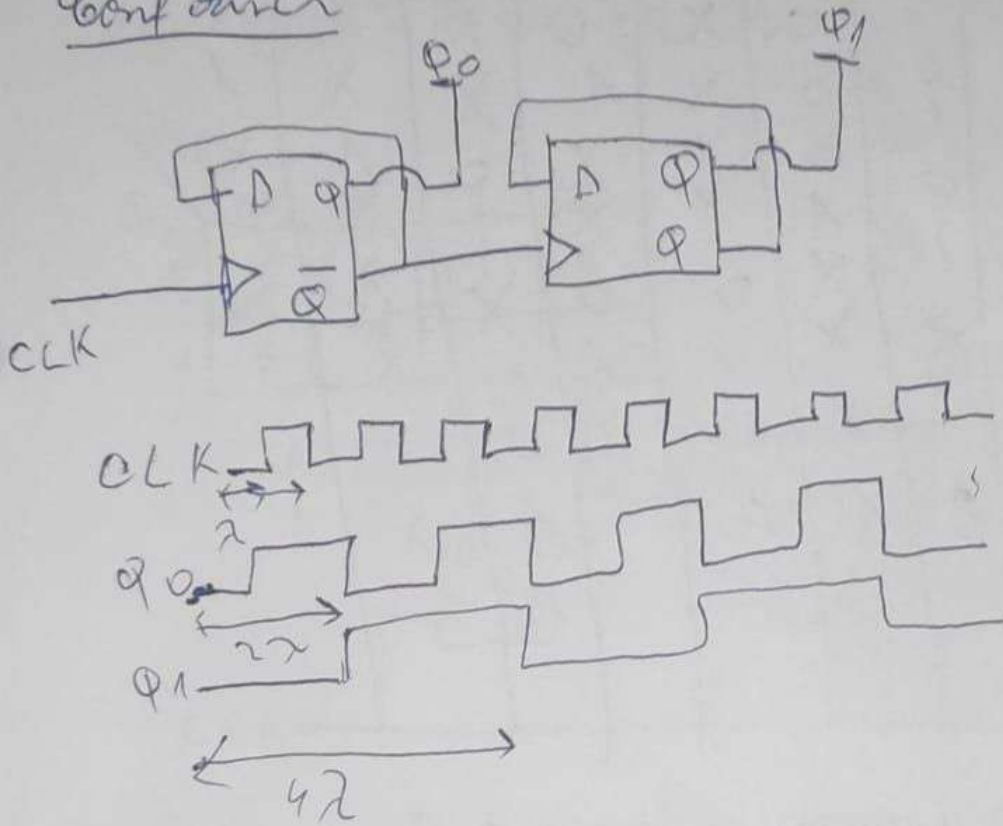


Unus 10 Probleme Logice

Conf asinc



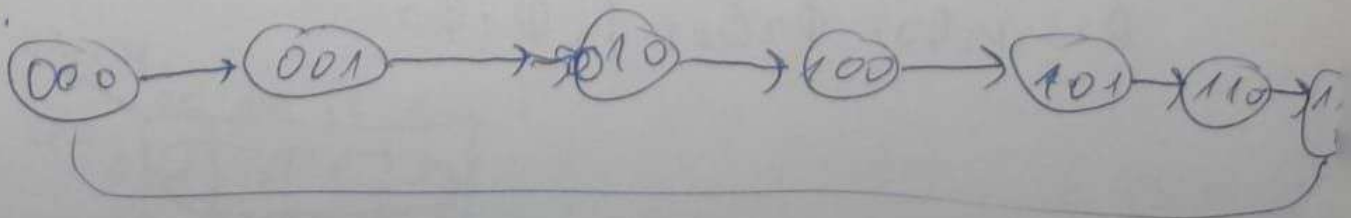
Configurația asincronă fn
ba divizor de frec în ordinul

2^n unde λ - lungimea de undă ($\gamma = \frac{1}{\lambda}$) o semnal de
n-re de bitați intrale

Pt generarea de număratele folosim configurația:

Num. nel descise de o MST (FSM) definită pe
un graf ciclic orientat

E.g.



