

MCU

File: mcu.kicad_sch

Sensors

File: sensors.kicad_sch

Bluetooth

File: bluetooth.kicad_sch

Outputs

File: outputs.kicad_sch

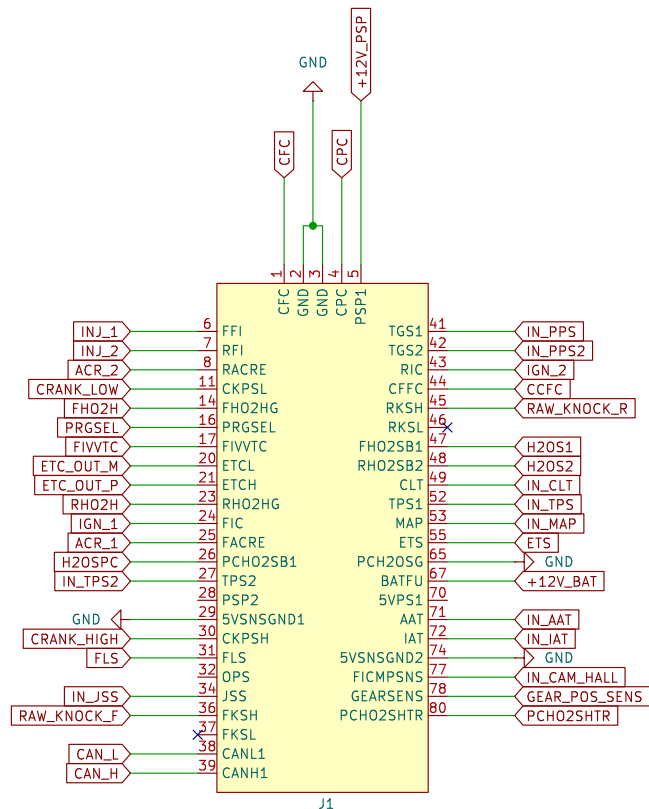
TODO:

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

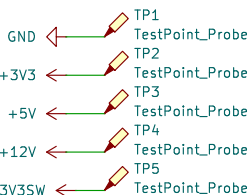
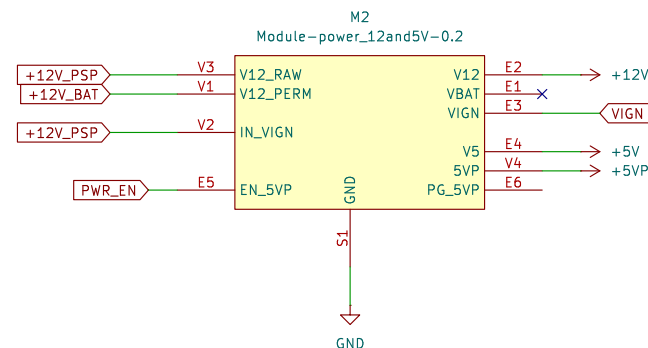
DONE: GEARSSENS analyze the signal -> Kind of analog?

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

Knock Sensor LOW signals not needed?



TODO: PSP = IGNITION BASED?



Hellen-Bremen

Sheet: /
File: hellenbremen.kicad_sch

Title:

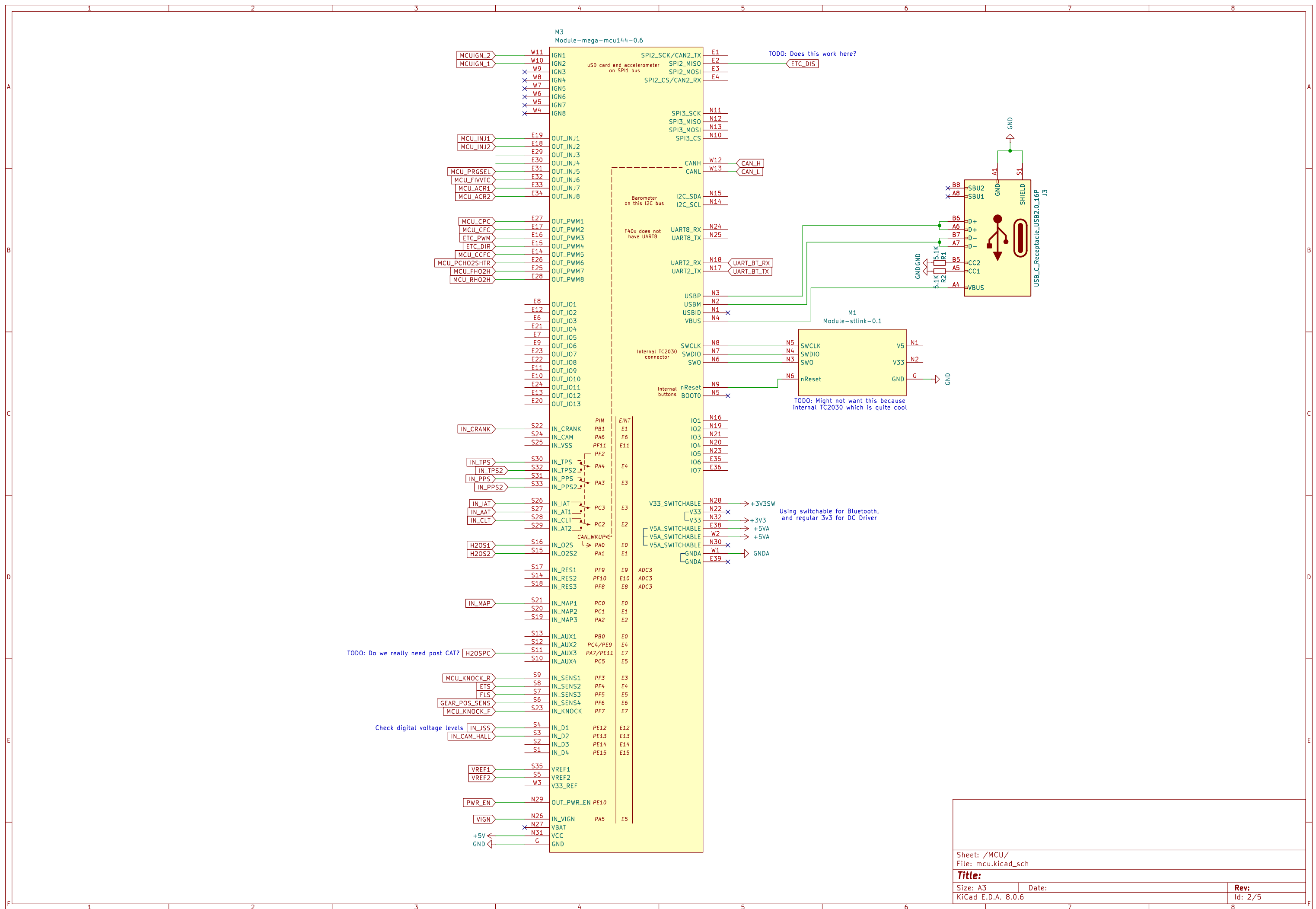
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