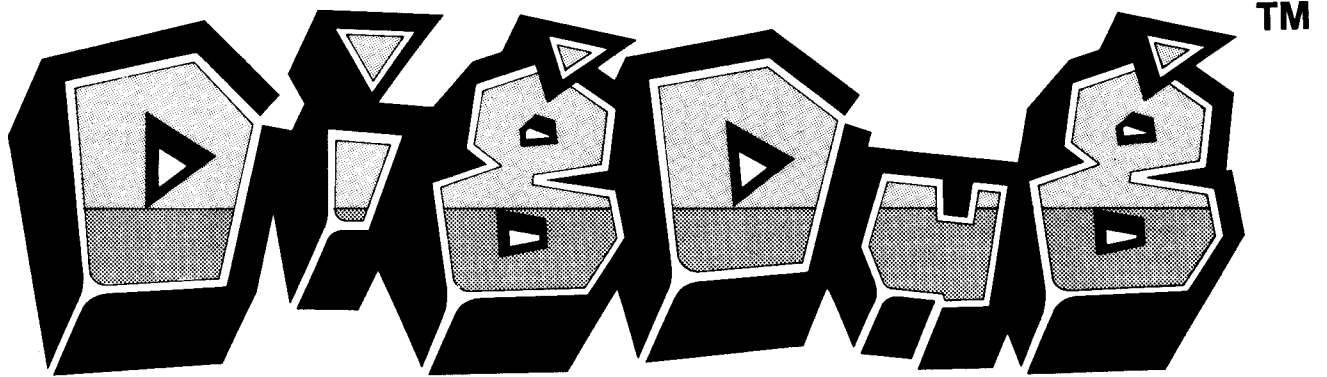
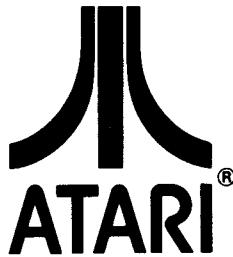


Schematic Package Supplement to



Operation, Maintenance and Service Manual



A Warner Communications Company

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Table of Contents

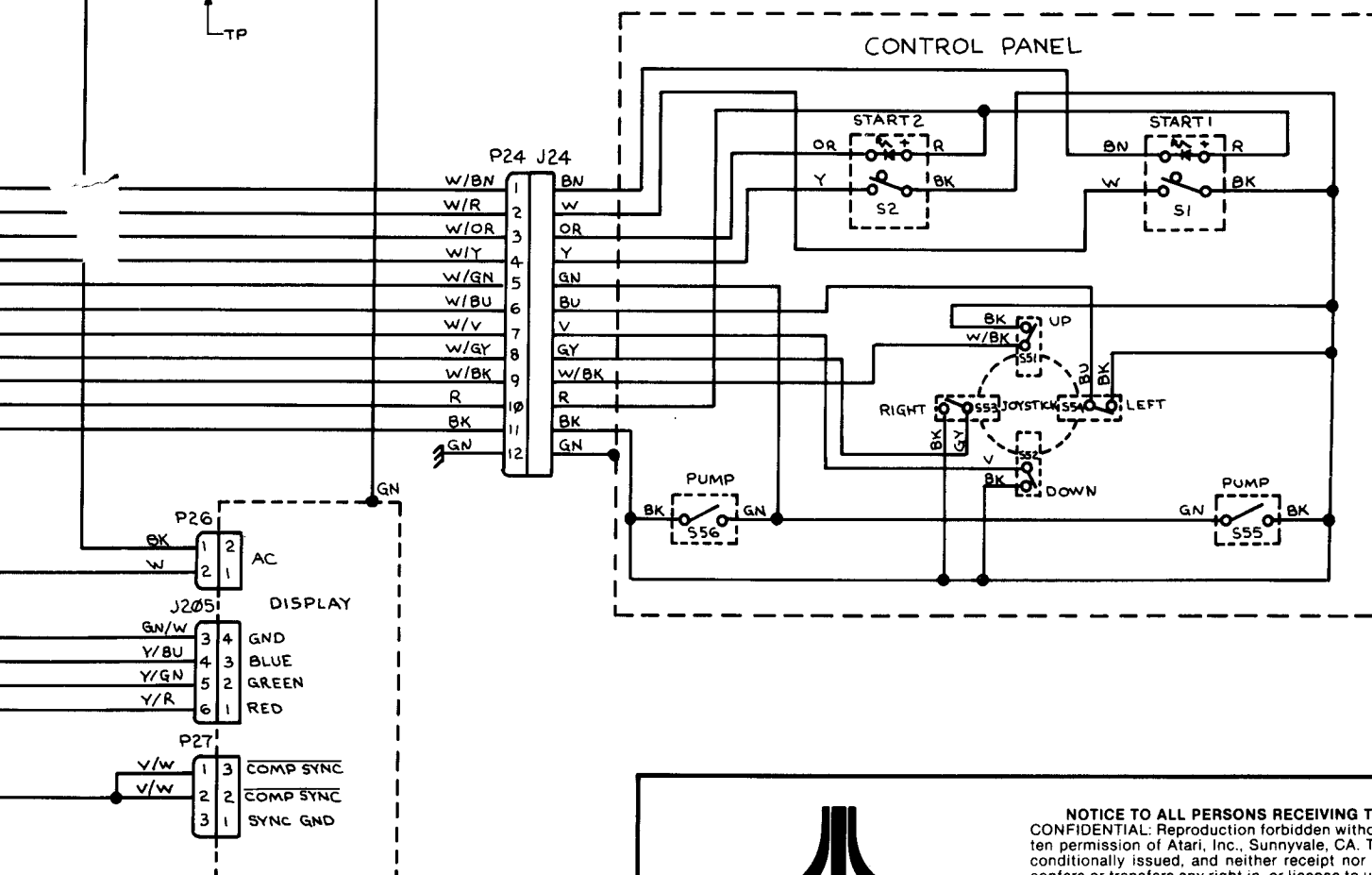
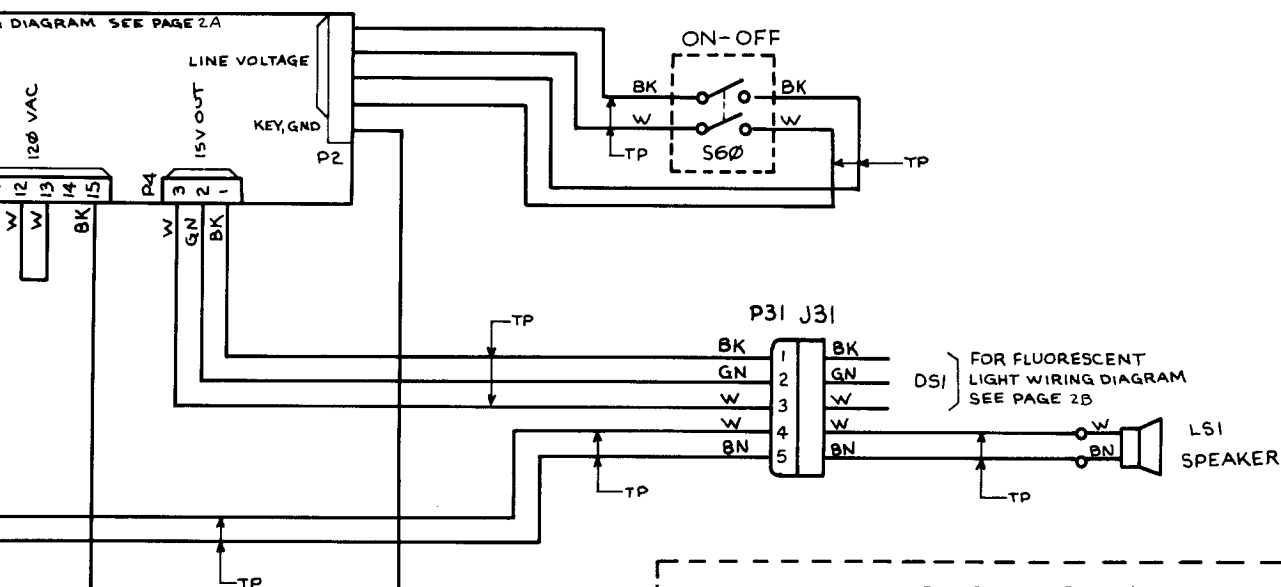
Sheet 1A	You Are Here
Sheet 1B	Dig Dug Upright Wiring Diagram (038294-01 A)
Sheet 2A	Color Raster-Scan Power Supply Wiring Diagram (037669-01 C) Regulator/Audio II PCB Schematic Diagram (035435-05 A)
Sheet 2B	Coin Door Wiring Diagram (037542-01 A) Utility Panel Wiring Diagram (038004-01 A) Fluorescent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

DIAGRAM SEE PAGE 2A



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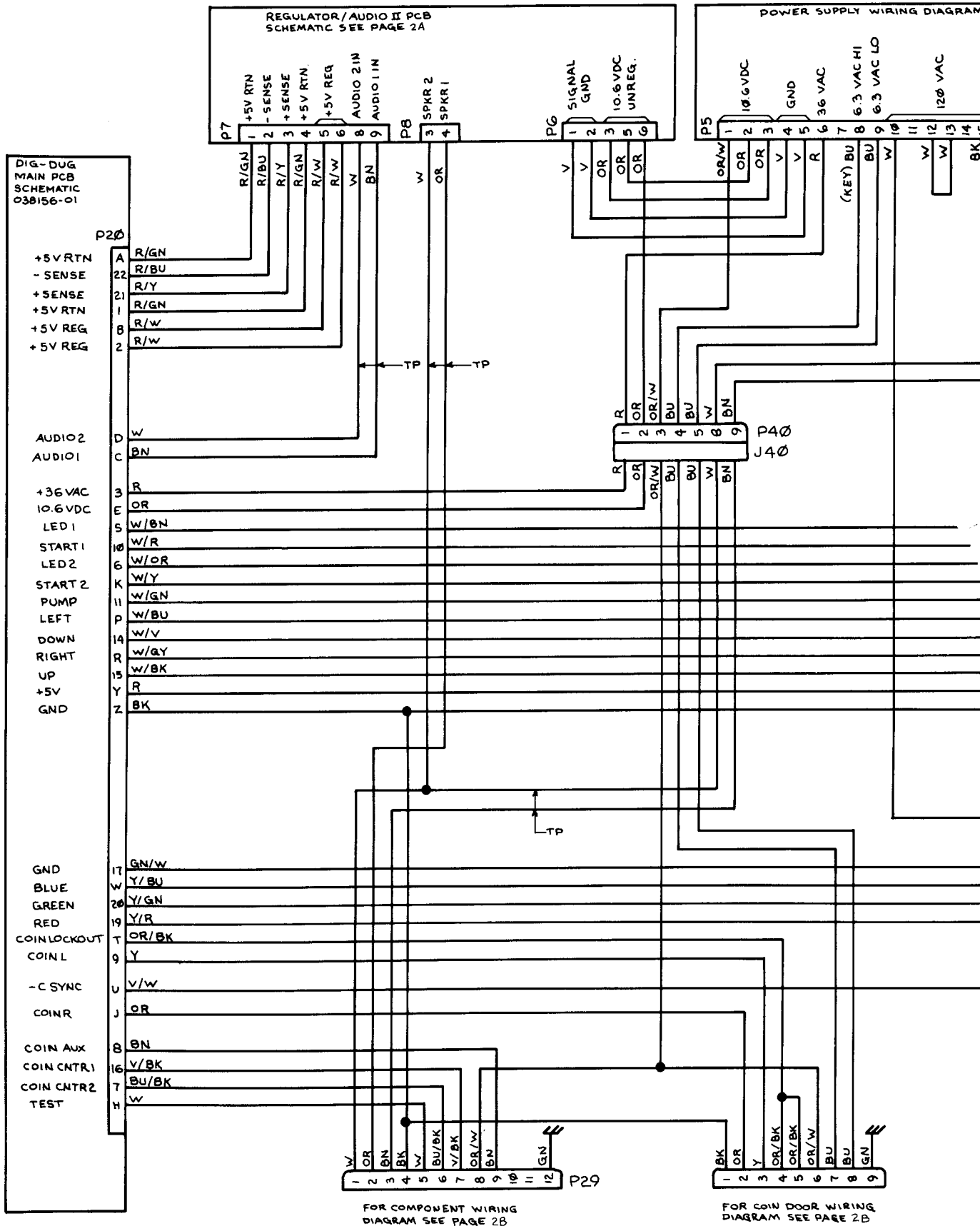
Dig Dug Game Wiring Diagram

