① $-60.5 \rightarrow$ IEEE 754

1 | 10000100 | 11100100....

② 0X4557F000

0100 0101 0101 0111 1111 0000 0000 0000
11

11010111111 = +3455

③

10000011 = -125 → modulo = 125

④

-125+
-3
-128

-3 = 11111101

| 10000011 +
| 11111101
1 | 10000000 = -128

⑤ Funzioni di 3 letterali F(A,B,C) con 7 mintermini

Sono 8

⑥ Duale di A XNOR B in SOP

A	B	X_m
0	0	1
0	1	0
1	0	0
1	1	1

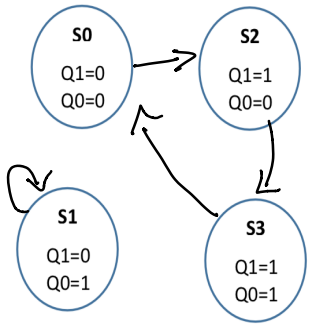
$$A \text{ xnor } B = \overline{(\bar{A}B + A\bar{B})} = (A + \bar{B})(\bar{A} + B) = m_1 + m_2$$

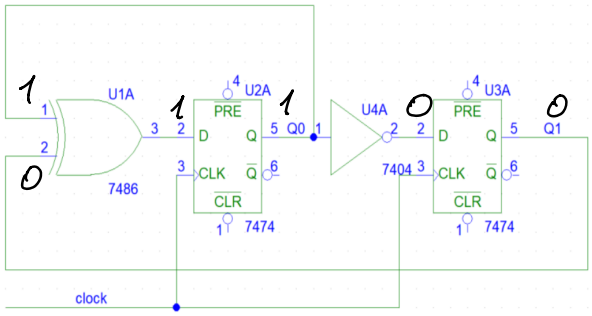
⑦

Funzione nulla

⑧

8- Si completi il bubble diagram dell'automa a stati finiti il cui schema è riportato di seguito:

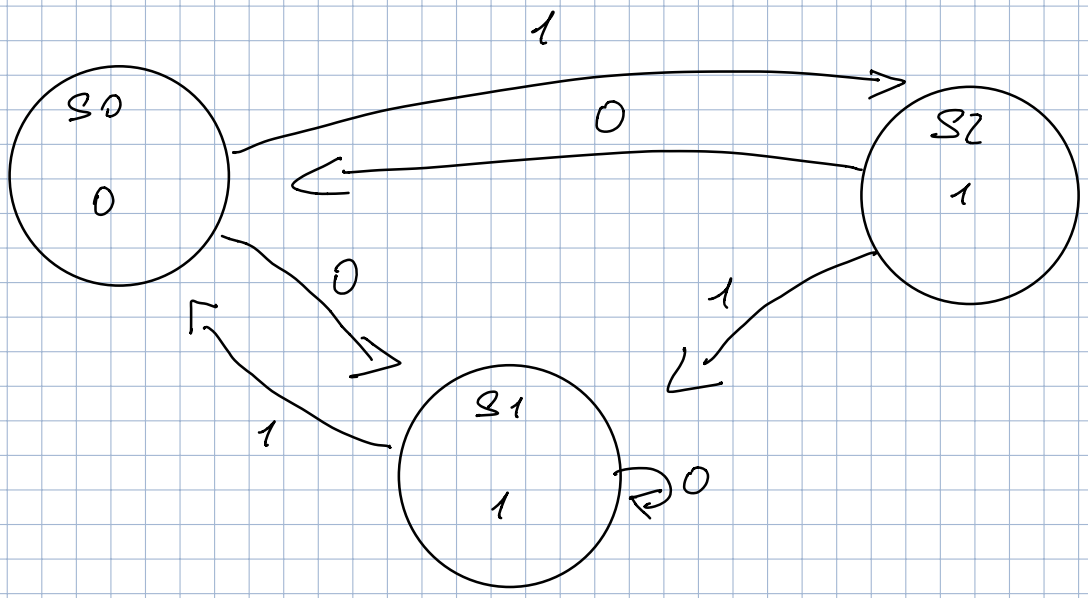




⑨

S0/0
S1/0
S2/1
S3/0
S4/1

(10)

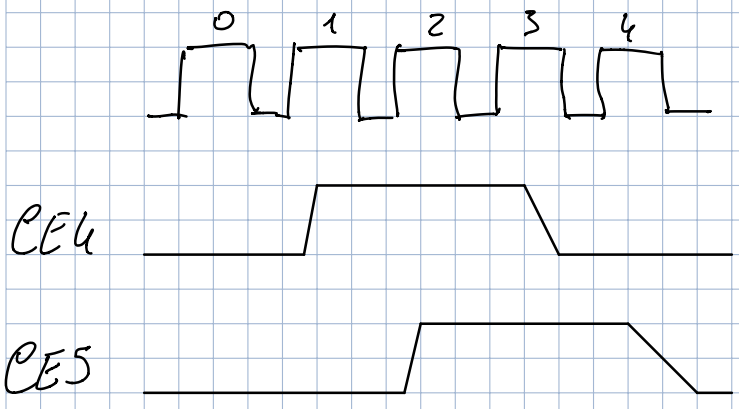


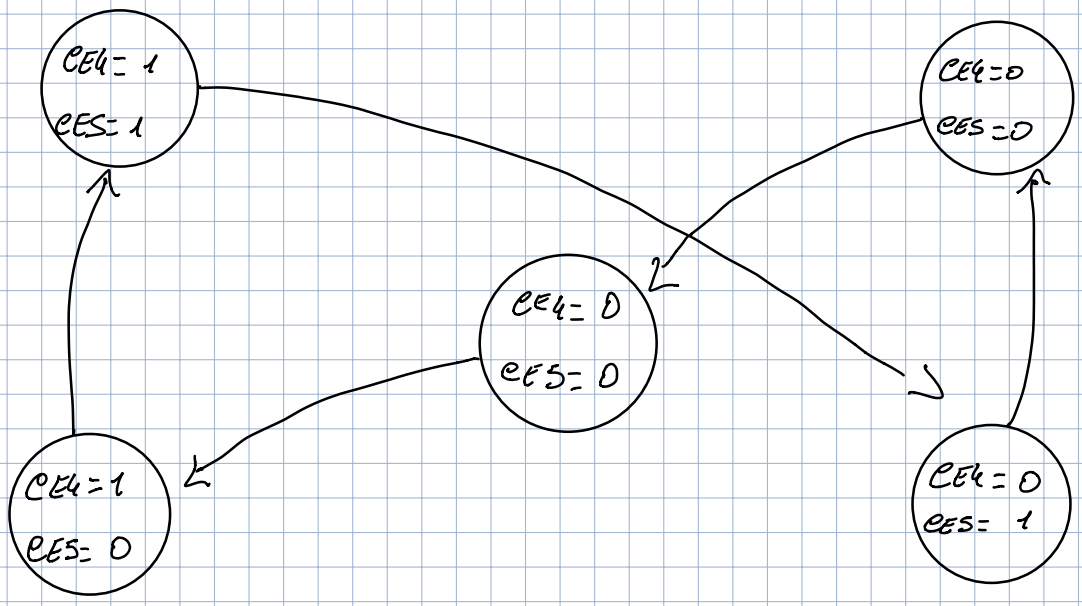
Partie 2

(1)

$\sigma \rightarrow R5 \circ t_2, t_3$

Autres $\rightarrow R4 \circ t_3, t_4$





Funzioni prossimo stato

Q_2	Q_1	Q_0	Q_2'	Q_1'	Q_0'
0	0	0	0	0	1
0	0	1	0	1	0
0	1	0	0	1	1
0	1	1	1	0	0
1	0	0	0	0	0
1	0	1	X	X	X
1	1	0	X	X	X
1	1	1	X	X	X

$$Q_2' = \bar{Q}_2 Q_1 Q_0$$

$$Q_1' = \bar{Q}_2 \bar{Q}_1 Q_0 + \bar{Q}_2 Q_1 \bar{Q}_0 = \bar{Q}_2$$

$$Q_0' = \bar{Q}_2 \bar{Q}_1 \bar{Q}_0 + \bar{Q}_2 Q_1 \bar{Q}_0 = \bar{Q}_2 \bar{Q}_0$$

Funzioni di uscita

$Q_2 Q_1 Q_0$	4	5
0 0 0	0	0
0 0 1	1	0
0 1 0	1	1
0 1 1	0	1
1 0 0	0	0
1 0 1	X	X
1 1 0	X	X
1 1 1	X	X

$$CE4 = \bar{Q}_2 \bar{Q}_1 Q_0 + \bar{Q}_2 Q_1 \bar{Q}_0$$

$$CE5 = \bar{Q}_2 Q_1 \bar{Q}_0 + \bar{Q}_2 Q_1 Q_0$$

② R0 = R1 + (R2 shiftato di 2 a sinistra)

poi R1 = R1 + R2

③

a) 05000650 → 120001003

b) Page fault, bit di validità a 0