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PRODUCT of SUMS

Map

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

Map Layout

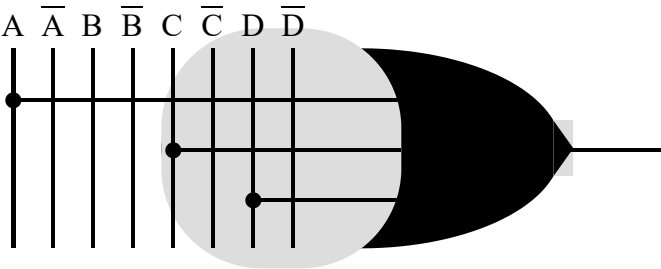|	$\overline{C}.\overline{D}$	$\overline{C}.D$	$C.D$	$C.\overline{D}$
$\overline{A}.\overline{B}$	0	1	3	2
$\overline{A}.B$	4	5	7	6
$A.B$	12	13	15	14
$A.\overline{B}$	8	9	11	10

Groups

(0,4)	$\overline{A}.\overline{C}.\overline{D}$

$$\overline{y} = \overline{A}.\overline{C}.\overline{D}$$

$$\overline{\overline{y}} = \overline{\overline{A}.\overline{C}.\overline{D}}$$

$$y = (A + C + D)$$

Truth Table

	A	B	C	D	Y
0	0	0	0	0	0
1	0	0	0	1	x
2	0	0	1	0	x
3	0	0	1	1	x
4	0	1	0	0	0
5	0	1	0	1	1
6	0	1	1	0	1
7	0	1	1	1	1

8	1	0	0	0	1
9	1	0	0	1	x
10	1	0	1	0	x
11	1	0	1	1	x
12	1	1	0	0	1
13	1	1	0	1	1
14	1	1	1	0	1
15	1	1	1	1	1