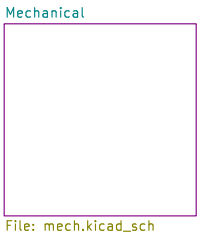
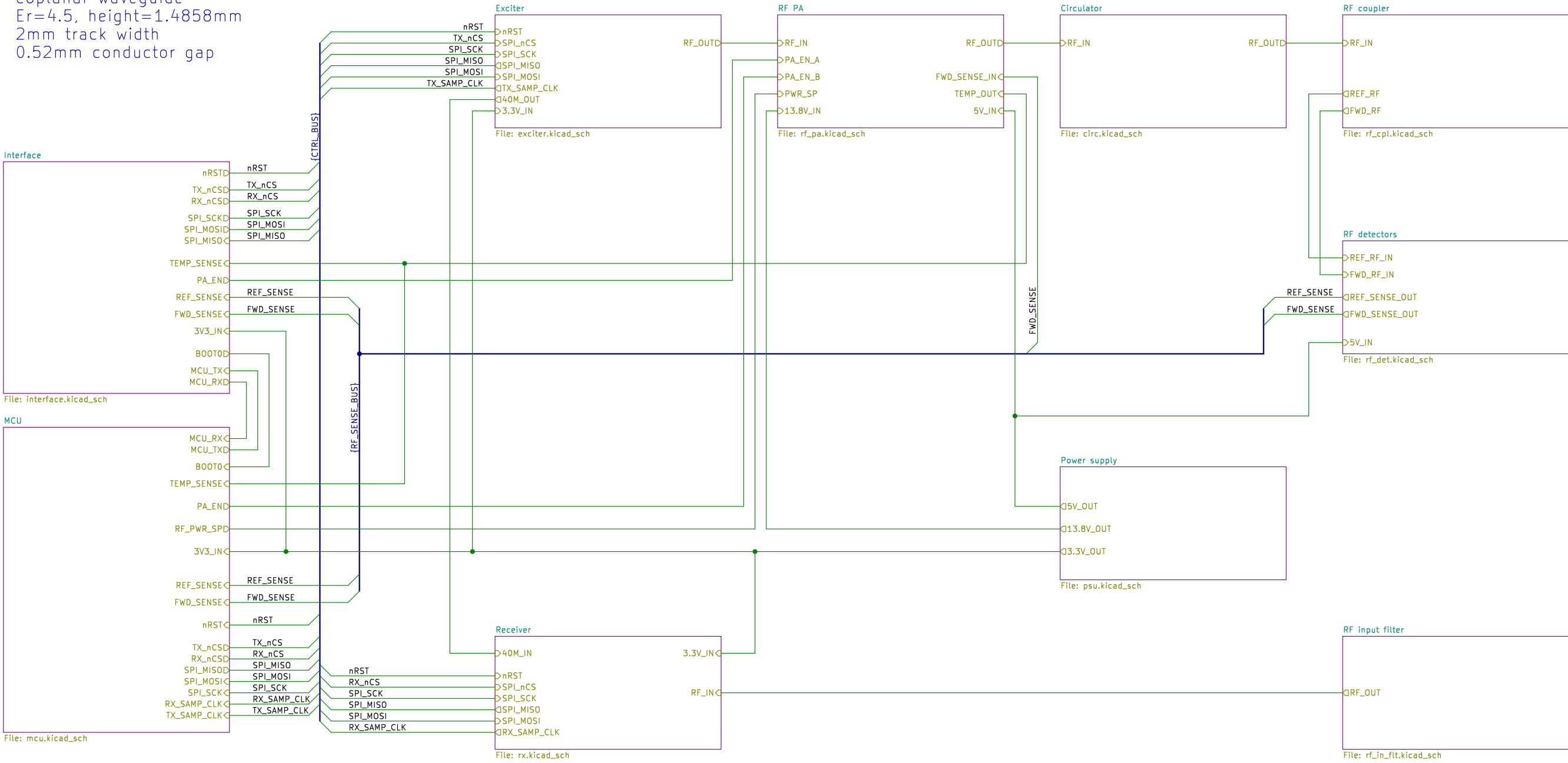


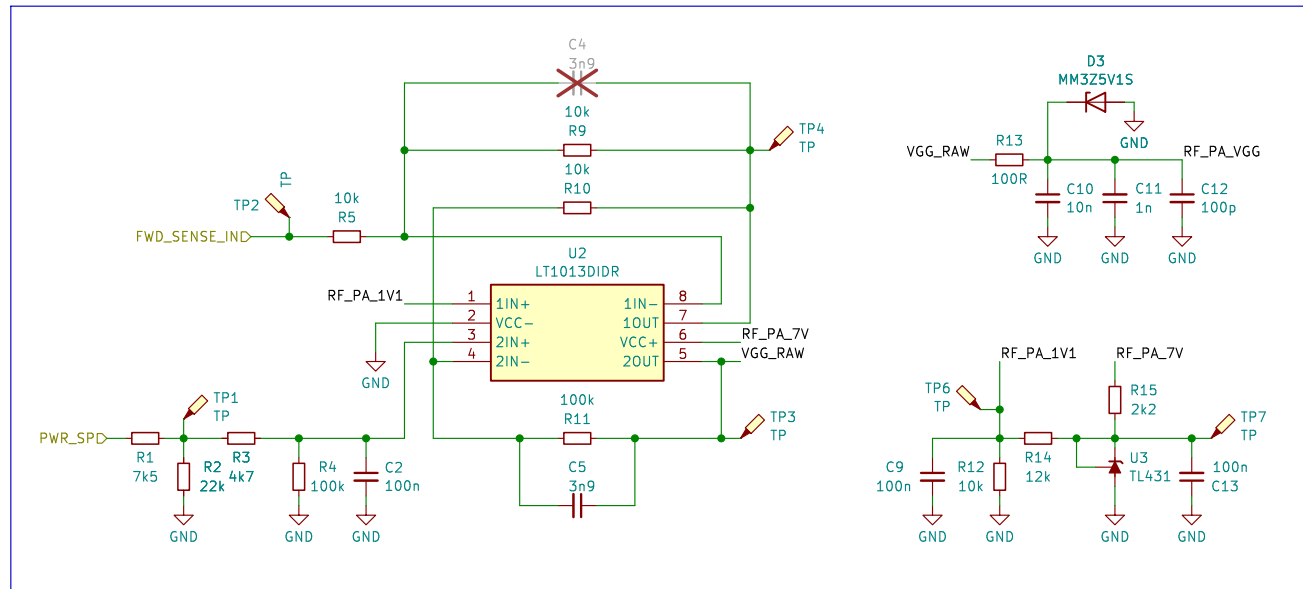
Low power RF tracks:
coplanar waveguide
Er=4.4, height=0.2104mm
0.25mm track width
0.052mm conductor gap

