

Lab 2 Report

Topics and Questions

ECE341, University of Idaho

Spring 2015

The following apply only to the report for Lab 2:

- In the testing and verification section:

- Include and complete a table similar to the one below. Use the oscilloscope to measure the delay period (*not* the stopwatch tool). Comment on any error between the desired and the measured value for both the software and hardware-assisted delay. Identify potential sources of the error (regardless if there is any significant error).

Desired Delay	Measured Delay (Software)	Measured Delay (Hardware)
1 ms		
10 ms		
100 ms		
1000 ms		

- In the conclusion of your report:

- Under what circumstances might you use the software-only delay instead of the hardware-assisted delay? Conversely, when might you use the hardware-assisted delay over the software-only one?
- What are the advantages and disadvantages with both types of delays?
- Address the limitations of each delay: What is the smallest length of time you can delay with the two types of delays? What is the longest length of time you can delay for both types?
- Describe potential method(s) that could be used to increase the maximum delay period for both the software-only and the hardware-assisted delay methods.