



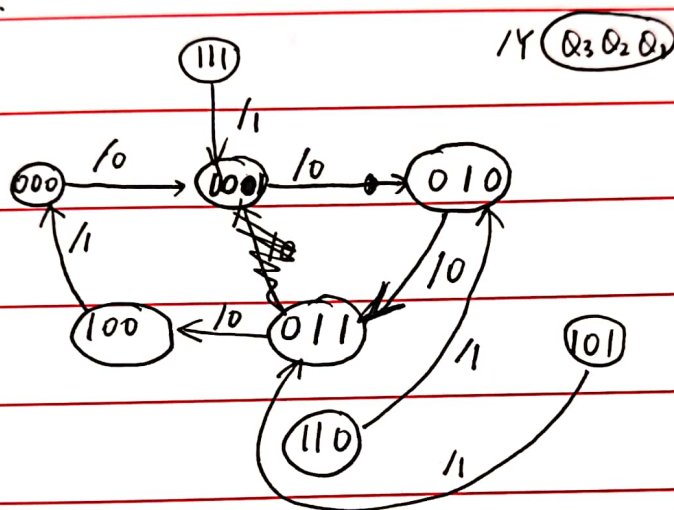
6.3 驱动方程

$$\begin{cases} J_1 = K_1 = Q_3' \\ J_2 = K_2 = Q_1 \\ J_3 = Q_1 Q_2; K_3 = Q_3 \end{cases} \quad \text{又 } Q^* = JQ' + K'Q$$

$$\Rightarrow \begin{cases} Q_1^* = Q_2' Q_1' + Q_3 Q_1 = Q_3 \oplus Q_1 \\ Q_2^* = Q_1 Q_2' + Q_1' Q_2 = Q_2 \oplus Q_1 \quad \text{为状态左移} \\ Q_3^* = Q_1 Q_2 Q_3' + Q_3' Q_3 = Q_1 Q_2 Q_3' \end{cases}$$

输出方程  $Y = Q_3$ .

状态转换图:



电路可以自启动.

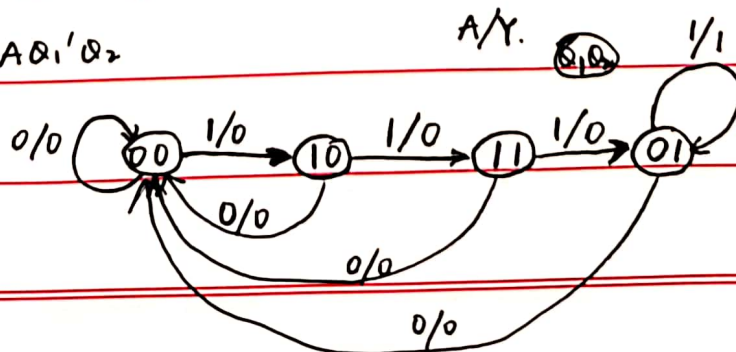
6.5 驱动方程

$$\begin{cases} D_1 = A Q_2' \\ D_2 = A (Q_2' Q_1')' = A (Q_1 + Q_2) \end{cases} \quad \text{又 } Q^* = D_1 Q' + D_2 Q$$

$$\Rightarrow \text{状态方程} \begin{cases} Q_1^* = A Q_2' \\ Q_2^* = A (Q_1 + Q_2) \end{cases}$$

输出方程  $Y = A Q_1' Q_2$

状态转换图:





6.8 驱动方程: 
$$\begin{cases} J_1 = X \oplus Q_1; K_1 = (XQ_1)' \\ J_2 = X \oplus Q_0; K_2 = (X'Q_0)' \end{cases}$$

由  $Q_n^* = J_n Q_{n-1}' + K_n' Q_{n-1}$

$$\Rightarrow Q_0^* = (X \oplus Q_1) Q_0' + (X'Q_0)' Q_0 = X'Q_1 Q_0' + XQ_1' Q_0' + XQ_1 Q_0$$

状态方程: 
$$Q_1^* = (X \oplus Q_0) Q_1' + (X'Q_0)' Q_1 = X'Q_0 Q_1' + XQ_0' Q_1' + X'Q_0 Q_1 = X'Q_0 + XQ_0' Q_1'$$

输出方程:  $Y = XQ_1 + X'Q_0$

状态转换图:

