

La sortida és directament l'estat, per tant només cal fer el diagrama de transició d'estats per tenir determinat el sistema (noteu que s'ordenen les files per ordre de visita, no per l'estat):

	CE = 0	CE = 1; UD = 0	CE = 1; UD = 1
Q_1Q_0	$Q_1^+Q_0^+$	$Q_1^+Q_0^+$	$Q_1^+Q_0^+$
00	00	01	10
01	01	11	00
11	11	10	01
10	10	00	11

Fem les TdV de les entrades als biestables, *com si fossin biestables D*:

CE	UD	Q_1	Q_0	D_1	D_0
0	0	0	0	0	0
0	0	0	1	0	1
0	0	1	0	1	0
0	0	1	1	1	1
0	1	0	0	0	0
0	1	0	1	0	1
0	1	1	0	1	0
0	1	1	1	1	1
1	0	0	0	0	1
1	0	0	1	1	1
1	0	1	0	0	0
1	0	1	1	1	0
1	1	0	0	1	0
1	1	0	1	0	0
1	1	1	0	1	1
1	1	1	1	0	1

Ara la mateixa taula, però per a biestables JK:

CE	UD	Q_1	Q_0	J_1K_1	J_0K_0
0	0	0	0	0 –	0 –
0	0	0	1	0 –	– 0
0	0	1	0	– 0	0 –
0	0	1	1	– 0	– 0
0	1	0	0	0 –	0 –
0	1	0	1	0 –	– 0
0	1	1	0	– 0	0 –
0	1	1	0	– 0	– 0
1	0	0	0	0 –	1 –
1	0	0	1	1 –	0 –
1	0	1	0	– 1	0 –
1	0	1	1	– 0	– 1
1	1	0	0	1 –	0 –
1	1	0	1	0 –	– 1
1	1	1	0	– 0	1 –
1	1	1	1	– 1	– 0

Fem els quatre mapes de Karnaugh. Per a J_1 :

$\begin{array}{c} \diagdown Q_1 Q_0 \\ \text{CE UD} \end{array}$	00	01	11	10
00	0	0	–	–
01	0	0	–	–
11	1	0	–	–
10	0	1	–	–

Per a K_1 :

$\begin{array}{c} \diagdown Q_1 Q_0 \\ \text{CE UD} \end{array}$	00	01	11	10
00	–	–	0	0
01	–	–	0	0
11	–	–	1	0
10	–	–	0	1

Per a J_0 :

$\begin{array}{c} \diagdown Q_1 Q_0 \\ \text{CE UD} \end{array}$	00	01	11	10
00	0	–	–	0
01	0	–	–	0
11	0	–	–	1
10	1	0	–	0

Per a K_0 :

$\begin{array}{c} \diagdown Q_1 Q_0 \\ \text{CE UD} \end{array}$	00	01	11	10
00	–	0	0	–
01	–	0	0	–
11	–	1	0	–
10	–	–	1	–

Escrivim les expressions simplificades en SdP (tractant de minimitzar el nombre de productes únics):

$$\begin{aligned}
 J_1 &= \text{CE} \cdot \text{UD} \cdot \overline{Q_0} + \text{CE} \cdot \overline{\text{UD}} \cdot Q_0 \\
 K_1 &= \text{CE} \cdot \text{UD} \cdot Q_0 + \text{CE} \cdot \overline{\text{UD}} \cdot \overline{Q_0} \\
 J_0 &= \text{CE} \cdot \text{UD} \cdot Q_1 + \text{CE} \cdot \overline{\text{UD}} \cdot \overline{Q_1} \cdot \overline{Q_0} \\
 K_0 &= \text{CE} \cdot \overline{Q_1} + \text{CE} \cdot \overline{\text{UD}} \cdot Q_0
 \end{aligned}$$

El logigrama quedaria així:

