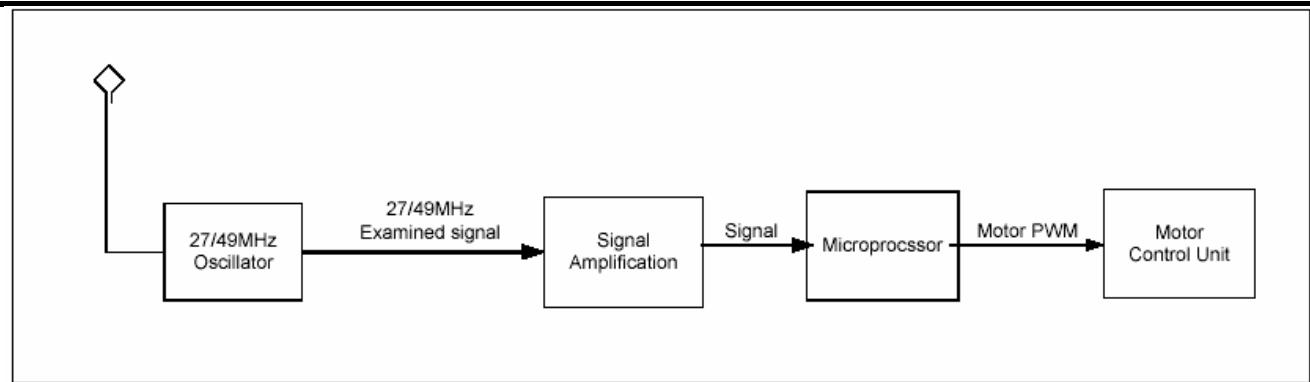
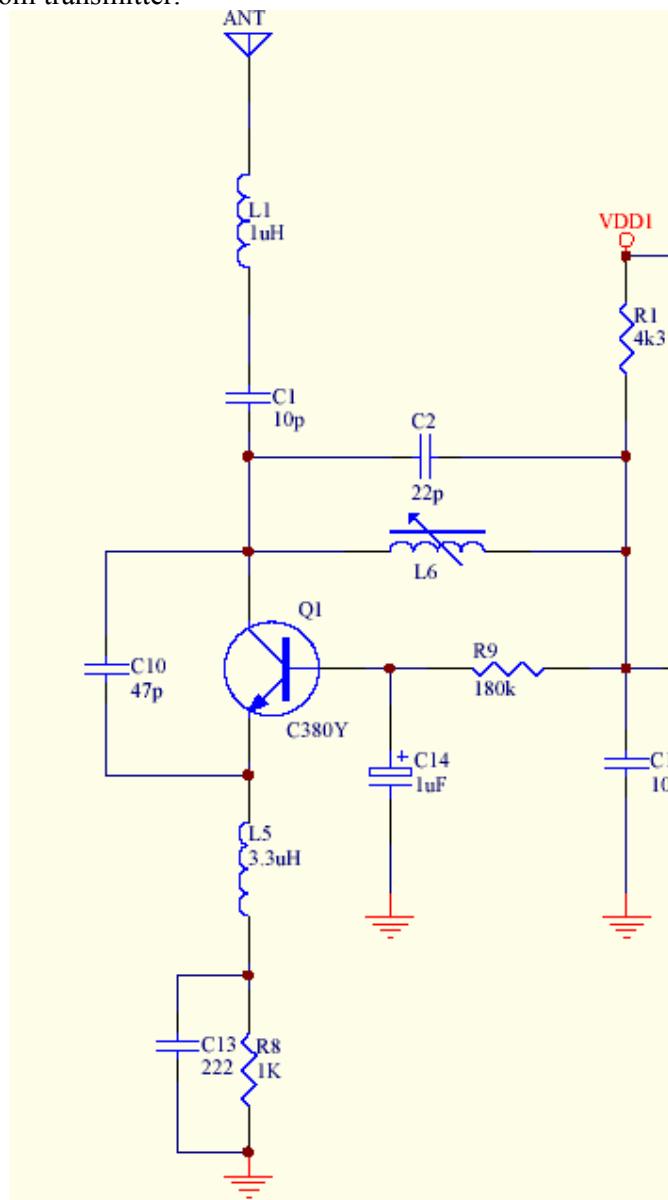


## EL137 Wireless Ultralite, 27/49MHz Receiver Operation Description

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The Radio Frequency of the receiver is based on standard 27/49MHz AM (Amplitude Modulation) citizen's band. A low power local oscillator frequency of 27/49MHz, generated by components of L5, L6, C2, C10, C13, C14, R8, R9 and Q1 (**Figure 1**), couple with antenna input via components of L1 and C1 (**Figure 1**) to discriminate RF signals from transmitter.



