"VIDEOPAC+" COMPUTER C7420/18

Service
Service
Service

HOME COMPUTER
MODULE

Service Manual

34 851A12

Documentation Technique Service Dokumentation Documentazione di Servizio Huolte-Ohje Manual de Servicio Manual de Serviço

Subject to modification
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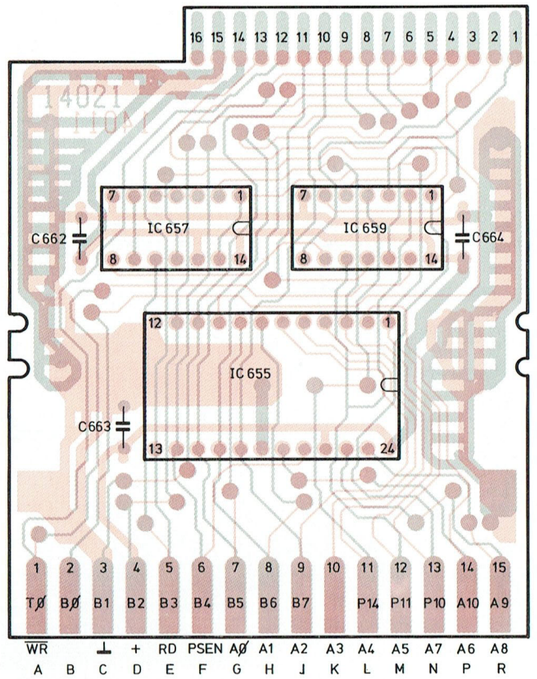
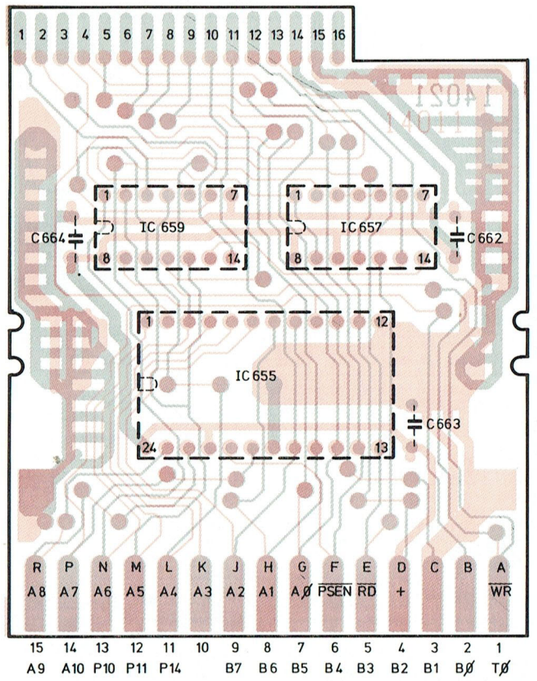
COUPLING CARTRIDGE PANEL



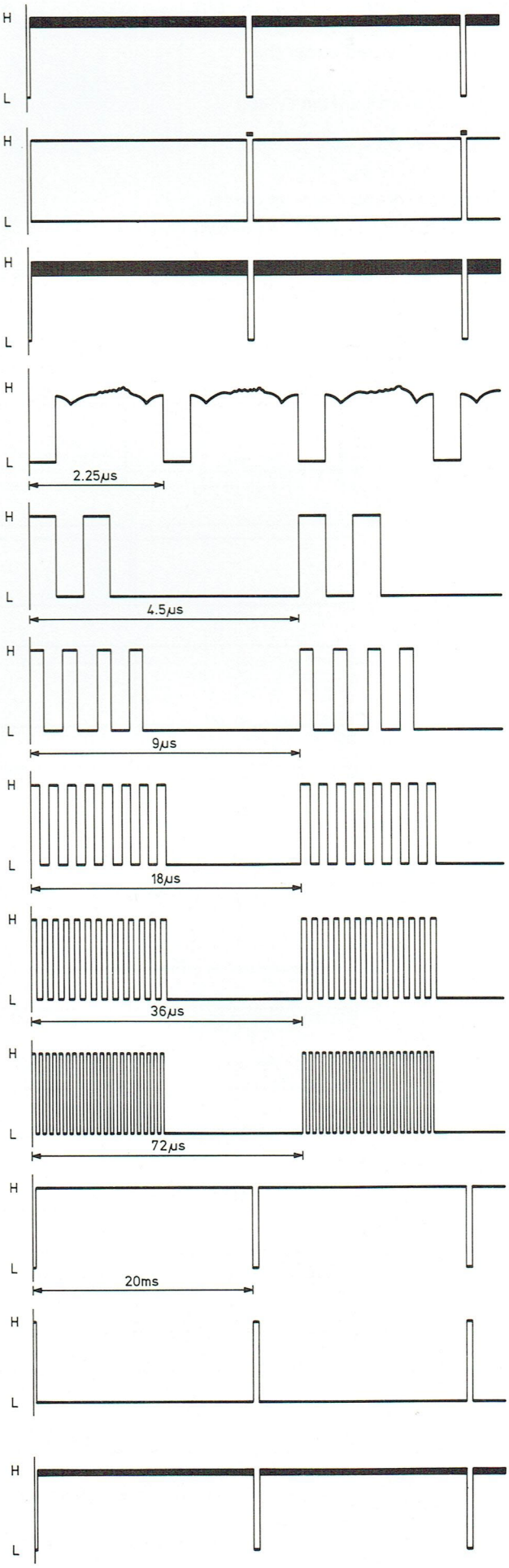
34 591 B 20

COUPLING CARTRIDGE PANEL



34592 B 20

10	9IC758 8IC759	D3 D3
11	12IC758 13IC759 16IC758 17IC759	D4 D4 D6 D6
12	15IC758 14IC759 19IC758 18IC759	D5 D5 D7 D7
13	30IC752	AØ
14	31IC752	A1
15	32IC752	A2
16	33IC752	A3
17	34IC752	A4
18	35IC752	A5
19	36IC752	A6
20	37IC752 40IC752 1IC752 2IC752 5IC752	A7 A10 A11 A12 A15
21	38IC752 3IC752	A8 A13



