LAB #7: Frequency Measurement

Lab writeup is due to your TA at the beginning of your next scheduled lab. Don’t put this off to the last minute! There is pre-lab work to complete before the start of the next lab. **NO LATE LAB REPORTS WILL BE ACCEPTED.**

1 Objectives

- To gain experience using input capture and output compare to measure an input signal’s frequency.

2 Reading

- Read Chapter 6 on timing generation and measurements.

3 Prelab

1. Write assembly code for a program that measures the frequency of a square wave. After each frequency measurement, it should transmit the measurement out the serial port. You may use lab 2 assembly code for this purpose.

4 Lab Tasks

1. Use a frequency generator to test your frequency measurement code.

5 Writeup

Include the following items. In this lab, only one writeup per team is required.

1. A printout of your assembly code.