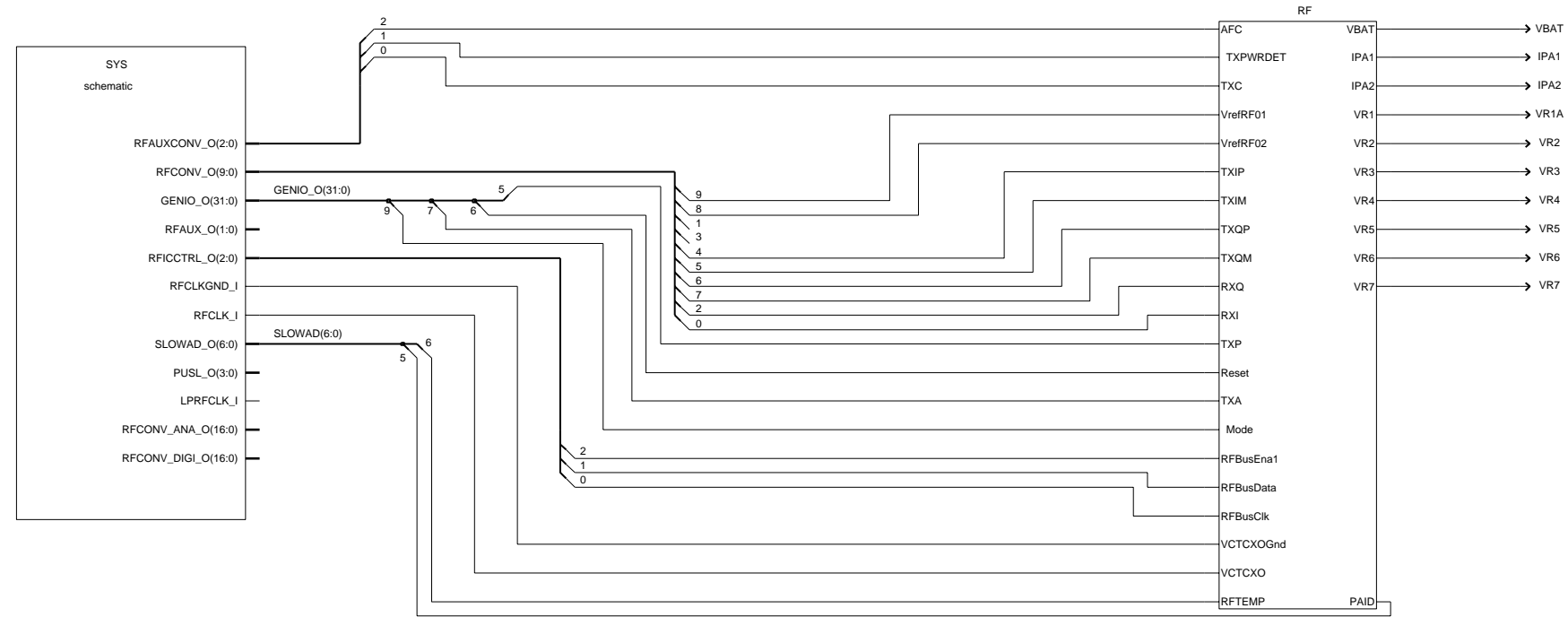
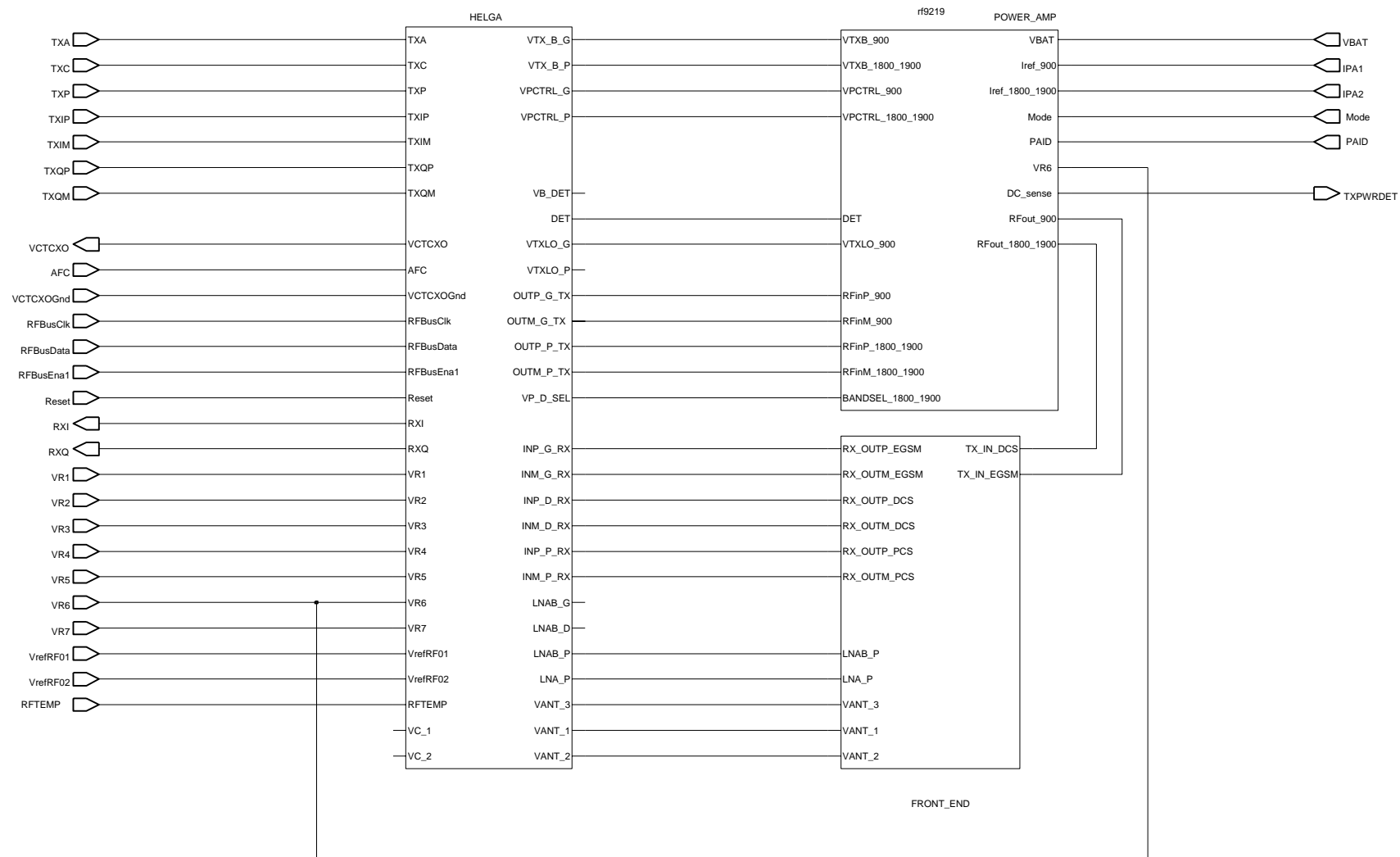


