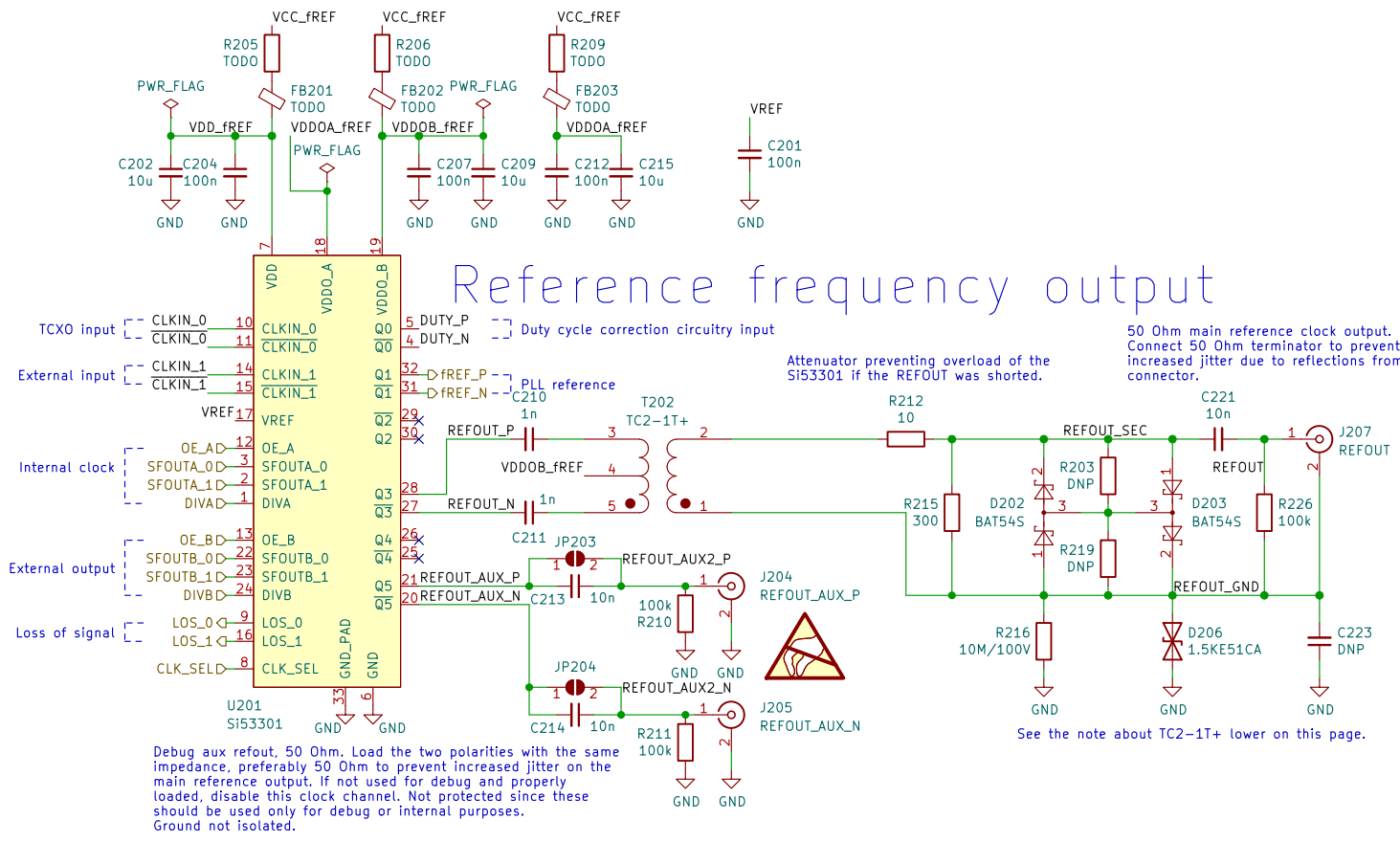
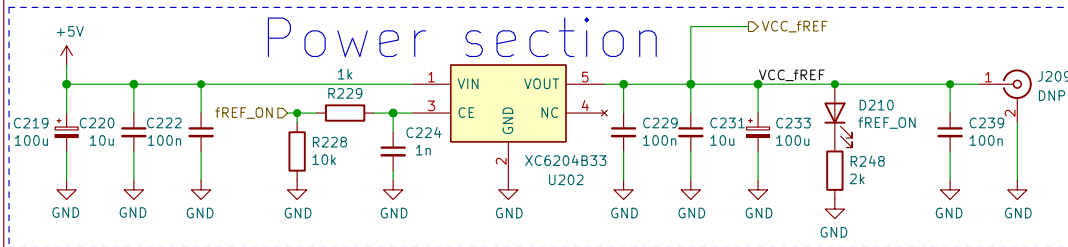


