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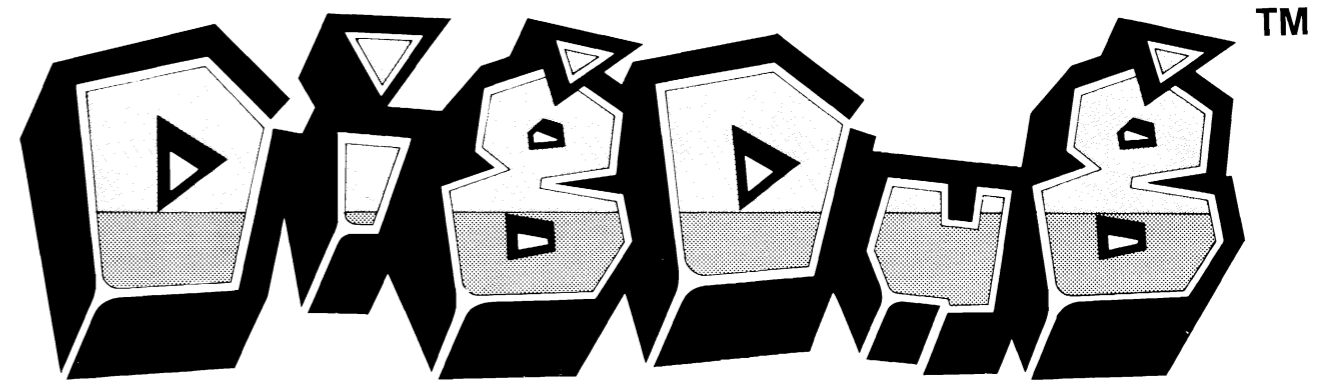
| | |
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NOTE
This staple temporarily holds the
schematic package together. Re-
move the staple before using the
schematics.

Schematic Package Supplement to



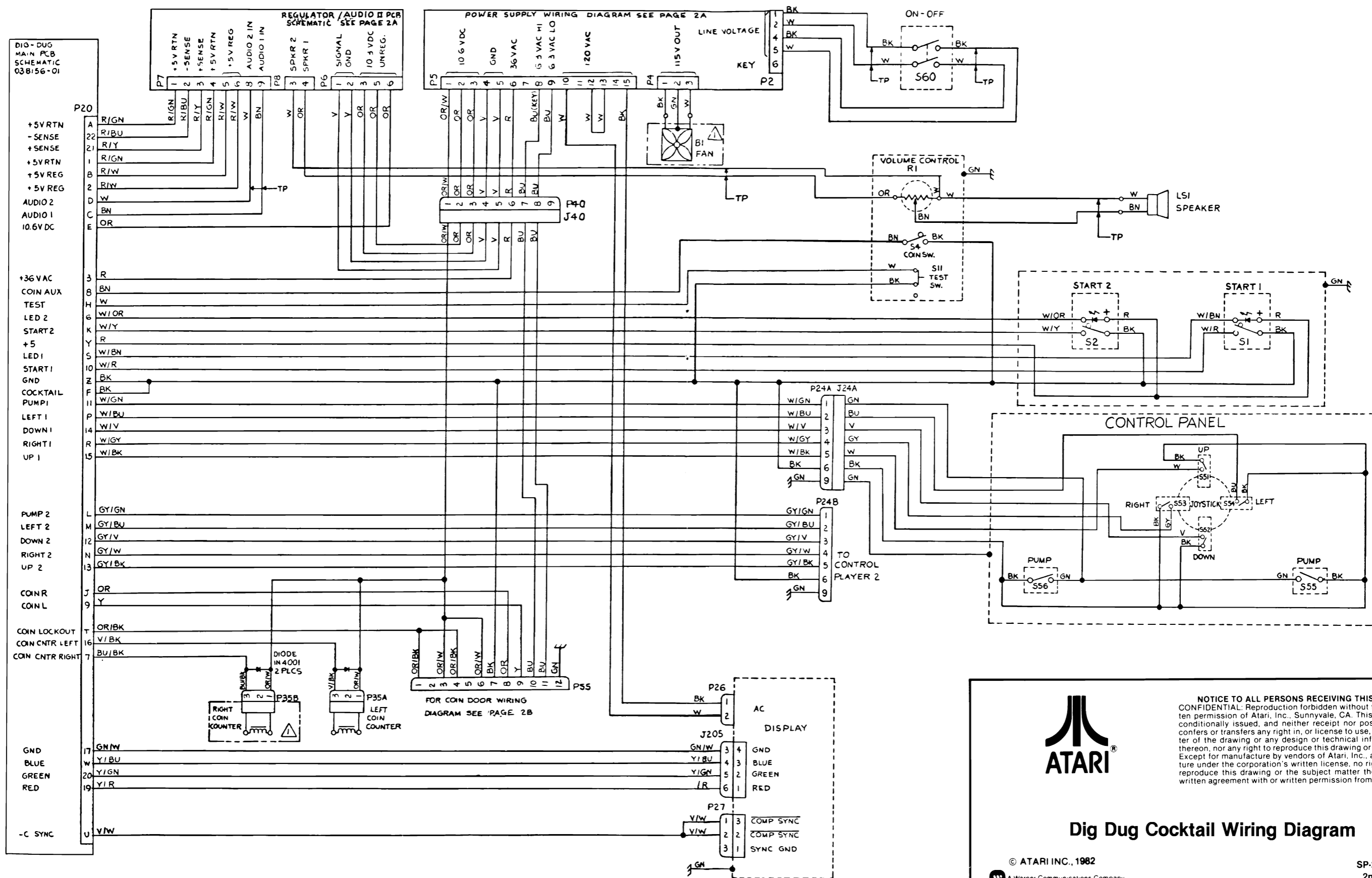
Operation, Maintenance and Service Manual



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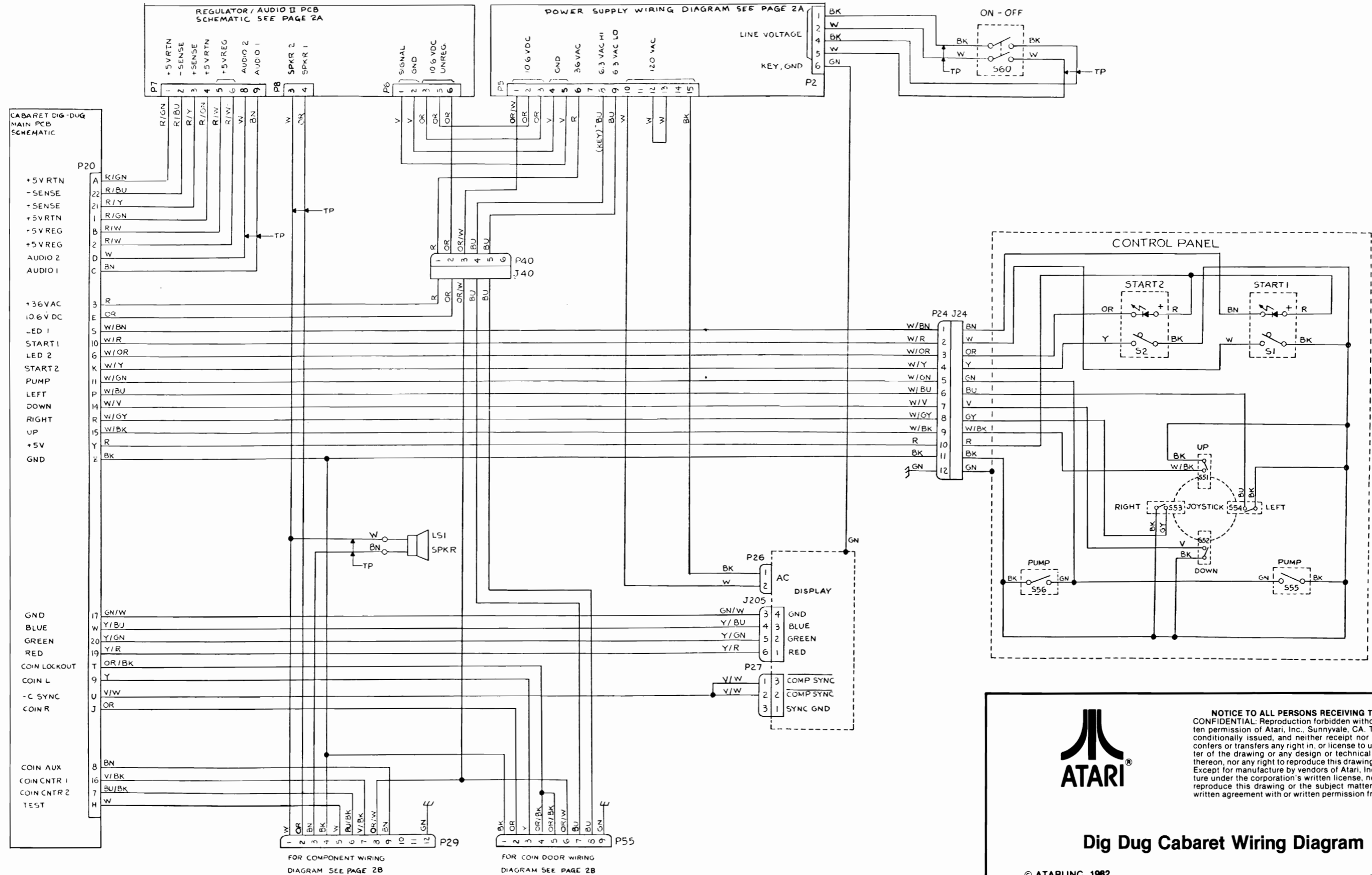
Cocktail Wiring Diagram



