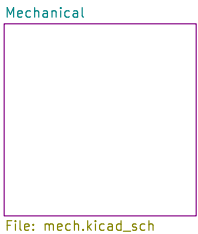
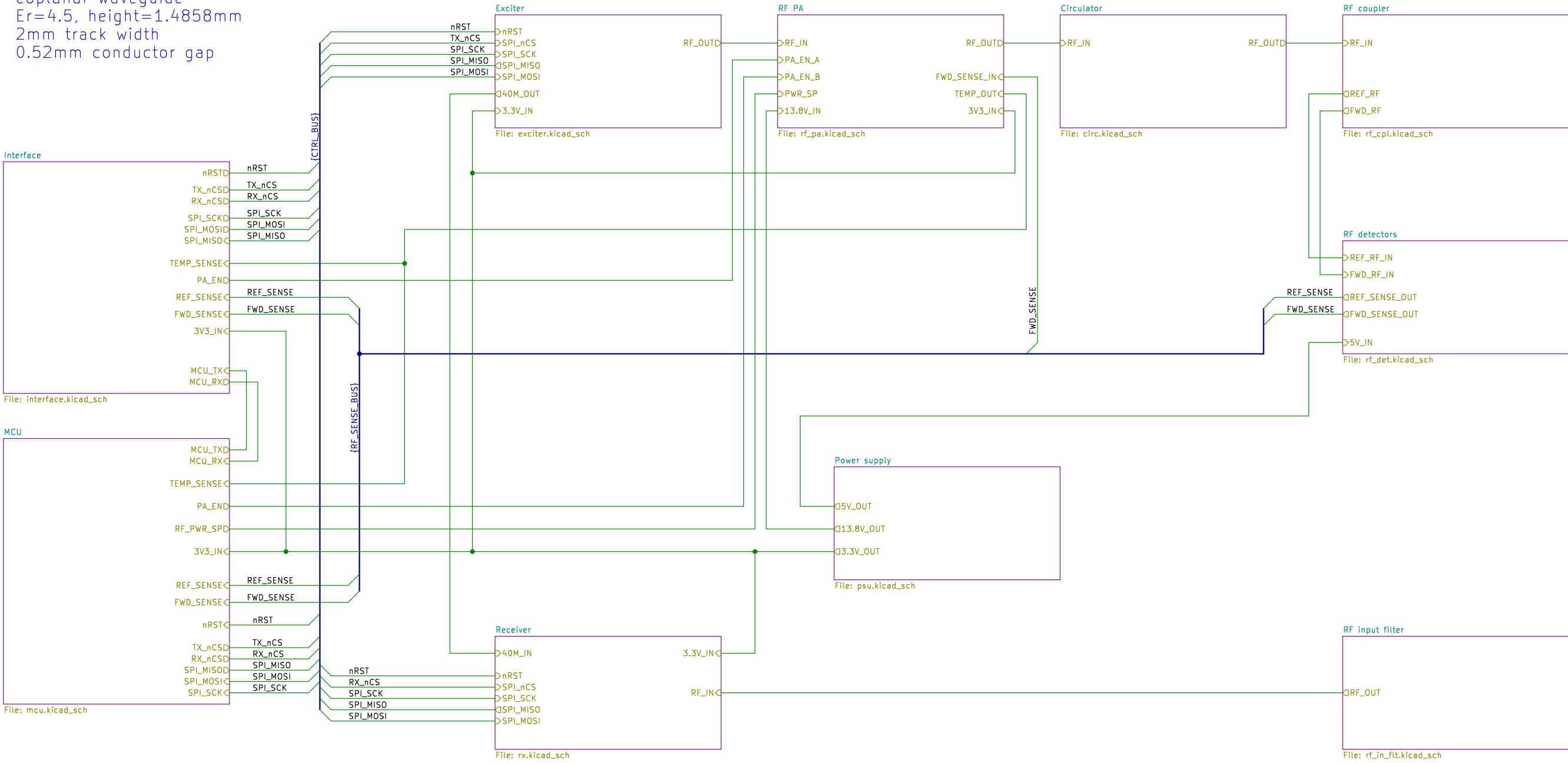


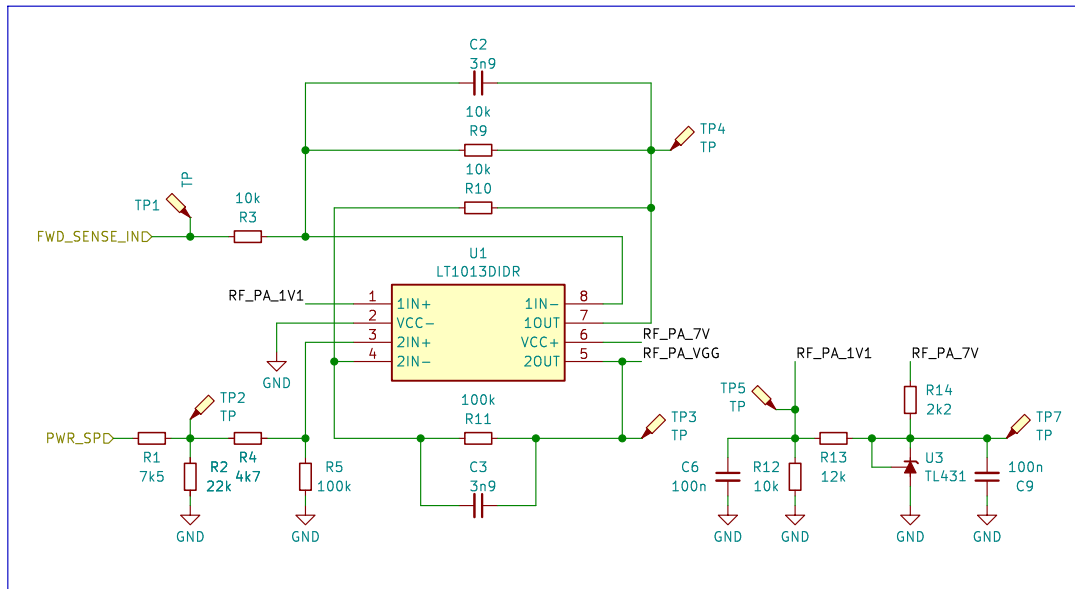
Low power RF tracks:
coplanar waveguide
Er=4.4, height=0.2104mm
0.25mm track width
0.052mm conductor gap

