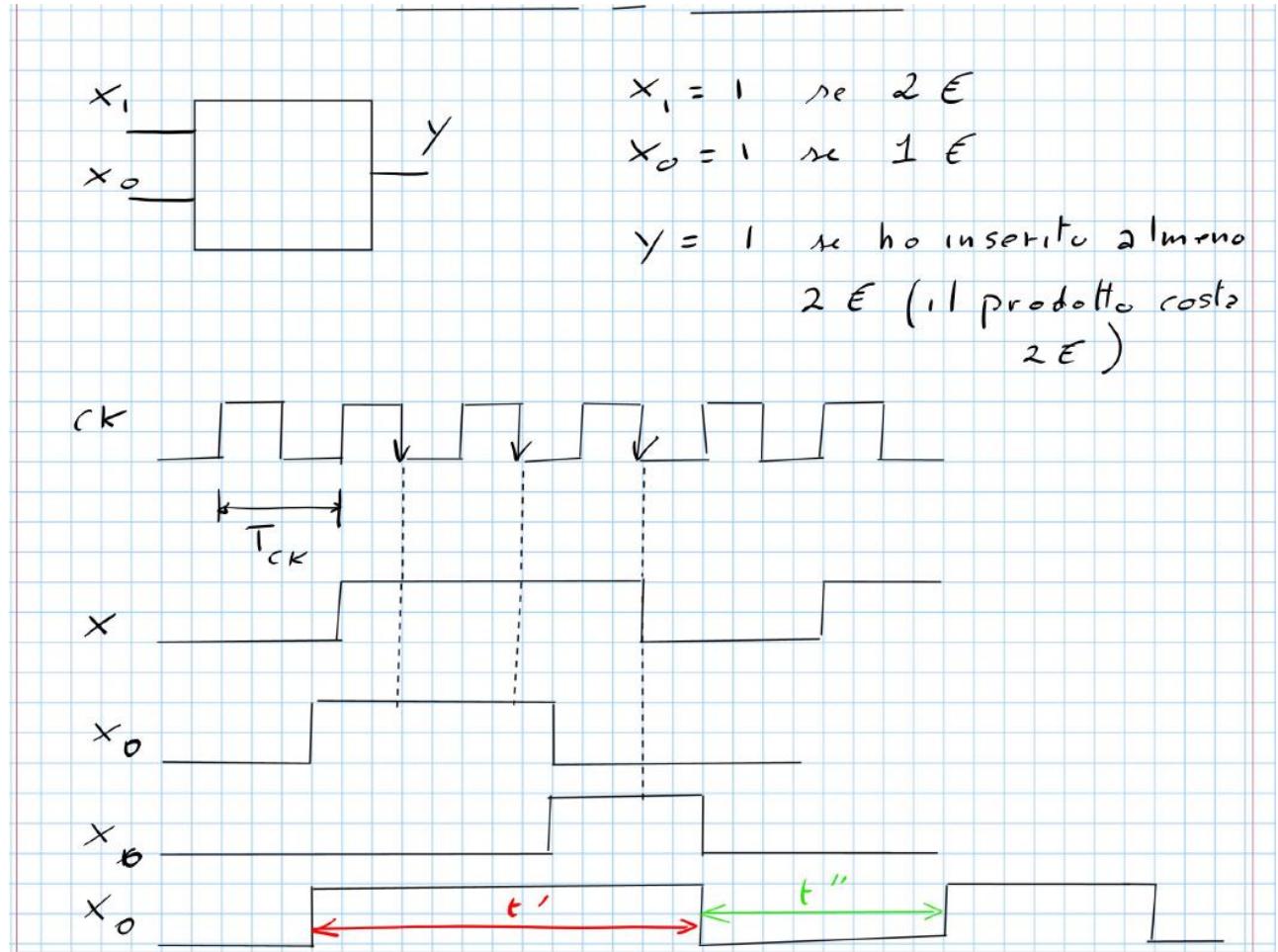
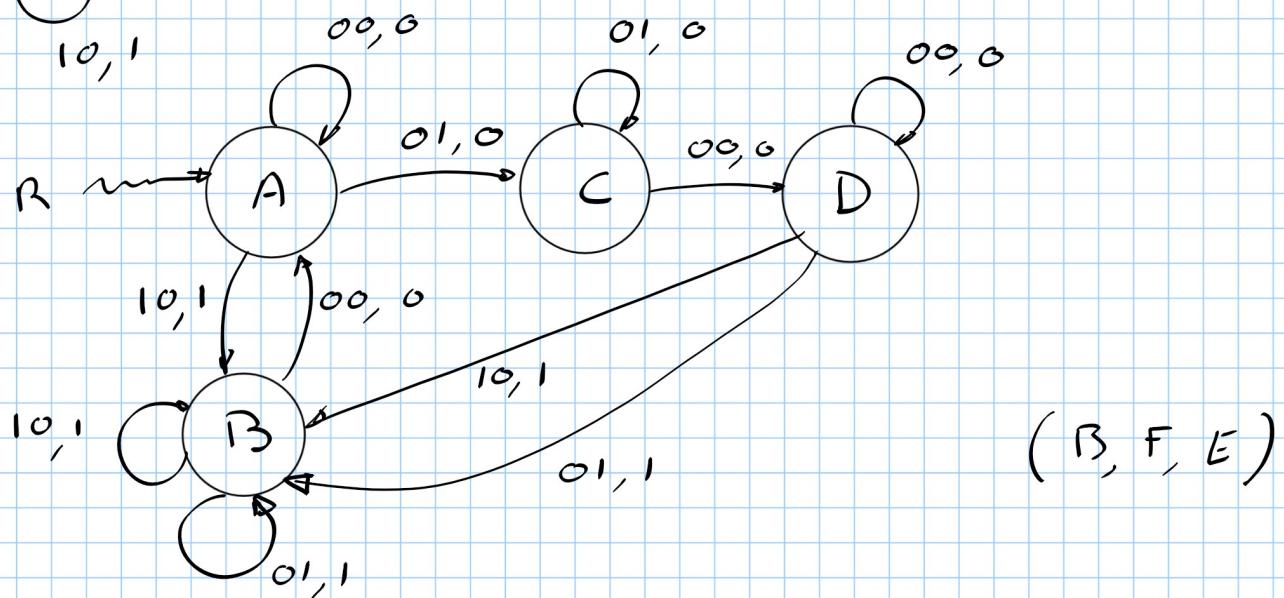