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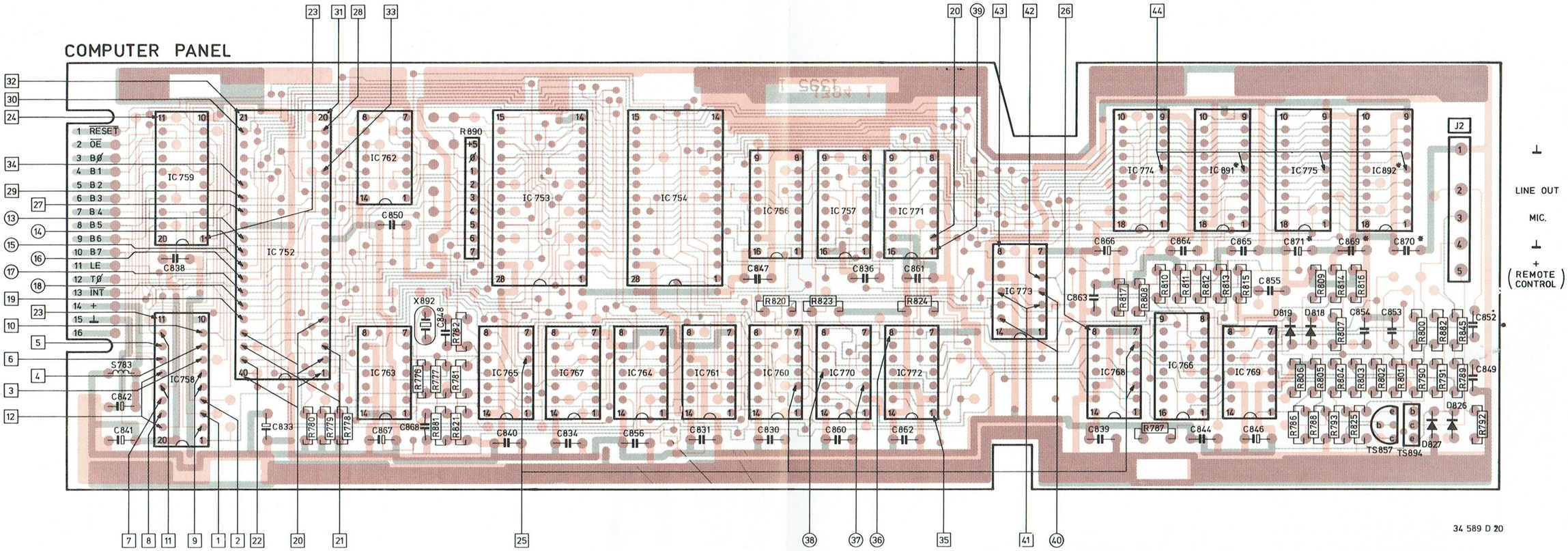
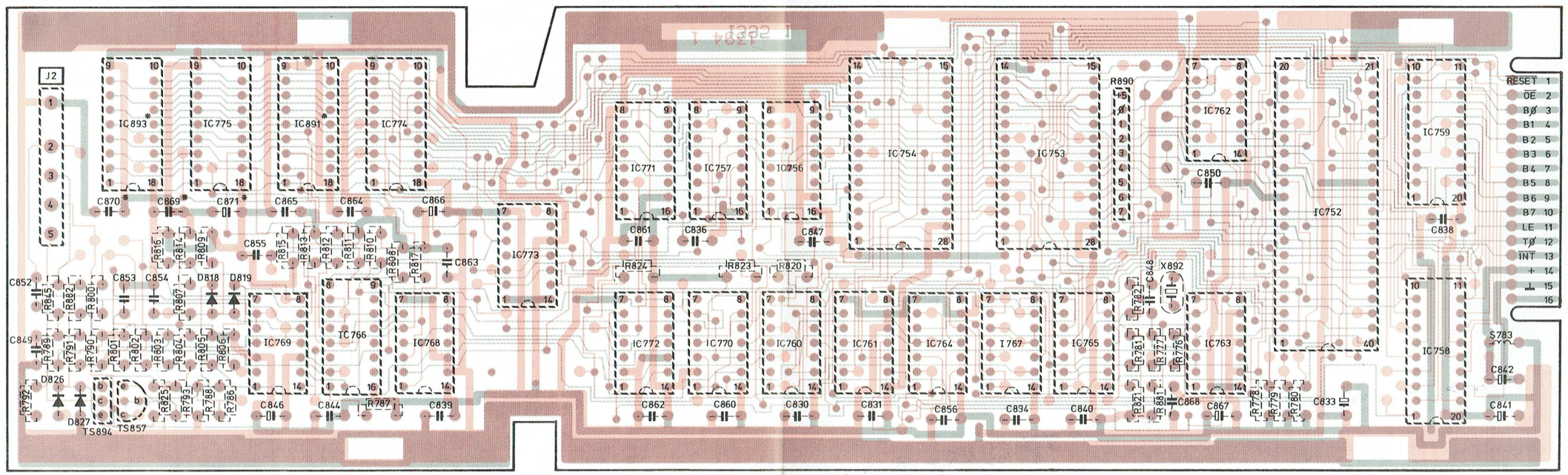
COMPUTER PANEL



