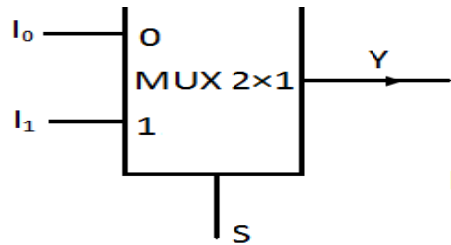


	A	B	C	D
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
4	0	1	0	0
6	0	1	1	0
9	1	0	0	1
10	1	0	1	0
12	1	1	0	0
7	0	1	1	1
15	1	1	1	1

	A	B	C	D	
0,1	0	0	0	-	PIA
0,2	0	0	-	0	
0,4	0	-	0	0	
1,9	-	0	0		PIB
2,6	0	-		0	
2,10	-	0		0	PIC
4,6	0		-	0	
4,12	-		0	0	PID
6,7	0			-	PIE
7,15	-				PIF

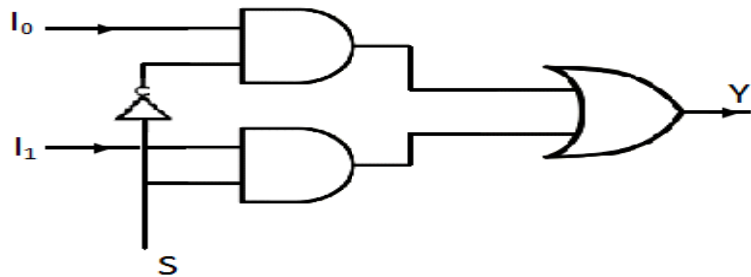
	A	B	C	D
0,2,4,6	0	-	-	PIG

	0	1	2	4	6	7	9	10	12	15		
PIA	+	+									0,1	PIA
PIB		+					+				0,2	
PIC			+					+			0,4	
PID				+					+		1,9	PIB
PIE					+	+					2,6	
PIF						+					2,10	PIC
PIG	+		+	+	+						4,6	
											4,12	PID
											6,7	PIE
											7,15	PIF
											0,2,4,6	PIG

