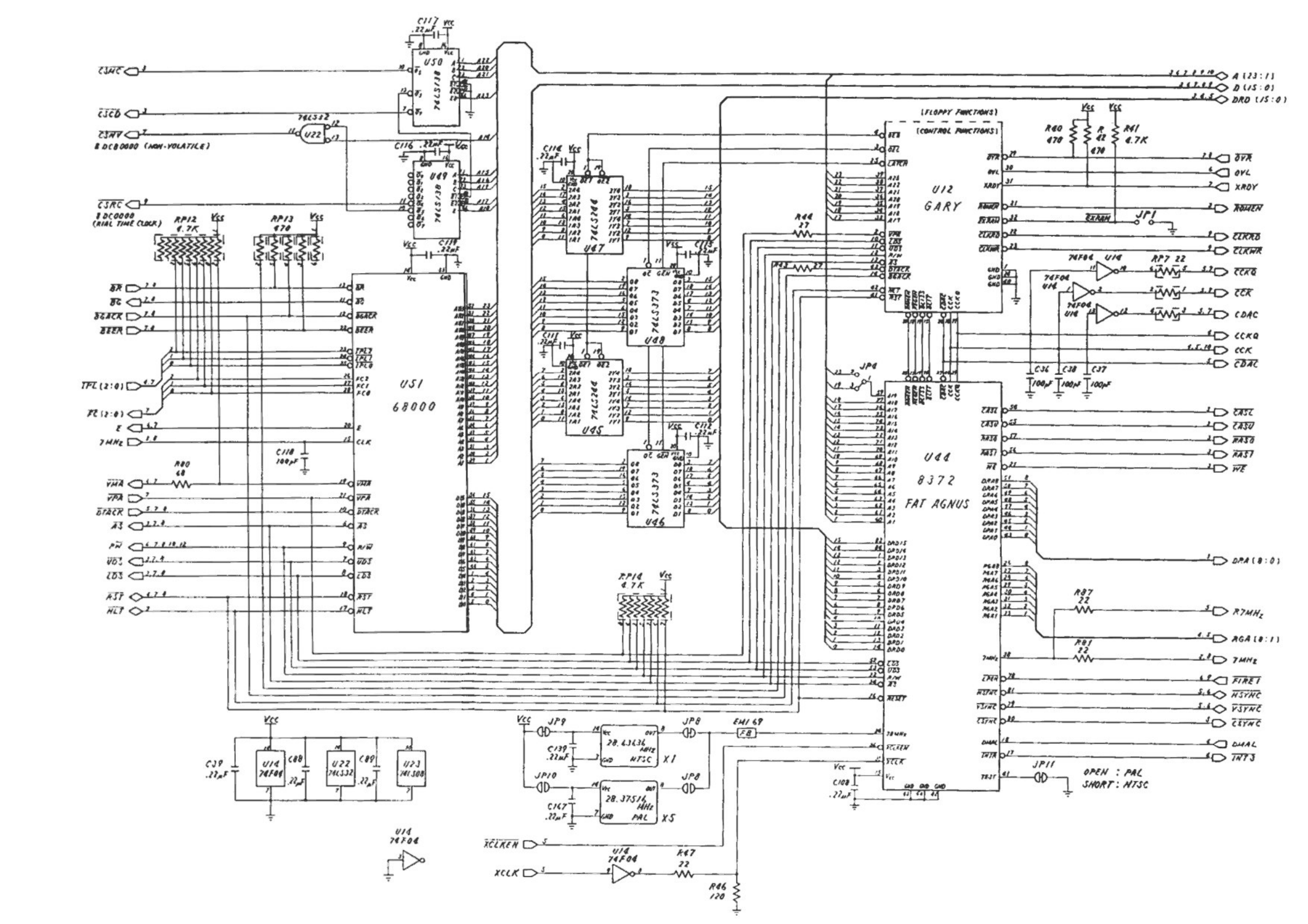
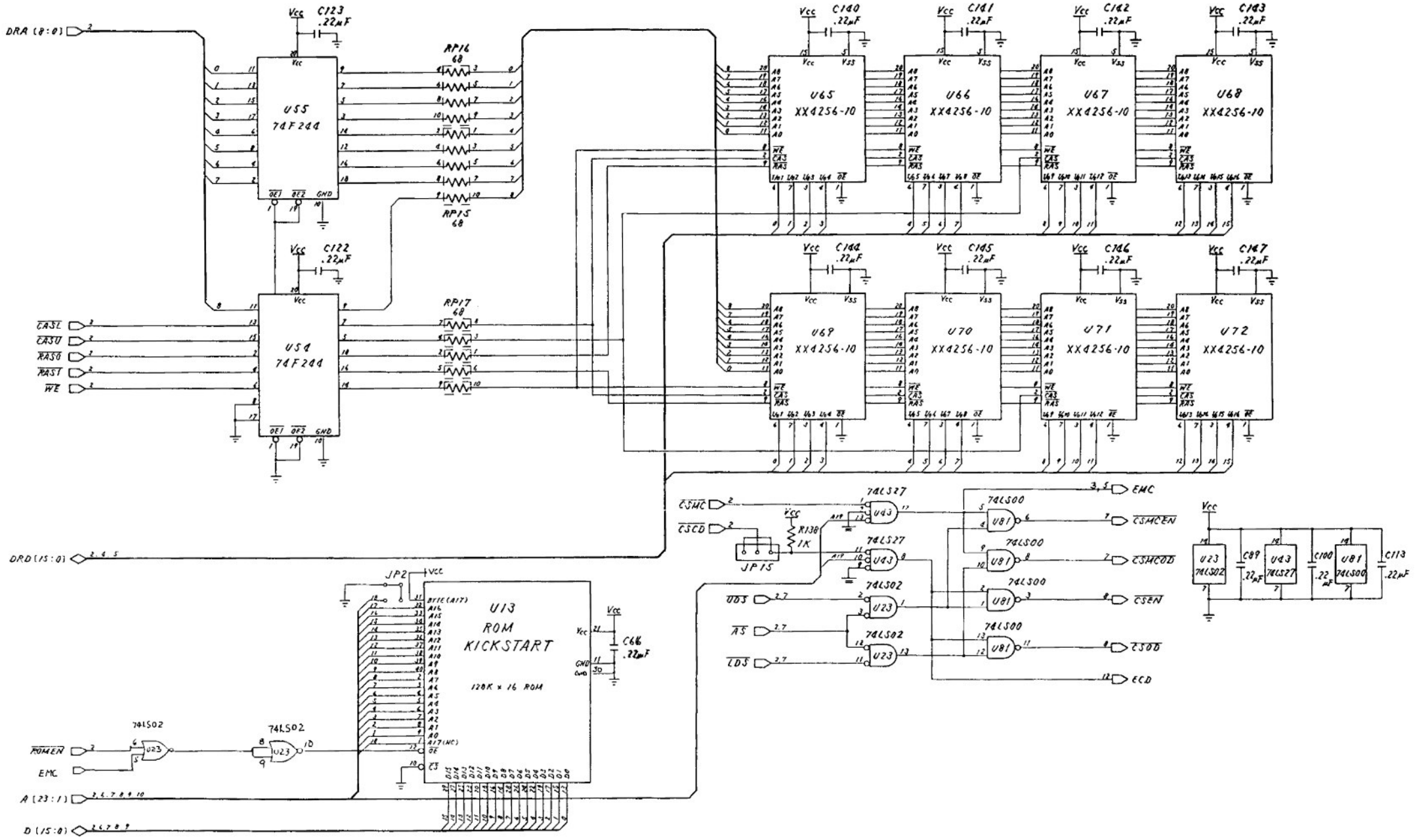
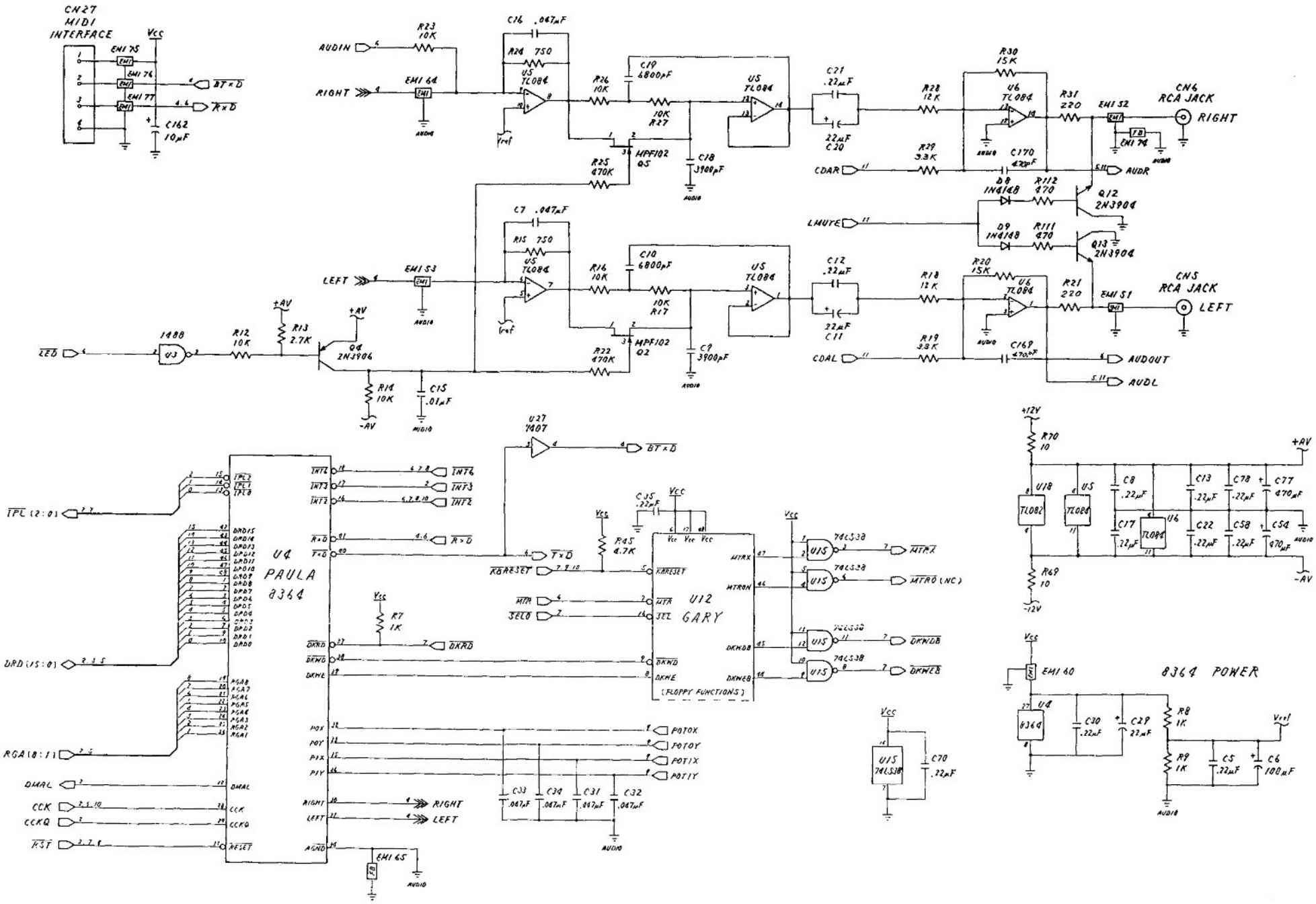
SIGNAL	DESCRIPTION
28MHZ	28.63636 MHz(NTSC)/28.37516 MHz(PAL) Master Clock
7MHZ	7 MHz Processor Clock
A[23:1]	Processor Address (68000)
ACK	Data Acknowledge (Parallel)
AS	Address Strobe (68000)
AUDIN	Audio Input (RS232 jack)
AUDOUT	Audio Output (RS232 jack)
BEER	Bus Error (68000)
BG	Bus Grant (68000)
BGACK	Bus Grant Acknowledge (68000)
BLISS	Blitter Slowdown (chips)
BLIT	Chip Memory Access (chips)
BR	Bus Request (68000)
BUSY	Device Busy (parallel)
CASL/CASU	CAS lower/upper byte (DRAM)
CCK	Color Clock aka C1 (chips)
CCKQ	Color Clock Quadrature aka C3 (chips)
CDAC	7 MHz Quatrature Clock
CHNG	Media Change (floppy)
CLKRD/CLKWR	Real-time Clock Read/Write
CSYNC	Composite Sync (video)
CTS	Clear to Send (rs232)
D[15:0]	Processor Data (68000)
DIR	Direction (floppy)
DKRD	Diskette Read Data (floppy)
DKWDB	Diskette Write Data (floppy)
DKWEB	Diskette Write Enable (floppy)
DMAL	Chip DMA Request (chips)
DRA[8:0]	DRAM Address (DRAM, chips)
DRD[15:0]	DRAM Data (DRAM, chips)
DSR	Data Set Ready (rs232)
DTACK	Data Transfer Acknowledge (68000)
DTR	Data Terminal Ready (rs232)
E	Peripheral E Clock (68000)
EXRAM	Expansion Memory Present
FC[0:0]	Function Control (68000)
FIRE0/FIRE1	Fire Button (joysticks)
HLT	Processor Halt (68000)
HSYNC	Horizontal Sync (video)
INDEX	Diskette Index Hole (floppy)
INT[2,3,6]	Interrput Requests (chips)
IORESET	I/O Reset
IPL[2:0]	Processor Interrupt Requests (68000)
KBCLOCK	Keyboard Clock (keyboard)
KBDATA	Keyboard Data (keyboard)
KBRESET	Keyboard Reset (keyboard)
LDS/UDS	Upper/Lower Data Strobe (68000)
LED	Power On LED

