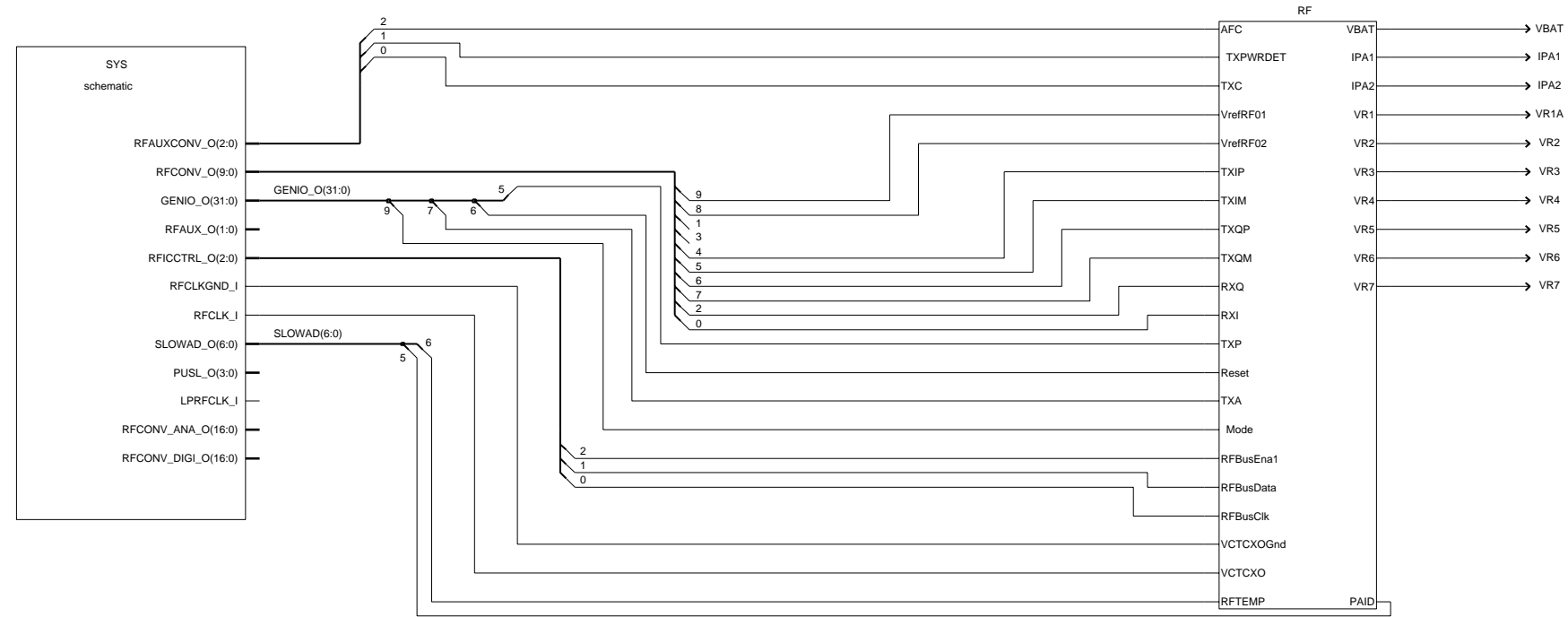
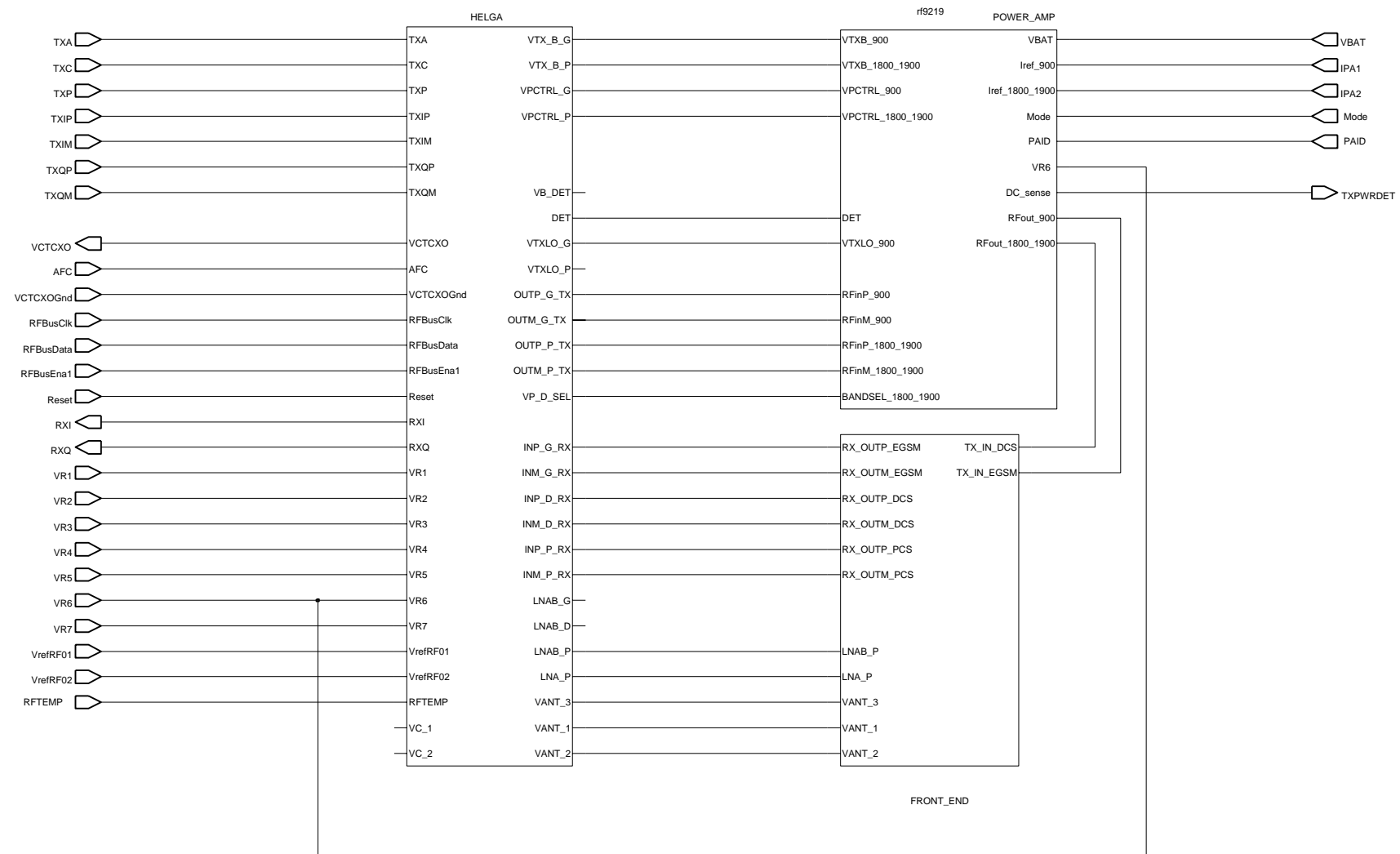