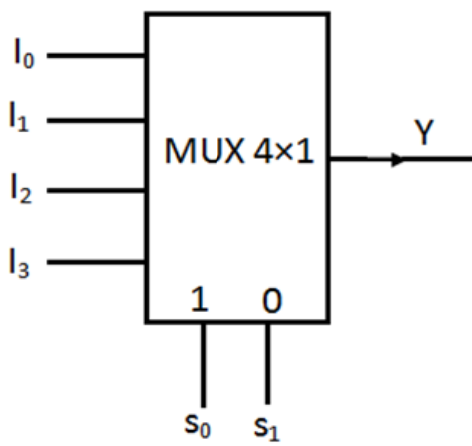


s	y
0	I ₀
1	I ₁

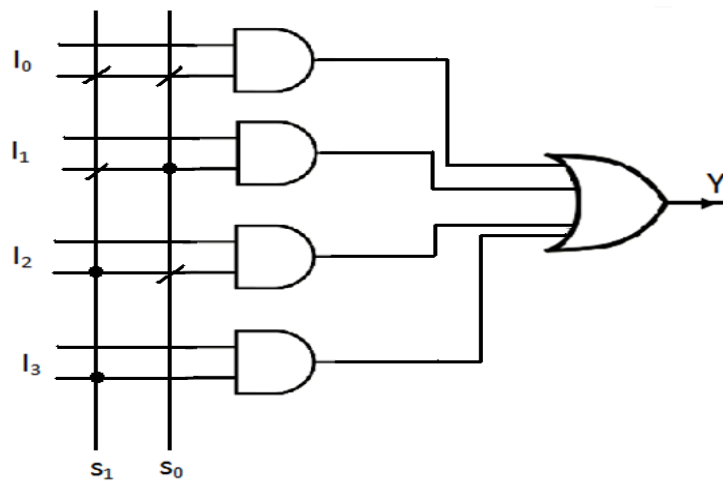
$$y = SI_0 + SI_1$$

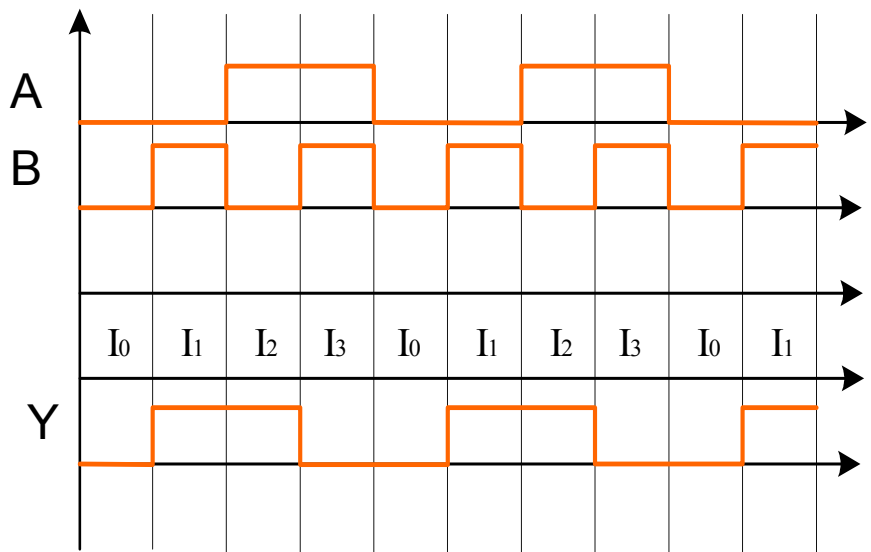
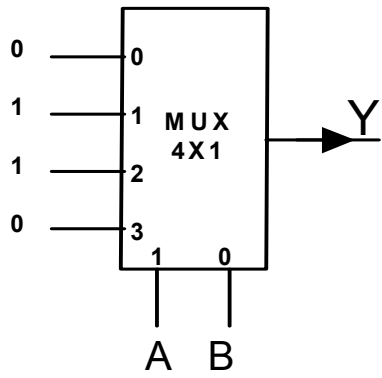
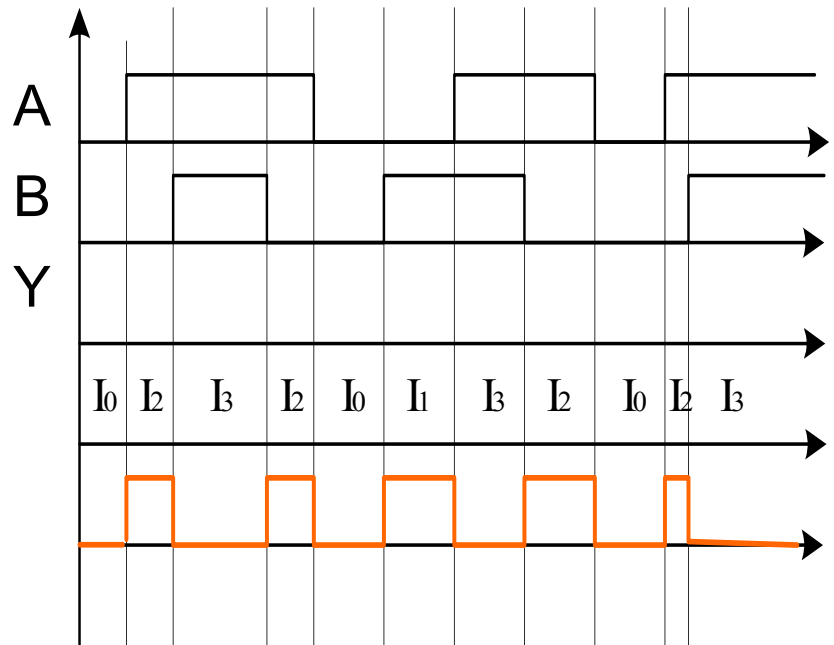
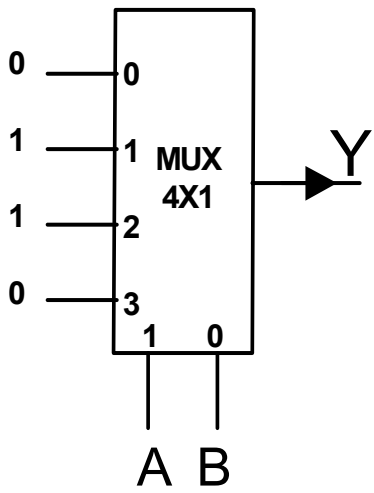


