A	В	C	Fault	Canonicalization		
0	0	0	0			
0	0	1	1	ĀBC		
0	1	0	1	ĀBĒ		
1	0	0	1	AB̄C̄		
0	1	1	1	ĀBC		
1	0	1	1	ABC		
1	1	0	1	ABĒ		
1	1	1	0			
$\overline{ABC} + \overline{ABC} + \overline{ABC} + \overline{ABC} + \overline{ABC} + \overline{ABC} + \overline{ABC}$						

A	В	C	Shutdown	Canonicalization
0	0	0	0	
0	0	1	0	
0	1	0	0	
1	0	0	0	
0	1	1	1	ĀBC
1	0	1	1	ABC
1	1	0	1	ABĒ
1	1	1	1	ABC

 $\overline{ABC} + \overline{ABC} + \overline{ABC} + \overline{ABC} + \overline{ABC} + \overline{ABC}$ $\overline{A}(\overline{B}C + \overline{BC} + \overline{BC}) + A(\overline{BC} + \overline{BC} + \overline{BC})$ $\overline{A}[\overline{B}C + \overline{B}(\overline{C} + C)] + A[\overline{B}(\overline{C} + C) + \overline{BC})]$ $\overline{A}(\overline{B}C + \overline{B}) + A(\overline{B} + \overline{BC})$ $\overline{A}(\overline{B} + C) + A(\overline{B} + \overline{C})$ $\overline{AB} + \overline{AB} + \overline{AC} + \overline{AC}$ \overline{AC} $\overline{AC}(A, B) + \overline{AC}(A, C)$

 $\overline{\mathbf{A}}\overline{\mathbf{B}}\mathbf{C} + \overline{\mathbf{A}}\mathbf{B}\overline{\mathbf{C}} + \overline{\mathbf{A}}\overline{\mathbf{B}}\overline{\mathbf{C}} + \overline{\mathbf{A}}\overline{\mathbf{B}}\mathbf{C} + \overline{\mathbf{A}}\overline{\mathbf{C}}\mathbf{C} + \overline{\mathbf{A}}\overline{\mathbf{C}}\mathbf{C} + \overline{\mathbf{B}}\overline{\mathbf{C}}\mathbf{C} + \overline{\mathbf{B}}\overline{\mathbf{C}}\mathbf{C} + \overline{\mathbf{B}}\overline{\mathbf{C}}\mathbf{C} + \overline{\mathbf{A}}\overline{\mathbf{C}}\mathbf{C} + \overline{\mathbf{C}}\mathbf{C} + \overline{\mathbf{C}}\overline{\mathbf{C}}\mathbf{C} + \overline{\mathbf{C}}\mathbf{C} + \overline{\mathbf{C}}\mathbf{C}$

$$\begin{split} \overline{\mathbf{A}}\overline{\mathbf{B}}\mathbf{C} + \overline{\mathbf{A}}\overline{\mathbf{B}}\overline{\mathbf{C}} + \overline{\mathbf{A}}\overline{\mathbf{B}}\mathbf{C} + \overline{\mathbf{A}}\overline{\mathbf{B}}\mathbf{C} + \overline{\mathbf{A}}\overline{\mathbf{B}}\mathbf{C} + \overline{\mathbf{A}}\overline{\mathbf{B}}\mathbf{C} + \overline{\mathbf{A}}\overline{\mathbf{C}} \\ \overline{\mathbf{B}}(\overline{\mathbf{A}}\mathbf{C} + \overline{\mathbf{A}}\overline{\mathbf{C}} + \overline{\mathbf{A}}\mathbf{C}) + \overline{\mathbf{B}}(\overline{\mathbf{A}}\overline{\mathbf{C}} + \overline{\mathbf{A}}\overline{\mathbf{C}}) + \overline{\mathbf{A}}\overline{\mathbf{C}}] \\ \overline{\mathbf{B}}(\overline{\mathbf{A}}\mathbf{C} + \overline{\mathbf{A}}\mathbf{C}) + \overline{\mathbf{B}}(\overline{\mathbf{A}} + \overline{\mathbf{A}}\overline{\mathbf{C}}) \\ \overline{\mathbf{B}}(\overline{\mathbf{A}}\mathbf{C} + \overline{\mathbf{A}}\mathbf{C}) + \overline{\mathbf{B}}(\overline{\mathbf{A}} + \overline{\mathbf{A}}\overline{\mathbf{C}}) \\ \overline{\mathbf{B}}(\overline{\mathbf{A}} + \overline{\mathbf{C}}\mathbf{C}) + \overline{\mathbf{B}}(\overline{\mathbf{A}} + \overline{\mathbf{C}}\mathbf{C}) \\ \overline{\mathbf{A}}\overline{\mathbf{B}} + \overline{\mathbf{A}}\overline{\mathbf{B}} + \overline{\mathbf{B}}\overline{\mathbf{C}} + \overline{\mathbf{B}}\overline{\mathbf{C}} \\ \overline{\mathbf{X}}\overline{\mathbf{Or}(\overline{\mathbf{A}}, \overline{\mathbf{B}})} + \overline{\mathbf{X}}\overline{\mathbf{Or}(\overline{\mathbf{B}}, \overline{\mathbf{C}})} \end{split}$$

 $\overline{ABC} + A\overline{BC} + AB\overline{C} + ABC$ $C(\overline{AB} + A\overline{B}) + AB(\overline{C} + C)$ AB + C[Xor(A, B)]