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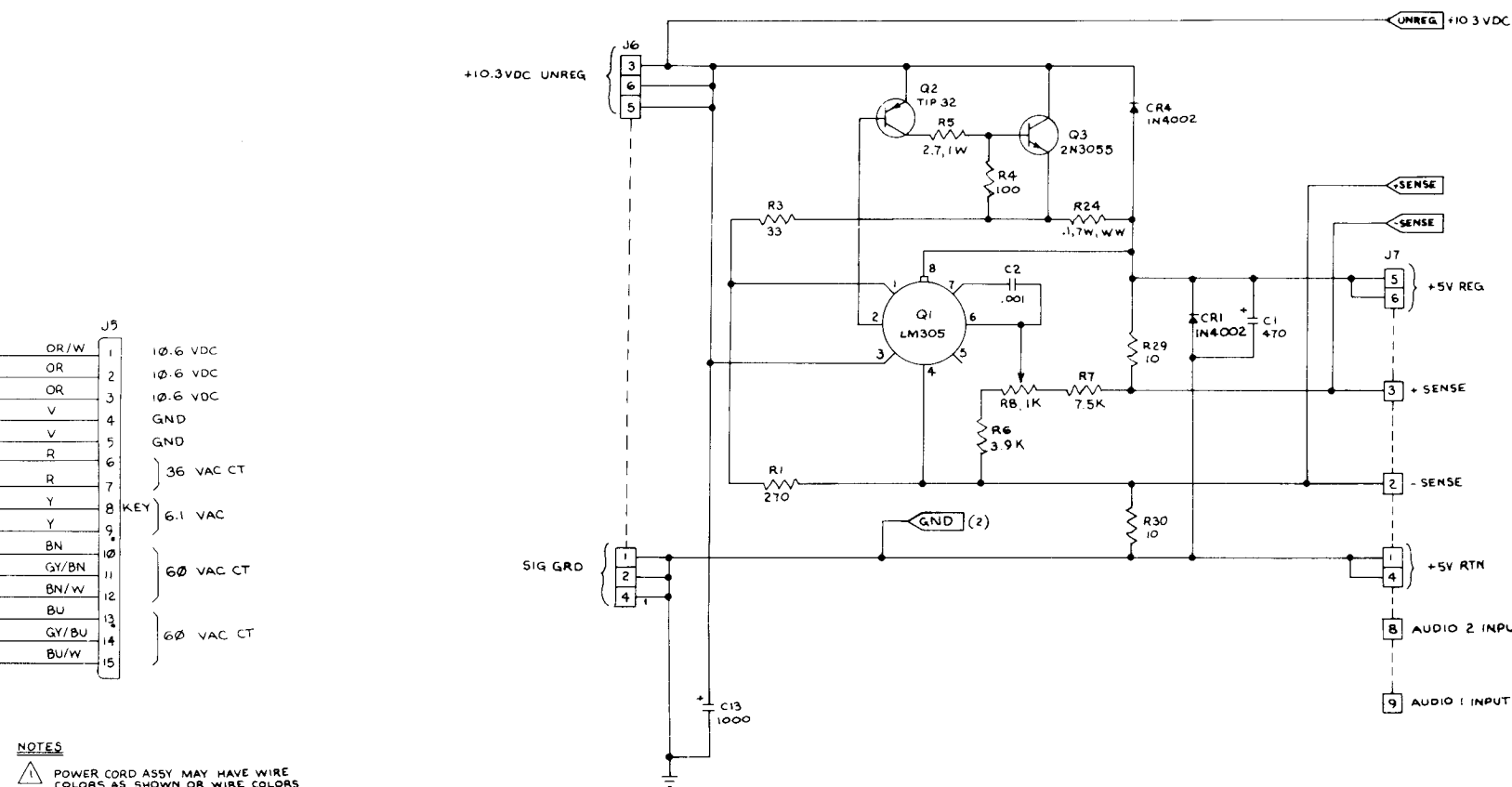
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Dig Dug Upright Game Wiring Diagram



Regulator/Audio II PCB Schematic Diagram



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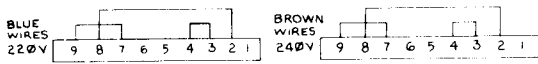
Dig Dug Power Supply and Reg./Audio II PCB

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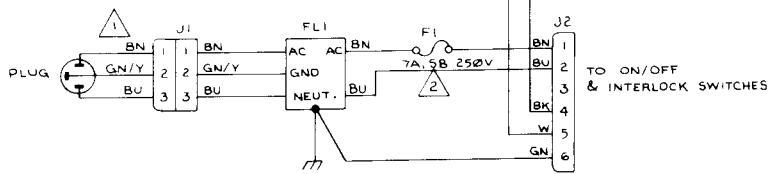
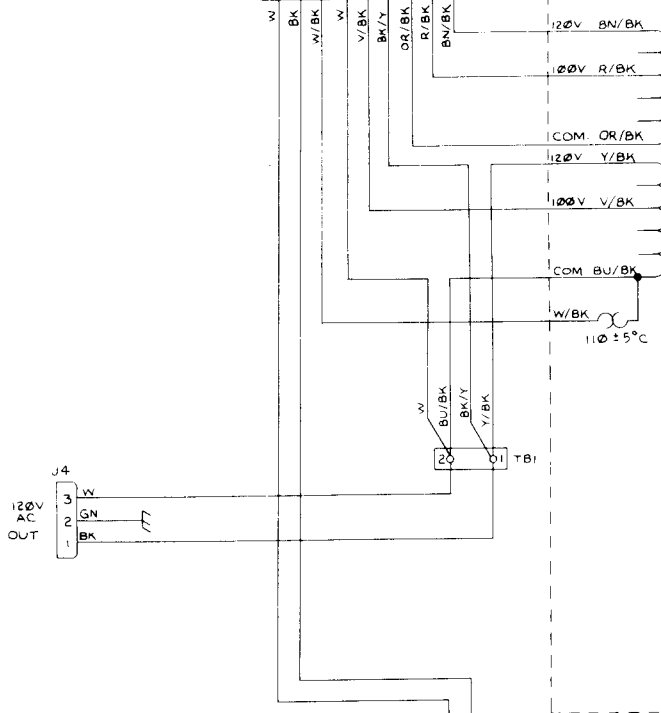
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Color Raster Power Supply Wiring Diagram



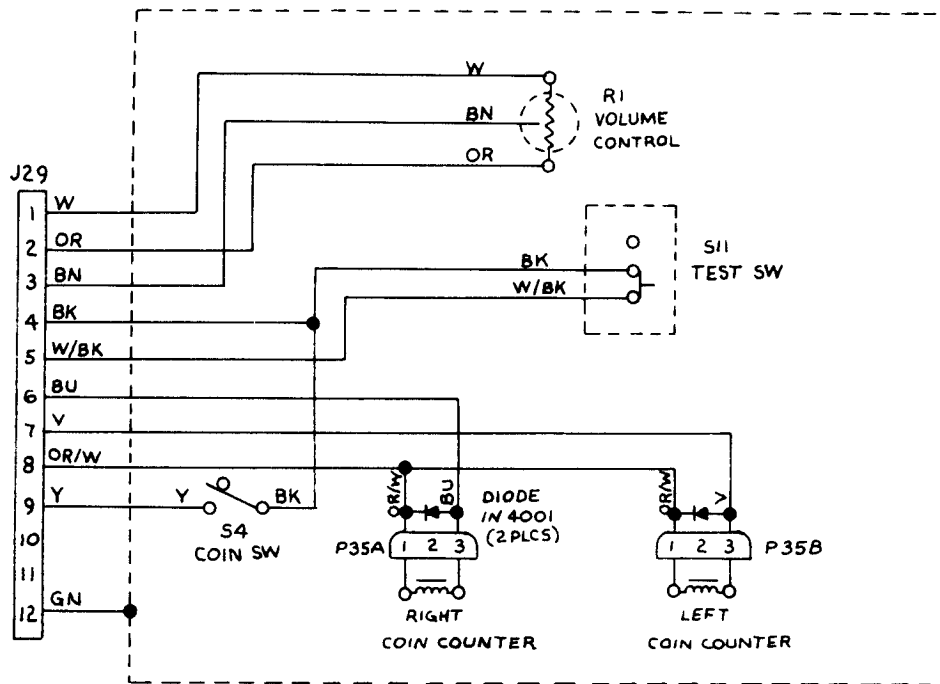
VOLTAGE SELECTION BLOCKS



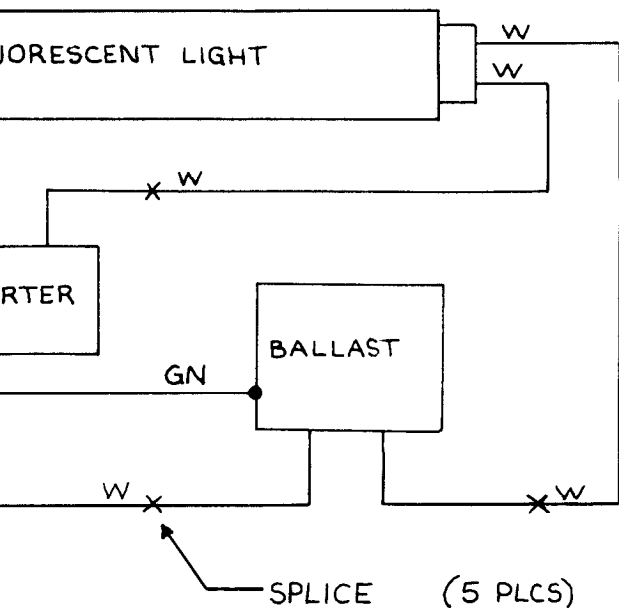
NOTES

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

Utility Panel Wiring Diagram



And Speaker Wiring Diagram



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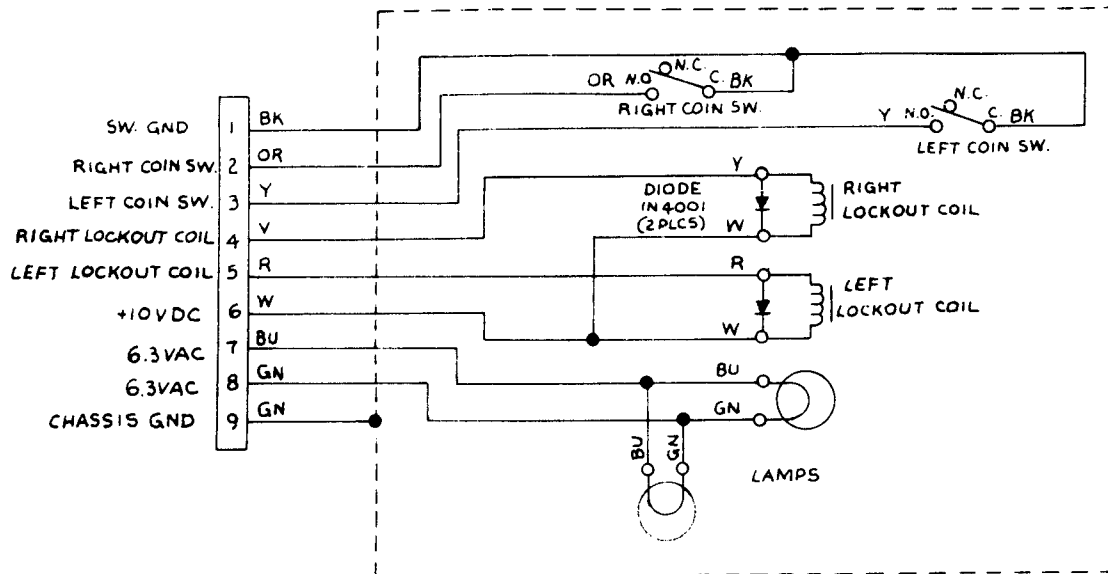
Dig Dug Game Wiring Interfaces

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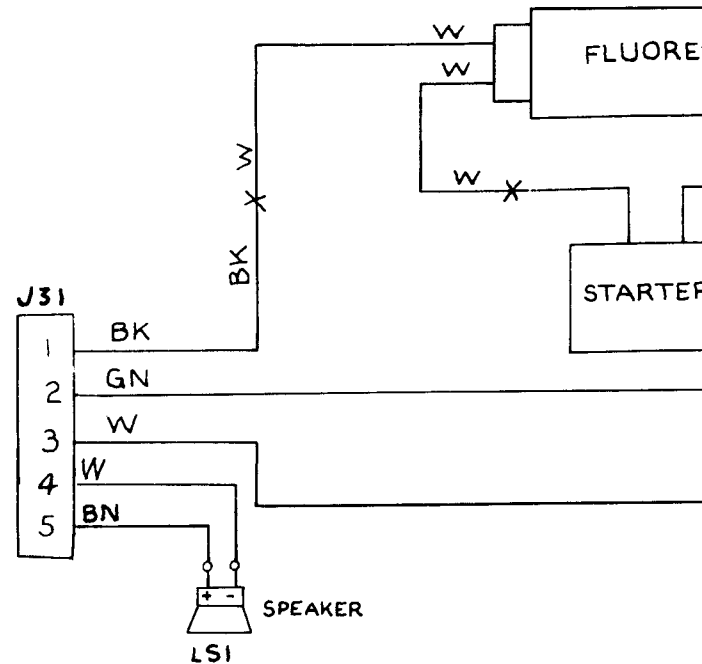
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Coin Door Wiring Diagram

