

christiankuttke based on design by Dennis Stiegekötter
openUC2 GmbH

Sheet: /
File: ADF_Board.kicad_sch

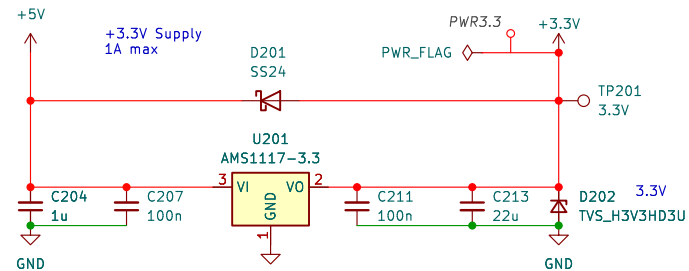
Title: QuantumMiniLabs_ODMR::ADF_Board

Size: A4
KiCad E.D.A. 9.0.0

Date: 2025-03-01

Rev: A
Id: 1/5

3,3V for PLL chip

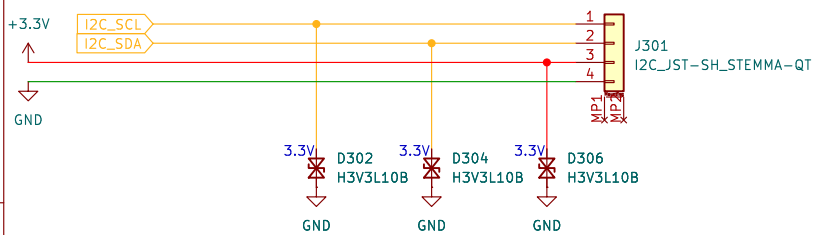
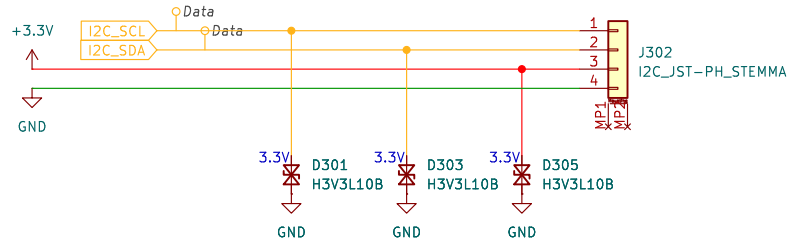


Id: 2/5

STEMMA and STEMMA QT

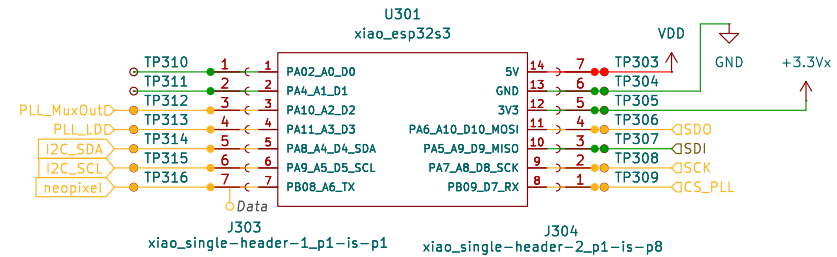
STEMMA and STEMMA QT for expansion
3.3V+I2C with max. 700 mA output at 3.3V

pinout order is correct
double checked for PH and SH



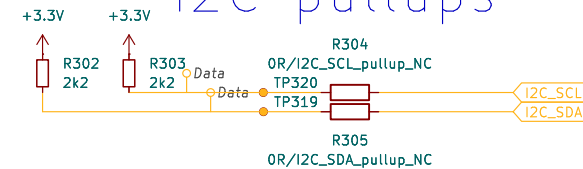
ODMR: Use with Adafruit TSL2591 module as contrast detector
featuring AMS TSL2591 light-to-digital sensor.
Adafruit TSL2591 has STEMMA QT connector
(JST SH 4-pin 1.0mm pitch).
I2C address is 0x29.

