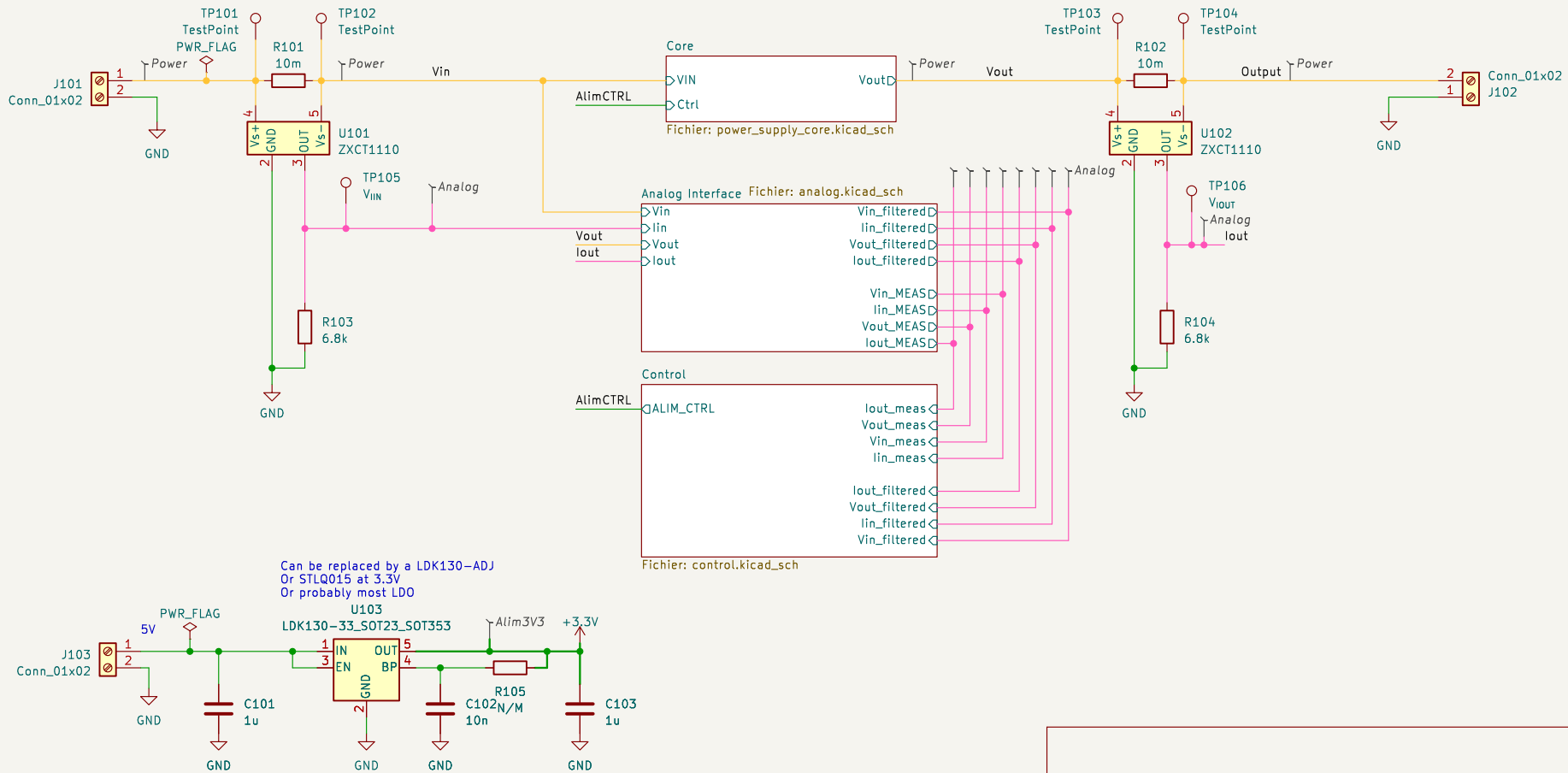


Assuming same constraints on input and output.
6A nominal max
With 10m makes 0.36W
Taking at least 0.5W resistor



Sheet: /		
File: power_supply.kicad_sch		
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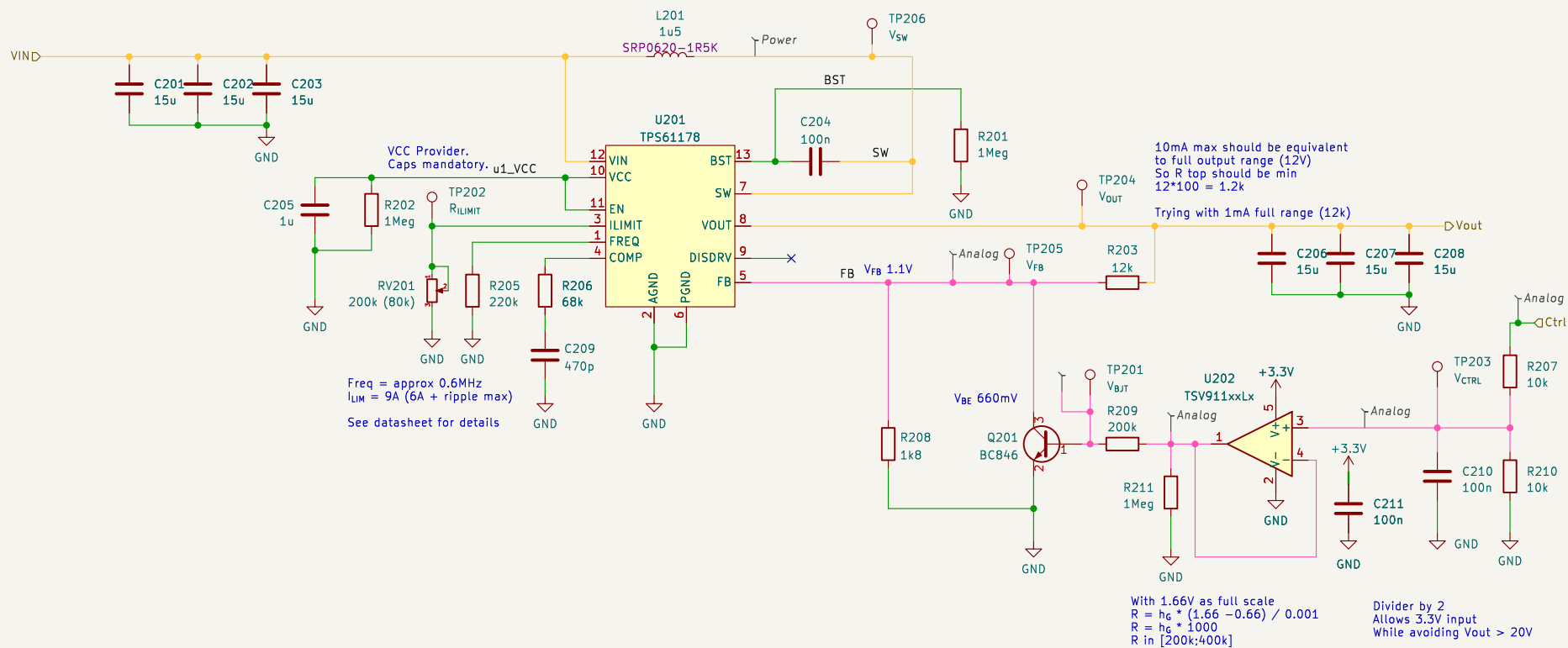
Input from 14 SunPower C60 (0.22m²)
 - 0.6V MPP 0.7V OC
 - 5.7A MPP 6.0A CC
 Nominal 8.4V @ 5.7A (48W)

Target output is 20V
 Therefore, at most, 2.4A @ 20V
 Otherwise, starting from cell voltage 6A
 We should handle 48W/6A/20V (not all same time)

Input is up to 6Amps
 20m will produce 0.7W and 120mV
 The ampli works up to 500mV (150mV rated)
 Add capability for gain on output to use 10m
 Without gain, output max is 3.2V

STM32 ADC is 5Msmps
 We can safely consider 500 kHz.

