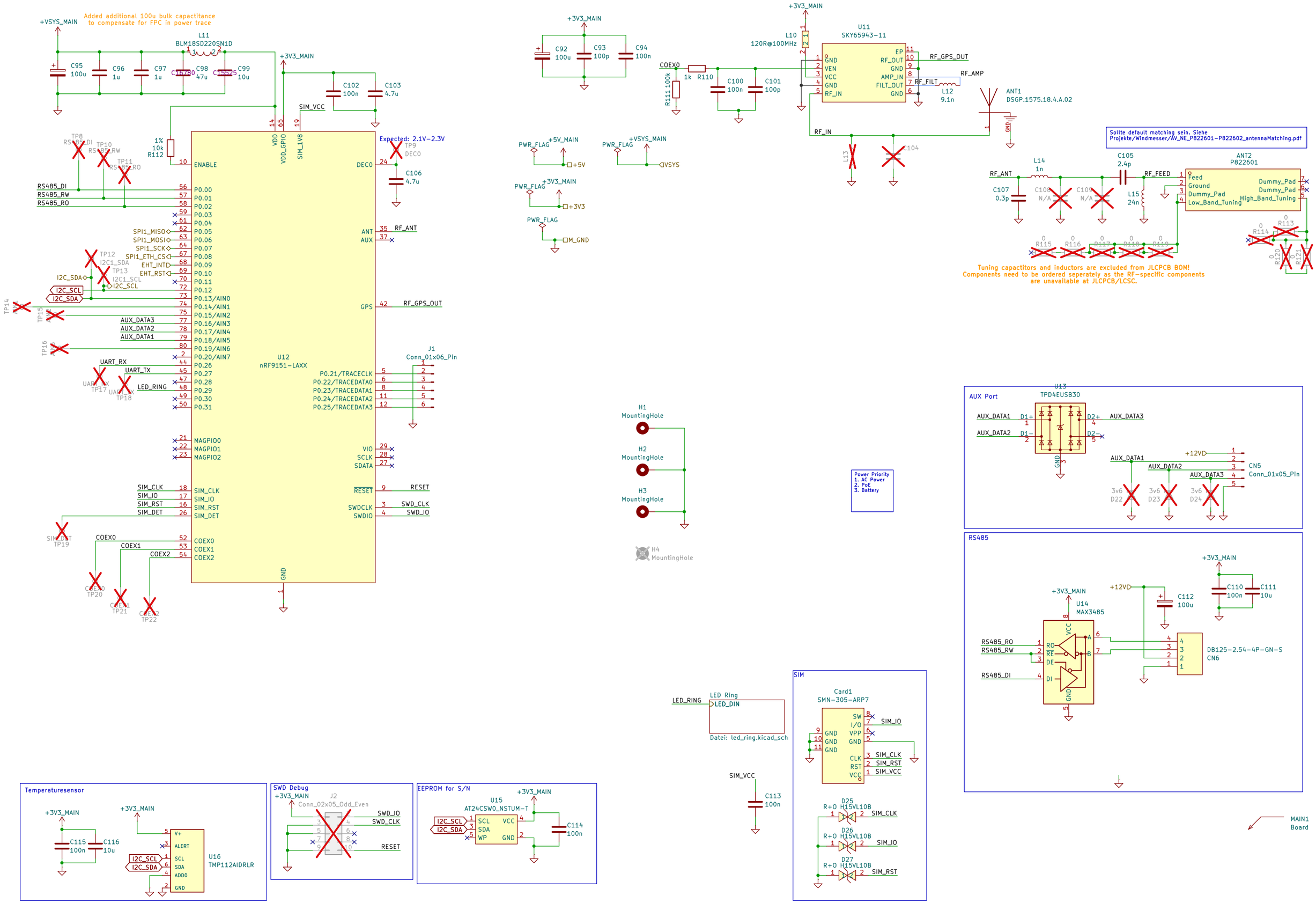
Added additional 100u bulk capacitance to compensate for FPC in power trace
+VSYS_MAIN
L11
BLM18SD220SN1D
C95 100u
C96 1u
C97 1u
C98 47u
C99 10u
+3V3_MAIN
C102 100n
C103 4.7u
SIM_VCC
U12
nRF9151-LAXX
ENABLE
VDD
VDD_GPIO
SIM_1V8
DECO
Expected: 2.1V-2.3V
TP9
C106 4.7u
RS485_DI
RS485_RW
RS485_RO
SPI1_MISO
SPI1_MOSI
SPI1_SCK
SPI1_ETH_CS
EHT_INT
EHT_RST
I2C_SDA
I2C_SCL
AUX_DATA3
AUX_DATA2
AUX_DATA1
UART_RX
UART_TX
LED_RING
MAGPIO0
MAGPIO1
MAGPIO2
SIM_CLK
SIM_IO
SIM_RST
SIM_DET
COEX0
COEX1
COEX2
GND
ANT
AUX
RF_ANT
GPS
RF_GPS_OUT
P0.21/TRACECLK
P0.22/TRACEDATA0
P0.23/TRACEDATA1
P0.24/TRACEDATA2
P0.25/TRACEDATA3
J1
Conn_01x06_Pin
VIO
SCLK
SDATA
RESET
SWDCLK
SWDIO
SWD_CLK
SWD_IO
+3V3_MAIN
C92 100u
C93 100p
C94 100n
COEX0
1k R110
R111 100k
C100 100n
C101 100p
L10
120R@100MHz
U11
SKY65943-11
GND
VEN
VCC
RF_IN
EP
RF_OUT
AMP_IN
FILT_OUT
RF_GPS_OUT
RF_AMP
RF_FILT
L12 9.1n
ANT1
DSGP.1575.18.4.A.02
L13
C104
PWR_FLAG
+5V_MAIN
+5V
+VSYS_MAIN
VSYS
+3V3_MAIN
+3V3
M_GND
Sollte default matching sein. Siehe Projekte/Windmesser/AV_NE_P822601-P822602_antennaMatching.pdf
RF_ANT
L14 1n
C105 2.4p
RF_FEED
ANT2
P822601
Feed
Ground
Dummy_Pad
Low_Band_Tuning
High_Band_Tuning
C107 0.3p
C108 N/A
C109 N/A
L15 24n
R113
R114
R115
R116
R117
R118
R119
R120
R121
Tuning capacitors and inductors are excluded from JLCPCB BOM!
Components need to be ordered seperately as the RF-specific components are unavailable at JLCPCB/LCSC.
H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole
Power Priority
1. AC Power
2. PoE
3. Battery
AUX Port
U13
TPD4EUSB30
AUX_DATA1
AUX_DATA2
AUX_DATA3
D1+
D1-
D2+
D2-
+12V
CN5
Conn_01x05_Pin
D22
D23
D24
RS485
+3V3_MAIN
U14
MAX3485
+12V
C112 100u
C110 100n
C111 10u
RS485_RO
RS485_RW
RS485_DI
RO
RE
DE
DI
VCC
GND
A
B
DB125-2.54-4P-GN-S
CN6
LED_RING
LED Ring
LED_DIN
Datei: led_ring.kicad_sch
SIM_VCC
C113 100n
SIM
Card1
SMN-305-ARP7
SW
I/O
VPP
GND
CLK
RST
VCC
SIM_IO
SIM_CLK
SIM_RST
SIM_VCC
D25
D26
D27
H15VL10B
R+O
MAIN1
Board
Temperaturesensor
+3V3_MAIN
C115 100n
C116 10u
U16
TMP112AIDRLR
V+
ALERT
SCL
SDA
ADD0
GND
I2C_SCL
I2C_SDA
SWD Debug
J2
Conn_02x05_Odd_Even
SWD_IO
SWD_CLK
RESET
EEPROM for S/N
U15
AT24CSW0_NSTUM-T
SCL
SDA
WP
VCC
GND
C114 100n