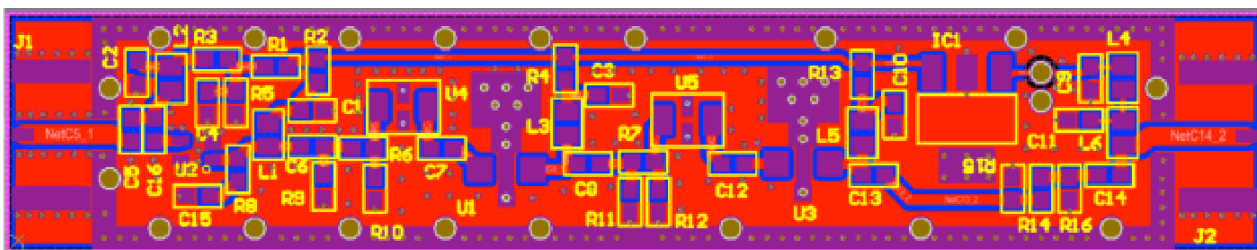
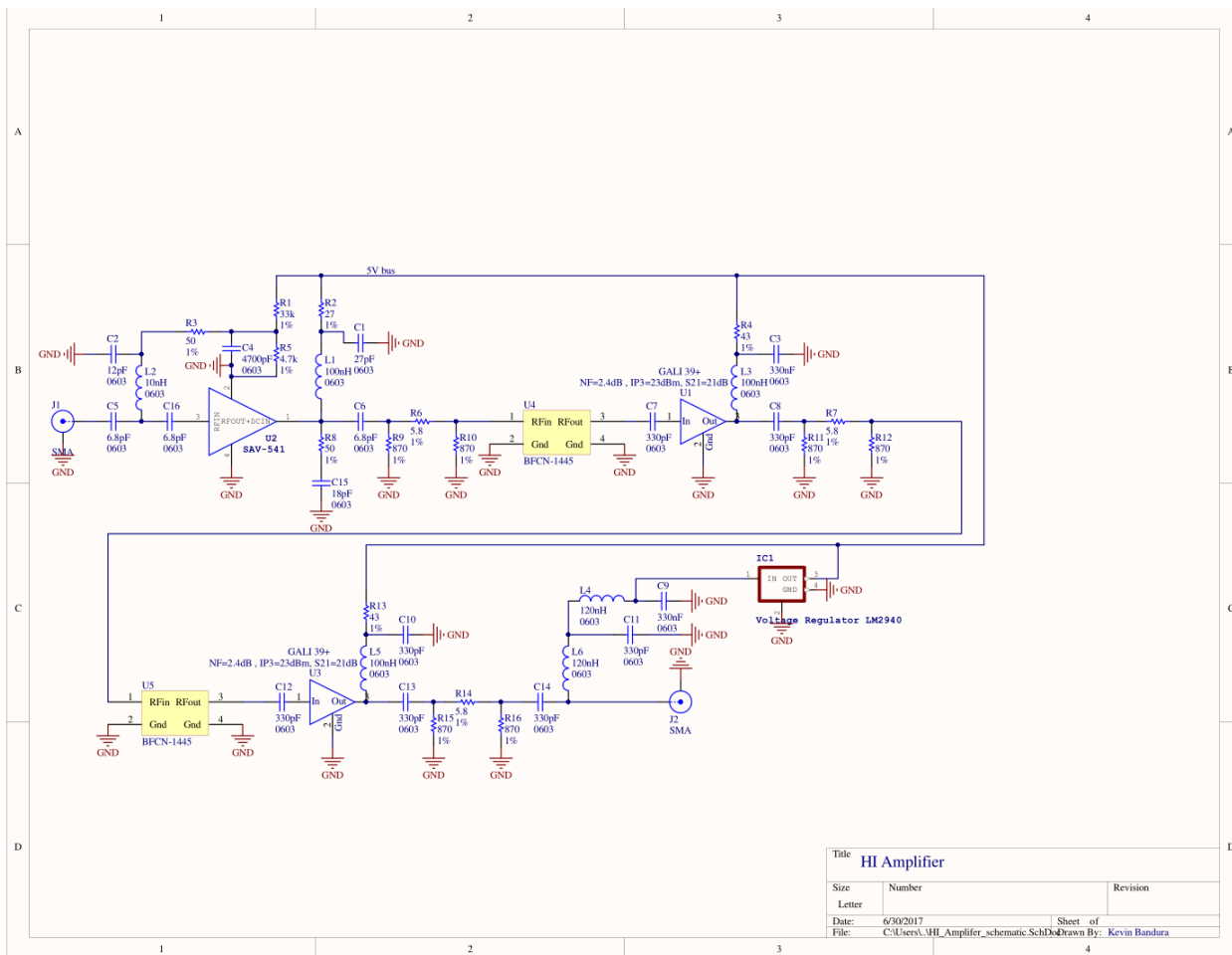


DSPIRA H1 LNA assembly

Kevin Bandura | Institute assembly notes

Earlier design reference. Component choices differ from later boards.

Schematic and board image



Assembly

Assemble all the surface mount passives first (Resistors, Capacitors and Inductors). Try to work from Left to right on the board, but also put on all components with the same value at once.

- 1) C5, C6 – 6.8pF capacitor
- 2) C2 – 12pF capacitor
- 3) C16 – MISS-LABELED, should be L16 – 6.8nH
- 4) L2 – 10 nH
- 5) R3,R8 – 50 ohm
- 6) C4 – 4700pF
- 7) R5 – 4.7k 7a) R1 33kohm
- 8) C15 – 18pF
- 9) L1, L3, L5 – 100nH
- 10) C1 – 27pF
- 11) R9,R10,R11,R12,R15,R16 – 870ohm
- 12) R6, R7,R14 – 5.8ohm
- 13) C7, C8,C3, C12,C13,C10,C14,C11 – 330pF
- 14) R4,R13 – 43 ohm
- 15) L6, L4 – 120nH
- 16) C9 - 330nF

Now place the actives:

- 17) U2 – SAV541. Align the dot and make sure the large pad lines up
- 18) U1,U3 – GALI 39
- 19) U4, U5 - BFCN-1445
- 20) IC1 – LM2940
- 21) J1 and J2. The input and output SMA connectors
- 22) R2 27 ohm

Finally add the Casing. Once everything lined up with holes, should just push on. Connect each tab on the underside.