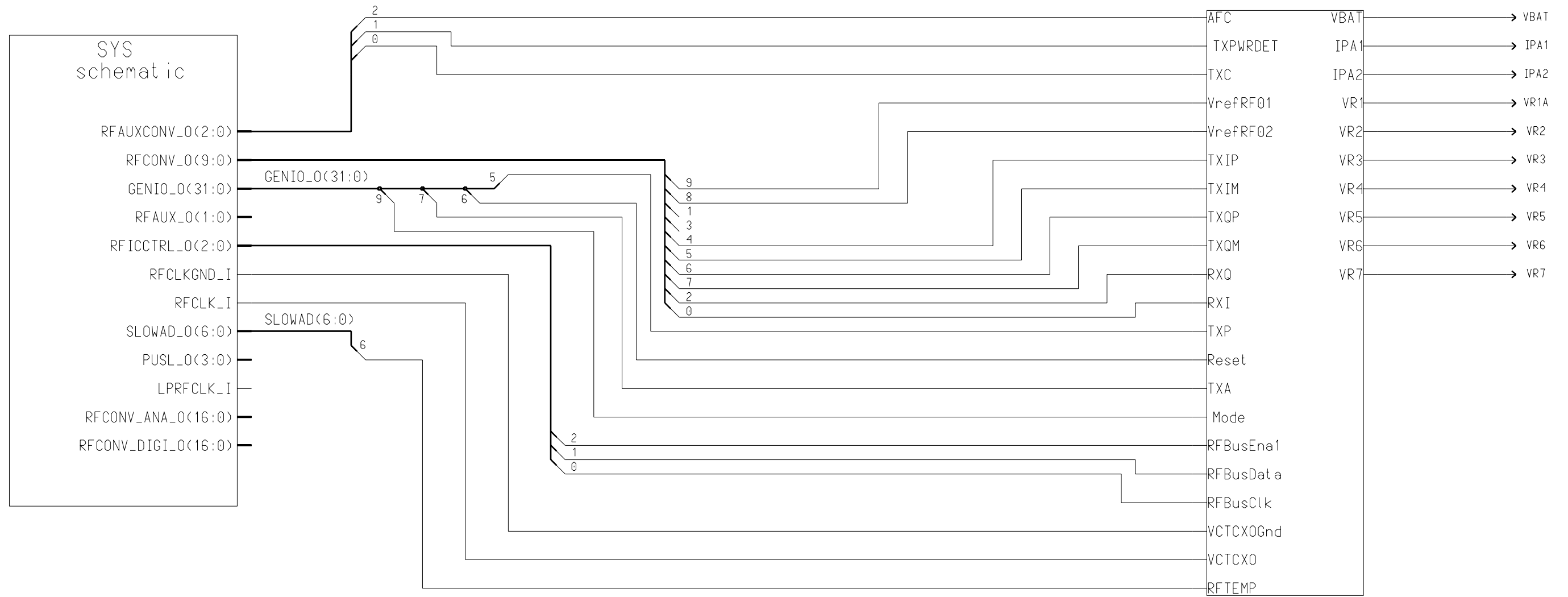
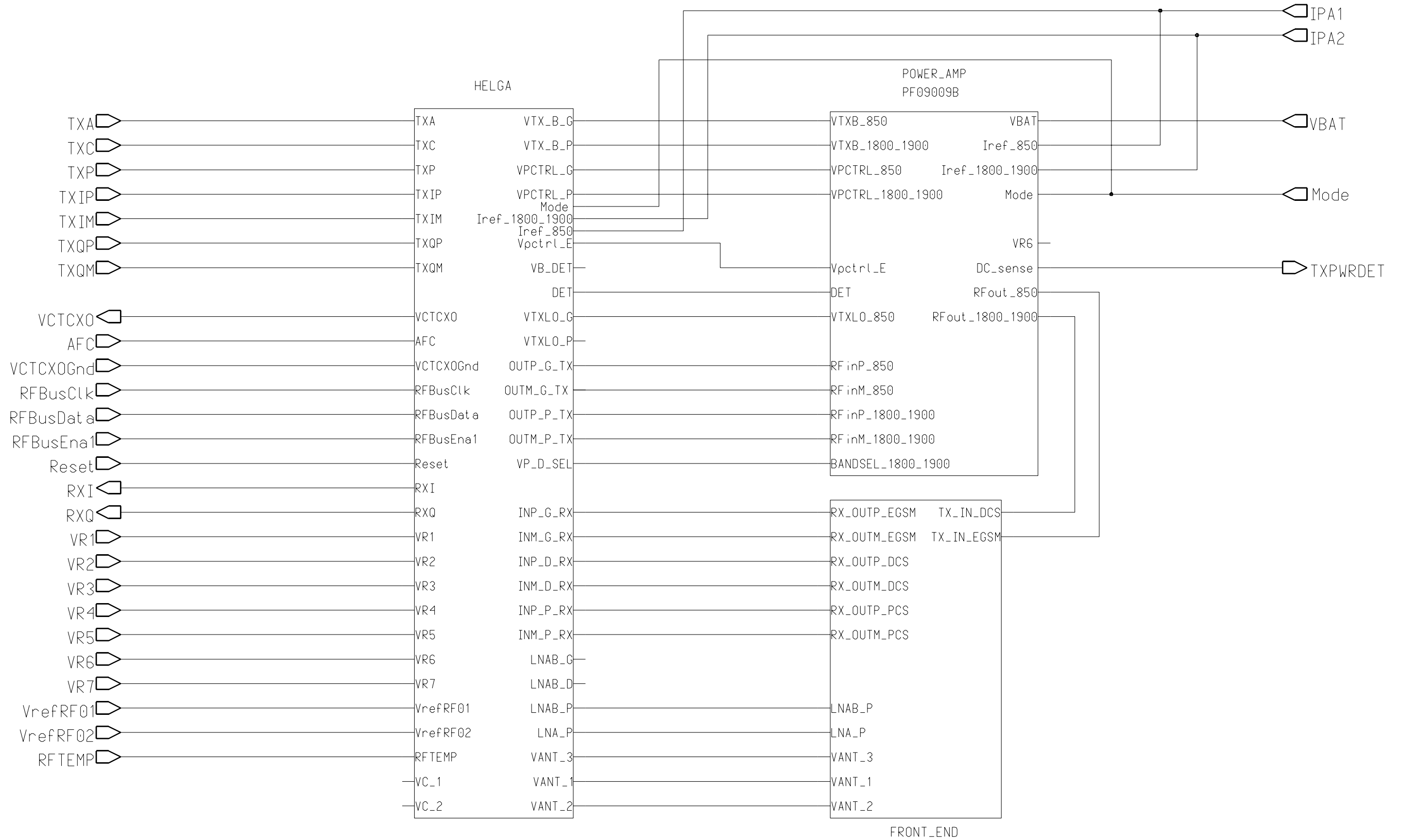


