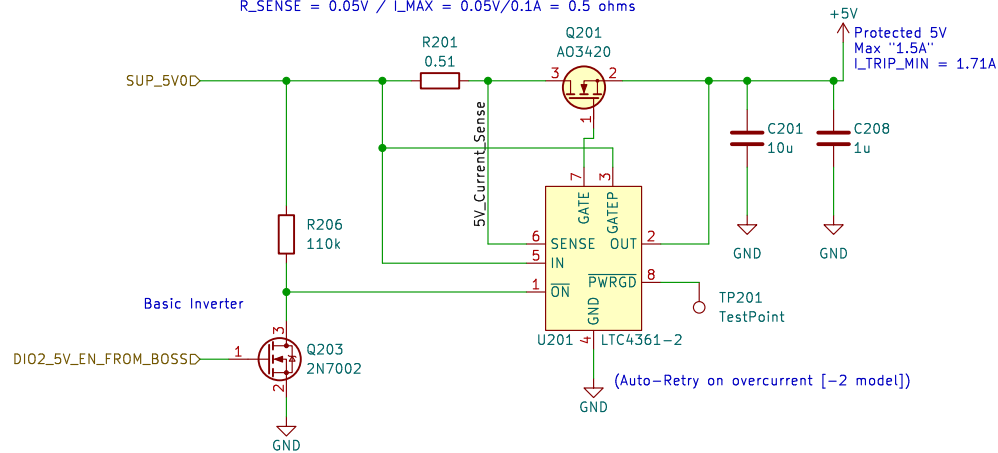


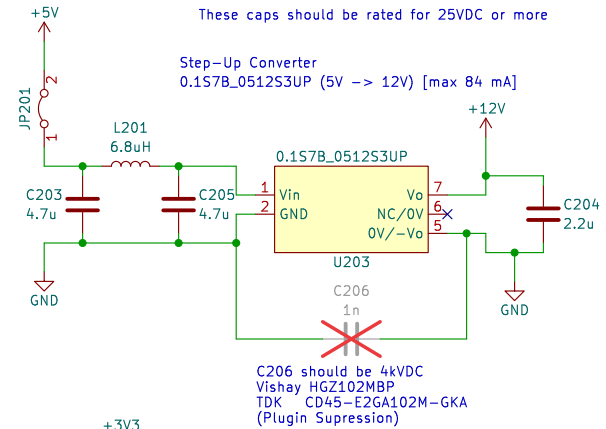
For the LTC4361 (per datasheet page 5):
 $R_{SENSE} = (0.05V) / I_{SENSE}$

5V Current Limit:
 Max Power = 0.5W (good for experiment safety)
 Max Current (at 5V) = $0.5W / 5V = 0.1A$
 $R_{SENSE} = 0.05V / I_{MAX} = 0.05V / 0.1A = 0.5 \text{ ohms}$

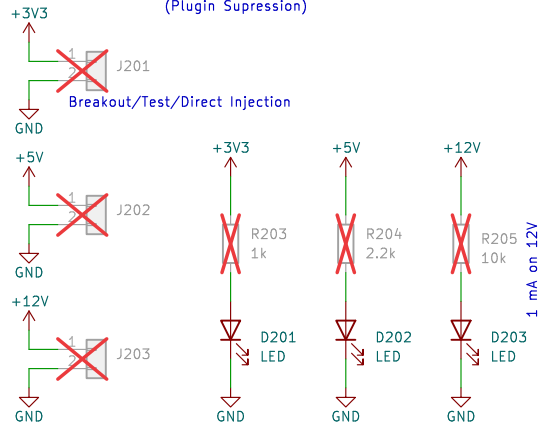


These caps should be rated for 25VDC or more

Step-Up Converter
 0.1S7B_0512S3UP (5V -> 12V) [max 84 mA]



C206 should be 4kVDC
 Vishay HGZ102MBP
 TDK CD45-E2GA102M-GKA
 (Plugin Supression)



3V3 Current Limit:
 Max Power = 2W (a little over the 1.75W max)
 Max Current (at 3V3) = $2W / 3V3 = 0.61A$
 $R_{SENSE} = 0.05V / I_{MAX} = 0.05V / 0.61A = 0.081 \text{ ohms}$

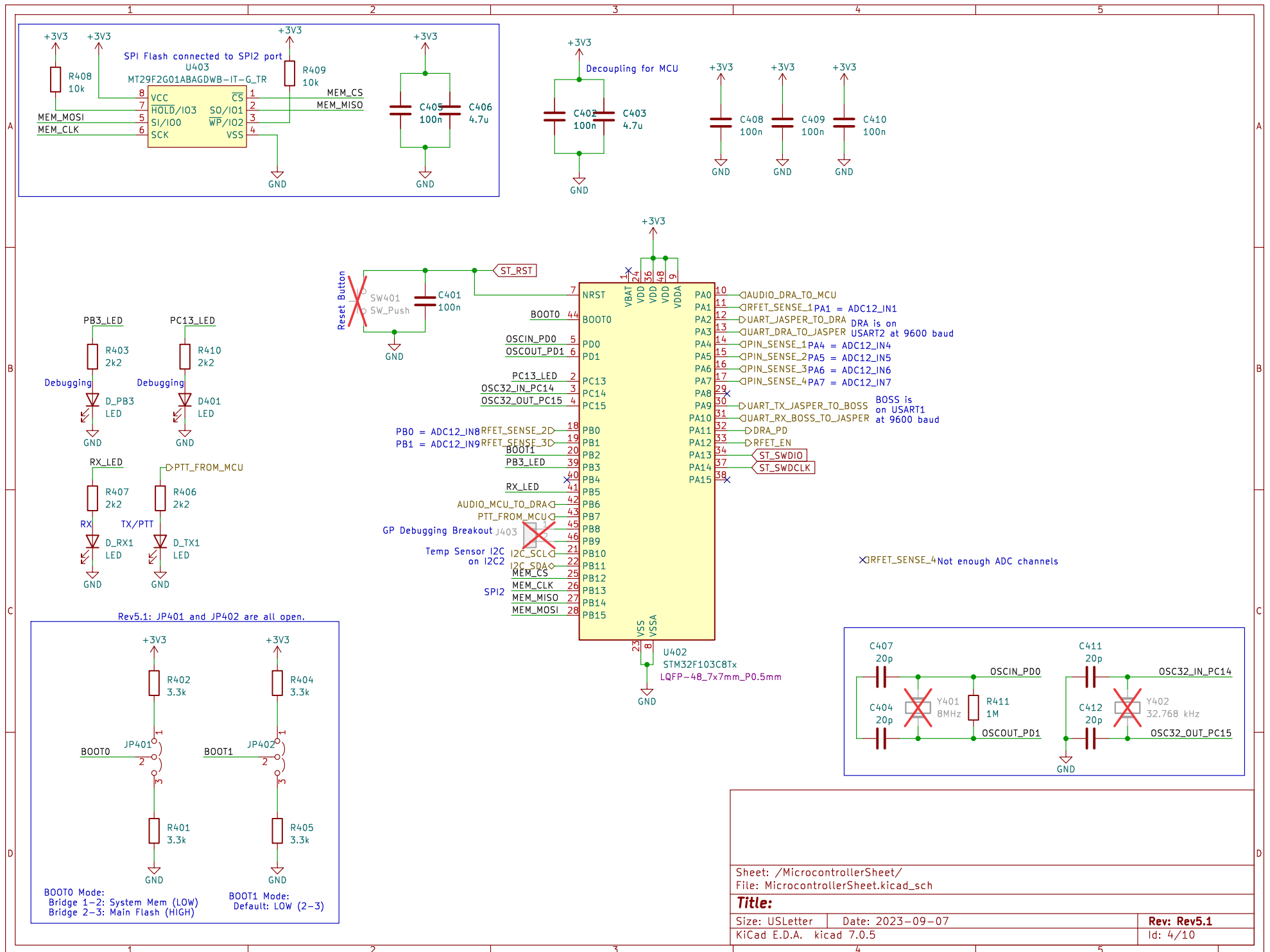
0.075 ohms => 0.66A => 2.2W

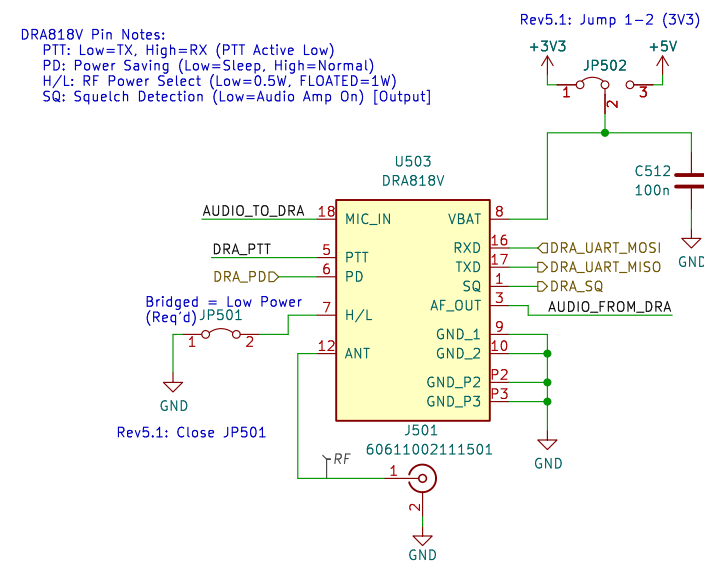
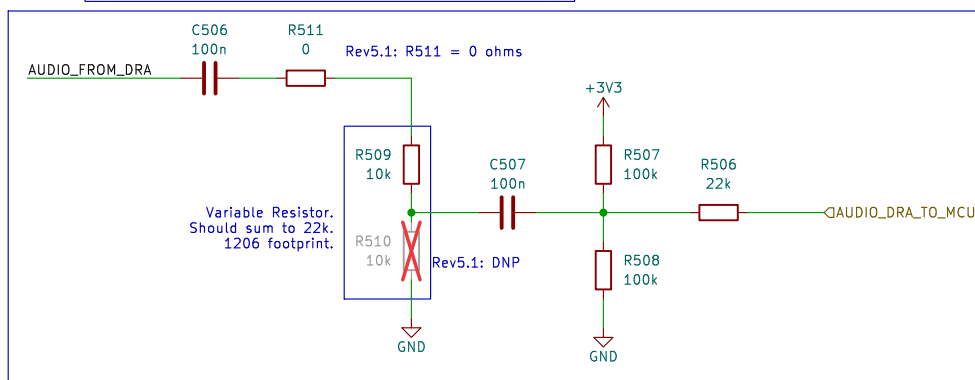
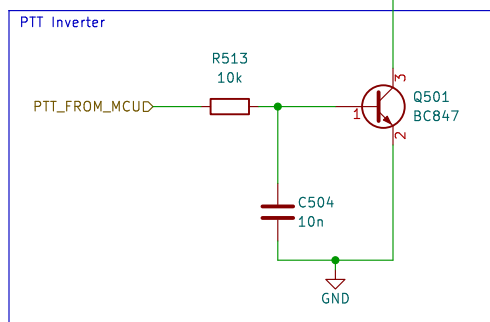
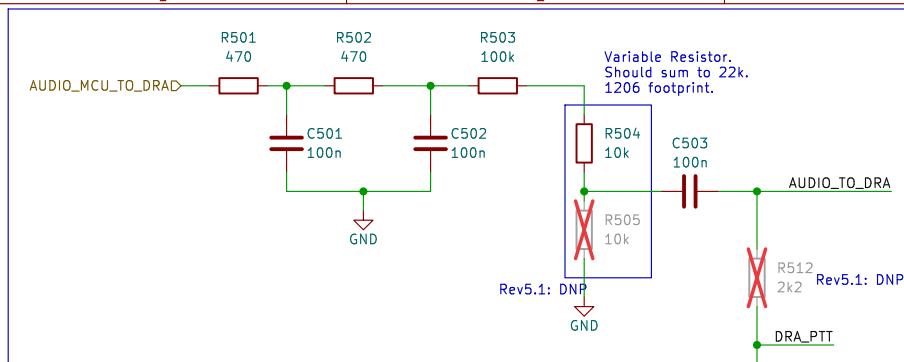
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Title:

Size: USLetter Date: 2023-09-07
 KiCad E.D.A. kicad 7.0.5

Rev: Rev5.1
 Id: 2/10





Sheet: /RF_System/
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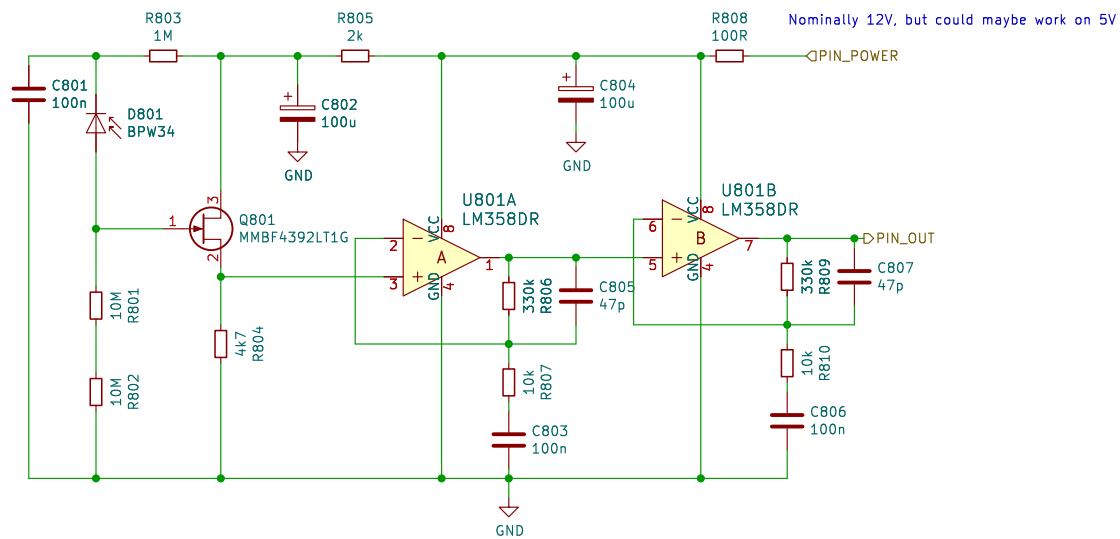
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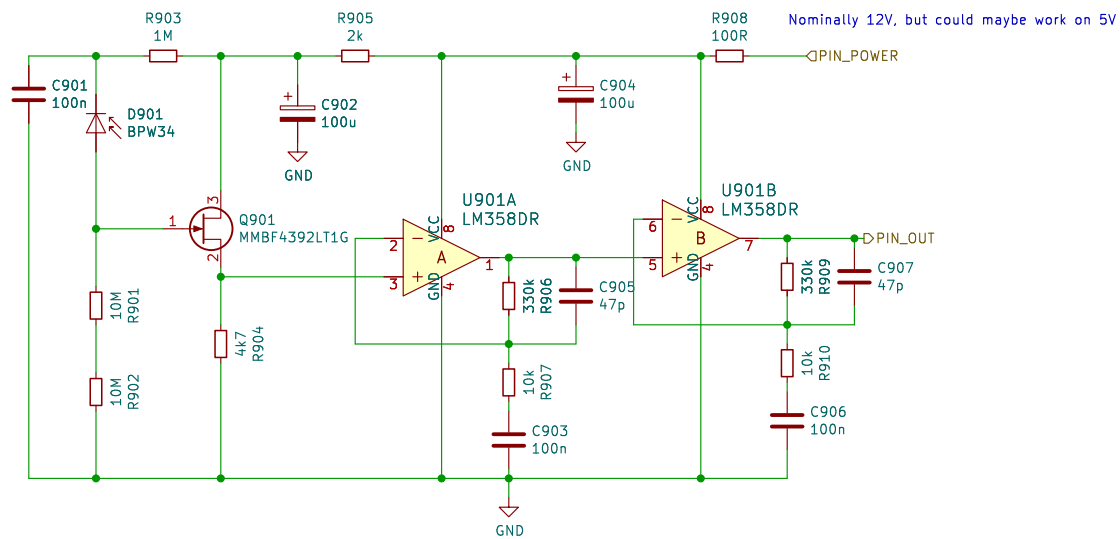
Size: USLetter	Date: 2023-09-07
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Size: 65Kb	Date: 2023-08-24
KiCad E.D.A.	kicad 7.0.5

