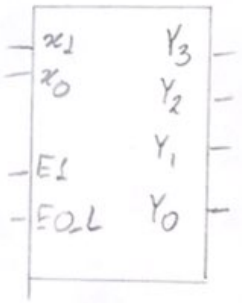
Guião 6 Parte I

1

2:4 decoder



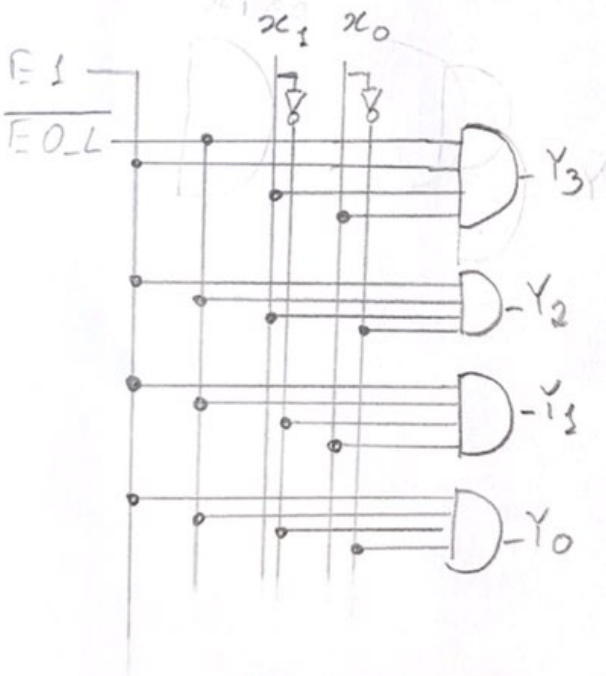
ES	EO_L	x_1	x_0	Y_3	Y_2	Y_1	Y_0
0	1	não coalisão					
1	0	0	0	0	0	0	1
		0	1	0	0	1	0
		1	0	0	1	0	0
		1	1	1	0	0	0

$$Y_3 = ES \times \overline{EO\_L} \times x_1 \times x_0$$

$$Y_2 = ES \times \overline{EO\_L} \times x_1 \times \overline{x_0}$$

$$Y_1 = ES \times \overline{EO\_L} \times \overline{x_1} \times x_0$$

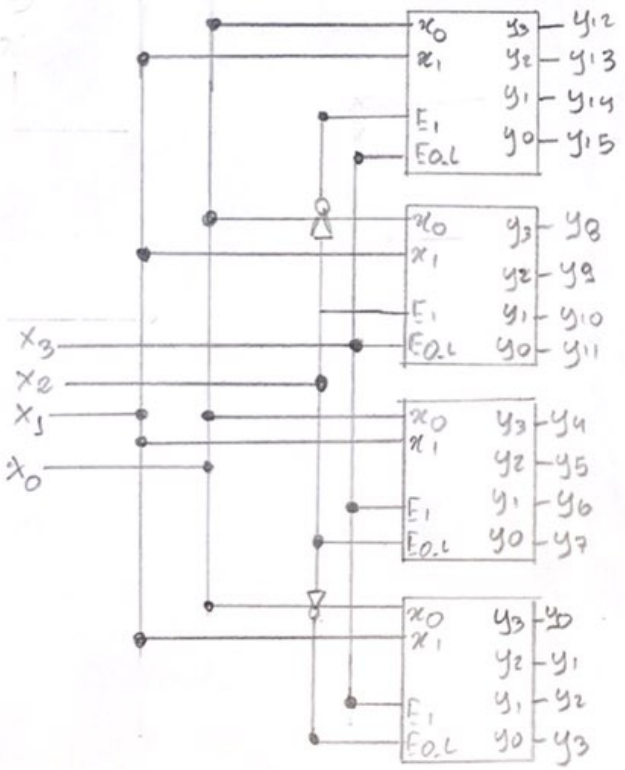
$$Y_0 = ES \times \overline{EO\_L} \times \overline{x_1} \times \overline{x_0}$$



5.

