

EL190 F22, 49.820 ~ 49.900MHz Receiver Operation Description

The Radio Frequency of the receiver is based on standard 49MHz AM (Amplitude Modulation) citizen's band. A low power local oscillator frequency of 49.820 ~ 49.900MHz, generated by components of Q1, C1, L1, C8, R5, C9, R3, C20 and T1(**Figure 1**), couple with antenna input via components of C2 (**Figure 1**) to discriminate RF signals from transmitter.

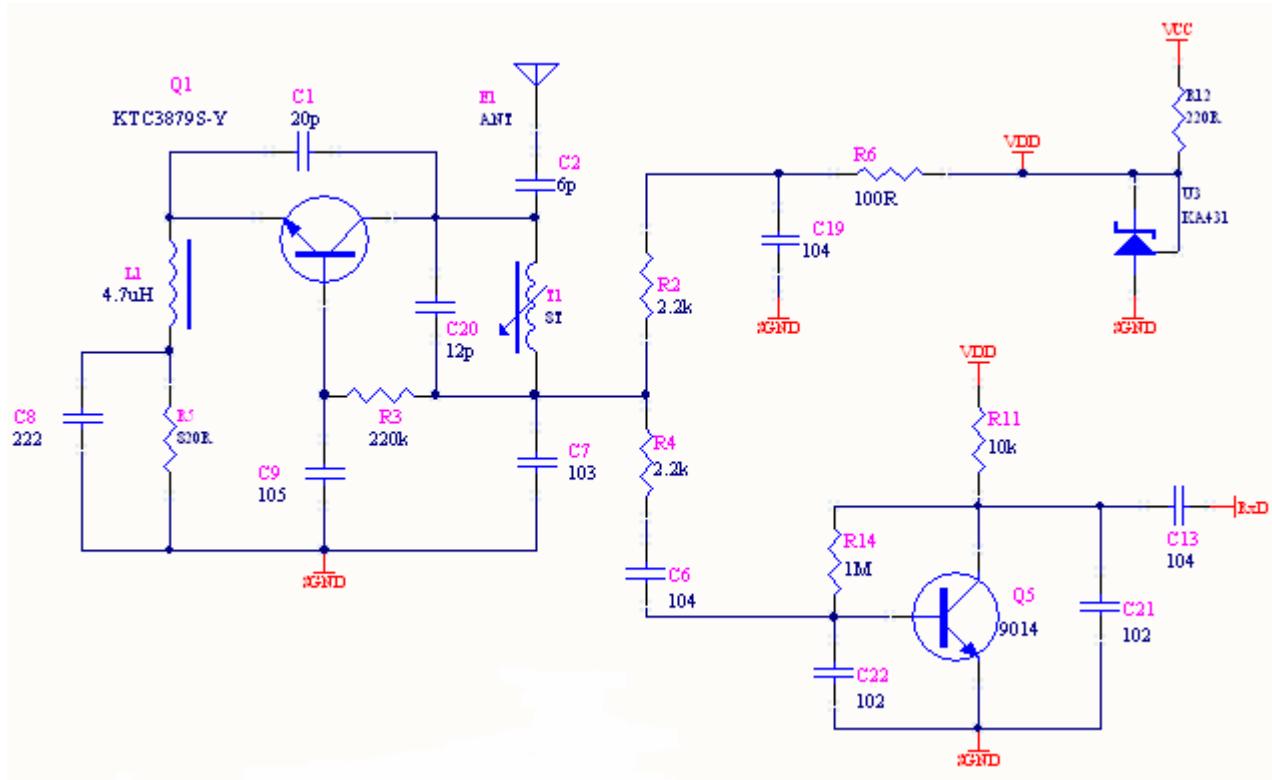


Figure 1

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The demodulated signal is sent to Q5 by R4 and C6 (see *Figure1*), and then is amplified by Q5, R14, C22, R11 and C21. The amplified signal is passed to the pin 11 of U1 via C13, R18 and is decoded to control commands by internal circuit of U1 (Figure 2).

