

TP-EN-CHRONOMETRE

* Prépat. A :

Le segment i s'allume pour la valeur 0 en $8(i)$

* Prépat. B :

$$N = (01)_2$$

$$V = (0100)_2$$

$$S = (1001100)_2$$

* Prépat. C :

				LSB							MSB
V3	V2	V1	V0	A	B	C	D	E	F	G	
0	0	0	0	0	0	0	0	0	0	1	
0	0	0	1	1	0	0	1	1	1	1	
0	0	1	0	0	0	1	0	0	1	0	
0	0	1	1	1	0	0	0	1	1	0	
0	1	0	0	1	0	0	1	1	0	0	
0	1	0	1	0	1	0	0	1	0	0	
0	1	1	0	0	1	0	0	0	0	0	
0	1	1	1	0	0	0	1	1	1	1	
1	0	0	0	0	0	0	0	0	0	0	
1	0	0	1	0	0	0	0	1	0	0	
1	0	1	0	x	x	x	x	x	x	x	
1	0	1	1	x	x	x	x	x	x	x	
1	1	0	0	x	x	x	x	x	x	x	
1	1	0	1	x	x	x	x	x	x	x	
1	1	1	0	x	x	x	x	x	x	x	
1	1	1	1	x	x	x	x	x	x	x	

car si $V > (9)_{10}$ indéterminé

G

V3	V2	V1	V0
1	1	x	x
x	x	x	x
1	1	1	1
x	x	1	1

$$G = V3 + V1$$

F

V3	V2	V1	V0
x	1	1	1
x	x	1	x
1	1	1	1
x	x	1	1

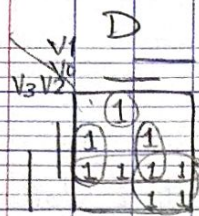
$$F = V0.V1 + V3.V2 + V3.V1 + V1.V2.V3 + V0.V2.V3$$

$$F = V1.(V0 + V3 + V2.V3) + V3.V2 + V0.V2.V3$$

E

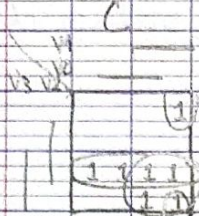
V3	V2	V1	V0
1	1	1	1
1	1	1	1
1	1	1	1
1	1	1	1

$$E = V0 + V3.V1 + V2.V0$$



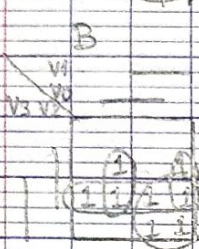
$$D = V_0 \cdot V_1 \cdot V_2 \cdot V_3 + V_2 \cdot V_3 + V_1 \cdot V_3 + V_0 \cdot V_1 \cdot V_2 + V_2 \cdot \overline{V_0} \cdot \overline{V_1}$$

$$D = V_3(V_1 + V_2) + V_2(\overline{V_0} \oplus \overline{V_1}) + V_0 \cdot \overline{V_1} \cdot V_2 \cdot V_3$$



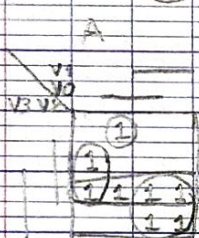
$$C = V_1 \cdot \overline{V_0} \cdot V_2 + V_3 \cdot V_2 + V_3 \cdot V_1$$

$$C = V_3(V_1 + V_2) + V_1 \cdot \overline{V_0} \cdot V_2$$



$$B = V_3(V_1 + V_2) + V_0 \cdot V_2 \cdot \overline{V_1} + V_2 \cdot V_1 \cdot \overline{V_0}$$

$$= V_3(V_1 + V_2) + V_2(\overline{V_0} \oplus \overline{V_1})$$



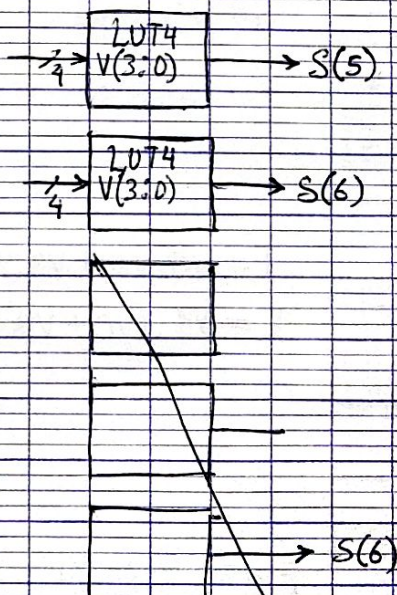
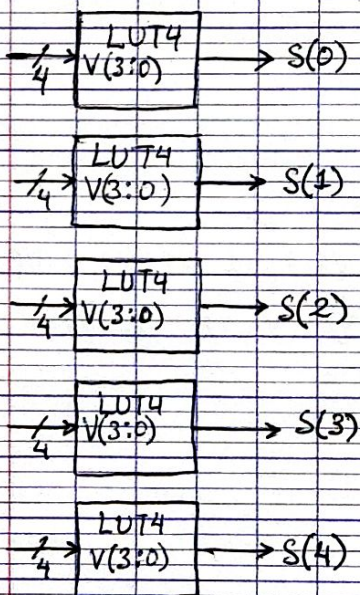
$$A = V_3(V_1 + V_2) + V_2 \cdot \overline{V_0} \cdot \overline{V_1} + V_0 \cdot V_1 \cdot V_2 \cdot V_3$$

