Politecnico di Torino

Projects and Laboratory on Communication Systems

Inventory Management System

Project Report

Authors:

Andreas Hølleland, Marcus Alexander Tjomsaas

June 18, 2022

Contents

CHAPTER 1

ChapterName

1.1 Section

We can insert and reference figures and stuff, look at the figure 1.1-A.

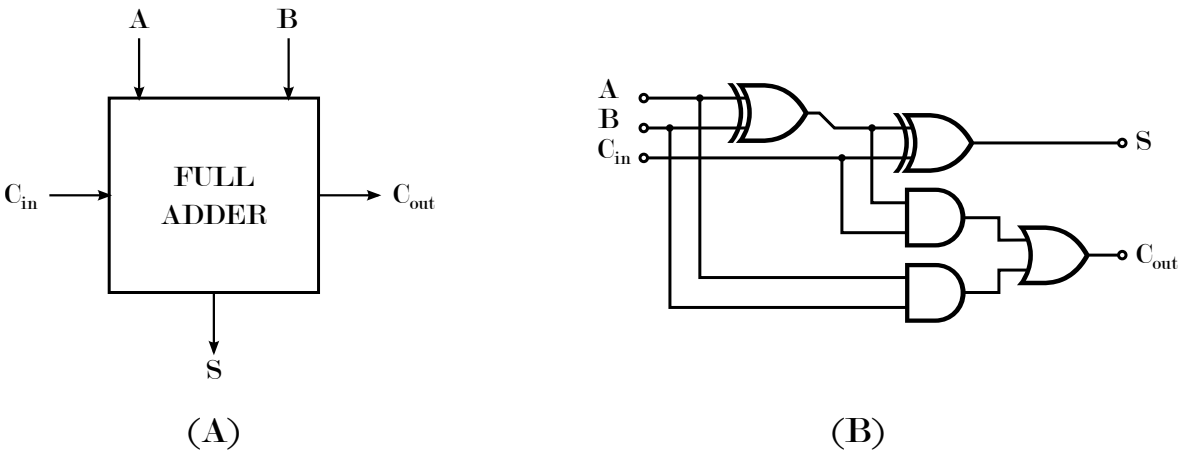

Figure 1.1: This is a caption for the figure

We can also make and reference tables, look at the table 1.1.

A B Cin	S	Cout
0 0 0	0	0
1 0 0	1	0
0 1 0	1	0
1 1 0	0	1
0 0 1	1	0
1 0 1	0	1
0 1 1	0	1
1 1 1	1	1

Table 1.1: Truth table of a 1-bit full adder.

We can also write equations and stuff, like equations 1.1 and 1.2

$$S = A \oplus B \oplus C_{in} \tag{1.1}$$

$$C_{out} = AB + C_{in}(A \oplus B) \tag{1.2}$$

1.1.1 SubSection

We can read data from a file with verbatiminput:

```
Reference layout = planar_full_adder.svg
Number of layers = 1
Total number of magnets = 150
Clock zones = 5
Width [nm] = 2080
Number of vertical magnets =       11
Height [nm] = 1300
Area [nm2] = 2704000
Area [um2] = 2.704000
########### Cu wire case ############
Wire 1 resistance [Ohm] = .26010000000000000000
Wire 2 resistance [Ohm] = .32500000000000000000
Power consumption for one layer [W] = .00000526590000000000
Total power consumption [W] = .00001053180000000000
########### Ta wire case ############
Wire 1 resistance [Ohm] = 81.12642857142857142857
Wire 2 resistance [Ohm] = 101.36904761904761904761
Power consumption for one layer [W] = .00002919927619047619
Total power consumption [W] = .00005839855238095238
```

Beryyy info:

- Delay = 3 clock cycles;
- Area = 2.7 μm^2;
- Power = 10.53 μW.

1.2 Another Section

This is another section with stuff.

……

……

…