

Lab 10- LCD Module

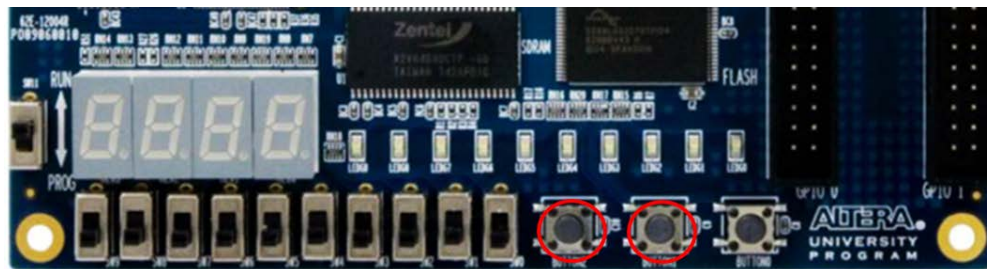
The purpose of this lab is to exercise the LCD module.

Lab 10.1:

Display Characters on LCD.

Display “IECS Digital...” on the 1st line, and “System Design...” on the 2nd line of LCD module.

- Use Button1 as an active-low asynchronous reset, such that LCD displays nothing when pressed.
- When Button2 is pressed, show the designate characters on LCD.

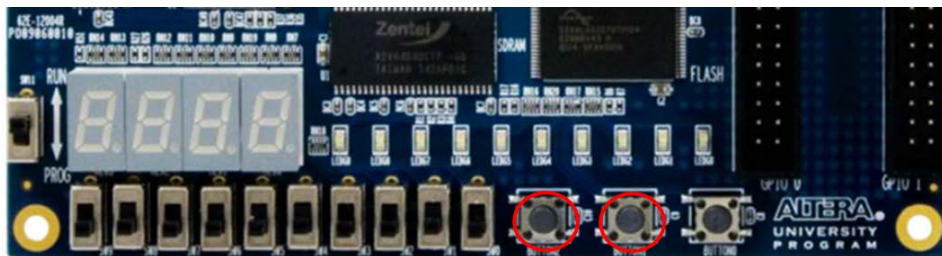


show resetn

Lab 10.2:

Display your student ID back-and-forth on LCD.

- Use Button1 as an active-low asynchronous reset, such that LCD displays nothing when pressed.
- When Button2 is pressed, show your student ID back-and-forth on the 1st line of LCD.



Show& resetn
shift ID

Lab-report:

Submit a lab report on **ilearn** by 11:00pm the day before of next lab. (The lab report must be a **PDF** file.) Your Lab report should include the following items:

- 1) VHDL design for displaying characters on LCD.
- 2) VHDL design for displaying student ID on LCD.
- 3) Observations and comments.