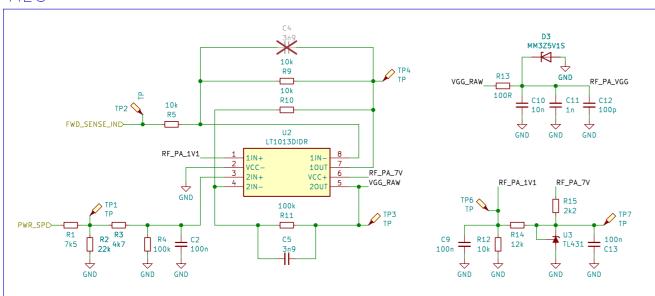
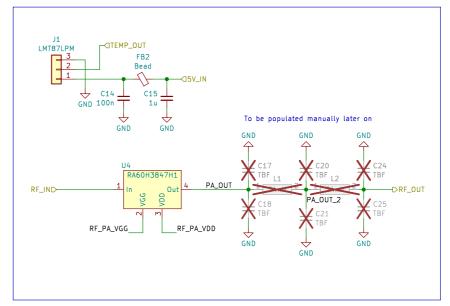
Low power RF tracks: coplanar waveguide Er=4.4, height=0.2104mm 0.25mm track width 0.052mm conductor gap High power RF tracks: coplanar waveguide RF PA RF coupler Circulator Er=4.5, height=1.4858mm 2mm track width RF_OUT ORF_IN RF_OUT[>RF_IN RF IN RF_OUTD 0.52mm conductor gap >PA_EN_A >PA_EN_B FWD_SENSE_IN< >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: 04-04-2024 KiCad E.D.A. kicad 7.0.11 File: mech.kicad_sch

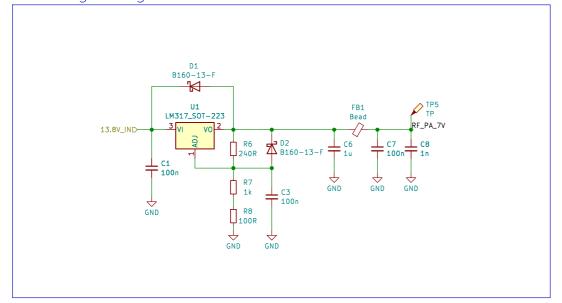
ALC



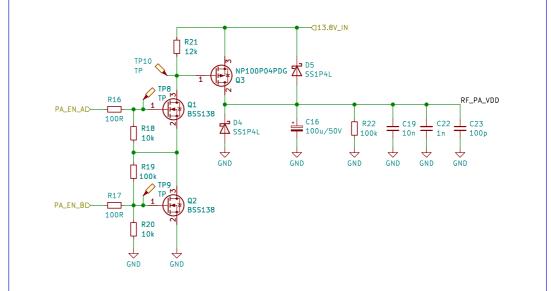
RF PA



Voltage reg.