Top level



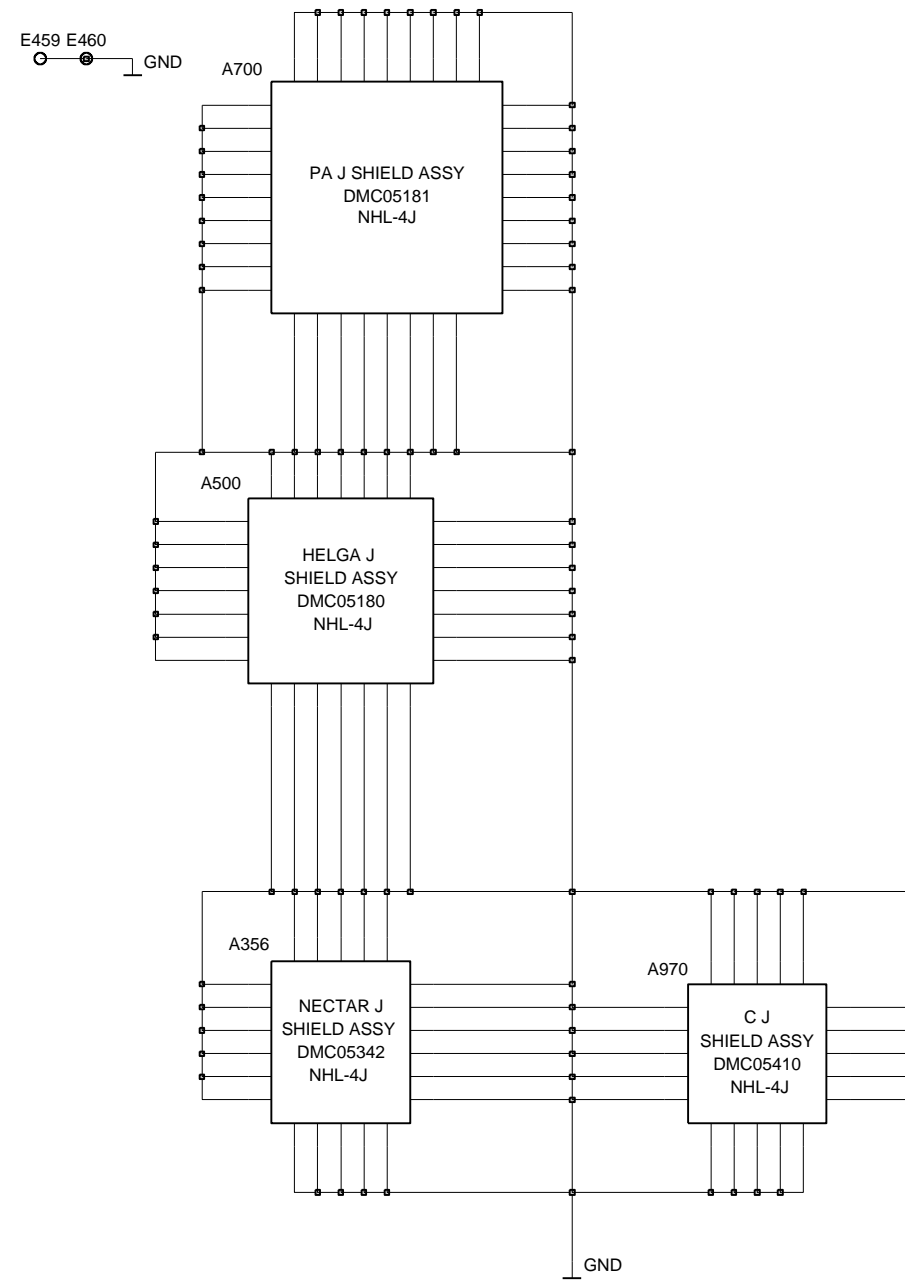
RF Top level



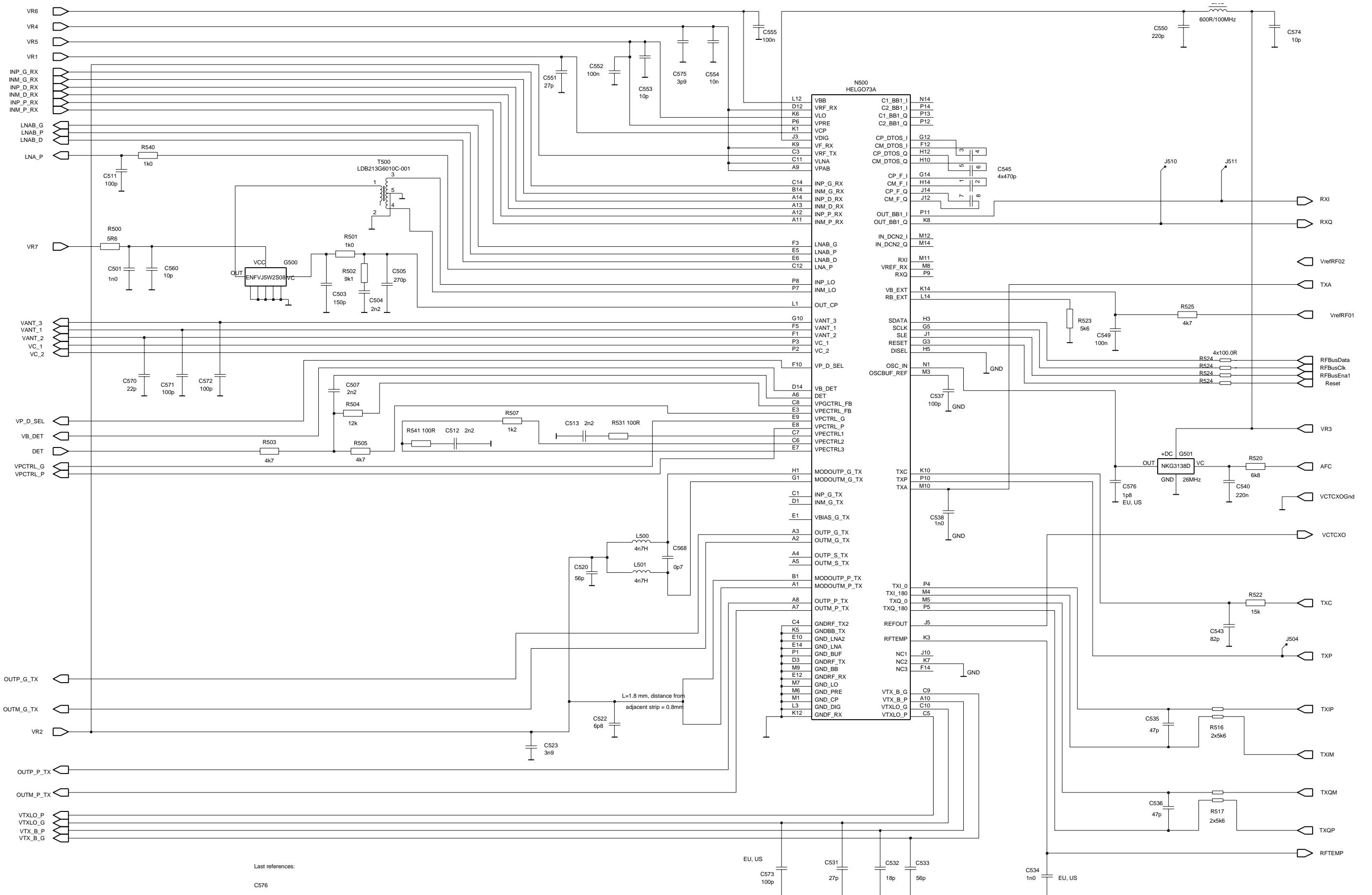
RF shields and vias

BB GLOBAL GND HOLES

RF GLOBAL GND HOLES



HELGO



Last references:

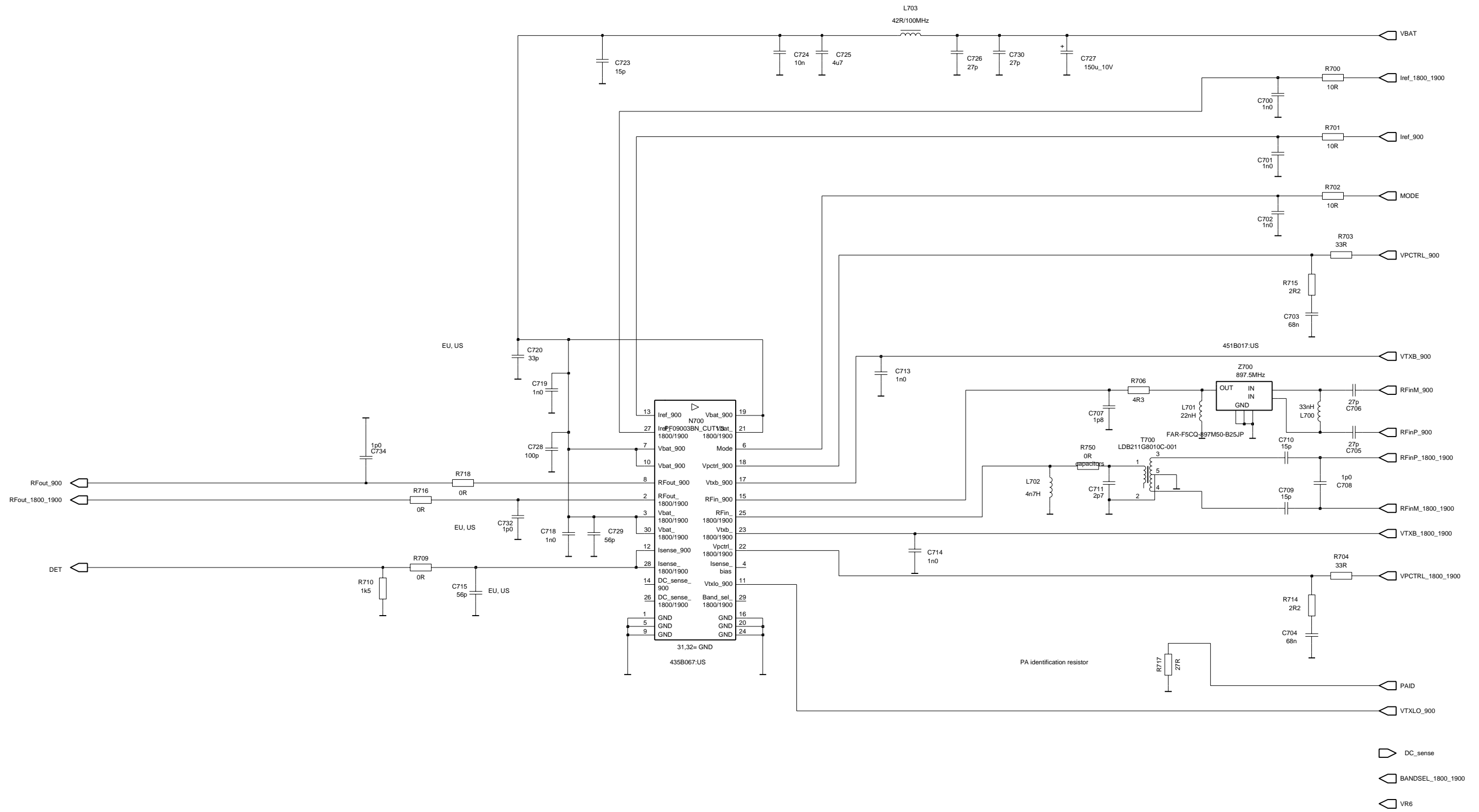
C576

R543

L510

T501

Power amplifier and power detection



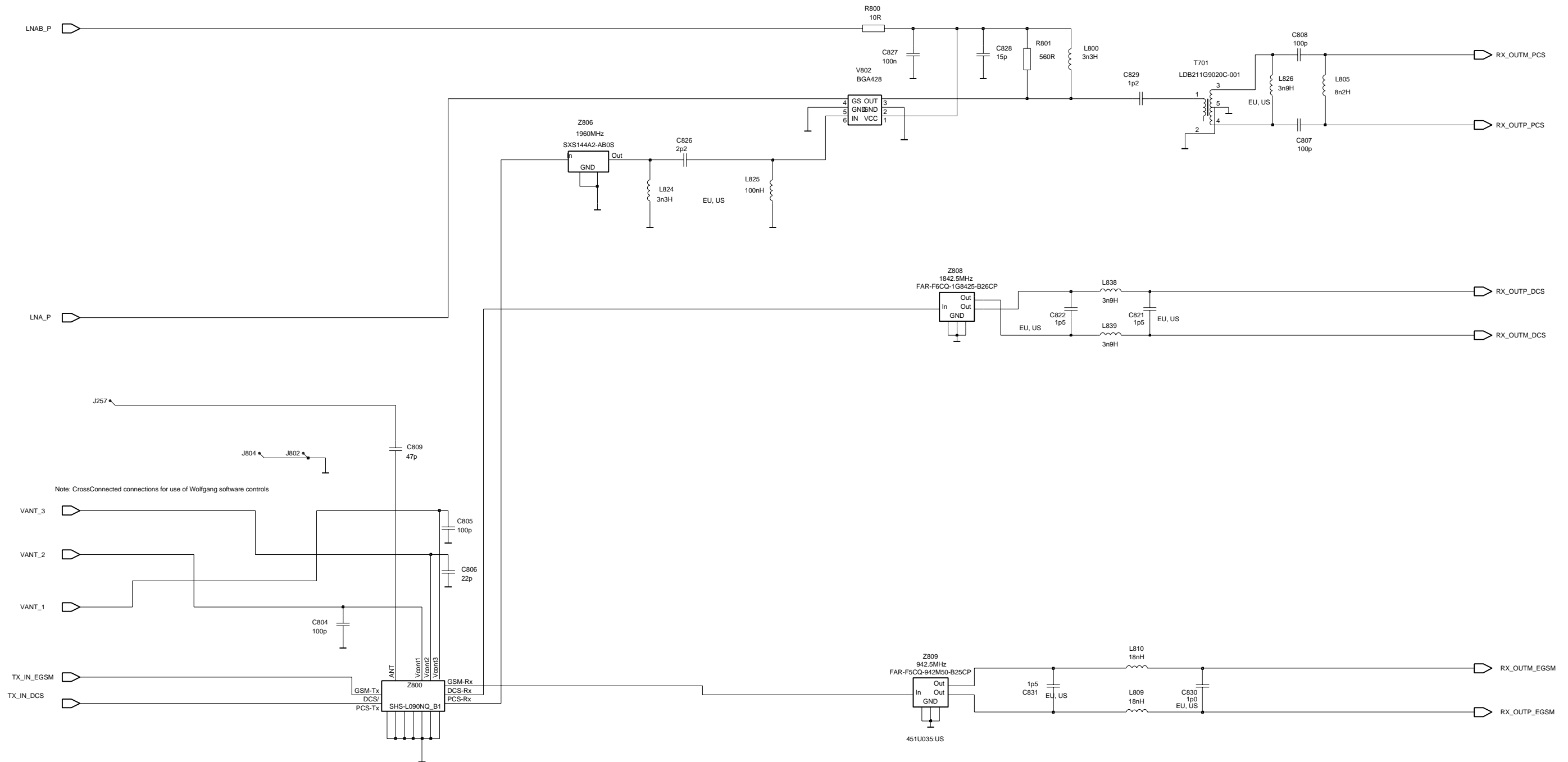
Last references:

C733

R717

L704

RX front end and antenna switch



Last references:

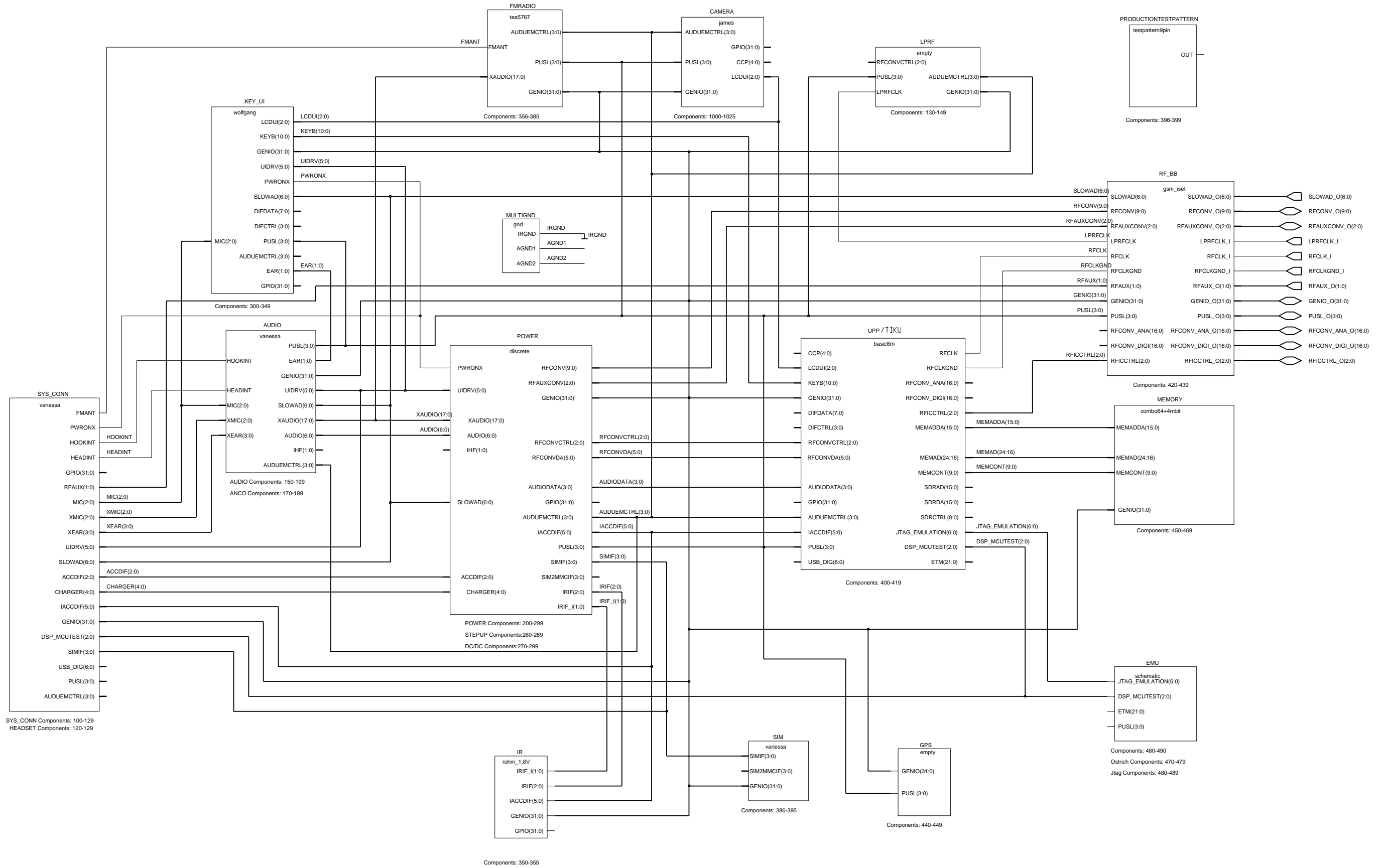
C835

R807

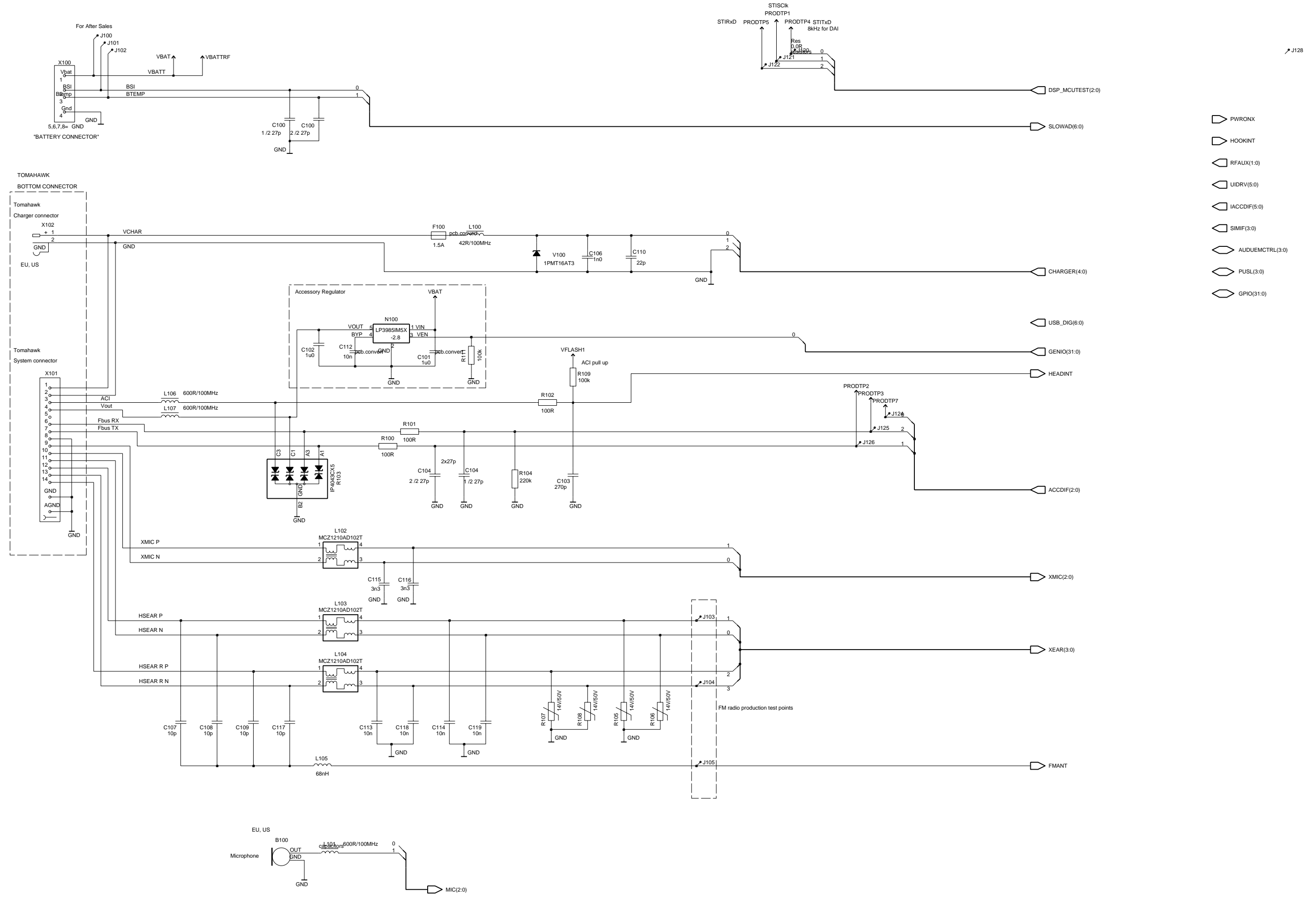
L825

Z806

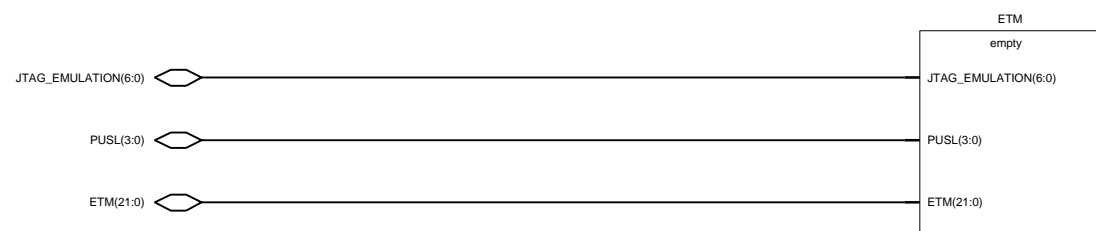
DCT4 Common Baseband (Top)



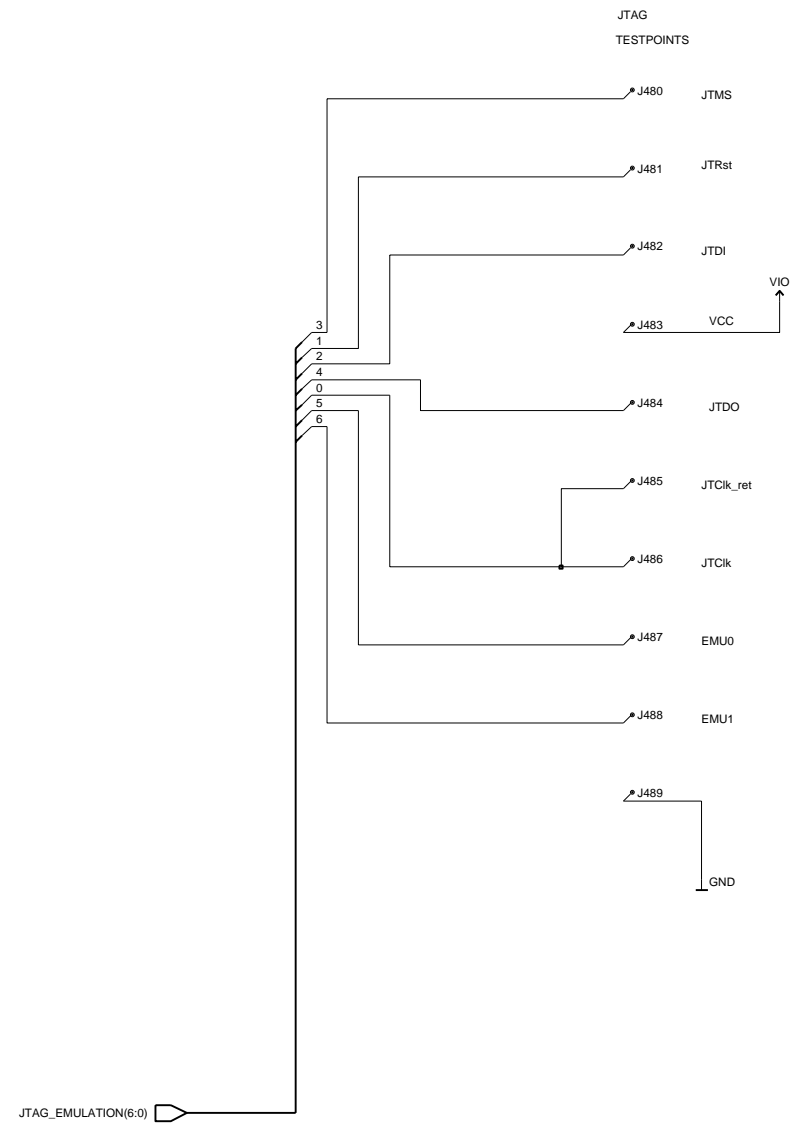
System connector



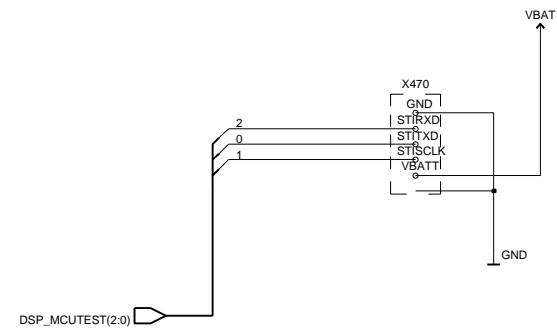
Test and emulator interface




Testpoints for JTAG emulator




Connector based Ostrich test interface



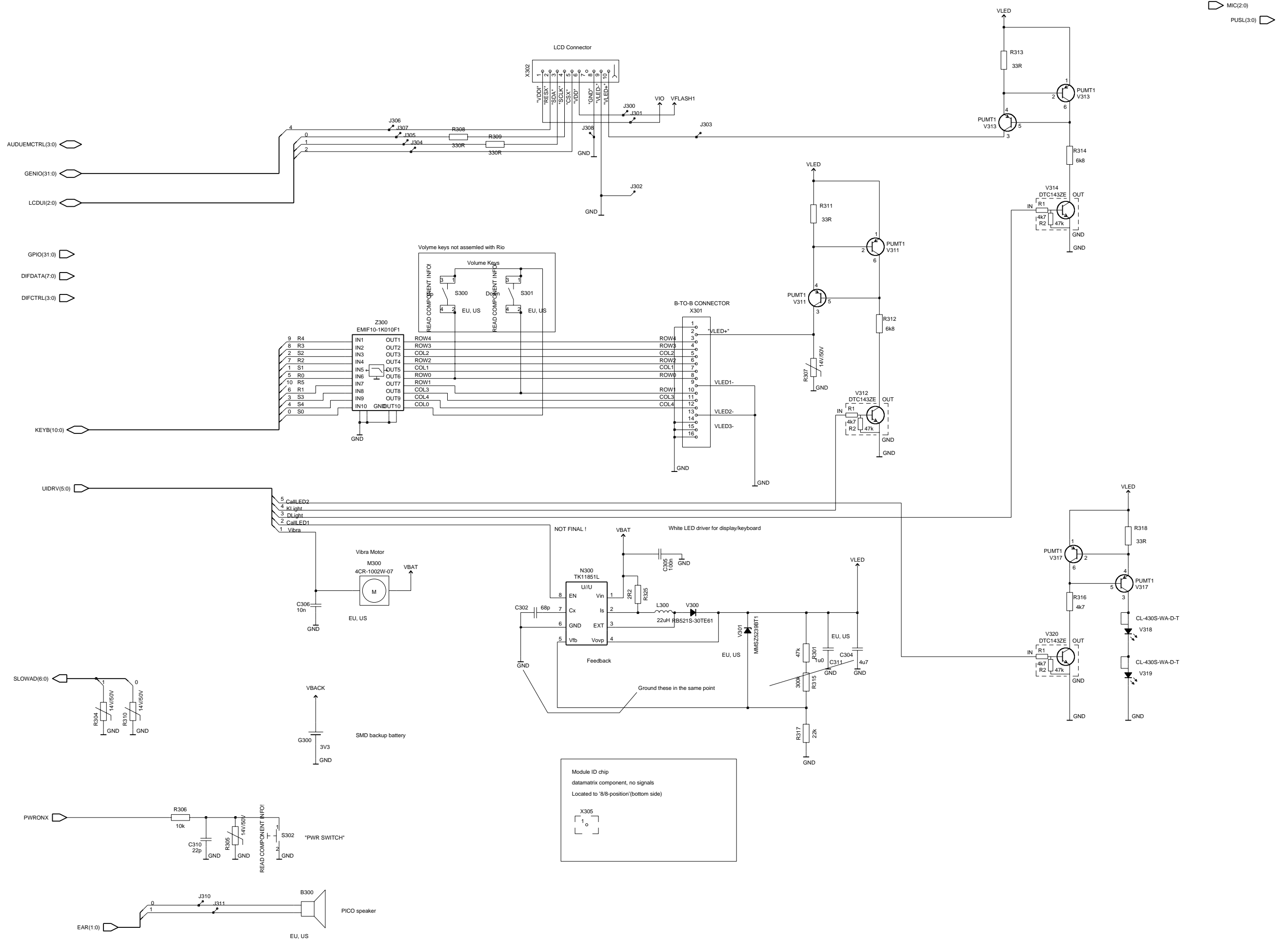
Empty ETM

PUSL(3:0) 

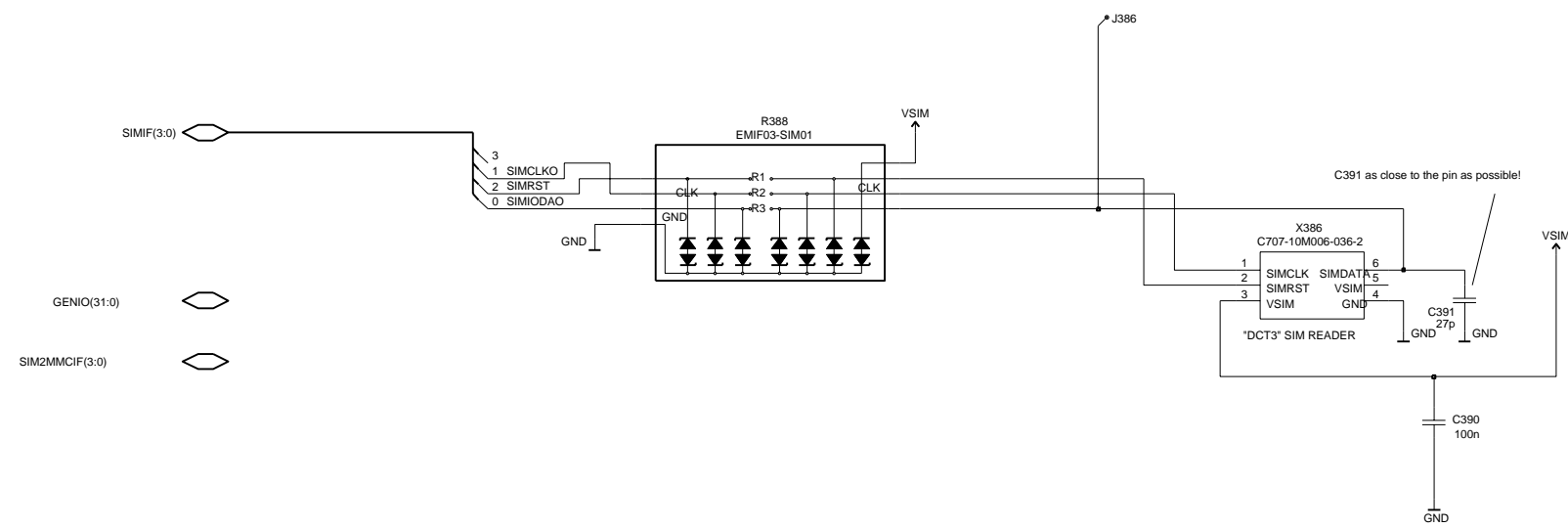
JTAG_EMULATION(6:0) 

ETM(21:0) 

