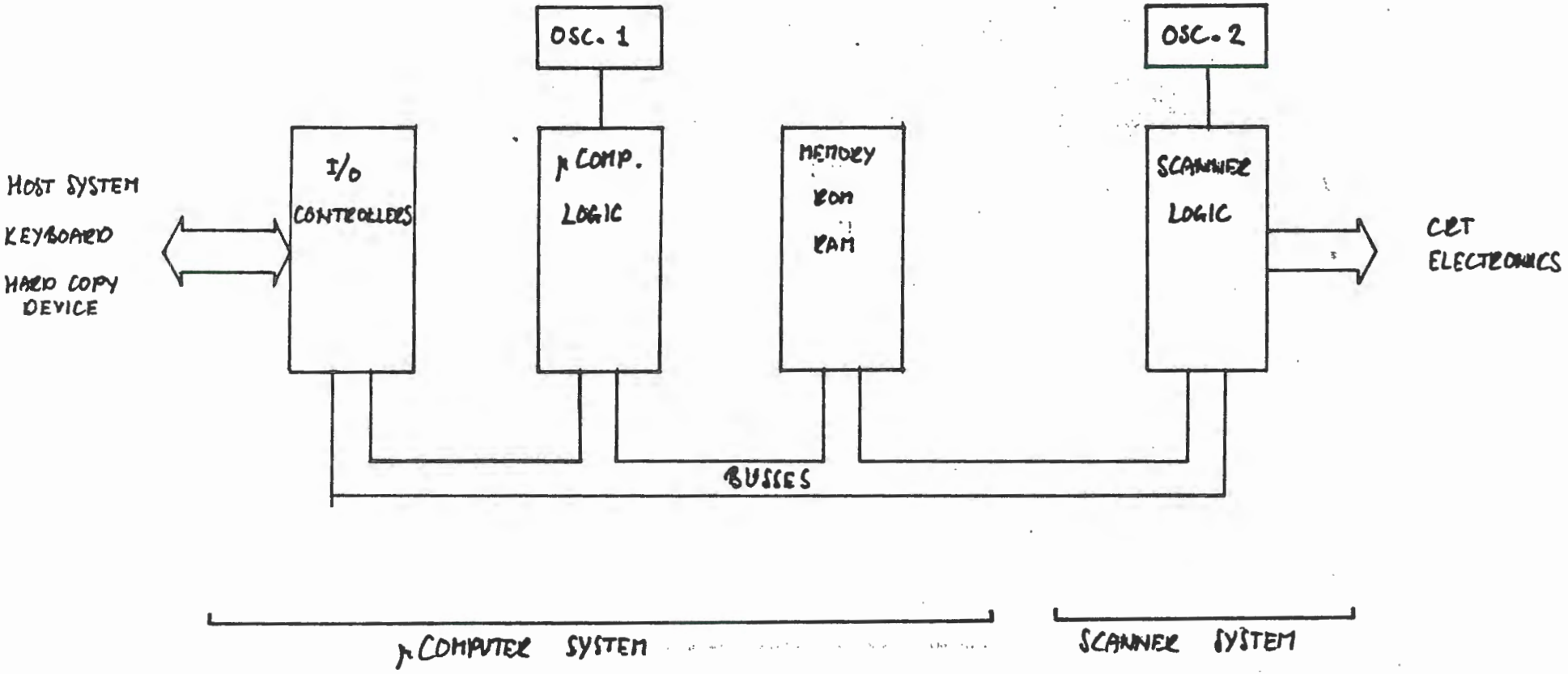
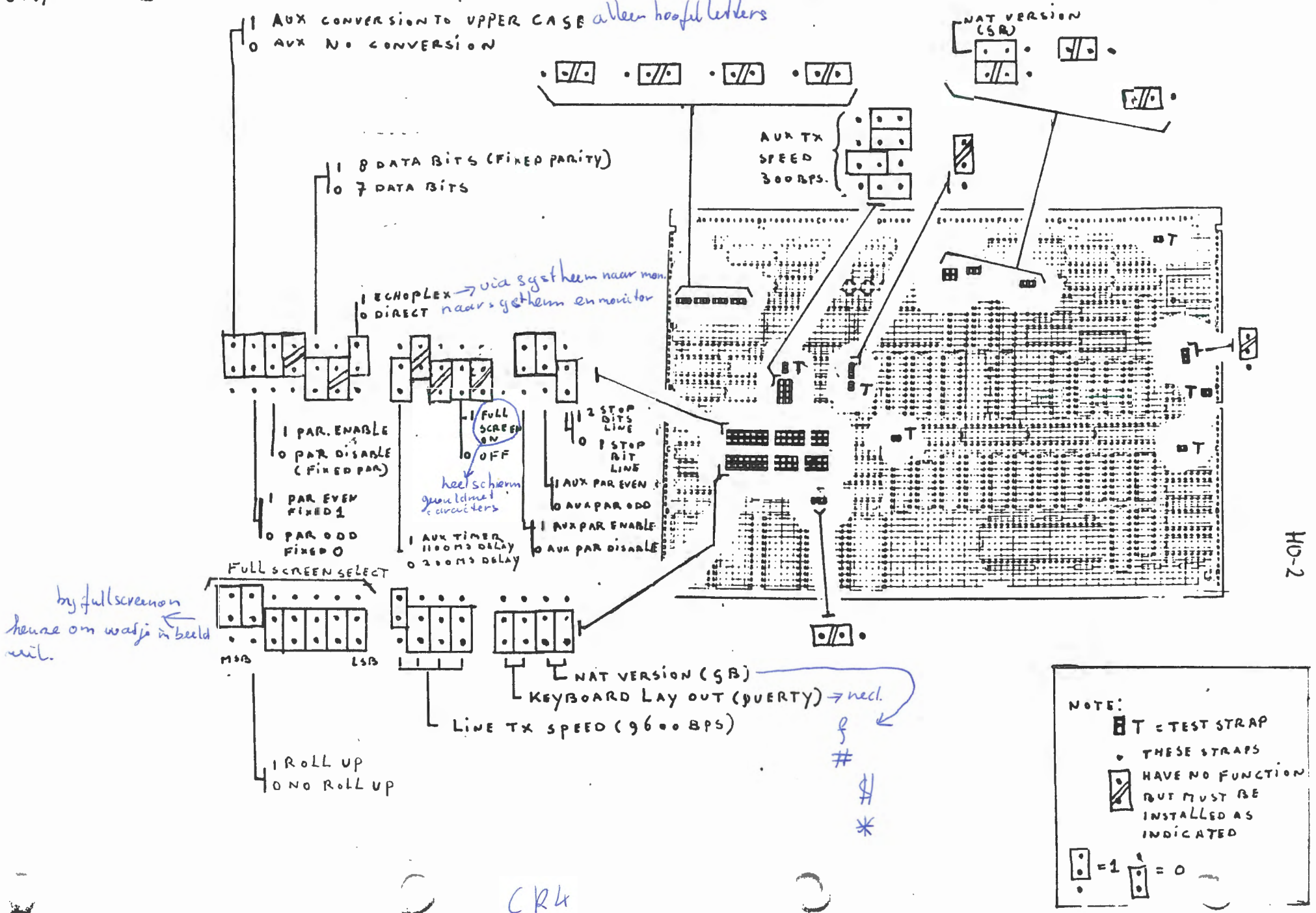
CRK-1 PCB