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Dig Dug Cocktail Wiring Diagram

Cabaret Wiring Diagram



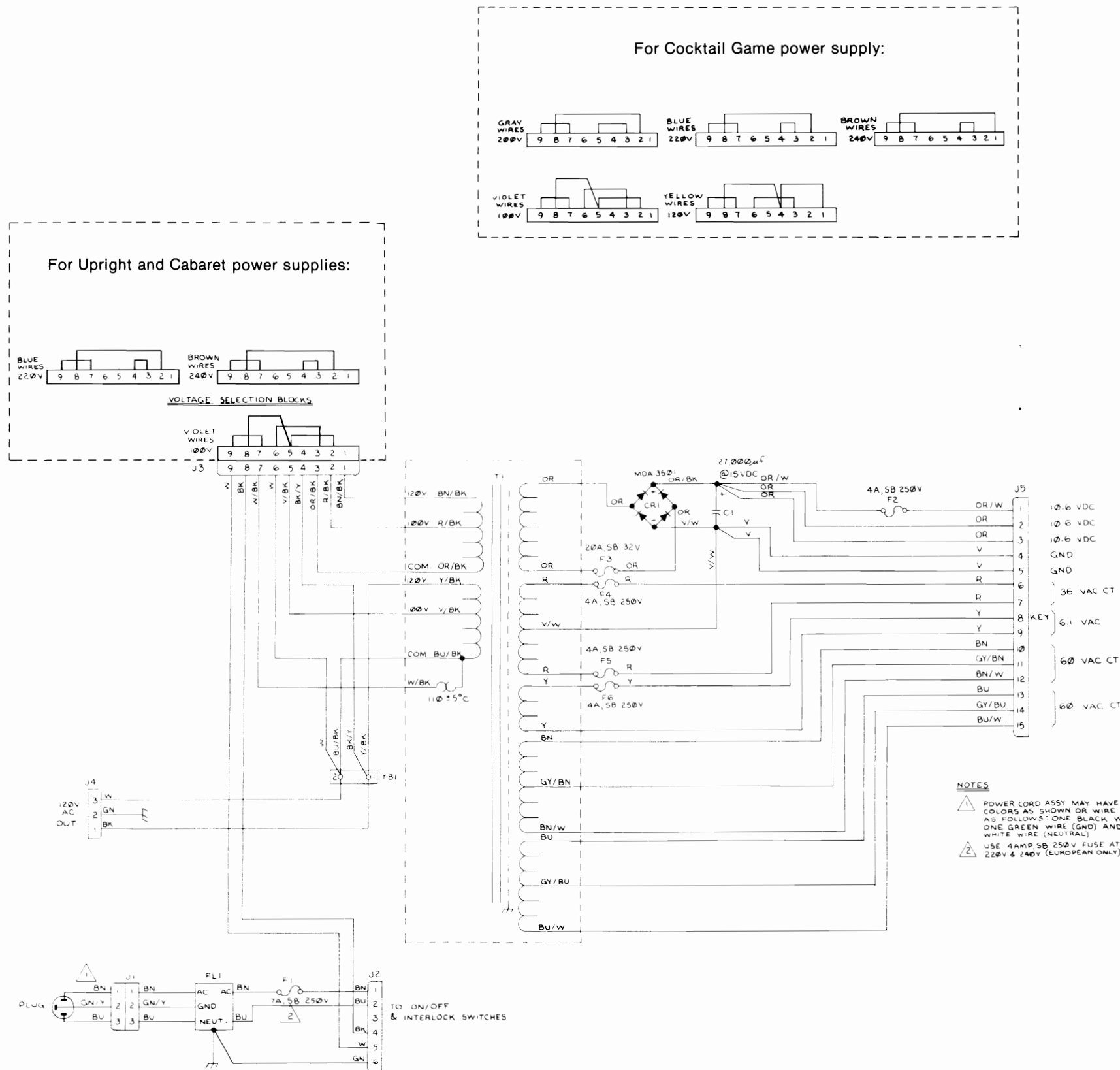
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Dig Dug Cabaret Wiring Diagram

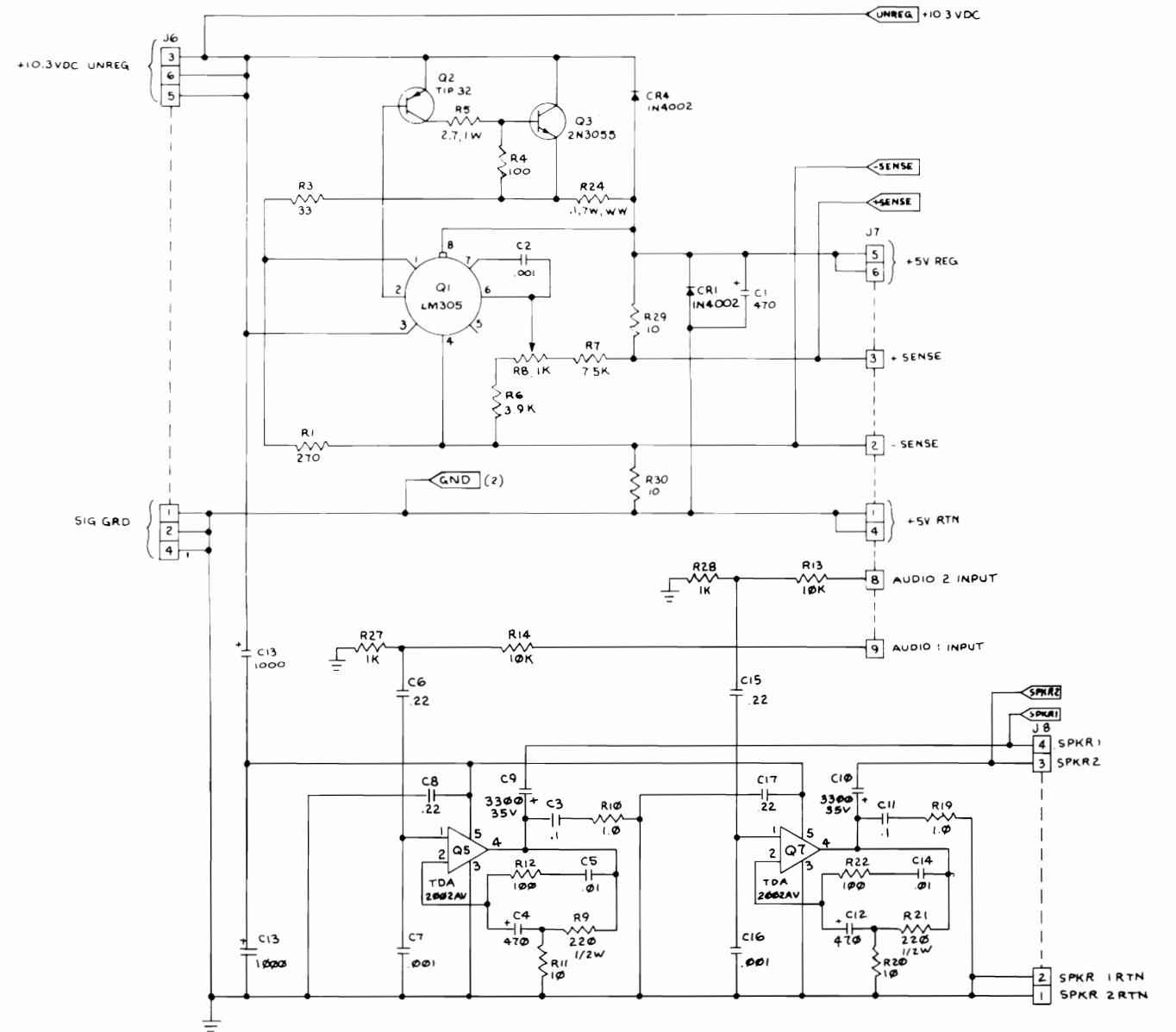
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Color Raster Power Supply Wiring Diagram



Regulator/Audio II PCB Schematic Diagram



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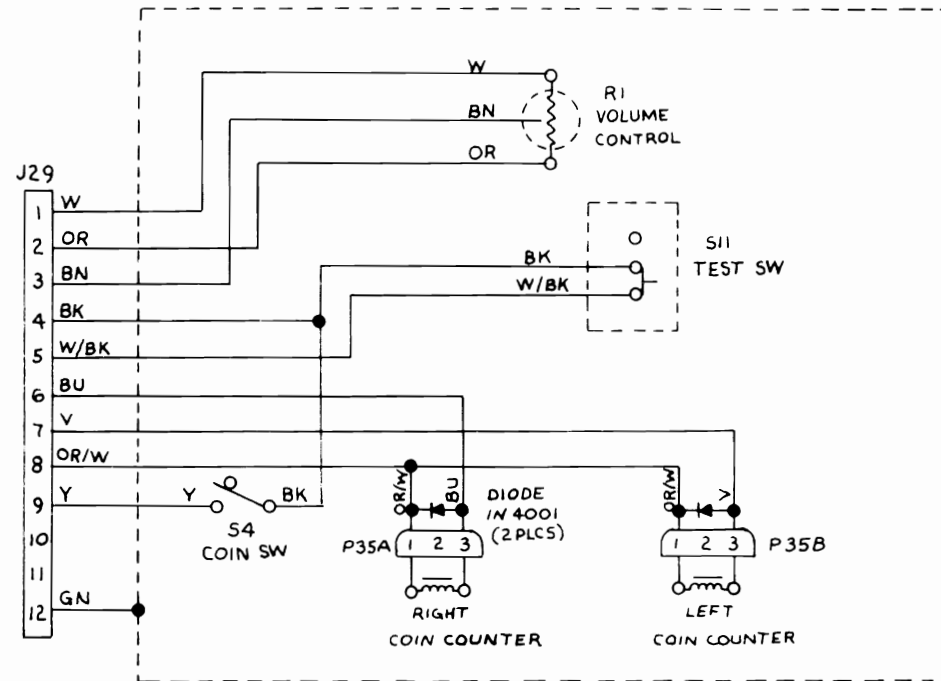
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Dig Dug Power Supply and Reg./Audio II PCB

