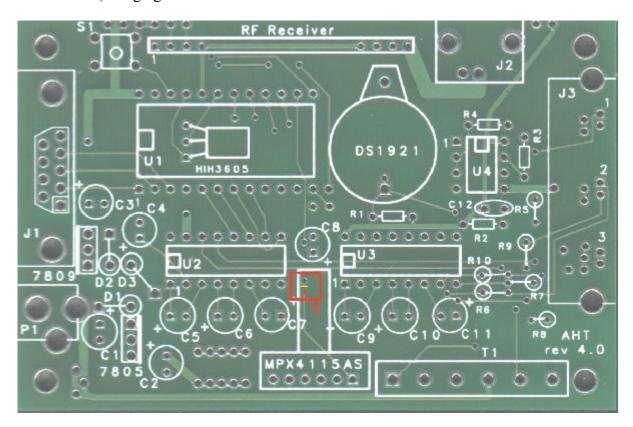
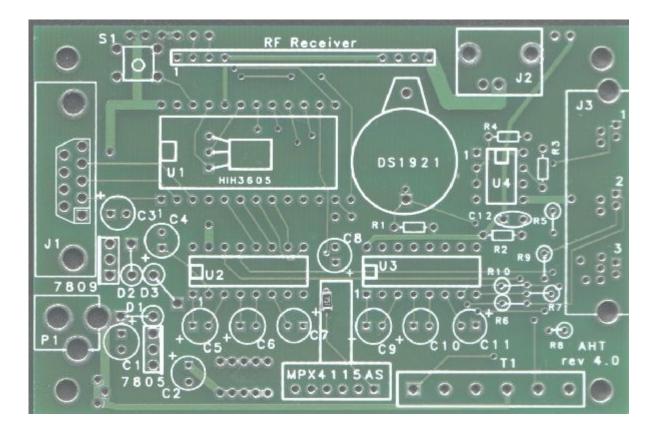
Board Modifications for MPX4115

The MPX4115 datasheet recommends bypass capacitors on its +5V supply and an RC filter on its output. These were not included when the board was designed and the board **MUST** be modified if you use the MPX4115. Otherwise its output is too noisy to be useful.

STEP 1: The first modification is made to the top of the board in the area bounded by the red rectangle 1 in the picture below. Cut the trace just below the via as shown by the yellow line. Scrape away the green resist to expose a section of the trace as shown by the red line. Solder a 750-ohm SMT resistor between the bared trace and via, bridging the cut made in the trace.

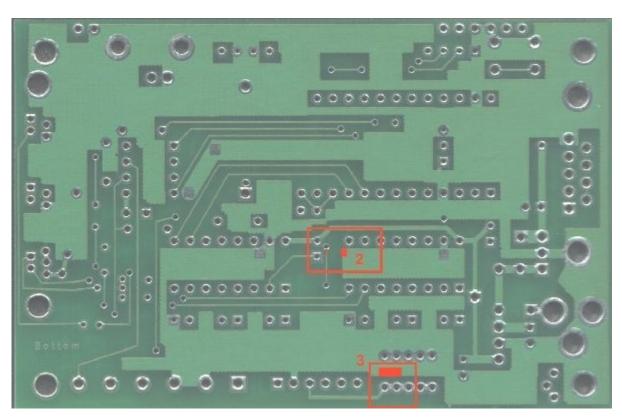


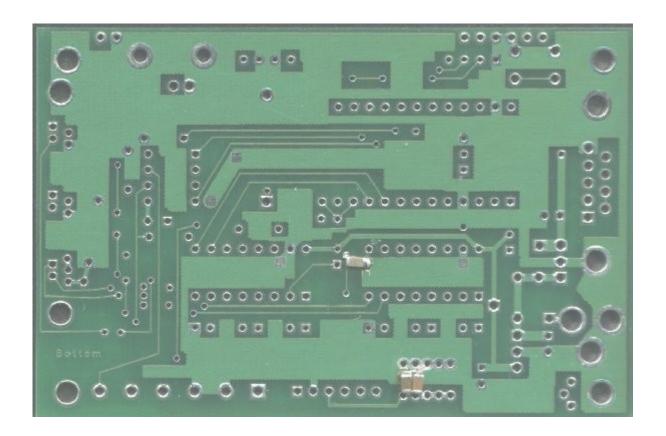


Two more modifications are required on the bottom of the board.

STEP 2: Scrape away the resist on a section of the trace as shown by the red line and corner of the ground plane as shown by the solid red rectangle in rectangle 2 below. Solder a $0.33\mu F$ SMT capacitor between the via/trace and ground plane.

STEP 3: Scrape away the resist on the ground plane as shown by the solid red rectangle in rectangle 3 below. Solder $1.0\mu\text{F}$ and $0.01\mu\text{F}$ SMT capacitors between the vias (below the just bared area) and the ground plane.





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