OSC. 1
OSC. 2
HOST SYSTEM
KEYBOARD
HARD COPY DEVICE
I/O CONTROLLERS
μ COMP. LOGIC
MEMORY ROM RAM
SCANNER LOGIC
CRT ELECTRONICS
BUSSES
μ COMPUTER SYSTEM
SCANNER SYSTEM

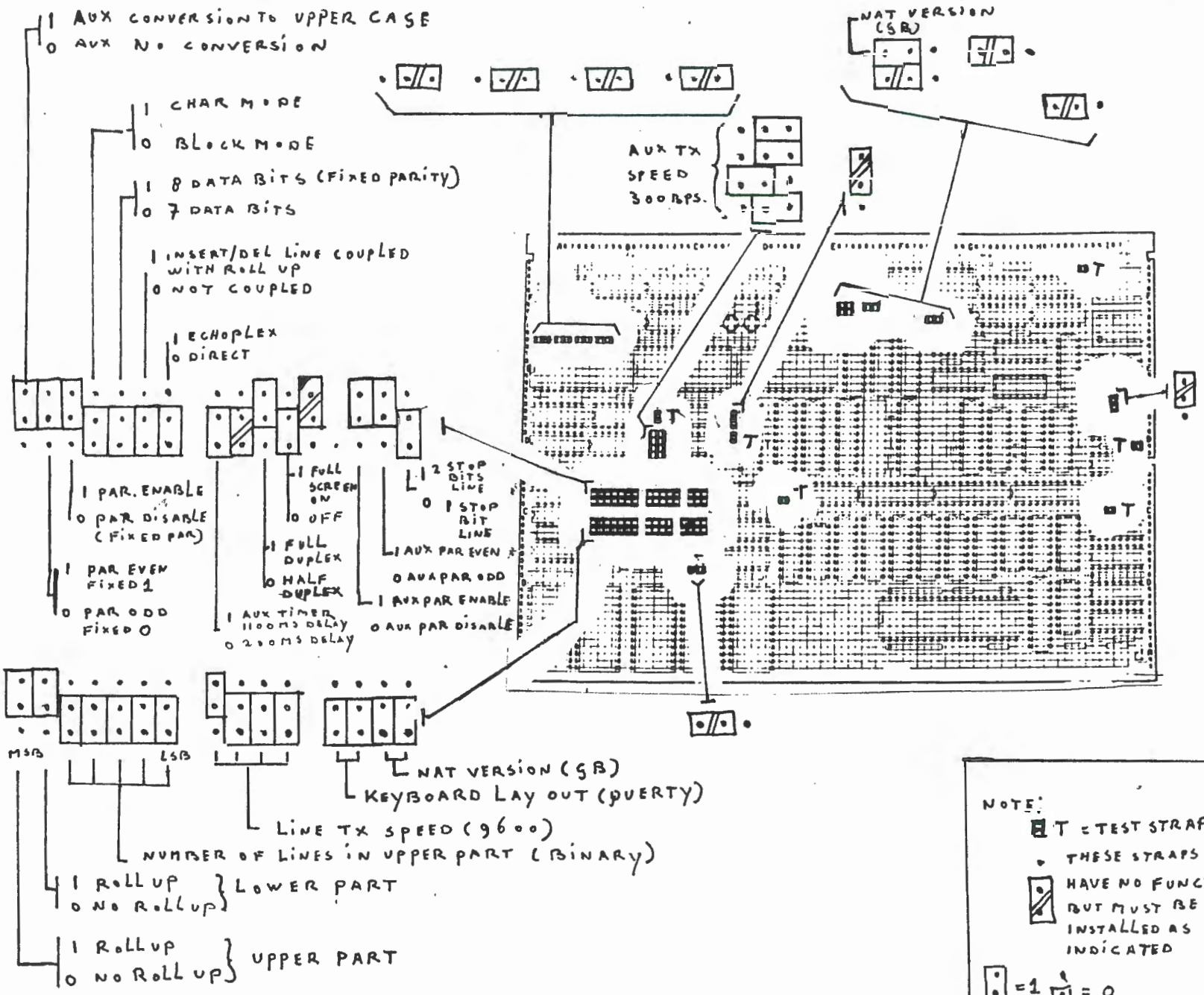
P 816/818 - 01



HO-2

CR4

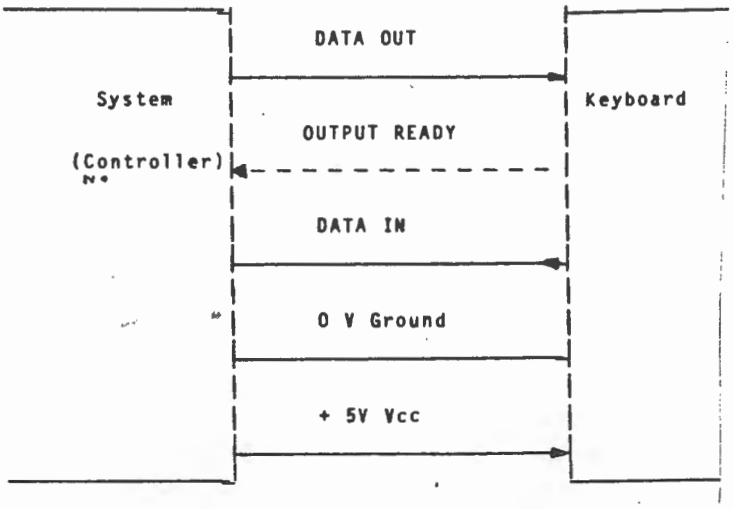
P 8 167 88-02



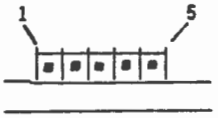
NOTE:
T = TEST STRAP
• THESE STRAPS HAVE NO FUNCTION BUT MUST BE INSTALLED AS INDICATED
= 1 = 0

HD-3

CRK



KEYBOARD PCB CONNECTOR



header
viewed on pins

1 OUTPUT READY
(not implemented)

2 + 5V Vcc

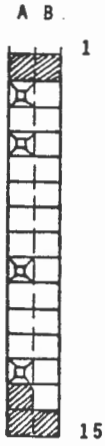
3 LATA OUT

4 DATA IN

5 OV ground return

CONNECTION CABLE VDU SIDE

A suitable extraction tool shall be provided. This has to be fixed between A/B 1 and A/B 15.



Connector viewed on receptacle openings

A 2 DATA OUT

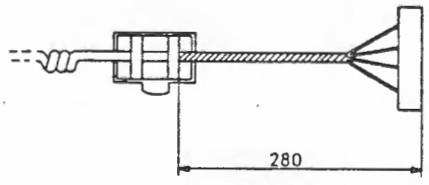
A 4 DATA IN

A 9 OV ground return

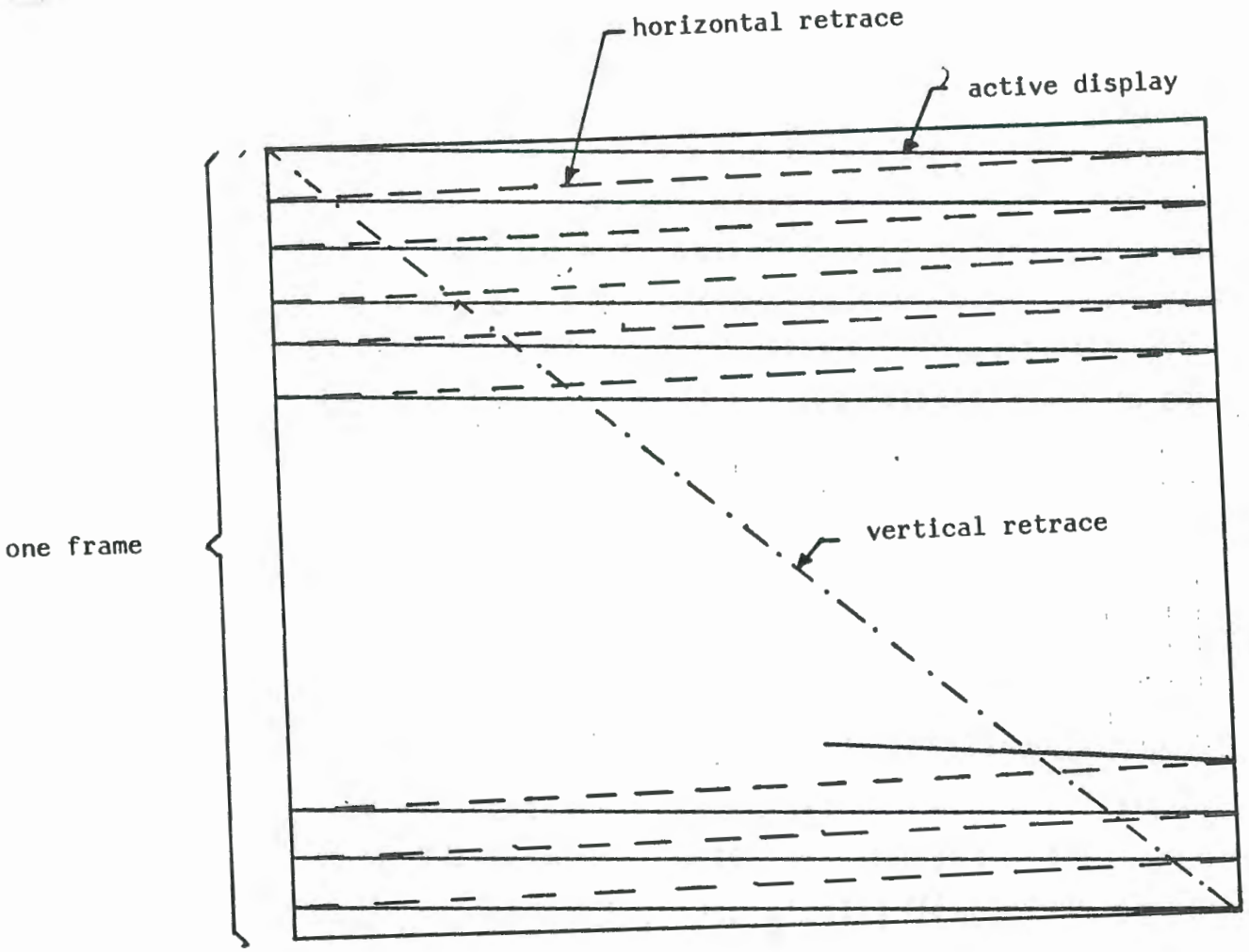
A 13 + 5V Vcc

A 1,14,15 lock

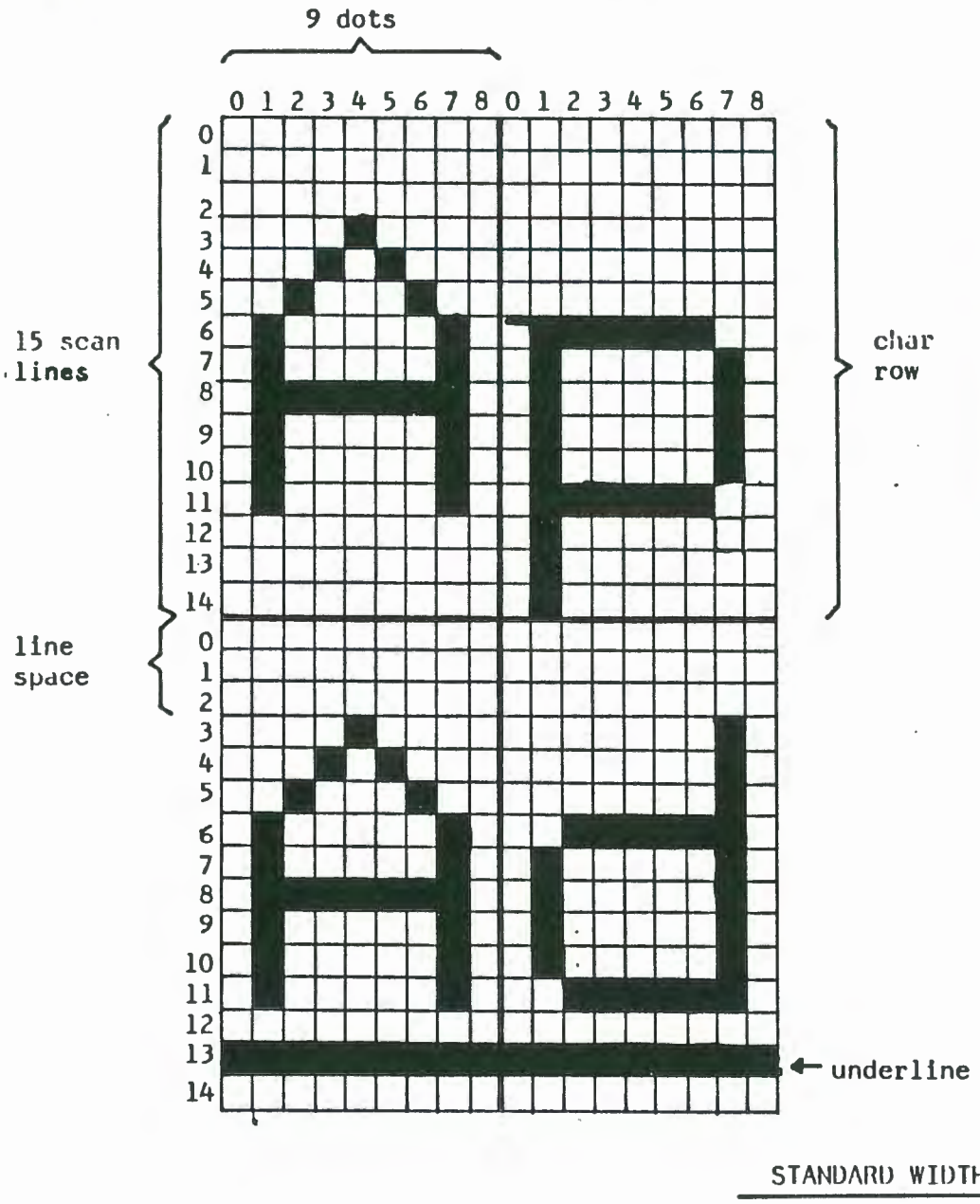
B 1,15 lock



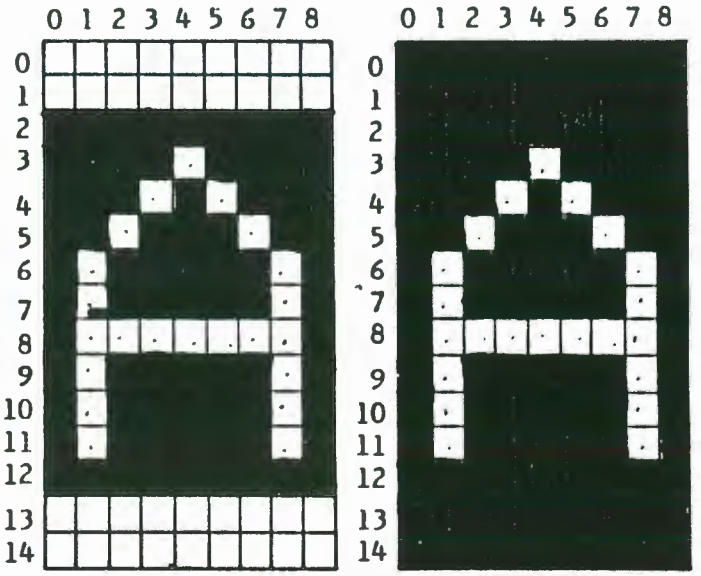
free length between strain relief and outer edge of latch housing: 280 mm