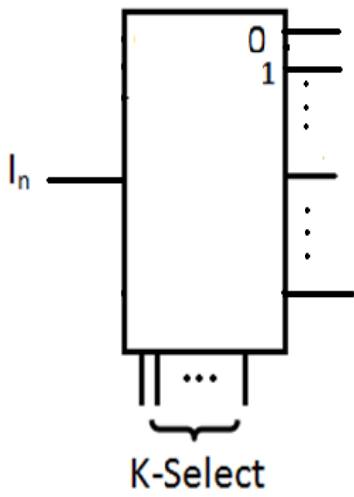
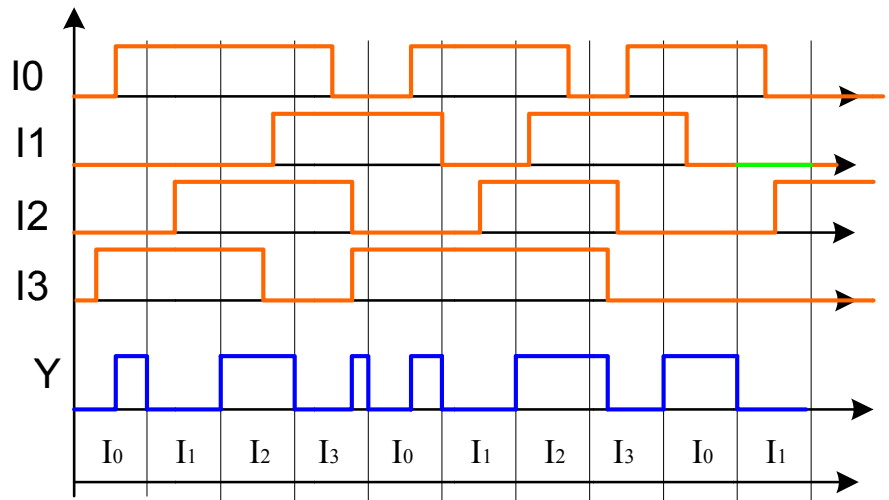
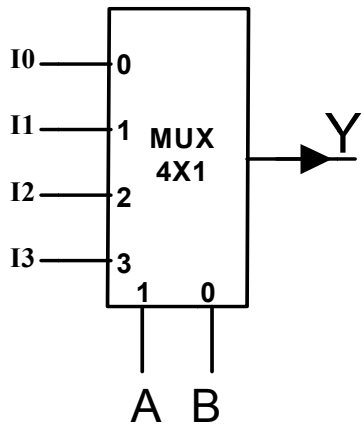
95



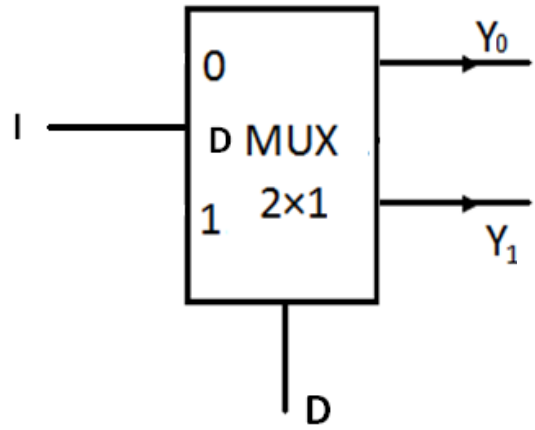
S ₁	S ₀	y
0	0	I ₀
0	1	I ₁
1	0	I ₂
1	1	I ₃



