

1. RS触发器(钟控):  $Q^{(n+1)} = S + \bar{R}Q$

$$JK: Q^{(n+1)} = J\bar{Q} + \bar{K}Q$$

$$D_1 = \bar{Q}_3^n$$

$$T: Q^{(n+1)} = T\bar{Q} + \bar{T}Q$$

$$D: Q^{(n+1)} = D$$

$$T': Q^{(n+1)} = \bar{Q}$$

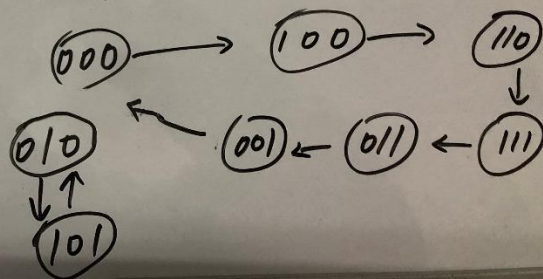
2. 第一步:  $D_1 = \bar{Q}_3, D_2 = Q_1, D_3 = Q_2$ .

第二步:  $Q_1^{(n+1)} = D_1 = \bar{Q}_3, Q_2^{(n+1)} = D_2 = Q_1, Q_3^{(n+1)} = D_3 = Q_2$

第三步: 状态表:

$Q_1 Q_2 Q_3$	$Q_1^{(n+1)}$	$Q_2^{(n+1)}$	$Q_3^{(n+1)}$
000	1	0	0
001	0	0	0
010	1	0	1
011	0	0	1
100	1	1	0
101	0	1	0
110	1	1	1
111	0	1	1

状态图:



第四步:

CP.	1	2	3	4	5	6	7	8
$Q_1$	0	0	0	0	1	1	1	1
$Q_2$	0	0	1	1	0	0	1	1
$Q_3$	0	1	0	1	0	1	0	1
$Q_1^{(n+1)}$	1	0	1	0	1	0	1	0
$Q_2^{(n+1)}$	0	0	0	0	1	1	1	1
$Q_3^{(n+1)}$	0	0	1	1	0	0	1	1

第四步:

时间图:

