

F4 - Logic Circuit Design Exercises

2nd Semester, 2008

Lab 1

Ben A. Abderazek
The University of Aizu
E-mail:benab@u-aizu.ac.jp

<p>Release Date: Oct. 1st, 2008 Due Date : Oct. 8st, 2008</p>

1 Objective

In this lab, you will learn how to design logic circuits using Cadence *icds* schematic tool.

2 Introduction to Cadence design tool

Read the following tutorial about Cadence tool:

<http://www.u-aizu.ac.jp/~benab/classes/cs/doc/cadence/>

3 Exercise 1-1: Create circuit schematic

Design the circuit shown in Fig. 1 with Cadence *icds* design tool.

4 Exercise 1-2: Create circuit symbol

Create the symbol for the circuit you designed in Exercise 1-1. Refer to Figure 2.

5 Exercise 1-3: Create circuit schematic

Create the circuit shown in Fig 3.

6 Exercise 1-4: Create circuit symbol

Create the symbol for the circuit you designed in Exercise 1-3. Refer to Figure 4

7 Submission procedure and Deadline

Your report should be prepared in English and should contain the following:

1. Your name, your ID and the Lab #.

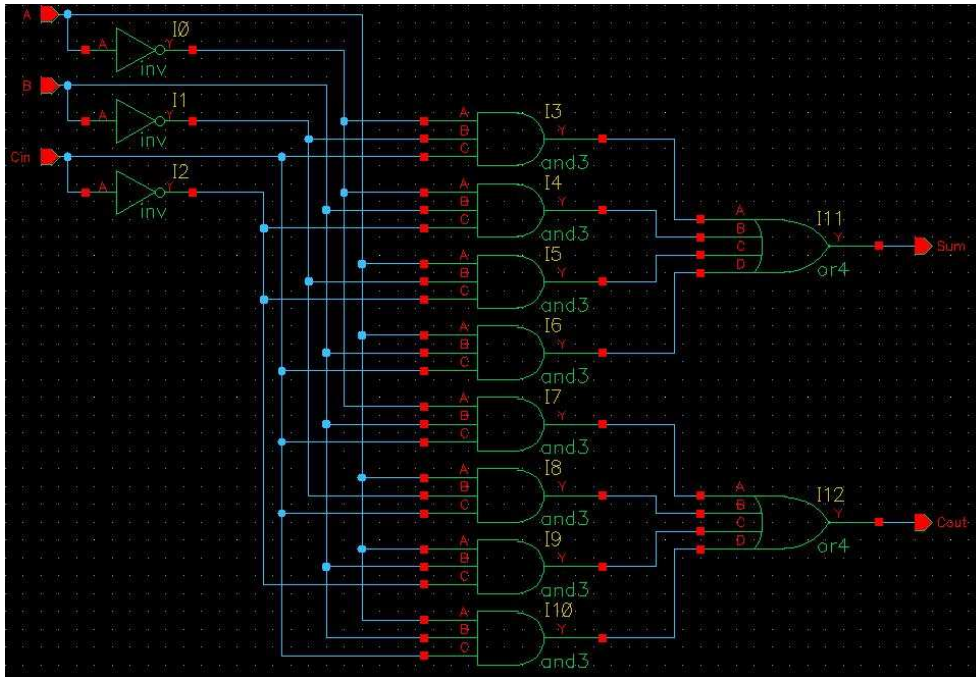


Figure 1: Circuit 1-1.



Figure 2: Symbol for circuit 1-1.

2. All schematics
3. Submission format: Hard copy.

References

- [1] Hiroshi Saito, Logic Circuit Design Web page, 2008.

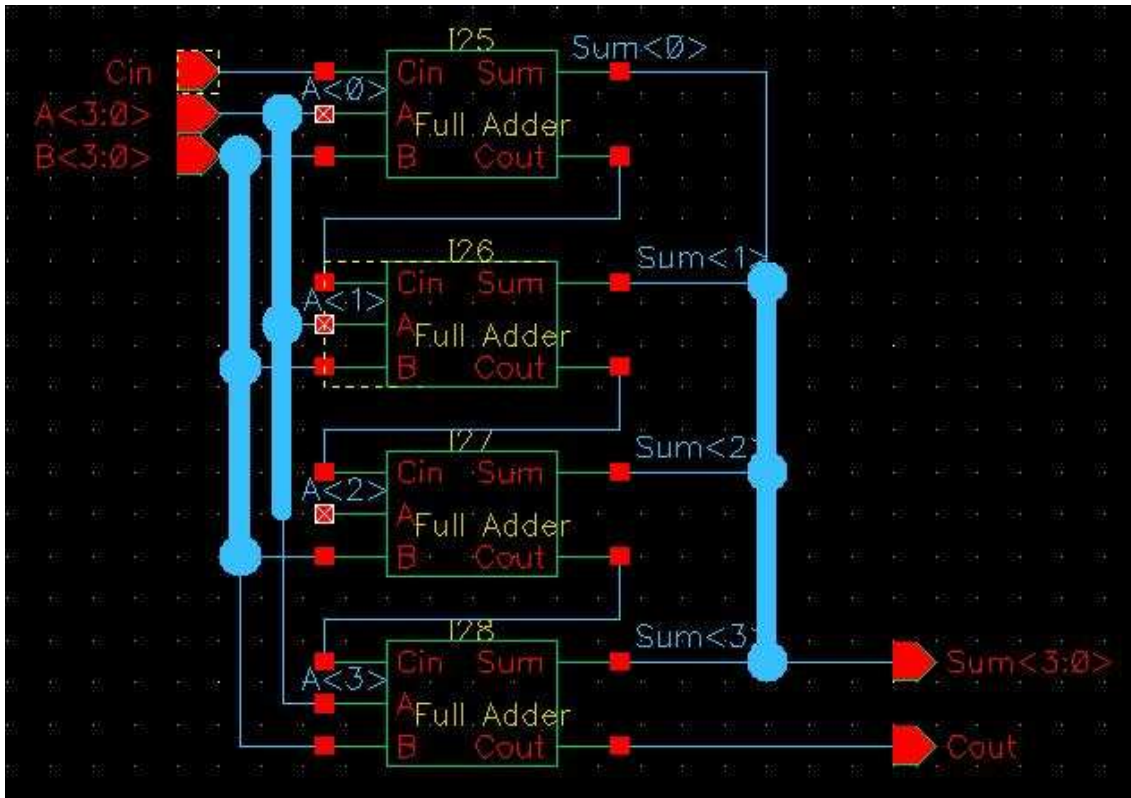


Figure 3: Circuit 1-3.



Figure 4: Symbol for circuit 1-3.