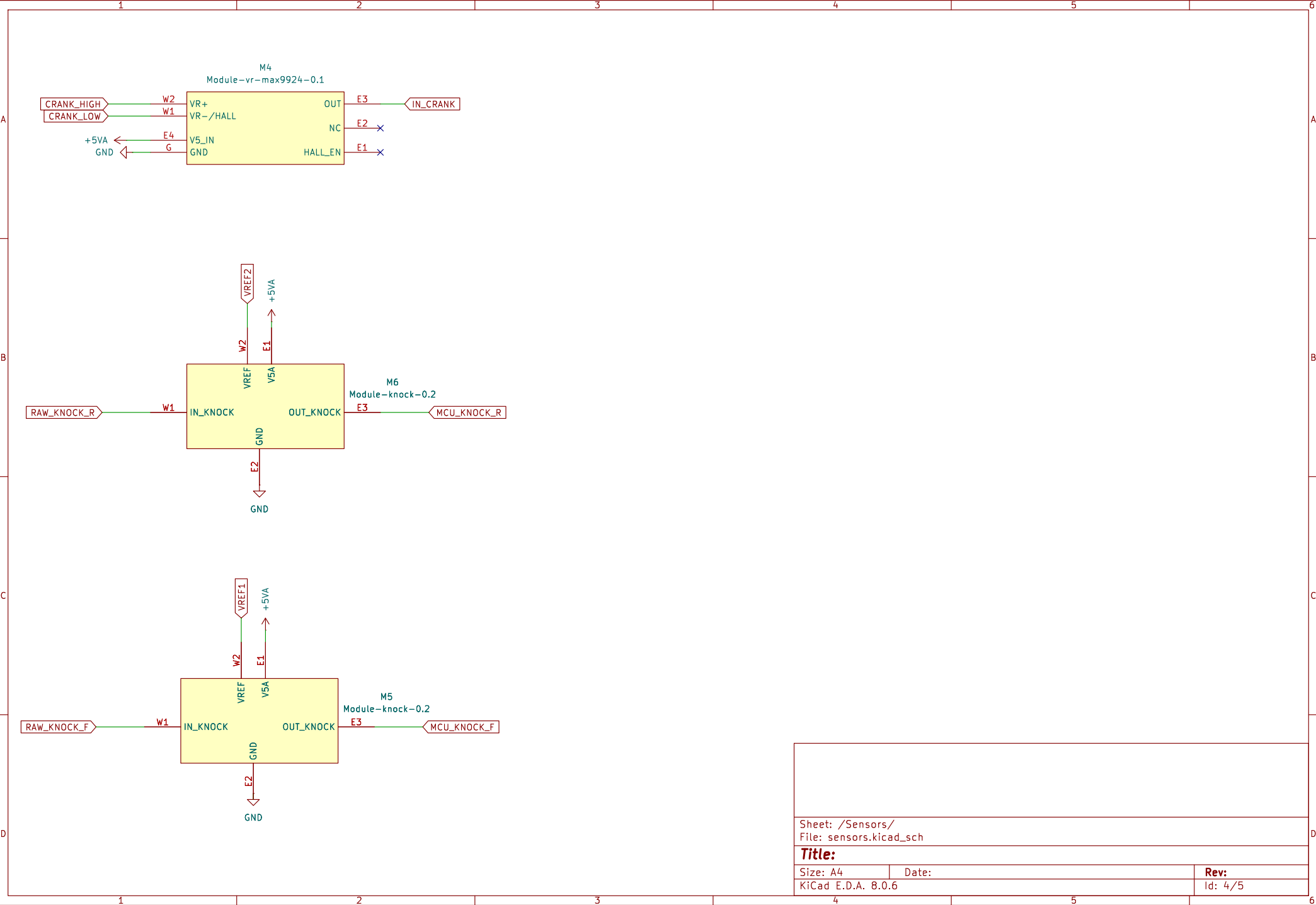
Date:

KiCad E.D.A. 8.0.6

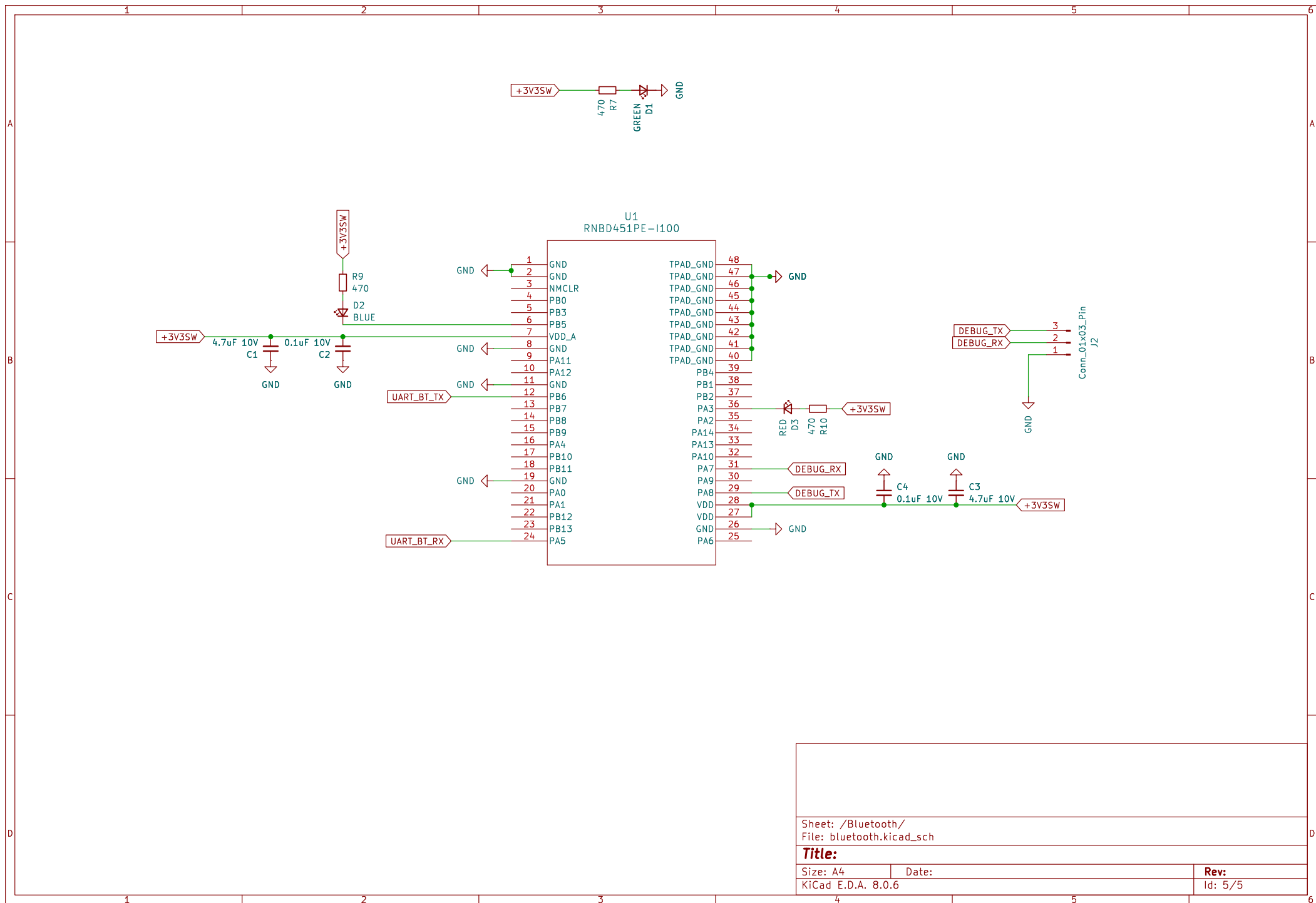
Rev: A

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:

Size: A4
KiCad E.D.A. 8.0.6

Date:

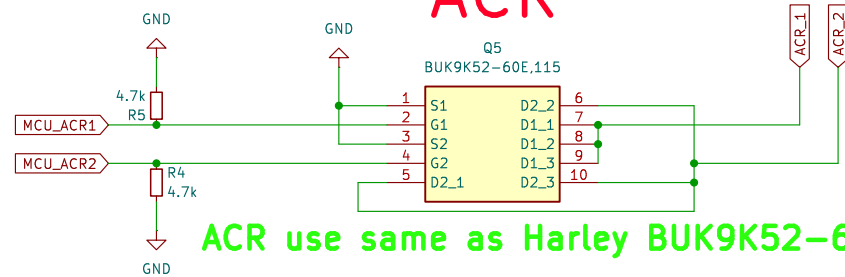
Rev:
Id: 5/5

INJECTORS



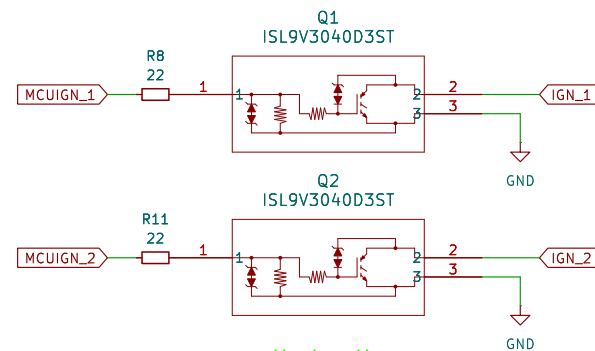
INJECTORS MEASURED TO TAKE MAX 1A EACH WHEN OPEN
VNLD5160TR-E should be fine
HARLEY uses 2N06L35

ACR



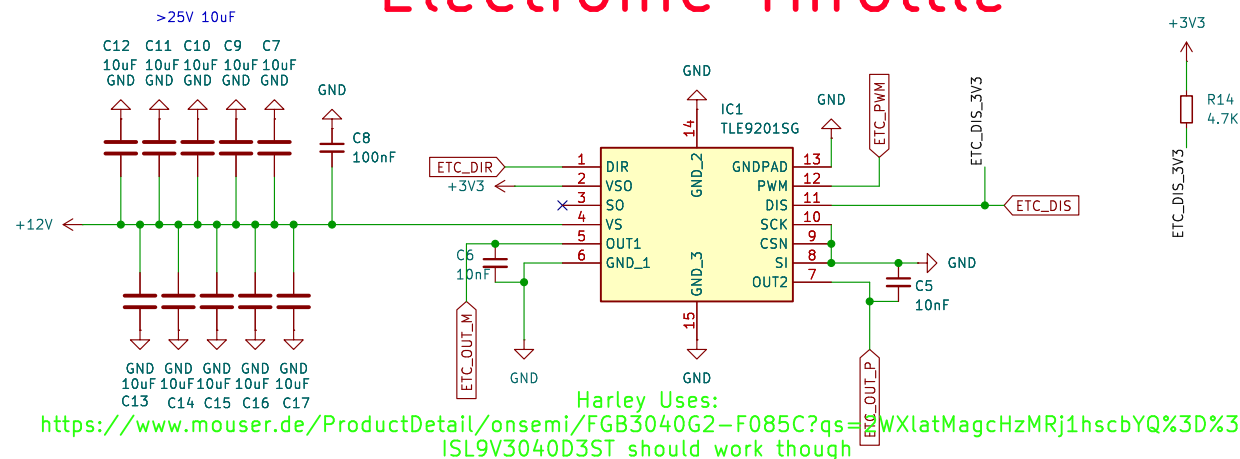
ACR use same as Harley BUK9K52-60E

IGNITION



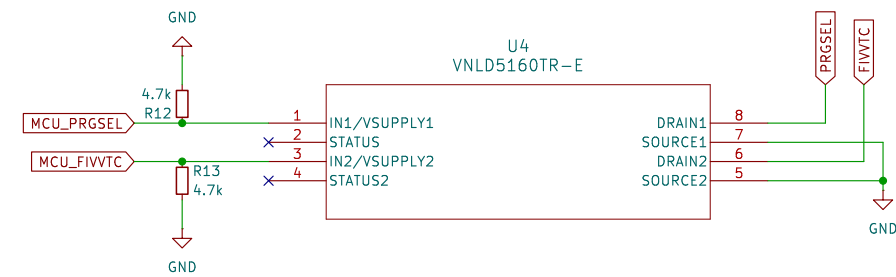
Harley Uses:
<https://www.mouser.de/ProductDetail/onsemi/FGB3040G2-F085C?qs=2WXlatMagcHzMRj1hscbYQ%3D%3D>
ISL9V3040D3ST should work though