Supply switching



Wojciech Kaczmarski, SP5WWP

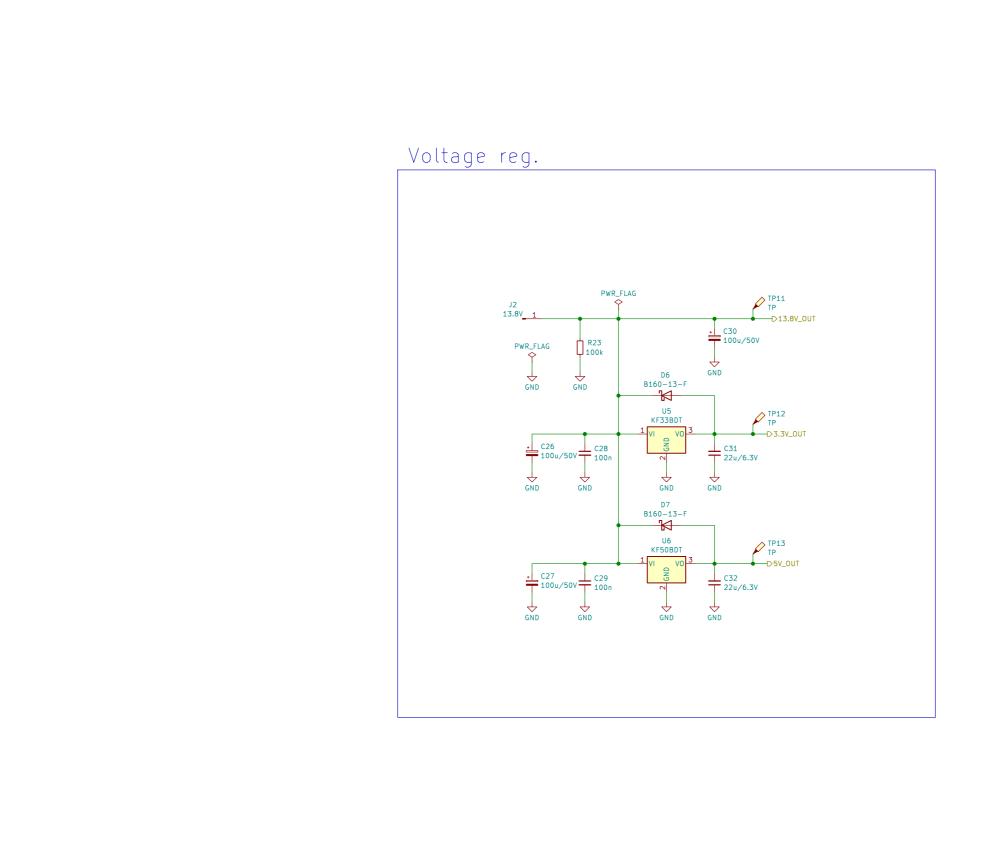
M17 Project

Sheet: /RF PA/
File: rf_pa.kicad_sch

Title: Remote Radio Unit - RF board

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

KiCad E.D.A. kicad 7.0.11



Wojciech Kaczmarski, SP5WWP

M17 Project

Sheet: /Power supply/
File: psu.kicad_sch

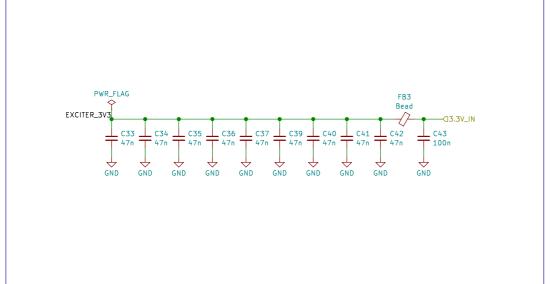
Title: Remote Radio Unit — RF board

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