Φ_2	Φ_1	Φ_0	Φ_2'	Φ_1'	Φ_0'	J_2	K_2	J_1	K_1	J_0	K_0
0	0	0	0	0	1	0	X	0	X	1	X
0	0	1	0	1	0	0	X	1	X	X	1
0	1	0	0	1	1	0	X	X	0	1	X
0	1	1	1	0	0	1	X	X	1	X	1
1	0	0	1	0	1	X	0	0	X	1	X
1	0	1	1	1	0	X	0	1	X	X	1
1	1	0	1	1	1	X	0	X	0	1	X
1	1	1	0	0	0	X	1	X	1	X	1

Dacă BB de tip 0 Kopioze intră la ieșirea Φ pe ~~frontul~~ are al semnului de cas.

$$D_2 = \Phi_2'$$

$$D_1 = \Phi_1'$$

$$D_0 = \Phi_0'$$

$$D_2 = \sum (3, 4, 5, 6)$$

$$D_2 =$$

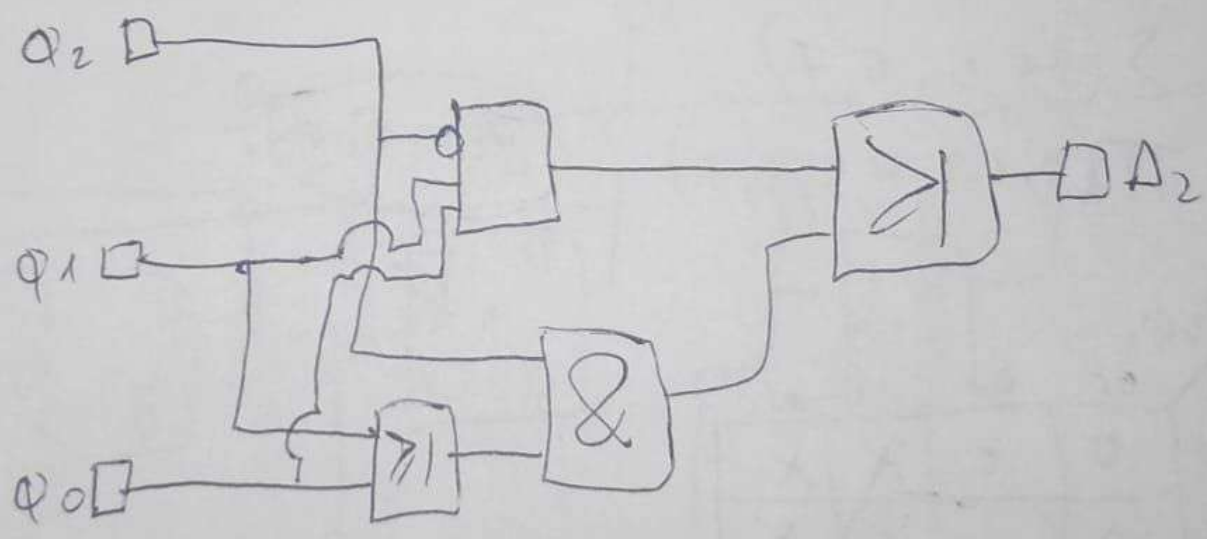
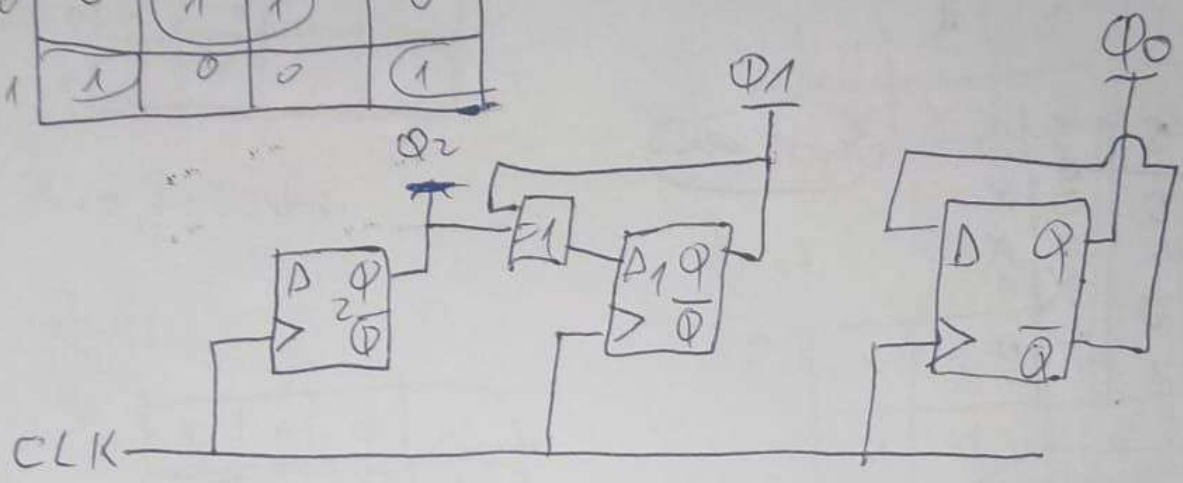
$\Phi_2 \backslash \Phi_1$	0	1
0	0	1
1	1	0

