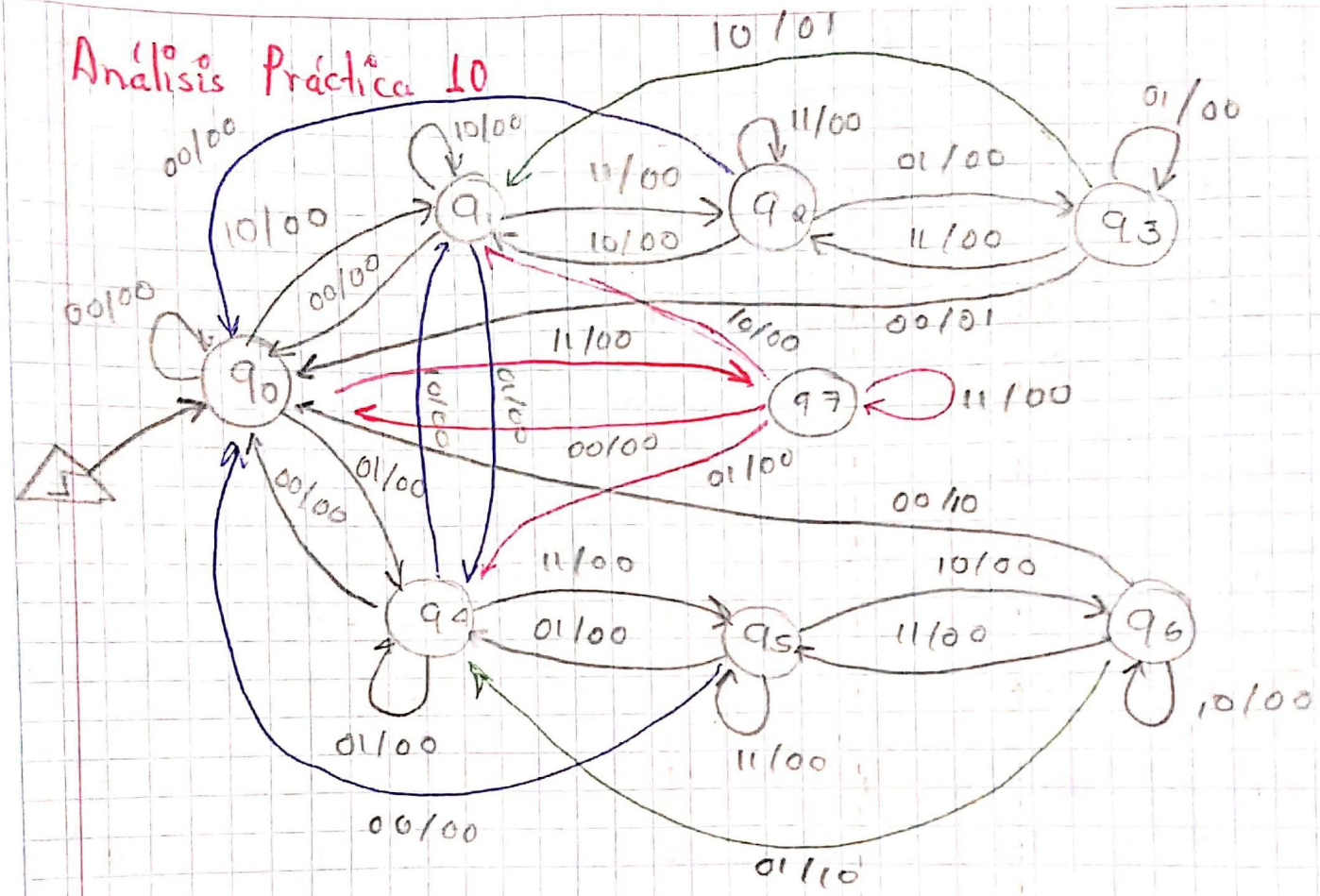
Santos Méndez Ulises Jesús 2CV8

Análisis Práctica 10



- Código Gray
- FF's JK
- Se calculan las salidas

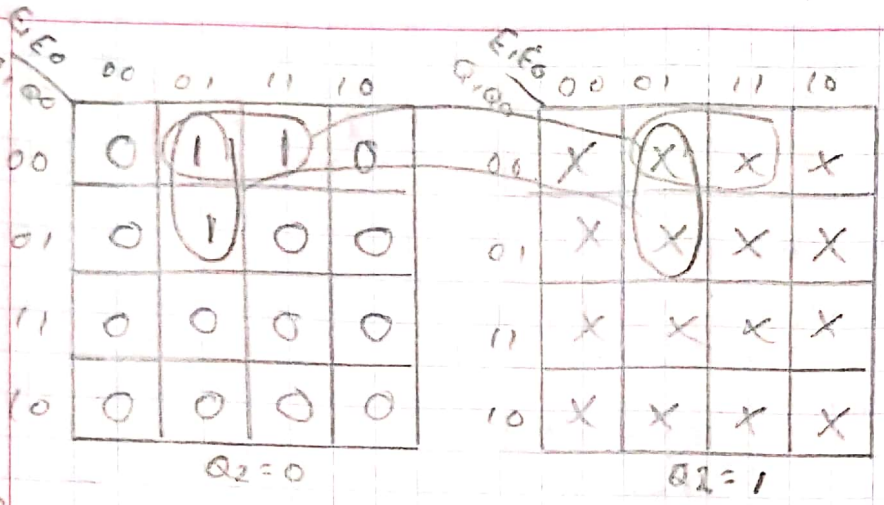
Se tienen 8 estados entonces:

$2^n = 2^3 = 8$ entonces necesitamos 3 FFJK

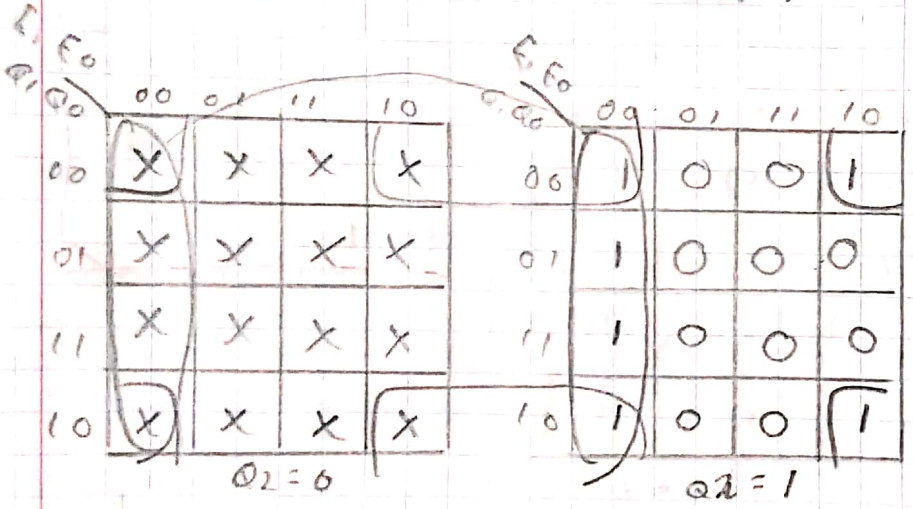
Edo_Act	E	Edo_Sig	S
q0	0 0	q0	0 0
q0	0 1	q4	0 0
q0	1 0	q1	0 0
q0	1 1	q7	0 0
q1	0 0	q0	0 0
q1	0 1	q4	0 0
q1	1 0	q1	0 0
q1	1 1	q2	0 0
q2	0 0	q0	0 0
q2	0 1	q3	0 0
q2	1 0	q1	0 0
q2	1 1	q2	0 0
q3	0 0	q0	0 1
q3	0 1	q3	0 0
q3	1 0	q1	0 1
q3	1 1	q2	0 0
q4	0 0	q0	0 0
q4	0 1	q4	0 0
q4	1 0	q1	0 0
q4	1 1	q5	0 0
q5	0 0	q0	0 0
q5	0 1	q4	0 0
q5	1 0	q6	0 0
q5	1 1	q5	0 0
q6	0 0	q0	1 0
q6	0 1	q4	1 0
q6	1 0	q6	0 0
q6	1 1	q5	0 0
q7	0 0	q0	0 0
q7	0 1	q4	0 0
q7	1 0	q1	0 0
q7	1 1	q7	0 0

q0 → 0 0 0
q1 → 0 0 1
q2 → 0 1 1
q3 → 0 1 0
q4 → 1 1 0
q5 → 1 1 1
q6 → 1 0 1
q7 → 1 0 0

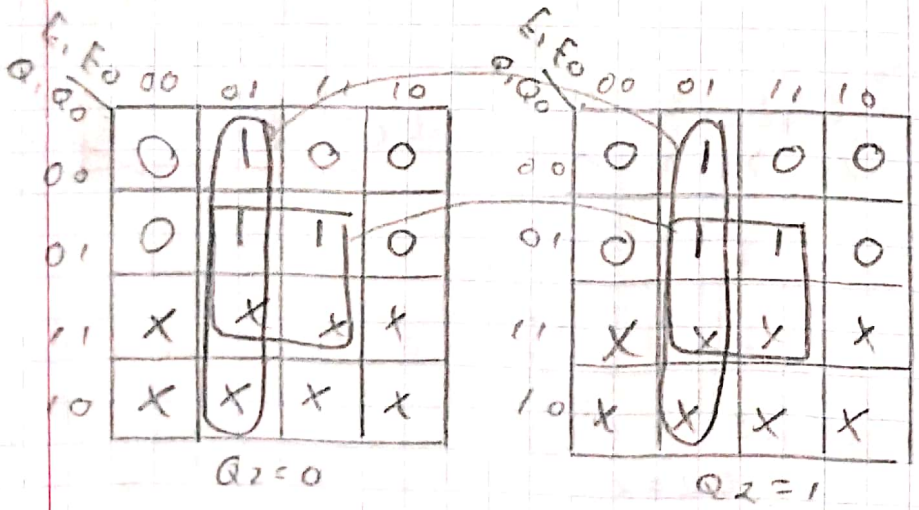
Edo_Act $Q_2\ Q_1\ Q_0$	E $E_1\ E_0$	Edo_Sig $Q_2^+\ Q_1^+\ Q_0^+$	S $S_1\ S_0$	J_2	K_2	J_1	K_1	J_0	K_0
0 0 0	0 0	0 0 0	0 0	0	X	0	X	0	X
0 0 0	0 1	1 1 0	0 0	1	X	1	X	0	X
0 0 0	1 0	0 0 1	0 0	0	X	0	X	1	X
0 0 0	1 1	1 0 0	0 0	1	X	0	X	0	X
0 0 1	0 0	0 0 0	0 0	0	X	0	X	X	1
0 0 1	0 1	1 1 0	0 0	1	X	1	X	X	1
0 0 1	1 0	0 0 1	0 0	0	X	0	X	X	0
0 0 1	1 1	0 1 1	0 0	0	X	1	X	X	1
0 1 1	0 0	0 0 0	0 0	0	X	X	1	X	1
0 1 1	0 1	0 1 0	0 0	0	X	X	0	X	1
0 1 1	1 0	0 0 1	0 0	0	X	X	1	X	0
0 1 1	1 1	0 1 1	0 0	0	X	X	0	X	0
0 1 0	0 0	0 0 0	0 1	0	X	X	1	0	X
0 1 0	0 1	0 1 0	0 0	0	X	X	0	0	X
0 1 0	1 0	0 0 1	0 1	0	X	X	1	1	X
0 1 0	1 1	0 1 1	0 0	0	X	X	0	1	X
1 1 0	0 0	0 0 0	0 0	X	1	X	1	0	X
1 1 0	0 1	1 1 0	0 0	X	0	X	0	0	X
1 1 0	1 0	0 0 1	0 0	X	1	X	1	1	X
1 1 0	1 1	1 1 1	0 0	X	0	X	0	1	X
1 1 1	0 0	0 0 0	0 0	X	1	X	1	X	1
1 1 1	0 1	1 1 0	0 0	X	0	X	0	X	1
1 1 1	1 0	1 0 1	0 0	X	1	X	1	X	0
1 1 1	1 1	1 1 1	0 0	X	0	X	0	X	0
1 0 1	0 0	0 0 0	1 0	X	1	X	0	X	1
1 0 1	0 1	1 1 0	1 0	X	0	X	1	X	1
1 0 1	1 0	1 0 1	0 0	X	0	X	0	X	0
1 0 1	1 1	1 1 1	0 0	X	0	X	1	X	0
1 0 0	0 0	0 0 0	0 0	X	1	X	0	X	X
1 0 0	0 1	1 1 0	0 0	X	0	X	1	X	X
1 0 0	1 0	0 0 1	0 0	X	1	X	0	X	X
1 0 0	1 1	1 0 0	0 0	X	0	X	0	X	X



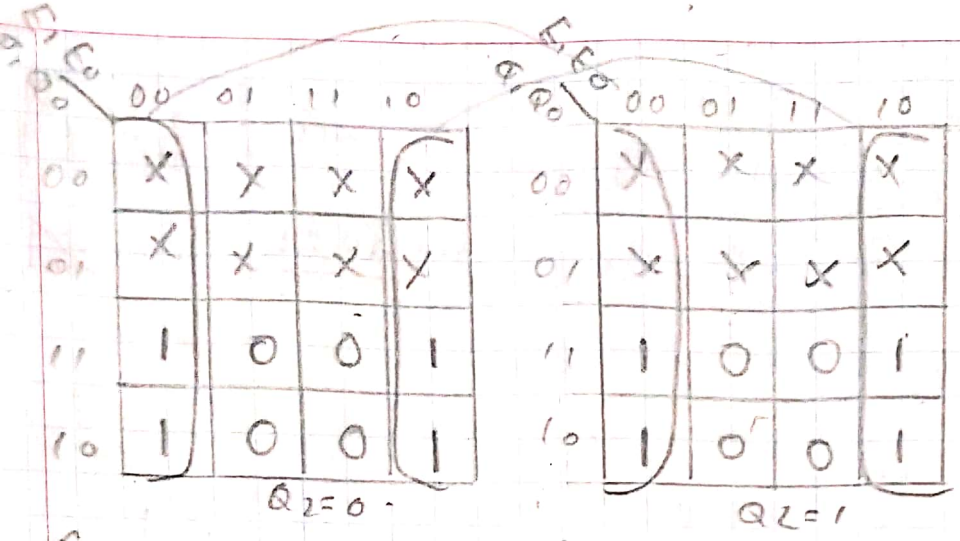
$$J_2 = \bar{Q}_1 \bar{E}_1 E_0 + \bar{Q}_1 \bar{Q}_0 E_0$$