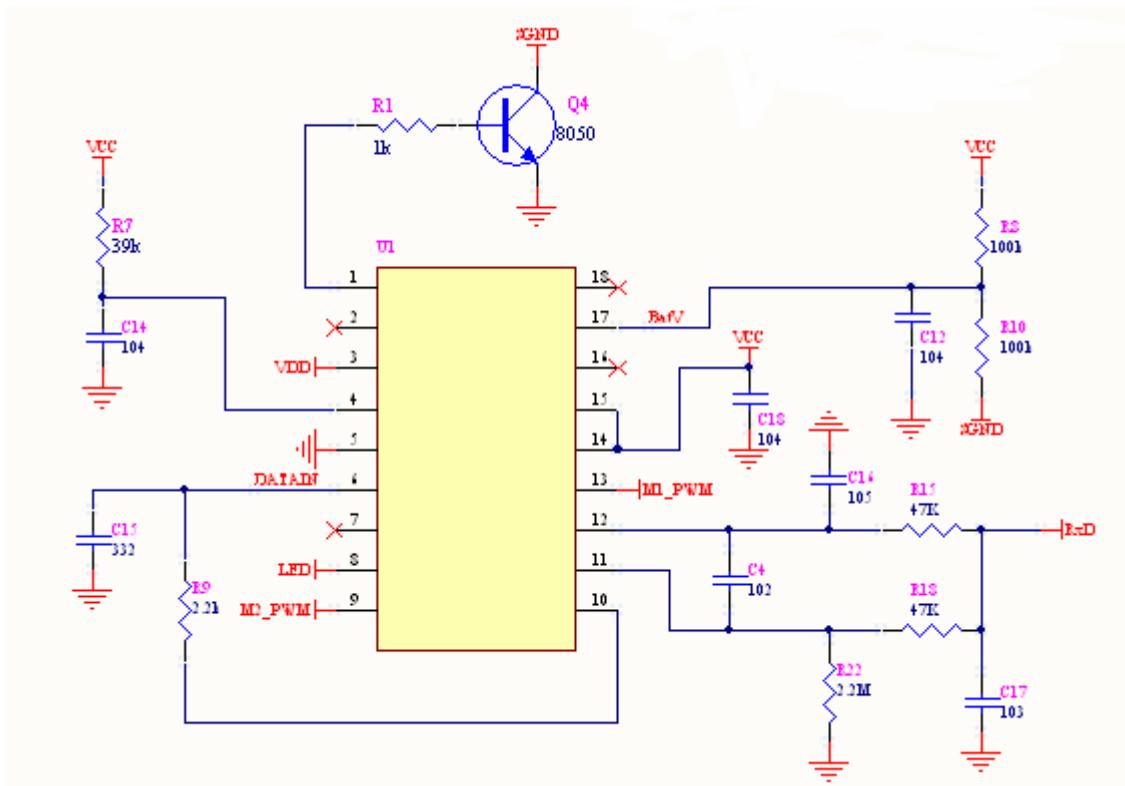


Figure2

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The control command signals drive the motors via MOSFET Q2 and Q3 accordingly (*Figure 3*).

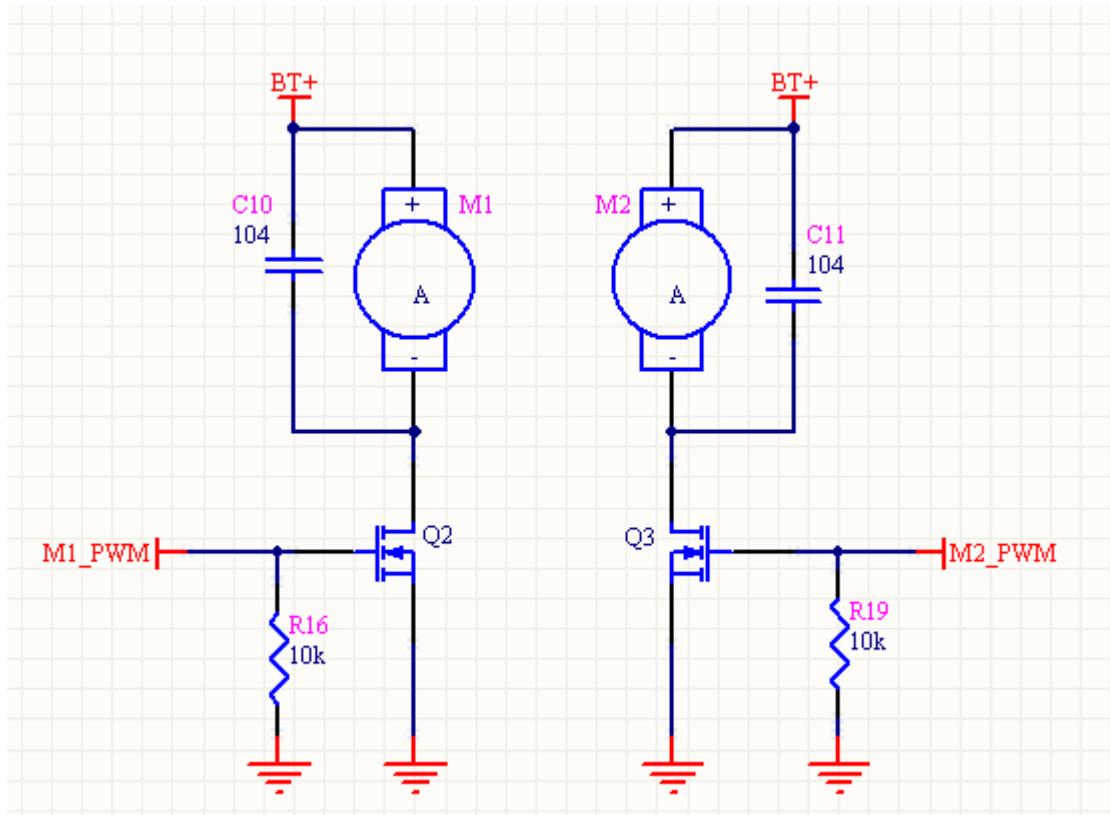


Figure3