*ONLY FOR VERSIONS WITH EXTENDED RAM

34 589 D 20

COMPUTER PANEL



34 590 D 20

MEASURE-MODE OSCILLOGRAMS

The oscillograms have been measured under the following condition

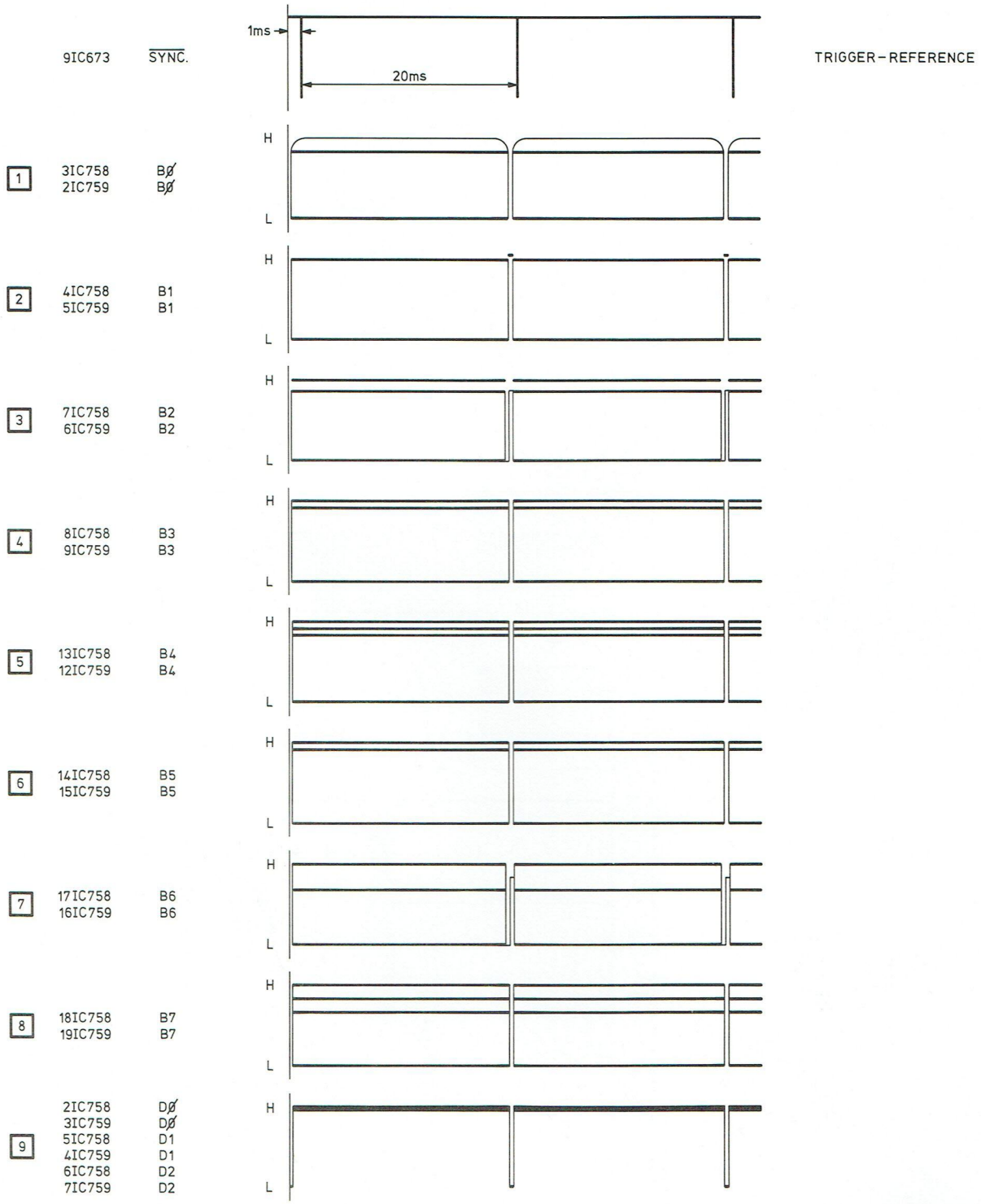
- Insert coupling cartridge into socket G7400
- Switch-on G7400 (SK1)
- Press <RESET> key
- Press <N> key

Then the screen will display the static measure mode:

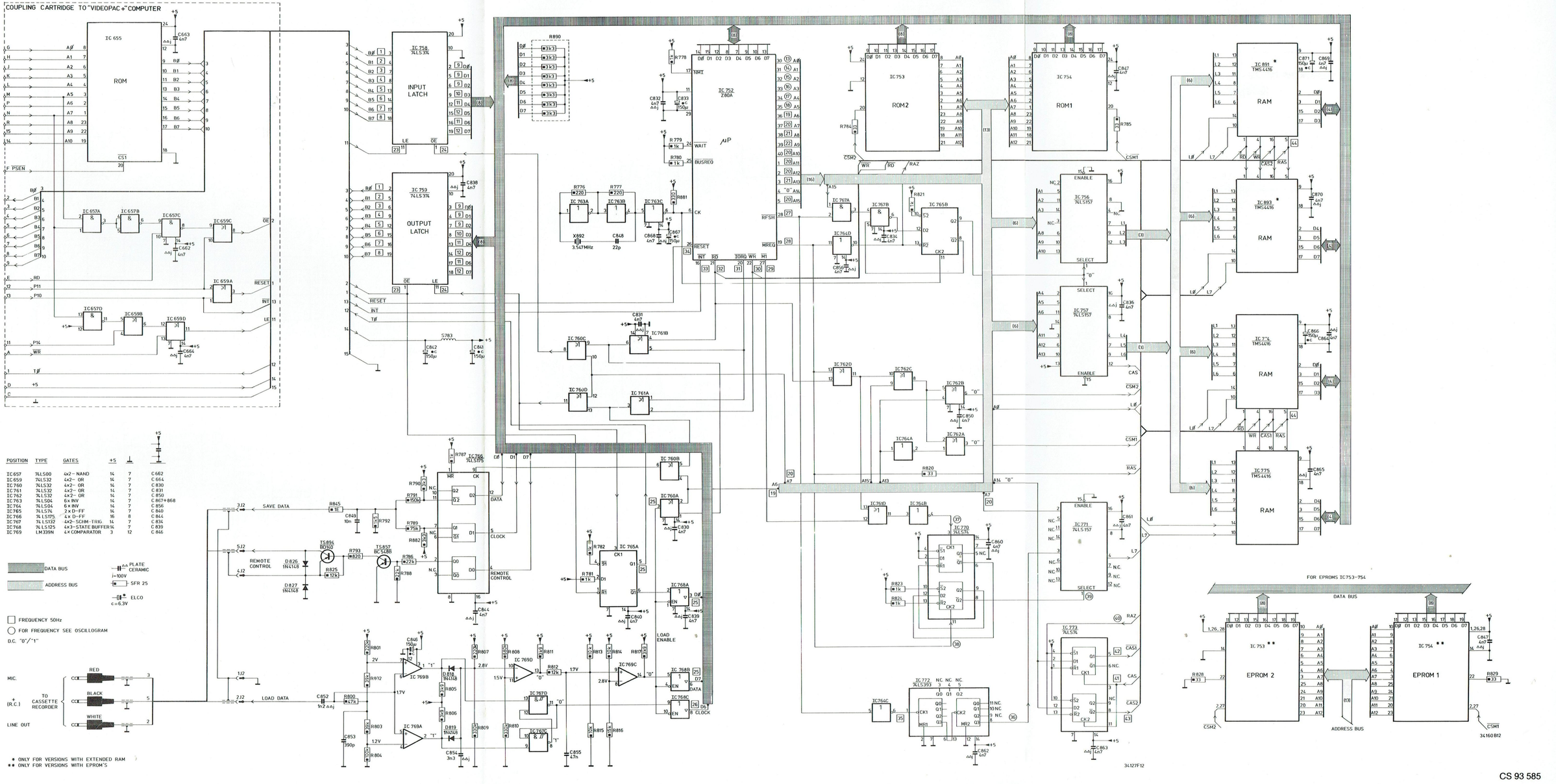
```
00001   X = 1   Y = 8   Aø = 140   A1 = 141

BASIC   VIDEOPAC+
14075   Bytes free

OK
■
```



34 715 C12



POSITION	TYPE	GATES	+5	⏚	
IC 657	74LS00	4x2- NAND	14	7	C 662
IC 659	74LS32	4x2- OR	14	7	C 664
IC 760	74LS32	4x2- OR	14	7	C 830
IC 761	74LS32	4x2- OR	14	7	C 831
IC 762	74LS32	4x2- OR	14	7	C 850
IC 763	74LS04	6x INV	14	7	C 867+868
IC 764	74LS04	6x INV	14	7	C 856
IC 765	74LS74	2x D-FF	14	7	C 840
IC 766	74LS175	4x D-FF	16	8	C 844
IC 767	74LS132	4x2-SCHM-TRIG	14	7	C 834
IC 768	74LS125	4x3-STATE BUFFER	14	7	C 839
IC 769	LM339N	4x COMPARATOR	3	12	C 846

