

孫元駿 107061123.

Date. No.

1. $B_3 \ B_2 \ B_1 \ B_0$

0 0 0 0

0 0 0 1

0 0 1 0

0 0 1 1

0 1 0 0

0 1 0 1

0 1 1 0

0 1 1 1

1 0 0 0

1 0 0 1

1 0 1 0

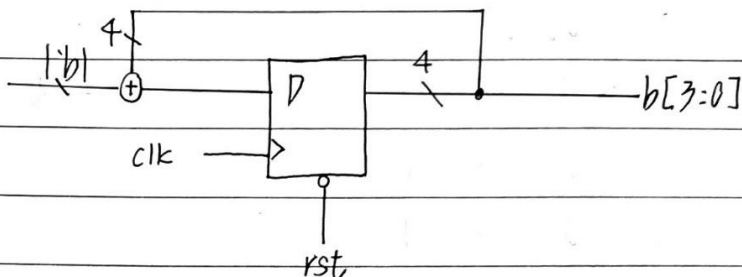
1 0 1 1

1 1 0 0

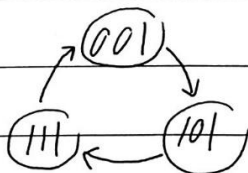
1 1 0 1

1 1 1 0

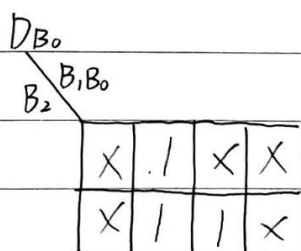
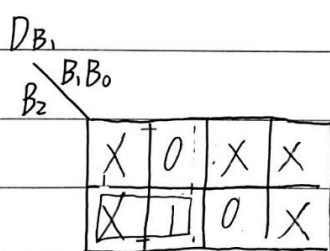
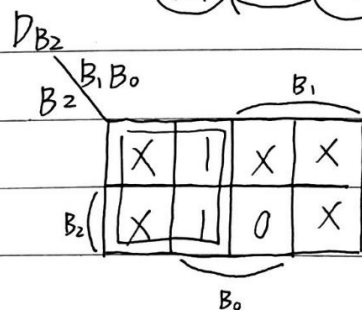
1 1 1 1



2. (a)



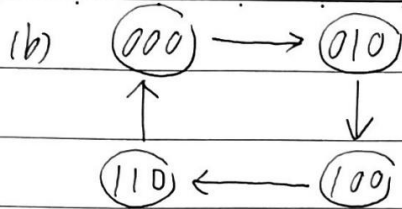
Present			Next		
B_2	B_1	B_0	B_2	B_1	B_0
0	0	1	1	0	1
1	0	1	0	0	1



$$D_{B_2} = B_1'$$

$$D_{B_1} = B_1' B_2$$

$$D_{B_0} = 1$$



Present			Next		
B_2	B_1	B_0	B_2	B_1	B_0
0	0	0	0	1	0
0	1	0	1	0	0
1	0	0	1	1	0
1	1	0	0	0	0

D_{B_2}

$B_2 \backslash B_1 B_0$	00	01	10	11
0	X	X	1	
1	1	X	X	

$$D_{B_2} = B_2 B_1' + B_2' B_1$$

D_{B_1}

$B_2 \backslash B_1 B_0$	00	01	10	11
0	1	X	X	
1	1	X	X	

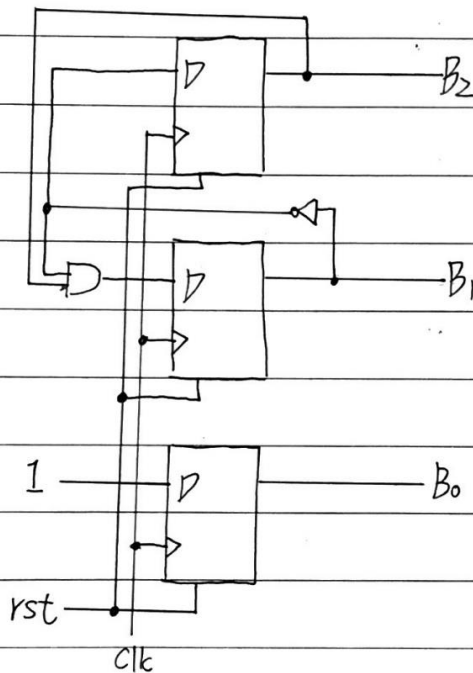
$$D_{B_1} = B_1'$$

D_{B_0}

$B_2 \backslash B_1 B_0$	00	01	10	11
0		X	X	
1		X	X	

$$D_{B_0} = 0$$

2. (a) Logic Diagram



(b) Logic Diagram