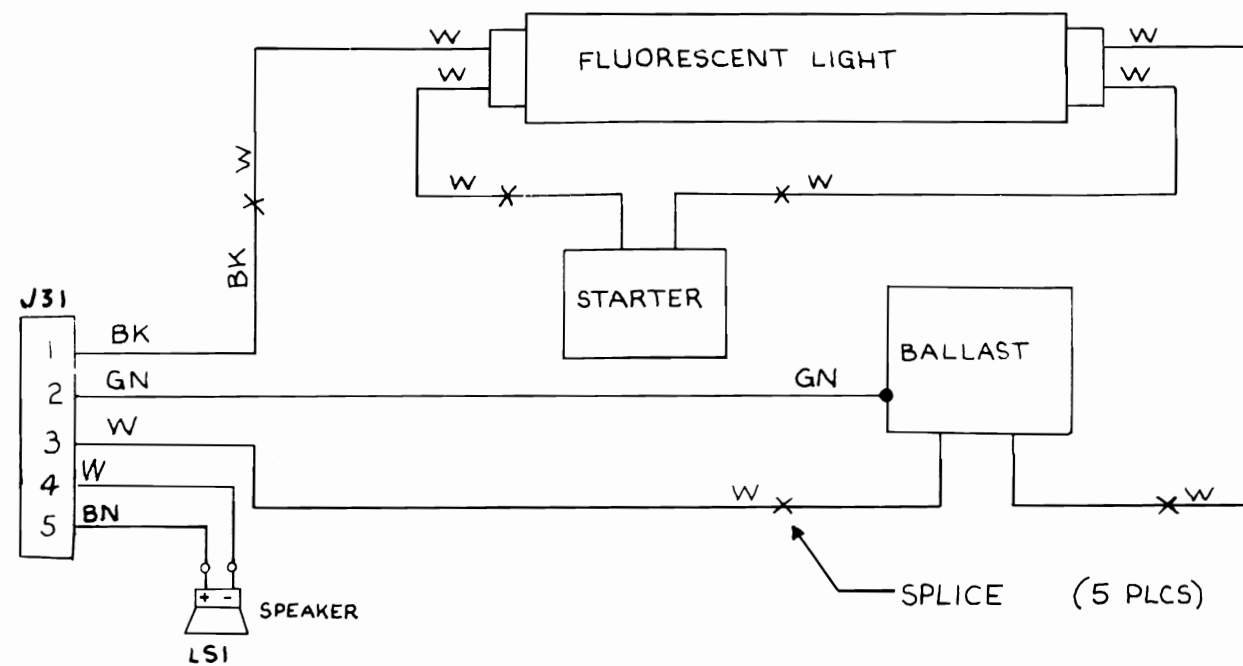
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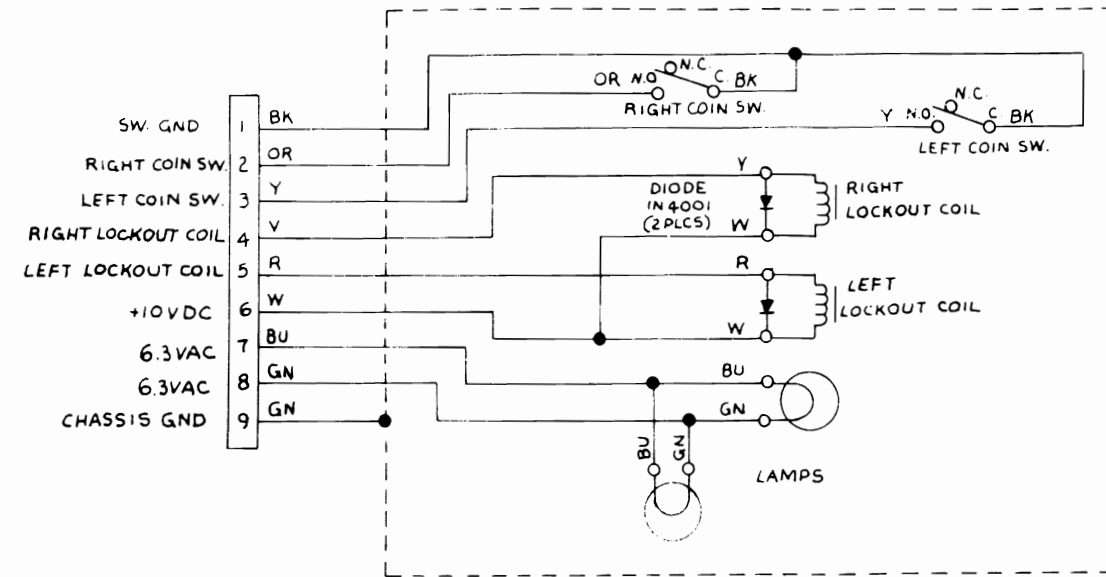
Utility Panel Wiring Diagram



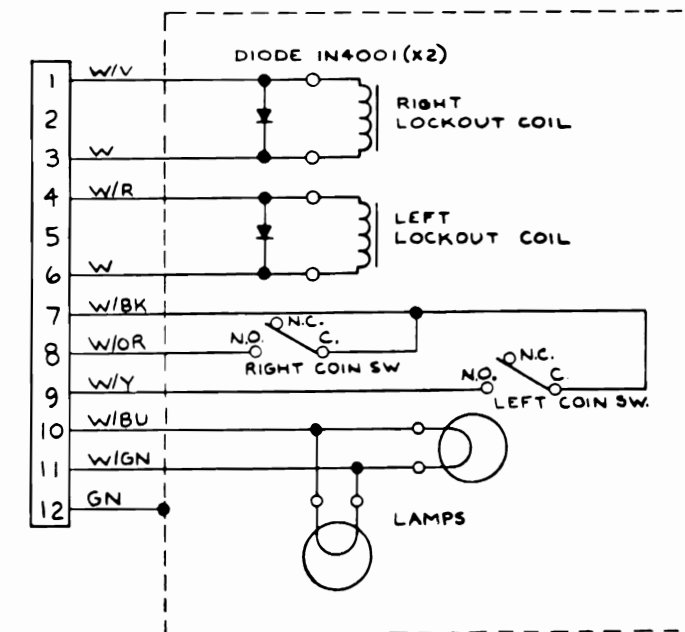
Fluorescent Light and Speaker Wiring Diagram