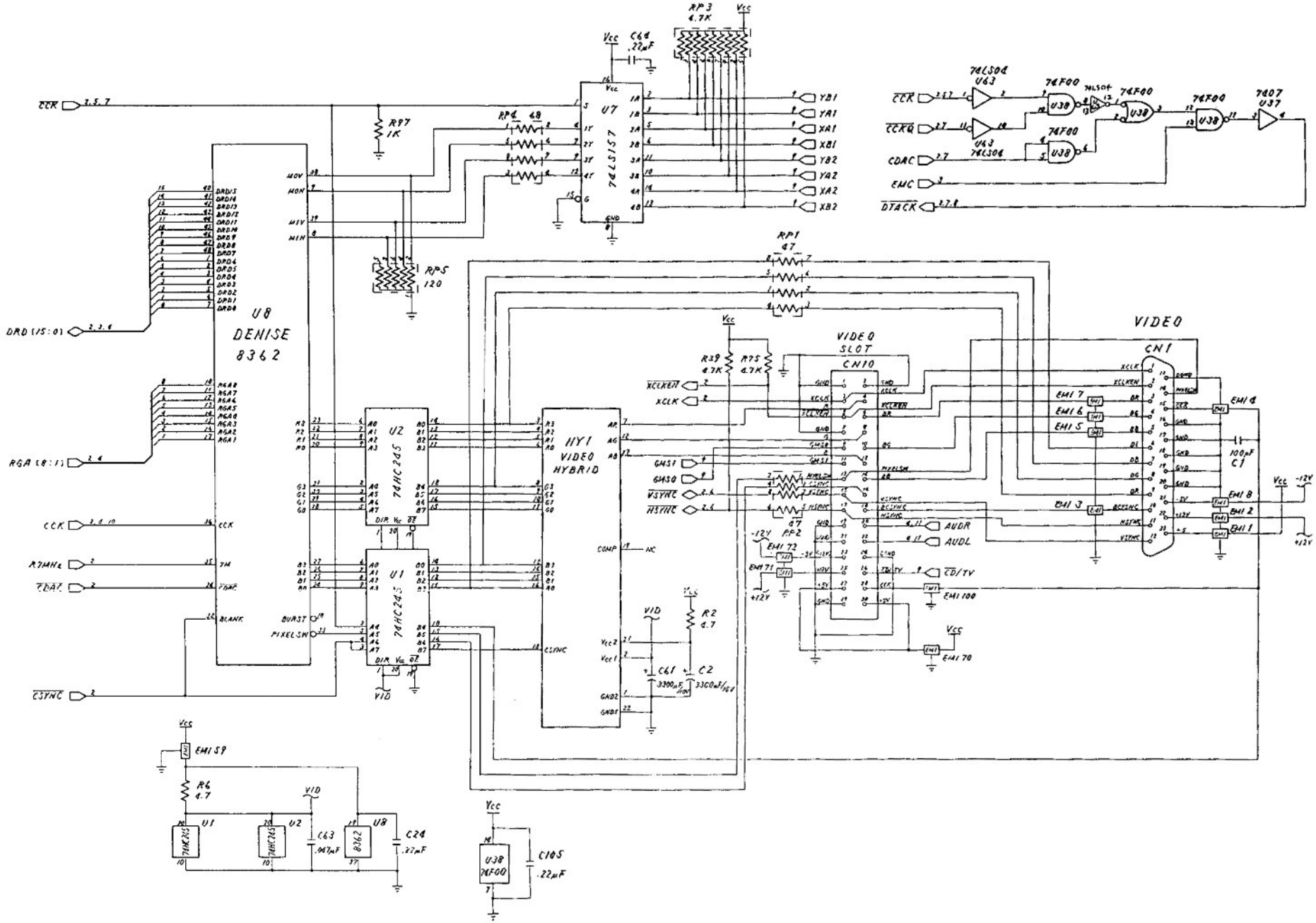
SIGNAL	DESCRIPTION
LEFT/RIGHT	Audio Channels
MTR	Motor On (floppy)
MTR0	Motor On Drive (floppy)
M0V/M0H	Mouse Quadrature Signals (joysticks)
M1V/M1H	Mouse Quadrature Signals (joysticks)
OVL	Overlay ROM over RAM
OVR	Override System Decodeing
PIXELSW	Pixel Switch (video)
POT0X/POT0Y	Pot Lines (joysticks)
POT1X/POT1Y	Pot Lines (joysticks)
POUT	Paper Out (parallel)
PPD[7:0]	Parallel Port Data (parallel)
RAMEN	RAM Enable (chips)
REGEN	Chip Register Enable (chips)
RAS0/RAS1	RAS Internal/Expansion Lines (DRAM)
RDY	Drive Ready (floppy)
RESET	General Reset
RGA[8:1]	Register Address Bus (chips)
RI	Ring Indicate (rs232)
ROMEN	ROM Enable
RTS	Request to Send (rs232)
RST	Processor Reset (68000)
RXD	Receive Data (RS232)
RW	Processor Read/Write (68000)
SEL	Select (parallel)
SEL[3:0]	Drive Select (floppy)
SIDE	Side Select (floppy)
STEP	Head Step Command (floppy)
TRK0	Track 0 Sense (floppy)
TXD	Transmit Data (RS232)
VMA	Valid Memory Address (68000)
VPA	Valid Peripheral Address (68000)
VSYNC	Vertical Sync (video)
WE	Write Enable (DRAM)
WPROT	Write Protect Sense (floppy)
XCLK	External 28 MHz Clock (genlock)
XCLKEN	External Clock Enable (genlock)
XRDY	External Data Ready
AUDL/AUDR	Amiga Audio Left/Right
AEMP	Audio Deemphasis
AUPLY	CD Audio Play
BAS	Buffered Address Strobe
BCLK	CD Audio Clock
BCSMCEN/BCSMCOD	Buffered Chip Select Memory Card Even/Odd
BRW	Buffered Processor Read/Write
BSEN	Logic Voltage Sense
BTXD	Buffer Transmit Data (Midi)
BLDS/BUDS	Buffered Upper/Lower Data Strobe

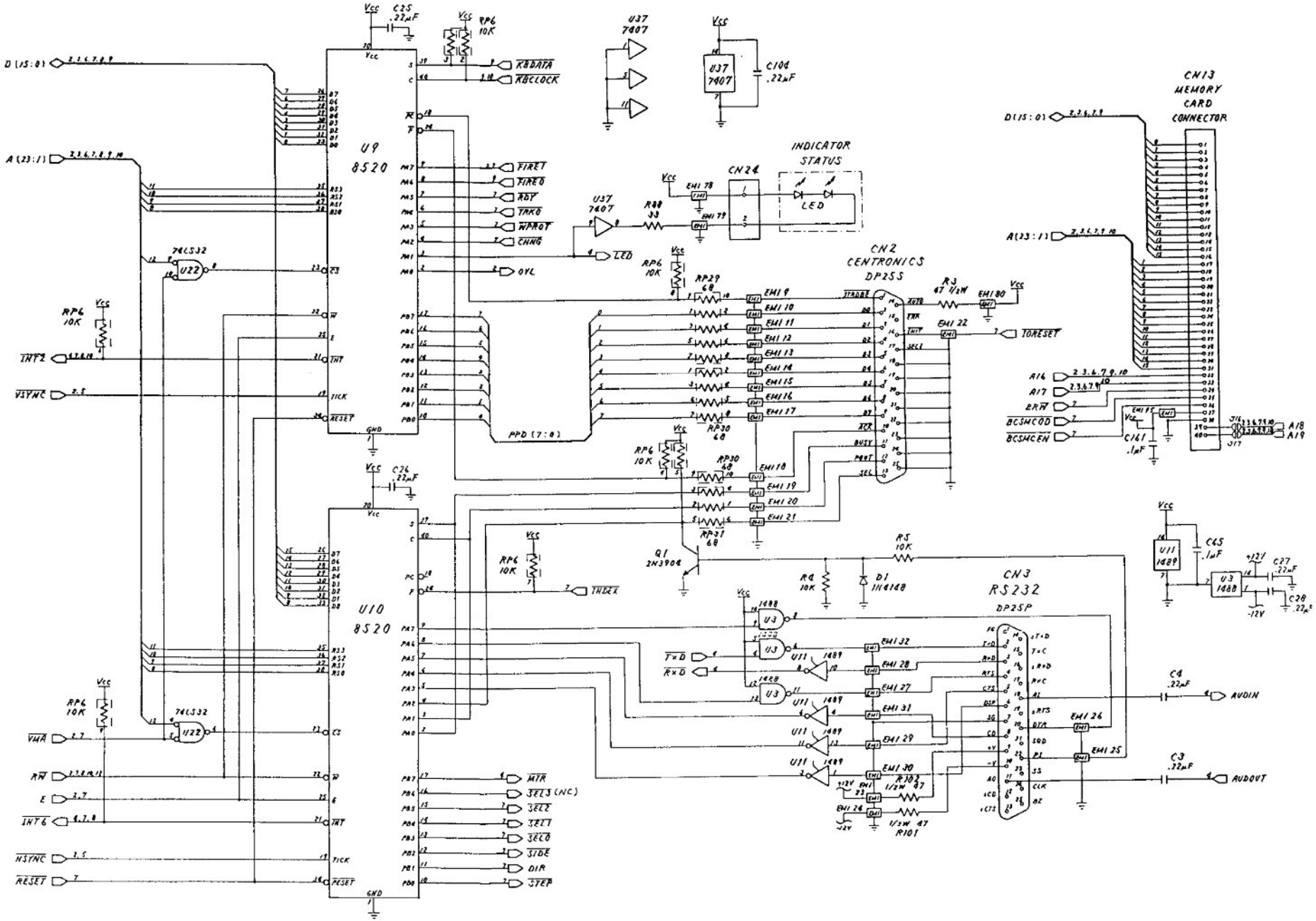
SIGNAL	DESCRIPTION
C16M	16MHz Dac Clock
CDAL/CDAR	CD Audio Left/Right
CD/TV	Select CD/TV (see INCD)
CONFIGIN	Config In
CONFIGOUT	Config Out
CSCD	Chip Select CDROM Driver
CSEN/CSOD	Chip Select CDROM Driver Even/Odd
CSMC	Chip Select Memory Card
CSMCEN/CSMCOD	Chip Select Memory Card Even/Odd
CSNV	Non-Volatile Memory Select
CSRC	Real Time Chip Select
CSX0	XT Device Chip Select No.0
DACATT	Attinator Data (Dac)
DACLCH	Attinator Latch (Dac)
DACST	Attinator Strobe (Dac)
DATA	CD Audio Data
DMCD	Dmac Dma Data
EOP,CSX1	End of Process/XT Device Chip Select No.1
GMS[1:0]	Genlock Mode Select (Remote Control)
IFRST	Interface Reset
INAC	Indicator Power/Status
INCD	Indicator CD/TV Mode
INTD	CD Drive Reset
INTS	SCSI Interrupt
IOR/IOW	Dmac Read/Write
KBSE	Keyboard Sense
LMUTE	Line Mute
LRCLK	Audio Left/Right Clock
MPS	Power Sense (Logic)
MS[1:0]	Genlock Mode Select (Amiga)
MUTE	CD Mute
POWER	Main Logic Power On/Off
SD[7:0]	Dmac XT/SCSI Data
VCK	Attinator Data Clock (Head Phone)
VDATA	Attinator Data Clock (Head Phone)
VF[2:1]	Filament Voltage
VST	Attinator Data Clock (Head Phone)
VPP	-30V Voltage
XA,YA,XB,YB[2:1]	Mouse Input Signal
XDACK	XT Device Data Acknowledge
XDREQ	XT Device Data Requirement
EMC	*ENABLE MEMORY CARD*
ECD	*ENABLE CDROM DRIVER (ROM)*
WEPROM	*WRITE ENABLE E²PROM*

