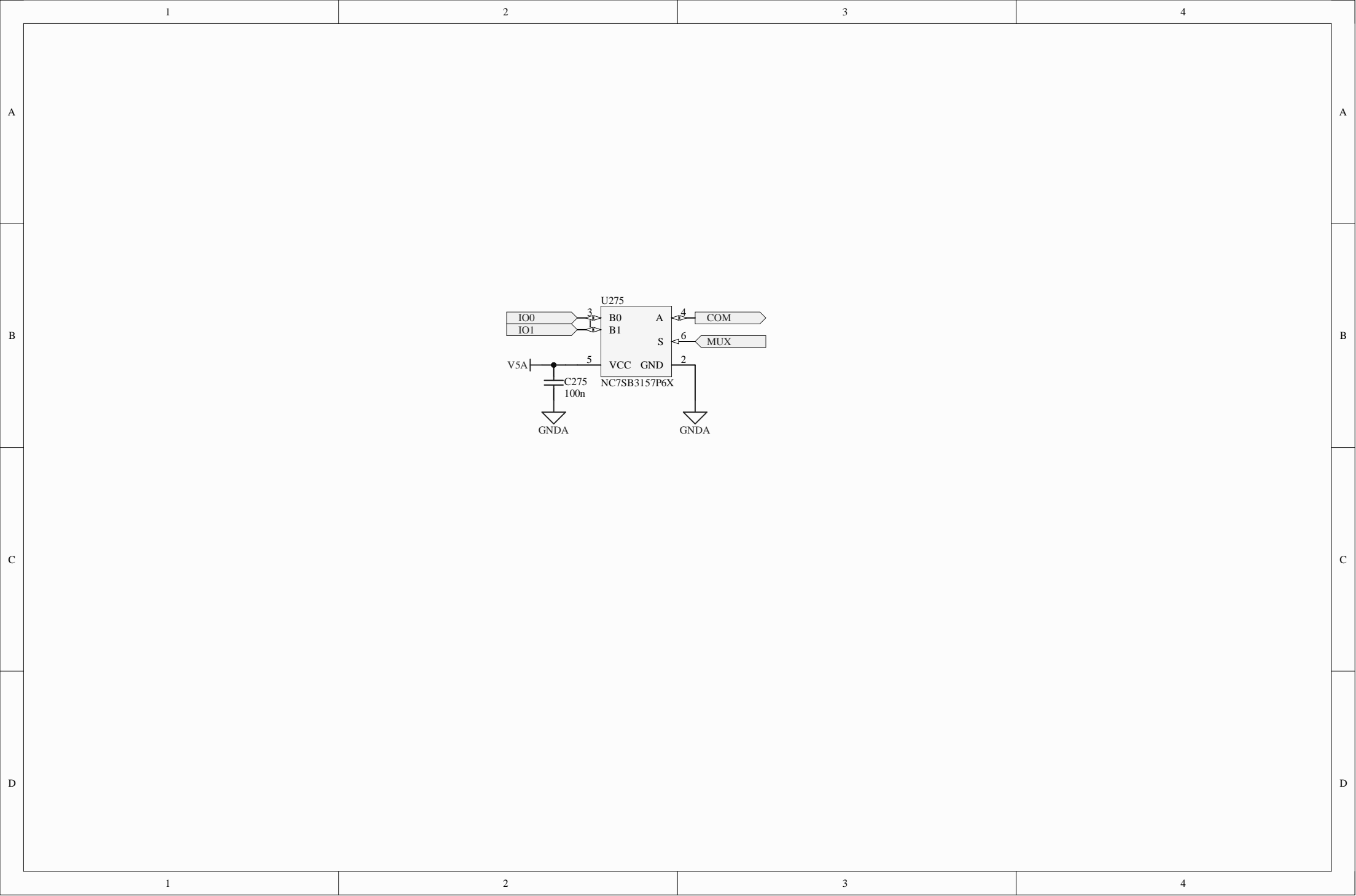


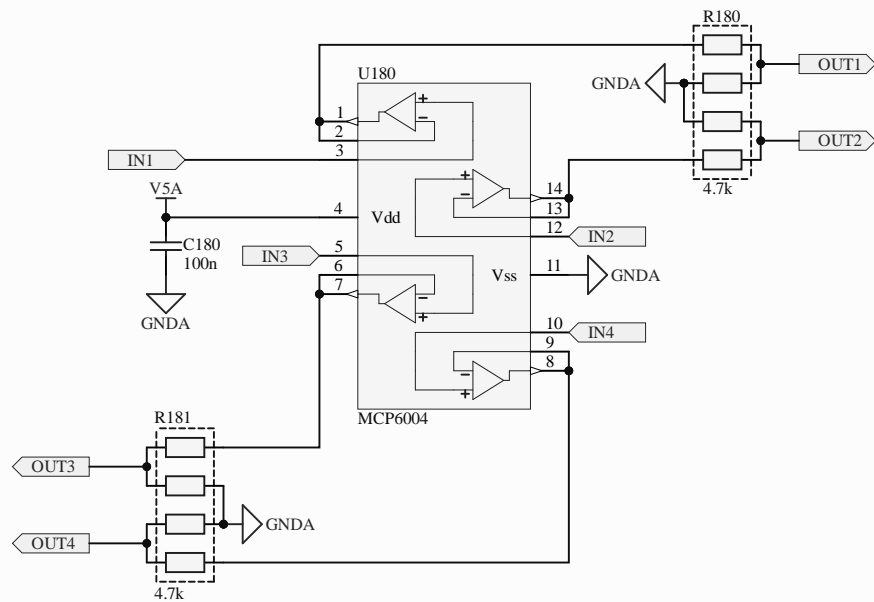


