

PROF

80

conseils  
nomenclature  
schema

## M I S E E N R O U T E

### A) SYSTEME AVEC LECTEURS DE FLOPPY :

Des la mise sous tension, le disque maitre doit se mettre en route; il faut alors :

- Introduire une disquette DOS dans le lecteur
- Fermer la porte du lecteur

### ATTENTION :

Ne jamais laisser une disquette dans un lecteur lors de l'arret ou de la mise en marche des alimentations.

Si l'on desire partir directement dans le basic resident; il est necessaire d'appuyer sur la touche BREAK tout en mettant la carte sous tension.

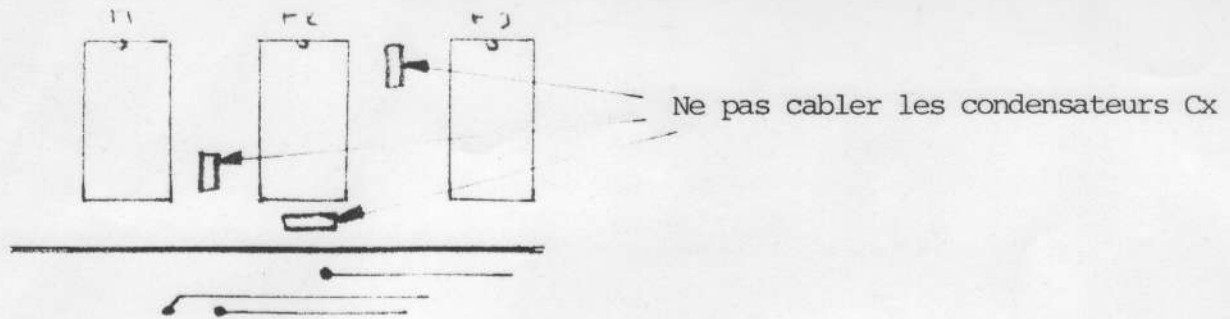
### B) SYSTEME SANS LECTEURS DE FLOPPY :

Afin de partir directement dans le basic dès la mise sous tension , il faut:

- Enlever le circuit FD 1771 de son support (A9)
- Couper la broche 3 du 7438 (A8) ou soulever la patte hors du support.

Si l'on ne desire pas effectuer ces modifications, il suffit d'appuyer sur la touche BREAK tout en mettant la carte sous tension.

B O N T R A V A I L



C) -La valeur des condensateurs de decouplage n'est pas tres importante.  
Elle peut etre comprise entre 10 nF et 100 nF.

-Les condensateurs de decouplage sont signales par le symbole:

-Entre les chips basic Cd= 220 nF et G20-G21 et G8-G9 et G4-G5  
et C8-C9

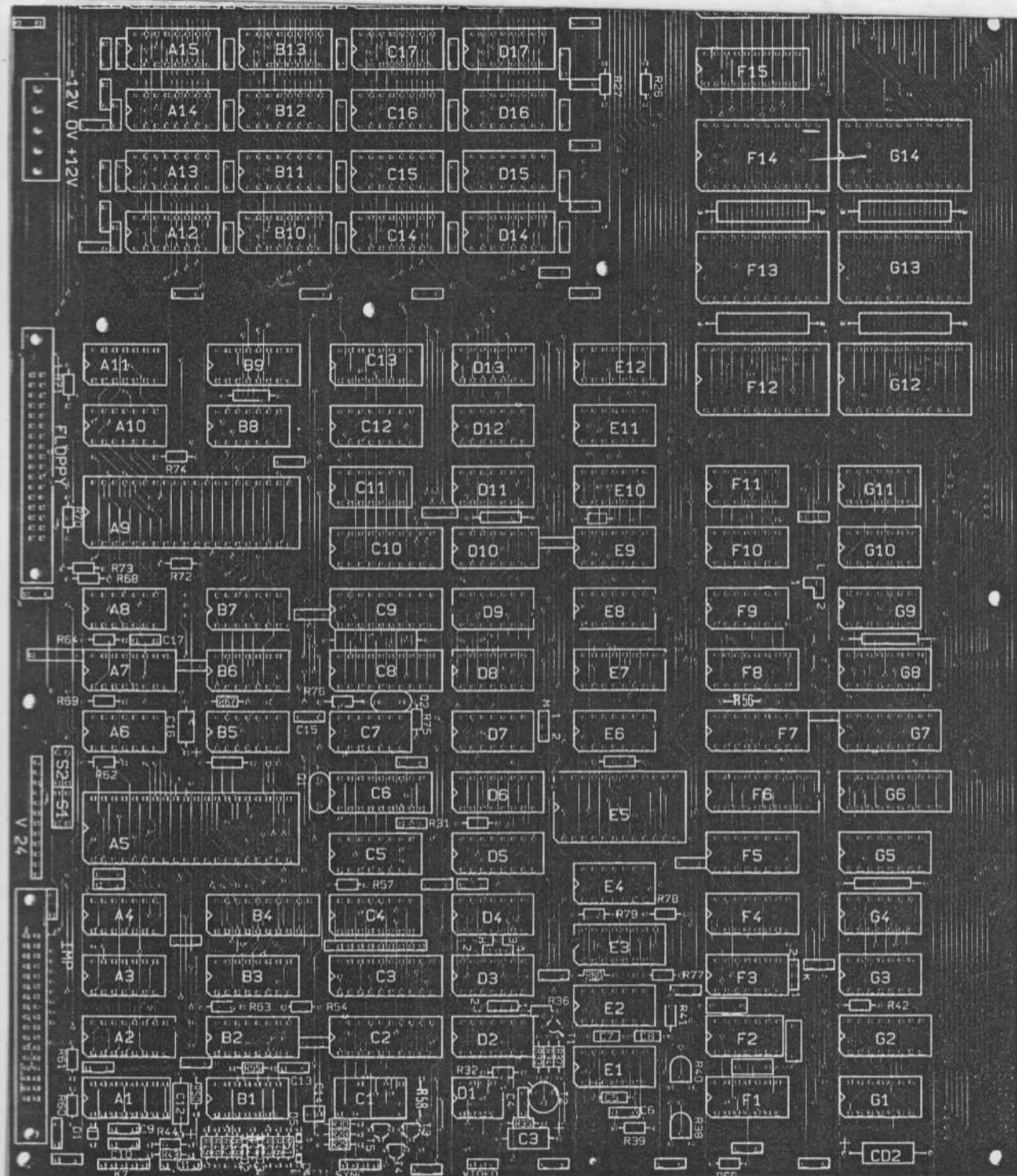
-Entre A5 et B5 et entre E5 et E6 souder un condensateur de 100 nF a la place du symbole

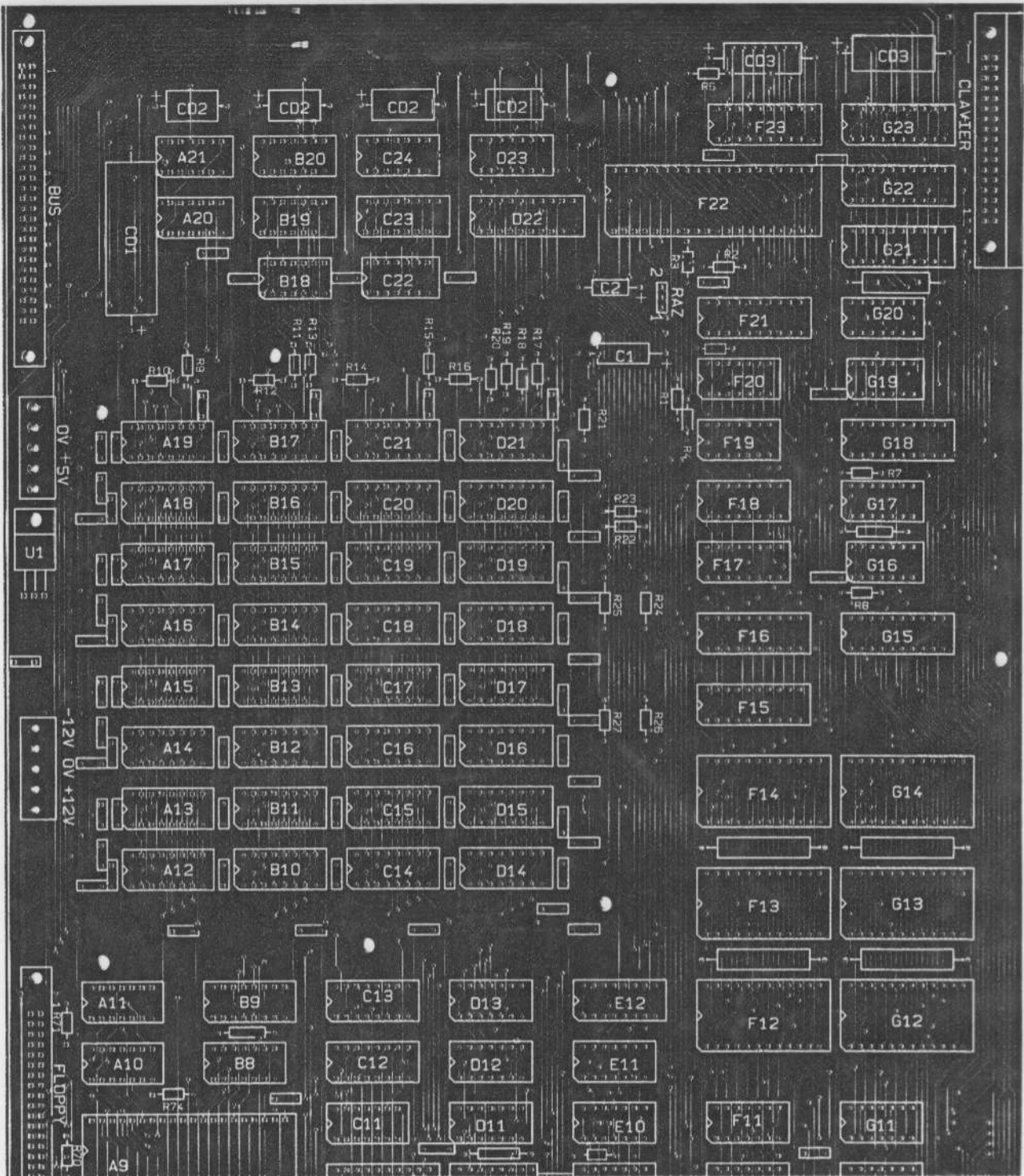
-Entre B8 et B9 et entre D10 et D11 Cd=100 nF

-Les pastilles ou vous devez souder les composants sont toutes de forme carre.

-L'oscillateur C1 doit etre place avec le point de reperage du cote de R30.