High power RF tracks:
coplanar waveguide
Er=4.5, height=1.4858mm
2mm track width
0.52mm conductor gap

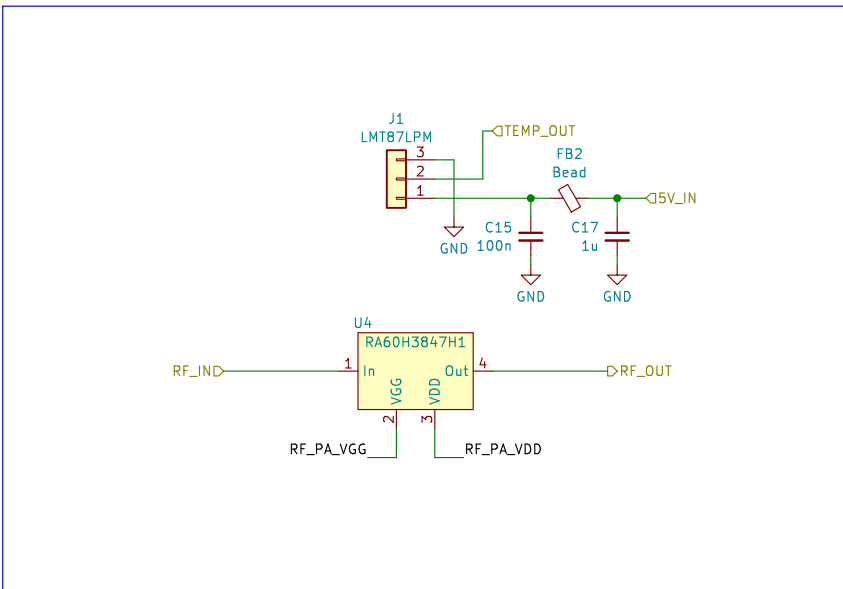


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|-------------------------------------|------------------|--------|
| Wojciech Kaczmarek, SP5WWP | | |
| M17 Project | | |
| Sheet: / | | |
| File: m17-rru-rf.kicad_sch | | |
| Title: Remote Radio Unit – RF board | | |
| Size: A3 | Date: 20–01–2024 | Rev: B |
| KiCad E.D.A. kicad 7.0.8 | Id: 1/12 | |

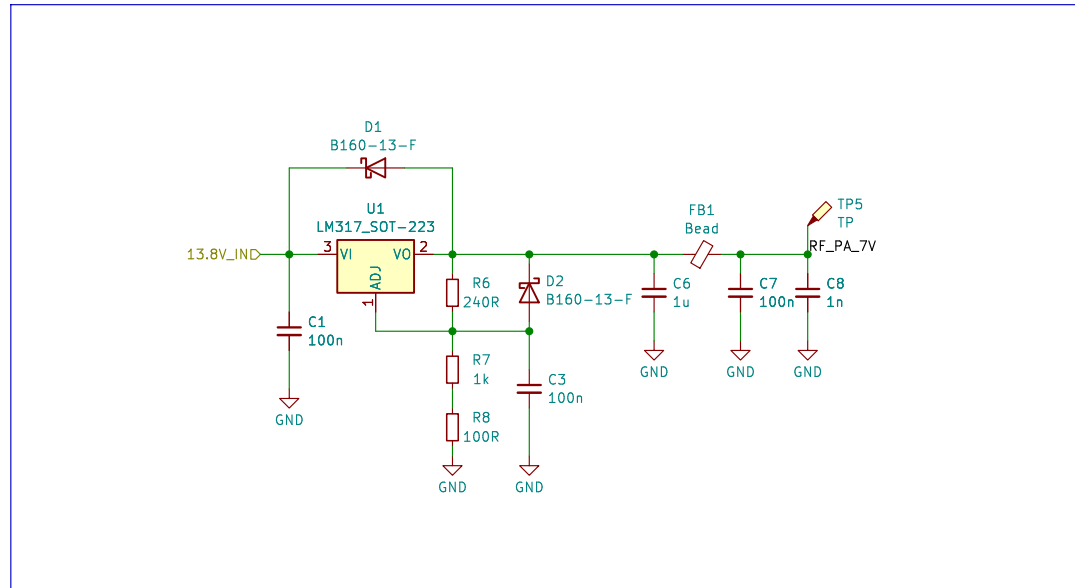
ALC



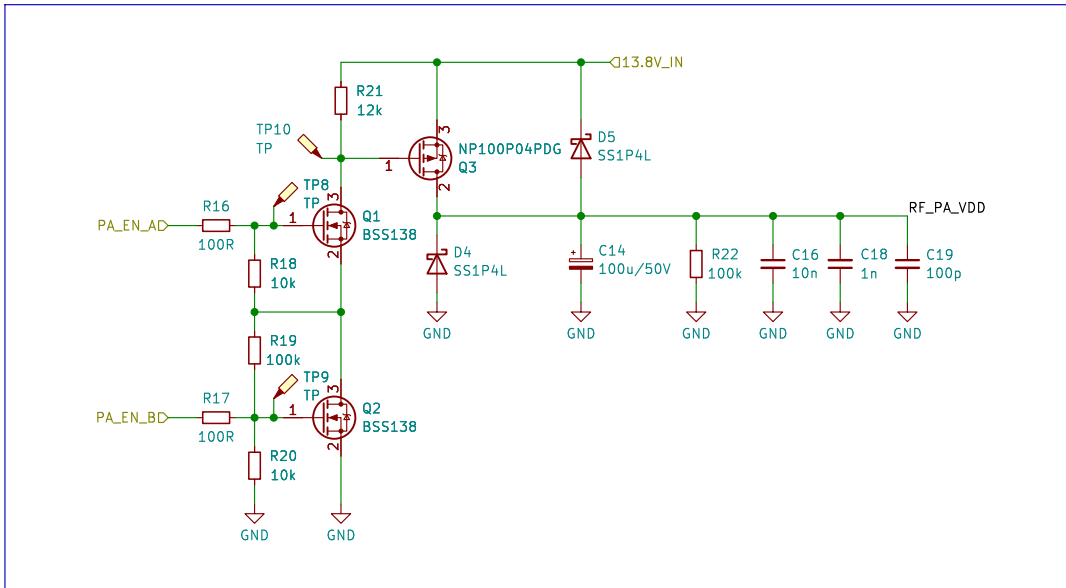
RF PA



Voltage reg.



