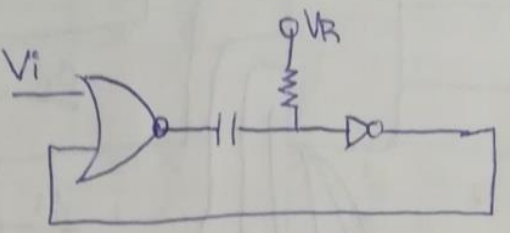
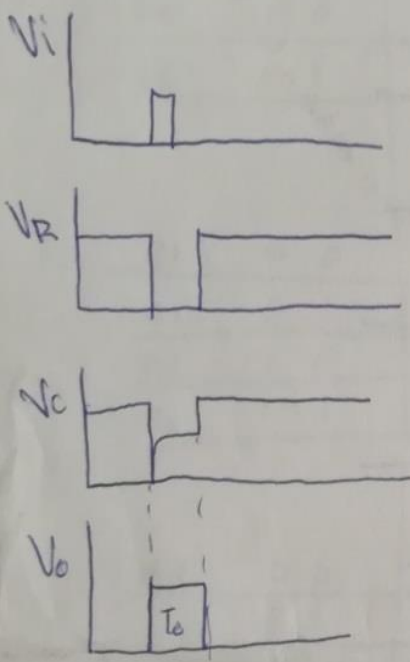
Final 01/02/2016

① Diotor

Monoestable positivo

$T_0 = 12 m seg.$





$$V_R = V_f + (V_0 - V_f).e^{\frac{-t}{\tau}}$$

$$\frac{V_{DD}}{2} = V_{DD} + -V_{DD}.e^{\frac{-t}{\tau}}$$

$$+\frac{V_{DD}}{2} = +V_{DD}.e^{\frac{-t}{\tau}}$$

$$+\frac{1}{2} = e^{\frac{-t}{\tau}}$$

$$\ln(1/2) = -\frac{t}{\tau}$$

$$\tau\,(+0'69) = +t$$

$$R = \frac{12.10^{-3}}{10.10^{6}.0'69} \Rightarrow \underline{1739{,}13\ \Omega}$$

---

② $T = 10100101$

$d_9\ d_8\ d_7\ d_6\ d_5\ \ d_4\ d_3\ d_2\ \ d_1$

$1\ 0\ 1\ 1\ 0\ K_4\ 0\ 1\ 0\ K_3\ 1\ K_2\ K_1$

$2^n \geq 10 + n$

$16 \geq 14$

$2^3\ 2^2\ 2^1\ 2^0$

$8\ 4\ 2\ 1$

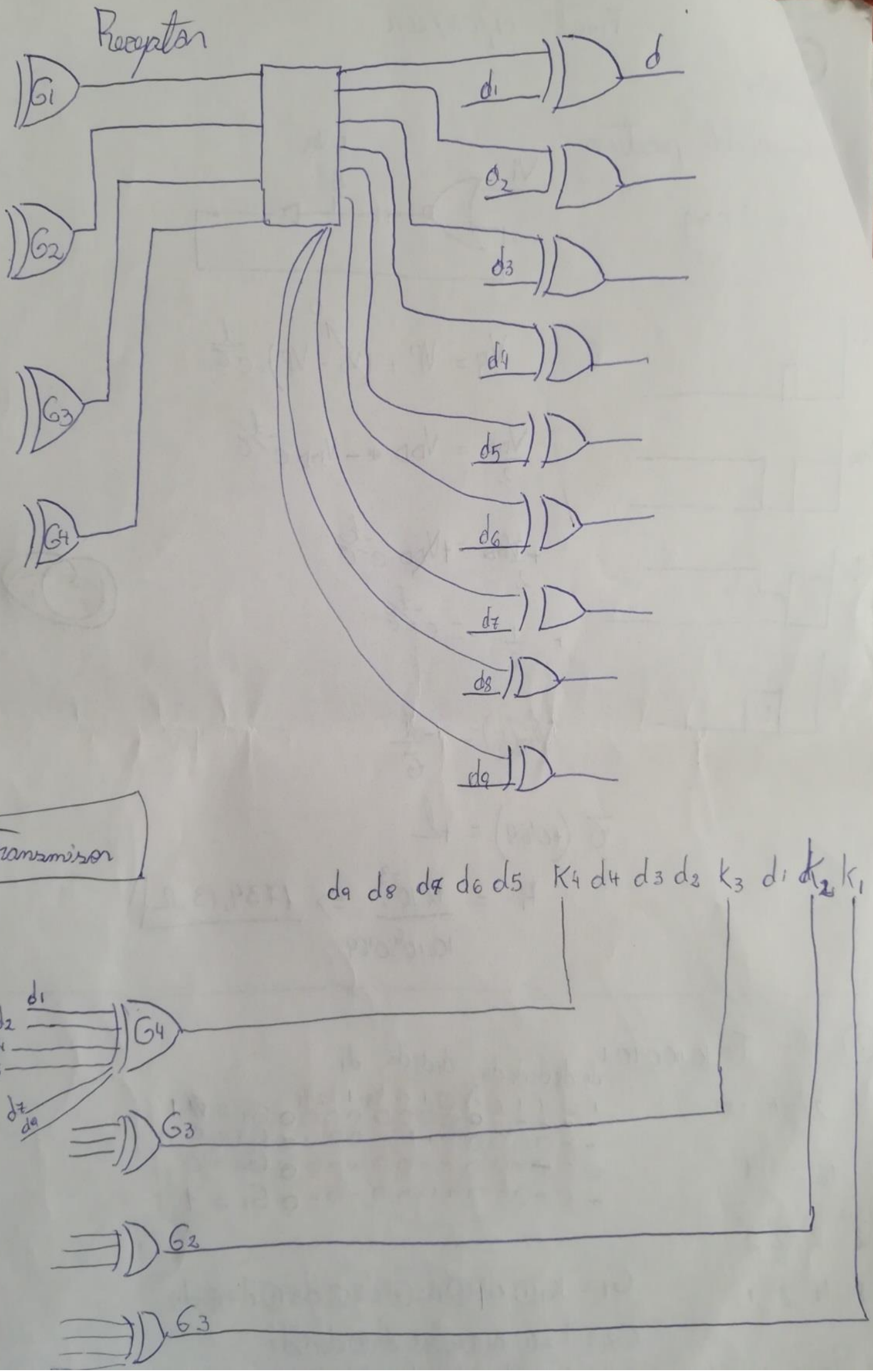
													$G_4 = 1$
-	-	-	-	0	0	0	0	0	0	0			$G_3 = 0$
-	-	0	0	0	-	-	-	0	0	0			$G_2 = 0$
0	0	-	0	0	-	-	0	0	-	-	0		$G_1 = 1$
-	0	-	0	-	0	-	0	-	0	-			

$$G_1 = K_1 \oplus d_9 \oplus d_2 \oplus d_4 \oplus d_5 \oplus d_7 \oplus d_9$$

$$G_2 = K_2 \oplus d_1 \oplus d_3 \oplus d_4 \oplus d_6 \oplus d_7$$

$$G_3 = K_3 \oplus d_2 \oplus d_3 \oplus d_4 \oplus d_8 \oplus d_9$$

$$G_4 = K_4 \oplus d_5 \oplus d_6 \oplus d_7 \oplus d_8 \oplus d_9$$


Receptor
G1
G2
G3
G4
d1
d2
d3
d4
d5
d6
d7
d8
d9
d
transmisor
d9 d8 d7 d6 d5 K4 d4 d3 d2 K3 d1 K2 K1
d1
d2
d4
d5
d7
d9
G4
G3
G2
G3

Examen 1° turno 2017

AB	Q(t)	Q(t+1)	J_1	K_1	J_0	K_0
00	00	00	0	X	0	X
00	01	01	0	X	X	0
00	10	10	0	0	0	X
00	11	11	X	0	X	0
10	00	01	0	X	1	X
10	01	10	1	X	X	1
10	10	11	X	0	1	X
10	11	00	X	1	X	1
01	00	10	1	X	0	X
01	01	11	1	X	X	0
01	10	00	X	1	0	X
01	11	01	X	1	X	0
11	00	11	1	X	1	X
11	01	00	0	X	X	1
11	10	01	X	1	1	X
11	11	10	X	0	X	1