PROF 80

MEM Ø / CMD

A	AE5D	AE6Ø
B	DA84	DA45
C	4ØØ2	4ØBA ou 4ØEØ

NEW BASIC

BØ78  
DA45  
4ØØ6

PRINT MEM

	NEW BASIC II	DISK BASIC (3 fichiers)	(1 fichier)
4K	3282		
16K	15568	5493	
32K	31954		
48K	48338	38261	39239

OUT ---,-

E8	232	RS232
E9	233	"
EA	234	"
EB	235	"

Avec apres la virgule..... "Ø" ou "1"

F8	248	BOOT	NORMAL
F9	249	ROM Basic	RAM Shadow
FA	250	CP/M	BASIC
FD	253	Normal	GC II
FE	254	1.8 MHZ	2.25 ou 3 ou 4 MHZ (Voir straps)
FF	255	Cassette	

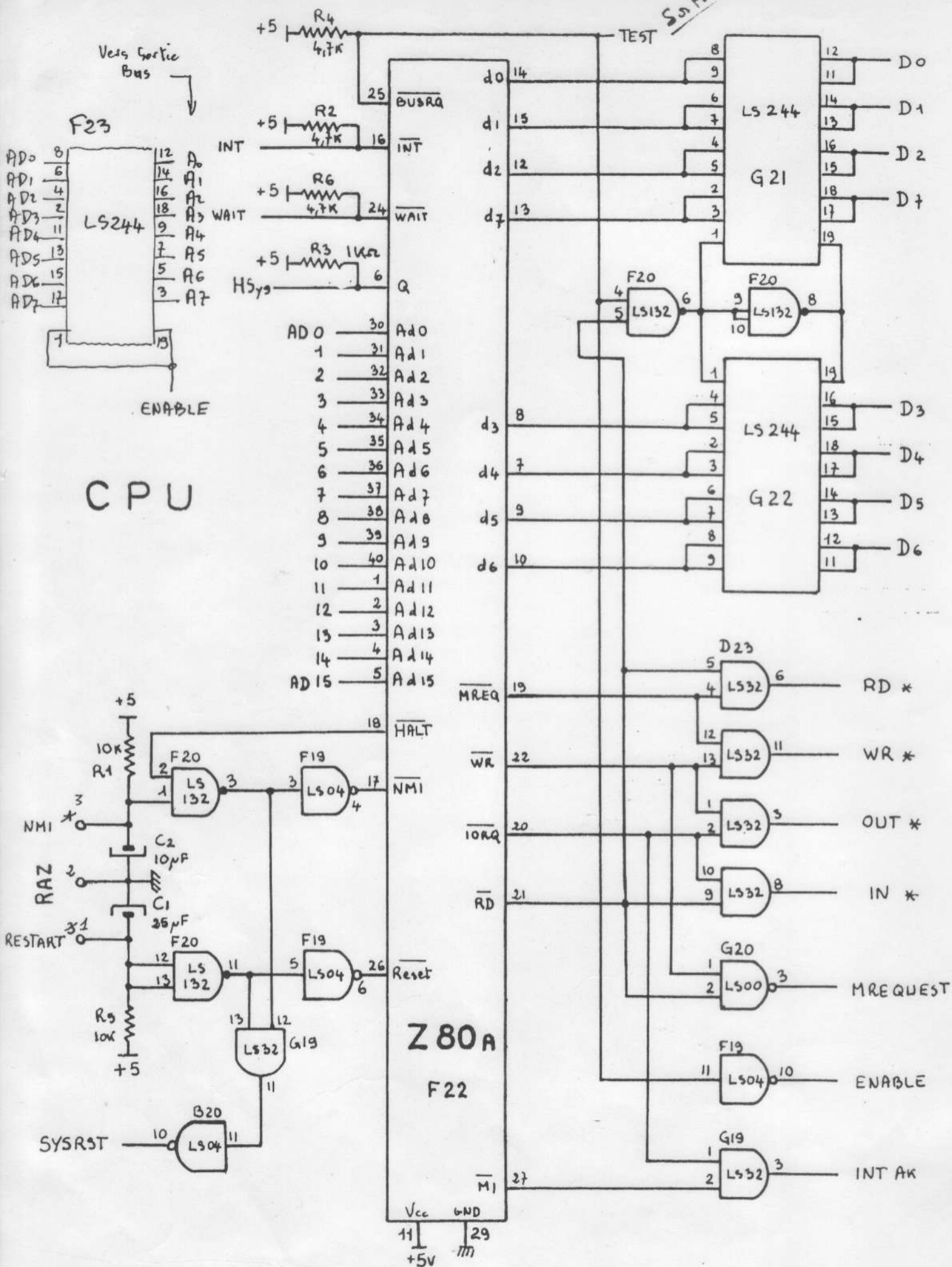
Debut du programme basic en 4ØA4 BASIC II  
6A46 Disk basic

ATTENTION. Le PROF 80 ne peut tourner a 4 Mhz que si les RAM et les EPROM ont des vitesses de R/W inferieures a 200 nS.

Les interrupteurs DIL sont utilises pour regler les vitesses de transmission RS232. (voir manuel TRS 80\*)

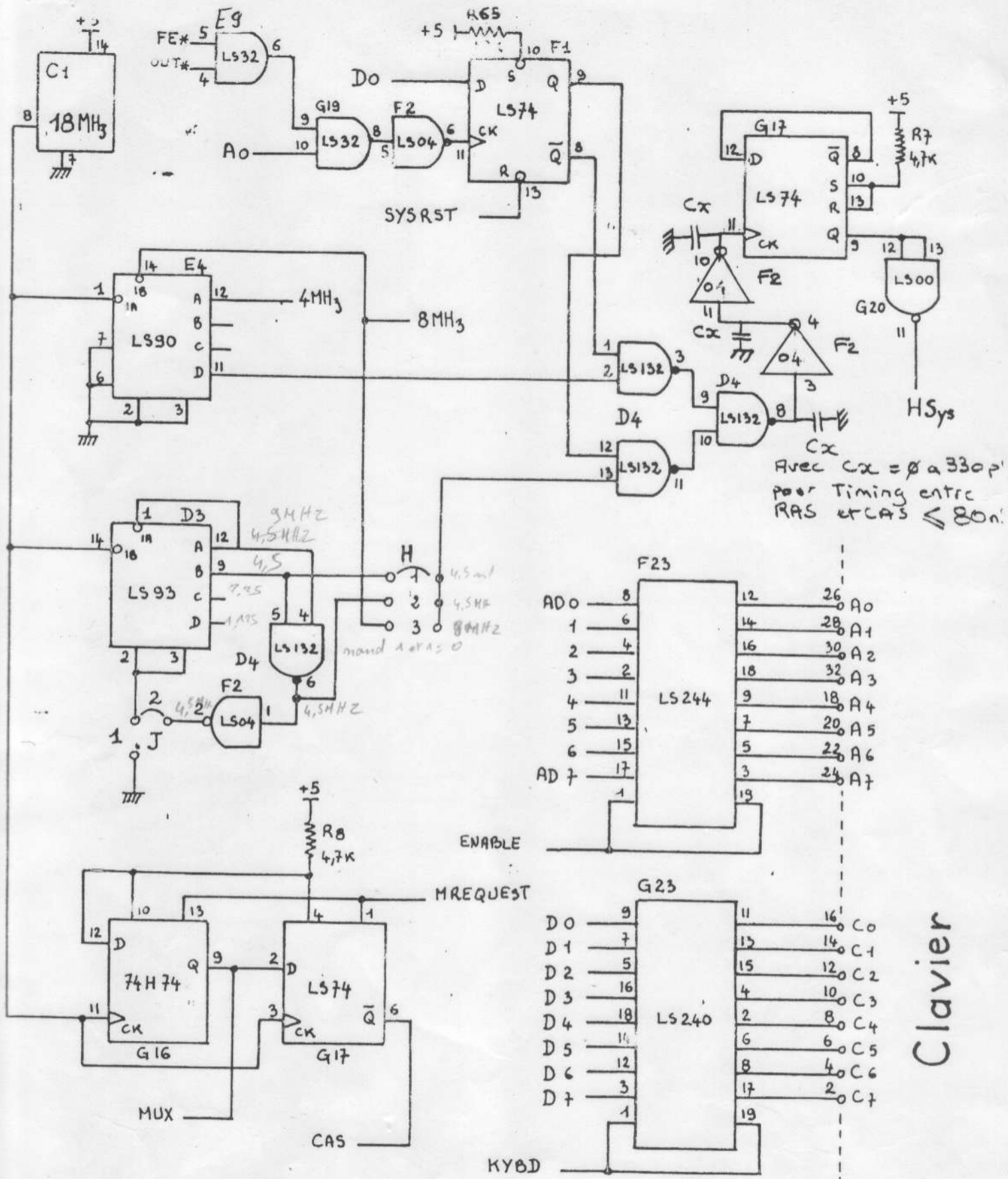
\* TRS 80 est une "marque depose" de TANDY Corp.

Sanjeev



# CPU



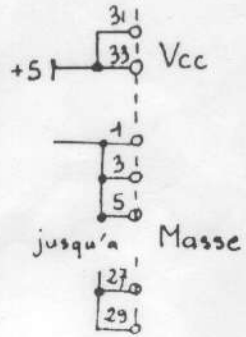


Avec Cx = 330pF  
 poor Timing entré  
 RAS et CAS ≤ 80ns

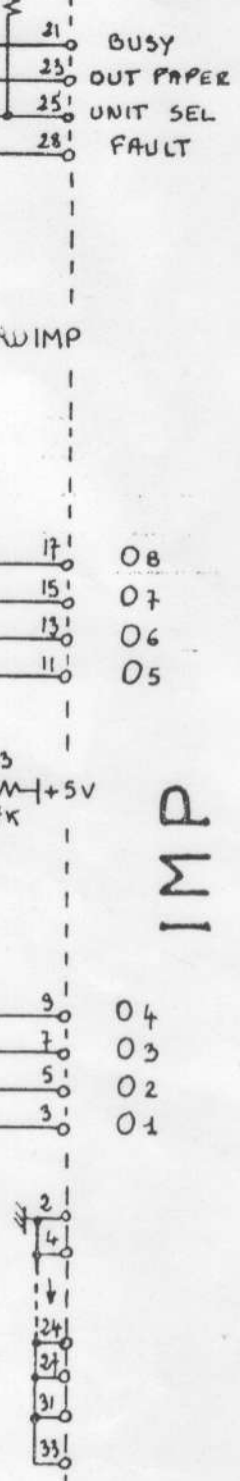
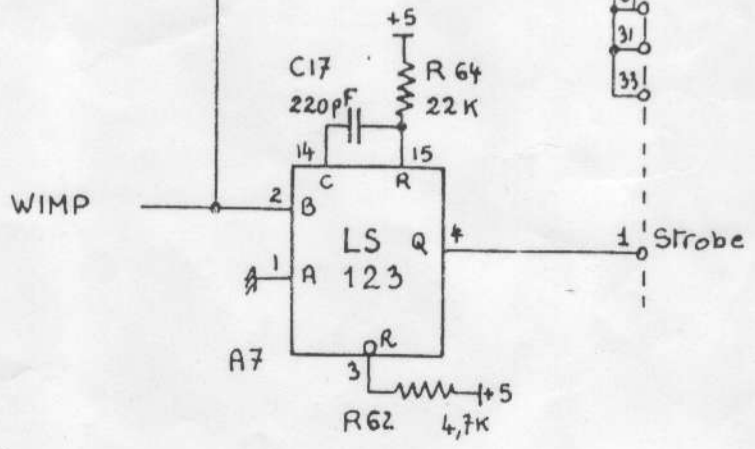
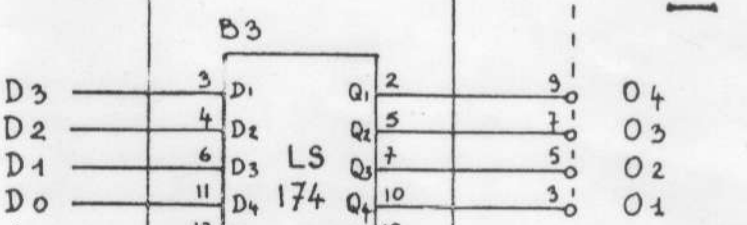
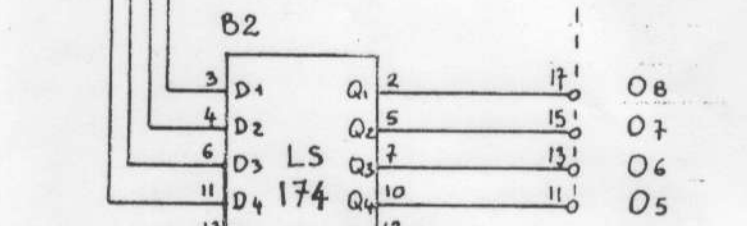
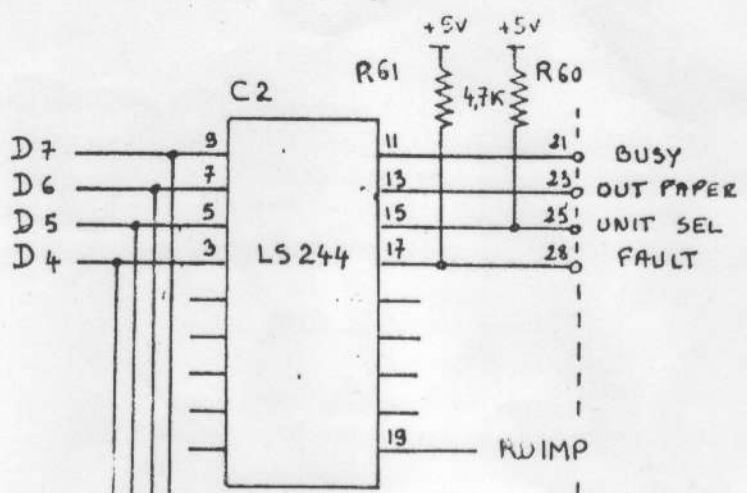
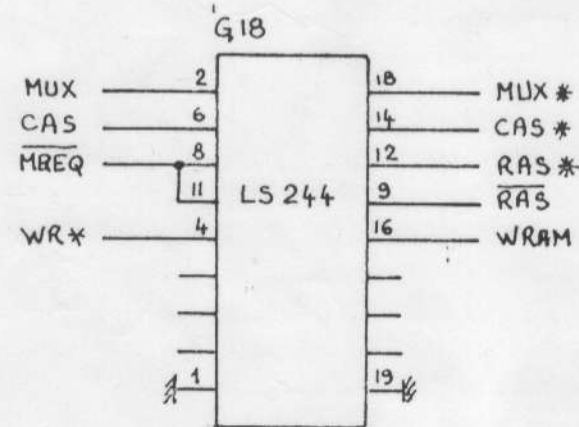
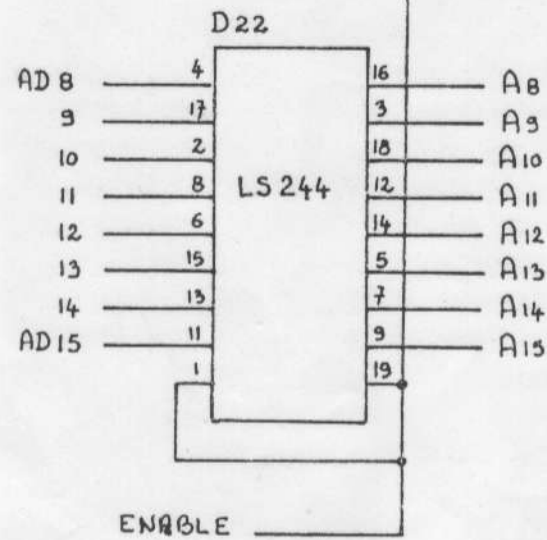
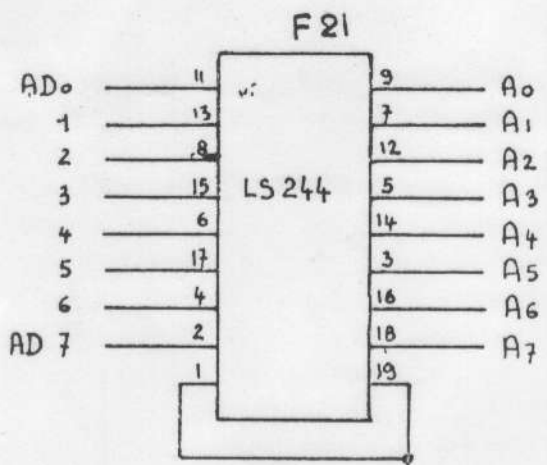
Clavier

H	J	Fréquence Horloge
1	1	→ 2,25 MHz
2	2	→ 3,00 MHz
3	x	→ 4,00 MHz

## Horloge

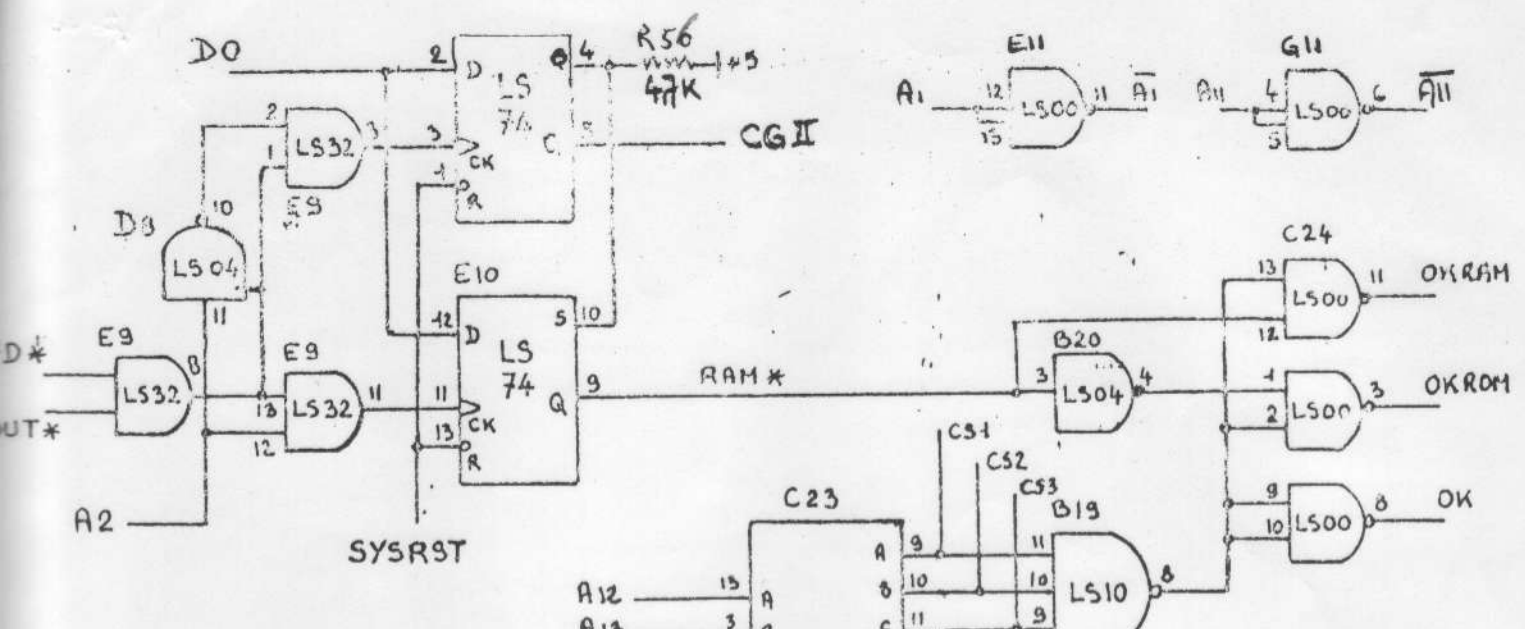




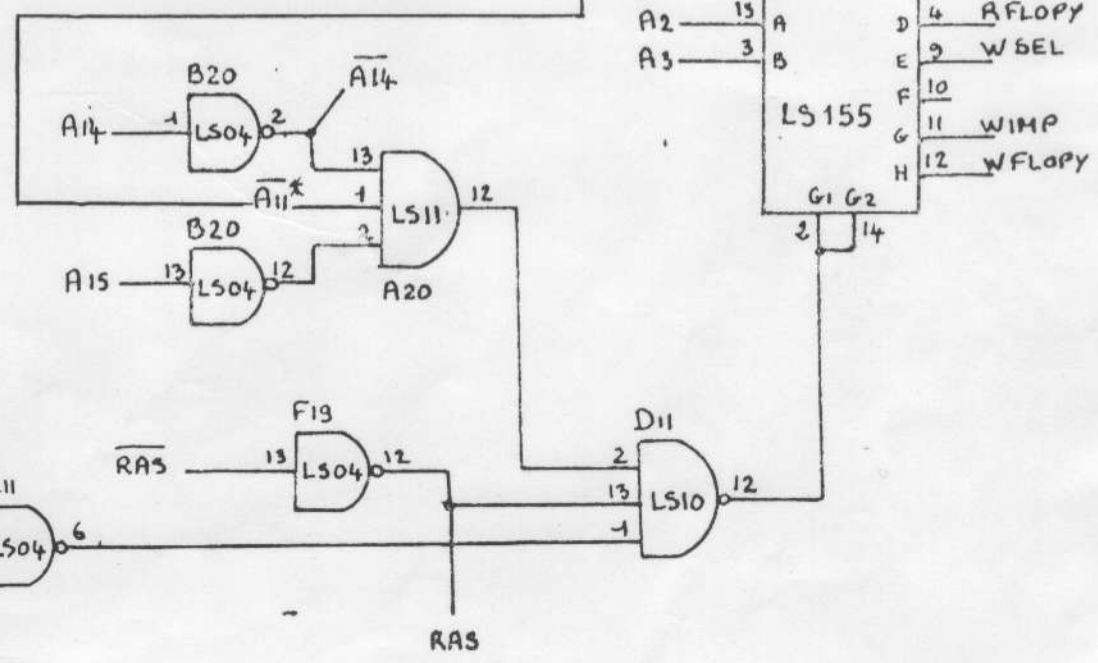
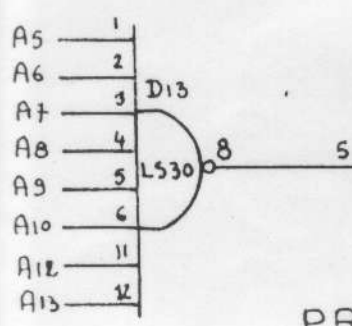
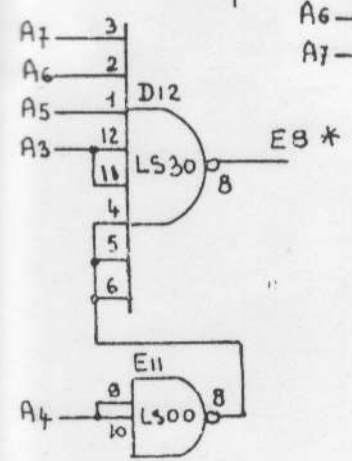
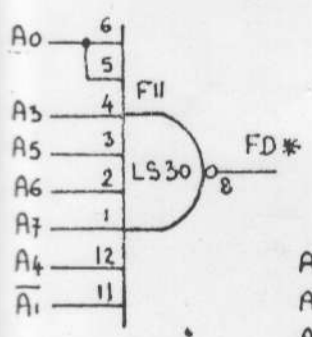


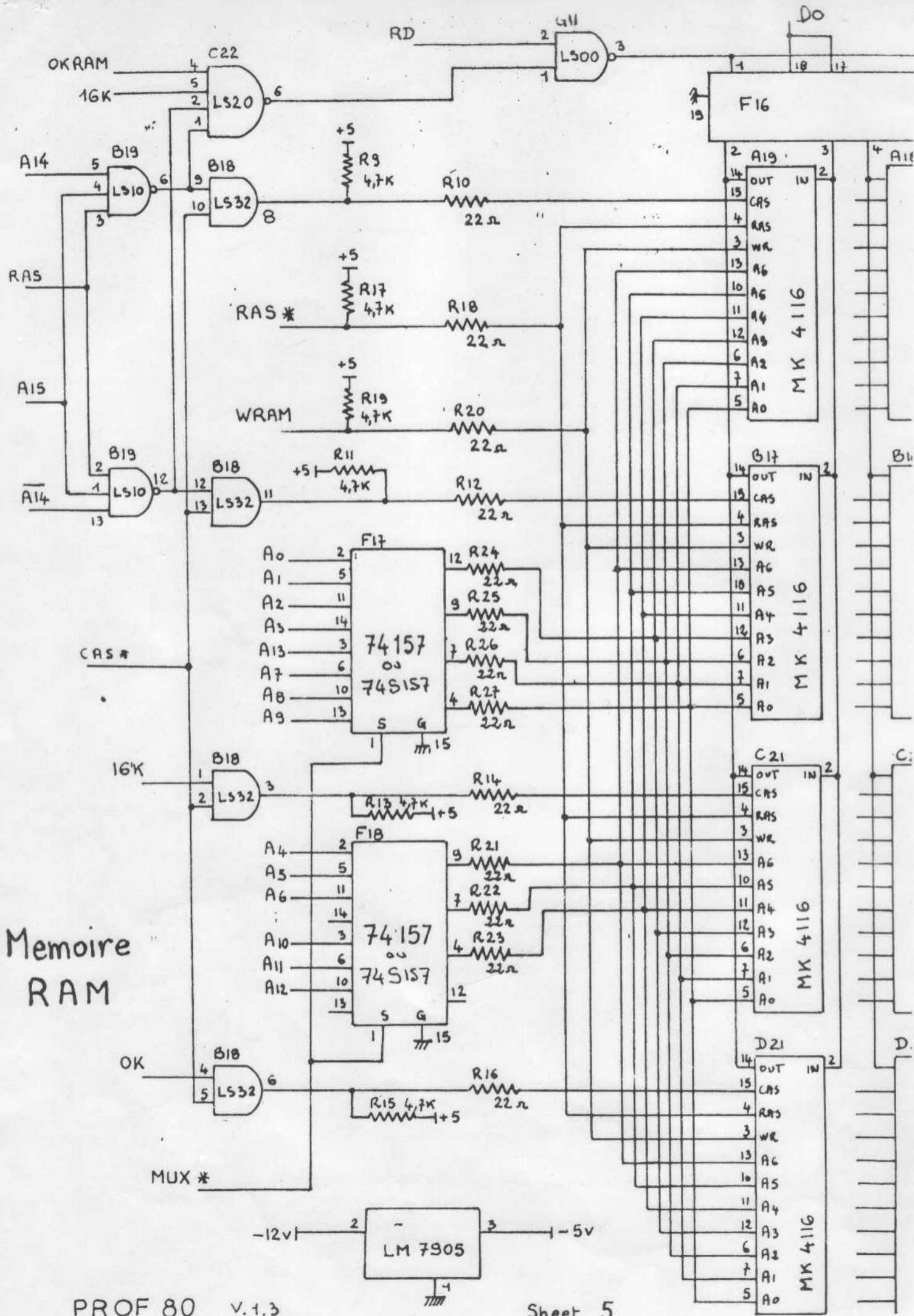
IMP

# Buffers et Imprimante

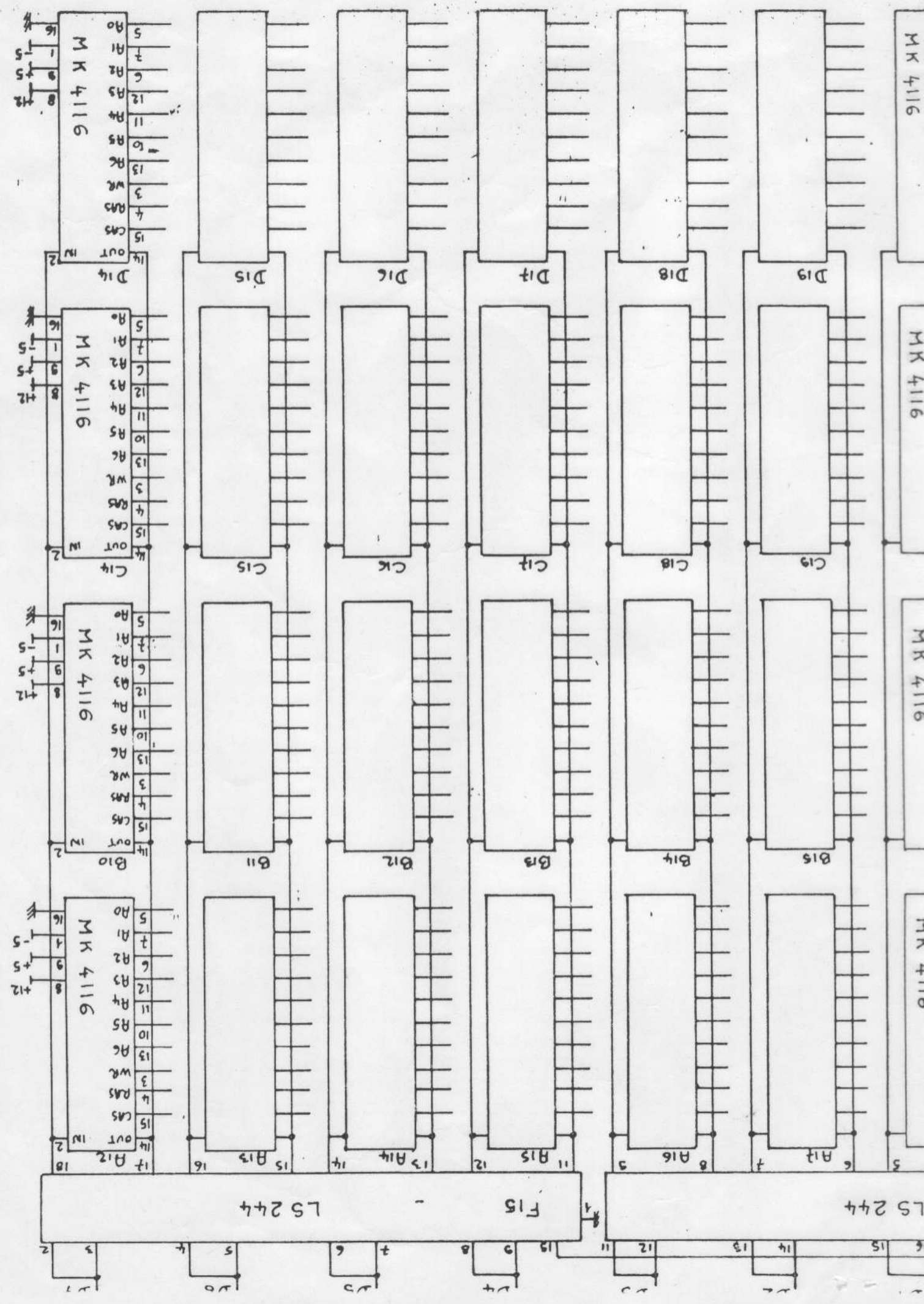


### Décodages



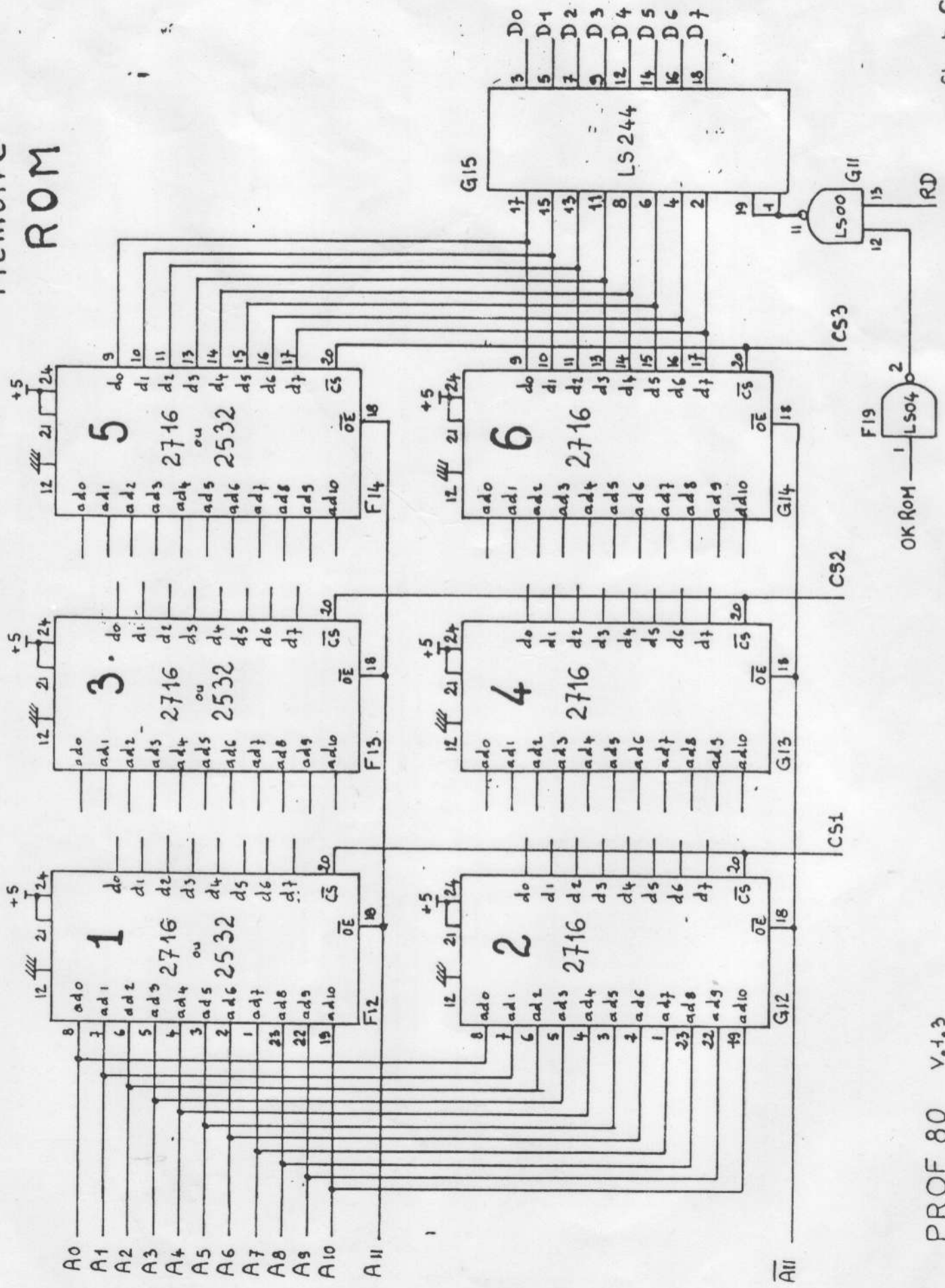


Memoire RAM

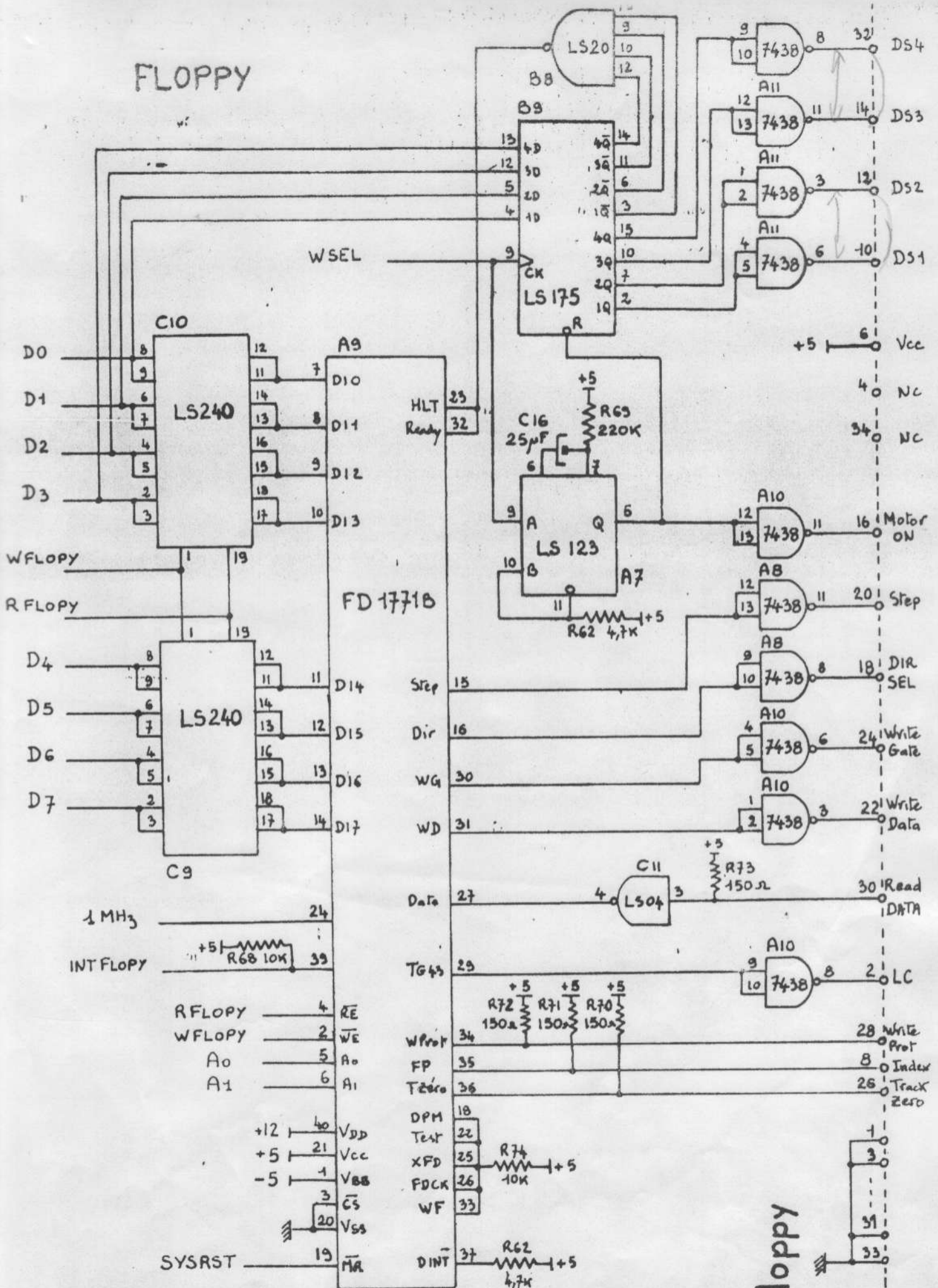


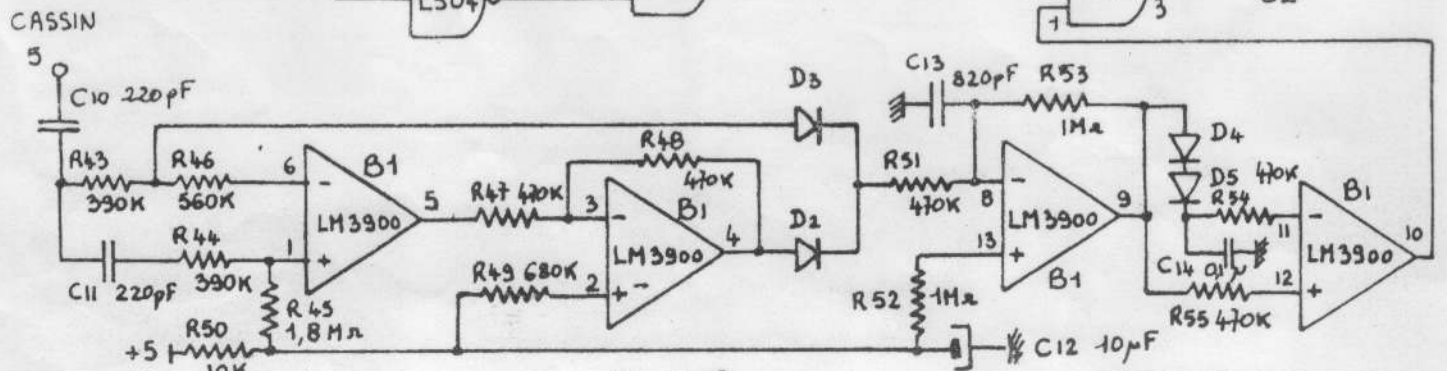
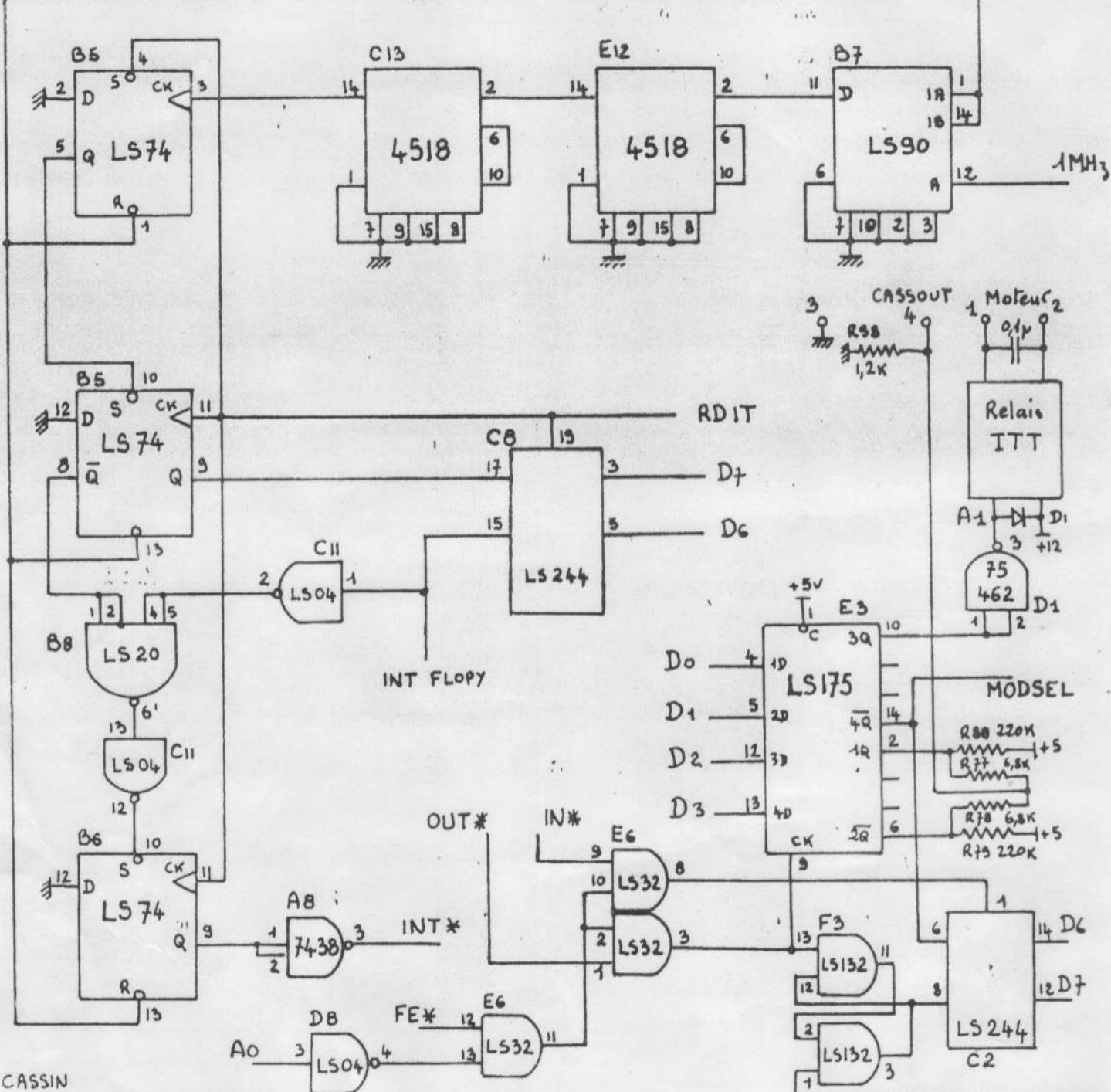
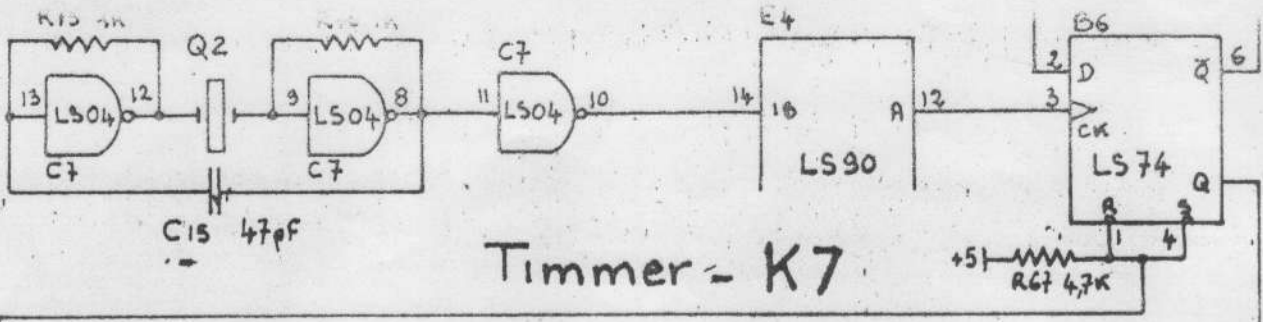


# Mémoire ROM



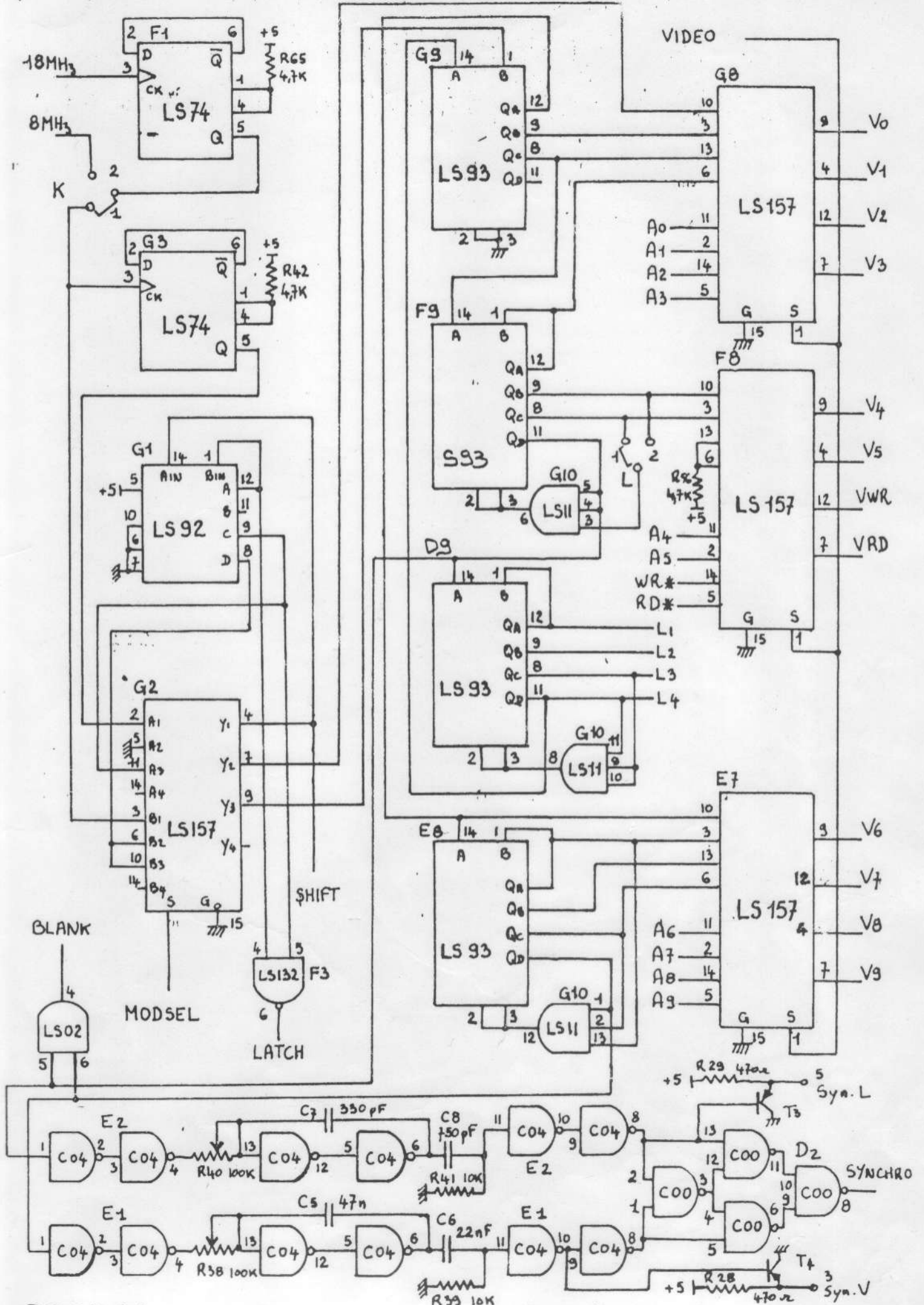
# FLOPPY





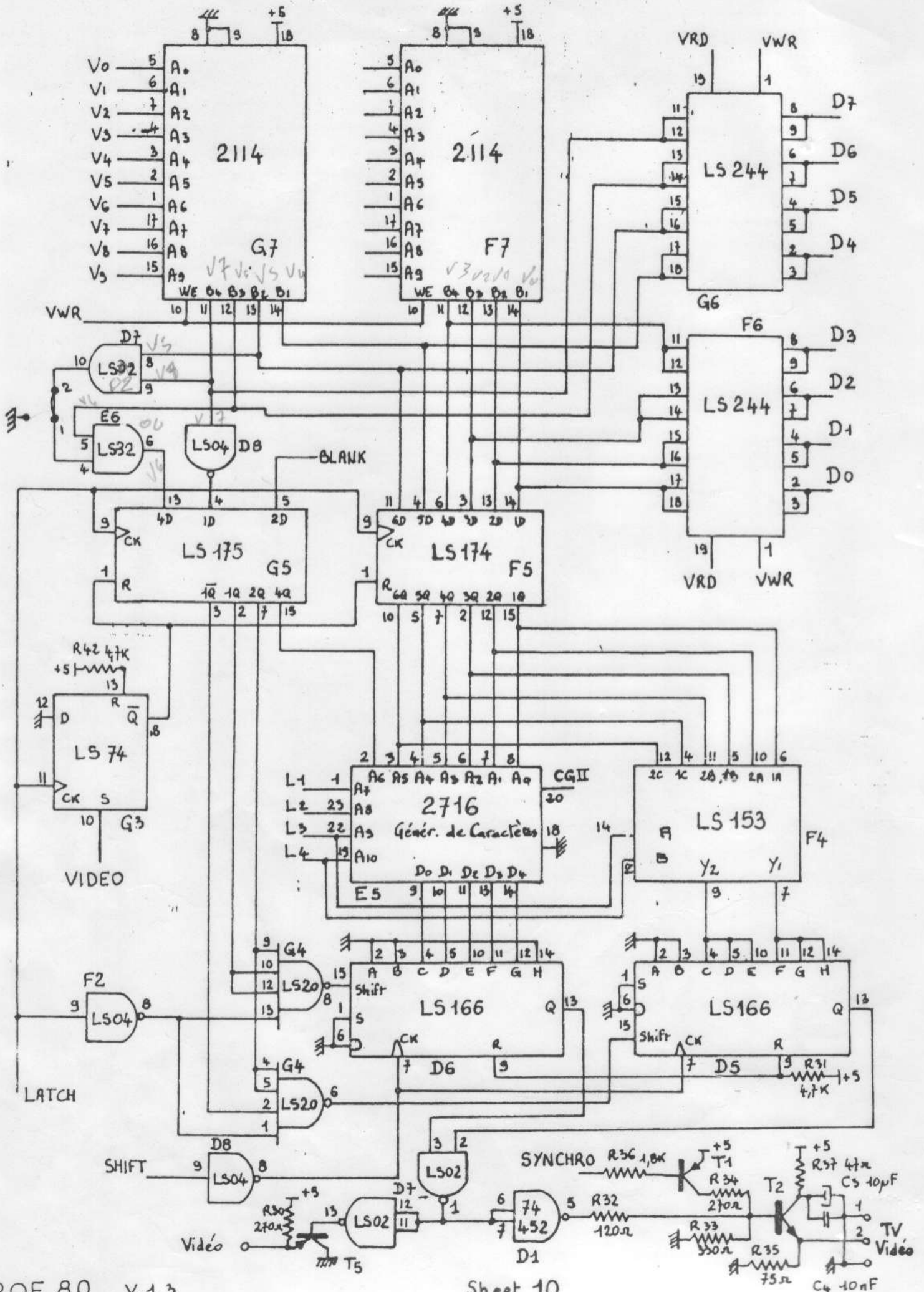


# Synchro Video

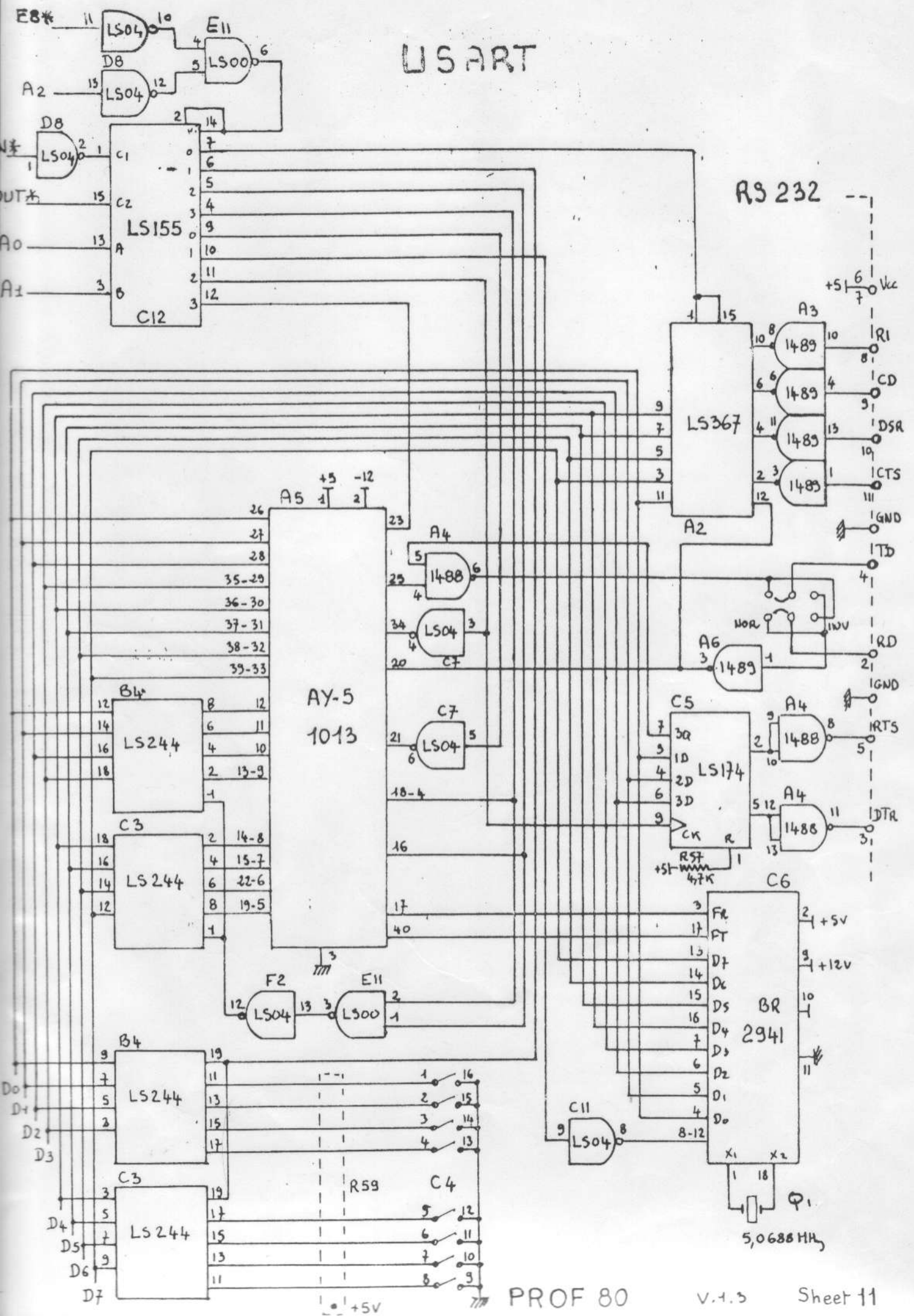


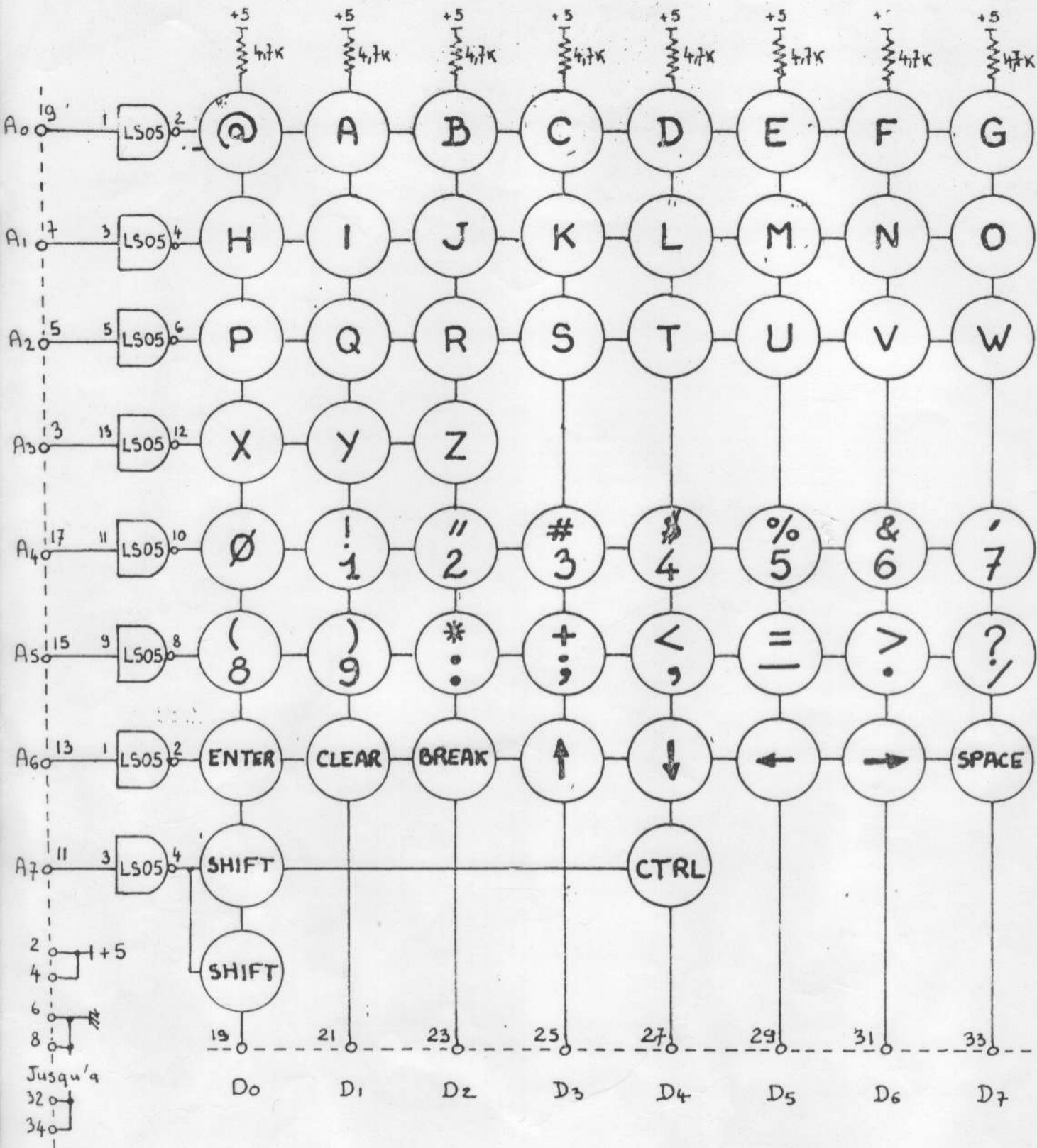


# RAM Vidéo

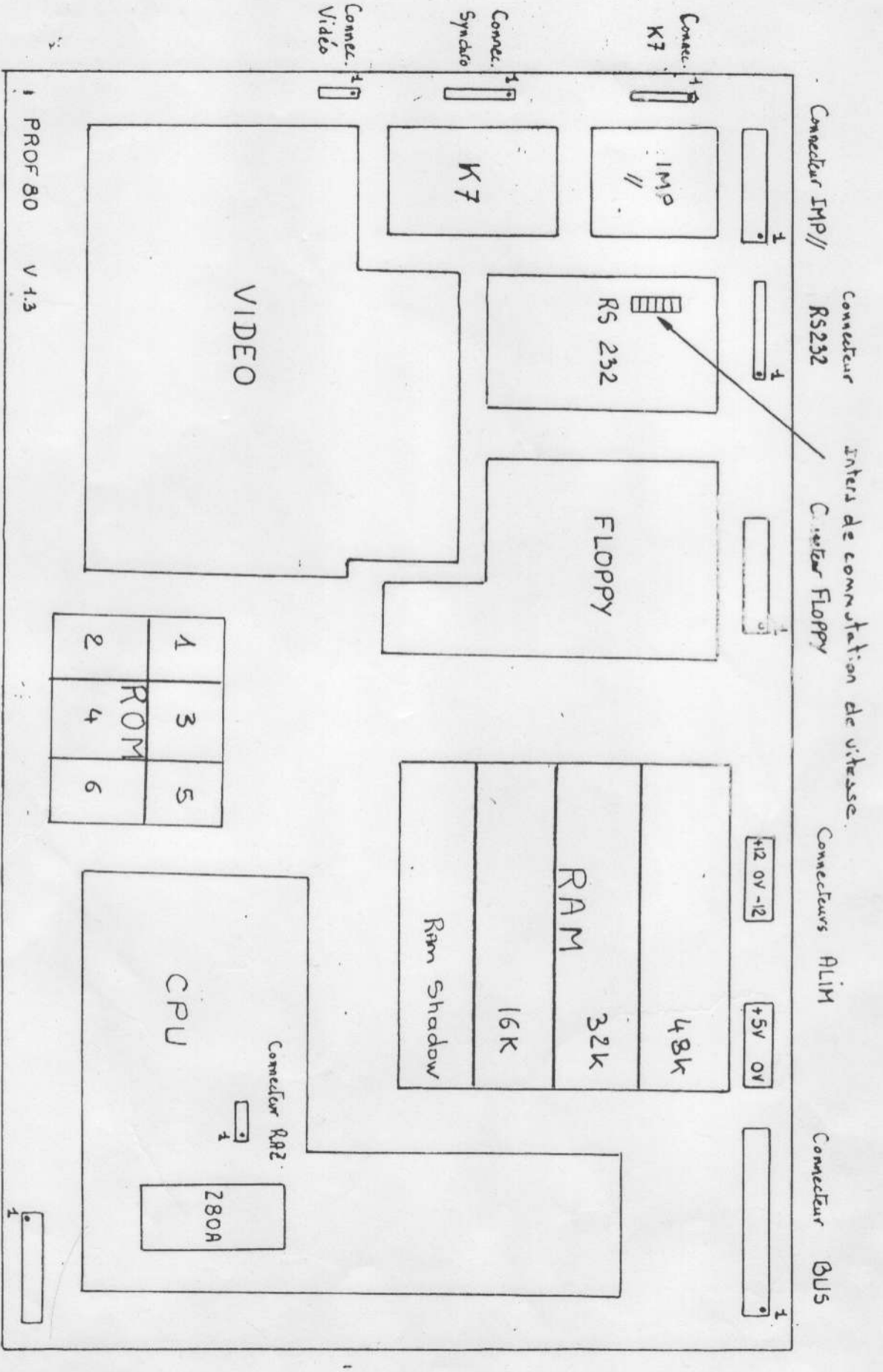


# USART



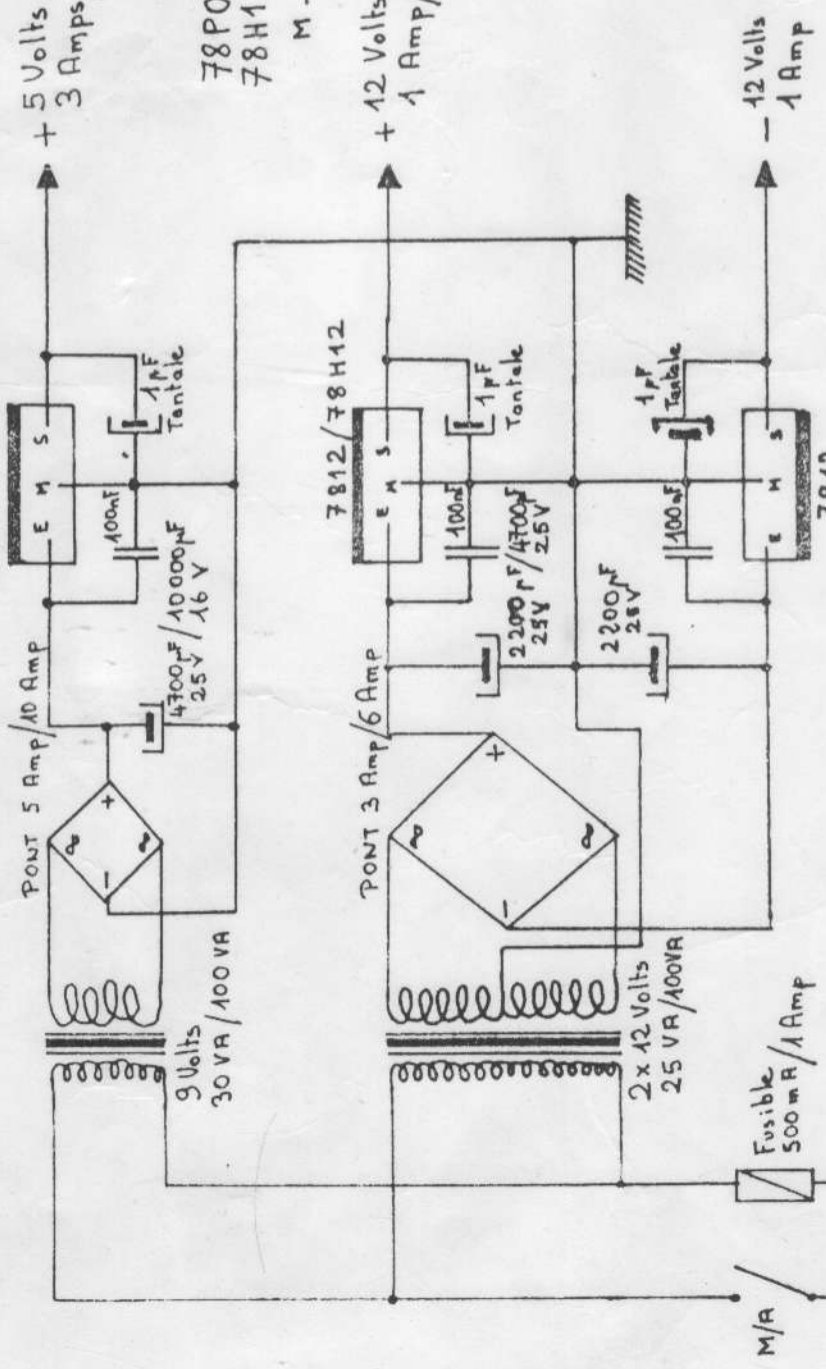


# CLAVIER

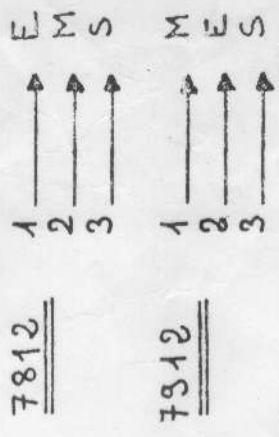
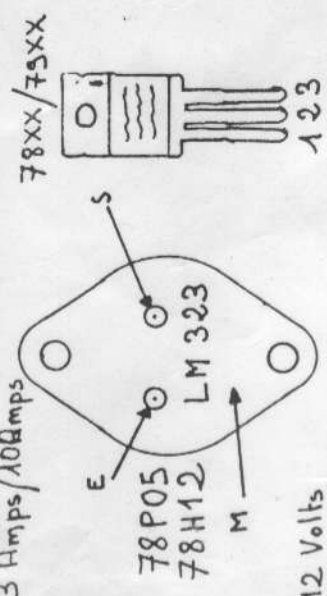




LM 323K / 78P05



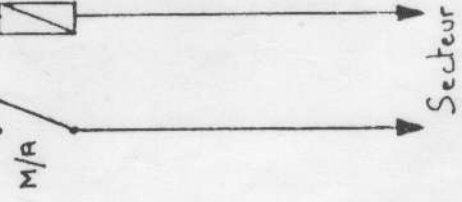
BROCHAGES :



*12V - 1A*  
*12V - 1A*

ATTENTION : Les régulateurs de tension seront montés sur un radiateur, isoler le 7912 des autres régulateurs.

# alim PROF 80



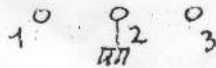
# Nomenclature du PROF 80

1	Boitier oscillateur	18MHz	Motorola ou Manudax	(C1)
1	Quartz	5,0688 MHz		(Q2)
1	Quartz	8,00 MHz		(Q1)
1	Relais	RZ2D12	ITT	(A1)
1	Switch	8 positions		(C4)
1	Circuit intégré	LM 7905		
1	"	DS 1488		(A4)
2	"	DS 1489		(A3 - A6)
1	"	LM 3900		(B1)
2	"	2114		(F7 - G7)
7	"	2716		(G12 - 13 - 14 - F12 - 13 - 14 - E5)
32	"	MK4116		(A12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - B10 - 11 - 12 - 13 - 14 - 15 - 16 - 17) (C14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - D14 - 15 - 16 - 17 - 18 - 19 - 20 - 21)
2	"	CD4518		(C13 - E12)
