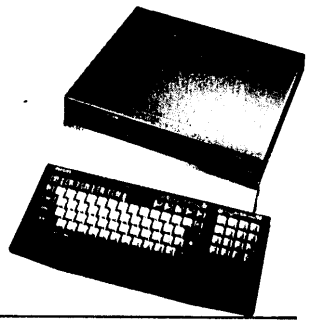
Home computer

NMS8250/00/16/19

NMS8255/00/16/19

Service
Service
Service



Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used

Service Manual

(GB) SPECIFICATION

Microprocessor	: Z80A
Memory	: 48k ROM 16k disk ROM 128k video RAM 128k user RAM
Video processor	: V9938
MSX controller	: S-3527
Floppy-disk drive	: 3.5", 1 MB
Interfaces	: RF output (UHF channel E36) Monitor output SCART Cassette recorder 2 joysticks Printer 2 cartridge slots
Keyboard	: QWERTY /00/16 AZERTY/19
Power supply voltage	: 220V ± 10%, 50Hz

(NL) SPECIFICATIE

Microprocessor	: Z80A
Geheugen	: 48k ROM 16k disk ROM 128k video RAM 128k gebruikers RAM
Videoprocessor	: V9938
MSX controller	: S-3527
Floppy-disk drive	: 3.5", 1 MB
Interfaces	: RF uitgang (UHF kanaal E36) Monitor uitgang SCART Cassette recorder 2 handbedieningen Printer 2 cartridge sleuven
Toetsenbord	: QWERTY /00/16 AZERTY/19
Voedingsspanning	: 220V ± 10%, 50Hz

(F) CARACTERISTIQUES TECHNIQUES

Micro processeur	: Z80A
Mémoire	: 48k ROM 16k ROM à disque 128k RAM vidéo 128k RAM utilisateur
Processeur vidéo	: V9938
Controle MSX	: S-3527
Lecteur de disquette	: 3.5", 1 MB
Interfaces	: Sortie RF (Canal UHF E36) Sortie monitor SCART Magnétophne cassette 2 poignées Imprimante 2 "slots" cartouche
Clavier	: QWERTY /00/16 AZERTY/19
Tension d'alimentation	: 220V ± 10%, 50Hz

(D) TECHNISCHE DATEN

Mikroprozessor	: Z80A
Speicher	: 48k ROM 16k Disk-ROM 128k Video-RAM 128k Gebrauchers-RAM
Videoprozessor	: V9938
MSX-Steuereinheit	: S-3527
Floppy Disk-Laufwerk	: 3.5", 1 MB
Schnittstellen	: RF Ausgang (UHF Kanal E36) Monitorausgang SCART Cassettenrecorder 2 Handbedienungen Drucker 2 Kassettenschlitze
Tastatur	: QWERTY /00/16 AZERTY/19
Versorgungsspannung	: 220V ± 10%, 50 Hz

(I) DATA TECNICI

Microprocessore	: Z80A
Memoria	: 48k ROM 16k ROM a disco 128k RAM video 128k RAM utilizzatori
Processore video	: V9938
MSX di controllo	: S-3527
Lettore di dischetto	: 3.5", 1 MB
Interfaccie	: Uscita RF (Canale UHf E36) Uscita monitore SCART Registratore a cassetta 2 leve manuali Stampa 2 connetori per cartuccia
Tastiera	: QWERTY /00/16 AZERTY/19
Tensione d'aliment.	: 220V ± 10%, 50 Hz

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

PHILIPS

"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".

Subject to modification

4822 727 15809

Printed in The Netherlands

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PHILIPS Published by Service Consumer Electronics