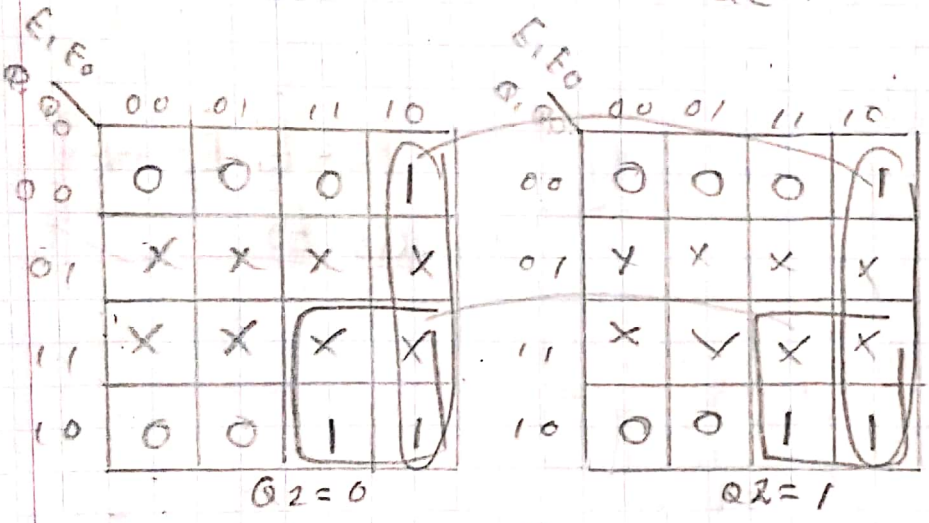
$$K_2 = \bar{E}_1 \bar{E}_0 + \bar{Q}_0 \bar{E}_0$$



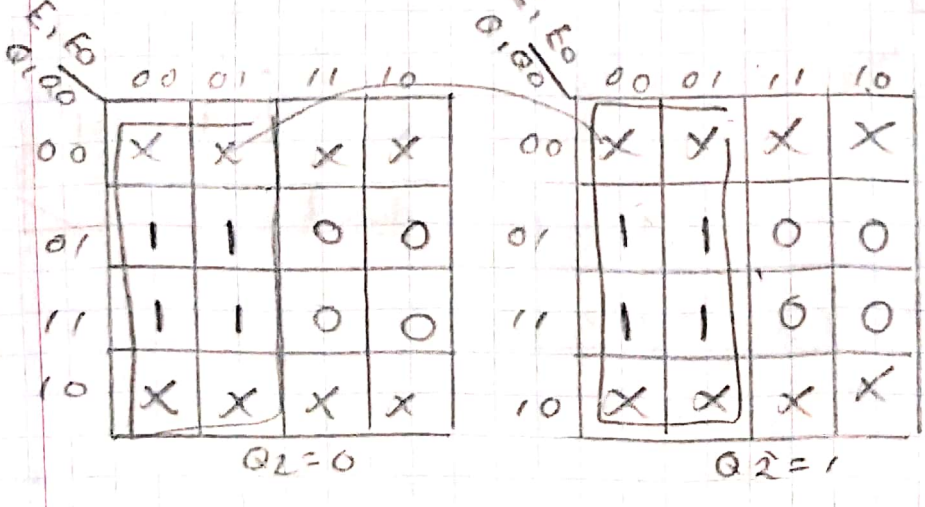
$$J_1 = \bar{E}_1 E_0 + Q_0 E_0$$



$K_1 = \overline{E_0}$



$J_0 = E_1\overline{E_0} + Q_1E_1$



$K_0 = \overline{E_1}$

Q_1Q_0 \ E_1E_0	00	01	11	10
00	0	0	0	0
01	0	0	0	0
11	0	0	0	0
10	0	0	0	0

$Q_2 = 0$

Q_1Q_0 \ E_1E_0	00	01	11	10
00	0	0	0	0
01	1	1	0	0
11	0	0	0	0
10	0	0	0	0

$Q_2 = 1$

$$S_1 = Q_2\bar{Q}_1Q_0\bar{E}_1$$

Q_1Q_0 \ E_1E_0	00	01	11	10
00	0	0	0	0
01	0	0	0	0
11	0	0	0	0
10	1	0	0	1

$Q_2 = 0$

Q_1Q_0 \ E_1E_0	00	01	11	10
00	0	0	0	0
01	0	0	0	0
11	0	0	0	0
10	0	0	0	0

$Q_2 = 1$

$$S_0 = \bar{Q}_2Q_1\bar{Q}_0\bar{E}_0$$