Upright and Cabaret Coin Door Wiring Diagram



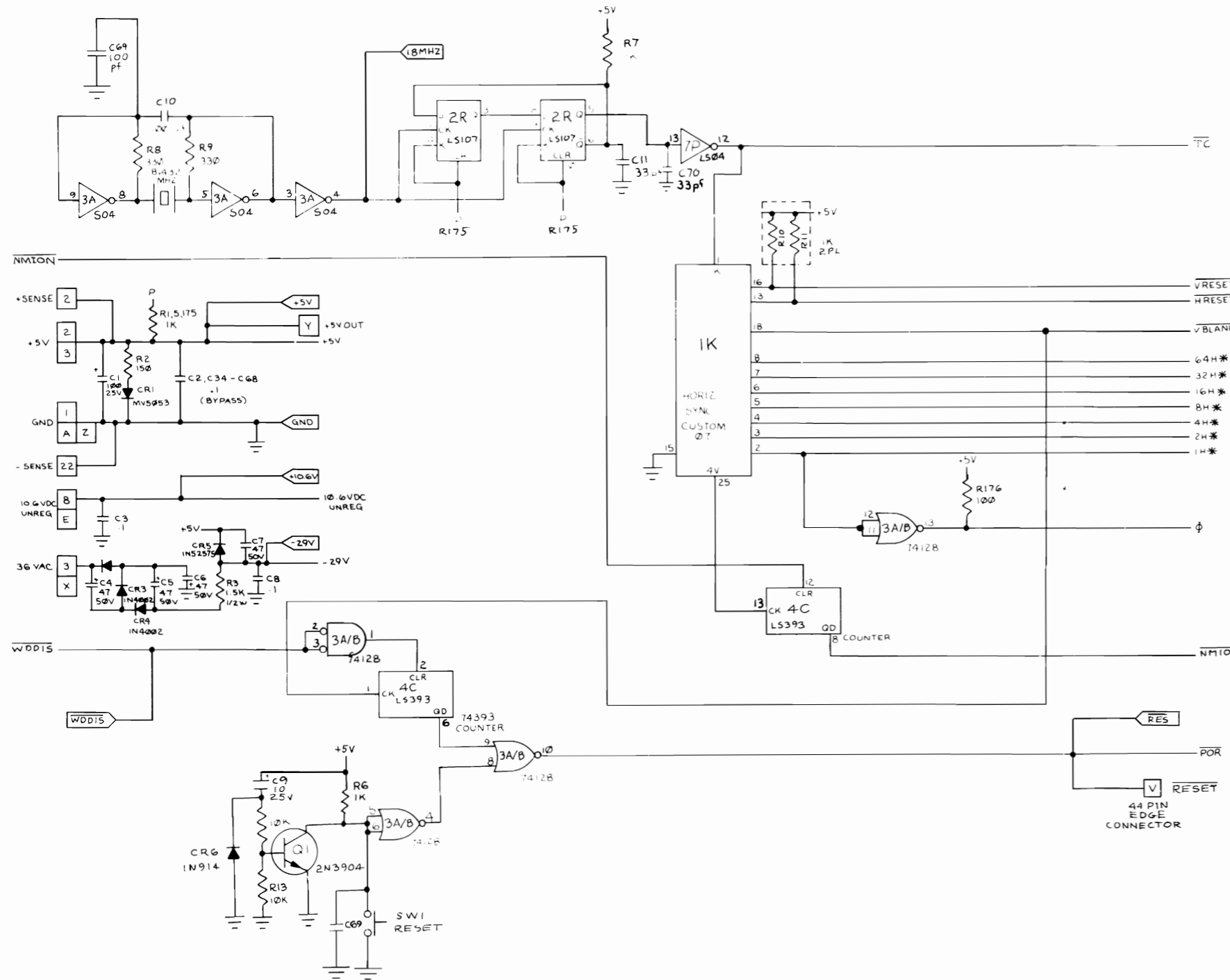
Cocktail Coin Door Wiring Diagram



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Dig Dug Game Wiring Interfaces

Power Input, Clock, NMI, and Watchdog



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 | D | 2K Playfield RAM |
| 8B80-8BFF | R/W | D | D | D | D | D | D | D | D | 1K Motion RAM (PIC, COLOR) |
| 9380-93FF | R/W | D | D | D | D | D | D | D | D | 1K Motion RAM (VPOS, HPOS) |
| 9B80-9BFF | 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 | Alphanumeric Color Select (Latched) |
| A003 | W | | | | | | | | D | Playfield Enable (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 |



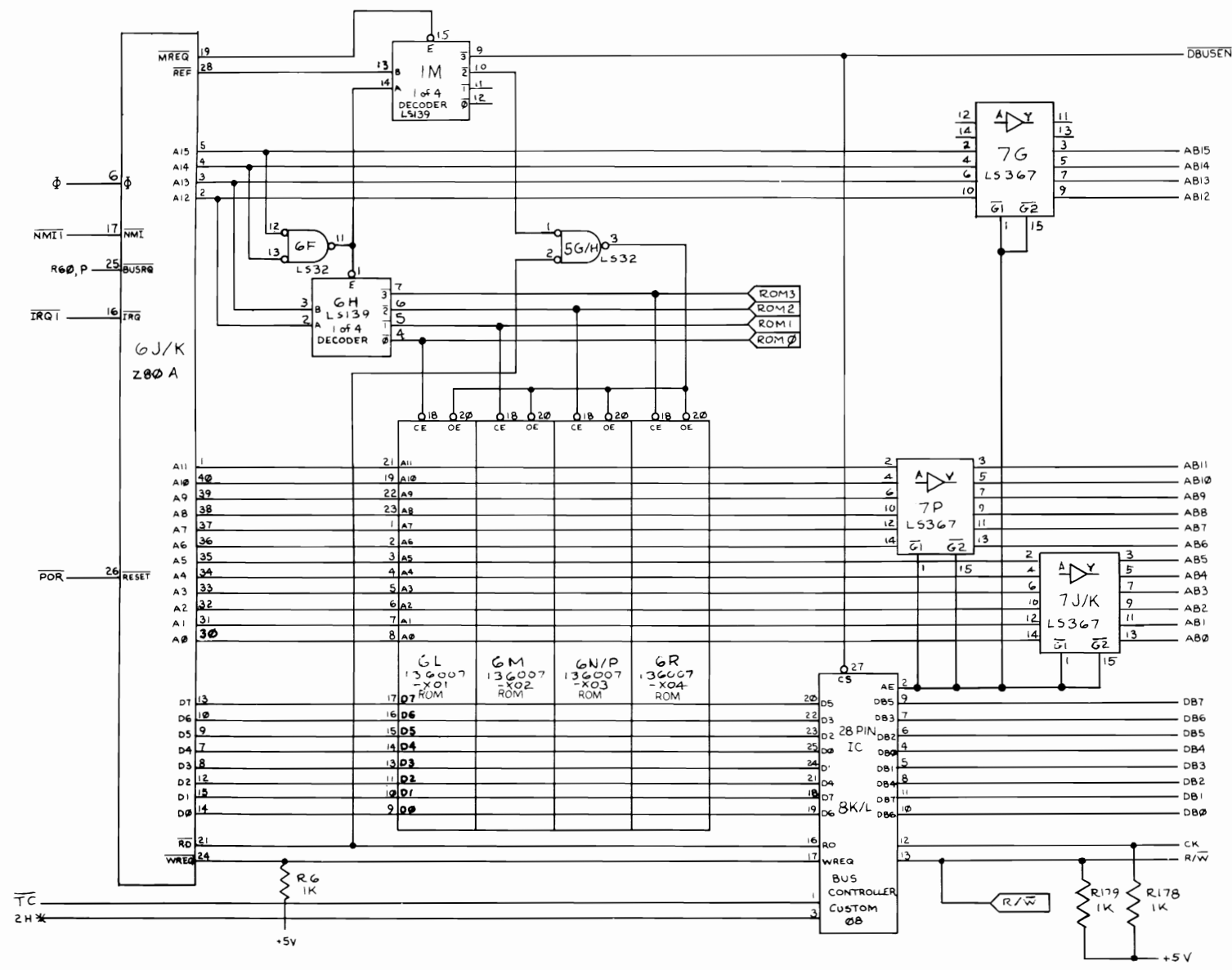
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Dig Dug Game PCB Schematic Diagram

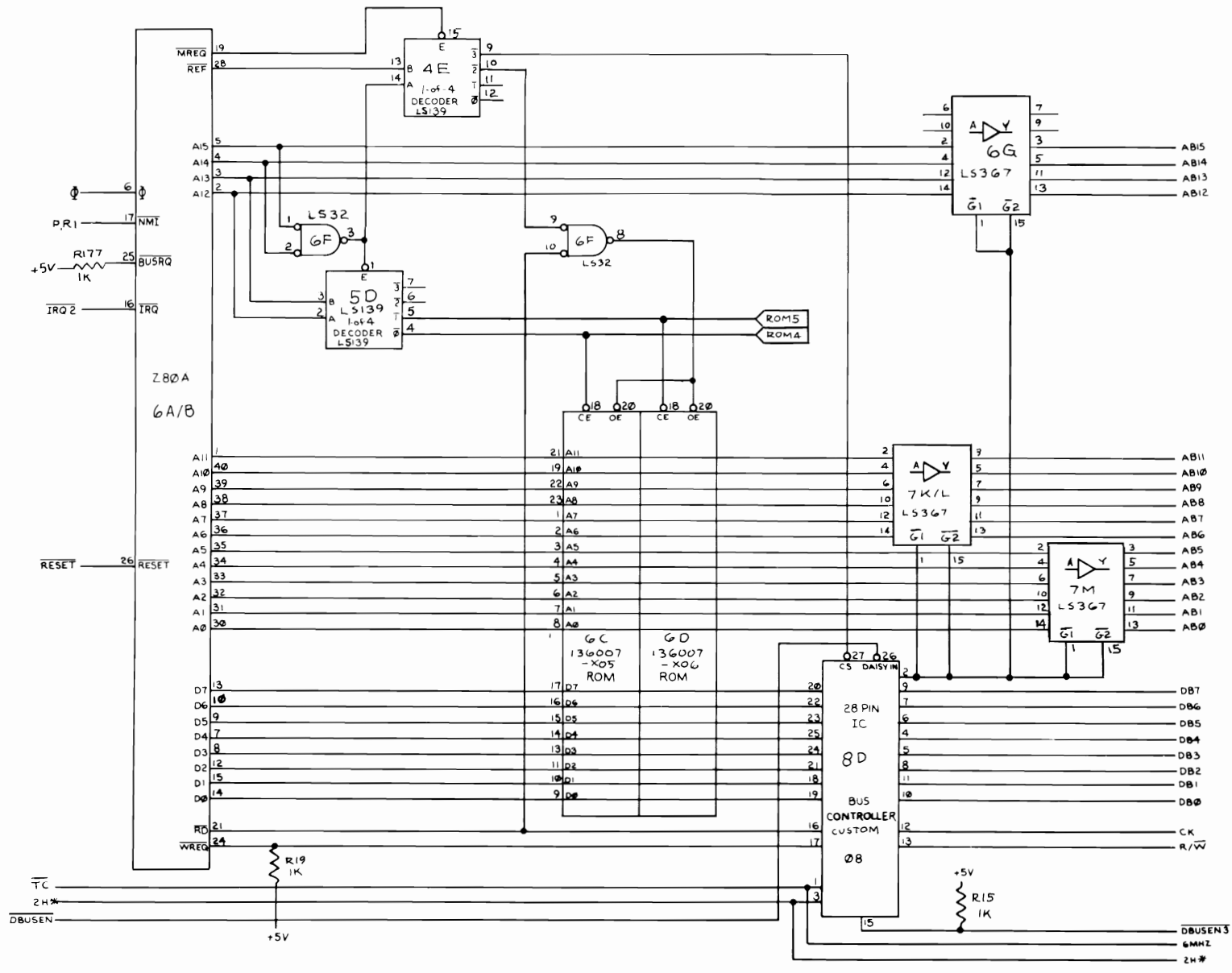
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1st Priority CPU



