www.32x8.com

SUM of PRODUCTS

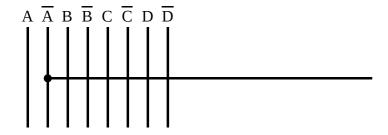### Map

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

(0,1,2,3,4,5,6,7)	$\overline{A}$

y = A'

Truth Table

	A	B	C	D	Y
0	0	0	0	0	x
1	0	0	0	1	x
2	0	0	1	0	x
3	0	0	1	1	x

4	0	1	0	0	x
5	0	1	0	1	x
6	0	1	1	0	1
7	0	1	1	1	1
8	1	0	0	0	0
9	1	0	0	1	0
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