Supply switching



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M17 Project

Sheet: /RF PA/

File: rf_pa.kicad_sch

Title: Remote Radio Unit – RF board

Size: A3

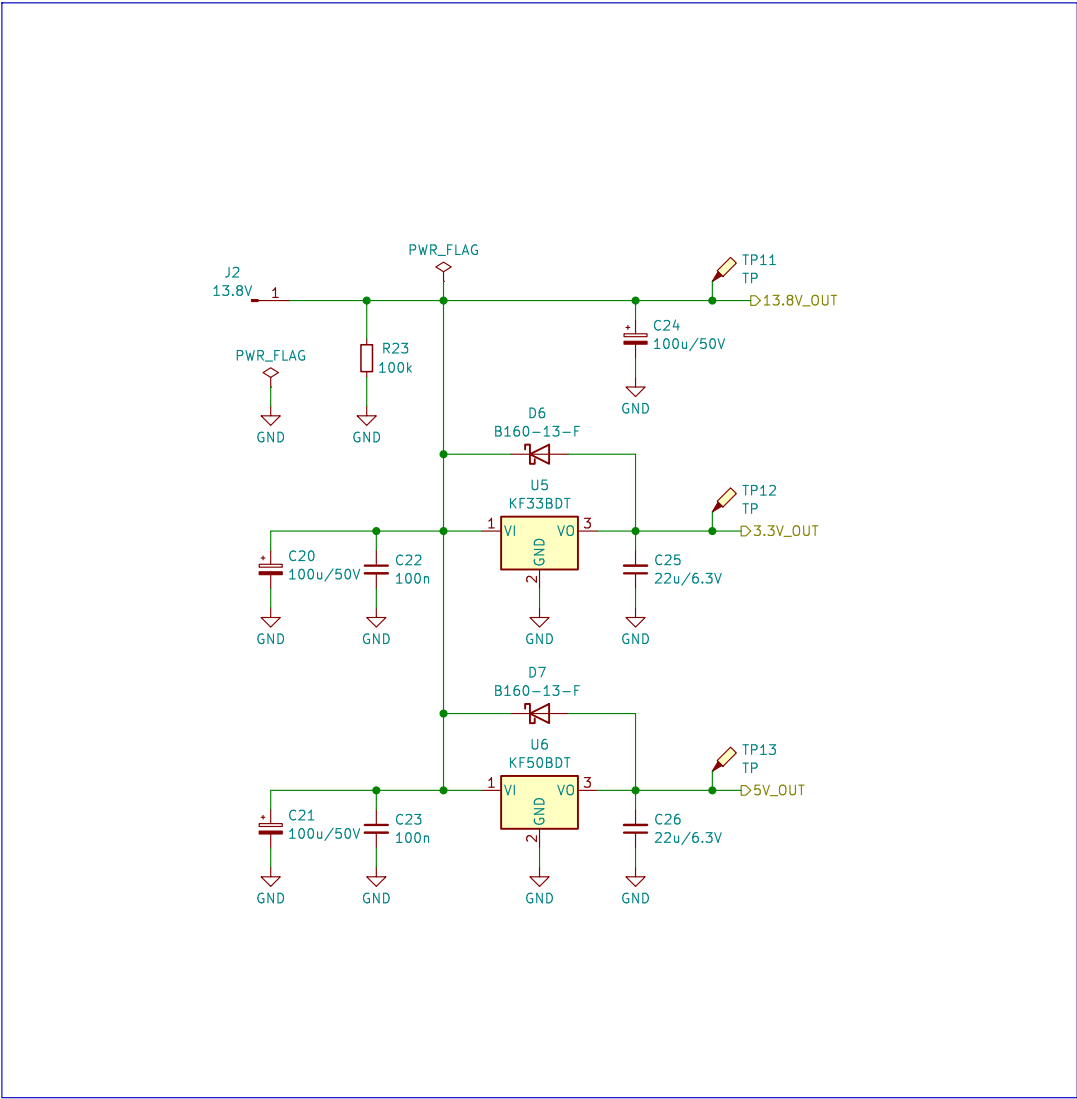
Date: 20-01-2024

Rev: B

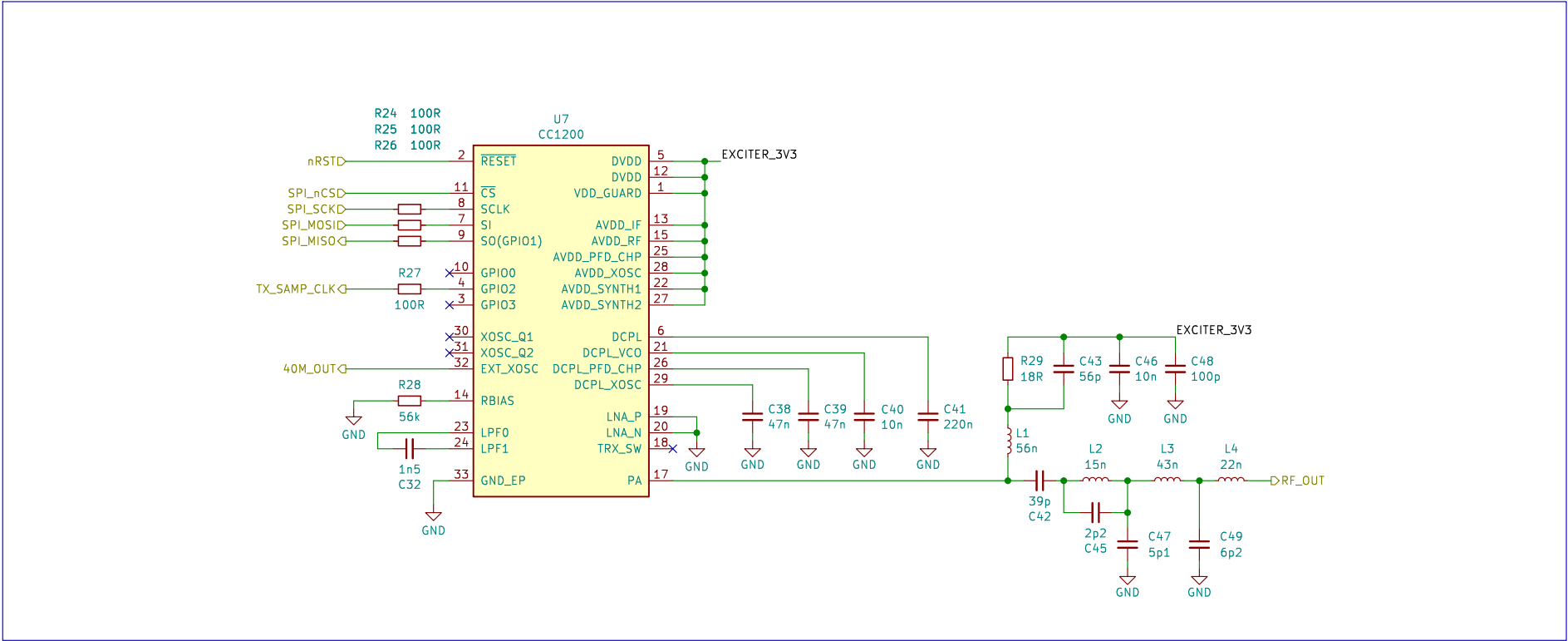
KiCad E.D.A. kicad 7.0.8

Id: 2/12

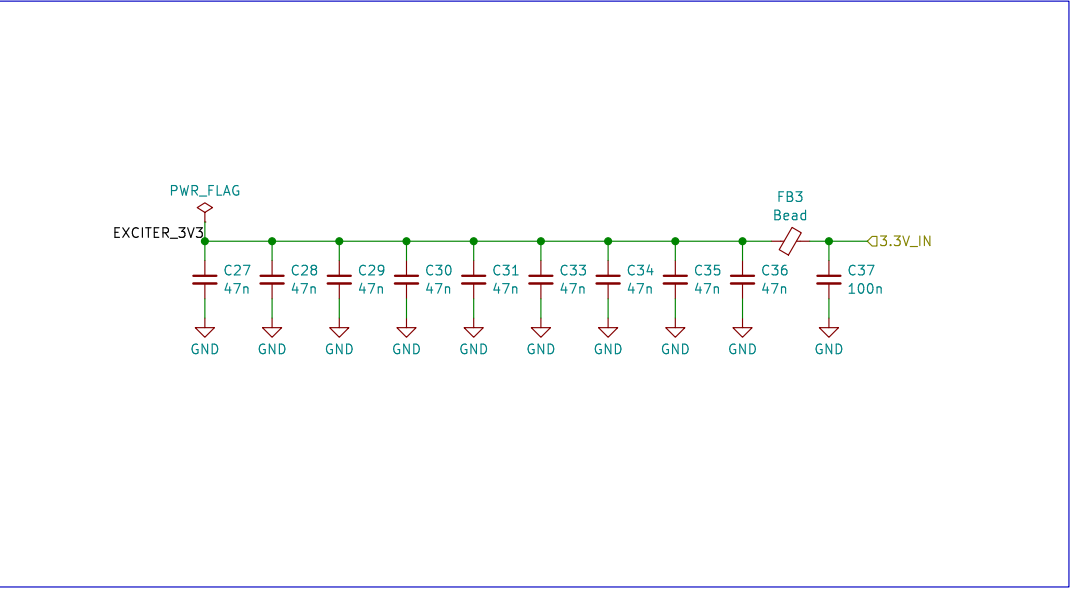
Voltage reg.



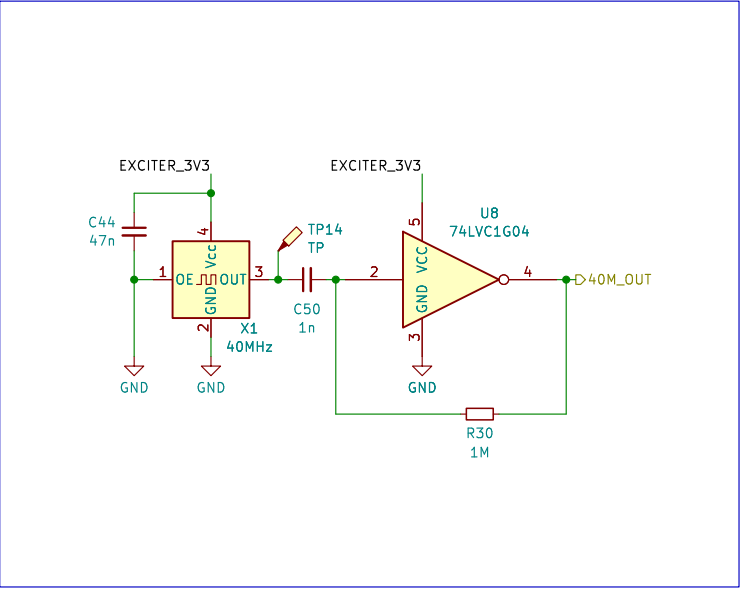
Exciter

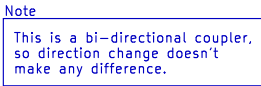


Decoupling



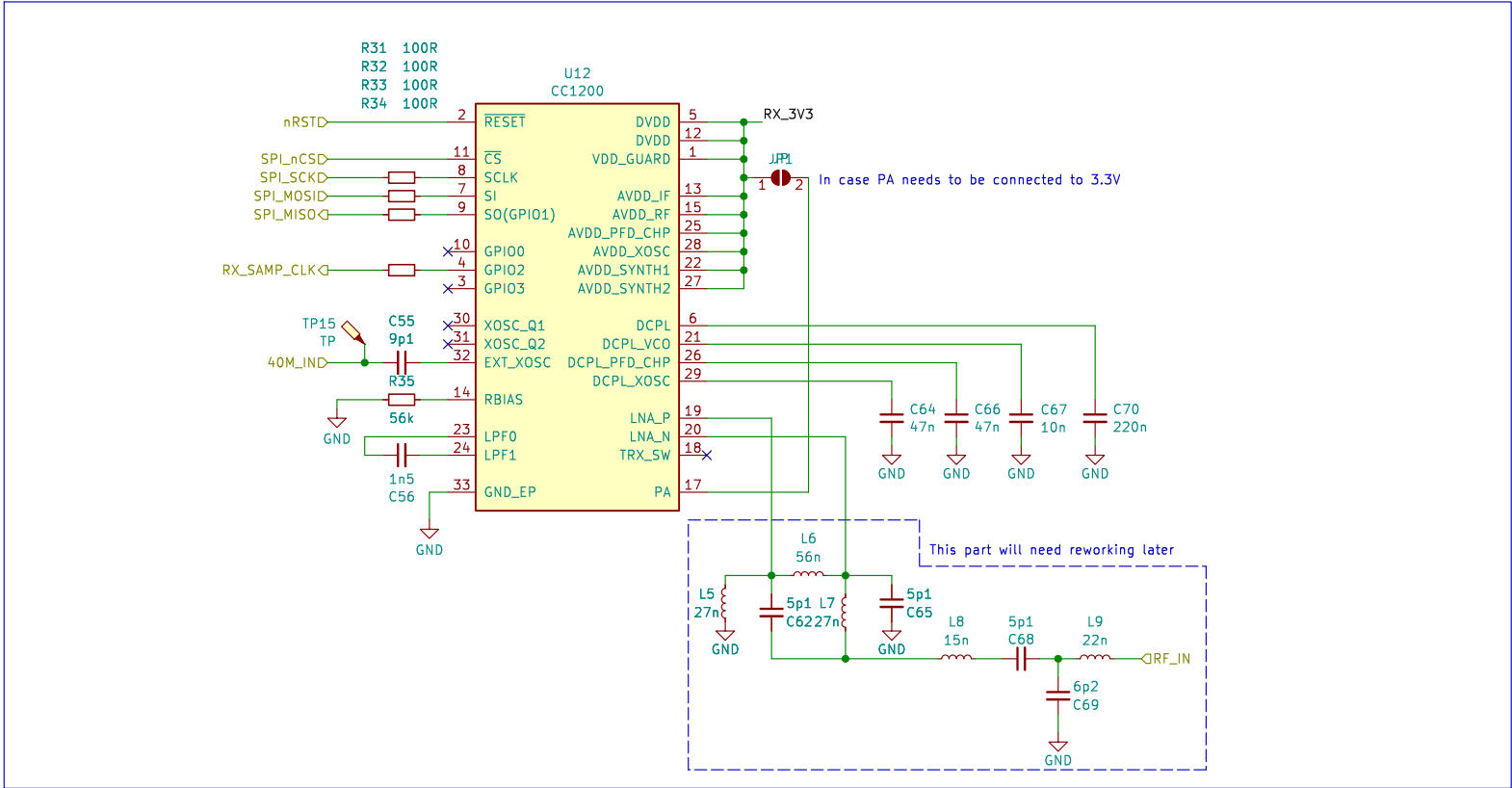
40MHz reference



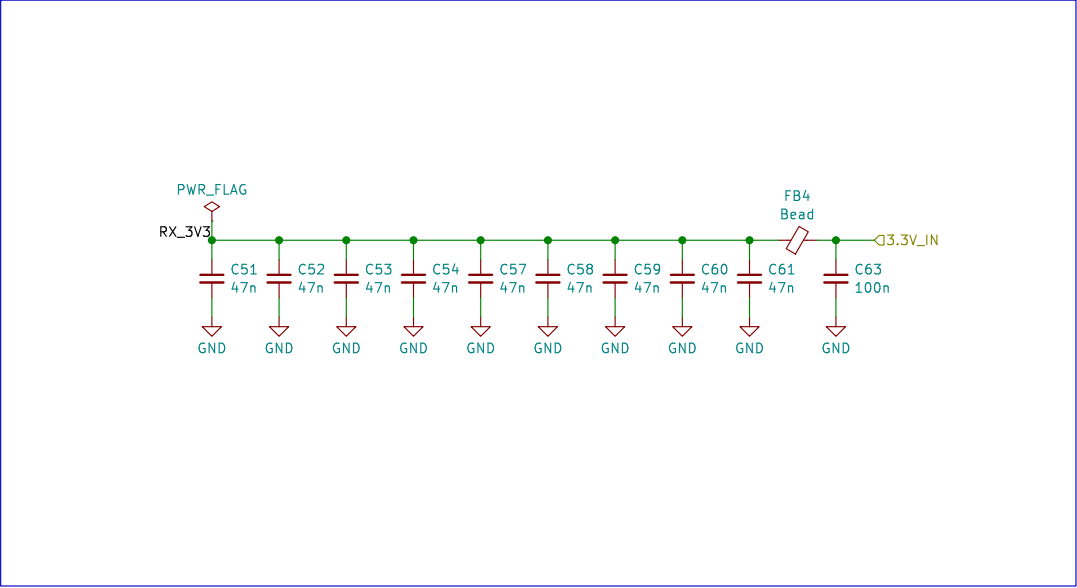


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| Size: A3 | Date: 20-01-2024 | Rev: B |
| KiCad E.D.A. kicad 7.0.8 | | Id: 5/12 |