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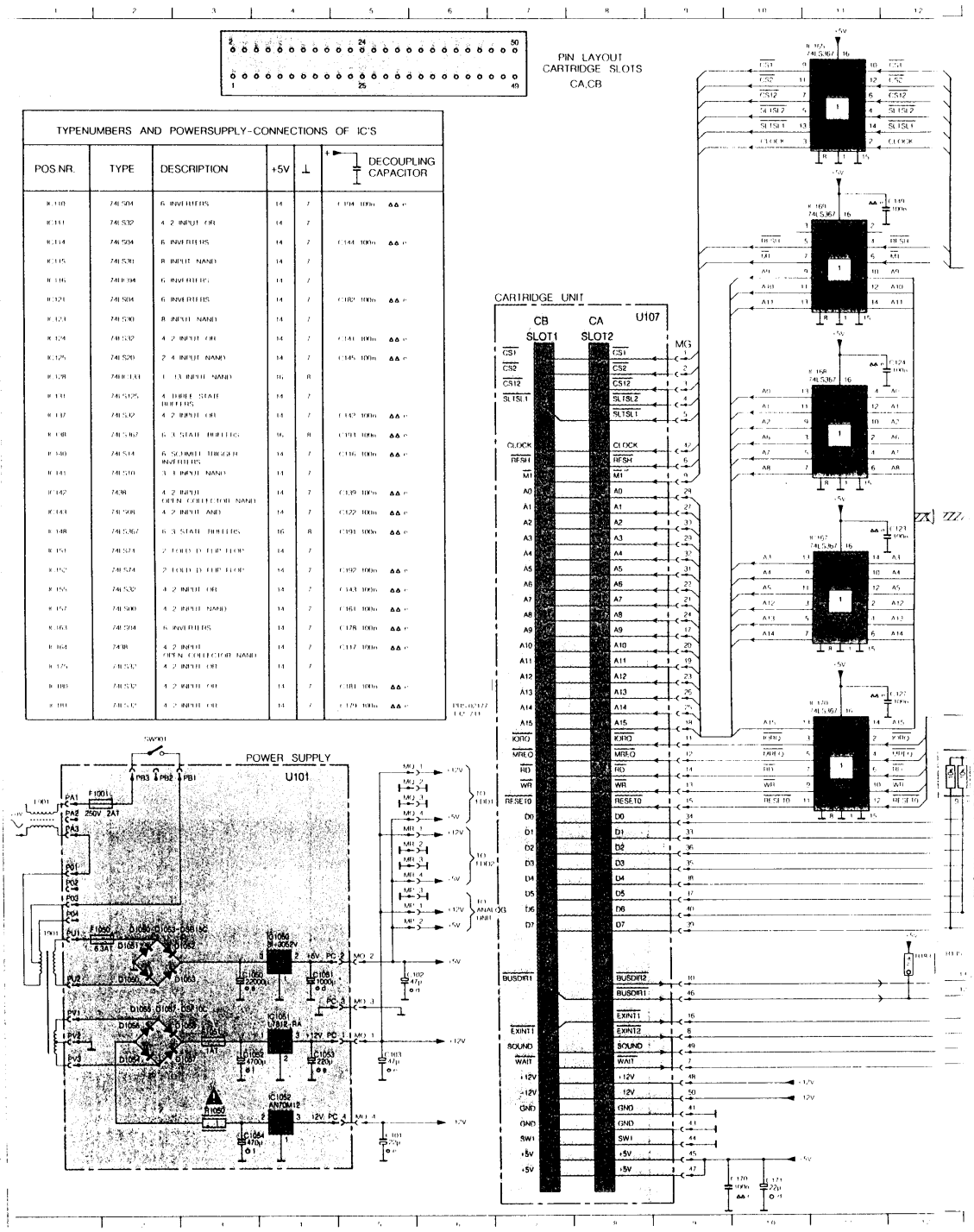
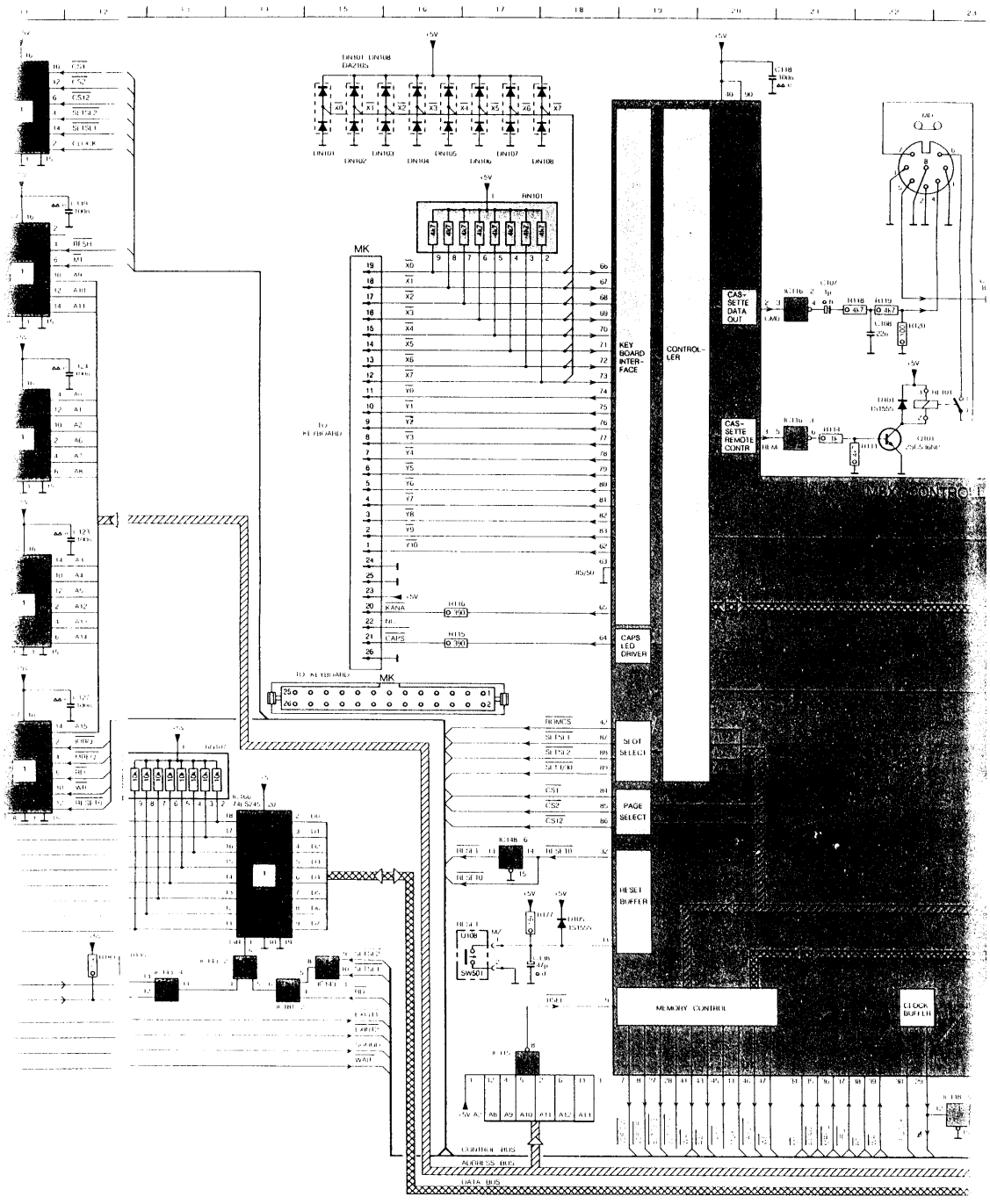


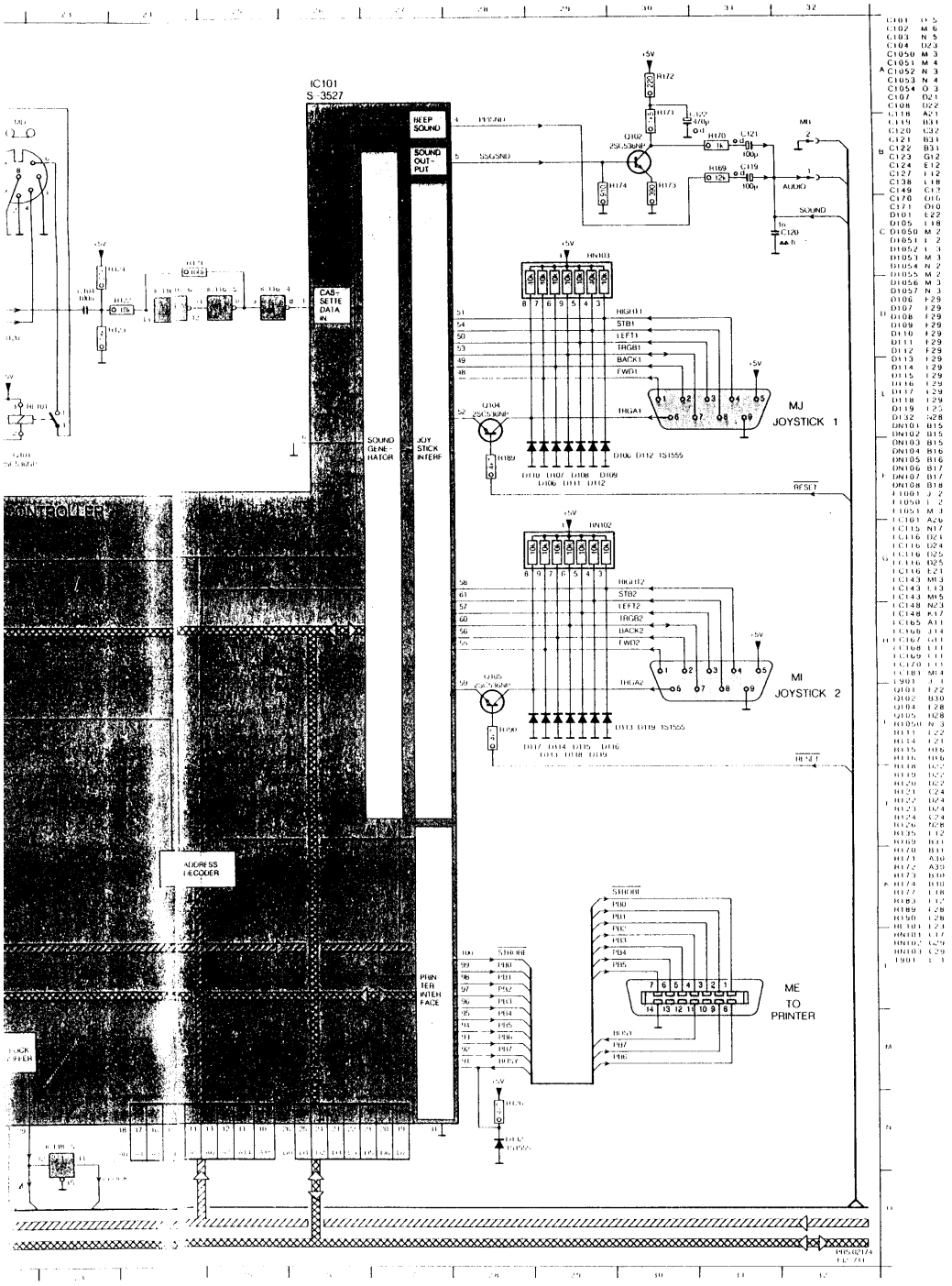
TYPENUMBERS AND POWERSUPPLY-CONNECTIONS OF IC'S