$$D_2 = \Phi_2 \Phi_0 + \Phi_2 \bar{\Phi}_1 + \bar{\Phi}_2 \Phi_1 \Phi_0$$

$$\Delta_1 = \sum(1, 2, 5, 6)$$

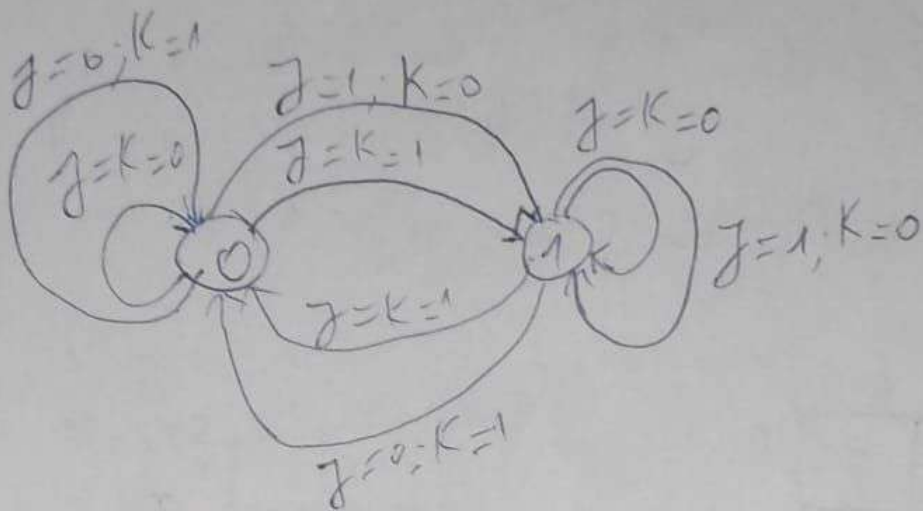
$$\Delta_1 = \Phi_1 \bar{\Phi}_0 + \bar{\Phi}_1 \Phi_0 = \Phi_1 \oplus \Phi_0$$