Multiplexer / buffer

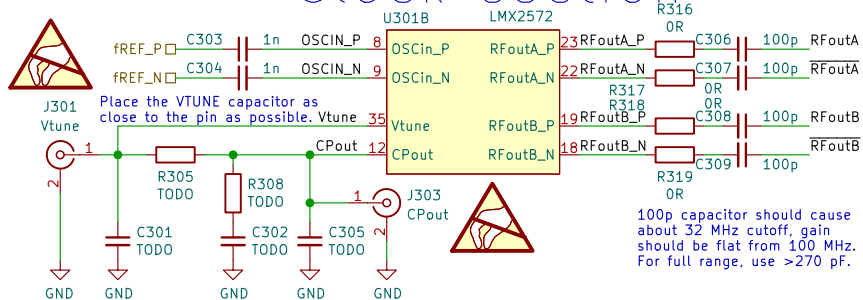


Power section



Schematic diagram of the U301A LMX2572 board showing the connection of the U301A LMX2572 chip to the board's input/output pins. The chip is represented by a yellow box on the right. The board's input/output pins are listed on the left. The chip's pins are listed on the right. The connections are as follows: SCKD to SCK (pin 16), SDID to SDI (pin 17), MUXOut to MUXout (pin 20), CSB to CSB (pin 24), CED to CE (pin 1), RampClk to RampClk (pin 30), RampDir to RampDir (pin 32), SYNC to SYNC (pin 5), and SysRefReq to SysRefReq (pin 28). Pull-up resistors R306, R309, R311, R313, R307, R310, R312, R314, and R315 are connected to GND and the respective input/output pins.