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

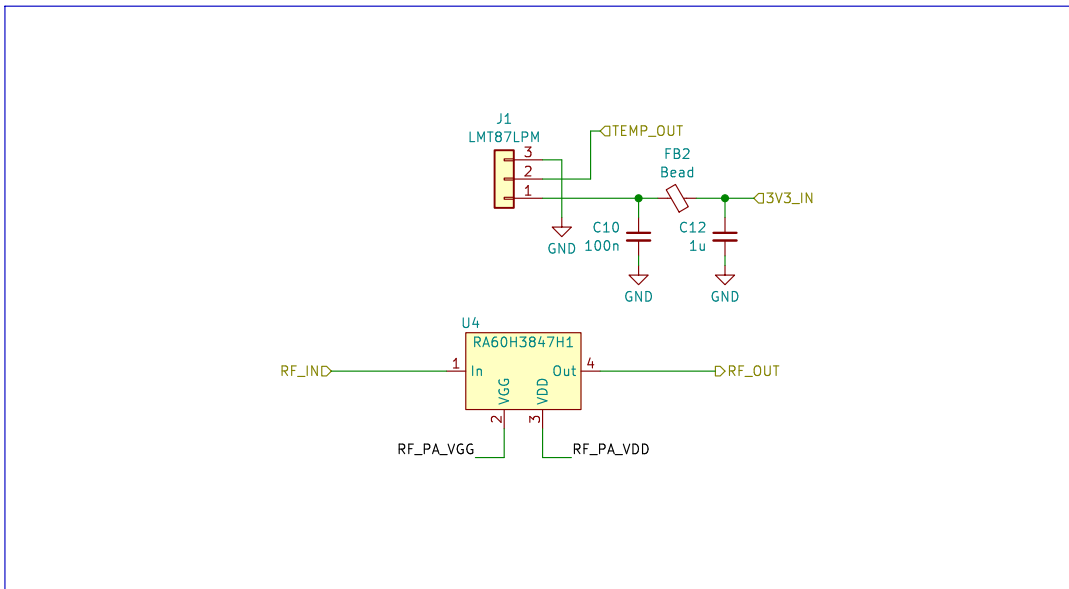


Wojciech Kaczmarek, SP5WWP		
M17 Project		
Sheet: /		
File: m17-rru-rf.kicad_sch		
Title: Remote Radio Unit – RF board		
Size: A3	Date: 30-10-2023	Rev: A
KiCad E.D.A. kicad 7.0.8		Id: 1/12

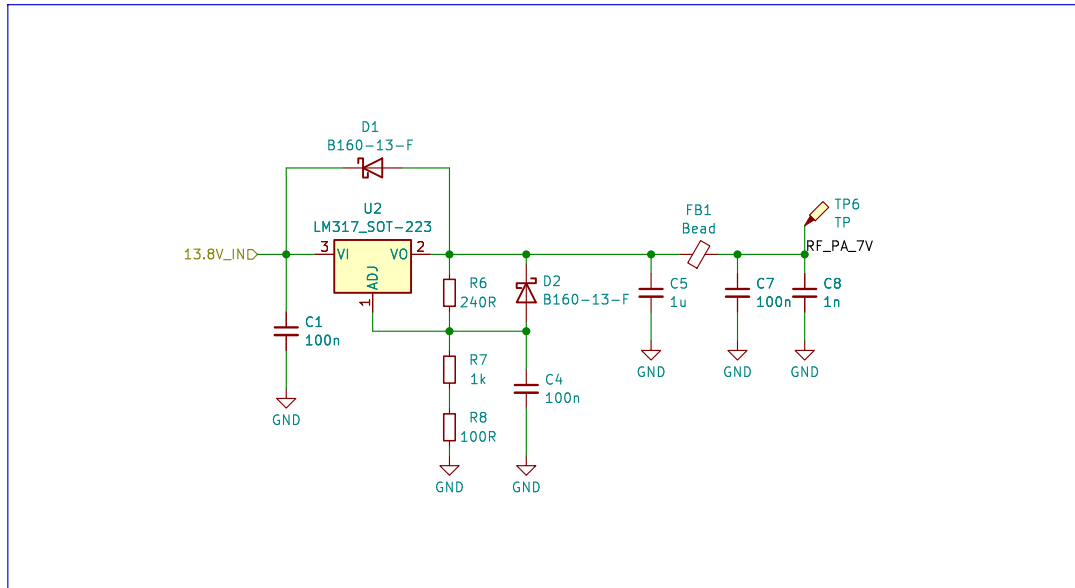
ALC



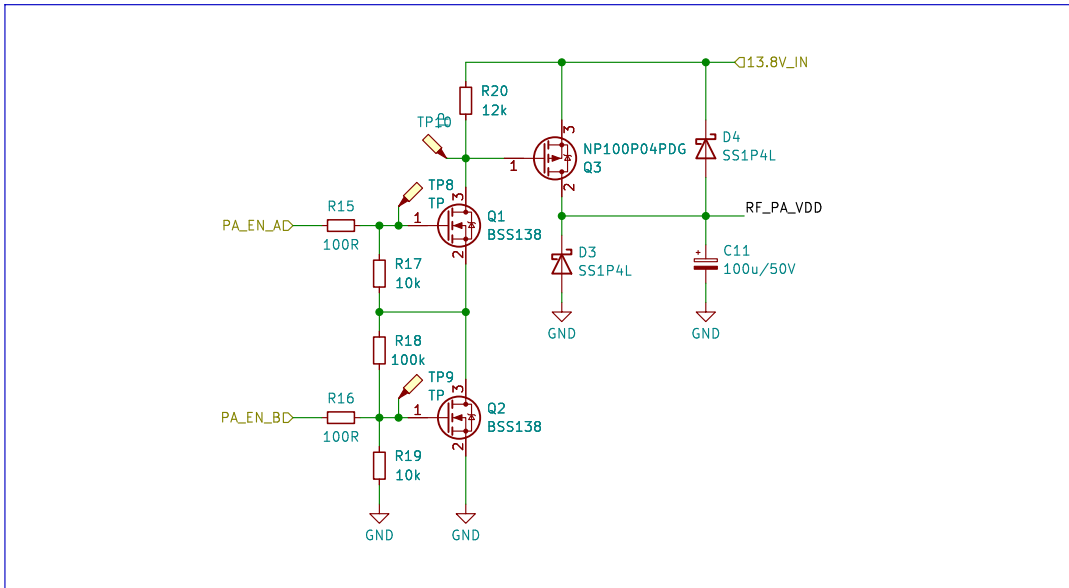
RF PA



Voltage reg.



