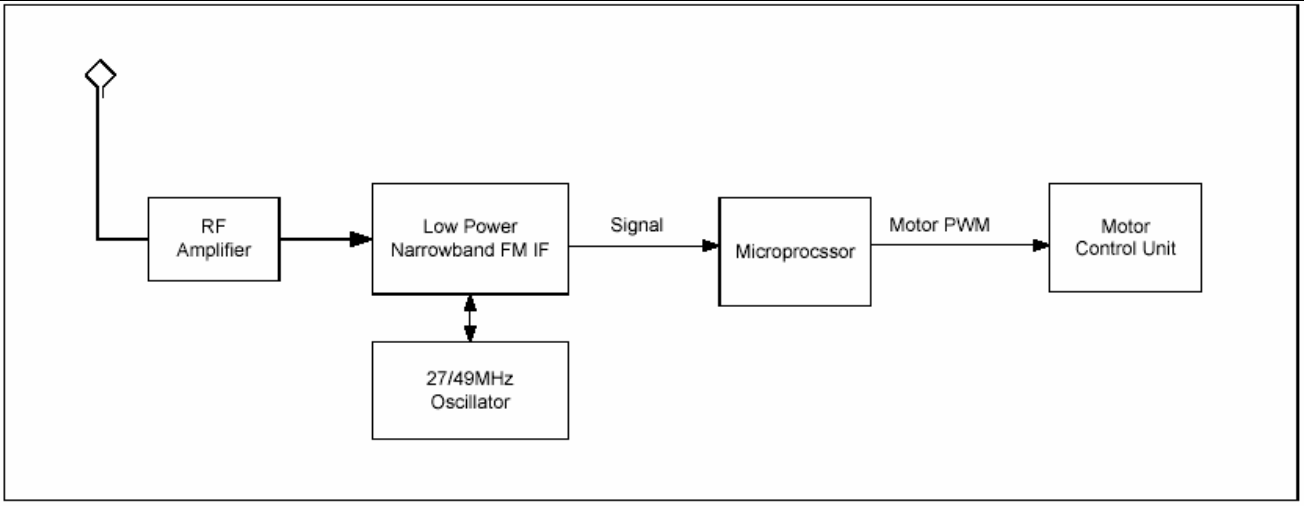
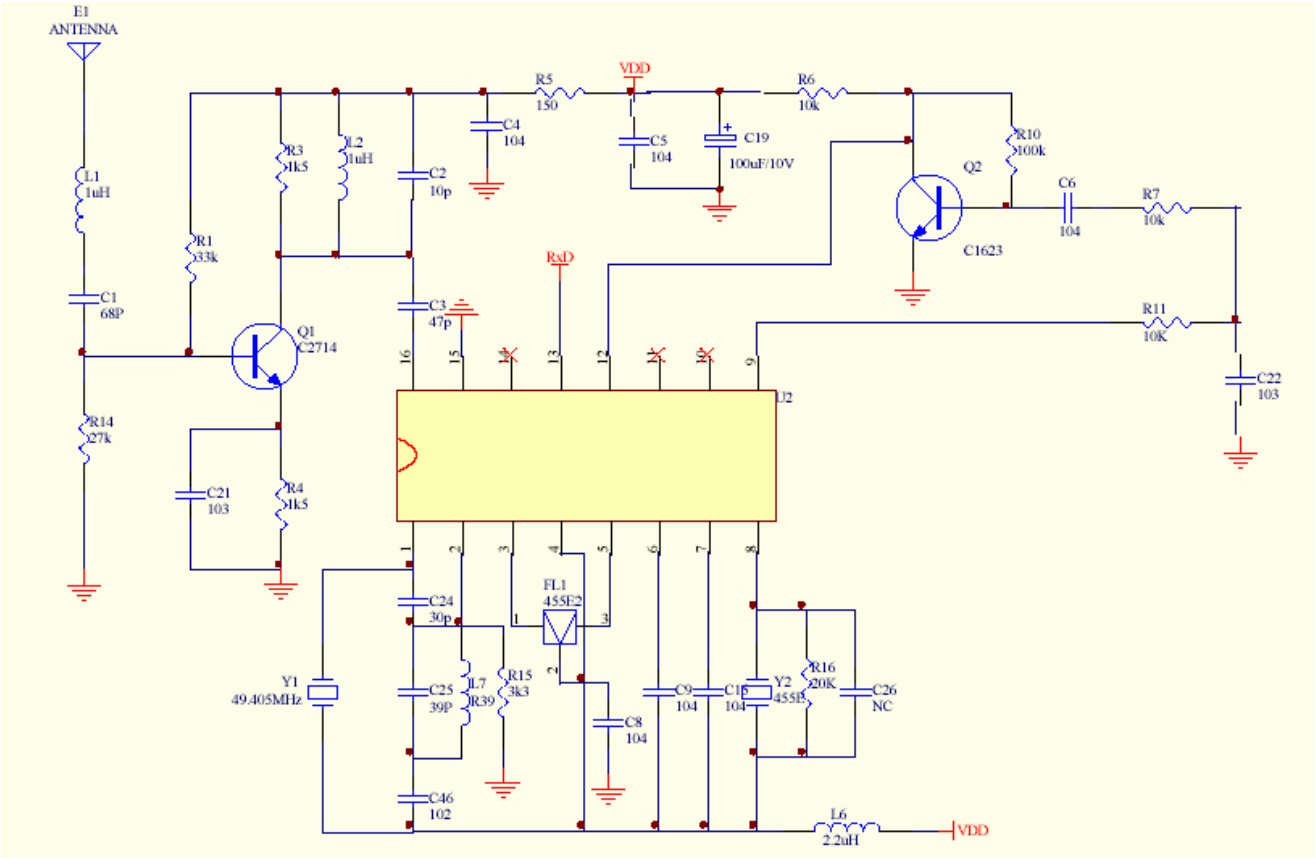
EL137 Wireless Ultralite, 27/49MHz Receiver Operation Description