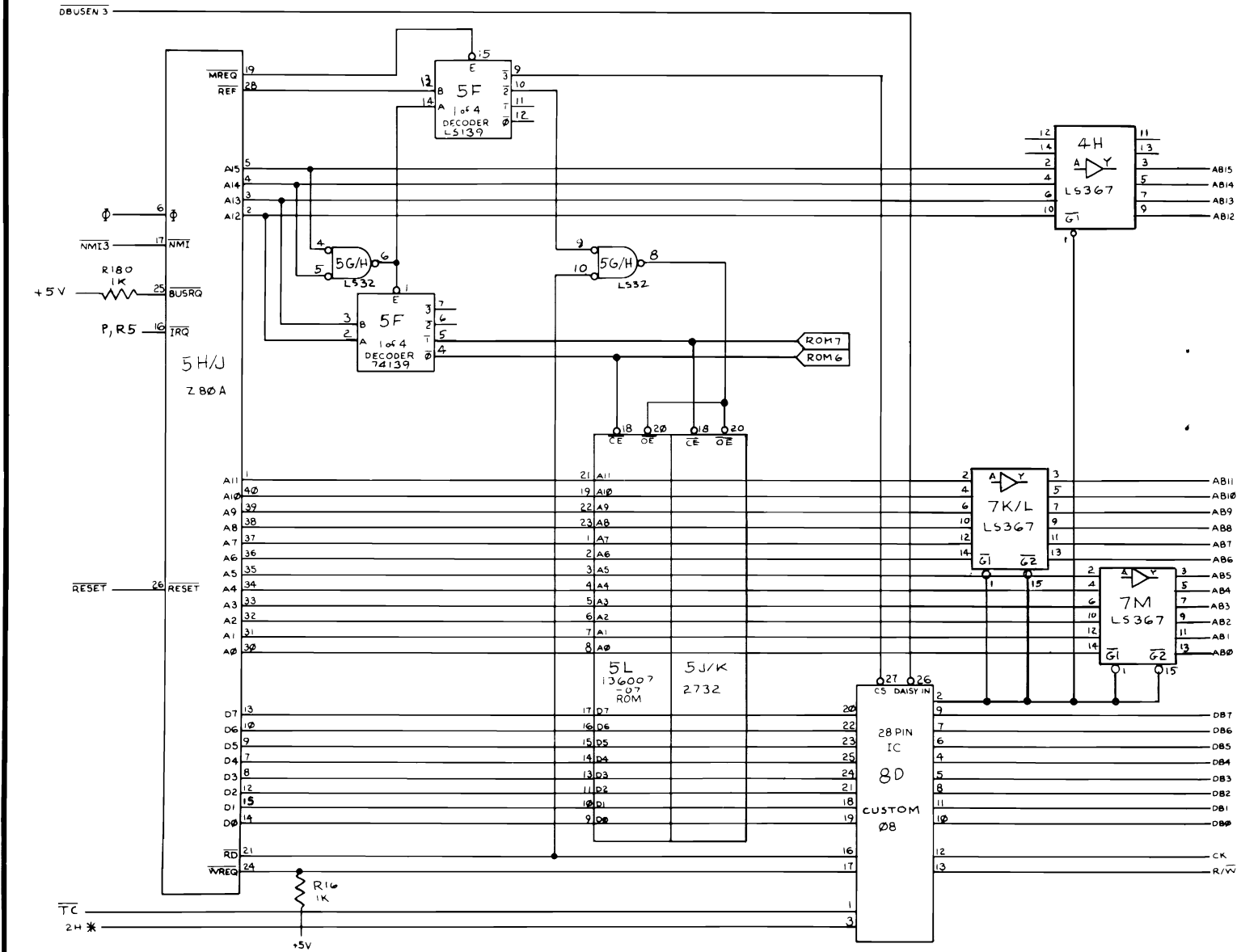
2nd Priority CPU



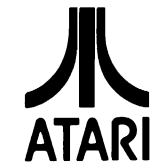
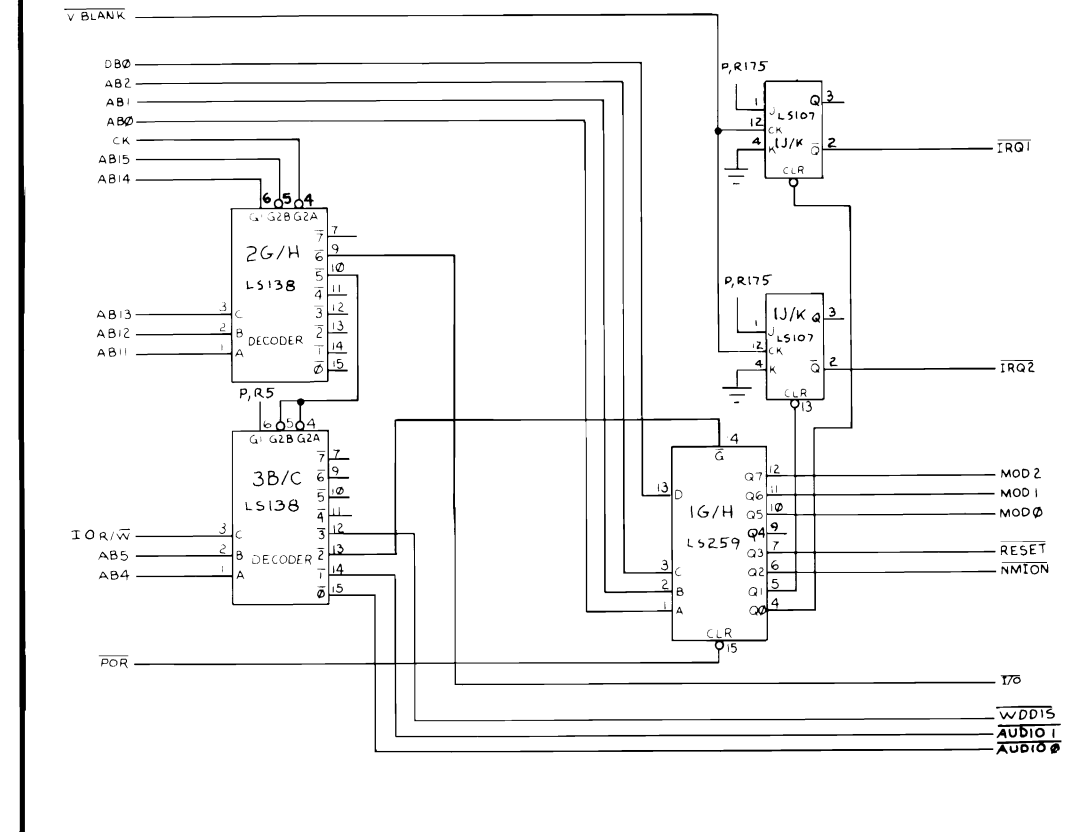
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Dig Dug Game PCB Schematic Diagram