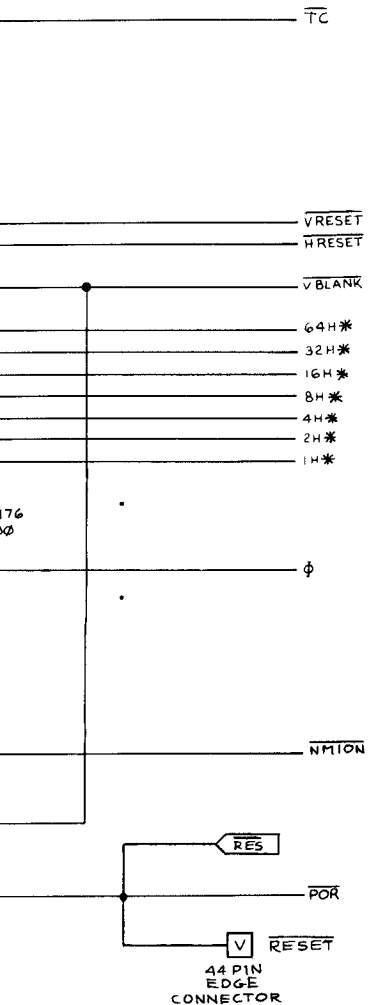


Fluorescent Light And



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:

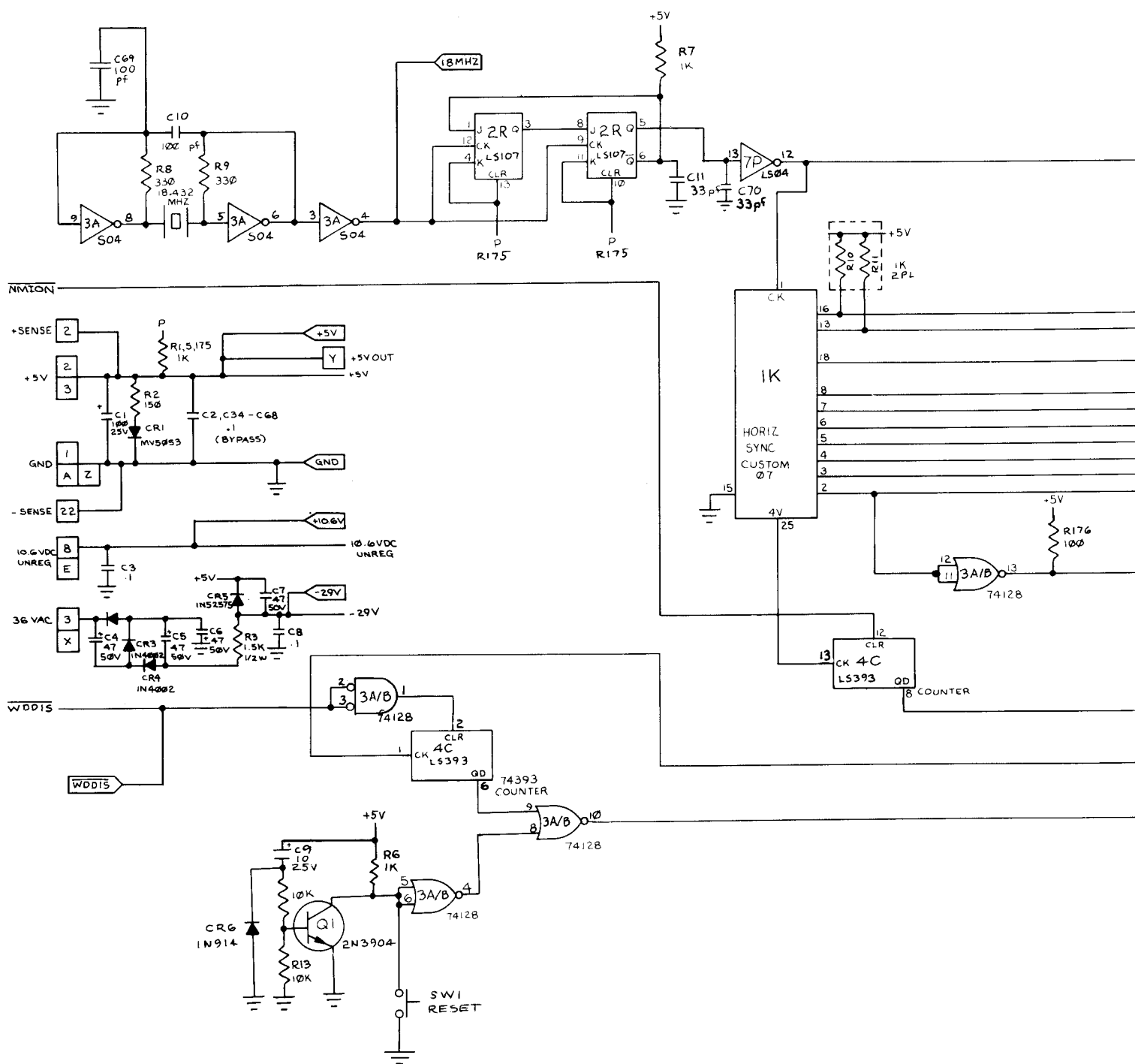
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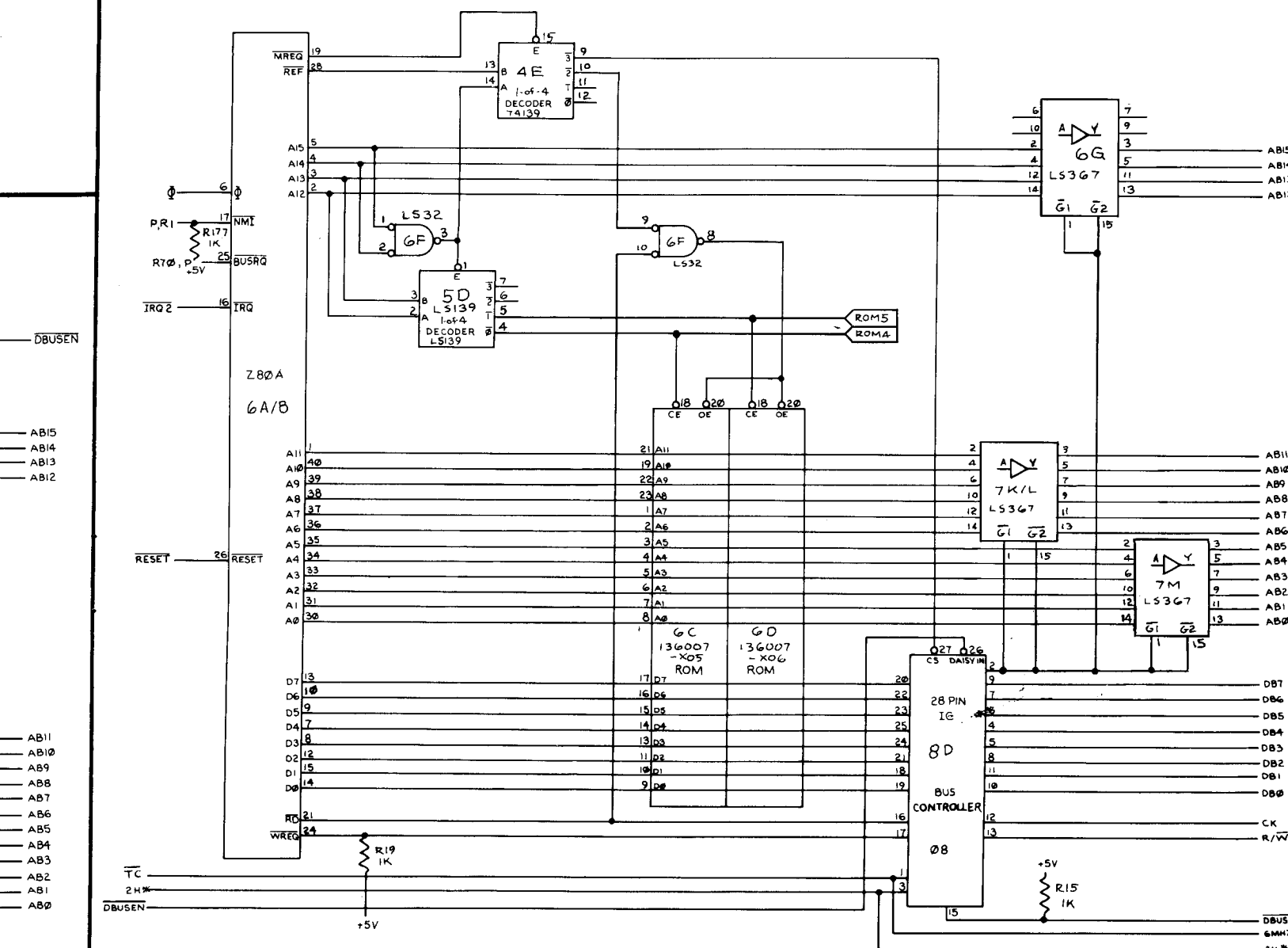
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CPU PCB Power Input, Clock, NMI, and Watchdog



2nd Priority CPU



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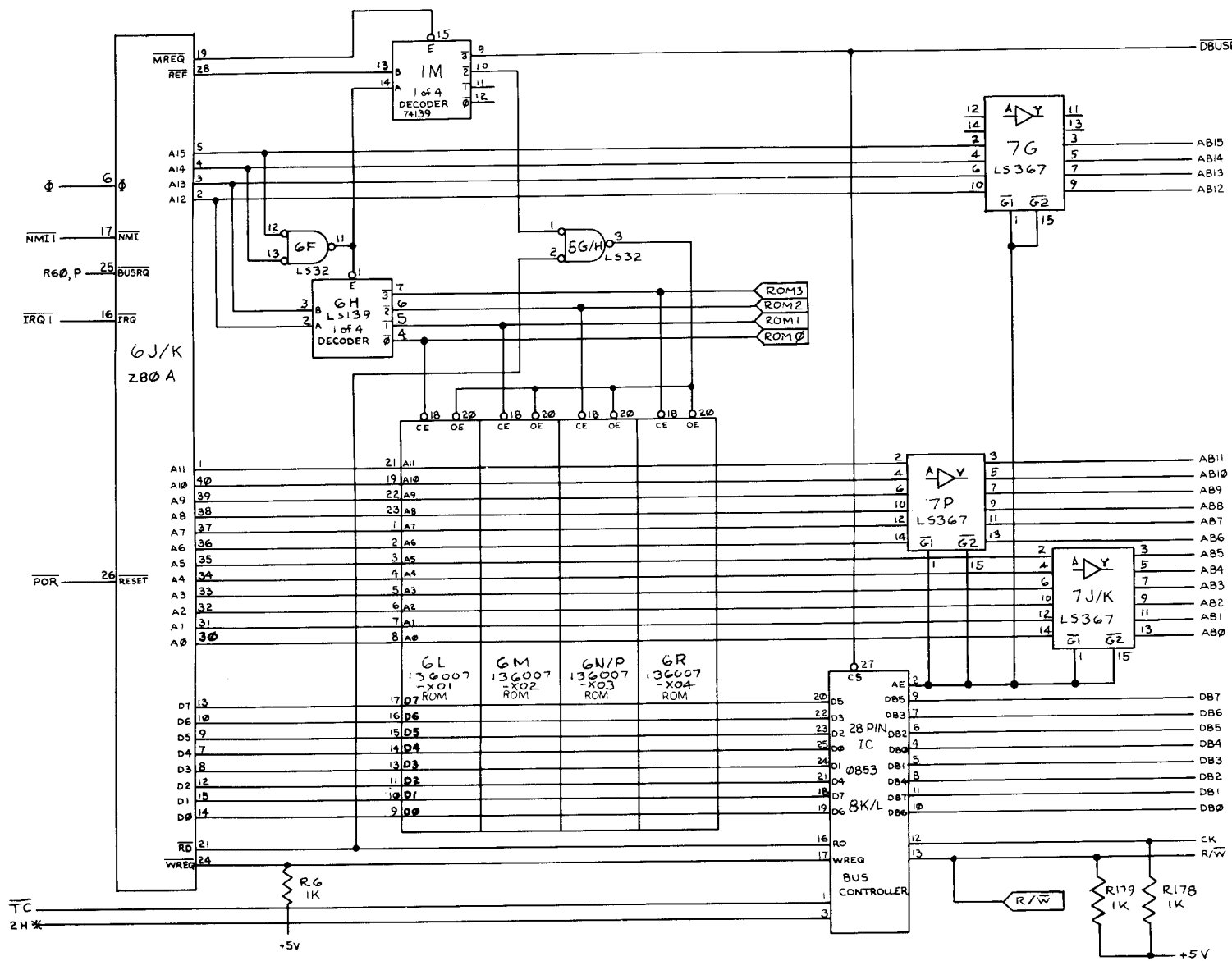
Dig Dug CPU PCB Schematic Diagram