non interlace raster scan system

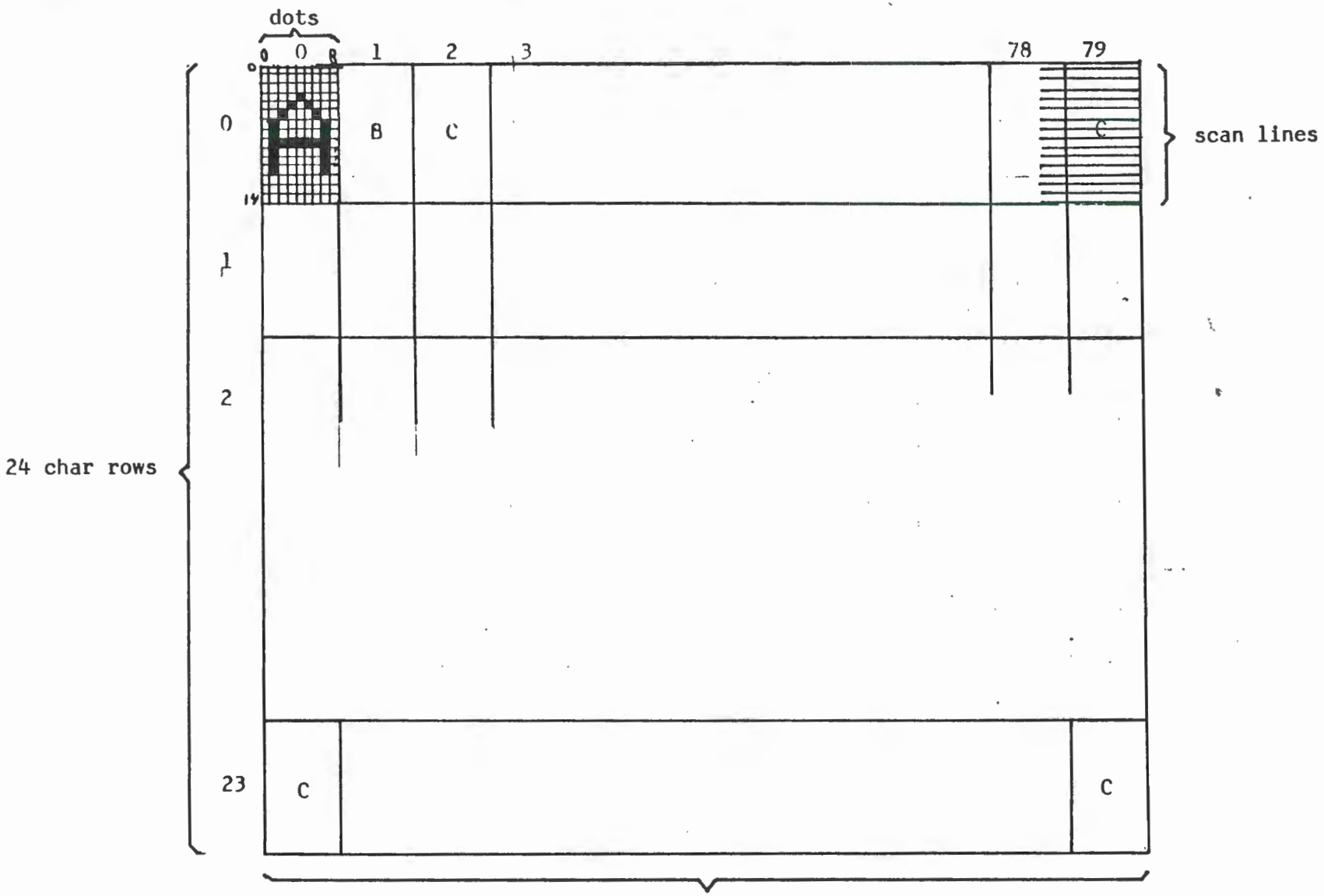


STANDARD WIDTH



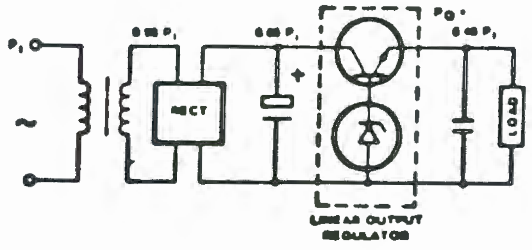
cursor

inverse video

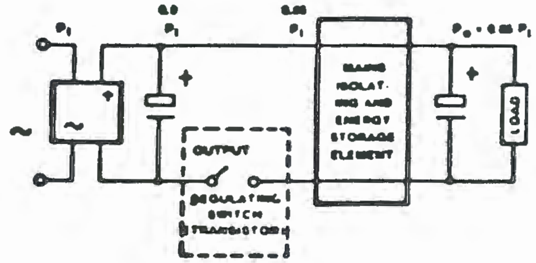


CRT SCREEN FORMAT

LOSSES IN REGULATED POWER SUPPLIES



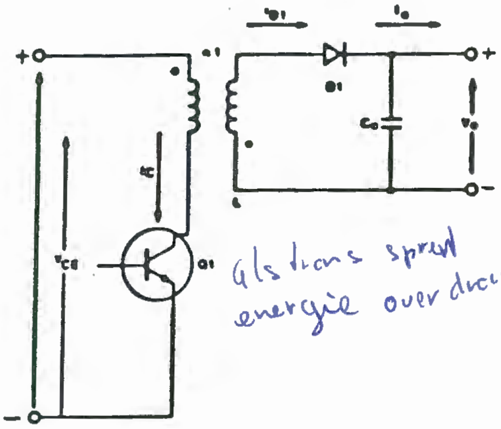
(a) CONVENTIONAL SUPPLY - 45% EFFICIENCY



