

ECE 4175

Project Seven

Scrolling SSN Display

Complete by:
Wednesday February 20th for an A+

References:
Chapter 15 1-Wire Interface
Chapter 10 Rotary Pulse Generator

Preamble

You might begin in the lab this week by compiling and running the two template files SSN.c and RPG.c (available for download from the www.qwikandlow.com website). These are the two files that you will merge together for this project.

Overview

For this project, you will merge two template files together to produce a display of the sixteen hex character “silicon serial number” of the Qwik&Low board on the LCD display, eight characters at a time. When you first run your P7.c file, you should see the first eight characters of the SSN. Then for each CCW increment of the RPG, the characters should move to the left one position, bringing in a new rightmost character. When you have incremented CCW eight times, you will have reached the last eight characters. Further CCW increments of the RPG should produce no further change to the display.

CW increments of the RPG should produce the same effect, only in the opposite direction, moving the characters to the right.

Your code should sleep when it is not otherwise doing anything other than blinking the “Alive” LED every two seconds.