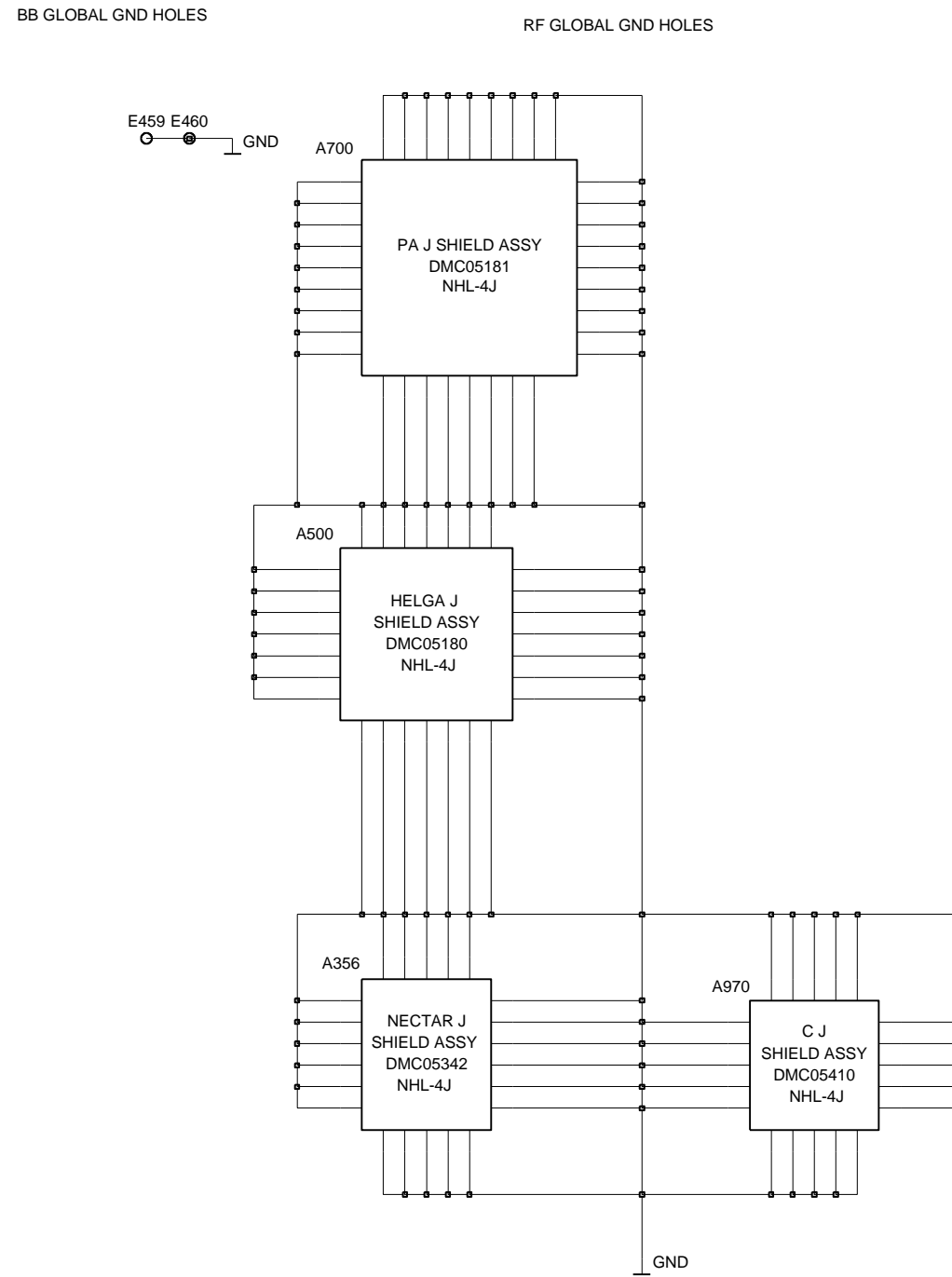
# Top level



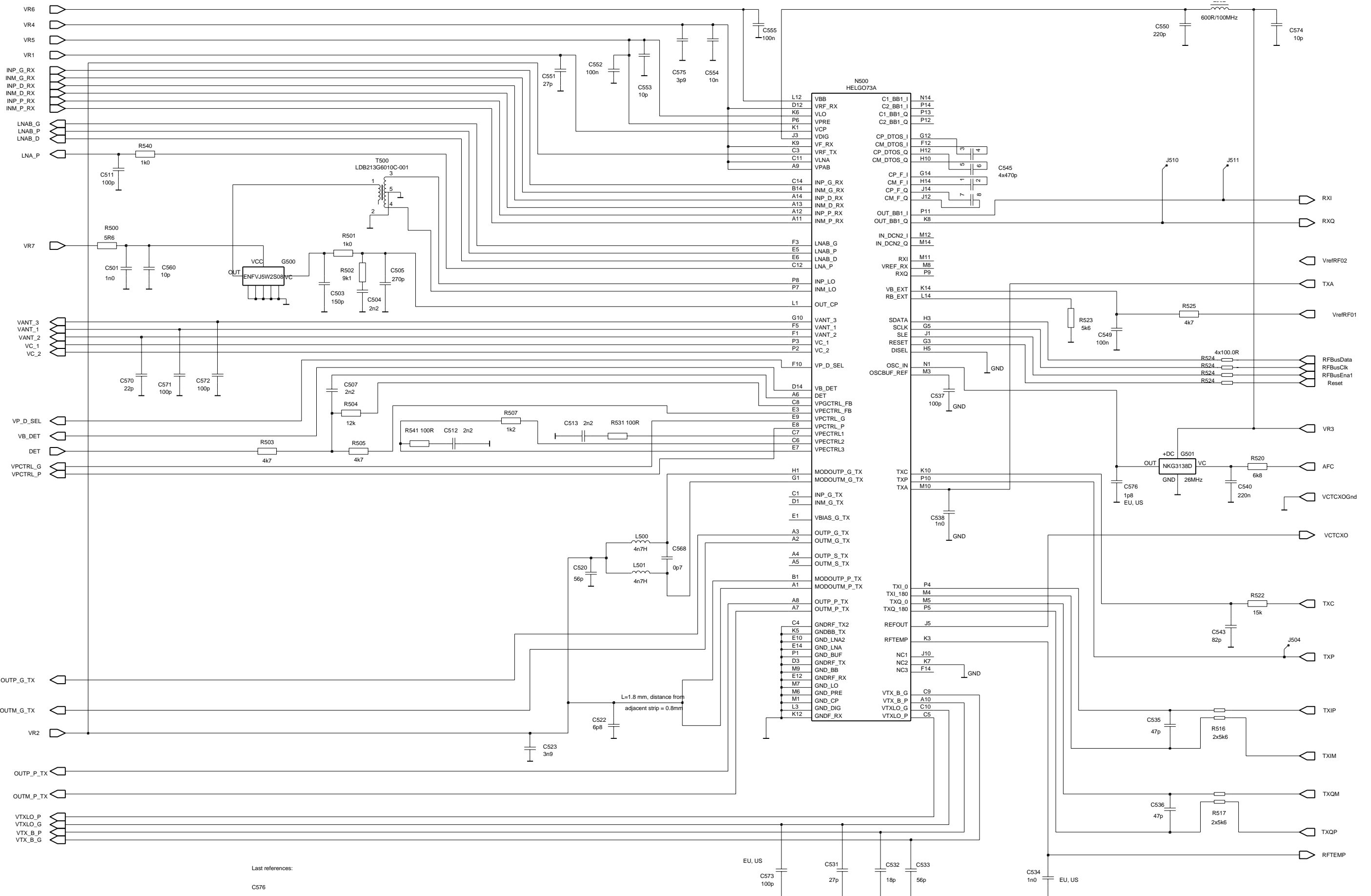
RF Top level



# RF shields and vias



# HELGO



Last references:

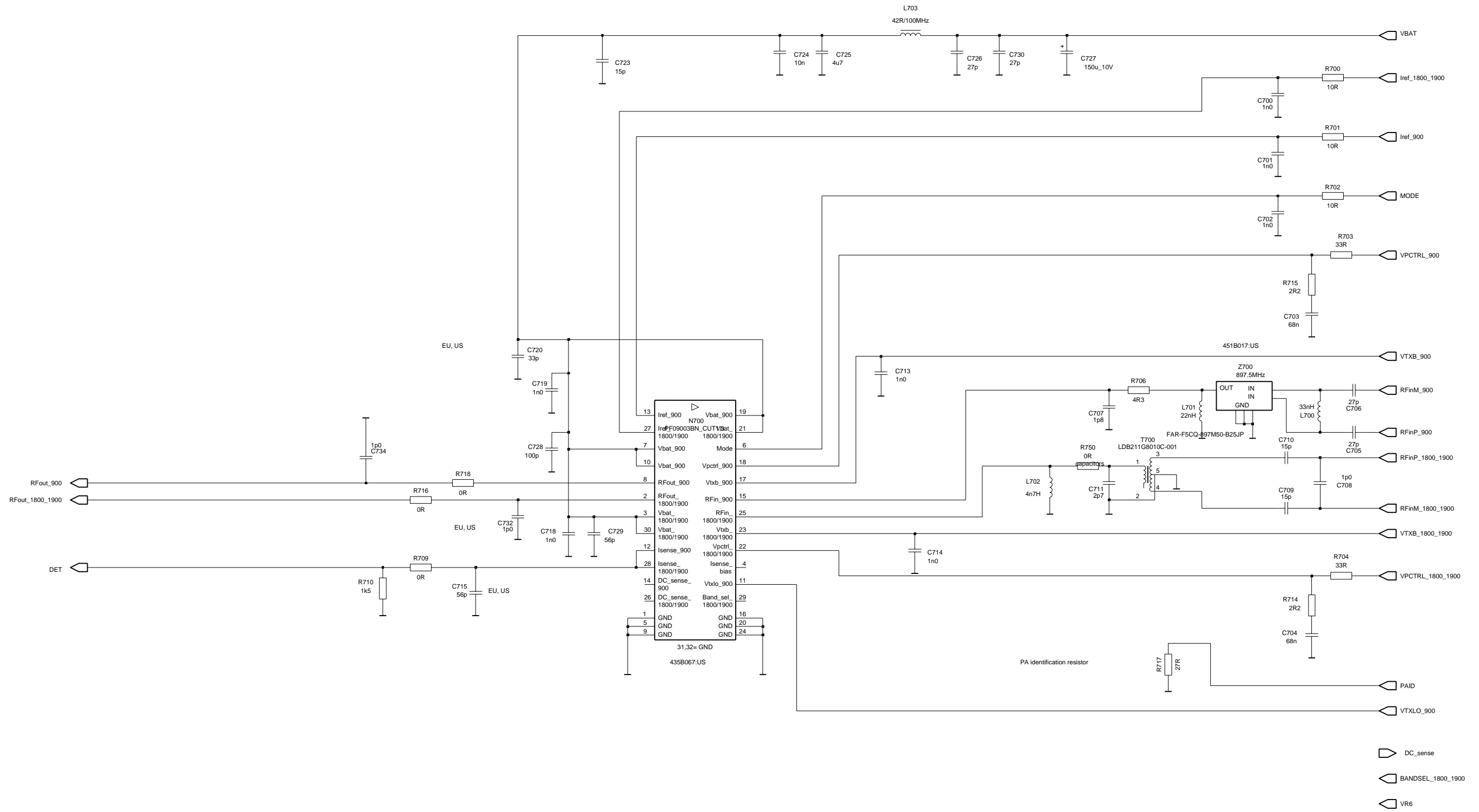
C576

R543

L510

T501

# Power amplifier and power detection



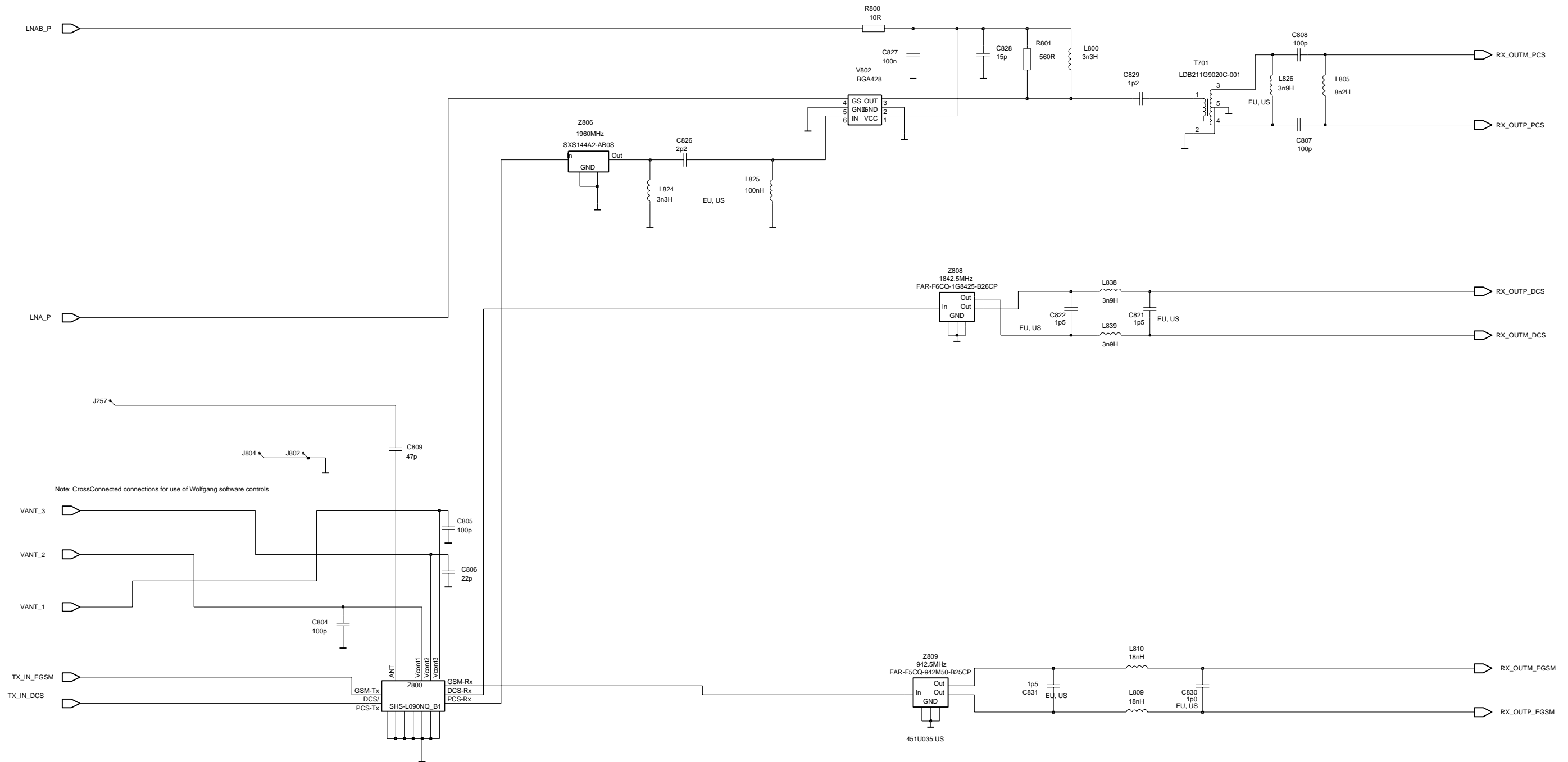
Last references:

C733

R717

L704

# RX front end and antenna switch



Last references:

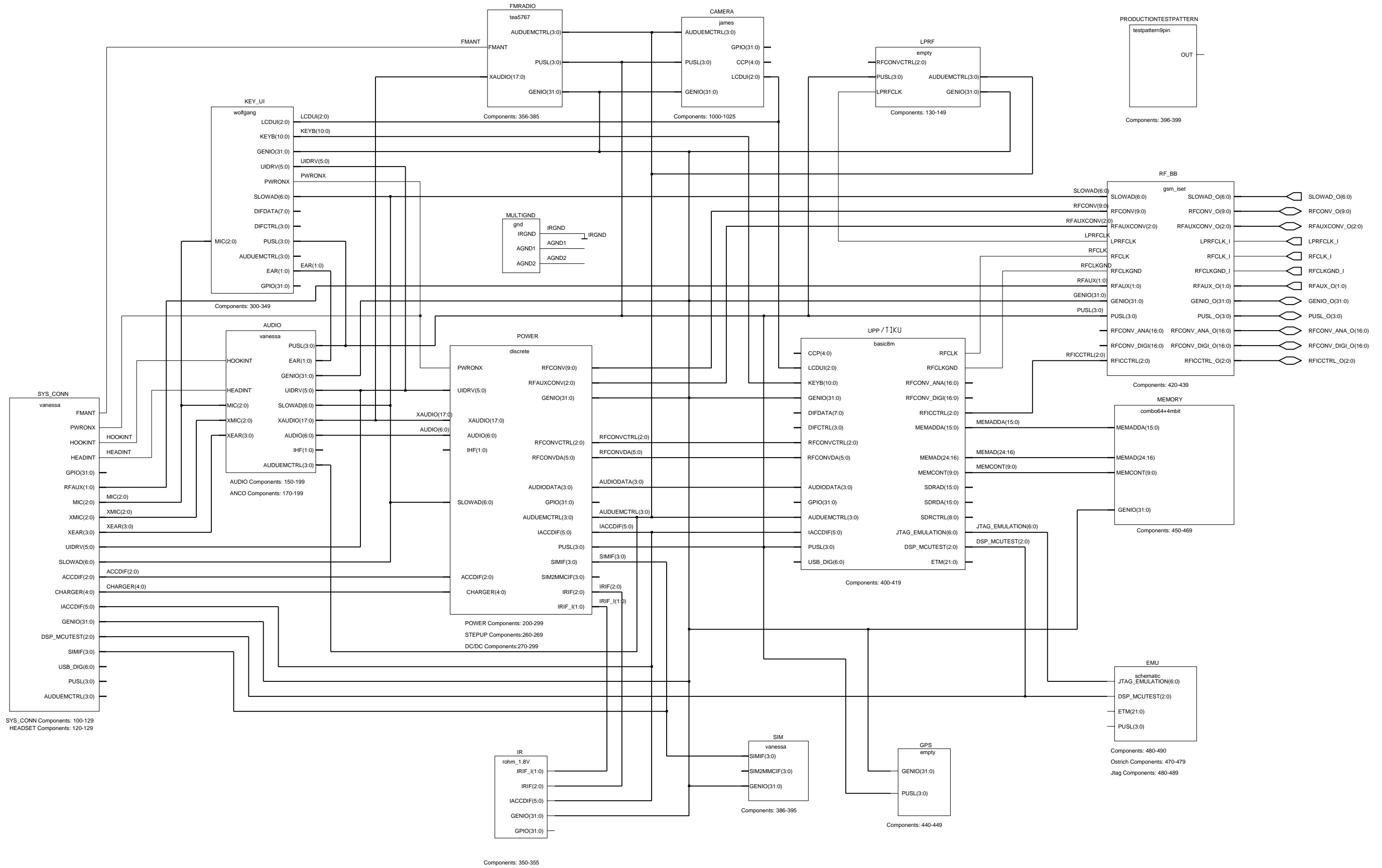
C835

R807

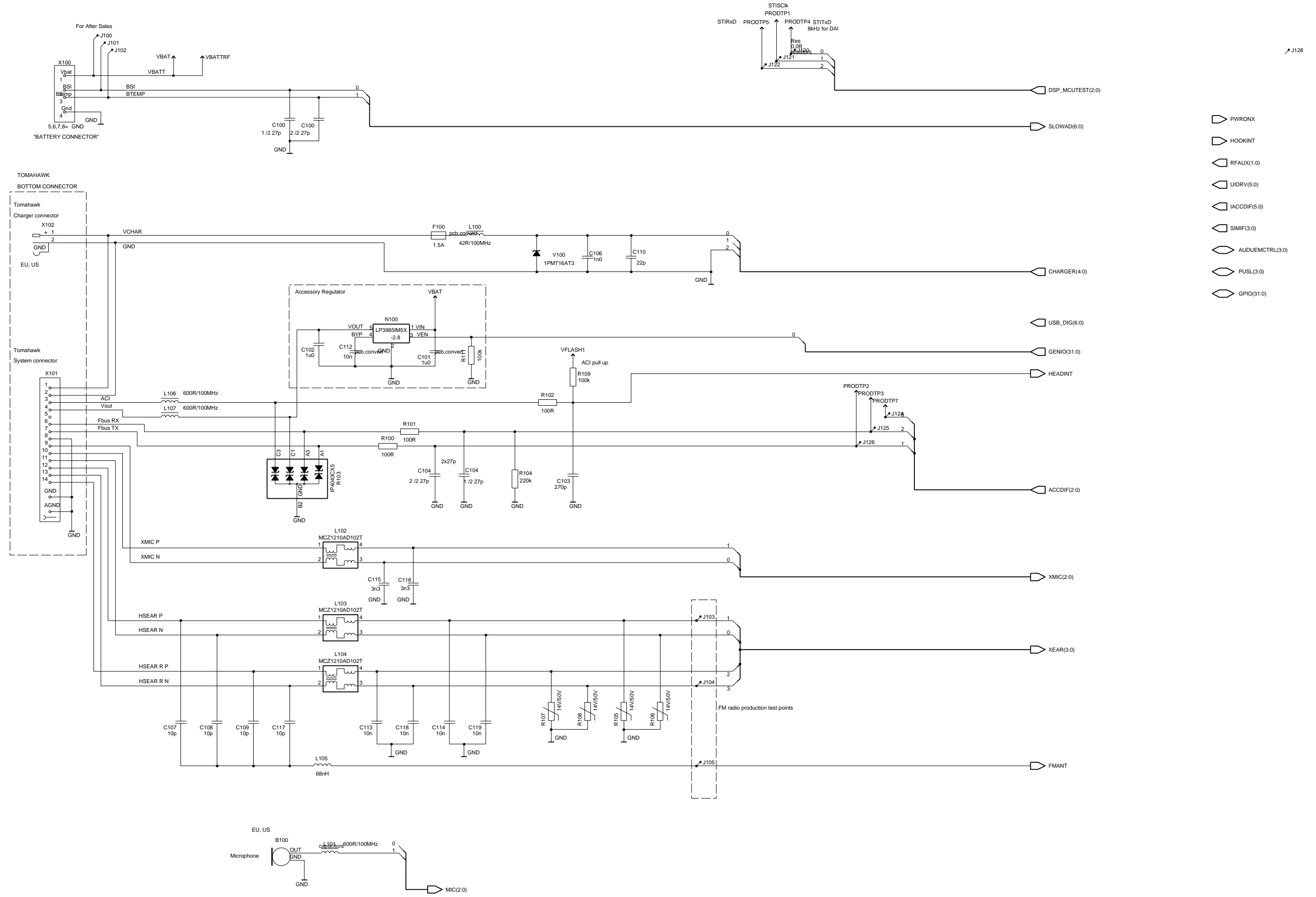
L825

Z806

# DCT4 Common Baseband (Top)

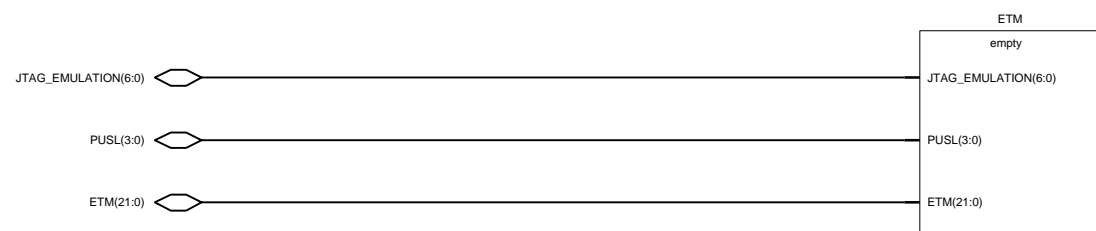


# System connector

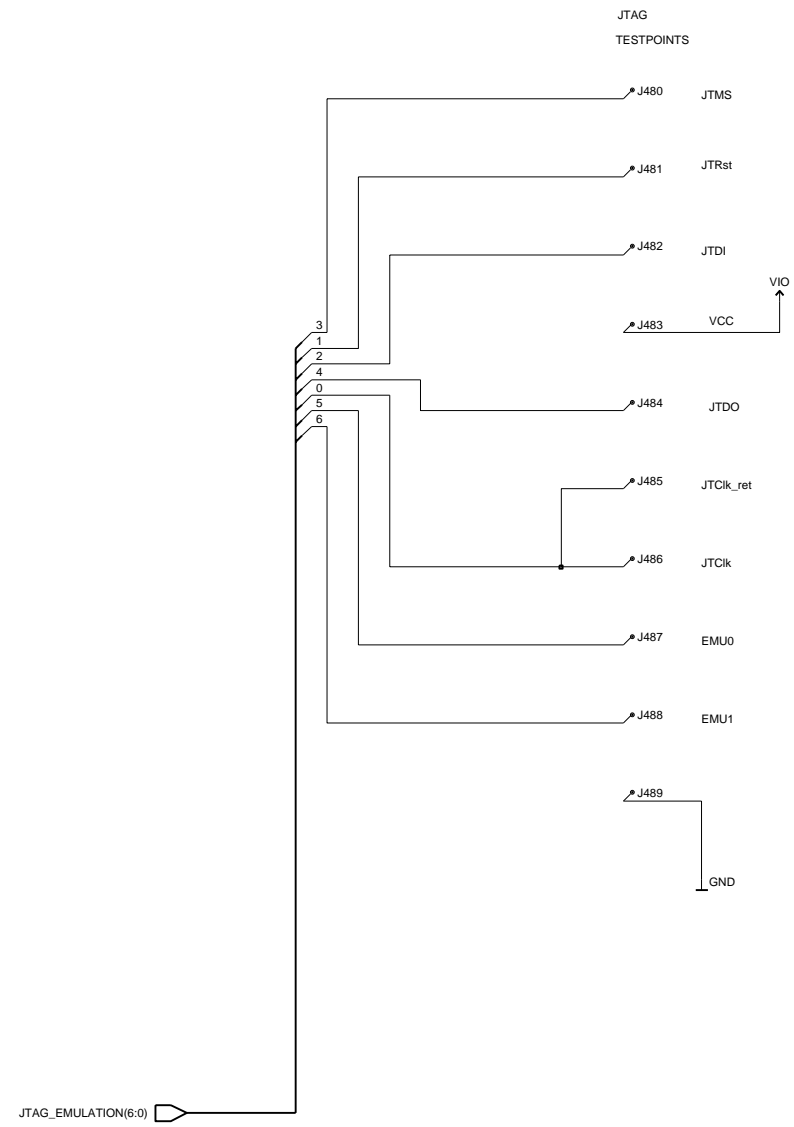




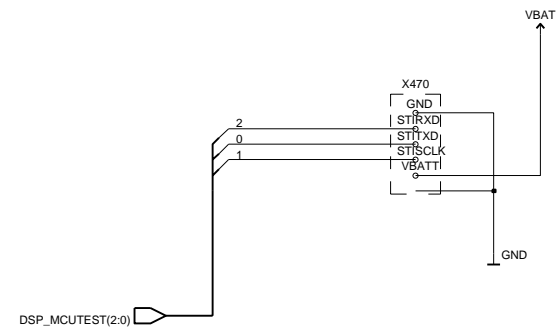
# Test and emulator interface




# Testpoints for JTAG emulator




# Connector based Ostrich test interface



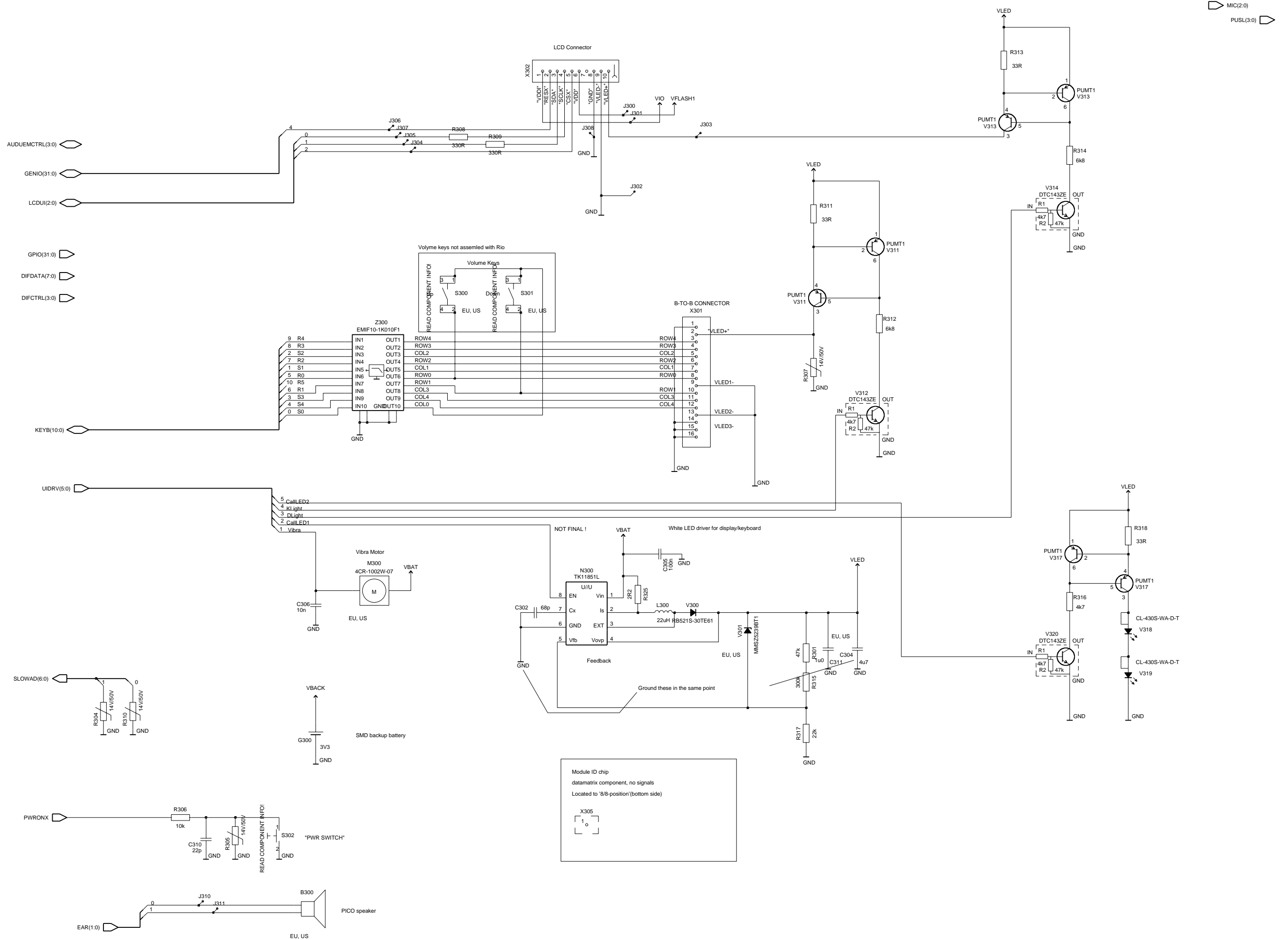
# Empty ETM

PUSL(3:0) 

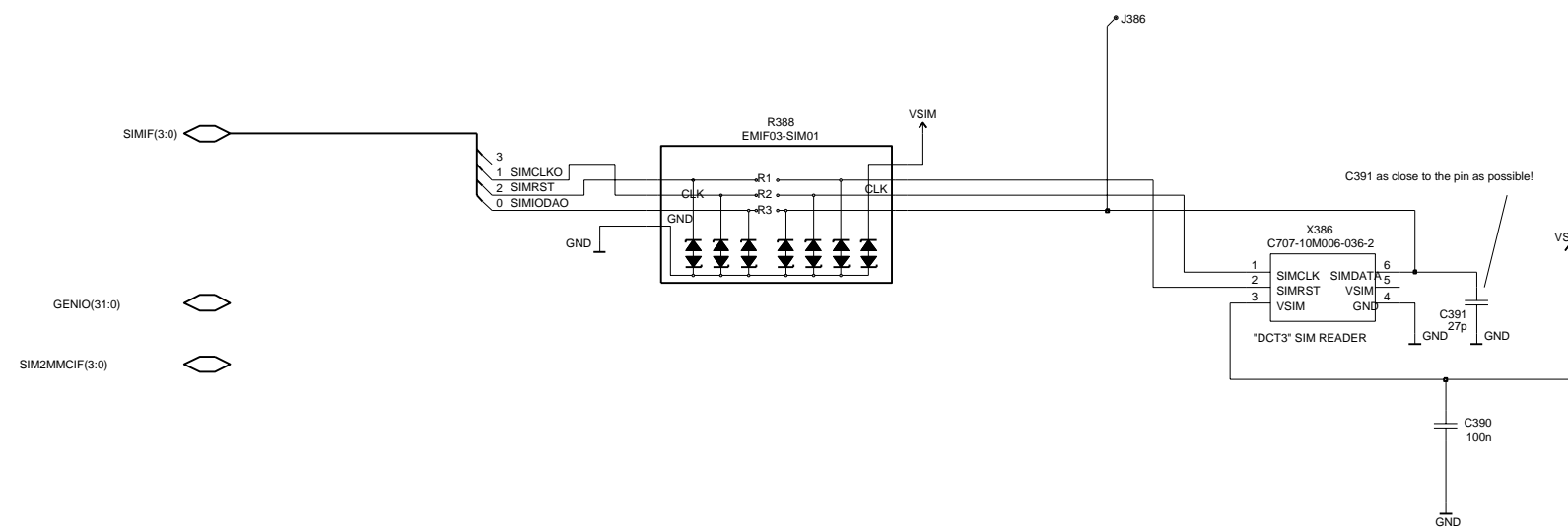
JTAG\_EMULATION(6:0) 

ETM(21:0) 

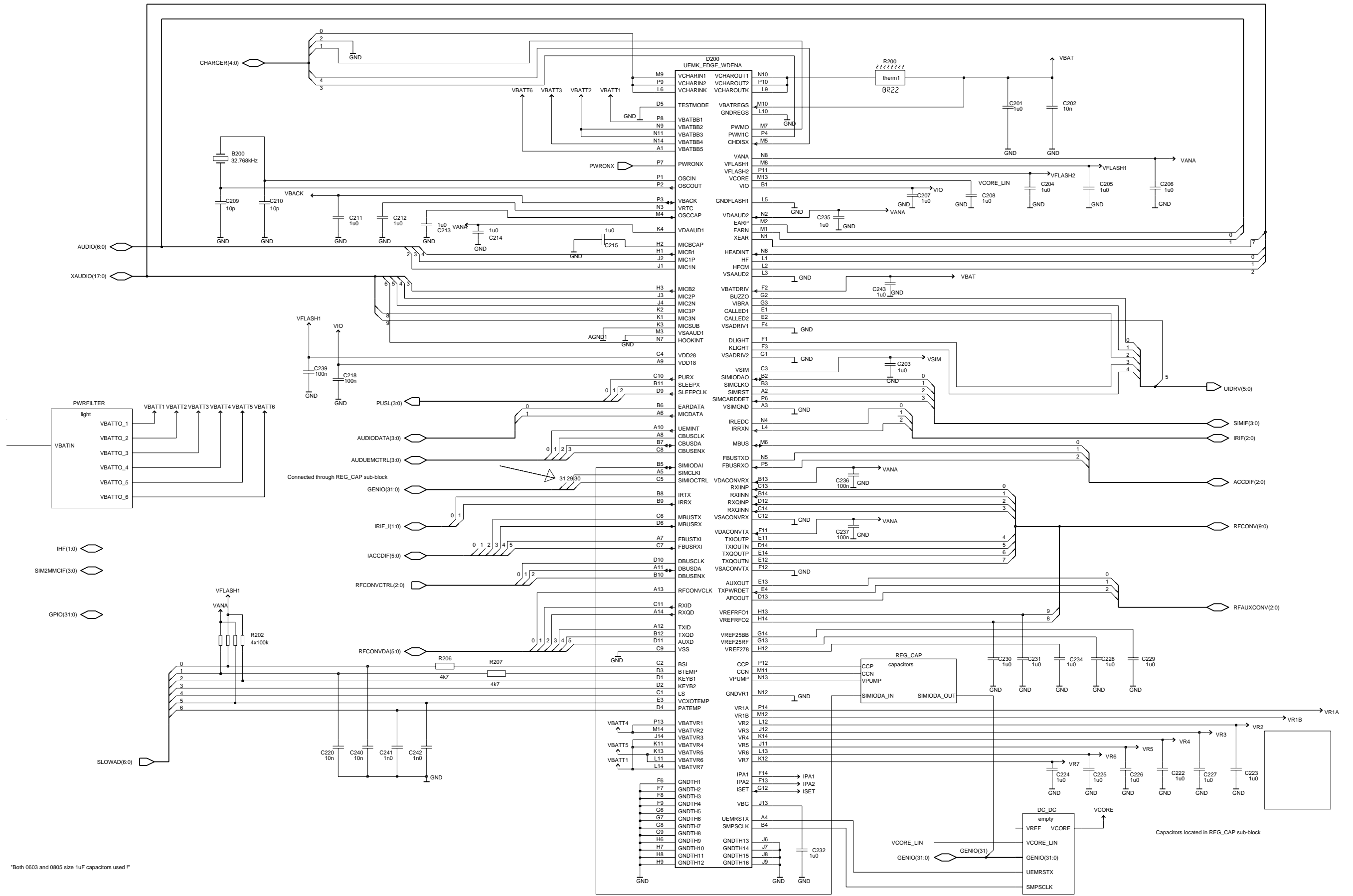
User Interface



SIM reader



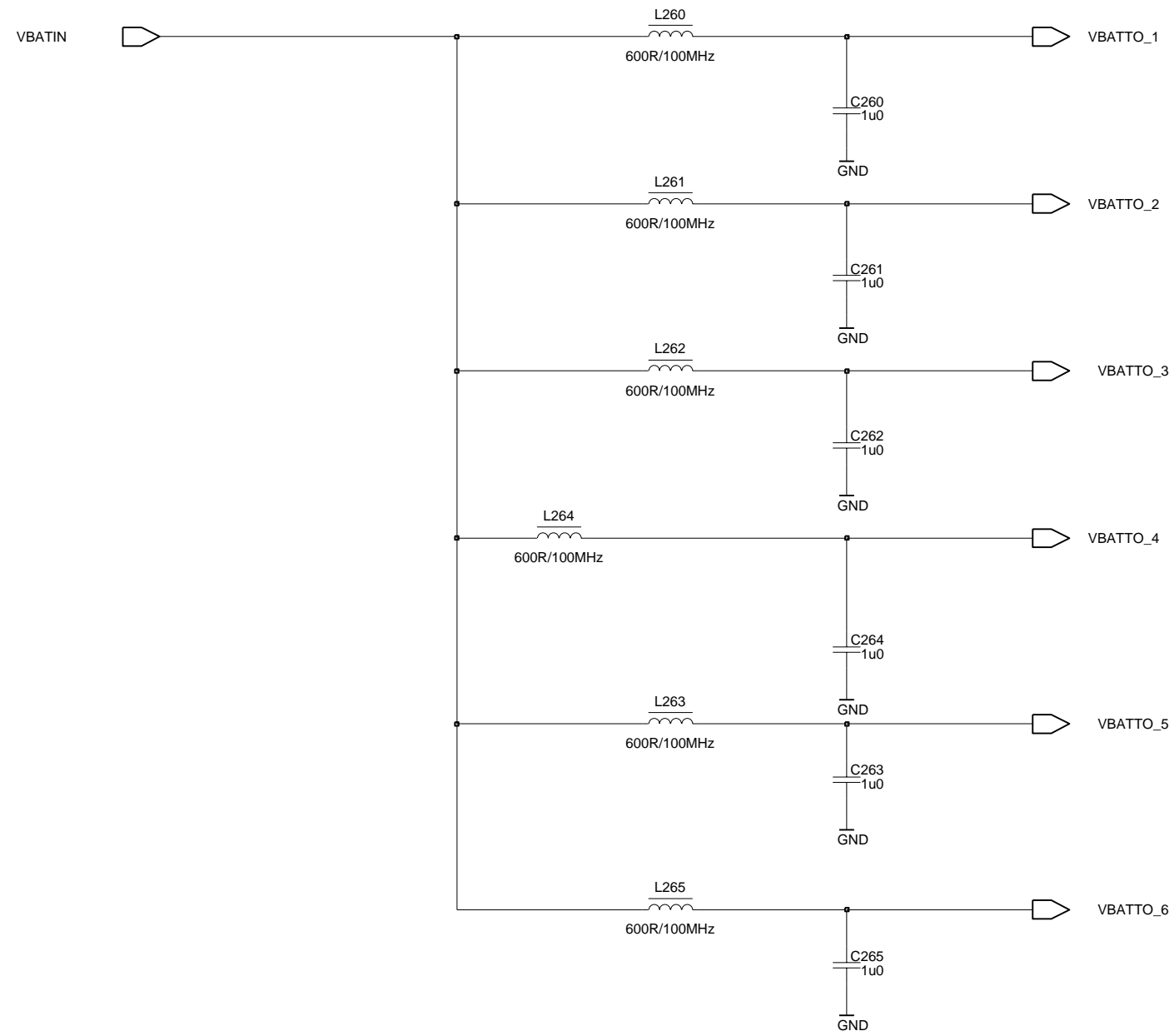
# Discrete power management



\*Both 0603 and 0805 size 1uF capacitors used !

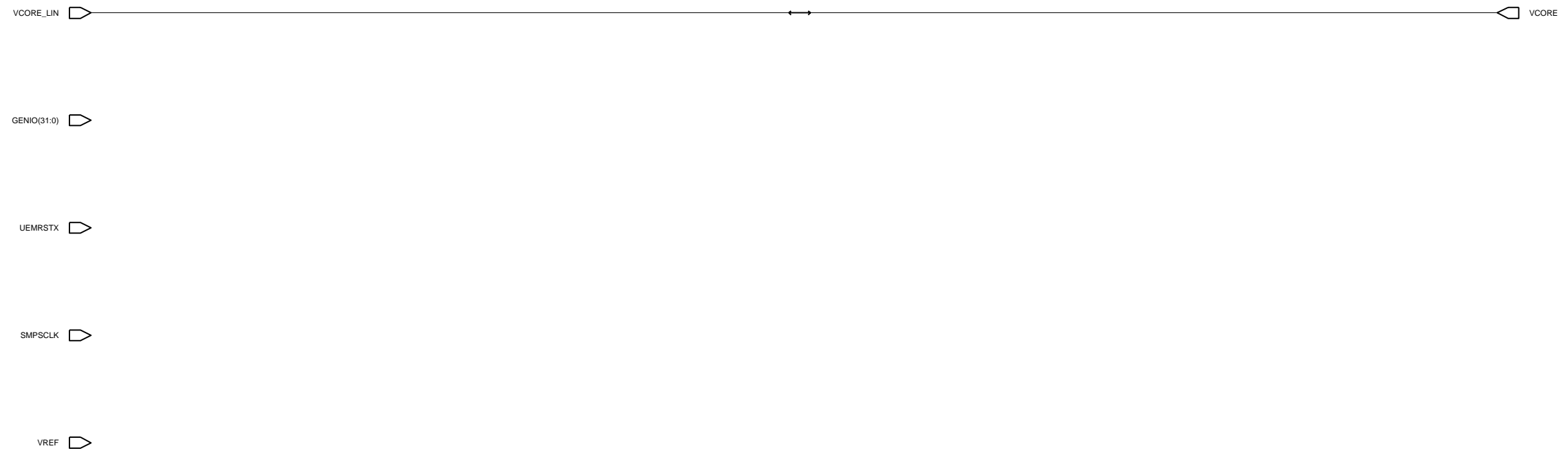
Used refs in REG\_CAP: C238, C200, C219, C233, C221 and R205

