EECS 2032

Lab 11 Fall 2020

In this lab, you will learn how to use MCUXpresso to write, compile and debug a simple project that runs on the LPC802 OM4000 board. Also you will write your first projects that toggles some LED's and read input data from a switch.

PreLab

Before the start of the lab you have to

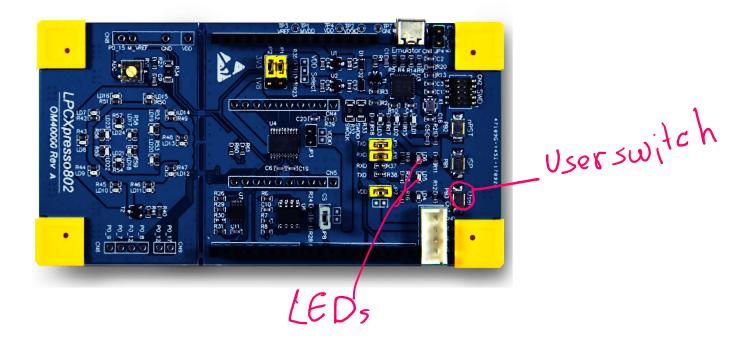
- Install MCUXpresso tool on your laptop
- Watch the two videos on the Eclass course site
- The user manual, the data sheet and the schematic diagram are posted on the lab site for your convenience.
- Read the interrupt part of the slides

LAB

Write, test and debug a program that does the following

Start with the green LED ON

Every time you push (and release) the Uer button the green LED changes its state $(ON \rightarrow OFF \rightarrow ON \text{ and so on})$



Submission

The code and the report are submitted to LAB11 as usual

The code is lab11_LED.c

The report is lab10_report in PDF format, no word file will be opened for marking

About 1 min video showing you demo the problem, note there is a limit on the file size you can upload on eclass, be very brief. If you want, you can upload it to youtube and submit the link

Report Format

The report should contain the following sections

- 1. Name and lab number on the front page
- 2. Problem statement in your own words
- 3. The code as submitted in lab10_LED.c
- 4. Design approach, this is basically how did you solve the problem, it could be pseudo code, FSM, or flow chart.
- 5. Any comments/difficulties/surprises if you had any