POS.NR.	TYPE	DESCRIPTION	+5V	⊥	+ DECOUPLING CAPACITOR
IC110	74LS04	6 INVERTERS	14	7	C104 100n ΔΔ +
IC111	74LS32	4 2 INPUT OR	14	7	
IC114	74LS04	6 INVERTERS	14	7	C144 100n ΔΔ +
IC115	74LS30	8 INPUT NAND	14	7	
IC116	74HC04	6 INVERTER	14	7	
IC121	74LS04	6 INVERTERS	14	7	C182 100n ΔΔ +
IC123	74LS30	8 INPUT NAND	14	7	
IC124	74LS32	4 2 INPUT OR	14	7	C141 100n ΔΔ +
IC125	74LS20	2 4 INPUT NAND	14	7	C145 100n ΔΔ +
IC126	74HC133	1 13 INPUT NAND	16	8	
IC131	74LS125	4 TRIPLE STATE BUFFERS	14	7	
IC137	74LS32	4 2 INPUT OR	14	7	C142 100n ΔΔ +
IC138	74LS367	6 3 STATE BUFFERS	16	8	C191 100n ΔΔ +
IC140	74LS14	6 SCHMITT TRIGGER INVERTERS	14	7	C136 100n ΔΔ +
IC141	74LS10	3 3 INPUT NAND	14	7	
IC142	7408	4 2 INPUT OPEN COLLECTOR NAND	14	7	C139 100n ΔΔ +
IC143	74LS08	4 2 INPUT AND	14	7	C122 100n ΔΔ +
IC148	74LS367	6 3 STATE BUFFERS	16	8	C193 100n ΔΔ +
IC151	74LS74	2 DOUBLE D FLIP FLOP	14	7	
IC152	74LS74	2 DOUBLE D FLIP FLOP	14	7	C192 100n ΔΔ +
IC155	74LS32	4 2 INPUT OR	14	7	C143 100n ΔΔ +
IC157	74LS00	4 2 INPUT NAND	14	7	C161 100n ΔΔ +
IC161	74LS04	6 INVERTERS	14	7	C178 100n ΔΔ +
IC164	7408	4 2 INPUT OPEN COLLECTOR NAND	14	7	C117 100n ΔΔ +
IC175	74LS32	4 2 INPUT OR	14	7	
IC180	74LS32	4 2 INPUT OR	14	7	C181 100n ΔΔ +
IC181	74LS32	4 2 INPUT OR	14	7	C179 100n ΔΔ +

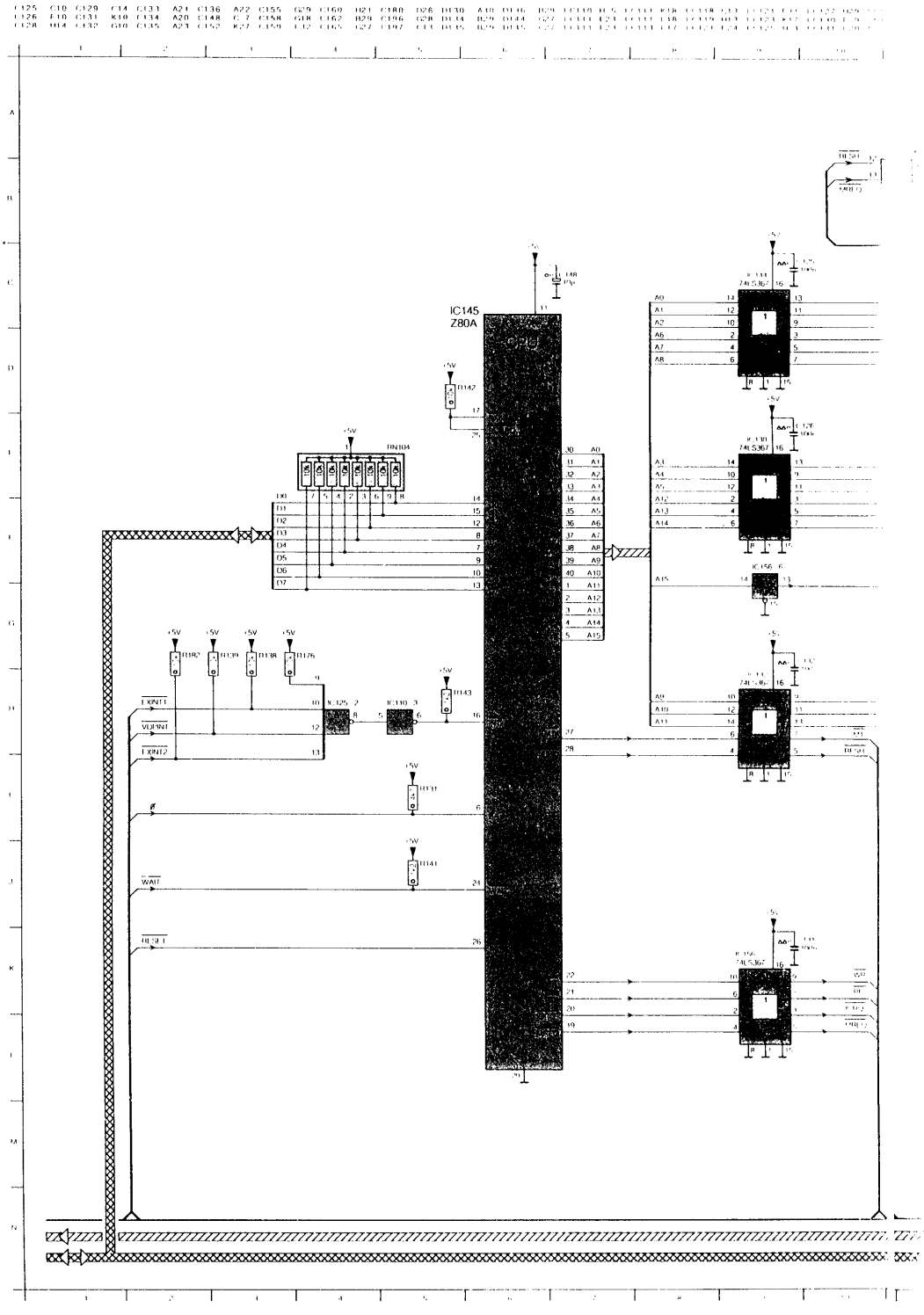


KEY BOARD INTER-FACE
CONTROL-LER
CAS-SETTE DATA OUT
CAS-SETTE REMOTE CONTR
CAPS LED DRIVER
SLOT SELECT
PAGE SELECT
RESET BUFFER
MEMORY CONTROL
CLOCK BUFFER
MK
TO KEYBOARD
CONTROL BUS
ADDRESS BUS
DATA BUS

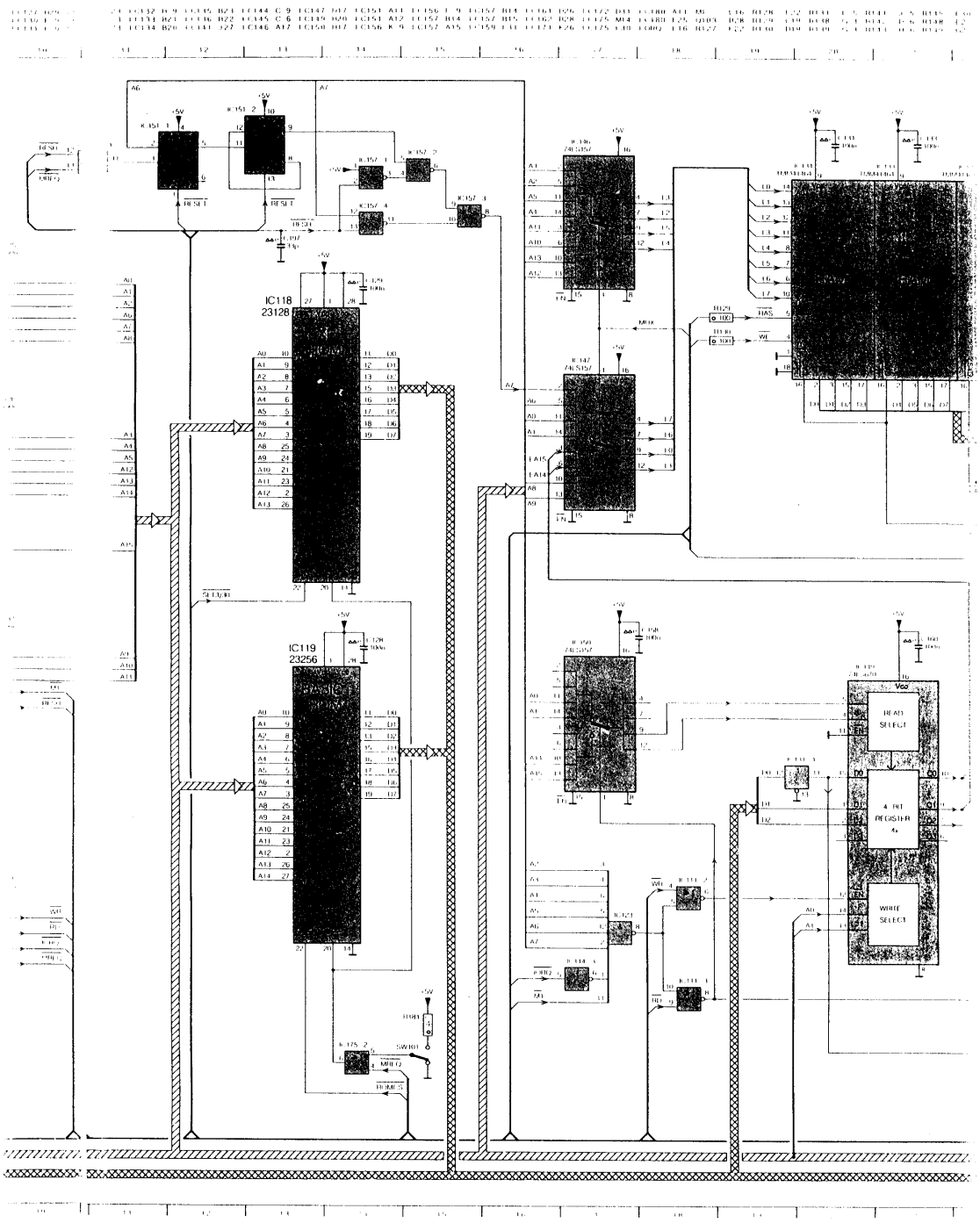
CS 7-500 B


IC101
S 3527
BEEP SOUND
SOUND OUT-PUT
CAS-SETTE DATA IN
SOUND GENE-RATOR
JOY STICK INTERF
CONTROLLER
ADDRESS DECODER
PRIN-TER INTER-FACE
MJ
JOYSTICK 1
MI
JOYSTICK 2
ME
TO
PRINTER
RESET
AUDIO
SOUND