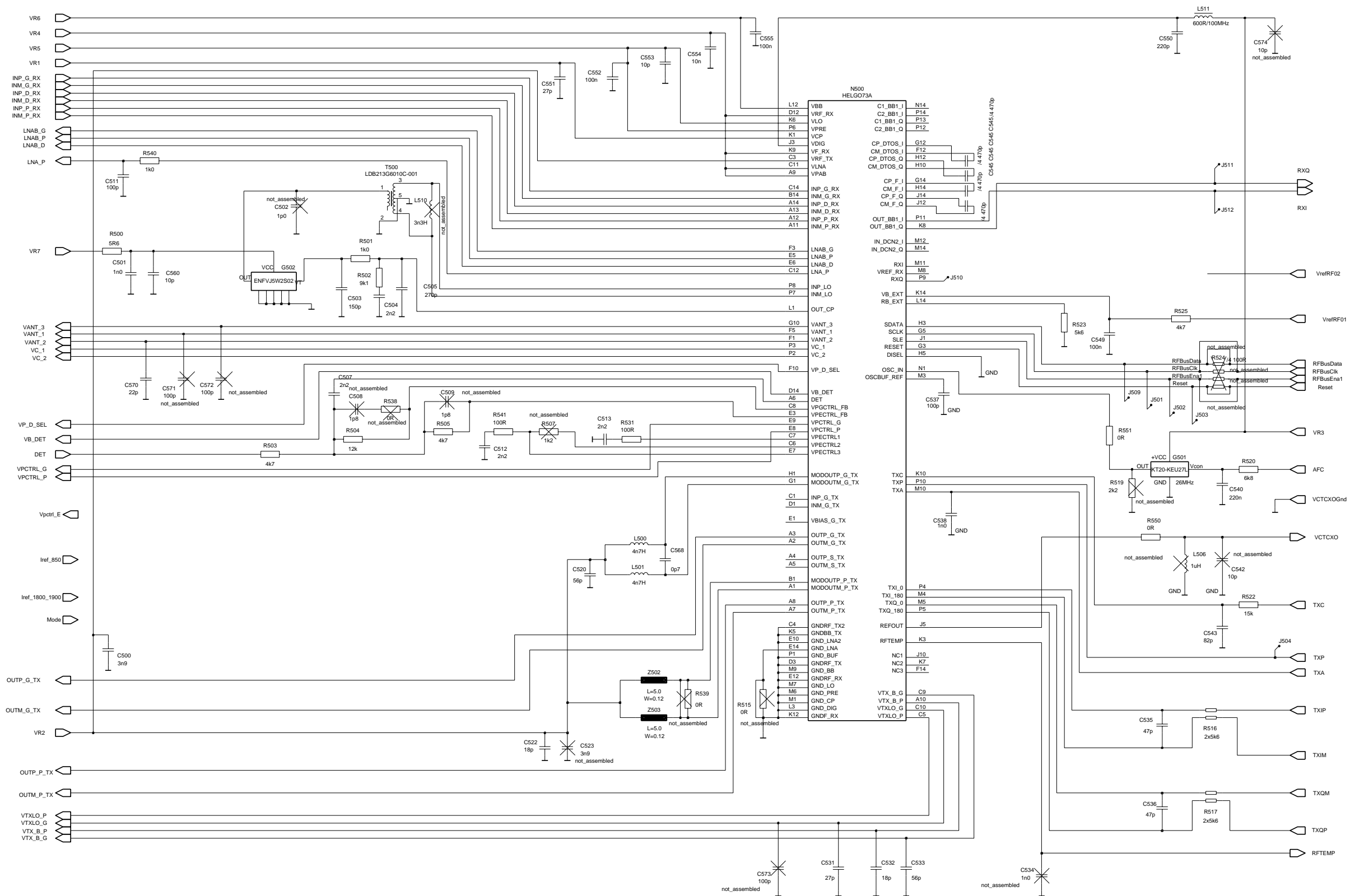
Block diagram



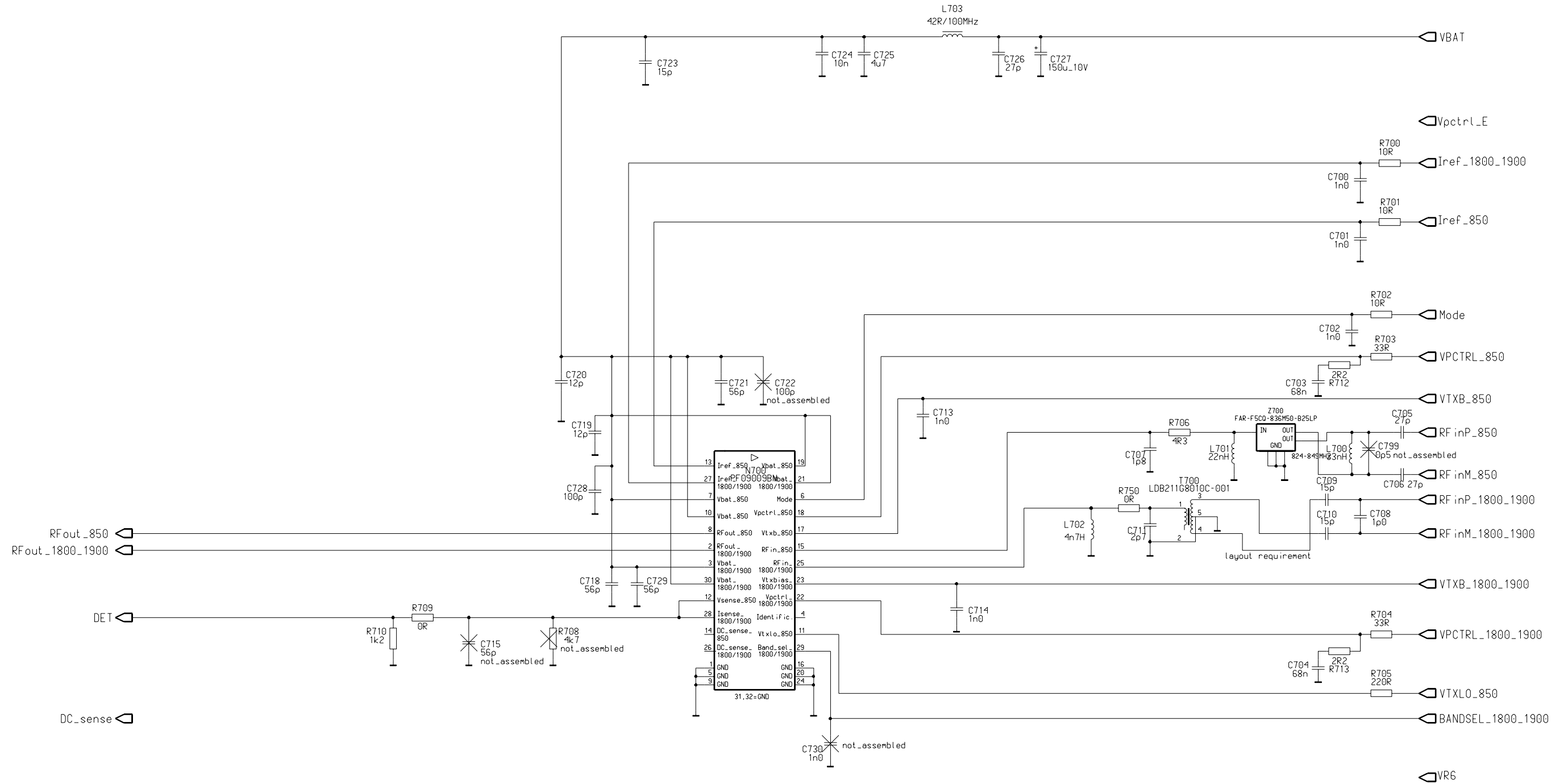
RF Block Diagram



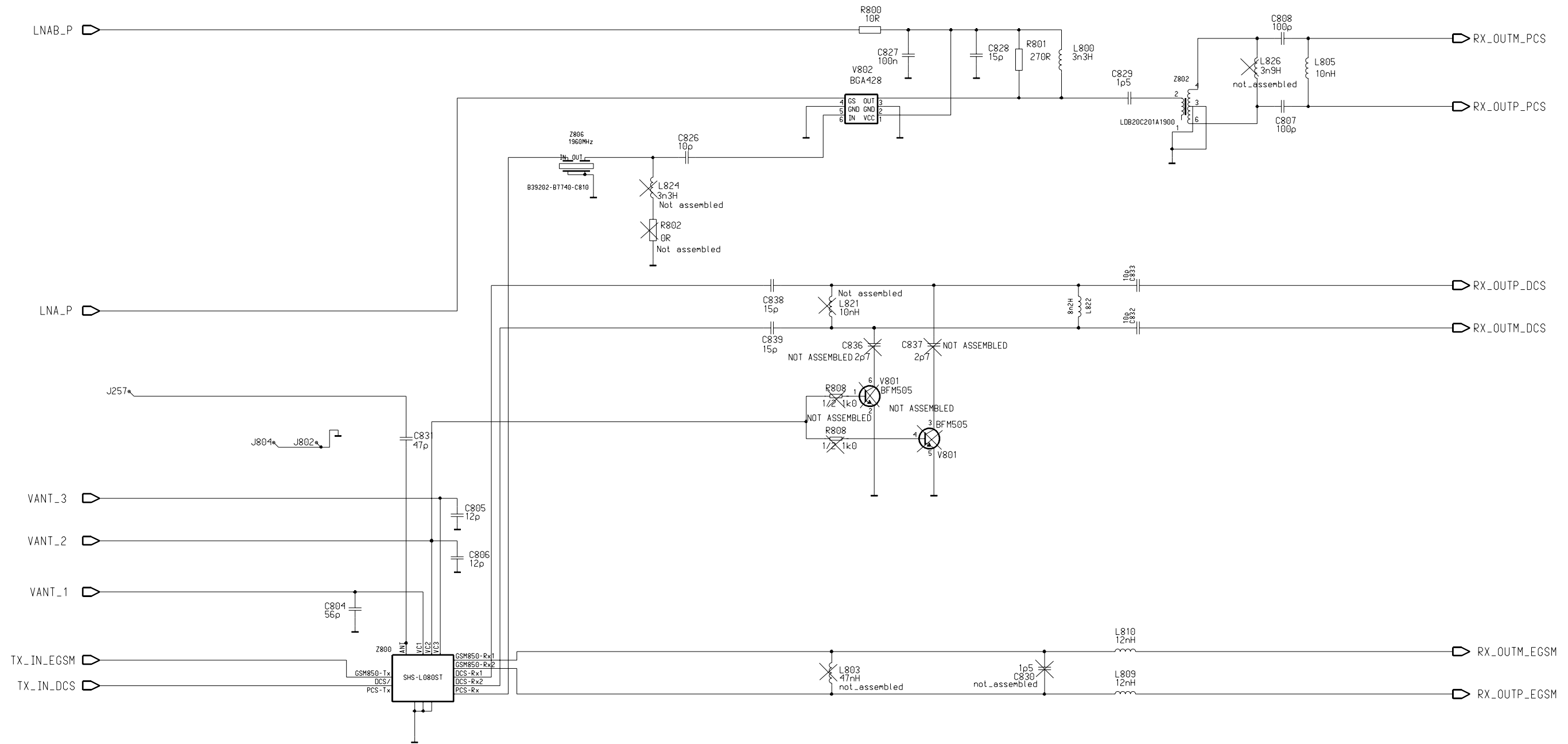
RF IC Helgo



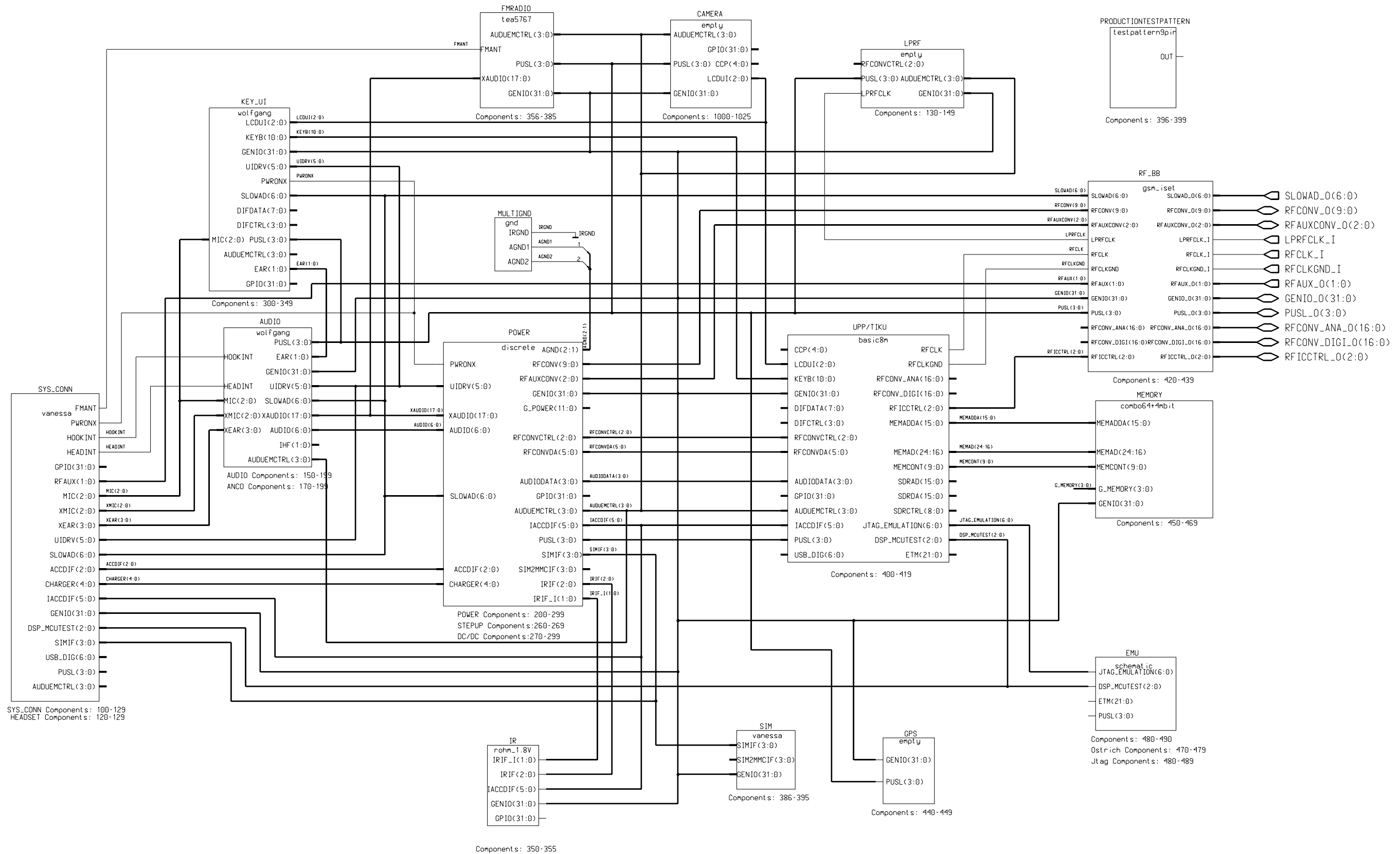
