

## **Pre-Lab 3 – Program through ETS and Toggle IO Test**

### **Part I – Write CONFIG Registers**

In this lab, we will perform a toggle I/O test on the pic16f883 using the program you wrote in Lab 2. We will need to write this program to the program memory of the device through the test application. Review the PIC16F88X Memory Programming Specification document to understand the commands that must be passed to the device serially through the ICSPCLK (RB6) and ICSPDAT (RB7) pins.

For part I, we will attempt to successfully enter Program/Verify mode on the PIC, and to write to the two CONFIG registers. Review the CONFIGURATION WORD 1 and CONFIGURATION WORD 2 register definitions in the Memory Programming Specification document (Register 4-1 and 4-2), and determine what values should be written to these registers. Review Figure 3-19 on the steps for writing to the CONFIG registers. You can skip the steps for writing to and reading/verifying the User ID fields, but you should read/verify both CONFIG registers. Fill out the attached form to indicate the sequence of commands that should be sent over ICSPDAT to write to each CONFIG register and read back each value to verify that it was written correctly. Submit this form at the beginning of lab on Wednesday, March 23.

**Due: Wednesday, March 23, 2016**

Use as many lines as needed.

[illegible]