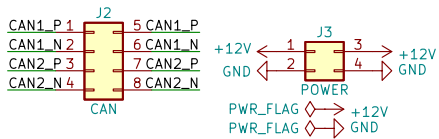
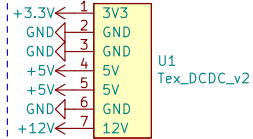


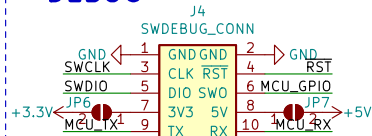
CAN POWER CONNECTORS



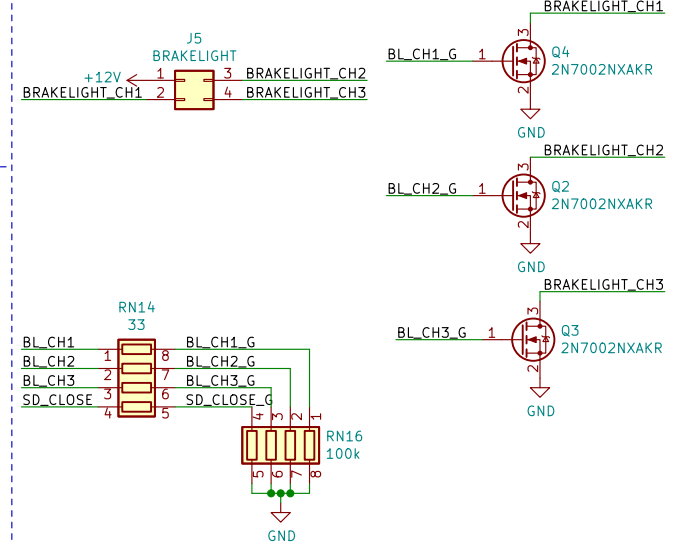
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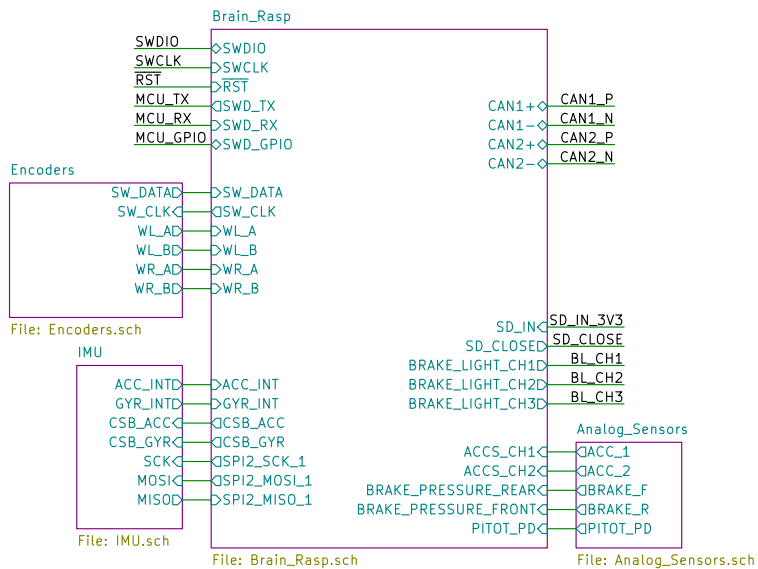
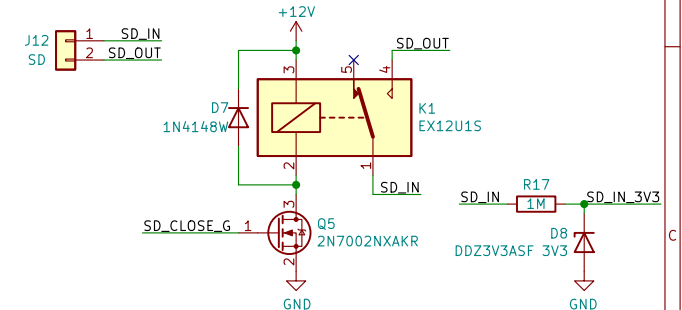
DEBUG



BRAKELIGHT



SHUTDOWN



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Sheet: /
File: DAS_ECU.sch

Title: DAS+ECU

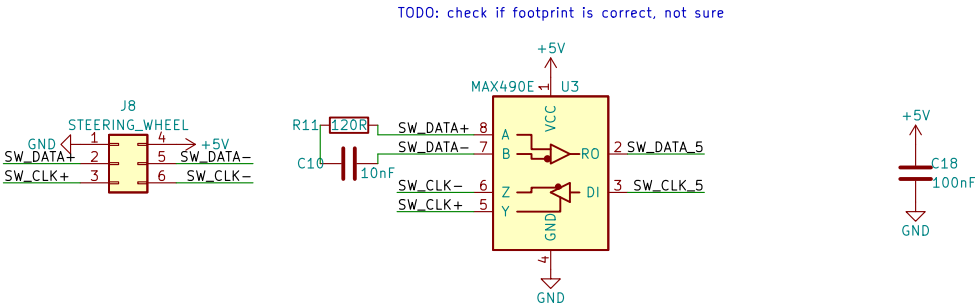
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Rev: v1.0
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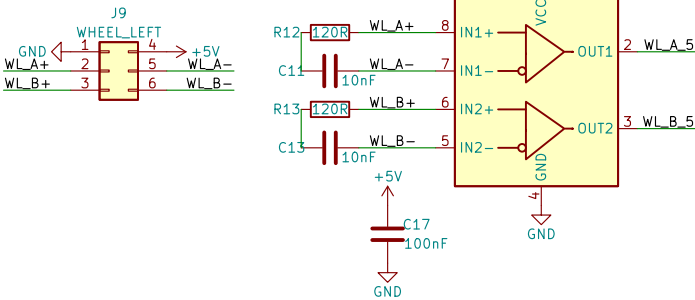
Steering Wheel Encoder

