

$A_2$	$A_1$	$B_2$	$B_1$	$P_3$	$P_4$	$P_2$	$P_1$
0	0	0	0	0	0	0	0
		0	1	0	0	0	0
		1	0	0	0	0	0
		1	1	0	0	0	0
0	1	0	0	0	0	0	1
		0	1	0	0	1	0
		1	0	0	0	1	1
		1	1	0	0	1	1
1	0	0	0	0	0	0	0
		0	1	0	0	1	0
		1	0	0	1	0	0
		1	1	0	1	1	0
1	1	0	0	0	0	0	0
		0	1	0	0	1	1
		1	0	0	1	1	0
		1	1	0	0	0	1

	00	01	11	10
00	0	0	0	0
01	0	0	0	0
11	0	0	1	0
10	0	0	0	0

 $P_8$ 

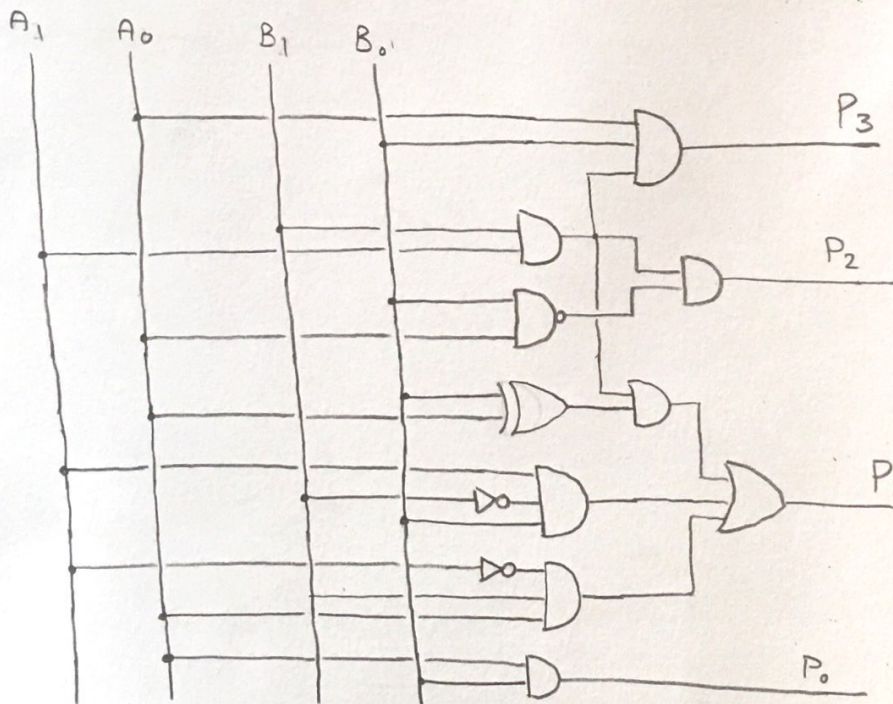
	00	01	11	10
00	0	0	0	0
01	0	0	0	0
11	0	0	0	1
10	0	0	1	1