Supply switching



Wojciech Kaczmarek, SP5WWP

M17 Project

Sheet: /RF PA/

File: rf_pa.kicad_sch

Title: Remote Radio Unit – RF board

Size: A3

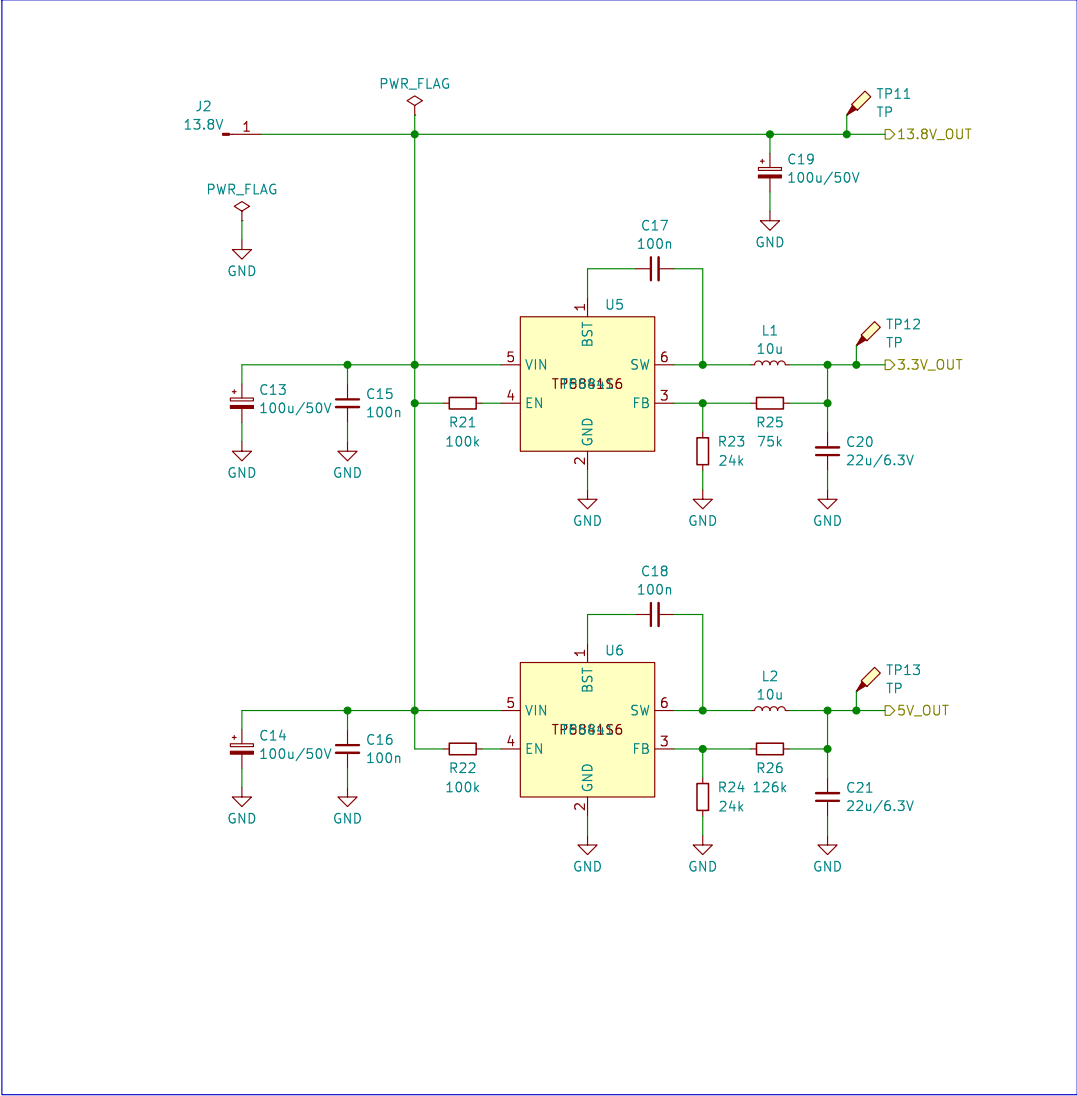
