

Laboratory Worksheet # 5 (PWM-Frequency and Pulsewidth)

Build the circuit as shown.

Copy and run the sample code from following web page. The code is at the end of the page and is titled *WorkSheet 5: PWM : Frequency and Pulsewidth*.

URL: <http://litec.rpi.edu/sample.html> (Sample Codes from LITEC home page.)

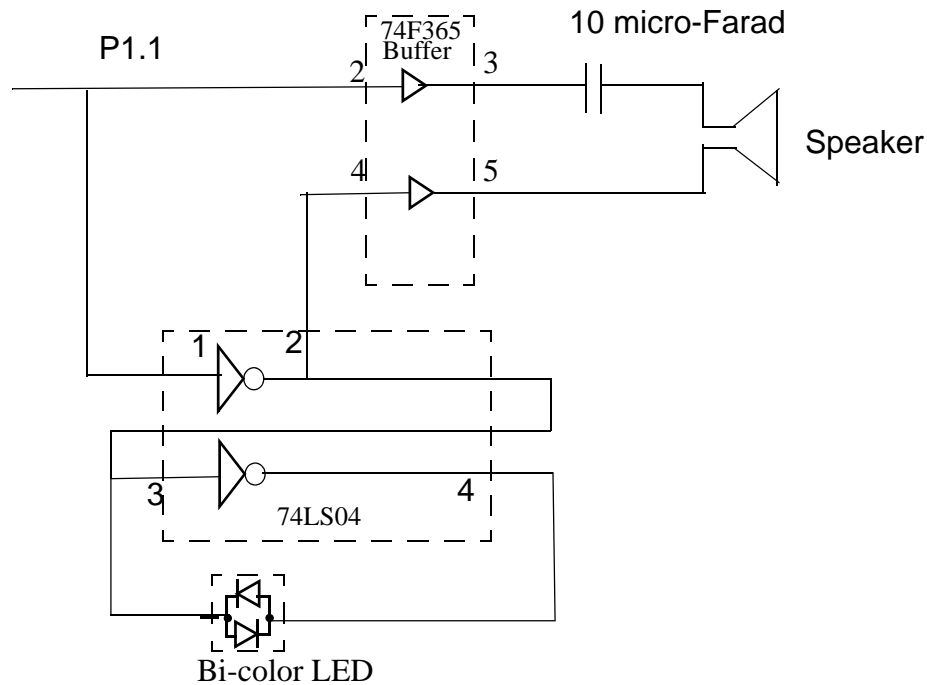
Part A:

- 1: Set *PCA_start* to 1000.
- 2: Change the **PulseWidth** and observe the effect on the LED.

At one extreme limit of the pulsewidth, the LED will be mostly green in color and at the other extreme, it will be mostly red in color. Explain this behavior.

Part B:

- 1: Set *Pulsewidth* to 1000.
- 2: Change *PCA_start*. Listen to the frequency of the speaker output .



Improper Circuit: Do not try this at home !