# 222 MHz BEACON



#### PROTOTYPE FOR RMG BEACONS BELOW 2 GHz

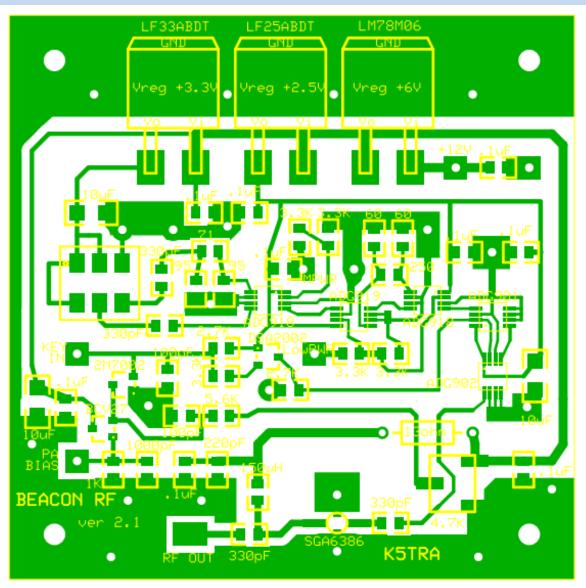
# PROTOTYPE

- The 222.060 MHz beacon was initially built with hand etched boards.
- This beacon preceded the 50, 144, 432, 902, and 1296 MHz beacons and was used as a design prototype for those beacons.
- The RF board uses a Silicon Labs Si530 IC for the source oscillator.
- Analog Devices MOS switch ICs are used to gate the RF for Morse ID and to switch attenuation for power steps.
- The PA module is a Mitsubishi RA30H2127M.

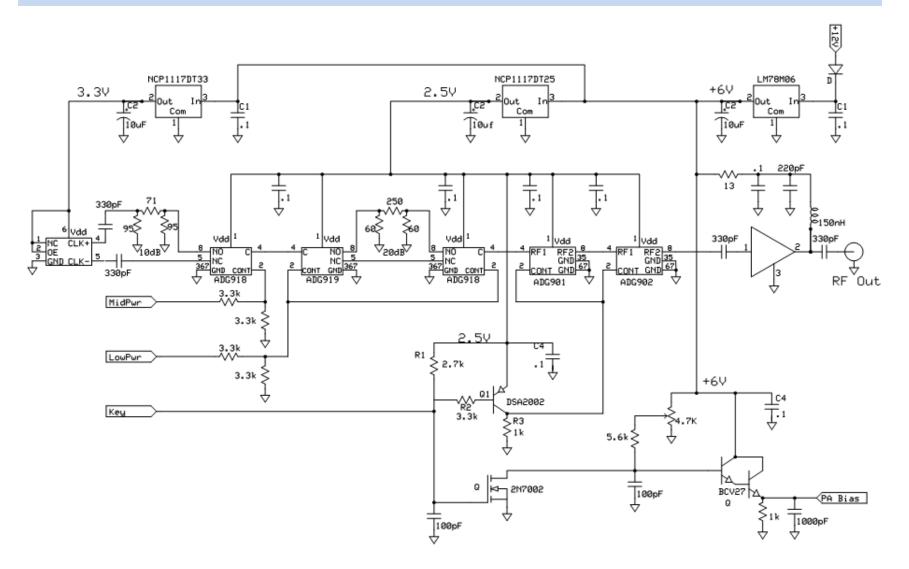
## **RF and Controller Boards**



#### **Beacon RF Board Layout**



### **Beacon RF Board Schematic**



# 222 MHz BEACON INTERIOR



# Summary

- The K5TRA 222.060 MHz beacon has been operational since 2011.
- Built with hand etched boards, it was the prototype for beacons on 5 other bands (50 through 1296 MHz).
- More detail about the subsequent beacons is posted on <u>http://k5tra.net/weaksig.html</u>.