

www.32x8.com

**SUM of PRODUCTS****Map**

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

**Map Layout**

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

(1,5,9,13)	$\overline{C}.D$
(5,7,13,15)	$B.D$
(0,1)	$\overline{A}.\overline{B}.\overline{C}$
(2,10)	$\overline{B}.C.\overline{D}$
(12,13)	$A.B.\overline{C}$

$$y = C'D + BD + A'B'C' + B'CD' + ABC'$$

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

www.  
32x8  
.com

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

www.  
32x8  
.com

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

www.  
32x8  
.com



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

www.  
32x8  
.com

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

www.  
32x8  
.com

Truth Table

	A	B	C	D	Y
0	0	0	0	0	1
1	0	0	0	1	1
2	0	0	1	0	1
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	0
9	1	0	0	1	1
10	1	0	1	0	1
11	1	0	1	1	x
12	1	1	0	0	1

13	1	1	0	1	x
14	1	1	1	0	0
15	1	1	1	1	1

© 2014-2022