

Sistemas Digitais

03/11/2018 - P

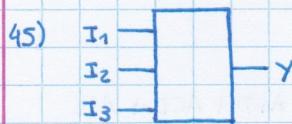
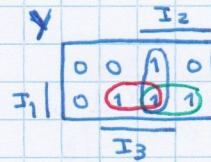


Tabela de verdade

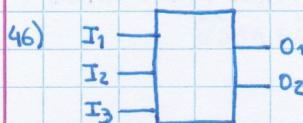
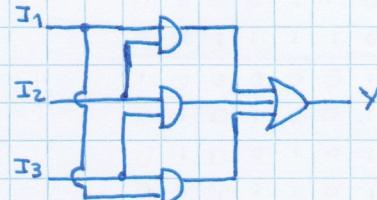
I_1	I_2	I_3	Y
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	1
1	1	1	1

Mapa de Karnaugh

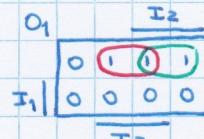


$$Y = I_2 \cdot I_3 + I_1 \cdot I_2 \\ + I_1 \cdot I_3$$

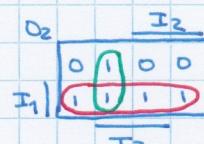
Planta de montagem



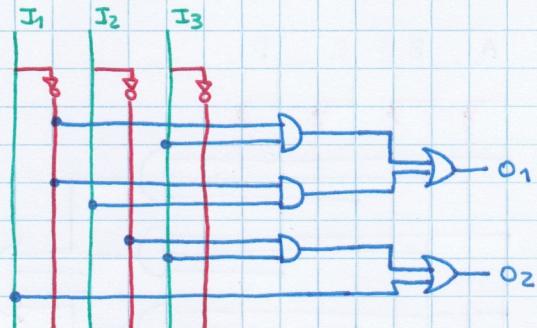
I_1	I_2	I_3	O_1	O_2
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	0
1	0	0	0	1
1	0	1	0	1
1	1	0	0	1
1	1	1	0	1



$$O_1 = \overline{I}_1 \cdot I_3 \\ + \overline{I}_1 \cdot I_2$$

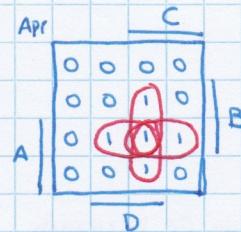


$$O_2 = I_1 + \overline{I}_2 \cdot I_3$$

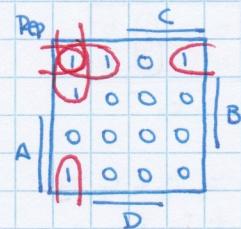




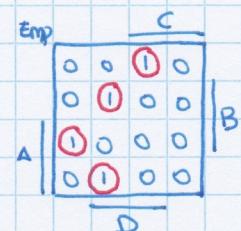
A	B	C	D	Apr	Emp	Rep
0	0	0	0	0	0	1
0	0	0	1	0	0	1
0	0	1	0	0	1	1
0	0	1	1	0	1	0
0	1	0	0	0	0	1
0	1	0	1	0	1	0
0	1	1	0	0	1	0
0	1	1	1	1	0	0
1	0	0	0	0	0	1
1	0	0	1	0	1	0
1	0	1	0	0	1	0
1	0	1	1	1	0	0
1	1	0	0	0	1	0
1	1	0	1	1	0	0
1	1	1	0	1	0	0
1	1	1	1	1	1	0



$$Apr = BCD + ABD + ACD + ABC$$



$$Rep = \bar{B}\bar{C}\bar{D} + \bar{B}\bar{A}\bar{D} + \bar{A}\bar{C}\bar{D} + \bar{B}\bar{A}\bar{C}$$



$$Emp = \bar{A}\bar{B}\bar{C}\bar{D} + \bar{A}\bar{B}\bar{C}D + \bar{A}\bar{B}C\bar{D} + A\bar{B}\bar{C}\bar{D} + A\bar{B}C\bar{D} + ABC\bar{D}$$

