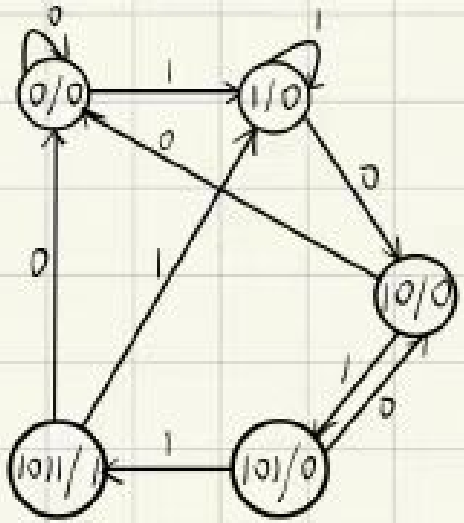
1、 原始狀態：



S_n	S_{n+1}		Z
	$x=0$	$x=1$	
0	0	1	0
1	10	1	0
10	0	101	0
101	10	1011	0
1011	0	1	1

狀態分配：

$Q_2^nQ_1^nQ_0^n$	$Q_2^{n+1}Q_1^{n+1}Q_0^{n+1}$		Z
	$x=0$	$x=1$	
000	000	001	0
001	010	001	0
010	000	011	0
011	010	100	0
100	000	001	1

$$D_2 = x\bar{Q}_2Q_1Q_0$$

$$D_1 = \bar{x}\bar{Q}_2\bar{Q}_1Q_0 + \bar{x}\bar{Q}_2Q_1Q_0 + x\bar{Q}_2Q_1\bar{Q}_0$$

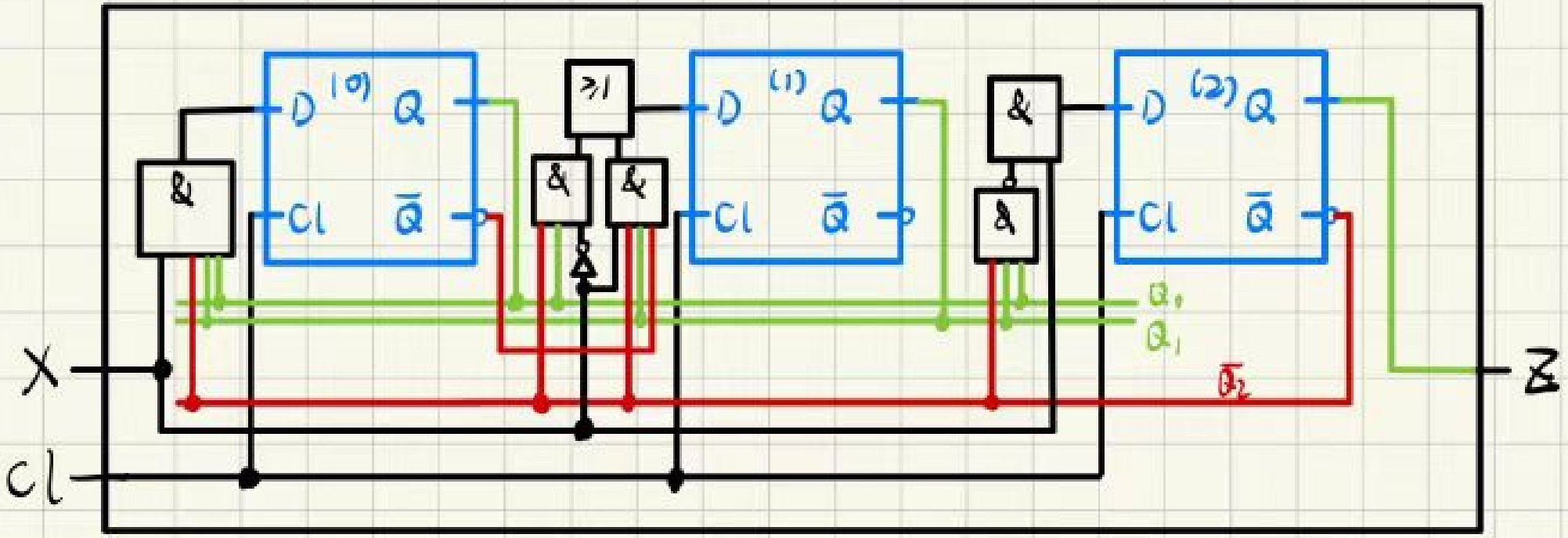
$$= \bar{x}\bar{Q}_2Q_0 + x\bar{Q}_2Q_1\bar{Q}_0$$

$$D_0 = x\,\overline{\bar{Q}_2Q_1Q_0}$$

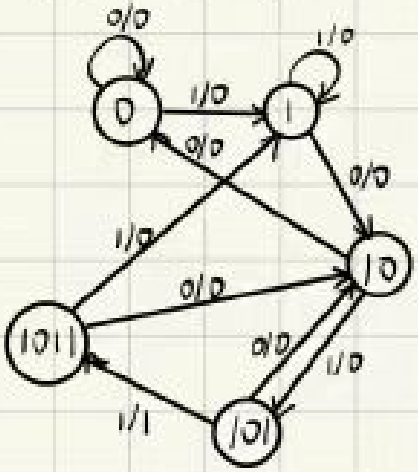
$$Z = Q_2$$

001	010	001	0
010	000	011	0
011	010	100	0
100	000	001	1

$$+ x\bar{Q}_2Q_1Q_0$$
$$= \bar{x}\bar{Q}_2Q_0 + x\bar{Q}_2Q_1\bar{Q}_0$$
$$D_0 = x\,\overline{\bar{Q}_2Q_1Q_0}$$
$$Z = Q_2$$



2. 原始状态：



S_n	S_{n+1}/Z	
	$x=0$	$x=1$
0	0/0	1/0
1	10/0	1/0
10	0/0	101/0
101	10/0	1011/1
1011	10/0	1/0

等效

状态分配：

$Q_1^nQ_0^n$	$Q_1^{n+1}Q_0^{n+1}/Z/J_1K_1/J_0K_0$	
	$x=0$	$x=1$
00	00/0/0d/0d	01/0/0d/1d
01	10/0/1d/d1	01/0/0d/d0
10	00/0/d1/0d	11/0/d0/1d
11	10/0/d0/d1	01/1/d1/d0
~~01~~	~~10/0~~	~~1/0~~

J_1：

$Q_1^nQ_0^n$ / x	00	01	11	10
0	0	1	d	d
1	0	0	d	d

$J_1 = \overline{Q_1}Q_0\overline{x}$

K_1：

$Q_1^nQ_0^n$ / x	00	01	11	10
0	d	d	0	1
1	d	d	1	0

$K_1 = \overline{Q_0}\overline{x} + Q_0x$

J_0：

$Q_1^nQ_0^n$ / x	00	01	11	10
0	0	d	d	0
1	1	d	d	1

$J_0 = x$

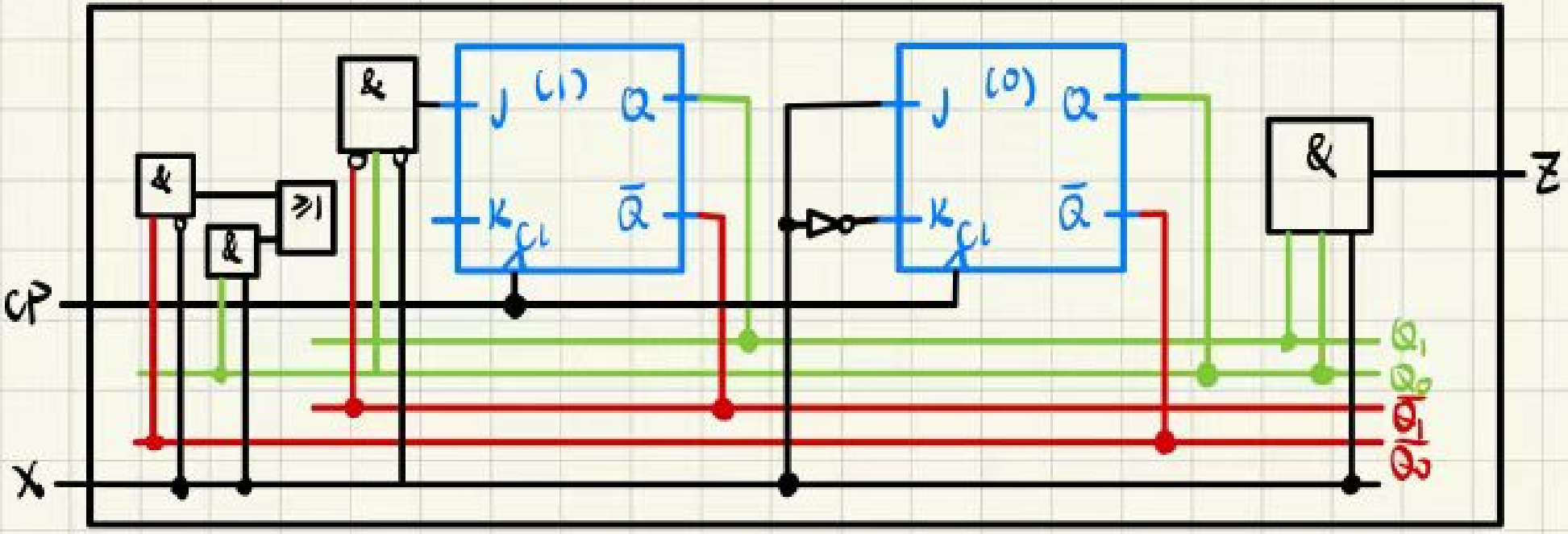
K_0：

$Q_1^nQ_0^n$ / x	00	01	11	10
0	d	1	1	d
1	d	0	0	d

$K_0 = \overline{x}$

$Z = Q_1Q_0x$

01	10/0/d/d1	01/0/d/d0
10	00/0/d1/0d	11/0/d0/1d
11	10/0/d0/d1	01/1/d1/d0
~~01~~	~~10/0~~	~~11/0~~

X	00	01	11	10
0	d	1	1	d
1	d	0	0	d

$Z = Q_1 Q_0 X$