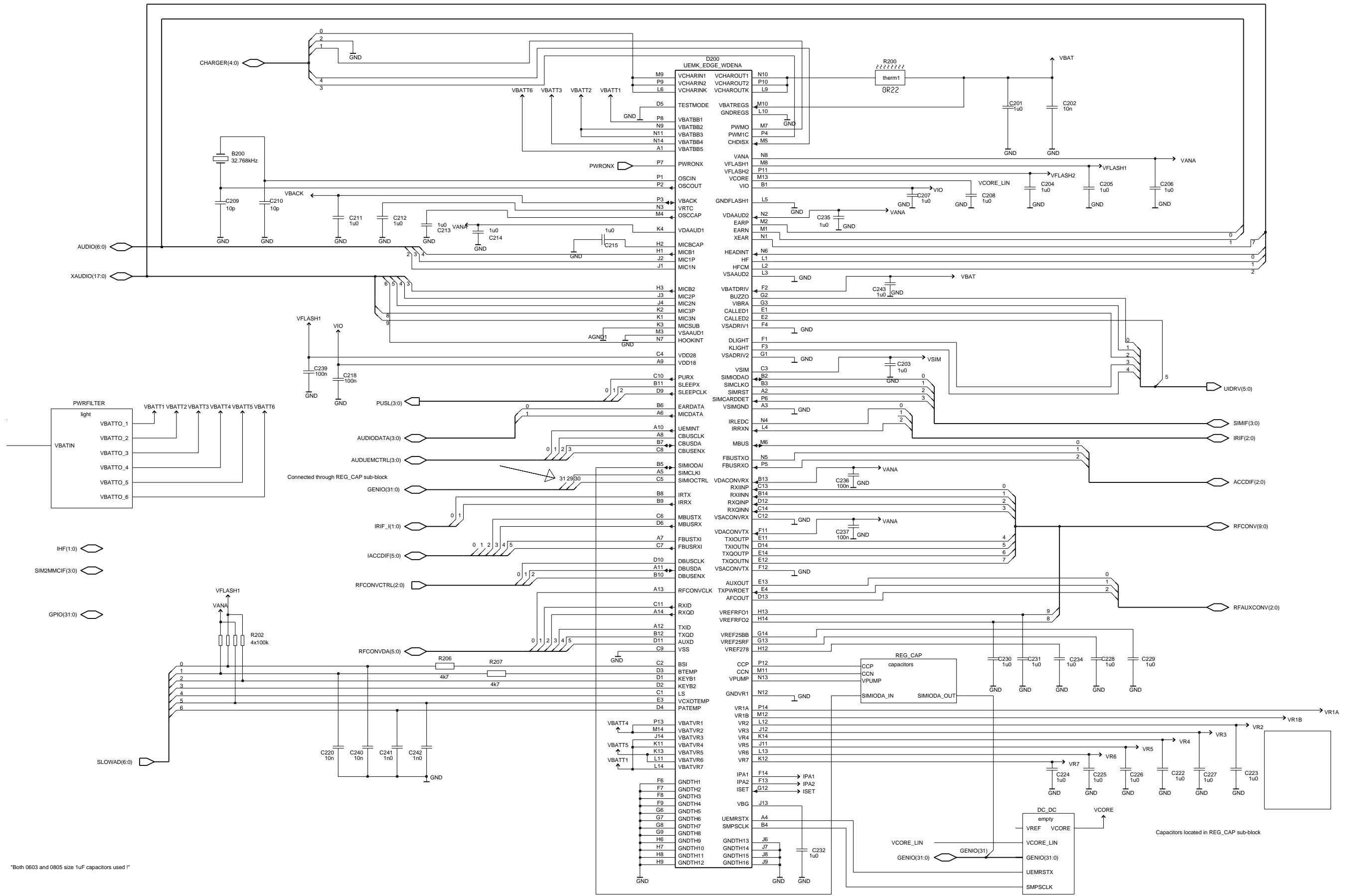
User Interface



SIM reader



Discrete power management

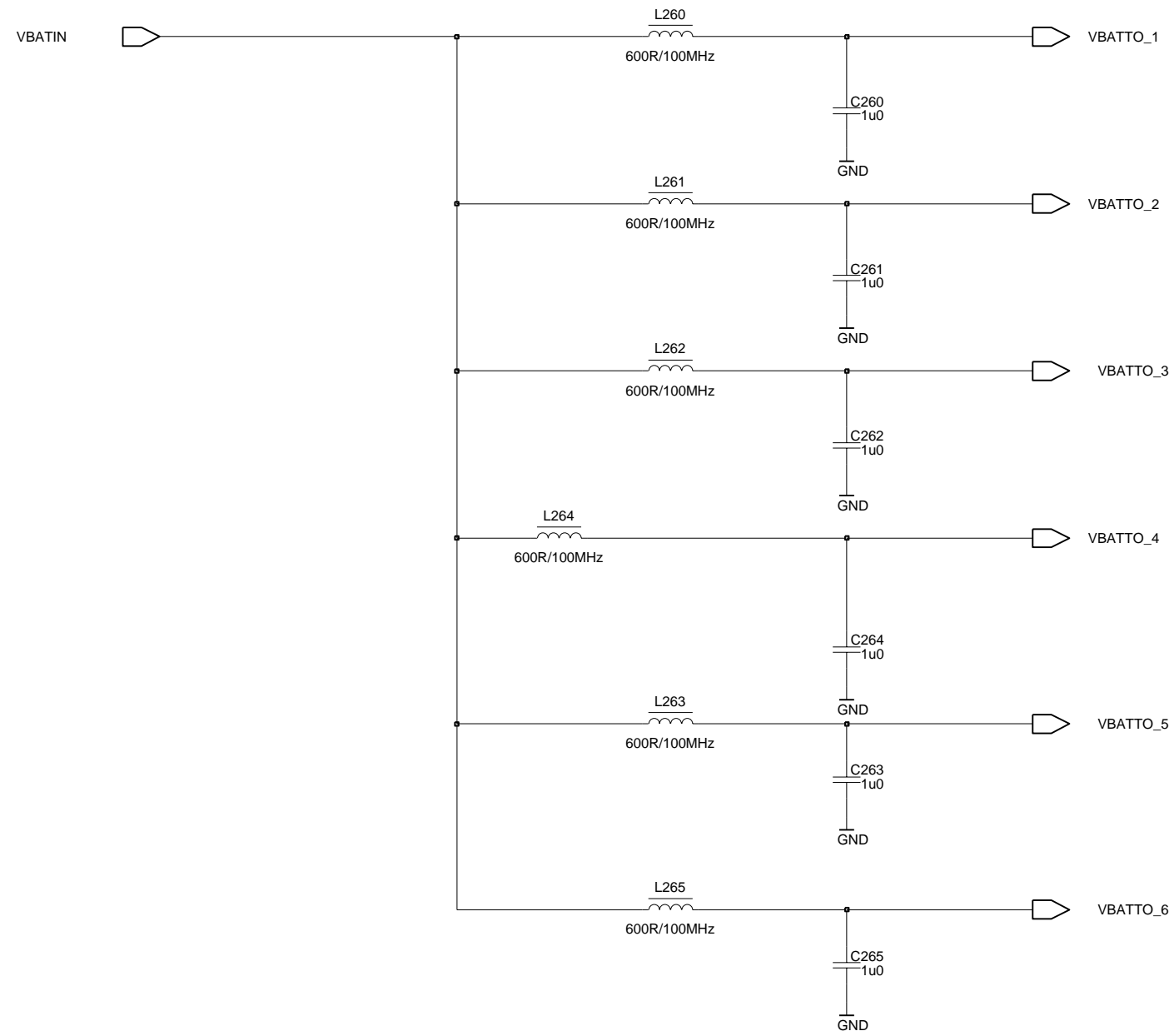


*Both 0603 and 0805 size 1uF capacitors used !

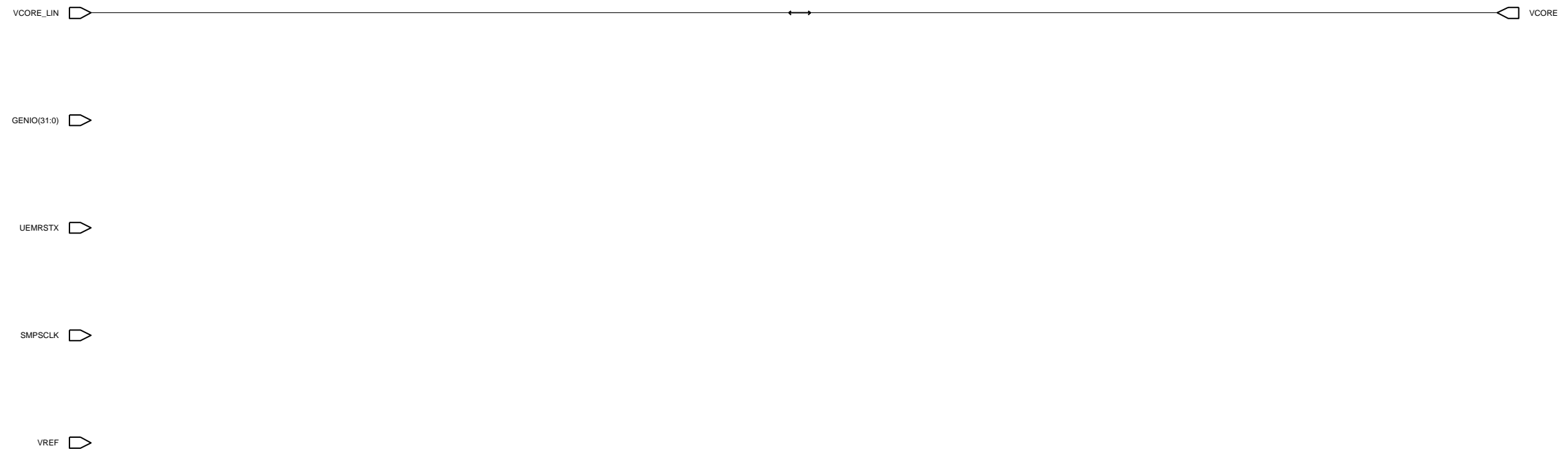
Used refs in REG_CAP: C238, C200, C219, C233, C221 and R205

Capacitors located in REG_CAP sub-block

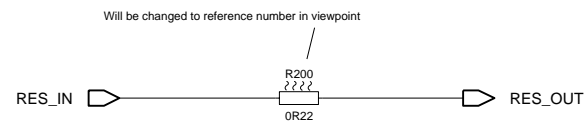
Light filtering



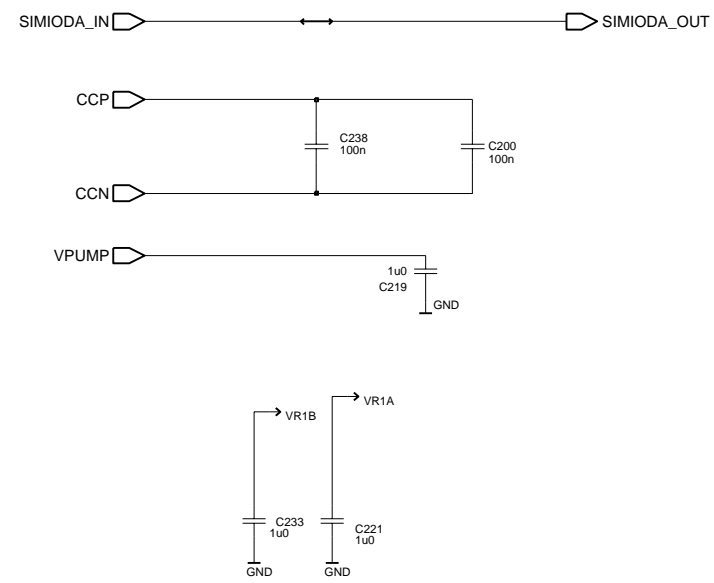
DC/DC converter



PWR resistor

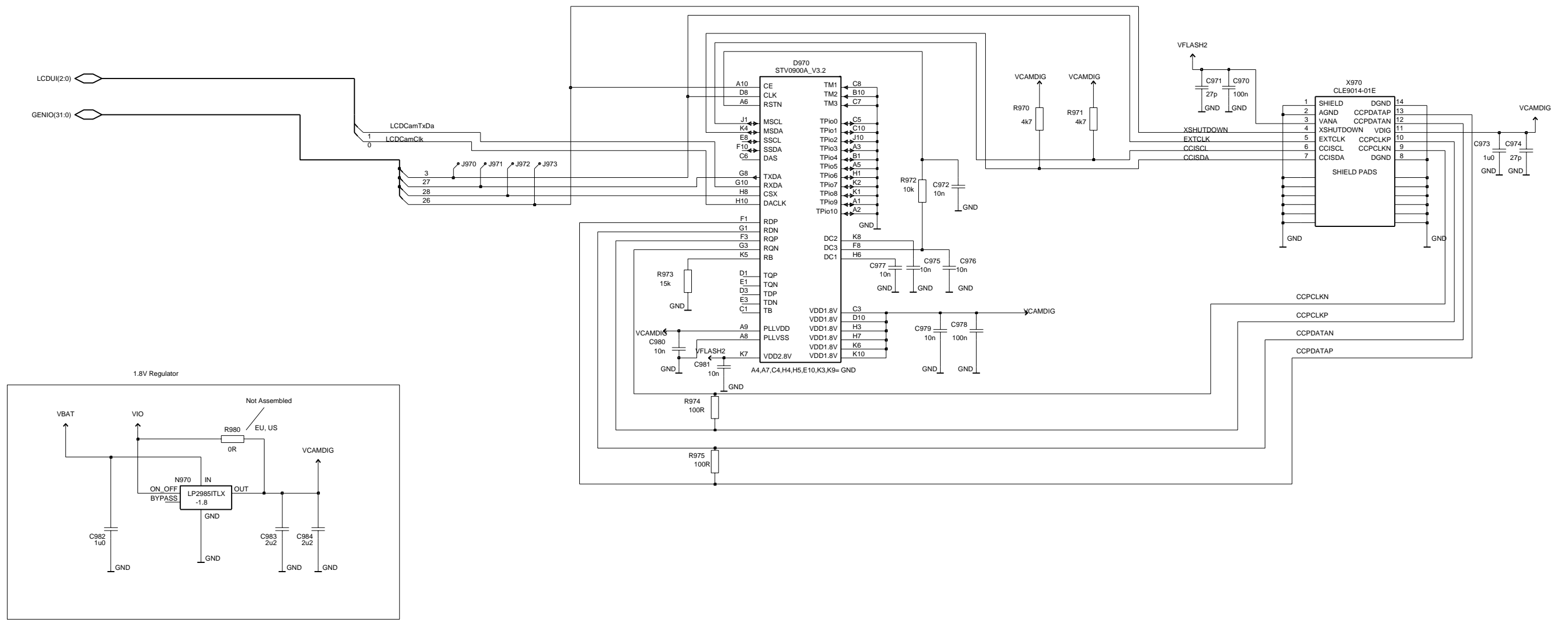
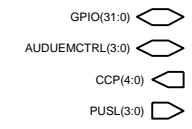


For old discrete power users

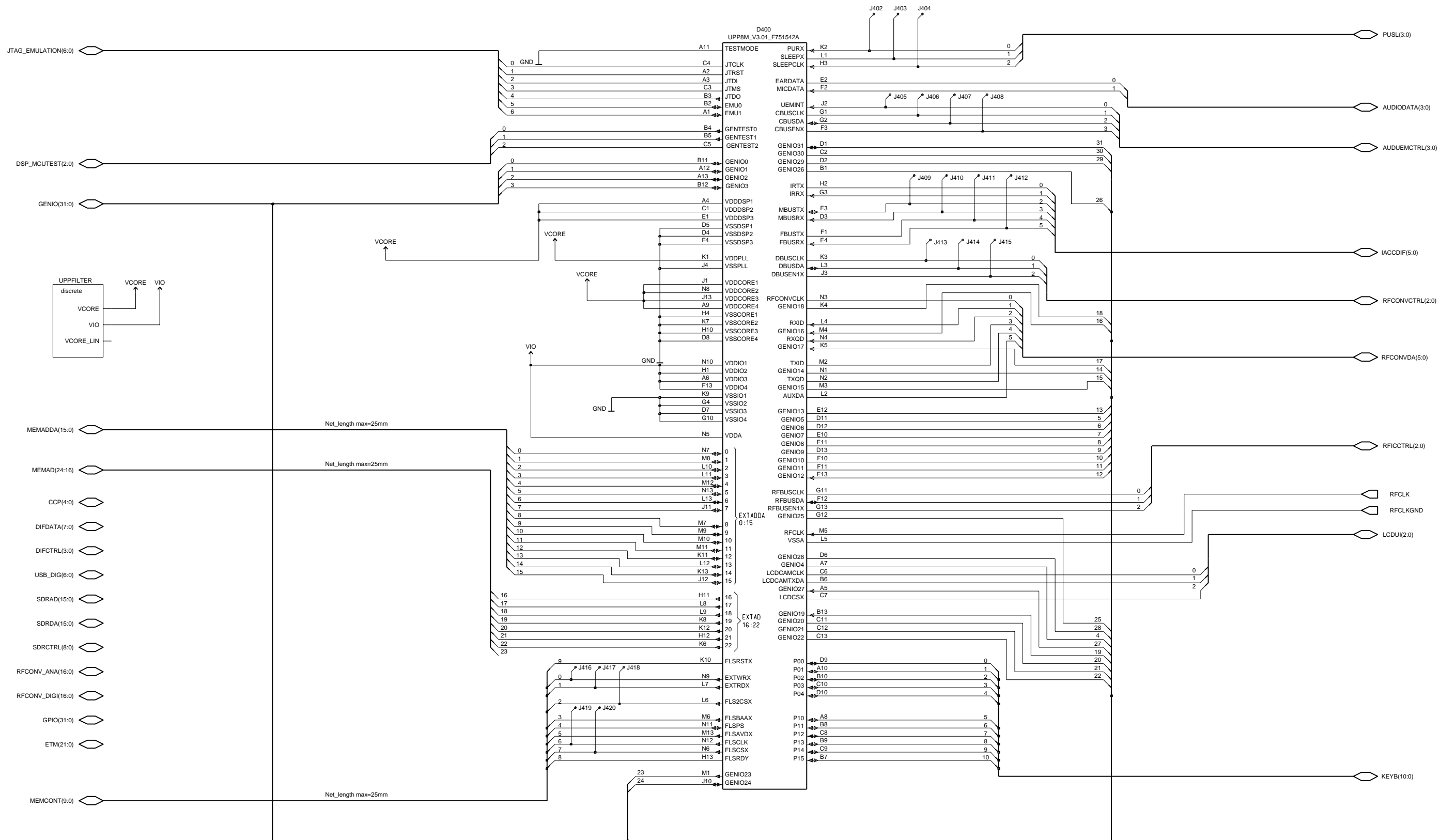


Camera

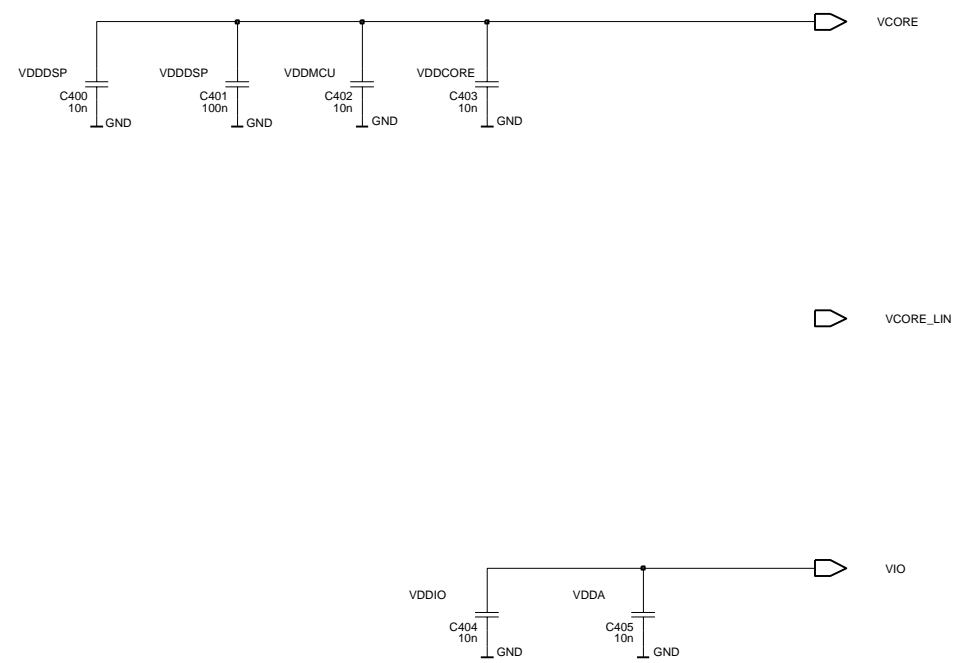
NOTE! New reference numbers 970-999, usage must be checked from RFI




UPP 8M implementation



Discrete decoupling capacitors for UPP




No LPRF interface in this product

GENIO(31:0) 

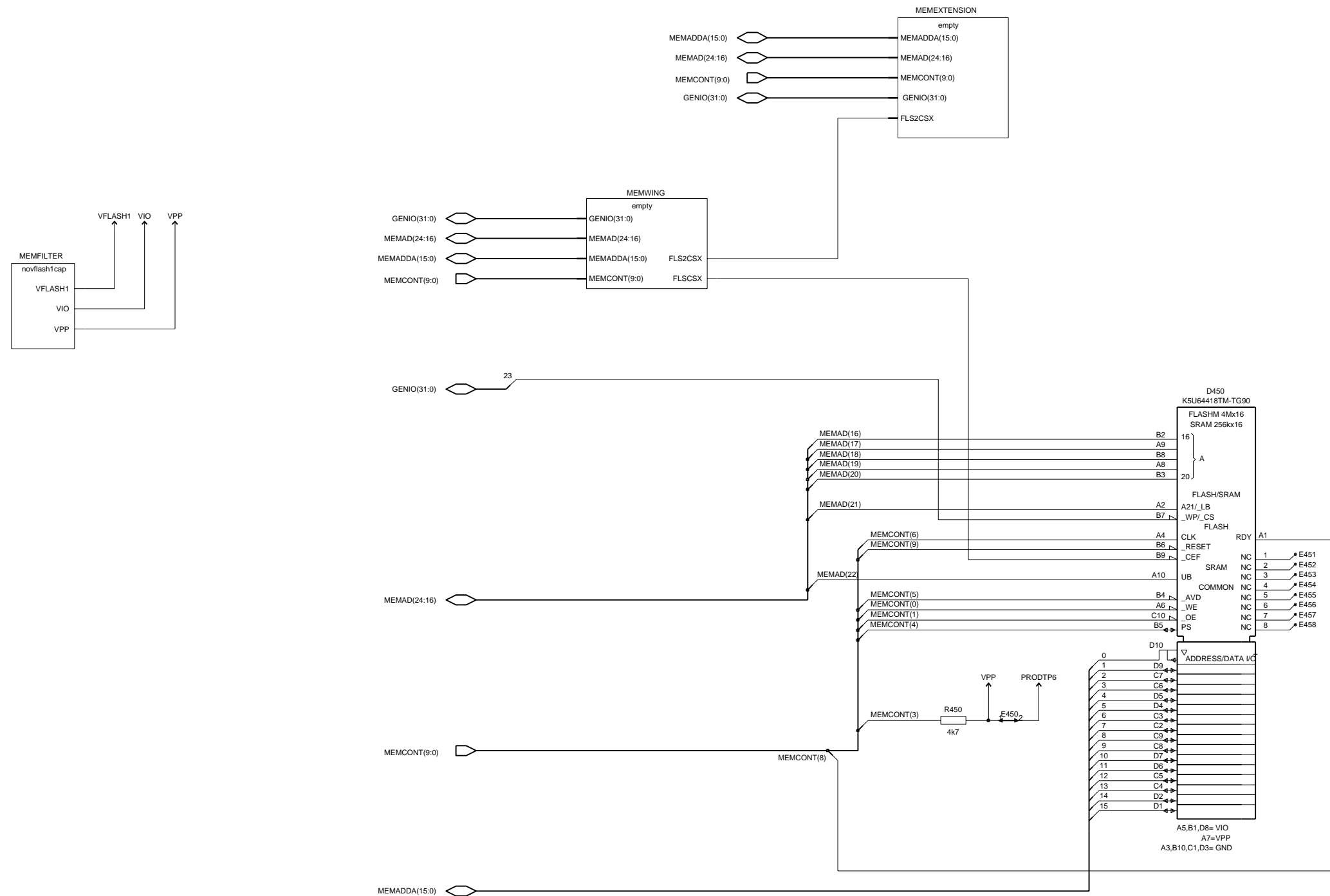
AUDUEMCTRL(3:0) 

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) 

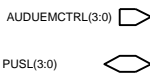
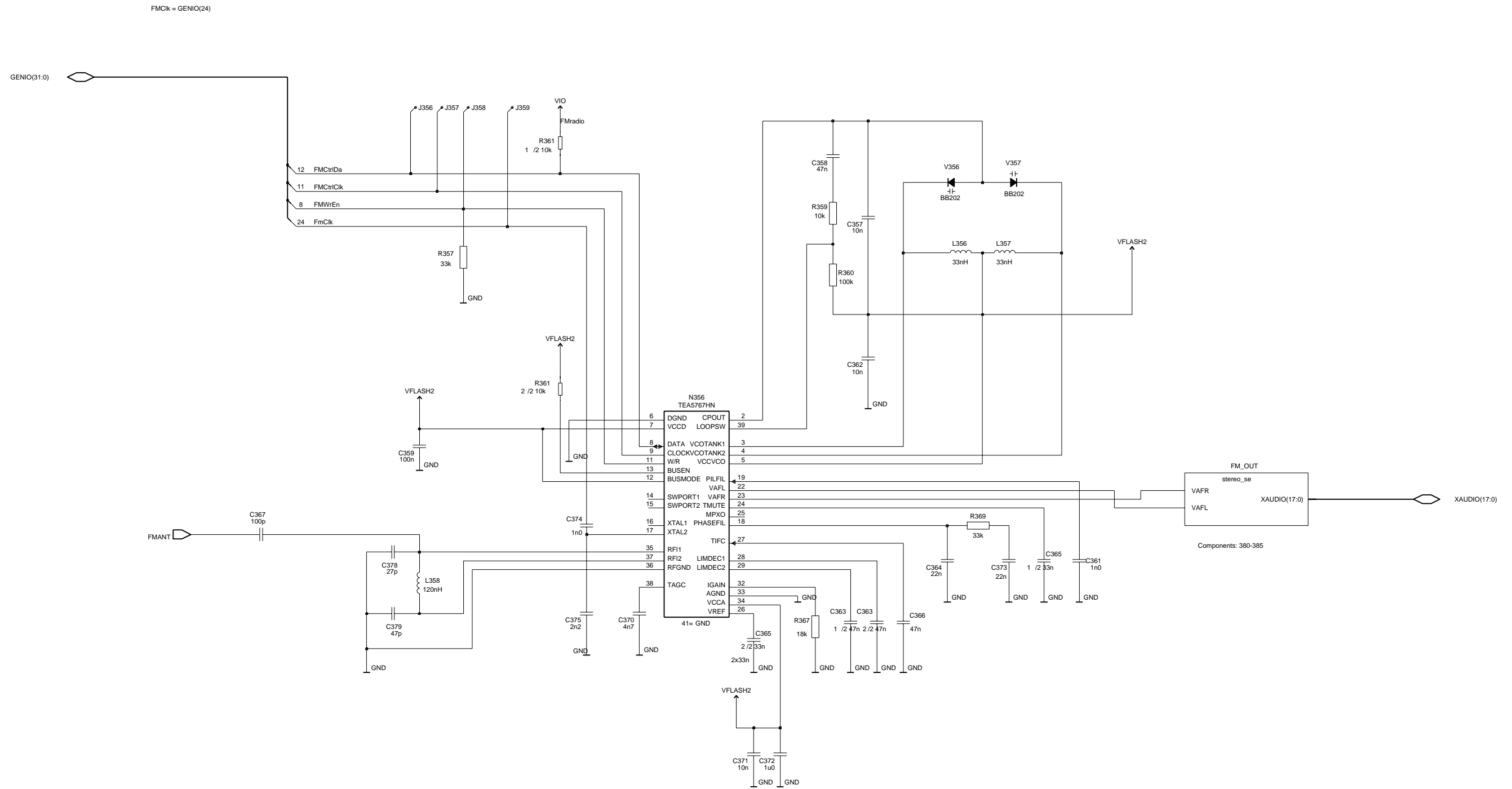
GENIO(31:0) 



Discrete capacitors for memory without VFlash1

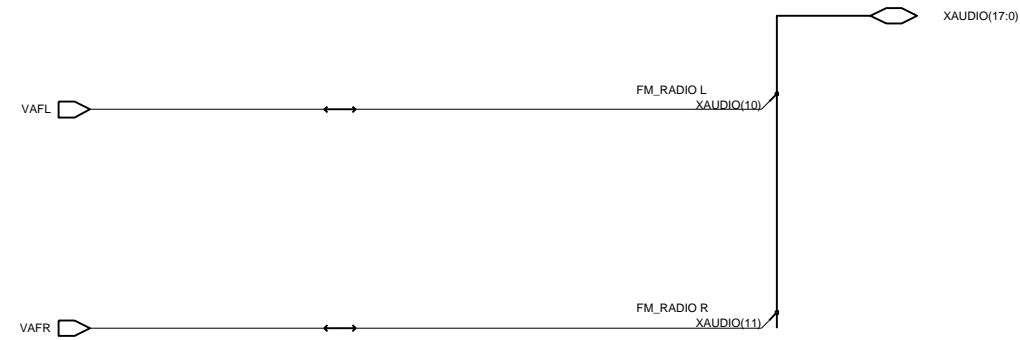


FM radio unit

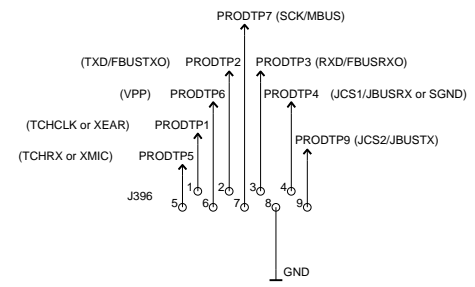


Notice:
 C374 (1n0) and C375 (2n2) are configured for 32kHz reference clock
 If reference clock is 6.5MHz, use C374 (3p9) and C375 (10p)

FM radio unit

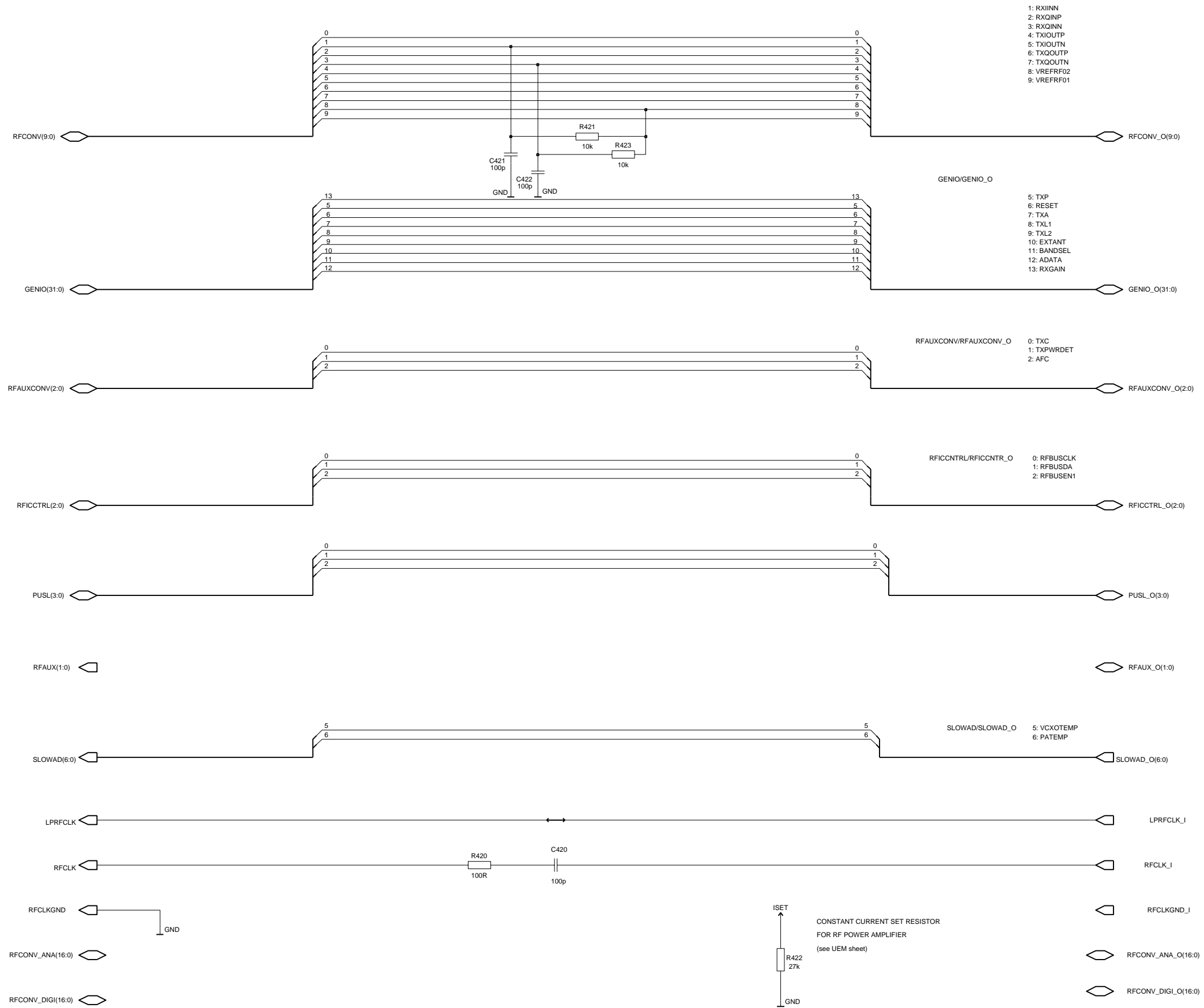


9 pin production test pattern



OUT

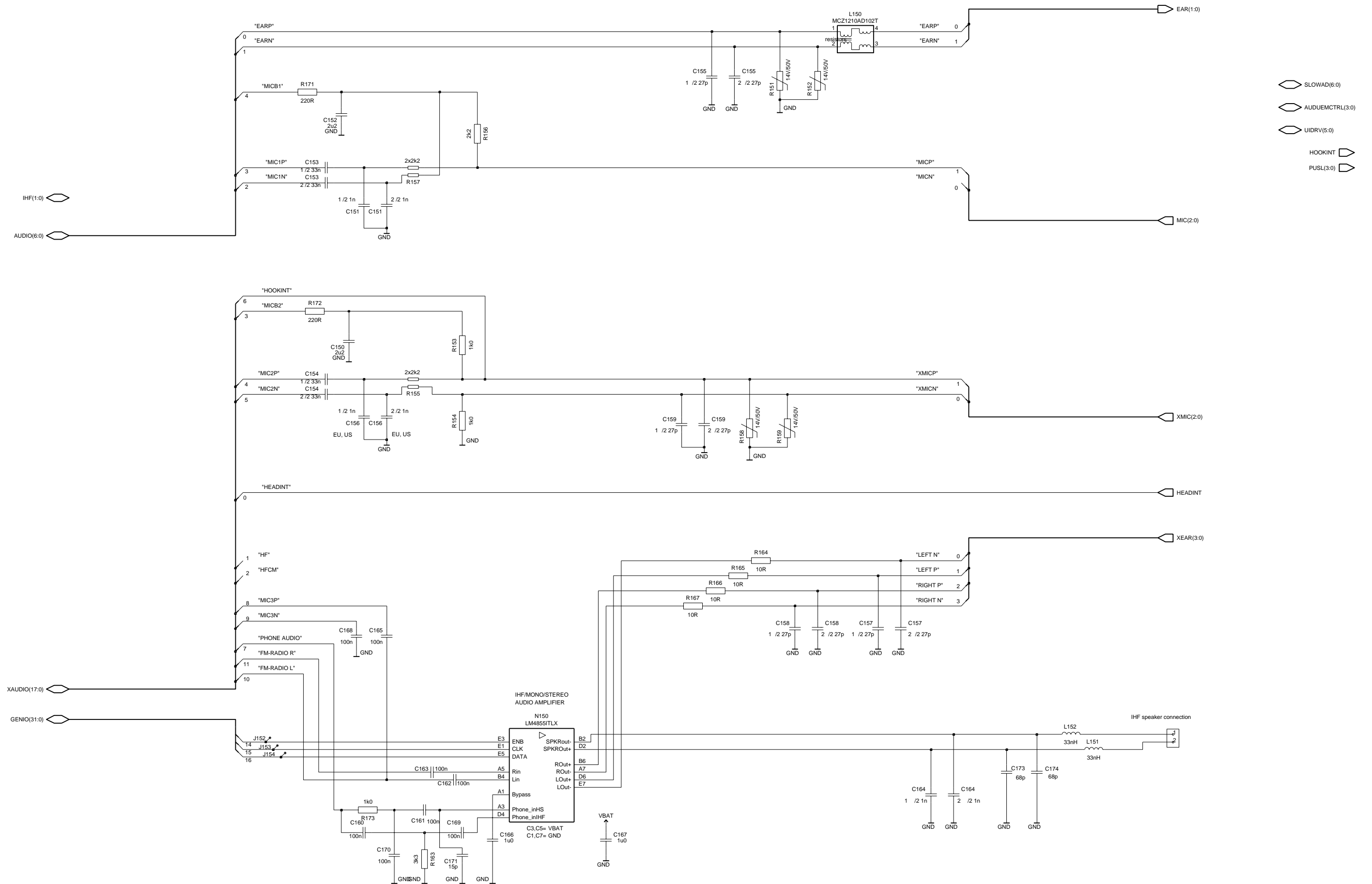
GSM RF-BB interface



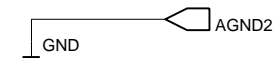
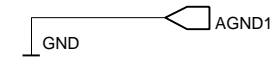
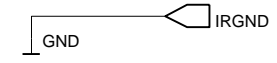
IPA1 AND IPA2 ARE USED IN RF, THE TOLERANCE OF R422 IS 1% (0402, 1430873)