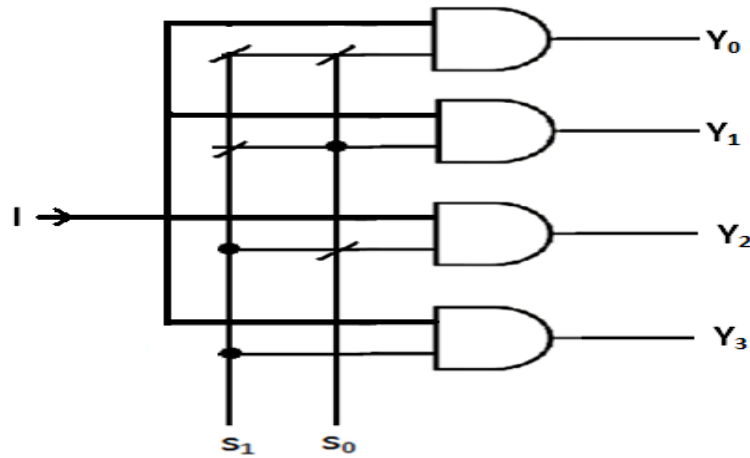
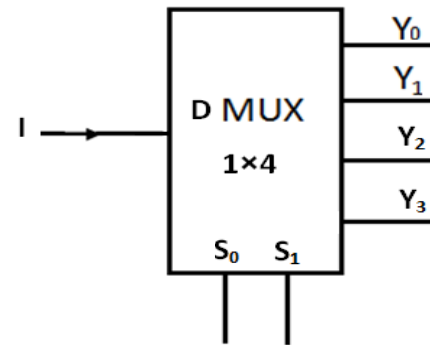




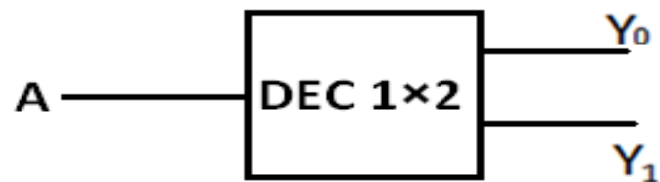
S	y_0	y_1
0	1	0
1	0	1



S_1	S_0	Y_3	Y_2	Y_1	Y_0
0	0	0	0	0	1
0	1	0	0	1	0
1	0	0	1	0	0
1	1	1	0	0	0

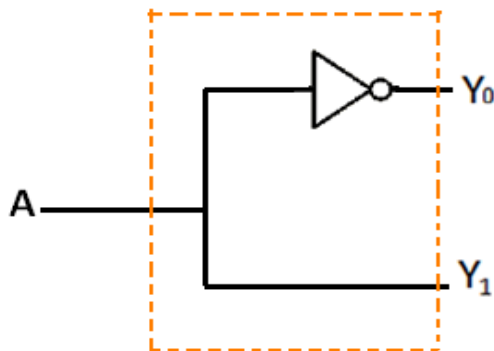


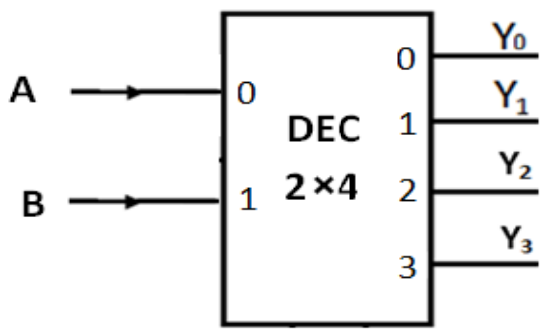
A	Y_0	Y_1
0	1	0
1	0	1



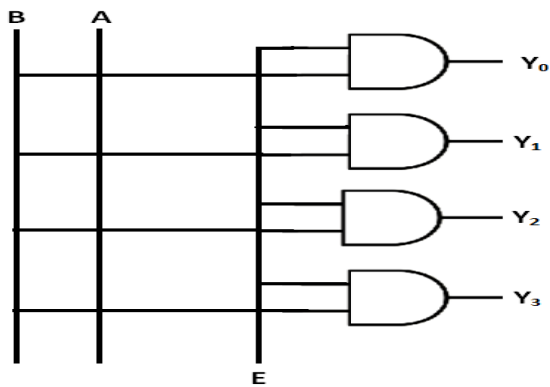
$$Y_1 = A$$

$$Y_0 = \bar{A}$$

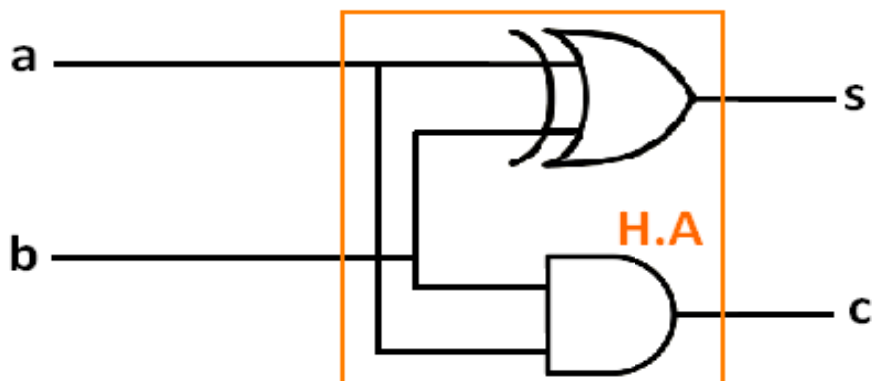
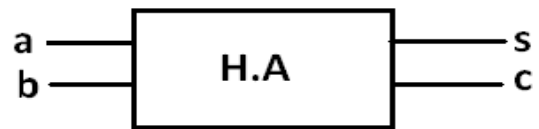




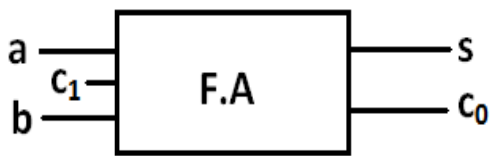
B	A	Y ₀	Y ₁	Y ₂	Y ₃
0	0	1	0	0	0
0	1	0	1	0	0
1	0	0	0	1	0
1	1	0	0	0	1



b	a	c	s
0	0	0	0
0	1	0	1
1	0	0	1
1	1	1	0



$$S = a\bar{b} + \bar{a}b = a \oplus b \quad C = ab$$



c_1	b	a	c_0	s
0	0	0	0	0
0	0	1	0	1
0	1	0	0	1
0	1	1	1	0
1	0	0	0	1
1	0	1	1	0
1	1	0	1	0
1	1	1	1	1

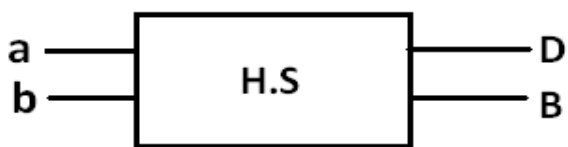
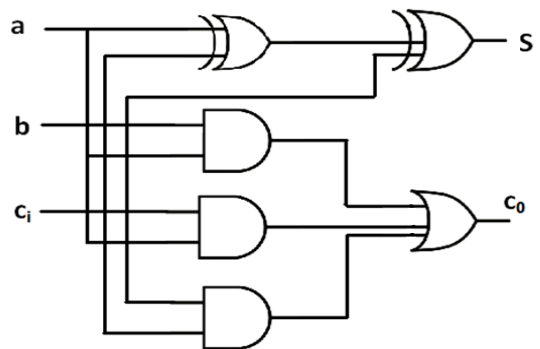
$$s = \sum m(1, 2, 4, 7)$$