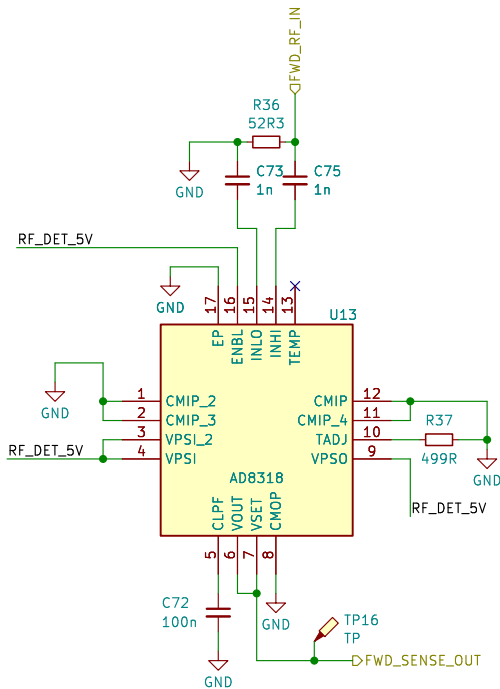
Receiver



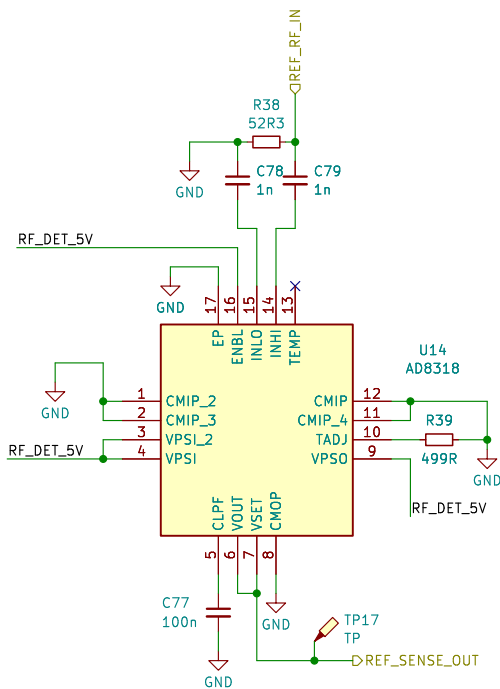
Decoupling



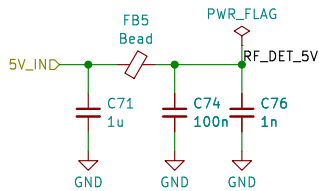
FWD power sense



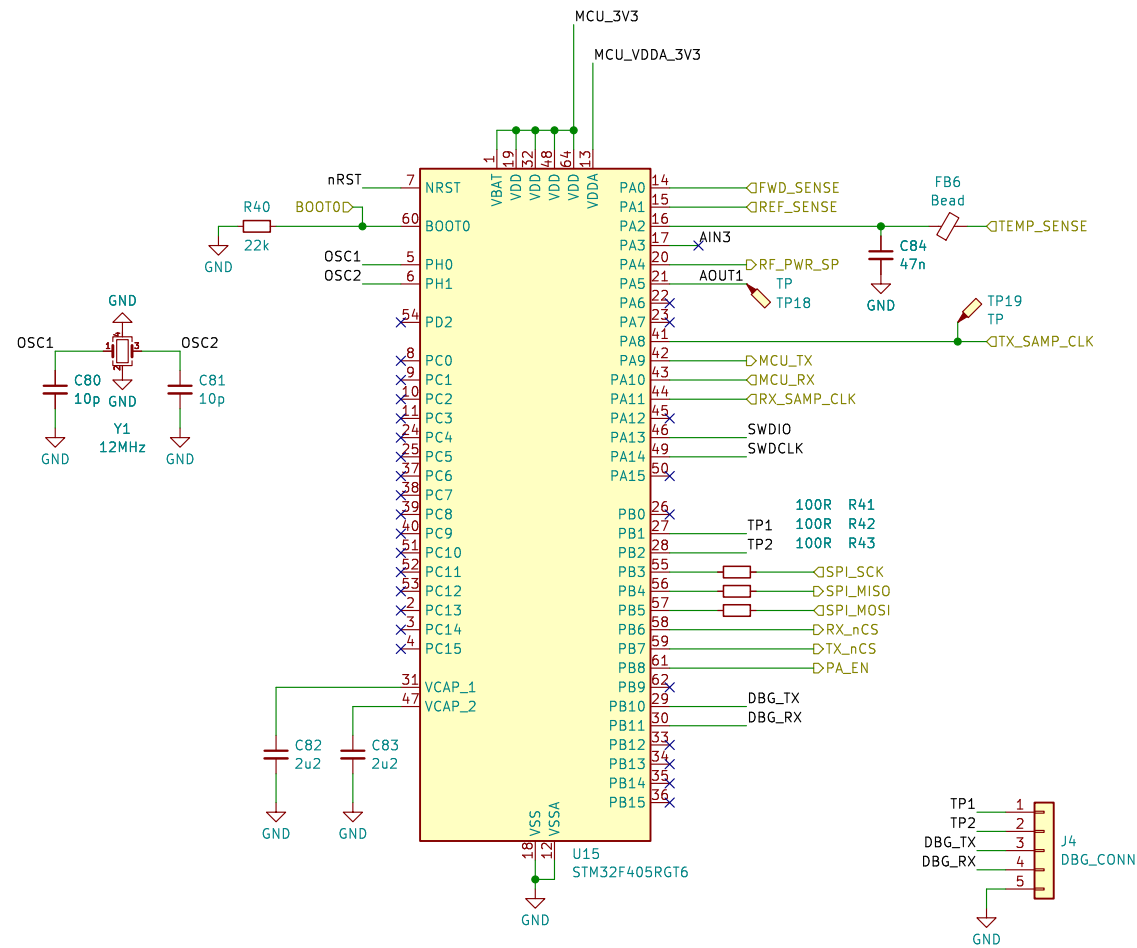
REF power sense



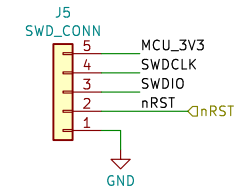
Decoupling



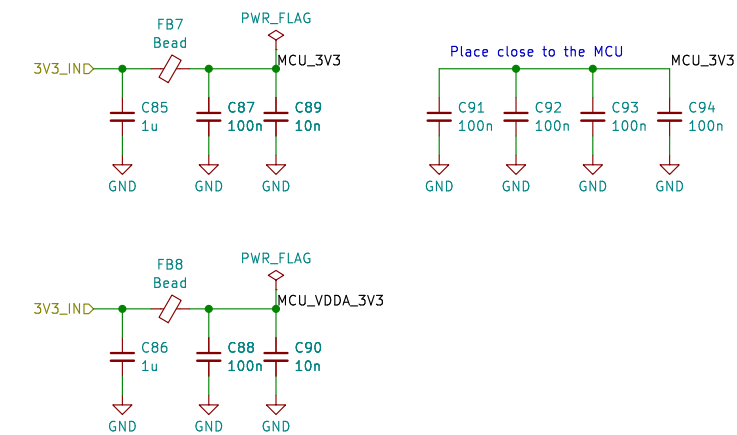
MCU



