

# Final State TABLE K-map

JK flip flop

$F_1 F_0$	000	001	011	010	110	111	101	100
00	(A) 00	(B) 00	(D) 00	(E) 00	(G) 01	(H) 00	(F) 00	(I) 01
01	(A) 00	XX	XX	(C) 00	(G) 01	(P) 11	(N) 11	(E) 01
11	(I) 11	(S) 11	(O) 11	(K) 10	(Q) 10	(P) 11	(N) 11	(M) 11
10	(I) 11	XX	(L) 00	(K) 10	(Q) 10	(H) 00	XX	(M) 11

$F_0$

0	0	0	0	0	1	0	0
0	X	X	0	1	1	1	1
1	1	1	0	0	1	1	1
1	X	0	0	0	0	X	1

$$F_0 = \overline{JK} \overline{C} \overline{K} + F_0 J \overline{K} + \overline{JK} \overline{F}_1 F_0 + \overline{F}_1 J K \overline{C} \overline{K} + F_1 F_0 \overline{J} C \overline{K} + F_1 \overline{J} \overline{K} + F_1 J \overline{K} + F_0 J C \overline{K}$$

$F_1$

0	0	0	0	0	0	0	0
0	X	X	0	0	1	1	0
1	1	1	1	1	1	1	1
1	X	0	1	0	X	1	1

$$F_1 = F_1 F_0 + F_1 \overline{J} \overline{K} + F_1 K C \overline{K} + F_0 J C \overline{K} + F_1 J \overline{K} + F_0 \overline{J} C \overline{K}$$