$$c_0 = \sum m(3, 5, 6, 7)$$

$$S = a\bar{b}\bar{c}_i + abc_i + \bar{a}bc_i + a\bar{b}c_i = a \oplus b$$

$$S = a(b \oplus c_i) + a(b \oplus c_i)$$

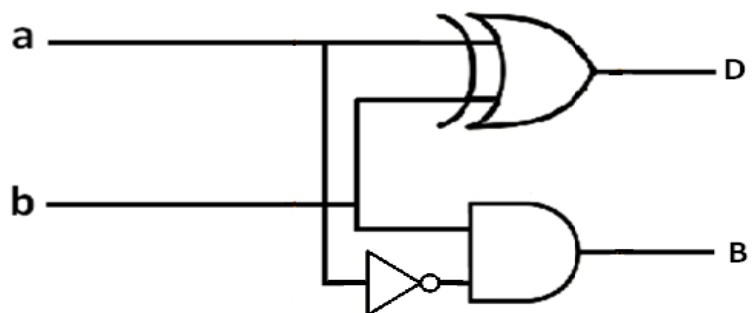
$$S = a \oplus (b \oplus c_i)$$



$$D = a\bar{b} + \bar{a}b = a \oplus b$$

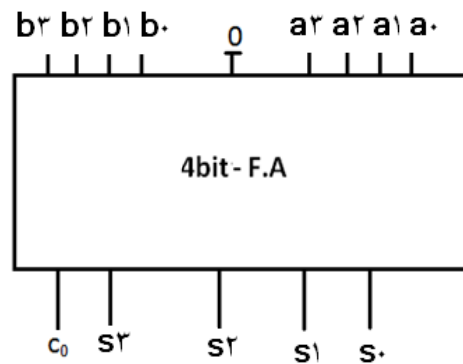
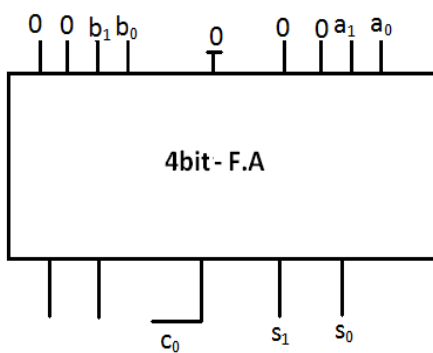
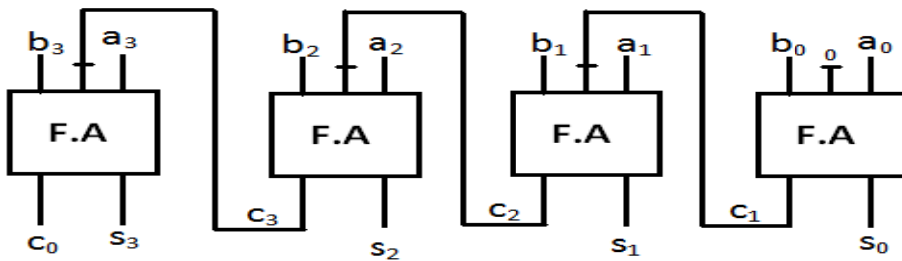
$$B = \bar{a}b$$

b	a	B	D
0	0	0	0
0	1	0	1
1	0	1	1
1	1	0	0





B_i	b	a	B_0	D
0	0	0	0	0
0	0	1	0	1
0	1	0	1	1
0	1	1	0	0
1	0	0	1	1
1	0	1	0	0
1	1	0	1	0
1	1	1	1	1



مقایسه گر ۴بیتی با استفاده از 4-bit F.A

