

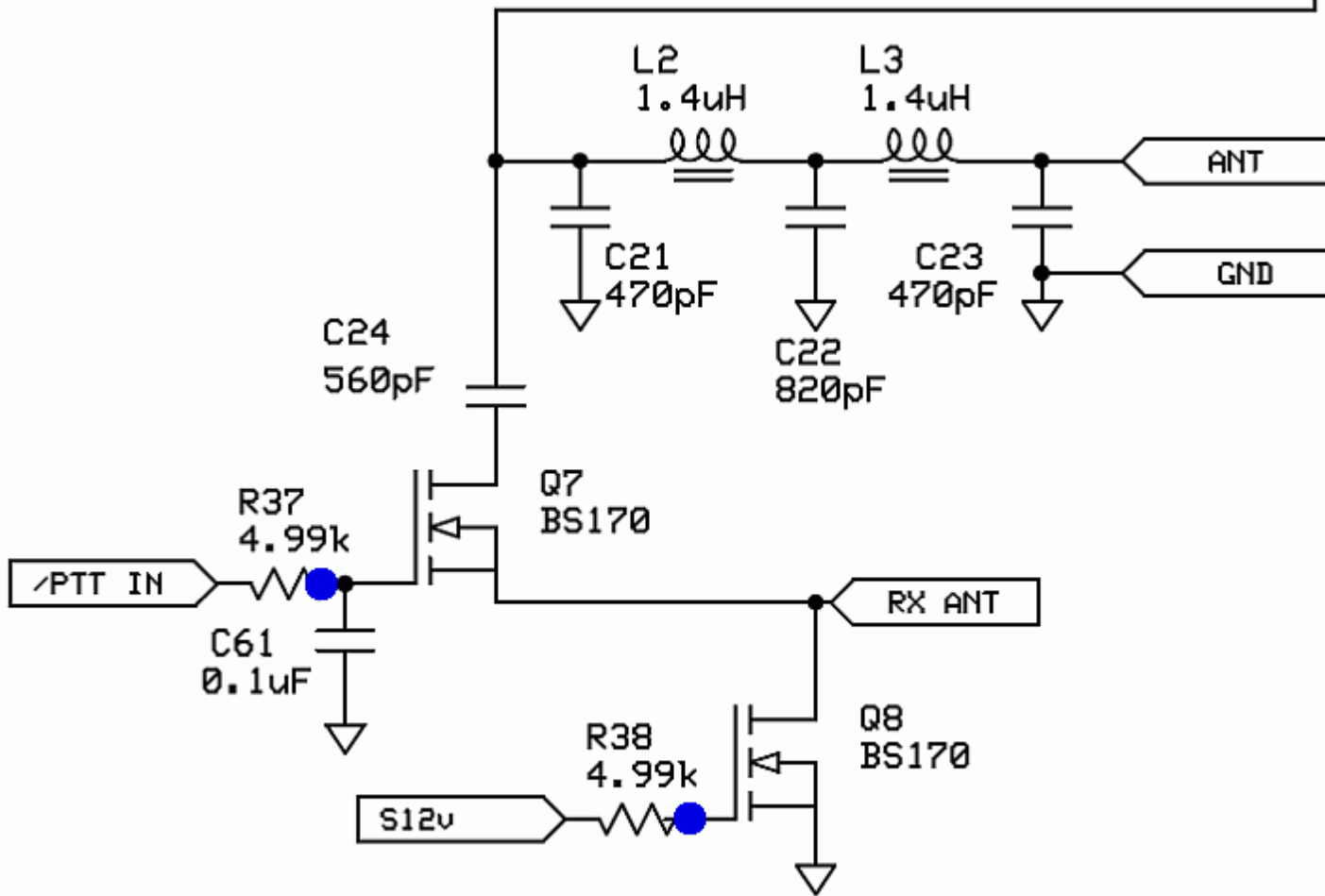
# Softrock RXTX V6.2 - 40/30m - Antenna Switching Circuit

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## Introduction

We're getting close to the end. This stage provides the complete paths from the antenna to the RX and TX functions. Q7, which we have been shunting for our RX tests, provides the switching of the Antenna terminals to the RX ANT stub.

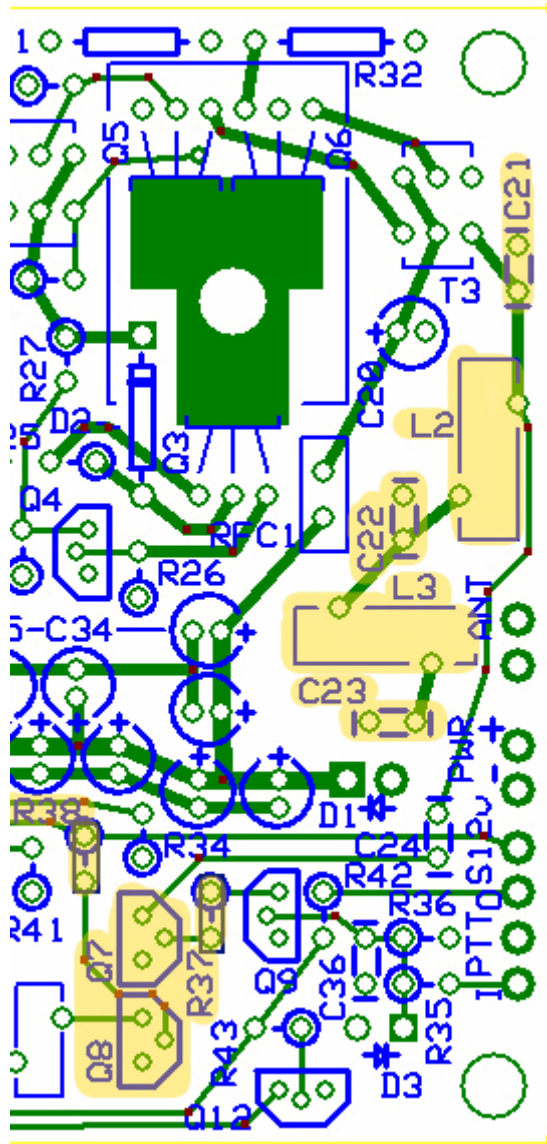
## Schematic



## Bill of Materials

Designation	Value	Orientation
C21	330pF, ceramic, 5%	n/a
C22	680pF, ceramic, 5%	n/a
C23	330pF, ceramic, 5%	n/a
L02	T37-6 (yellow) (#26) (0.77 uH)	16T
L03	T37-6 (yellow) (#26) (0.77 uH)	16T
Q07	BS170 FET	TO 92
Q08	BS170 FET	TO 92
R37	4.99 K, 1/4W, 1%	North-South
R38	4.99 K, 1/4W, 1%	North-South

## Build Notes



- Wind and install L2 and L3 (11" of #30 per coil)
- Install C21 and C23
- Install Q7 and Q8
- Install R37 and R38

## Testing

### Current Draw

Still should read about 38 mA

## Continuity Tests

You should have continuity from ANT to the top hole of C24

## RX Functioning

- Set up Rocky for receiving in the band of interest (e.g., center freq = 7.056 MHz)
- Connect the Line In pads to the PC sound card's stereo Line In or stereo mike inputs
- Set up your signal generator to generate RF at a frequency within 5 or 10 kHz of the center frequency. (Author used MFJ antenna analyzer set at 7.040 MHz.)
- Couple the signal to the ANT input of the board
- Run Rocky
- Power up the board
- You should see the signal in Rocky's spectrum display at the frequency of the generator.
- If your RF source can sweep the frequency, do so and you should see the result as a "hump" traveling up or down the spectrum display as the frequency changes

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