The Radio Frequency of the receiver is based on standard 27/49MHz FM (Frequency Modulation) citizen's band. The induced RF signals via antenna are amplified by and RF amplifier (L1, C1, R14, R1, Q1, C21, R4). A low power local oscillator frequency of 27/49MHz, coupled with Low Power Narrowband FM IF chip (U2) and components of Y1, Y2, FL1, L7, C24, C25, C46, C26, C22, C8, C9, C16, C3, C2, Q2, R10, R15, R16, R7, R11(***Figure 1***) to extract amplified signals from RF amplifier and output decoded signal via U2 I/O pin 13 to the Microprocessor (U1, ***Figure 2***)



The Microprocessor U2 (***Figure 2***) examines decoded signals from U2 (***Figure 1***) and convert the received signal to Pulse Width Modulated (PWM) signal. The PWM signal will be outputted to Q5 (***Figure 3***) to control speed of the motor speed via I/O pin 8 of U2.

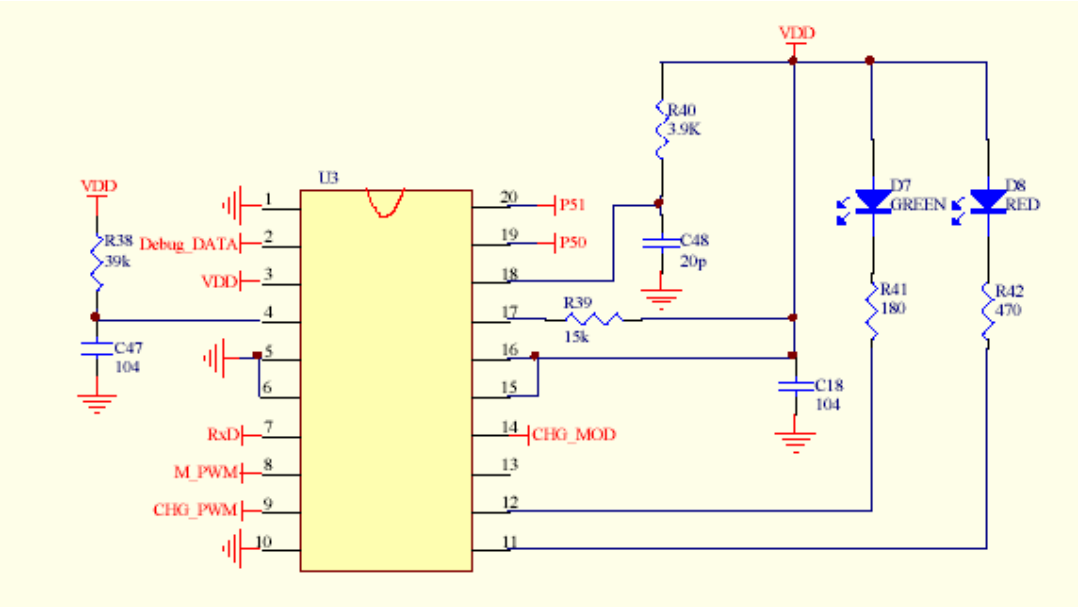


Figure 2

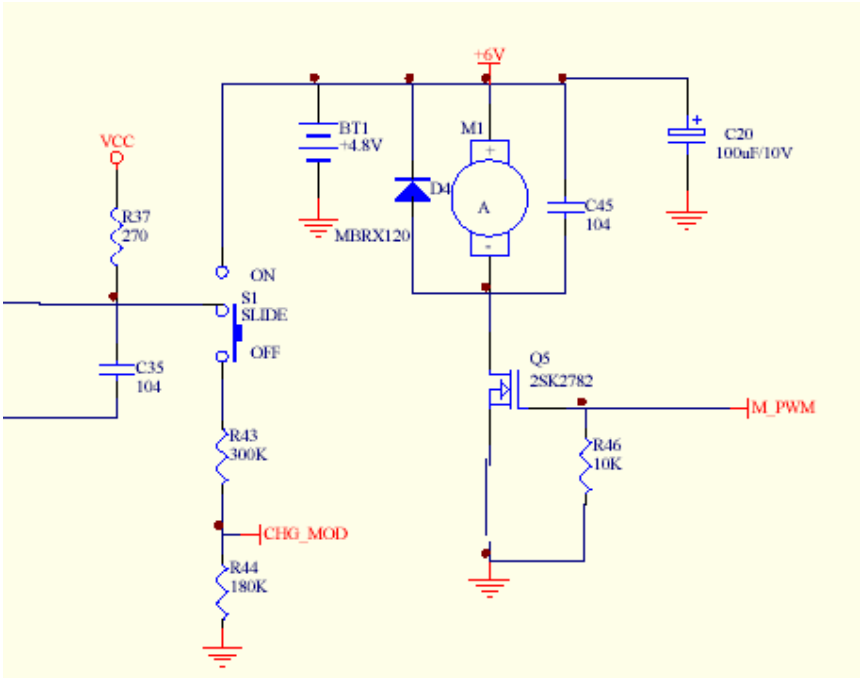


Figure 3