Power Amplifier Detection



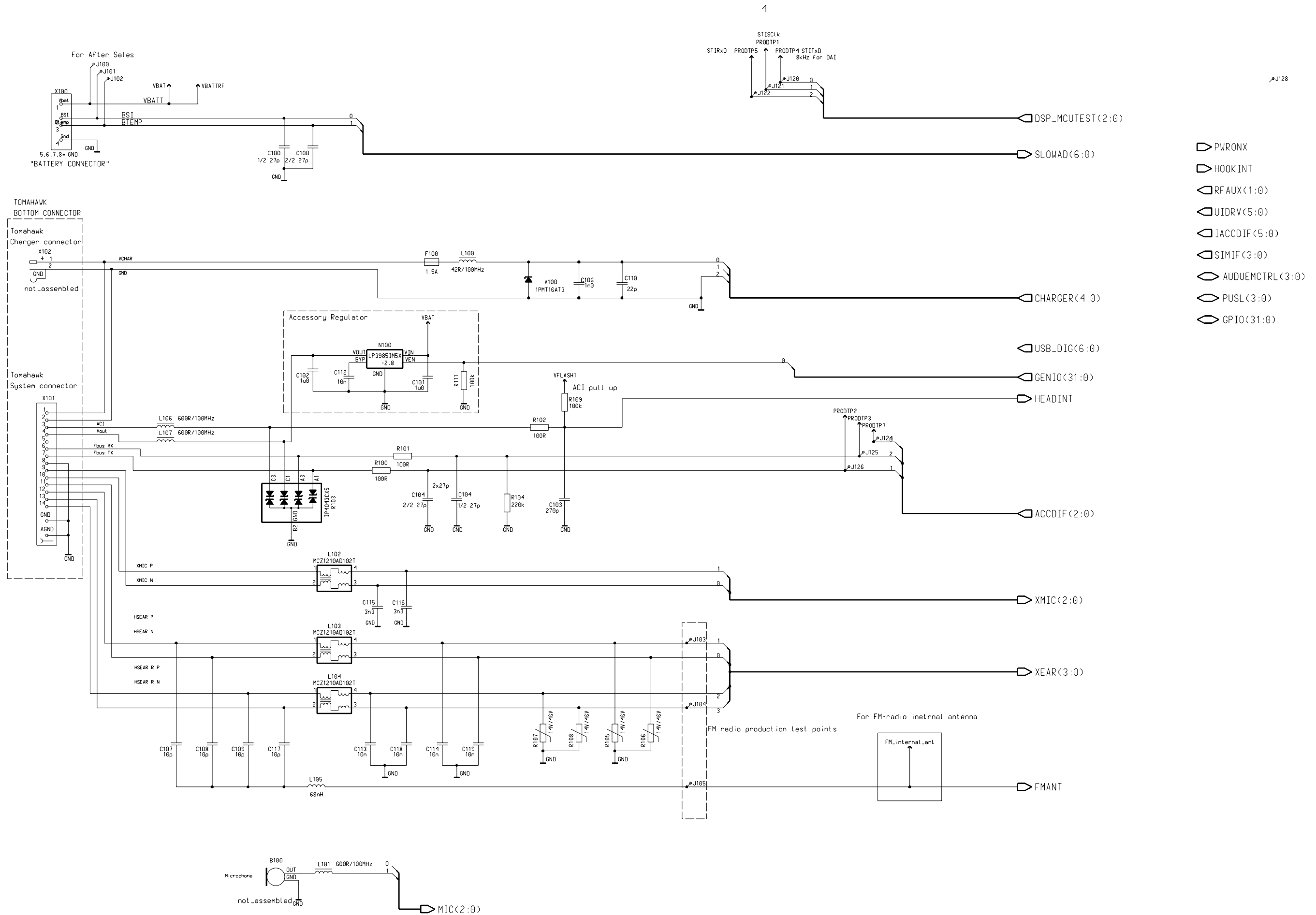
RX Front End and Antenna Switch



BB Block Diagram

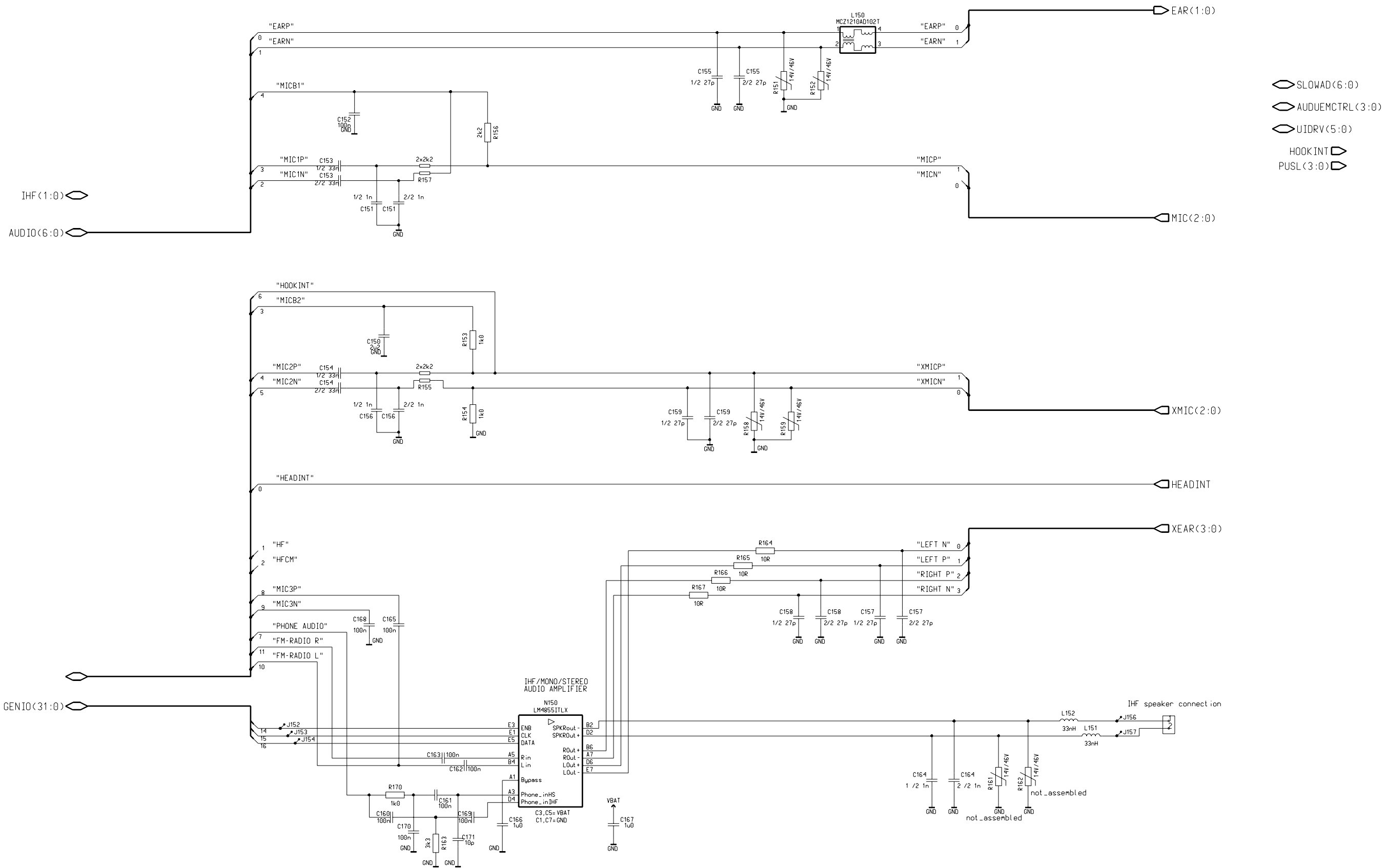


System Connector