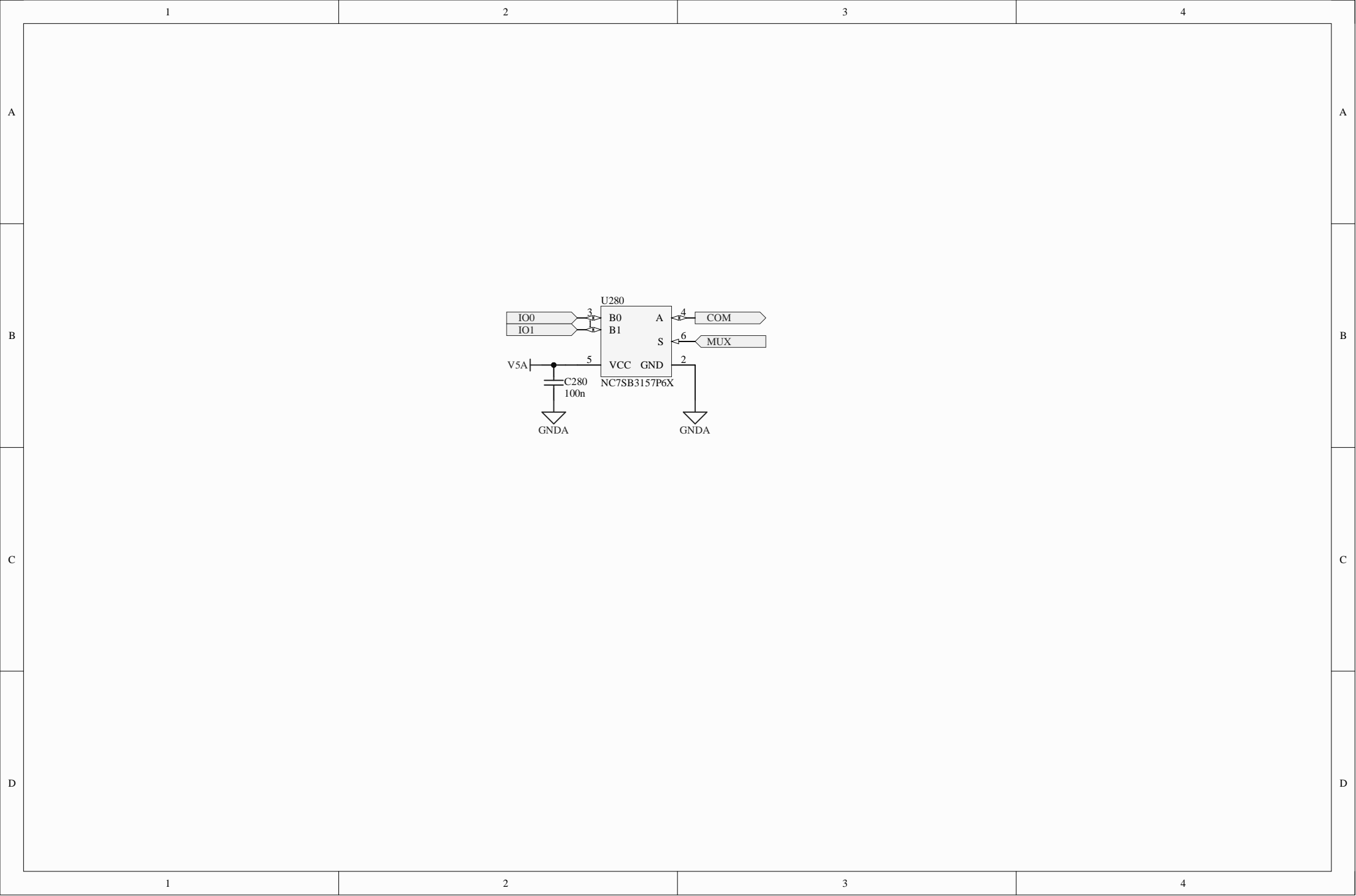