As regulator freq is 600Khz
 Let's set the low pass to around 60Khz
 50kHz provides 33k resistors



Sheet: /Core/
 File: power_supply_core.kicad_sch

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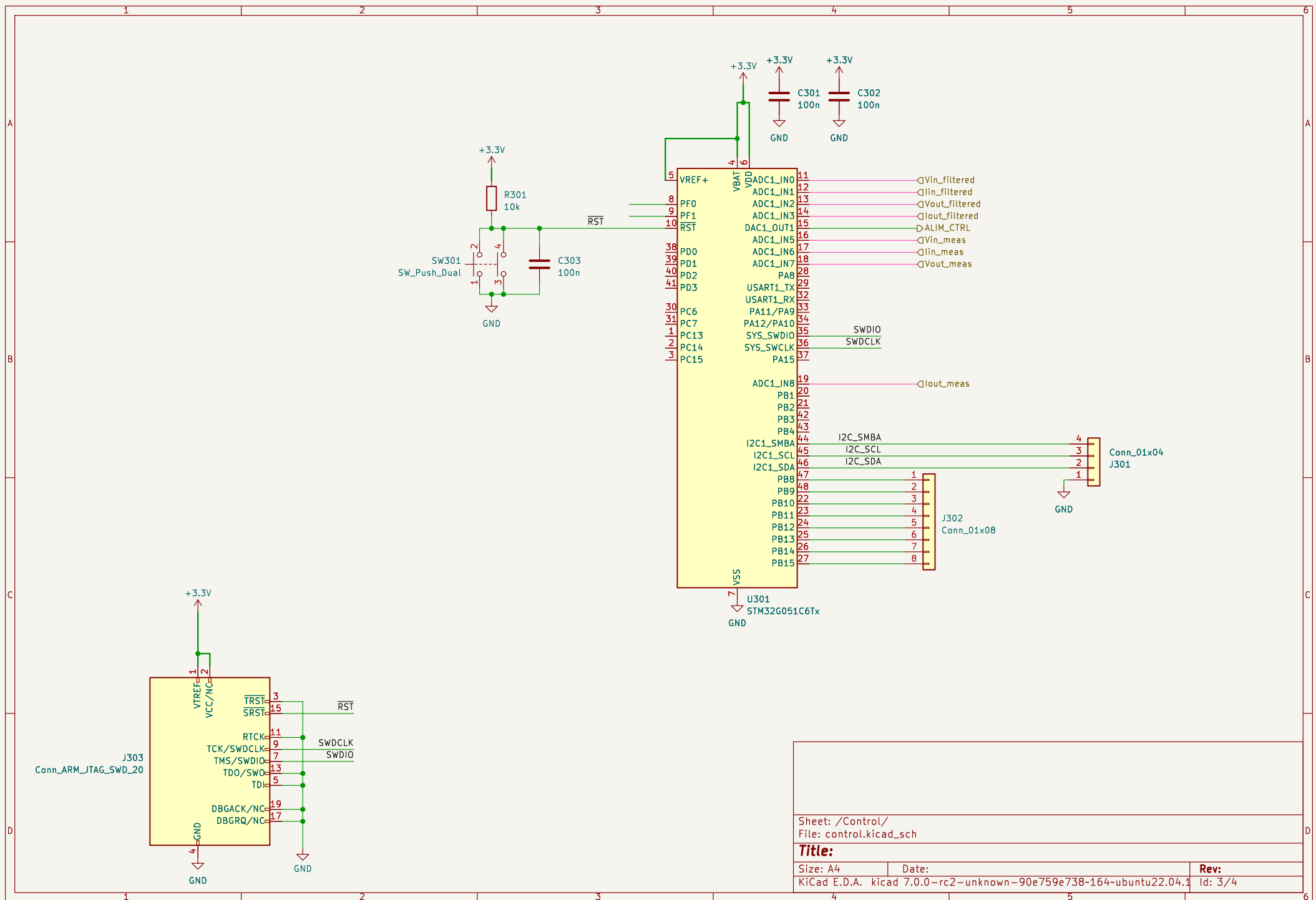