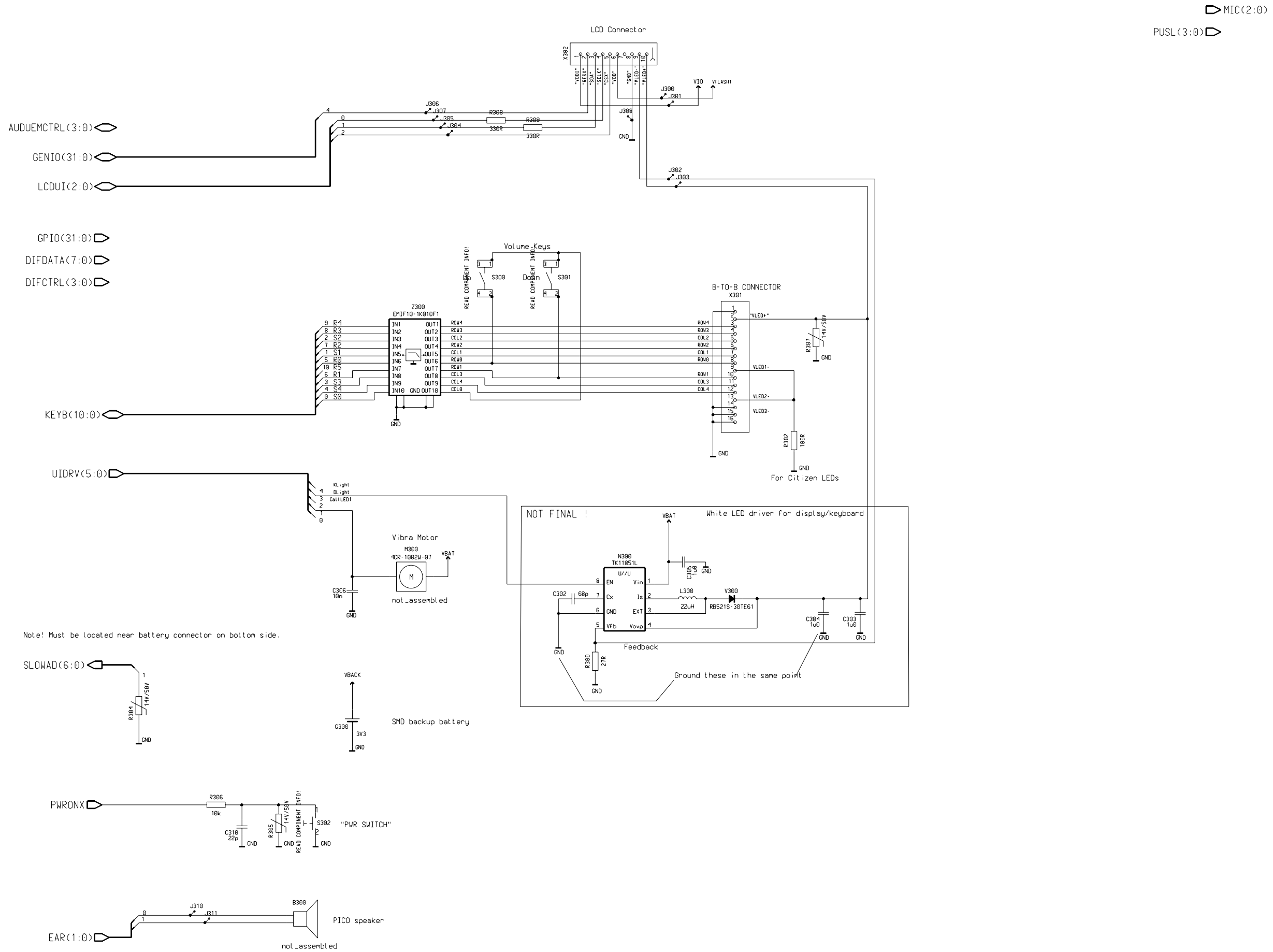
Audio

5

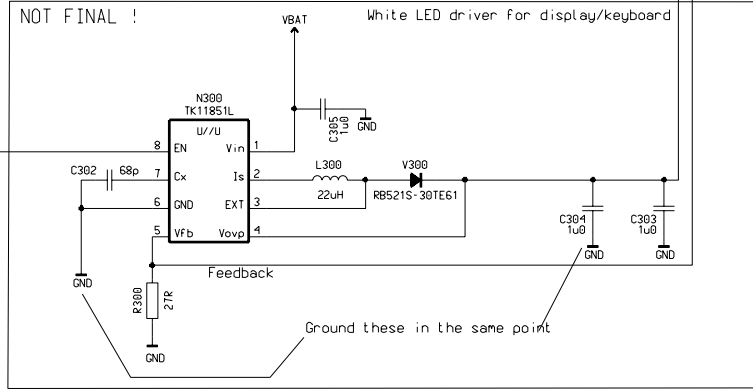


User Interface

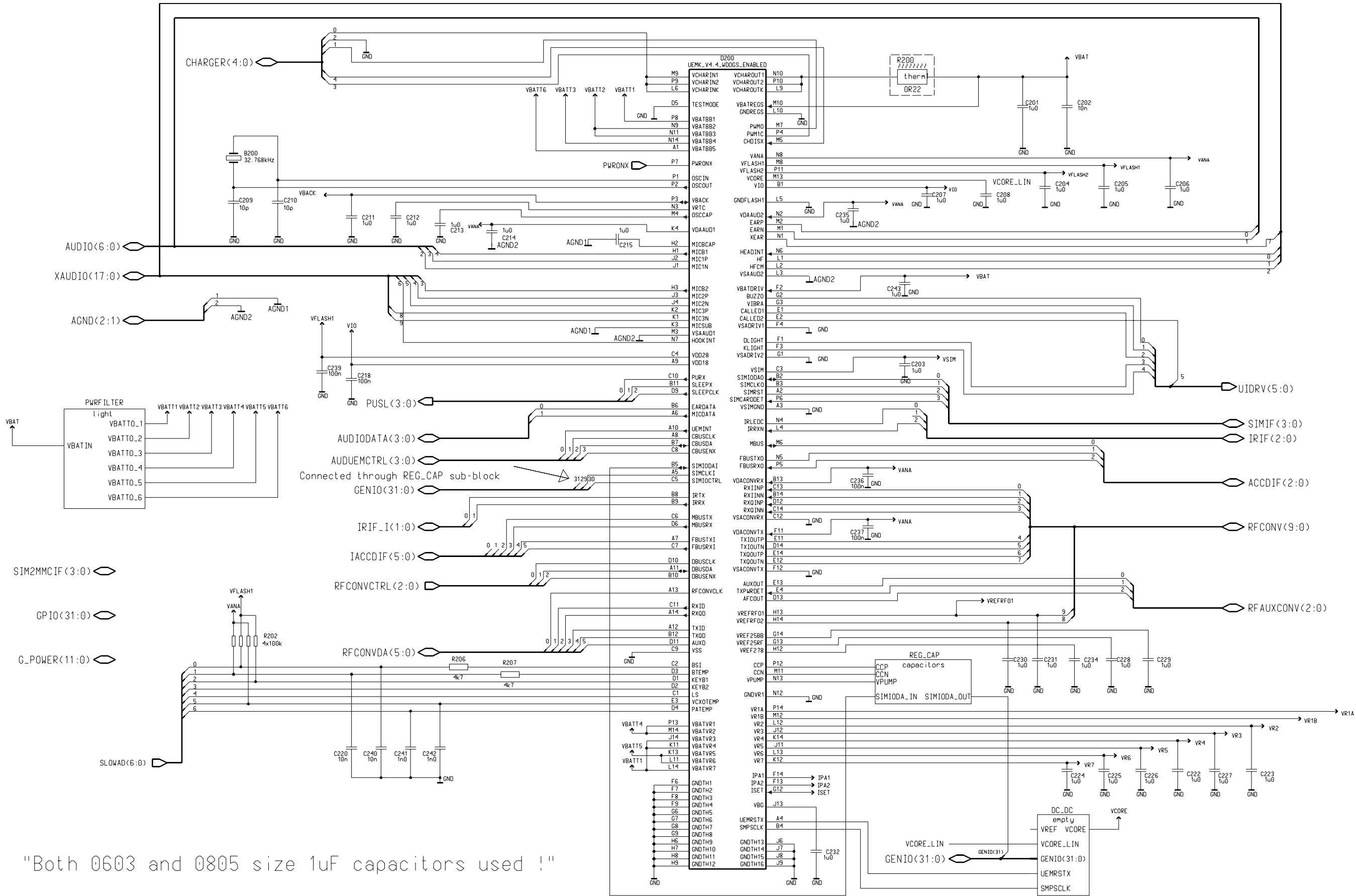
1



Note! Must be located near battery connector on bottom side.

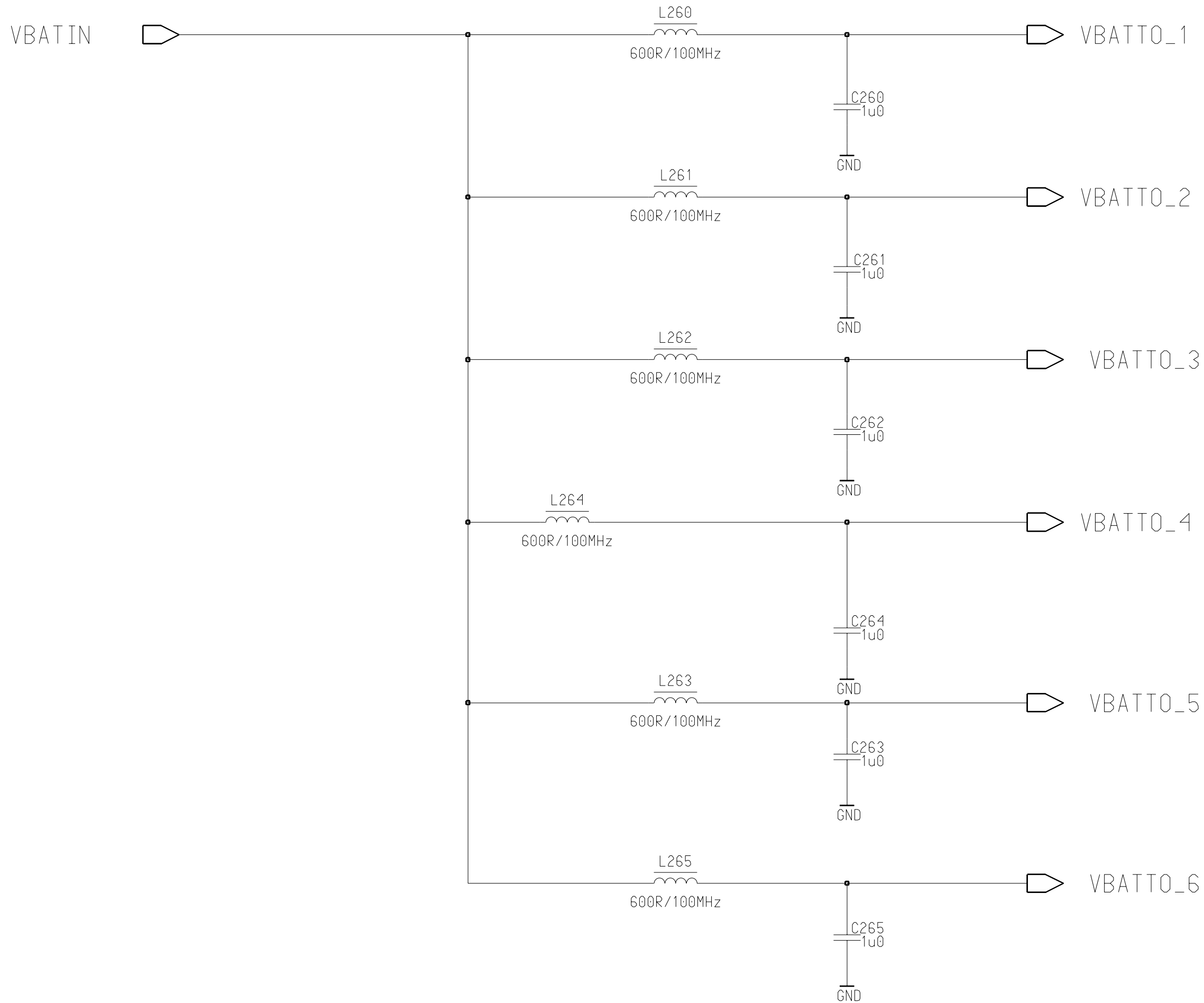


Power Management

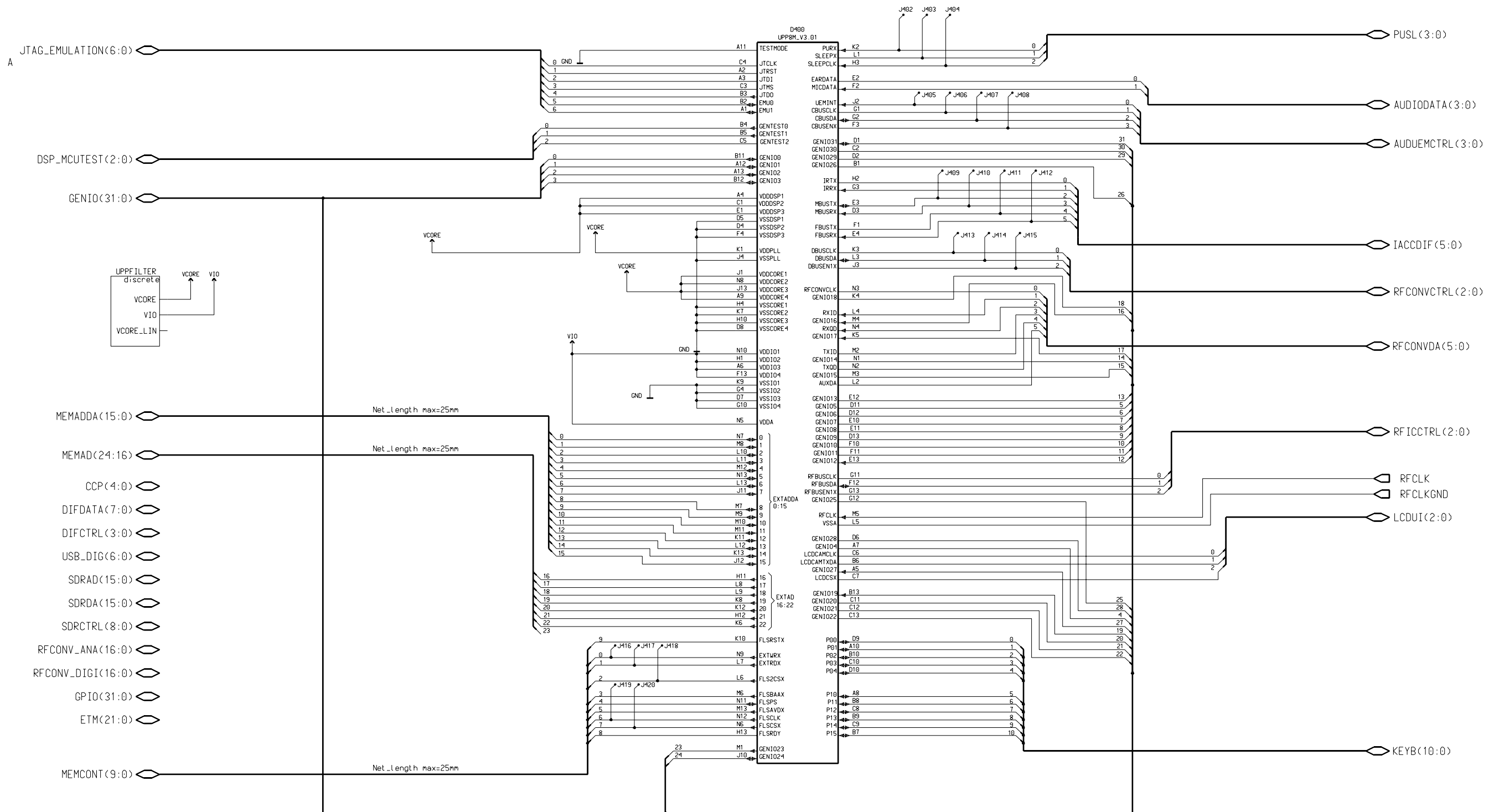


"Both 0603 and 0805 size 1uF capacitors used !"