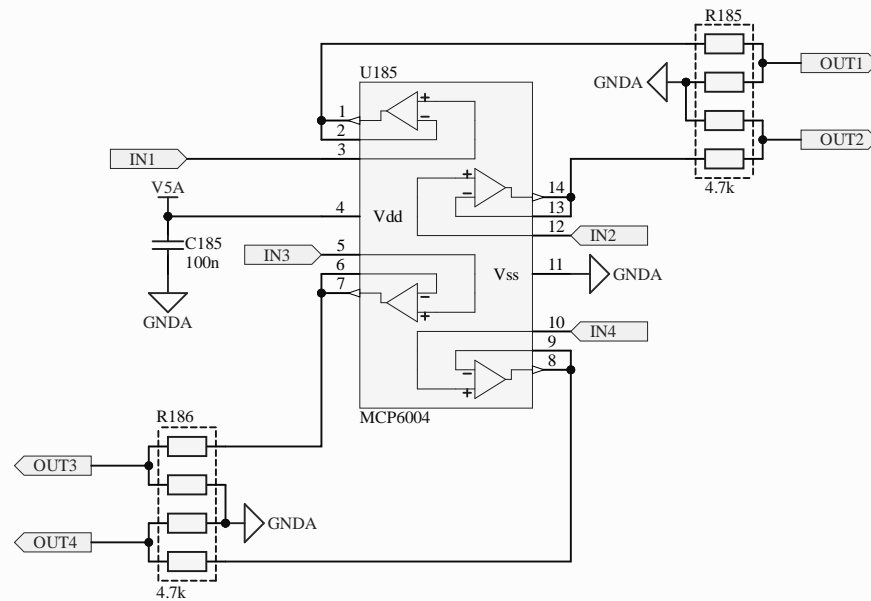


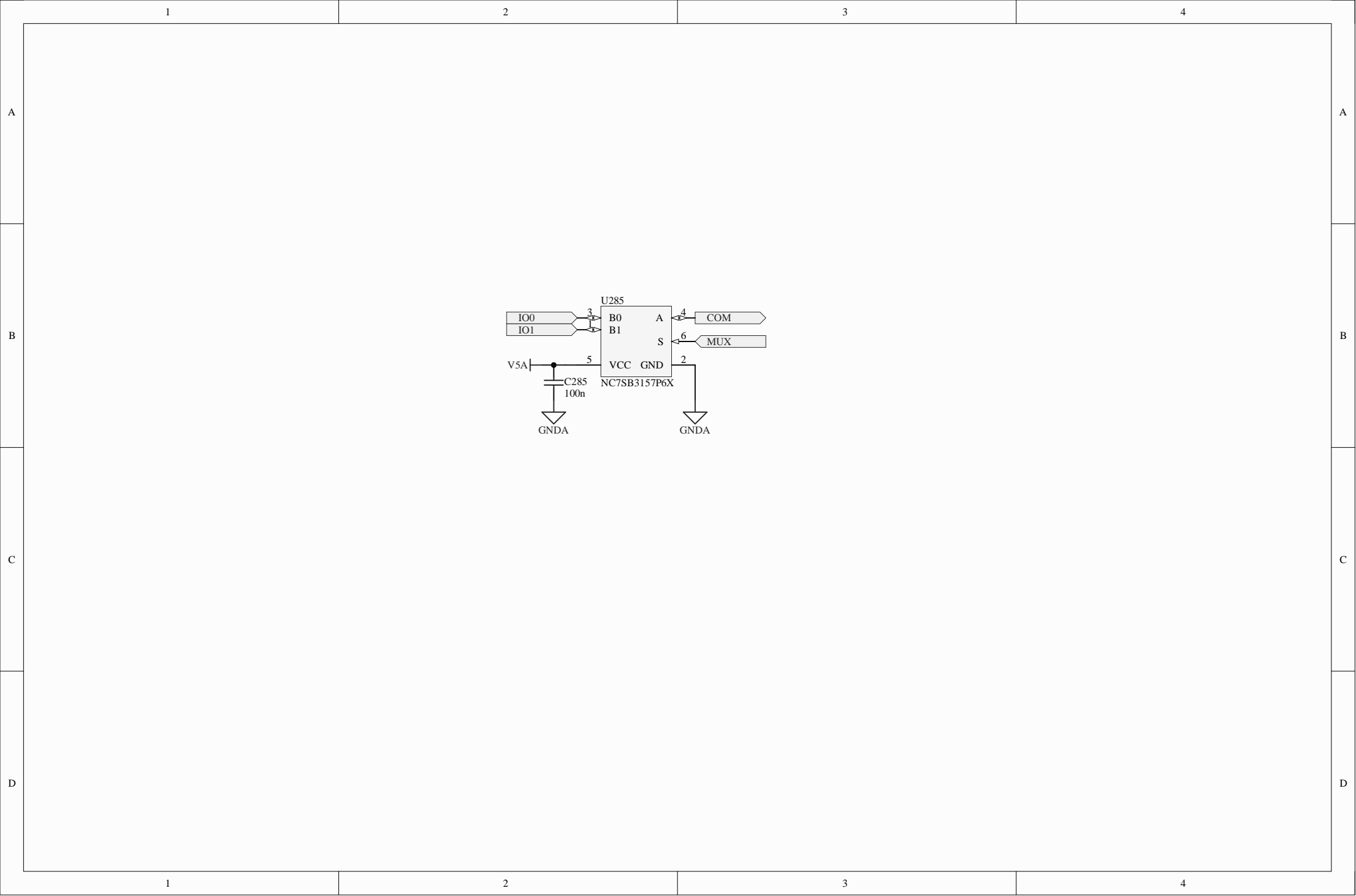


