



	NextState		Output	
	i=0	i=1	i=0	i=1
A	B	C	0	0
B	D	F	0	0
C	G	E	0	0
D				
E				
F				
G				

A = 000  
 B = 001  
 C = 010  
 D = 011  
 E = 100  
 F = 101  
 G = 110

		$S_2, S_1$			
		00	01	11	10
$S_0, I_n$	00	0			
	01	0			
	11	1			
	10	0			

	NextState	Output
0000	001	0
0001	010	0
0010	011	0
0011		
0100		
0101		
0110		
0111		
1000		
1001		
1010		
1011		
1100		
1101		



A = 0000001  
B = 0000010  
C = 0000100  
D = 0001000  
E = 0010000  
F = 0100000  
G = 1000000



A = 0000  
 B = 0001  
 C = 0010  
 D = 0100  
 E = 1000  
 F = 0101  
 G = 0110

	NextState	Output
00000	0001	0
00001	0010	0
00010	0100	0
00011	0101	0
00100	0110	0
00101	1000	0
01000		
01001		
01010		
01011		
01100		
01101		
10000		
10001		

$S_0, I_n$ \ $S_2, S_1$	00	01	11	10
00	0	1	1	1
01	0	0	1	1
11	1	x	x	0
10	1	x	x	1

$S_0, I_n$ \ $S_2, S_1$	00	01	11	10
00	1	x	x	x
01	0	x	x	x
11	x	x	x	x
10	x	x	x	x

In



Number of  
flip-flops

Complexity  
of next state  
logic

Complexity  
of output  
logic

Binary

One-hot

Output