$$= V_3(V_1 + V_2) + \overline{V_1}(V_2 \cdot \overline{V_0} + V_0 \cdot \overline{V_2} \cdot \overline{V_3})$$

* Prep 1.E:

N1	N0	EN	EN	EN	EN
0	0	(3)	(2)	(1)	(0)
0	1	1	1	0	1
1	0	1	0	1	1
1	1	0	1	1	1

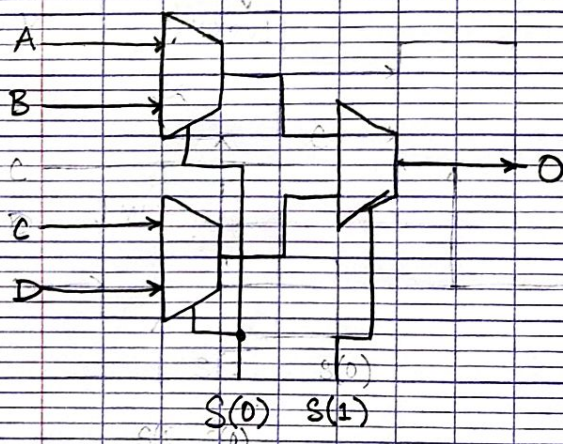
* Prep 1.D:



* Prep 1.F:

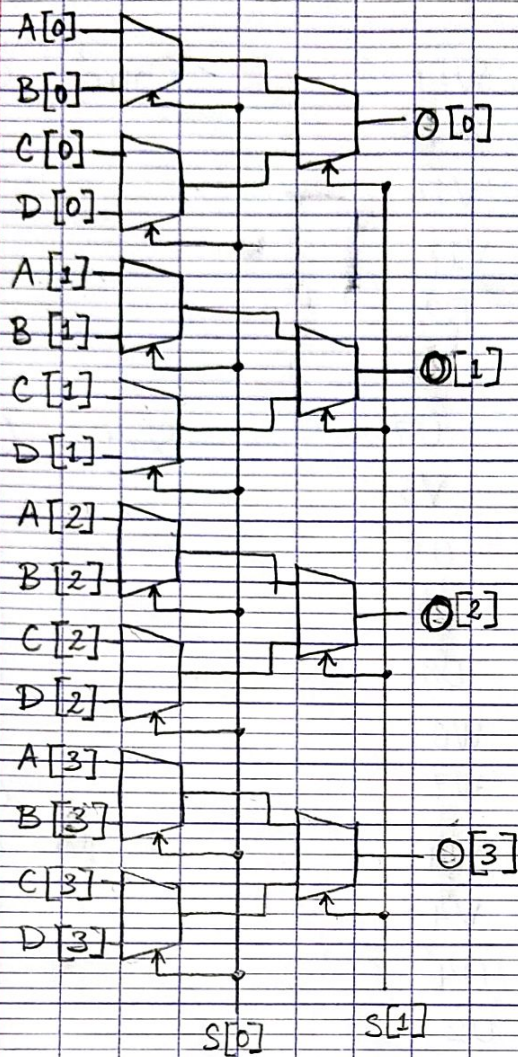
V(3)	SW3	W17	Entrée (I)
V(2)	SW2	W16	I
V(1)	SW1	V16	I
V(0)	SW0	V17	I
N(1)	SW15	R2	I
N(0)	SW14	T1	I
S(6)	CG	U7	Sortie (O)
S(5)	GF	V5	O
S(4)	CE	U5	O
S(3)	CD	V8	O
S(2)	CC	U8	O
S(1)	CB	W6	O
S(0)	CA	W7	O
ENAN(3)	AN3	W4	O
ENAN(2)	AN2	V4	O
ENAN(1)	AN1	U4	O
ENAN(0)	AN0	U2	O

* Prep 2.A:



S(1)	S(0)	n
0	0	A
0	1	B
1	0	C
1	1	D

Prep 2. B:



Dans un multiplexeur
MUX 4×4 v 1×4 il se
cachent 16 multiplexeurs
MUX 2×1 .