

9/20/2004

بار بزرگاری

Present state $y_0 y_1$	next state		output s	
	$x=0$	$x=1$	$x=0$	$x=1$
A → 00	01	00	0	1
B → 01	10	11	1	0
C → 10	00	01	1	0
D → 11	11	10	0	1
$y_0 y_1$	$y_0 y_1$	$y_0 y_1$		

$$P_1 = (A B C D)$$

$$P_2 = (A)(D)(B C)$$

(C A)
(D B)

$$P_3 = (A D)(B C)$$

$$(B D)(C A)$$

$$P_4 = (A)(D)(B)(C)$$

$$(A C)(D B)$$

8 y_0

$x \backslash y_0 y_1$	00	01	11	10
0	0	1	1	0
1	0	1	1	0

⇒ y_1

$\oplus Y_1$

$x \backslash y_0 y_1$	00	01	11	10
0	1	0	1	0
1	0	1	0	1

$$\Rightarrow \bar{x} \bar{y}_0 \bar{y}_1 + \bar{x} y_0 y_1 + x \bar{y}_0 y_1 + x y_0 \bar{y}_1$$

$$\bar{x} (\bar{y}_0 \bar{y}_1 + y_0 y_1) + x (\bar{y}_0 y_1 + y_0 \bar{y}_1) = \bar{x} \oplus (\bar{y}_0 \bar{y}_1 + y_0 \bar{y}_1) = \bar{x} \oplus y_0 \oplus y_1$$

$\oplus S$

$x \backslash y_0 y_1$	00	01	11	10
0	0	1	0	1
1	1	0	1	0

$$\Rightarrow \bar{x} \bar{y}_0 y_1 + \bar{x} y_0 \bar{y}_1 + x \bar{y}_0 \bar{y}_1 + x y_0 y_1$$

$$\bar{x} (\bar{y}_0 y_1 + y_0 \bar{y}_1) + x (\bar{y}_0 \bar{y}_1 + y_0 y_1) =$$

$$x \oplus (\bar{y}_0 y_1 + y_0 \bar{y}_1) = x \oplus y_0 \oplus y_1$$