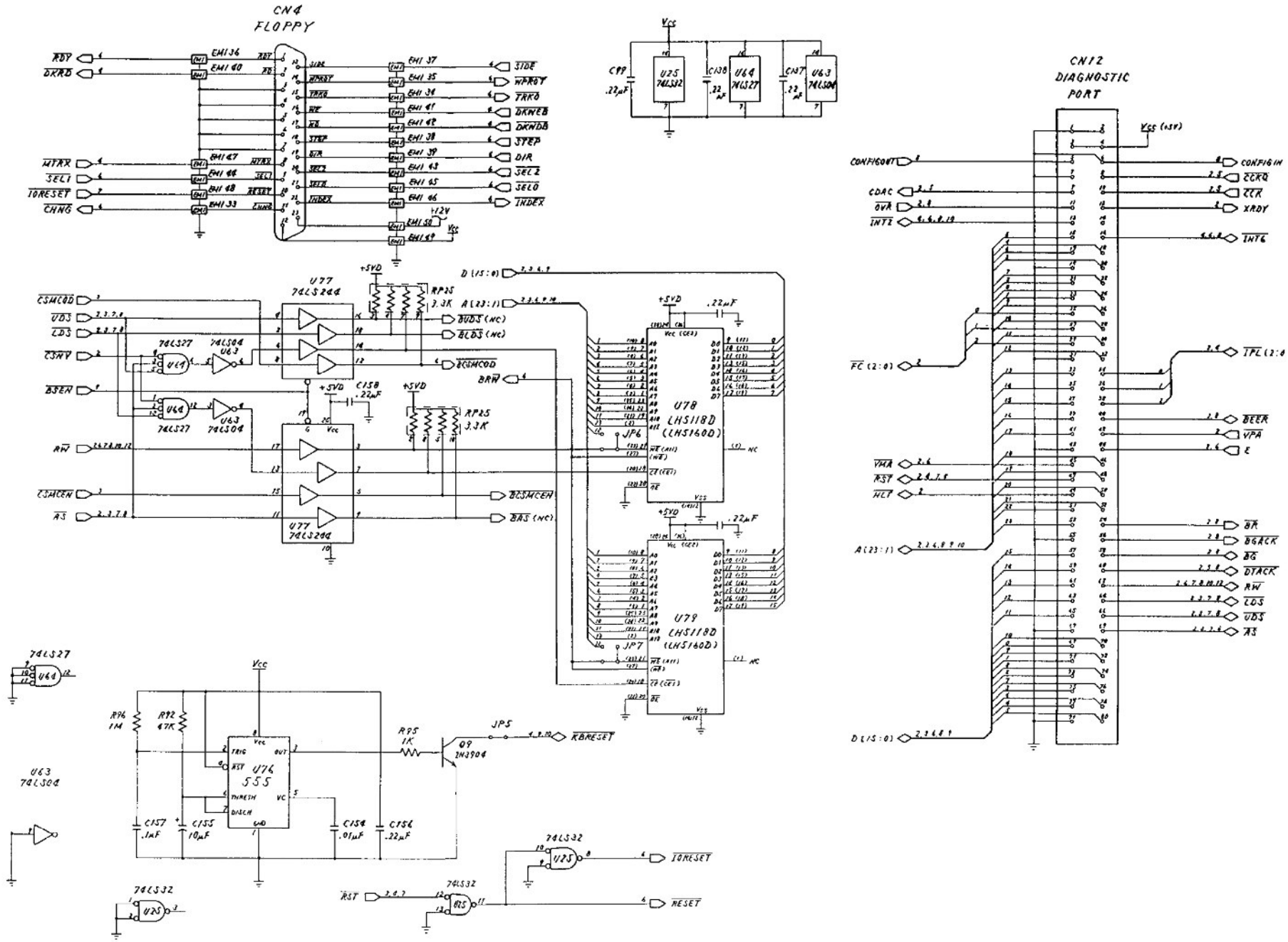

U50
74LS138
U49
74LS138
74LS32
U22
CSRC
CSCD
CSAV
8 DC0000 (NON-VOLATILE)
8 DC0000 (REAL TIME CLOCK)
RP12 4.7K
RP13 470
U67
74LS244
U48
74LS373
U45
74LS244
U46
74LS373
U51
68000
RP14 4.7K
R60 68
C118 100pF
IPL(2:0)
FC(2:0)
7MHz
VMA
VPA
BGACK
AS
RW
UDS
LDS
RST
HLT
(FLOPPY FUNCTIONS)
(CONTROL FUNCTIONS)
U12
GARY
R60 470
R 42 470
R61 4.7K
JP1
R44 27
R43 27
74F04 U14
RP7 22
C36 100pF
C38 100pF
C37 100pF
JP6
U44
8372
FAT AGNUS
R87 22
R81 22
A(23:1)
D(15:0)
DRD(15:0)
DVR
OVL
XRDY
ROMEN
CLKRD
CLKWR
CCKQ
CCK
CDAC
CASL
CASU
RASO
RAS1
WE
DRA(8:0)
RGA(8:1)
7MHz
FIRE1
HSYNC
VSYNC
CSYNC
DMAL
INT3
JP11
OPEN : PAL
SHORT : NTSC
C117 .22µF
C116 .22µF
C119 .22µF
C114 .22µF
C115 .22µF
C111 .22µF
C112 .22µF
C39 .22µF
C88 .22µF
C89 .22µF
U14 74F04
U22 74LS32
U23 74LS08
JP9
JP10
JP8
EMI 69
FB
28.63636 MHz NTSC X1
28.37516 MHz PAL X5
C139 .22µF
C167 .22µF
C108 .22µF
XCLKEN
XCLK
R47 22
R46 120

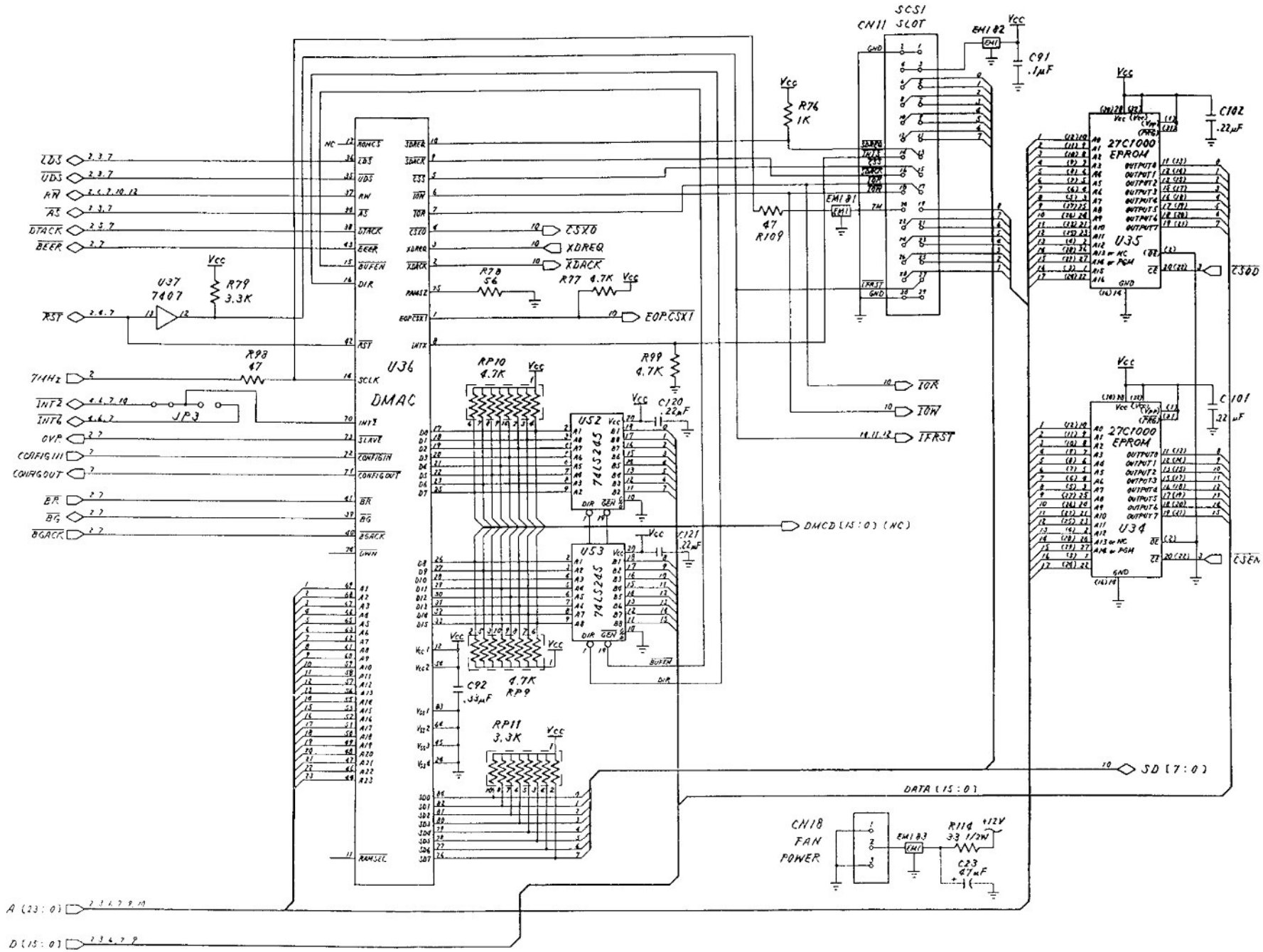

DRA (8:0)
U55
74F244
U54
74F244
RP16
68
RP15
68
RP17
68
C123
.22µF
C122
.22µF
CASL
CASU
RASO
RAST
WE
U65
XX4256-10
U66
XX4256-10
U67
XX4256-10
U68
XX4256-10
U69
XX4256-10
U70
XX4256-10
U71
XX4256-10
U72
XX4256-10
C140
C141
C142
C143
C144
C145
C146
C147
DRD (15:0)
JP2
U13
ROM
KICKSTART
128K x 16 ROM
C66
.22µF
ROMEN
EMC
A (23:1)
D (15:0)
74LS02
74LS27
74LS00
CSMC
CSCD
JP15
R138
1K
UDS
AS
LDS
CSMCEN
CSMCOD
CSEN
CSOD
ECD
C89
C100
C113

