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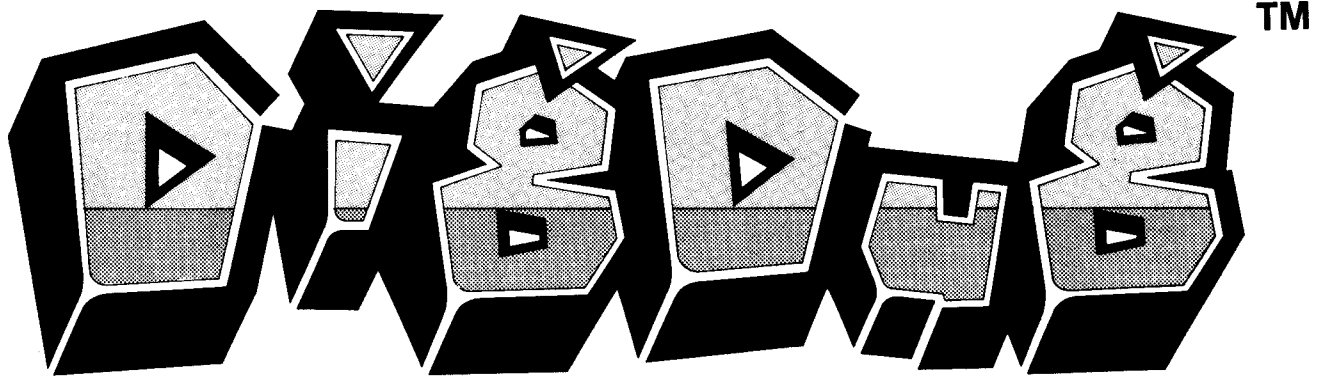


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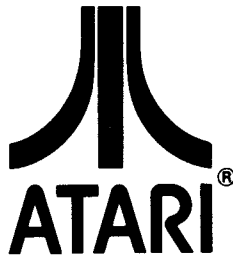


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Schematic Package Supplement to



Operation, Maintenance and Service Manual



 A Warner Communications Company

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Table of Contents

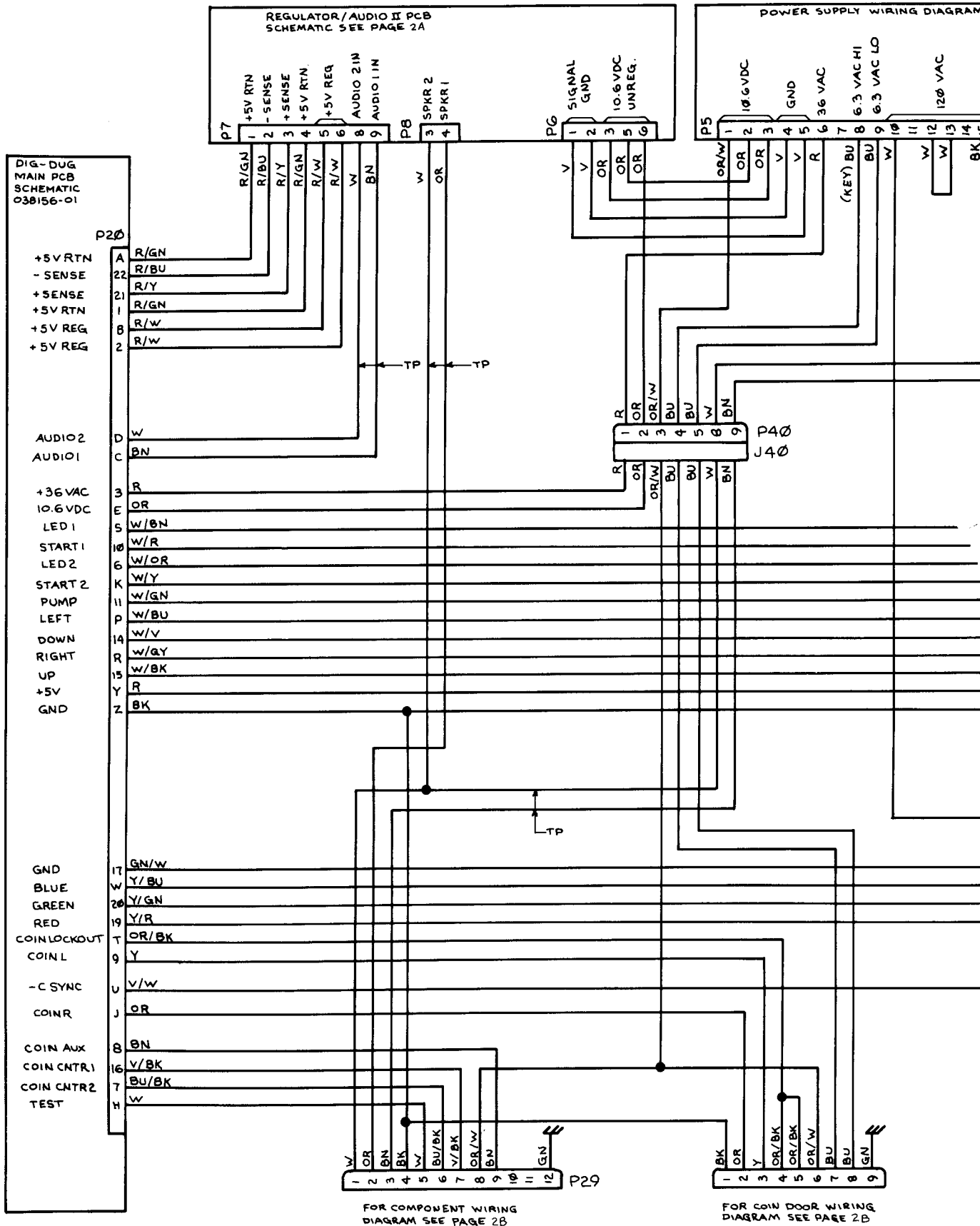
Sheet 1A	You Are Here
Sheet 1B	Dig Dug Upright Wiring Diagram (038294-01 A)
Sheet 2A	Color Raster-Scan Power Supply Wiring Diagram (037669-01 C) Regulator/Audio II PCB Schematic Diagram (035435-05 A)
Sheet 2B	Coin Door Wiring Diagram (037542-01 A) Utility Panel Wiring Diagram (038004-01 A) Fluorescent Light and Speaker Wiring Diagram (035833-01 A)

Game PCB Schematics, Sheets 3A—8A

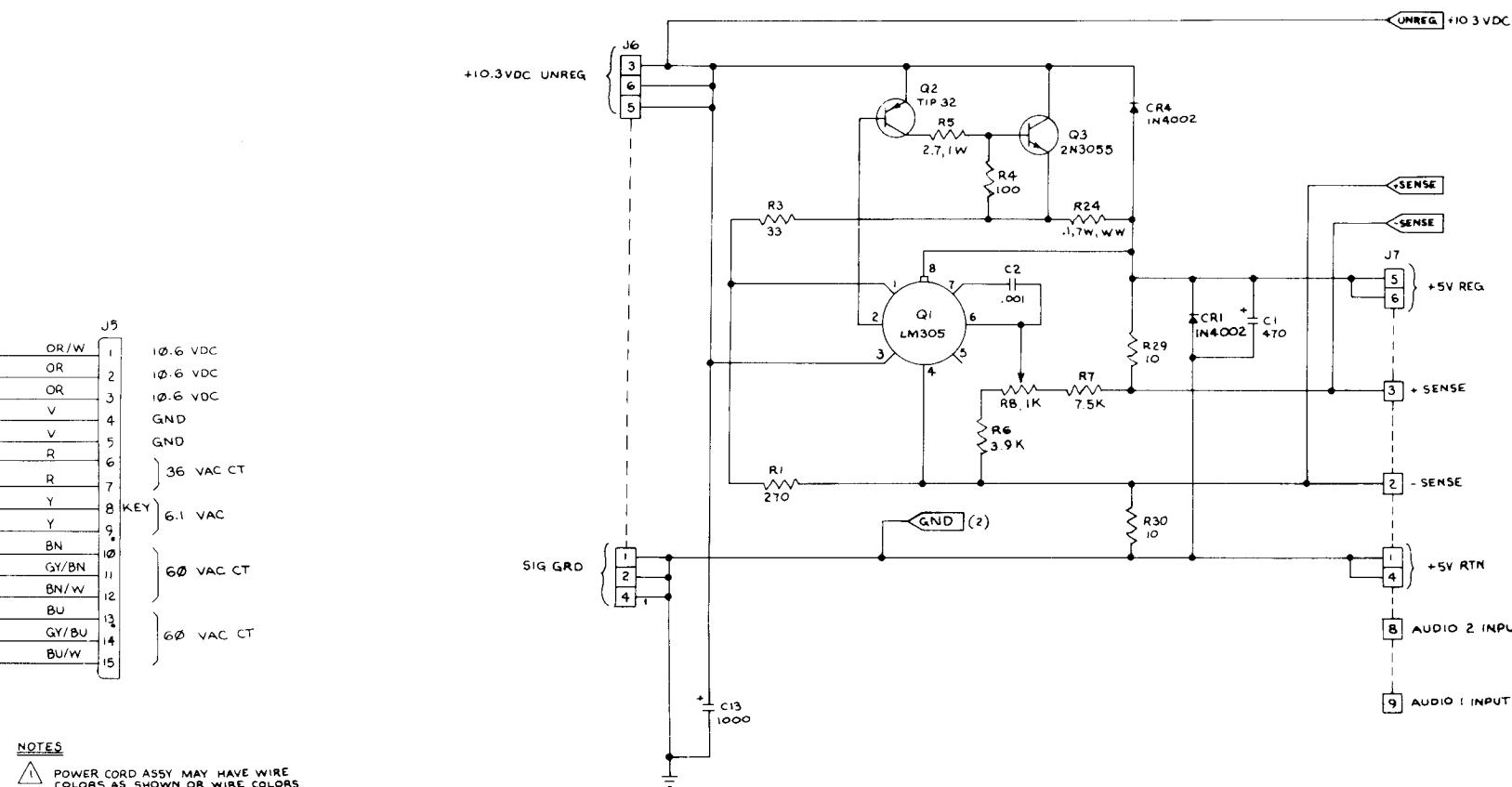
Sheet 3A	CPU PCB Power Input, Clock, NMI, Watchdog, and Memory Map
Sheet 3B	1st Priority CPU, 2nd Priority CPU
Sheet 4A	3rd Priority CPU, CPU PCB Address Decoder
Sheet 4B	Switch Inputs, Coin Door and Control Panel Outputs
Sheet 5A	Audio Output
Sheet 5B	Sync Generator
Sheet 6A	Playfield Generator
Sheet 6B	Motion Object RAM, Motion Object Address Generator, Decoder and Match Line Flag
Sheet 7A	Motion Object Generator
Sheet 7B	Video Output, Video Color Controller
Sheet 8A	High-Score Table
Sheet 8B	Electrohome 19-Inch Color Raster-Scan Video Display Schematic Diagram

NOTE
This staple temporarily holds the schematic package together. Remove the staple before using the schematics.

Dig Dug Upright Game Wiring Diagram



Regulator/Audio II PCB Schematic Diagram



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Dig Dug Power Supply and Reg./Audio II PCB

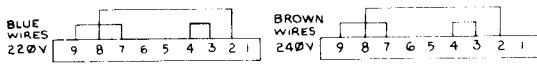
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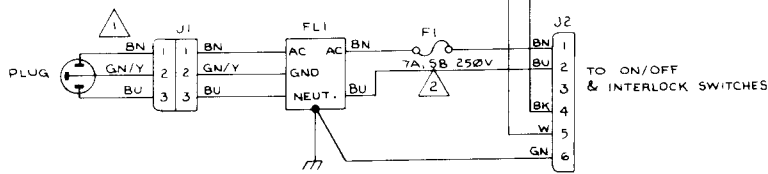
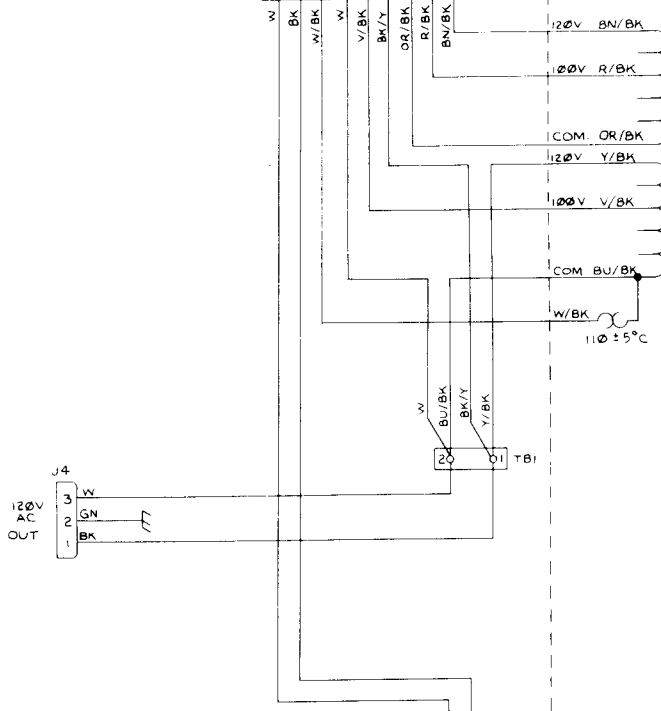
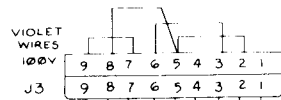
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Color Raster Power Supply Wiring Diagram



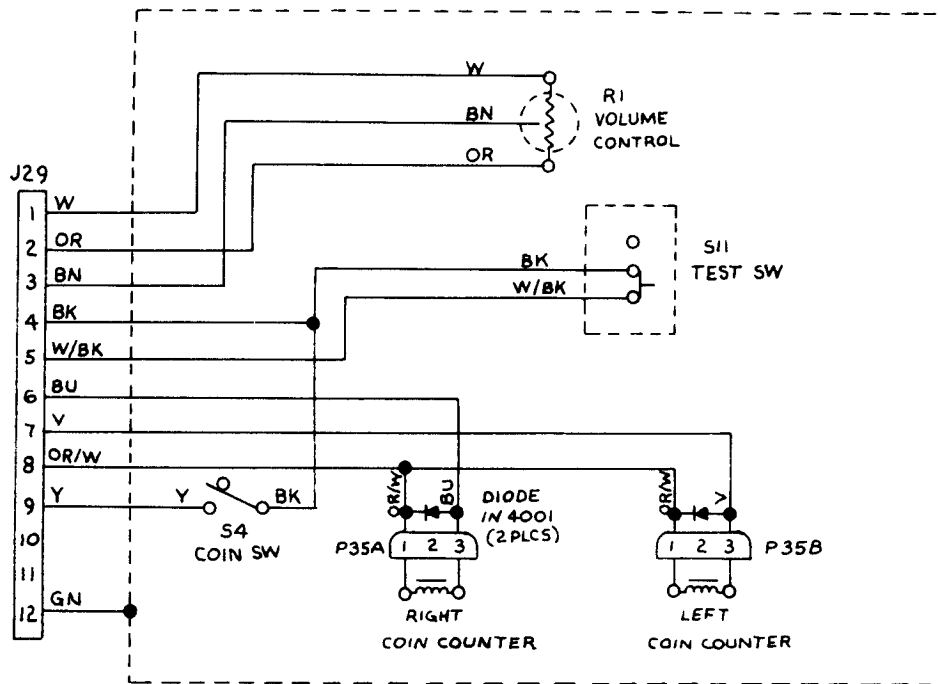
VOLTAGE SELECTION BLOCKS



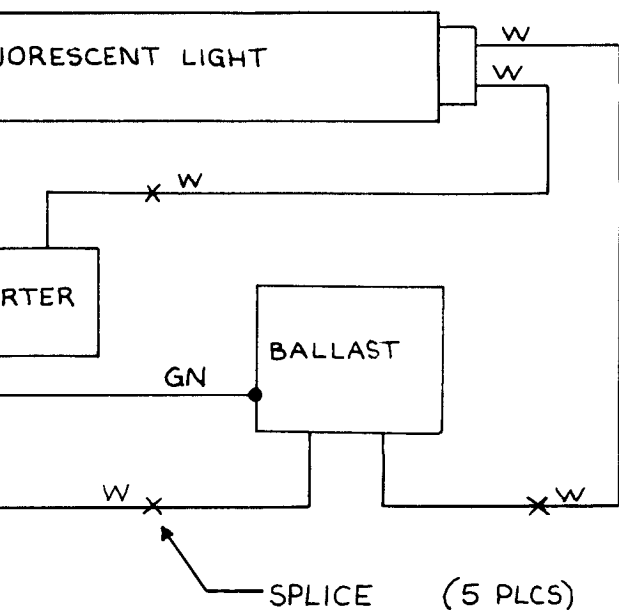
NOTES

- △ PO
- △ CO
- △ A:
- △ O:
- △ W:
- △ US
- △ 2:

Utility Panel Wiring Diagram



And Speaker Wiring Diagram



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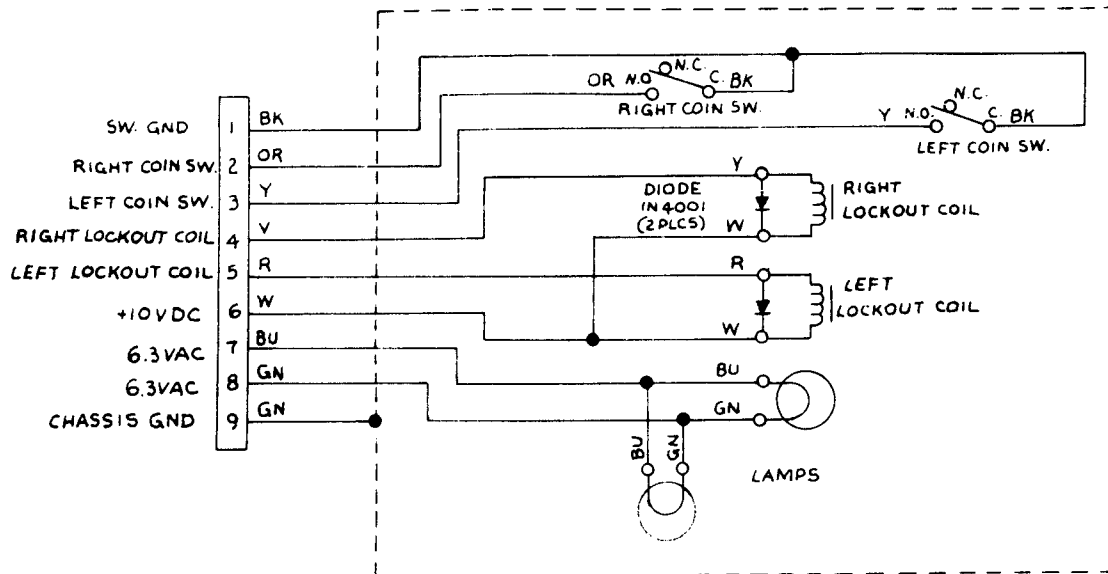
Dig Dug Game Wiring Interfaces

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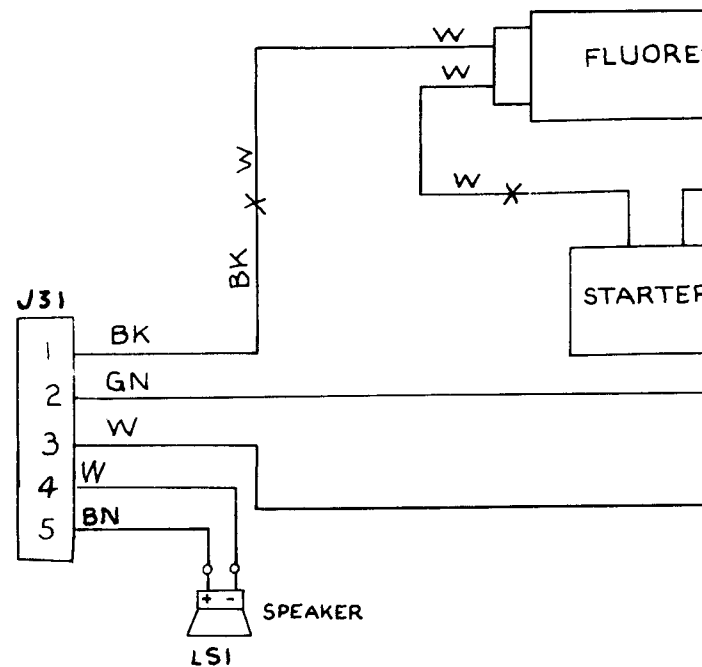
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Coin Door Wiring Diagram

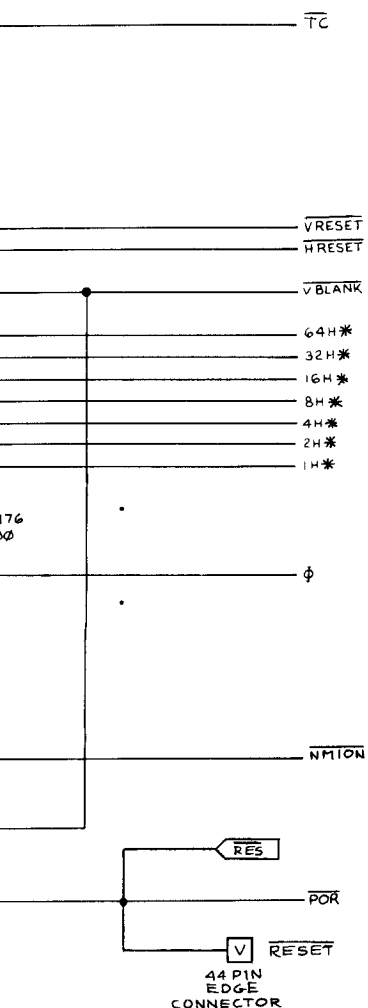


Fluorescent Light And



MEMORY MAP

HEXA- DECIMAL ADDRESS	R/W	DATA								FUNCTION
		D7	D6	D5	D4	D3	D2	D1	D0	
0000-3FFF	R	D	D	D	D	D	D	D	D	1st Priority Z80 CPU ROM (16K)
0000-1FFF	R	D	D	D	D	D	D	D	D	2nd Priority Z80 CPU ROM (8K)
0000-0FFF	R	D	D	D	D	D	D	D	D	3rd Priority Z80 CPU ROM (4K)
6800-680F	W					D	D	D	D	Audio Control
6810-681F	W					D	D	D	D	Audio Control
6820	W								D	0 = Reset IRQ1 (Latched)
6821	W								D	0 = Reset IRQ2 (Latched)
6822	W								D	0 = Enable NMI3 (Latched)
6823	W								D	0 = Reset 2nd and 3rd Z80 CPUs (Latched)
6825	W								D	Custom Chip 53 Mode Control (Latched)
6826	W								D	Custom Chip 53 Mode Control (Latched)
6827	W								D	Custom Chip 53 Mode Control (Latched)
6830	W									Watchdog Reset
7000	R/W	D	D	D	D	D	D	D	D	Custom Chip 06—Data
7100	R/W	D	D	D	D	D	D	D	D	Custom Chip 06—Command
8000-87FF	R/W	D	D	D	D	D	D	D		2K Playfield RAM
8800-8BFF	R/W	D	D	D	D	D	D	D	D	1K Motion RAM (PIC)
9000-93FF	R/W	D	D	D	D	D	D	D	D	1K Motion RAM (HPOS, VPOS)
9800-9BFF	R/W	D	D	D	D	D	D	D	D	1K Motion RAM (FLIP)
A000	W								D	Playfield Select (Latched)
A001	W								D	Playfield Select (Latched)
A002	W								D	Playfield Color Select (Latched)
A003	W								D	Alphanumeric Color Select (Latched)
A004	W								D	Playfield Color Select (Latched)
A005	W								D	Playfield Color Select (Latched)
A007	W								D	Flip Video
B800-B83F	W	D	D	D	D	D	D	D	D	Write EAROM Address and Data
B800	R	D	D	D	D	D	D	D	D	Read EAROM Data
B840	W					D	D	D	D	Write EAROM Control



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Dig Dug CPU PCB Schematic Diagram

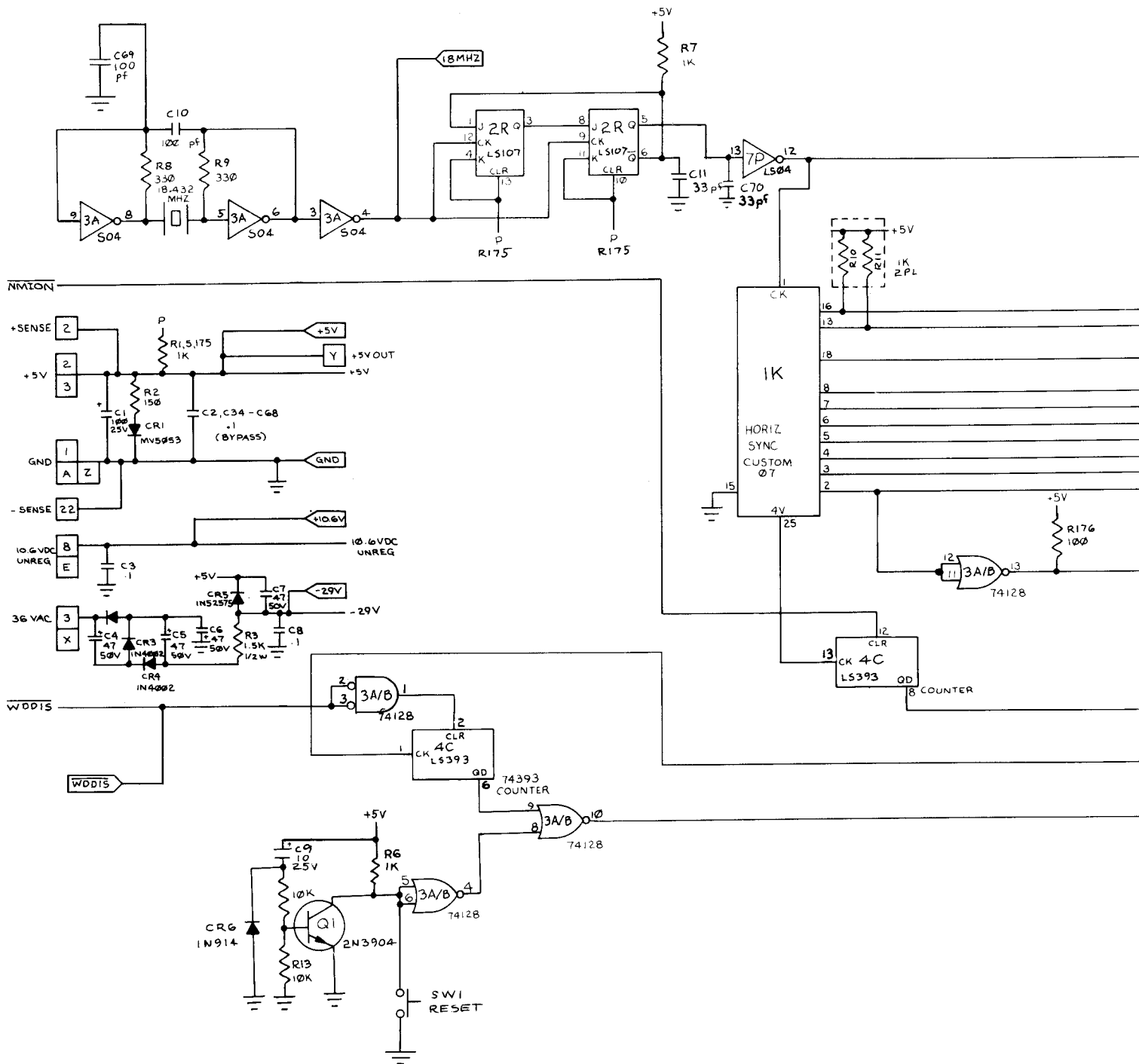
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CPU PCB Power Input, Clock, NMI, and Watchdog





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Dig Dug CPU PCB Schematic Diagram

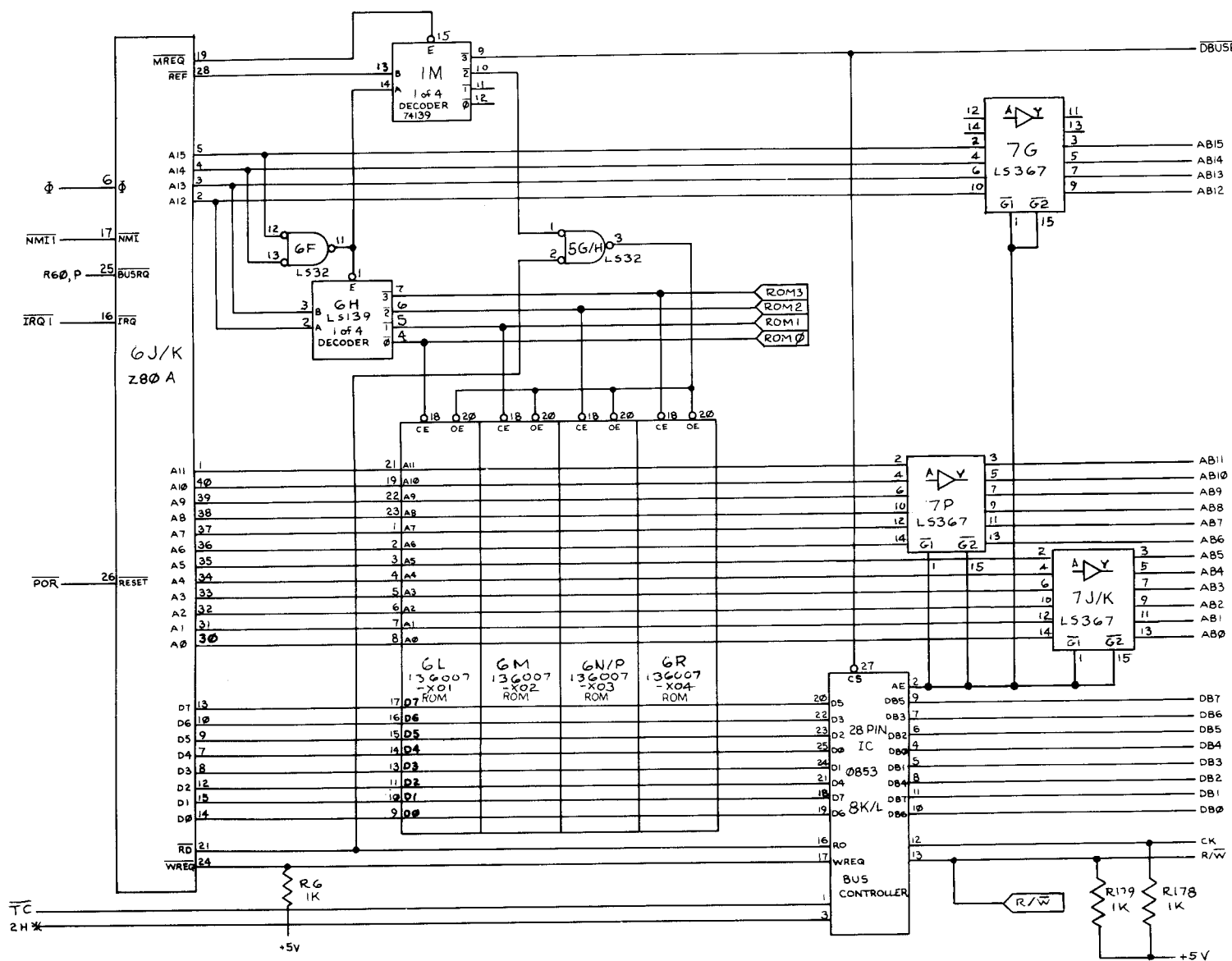
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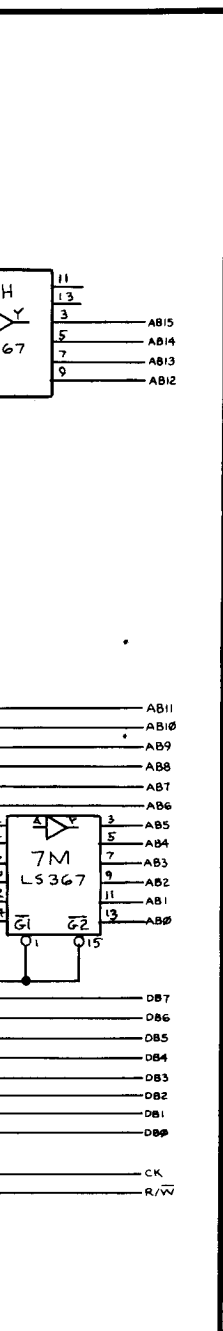


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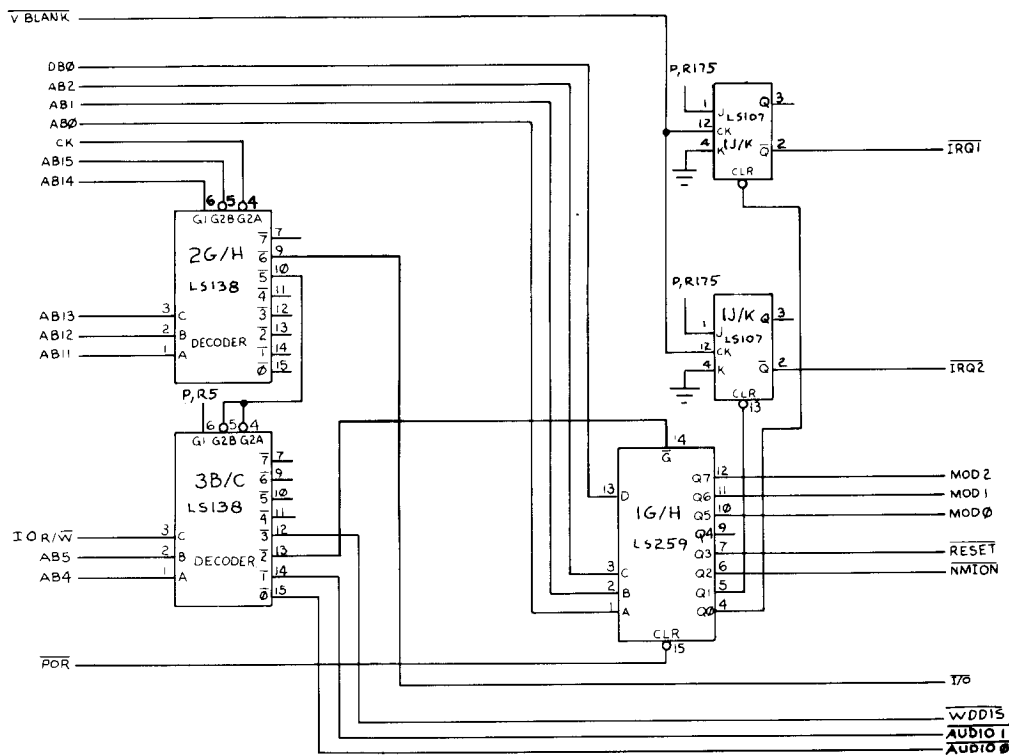
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1st Priority CPU





CPU PCB Address Decoder



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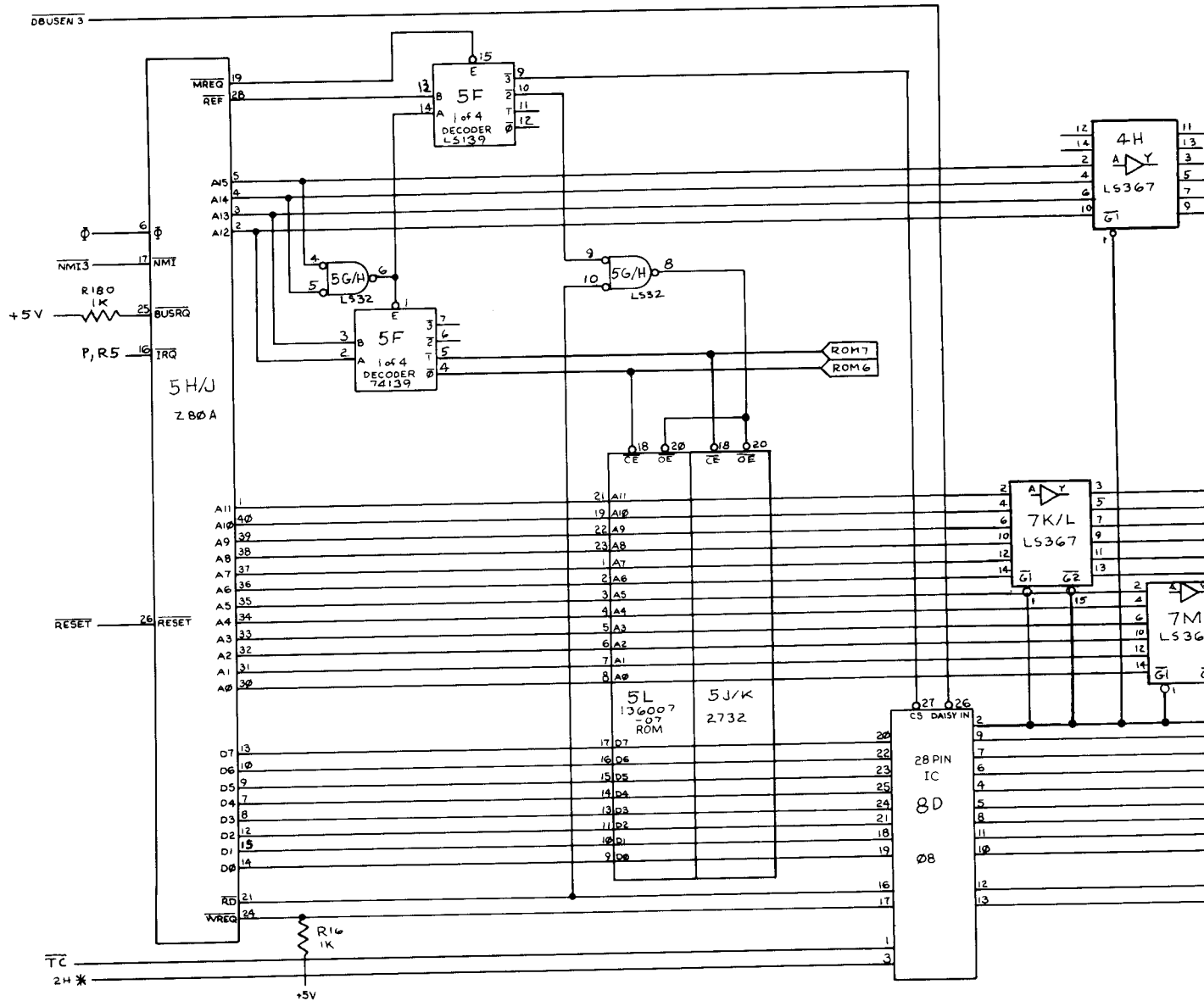
Dig Dug CPU PCB Schematic Diagram

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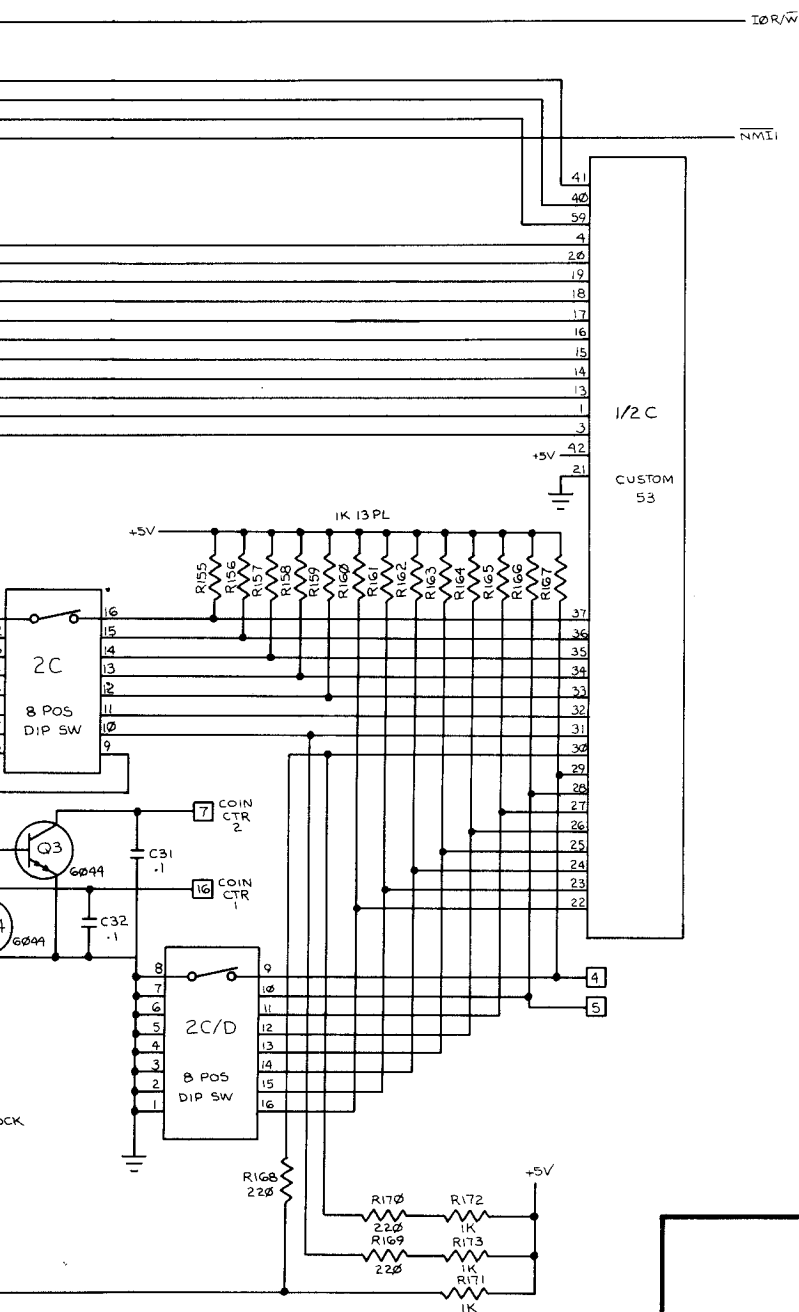
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3rd Priority CPU



Control Panel Outputs



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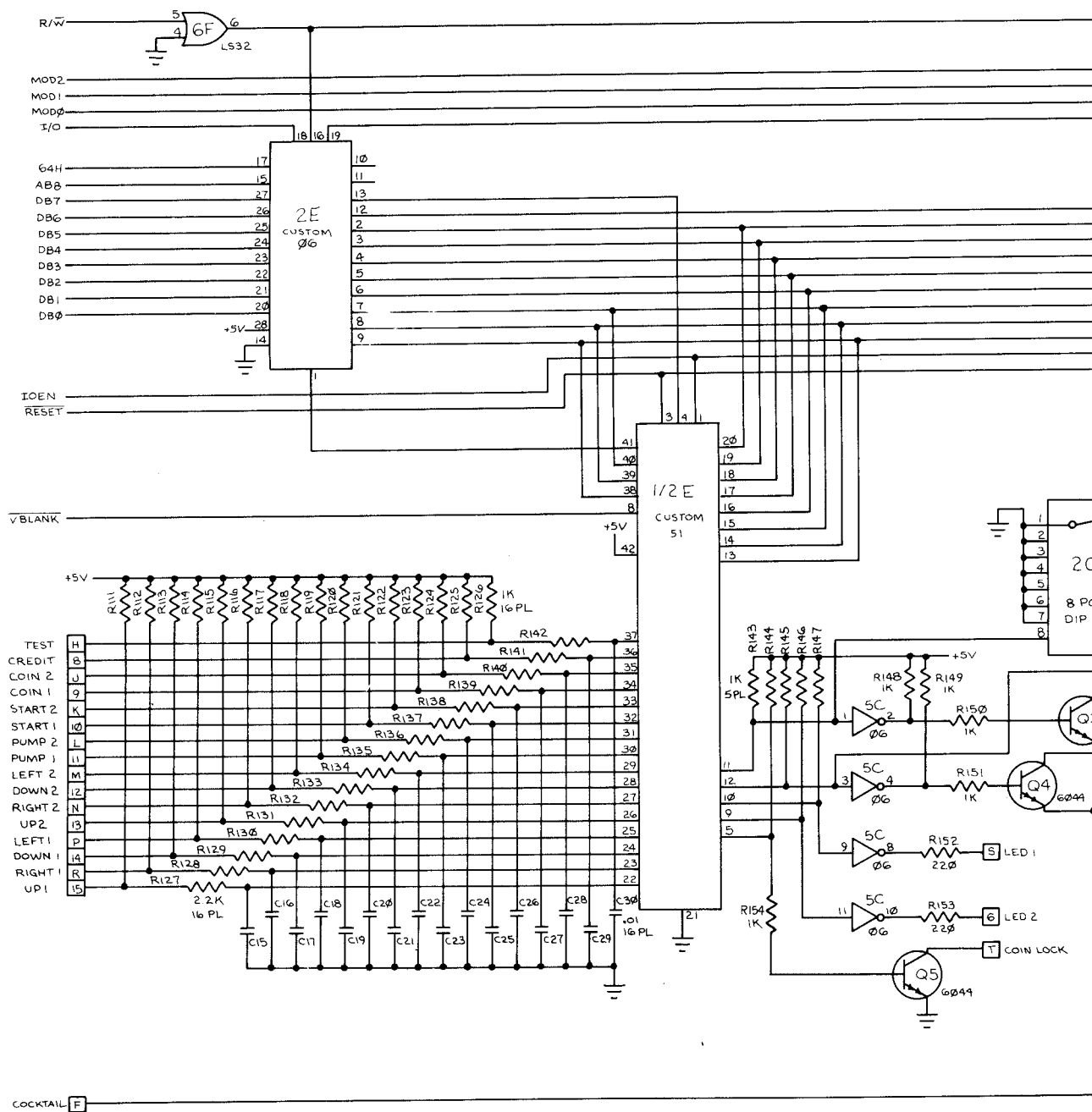
Dig Dug CPU PCB Schematic Diagram

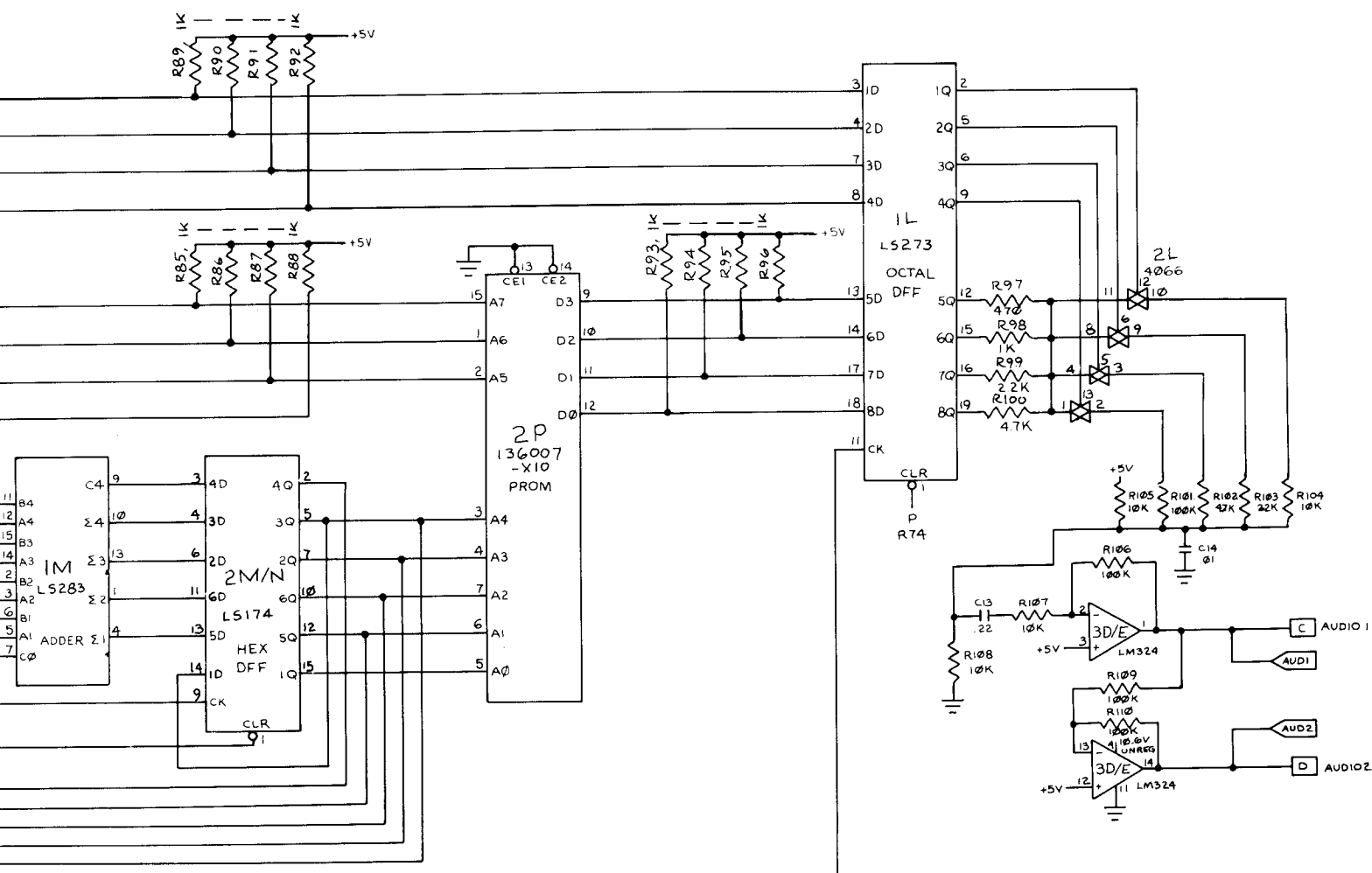
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Switch Inputs, Coin Door and Control P





I/O 2H*



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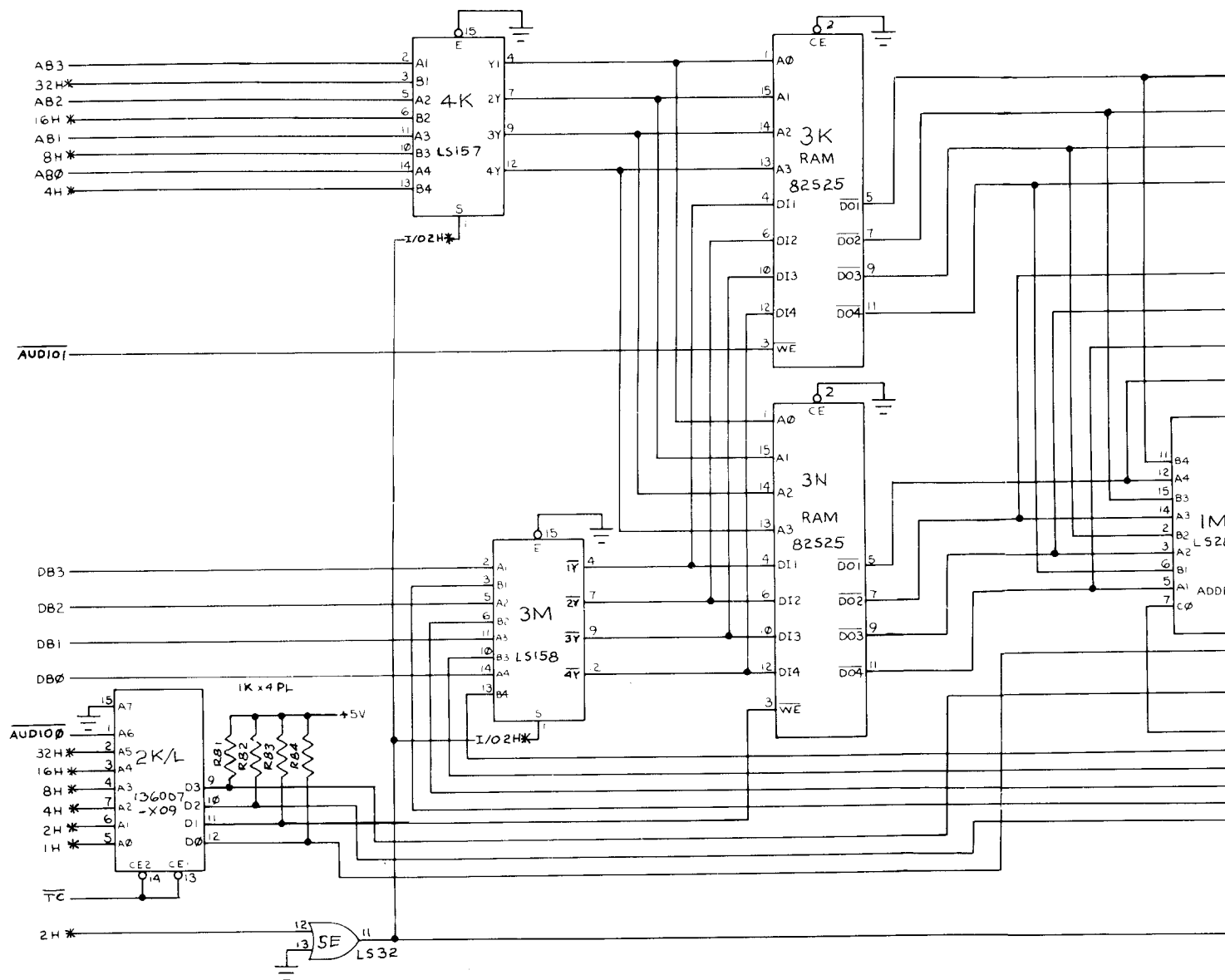
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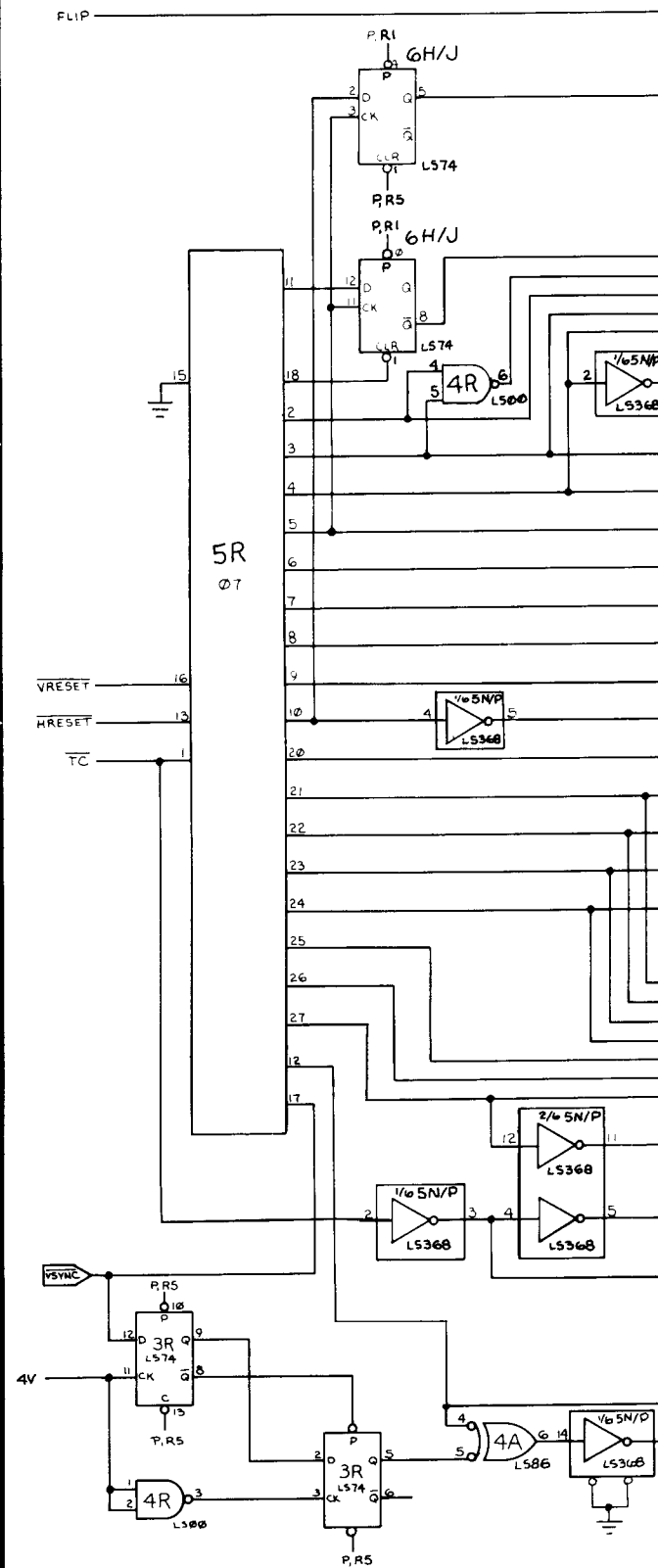
Audio



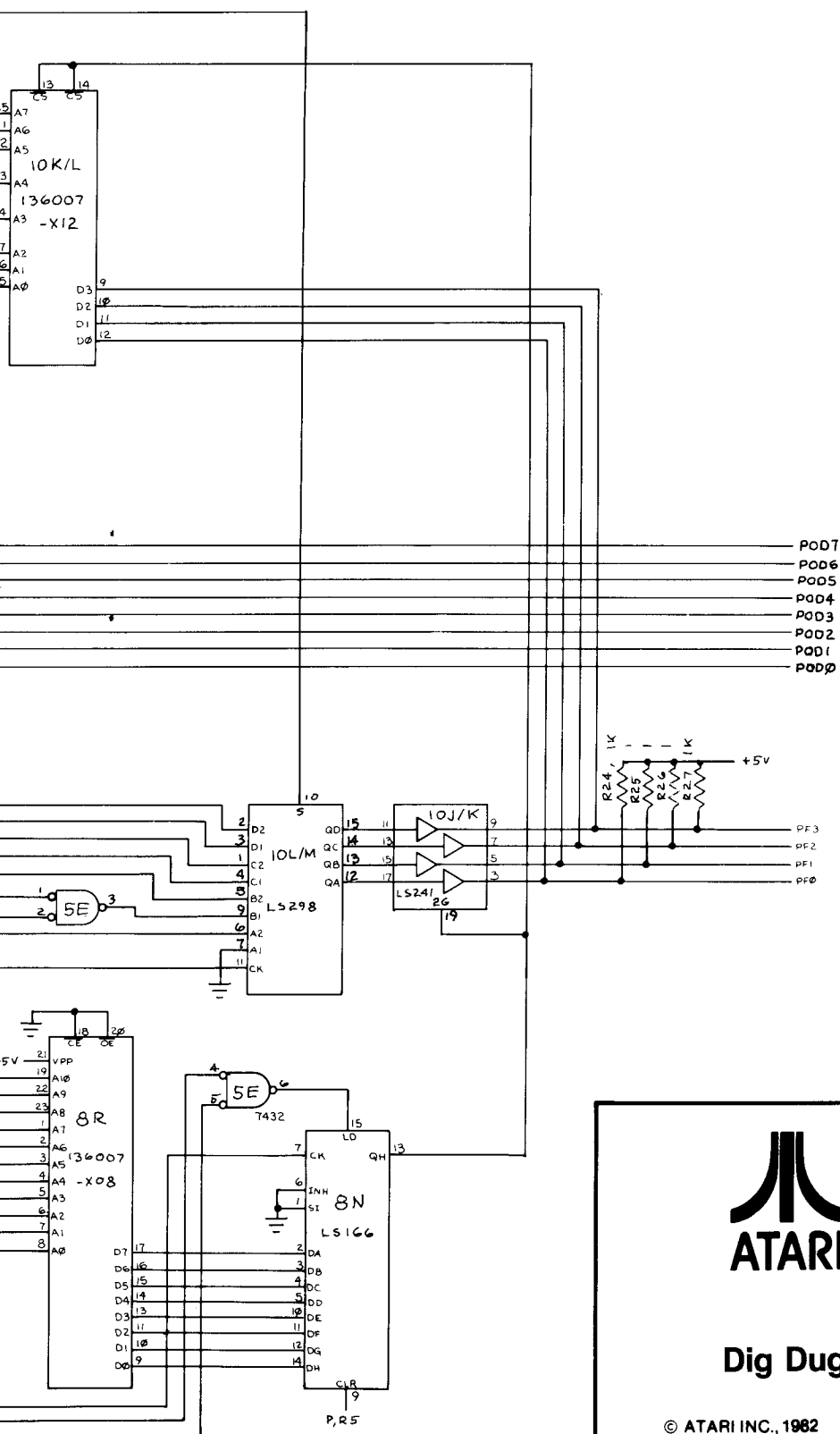


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Sync Generator



FLIP



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Dig Dug Video PCB Schematic Diagram

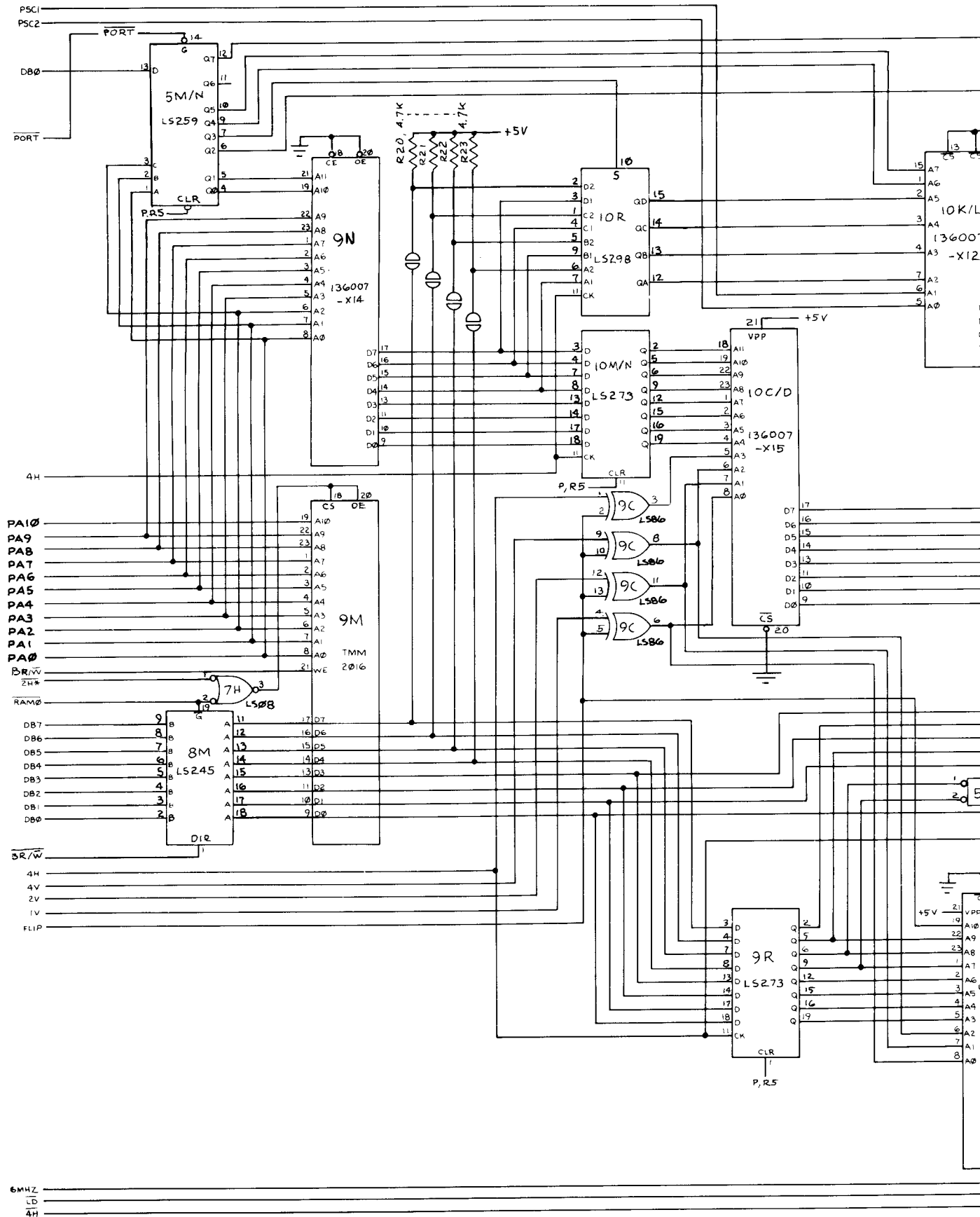
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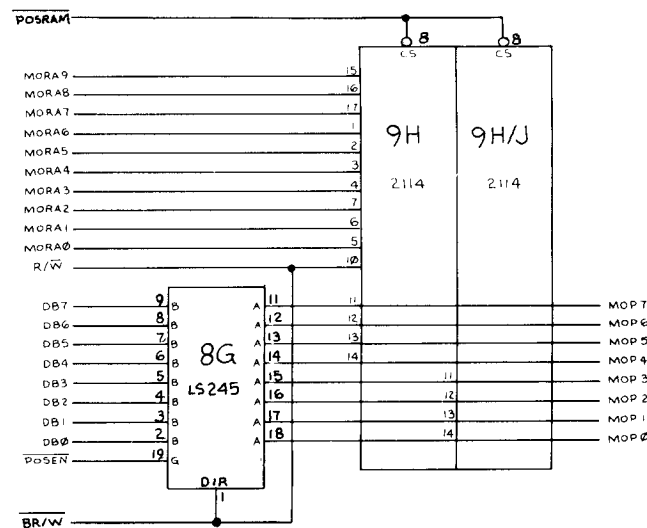
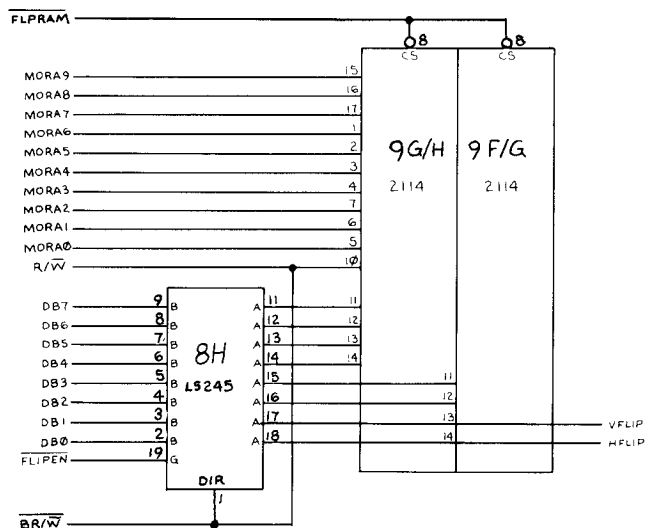
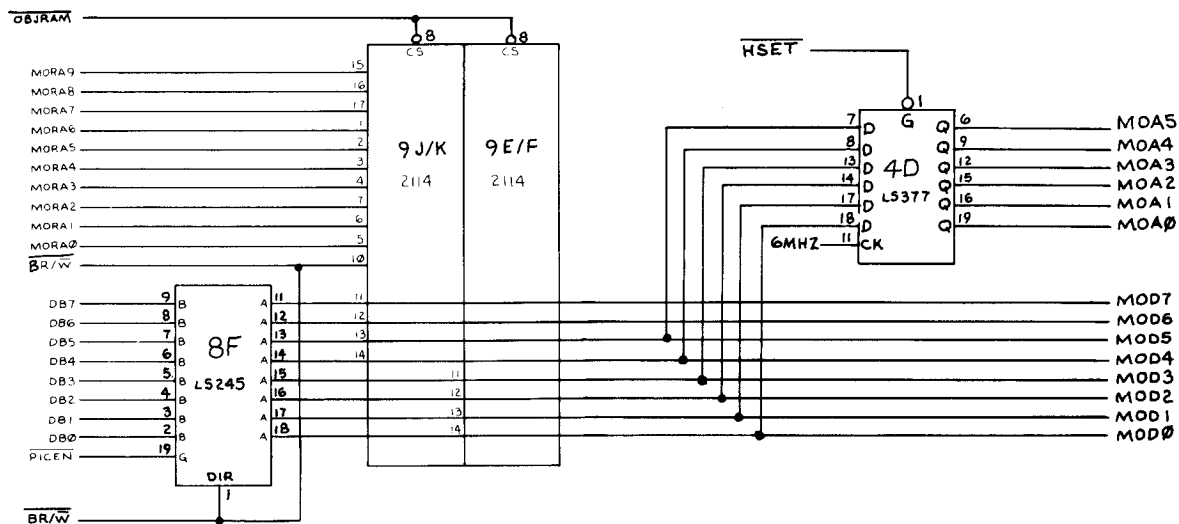
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Playfield Generator



Motion Object RAM



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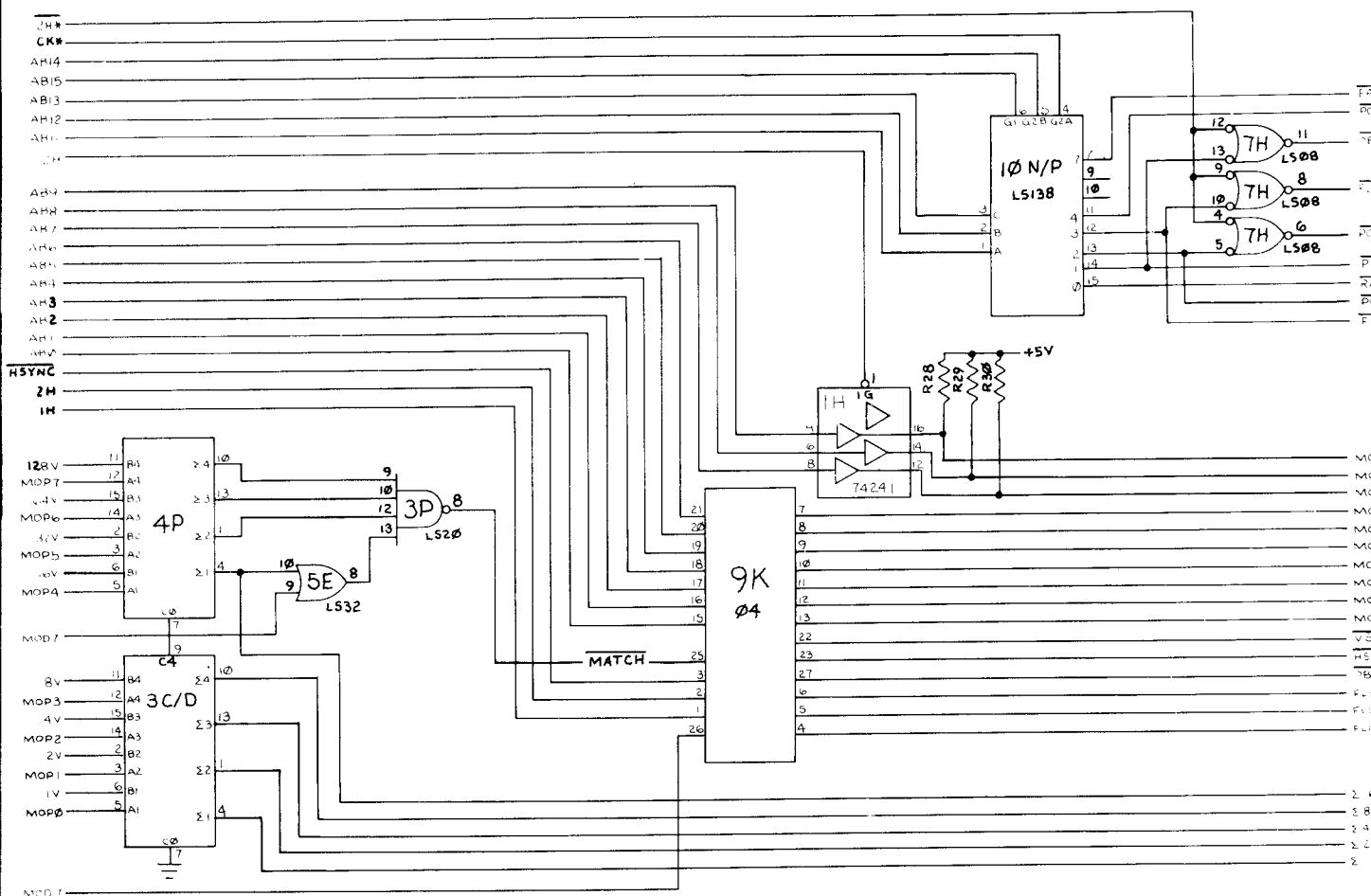
Dig Dug Video PCB Schematic Diagram

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Motion Object Address Generator, Decoder, and Match Line Flag



Generator

The schematic diagram illustrates the electrical connections for the Dig Dug video PCB. Key components include:

- Resistors:** R37 through R45 are shown as 1K ohm resistors.
- Capacitors:** C1 through C4 are shown as electrolytic capacitors.
- Integrated Circuits:** LS157 (4M), LS200 (2H/J), T4298 (T4298), and several other ICs are depicted.
- Connectors:** MOBJ0 through MOBJ3 are labeled as Motion Object Output connectors.

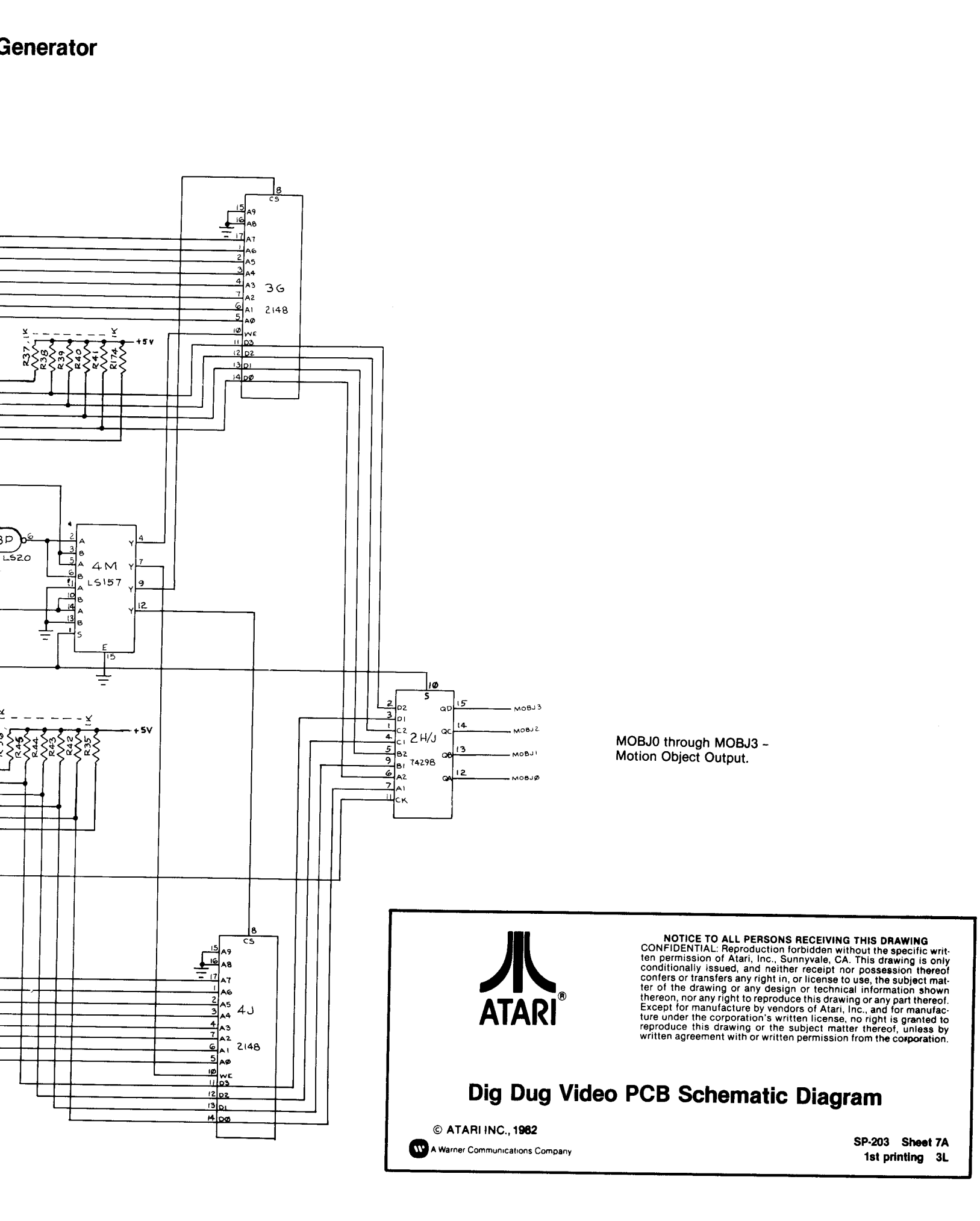
The diagram also shows power supply rails (+5V) and ground connections throughout the circuit.

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Dig Dug Video PCB Schematic Diagram

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1st printing 3L



Generator

3P
LS2.0

4M
LS157

2H/J
7429B

4J
2148

3G
2148

MOBJ0 through MOBJ3 -
Motion Object Output.

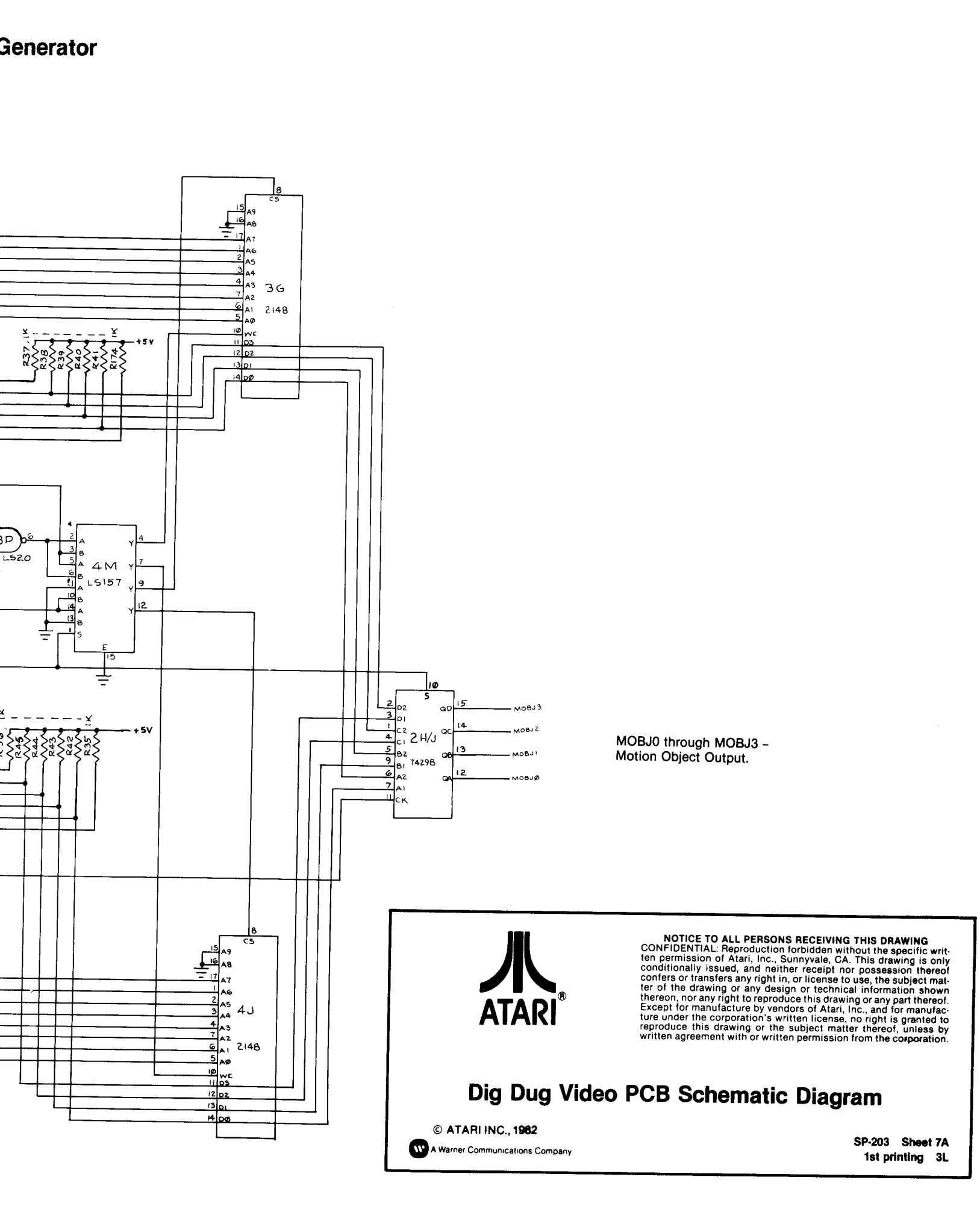
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Dig Dug Video PCB Schematic Diagram

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Generator

MOBJ0 through MOBJ3 -
Motion Object Output.

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Dig Dug Video PCB Schematic Diagram

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Generator

MOBJ0 through MOBJ3 -
Motion Object Output.

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Generator

MOBJ0 through MOBJ3 -
Motion Object Output.



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Generator

MOBJ0 through MOBJ3 - Motion Object Output.



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Generator

MOBJ0 through MOBJ3 -
Motion Object Output.

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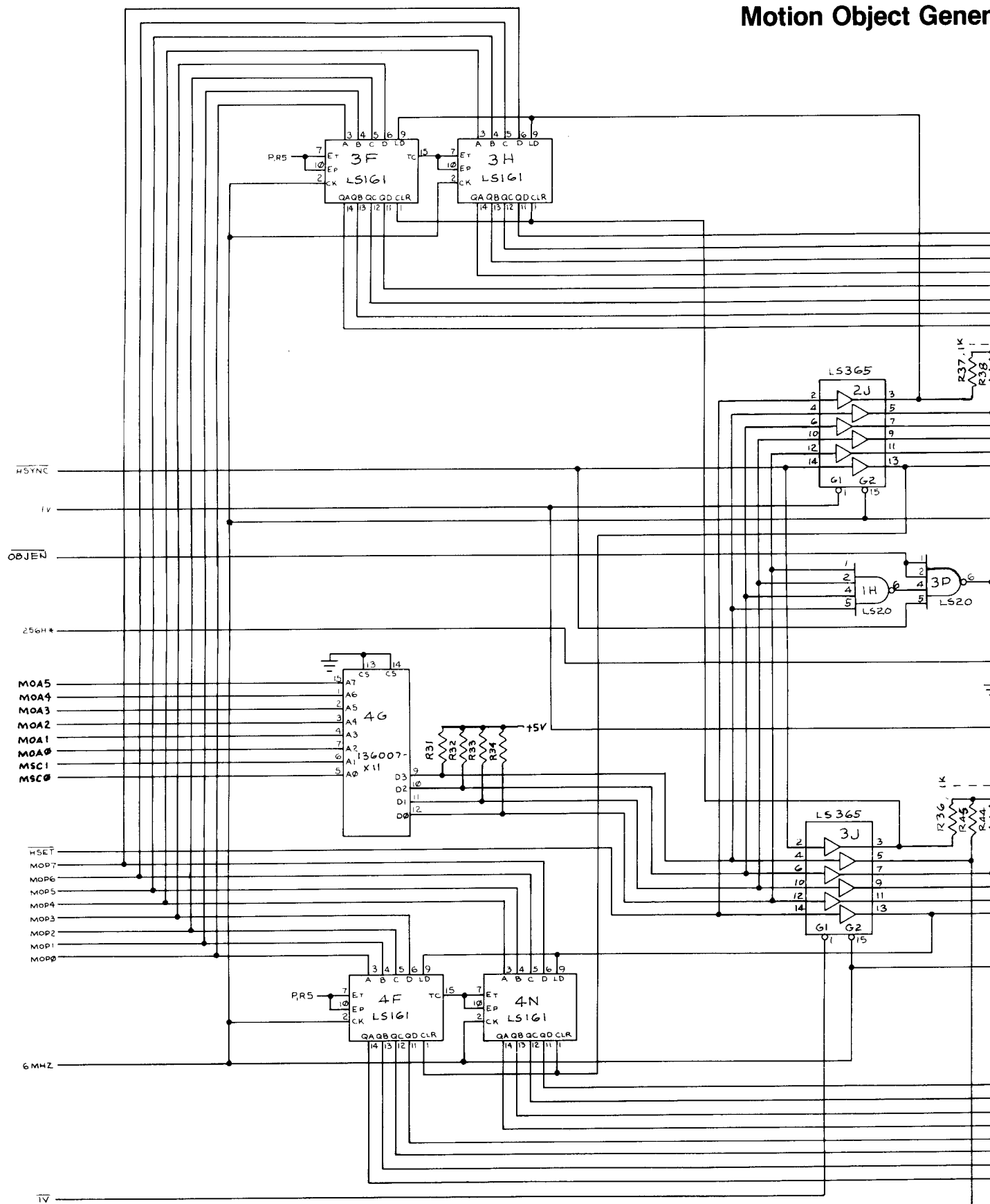
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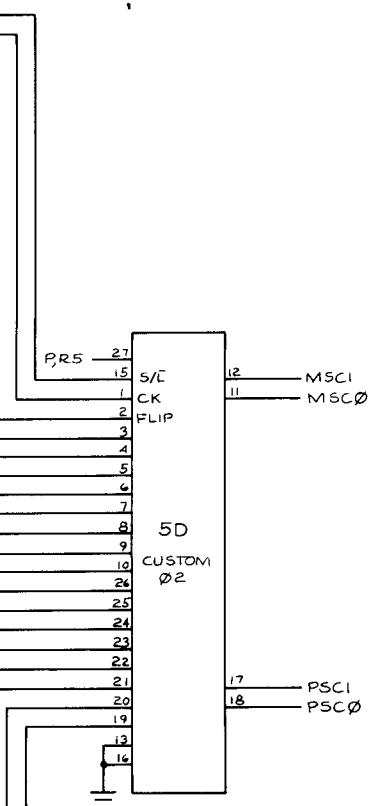
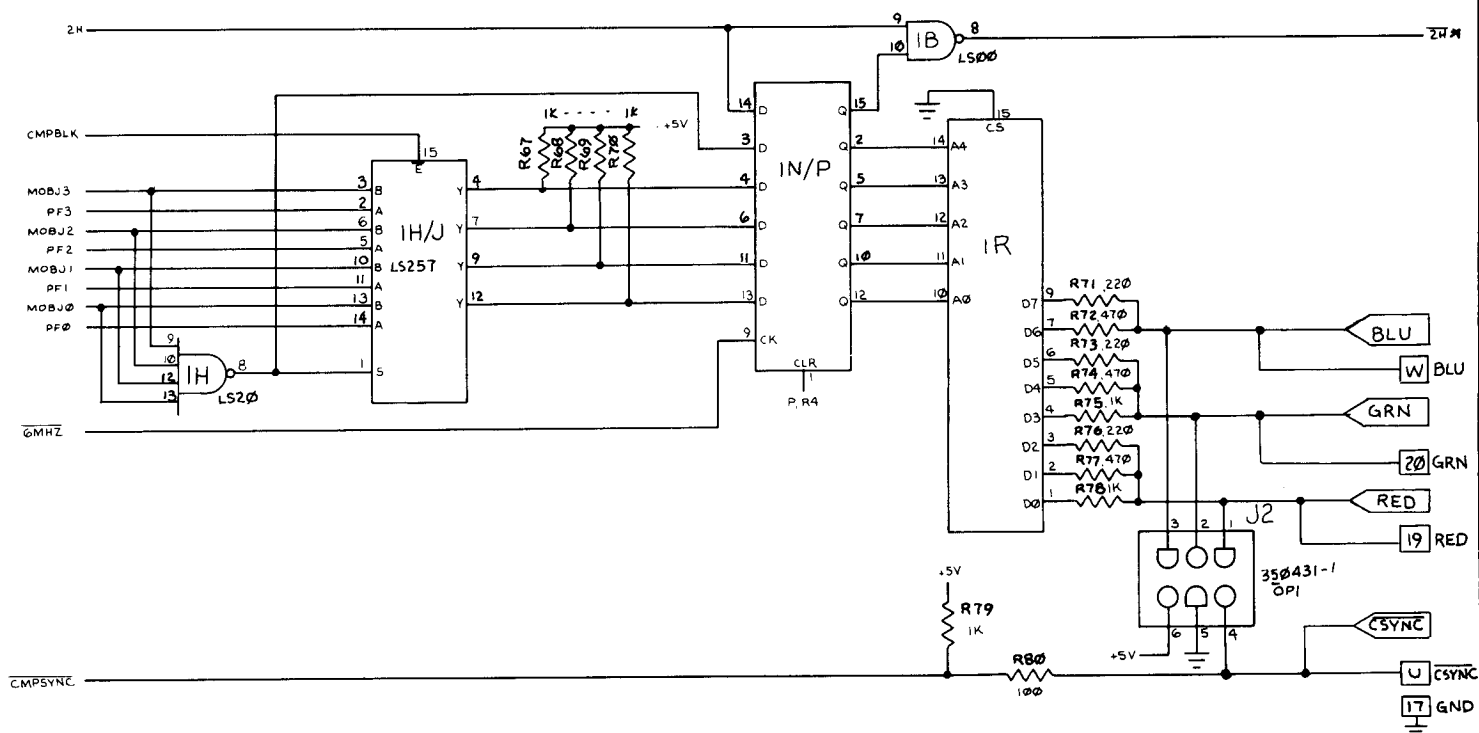
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Motion Object Gener



MOP0 through MOP7 - Motion Object
V and H Position Data.
MOBJA0 through MOBJA7 - Motion
Object Picture Address.

Video Output



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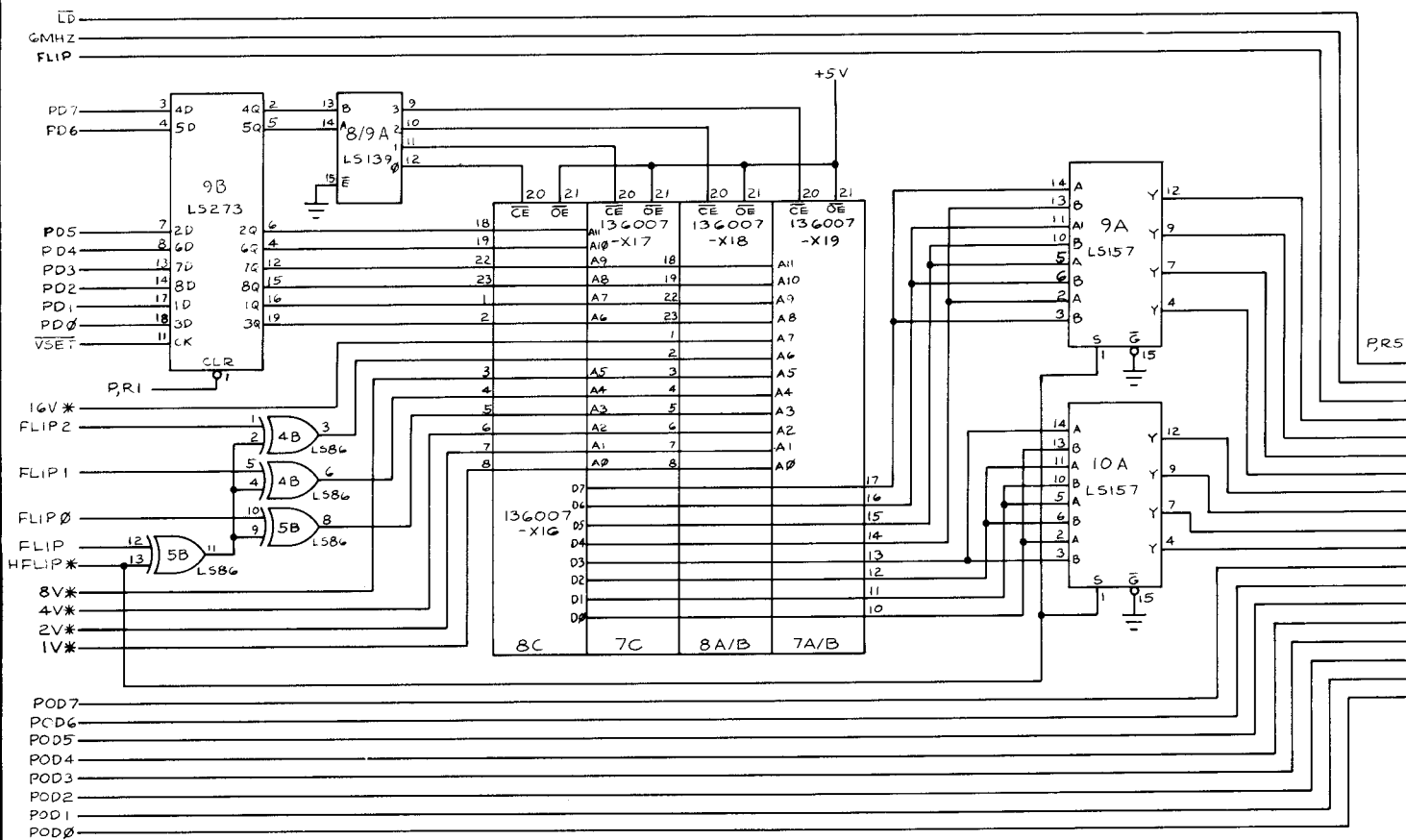
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Video Color Controller





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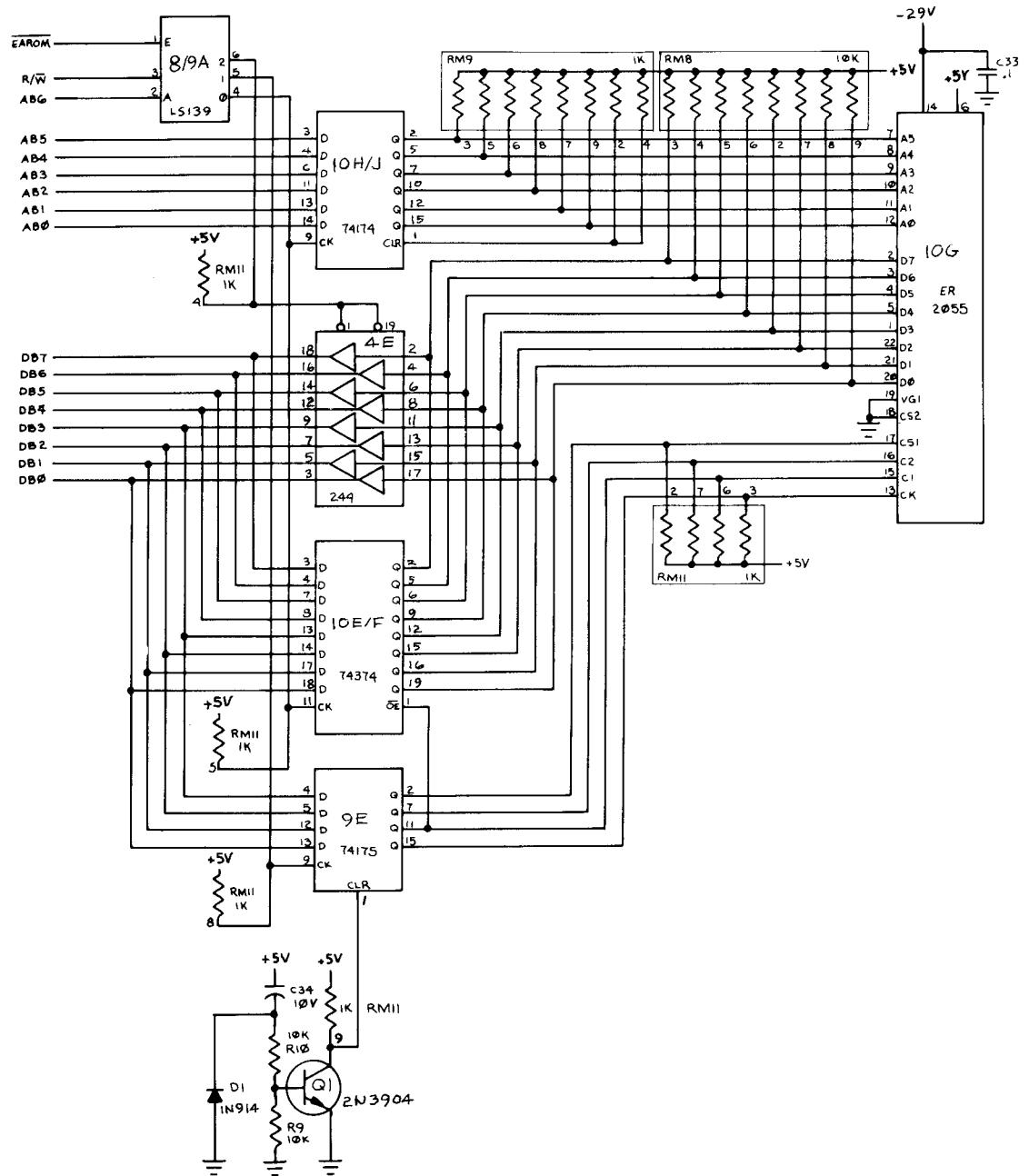
Dig Dug Video PCB Schematic Diagram

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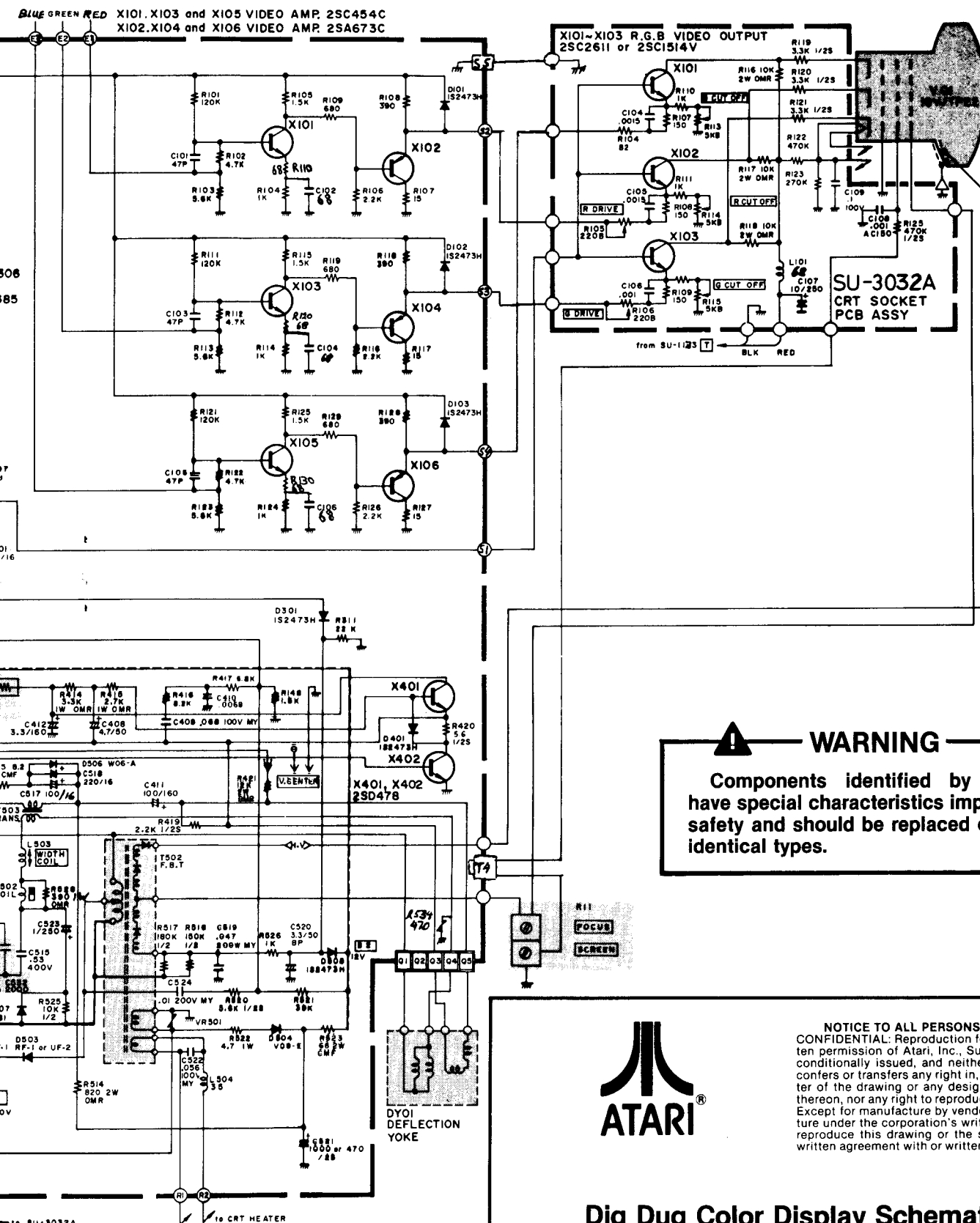
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High-Score Table



Schematic Diagram



Dig Dug Color Display Schematic Diagram

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1st printing 3L

Schematic Notes

Unless otherwise specified

Resistance: (Ω) (K $\rightarrow$ K Ω , M $\rightarrow$ M Ω), 1/4 (W) carbon resistor

Capacitance: 1 or higher $\rightarrow$ (pF), less than 1 $\rightarrow$ (μ F)

working voltage $\rightarrow$ 50 (V)

ceramic capacitor

Inductance: (μ H)

Electrolytic Cap: Capacitance Value (μ F)/working voltage (V),

NP $\rightarrow$ non-polar (or bipolar) electrolytic cap.

Refer to the parts list for additional component information.

Ⓢ indicates test point connection

Ⓢ indicates chassis ground unless otherwise specified

Hz indicates cycles per second

For **safety** purposes (and continuing reliability)

⚠ replace all components marked with safety symbol with identical type.

NOTE: FR $\rightarrow$ fusible resistor ($\text{---}\text{---}\text{---}$)

Parts identification on circuit boards:

e.g. SU1126A (R107 = R1107)

SU3030A (R113 = R3113)

Color Display Scheme

