

Name	State Code $y_8y_7y_6y_5y_4y_3y_2y_1y_0$	Next State		Output
		$w = 0$	$w = 1$	
		$Y_8Y_7Y_6Y_5Y_4Y_3Y_2Y_1Y_0$	$Y_8Y_7Y_6Y_5Y_4Y_3Y_2Y_1Y_0$	
A	0 0000 0001	0 0000 0010(B)	0 0010 0000(F)	0
B	0 0000 0010	0 0000 0100(C)	0 0010 0000(F)	0
C	0 0000 0100	0 0000 1000(D)	0 0010 0000(F)	0
D	0 0000 1000	0 0001 0000(E)	0 0010 0000(F)	0
E	0 0001 0000	0 0001 0000(E)	0 0010 0000(F)	1
F	0 0010 0000	0 0000 0010(B)	0 0100 0000(G)	0
G	0 0100 0000	0 0000 0010(B)	0 1000 0000(H)	0
H	0 1000 0000	0 0000 0010(B)	1 0000 0000(I)	0
I	1 0000 0000	0 0000 0010(B)	1 0000 0000(I)	1

$$Y_1 = w'(y_0 + y_5 + y_6 + y_7 + y_8)$$

$$Y_2 = w'(y_1)$$

$$Y_3 = w'(y_2)$$

$$Y_4 = w'(y_3 + y_4)$$

$$Y_5 = w(y_0 + y_1 + y_2 + y_3 + y_4)$$

$$Y_6 = w(y_5)$$

$$Y_7 = w(y_6)$$

$$Y_8 = w(y_7 + y_8)$$

Name	State Code $y_8y_7y_6y_5y_4y_3y_2y_1y_0$	Next State		Output
		$w = 0$	$w = 1$	
		$Y_8Y_7Y_6Y_5Y_4Y_3Y_2Y_1Y_0$	$Y_8Y_7Y_6Y_5Y_4Y_3Y_2Y_1Y_0$	
A	0 0000 0000	0 0000 0011(B)	0 0010 0001(F)	0
B	0 0000 0011	0 0000 0101(C)	0 0010 0001(F)	0
C	0 0000 0101	0 0000 1001(D)	0 0010 0001(F)	0
D	0 0000 1001	0 0001 0001(E)	0 0010 0001(F)	0
E	0 0001 0001	0 0001 0001(E)	0 0010 0001(F)	1
F	0 0010 0001	0 0000 0011(B)	0 0100 0001(G)	0
G	0 0100 0001	0 0000 0011(B)	0 1000 0001(H)	0
H	0 1000 0001	0 0000 0011(B)	1 0000 0001(I)	0
I	1 0000 0001	0 0000 0011(B)	1 0000 0001(I)	1

$$Y_1 = w'(y_0' + y_5 + y_6 + y_7 + y_8)$$

$$Y_2 = w'(y_1)$$

$$Y_3 = w'(y_2)$$

$$Y_4 = w'(y_3 + y_4)$$

$$Y_5 = w(y_0' + y_1 + y_2 + y_3 + y_4)$$

$$Y_6 = w(y_5)$$

$$Y_7 = w(y_6)$$

$$Y_8 = w(y_7 + y_8)$$