DATA BUS

ADDRESS BUS

PLATE CERAMIC i=100V

SFR 25

ELCO c=6.3V

FREQUENCY 50Hz

FOR FREQUENCY SEE OSCILLOGRAM

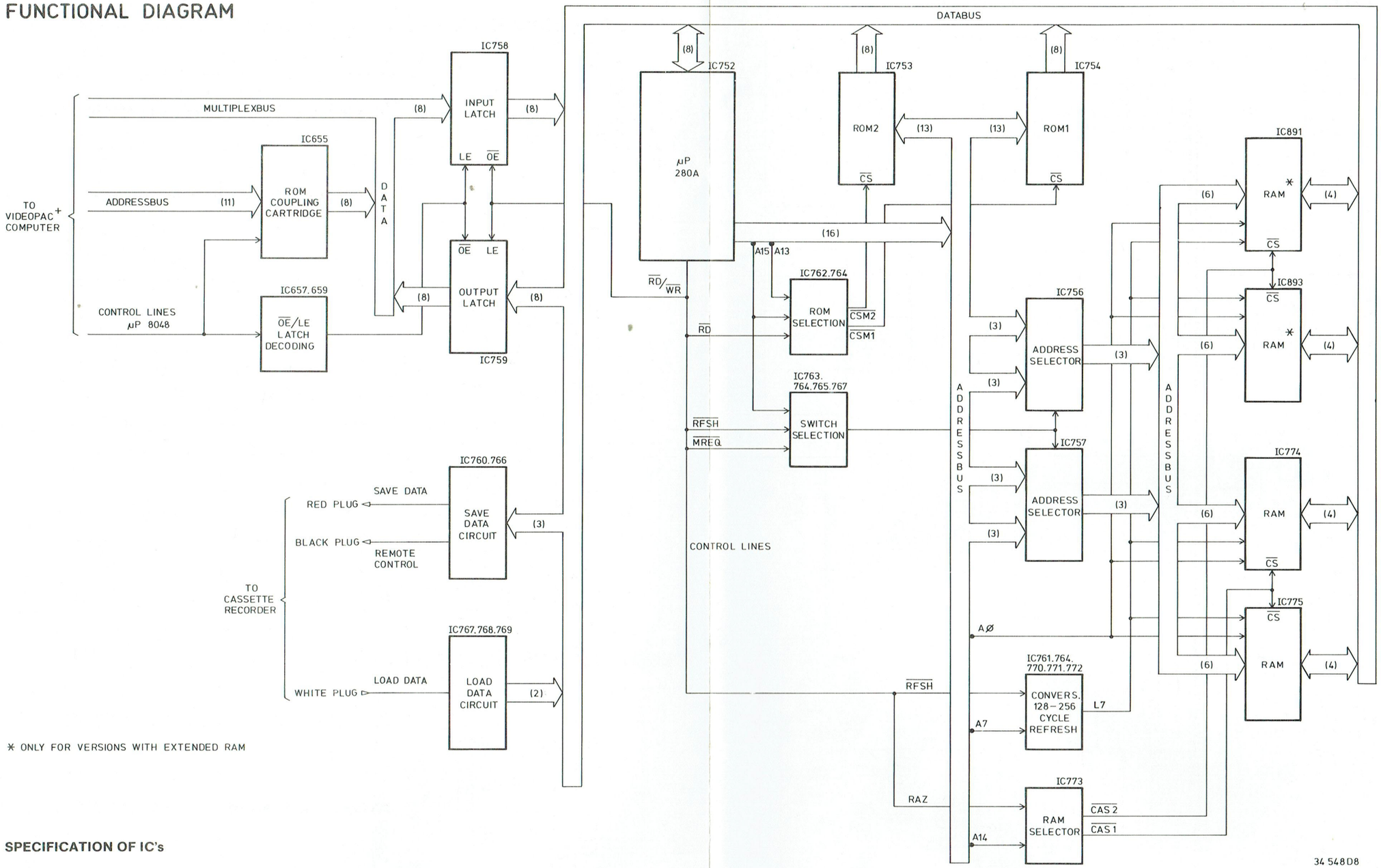
D.C. "0"/"1"