SWD



Decoupling



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M17 Project

Sheet: /MCU/

File: mcu.kicad_sch

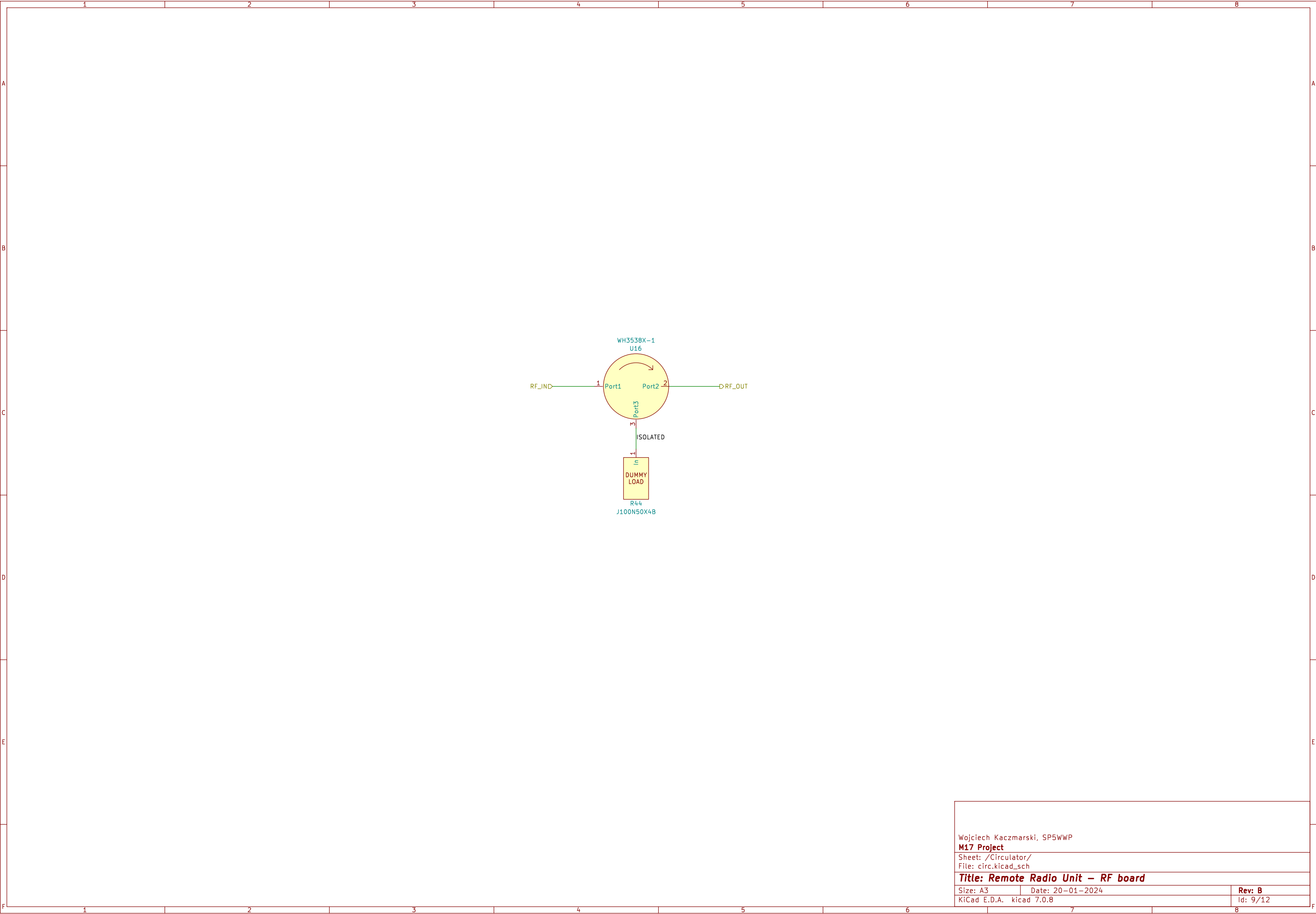
Title: Remote Radio Unit – RF board

Size: A3 Date: 20–01–2024

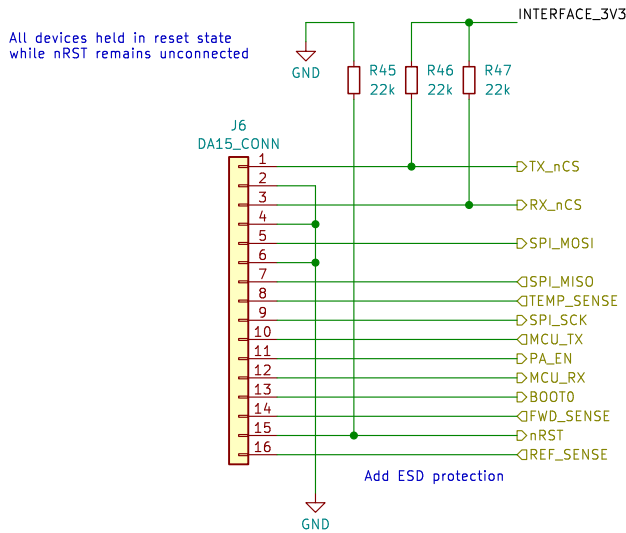
KiCad E.D.A. kicad 7.0.8

Rev: B

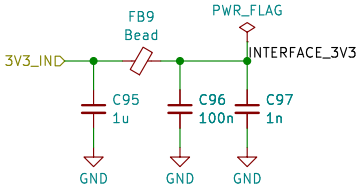