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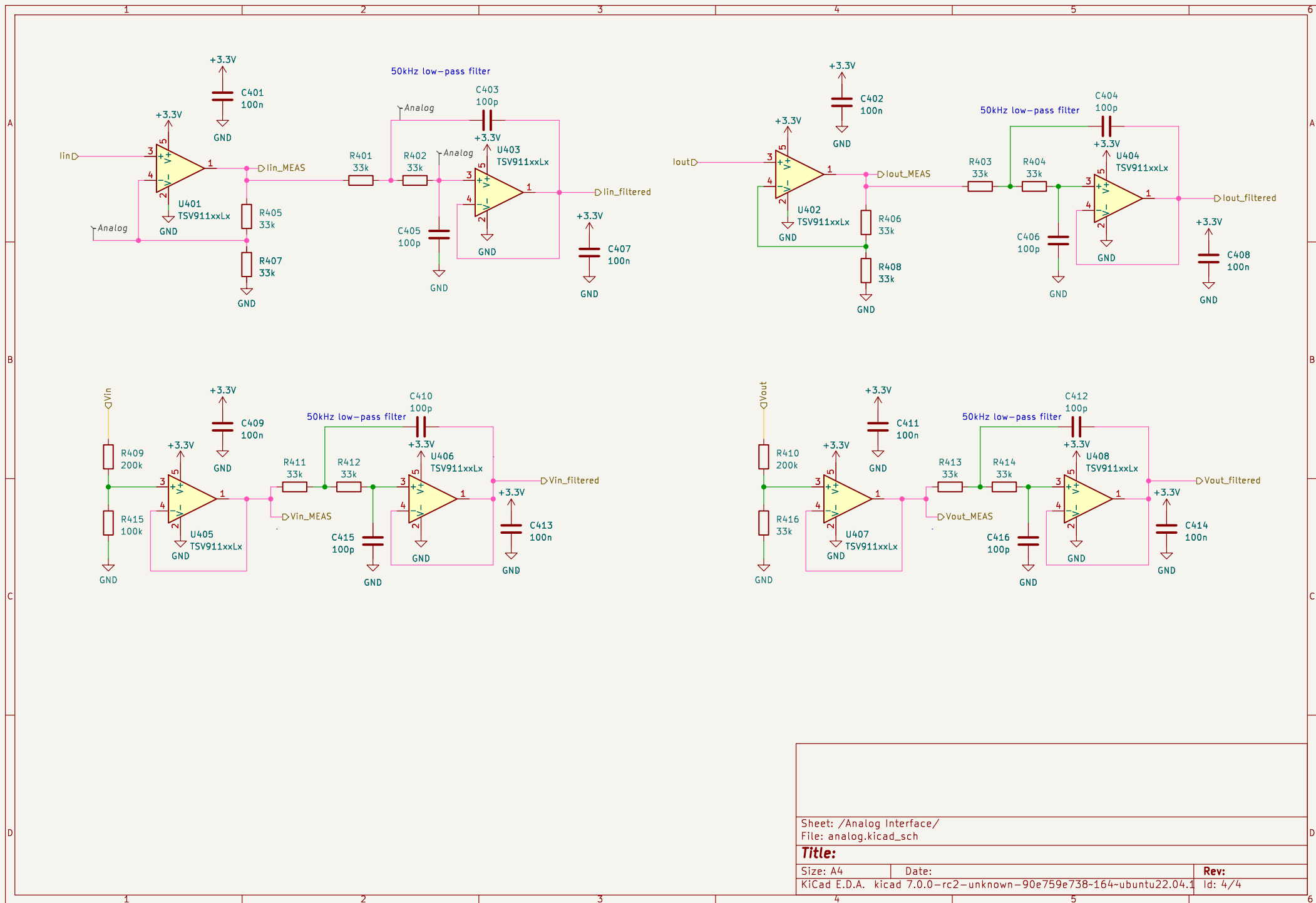
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Sheet: /Analog Interface/		
File: analog.kicad_sch		
Title:		
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