Audio

Varistor arrays have reliability issues



MultiGND symbol bypass

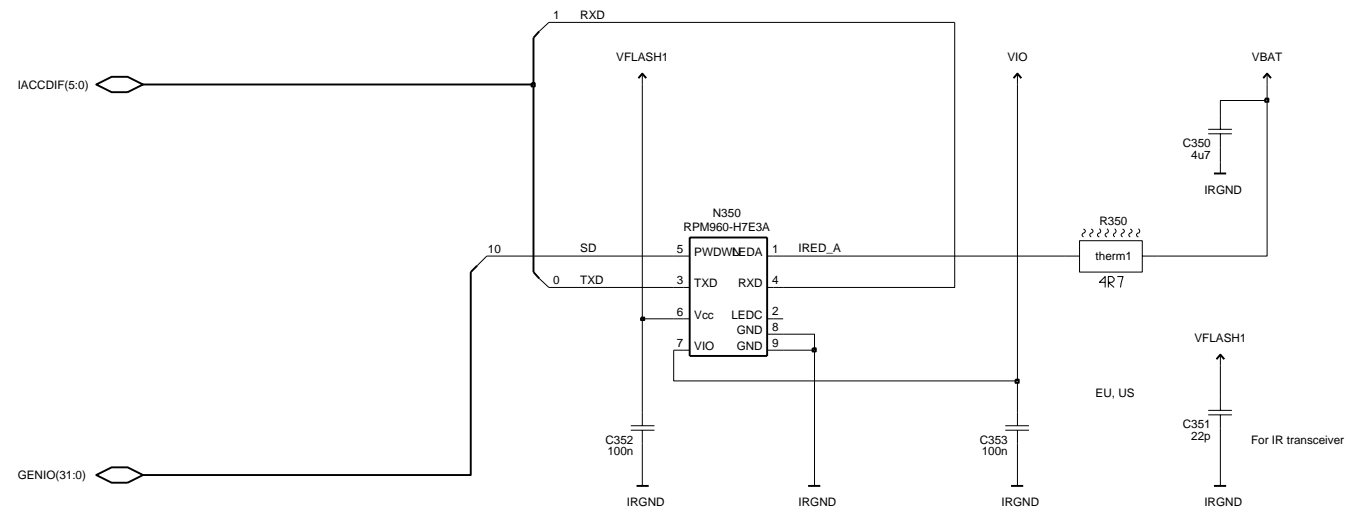


GPS empty sheet

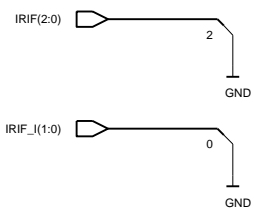
 PUSL(3:0)

 GENIQ(31:0)

Rohm IR module 1.8V



GPIO(31:0)

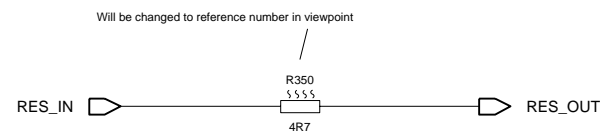


UEM IR level shifters
are ground, when 1.8V
IR is used!

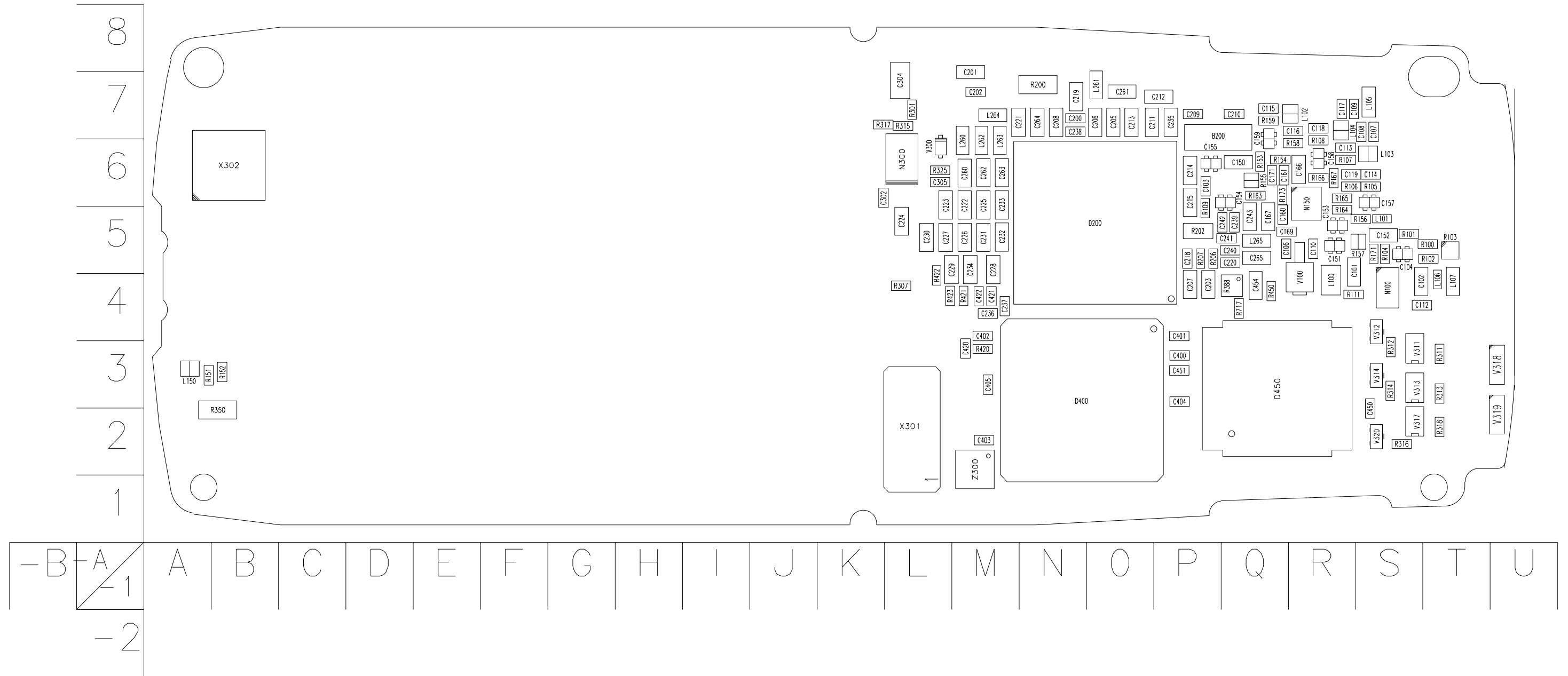
Used referenses

- C 350 - 353
- N 350
- R 350

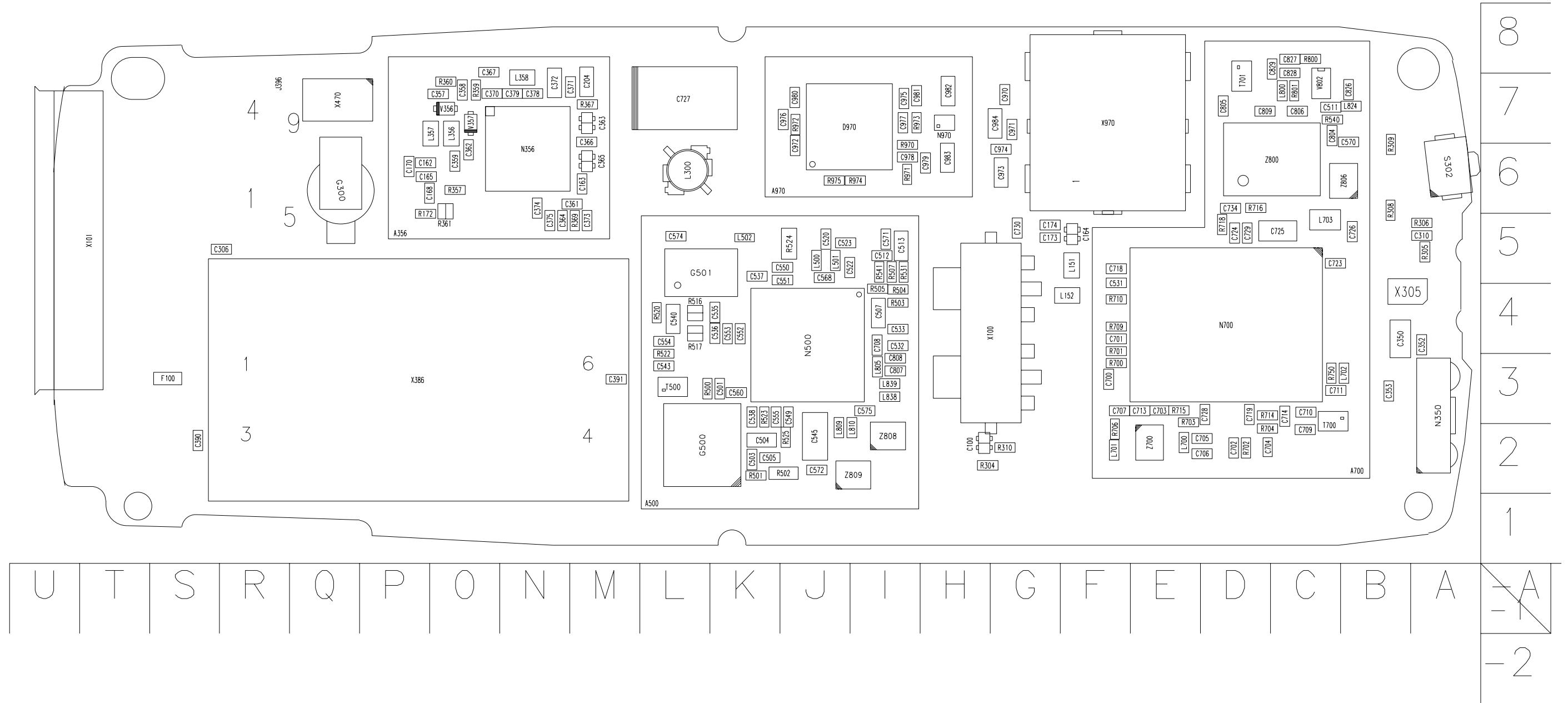
IR resistor



Layout



Layout



Layout