XIAO ESP32S3

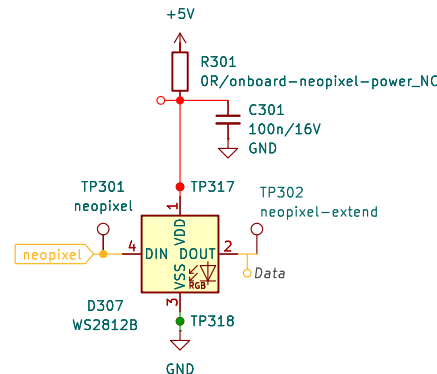


Den Mux-Ausgang der PLL habe ich nie gebraucht.
Falls noch Bedarf an freien Pins des Xiao Boards
besteht, kann die PLL_MuxOut Verbindung entfernt
werden. Auch habe ich nie Daten von dem IQ-
Modulator über SPI empfangen und die entsprech-
ende Leitung könnte bei Bedarf ebenfalls
ersetzt werden.

I2C pullups



Neopixel



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Sheet: /ESP-module/

File: esp-module.kicad_sch

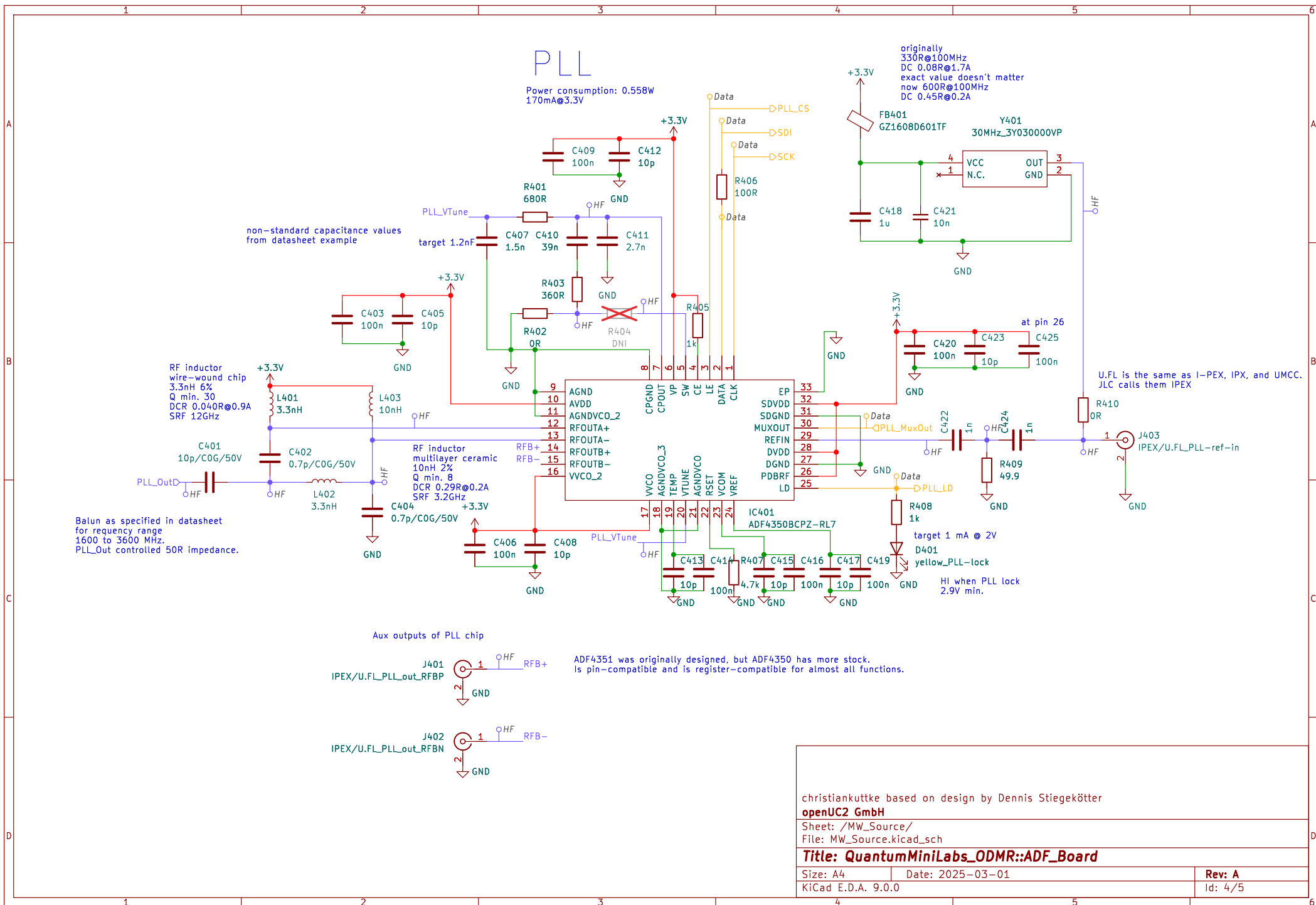