00 01 10 11

0 0 0 X
0 1 1 X
1 0 X 1
1 1 X 0

Q_1Q_0

AB \ Q_1Q_0	00	01	11	10
00	0	0	1	1
01	1	1	0	0
11	1	0	1	0
10	0	1	0	1

$Q_1 = B\cdot\bar{Q}_1\bar{Q}_0 + \bar{A}B\bar{Q}_1$

Q_1Q_0

AB \ Q_1Q_0	00	01	11	10
00	0	1	1	0
01	0	1	1	0
11	1	0	0	1
10	1	0	0	1

$Q_0 = A\bar{Q}_0 + \bar{A}Q_0$

Q_1Q_0

AB \ Q_1Q_0	00	01	11	10
00	0	0	X	X
01	1	1	X	X
11	1	0	X	X
10	0	1	X	X

$\bar{J}_1 = \bar{Q}_1\bar{Q}_0B + \bar{A}B + A\bar{B}Q_0$

Q_1Q_0

AB \ Q_1Q_0	00	01	11	10
00	X	X	0	0
01	X	X	1	1
11	X	X	0	1
10	X	X	1	0

$K_1 = \bar{A}B + AB\bar{Q}_0 + A\bar{B}Q_0$

Q_1Q_0

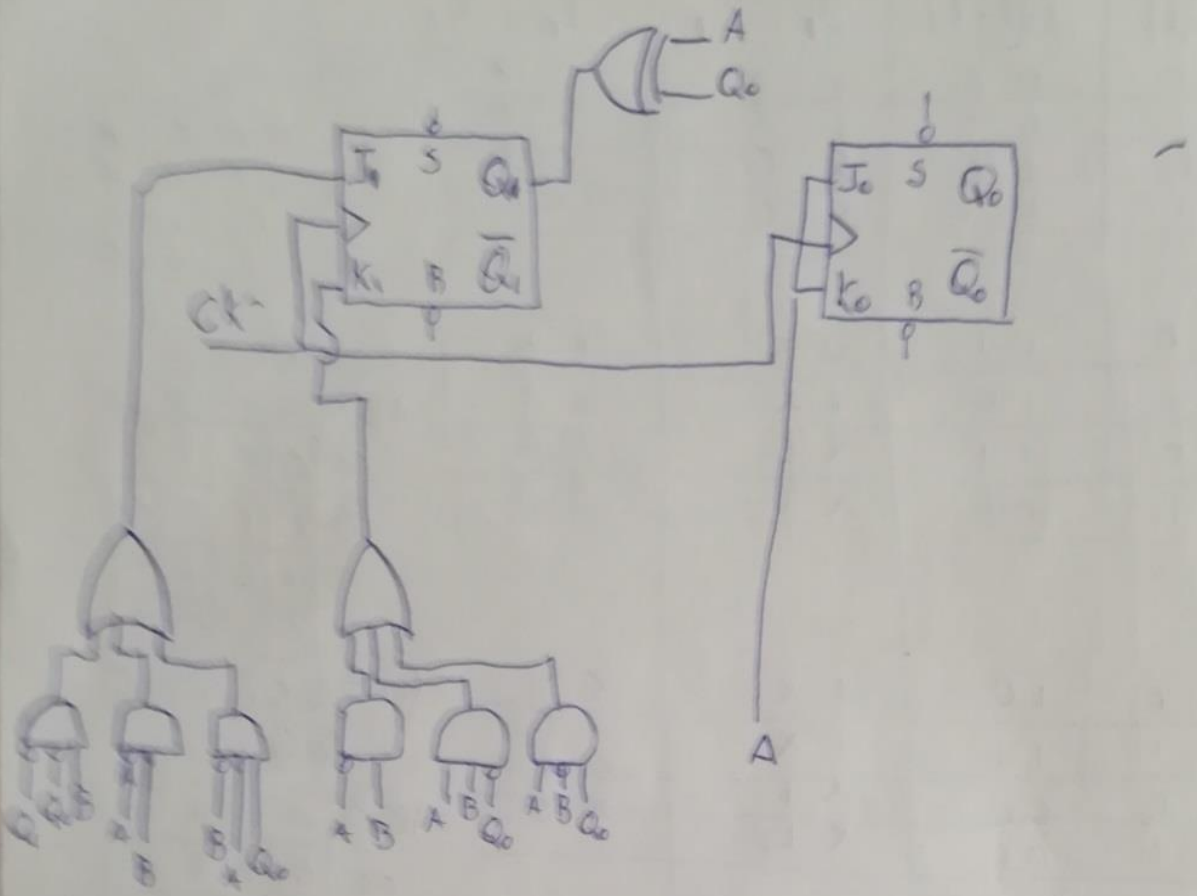
AB \ Q_1Q_0	00	01	11	10
00	0	X	X	0
01	0	X	X	0
11	1	X	X	1
10	1	X	X	1

$J_0 = A$

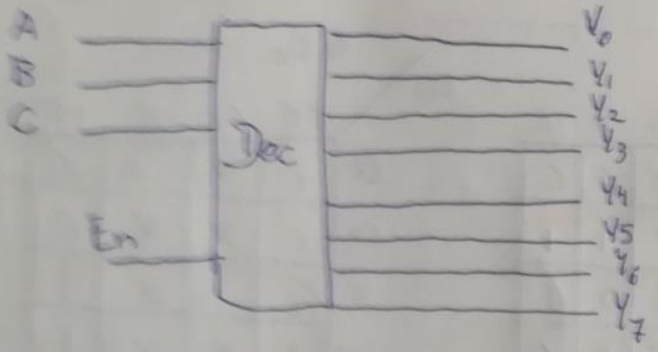
Q_1Q_0

AB \ Q_1Q_0	00	01	11	10
00	X	0	0	X
01	X	0	0	X
11	X	1	1	X
10	X	1	1	X

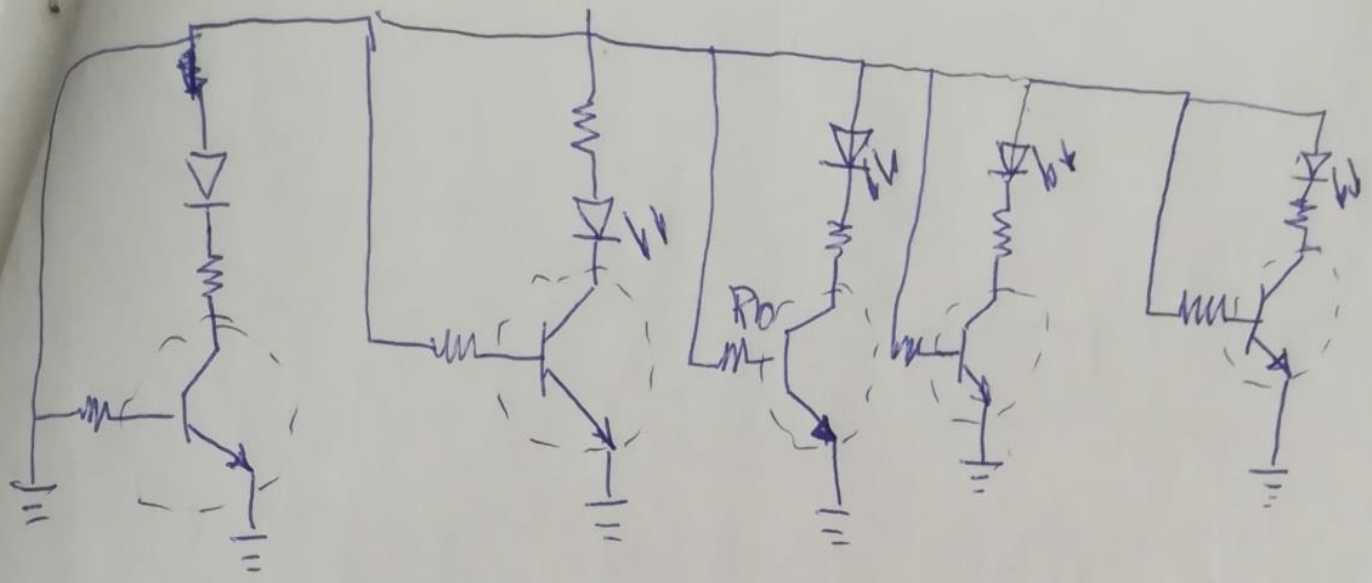
$K_0 = A$



④



En	A	B	C	Y_7	Y_6	Y_5	Y_4	Y_3	Y_2	Y_1	Y_0
0	x	x	x	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	1
1	0	0	1	0	0	0	0	0	0	1	0
1	0	1	0	0	0	0	0	0	1	0	0
1	0	1	1	0	0	0	0	1	0	0	0
1	1	0	0	0	0	0	1	0	0	0	0
1	1	0	1	0	0	1	0	0	0	0	0
1	1	1	0	0	1	0	0	0	0	0	0
1	1	1	1	1	0	0	0	0	0	0	0



$$V_{cc} - V_D - V_R = 0$$

$$V_R = V_{cc} - V_D$$

$$R_c = \frac{V_{cc} - V_D}{I_c}$$

$R_c =$

$$I_B = \frac{I_c}{\beta}$$

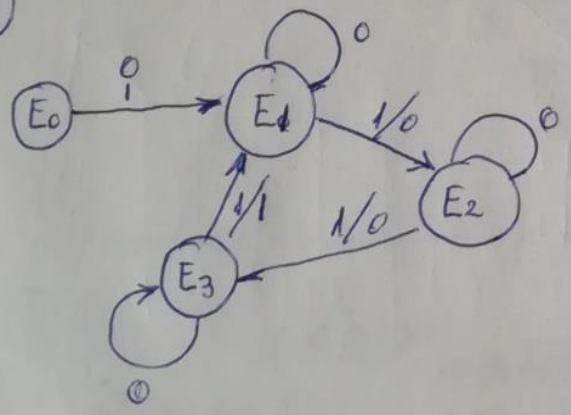
$$V_{cc} - V_{Rb} - V_{BE} = 0$$

$$V_{Rb} = V_{cc} - V_{BE}$$

$$R_b = \frac{V_{cc} - V_{BE}}{I_b}$$

---

(6)



Examen 1° turno 2017

A	B	C	D	S_2	S_1	S_0	MUX
0	0	0	0	1	0	0	D
0	0	0	1	0	1	1	1
0	0	1	0	0	1	1	1
0	0	1	1	0	1	0	$\bar{D}$
0	1	0	0	0	1	1	1
0	1	0	1	0	1	0	$\bar{D}$
0	1	1	0	0	1	0	$\bar{D}$
0	1	1	1	0	0	1	$\bar{D}$
1	0	0	0	0	1	1	0
1	0	0	1	0	1	0	
1	0	1	0	0	0	0	
1	0	1	1	0	0	1	
1	1	0	0	0	1	0	
1	1	0	1	0	0	1	
1	1	1	0	0	0	1	
1	1	1	1	0	0	0	

0	0	0	0	
1	0	0	1	
2	0	1	0	
3	0	1	1	
4	1	0	0	
5	1	0	1	
6	1	1	0	
7	1	1	1	

S_2

	00	01	11	10
00	1			
01				
11				
10				

$\bar{S_2} = \bar{A}BC\bar{D}$

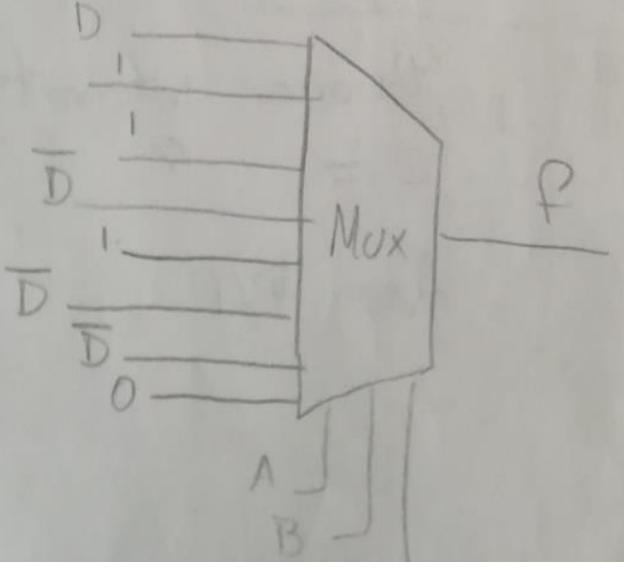
	00	01	11	10
00	0	1	1	1
01	1	1	0	1
11	1	0	0	0
10	1	1	0	1