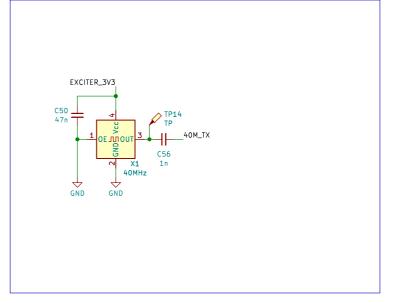
KiCad E.D.A. kicad 7.0.11 Id: 3/12

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

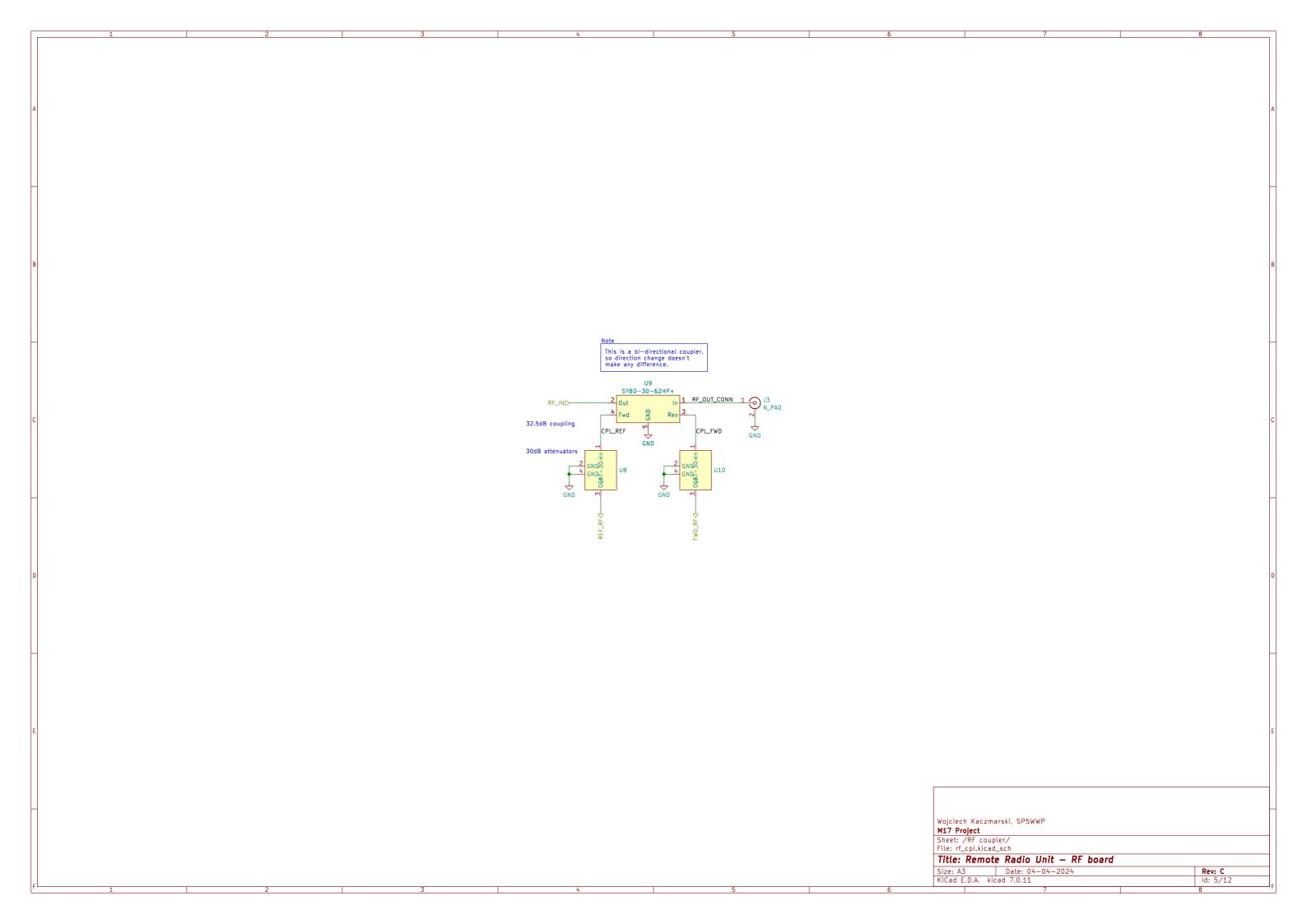
Decoupling



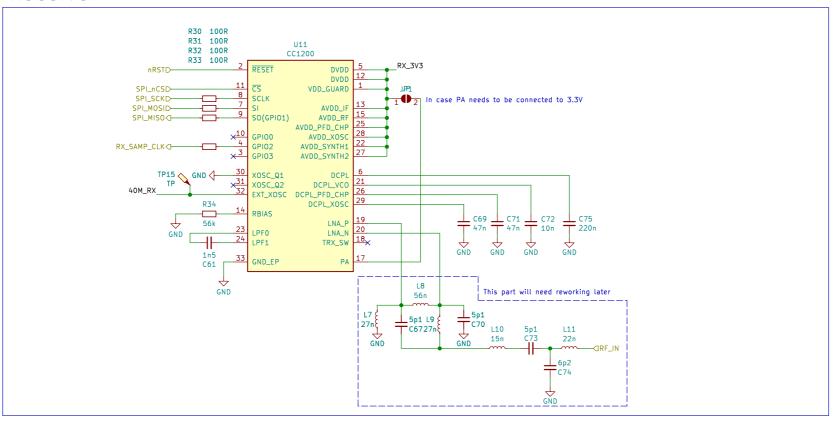
Local 40MHz reference



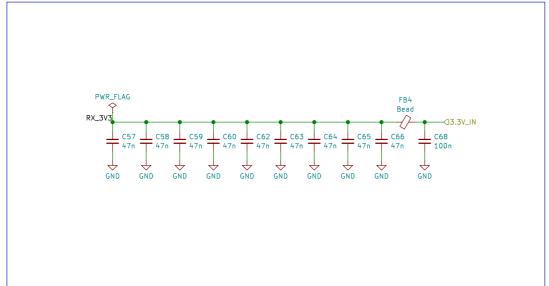
	Wojciech Kaczmarski, SP5WWP M17 Project			
	Sheet: /Exciter/ File: exciter.kicad_sch			
	Title: Remote Radio Unit - RF board			
	Size: A3	Date: 04-04-2024	Rev: C	
KiCad E.D.A. kicad 7.0.11		ad 7.0.11	ld: 4/12	
		7	8	