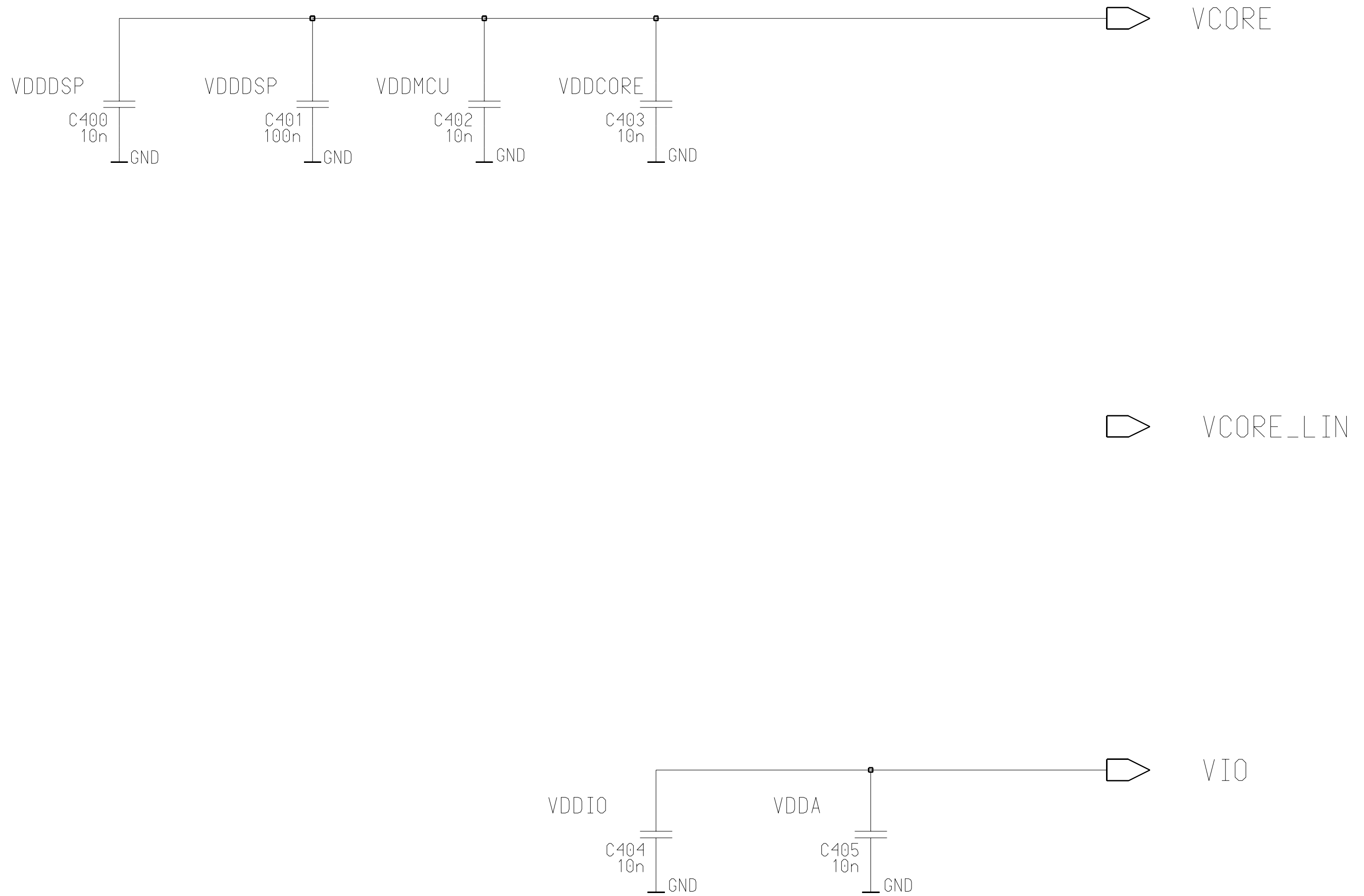
Light Filtering



UPP 8M

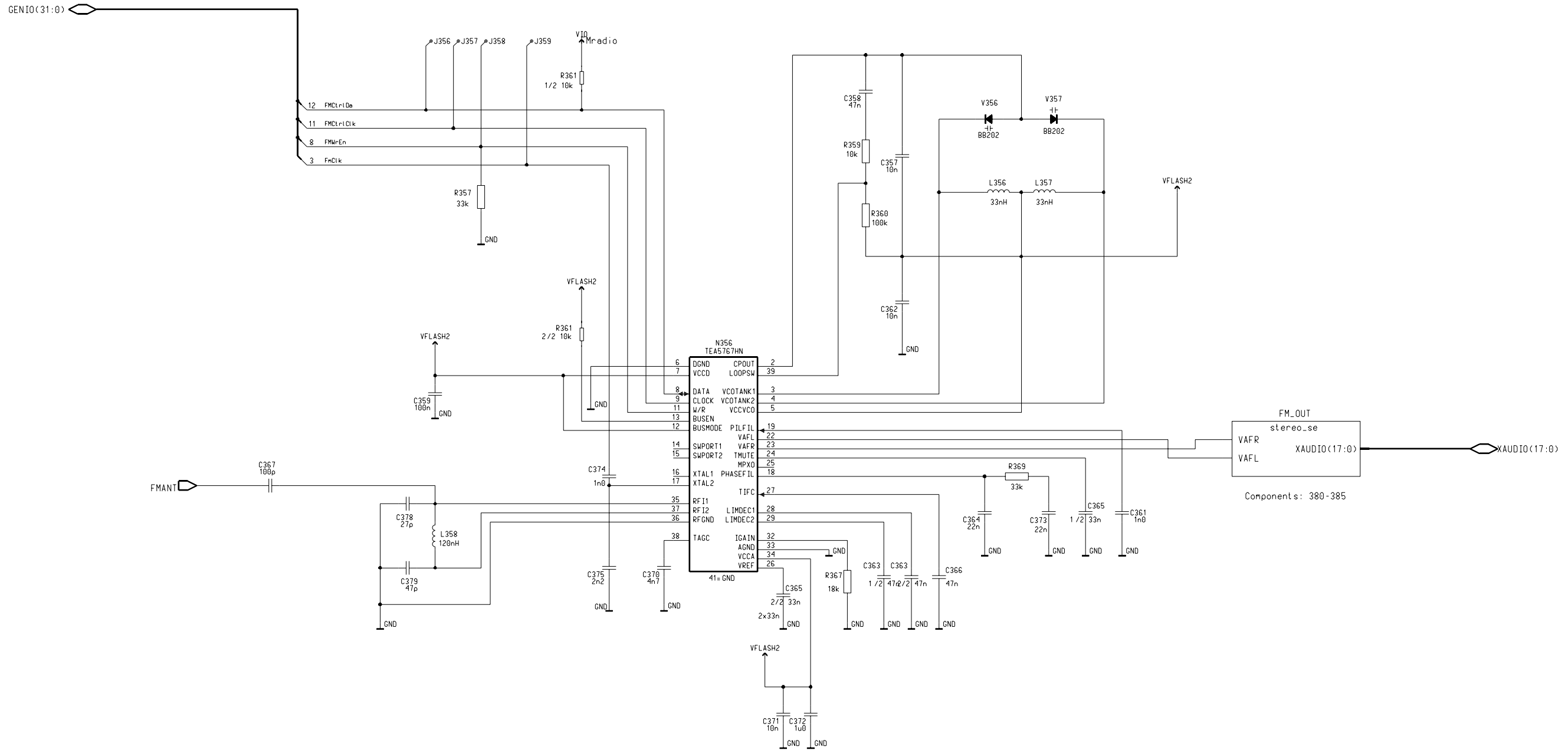


UPP Decoupling Capacitors



FM Radio IC

FMCLK = GENIO(3)



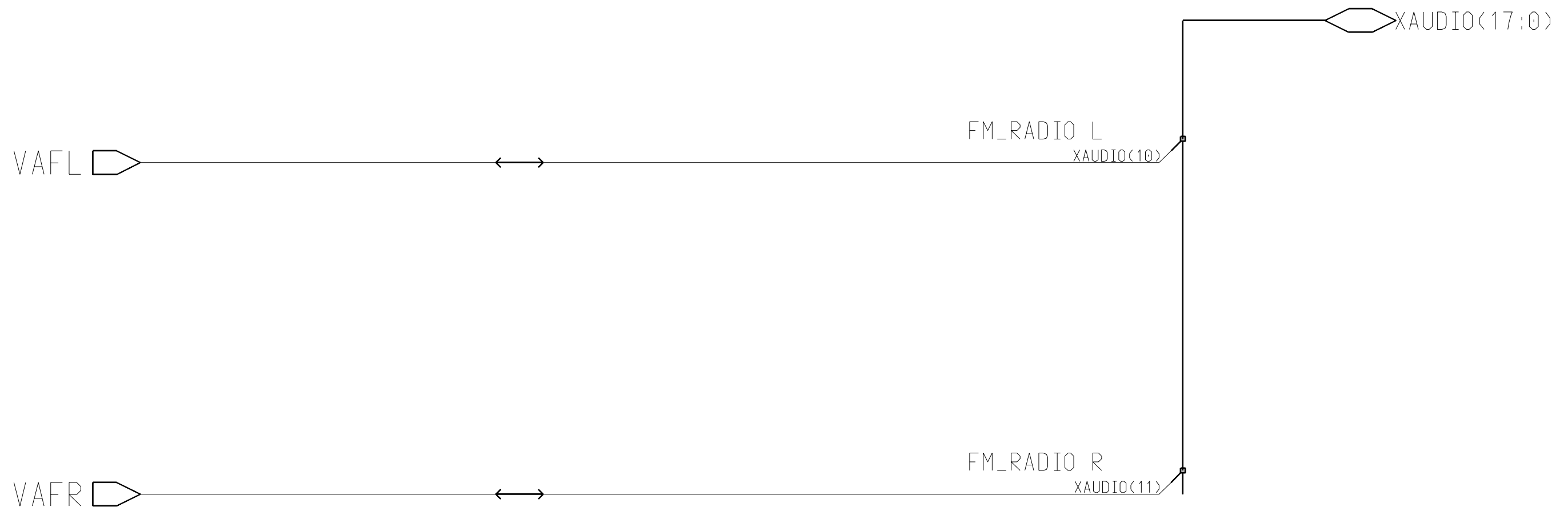
AUDUEMCTRL(3:0)

PUSL(3:0)

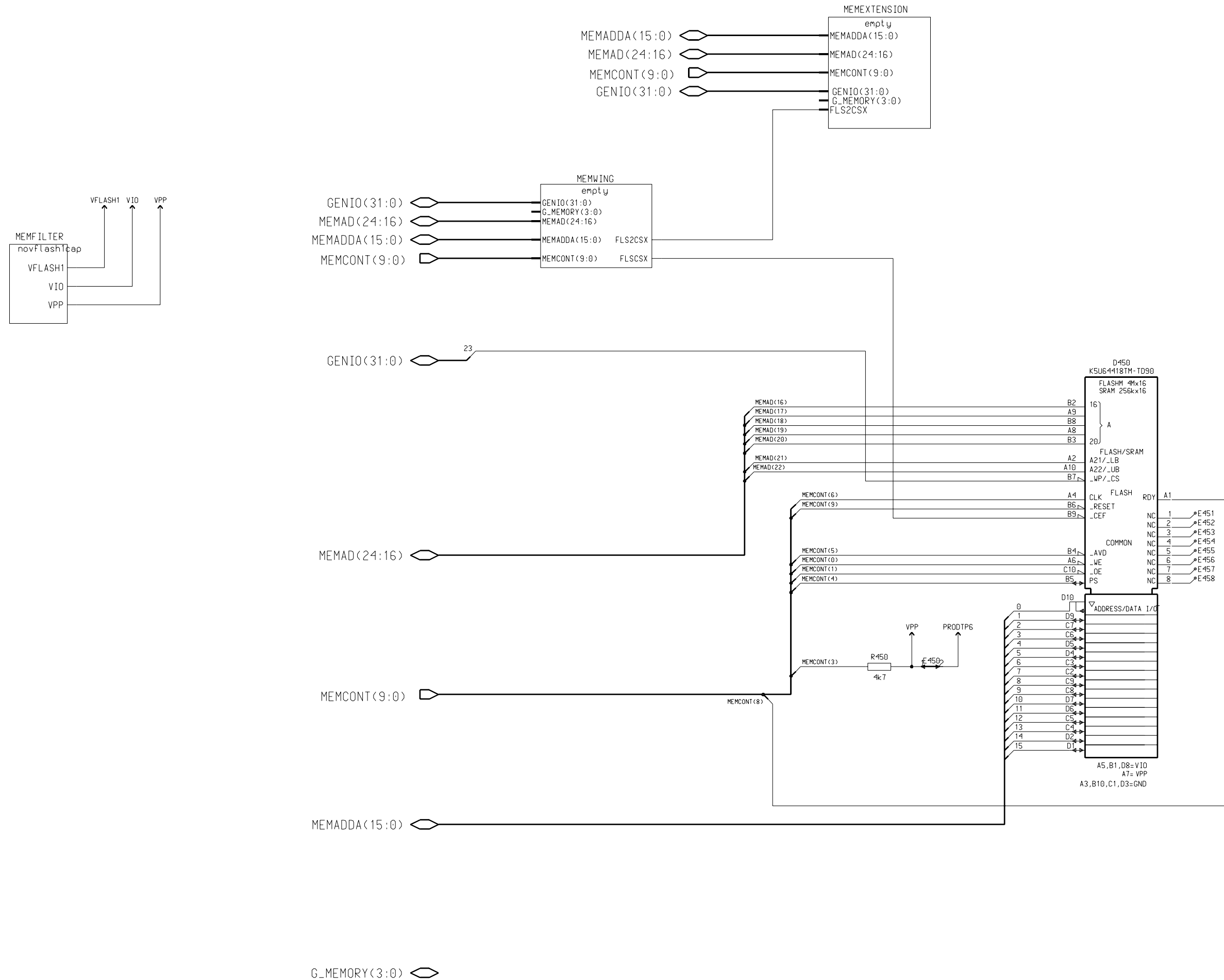
Notice:

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

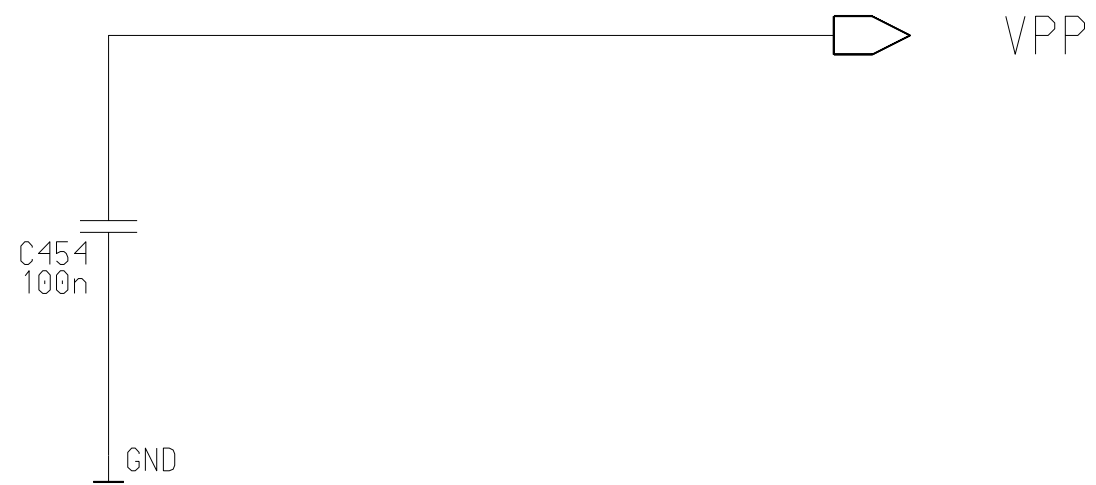


Combo Memory

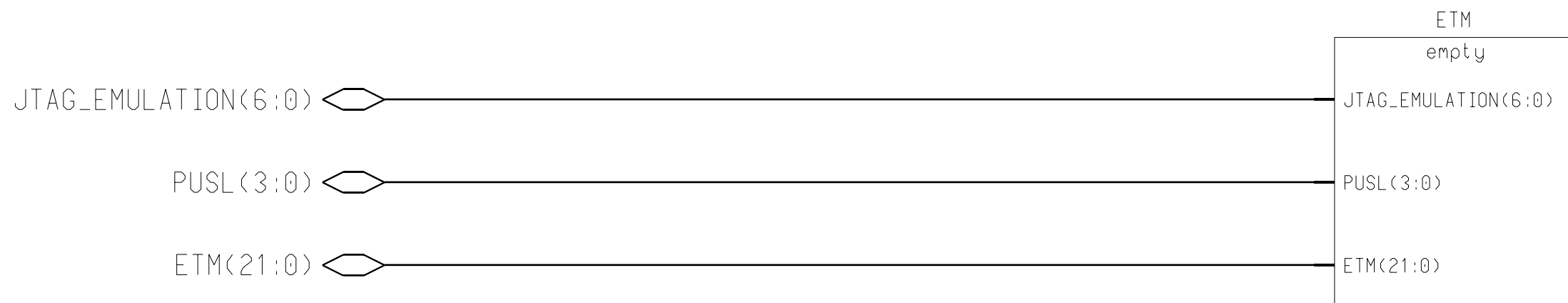


G_MEMORY(3:0)