Steering Wheel Encoder:
RLS RM44SC0012B10F2F10

Cable:
-Vdd: Red
-GND: Blue
-Clock+: White
-Clock-: Brown
-Data+: Green
-Data-: Yellow



LEFT WHEEL ENCODER

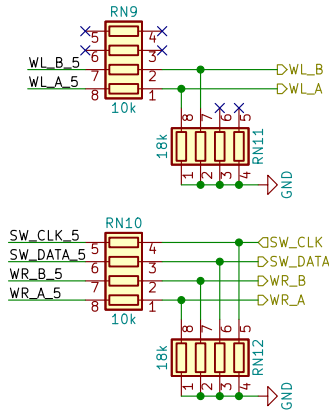
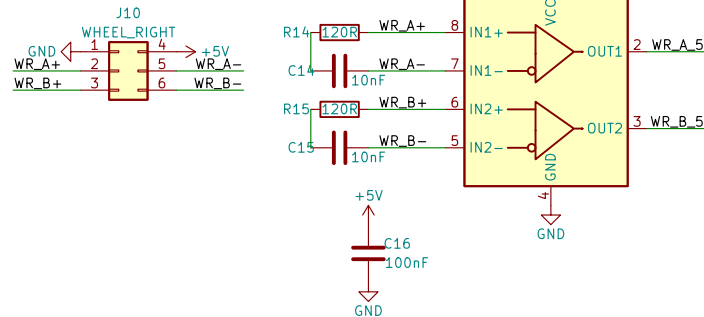


Radial incremental magnetic rings:
RLS MR075E060A120B00
-outer diameter: 57mm
-cross section height: 10mm
-radial magnetisation
-inner diameter: 85mm
-with reference mark
-number of poles: 120

Wheel Encoder:
RLS LM131CD40AB10F00
-RS422
-interpolation factor: 400

Cable:
-5V: Brown
-GND: White
-A+: Green
-A-: Yellow
-B+: Blue
-B-: Red

RIGHT WHEEL ENCODER



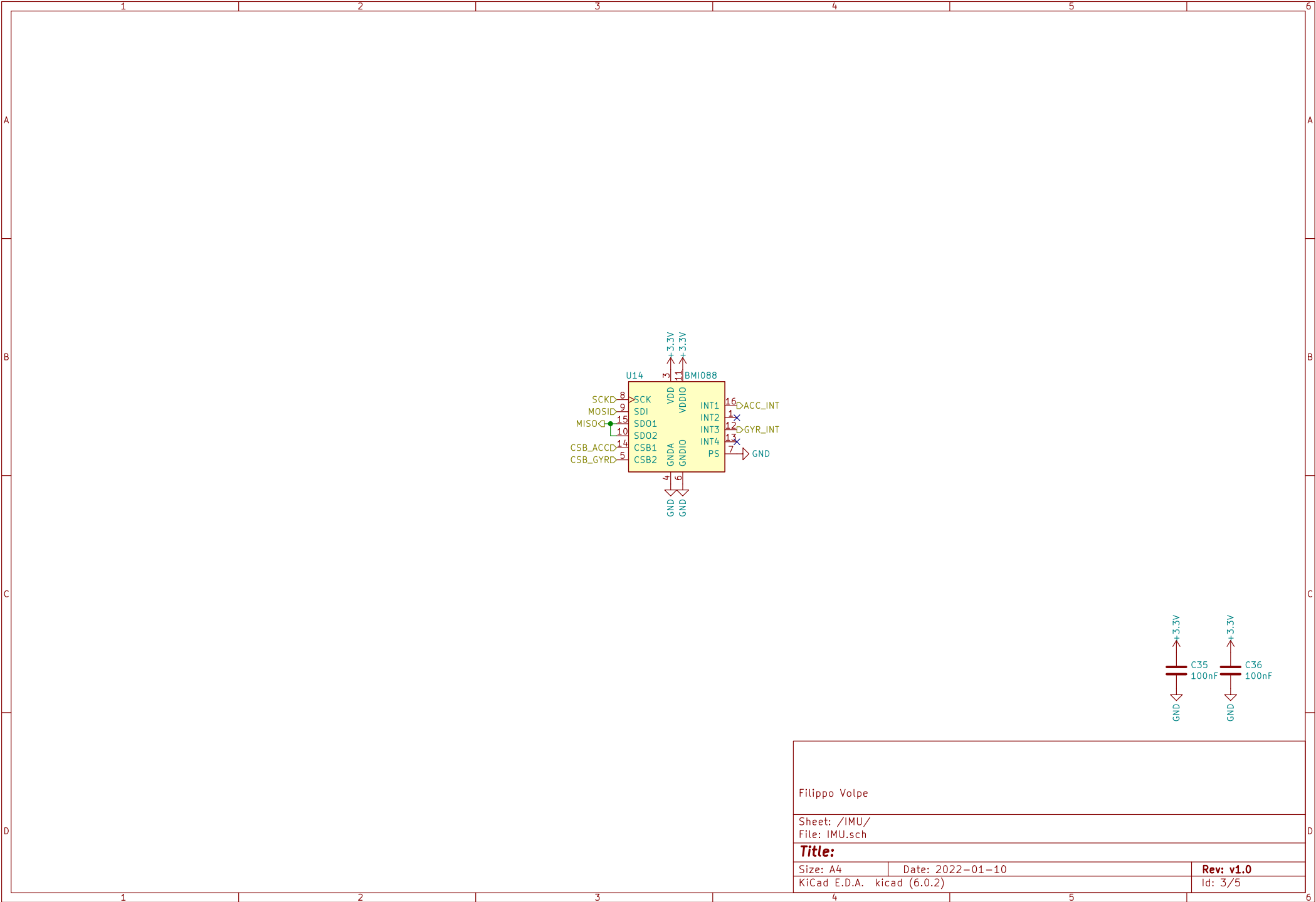
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KiCad E.D.A. kicad (6.0.2)

