

ELC 2137 Lab #8: 4-digit display

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March 26, 2020

Summary

In lab 8, the previous 2 digit, 7 segment display was expanded into a 4 digit display with the ability to switch between hexadecimal and decimal output. Using the sseg_decoder, bcd11 and add3 from previous labs, code a 4-input mux, anode decoder, and a four digit driver which was added individually. This was then connected to the basys3 board and tested through sseg4_manual module. The goal of this lab was for switch 15 to change which digit lights up either displaying the first or second position. The 14th switch controlled the sign of the number and displayed a negative when turned on. The other switches were used to change the digits and provide a decimal number large enough to be displayed in four place holders.

Q&A

Answer questions posed in the lab assignment here.

Results

In this section, put your simulation waveforms, results tables, pictures of hardware, and any other required items.

Code

Include all of the code you wrote or modified here.