4:16 usando 2:4

x_3	x_2	x_1	x_0	y_{15}	y_{14}	y_{13}	y_{12}	y_{11}	y_{10}	y_9	y_8	y_7	y_6	y_5	y_4	y_3	y_2	y_1	y_0
0	0	0	0																1
		0	1															1	
		1	0														1		
		1	1													1			
	1	0	0												1				
		0	1											1					
		1	0										1						
		1	1									1							
1	0	0	0								1								
		0	1							1									
		1	0						1										
		1	1					1											
	1	0	0				1												
		0	1			1													
		1	0		1														
		1	1	1															



1) Pont II

$f(A,B,C,D) = \overline{A} \times B \times C + A \times D + A \times C$

CD \ AB	00	01	11	10
00	0	1	3	2
01	4	5	1	1
11	12	1	1	1
10	8	1	1	1

(C: 00, 01, 11, 10 — D: 00, 01, 11, 10 — A: 11, 10 — $\overline{B}$: 11, 10)

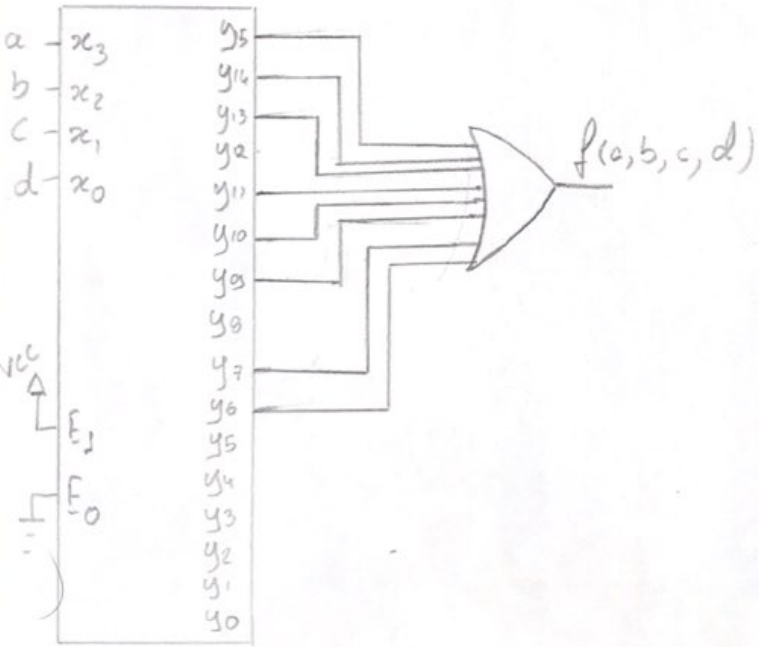
$= (A \times D) + (A \times C) + (B \times C)$

$f(A,B,C,D) = \sum m(6,7,9,10,11,13,14,15) = (...)$

$= (A \times D) + (A \times C) + (B \times C)$

2)

(mo quentus tive de colocar um mof antes de Saída pq?)



E_L	x_7	x_6	x_5	x_4	x_3	x_2	x_1	x_0	Y_2	Y_1	Y_0	OS_L	
	1	X	X	X	X	X	X	X	1	1	1	0	
	0	1	X	X	X	X	X	X	1	1	0	0	
	0	0	1	X	X	X	X	X	1	0	1	0	
	0	0	0	1	X	X	X	X	1	0	0	0	
	0	0	0	0	1	X	X	X	0	1	1	0	
	0	0	0	0	0	1	X	X	0	1	0	0	
	0	0	0	0	0	0	1	X	0	0	1	0	
	0	0	0	0	0	0	0	1	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	1	← Erro
1	X	X	X	X	X	X	X	X	0	0	0		← N funciona

$H_7 = x_7$

$H_6 = \overline{x_7} \cdot x_6$

$H_5 = \overline{x_7} \cdot \overline{x_6} \cdot x_5$

$H_4 = \overline{x_7} \cdot \overline{x_6} \cdot \overline{x_5} \cdot x_4$

$H_3 = \overline{x_7} \cdot \overline{x_6} \cdot \overline{x_5} \cdot \overline{x_4} \cdot x_3$

$H_2 = \overline{x_7} \cdot \overline{x_6} \cdot \overline{x_5} \cdot \overline{x_4} \cdot \overline{x_3} \cdot x_2$

$H_1 = \overline{x_7} \cdot \overline{x_6} \cdot \overline{x_5} \cdot \overline{x_4} \cdot \overline{x_3} \cdot \overline{x_2} \cdot x_1$