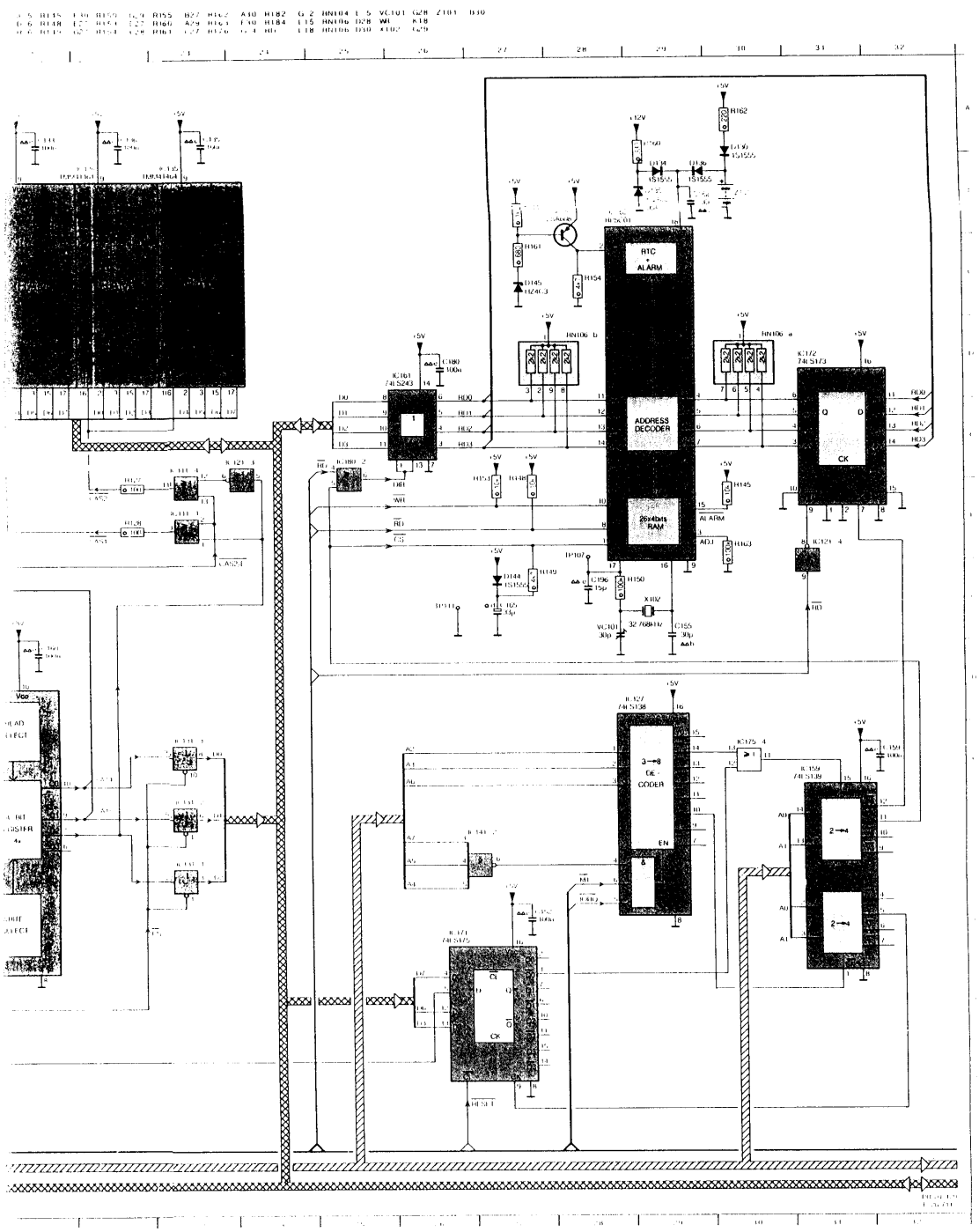
C57-510 C


IC145
Z80A
RN104
IC125
IC110
IC156
74LS367
EXINT1
VDPINT
EXINT2
WAIT
RESET
MREQ

CS 7-531 4

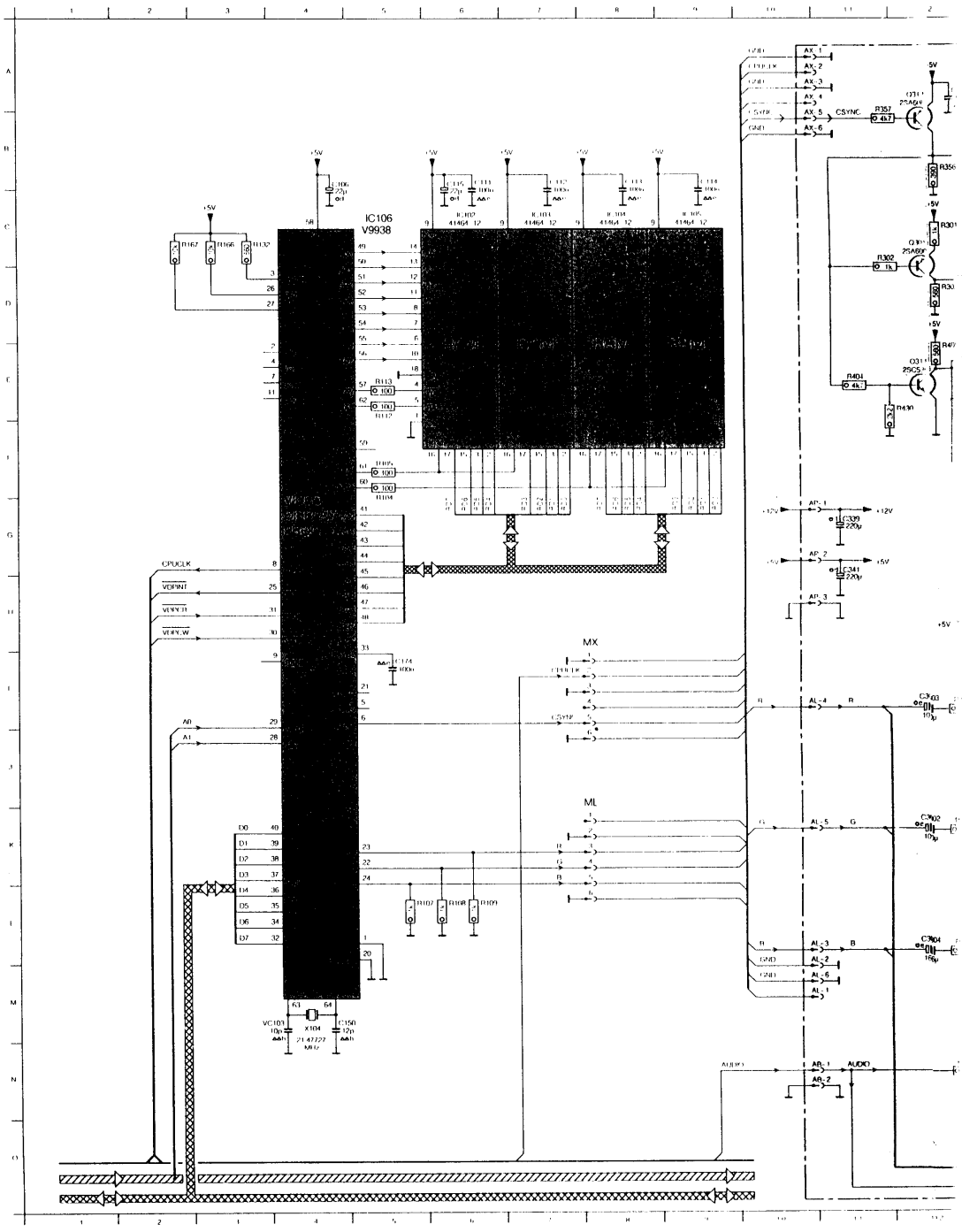

IC118
23128
IC119
23256
READ SELECT
4 BIT REGISTER
WRITE SELECT
RESET
MUX
SW101
ROMCS

CS 7-561B

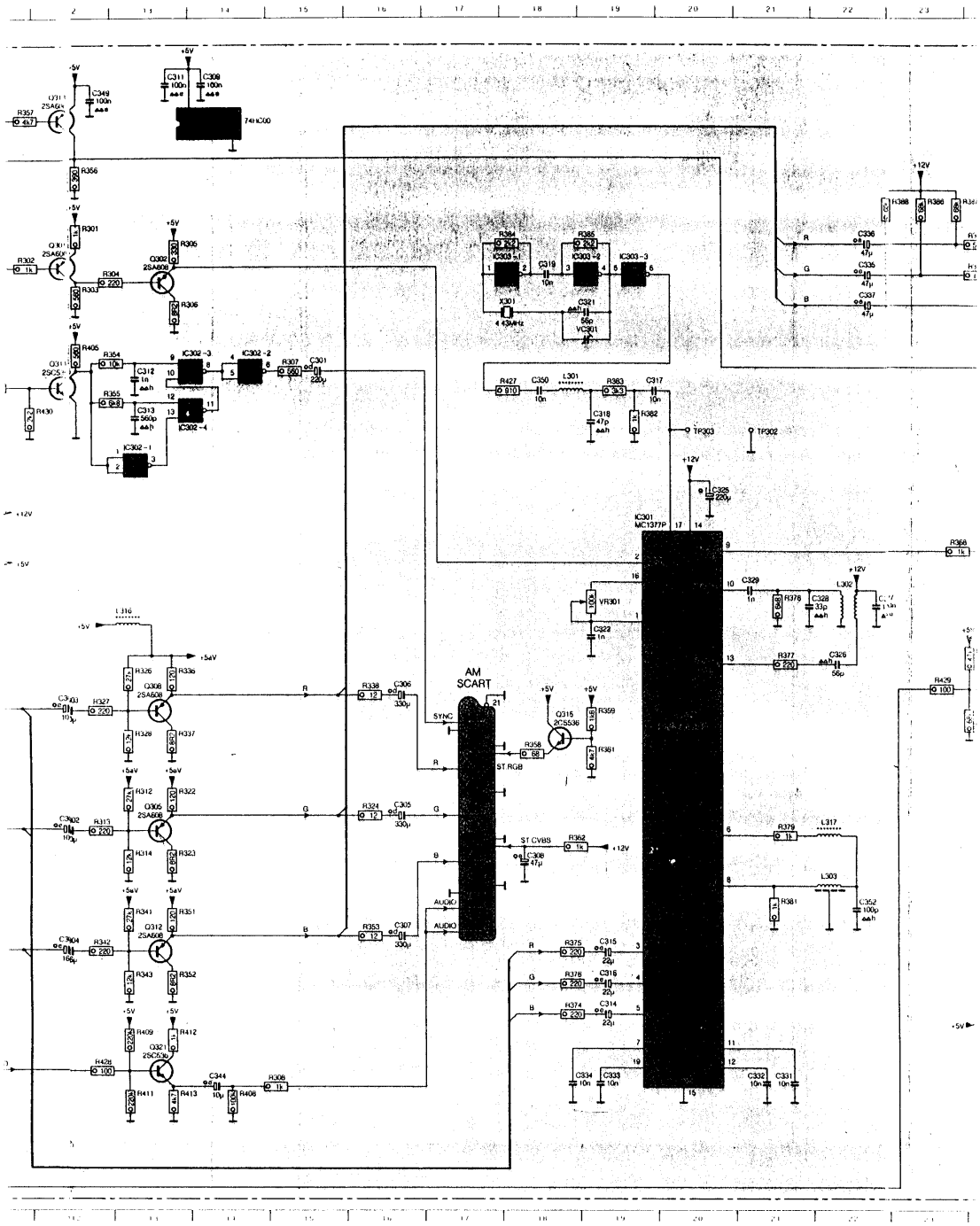


CS 7-58 C

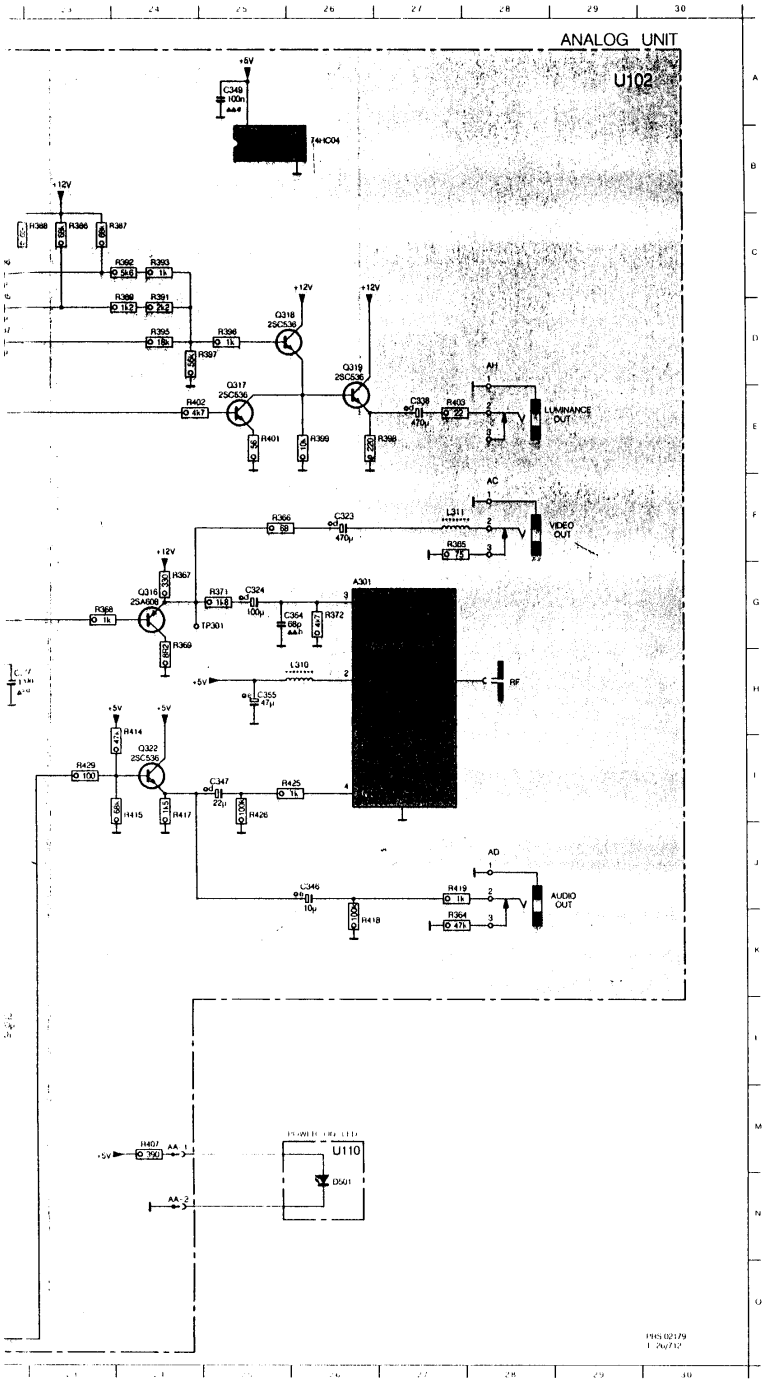
CS 7 58


IC106
V9938
MX
ML
CPUCLK
VDPINT
VDPCR
VDPCW
CSYNC
AUDIO
