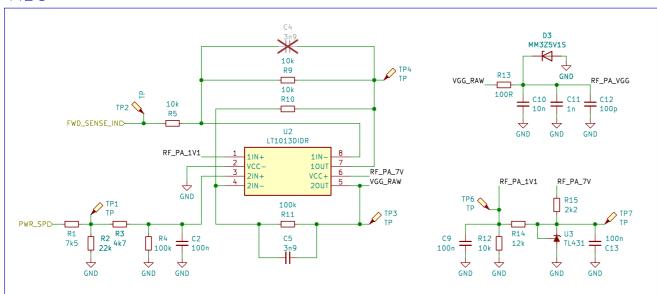
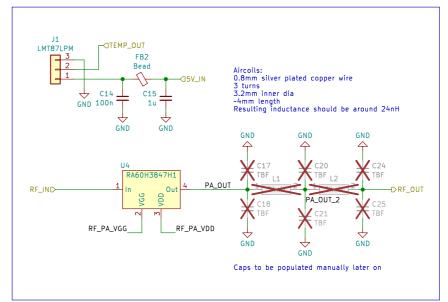
Low power RF tracks: coplanar waveguide Er=4.4, height=0.2104mm 0.25mm track width 0.052mm conductor gap High power RF tracks: coplanar waveguide RF PA RF coupler Circulator Er=4.5, height=1.4858mm 2mm track width RF_OUT ORF_IN RF_OUT[>RF_IN RF IN RF_OUTD 0.52mm conductor gap >PA_EN_A >PA_EN_B FWD_SENSE_IN< >PWR_SP TEMP_OUT OREF_RF >3.3V_IN >13.8V_IN 5V_IN< DFWD_RF File: rf_pa.kicad_sch File: rf_cpl.kicad_sch File: exciter.kicad_sch File: circ.kicad_sch TX_nCS RX_nCS TX_nCSD RX_nCSD SPI_SCK SPI_MOSI SPI_MISO SPI_SCKD SPI_MOSID RF detectors >REF_RF_IN TEMP_SENSE FWD_RF_IN PA_ENG REF_SENSE_OUT REF_SENSE REF_SENSE< FWD_SENSE OFWD_SENSE_OUT FWD_SENSE FWD_SENSE 3V3_IN< >5V_IN ВООТО File: rf_det.kicad_sch MCU_TX< File: interface.kicad_sch MCU_RX< Power supply воото TEMP_SENSE< PA_ENG D5V_OUT RF_PWR_SP[013.8V_0UT 3V3_IN REF_SENSE REF_SENSE< File: psu.kicad_sch FWD_SENSE FWD_SENSE nRST nRST RF input filter 3.3V_IN< DnRST
DSPI_nCS
SPI_SCK
DSPI_MISO
SPI_MOSI
DRX_SAMP_CLK RX_nCS SPI_SCK SPI_MISO SPI_MOSI RX_SAMP_CLE RX_SAMP_CLK< File: mcu.kicad_sch File: rx.kicad_sch File: rf_in_flt.kicad_sch Mechanical Wojciech Kaczmarski, SP5WWP M17 Project Sheet: / File: m17-rru-rf.kicad_sch Title: Remote Radio Unit - RF board Size: A3 Date: 05-04-2024 KiCad E.D.A. kicad 7.0.11 File: mech.kicad_sch

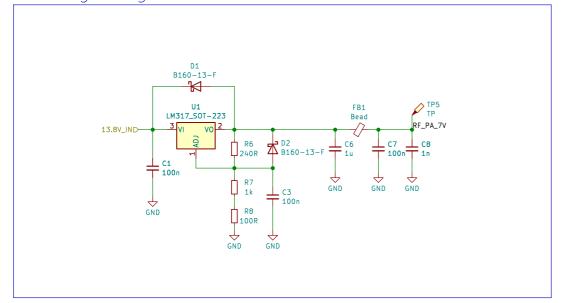
ALC



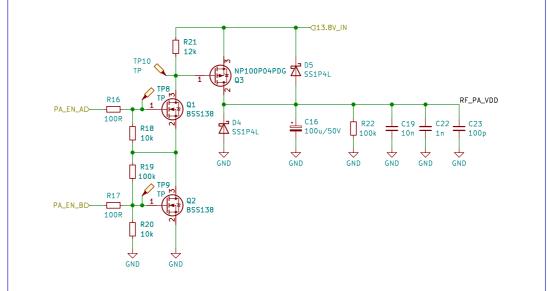
RF PA



Voltage reg.