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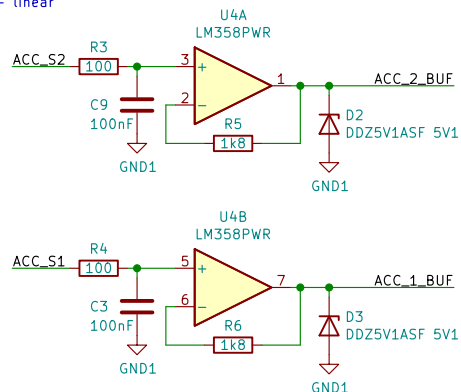
Rev: v1.0

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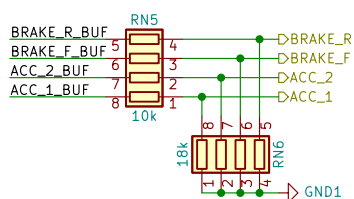
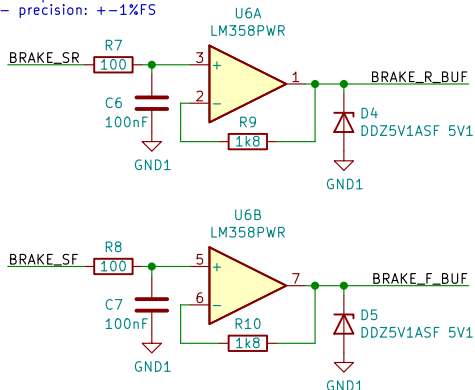
ACCELERATOR

Accelerator potentiometer:
Aviorace DIA95-25
- resistance: 1.7kOhm
- linear



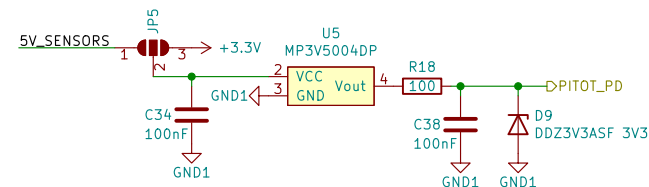
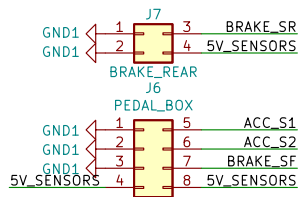
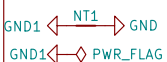
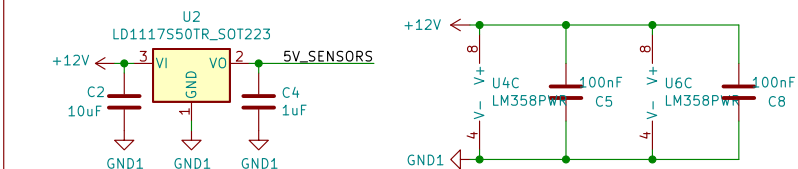
BRAKES

Brake pressure transducers:
Aviorace SP100
- ratiometric
- input: 0-100 bar
- output: 0.5-4.5 V
- precision: $\pm 1\%$ FS



POWER

Output current @5V:
- Brake transducers: $2 \times 5.5\text{mA} = 11\text{mA}$
- Accelerator potentiometers: $2 \times 3\text{mA} = 6\text{mA}$
Power dissipated: 0.12W



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Title: DAS+ECU

Size: A4 Date: 2022-01-10
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Rev: v1.0
Id: 5/5