X104
21.47727
MHz

CS 7 582 A

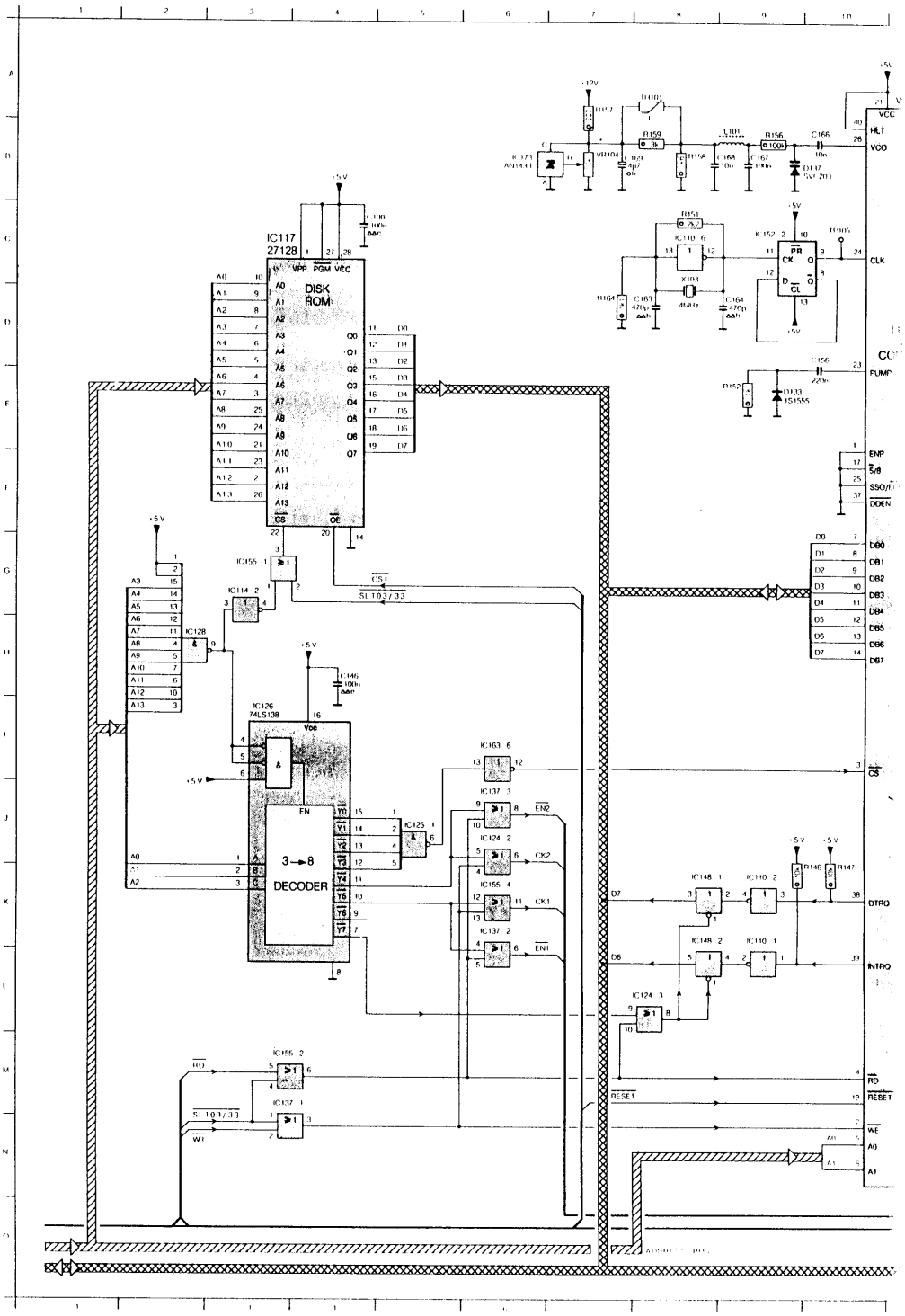

AM
SCART
IC301
MC1377P
74HC00
IC303-1
IC303-2
IC303-3
IC302-1
IC302-2
IC302-3
IC302-4
X301
4.43MHz
VC301
VR301
SYNC
ST.RGB
ST.CVBS
AUDIO
+5V
+12V