# Light filtering

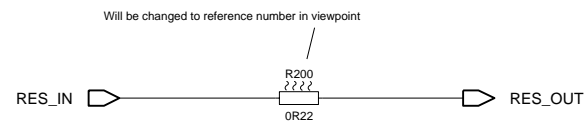




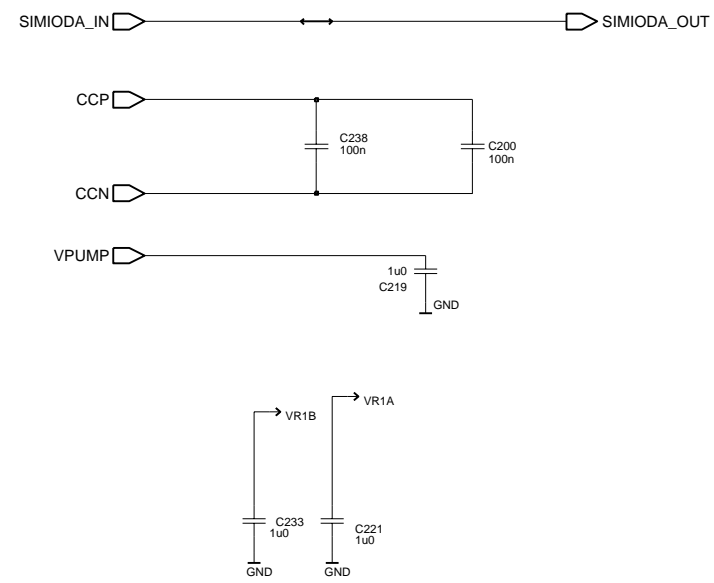
# DC/DC converter



# PWR resistor

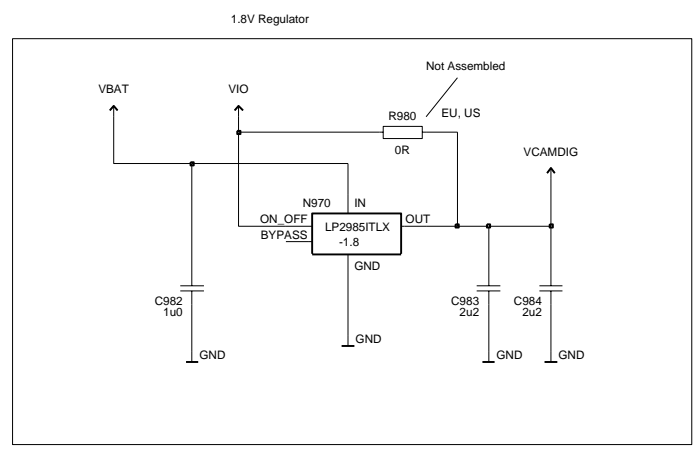
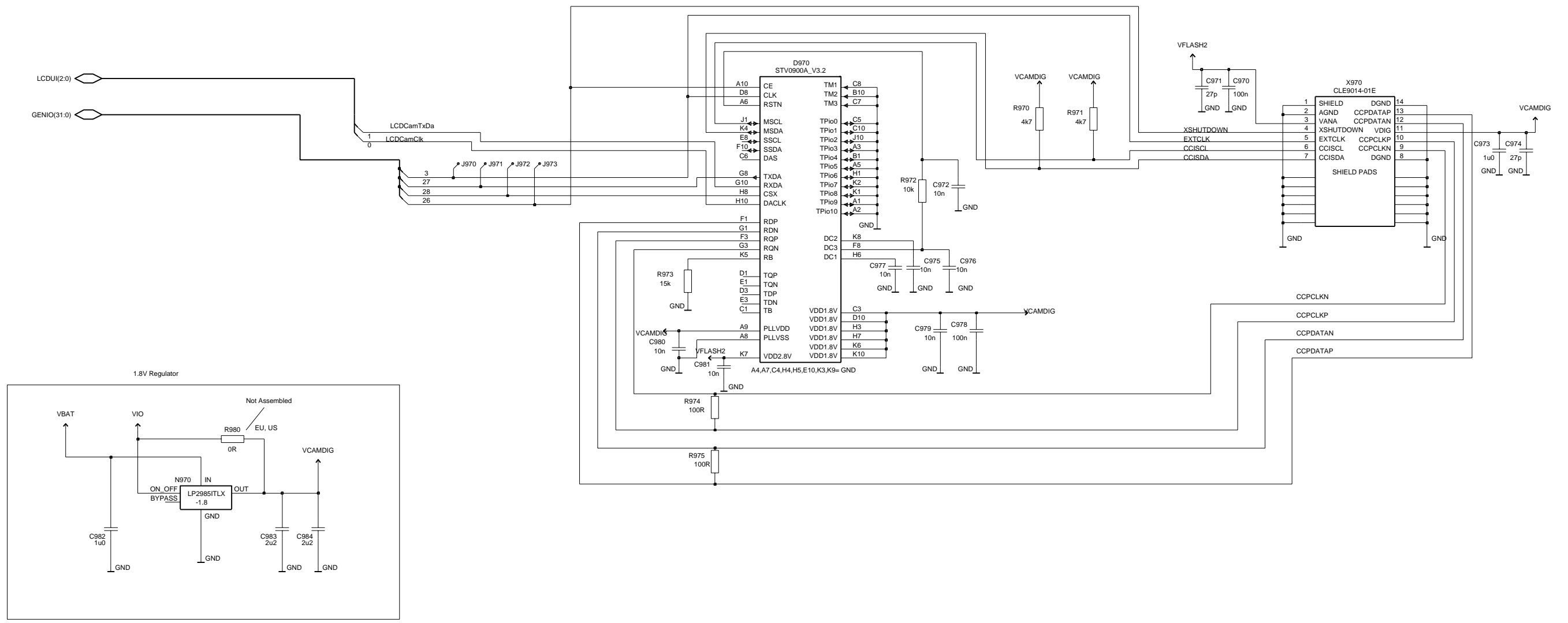
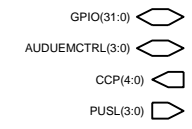


# For old discrete power users

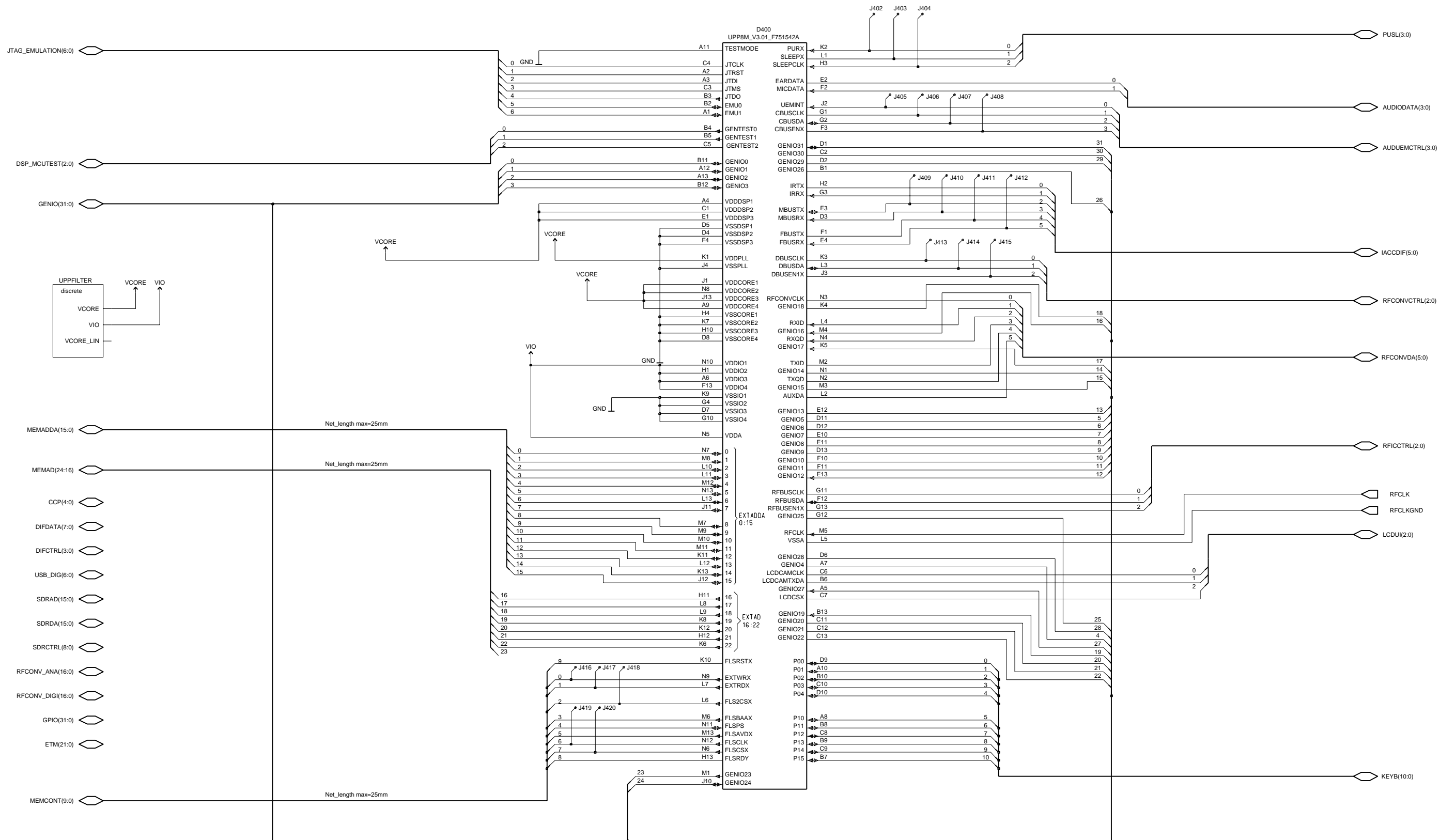


# Camera

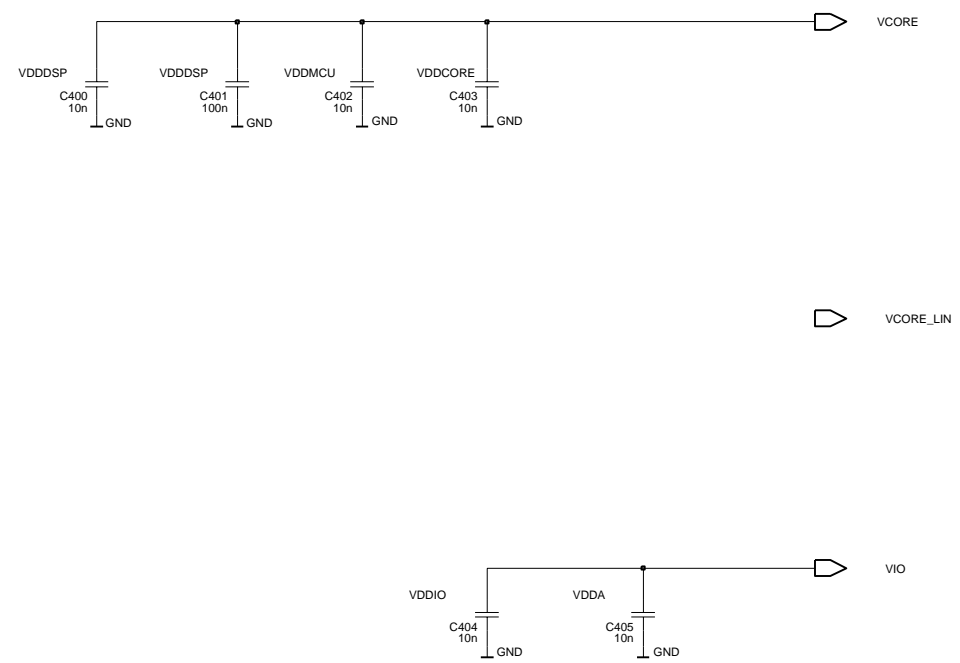
NOTE! New reference numbers 970-999, usage must be checked from RFI




# UPP 8M implementation



# Discrete decoupling capacitors for UPP




# No LPRF interface in this product

GENIO(31:0) 