Date: 30-10-2023

Rev: A

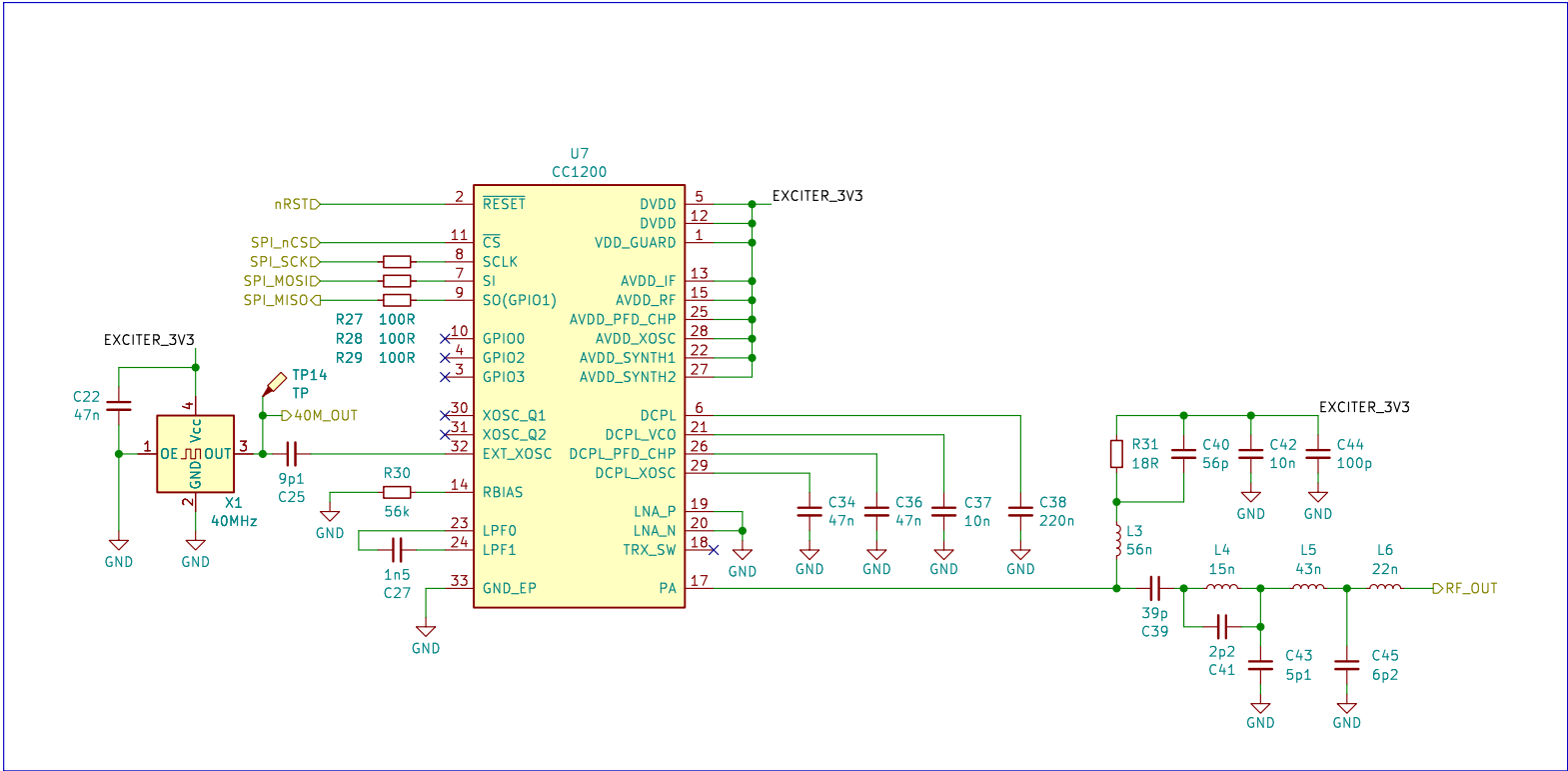
KiCad E.D.A. kicad 7.0.8

Id: 2/12

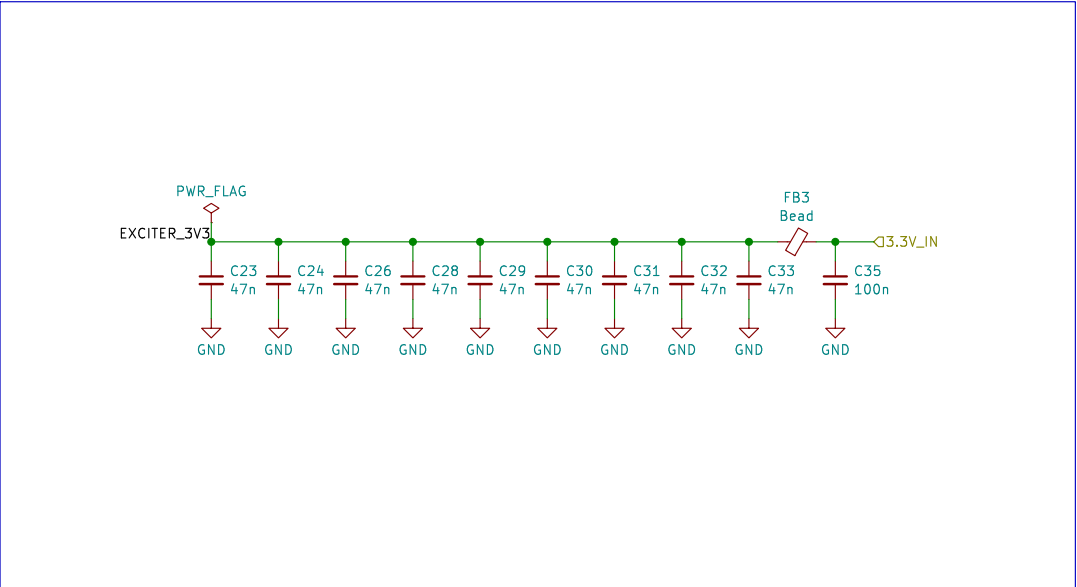
Voltage reg.

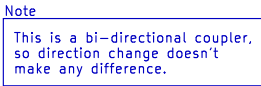


Exciter



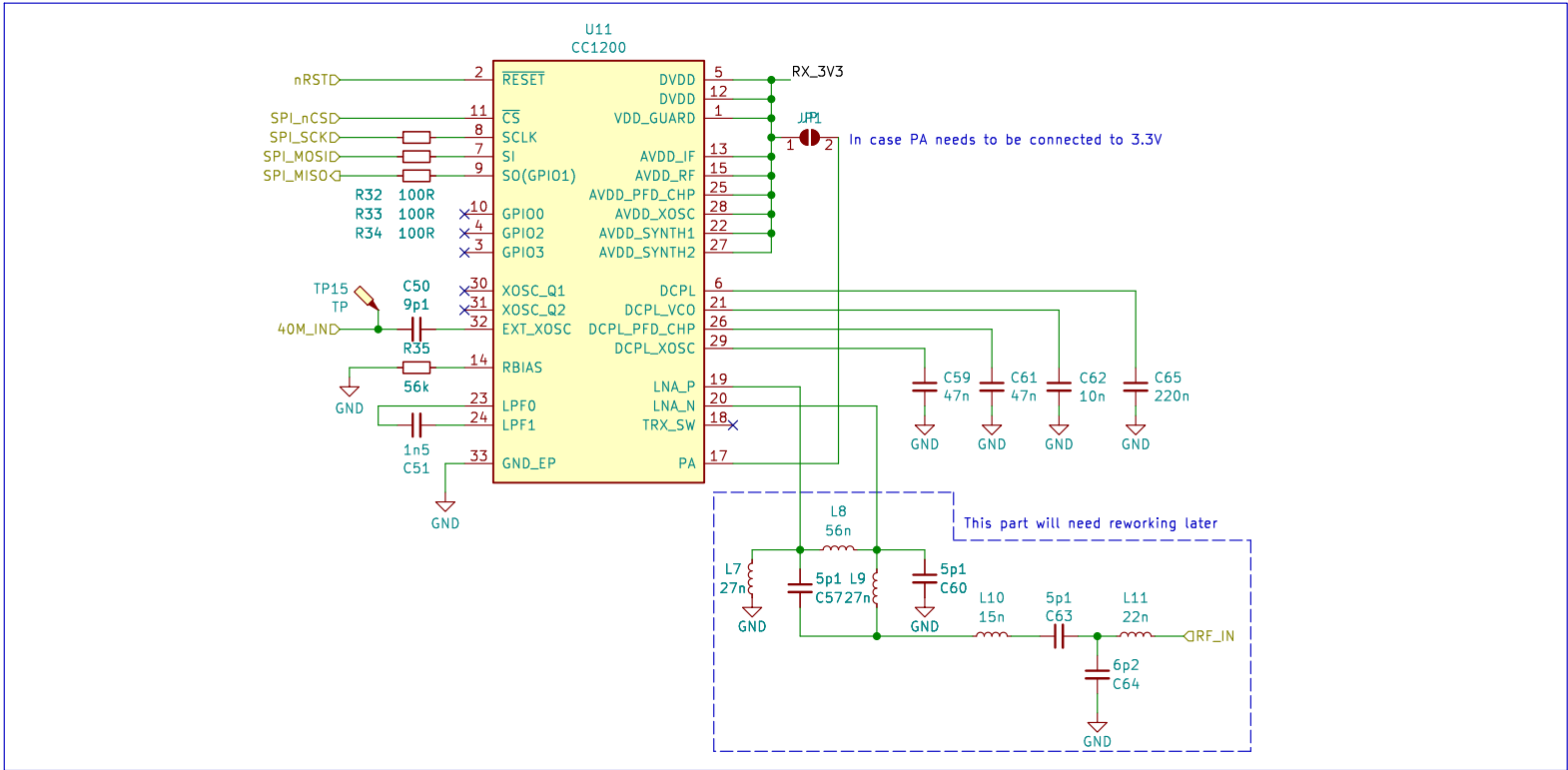
Decoupling



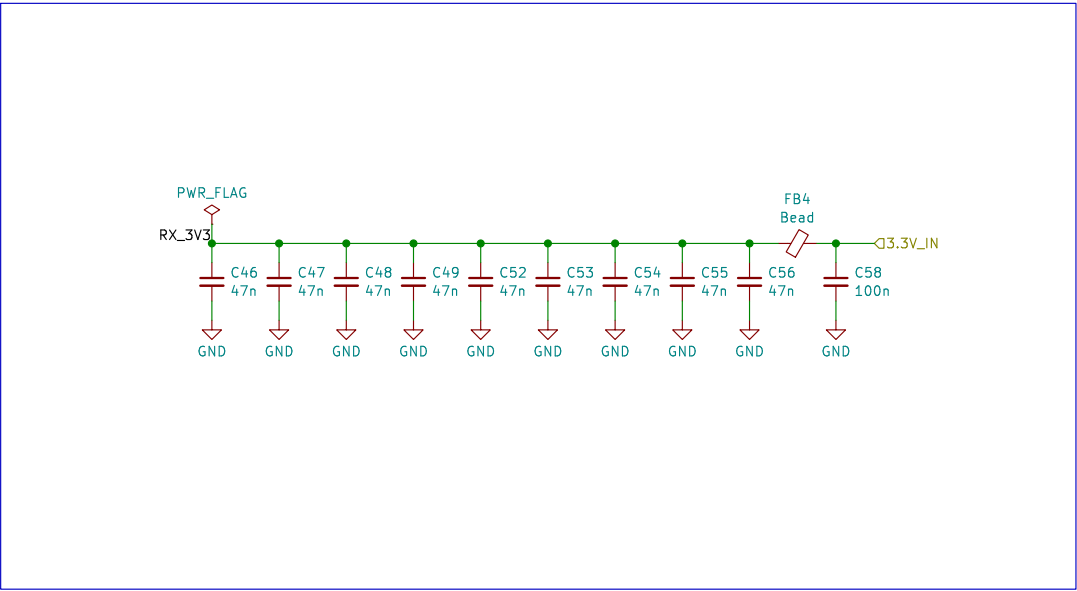


Size: A3	Date: 30-10-2023	Rev: A
KiCad E.D.A. kicad 7.0.8		Id: 5/12

Receiver



Decoupling



Wojciech Kaczmarek, SP5WWP

M17 Project

Sheet: /Receiver/

File: rx.kicad_sch

Title: Remote Radio Unit – RF board

Size: A3

Date: 30-10-2023

Rev: A

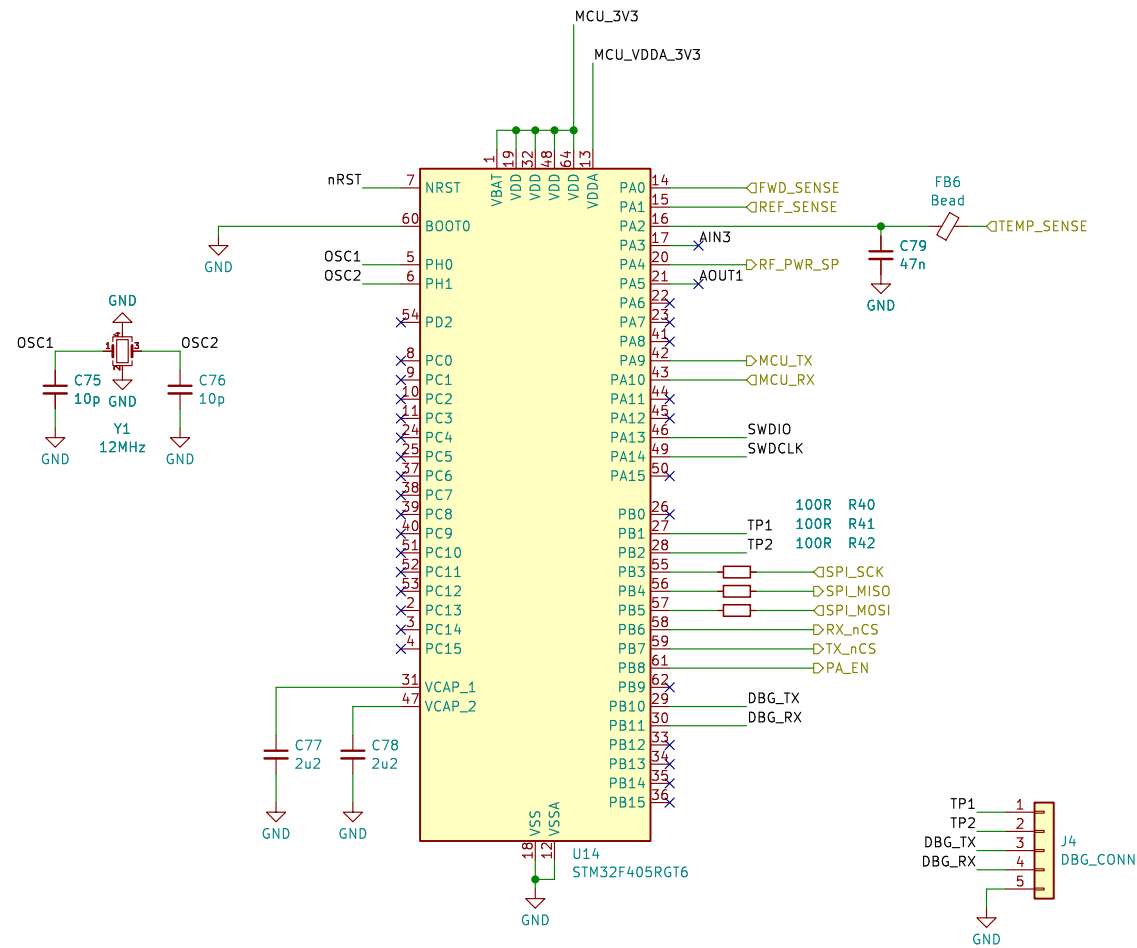
KiCad E.D.A. kicad 7.0.8

Id: 6/12

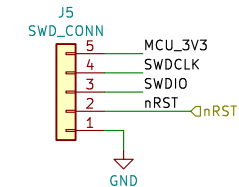
The schematic diagram illustrates a power supply decoupling circuit for a 5V supply. The circuit components and their connections are as follows:

- 5V_IN**: The input power supply.
- R55**: A series resistor with a value of 100 Ohms.
- L55**: A series inductor with a value of 100 nH.
- C66**: A decoupling capacitor with a value of 1 uF connected to GND.
- L56**: A series inductor with a value of 100 nH.
- C69**: A decoupling capacitor with a value of 100 nF connected to GND.
- C71**: A decoupling capacitor with a value of 1 nF connected to GND.
- PWR_FLAG**: The power supply pin of the **RF_DET_5V** block.

