

S0 = 000	

S1 = 001

S2 = 010

S3 = 011

S4 = 100

Present State	Next State			
	X = 0	X = 1		
S0	S1	S2		
S1	S1	S3		
S2	S4	S2		
S3	S4	S2		
S4	S1	S3		

5 states => 3FF

Present State	Next Q2* Q		Output Z	C_State HEX[2:0]	N_S HEX	
Q2Q1Q0	X = 0	X = 1			X=0	X=1
000	001	010	0	000	0010	0100
001	001	011	0	001	0010	0110
010	100	010	0	010	1000	0100
011	100	010	1	011	1000	0100
100	001	011	1	100	0010	0110
101	000	000	0	101	0000	0000
110	000	000	0	110	0000	0000
111	000	000	0	111	0000	0000

Ph ng trình C_State

Q1 Q0	00	01	11	10	
Q2					
0					
1	1	1	1	1	

Q1 Q0	00	01	11	10
Q2				
0	0	0	1	1
1			1	1

HEX[2] = Q2

Q1 Q0	00	01	11	10
Q2				
0		1	1	
1		1	1	

HEX[1] = Q1

Ph ng trình N_State

Q0 X	00	01	11	10	
Q2 Q1					
00	0	0	0	0	
01	1	0	0	1	
11	0	0	0	0	
10	0	0	0	0	

HEX[2] = Q2'Q1X' = D2

Q0 X	00	01	11	10
Q2 Q1				
00	0	1	1	0
01	0	1	1	0
11	0	0	0	0
10	0	\Box	0	0

HEX[1] = Q2'X + Q1'Q0'X = D1

HEX[0] = Q1'Q0'X' + Q2Q1'Q0' + Q2'Q1'Q0 = D0

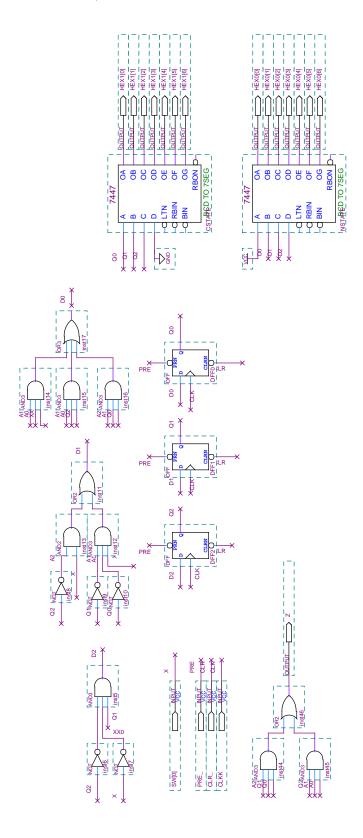
Q0 X	00	01	11	10
Q2 Q1				
00	0	0	0	0
01	0	0	0	0
11	0	0	0	0
10	0	0	0	0

HEX[X]=1

Ph ng trình Output Z

Q1 Q0	00	01	11	10
Q2				
0	0	0	1	0
1	1	0	0	0

Z = Q2'Q1Q0 + Q2Q1'Q0'



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