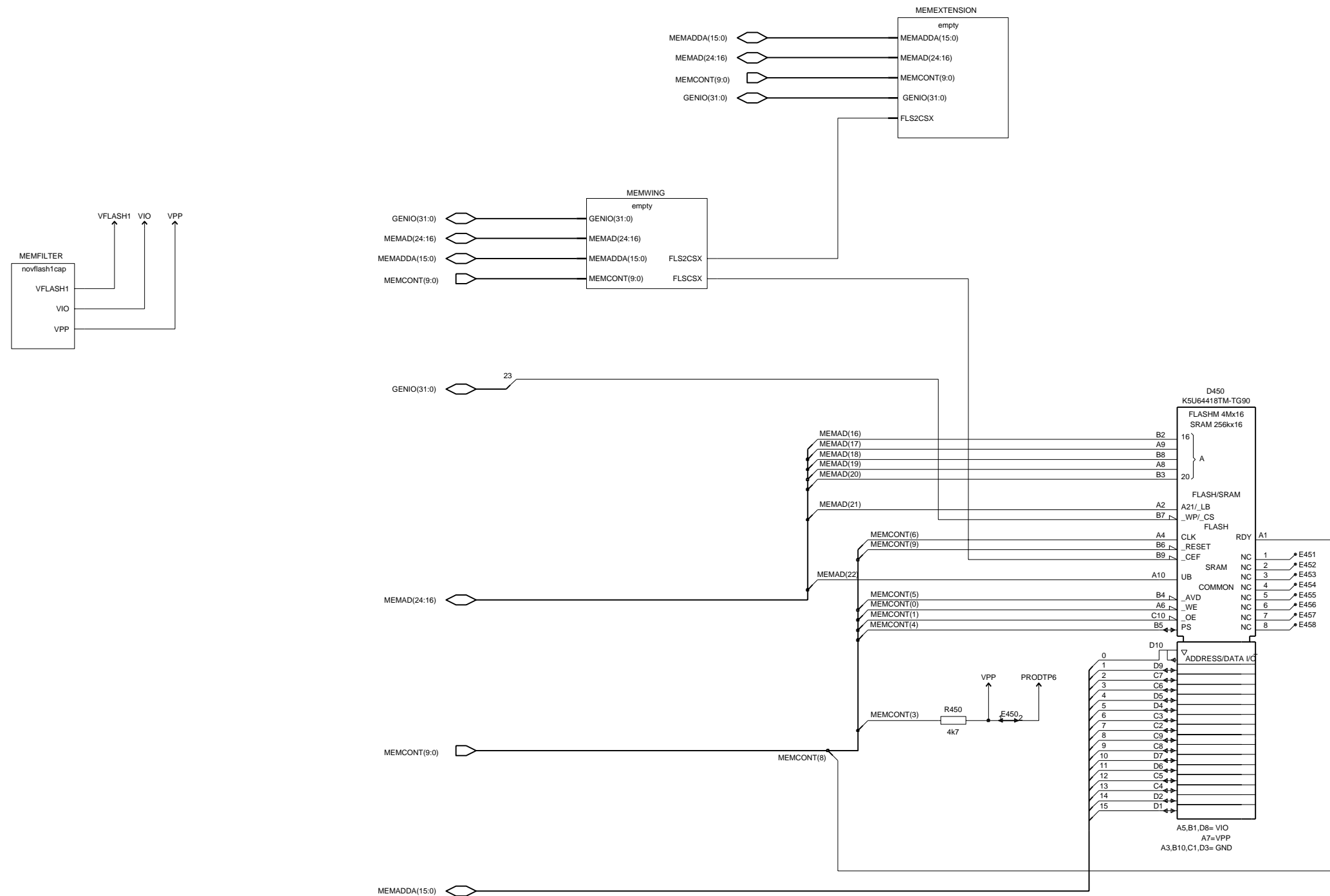
AUDUEMCTRL(3:0) 

PUSL(3:0) 

RFCONVCTRL(2:0) 


LPRFCLK 


# Combo memory 64+4Mbit







# Memory extension

GENIO(31:0) 

FLS2CSX 

MEMAD(24:16) 

MEMCONT(9:0) 

MEMADDA(15:0) 

# Empty wing sheet

MEMADDA(15:0) ◁

MEMAD(24:16) ◁

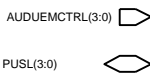
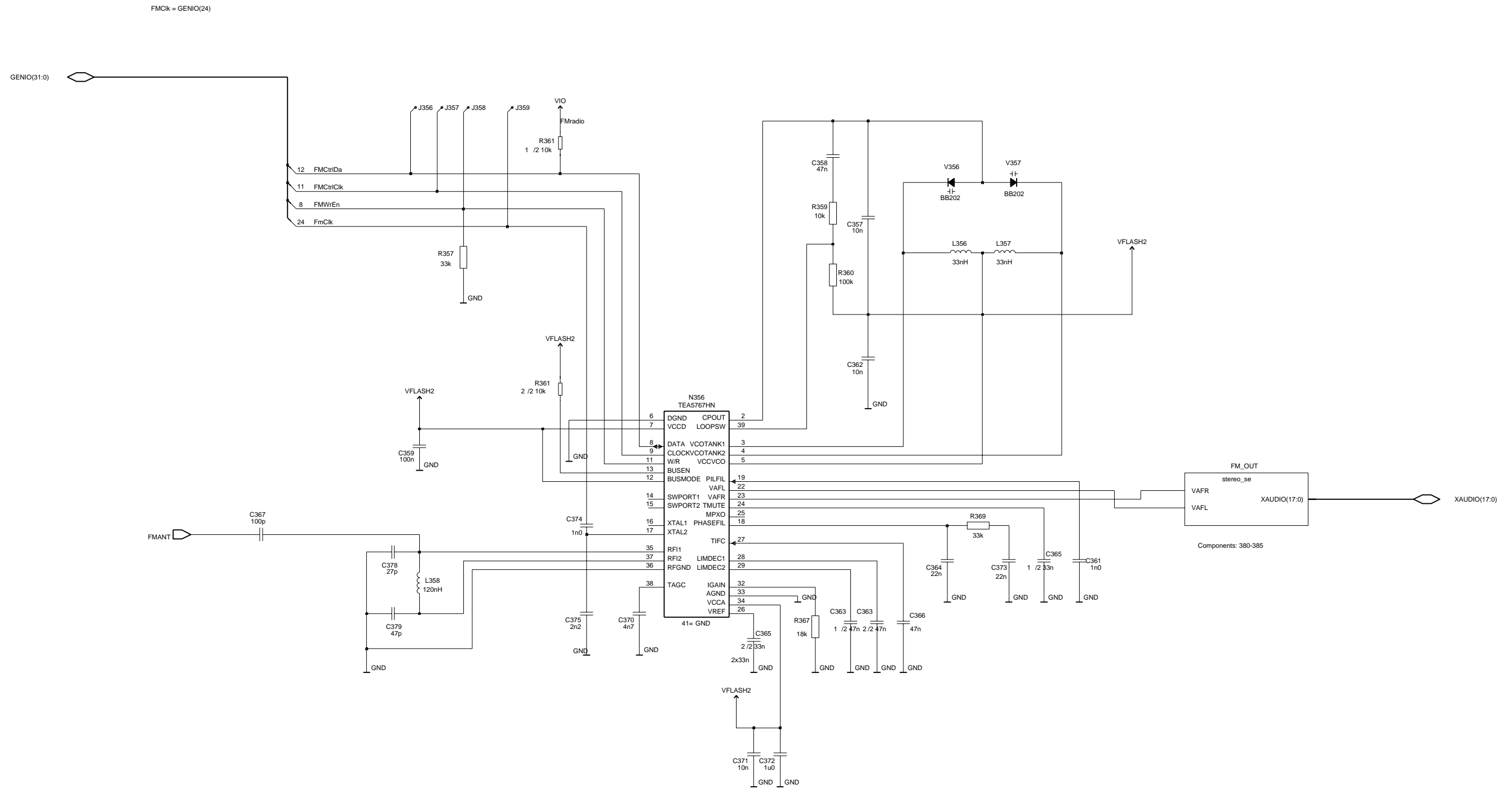
GENIO(31:0) ◁



# Discrete capacitors for memory without VFlash1

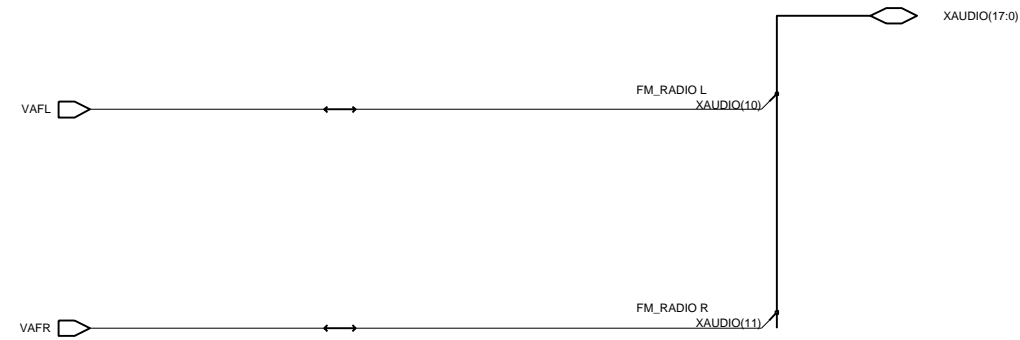


FM radio unit

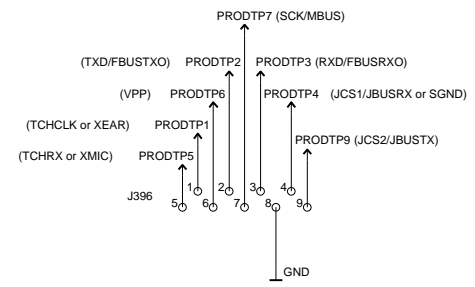


Notice:  
 C374 (1n0) and C375 (2n2) are configured for 32kHz reference clock  
 If reference clock is 6.5MHz, use C374 (3p9) and C375 (10p)

