

HW 9

AB \ CD	00	01	11	10
00			1	1
01				1
11	1		1	1
10	1			1

AB \ CD	00	01	11	10
00		X	1	1
01		X		
11	X			1
10	X		1	1

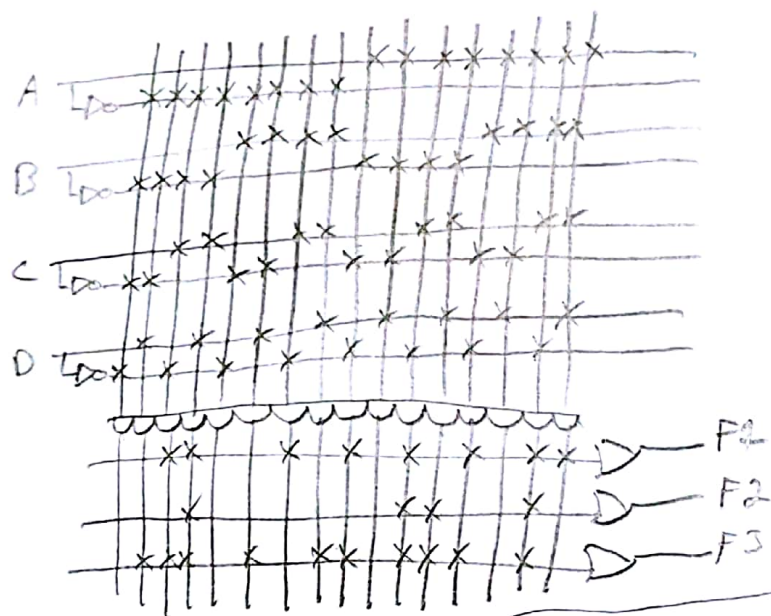
AB \ CD	00	01	11	10
00		1	1	1
01		1	1	
11	1			1
10	1		1	1

ROM

$$F1 = ABCD + ABC\bar{D} + \bar{A}\bar{B}C + A\bar{B}\bar{D} + \bar{A}\bar{C}\bar{D} + A\bar{C}D$$

$$F2 = \sum m[3, 10, 11, 14] + \sum d[1, 2, 5, 8, 12]$$

$$F3 = \sum m[1, 2, 3, 5, 7, 8, 10, 11, 12, 14]$$

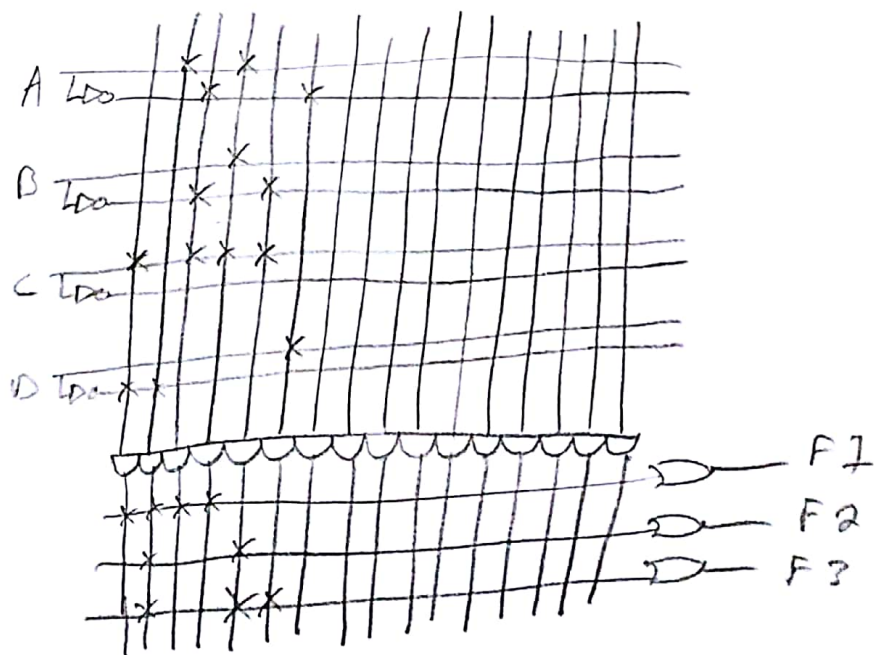


PLA

$$F1 = C\bar{D} + A\bar{D} + \bar{A}\bar{B}C + ABC$$

$$F2 = A\bar{D} + \bar{B}C$$

$$F3 = \bar{A}B + A\bar{D} + \bar{B}C$$



# HW7

1.)

	F <sub>2</sub>				
	CD	00	01	11	10
AB	00	1	1	1	
	01		1	1	
	11	1	1		
	10		1		

AM

		F2			
		CD			
AB		00	01	11	10
	00		1	1	1
	01				
	11	1	X	1	
	10		X	X	X

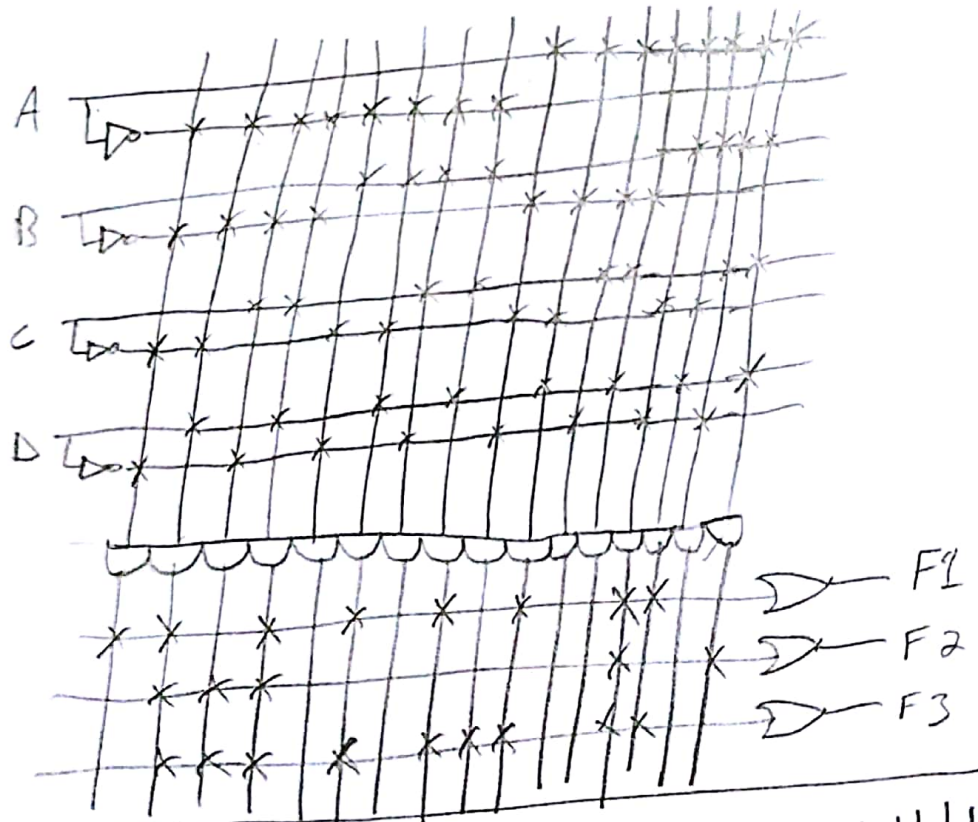
F3				
AB \ CD	00	01	11	10
00		1	1	1
01		1	1	
11	1	1		
10	1	1		

## ROM

$$F1 = \bar{A}\bar{B}\bar{C}\bar{D} + \bar{A}\bar{B}\bar{C}D + \bar{A}\bar{B}C\bar{D} + \bar{A}\bar{B}CD + \bar{A}B\bar{C}\bar{D} + \bar{A}B\bar{C}D + \bar{A}B\bar{C}D + \bar{A}B\bar{C}D$$

$$F2 = \sum m[1,2,3,12,15] + \sum d[9,10,11,13]$$

$$F3 = \sum m[1,2,3,5,9,8,9,12,13]$$



## PLA

$$F1 = \bar{C}D + \bar{A}D + \bar{A}\bar{B}\bar{C} + A\bar{B}\bar{C}$$

$$F2 = \bar{B}C + \bar{B}D + AD + A\bar{B}\bar{C}$$

$$F3 = A\bar{C} + \bar{A}D + \bar{A}\bar{B}\bar{C}$$

