

#	Código				Saídas			
	A	B	C	D	S3	S2	S1	S0
0	0	0	0	0	0	0	0	1
1	0	0	0	1	0	0	1	0
2	0	0	1	0	0	0	1	1
4	0	1	0	0	0	1	0	0
5	0	1	0	1	0	1	0	1
6	0	1	1	0	0	1	1	0
8	1	0	0	0	0	1	1	1
9	1	0	0	1	1	0	0	0
10	1	0	1	0	1	0	0	1
13	1	1	0	1	0	0	0	0

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CD	AB			
	00	01	11	10
00	0	4	12	8
01	1	5	13	9
11	3	7	15	11
10	2	6	14	10

CD		S3			
		AB		11	10
		00	01		
00				X	
01					1
11	X	X	X	X	X
10				X	1

		S2			
		AB	01	11	10
CD	00		1	X	1
	01		1		
	11	X	X	X	X
	10		1	X	

		S1			
		AB		11	10
CD	00			X	1
	01	1			
	11	X	X	X	X
	10	1	1	X	

		S0			
		AB			
		00	01	11	10
CD	00	1		X	1
	01		1		
	11	X	X	X	X
	10	1		X	1

MIN TERMOS S3

- 1 $A\bar{B}D$
- 2 AC

MIN TERMOS S2

- 1 $\bar{A}B$
- 2 $A\bar{C}\bar{D}$

MIN TERMOS S1

- 1 $\bar{A}C$
- 2 $\bar{A}\bar{B}D$
- 3 $A\bar{C}\bar{D}$

MIN TERMOS S0

- 1 $\bar{A}BD$
- 2 $\bar{B}\bar{D}$

$$\begin{aligned}
 S3(A, B, C, D) &= A\bar{B}.D + A.C \\
 S2(A, B, C, D) &= \bar{A}.B + A.\bar{C}.\bar{D} \\
 S1(A, B, C, D) &= \bar{A}.C + \bar{A}.\bar{B}.D + A.\bar{C}.\bar{D} \\
 S0(A, B, C, D) &= \bar{A}.B.D + \bar{B}.\bar{D}
 \end{aligned}$$