Syntéza kombinačných logických obvodov

y = f(a,b,c) = (1100 1101)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| s | a | b | c | y |
| 0 | 0 | 0 | 0 | 1 |
| 1 | 0 | 0 | 1 | 1 |
| 2 | 0 | 1 | 0 | 0 |
| 3 | 0 | 1 | 1 | 0 |
| 4 | 1 | 0 | 0 | 1 |
| 5 | 1 | 0 | 1 | 1 |
| 6 | 1 | 1 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| y |  | b | bc | c |
|  | 1 | 0 | 0 | 1 |
| a | 1 | 0 | 0 | 1 |

MDNF:

y = !b + a\*c

NAND:

y = !!(!b + a\*c) = !(!!b \* !(a\*c)) = !(b \* !(a\*c))

MKNF:

y = (a + !b) \* (!b+c)

NOR:

y = !(!(a + !b) + !(!b+c))