

EECS355 Mini-project 1: LCD Display

Description:

In this mini-project, you will use the included zip file, “de2lcd”, to gain a better understanding of how the LCD screen on the DE2 board functions. The following state diagram shown in Figure 1 is used to initialize the LCD screen for printing.

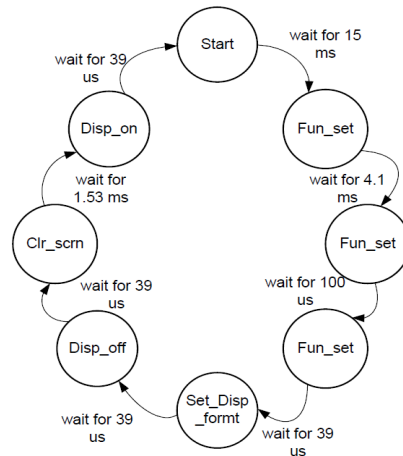


Figure 1 Initialization State Diagram.

After the initialization is performed, you can place the HEX values of the ASCII code on the data bus and use the control signals, LCD_E, LCD_RS, and LCD_RW, to write out the characters one by one onto the LCD.

Things to do:

- 1) Modify the default message that prints out on the LCD screen.
- 2) Add an additional input to the design that causes the message to print one message when the input signal is high and a different message when the input signal is low.