3rd Priority CPU



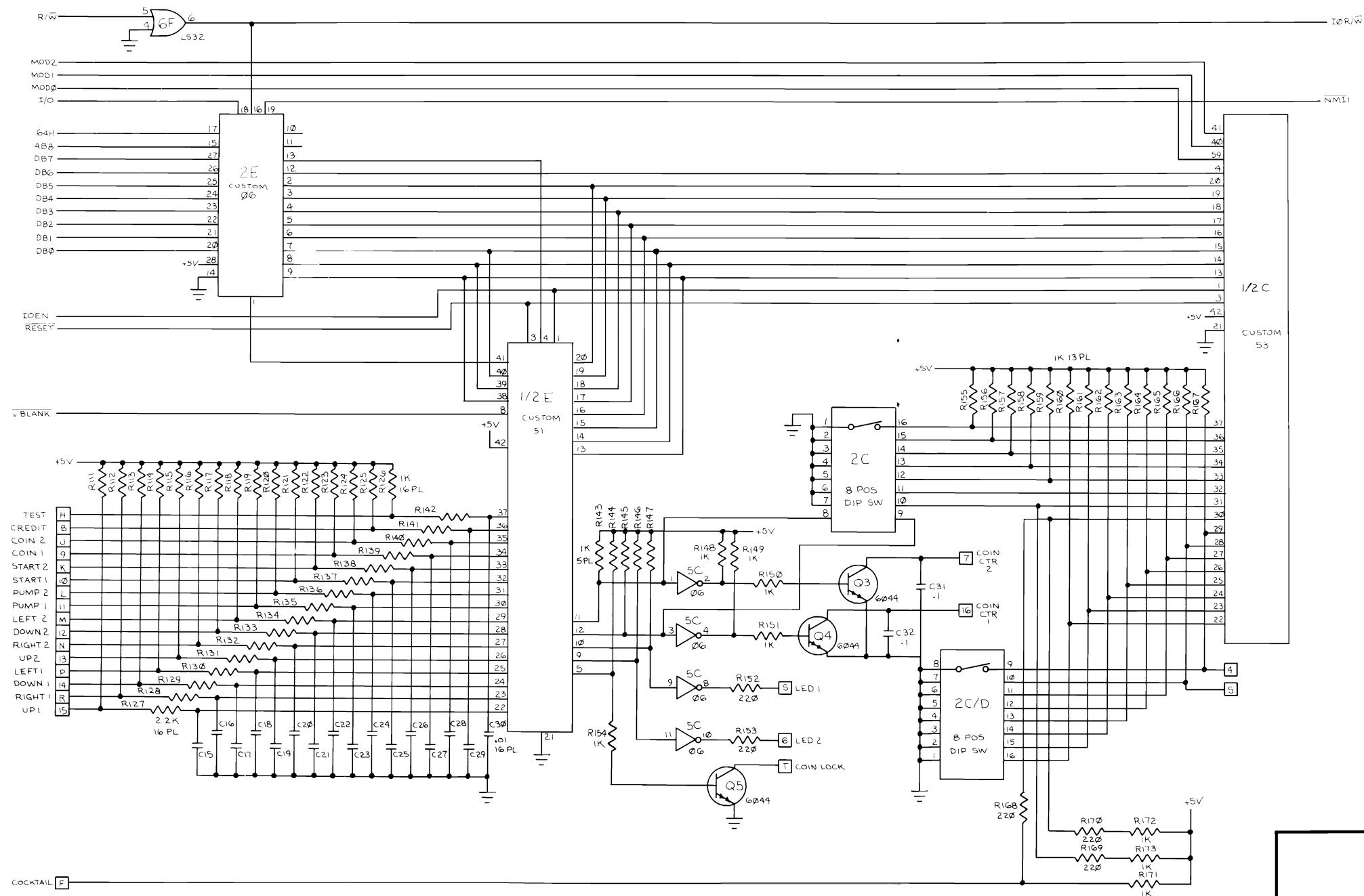
Address Decoder



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Dig Dug Game PCB Schematic Diagram

Switch Inputs, Coin Door and Control Panel Outputs



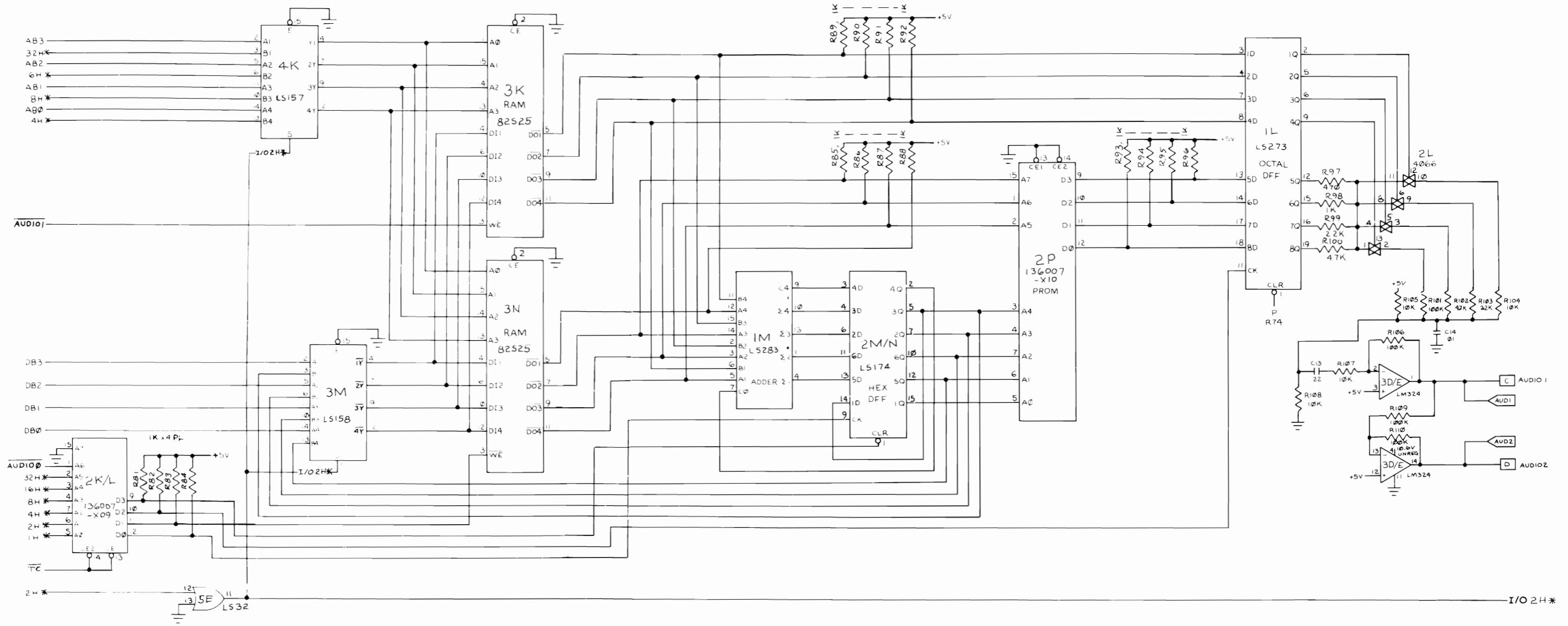
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Dig Dug Game PCB Schematic Diagram

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Audio



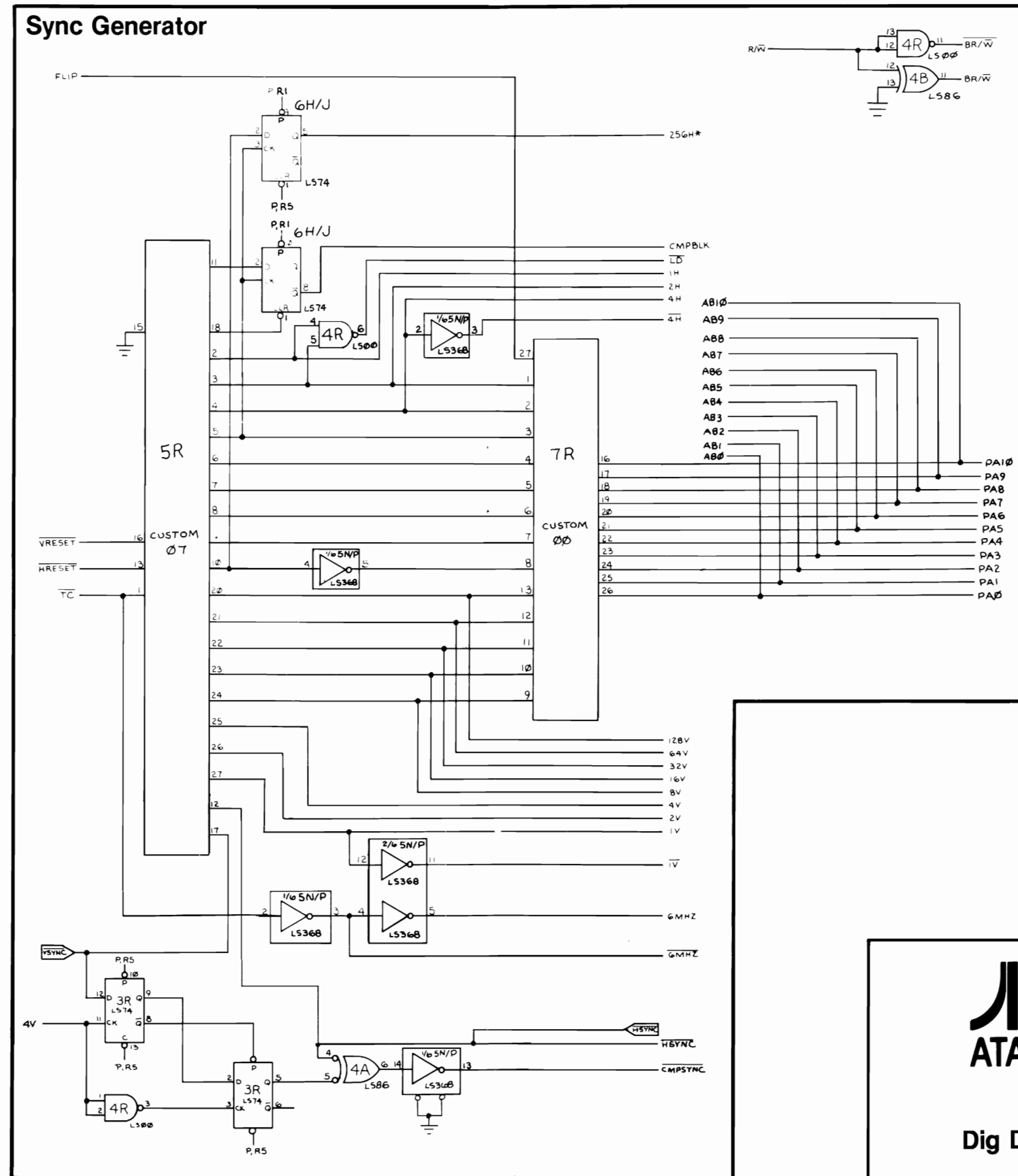
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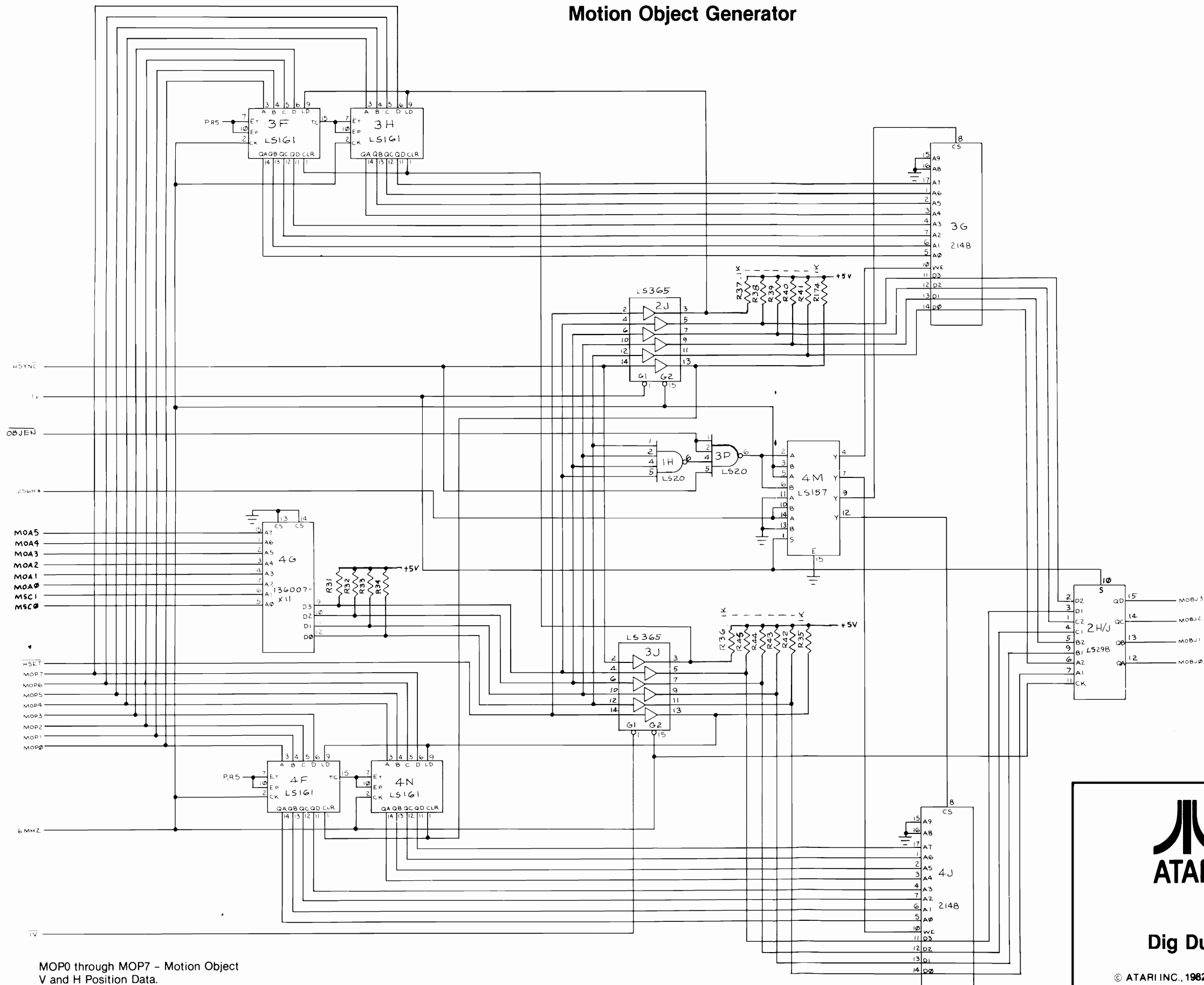
Sync Generator



