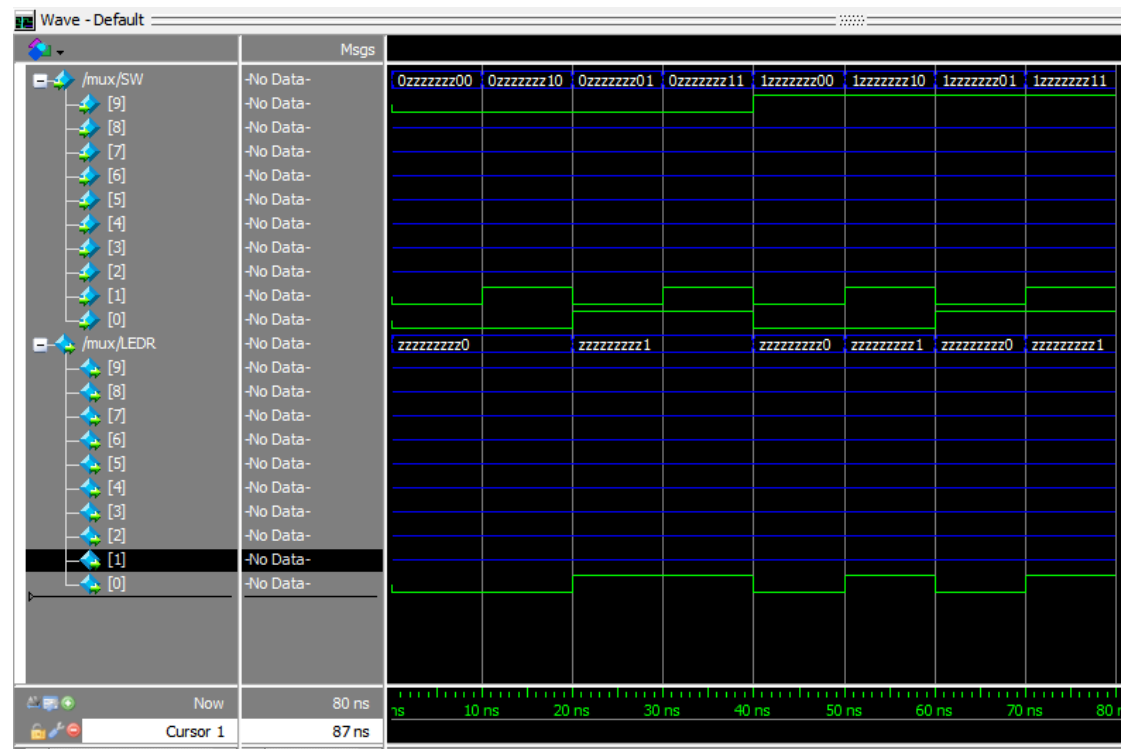


CSC258 Prelab 2

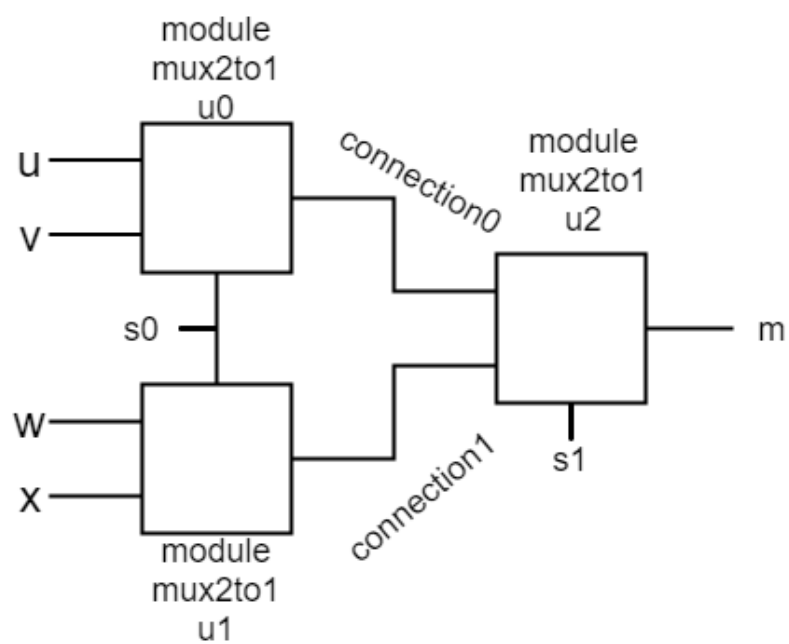
Haoda Li

Part I



Part II

1. $2^6 = 64$ rows
- 2.



Part III

Truth Table

	C3	C2	C1	C0	HEX0	HEX1	HEX2	HEX3	HEX4	HEX5	HEX6
0	0	0	0	0							1
1	0	0	0	1	1			1	1	1	1
2	0	0	1	0			1			1	
3	0	0	1	1					1	1	
4	0	1	0	0	1			1	1		
5	0	1	0	1		1			1		
6	0	1	1	0		1					
7	0	1	1	1				1	1	1	1
8	1	0	0	0							
9	1	0	0	1					1		
A	1	0	1	0				1			
b	1	0	1	1	1	1					
C	1	1	0	0		1	1				1
d	1	1	0	1	1					1	
E	1	1	1	0		1	1				
F	1	1	1	1		1	1	1			

Kernel Map

HEX0	C1' C0'	C1' C0	C1 C0	C1 C0'
C3' C2'		1		
C3' C2	1			
C3 C2		1		
C3 C2'			1	

$$\overline{C_3} \overline{C_2} \overline{C_1} C_0 + \overline{C_3} C_2 \overline{C_1} \overline{C_0} + C_3 C_2 \overline{C_1} C_0 + C_3 \overline{C_2} C_1 C_0$$

HEX1	C1' C0'	C1' C0	C1 C0	C1 C0'
C3' C2'				
C3' C2		1		1
C3 C2	1		1	1
C3 C2'			1	

$$C_3 C_2 \overline{C_0} + \overline{C_3} C_2 \overline{C_1} C_0 + C_3 C_1 C_0 + C_2 C_1 \overline{C_0}$$

HEX2	C1' C0'	C1' C0	C1 C0	C1 C0'
C3' C2'				1
C3' C2				
C3 C2	1		1	1
C3 C2'				

$$\overline{C_3} \overline{C_2} C_1 \overline{C_0} + C_3 C_2 \overline{C_0} + C_3 C_2 C_1$$

HEX3	C1' C0'	C1' C0	C1 C0	C1 C0'
C3' C2'		1		
C3' C2	1		1	
C3 C2			1	
C3 C2'				1

$$C_3 C_2 C_1 C_0 + \overline{C_3} C_2 \overline{C_1} C_0 + C_2 C_1 C_0 + C_3 \overline{C_2} C_1 \overline{C_0}$$

HEX4	C1' C0'	C1' C0	C1 C0	C1 C0'
C3' C2'		1	1	
C3' C2	1	1	1	
C3 C2				
C3 C2'		1		

$$\overline{C_3}C_0 + \overline{C_3}C_2\overline{C_1} + \overline{C_2}C_1C_0$$

HEX5	C1' C0'	C1' C0	C1 C0	C1 C0'
C3' C2'		1	1	1
C3' C2			1	
C3 C2		1		
C3 C2'				

$$\overline{C_3}C_2C_0 + \overline{C_3}C_2C_1 + \overline{C_3}C_1C_0 + C_3C_2\overline{C_1}C_0$$

HEX6	C1' C0'	C1' C0	C1 C0	C1 C0'
C3' C2'	1	1		
C3' C2			1	
C3 C2	1			
C3 C2'				

$$\overline{C_3}C_2C_1 + \overline{C_3}C_2C_1C_0 + C_3C_2\overline{C_1}C_0$$

