State transition diagram with four states: 00, 01, 11, 10.

- 00 → 01 : 01
- 01 → 01 : 11, 01 (self-loop)
- 00 → 11 : 10, 11, 00
- 11 → 00 : 10
- 11 → 01 : 00 (label in oval: 00, 08)
- 01 → 11 : 10
- 01 → 10 : 00, 11
- 10 → 11 : 01
- 10 → 10 : 10 (self-loop)
- 11 → 11 : 01, 11 (self-loop)

Q_1Q_2 \\ X_1X_2	00	01	11	10
00				
01				
11				
10				

S_1

Q_1Q_2 \ X_1X_2	00	01	11	10
00	1	0	X	0
01	1	0	0	1
11	0	–	–	0
10	0	–	0	–

R_1

Q_1Q_2 \ X_1X_2	00	01	11	10
00	0	–	0	–
01	0	–	–	0
11	1	0	0	1
10	1	0	1	0

$\overline{X_1} + X_2$

Q_1Q_2 \ X_1X_2	00	01	11	10
00	1	1	1	0
01	–	–	–	0
11	–	–	–	0
10	1	1	1	0

g_2

R_2

Q_1Q_2 \ X_1X_2	00	01	11	10
00	0	0	0	1
01	0	0	0	1
11	0	0	0	1
10	–	0	0	–

i_1

Q_1Q_2 \ X_1X_2	00	01	11	10
00	1	0	1	0
01	1	0	0	1
11	–	–	–	–
10	–	–	–	–

u_1

Q_1Q_2 \ X_1X_2	00	01	11	10
00	–	–	–	–
01	–	–	–	–
11	1	0	0	1
10	1	0	1	1

i_2

Q_1Q_2 \ X_1X_2	00	01	11	10
00	1	1	1	0
01	–	–	–	–
11	–	–	–	1
10	0	1	0	1

u_2

Q_1Q_2 \ X_1X_2	00	01	11	10
00	–	–	–	–
01	0	0	0	1
11	0	0	0	1
10	–	–	–	–

	Q'_D	Q'_C	Q'_B	Q'_A
0	0	1	1	0
1	1	1	1	1
2	1	1	1	0
3	0	1	0	1
4	1	0	1	1
5	1	0	0	0
6	1	1	0	0
7	0	1	0	0
8	1	0	1	0
9	0	1	1	1
10	1	0	0	1
11	0	0	0	1
12	1	1	1	1
13	0	0	0	1
14	0	0	0	0
15	0	0	1	0

Stan	Q_D'	Q_C'	Q_B'	Q_A'	
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					