**Figure 1**

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The discriminated RF signals will be reshaped and amplified via components R10, R16, R17, R18, R20, C4, C16, C17 and U1A (**Figure 2**).

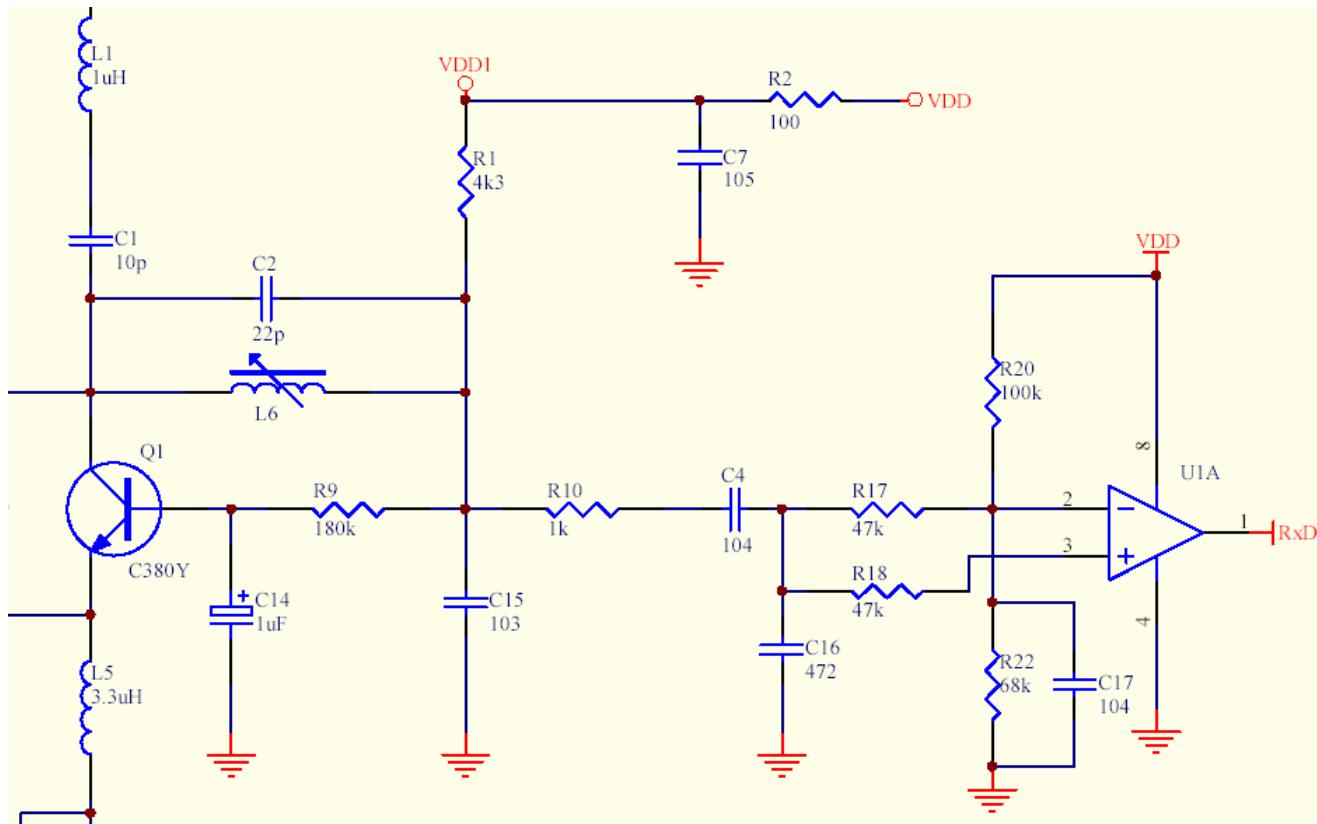


Figure 2

## EL137 Wireless Ultralite, 27/49MHz Receiver Operation Description

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The Microprocessor U2 (**Figure 3**) examines reshaped/amplified RF signals from U1A (**Figure 2**) and convert the received signal to Pulse Width Modulated (PWM) signal. The PWM signal will be outputted to Q10 (**Figure 4**) to control speed of the motor speed via I/O pin 8 of U2.