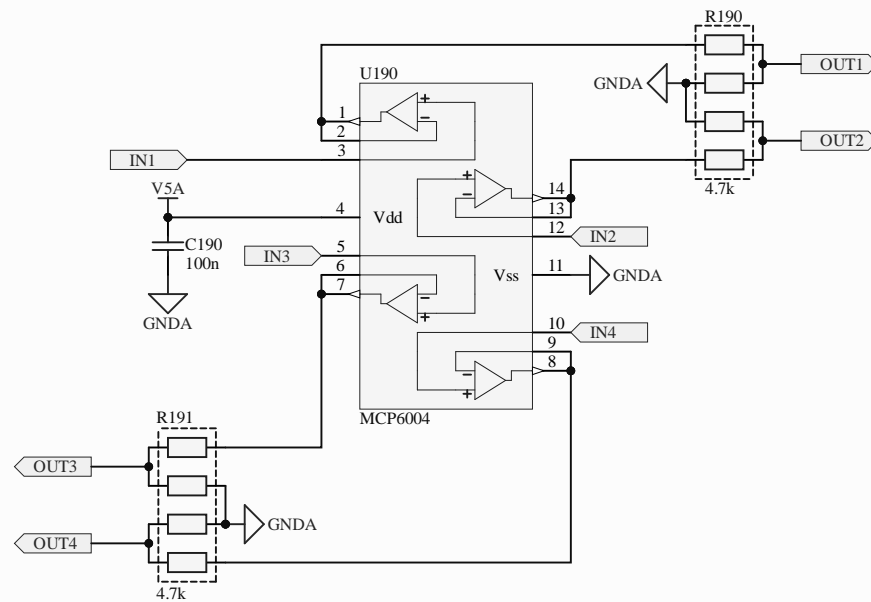






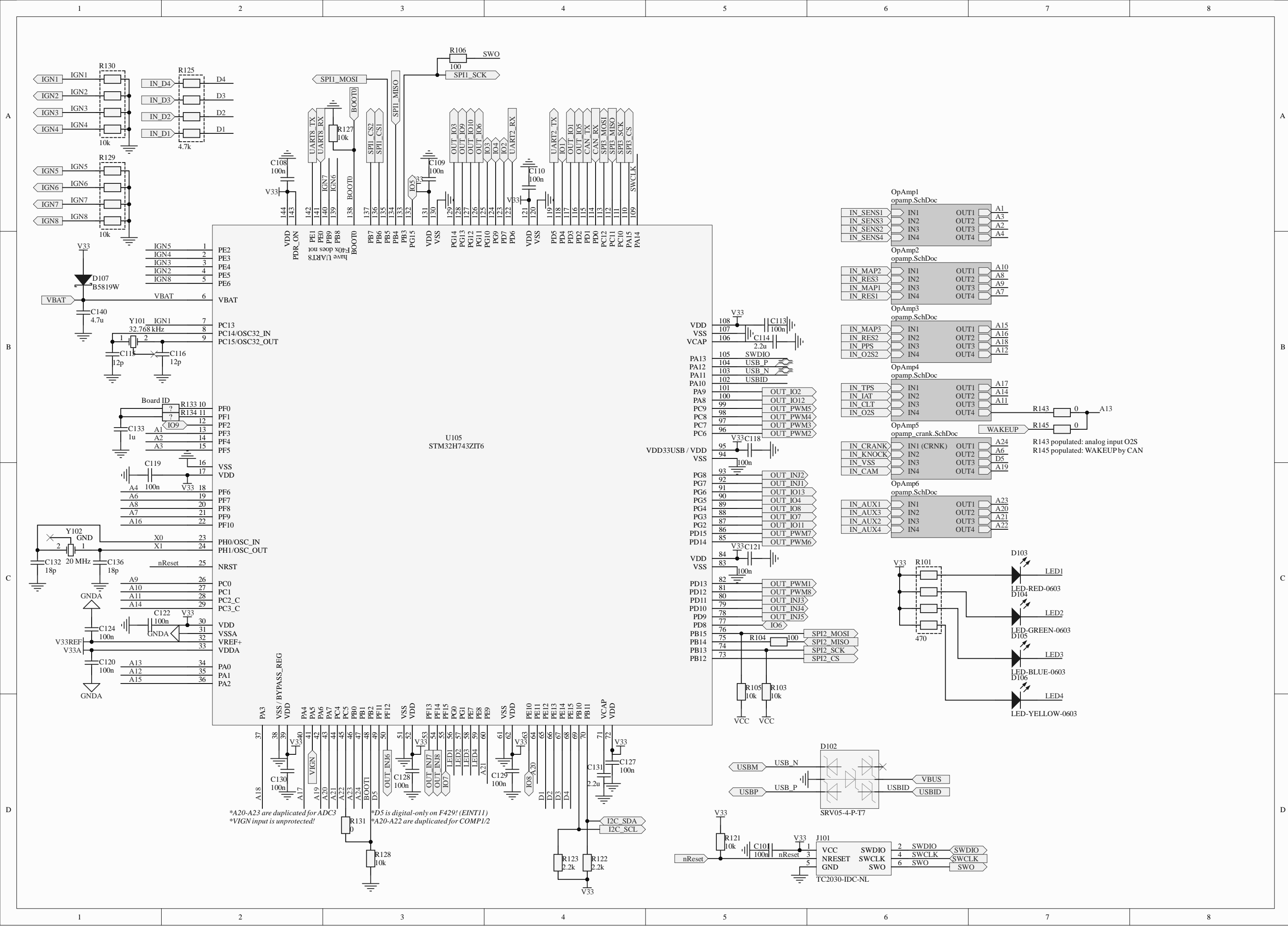












A

A

B

B

C

C

D

D

E

E

F

F

G

G

H

H