(b) SWITCHED-MODE SUPPLY - 80% EFFICIENCY

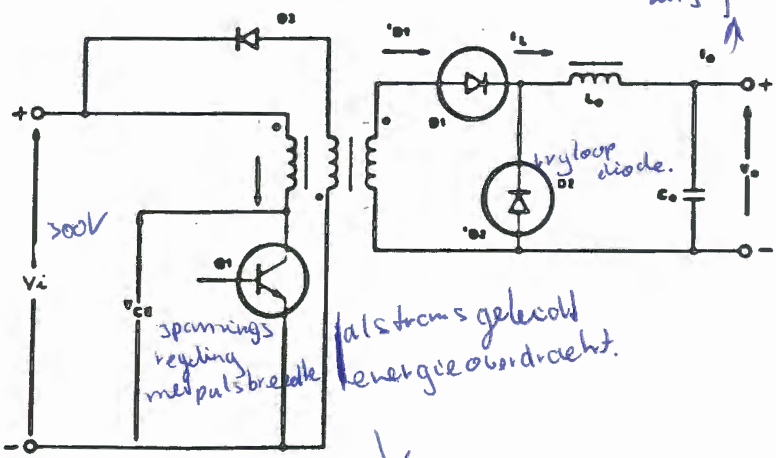
minder vermogen nodig (kleine trafo)

FLYBACK CONVERTER CIRCUIT



als trans. sperd energie overdracht

FORWARD CONVERTER CIRCUIT DIAGRAM



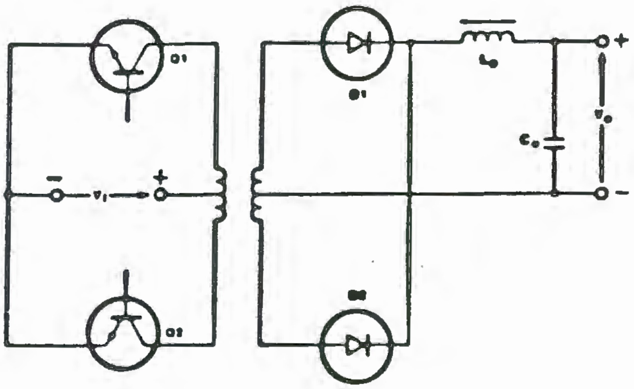
spannings regeling met pulsbreedte

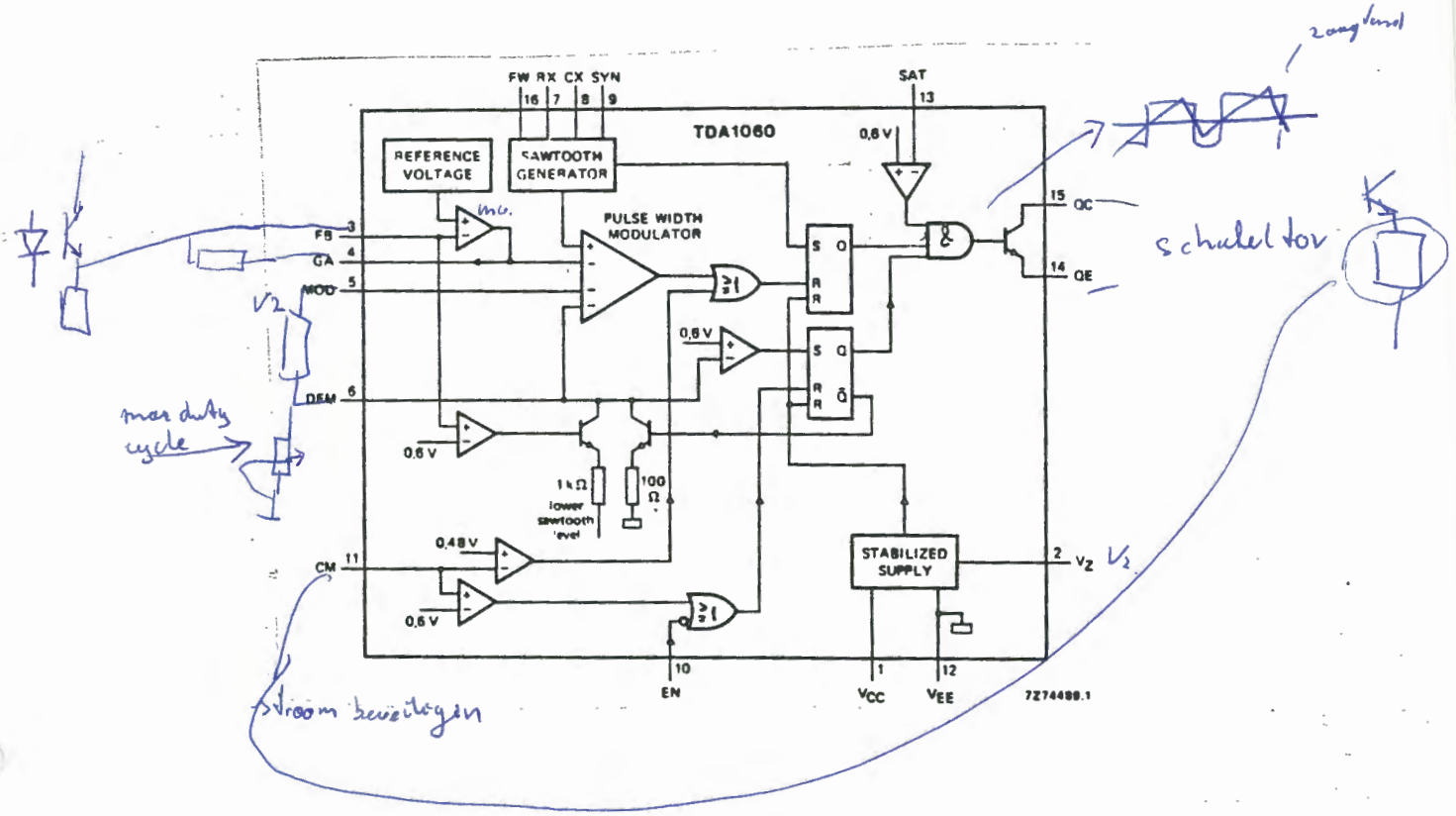
als trans. geleidt energieoverdracht.

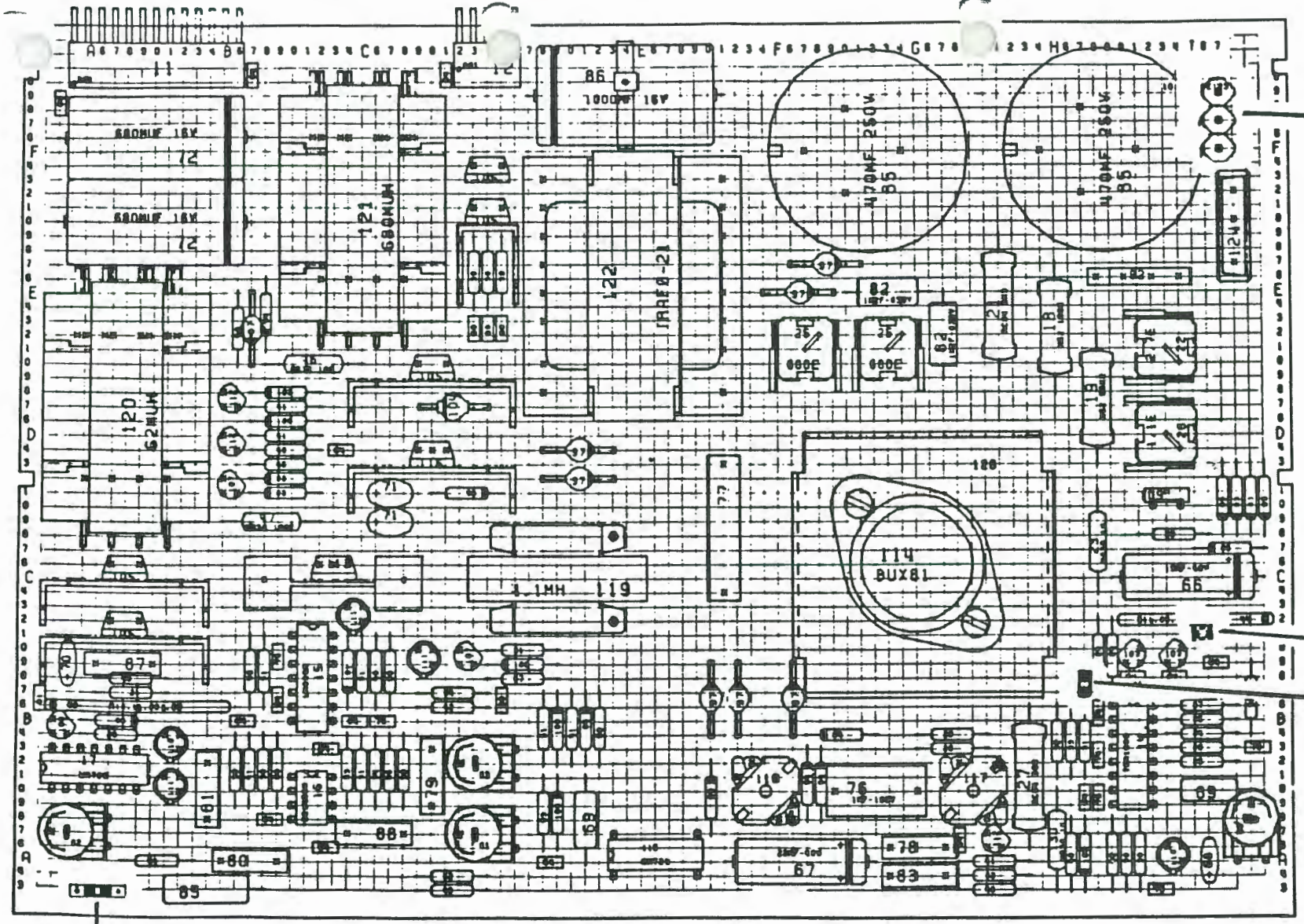
↓

toegepast in mon

PUSH-PULL CONVERTER CIRCUIT DIAGRAM




TDA1060
REFERENCE VOLTAGE
SAWTOOTH GENERATOR
PULSE WIDTH MODULATOR
STABILIZED SUPPLY
FW RX CX SYN
16 7 8 9
SAT
13
0,6 V
FB 3
CA 4
MOD 5
DEM 6
CM 11
0,48 V
0,6 V
1 kΩ
100 Ω
lower sawtooth level
15 QC
14 QE
2 VZ
10 EN
1 VCC
12 VEE
7Z74488.1
max duty cycle
stroom bevestigen
schakeltor



Interconnection block at :	Grounding system
A5 A3	Logic ground directly connected to protective ground.
A6 A3	Logic ground connected to protective ground by means of a capacitor of 3, 9 nF.
A7 A3	Logic ground connected to protective ground by a capacitor of 3,9 nF and a resistor of 1 kOhm in paralel.