S_0

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

$S1 =$

$S_0 =$



(2) Calcular: a) Frecuencia max
b) Margen de ruido
b) Fan out
c) potencia max disipada

$$f = \frac{1}{T_1} = \frac{1}{3'4 \cdot 10^{-9}} = 2'94 \cdot 10^{8} \text{ Hz}$$

$f_{max} \rightarrow f = \frac{1}{T_2} = 333\,333\,333,3 \text{ Hz}$

$$I_{cc} = \frac{I_{ccH} + I_{ccL}}{2}$$

$I_{cc} =$

$P_D = I_{cc} \cdot V_{cc}$

$P_D = 0'009 \text{ W}$

$V_{ML} = V_{iL(max)} - V_{oL(max)} = 1V - 0'5 = 0'5$

$V_{MH} = V_{o(min)H} - V_{IH(min)} = 2'3V - 1'9V = 0'4$

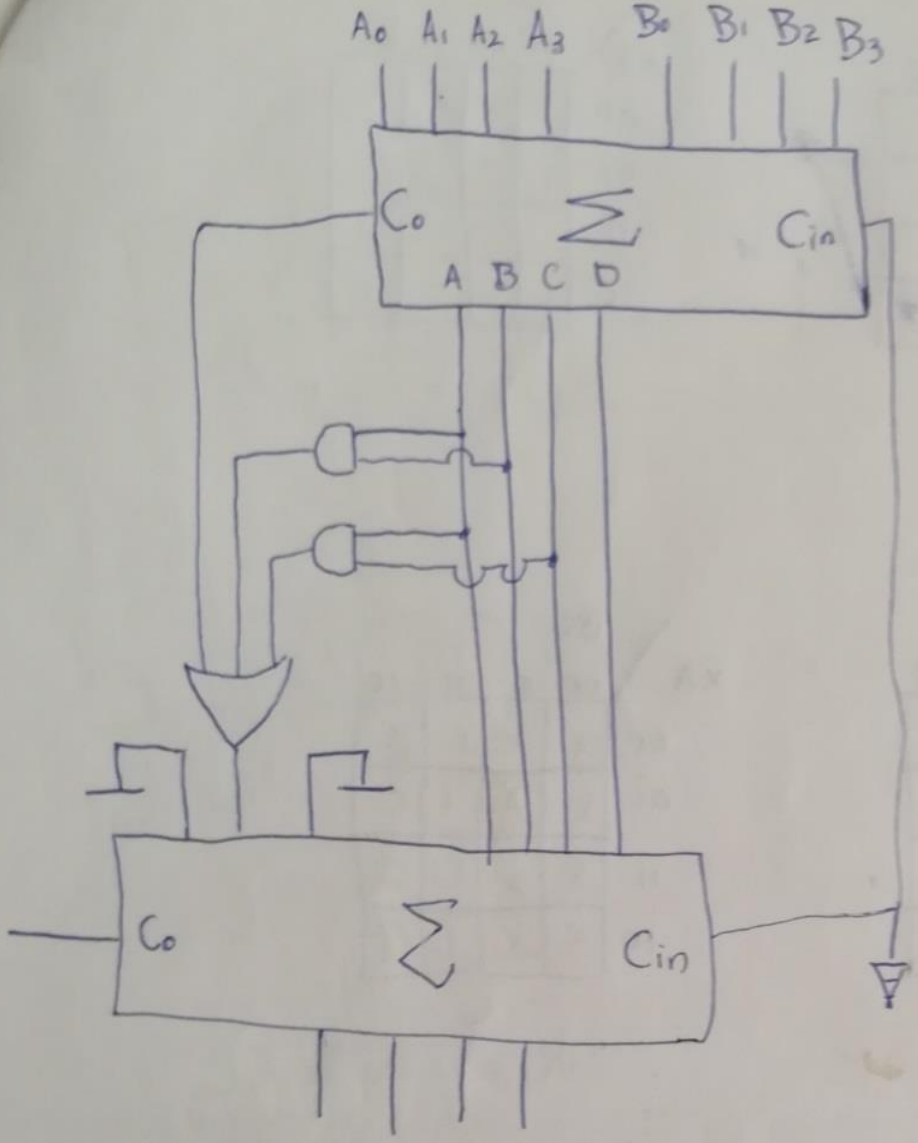
Nombre = Service_WEB

Apn = internet.movil

Usuario = internet

C = ci

Auto = PAP



$$K = C_0 + S_1 S_3 + S_2 S_3$$

(4)

0	0	0	0
1	0	0	1
2	0	1	1
3	0	1	0
4	1	1	0
5	1	1	1
6	1	0	1
7	1	0	0

Q(t)		Q(t+1)	
J	K	J	K
0	0	0	x
0	1	1	x
1	0	x	1
1	1	x	0

X	A	B	C	Q(t+1)			J_2	K_2	J_1	K_1	J_0	K_0	R
0	0	0	0	0	0	1	0	x	0	x	1	x	
0	0	0	1	0	1	1	0	x	1	x	x	0	
0	0	1	1	0	1	0	0	x	x	0	x	1	
0	0	1	0	1	1	0	1	x	x	0	0	x	
0	1	1	0	1	1	1	x	0	x	0	1	x	
0	1	1	1	1	0	1	x	0	x	1	x	0	
0	1	0	1	1	0	0	x	0	0	x	x	1	
0	1	0	0	0	0	0	x	1	0	x	0	x	
1	1	0	0	1	0	1	x	0	0	x	1	x	
1	1	0	1	1	1	1	x	0	1	x	x	0	
1	1	1	1	1	1	0	x	0	x	0	x	1	
1	1	1	0	0	1	0	x	1	x	0	0	x	
1	0	1	0	0	1	1	0	x	x	0	1	x	
1	0	1	1	0	0	1	0	x	x	1	x	0	
1	0	0	1	0	0	0	0	x	0	x	x	1	
1	0	0	0	1	0	0	1	x	0	x	0	x	

xA \ BC	00	01	11	10
00	0	0	0	1
01	x	x	x	x
11	x	x	x	x
10	1	0	0	0

$J_2 = x\bar{B}\bar{C} + \bar{x}B\bar{C}$

xA \ BC	00	01	11	10
00	x	x	x	x
01	1	0	0	0
11	0	0	0	1
10	x	x	x	x

$K_2 = \bar{x}B\bar{C} + xB\bar{C}$

xA \ BC	00	01	11	10
00	0	1	x	x
01	0	0	x	x
11	0	1	x	x
10	0	0	x	x

$J_1 = \bar{x}\bar{A}C + xA.C$

xA \ BC	00	01	11	10
00	x	x	0	0
01	x	x	1	0
11	x	x	0	0
10	x	x	1	0

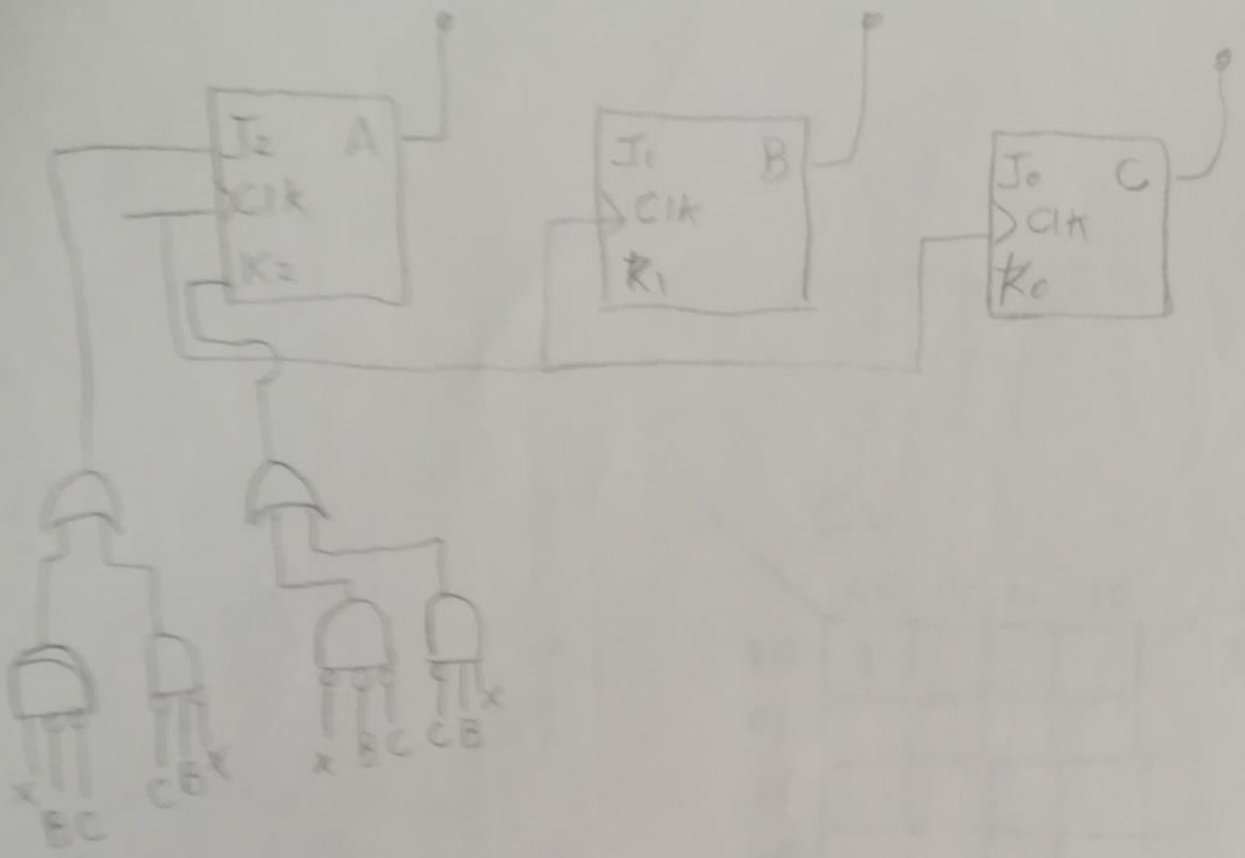
$K_1 = \bar{x}AG + x\bar{A}.C$

xA \ BC	00	01	11	10
00	x	0	1	x
01	x	1	0	x
11	x	0	1	x
10	x	1	0	x

$K_0 = \bar{x}\bar{A}B + \bar{x}A\bar{B} + xAB + x\bar{A}\bar{B}$

xA \ BC	00	01	11	10
00	1	x	x	0
01	0	x	x	1
11	1	x	x	0
10	0	x	x	1

$J_0 = \bar{x}\bar{A}B + \bar{x}AB + xA.\bar{B} + x\bar{A}.B$


J2
A
Clk
K2
J1
B
Clk
K1
J0
C
Clk
K0
x
BC
CB
x
x
BC
CB
x

Final 15/02/2016 Prof. Guille

Margen de Ruido

Es el margen q' se especifica a maxima carga en la entrada, cuya margen si es superado no se acaguean los niveles logicos en la salida, tambien produce efectos indeseables en la salida.

