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Persamaan gerbang logika $DC + BC + AB$

1. Ubahlah persamaan diatas menjadi gerbang NAND

A	B	C	D	DC	BC	AB	X
0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0
0	0	1	0	0	0	0	0
0	0	1	1	1	0	0	1
0	1	0	0	0	0	0	0
0	1	0	1	0	0	0	0
0	1	1	0	0	1	0	1
0	1	1	1	1	1	0	0
1	0	0	0	0	0	0	0
1	0	0	1	0	0	0	0
1	0	1	0	0	0	0	1
1	0	1	1	1	0	1	1
1	1	0	0	0	0	1	1
1	1	0	1	0	0	1	1
1	1	1	0	0	1	1	1
1	1	1	1	1	1	1	1

b. Sop dan Pos

Keterangan : $DC = A$
 $BC = B$
 $AB = C$
 $X = X$

Tabel Kebenaran Minterm dan Maxterm

Max Value	A	B	C	X	
0	0	0	0	0	→ maxterm (A+B+C)
1	0	0	0	0	→ maxterm (A+B+C)
2	0	0	0	0	→ maxterm (A+B+C)
3	1	0	0	1	→ minterm (A'B'C')
4	0	0	0	0	→ maxterm (A+B+C)
5	0	0	0	0	→ maxterm (A+B+C)
6	0	1	0	1	→ minterm (A'BC')
7	1	1	0	1	→ minterm (ABC')
8	1	0	0	0	→ maxterm (A+B+C)
9	0	0	0	0	→ maxterm (A+B+C)
10	0	0	0	0	→ maxterm (A+B+C)
11	0	0	0	0	→ maxterm (A+B+C)
12	0	0	0	0	→ maxterm (A+B+C)
13	0	0	0	0	→ maxterm (A+B+C)
14	0	1	1	1	→ minterm (A'BC)
15	1	1	1	1	→ minterm (ABC)