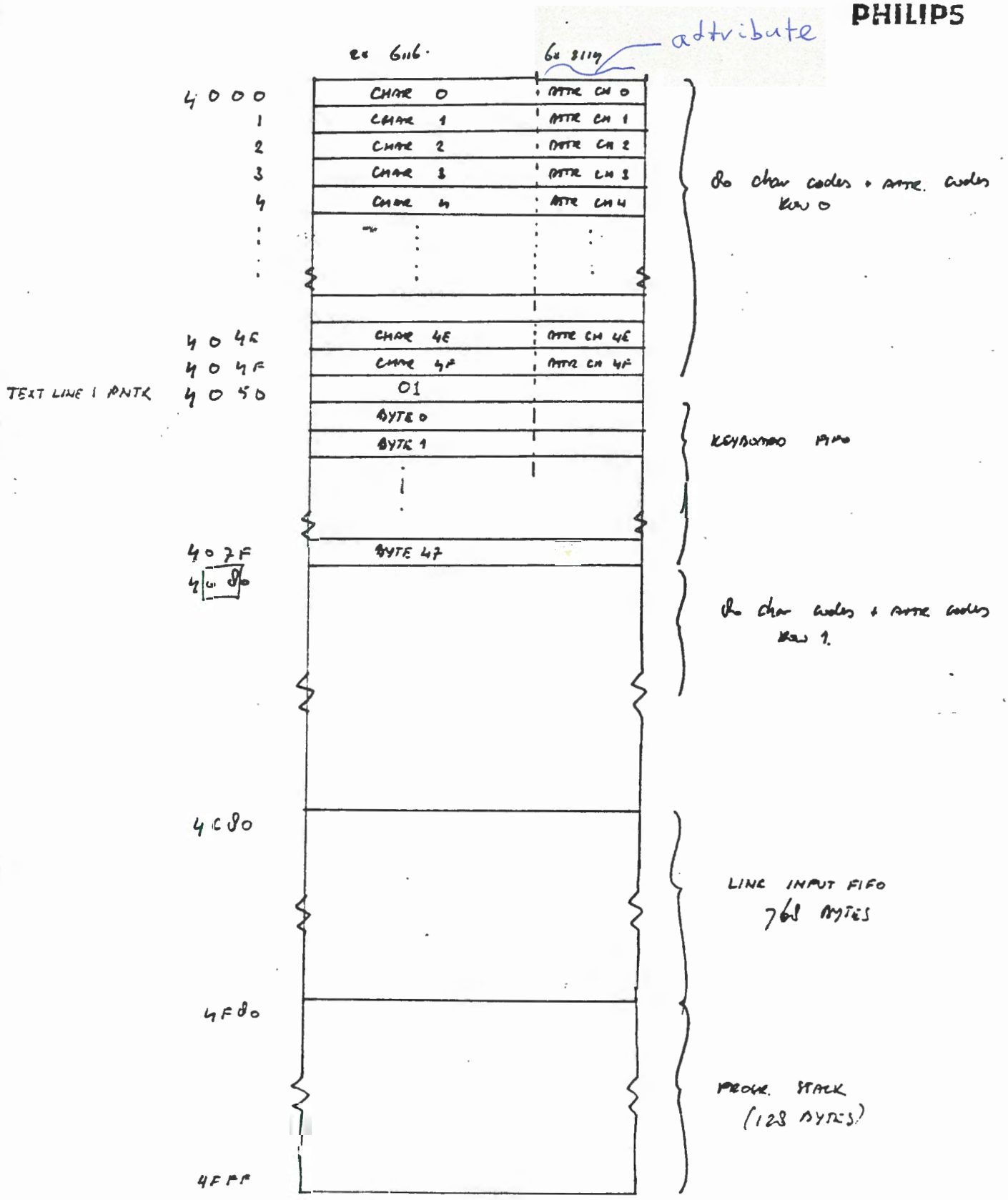
ASSY CARD

CAC1

5122.194.47650

Image memory + Scratch memory + attr. memory

PHILIPS

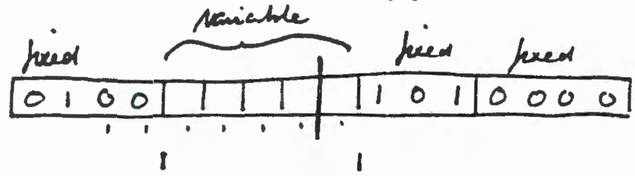


PHILIPS

(Scanner's image memory access.
Generation line pointer addresses.

10 when LSB row count = 1
5 " " " " " = 0

10/5



SCAN ROW BUFFER

contains respective line (row) pointer addresses in image memory

	from row counter				
0	00000	⇒	4050	line (row) 1	pointer
1	00001	⇒	40D0	line 2	point
2	00010	⇒	4150	line 3	point
3	00011	⇒	41D0	line 4	point
4	00100	⇒	4250	line 5	point
⋮	⋮		⋮		
22	10110	⇒	4B50	line 22	point
23	10111	⇒	4BD0	line 23	point
24	11000	⇒	4C50	line 24	point

