

SUM of PRODUCTS

Map

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

Map Layout

	$\overline{D}.\overline{E}.\overline{F}$	$\overline{D}.\overline{E}.F$	$\overline{D}.E.\overline{F}$	$\overline{D}.E.F$	$D.\overline{E}.\overline{F}$	$D.\overline{E}.F$	$D.E.\overline{F}$	$D.E.F$
$\overline{A}.\overline{B}.\overline{C}$	0	1	3	2	4	5	7	6
$\overline{A}.\overline{B}.C$	8	9	11	10	12	13	15	14
$\overline{A}.B.\overline{C}$	24	25	27	26	28	29	31	30
$\overline{A}.B.C$	16	17	19	18	20	21	23	22
$A.\overline{B}.\overline{C}$	32	33	35	34	36	37	39	38
$A.\overline{B}.C$	40	41	43	42	44	45	47	46
$A.B.\overline{C}$	56	57	59	58	60	61	63	62
$A.B.C$	48	49	51	50	52	53	55	54

Groups

(17,19,25,27,49,51,57,59)	$B.\overline{D}.F$
(41,43,57,59)	$A.C.\overline{D}.F$

y = BD'F + ACD'F

A \overline{A} B \overline{B} C \overline{C} D \overline{D} E \overline{E} F \overline{F}



A \overline{A} B \overline{B} C \overline{C} D \overline{D} E \overline{E} F \overline{F}



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Truth Table

	A	B	C	D	E	F	Y
0	0	0	0	0	0	0	0
1	0	0	0	0	0	1	0
2	0	0	0	0	1	0	0
3	0	0	0	0	1	1	0
4	0	0	0	1	0	0	0
5	0	0	0	1	0	1	0
6	0	0	0	1	1	0	0
7	0	0	0	1	1	1	0
8	0	0	1	0	0	0	0
9	0	0	1	0	0	1	0
10	0	0	1	0	1	0	0
11	0	0	1	0	1	1	0
12	0	0	1	1	0	0	0
13	0	0	1	1	0	1	0
14	0	0	1	1	1	0	0
15	0	0	1	1	1	1	0
16	0	1	0	0	0	0	0
17	0	1	0	0	0	1	1
18	0	1	0	0	1	0	0
19	0	1	0	0	1	1	1
20	0	1	0	1	0	0	0
21	0	1	0	1	0	1	0
22	0	1	0	1	1	0	0
23	0	1	0	1	1	1	0
24	0	1	1	0	0	0	0
25	0	1	1	0	0	1	1
26	0	1	1	0	1	0	0
27	0	1	1	0	1	1	1
28	0	1	1	1	0	0	0
29	0	1	1	1	0	1	0
30	0	1	1	1	1	0	0
31	0	1	1	1	1	1	0

32	1	0	0	0	0	0	0
33	1	0	0	0	0	1	0
34	1	0	0	0	1	0	0
35	1	0	0	0	1	1	0
36	1	0	0	1	0	0	0
37	1	0	0	1	0	1	0
38	1	0	0	1	1	0	0
39	1	0	0	1	1	1	0
40	1	0	1	0	0	0	0
41	1	0	1	0	0	1	1
42	1	0	1	0	1	0	0
43	1	0	1	0	1	1	1
44	1	0	1	1	0	0	0
45	1	0	1	1	0	1	0
46	1	0	1	1	1	0	0
47	1	0	1	1	1	1	0
48	1	1	0	0	0	0	0
49	1	1	0	0	0	1	1
50	1	1	0	0	1	0	0
51	1	1	0	0	1	1	1
52	1	1	0	1	0	0	0
53	1	1	0	1	0	1	0
54	1	1	0	1	1	0	0
55	1	1	0	1	1	1	0
56	1	1	1	0	0	0	0
57	1	1	1	0	0	1	1
58	1	1	1	0	1	0	0
59	1	1	1	0	1	1	1
60	1	1	1	1	0	0	0
61	1	1	1	1	0	1	0
62	1	1	1	1	1	0	0
63	1	1	1	1	1	1	0