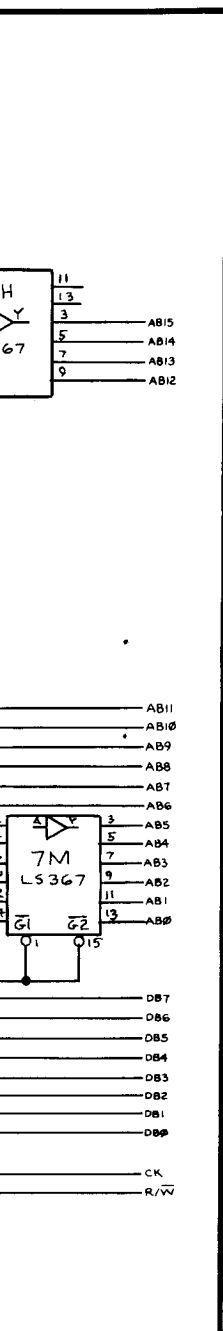
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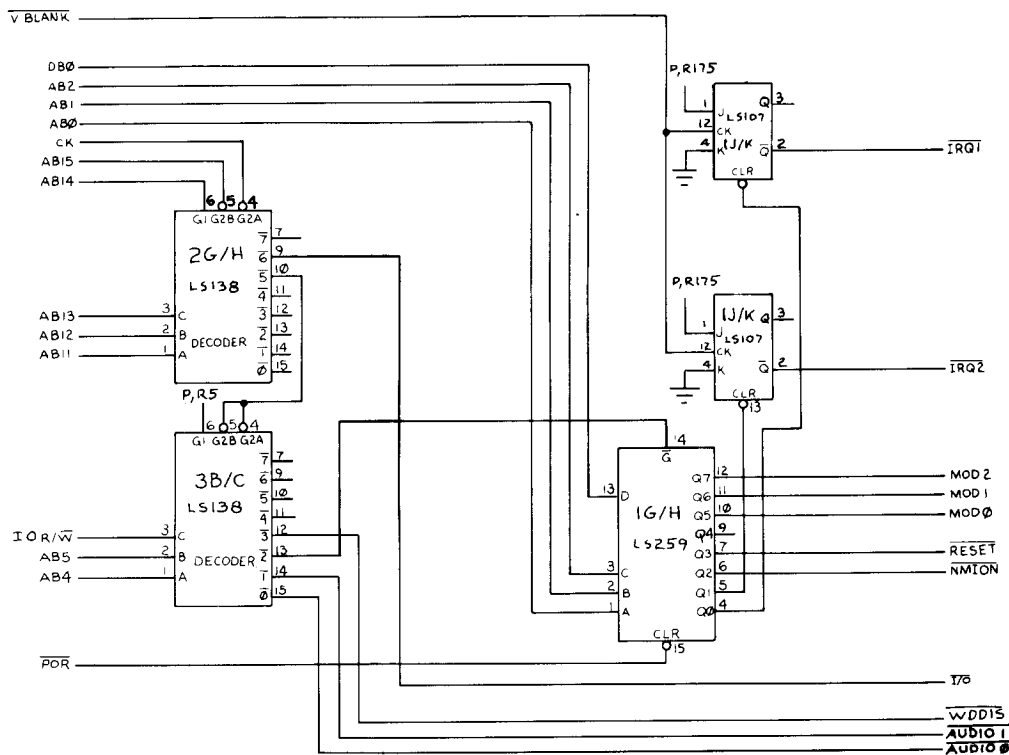
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1st Priority CPU





CPU PCB Address Decoder



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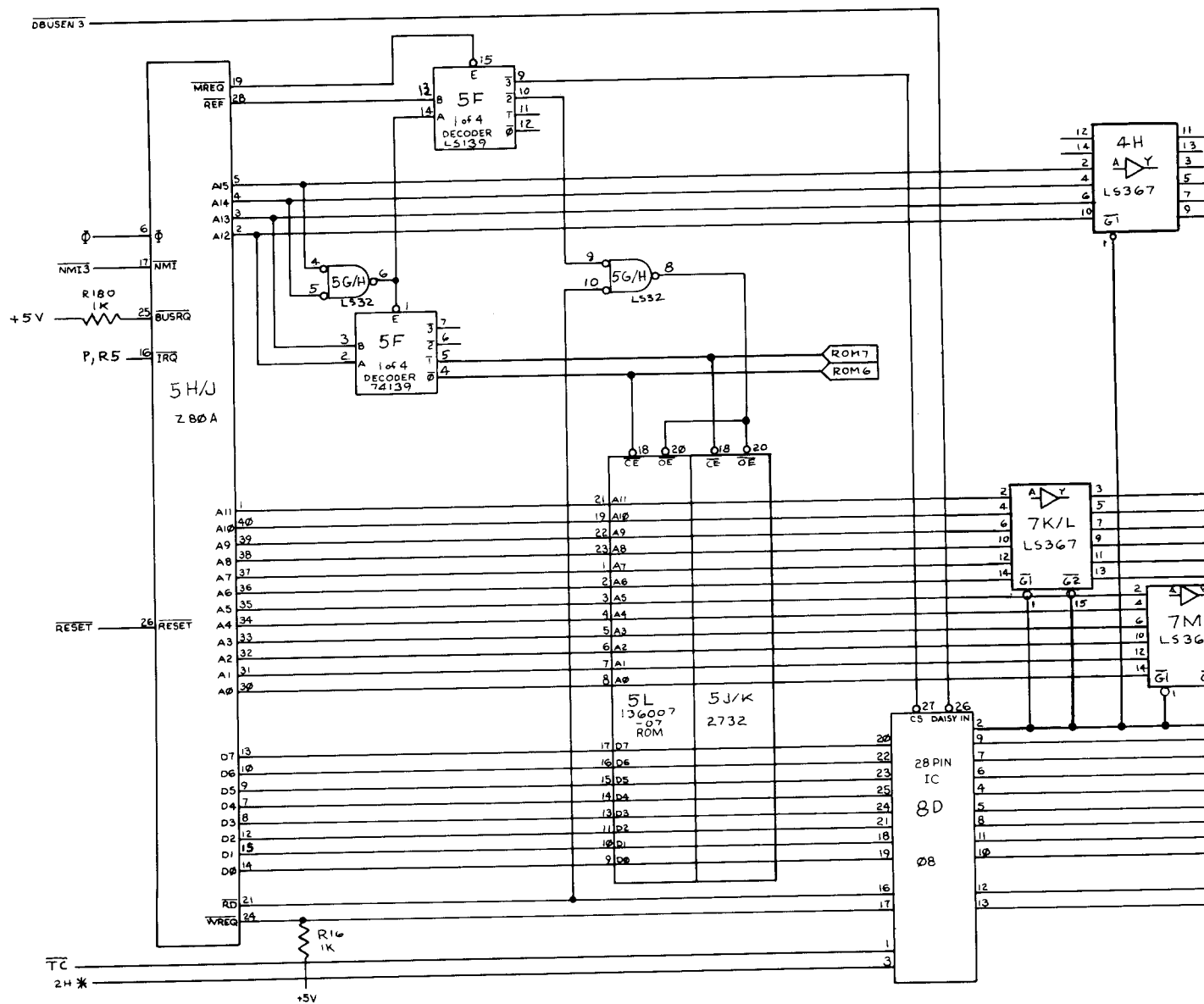
Dig Dug CPU PCB Schematic Diagram

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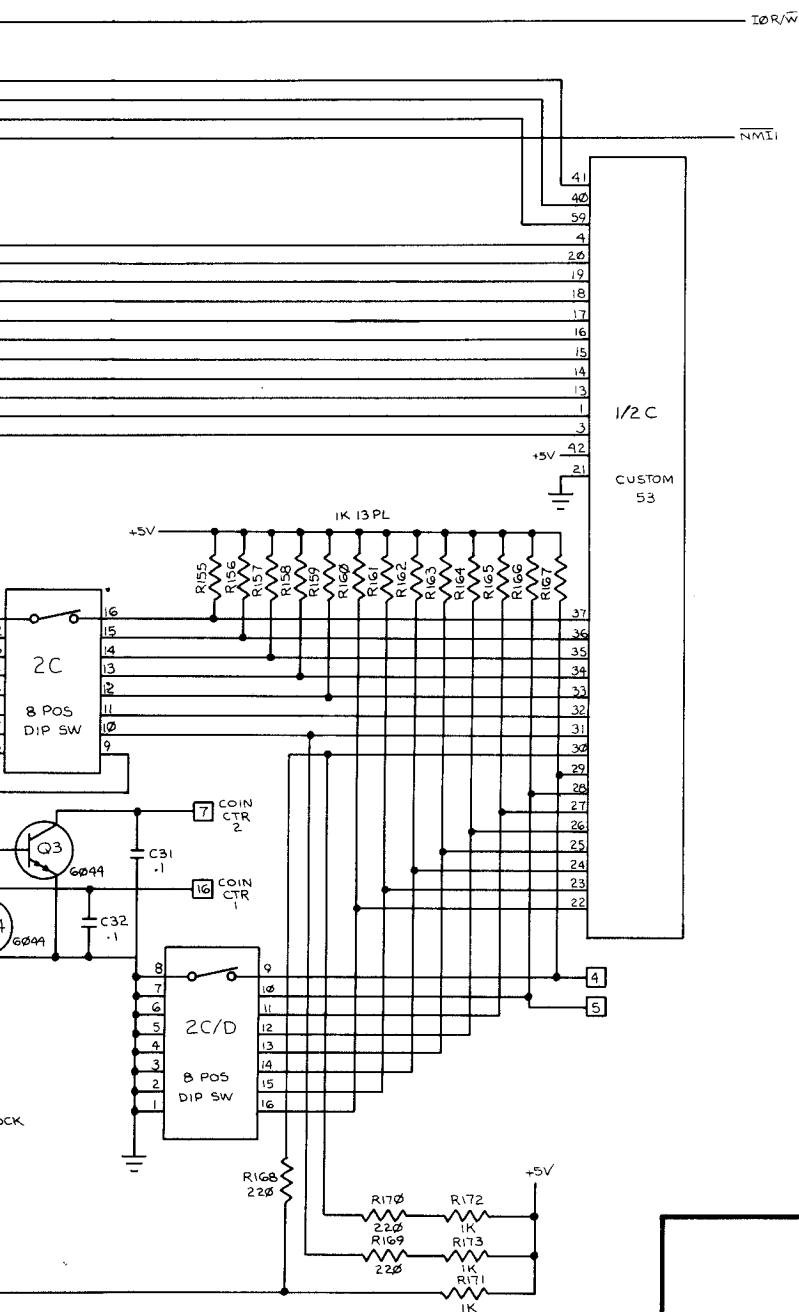
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3rd Priority CPU



Control Panel Outputs



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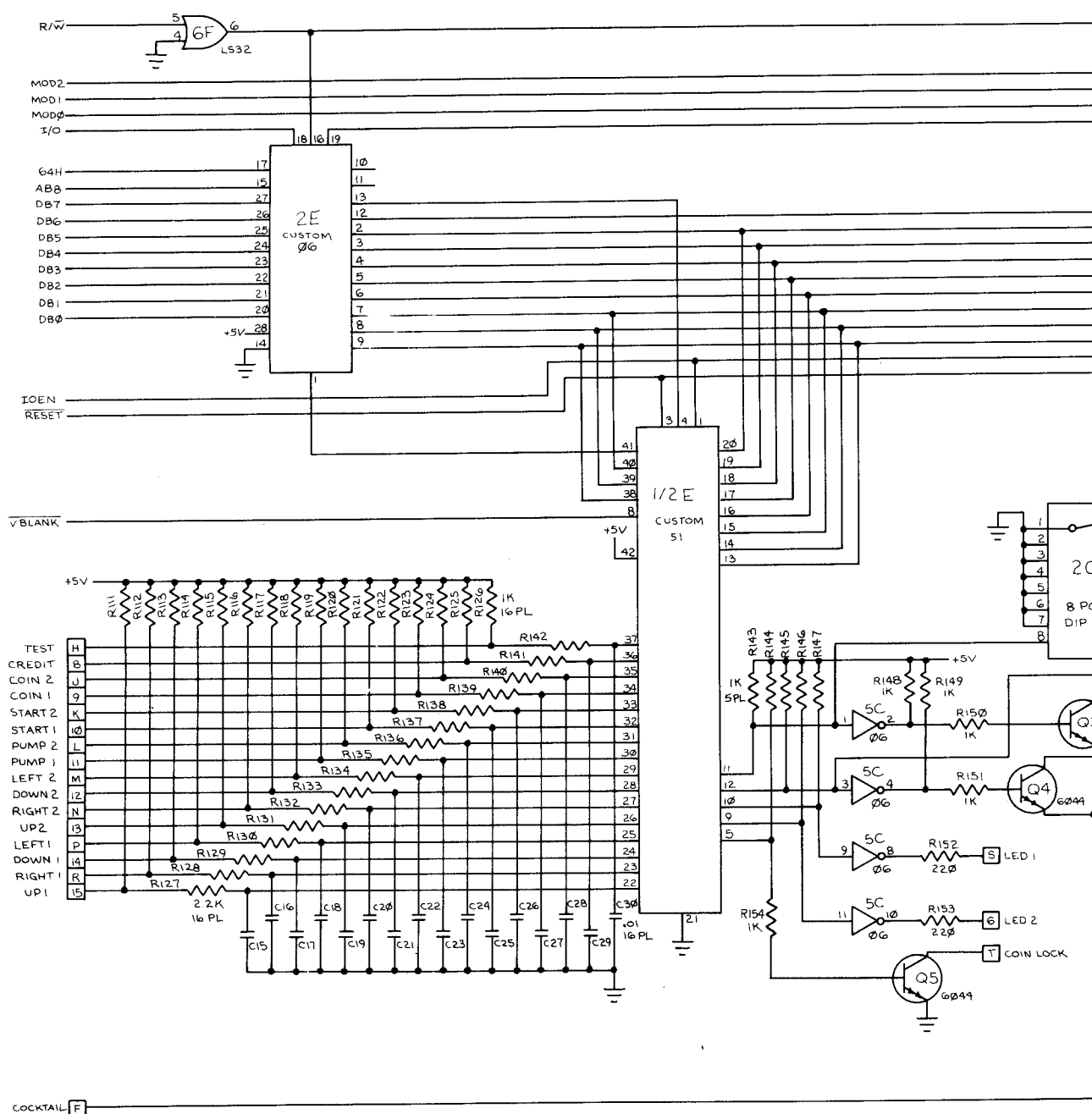
Dig Dug CPU PCB Schematic Diagram

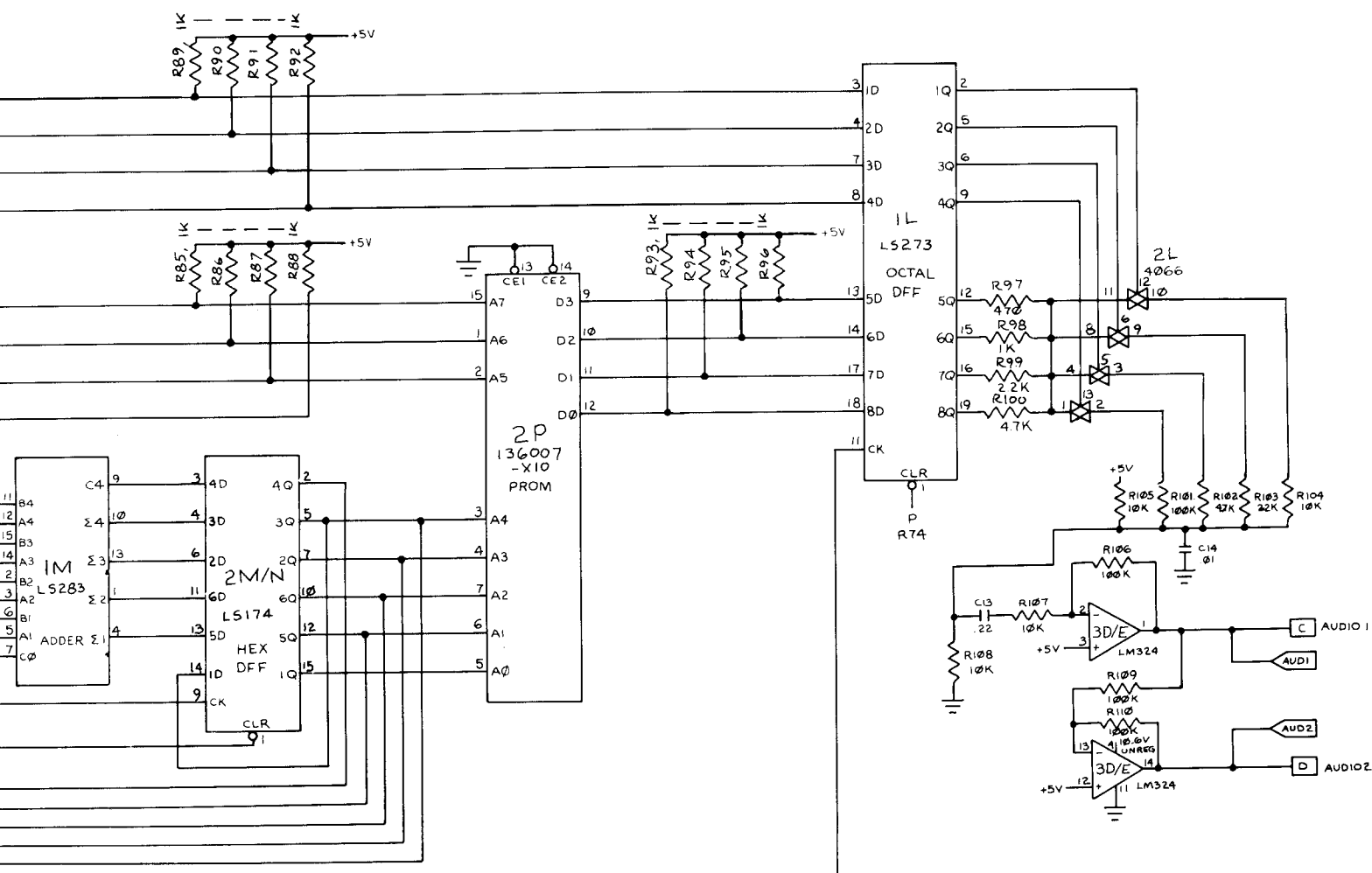
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Switch Inputs, Coin Door and Control P





I/O 2H*



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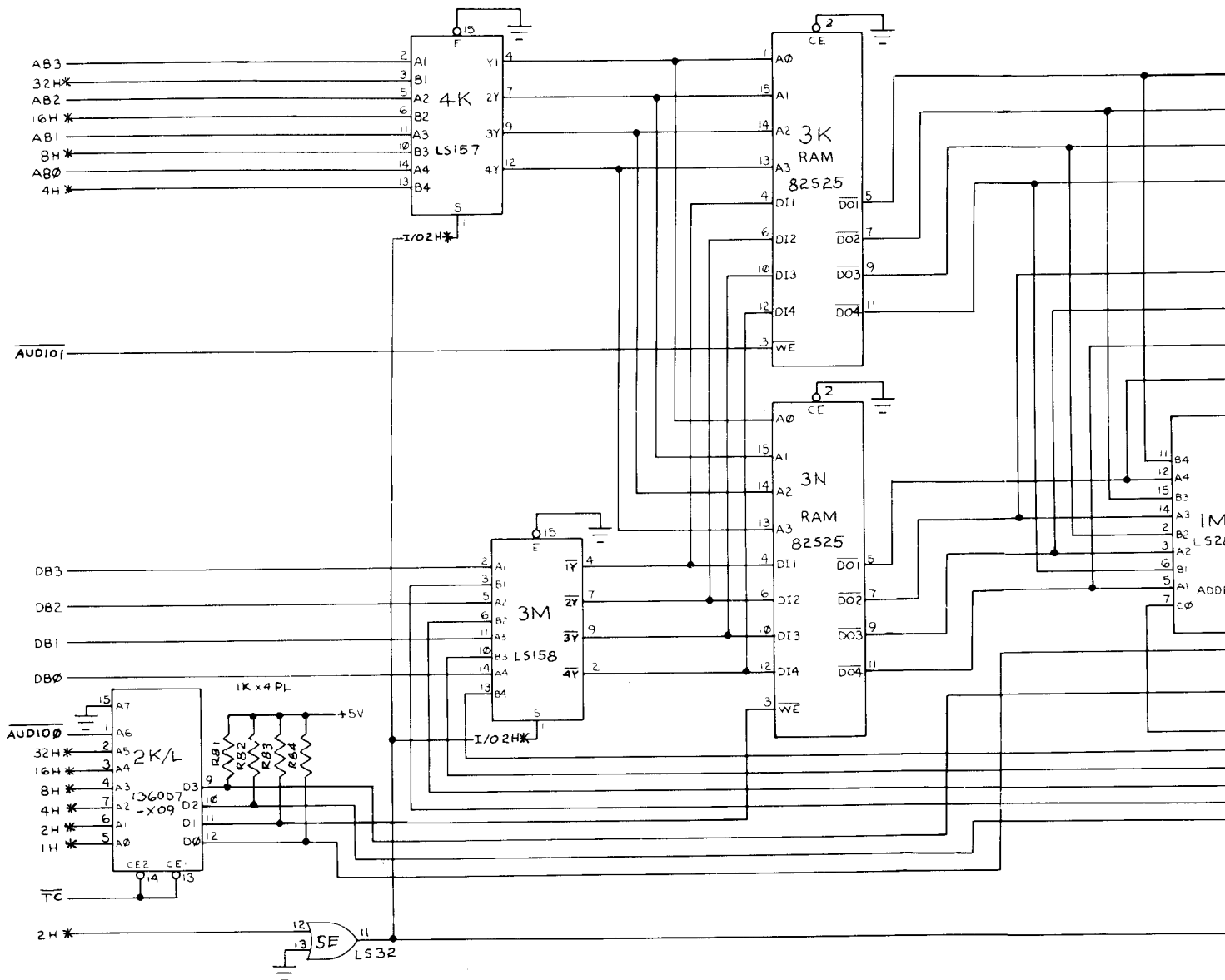
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Audio

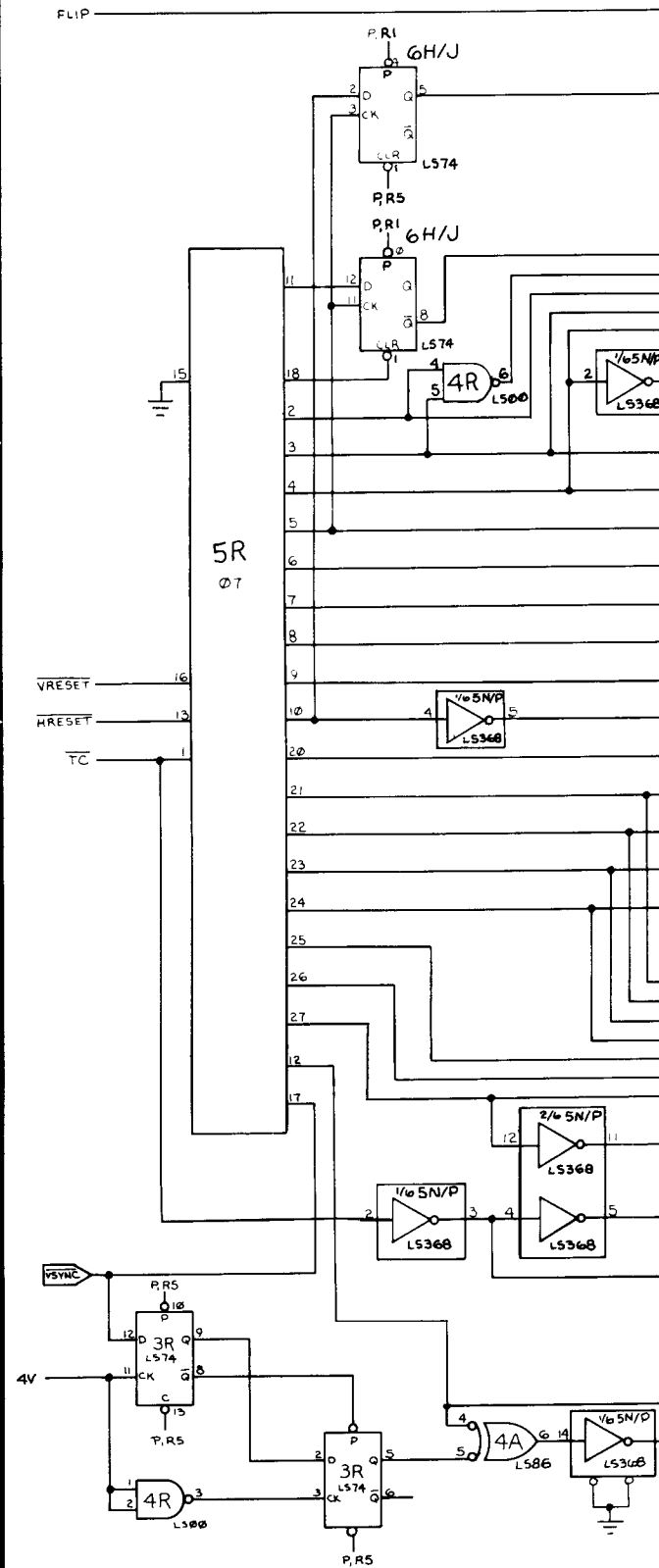




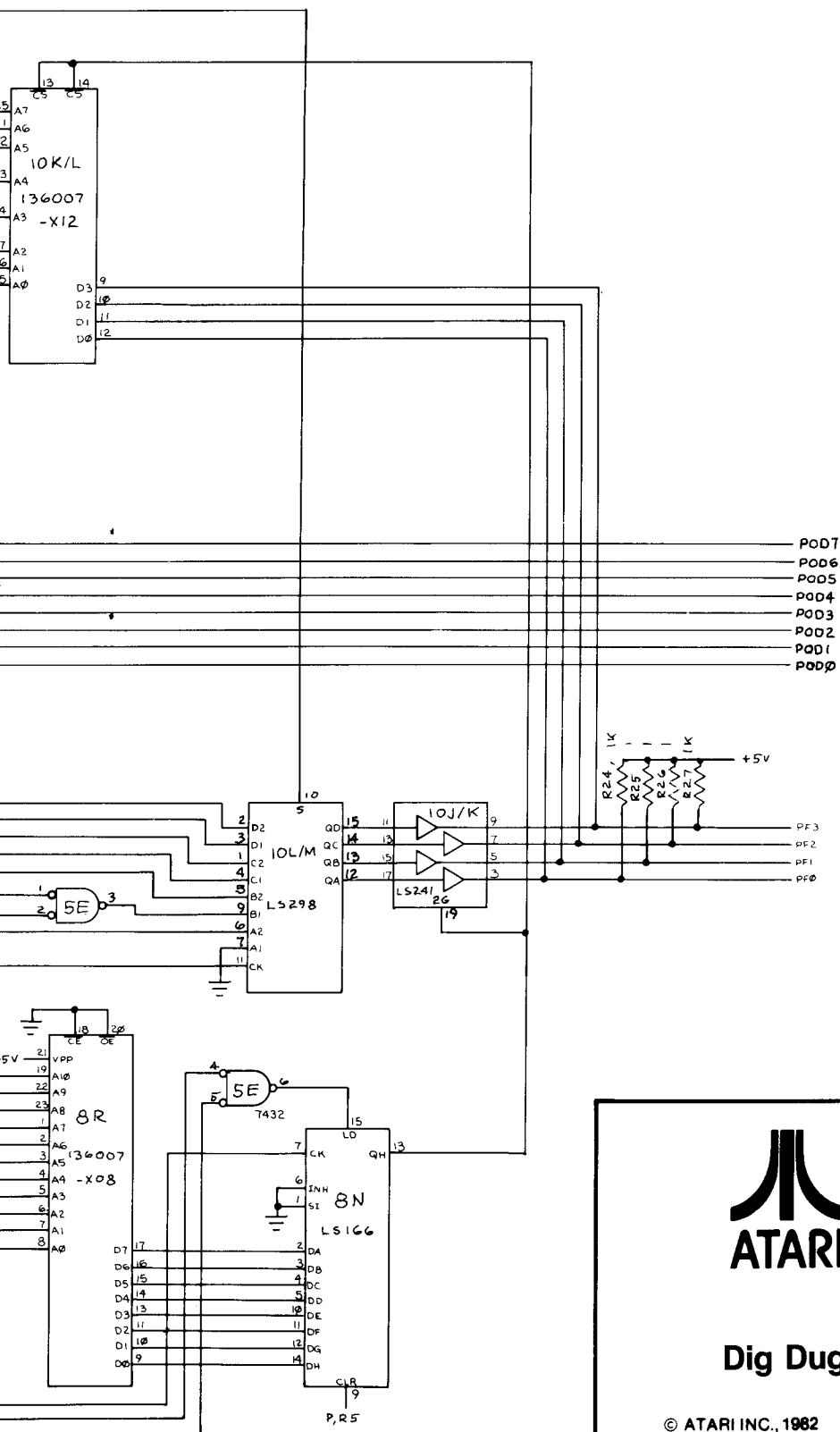
Dig Dug Video PCB Schematic Diagram

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Sync Generator



FLIP



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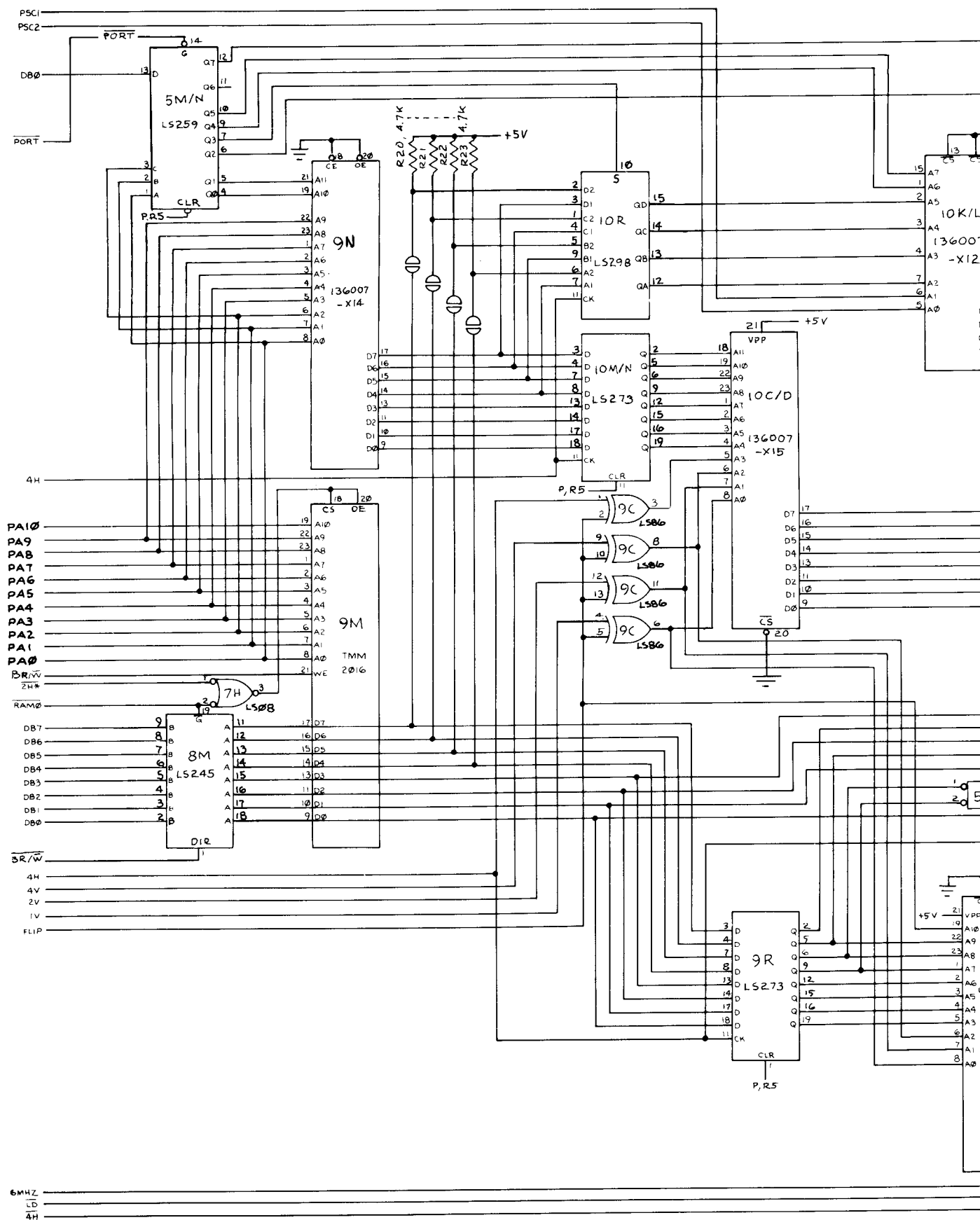
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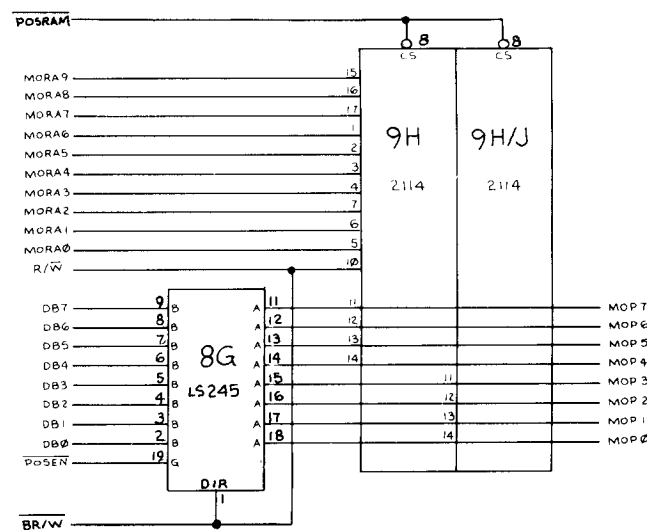
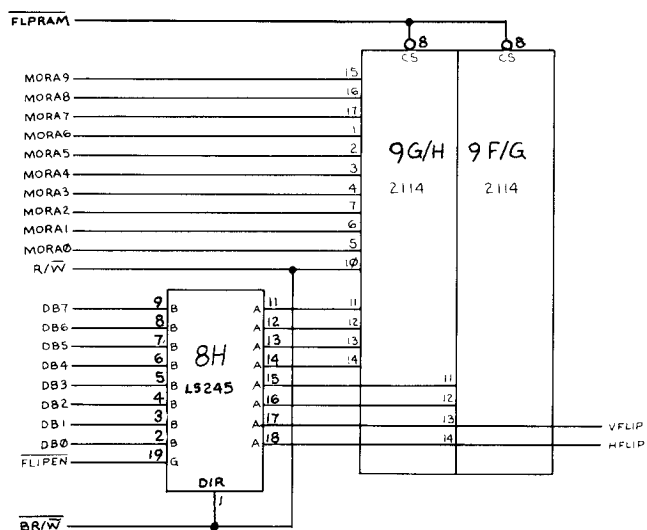
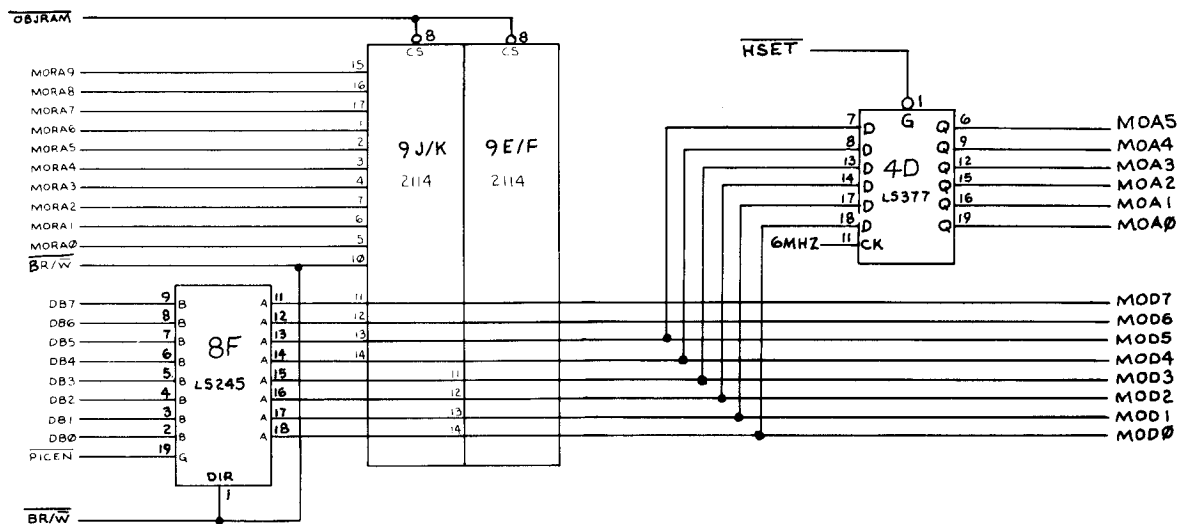
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Playfield Generator



Motion Object RAM



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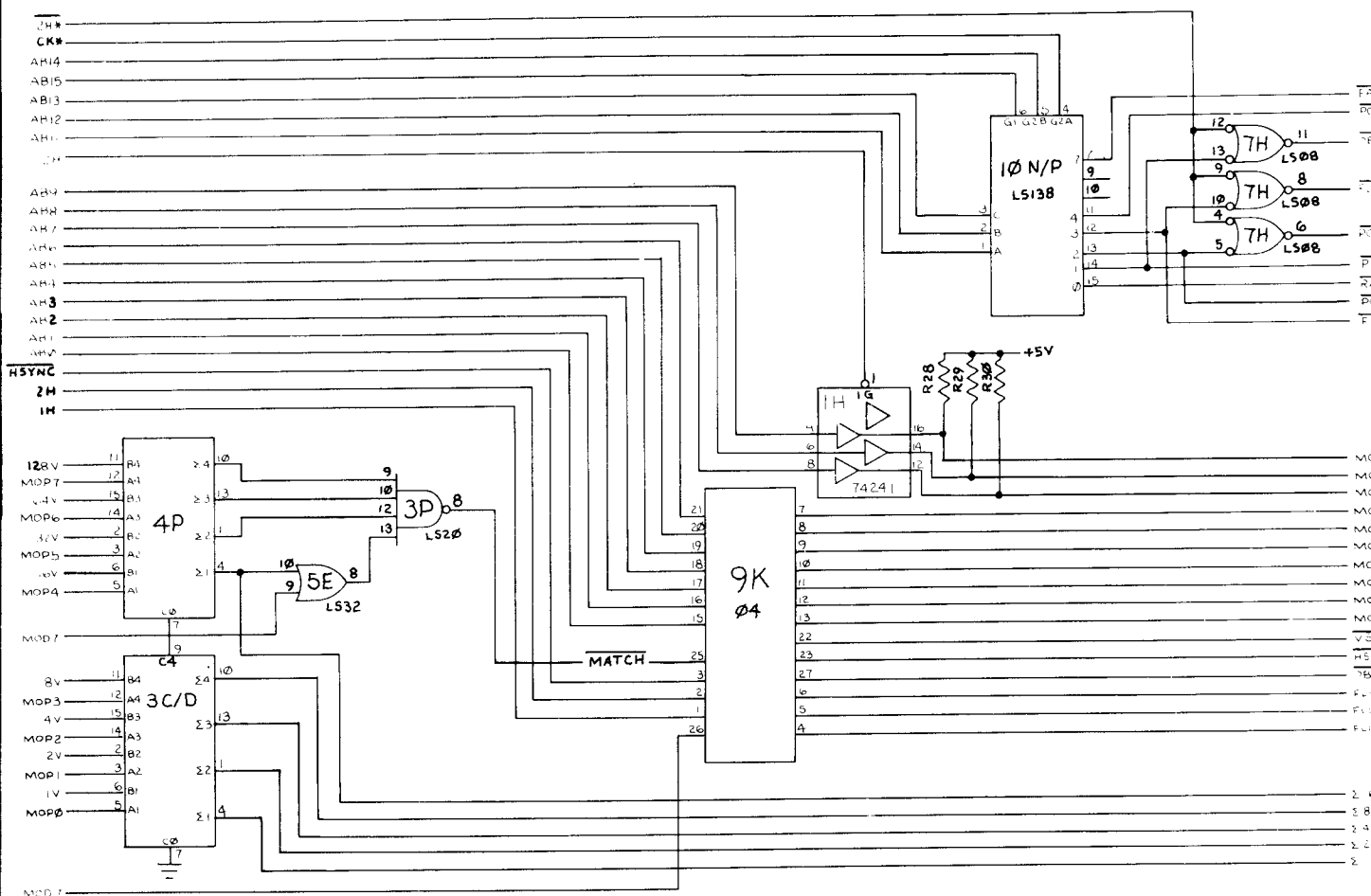
Dig Dug Video PCB Schematic Diagram

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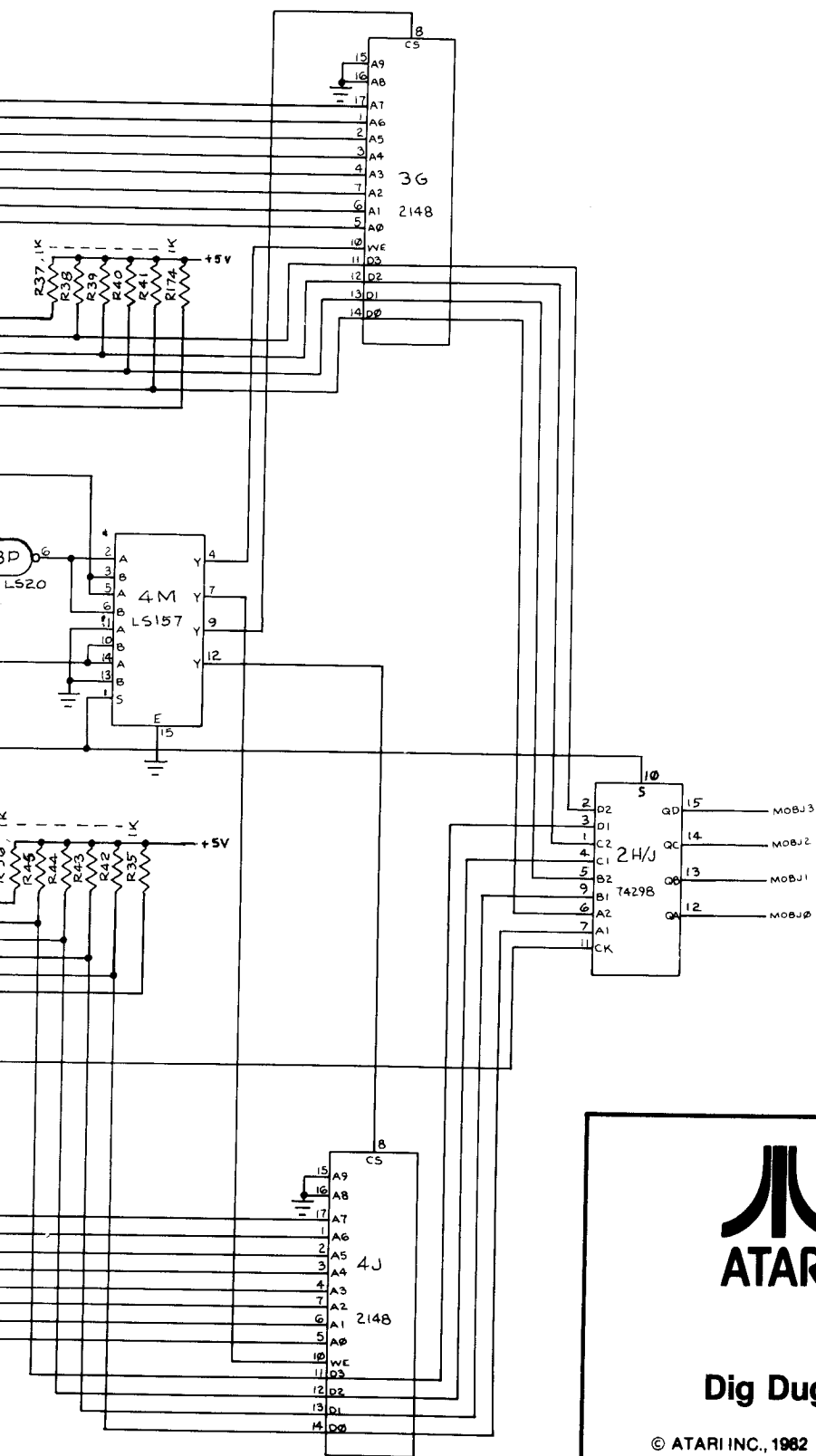
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Motion Object Address Generator, Decoder, and Match Line Flag



Generator



MOBJ0 through MOBJ3 -
Motion Object Output.



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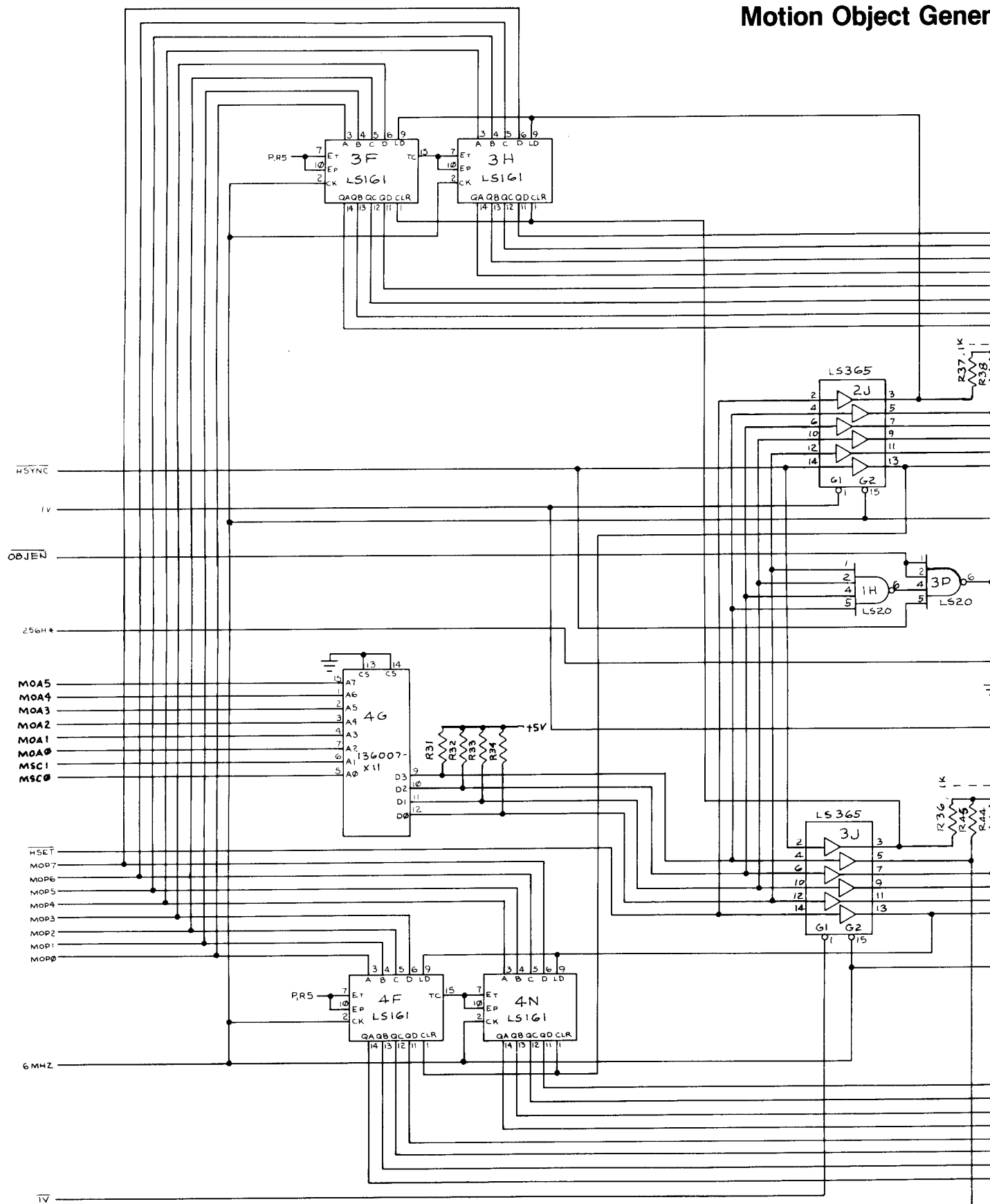
Dig Dug Video PCB Schematic Diagram

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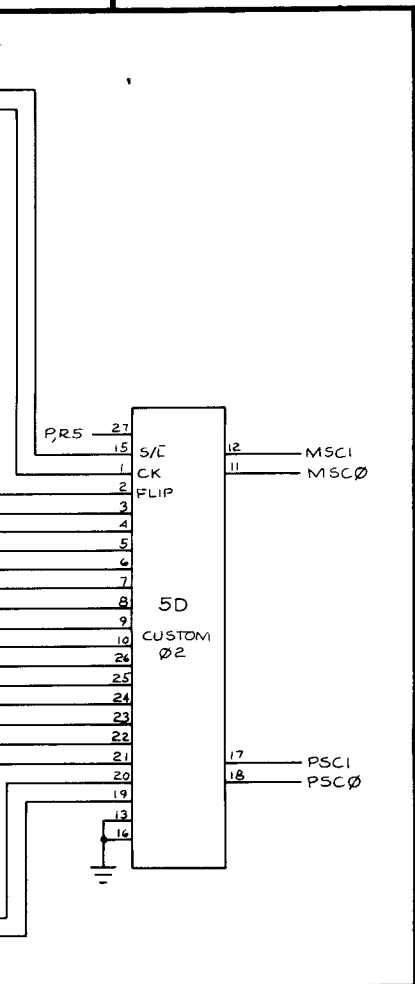
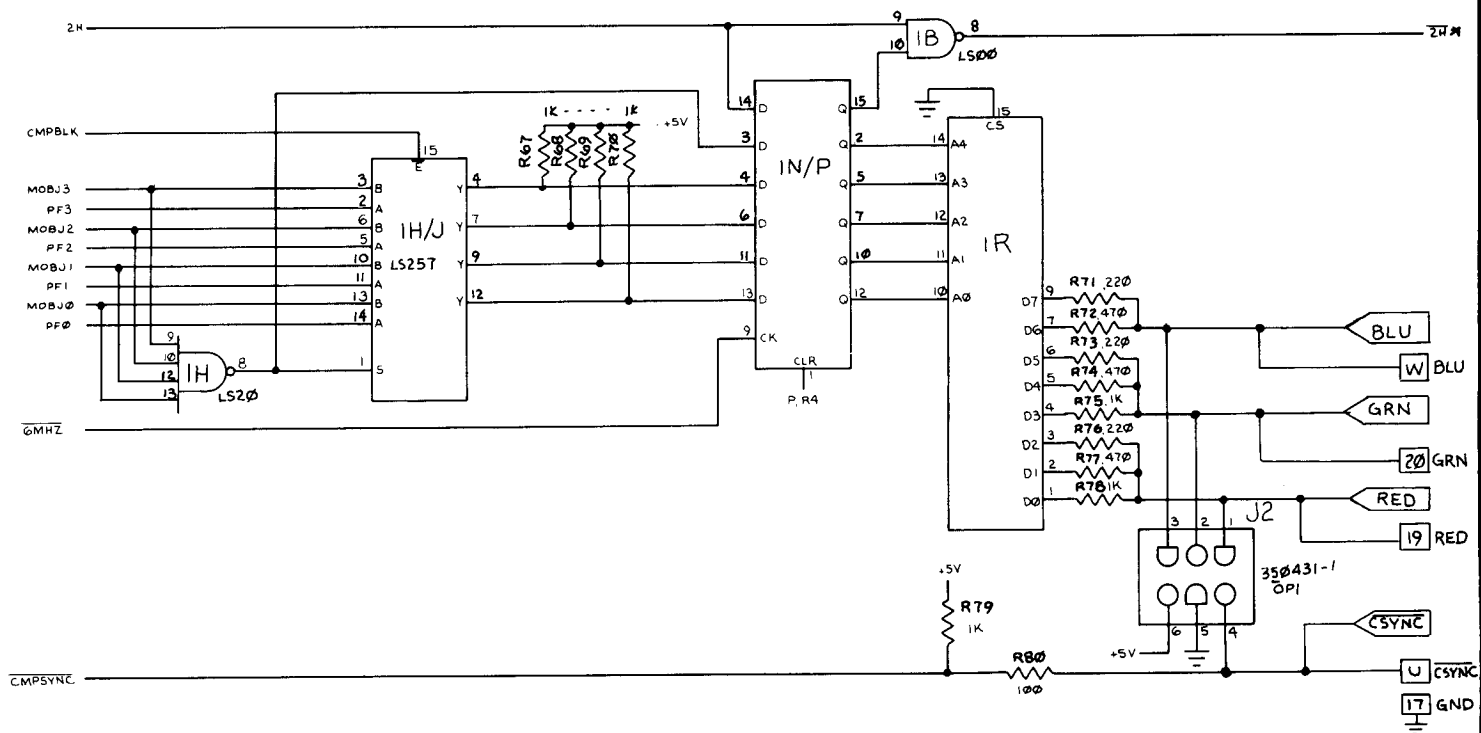
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Motion Object Gener



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

Video Output



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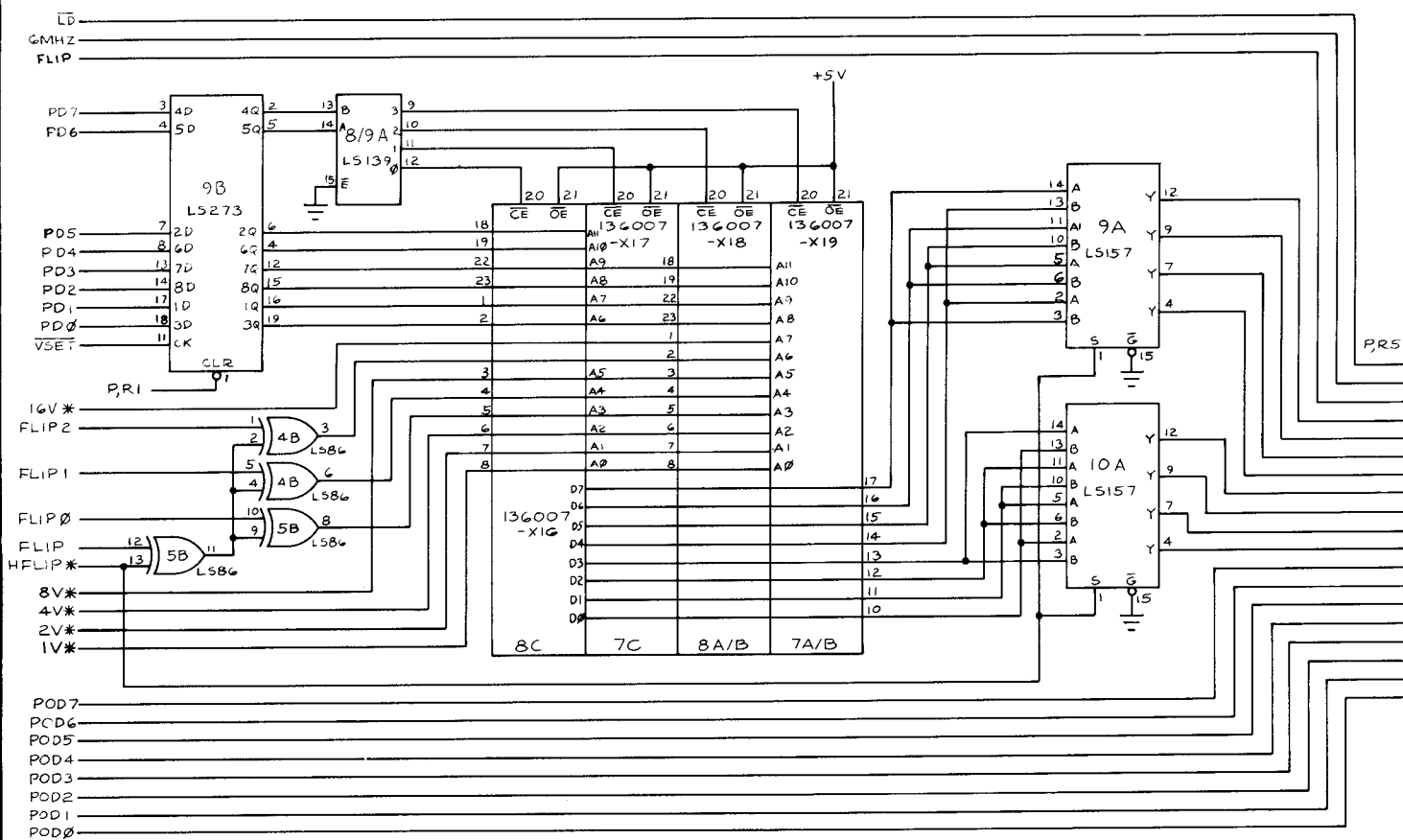
Dig Dug Video PCB Schematic Diagram

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Video Color Controller





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Dig Dug Video PCB Schematic Diagram

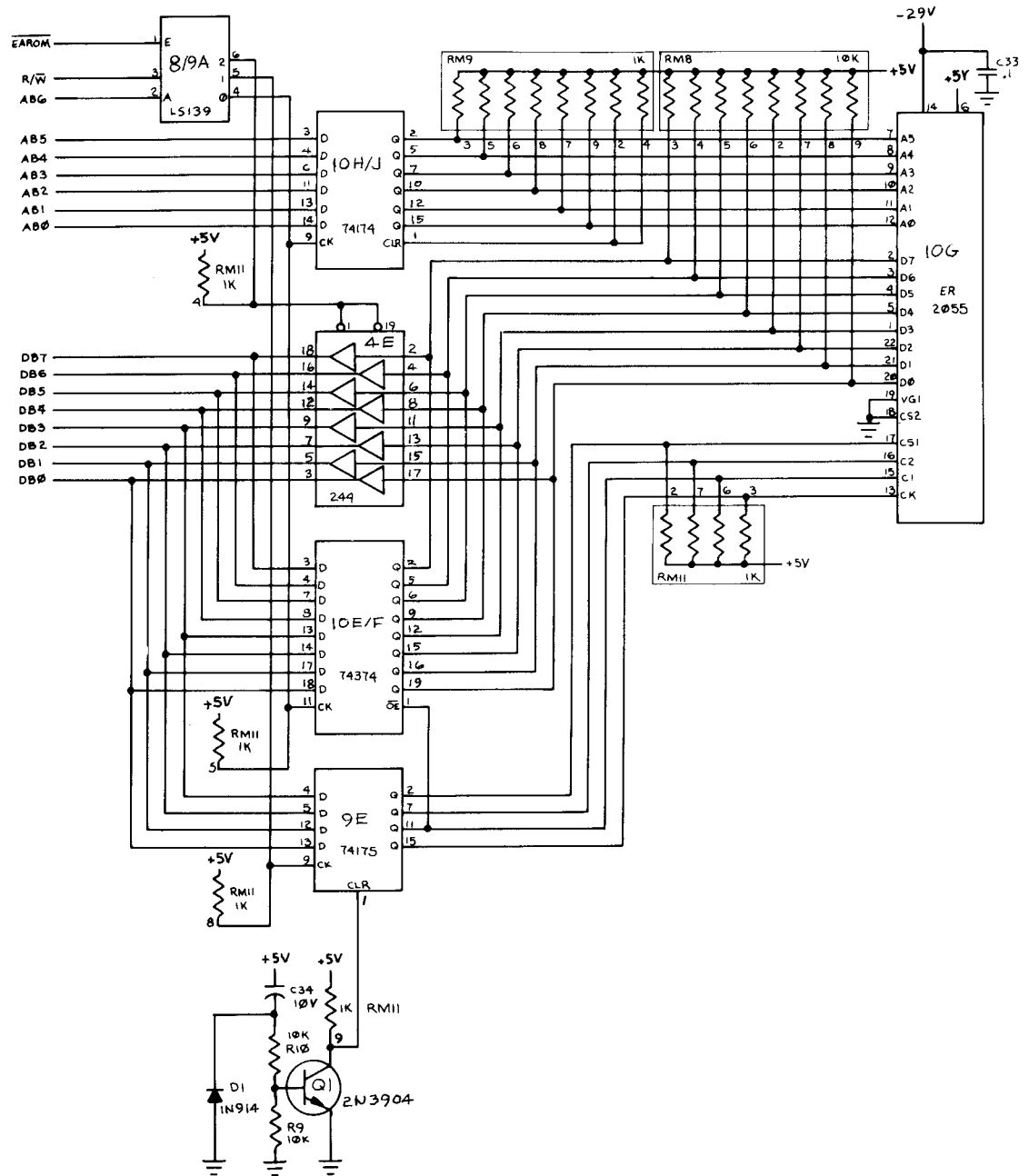
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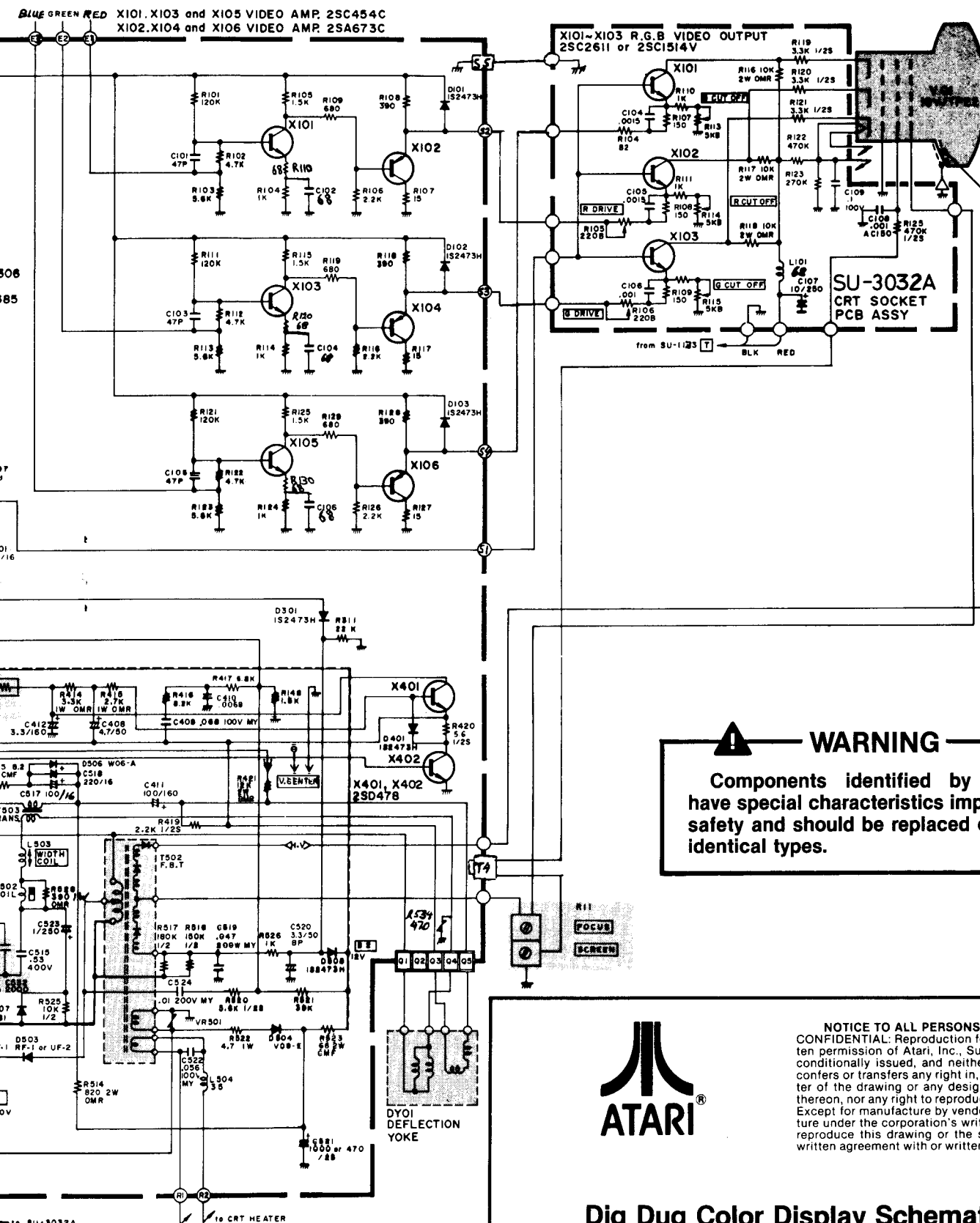
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High-Score Table



Schematic Diagram



WARNING



Components identified by shading have special characteristics important to safety and should be replaced only with identical types.



Dig Dug Color Display Schematic Diagram

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SP-203 Sheet 8B
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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 ($\text{---}\text{FR}\text{---}$)

Parts identification on circuit boards:

e.g. SU1126A (R107 = R1107)

SU3030A (R113 = R3113)

Color Display Scheme