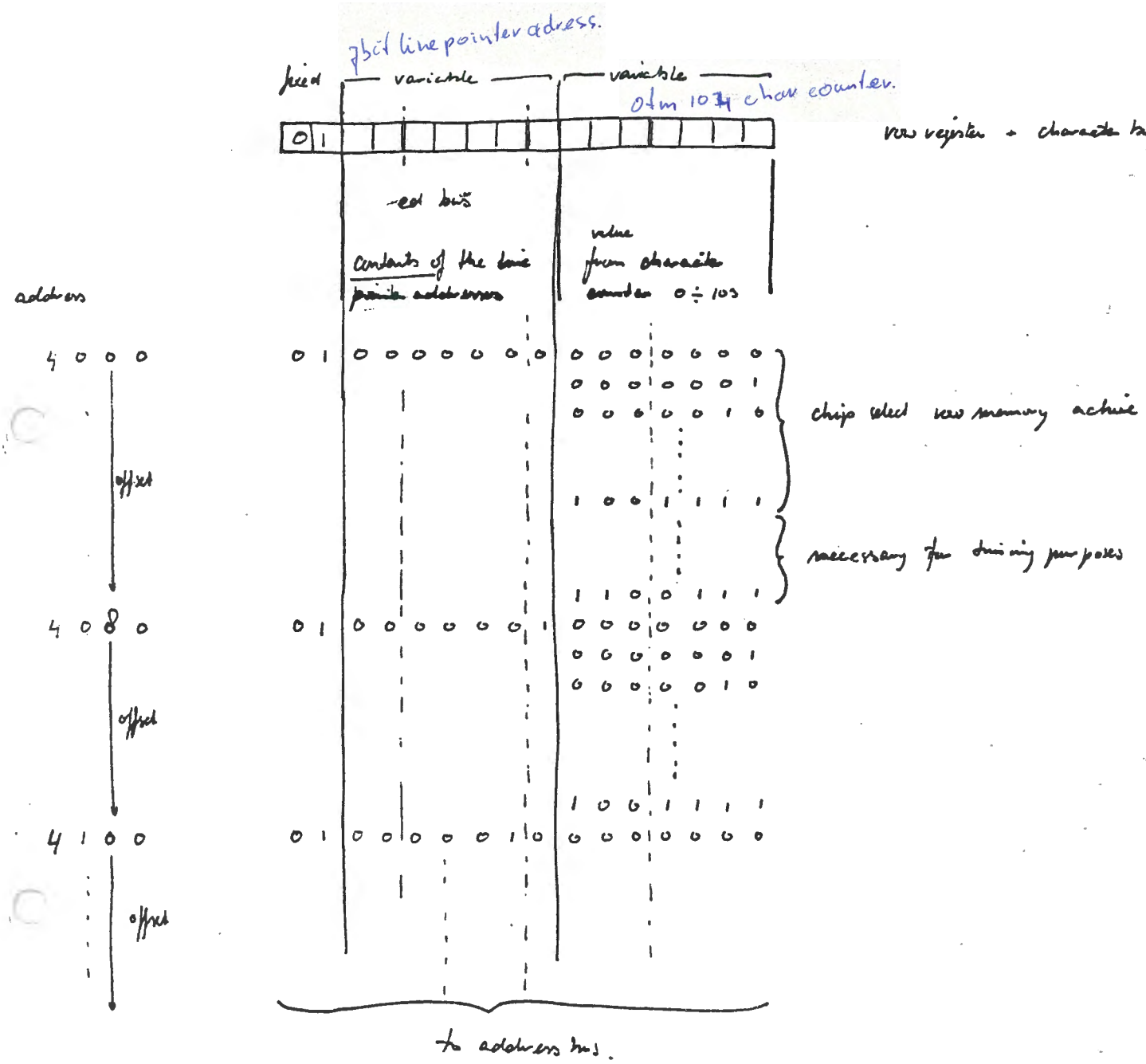
to address bus

NB line 24 point used in Y316/818
is used in X3300 series

256
14
1024
256
3584

PHILIPS

Examples generation of the addresses in image memory where the character information to be displayed is stored.

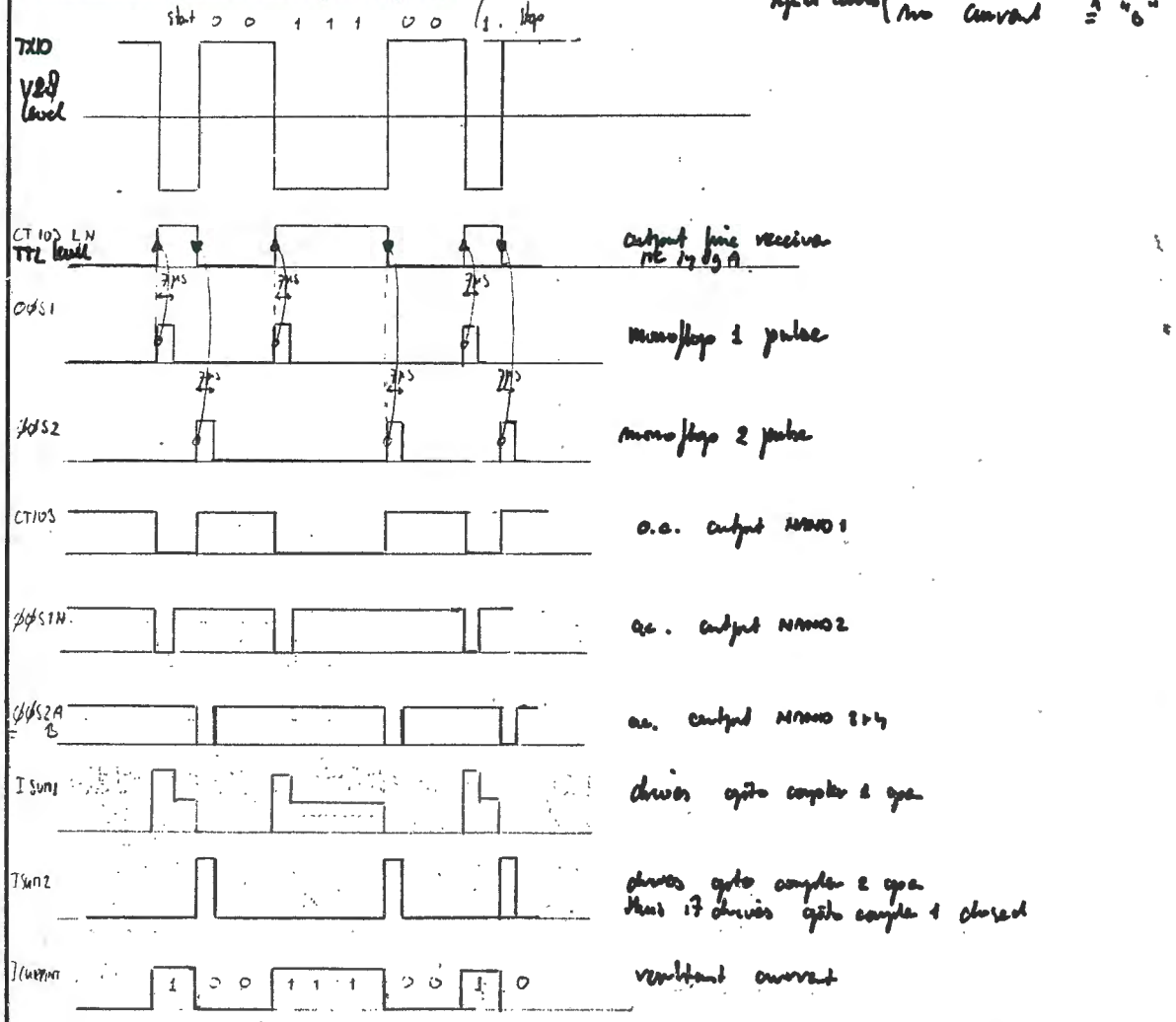


Scrolling of the screen by changing the contents of the text line pointers. PHILIPS

		text line pointer address:	contents this address	1 line shifted up- wards	2 lines shifted upwards	3 lines shifted upwards	etc.
TEXT LINE	0	4050	01	02	03	04	
ON SCREEN	1	4000	02	03	04	05	
	2	4150	03	04	05	.	
	3	4100	04	05	06	.	
	4	4250	05	06	07		
	5	4200	06	07	08		
	6	4350	07	08	09		
	7	4300	08	09	0A		
	8	4450	09	0A	0B	.	
	9	4400	0A	0B	0C		
	10	4550	0B	0C	0D		
	11	4500	0C	0D	0E		
	12	4650	0D	0E	0F		
	13	4600	0E	0F	10		
	14	4750	0F	10	11		
	15	4700	10	11	12		
	16	4850	11	12	13		
	17	4800	12	13	14		
	18	4950	13	14	15		
	19	4900	14	15	16		
	20	4A50	15	16	17	00	
	21	4A00	16	17	00	01	
	22	4B50	17	00	01	02	
	23	4B00	00	00	01	02	
	24	4C50	00	01	02	03	

TIME	AIDS	SUBJECTS transmit signal wave forms	COURSE NAME :	REMARKS

CVC 1 Current loop adapter



SECTION :	SHEET: OF:	DATE:	PAGE: