

Date

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## Bài 1

Ta có bảng thật:  $M < N: 1$  ;  $M \geq N: 0$ 

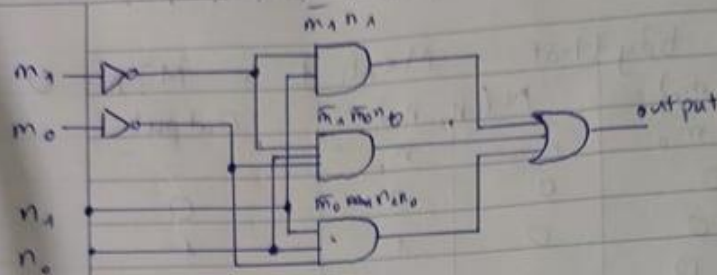
$M(m_1, m_0)$		$N(n_1, n_0)$		Output
$m_1$	$m_0$	$n_1$	$n_0$	
0	0	0	0	0
0	0	0	1	1
0	0	1	0	1
0	0	1	1	1
0	1	0	0	0
0	1	0	1	0
0	1	1	0	1
0	1	1	1	1
1	0	0	0	0
1	0	0	1	0
1	0	1	0	0
1	0	1	1	1
1	1	0	0	0
1	1	0	1	0
1	1	1	0	0
1	1	1	1	0

Bảng Bìa Cacho

$m_1, m_0 \backslash n_1, n_0$	00	01	11	10
00	0	1	1	1
01	0	0	1	1
11	0	0	00	0
10	0	0	01	00

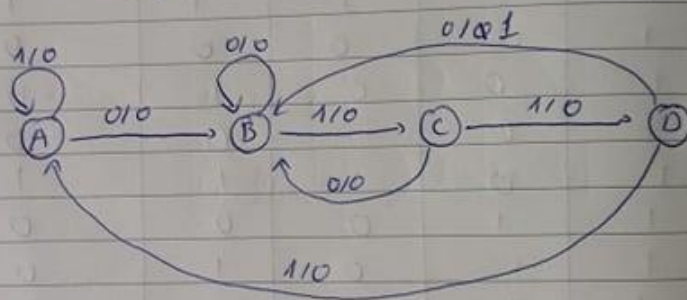
$$\text{output} = \overline{m_1} n_1 + \overline{m_1} \overline{m_0} n_0 + \overline{m_0} n_1 n_0$$

Date: . . . No. . . .



Bài 2

B1: Số đề trạng thái : 0110



Bảng trạng thái

PS	NS	
	$x=0$	$x=1$
A	B, 0	A, 0
B	B, 0	C, 0
C	B, 0	D, 0
D	B, 0 1	A, 0

B2:

Ta có 4 trạng thái  $\rightarrow$  2 flip-flop

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No.

PS	MS ( $\theta_1, \theta_2$ )	
$(q_1, q_2)$	$x=0$	$x=1$
A=00	01, 0	00, 0
B=01	01, 0	10, 0
C=10	01, 0	11, 0
D=11	01, 1	00, 0

B3: Bảng kích JKFF

q	Q	J	K
0	0	0	-
0	1	1	-
1	0	-	1
1	1	-	0

PS	MS ( $Q_1, Q_2$ )		$x=0$		$x=1$	
	$x=0$	$x=1$	$J_1 K_1$	$J_2 K_2$	$J_1 K_1$	$J_2 K_2$
00	01	00	0-	1-	0-	0-
01	01	10	0-	-0	1-	-1
10	01	11	-1	1-	-0	1-
11	001	00	-1	-0	-1	-1

B4: Bìa cacno

$J_1$	$q_1 q_2$	00	01	11	10
0	0	0	0	-	-
1	0	0	1	-	-

$$J_1 = x q_2$$

$J_2$	$q_1 q_2$	00	01	11	10
0	0	1	-	-	1
1	0	0	-	-	1

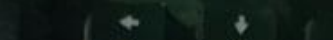
$$J_2 = \bar{x} + q_1$$

$K_1$	$q_1 q_2$	00	01	11	10
0	0	-	-	1	1
1	0	-	-	1	0

$$K_1 = q_2 + \bar{x}$$

$K_2$	$q_1 q_2$	00	01	11	10
0	0	-	0	0	-
1	0	-	1	1	-

$$K_2 = x q_2$$



No

Output

$q \times q$	00	01	11	10
0	0	0	1	0
1	0	0	0	0

output =  $\pi 9142$

85: Vẽ mặt