 $P_4$ 

	00	01	11	10
00	0	0	0	0
01	0	0	1	1
11	0	1	0	1
10	0	1	1	0

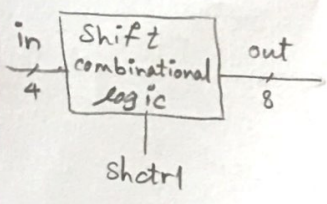
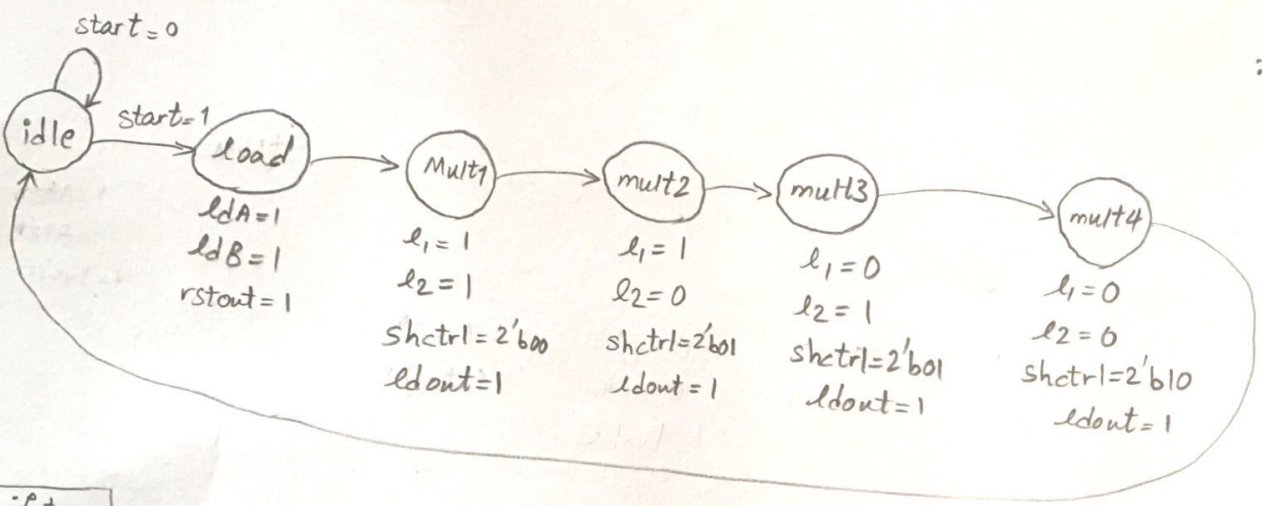
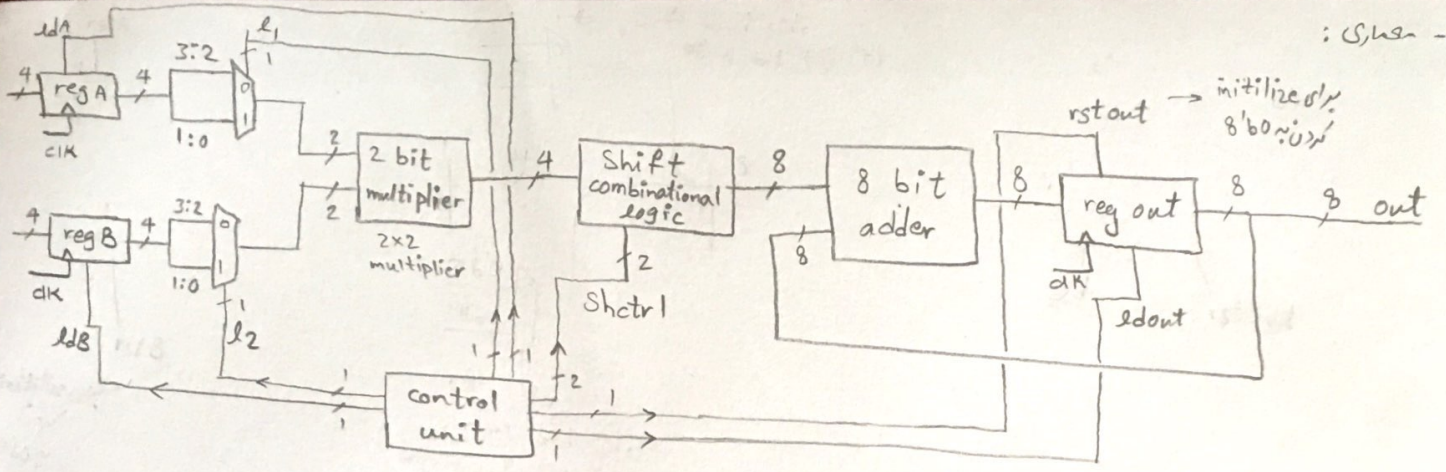
 $P_2$ 

	00	01	11	10
00	0	0	0	0
01	0	1	1	0
11	0	1	1	0
10	0	0	0	0

 $P_1$ 

$$A_1 A_0 \times B_1 B_0 = P_3 P_2 P_1 P_0$$





→ out = (Shctrl = 2'b00) ? { 4'b0, in } :  
 (Shctrl = 2'b01) ? { 2'b0, in, 2'b0 } :  
 (Shctrl = 2'b10) ? { in, 4'b0 } : 8'bZ;

rstout برای initialize کردن اولیه رجیستر out به مقدار 8'b0 برای مرحله اول است.

8 bit adder هم یک جمع کننده 8 بیتی است که یک combinational block می باشد.