Id: 8/12



External connector



Decoupling



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M17 Project

Sheet: /Interface/

File: interface.kicad_sch

Title: Remote Radio Unit – RF board

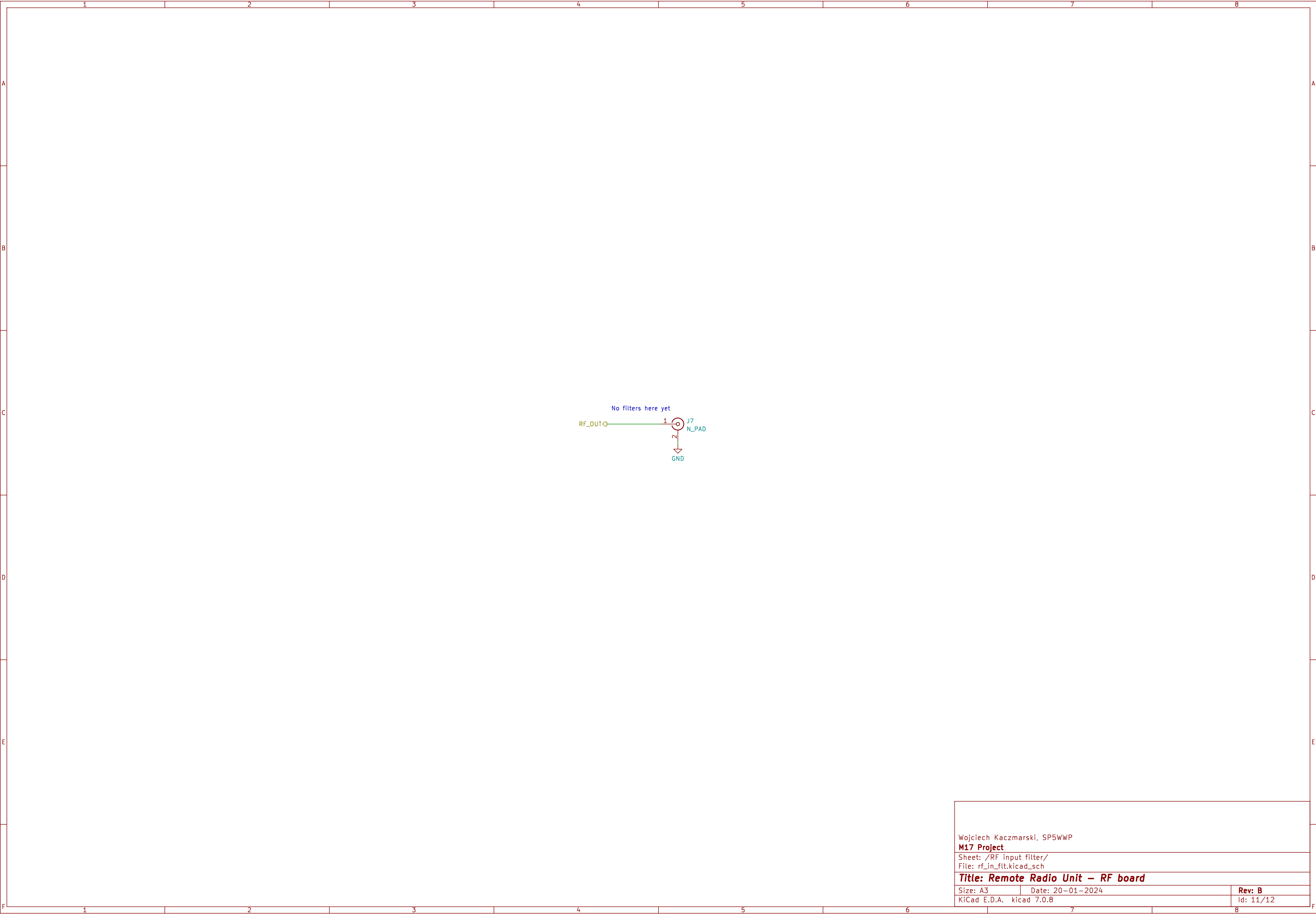
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Date: 20–01–2024

