Dept. of Computer Science and Engineering
CSE3201 – Digital Logic Design
Lab 5
Running Maximum and Minimum

In this lab you will design, implement, and test a binary a circuit that keep track of the maximum and minimum values of the input.

Specifications

- The circuit receives a sequence of binary numbers.
- The numbers are between +127 to -128
- The numbers are represented in a 2's complement format and entered using the positional switches SW7 ... SW0 with SW7 is the MSB.
- The running maximum and minimum numbers are displayed on the 7-segment displays in a signed hex format (three displays per number, one for the sign and two for the magnitude).
- The input is set using the switches, and KEY[0] is pushed down to indicate that the number is ready for processing

Pre-Lab Work

Complete your design using Verilog, show the program to the TA before starting

Lab report
See the guidelines for the lab report on the Lab section of the course web page. In your report you have to justify the design decisions you made in your design.