

1111240 林承信

1.a

A 0101  
B 0111

$$J = xy$$

$$K = (x+y)'$$

$$S = x \oplus y \oplus C_i$$

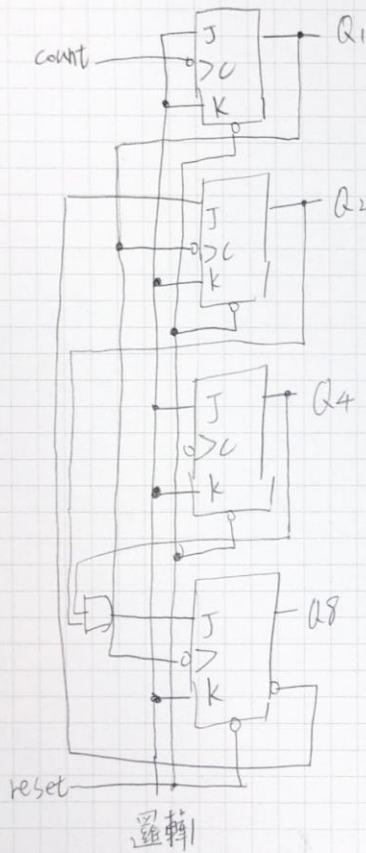
$$C_{i+1} = xy + xC_i + yC_i$$

$C_i = 1$   $C_i = 1$   $C_i = 1$   $C_i = 0$   
A  $\rightarrow 0010 \rightarrow 0001 \rightarrow 1000 \rightarrow 1100$  #

B  $\rightarrow 0111 \rightarrow 1101 \rightarrow 1110 \rightarrow 1111$

進位  $\Rightarrow 1.1.1.0$

2.a



未使用狀態

1010 1011 1100 1101 1110 1111

發生情況

1010  $\rightarrow$  1011  $\rightarrow$  0100

1100  $\rightarrow$  1101  $\rightarrow$  0100

1110  $\rightarrow$  1111  $\rightarrow$  0000

目前狀態

0 0 0

9 0

0 1 2

0 1

10

10

1	1
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1 1

次-狀態

A	B	C
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001

$$O(0)$$

1 0 0

x f X

110

 $x, y, z$ 

0	0	0

x x x

$$A \begin{array}{c|c|c|c} & & B & \\ \hline & 1 & x & 1 \\ \hline 1 & 1 & x & x \\ \hline & & c & \end{array}$$

$$D_A = AB' + A'B$$

$$\begin{array}{c}
 \begin{array}{c} B \\ \hline 1 \quad 1 \quad x \\ \hline x \quad x \end{array} \\
 \begin{array}{c} A \\ \hline 1 \quad x \quad x \end{array} \\
 \hline
 DB = C + AB
 \end{array}$$

$$D_C = A'B'C$$