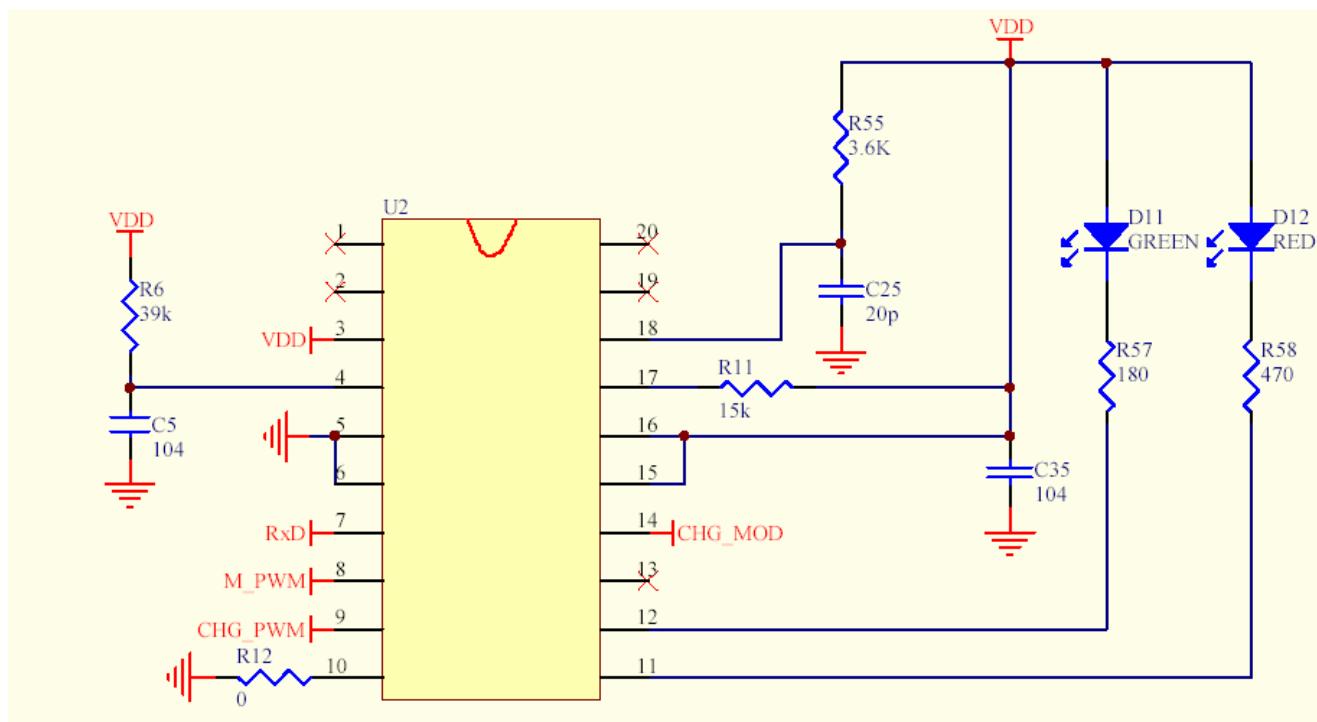


Figure 3

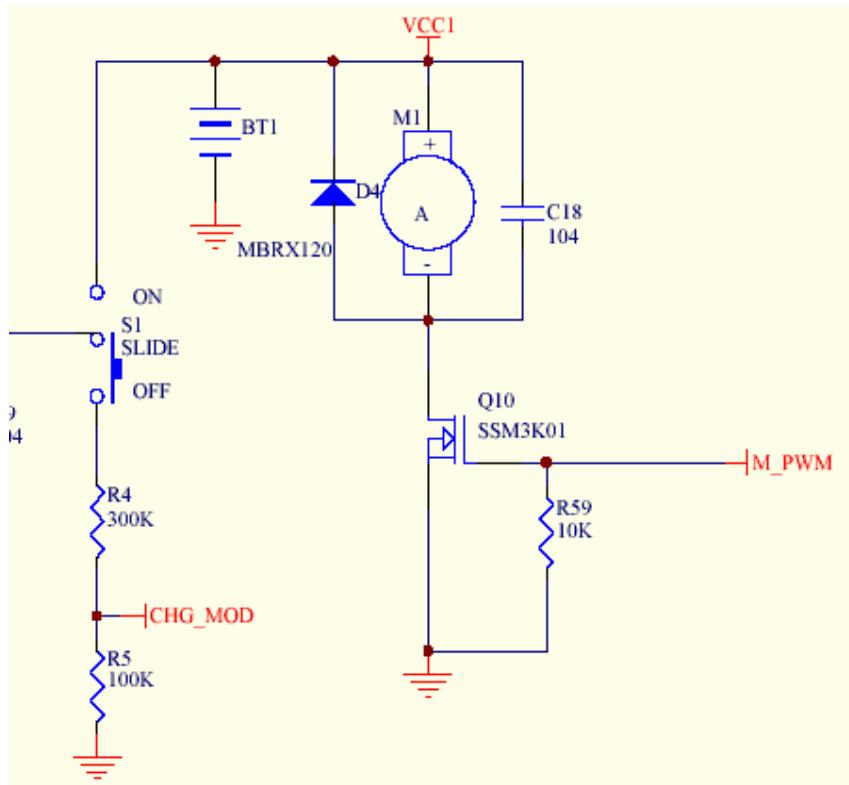


Figure 4