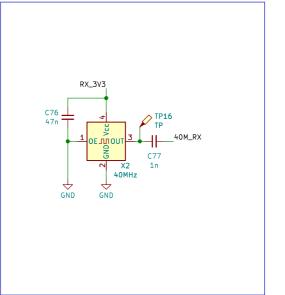
Receiver



Decoupling



Local 40MHz reference



Wojciech Kaczmarski, SP5WWP

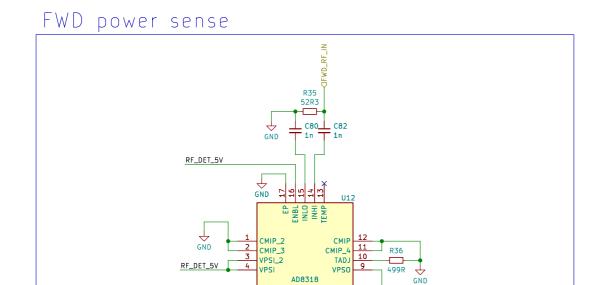
M17 Project

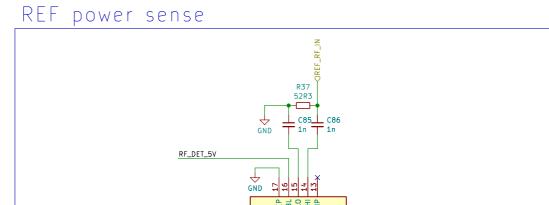
Sheet: /Receiver/
File: rx.kicad_sch

Title: Remote Radio Unit — RF board

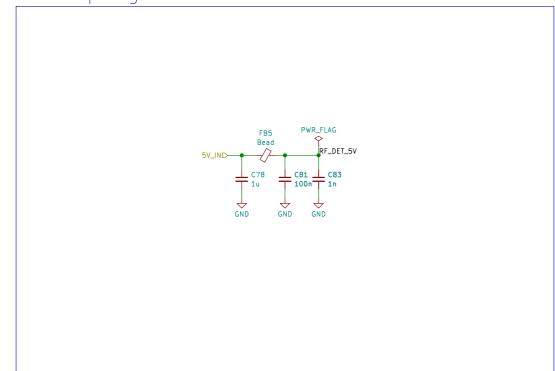
Size: A3 Date: 04-04-2024 Rev: C