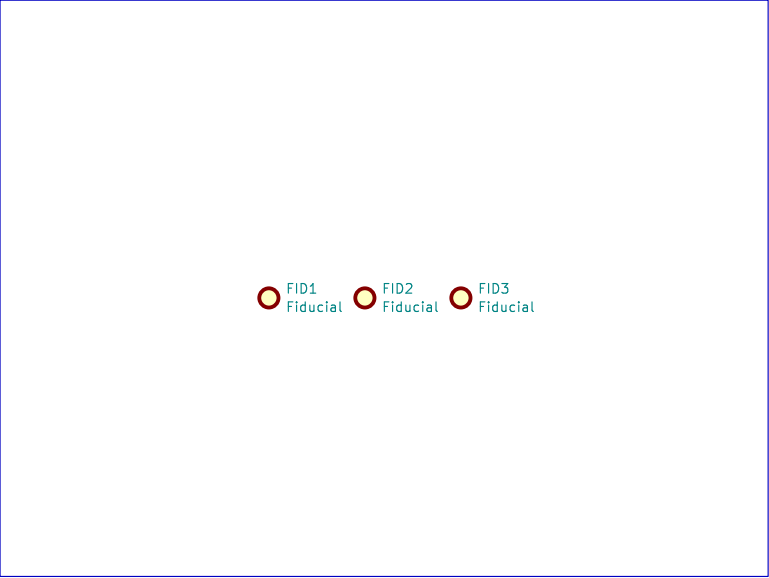
Rev: B

KiCad E.D.A. kicad 7.0.8

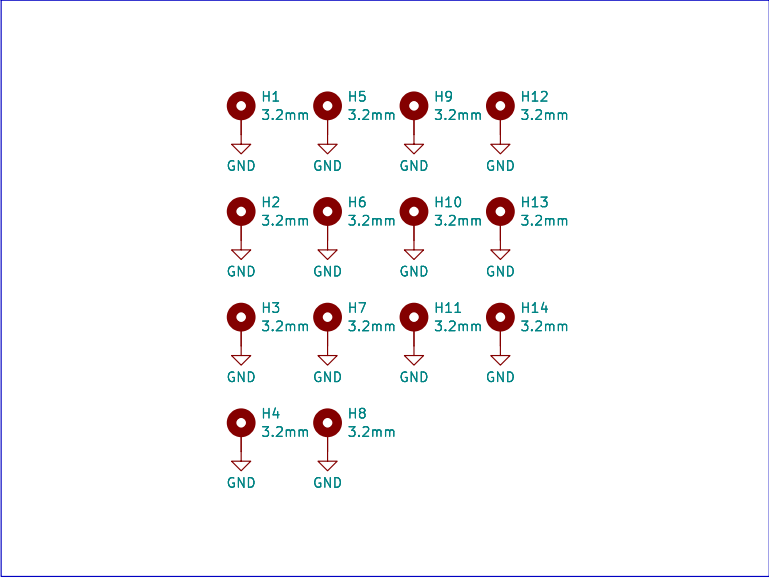
Id: 10/12



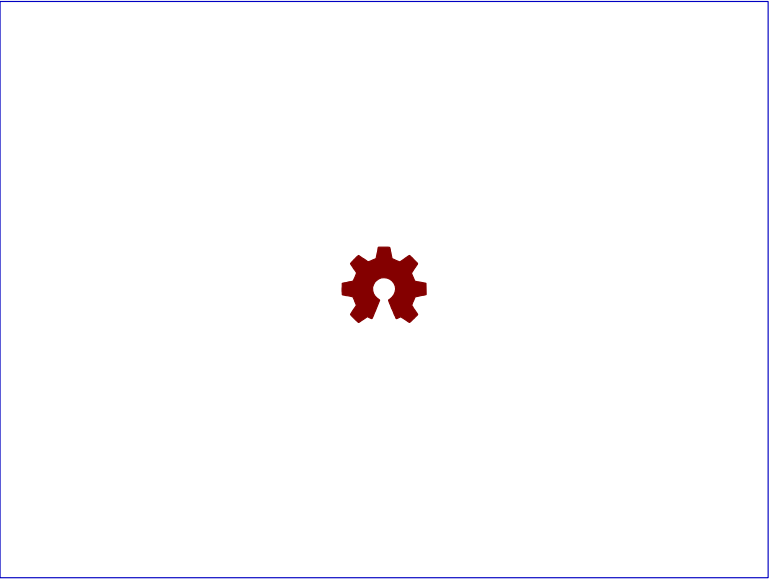
Fiducials



Mounting holes



Graphics



Wojciech Kaczmarek, SP5WWP
M17 Project
Sheet: /Mechanical/
File: mech.kicad_sch

Title: Remote Radio Unit – RF board

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|--------------------------|------------------|-----------|
| Size: A3 | Date: 20–01–2024 | Rev: B |
| KiCad E.D.A. kicad 7.0.8 | | Id: 12/12 |