EECE 144
Fall 2011

Lab Report #7
Section 4
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Signature	Printed Name	Date
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1   Description/Objectives

2   Procedure

$$J(w, x, y, z) = \sum m(1, 3, 9, 11, 12, 13, 14, 15) \tag{1}$$

$$K(w, x, y, z) = \sum m(0, 1, 3, 12, 14) \tag{2}$$

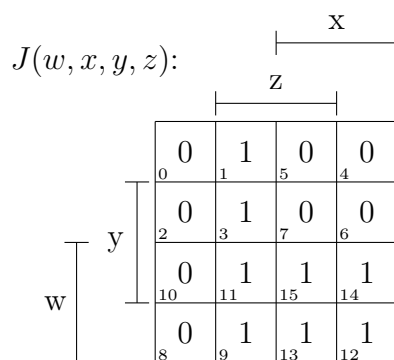Figure 1: Karnaugh Map of function J (Equation 1).

Index	w	x	y	z	J
0	0	0	0	0	0
1	0	0	0	1	1
2	0	0	1	0	0
3	0	0	1	1	1
4	0	1	0	0	0
5	0	1	0	1	0
6	0	1	1	0	0
7	0	1	1	1	0
8	1	0	0	0	0
9	1	0	0	1	1
10	1	0	1	0	0
11	1	0	1	1	1
12	1	1	0	0	1
13	1	1	0	1	1
14	1	1	1	0	1
15	1	1	1	1	1

Table 1: Truth table of function J (Equation 1).
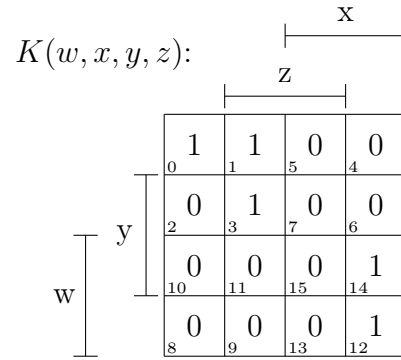
Figure 2: Karnaugh Map of function K (Equation 2).

3 Observations

4 Conclusion

Index	w	x	y	z	K
0	0	0	0	0	1
1	0	0	0	1	1
2	0	0	1	0	0
3	0	0	1	1	1
4	0	1	0	0	0
5	0	1	0	1	0
6	0	1	1	0	0
7	0	1	1	1	0
8	1	0	0	0	0
9	1	0	0	1	0
10	1	0	1	0	0
11	1	0	1	1	0
12	1	1	0	0	1
13	1	1	0	1	0
14	1	1	1	0	1
15	1	1	1	1	0

Table 2: Truth table of function K (Equation 2).