Rev: Rev5.1

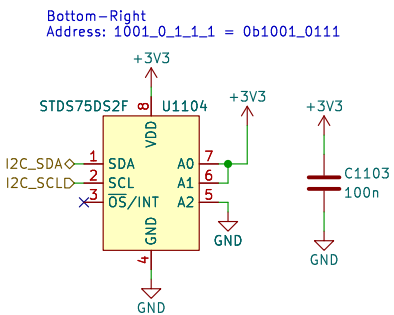
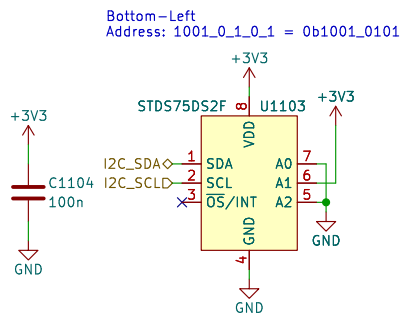
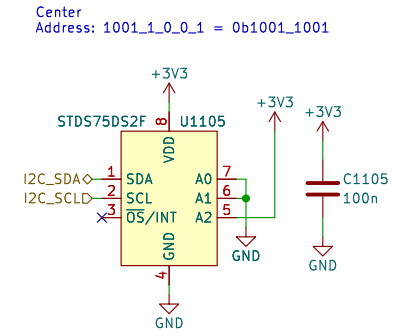
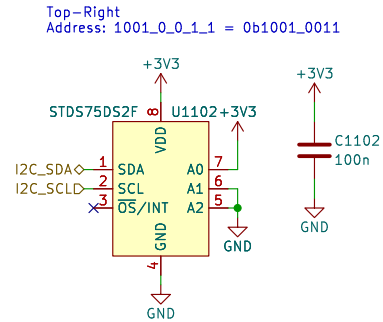
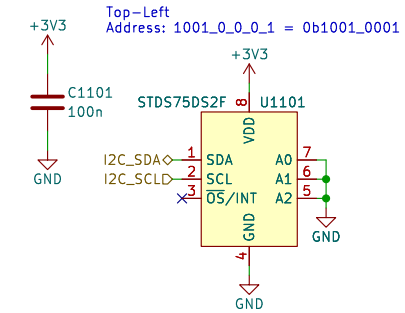
Id: 5/10





Note: Rev5 and Rev5.1 are missing I2C pull-up resistors.
I2C pull-up resistors will be added in next rev.

Address: 1001_A2_A1_A0_RW
When RW=1, READ mode



Sheet: /TempSensors/
File: TempSensors.kicad_sch

Title:

Size: A4 Date: 2023-09-07

KiCad E.D.A. kicad 7.0.5

Rev: Rev5.1

Id: 11/10