

## Tabela de Estados

Estado atual	Proximo Estado	Entradas Flip-Flop							
$Q_3 Q_2 Q_1 Q_0$	$Q_3^+ Q_2^+ Q_1^+ Q_0^+$	$JQ_3 KQ_3$	$JQ_2 KQ_2$	$JQ_1 KQ_1$	$JQ_0 KQ_0$				
0 0 0 0	0 0 0 1	0	x	0	x	0	x	1	x
0 0 0 1	0 0 1 1	0	x	0	x	1	x	x	0
0 0 1 0	0 1 1 0	0	x	1	x	x	0	0	x
0 0 1 1	0 0 1 0	0	x	0	x	x	0	x	1
0 1 0 0	1 1 0 0	1	x	x	0	0	x	0	x
0 1 0 1	0 1 0 0	0	x	x	0	0	x	x	1
0 1 1 0	0 1 1 1	0	x	x	0	x	0	1	x
0 1 1 1	0 1 0 1	0	x	x	0	x	1	x	0
1 0 0 0	0 0 0 0	x	1	0	x	0	x	0	x
1 0 0 1	1 0 0 0	x	0	0	x	0	x	x	1
1 0 1 0	1 0 1 1	x	0	0	x	x	0	1	x
1 0 1 1	1 0 0 1	x	0	0	x	x	1	x	0
1 1 0 0	1 1 0 1	x	0	x	0	0	x	1	x
1 1 0 1	1 1 1 1	x	0	x	0	1	x	x	0
1 1 1 0	1 0 1 0	x	0	x	1	x	0	0	x
1 1 1 1	1 1 1 0	x	0	x	0	x	0	x	1

	$\bar{Q}_1$	$Q_1$	
$\bar{Q}_3$	0	0	$\bar{Q}_2$
	1	0	$Q_2$
$Q_3$	x	x	$\bar{Q}_2$
	x	x	$Q_2$
$\bar{Q}_0$		$Q_0$	$\bar{Q}_0$

$$J_{Q_3} = Q_2 \cdot \bar{Q}_1 \cdot \bar{Q}_0$$

	$\bar{Q}_1$	$Q_1$	
$\bar{Q}_3$	x	x	$Q_2$
	x	x	$Q_2$
$Q_3$	0	0	$Q_2$
	1	0	$\bar{Q}_2$
$\bar{Q}_0$		$Q_0$	$\bar{Q}_0$

$$K_{Q_3} = \bar{Q}_2 \cdot \bar{Q}_1 \cdot \bar{Q}_0$$

	$\bar{Q}_1$	$Q_1$	
$\bar{Q}_3$	0	0	$\bar{Q}_2$
	x	x	$Q_2$
$Q_3$	x	x	$Q_2$
	0	0	$\bar{Q}_2$
$\bar{Q}_0$		$Q_0$	$\bar{Q}_0$

$$J_{Q_2} = \bar{Q}_3 \cdot Q_1 \cdot \bar{Q}_0$$

	$\bar{Q}_1$	$Q_1$	
$\bar{Q}_3$	x	x	$\bar{Q}_2$
	0	0	$Q_2$
$Q_3$	0	0	$\bar{Q}_2$
	x	x	$Q_2$
$\bar{Q}_0$		$Q_0$	$\bar{Q}_0$

$$K_{Q_2} = Q_3 \cdot Q_1 \cdot \bar{Q}_0$$



	$\bar{Q}_1$	$Q_1$	
$\bar{Q}_3$	0	1	$\bar{Q}_2$
	0	0	$Q_2$
$Q_3$	0	1	$\bar{Q}_2$
	0	0	$Q_2$
	$\bar{Q}_0$	$Q_0$	$\bar{Q}_0$

$$J_{Q_1} = \bar{Q}_3 \bar{Q}_2 Q_0 + Q_3 Q_2 Q_0$$

	$\bar{Q}_0$	$Q_0$	
$\bar{Q}_3$	x	x	$\bar{Q}_2$
	x	1	$Q_2$
$Q_3$	x	0	$\bar{Q}_2$
	x	0	$Q_2$
	$\bar{Q}_0$	$Q_0$	$\bar{Q}_0$

$$K_{Q_1} = \bar{Q}_3 Q_2 Q_0 + Q_3 \bar{Q}_2 Q_0$$

	$\bar{Q}_1$	$Q_1$	
$\bar{Q}_3$	1	x	$\bar{Q}_2$
	0	x	$Q_2$
$Q_3$	1	x	$\bar{Q}_2$
	0	x	$Q_2$
	$\bar{Q}_0$	$Q_0$	$\bar{Q}_0$

$$J_{Q_0} = \bar{Q}_3 \bar{Q}_2 \bar{Q}_1 + Q_3 Q_2 \bar{Q}_1 + \bar{Q}_3 Q_2 Q_1 + Q_3 \bar{Q}_2 Q_1$$

	$\bar{Q}_1$	$Q_1$	
$\bar{Q}_3$	x	0	$\bar{Q}_2$
	x	1	$Q_2$
$Q_3$	x	0	$\bar{Q}_2$
	x	1	$Q_2$
	$\bar{Q}_0$	$Q_0$	$\bar{Q}_0$

$$K_{Q_0} = \bar{Q}_3 \bar{Q}_2 Q_1 + Q_3 Q_2 Q_1 + \bar{Q}_3 Q_2 \bar{Q}_1 + Q_3 \bar{Q}_2 \bar{Q}_1$$