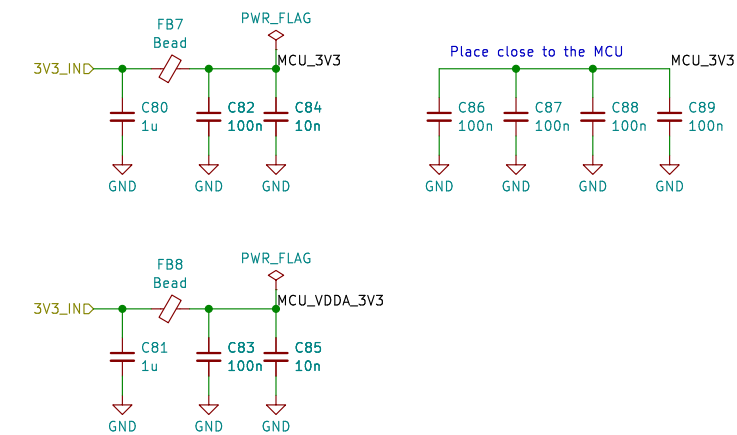
MCU



SWD



Decoupling



Wojciech Kaczmarek, SP5WWP

M17 Project

Sheet: /MCU/

File: mcu.kicad_sch

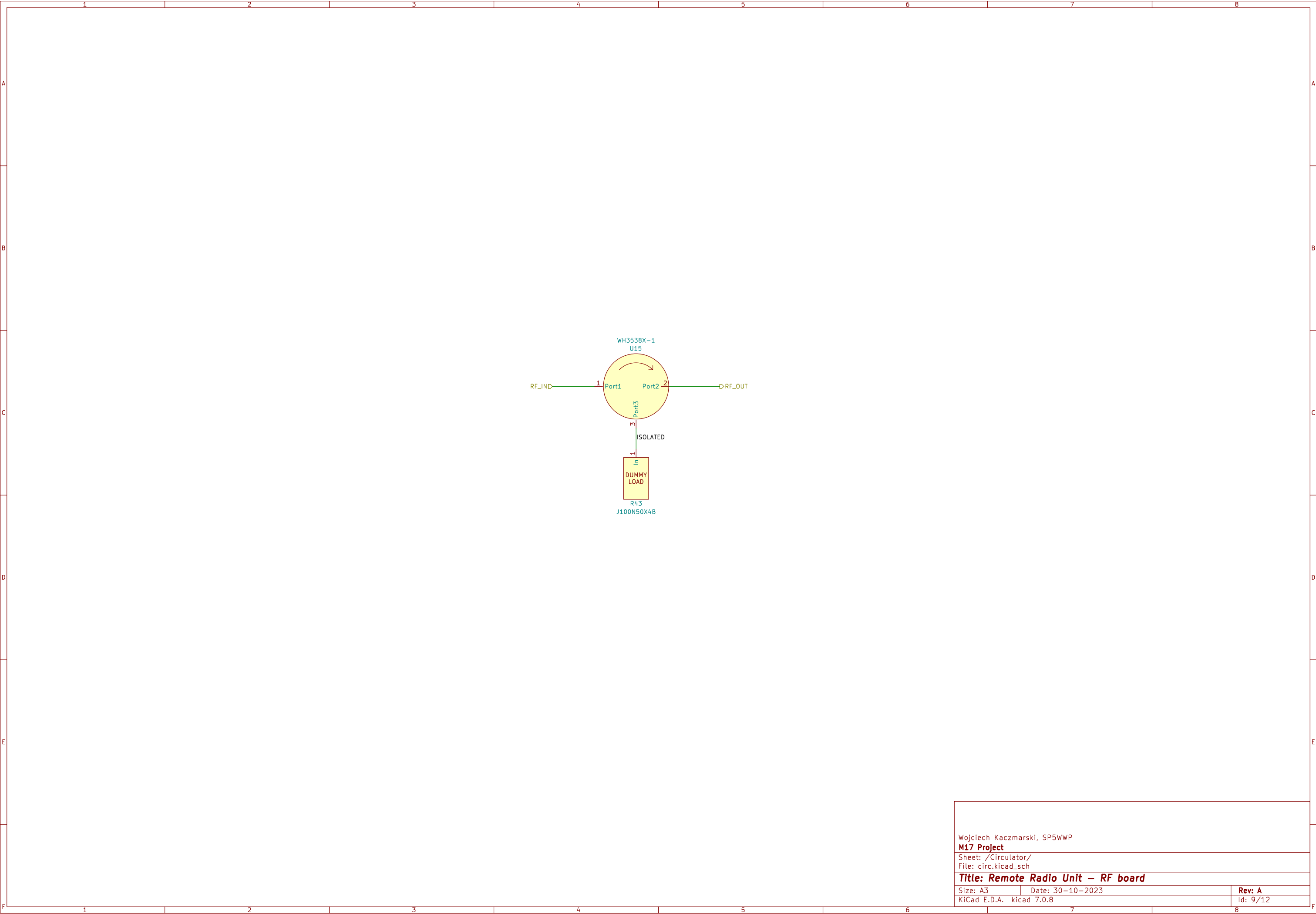
Title: Remote Radio Unit – RF board

Size: A3 Date: 30-10-2023

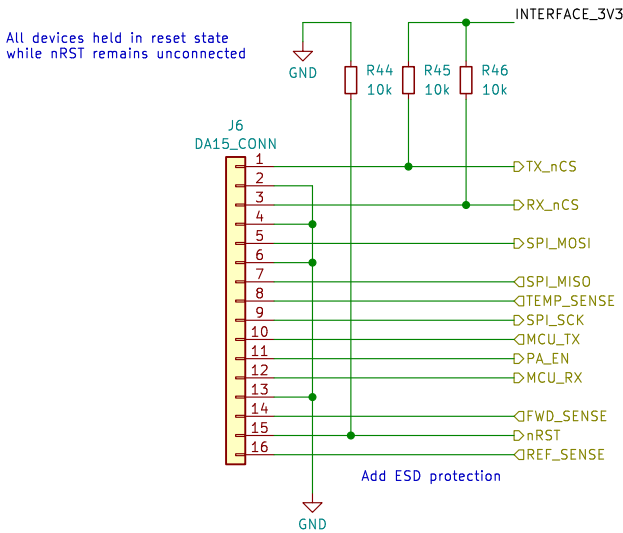
Rev: A

KiCad E.D.A. kicad 7.0.8

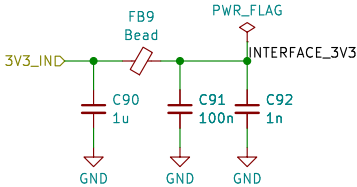
Id: 8/12



External connector



Decoupling



Wojciech Kaczmarek, SP5WWP

M17 Project

Sheet: /Interface/

File: interface.kicad_sch