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Dig Dug Game PCB Schematic Diagram

Motion Object Generator



MOBJ0 through MOBJ3 -
Motion Object Output.

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



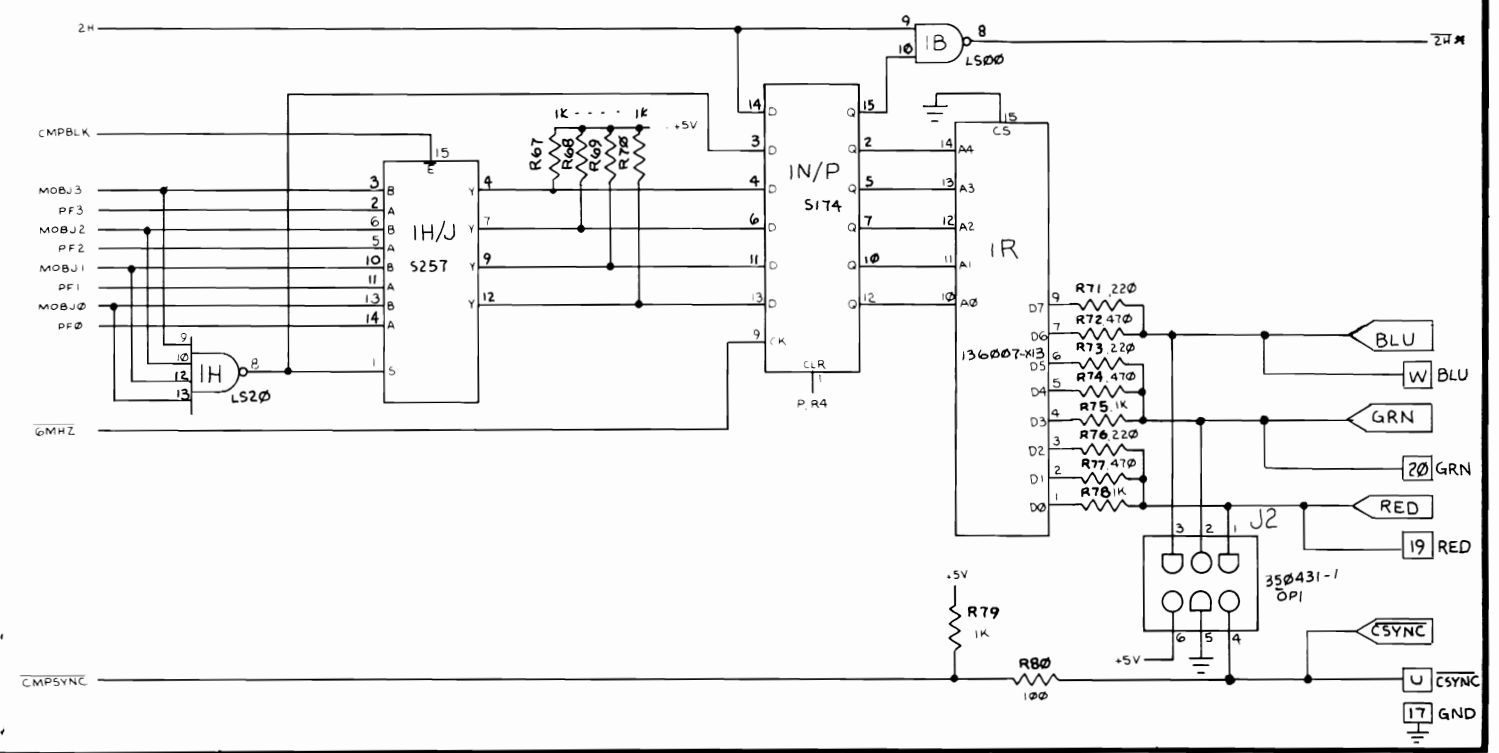
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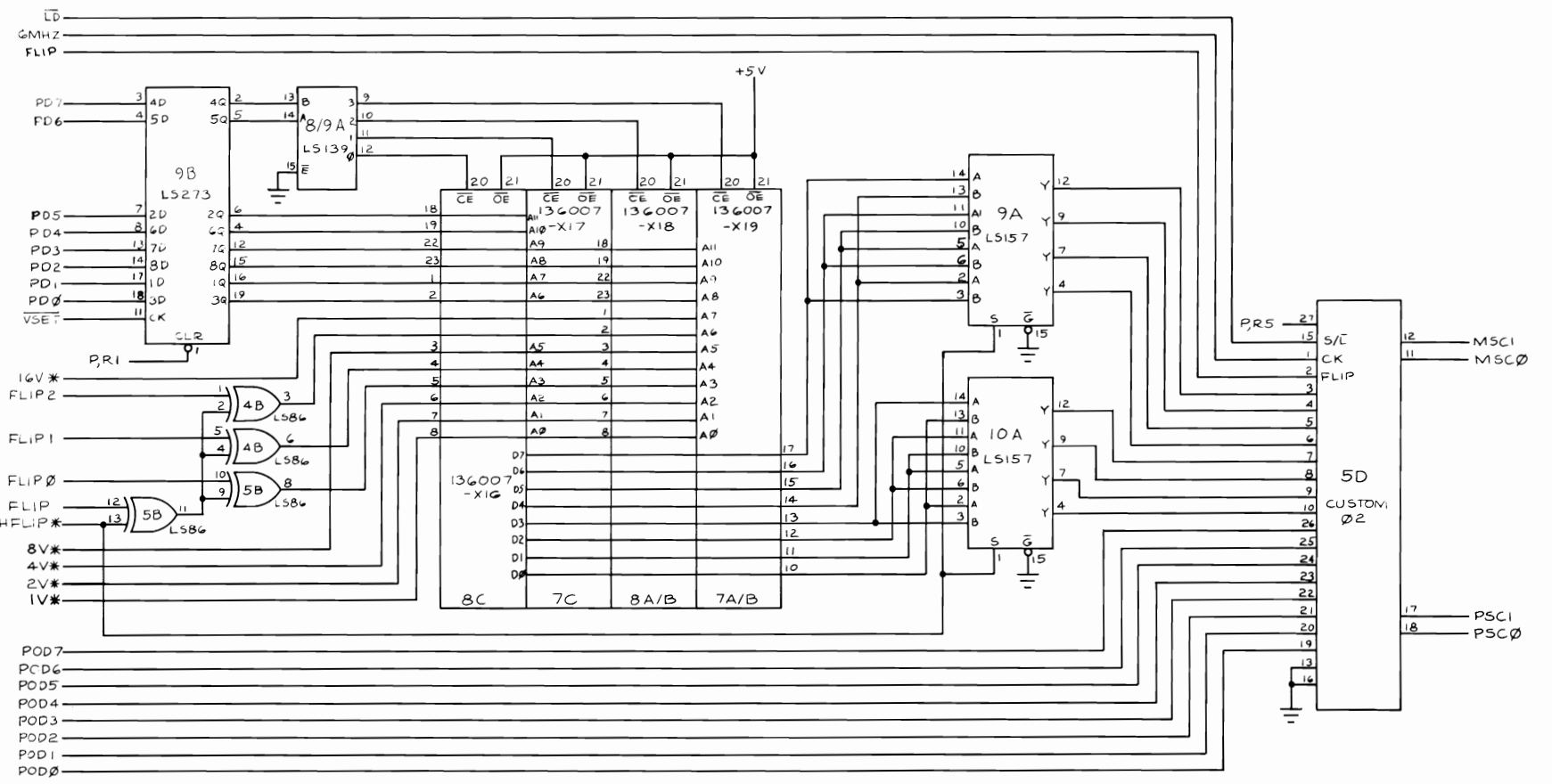
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Video Output