$\Phi_2 \Phi_1$	00	01	11	10
Φ_0	0	1	1	0
	1	1	0	1



$$\Delta_0 = \sum(0, 2, 4, 6) = \bar{\Phi}_0$$

$\Phi_2 \Phi_1$	00	01	11	10
Φ_0	1	1	1	1
	1	0	0	0



Q	Q'	J	K
0	0	0	X
0	1	1	X
1	0	X	1
1	1	X	0

$X = 1 \text{ atau } 0$

Tabel pg_2

$$J_2 = \sum(3, 4, 5, 6, 7)$$

$$\prod(0, 1, 2, 4, 5, 6, 7)$$

$J_2 = \Phi_1 \Phi_0$

$\Phi_2 \Phi_1$	Φ_0	00	01	11	10
0	0	0	0	X	X
1	0	0	1	X	X

$$J_1 = \sum (1, 2, 3, 5, 6, 7)$$

$$K_1 = \sum (0, 2, 3, 4, 6, 7)$$

$$J_0 = 1 = K_0$$

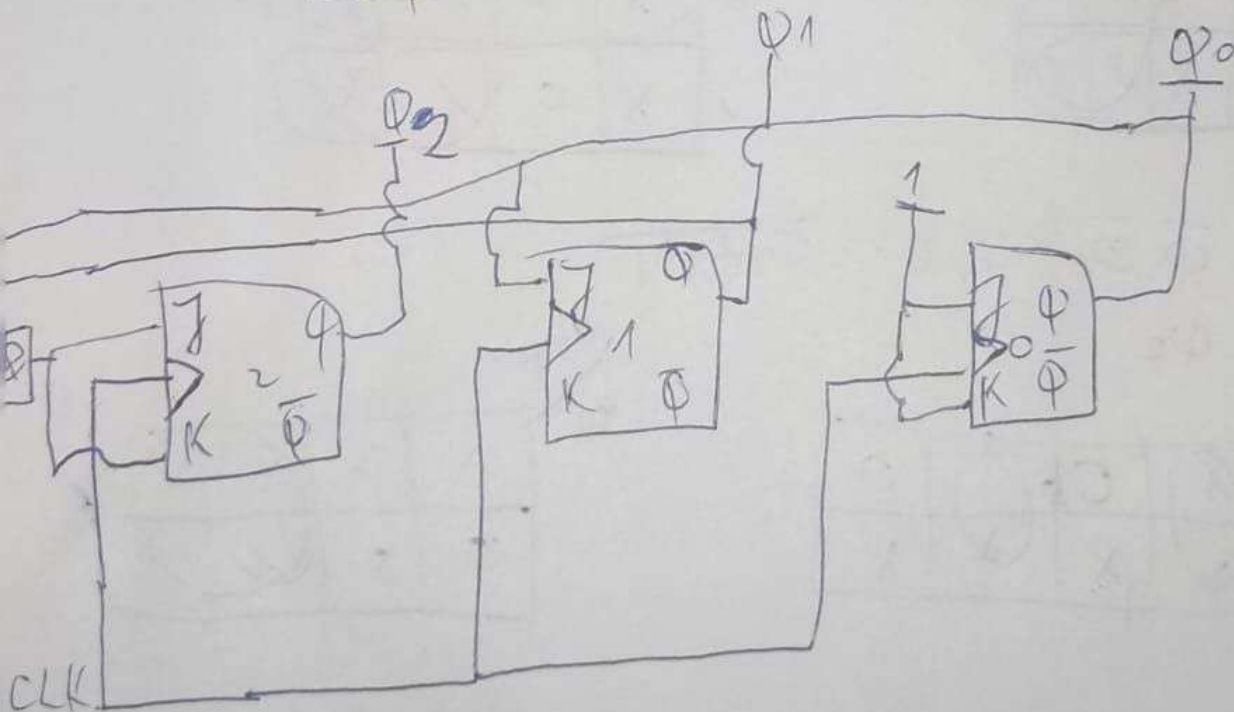
$\Phi_2 \backslash \Phi_1$	00	01	11	10
Φ_0				
0	0	X	X	0
1	1	X	X	1

$\Phi_2 \backslash \Phi_1$	00	01	11	10
Φ_0				
0	1	1	1	1
1	X	X	X	X

$$K_1 = J_1 = \Phi_0$$

$\Phi_2 \backslash \Phi_1$	00	01	11	10
Φ_0				
0	X	0	0	X
1	X	1	1	X

$\Phi_2 \backslash \Phi_1$	00	01	11	10
Φ_0				
0	X	X	X	X
1	1	1	1	1



Q_2	Q_1	Q_0	Q_2'	Q_1'	Q_0'	J_2	K_2	J_1	K_1	J_0	K_0
0	0	0	0	0	1	0	X	X	1	1	X
0	0	1	0	1	1	0	X	X	X	X	0
0	1	0	1	0	0	1	X	1	X	0	X
0	1	1	1	1	1	1	X	X	X	X	0
1	0	0	0	1	0	X	1	X	0	0	X
1	0	1	1	1	0	X	0	1	1	X	1
1	1	0	1	0	1	X	1	1	X	X	1
1	1	1	0	0	0	X	1	1	X	X	1

$$K_2 = \overline{Q_0 + Q_1}$$

$$J_1 = Q_0 + Q_2$$

$J_2 = Q_1 Q_0$

$Q_2 \backslash Q_1 Q_0$	00	01	11	10
0	0	1	X	X
1	0	X	X	X

$Q_2 \backslash Q_1 Q_0$	00	01	11	10
0	X	X	0	1
1	X	X	1	0

$$K_1 = \overline{Q_0 + Q_2}$$

$Q_2 \backslash Q_1 Q_0$	00	01	11	10
0	0	X	X	1
1	1	X	X	1

$Q_2 \backslash Q_1 Q_0$	00	01	11	10
0	X	1	1	X
1	X	0	1	X

$$J_0 = \overline{Q_2} \overline{Q_1} + Q_2 Q_1 = \overline{Q_2 \oplus Q_1}$$

$$K_0 = Q_2$$

$Q_2 \backslash Q_1 Q_0$	00	01	11	10
0	1	0	1	0
1	X	X	X	X

$Q_2 \backslash Q_1 Q_0$	00	01	11	10
0	X	X	X	X
1	0	0	1	1

