

STATO	CODIFICA
I	0000
a	0001
b	0010
X1	0011
X'	0100
XY'	0101
U'0	0110
I'	0111
X''	1000
XY''	1001
U''0	1010
X'''	1011
XY'''	1100
U'''0	1101
/	1110
/	1111

STATO	$y_3y_2y_1y_0, z$	$y_3y_2y_1y_0, z$
0000	0001,0	0000,0
0001	0010,0	0000,0
0010	0100,0	0011,0
0011	0101,0	0101,0
0100	0100,0	0101,0
0101	0110,0	1000,0
0110	0111,0	1001,0
0111	0001,1	0000,1
1000	1001,0	1001,0
1001	1010,0	1011,0
1010	0000,1	1100,0
1011	1100,0	1100,0
1100	1101,0	0011,0
1101	0000,0	0101,0
1110		
1111		

$x=0$

$y_3/y_2/y_1/y_0$	00	01	11	10
00				
01				
11	1		/	/
10	1	1	1	

$x=1$

$y_3/y_2/y_1/y_0$	00	01	11	10
00				
01		1		1
11			/	/
10	1	1	1	1

$$y_3' = x y_3 \bar{y}_2 + \bar{x} y_3 \bar{y}_1 y_0 + y_3 \bar{y}_2 y_0 + x y_2 y_1 \bar{y}_0 + x \bar{y}_3 y_2 \bar{y}_1 y_0$$

$x_3 \cancel{y_3} \cancel{y_2} \cancel{y_1} \cancel{y_0}$   $x=0$

	00	01	11	10
00			1	1
01	1	1		1
11	1		/	/
10			1	

$x_3 \cancel{y_3} \cancel{y_2} \cancel{y_1} \cancel{y_0}$   $x=1$

	00	01	11	10
00			1	
01	1			
11		1	/	/
10			1	1

$$y_2' = \bar{x} y_1 (\bar{y}_2 + y_0) + \bar{y}_2 y_1 y_0 +$$

$$+ x y_3 \bar{y}_1 + x y_3 y_2 y_0 +$$

$$+ \bar{y}_3 y_2 \bar{y}_1 + \bar{y}_3 y_2 \bar{y}_1 \bar{y}_0$$

$x_3 \cancel{y_3} \cancel{y_2} \cancel{y_1} \cancel{y_0}$   $x=0$

	00	01	11	10
00		1		
01		1		1
11			/	/
10		1		

$x_3 \cancel{y_3} \cancel{y_2} \cancel{y_1} \cancel{y_0}$   $x=1$

	00	01	11	10
00				1
01				
11	1		/	/
10		1		

$$y_1' = x y_3 y_2 \bar{y}_0 + y_3 \bar{y}_2 \bar{y}_1 y_0 + \bar{x} y_2 y_1 \bar{y}_0$$

$$+ \bar{x} \bar{y}_3 \bar{y}_1 y_0 + x \bar{y}_3 \bar{y}_2 y_1 \bar{y}_0$$

	00	01	11	10
00	1		1	
01			1	1
11	1		/	/
10	1			

	00	01	11	10
00			1	1
01	1			1
11	1	1	/	/
10	1	1		

$$\begin{aligned}
 Y_0' = & X Y_2 \bar{Y}_0 + \cancel{X} Y_3 Y_1 + \bar{X} Y_2 Y_1 \\
 & + Y_3 \bar{Y}_2 \bar{Y}_1 \bar{X} + \overline{Y_3 Y_2 Y_1 Y_0} \\
 & + \bar{X} \bar{Y}_2 \overline{Y_1 Y_0}
 \end{aligned}$$

	00	01	11	10
00				
01			1	
11			/	/
10				1

	00	01	11	10
00				
01			1	
11			/	/
10				

$$Z^1 = Y_2 Y_1 Y_0 + \bar{X} Y_3 Y_1 \bar{Y}_0$$