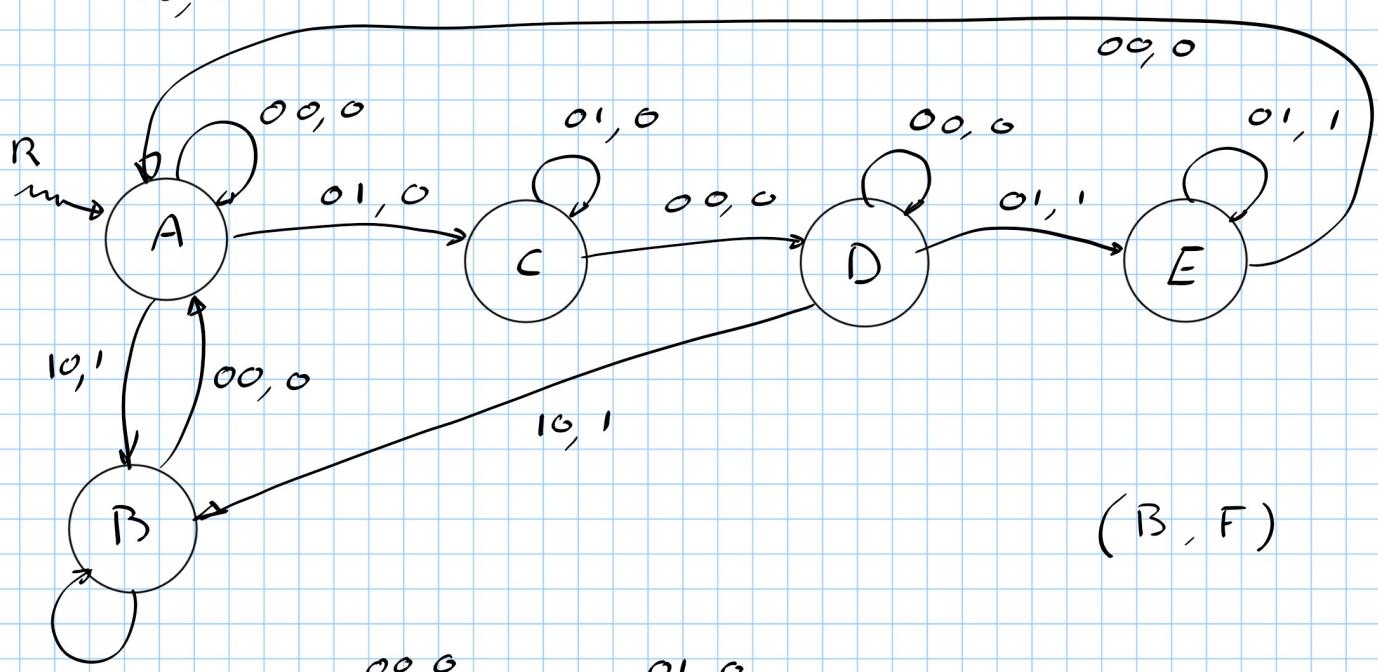
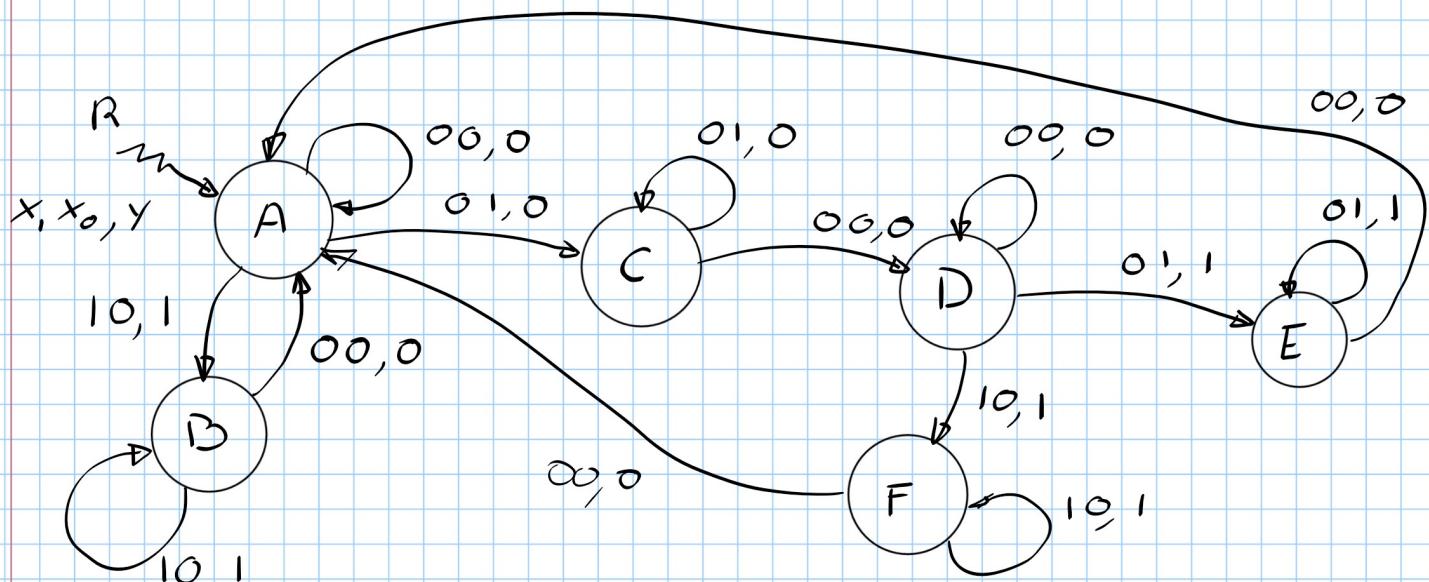


Esercizio FSM



- Il tempo in cui la moneta passa davanti al sensore t' $\rightarrow T_{CK}$
- Il tempo che trascorre fra l'inserimento di due monete successive t'' $\rightarrow T_{CK}$



x_1, x_0	00	01	11	10
A	$A, 0$	$C, 0$	-	$B, 1$
B	$A, 0$	$B, 1$	-	$B, 1$
C	$D, 0$	$C, 0$	-	-
D	$D, 0$	$B, 1$	-	$B, 1$

← inserimento di una moneta
in un tempo inferiore ad
un periodo di ck

↑
inserimento di due monete contemporaneamente

	q_1, q_0
A	0 0
B	0 1
C	1 1
D	1 0

x_1, x_0	00	01	11	10	q'_1, q'_0, Y
A	00, 0	11, 0	-	01, 1	
B	01, 0	00, 0	01, 1	-	01, 1
C	11	10, 0	11, 0	-	-
D	10	10, 0	01, 1	-	01, 1

FF - D

q_1, q_0	00	01	11	10	$q'_1 \equiv D_1$
00	0	1	-	0	
01	0	0	-	0	
11	1	1	-	-	
10	1	0	-	0	

q_1, q_0	00	01	11	10	$q'_0 \equiv D_0$
00	0	1	-	1	
01	0	1	-	1	
11	0	1	-	-	
10	0	1	-	1	

$$D_1 = q_1 q_0 + q_1 \bar{x}_1 \bar{x}_0 + \bar{q}_1 \bar{q}_0 x_0$$

$$D_0 = x_0 + x_1$$

x_1, x_0	00	01	11	10	Y
00	0	0	-	1	
01	0	1	-	1	
11	0	0	-	-	
10	0	1	-	1	

$$\begin{aligned}
 Y &= x_1 + \bar{q}_1 q_0 x_0 + q_1 \bar{q}_0 x_0 = \\
 &= x_1 + x_0 (q_1 \oplus q_0)
 \end{aligned}$$

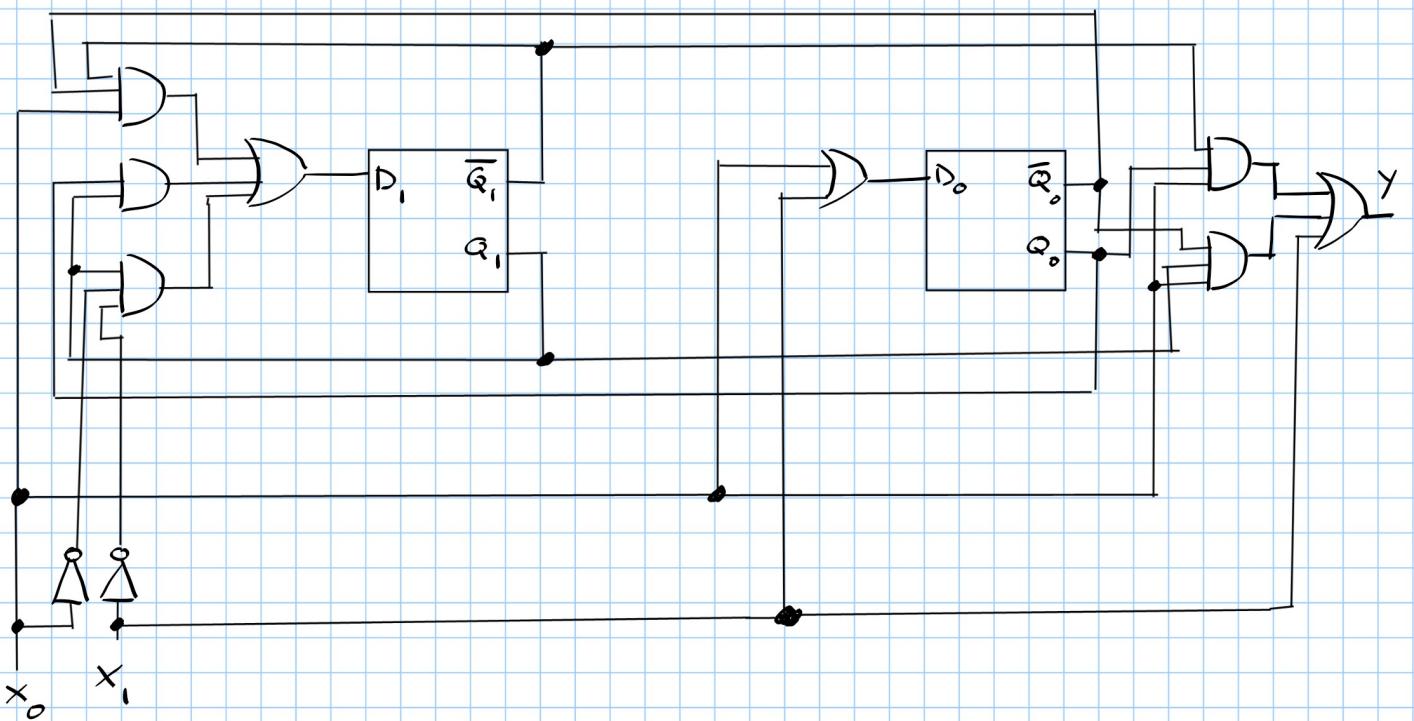


Diagramme zu 6 stati

x_1, x_0	00	01	11	10
start	00	01	11	10
X A	A, 0	C, 0	-	B, 1
X B	A, 0	-	-	B, 1
C	D, 0	C, 0	-	-
D	D, 0	E, 1	-	F, 1
E	A, 0	E, 1	-	-
X F	A, 0	-	-	F, 1

Pauli - Unger

A				
B	V	B		
C	AD	AB	C	
D	X	AD	X	D
E	X	V	X	AD E
F	BF	BF	AD	AD V

$$\beta | \beta, 0 | C, 0 | - | \beta, 1 |$$

$$\{A, B, F\} \Rightarrow \beta$$

$$\{A, B, F\} \quad \{E, F, B\} \quad \{C\} \quad \{D\}$$



$$\{A, B, F\} \quad \{E, F, B\} \quad \{C\} \quad \{D\}$$

$$\{A, B, F\} \quad \{E, F, B\} \quad \{C\} \quad \{D\}$$

$$\{A\} \quad \{E, F, B\} \quad \{C\} \quad \{D\}$$

$$\{A, B, F\} \quad \{E\} \quad \{C\} \quad \{D\}$$

$$A \quad \alpha \quad C \quad D \\ \{B\}$$

$$\beta \quad E \quad C \quad D$$

P

E

C

D