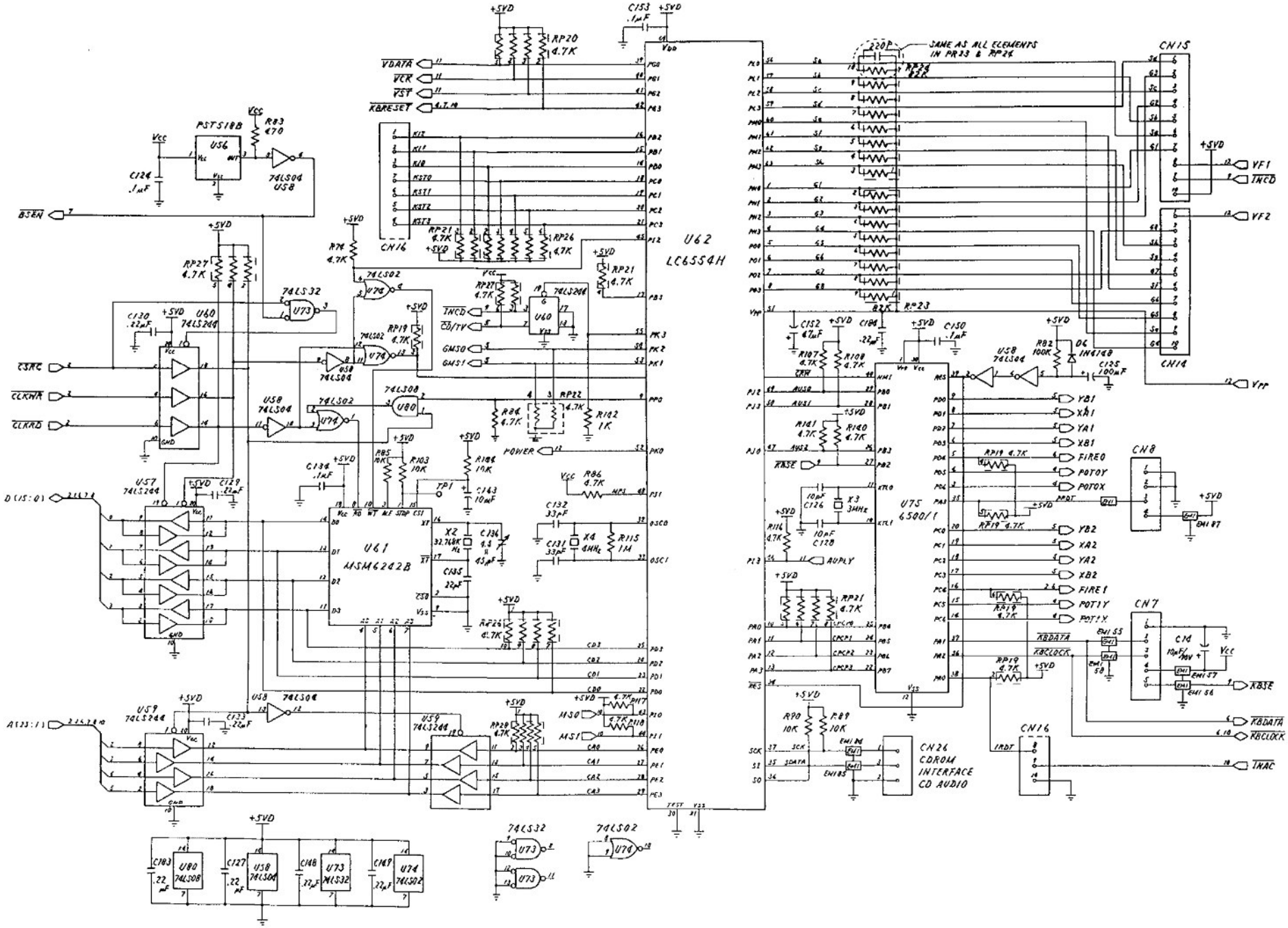

CN27
MIDI
INTERFACE
Vcc
EMI 75
EMI 76
EMI 77
BT x D
R x D
C162
10µF
AUDIN
RIGHT
R23
10K
EMI 64
C16 .047µF
R24 750
U5
TL084
R26
10K
C19
6800pF
10K
R27
HPF102
Q5
C18
3900pF
Vref
AUDIO
U5
TL084
C21
.22µF
22µF
C20
R28
12K
R30
15K
U6
TL084
R31
220
EMI 52
CN4
RCA JACK
RIGHT
CDAR
R29
3.3K
C170
470pF
AUDR
D8
IN4148
R112
470
Q12
2N3904
LMUTE
D9
IN4148
R111
470
Q13
2N3904
C7 .047µF
R15 750
LEFT
EMI 53
R16
10K
C10
6800pF
10K
R17
HPF102
Q2
C9
3900pF
R22
470K
U5
TL084
C12
.22µF
22µF
C11
R18
12K
R20
15K
U6
TL084
R21
220
EMI 51
CN5
RCA JACK
LEFT
CDAL
R19
3.3K
C169
470pF
AUDOUT
AUDL
+AV
R13
2.7K
Q4
2N3906
ZED
1488
U3
R12
10K
R14
10K
C15
.01µF
-AV
U27
7407
BT x D
R x D
KBRESET
R45
4.7K
C35
.22µF
MTR
SEL0
U12
GARY
(FLOPPY FUNCTIONS)
MTRX
MTRB (NC)
DKWDB
DKWEB
74LS38
U15
U4
PAULA
8364
INT2
INT3
INT6
R7
1K
DXRD
DKWD
DKWE
POTOX
POTOY
POTIX
POTIY
C33
C34
C31
C32
.047µF
RIGHT
LEFT
AGND
EMI 65
FB
AUDIO
C70
.22µF
TPL (2:0)
DRD (15:0)
RGA (8:1)
DMAL
CCK
CCKQ
RST
+12V
R70
10
R69
10
-12V
U18
TL082
U5
TL084
U16
C8
C13
C78
C77
C17
C22
C58
C54
470µF
.22µF
8364 POWER
EMI 60
C30
C29
R8
1K
R9
1K
C5
C6
100µF
Vref

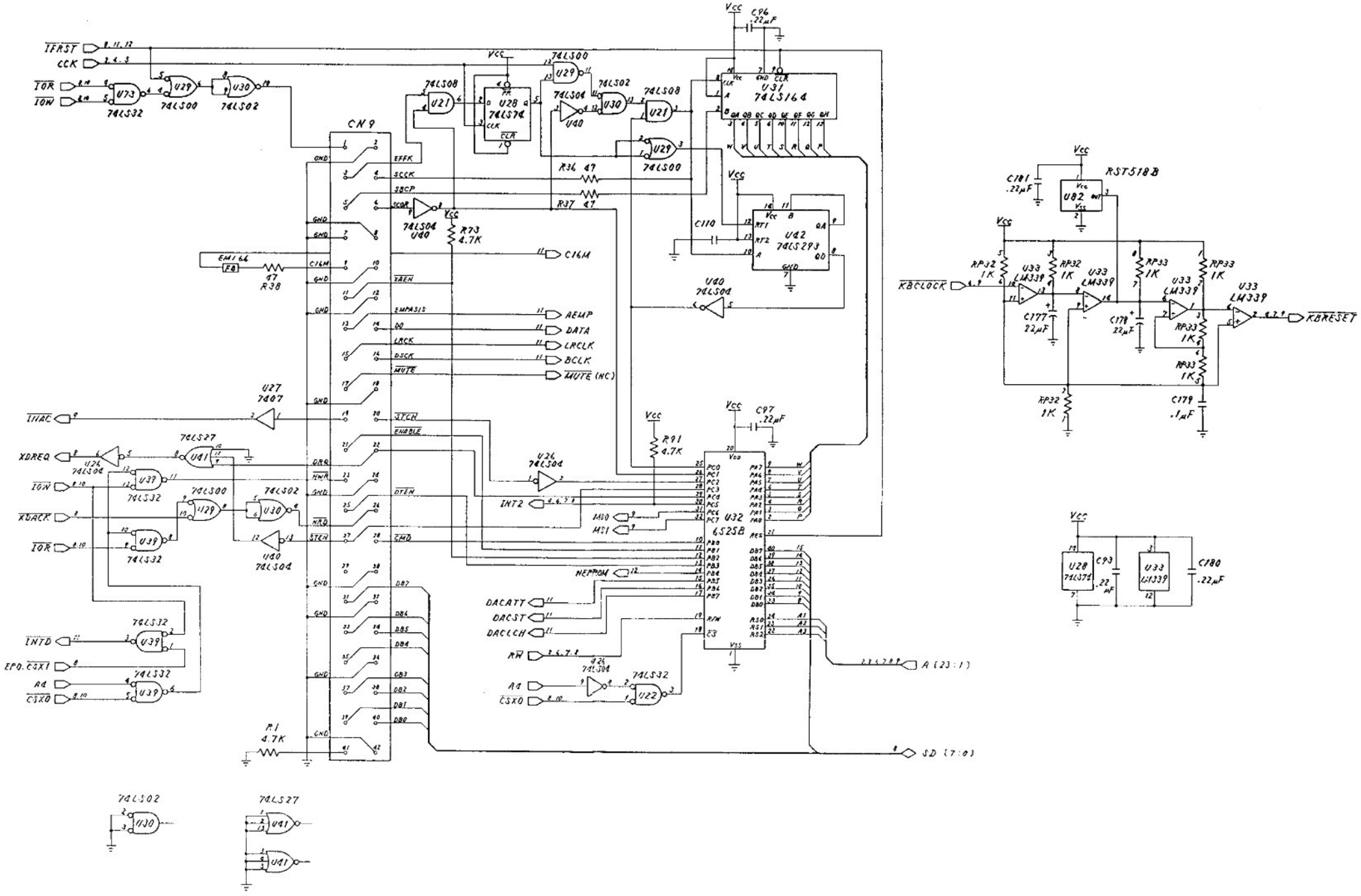

U8
DENISE
8362
U7
74LS157
U1
74HC245
U2
74HC245
HY1
VIDEO
HYBRID
VIDEO
SLOT
CN10
VIDEO
CN1
RP3
4.7K
RP4
4.8
RP5
120
RP1
4.7
RP2
4.7
R97
1K
R39
4.7K
R75
4.7K
R6
4.7
R2
4.7
C64
.22µF
C63
.047µF
C24
.22µF
C105
.22µF
C61
3300µF/10V
C2
330µF/16V
C1
100pF
74LS04
U63
74F00
U38
74LS04
U63
74F00
U38
74F00
U38
74F00
U38
7407
U37
U38
74F00
EMI SP
EMI 72
EMI 71
EMI 100
EMI 70
EMI 7
EMI 6
EMI 5
EMI 4
EMI 3
EMI 8
EMI 2
EMI 1
Vcc
-12V
+12V
-5V
+5V
DRD (15:0)
RGA (8:1)
CCK
A7MHz
7BAF
CSYNC
BLANK
BURST
PIXELSW
VID
XCLKEN
XCLK
GMS1
GMS0
VSYNC
HSYNC
COMP
NC
AUDR
AUDL
CD/TV
YB1
YA1
XA1
XB1
YB2
YA2
XA2
XB2
CCK
CCKQ
CDAC
EMC
DTACK

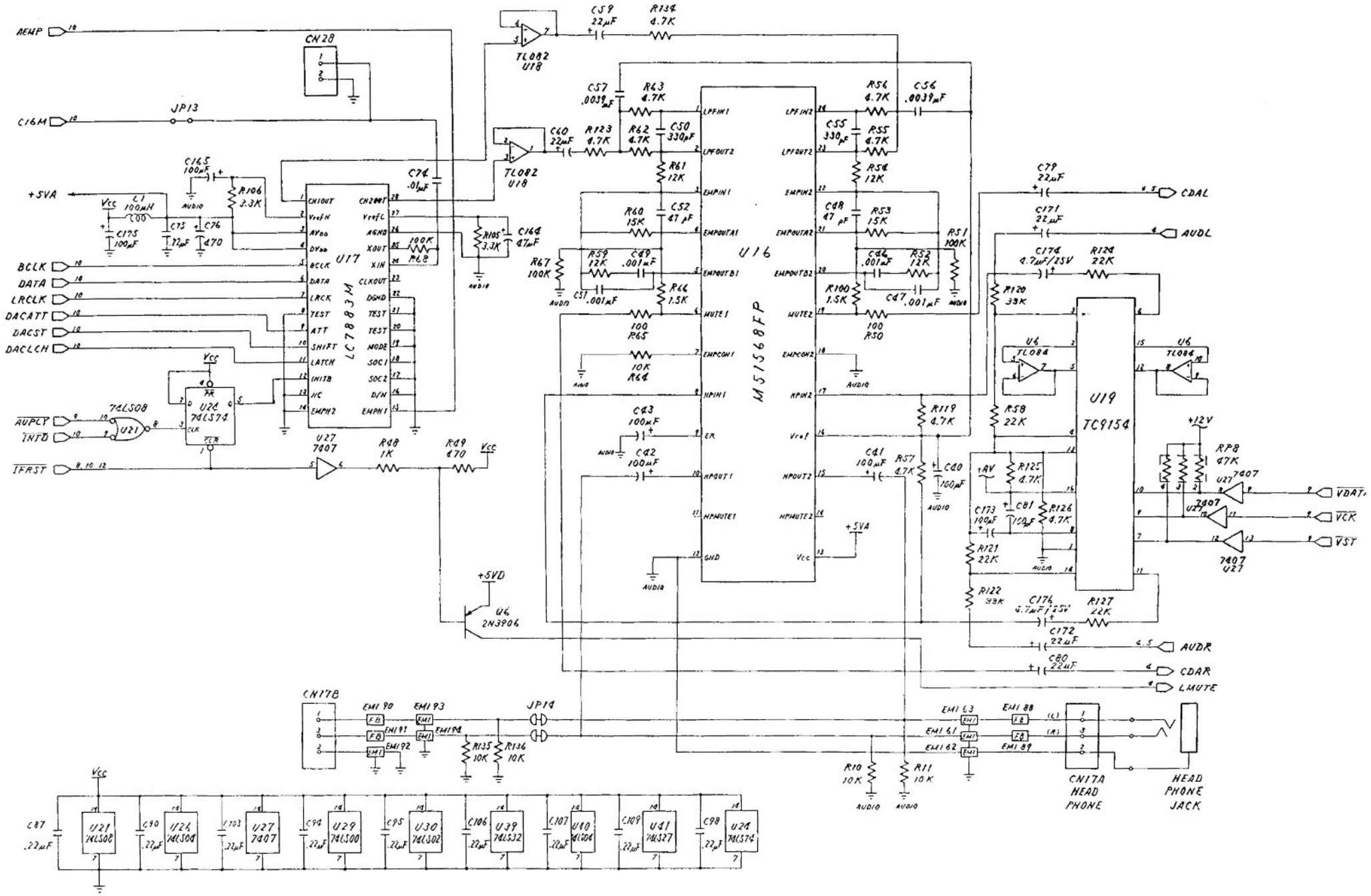

U9
8520
U10
8520
CN13
MEMORY
CARD
CONNECTOR
CN2
CENTRONICS
DP25S
CN3
RS232
DP25P
INDICATOR
STATUS
LED
U37
7407
74LS32
U22
RP6
10K
RP29
RP30
RP31
68
C25
.22μF
C26
.22μF
C104
.22μF
C161
.1μF
C45
.1μF
C27
.22μF
C28
.22μF
C4
.22μF
C3
.22μF
R88
33
R3
47 1/2W
R5
10K
R4
10K
R102
1/2W 47
R101
1/5W 47
Q1
2N3906
D1
1N4148
U11
1489
U3
1488
D(15:0)
A(23:1)
KBDATA
KBCLOCK
FIRET
FIRE0
RDY
TRK0
WPROT
CHNG
DVL
LED
PPD(7:0)
INT2
VSYNC
THREX
VMA
RW
E
INT6
HSYNC
RESET
MTR
SEL3 (NC)
SEL2
SEL1
SEL0
SIDE
DIR
STEP
TDRESET
A16
A17
RRW
BCSHCOD
BCSHCEN
A18
A19
AUDIN
AUDOUT
+12V
-12V
Vcc
GND

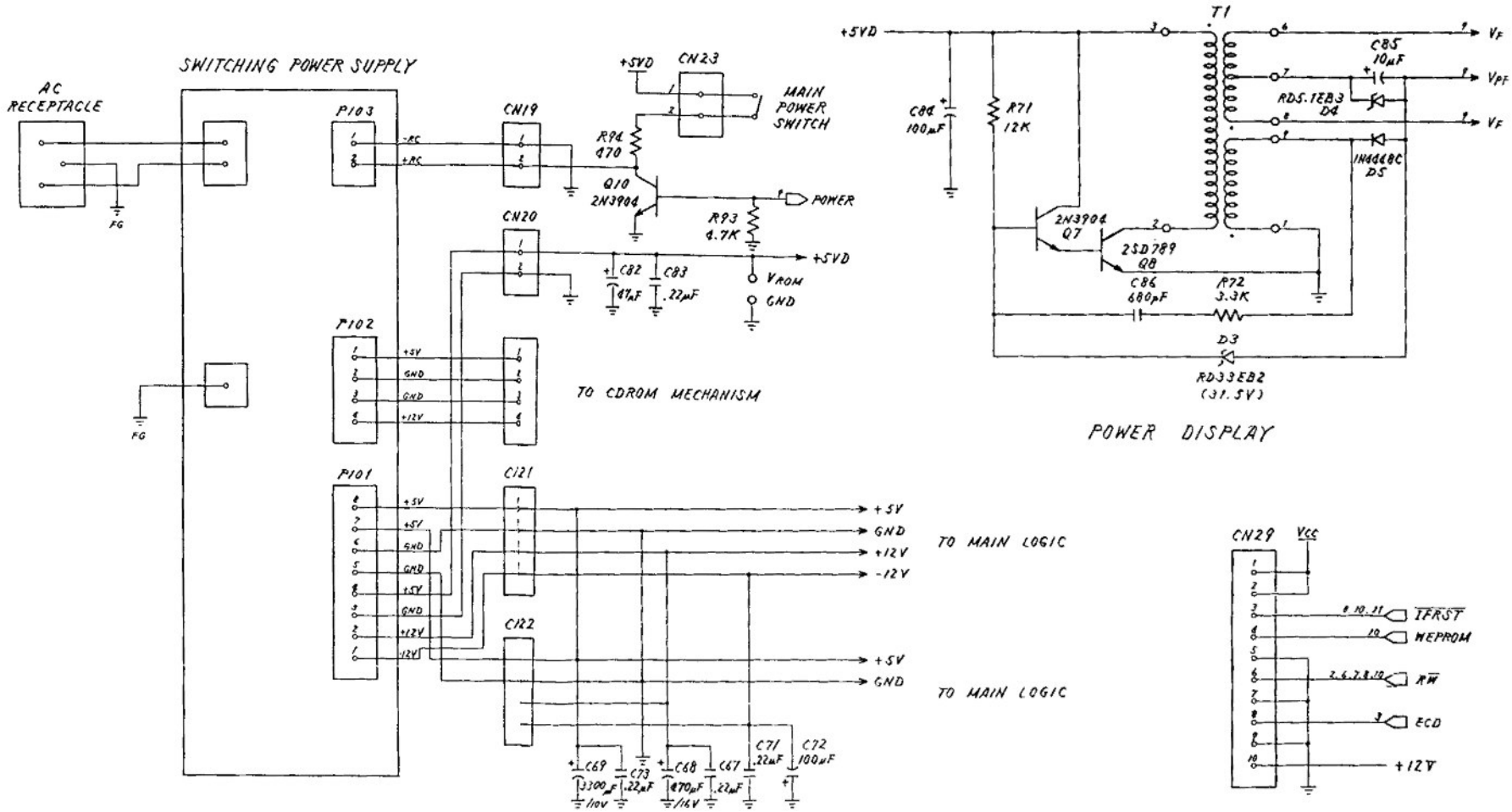

CN4
FLOPPY
CN12
DIAGNOSTIC
PORT
U77
74LS244
U78
LH5118D
(LH5160D)
U79
LH5118D
(LH5160D)
U76
555
U63
74LS04
74LS27
74LS32
JP6
JP7
JP5
Q9
2N3904
RP25
3.3K
RP95
1K
RP96
1M
RP92
47K
C157
.1μF
C155
10μF
C158
.01μF
C156
.22μF
C158
.22μF
C159
.22μF
C138
.22μF
C137
.22μF
+5VD
+12V
Vcc
Vss (+5V)
RDY
DRRD
WTRX
SEL1
IORESET
CHNG
SIDE
WRRDY
TRK0
DKWEB
DKWDB
STEP
DIR
SEL2
SEL0
INDEX
CSMCOD
UDS
LDS
CSMV
BSEN
RW
CSMCEN
AS
BUDS (NC)
BLDS (NC)
BCSMCOD
BRW
BCSMCEN
BAS (NC)
D (15:0)
A (23:1)
FC (2:0)
RBRESET
RST
IORESET
RESET
CONFIGOUT
CDAC
DVA
INT2
VMA
HLT
CONFIGIN
ZCRQ
ZCR
XRDY
INT6
IPL (2:0)
BEER
VPA
E
BR
BGACK
BG
DTACK


SCSI
CN11 SLOT
U36
DMAC
U37
7407
U35
27C1000
EPROM
U34
27C1000
EPROM
U52
74LS245
U53
74LS245
R76
1K
R109
47
R79
3.3K
R78
56
R77 4.7K
R98
47
R99
4.7K
RP10
4.7K
RP9
4.7K
RP11
3.3K
C91
.1μF
C102
.22μF
C101
.22μF
C120
.22μF
C121
.22μF
C92
.33μF
C23
47μF
R114
3.3 1/2W
+12V
JP3
CN18
FAN
POWER
DMCD (15:0) (NC)
SD (7:0)
DATA (15:0)
A (23:0)
D (15:0)
IOR
IOW
IFRST
EOP CSX1
CSX0
XDREQ
XDACK
CSROM
CSEN
RST
INT2
INT6
OVP
CONFIG III
CONFIG OUT
BR
BG
BGACK
7.14Hz
LDS
UDS
R/W
AS
DTACK
BERR


U62
LC6554H
U61
MSM6242B
U75
6500/1
U56
PST518B
U60
74LS244
U59
74LS244
U57
74LS244
U80
74LS08
U73
74LS32
U74
74LS02
U58
74LS04
CN15
CN14
CN8
CN7
CN16
CN26
CDROM
INTERFACE
CD AUDIO
SAME AS ALL ELEMENTS
IN RP23 & RP24
VDATA
VCR
VST
KBRESET
BSEN
CSRC
CLKWR
CLKRD
INCD
CD/TV
GMS0
GMS1
POWER
AUPLY
XBDATA
XBCLOCK
XBSE
INAC
VF1
VF2
Vpp
YB1
XA1
YA1
XB1
FIRE0
POT0Y
POT0X
YB2
XA2
YA2
XB2
FIRE1
POT1Y
POT1X
D(15:0)
A(23:1)
+5VD
Vcc
RP20 4.7K
RP21 4.7K
RP22 4.7K
RP23 82K
RP24 220
RP26 4.7K
RP27 4.7K
R83 470
R84 4.7K
R85 10K
R86 4.7K
R87 10K
R88 10K
R89 10K
R90 10K
R102 1K
R103 10K
R107 4.7K
R108 4.7K
R114 4.7K
R115 1M
R116 4.7K
R140 4.7K
R141 4.7K
R82 100K
C120 .22µF
C124 .1µF
C125 100mF
C126 10pF
C127 .22µF
C128 10pF
C129 22pF
C130 .22µF
C131 33pF
C132 33pF
C133 .22µF
C134 .1µF
C135 22pF
C136 4.5 TO 45pF
C143 10mF
C147 .22µF
C148 .22µF
C149 .22µF
C150 .1µF
C152 47µF
C153 .1µF
C183 .22µF
X2 32.768K Hz
X3 3MHz
X4 4MHz
DL IN4148
EMI 55
EMI 56
EMI 57
EMI 58
EMI 87
TP1


IFRST
CCK
IOR
IOW
74LS32
74LS00
74LS02
74LS08
74LS04
74LS74
74LS164
74LS293
74LS27
74LS06
CN 9
EFFK
SCCK
SBCP
SCOR
C16M
XAEN
EMPASIS
DO
LRCK
DSCK
MUTE
AEMP
DATA
LRCLK
BCLK
MUTE (NC)
XTCH
ENABLE
DRQ
HWR
HRD
OYEN
CMD
DB7
DB6
DB5
DB4
DB3
DB2
DB1
DB0
R36 47
R37 47
R73 4.7K
R38 47
R91 4.7K
R1 4.7K
C96 .22μF
C97 .22μF
C110
U27 7407
U24 74LS06
U26 74LS04
U31 74LS164
U2 74LS293
U32 6525B
IIIAC
XDREQ
XDACK
INTD
EPD. CSX1
A4
CSX0
INT2
IA10
MSI
NEPROM
DACATT
DACST
DACLCH
RW
A (23:1)
SD (7:0)
RST518B
U82
C181 .22μF
KBCLOCK
KBRESET
RP32 1K
RP33 1K
U33 LM339
C177 22μF
C178 22μF
C179 .1μF
U28 74LS74
C93 .22 μF
C180 .22μF


AEHP
C16M
JP13
CN28
+5VA
BCLK
DATA
LRCLK
DACATT
DACST
DACLCH
AUPCY
INTO
IFRST
74LS08
U21
74LS74
U27
7407
LC7883M
U17
TL082
U18
M51568FP
U16
TC9154
U19
TL084
U6
2N3906
+5VD
+12V
CDAL
AUDL
AUDR
CDAR
LMUTE
VDAT
VCK
VST
CN17B
CN17A
HEAD PHONE
HEAD PHONE JACK
74LS00
74LS02
74LS32
74LS27
74LS04


SWITCHING POWER SUPPLY
AC RECEPTACLE
FG
FG
P103
-RC
+RC
CN19
+5VD
CN23
MAIN POWER SWITCH
R94 470
Q10 2N3904
POWER
R93 4.7K
CN20
+5VD
C82 47μF
C83 .22μF
VROM
GND
P102
+5V
GND
GND
+12V
TO CDROM MECHANISM
P101
+5V
+5V
GND
GND
+5V
GND
+12V
-12V
C121
C122
+5V
GND
TO MAIN LOGIC
+5V
GND
TO MAIN LOGIC
C69 3300μF/10V
C73 .22μF
C68 470μF/16V
C67 .22μF
C71 .22μF
C72 100μF
T1
+5VD
C84 100μF
R71 12K
C85 10μF
RD5.1EB3 D4
1N4148C D5
VF
VPF
VF
2N3904 Q7
2SD789 Q8
C86 680pF
R72 3.3K
D3
RD33EB2 (31.5V)
POWER DISPLAY
CN29
Vcc
8,10,11
IFRST
10
WEPROM
2,6,7,8,10
RW
3
ECD
+12V