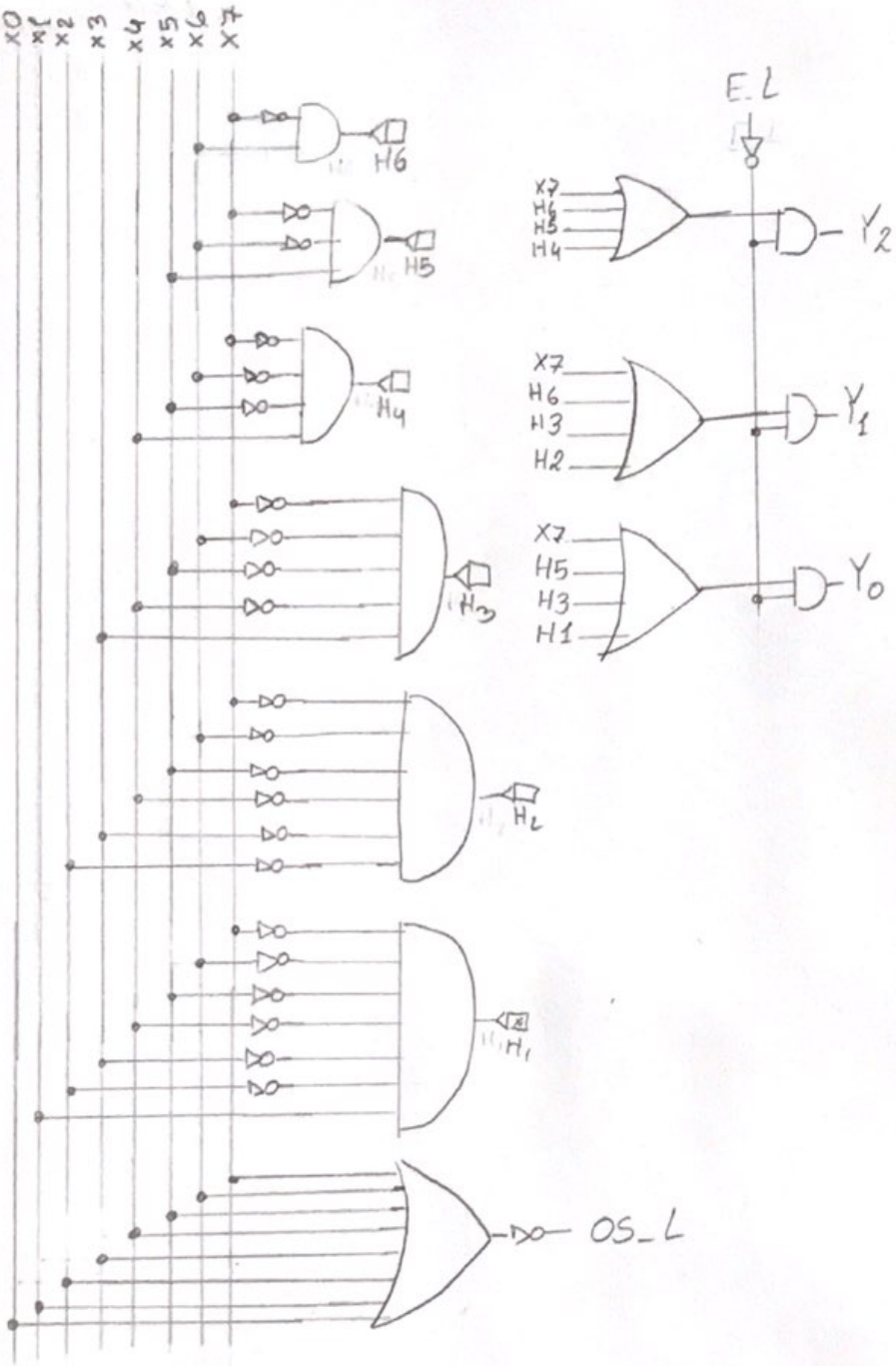
$H_0 = \overline{x_7} \cdot \overline{x_6} \cdot \overline{x_5} \cdot \overline{x_4} \cdot \overline{x_3} \cdot \overline{x_2} \cdot \overline{x_1} \cdot x_0$

$y_2 = H_7 + H_6 + H_5 + H_4$

$y_1 = H_7 + H_6 + H_3 + H_2$

$y_0 = H_7 + H_5 + H_3 + H_1$

$OS\_L = (\overline{x_0 + x_1 + x_2 + x_3 + x_4 + x_5 + x_6 + x_7}) + EL$


x0
x1
x2
x3
x4
x5
x6
x7
H6
H5
H4
H3
H2
H1
E_L
X7
H6
H5
H4
Y2
X7
H6
H3
H2
Y1
X7
H5
H3
H1
Y0
OS_L