3	"	7438		(A8 - A10 - A11)
2	"	74157		(F17 - F18)
1	"	75452		(D1)
1	"	74C00		(D2)
2	"	74C04		(E1 - E2)
4	"	74LS00		(C24 - E11 - G11 - G20)
1	"	74LS02		(D7)
6	"	74LS04		(B20 - C7 - C11 - D8 - F2 - F19)
2	"	74LS10		(B19 - D11)
2	"	74LS11		(A20 - G10)
3	"	74LS20		(B8 - C22 - G4)
4	"	74LS30		(D12 - D13 - F10 - F11)
6	"	74LS32		(A21 - B18 - D23 - E6 - E9 - G19)
6	"	74LS74		(B5 - B6 - E10 - G3 - G17 - F1)
1	"	74H74		(G16)
2	"	74LS90		(B7 - E4)
1	"	74LS92		(G1)
5	"	74LS93		(D3 - D9 - E8 - F9 - G9)
1	"	74LS123		(A7)
3	"	74LS132		(D4 - F3 - F20)
1	"	74LS153		(F4)
3	"	74LS155		(C12 - C23 - D10)
4	"	74LS157		(E7 - F8 - G2 - G8)
2	"	74LS166		(D5 - D6)
4	"	74LS174		(B2 - B3 - C5 - F5)
3	"	74LS175		(B9 - E3 - G5)
3	"	74LS240		(C9 - C10 - G23)
15	"	74LS244		(B4 - C2 - C3 - C8 - D22 - F6 - F15 - F16 - F21 - F23 - G6 - G15 - G18 - G21 - G22)
1	"	74LS367		(A2)
1	"	BR 2941L		(C6)
1	"	FD 1771 B01		(A9)
1	"	AY5-1013		(A5)
1	"	Z80A		(F22)

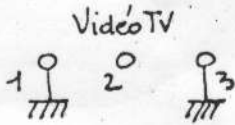
## Nomenclature (Suite)

1	Transistor	NPN	2N2222	(T2)
4	"	-PNP	2N2907	(T1-3-4-5)
5	Diode		1N4148	(D1-2-3-4-5)
1	Capacité		47pF	(C15)
3	"		220pF	(C10-11-17)
1	"		330pF	(C7)
1	"		750pF	(C8)
1	"		820pF	(C13)
1	"		10nF	(C4)
1	"		22nF	(C6)
1	"		47nF	(C5)
2	"		100nF	(C14)