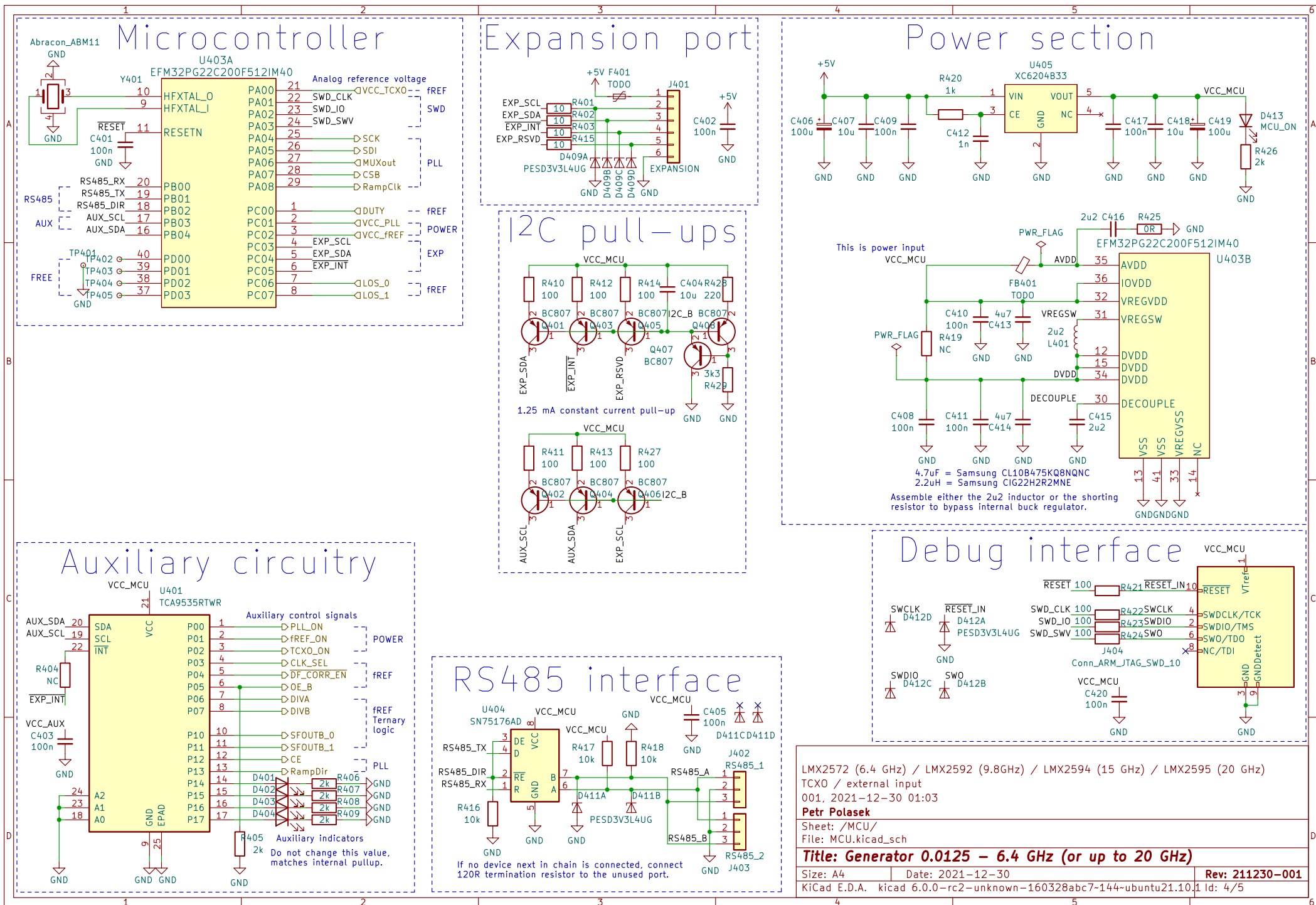
Clock section



Be careful as the outputs
Before connecting anything
cable and on the connector

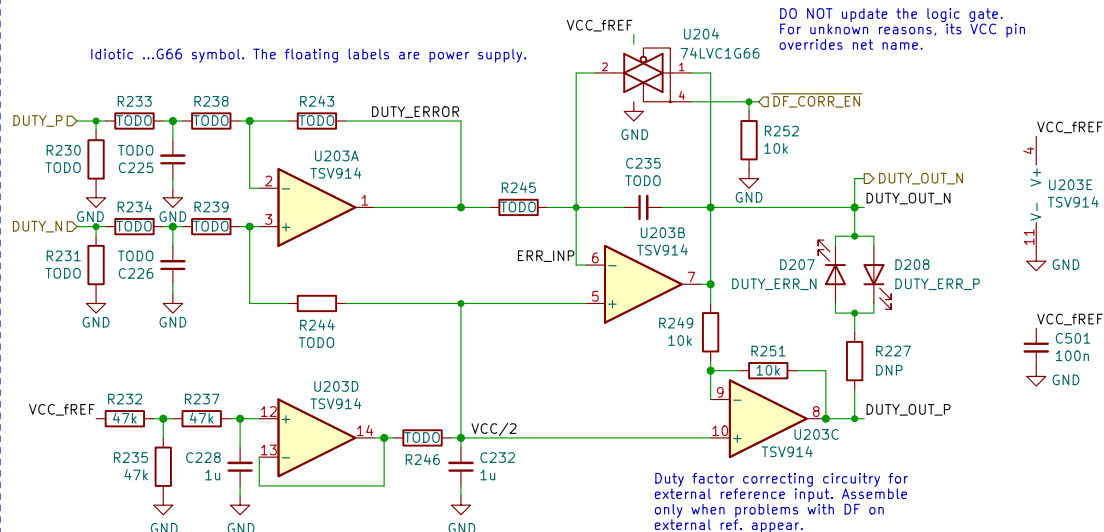
The schematic diagram illustrates the power management section of the iNtelliSense module. It shows the connection of various power management ICs (U300, U301A, U301B, U301C, U301D, U302) to the system power rails. The diagram includes components like resistors (R300-R332), capacitors (C300-C340), and connectors (J308). The power rails shown are +5V, GND, VCC_PLL, VccBUF, VccDIG, VccMASH, VccCP, VccVCO, and VccVARAC. The diagram is color-coded: red for power rails, green for ground, and blue for signal lines.