* ONLY FOR VERSIONS WITH EXTENDED RAM

** ONLY FOR VERSIONS WITH EPROM'S

CS 93 585

FUNCTIONAL DIAGRAM

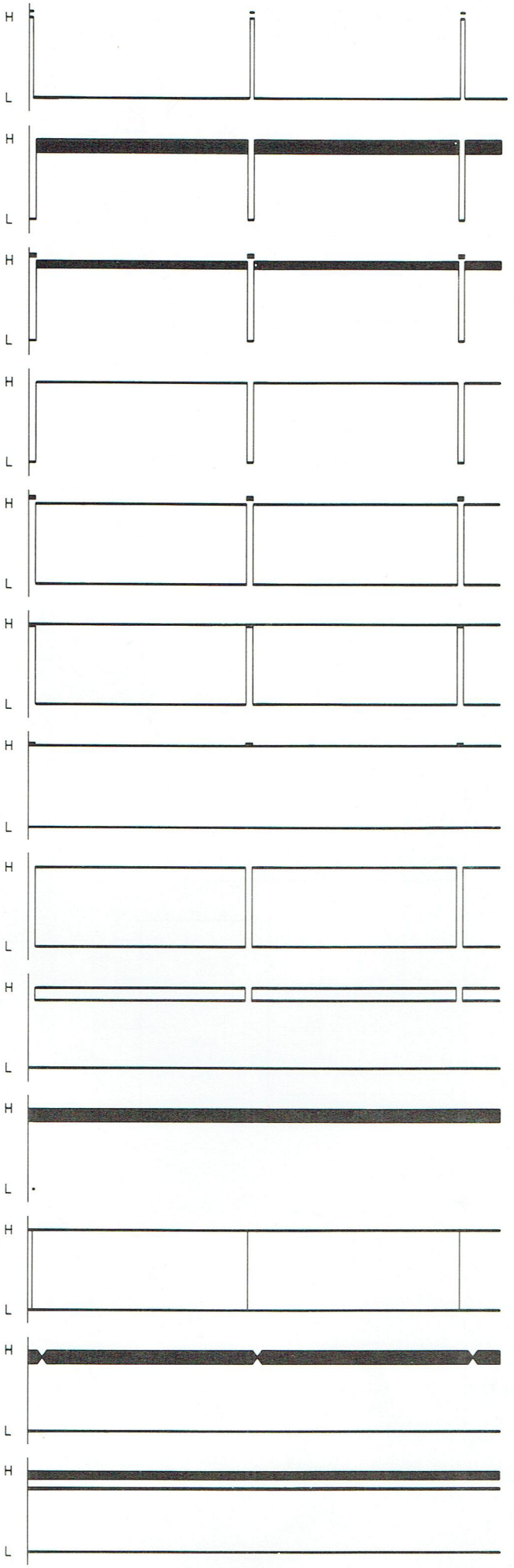


* ONLY FOR VERSIONS WITH EXTENDED RAM

SPECIFICATION OF IC's

Position	Type	Description	Function
IC655	TMS2316	ROM	Coupling
IC657	74LS00	4 x 2-Nand	I/O Control
IC659	74LS32	4 x 2-OR	I/O Control
IC752	Z80A	µProcessor	C.P.U.
IC753	TMS4764	ROM 2	Interpreter
IC754	TMS4764	ROM 1	Interpreter
IC756	74LS157	2 x 4-bit Selector	Address selector
IC757	74LS157	2 x 4-bit Selector	Address selector
IC758	74LS374	8-bit Latch	Data Input Latch
IC759	74LS374	8-bit Latch	Data Output Latch
IC760	74LS32	4 x 2-OR	I/O Control
IC761	74LS32	4 x 2-OR	I/O Control
IC762	74LS32	4 x 2-OR	$\overline{CSM\ 1}$, $\overline{CSM\ 2}$
IC763	74LS04	6 x Inverter	Buffer clock signal µP
IC764	74LS04	6 x Inverter	RAZ, CK
IC765	74LS74	2 x D-FF	Select-Address Selector, TØ
IC766	74LS175	4 x D-FF	Remote Control, Save Data
IC767	74LS132	4 x 2-Schm. trigger	Level restorer
IC768	74LS125	4 x 3-State buffer	Detector, Clock, Data
IC769	LM339N	4 x Op-amp.	Comparator
IC770	74LS74	2 x D-FF	Select-Address Selector
IC771	74LS157	2 x 4-bit Selector	Address Selector
IC772	74LS393	2 x 4-bit Counter	256-cycle refresh counter
IC773	74LS74	2 x D-FF	$\overline{CAS\ 1}$, $\overline{CAS\ 2}$
IC774	TMS4416-15	RAM	Program memory
IC775	TMS4416-15	RAM	Program memory
IC891*	TMS4416-15	RAM	Extended program memory
IC893*	TMS4416-15	RAM	Extended program memory

22	39IC752	A9	
23	11IC758 1IC759	LE $\overline{OE}$	
24	1IC758 11IC759	$\overline{OE}$ LE	
25	5IC765A 3IC760A 3IC768A 6IC768B	TØ EN DØ D7	
26	8IC768C	D6	
27	28IC752	$\overline{RFSH}$	
28	19IC752	$\overline{MREQ}$	
29	27IC752	$\overline{M1}$	
30	22IC752	$\overline{WR}$	
31	20IC752	$\overline{IORQ}$	
32	21IC752	$\overline{RD}$	
33	16IC752	$\overline{INT}$	
34	26IC752	$\overline{RESET}$	



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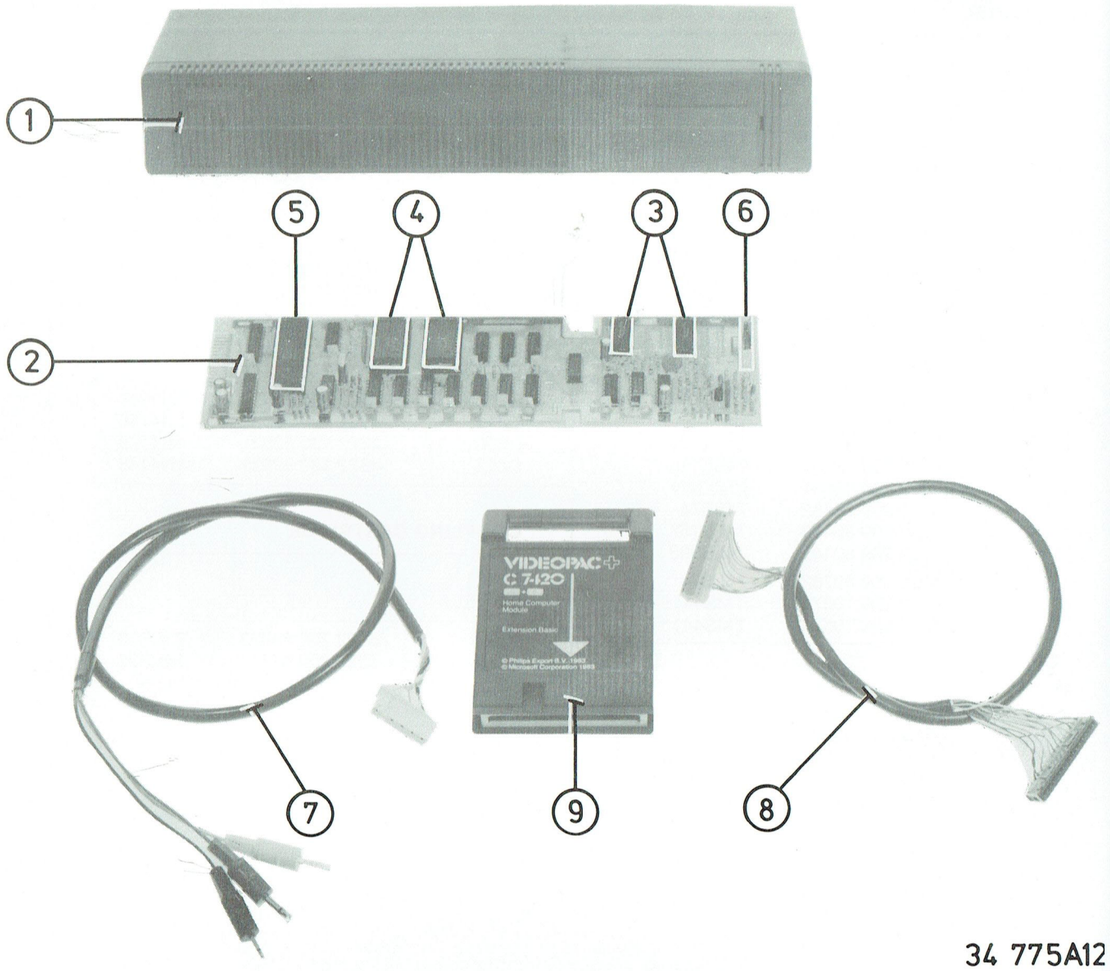
CS 93 586



