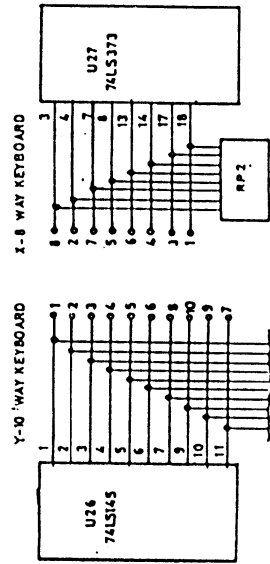


| | | | | | | | |
|-------|------|----------|-------|----------|-----------|------|------|
| X1 | X2 | X3 | X4 | X5 | X6 | X7 | X8 |
| SHIFT | 1 | Z | X | C | V | B | M |
| CTRL | LOCK | A | S | D | F | G | H |
| Y3 | TAB | Q | W | E | R | T | Y |
| Y4 | ESC | 1 | 2 | 3 | 4 | 5 | 6 |
| Y5 | F1 | F8 | F2 | F7 | F6 | F5 | F3 |
| Y6 | | | ERASE | A | - | 8 | 9 |
| Y7 | | | | C | @ | P | O |
| Y8 | | | | : | : | L | K |
| Y9 | INS | DEL | SPACE | SHIFT | / | . | W |
| Y10 | ALT | JOY DOWN | ENTER | JOY LEFT | JOY RIGHT | HOLD | STOP |



SECTION OF 03-06 SH. 2

- Printer
- A1 OV
- A2 /strobe
- A3 Data 3
- A5 Data 2
- A6 Data 1
- A7 Data 0
- B1 OV
- B2 /ready
- B3 Data 4
- B5 Data 5
- B6 Data 6
- B7 Data 7

Use 12 way flexible ribbon cable.
All signals at TTL levels.

Monitor

- A1 Green signal
- A2 OV
- A3 Monochrome composite video
- A4 /HSYNC
- A5 /VSYNC
- A7 Left audio
- B2 OV
- B3 B/w signal
- B4 Red signal
- B5 /CSYNC
- B6 Mode switch (Peritel)
- B7 Right audio

Use multi core screened cable. All syncs are TTL levels R,G and B levels are 0 to 4 volts linear (not TTL).

ENTERPRISE PIN OUT INFORMATION

Enterprise pin outs as follows:-
All looking into connector on Enterprise - Pin B1 top left
Pin A1 bottom left

Edge fingers are on 2.54mm pitch, some positions are not used but still counted.

Control 1/Control 2

- A1 - Keyboard J (Common)
- A2 - Keyboard L
- A4 - KB4(9) (Right)
- A5 - KB2(7) (Down)
- A6 - KB0(5) (Fire)
- B1 - OV
- B4 - +5V
- B5 - KB3(8) (Left)
- B6 - KB1(6) (Up)

Numbers in brackets are control 2. All signals are TTL levels - read as part of keyboard matrix. Use multi-core screened cable.

Serial/Network

- A1 - Reference
- A3 - RTS
- A4 - CTS
- B1 - OV
- B3 - Data Out
- B4 - Data In

Use 6 core screened cable

Signal levels relative to

OV line 0 = OV

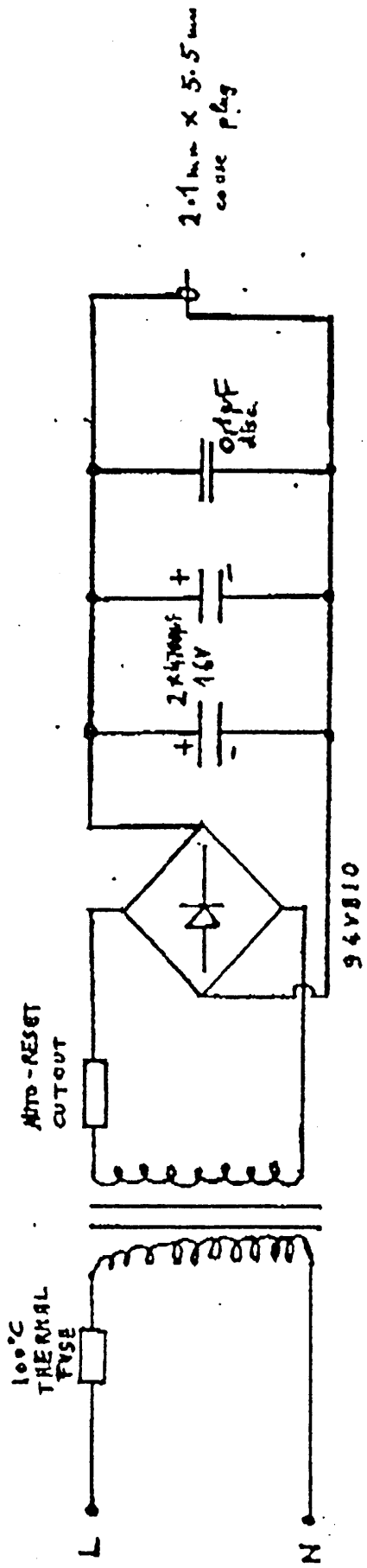
1 = +12V

Relative to ref. line

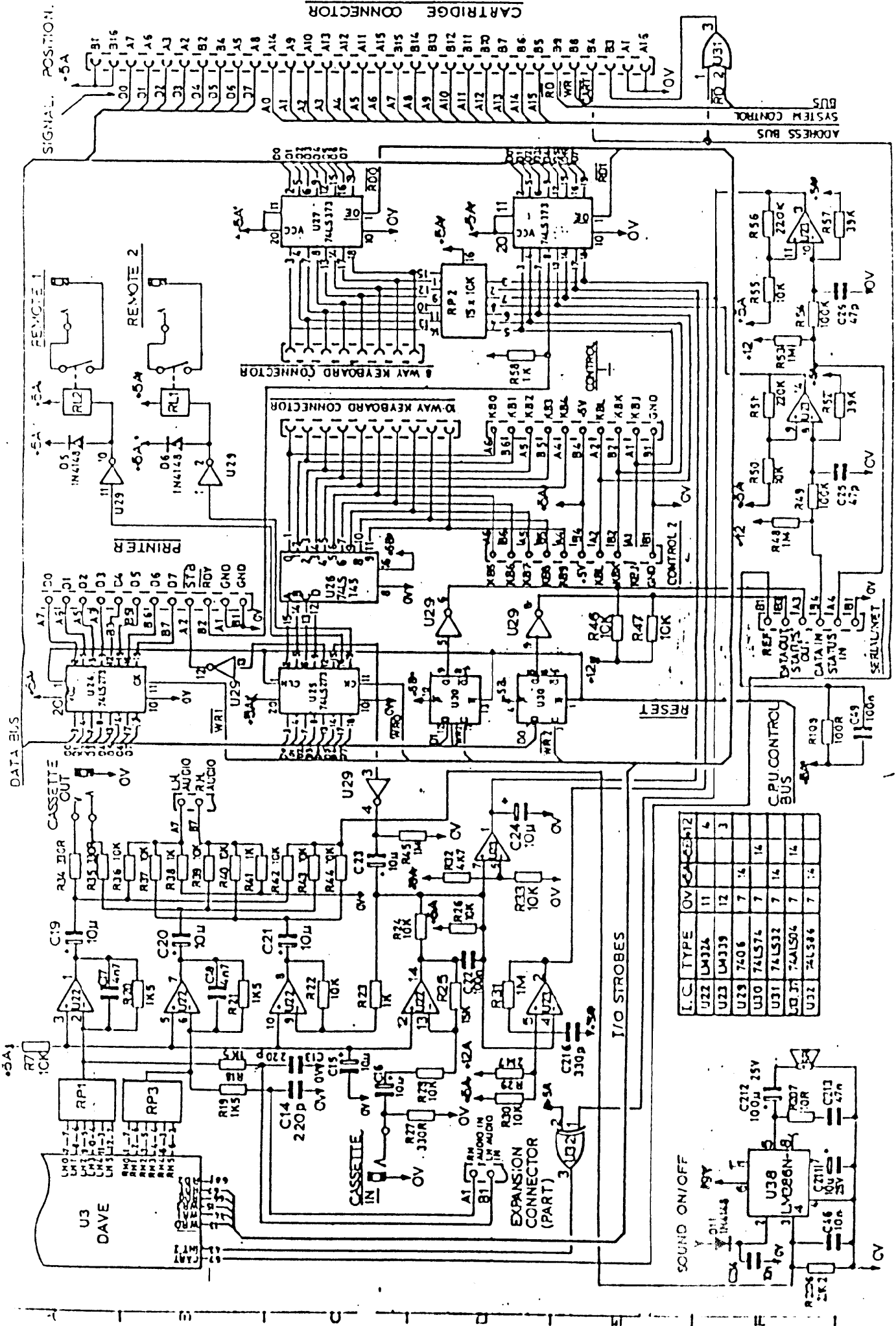
0 = -5V

1 = +7V

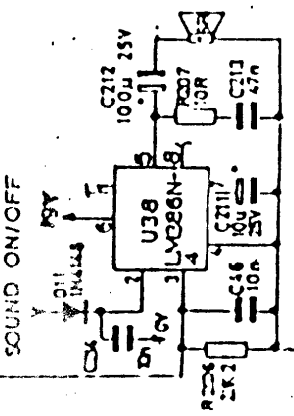
For networking connect 'RTS' to 'CTS' to form 'control bus', and 'data in' to 'data out' to form 'data bus'. Reference is an offset 'ground', this may not be possible with certain equipment configurations.



| | | | | |
|---|---|---|---|---|
| A | B | C | D | E |
|---|---|---|---|---|



| L.C. TYPE | OV | CASE | ST2 |
|-----------|---------|------|-----|
| U22 | LM324 | 11 | 4 |
| U23 | LM339 | 12 | 3 |
| U29 | 7406 | 7 | 14 |
| U30 | 74LS74 | 7 | 14 |
| U31 | 74LS32 | 7 | 14 |
| U32 | 74ALS04 | 7 | 14 |
| U33 | 74LS86 | 7 | 14 |



CARTRIDGE CONNECTOR

SIGNAL POSITION

ADDRESS BUS
SYSTEM CONTROL

DATA BUS

I/O STROBES

SOUND ON/OFF

PRINTER

REMOTE 1

REMOTE 2

8 WAY KEYBOARD CONNECTOR

8 WAY KEYBOARD CONNECTOR

CONTROL 1

CONTROL 2

RESET

CPU CONTROL BUS

DATA OUT

STATUS IN

CATA IN

STATUS IN

STATUS IN

STATUS IN

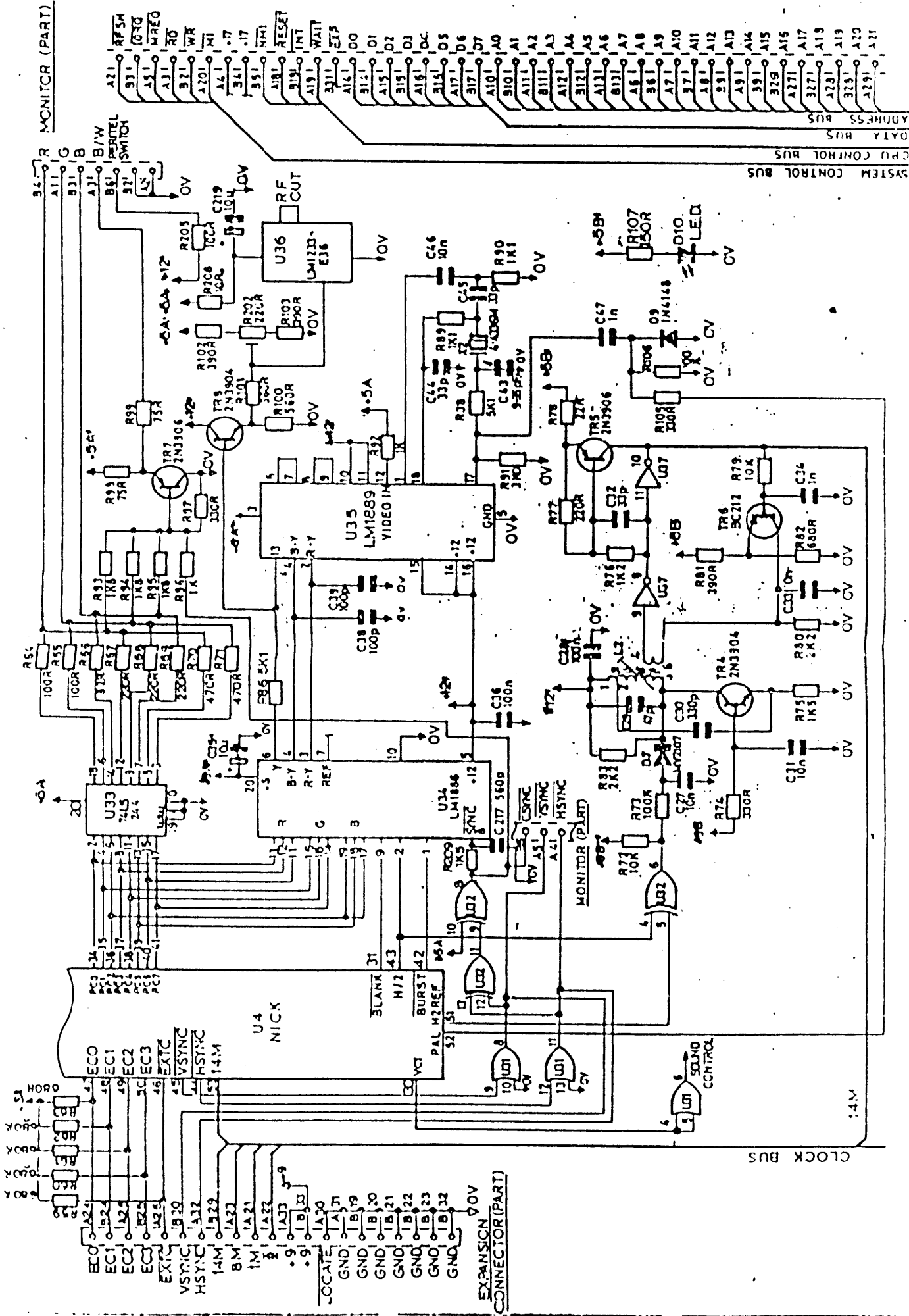
STATUS IN

STATUS IN

STATUS IN

STATUS IN

EXPANSION CONNECTOR (PART)



CLOCK BUS

SYSTEM CONTROL BUS

CPU CONTROL BUS

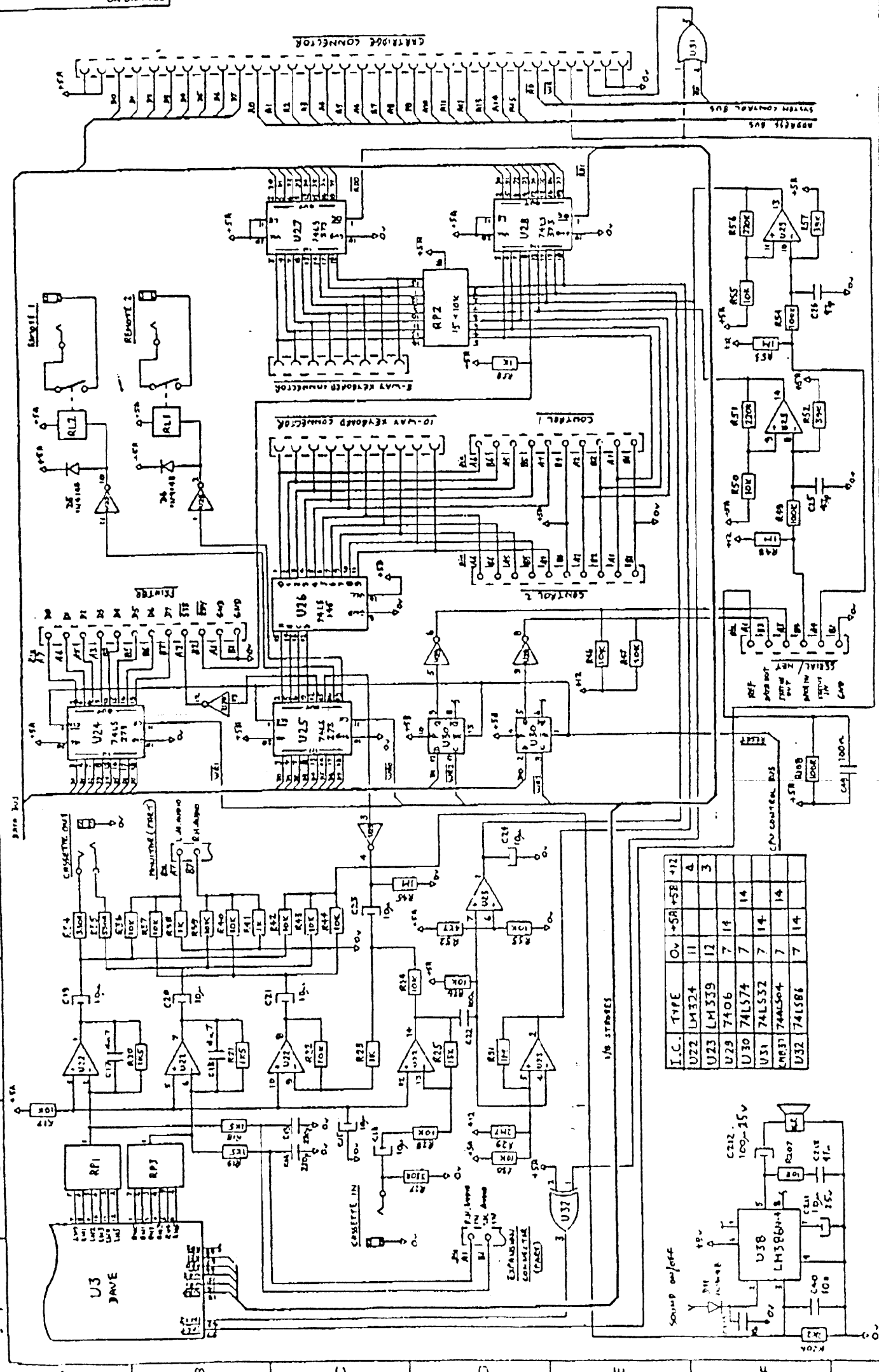
DATA BUS

ADDRESS BUS

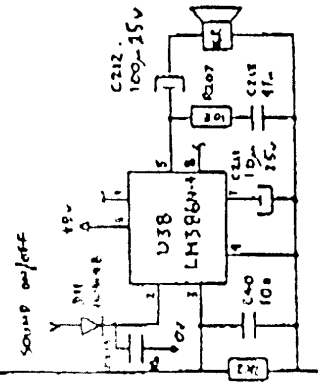
MONITOR (PART)

EXPANSION CONNECTOR (PART)

CONNECTION (PART)

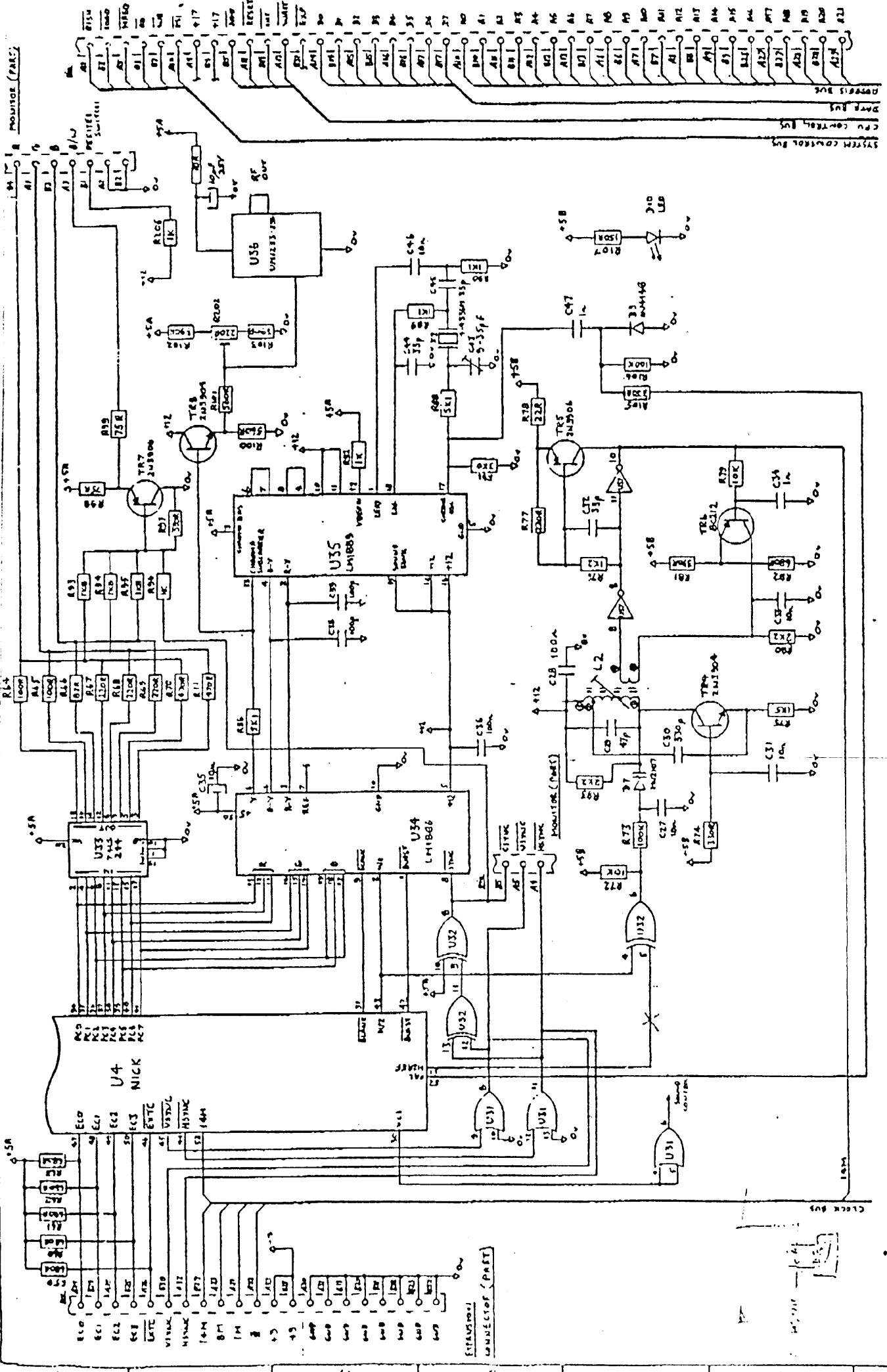


| I.C. TYPE | QTY | REF |
|------------|-----|-----|
| U22 LM324 | 11 | 4 |
| U23 LM339 | 12 | 3 |
| U29 7406 | 7 | 14 |
| U30 74LS74 | 7 | 14 |
| U31 74LS52 | 7 | 14 |
| U32 74LS86 | 7 | 14 |



EXPANSION CONNECTOR (PART)

DRAWING NO.



ROUTING (PART)

EXPANSION CONNECTOR (PART)

Clock Bus

System Control Bus

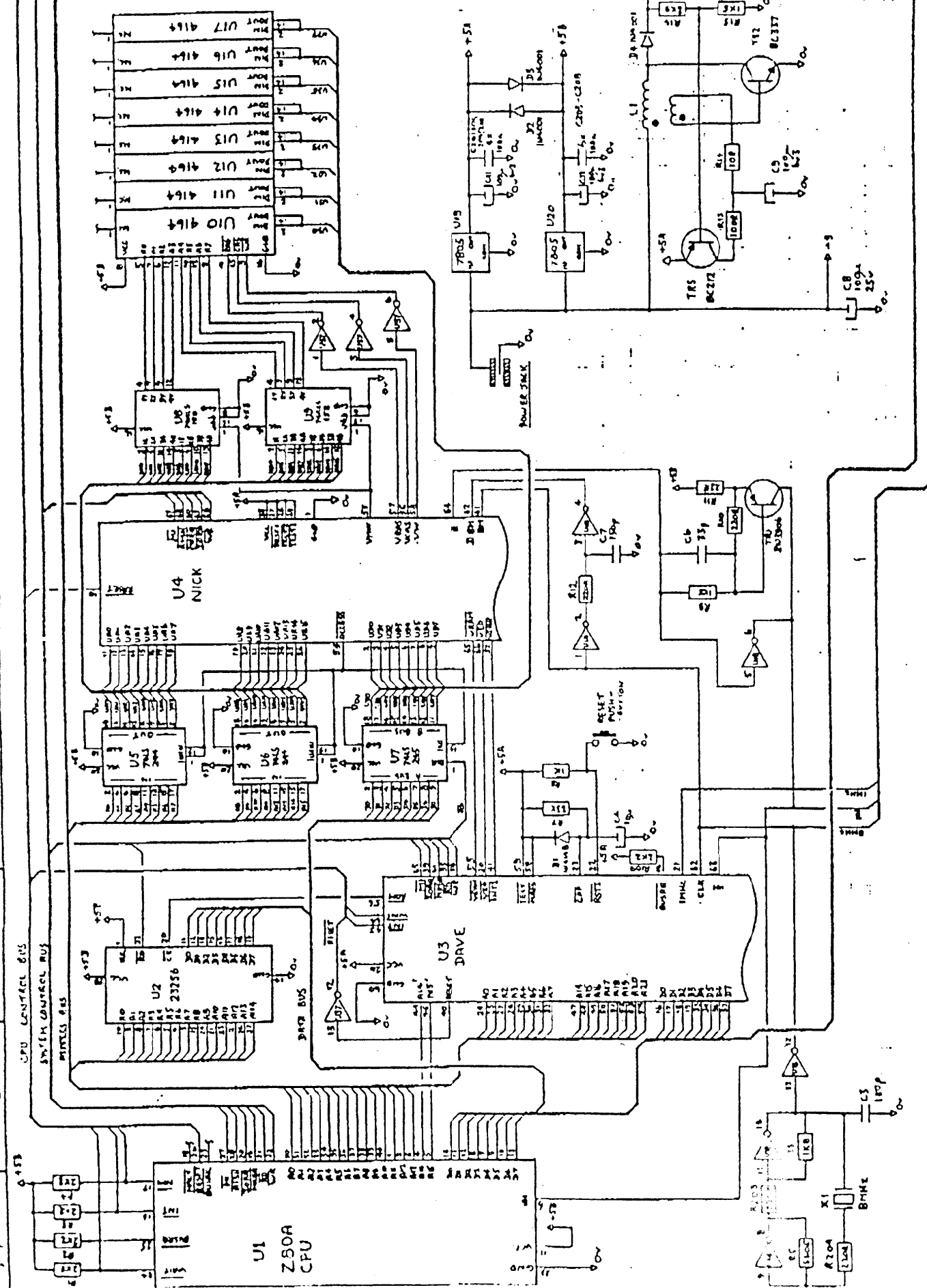
Data Bus

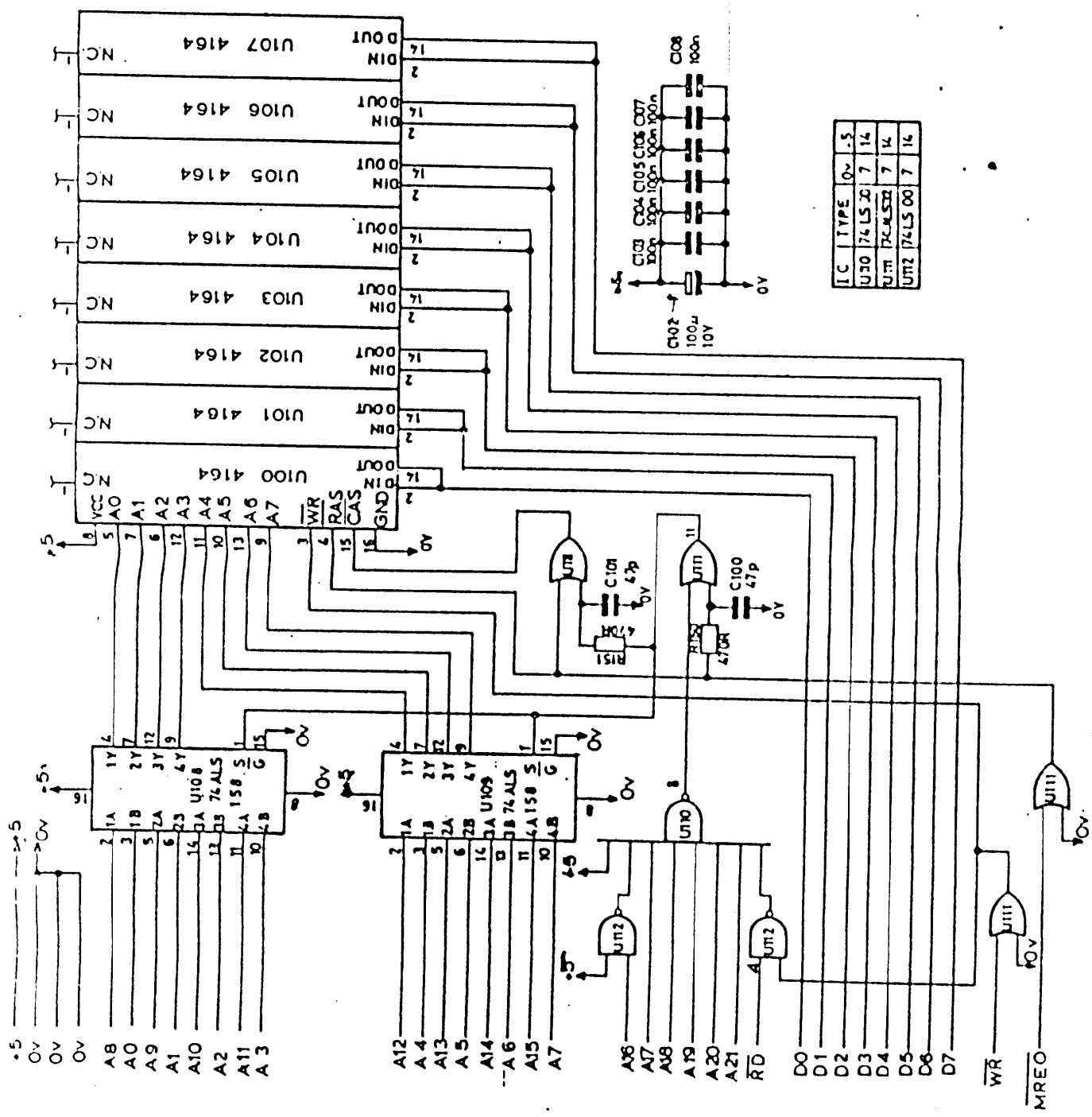
Address Bus

U4 NICK

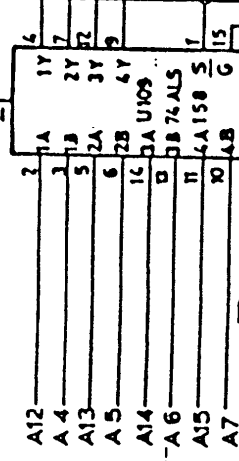
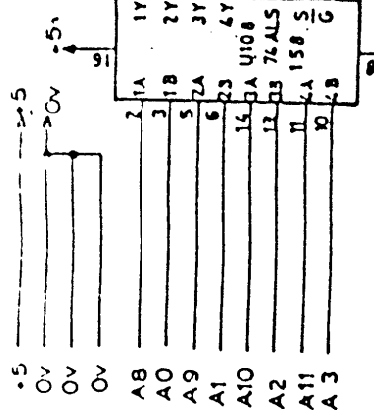
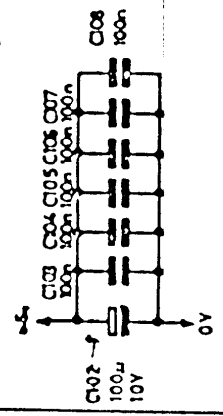
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 A100

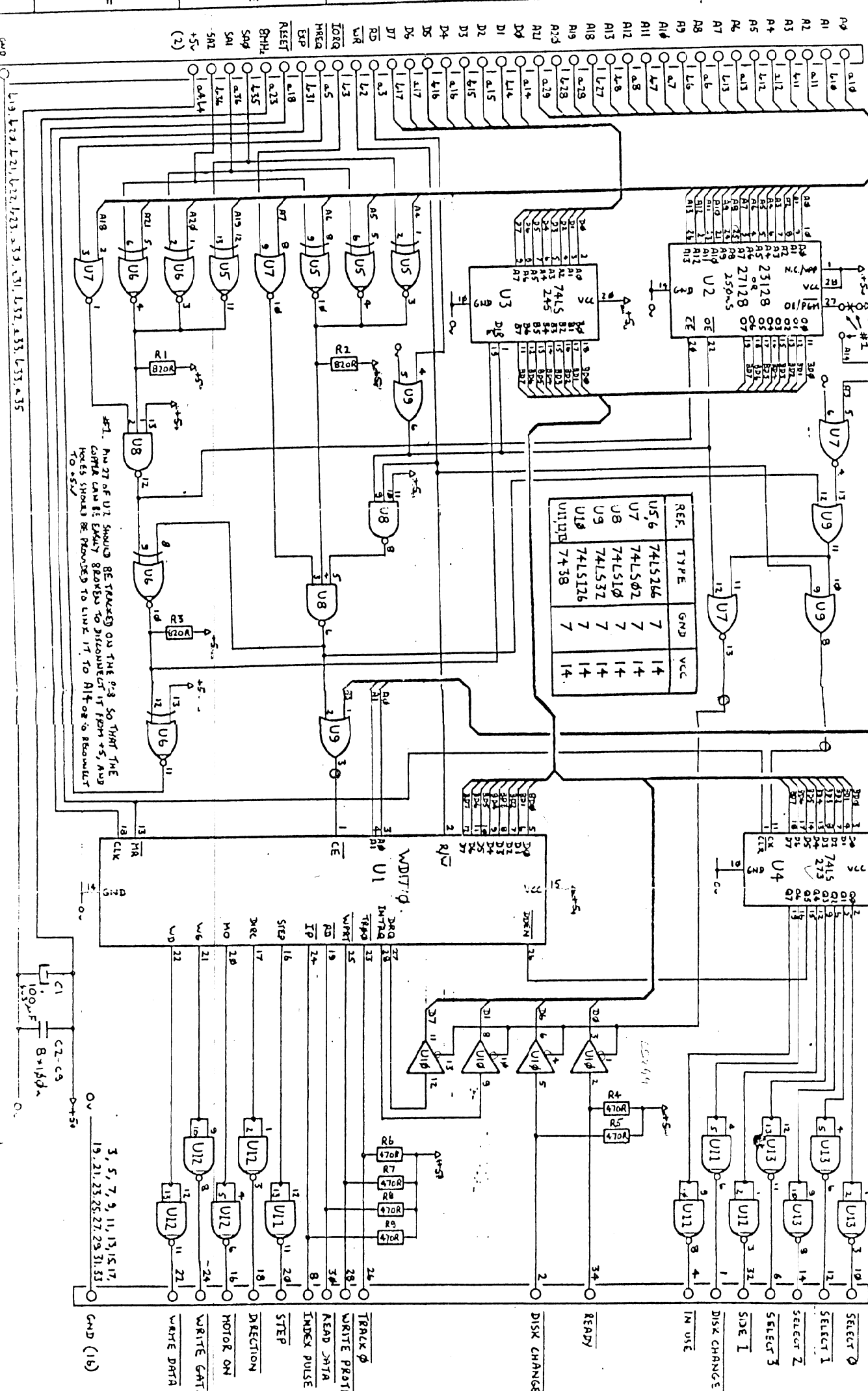




| IC | TYPE | Q | S |
|------|--------|---|----|
| U100 | 74LS20 | 7 | 14 |
| U101 | 74LS20 | 7 | 14 |
| U102 | 74LS00 | 7 | 14 |



PC3 EDGE CONNECTOR PINS NOT SHOWN ARE OPEN CIRCUIT



#1. Pin 27 of U1 should be traced on the PCB so that the cap can be easily reached to disconnect it from +5V and holes should be provided to link it to A14 or to Resistor to +5V

PCB L19, L21, L22, L23, L33, L34, L35, L36, L37, L38, L39, L40, L41, L42, L43, L44, L45, L46, L47, L48, L49, L50, L51, L52, L53, L54, L55, L56, L57, L58, L59, L60, L61, L62, L63, L64, L65, L66, L67, L68, L69, L70, L71, L72, L73, L74, L75, L76, L77, L78, L79, L80, L81, L82, L83, L84, L85, L86, L87, L88, L89, L90, L91, L92, L93, L94, L95, L96, L97, L98, L99, L100

DISK DRIVE CONNECTOR

SELECT 0
SELECT 1
SELECT 2
SELECT 3
SIDE I
DISK CHANGE RES
IN USE
READY
DISK CHANGE
TRACK 0
WRITE PROTECT
READ DATA
INDEX PULSE
STEP
DIRECTION
MOTOR ON
WRITE GATE
WRITE DATA
GND (16)

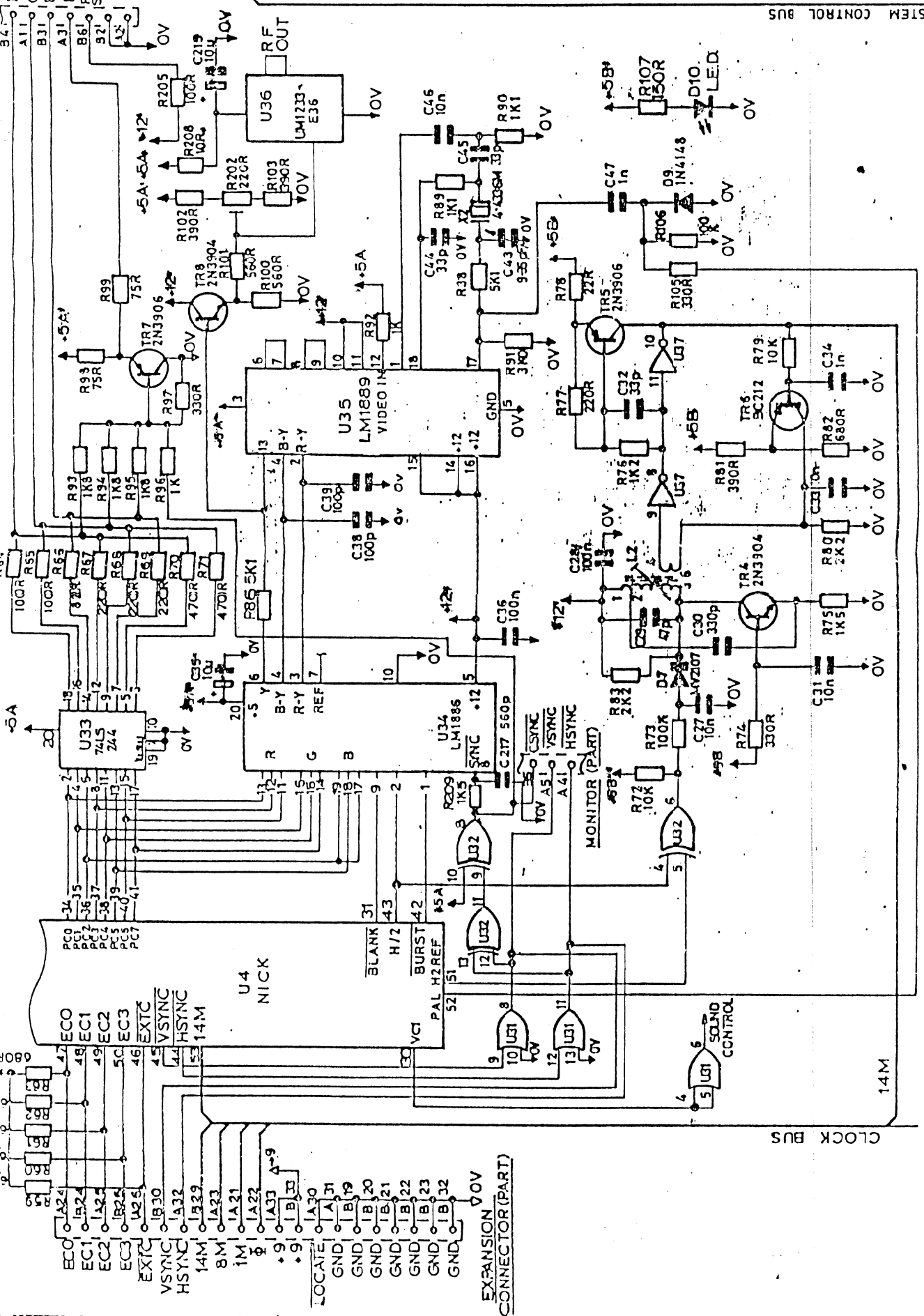
CLOCK BUS

SYSTEM CONTROL BUS

CPU CONTROL BUS

DATA BUS

ADDRESS BUS



PC0 34 J5
PC1 36 J7
PC2 38 J9
PC3 40 J11
PC4 42 J13
PC5 44 J15
PC6 46 J17
PC7 48 J19

ECO 47
EC1 48
EC2 49
EC3 50
EXTC 46
VSYNC 45
HSYNC 44
14M 5
8M 1
1M 1

LOCATE 1A30
GND 1A31
GND 1B19
GND 1B20
GND 1B21
GND 1B22
GND 1B23
GND 1B32

EXPANSION CONNECTOR (PART)

MONITOR (PART)

PC0 34 J5
PC1 36 J7
PC2 38 J9
PC3 40 J11
PC4 42 J13
PC5 44 J15
PC6 46 J17
PC7 48 J19

ECO 47
EC1 48
EC2 49
EC3 50
EXTC 46
VSYNC 45
HSYNC 44
14M 5
8M 1
1M 1

LOCATE 1A30
GND 1A31
GND 1B19
GND 1B20
GND 1B21
GND 1B22
GND 1B23
GND 1B32

EXPANSION CONNECTOR (PART)

MONITOR (PART)

PC0 34 J5
PC1 36 J7
PC2 38 J9
PC3 40 J11
PC4 42 J13
PC5 44 J15
PC6 46 J17
PC7 48 J19

ECO 47
EC1 48
EC2 49
EC3 50
EXTC 46
VSYNC 45
HSYNC 44
14M 5
8M 1
1M 1

LOCATE 1A30
GND 1A31
GND 1B19
GND 1B20
GND 1B21
GND 1B22
GND 1B23
GND 1B32

EXPANSION CONNECTOR (PART)

MONITOR (PART)

PC0 34 J5
PC1 36 J7
PC2 38 J9
PC3 40 J11
PC4 42 J13
PC5 44 J15
PC6 46 J17
PC7 48 J19

ECO 47
EC1 48
EC2 49
EC3 50
EXTC 46
VSYNC 45
HSYNC 44
14M 5
8M 1
1M 1

LOCATE 1A30
GND 1A31
GND 1B19
GND 1B20
GND 1B21
GND 1B22
GND 1B23
GND 1B32

EXPANSION CONNECTOR (PART)

MONITOR (PART)

PC0 34 J5
PC1 36 J7
PC2 38 J9
PC3 40 J11
PC4 42 J13
PC5 44 J15
PC6 46 J17
PC7 48 J19

ECO 47
EC1 48
EC2 49
EC3 50
EXTC 46
VSYNC 45
HSYNC 44
14M 5
8M 1
1M 1

LOCATE 1A30
GND 1A31
GND 1B19
GND 1B20
GND 1B21
GND 1B22
GND 1B23
GND 1B32

EXPANSION CONNECTOR (PART)

MONITOR (PART)

PC0 34 J5
PC1 36 J7
PC2 38 J9
PC3 40 J11
PC4 42 J13
PC5 44 J15
PC6 46 J17
PC7 48 J19

ECO 47
EC1 48
EC2 49
EC3 50
EXTC 46
VSYNC 45
HSYNC 44
14M 5
8M 1
1M 1

LOCATE 1A30
GND 1A31
GND 1B19
GND 1B20
GND 1B21
GND 1B22
GND 1B23
GND 1B32

EXPANSION CONNECTOR (PART)

MONITOR (PART)

PC0 34 J5
PC1 36 J7
PC2 38 J9
PC3 40 J11
PC4 42 J13
PC5 44 J15
PC6 46 J17
PC7 48 J19

ECO 47
EC1 48
EC2 49
EC3 50
EXTC 46
VSYNC 45
HSYNC 44
14M 5
8M 1
1M 1

LOCATE 1A30
GND 1A31
GND 1B19
GND 1B20
GND 1B21
GND 1B22
GND 1B23
GND 1B32

EXPANSION CONNECTOR (PART)

MONITOR (PART)

PC0 34 J5
PC1 36 J7
PC2 38 J9
PC3 40 J11
PC4 42 J13
PC5 44 J15
PC6 46 J17
PC7 48 J19

ECO 47
EC1 48
EC2 49
EC3 50
EXTC 46
VSYNC 45
HSYNC 44
14M 5
8M 1
1M 1

LOCATE 1A30
GND 1A31
GND 1B19
GND 1B20
GND 1B21
GND 1B22
GND 1B23
GND 1B32

EXPANSION CONNECTOR (PART)

MONITOR (PART)

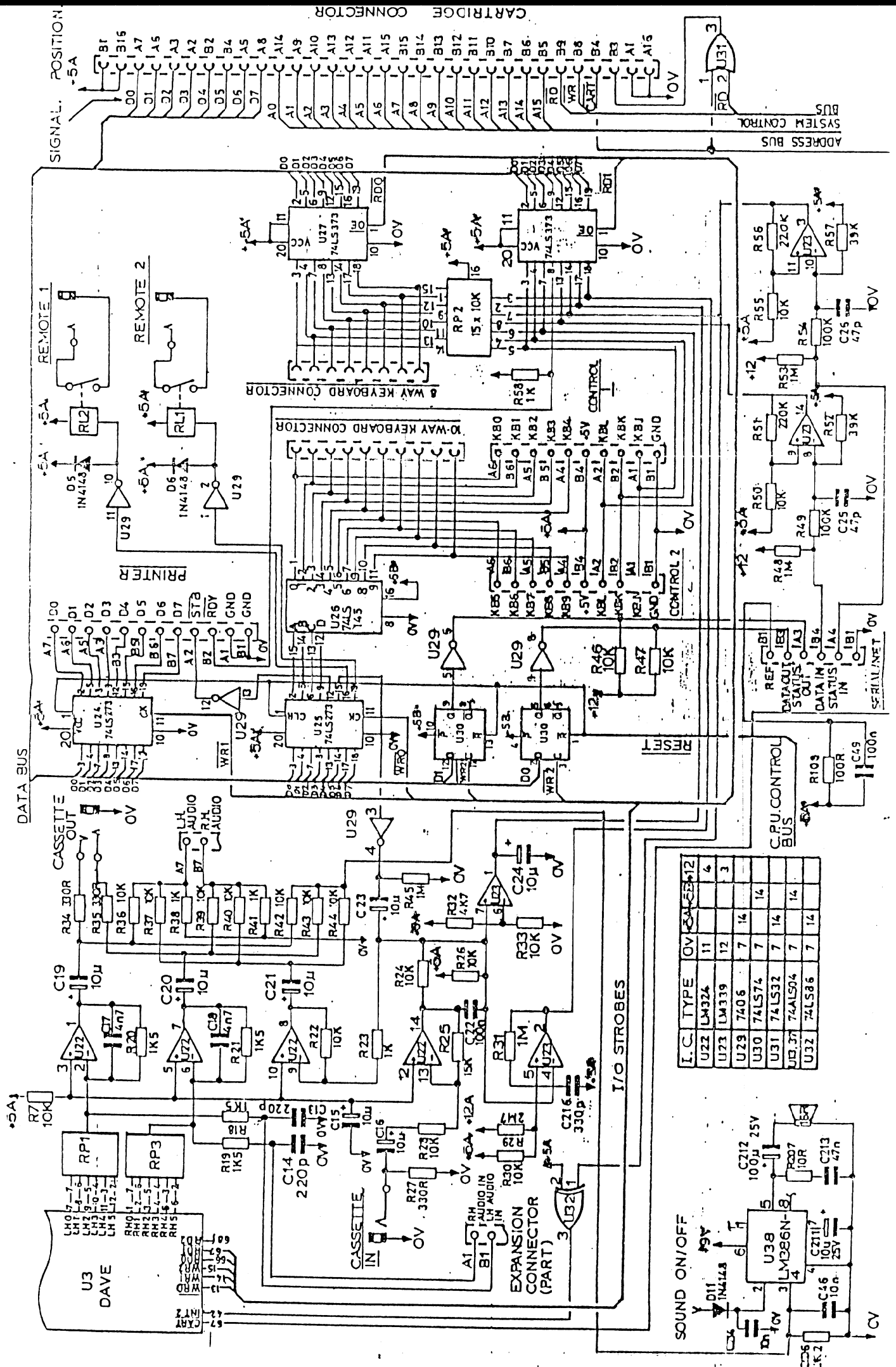
PC0 34 J5
PC1 36 J7
PC2 38 J9
PC3 40 J11
PC4 42 J13
PC5 44 J15
PC6 46 J17
PC7 48 J19

ECO 47
EC1 48
EC2 49
EC3 50
EXTC 46
VSYNC 45
HSYNC 44
14M 5
8M 1
1M 1

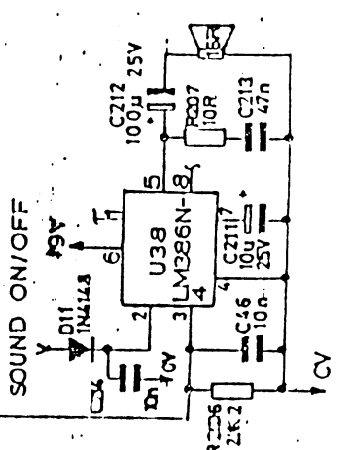
LOCATE 1A30
GND 1A31
GND 1B19
GND 1B20
GND 1B21
GND 1B22
GND 1B23
GND 1B32

EXPANSION CONNECTOR (PART)

MONITOR (PART)



| I.C. | TYPE | OV | VALUES |
|--------|---------|----|--------|
| U22 | LM324 | 11 | 4 |
| U23 | LM339 | 12 | 3 |
| U29 | 7406 | 7 | 14 |
| U30 | 74LS74 | 7 | 14 |
| U31 | 74LS32 | 7 | 14 |
| U33,37 | 74ALS04 | 7 | 14 |
| U32 | 74LS86 | 7 | 14 |



SYSTEM CONTROL BUS
ADDRESS BUS

CARTRIDGE CONNECTOR

SIGNAL POSITION
-5A

DATA BUS

I/O STROBES

C.P.U. CONTROL BUS
REF. OUT, B1
DATA OUT, B3
STATUS, O, A3
DATA IN, B4
STATUS, IN, B1
SERIAL NET, OV

10-WAY KEYBOARD CONNECTOR

8-WAY KEYBOARD CONNECTOR

PRINTER

REMOTE 1

REMOTE 2

SOUND ON/OFF

U3 DAVE

U38

U37

U36

U35

U34

U33

U32

U31

U30

U29

U28

U27

U26

U25

U24

U23

U22

U21

U20

U19

U18

U17

U16

U15

U14

U13

U12

U11

U10

U9

U8

U7

U6

U5

U4

U3

U2

U1

U0

U-1

U-2

U-3

U-4

U-5

U-6

U-7

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