CS1-502B

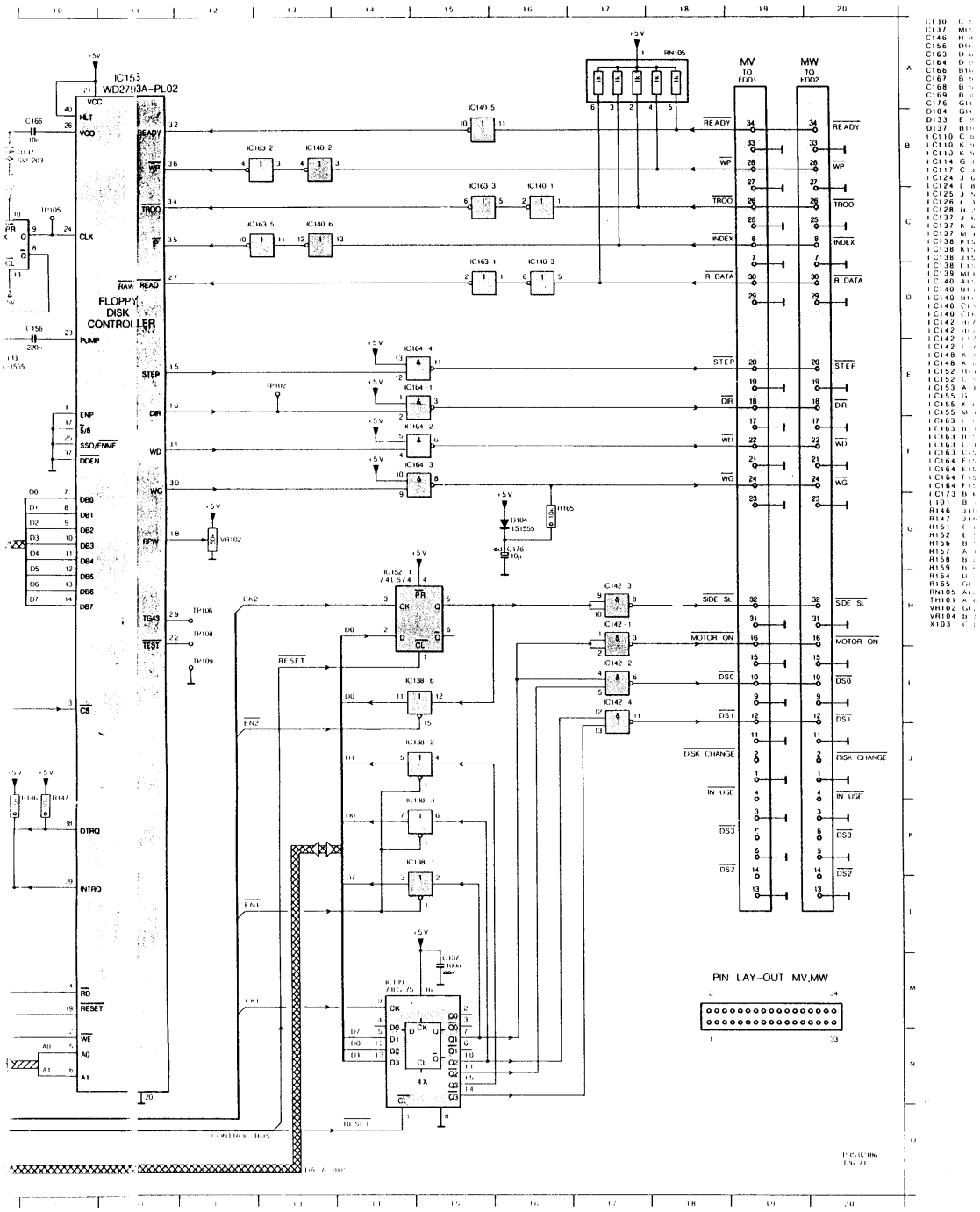


A301	G26	R378	H21				
C106	B 4	R379	K21				
C111	B 6	R381	L21				
C112	B 7	R382	E19				
C113	B 8	R383	E19				
C114	B 9	R384	C18				
C115	B 6	R385	C19				
C150	M 4	R386	C23				
C174	I 5	R387	C24				
C301	E15	R388	C23				
C302	K12	R389	C24				
C303	I12	R391	C24				
C304	L12	R392	C24				
C305	J16	R393	C24				
C306	I16	R395	D24				
C307	L16	R396	D25				
C308	K18	R397	D25				
C309	A14	R398	E27				
C311	A13	R399	E26				
C312	E13	R401	E25				
C313	E13	R402	E24				
C314	M19	R403	E27				
C315	L19	R404	E11				
C316	M19	R405	E12				
C317	E19	R407	M24				
C318	E19	R408	N14				
C319	C18	R409	M13				
C321	D19	R411	N13				
C322	H19	R412	M13				
C323	F26	R413	N13				
C324	G25	R414	H24				
C325	F20	R415	I24				
C326	H22	R417	I24				
C327	H22	R418	K26				
C328	H22	R419	J27				
C329	H21	R425	I26				
C331	N21	R426	I25				
C332	N21	R427	E18				
C333	N19	R428	N12				
C334	N19	R429	I23				
C335	C22	R430	E12				
C336	C22	U102	A30				
C337	D22	U110	M26				
C338	E27	VC103	M 4				
C339	G11	VC301	D19				
C341	G11	VR301	H19				
C344	N14	X104	M 4				
C346	J26	X301	D18				
C347	I25						
C349	A12						
C349	A25						
C350	E18						
C352	L22						
C354	G26						
C355	H25						
D501	N26						
I C102	C 6						
I C103	C 7						
I C104	C 8						
I C105	C 9						
I C106	C 5						
I C302	B14						
I C302	F14						
I C302	F13						
I C302	E14						
I C302	E14						
I C303	C18						
I C303	C19						
I C303	C19						
I C303	B25						
I 301	E18						
I 302	H22						
I 303	K22						
I 310	H26						
I 311	F27						
I 316	H13						
I 317	K22						
Q301	C12						
Q302	C13						
Q305	J13						
Q308	I13						
Q312	I13						
Q313	A12						
Q314	E12						
Q316	G24						
Q317	D25						
Q318	D25						
Q319	D26						
Q321	N13						
Q322	I24						
R104	F 5						
R105	F 5						
R107	I 6						
R108	I 6						
R109	I 6						
R112	I 5						
R113	E 5						
R132	C 3						
R166	C 3						
R167	C 3						
R301	C12						
R302	C11						
R303	D12						
R304	D13						
R305	C14						
R306	D14						
R307	E15						
R308	N15						
R312	J13						
R313	K12						
R314	K13						
R322	J13						
R323	K13						
R324	J16						
R326	I13						
R327	I12						
R328	J13						
R336	I13						
R337	J13						
R338	I16						
R341	I13						
R342	I12						
R343	M17						
R351	I13						
R352	M18						
R353	I16						
R354	I13						
R355	E13						
R356	B12						
R357	A11						
R358	J18						
R359	I19						
R361	J19						
R362	K18						
R364	K27						
R365	I27						
R366	I25						
R367	G24						
R368	G23						
R369	G24						
R371	G25						
R372	G26						
R374	M18						
R375	L18						
R376	M18						
R377	I21						

CS7-502C


IC117
27128
DISK
ROM
VPP PGM VCC
IC126
74LS138
3→8
DECODER
HLT
VCO
CLK
PUMP
ENP
SSO/FI
DDEN
DB0
DB1
DB2
DB3
DB4
DB5
DB6
DB7
CS
DTRQ
INTRQ
RD
RESET
WE
A0
A1

CS7-503.A



CS7-583-B

CS 7 5