3	"		10µF 10V	(C2-3-12)
2	"		25µF 10V	(C1-16)
13	Résistance 1/4W		22Ω	(R10-12-14-16-18-20-21-22-23-24-25-26-27)
1	"		47Ω	(R37)
1	"		75Ω	(R35)
1	"		120Ω	(R32)
4	"		150Ω	(R70-71-72-73)
2	"		270Ω	(R30-34)
2	"		330Ω	(R3-33)
2	"		470Ω	(R28-29)
2	"		1KΩ	(R75-76)
1	"		1,2KΩ	(R58)
1	"		1,8KΩ	(R36)
24	"		4,7KΩ	(R2-4-6-7-8-9-11-13-15-17-19-31-42-56-57-60-61-62-63-65-67)
2	"		6,8KΩ	(R77-78)
7	"		10KΩ	(R1-5-39-41-50-68-74)
1	"		22KΩ	(R64)
3	"		220KΩ	(R69-79-80)
2	"		390KΩ	(R43-44)
5	"		470KΩ	(R47-48-51-54-55)
1	"		560KΩ	(R46)
1	"		680KΩ	(R49)
2	"		1MΩ	(R52-53)
1	"		1,8MΩ	(R45)
2	"		100KΩ	ajustable (R38-40)
1	Boitier 8.R		10KΩ	(R59)
120	Capa découplage		0,53µF	
6	"		47µF 15V	
1	"		470µF 20V	
6	" Mylar		0,22µF	
2	Switch Dip		2 positions	
3	Barettes Coudées		Petit Modèle	
1 Support à souder 8 Broches				
55	"	"	"	14 "
55	"	"	"	16 "
3	"	"	"	18 "
18	"	"	"	20 "
7	"	"	"	24 "
3	"	"	"	40 "

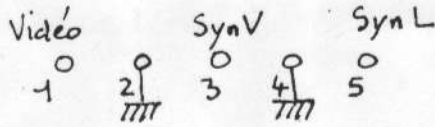
Prise RAZ



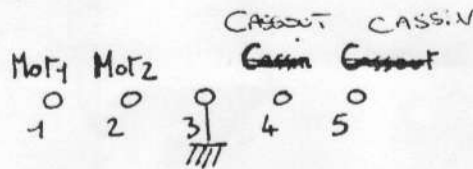
Prise Video TV



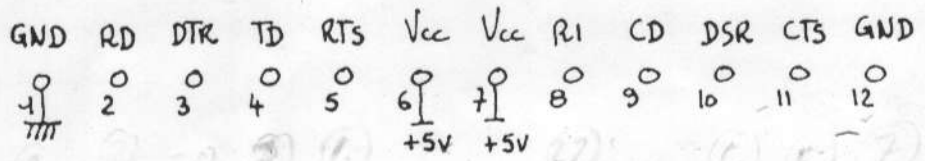
Prise Synchro



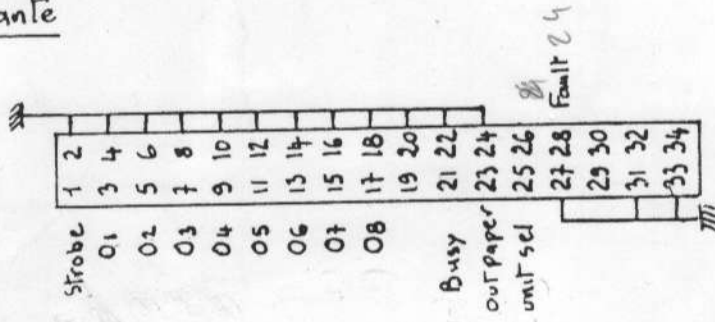
Prise K7



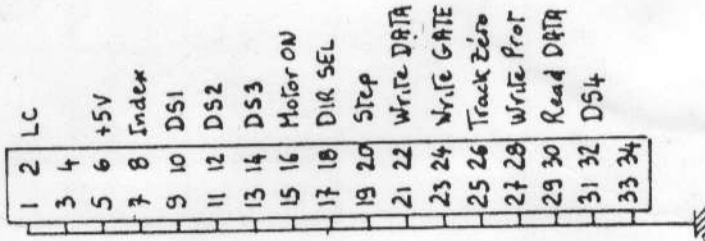
Prise RS232



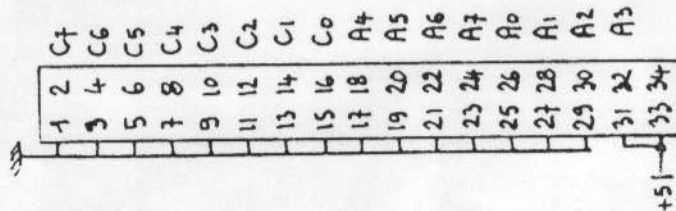
Prise Imprimante



Prise Floppy



Prise Clavier



Prise BUS