KiCad E.D.A. kicad 7.0.11 Id: 6/12



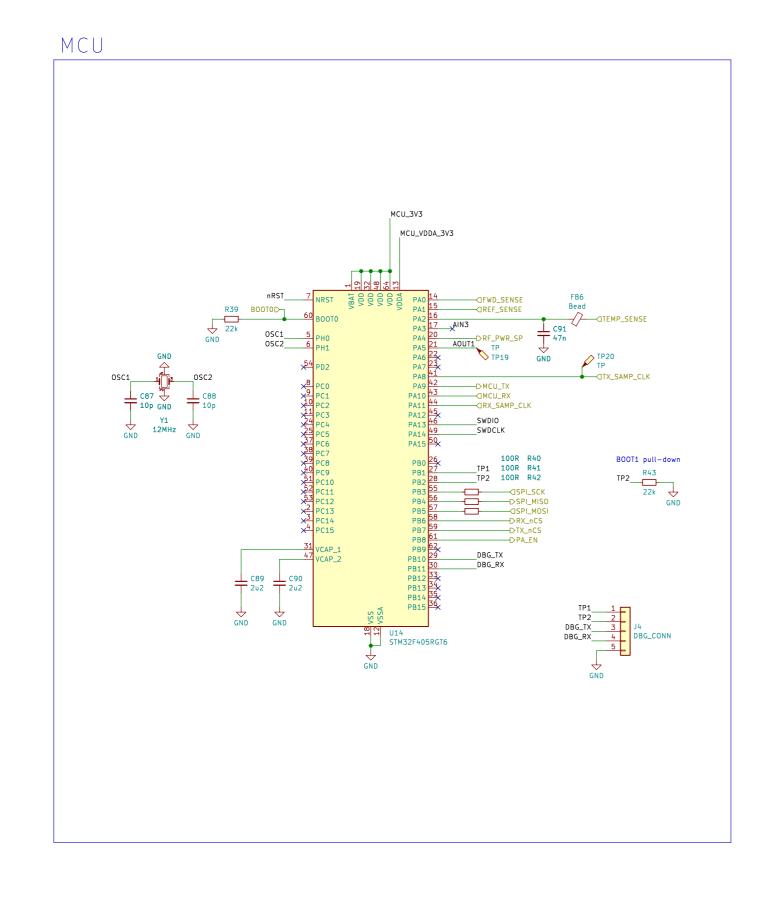


Decoupling

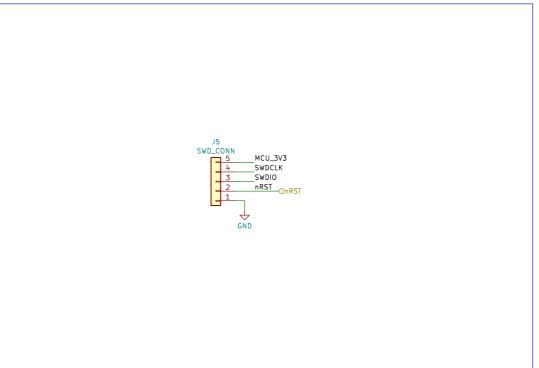


Wojciech Kaczmarski, SP5WWP
M17 Project
Sheet: /RF detectors/
File: rf_det.kicad_sch

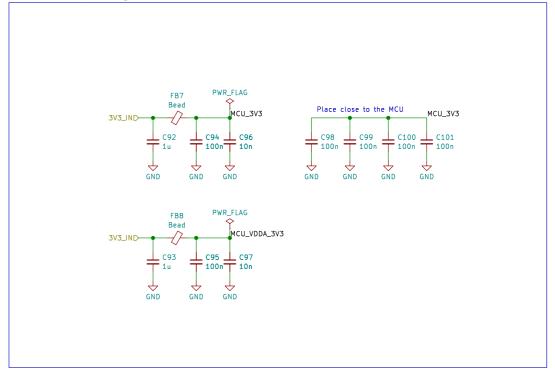
Title: Remote Radio Unit — RF board
Size: A3 Date: 04-04-2024
KiCad E.D.A. kicad 7.0.11







Decoupling



Wojciech Kaczmarski, SP5WWP

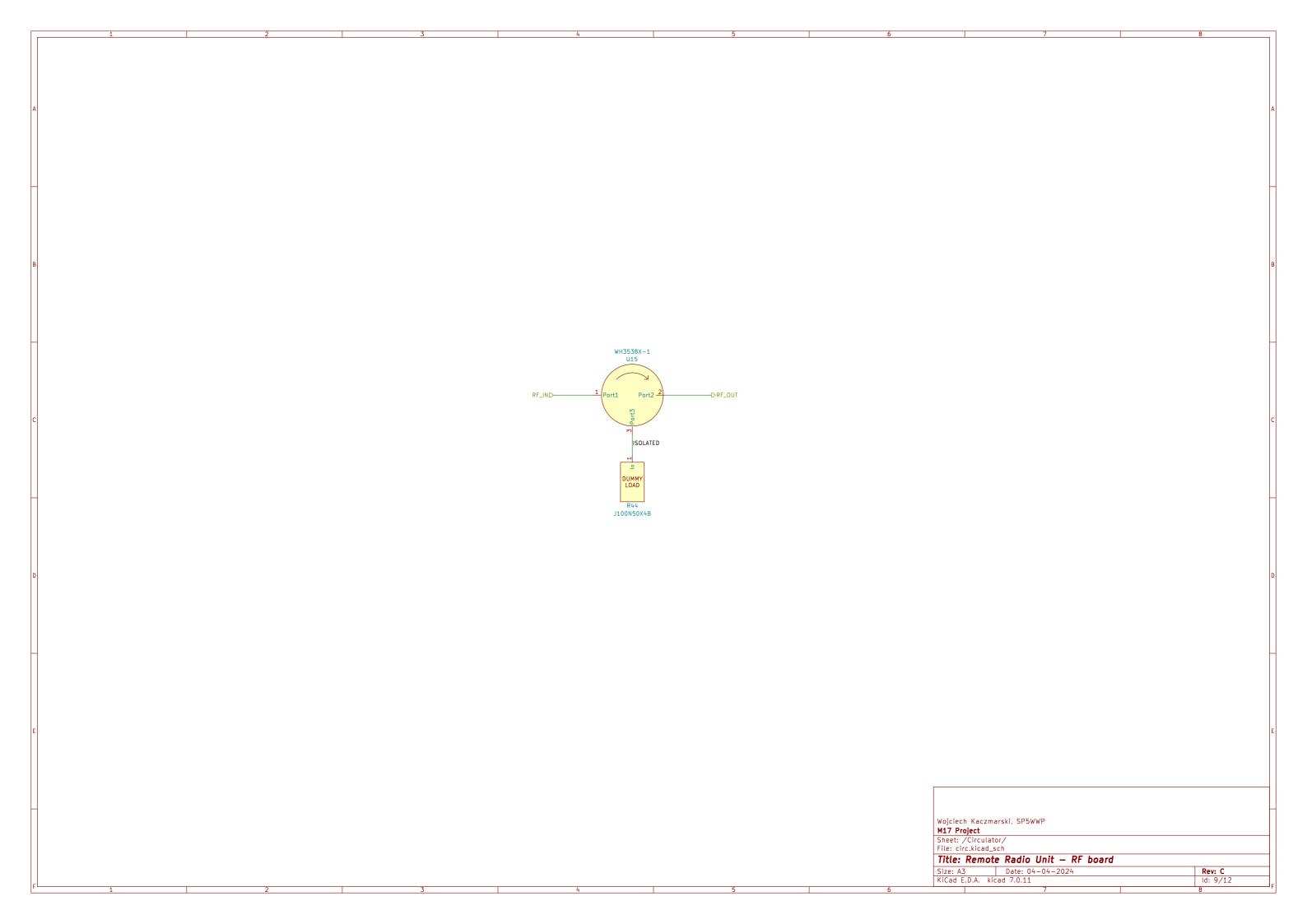
M17 Project

Sheet: /MCU/
File: mcu.kicad_sch

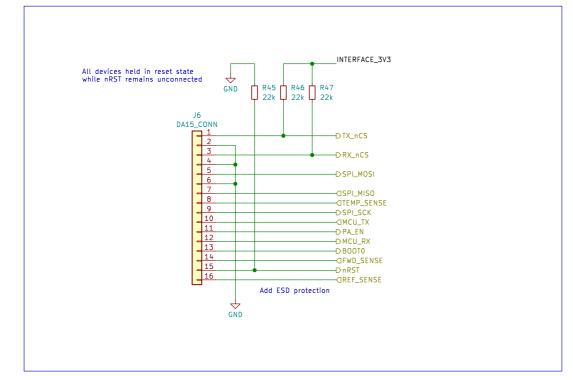
Title: Remote Radio Unit — RF board

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

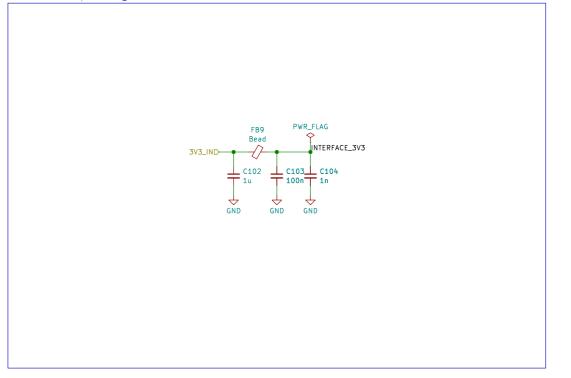
KiCad E.D.A. kicad 7.0.11 Id: 8/12



External connector



Decoupling



Wojciech Kaczmarski, SP5WWP

M17 Project

Sheet: /Interface/
File: interface.kicad_sch

Title: Remote Radio Unit — RF board

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

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