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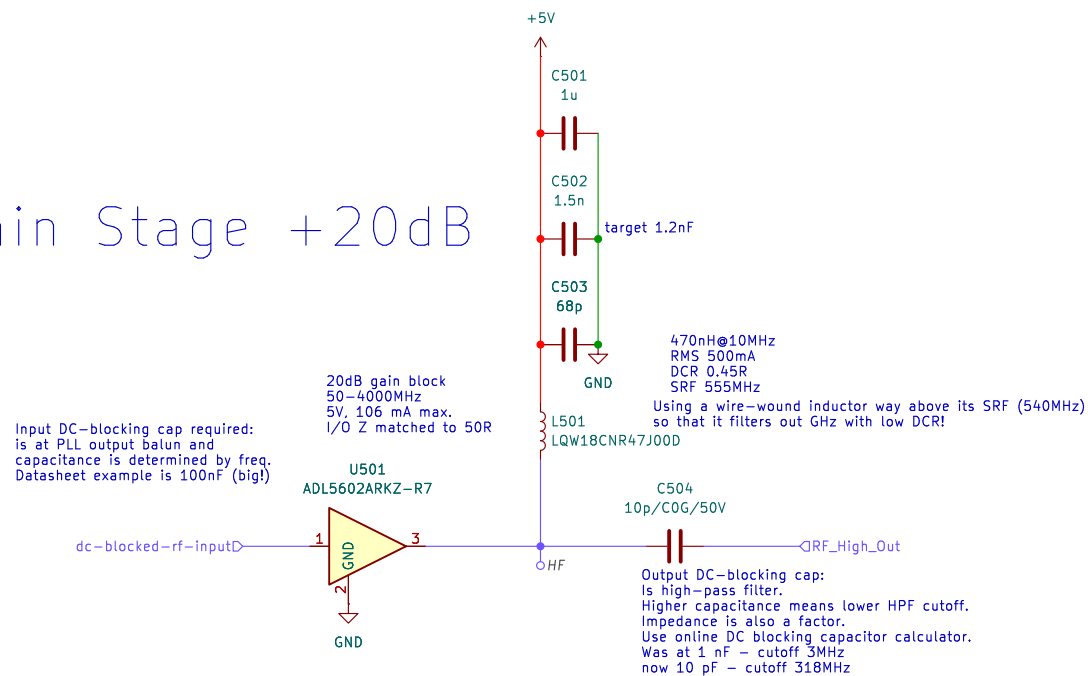
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Gain Stage +20dB



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Sheet: /rf-amplifier/
File: rf-amplifier.kicad_sch

Title: QuantumMiniLabs_ODMR::ADF_Board

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| Size: A4 | Date: 2025-03-01 |
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Rev: A

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