

ECE 424 – INTRODUCTION TO VLSI DESIGN + LAB

LABORATORY WORK 4

In this laboratory work, we will design logic circuits by using CMOS logic gates that we had constructed last week.

- 1) Design a circuit that gives the output $f = (A' + B') + (A' \cdot B)$. While you are designing that circuit, use hierarchy blocks.
- 2) A Karnaugh map is given in Figure 1. Try to find the output function of that Karnaugh map and construct a logic circuit which has the same characteristic with the map that is given in Figure 1. Don't forget to use hierarchy blocks.

		A	
		0	1
B C	0 0	0	0
	0 1	1	1
	1 1	0	1
	1 0	0	1

Figure 1

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