Electronic Throttle



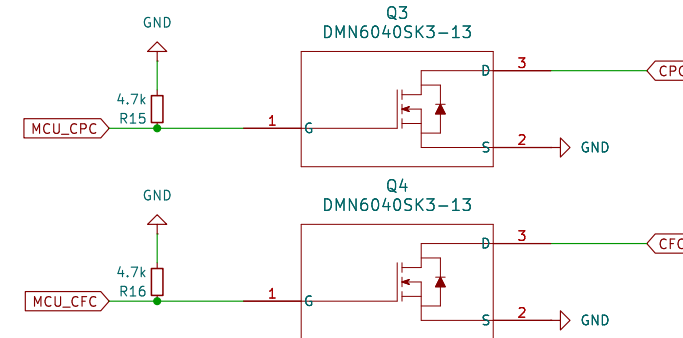
Harley Uses:
<https://www.mouser.de/ProductDetail/onsemi/FGB3040G2-F085C?qs=2WXlatMagcHzMRj1hscbYQ%3D%3D>
ISL9V3040D3ST should work though

PURGE & VVT SOLENOIDS



TODO: PURGE AND VVT SOLENOIDS NOT MEASURED YET AT ALL

COOLANT FAN & PUMP



COOLANT FAN PULLS AROUND 4A WHEN CONSTANT 100%,
INITIALLY PULLING UP TO 8A FOR GETTING SPINNING
HARLEY USES: HUF76629D3ST/4553106

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

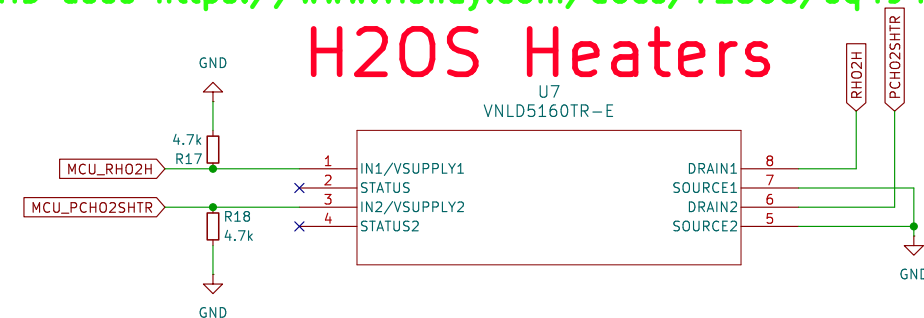
Weytronik: <https://www.digikey.de/de/products/detail/vishay-siliconix/SISS54DN-T1-GE3/14004251?s=N4lgTCBcDaiMoEk5wKwBYAiA5EBdAvka>

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

VNLD5160TR-E should work. Will test

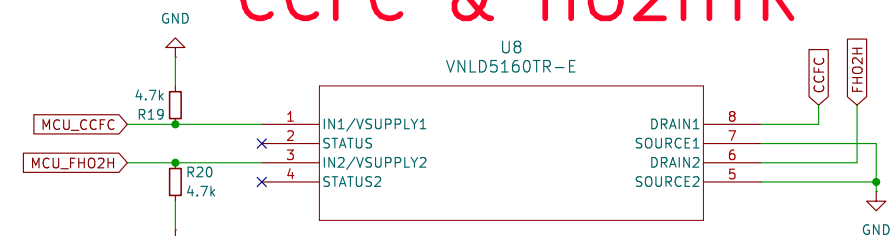
HD uses <https://www.vishay.com/docs/71506/sq4946aey.pdf>

H2OS Heaters



CCFC: Harley uses 2N06L35 TODO!

CCFC & HO2HTR



Sheet: /Outputs/
File: outputs.kicad_sch

Title:

Size: A3

Date:

Rev:

KiCad E.D.A. 8.0.6

Id: 6/5