

Q11 = 1
Tck = 0

A	B	C	D	F		
0	0	0	0	1	$\rightarrow a'b'c'd$	m_0
0	0	0	1	0		m_1
0	0	1	0	0		m_2
0	0	1	1	1	$\rightarrow a'b'cd$	m_3
0	1	0	0	0		m_4
0	1	0	1	1	$\rightarrow a'bc'd$	m_5
0	1	1	0	1	$\rightarrow a'bcd'$	m_6
0	1	1	1	0		m_7
1	0	0	0	0		m_8
1	0	0	1	1	$\rightarrow ab'c'd$	m_9
1	0	1	0	1	$\rightarrow ab'cd'$	m_{10}
1	0	1	1	0		m_{11}
1	1	0	0	1	$\rightarrow abc'd'$	m_{12}
1	1	0	1	0		m_{13}
1	1	1	0	0		m_{14}
1	1	1	1	1	$\rightarrow abcd$	m_{15}

bool value
selection

Sum of minterms $\Sigma (0, 3, 5, 6, 9, 10, 12, 15)$

Product of maxterm $\Pi (1, 2, 4, 7, 8, 11, 13, 14)$

$$F = a'b'c'd + a'b'cd + a'bc'd + a'bcd' + ab'c'd + ab'cd' + abc'd' + abcd$$

$$F = a'b'(c'd + cd) + c'd(a'b + ab') + cd'(a'b + ab') + ab(c'd' + cd)$$

F