Supply switching



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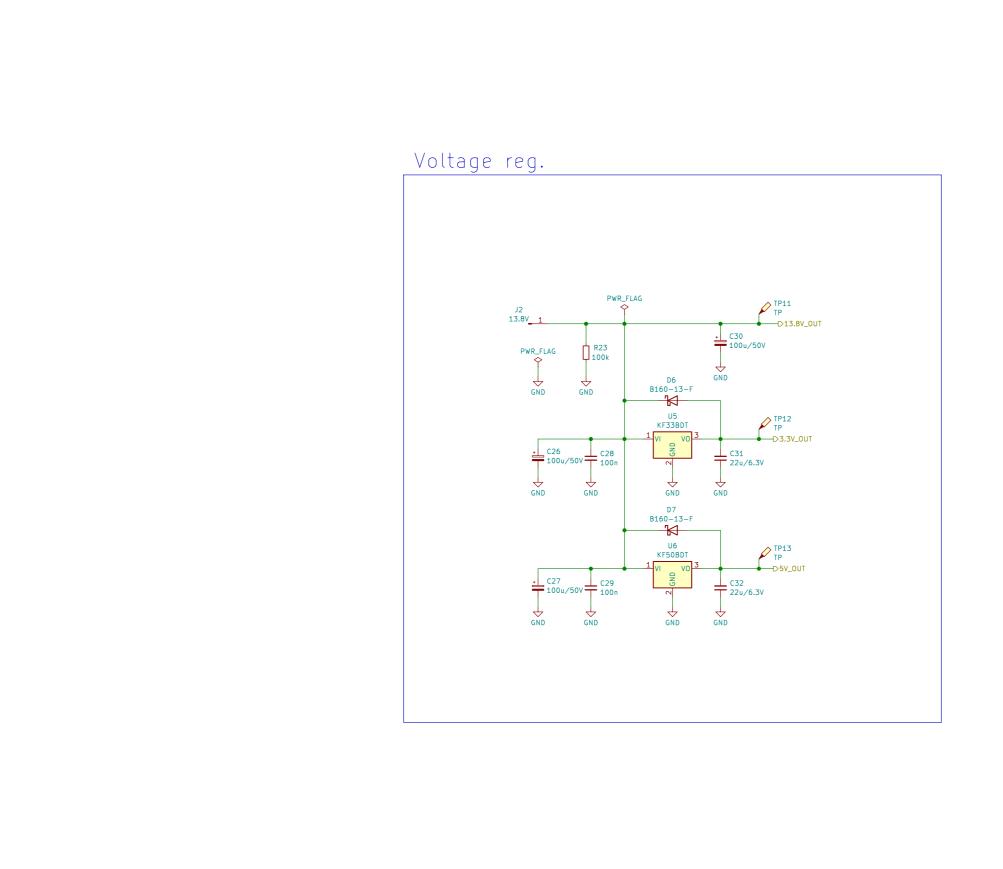
M17 Project

Sheet: /RF PA/
File: rf_pa.kicad_sch

Title: Remote Radio Unit — RF board

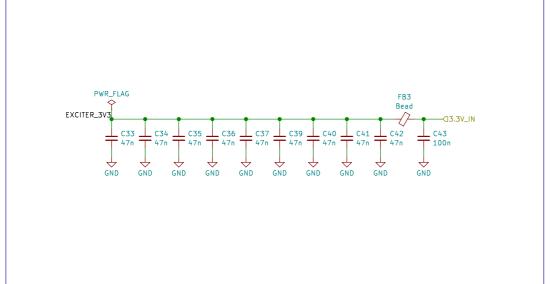
Size: A3 Date: 05-04-2024 Rev: C

KiCad E.D.A. kicad 7.0.11

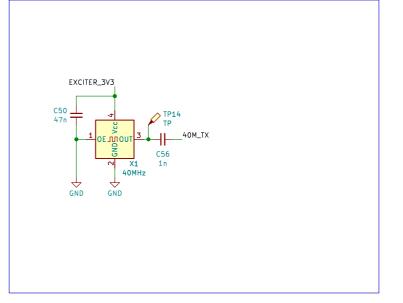


R2A 1008 R25 1008 R25 1008 R26 1008 R27 R28 1008 R28 1008 R28 1008 R29 1008

Decoupling



Local 40MHz reference



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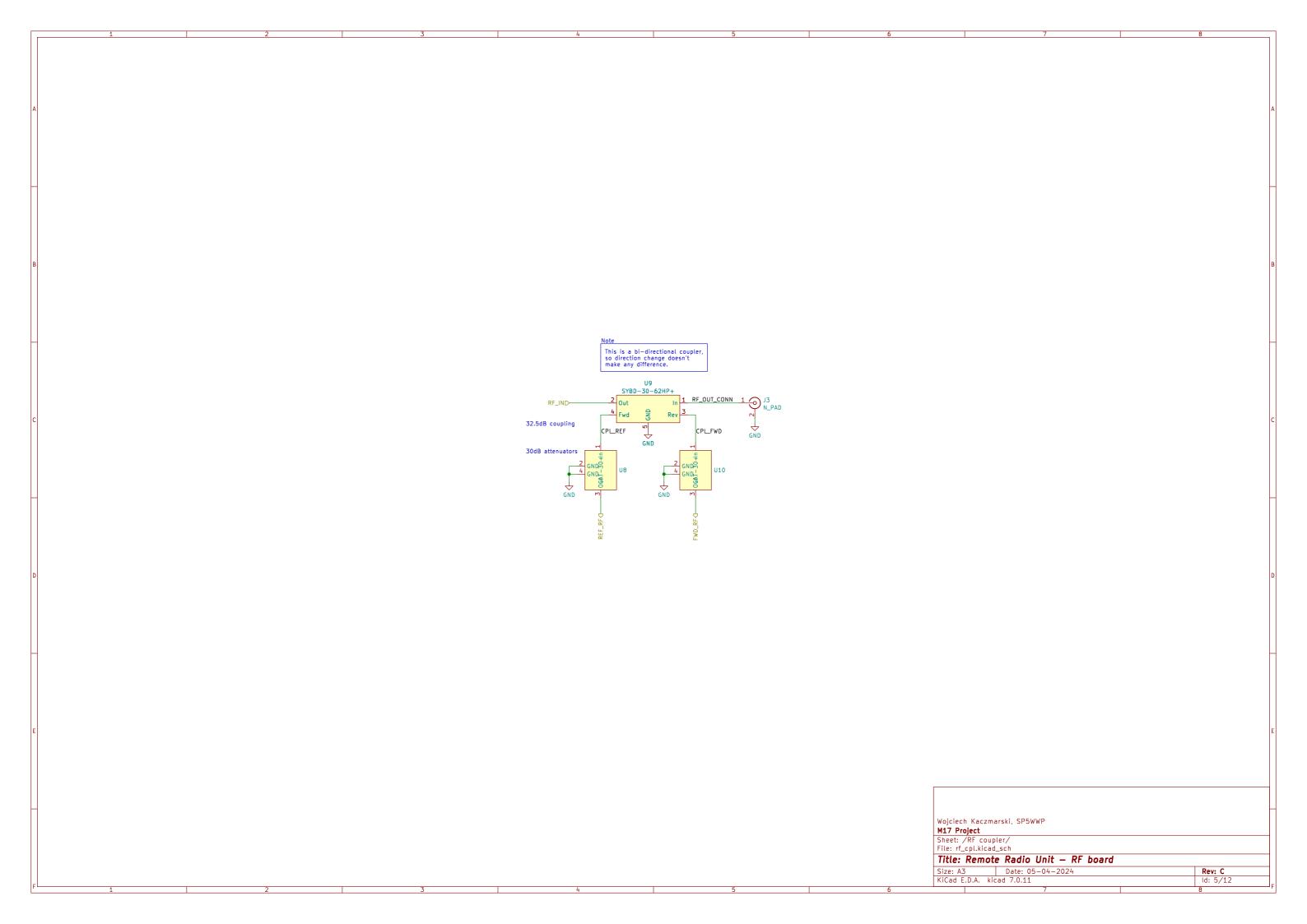
M17 Project

