

ELC 2137 Lab 04: Subtractor

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Summary

In this lab, it is to compare various implementations of a two-bit adder/subtractor. This is a relatively simple circuit that has sufficient complexity to highlight some important aspects of digital circuit design.

Q&A

1. Why did we use two full adders instead of a half adder and a full adder?
2. How many input combinations would it take to exhaustively test the adder/subtractor?
3. Why were the combinations given in the truth table chosen?
4. Do the results from your adder/subtractor match what you would expect from theory? Explain any discrepancies.

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.