Title: Remote Radio Unit – RF board

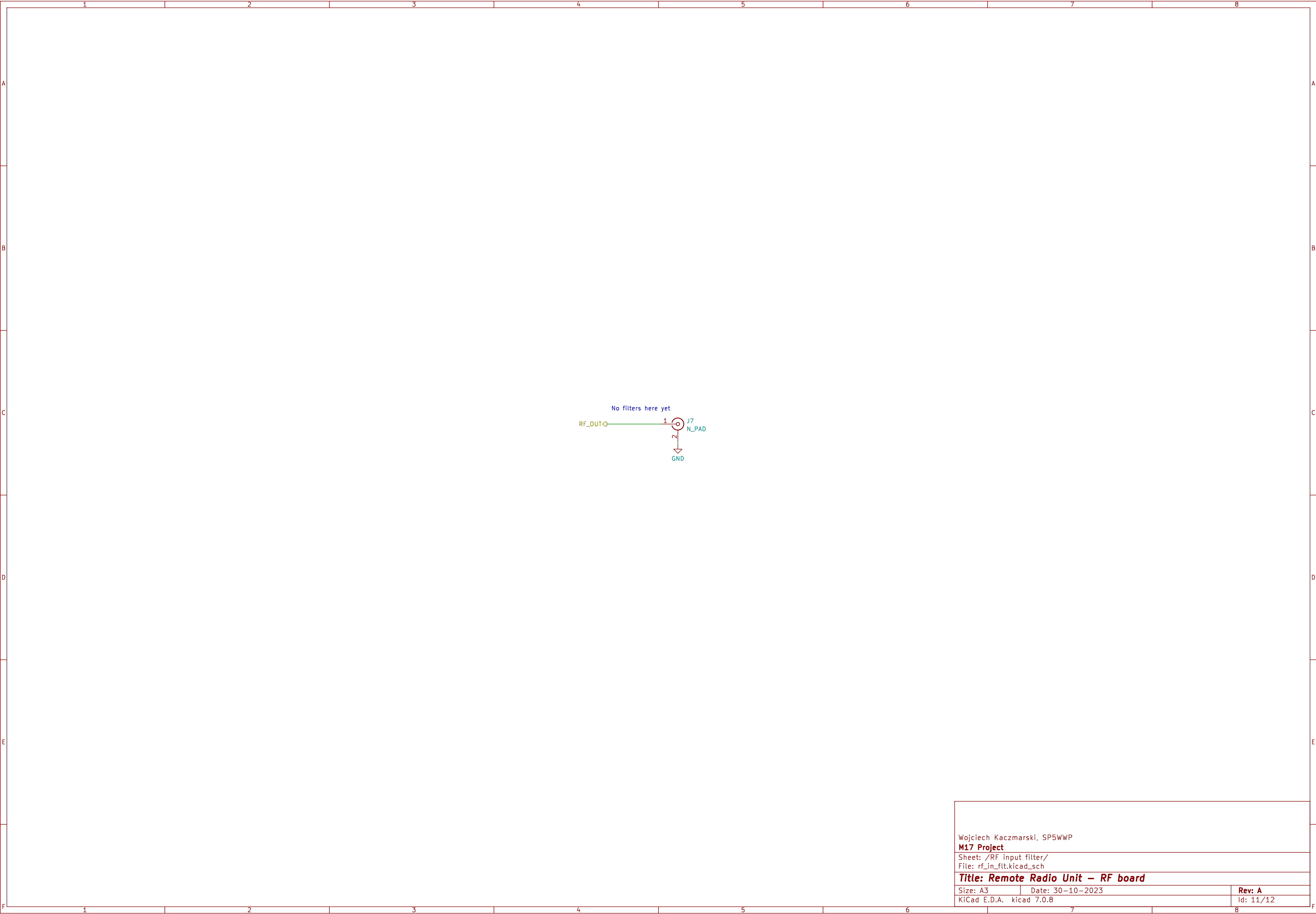
Size: A3

Date: 30-10-2023

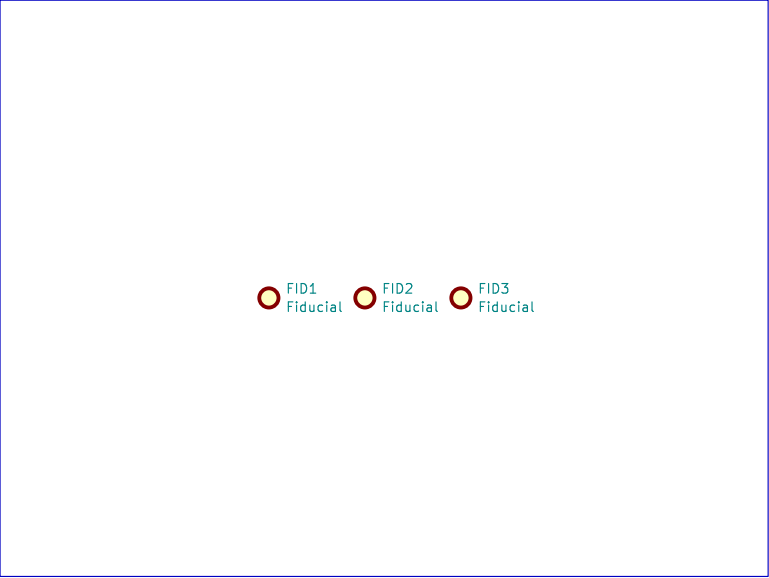
Rev: A

KiCad E.D.A. kicad 7.0.8

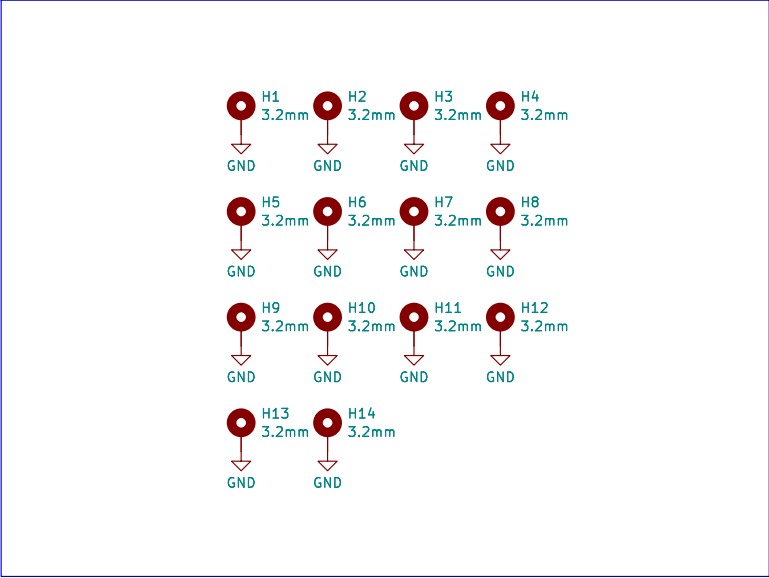
Id: 10/12



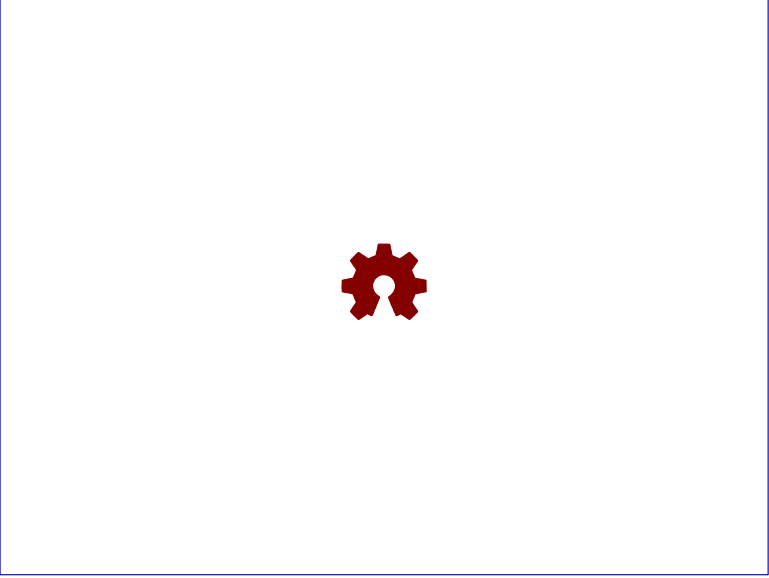
Fiducials



Mounting holes



Graphics



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

Title: Remote Radio Unit – RF board

Size: A3	Date: 30-10-2023	Rev: A
KiCad E.D.A. kicad 7.0.8		Id: 12/12