Video Color Controller



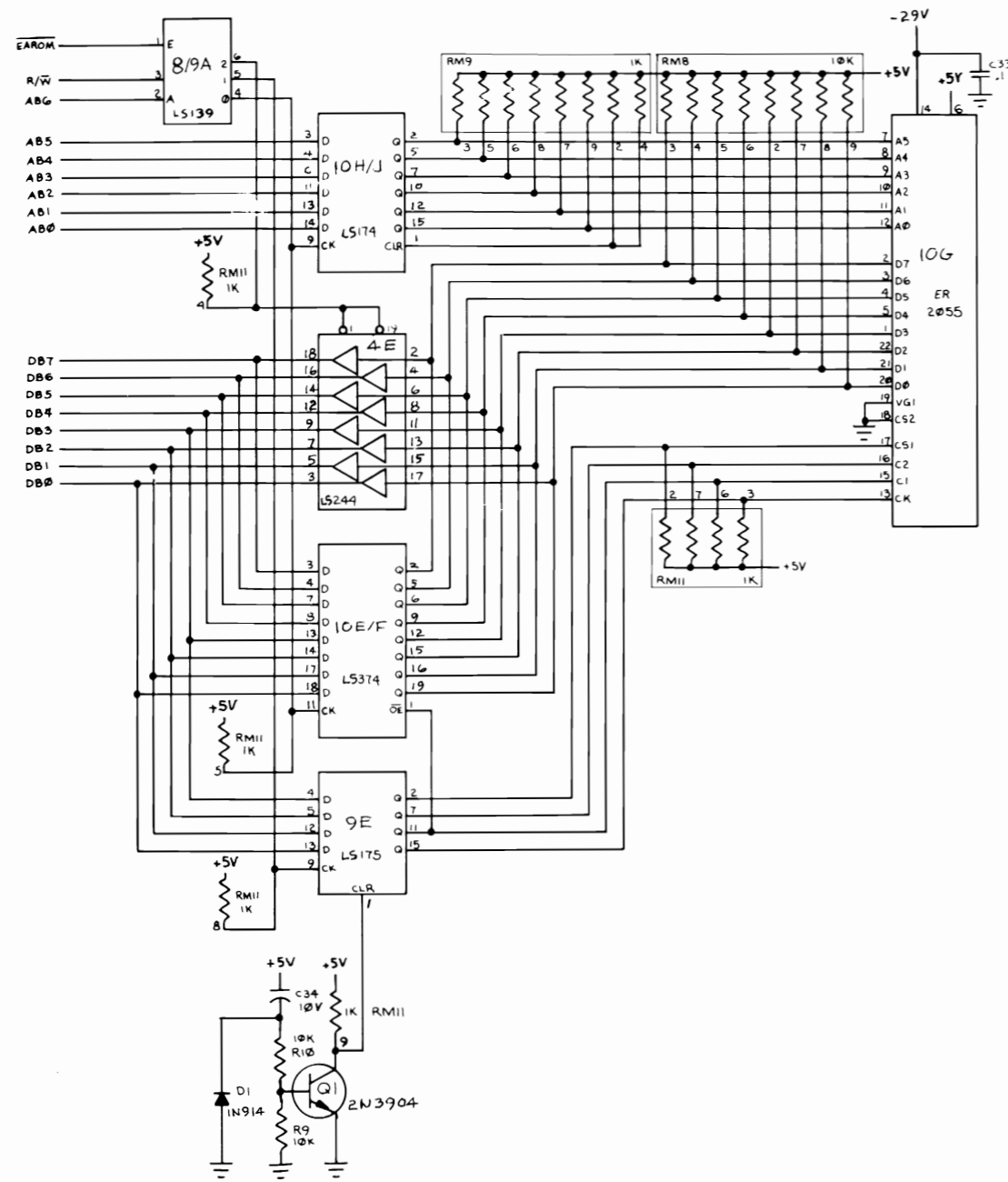
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Dig Dug Game PCB Schematic Diagram

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High-Score Table



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Dig Dug Game PCB Schematic Diagram

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Color Display Schematic Diagram

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.

$\text{\textcircled{P}}$ indicates test point connection

$\text{\textcircled{G}}$ indicates chassis ground unless otherwise specified

Hz indicates cycles per second

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

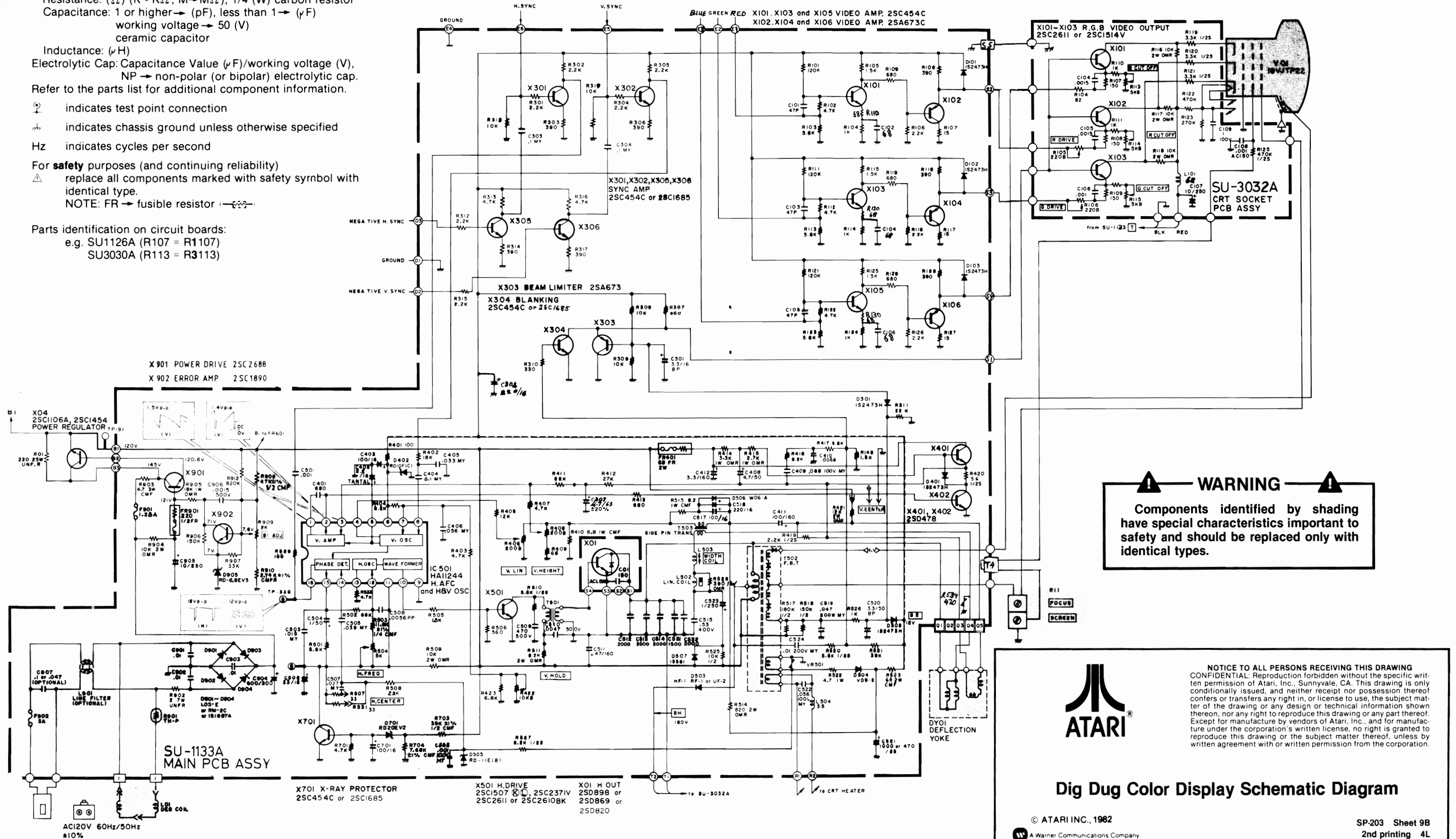
$\text{\textcircled{A}}$ replace all components marked with safety symbol with identical type.

NOTE: FR \rightarrow fusible resistor

Parts identification on circuit boards:

e.g. SU1126A (R107 = R1107)

SU3030A (R113 = R3113)



WARNING

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

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Dig Dug Color Display Schematic Diagram

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