www.32x8.com

SUM of PRODUCTS

Map

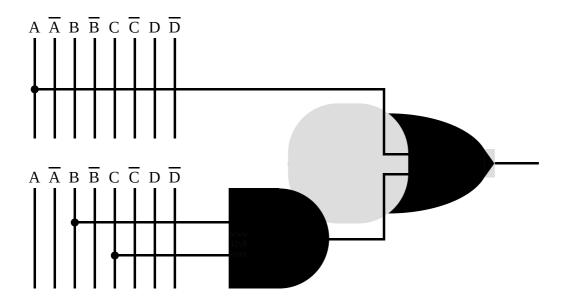|	$\overline{C}.\overline{D}$	$\overline{C}.D$	C.D	C.$\overline{D}$
$\overline{A}.\overline{B}$	0	0	0	0
$\overline{A}.B$	0	x	1	1
A.B	x	x	x	x
A.$\overline{B}$	1	1	x	x

Map Layout

	$\overline{C}.\overline{D}$	$\overline{C}.D$	C.D	C.$\overline{D}$
$\overline{A}.\overline{B}$	0	1	3	2
$\overline{A}.B$	4	5	7	6
A.B	12	13	15	14
A.$\overline{B}$	8	9	11	10

Groups

(8,9,10,11,12,13,14,15)	A
(6,7,14,15)	B.C

y = A + BC

Truth Table

	A	B	C	D	Y
0	0	0	0	0	0
1	0	0	0	1	0
2	0	0	1	0	0
3	0	0	1	1	0
4	0	1	0	0	0
5	0	1	0	1	x
6	0	1	1	0	1
7	0	1	1	1	1
8	1	0	0	0	1
9	1	0	0	1	1
10	1	0	1	0	x
11	1	0	1	1	x
12	1	1	0	0	x
13	1	1	0	1	x
14	1	1	1	0	x
15	1	1	1	1	x