

## **HELEX Circuit description**

### **1. Transmitter**

The transmitter outputs of IC1's Pin 14 are designed to generate the correct PWM for the communicate interface, the signal per Q8 and Q7 equipped and filter then modulated to 72MHz carrier, and then per FT4 coupling and frequency selection to Q2 for amplitude amplification, then per FT3 coupling to Q4 to power Amplifier then per FT2 and FT1 to antenna radiate to receiver.

### **2. Receiver**

The signal per Antenna to Q2 (LNA) then input to IF receiver U4, the U4 will complete mixer action, signal amplifier, filter and demodulated then restore the signal output to U5, U6 comparator by U4 pin 9, the U5 and U6 to make the sine wave transition to square wave for MCU U1 input data, and then the MCU will complete that pertinent action by RC control.