

# EL199 Pterosaur 49.820 ~ 49.900MHz Transmitter Operation Description

The Microprocessor (U1, Figure 1) reads input commands (SW2/SW3/W2/W3, Figure 1), and then encodes them to digital codes. The codes are sent to RF oscillator via pin 6 of U1, Q6, Q7 and then modulates 49.820 ~ 49.900 MHz carry frequency signal via Q1 (Figure 2) to achieve AM signal.

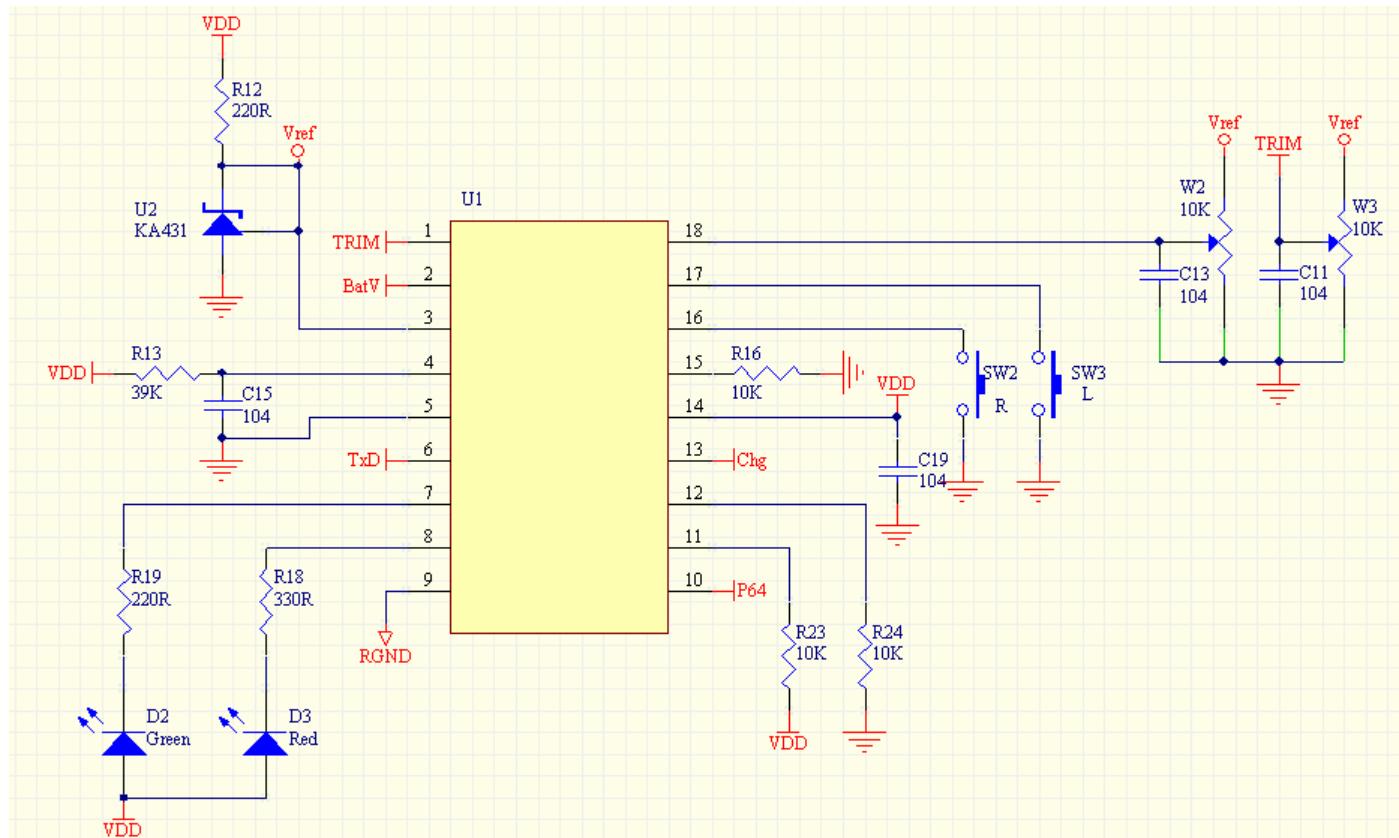
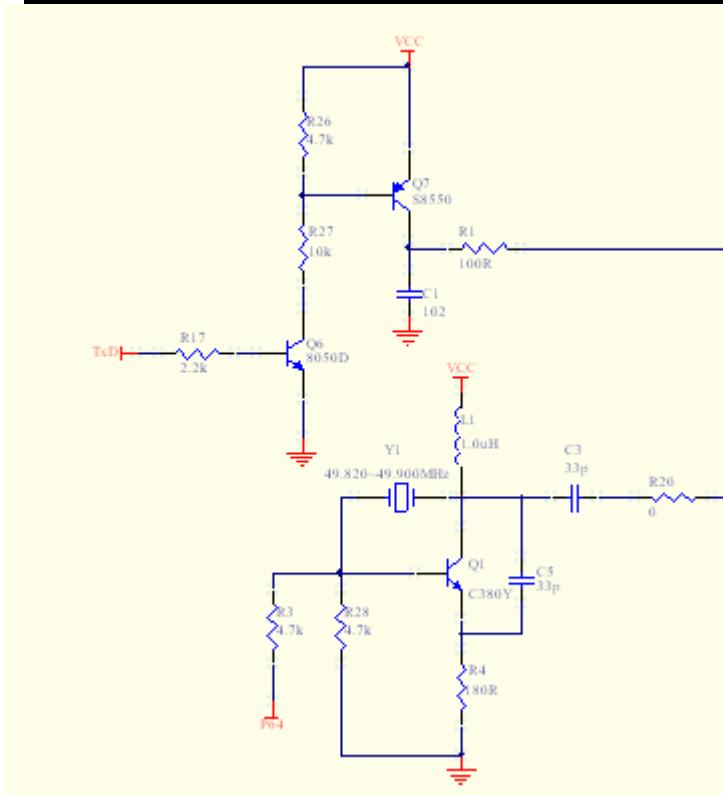


Figure 1

The Radio Frequency of the transmitter is based on standard 49MHz AM citizen's band. It generates low power 49.820 ~ 49.900MHz AM carrier frequency via major components of Q1, Y1, L1, C5, R4, R3 and R28 etc. (Figure 2). Please note that the value of the components may vary. Please see the attached schematics for more detail.

# EL199 Pterosaur 49.820 ~ 49.900MHz Transmitter Operation Description



**Figure 2**

The AM signal (via capacitor C3) is passed to RF amplifier (**Figure 3**,Q2,C8,R9, and L2), which amplifies the signal and then couples the signal into the antenna (ANT1) via components C4,C6,L4,C7 and L3.

# EL199 Pterosaur 49.820 ~ 49.900MHz Transmitter Operation Description

---

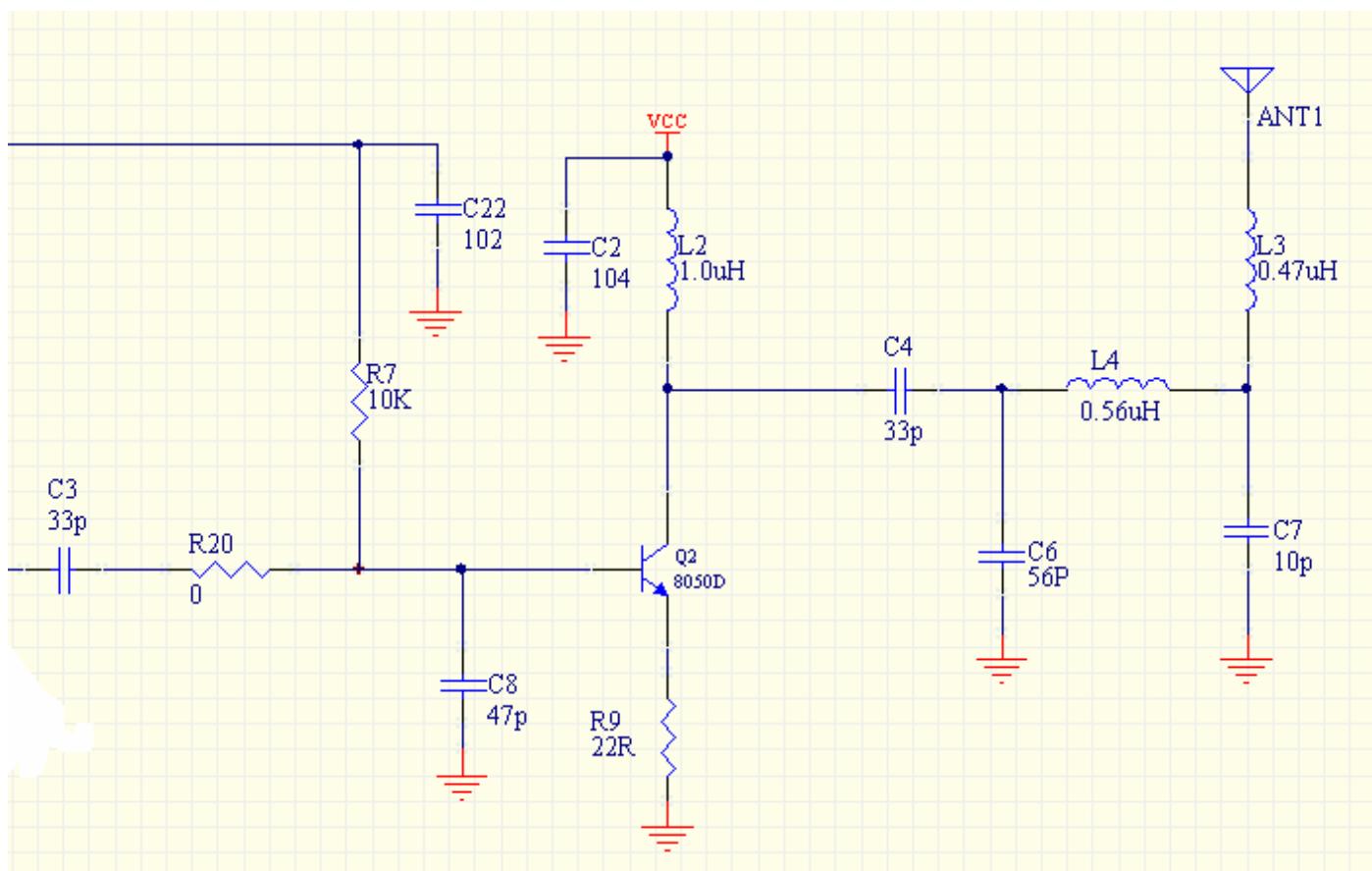


Figure 3