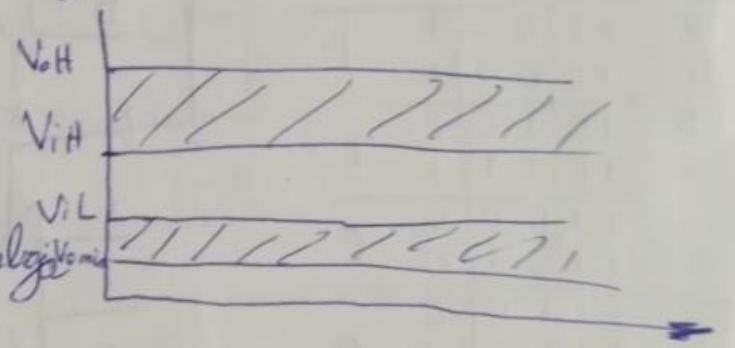
~~Tiempo de subida~~ Ruido en baja

$$M_{RH} = V_{omin\,H} - V_{imax\,H}$$

~~Tiempo de retardo~~ Ruido en baja

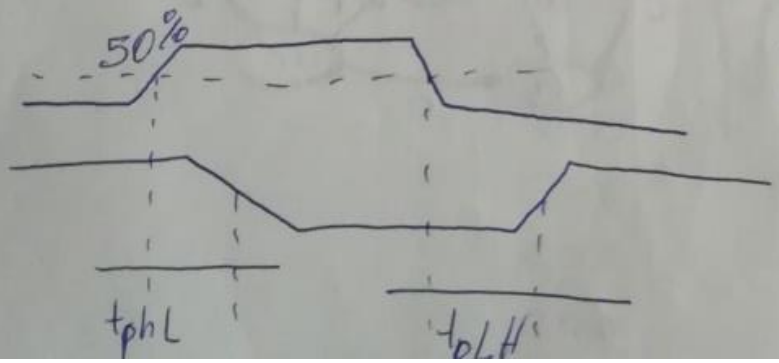
$$M_{RL} = V_{omax\,L} - V_{imin\,L}$$

Grafica



(t_{pHL}) Tiempo de subida: es el tiempo en el cual hay un cambio en la entrada con su respectivo cambio en la salida, la salida pasa de alta a baja

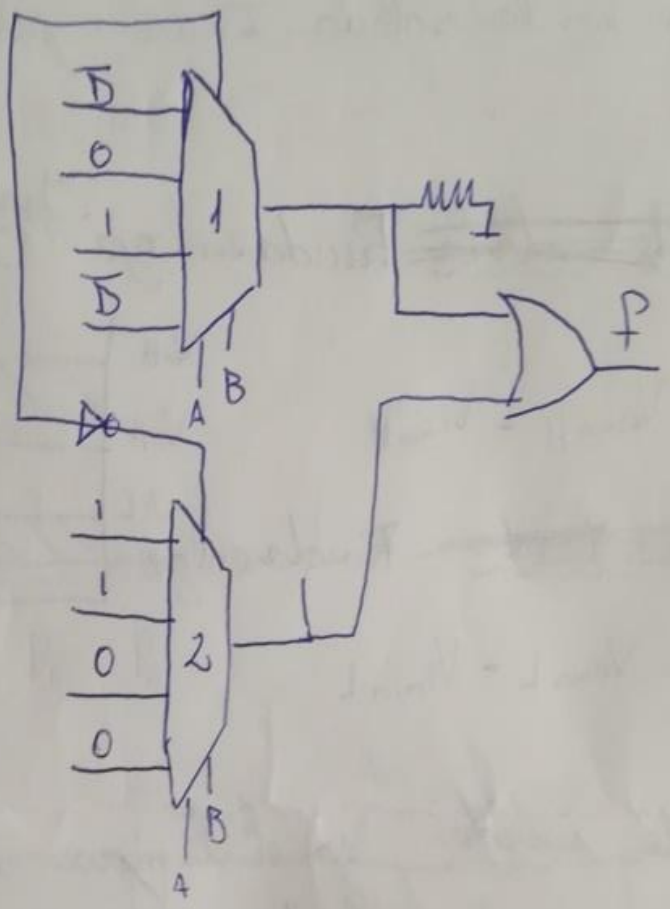
Tiempo de bajada (t_{pLH}): es el tiempo en el cual hay un cambio en la entrada con su respectivo cambio en la salida, la salida pasa de baja a alta



tiempo de propagacion es el promedio

(2) Resolver con 2 Mux 4:1, una de los Mux en alta impedancia y el otra queda en cero cuando la señal Enable esta en alta (15 puntos)

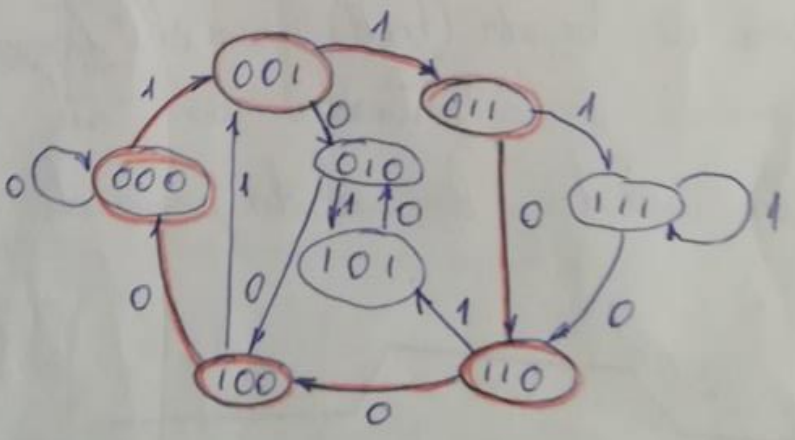
	A	B	C	D	F	
15	0	0	0	0	1	$\overline{D}$
14	0	0	0	1	0	
13	0	0	1	0	0	0
12	0	0	1	1	0	
11	0	1	0	0	1	1
10	0	1	0	1	1	
9	0	1	1	0	1	$\overline{D}$
8	0	1	1	1	0	
7	1	0	0	0	1	1
6	1	0	0	1	1	
5	1	0	1	0	1	1
4	1	0	1	1	1	
3	1	1	0	0	0	0
2	1	1	0	1	0	
1	1	1	1	0	0	0
0	1	1	1	1	0	



(3) Tela debo

(4)

						Par
0	0	0	0	0	1	0000
1	0	0	0	1		
2	0	0	1	0	1	0010
3	0	0	1	1		
4	0	1	0	0	1	0100
5	0	1	0	1		
6	0	1	1	0	1	0110
7	0	1	1	1		
8	1	0	0	0	1	1000
9	1	0	0	1		

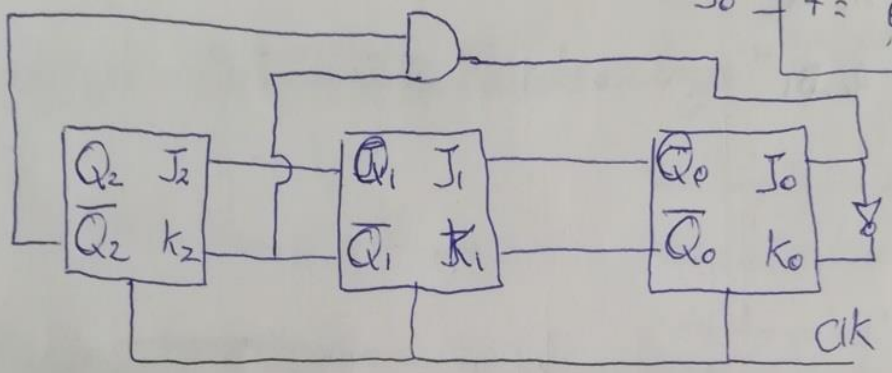


$Q_2Q_1Q_0$	Asignación	F
000	0000	1
001	0010	1
011	0100	0
110	0110	0
100	1000	0

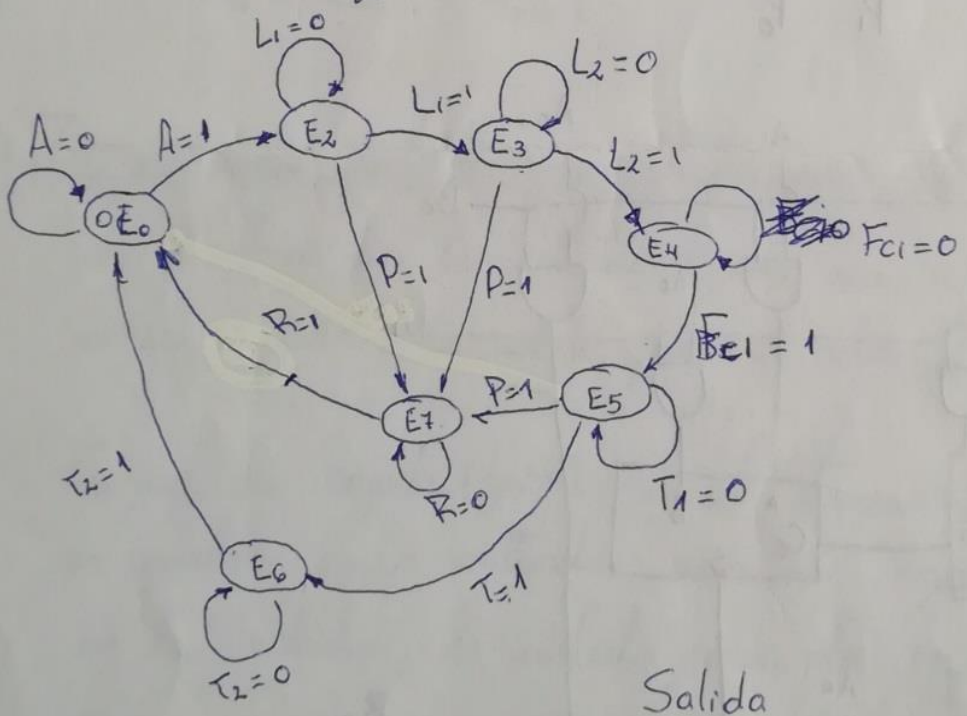
$F =$

Q_2 \ Q_1Q_0	00	01	11	10
0	1	1	0	X
1	0	X	X	0

$J_0 = F = \overline{Q_2} \cdot \overline{Q_1}$



(5)

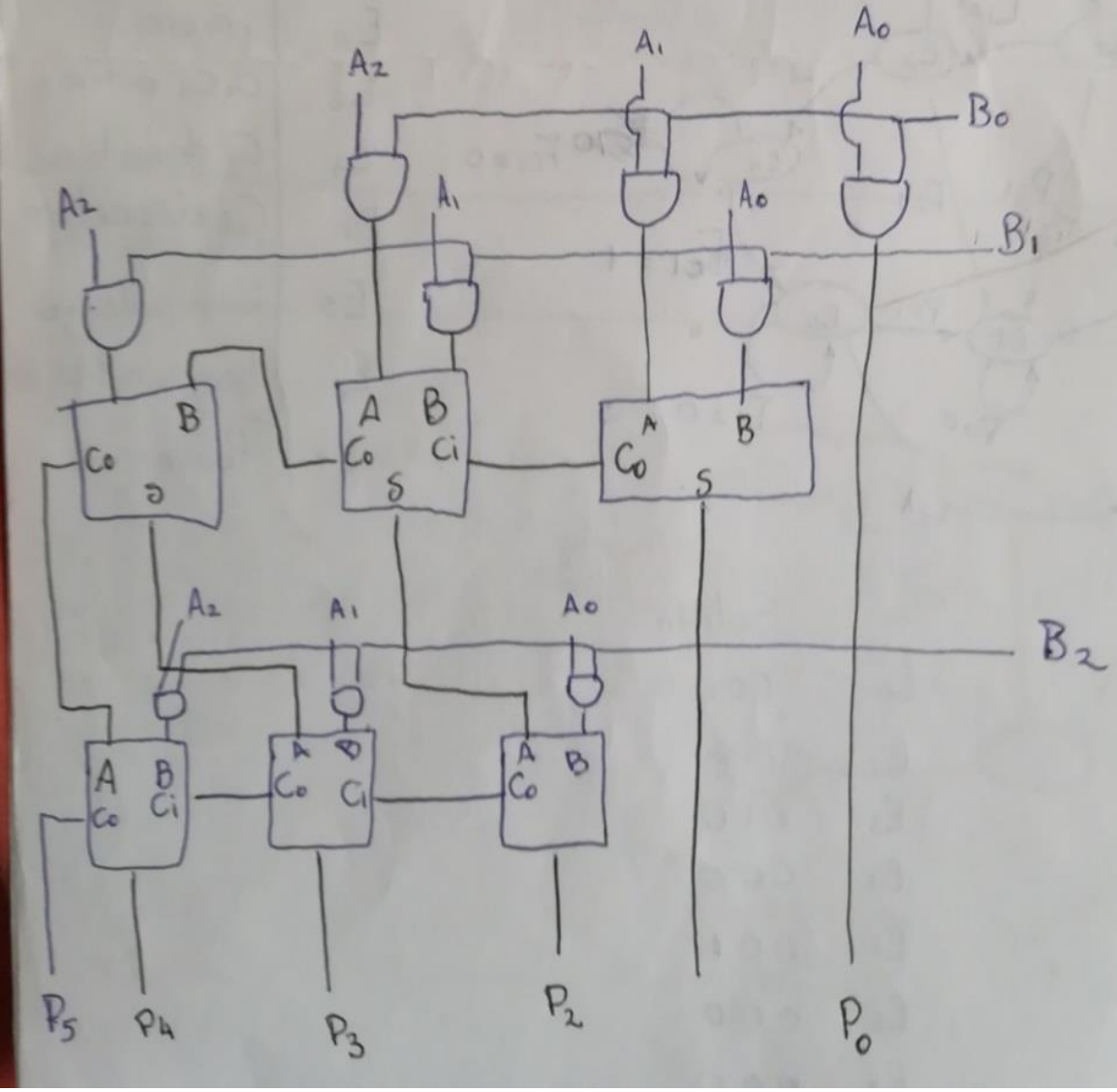


Estados	Descripción
E_0	inicio
E_2	C_1C_2 activos
E_3	C_1 desactivo
E_4	C_2 desactivo
E_5	Vacia valanza
E_6	tiempo retración
E_7	Pausa

	Salida
E_0	000
E_2	110
E_3	010
E_4	000
E_5	001
E_6	000
E_7	000

Realizar cuenta de multiplicación binaria

$$
\begin{array}{cccccc}
 & & A_2 & A_1 & A_0 & \\
 & & B_2 & B_1 & B_0 & \\
\hline
 & & A_2B_0 & A_1B_0 & A_0B_0 & \\
 & A_2B_1 & A_1B_1 & A_0B_1 & & \\
A_2B_2 & A_1B_2 & A_0B_2 & & & \\
\hline
C_4 & C_3 & C_2 & C_1 & & \\
\hline
P_5 & P_4 & P_3 & P_2 & P_1 & P_0
\end{array}
$$

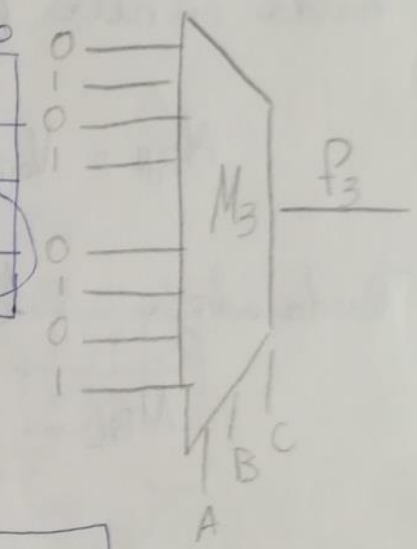


	A	B	C	D	F_1	F_2	F_3	M_1	M_2
0	0	0	0	0	0	0	0	0	0
1	0	0	0	1	0	0	0		
2	0	0	1	0	0	0	1	0	0
3	0	0	1	1	0	0	1		
4	0	1	0	0	0	1	0	0	1
5	0	1	0	1	0	1	0		
6	0	1	1	0	0	1	1	0	1
7	0	1	1	1	0	1	1		
8	1	0	0	0	1	0	0	1	0
9	1	0	0	1	1	0	0		
10	1	0	1	0	1	0	1	1	0
11	1	0	1	1	1	0	1		
12	1	1	0	0	1	1	0	1	1
13	1	1	0	1	1	1	0		
14	1	1	1	0	1	1	1	1	1
15	1	1	1	1	1	1	1		

A	B	C	F
0	0	0	0
0	0	1	1
0	1	0	2
0	1	1	3
1	0	0	4
1	0	1	5
1	1	0	6
1	1	1	7

AB \ CD	00	01	11	10
00	0	0	0	0
01	0	0	0	0
11	1	1	1	1
10	1	1	1	1

$F_1 = A$



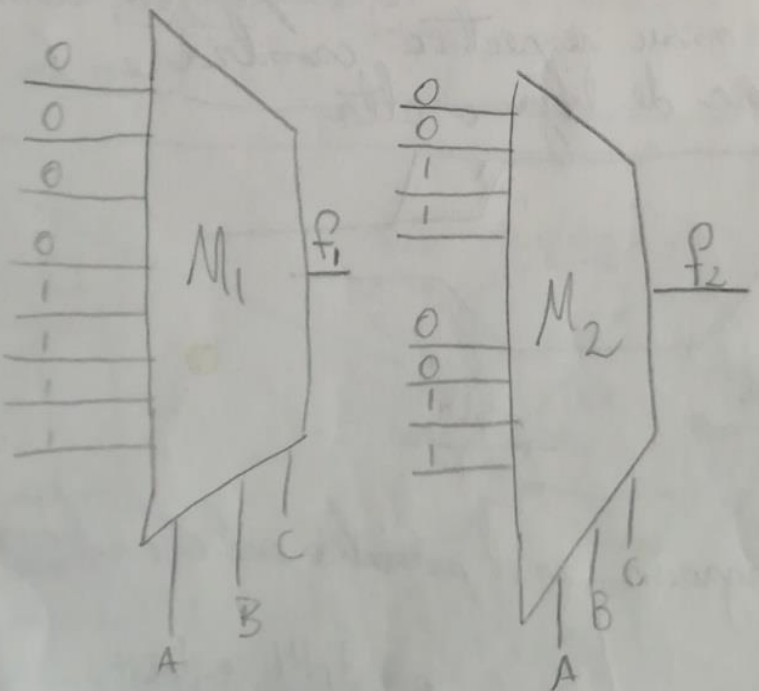
AB \ CD	00	01	11	10
00	0	0	0	0
01	1	1	1	1
11	1	1	1	1
10	0	0	0	0

$F_2 = B$

AB \ CD	00	01	11	10
00	0	0	1	1
01	0	0	1	1
11	0	0	1	1
10	0	0	1	1

$F_3 = C$

M_3
0
1
0
1
0
1
0
1



Examen Final enero 2015

(2) Margen de Ruido: es la tensión a máxima carga que puede existir en la entrada, cuya magnitud si es superada no se hacen los niveles lógicos. Puede causar efectos indeseables en la salida.

Ruido en alta (Tiempo de crecimiento)

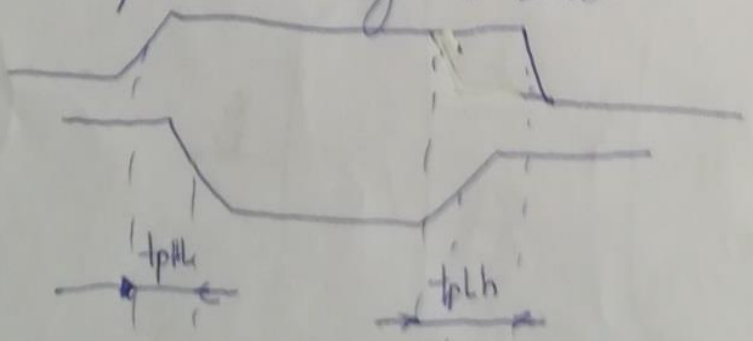
$$M_{RH} = V_{o(max)H} - V_{i(max)H}$$

Ruido en baja (Tiempo d' retarda)

$$M_{RL} = V_{i\,min\,L} - V_{o\,min\,L}$$

Tiempo de subida t_{pHL} = es el tiempo de cambio en la entrada con su respectivo cambio en la salida, la salida pasa de alta a baja

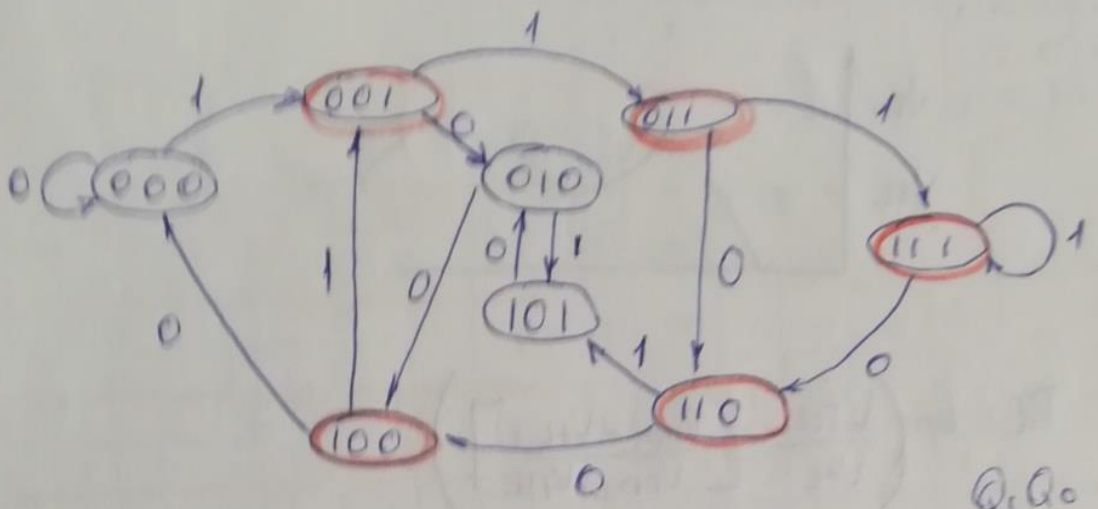
Tiempo de bajada t_{pHL}: el el tiempo de cambio en la entrada con su respectivo cambia en la salida, la salida pasa de baja a alta



tiempo de propagación: es el promedio entre ambos

$$t_p = \frac{t_{pHL} + t_{pLH}}{2}$$

11011 00110 10110 11011 00010

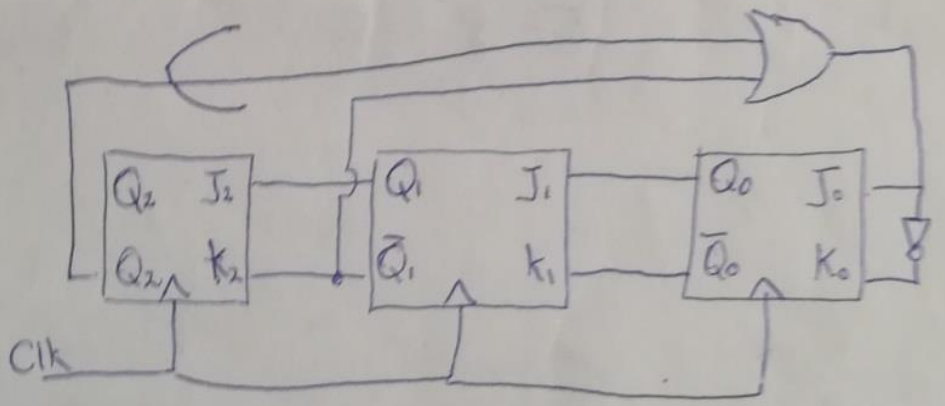


Q(t)	Asignación	$f=J_0$
001	11011	1
011	00110	1
111	10110	0
110	11011	0
100	00010	1

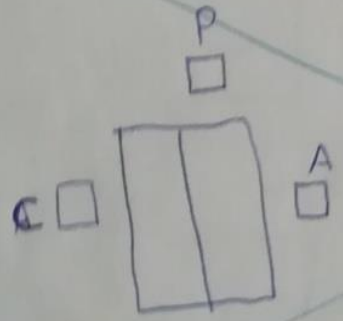
Q_1Q_0

Q_2	00	01	11	10
0	X	1	1	X
1	1	X	0	0

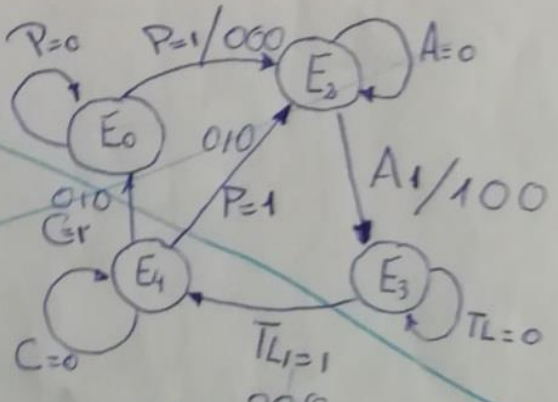
$$f = \overline{Q_1} + \overline{Q_2}$$



5

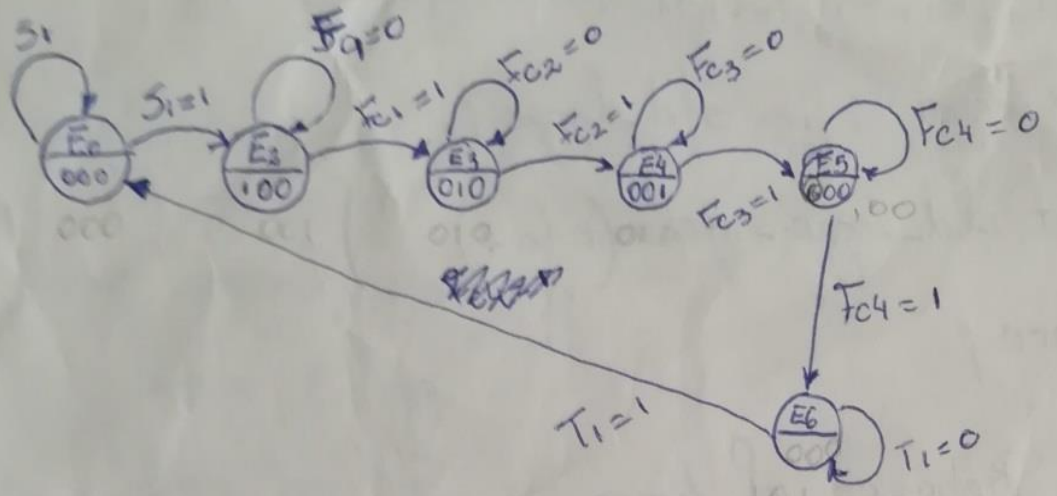


P: dilecta persona
A: puerta abierta
TL: tiempo límite de estar abierta



Mal

Feb 2014 (Navarro)



Salidas

$S=0$

$S=1$

$C_1=0$

$C_1=1$

$C_2=0$

$C_2=1$

SC_1C_2

Estados

$000 = E_0$

$001 = E_2$

$010 = E_3$

$011 = E_4$

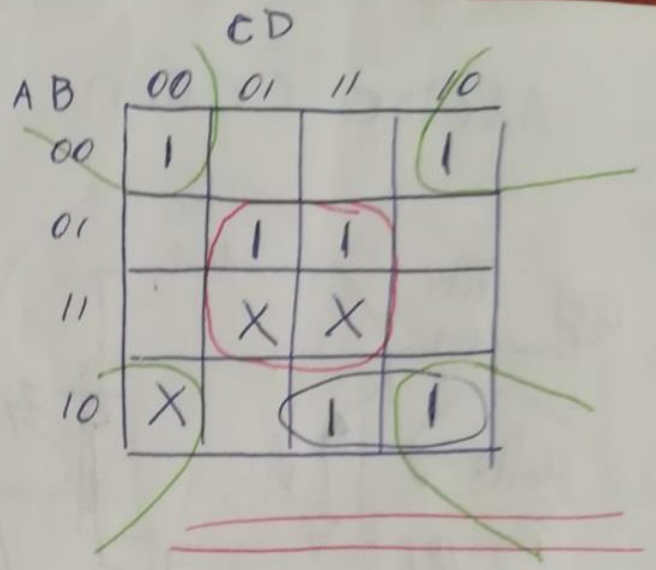
$100 = E_5$

$101 = E_6$

Entradas						Q(t)	Q(t+1)	Salidas
S	E_{C1}	F_{C2}	F_{C3}	F_{C4}	T_1	$Q_2Q_1Q_0$	$Q_2Q_1Q_0$	$S_2S_1S_0$
0	x	x	x	x	x	000	000	000
1	x	x	x	x	x	000	001	100
x	0	x	x	x	x	001	001	100
x	1	x	x	x	x	001	010	000
x	x	0	x	x	x	010	010	010
x	x	1	x	x	x	010	011	001 010
x	x	x	0	x	x	011	011	001
x	x	x	1	x	x	011	100	000
x	x	x	x	0	x	100	100	000
x	x	x	x	1	x	100	101	000
x	x	x	x	x	0	101	101	000
x	x	x	x	x	1	101	000	000