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File: exciter.kicad_sch

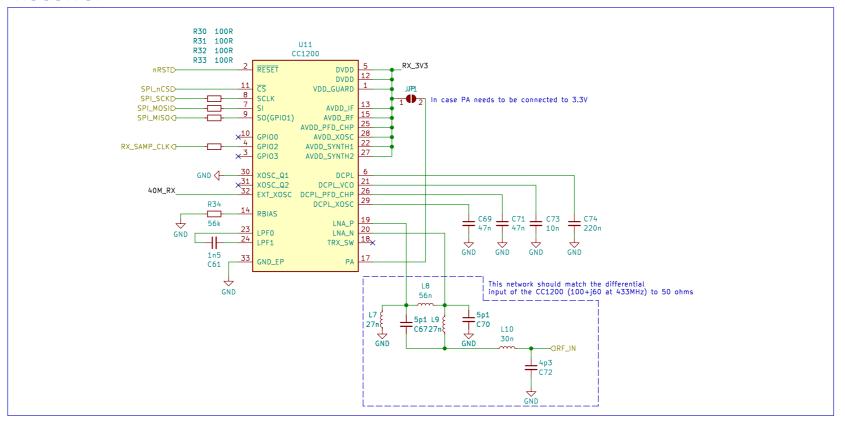
Title: Remote Radio Unit — RF board

Size: A3 Date: 05-04-2024 Rev: C

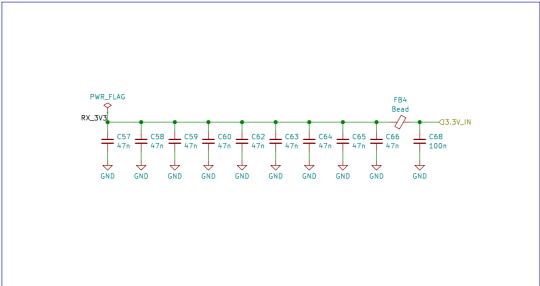
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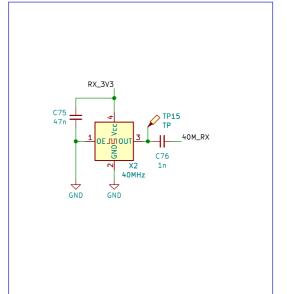
Receiver



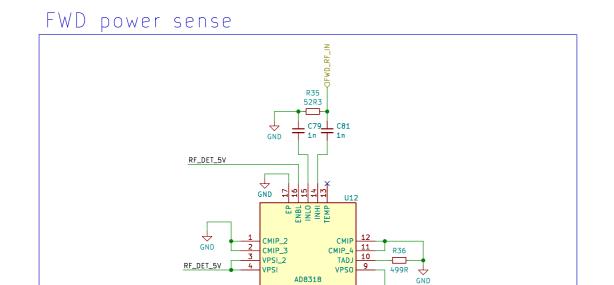
Decoupling

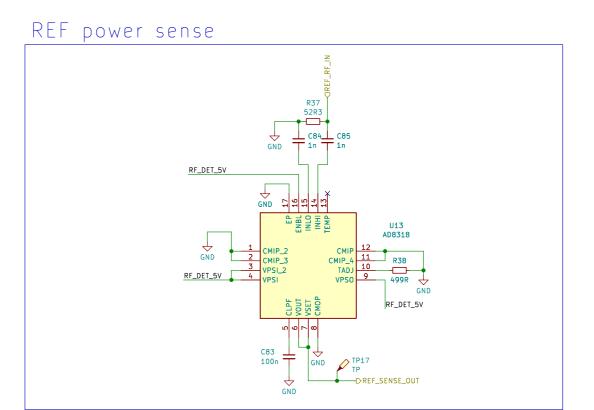


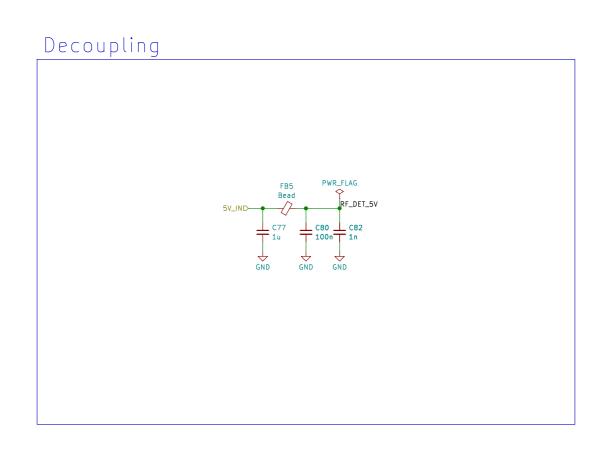
Local 40MHz reference



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	Sheet: /Receiver File: rx.kicad_sch	Sheet: /Receiver/ File: rx.kicad_sch		
Title: Remote Radio Unit — RF board				
	Size: A3	Date: 05-04-2024	Rev: C	
KiCad E.D.A. kicad 7.0.11			ld: 6/12	







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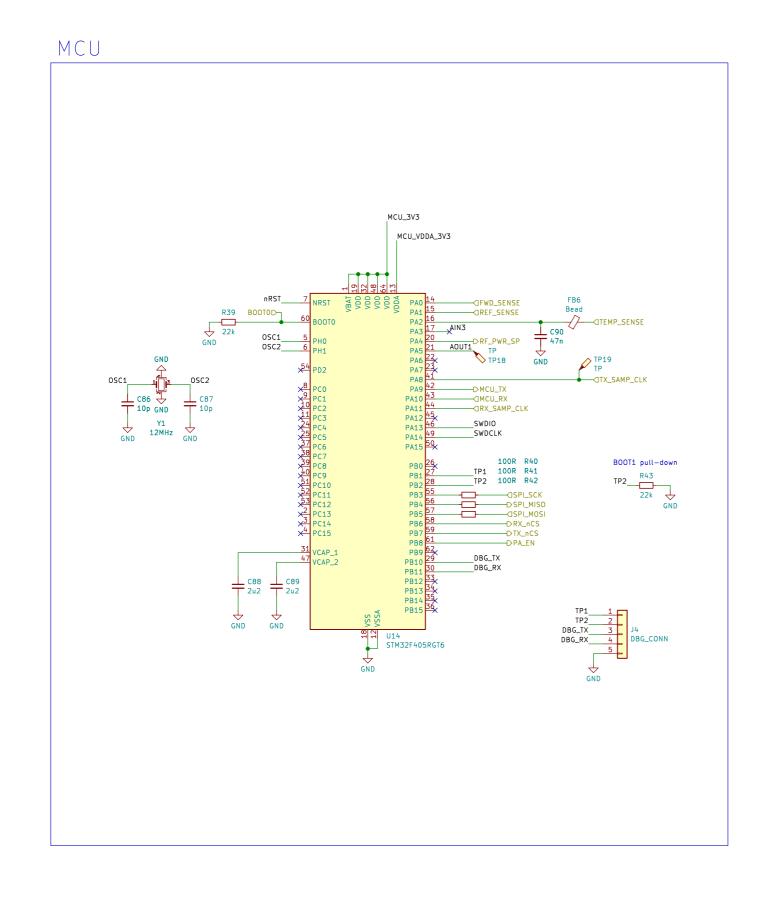
M17 Project