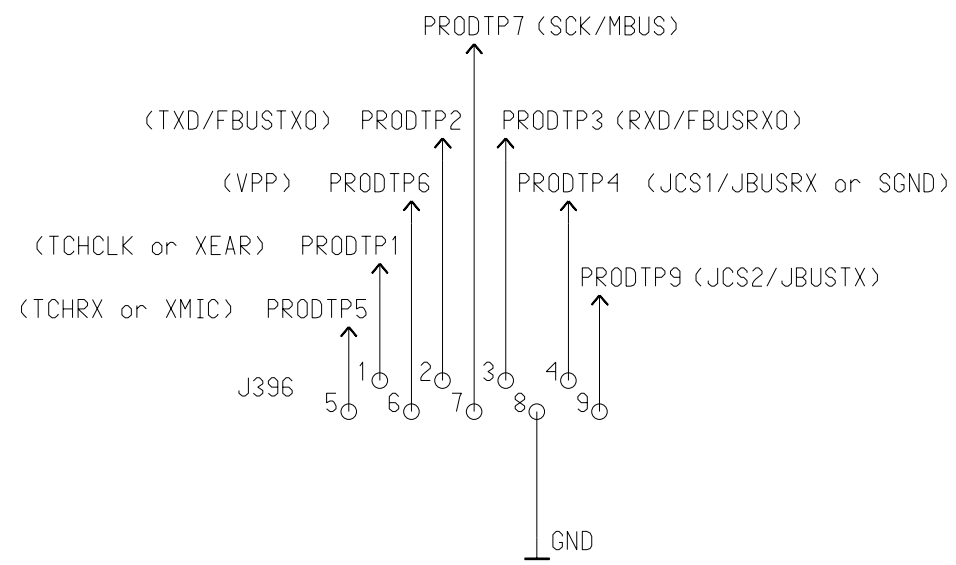
Combo Decoupling Capacitors



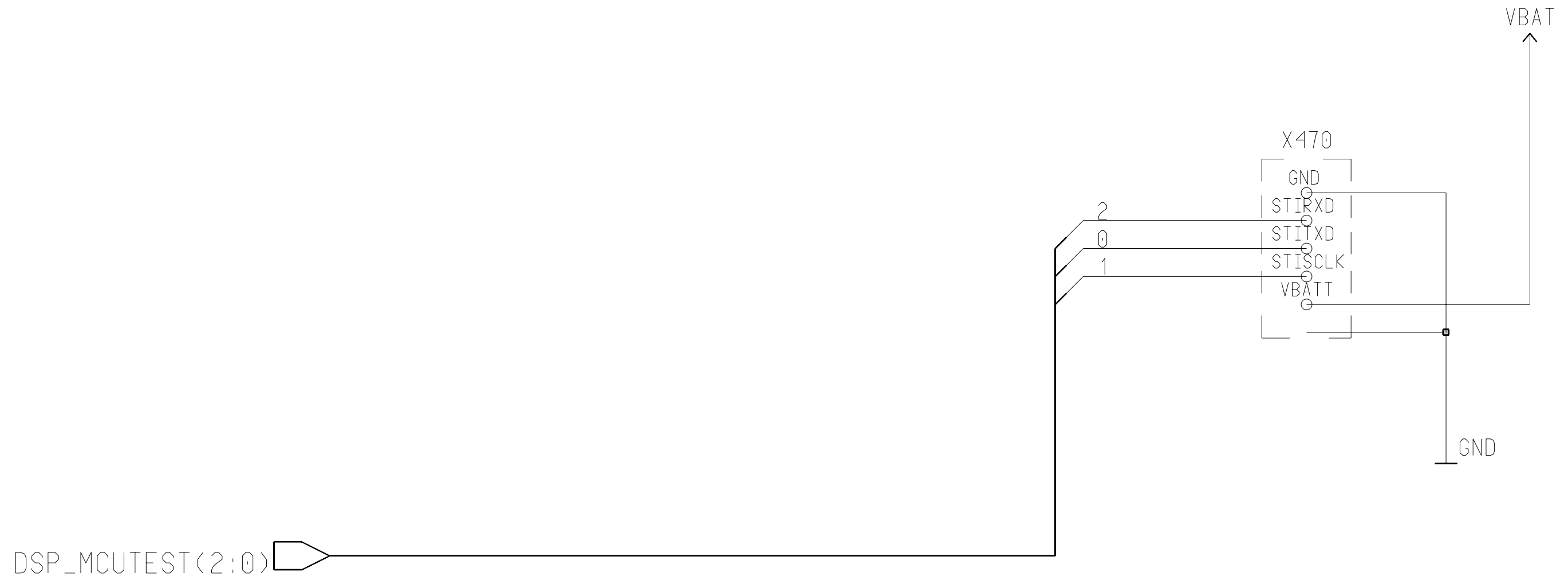
Emulators



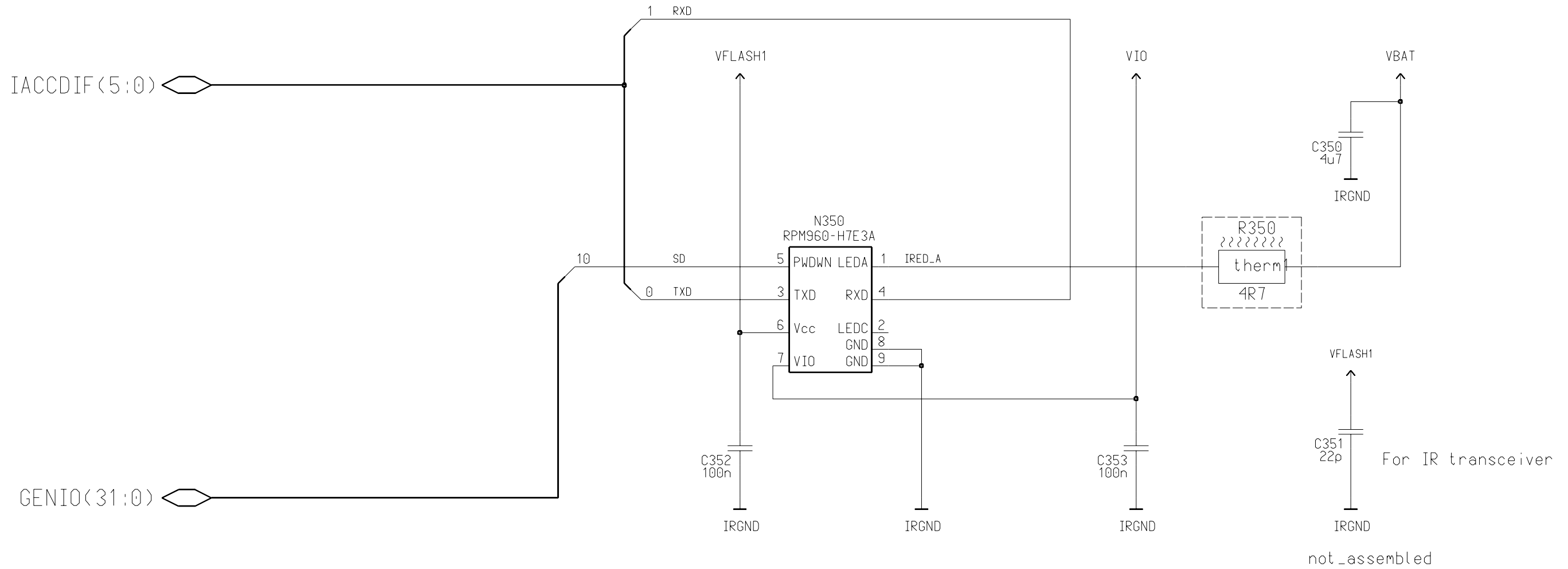
Ostrich Emulator Connector



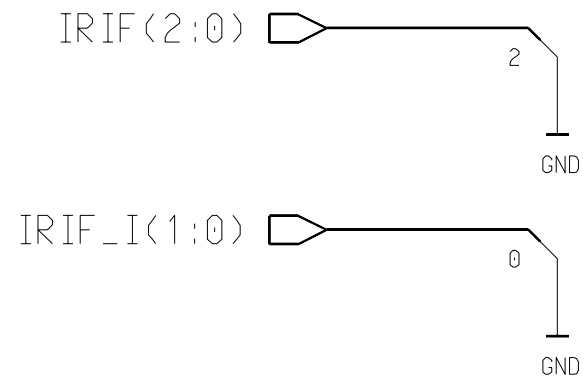
Production Test Pattern



IR

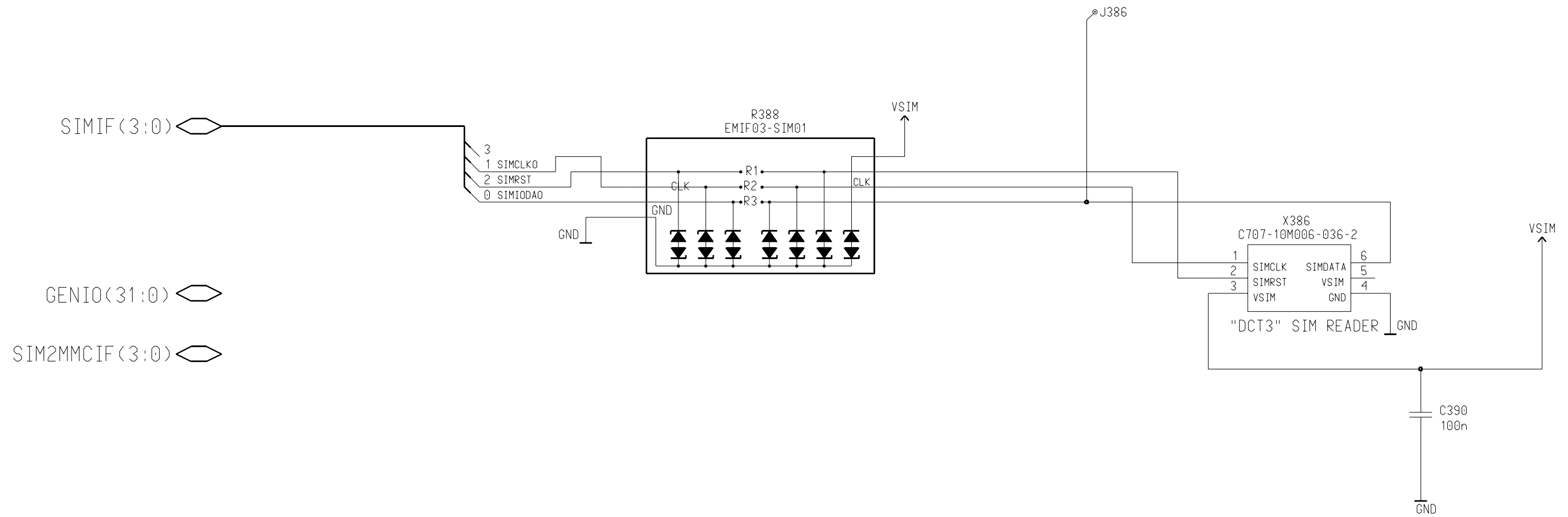


GPIO(31:0)

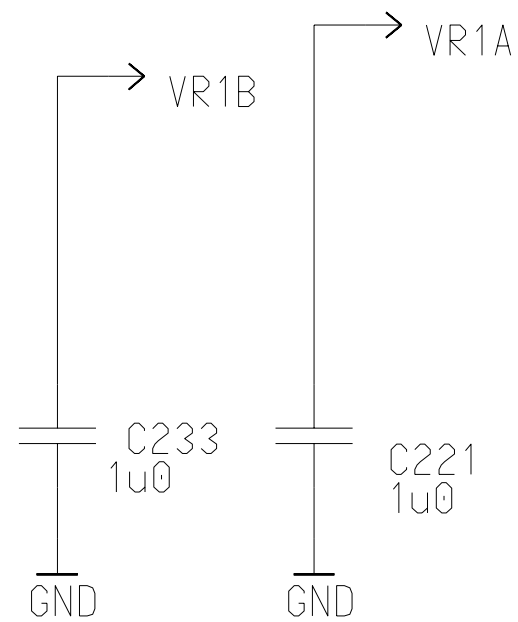
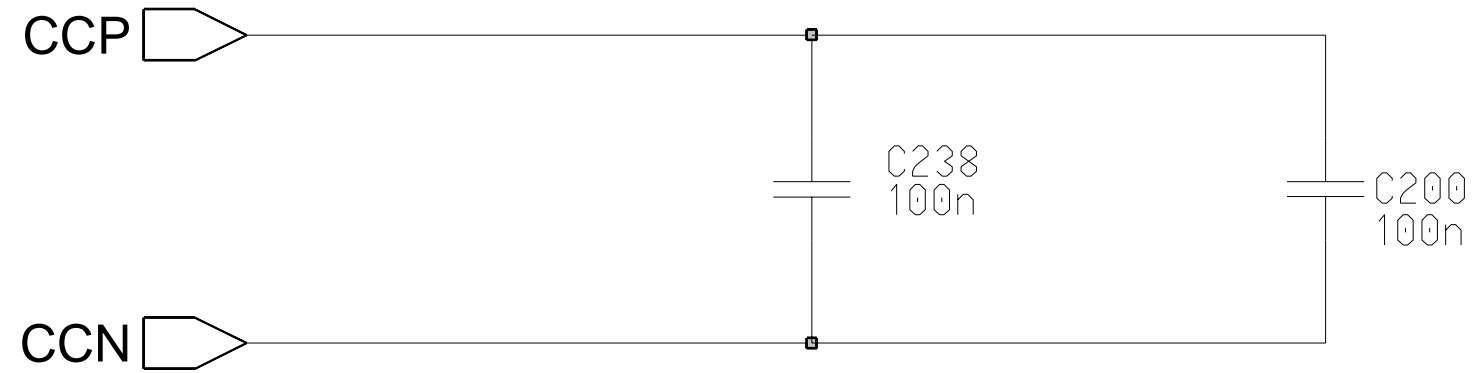
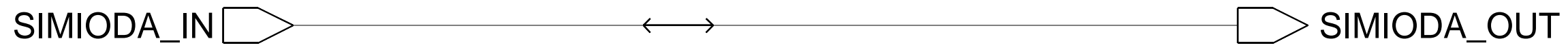


UEM IR level shifters are ground, when 1.8V IR is used!

Sim Reader

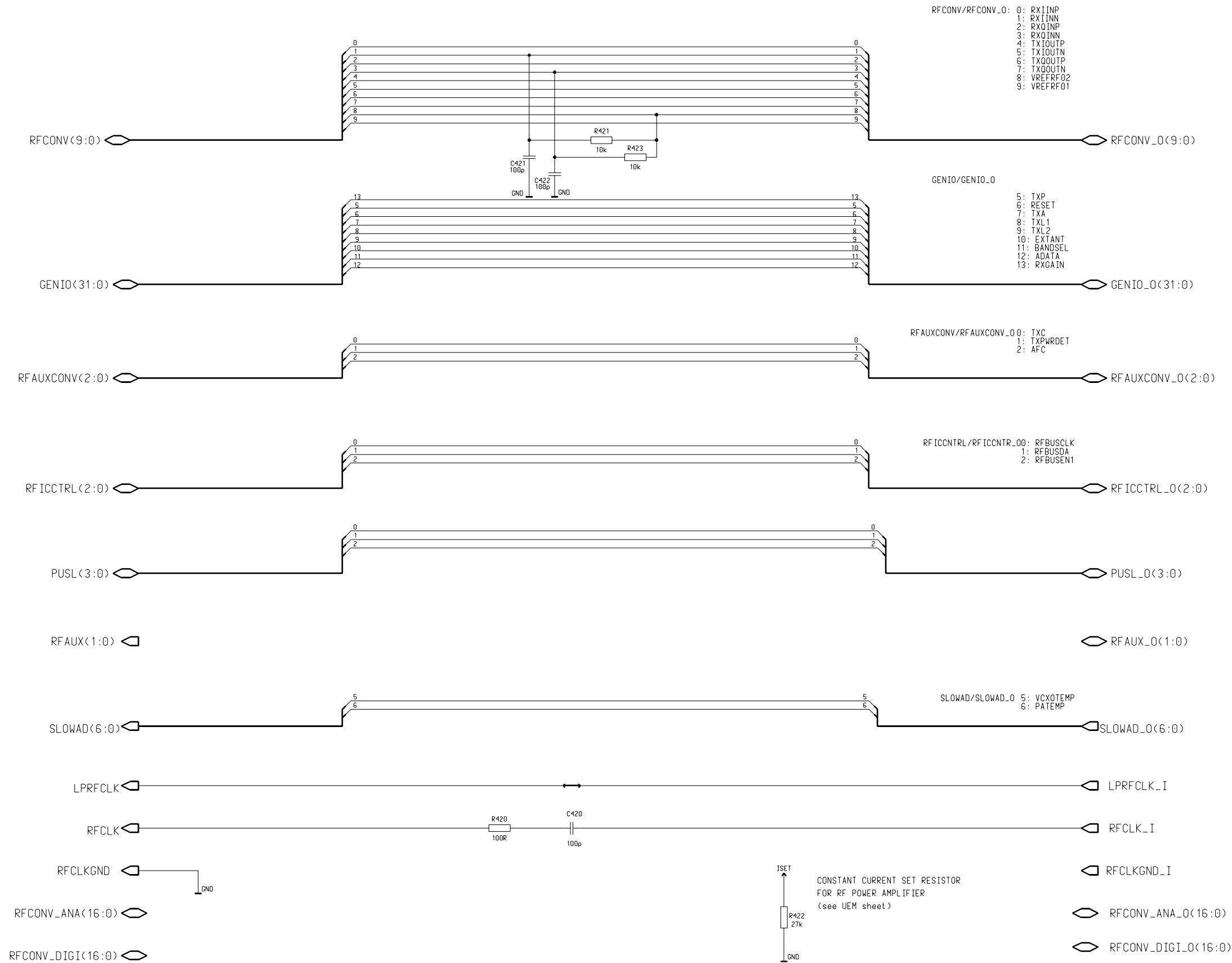


Power Discrete



RF and BB Interface

4



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