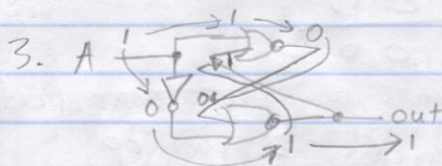


Jun ho Lim

⑦ Digital logic H/W

1. $0x2E$ because load is 0 and it won't effect to send Input to bus.

2.



there fore out put = 1

4. $0xBB$ because load is 1 which means value will transfer to holds and erase old one.

5. $A=0x2F$ $B=0xED$ $C=0x1F$ $D=0xA1$
 $A=0x2F$ $B=0x5F$ $C=0x5F$ $D=0x5F$

6. it will change B, C, D but A will be back to original number.

7. $inc(A) \rightarrow B, C, D$ $inc(B) \rightarrow C, D$ $C \rightarrow A, B$

	A	B	C	D		A	B	C	D
0	$0x2F$	$0xED$	$0x1F$	$0xA1$	-	-	-	-	-
1	$0x2F$	$0xED$	$0x1F$	$0xA1$	$A \rightarrow B, C, D$	$0x2F$	$0xD1$	$0xD1$	$0xD1$
2	$0x2F$	$0xD1$	$0xD1$	$0xD1$	$B \rightarrow C, D$	$0x2F$	$0xD1$	$0x2F$	$0x2F$
3	$0x2F$	$0xD1$	$0x2F$	$0x2F$	$C \rightarrow A, B$	$0xD1$	$0x2F$	$0x2F$	$0x2F$

8.

• $A \rightarrow B, C, D$

Sel	OP	A	B	C	D
00	11	0	1	1	1

• $B \rightarrow C, D$

Sel	OP	A	B	C	D
01	11	0	0	1	1

• $C \rightarrow A, B$

Sel	OP	A	B	C	D
10	11	1	1	0	0

control code

9.	clock	A	B	C	D	Sel	OP
	0	0x2F	0xED	0x1F	0xA1	00	11
$A \rightarrow B, C, D$	1	0x2F	0xED	0x1F	0xA1	01	11
$B \rightarrow C, D$	2	0x2F	0xED	0xD1	0xD1	10	11
$C \rightarrow A, B$	3	0x2F	0xD1	0x2F	0x2F	11	11

10.

11. control code Action

Dmux Rmux Sub

00 10 0 Sub(AC) \rightarrow A

01 00 1 Sub(BA) \rightarrow B

12.

13.