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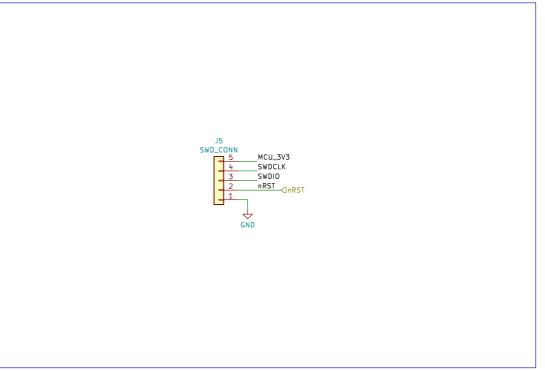
Title: Remote Radio Unit — RF board

Size: A3 | Date: 05-04-2024 | Rev: C

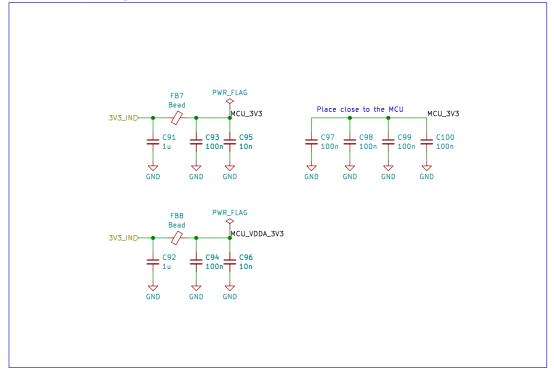
KiCad E.D.A. kicad 7.0.11 | Id: 7/12







Decoupling



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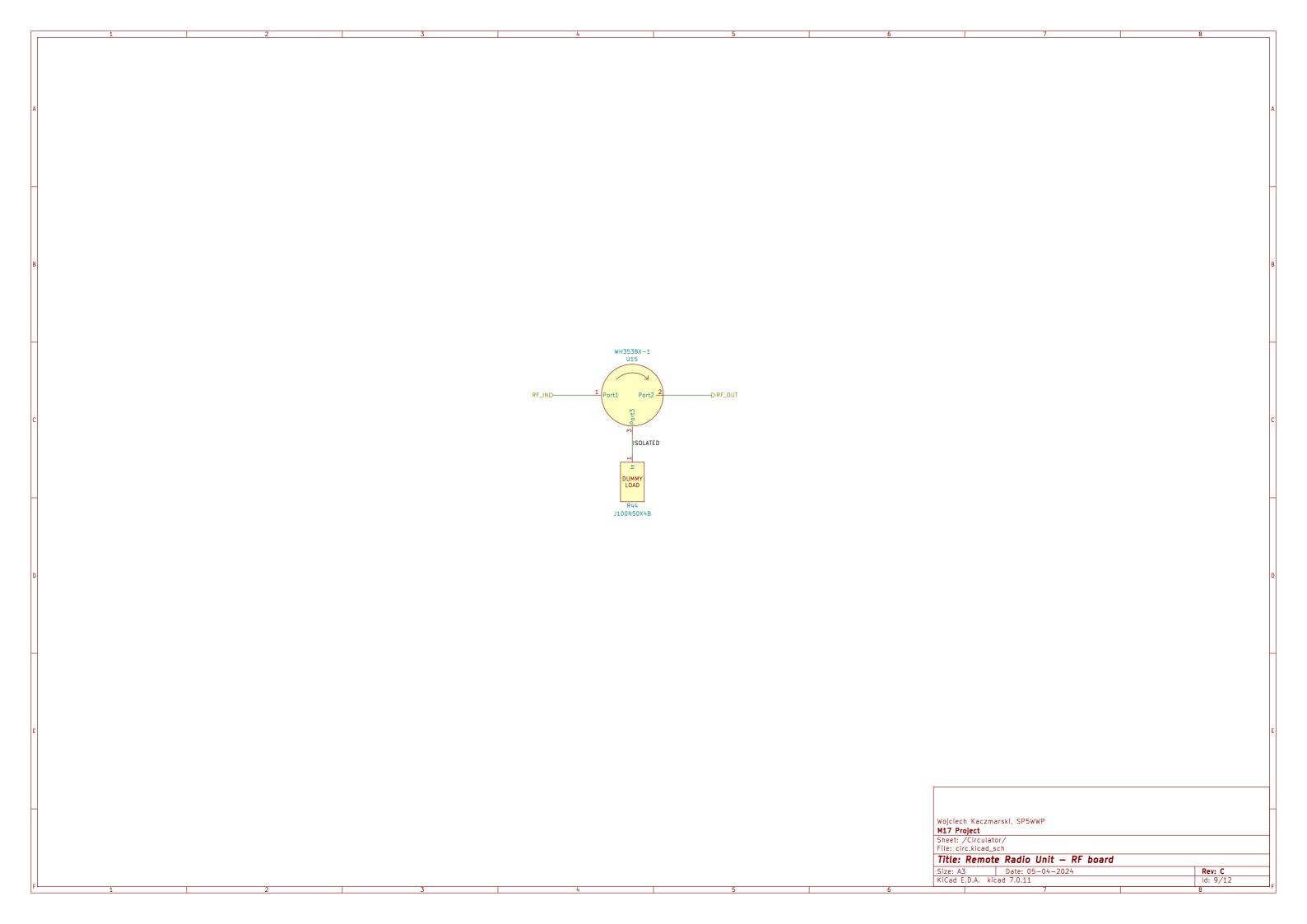
M17 Project

Sheet: /MCU/
File: mcu.kicad_sch

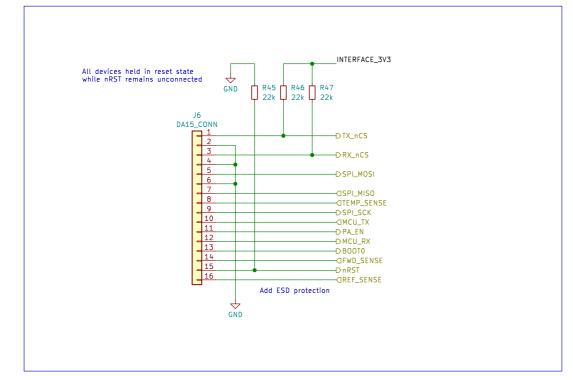
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Size: A3 Date: 05-04-2024 Rev: C

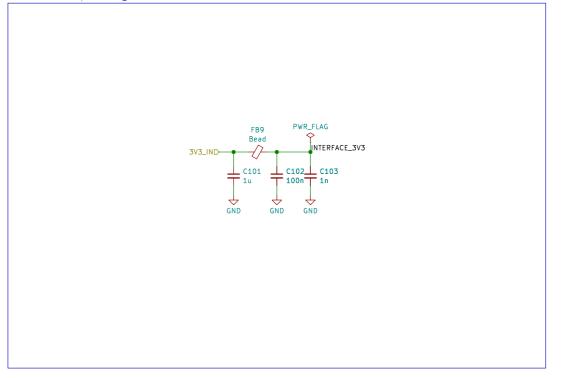
KiCad E.D.A. kicad 7.0.11 Id: 8/12



External connector



Decoupling



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M17 Project

Sheet: /Interface/
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Title: Remote Radio Unit — RF board

Size: A3 Date: 05-04-2024 Rev: C

KiCad E.D.A. kicad 7.0.11 Id: 10/12