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Duty factor / DC corrector

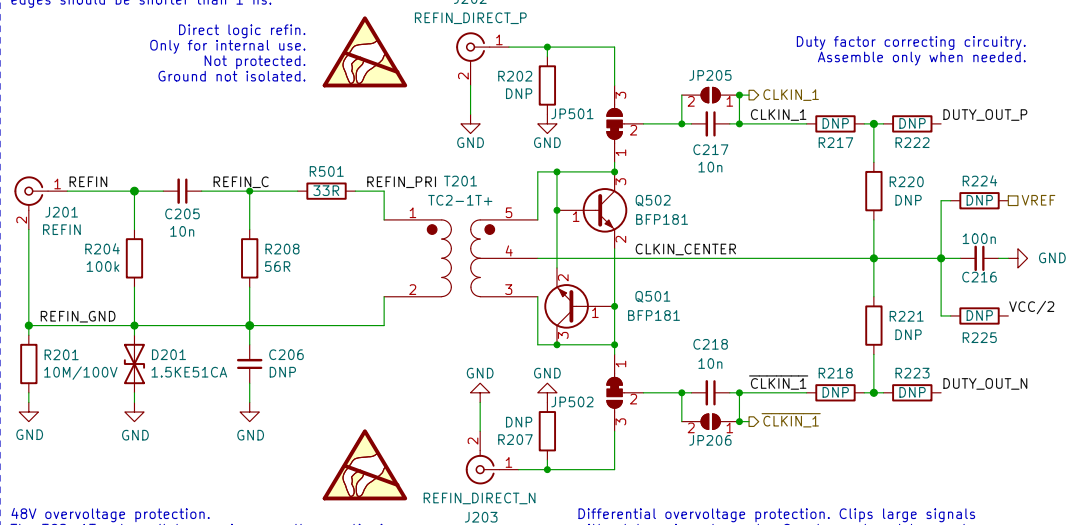
Idiotic ...G66 symbol. The floating labels are power supply.



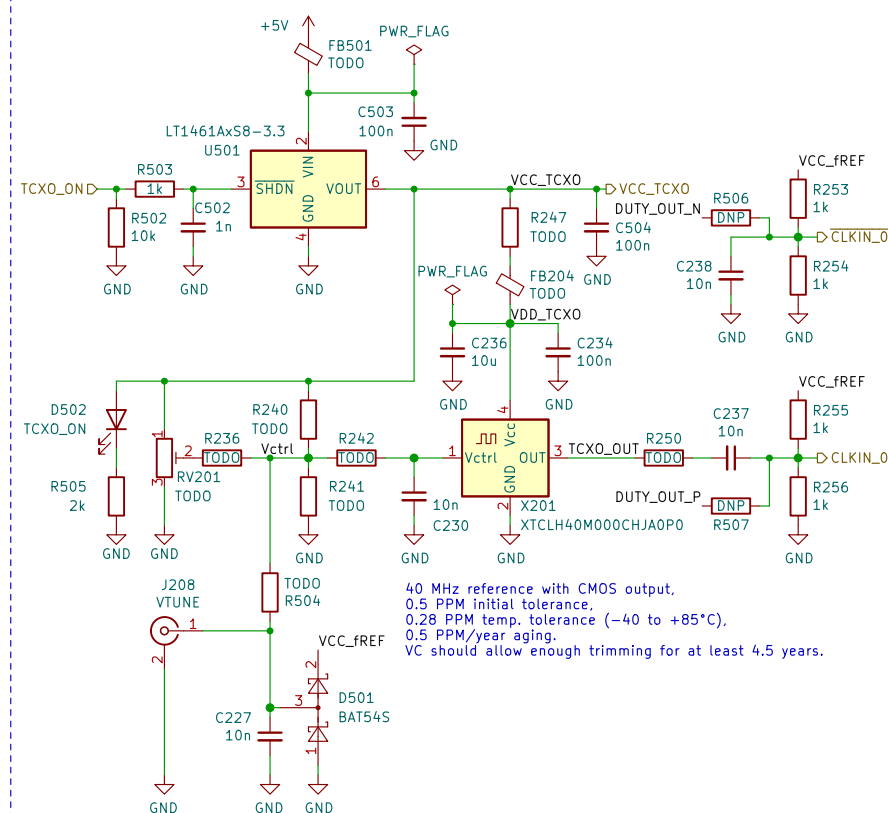
Reference frequency input

The Si53301 requires slew rate at least 750 V/us to meet 50 fs additive jitter. This would require 5.5 Vpk-pk @ 10 MHz or 1.45 Vpk-pk at 40 MHz for sine wave. Therefore, clipped sine wave or rectangle is required for best jitter performance. The clipped sine should have slew rate at least 400 V/us and voltage at least 150 mVpp. edges should be shorter than 1 ns.

Direct logic ref.
Only for internal use.
Not protected.
Ground not isolated.



VCTCXO



LMX2572 (6.4 GHz) / LMX2592 (9.8GHz) / LMX2594 (15 GHz) / LMX2595 (20 GHz)
TCXO / external input
001, 2021-12-30 01:03

Petr Polasek

Sheet: /Clock reference/Input Clocks/
File: input_clocks.kicad_sch

Title: Generator 0.0125 - 6.4 GHz (or up to 20 GHz)

Size: A4 Date: 2021-12-30 Rev: 211230-001

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