www.32x8.com

# **SUM of PRODUCTS**

## Map

	$\overline{\mathrm{C.D}}$	$\overline{\mathrm{C}}.\mathrm{D}$	C.D	$C.\overline{D}$
$\overline{A}.\overline{B}$	X	0	0	0
$\overline{\mathbf{A}}.\mathbf{B}$	0	1	1	0
A.B	X	X	0	0
$A.\overline{B}$	X	0	X	0

### **Map Layout**

	$\overline{\mathrm{C.D}}$	$\overline{\mathrm{C}}.\mathrm{D}$	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

$$(5,7)$$
  $\overline{A}.B.D$ 

$$y = A'BD$$

$$A \overline{A} B \overline{B} C \overline{C} D \overline{D}$$

www. 32x8 .com

#### **Truth Table**

	A	В	C	D	Y
0	0	0	0	0	X

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	1
6	0	1	1	0	0
7	0	1	1	1	1
8	1	0	0	0	X
9	1	0	0	1	0
10	1	0	1	0	0
11	1	0	1	1	X
12	1	1	0	0	X
13	1	1	0	1	X
14	1	1	1	0	0
15	1	1	1	1	0

© 2014-2022