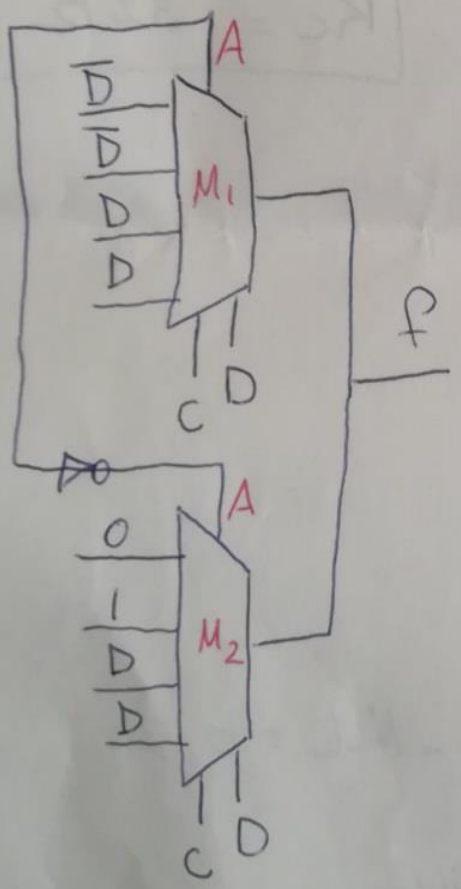
①

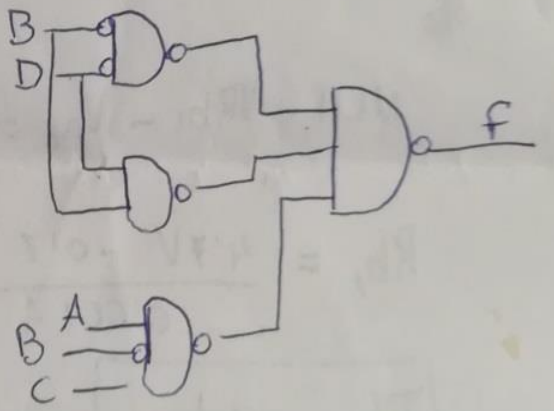
	A	B	C	D	f	
0	0	0	0	0	1	$\bar{D}$
1	0	0	0	1	0	
2	0	0	1	0	1	$\bar{D}$
3	0	0	1	1	0	
4	0	1	0	0	0	D
5	0	1	0	1	1	
6	0	1	1	0	0	D
7	0	1	1	1	1	
8	1	0	0	0	X	0
9	1	0	0	1	0	
10	1	0	1	0	1	1
11	1	0	1	1	1	
12	1	1	0	0	0	D
13	1	1	0	1	X	
14	1	1	1	0	0	D
15	1	1	1	1	X	



$$F = \bar{B}\bar{D} + BD + A\bar{B}C$$

$$F = \overline{\left(\overline{\bar{B}\bar{D}}\right)\cdot\left(\overline{BD}\right)\cdot\left(\overline{A\bar{B}C}\right)}$$





(1) Conversor BCD a Gray 24/07/17

	A	B	C	D	a	b	c	D	
0	0	0	0	0	0	0	0	0	9
1	0	0	0	1	0	0	0	1	8
2	0	0	1	0	0	0	1	1	7
3	0	0	1	1	0	0	1	0	6
4	0	1	0	0	0	1	1	0	5
5	0	1	0	1	0	1	1	1	4
6	0	1	1	0	0	1	0	1	3
7	0	1	1	1	0	1	0	0	2
8	1	0	0	0	1	1	0	0	1
9	1	0	0	1	1	1	0	1	0

a =

AB \ CD	00	01	11	10
00	0	0	0	0
01	0	0	0	0
11	X	X	X	X
10	1	1	X	X

$a = A$

AB \ CD	00	01	11	10
00	0	0	0	0
01	1	1	1	1
11	X	X	X	X
10	1	1	X	X

$b = B + A$

AB \ CD	00	01	11	10
00	0	0	1	1
01	1	1	0	0
11	X	X	X	X
10	0	0	X	X

$c = \overline{B}C + B\overline{C}$

AB \ CD	00	01	11	10
00	0	1	0	1
01	0	1	0	1
11	X	X	X	X
10	0	1	X	X

$d = \overline{C}D + C\overline{D}$

a) $a = \sum 8,9$

$b = \sum 4,5,6,7,8,9$

$c) = \sum 2,3,4,5$

$d = \sum 1,2,5,6,9$

$a = \overline{\Pi}(2,3,4,5,6,7,8,9)$

$b = \overline{\Pi}(6,7,8,9)$

$c = \overline{\Pi}(0,1,2,3,8,9)$

$d = \overline{\Pi}(1,2,5,6,9)$

(2) Margen de Ruido: se especifica a máxima cantidad en la tolerancia en la tensión de entrada mas allá de la cual no se aseguran los niveles lógicos, una señal de ruido que supere ese margen puede causar efectos indeseables en la salida

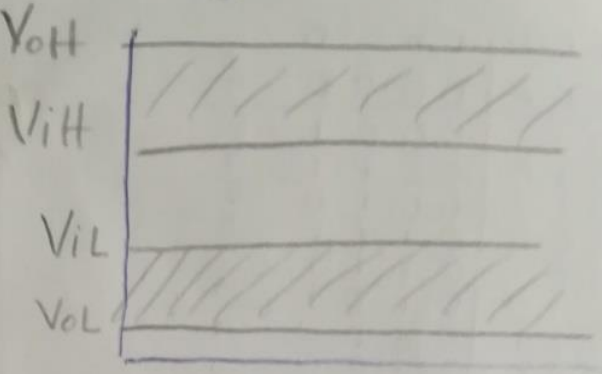
Ruido en alta

$$M_{RH} = V_{OH(min)} - V_{iH(max)}$$

Ruido en Baja

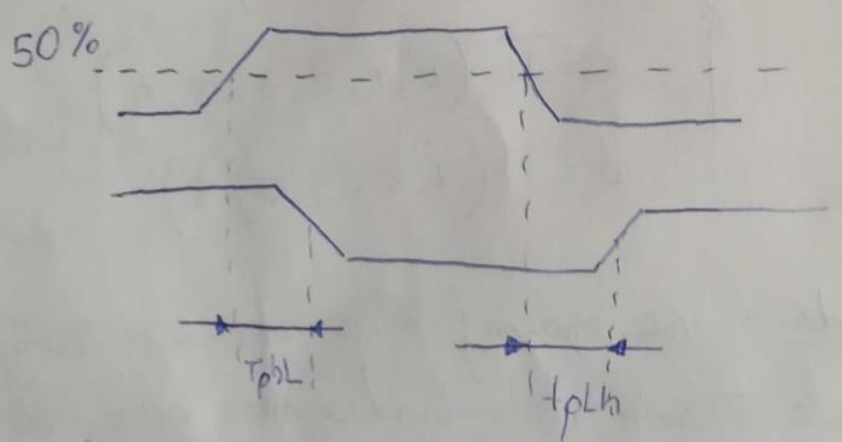
$$M_{RL} = V_{oL_1(max)} - V_{iL(min)}$$

Grafica M.R.



Tiempo de subida: es el tiempo entre el cambio de la entrada y el correspondiente cambio en la salida, cuando la salida cambia de alta a baja (t_{phL})

Tiempo de bajada: es el tiempo entre el cambio de la entrada y el correspondiente cambio en la salida, la salida pasa de baja a alta (t_{pLh})



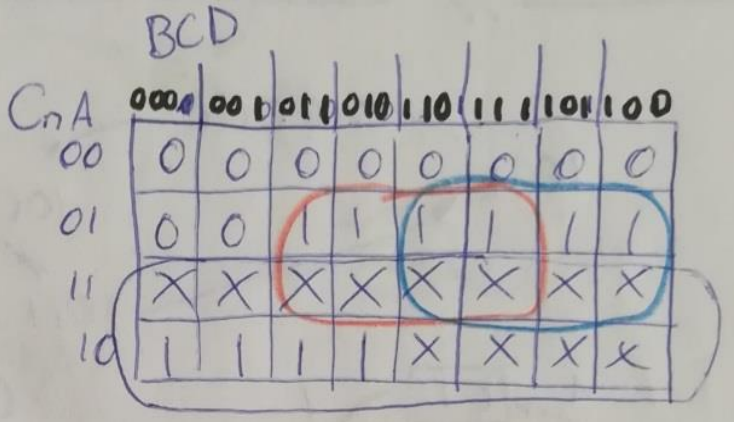
$$t_p = \frac{t_{phL} + t_{pLh}}{2}$$

Tiempo de ayuda: es el promedio de t_{pHL} y t_{pLH}

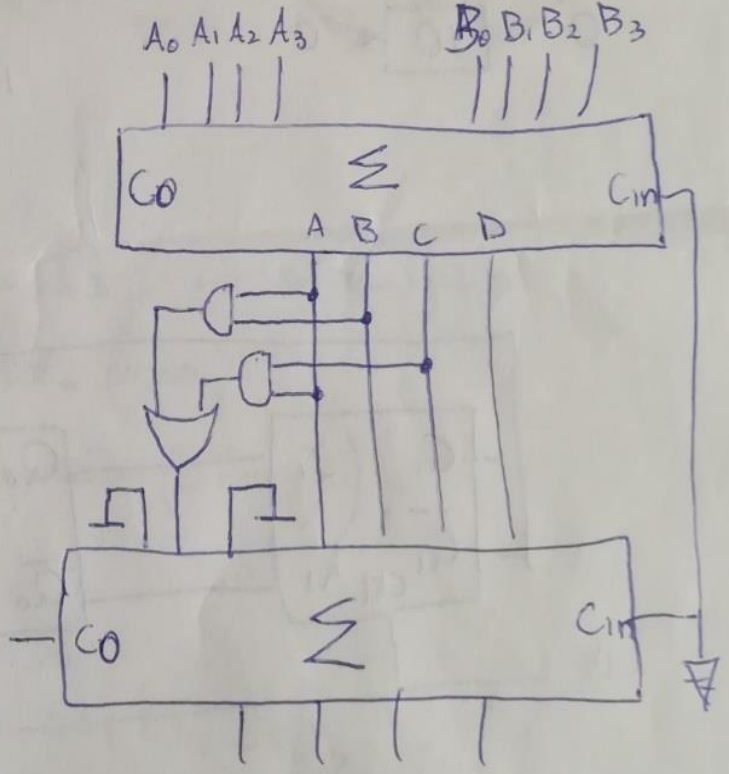
Final 24/07/17

Diseño do Σ BCD de 2 nº con detalles

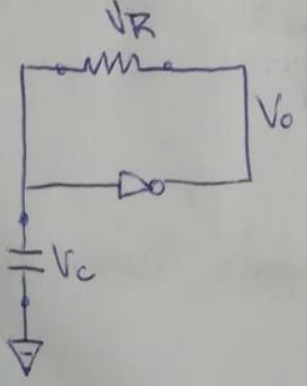
	C_n	A	B	C	D	S
0	0	0	0	0	0	0
1	0	0	0	0	1	0
2	0	0	0	1	0	0
3	0	0	0	1	1	0
4	0	0	1	0	0	0
5	0	0	1	0	1	0
6	0	0	1	1	0	0
7	0	0	1	1	1	0
8	0	1	0	0	0	0
9	0	1	0	0	1	0
	0	1	0	1	0	1
	0	1	0	1	1	1
	0	1	1	0	0	1
	0	1	1	0	1	1
	0	1	1	1	0	1
	0	1	1	1	1	1
	1	0	0	0	0	1
	1	0	0	0	1	1
	1	0	0	1	0	1
	1	0	0	1	1	1
						X
						X

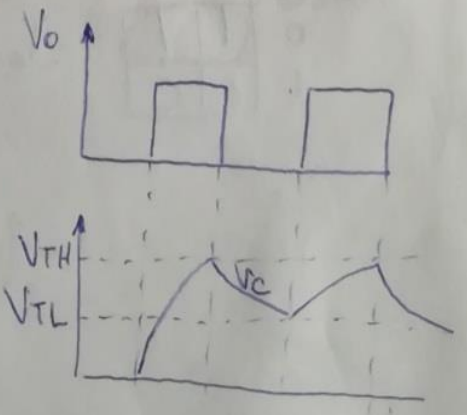


$S = C_n + AC + AB$



(4)





④

$$T = RC \cdot \ln\left[\frac{V_{TH}}{V_{TL}}\left(\frac{V_{DD} - V_{TL}}{V_{DD} - V_{TH}}\right)\right]$$

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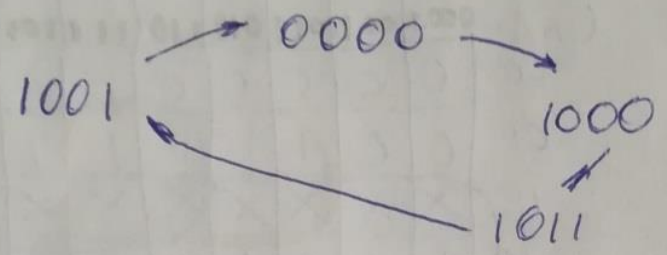
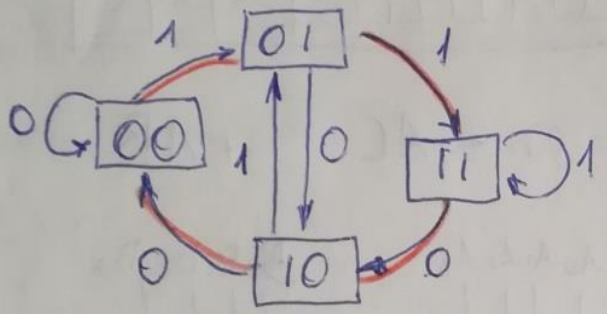
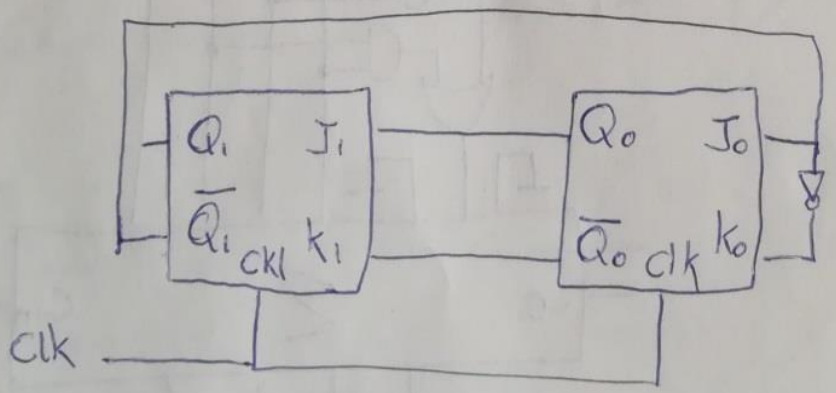
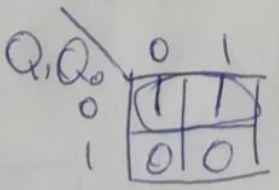
⑤





Q(t)	Asignación	f J_0
00	1001	1
01	0000	1
11	1000	0
10	1011	0



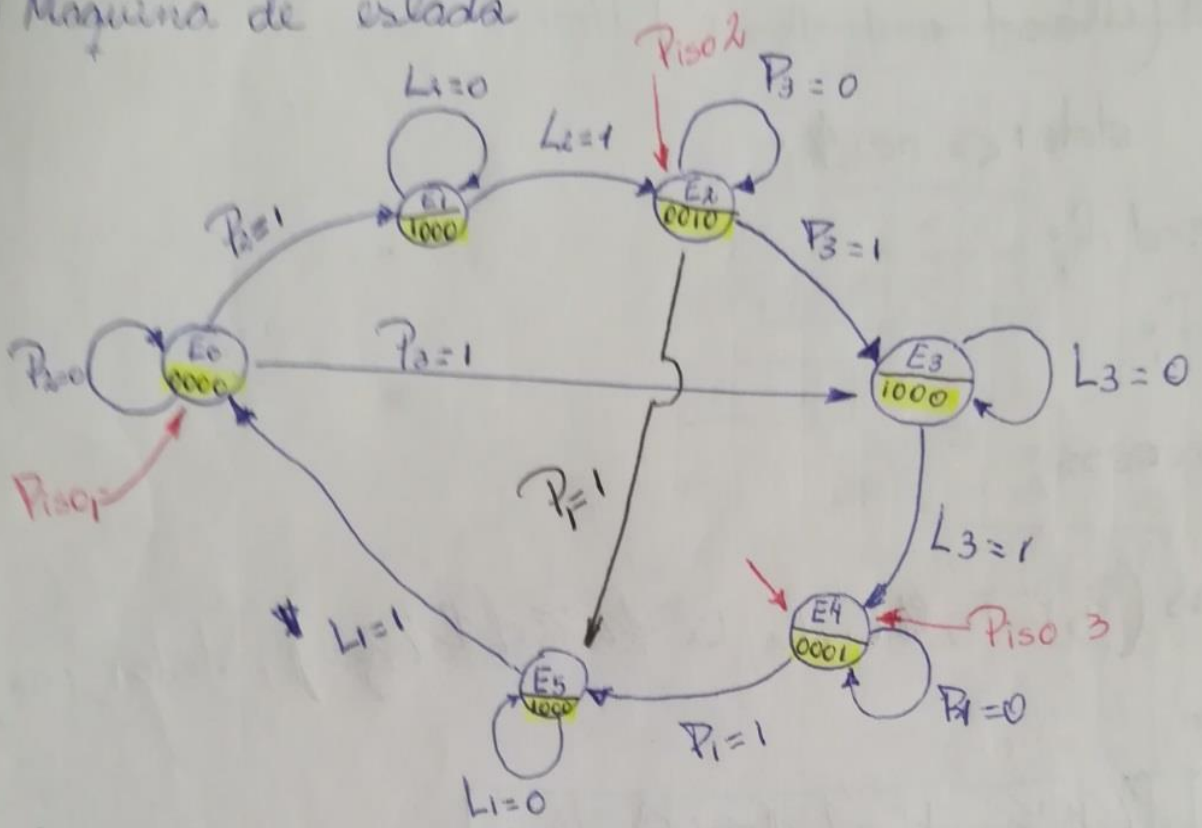


$J_0 = \bar{Q}_1$

24/07/17

L4 L1 L2 L3

⑥ Maquina de estada



Entity Moore is

Port (P1, P2, P3, L1, L2, L3 : in std_logic;

Clk, Reset : in std_logic;

Z : out std_logic_vector (0 to 3));

end Moore;

Architecture Cod of Moore is

Type state is (E0, E1, E2, E3, E4, E5);

Signal state1, nex : state;

Begin

Process (Clk, reset, ~~state1, nex~~);

Begin

if (reset = '1') then

state1 <= E0;

```
else
  if(clk'event and clk='1') then
    state1 <= nex;
  end if;
en if;
end process;

Process (P1, P2, P3, L1, L2, L3 , state1, nex);
Begin
  if(clk'event and clk='1') then
  Case state1 is
  when E0 =>
    Z<="0000";
    if(P2='1') then nex<=E1;
    elsif(P3='1') then nex<=E3;
    else
    nex<=E0;
    end if;
  when E1 =>
```

Si !!

Finales resueltos, son típicamente de Guille, tengan cuidado con lo que anda saliendo en los finales de Toledo, son mas fáciles que los de guille, pero mete agun que otra variante!!!

Chekus!!!