# FM radio unit

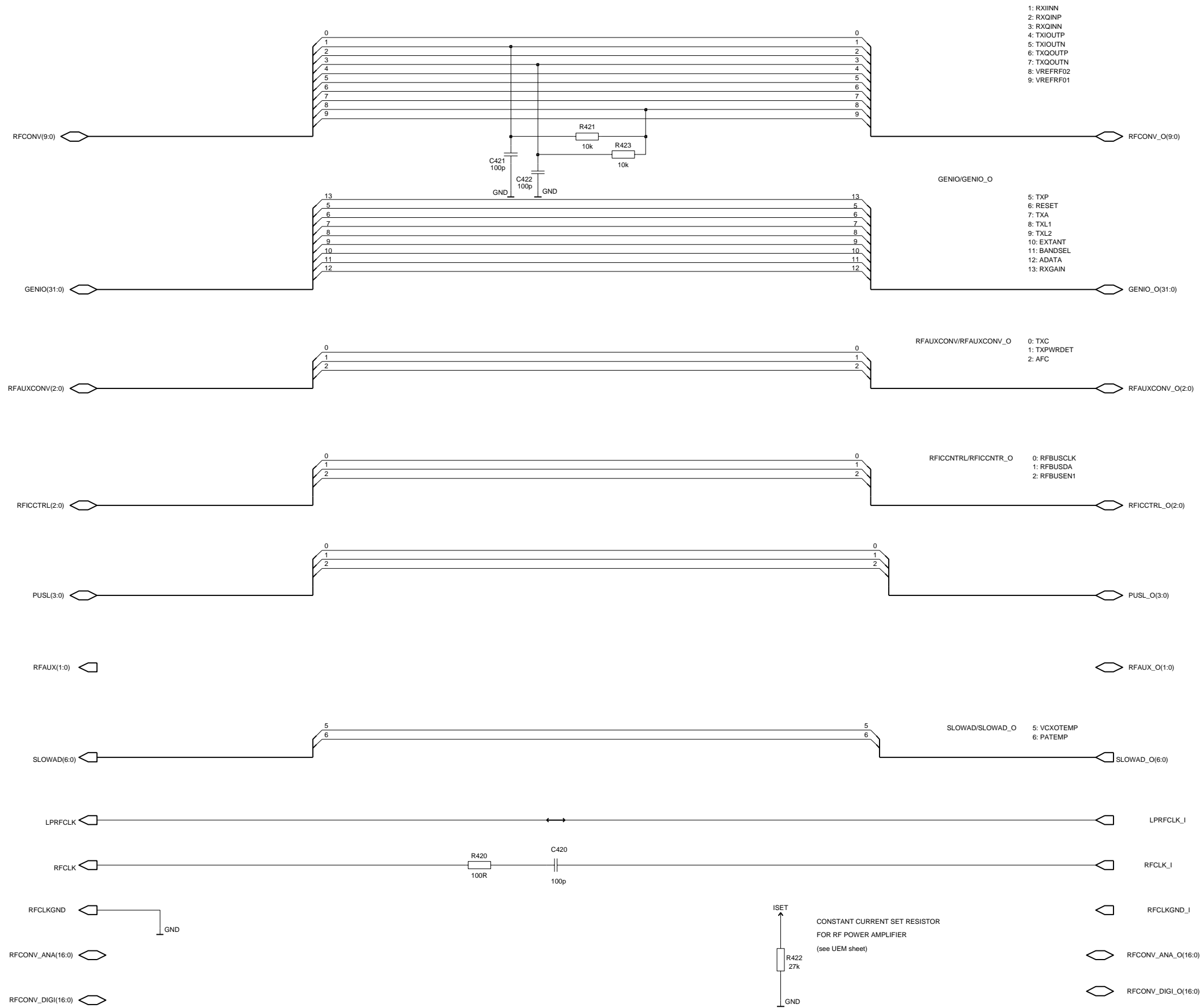


# 9 pin production test pattern



OUT

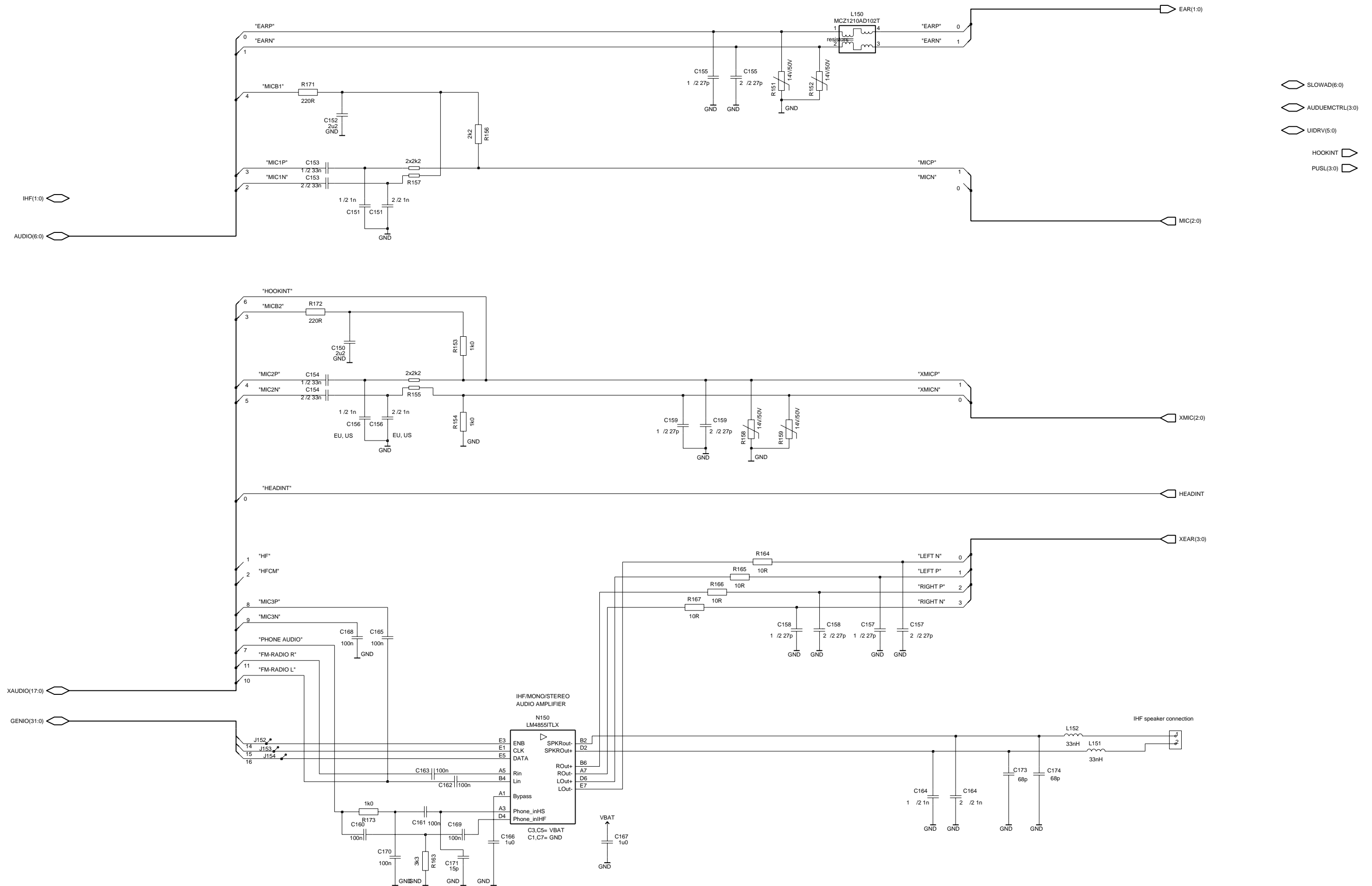
GSM RF-BB interface



IPA1 AND IPA2 ARE USED IN RF, THE TOLERANCE OF R422 IS 1% (0402, 1430873)

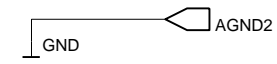
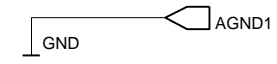
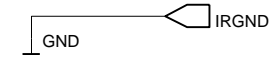
Audio

Varistor arrays have reliability issues





# MultiGND symbol bypass

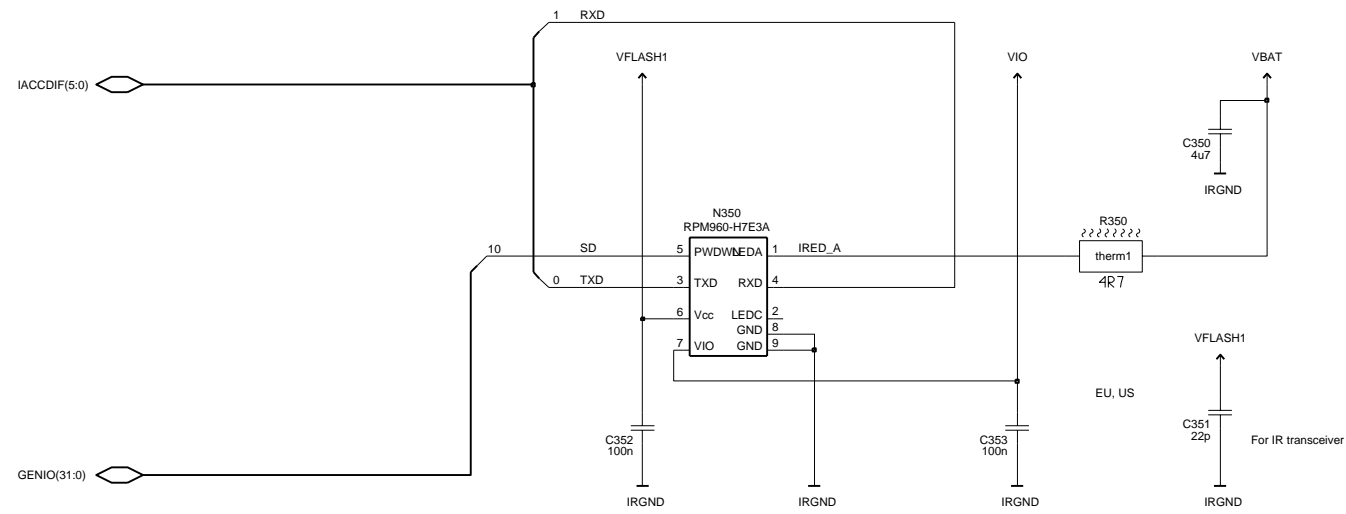


# GPS empty sheet

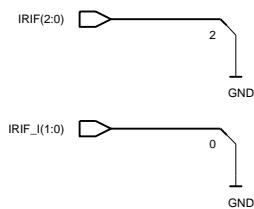
 PUSL(3:0)

 GENIQ(31:0)

# Rohm IR module 1.8V



GPIO(31:0)

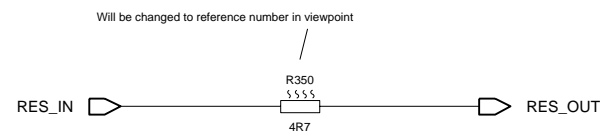


UEM IR level shifters  
are ground, when 1.8V  
IR is used!

Used referenses

- C 350 - 353
- N 350
- R 350

IR resistor



# Layout