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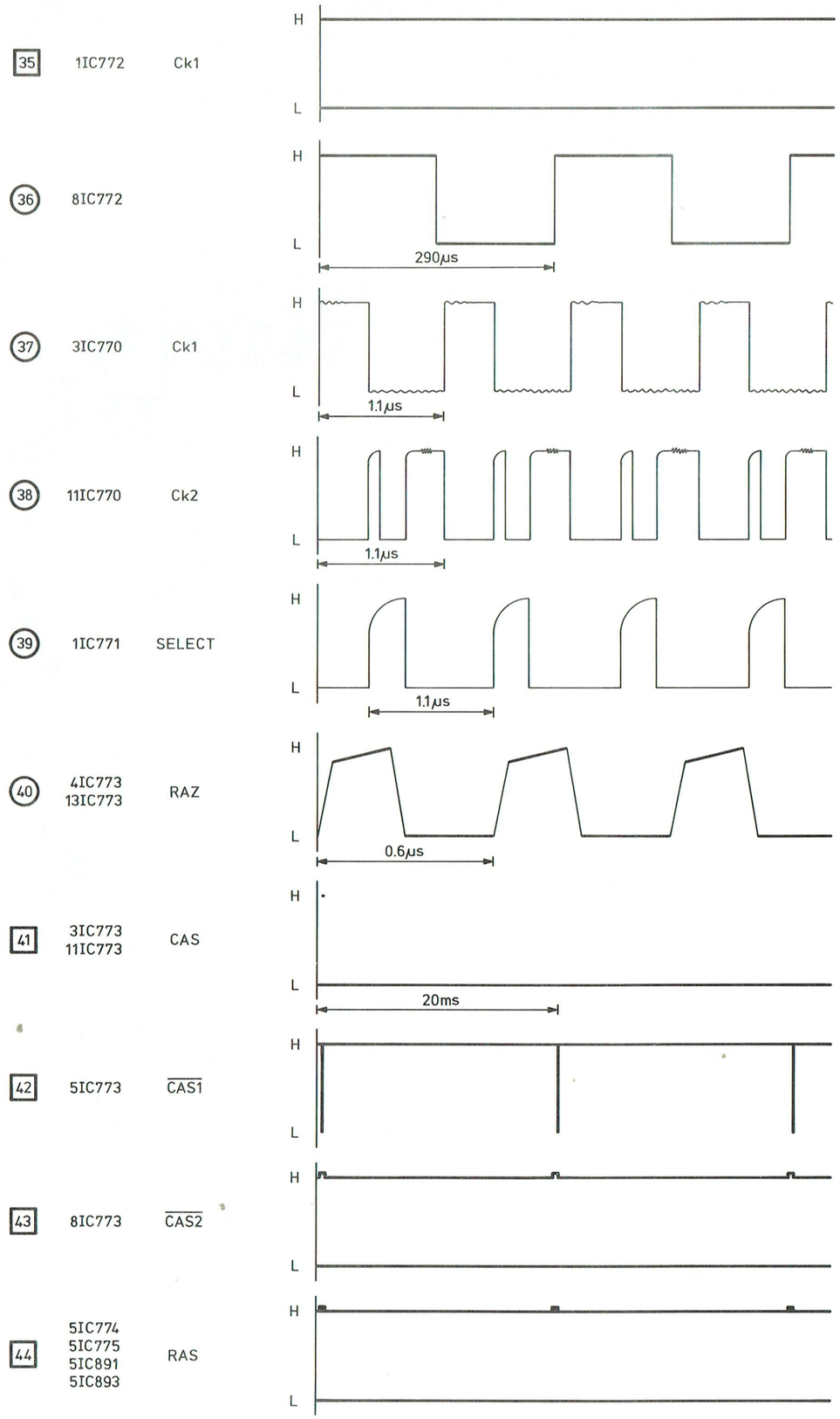
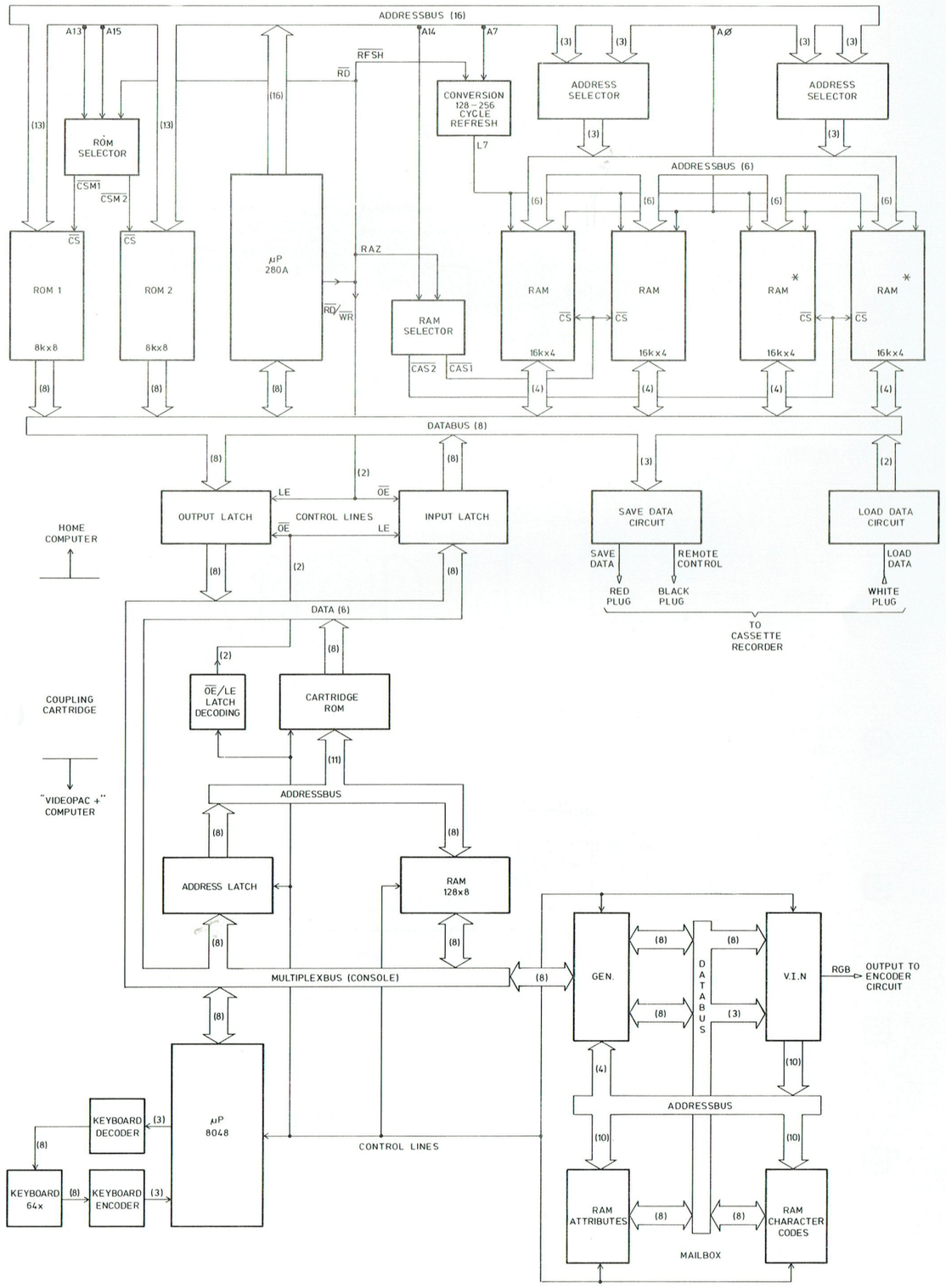
1	4822 432 10462	Cabinet
2	4822 212 21867	Main panel
3	5322 255 44233	IC-socket (18 p)
4	5322 255 44047	IC-socket (28 p)
5	5322 255 44217	IC-socket (40 p)
6	4822 267 40247	Socket (5 p)
7	4822 321 20866	Tape recorder cable with connector and 3 plugs
8	4822 321 20832	Cable with 2-connectors 16 p
9	4822 218 20369	Coupling cartridge



34 705 C11
CS 93 587

FUNCTIONAL BLOCKDIAGRAM OF C7420 MOUNTED ON "VIDEOPAC +" COMPUTER



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34 547D8

MAIN PANEL

IC752	4822 209 10569	Z80A
IC753	4822 209 50232	TMS4764
IC754	4822 209 50233	TMS4764
IC756	5322 209 85489	74LS157
IC757	5322 209 85489	74LS157
IC758	5322 209 85869	74LS374
IC759	5322 209 85869	74LS374
IC760	5322 209 85311	74LS32
IC761	5322 209 85311	74LS32
IC762	5322 209 85311	74LS32
IC763	4822 209 80783	74LS04
IC764	4822 209 80783	74LS04
IC765	4822 209 80782	74LS74
IC766	5322 209 84999	74LS175
IC767	5322 209 85201	74LS132
IC768	5322 209 85966	74LS125
IC769	4822 209 80631	LM339N
IC770	4822 209 80782	74LS74
IC771	5322 209 85489	74LS157
IC772	4822 209 80447	74LS393
IC773	4822 209 80782	74LS74
IC774	4822 209 10571	TMS4416-15
IC775	4822 209 10571	TMS4416-15

C848	4822 122 40358	22 pF
C849	4822 122 40356	10 nF
C853	4822 122 32023	390 pF - 50 V
C855	4822 122 40357	47 nF

R890	4822 111 90443	8 x 3k3
S783	4822 157 50967	0,47 µH
X892	4822 242 70637	3,547 MHz

TS857	4822 130 40937	BC548B
TS894	4822 130 40824	BD140

D818	4822 130 30621	1N4148
D819	4822 130 30621	1N4148
D826	4822 130 30621	1N4148
D827	4822 130 30621	1N4148

COUPLING CARTRIDGE

IC657	5322 209 84823	74LS00
IC659	5322 209 85311	74LS32