Schematic Package Supplement to

Operation, Maintenance and Service Manual

ATARI
A Warner Communications Company

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Dig Dug Upright Game Wiring Diagram
Color Raster Power Supply Wiring Diagram
### MEMORY MAP

<table>
<thead>
<tr>
<th>HEXA-DECIMAL ADDRESS</th>
<th>R/W</th>
<th>DATA</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000-3FFF</td>
<td>R</td>
<td>D D D D D D D D</td>
<td>1st Priority Z80 CPU ROM (16K)</td>
</tr>
<tr>
<td>0000-1FFF</td>
<td>R</td>
<td>D D D D D D D D</td>
<td>2nd Priority Z80 CPU ROM (8K)</td>
</tr>
<tr>
<td>0000-0FFF</td>
<td>R</td>
<td>D D D D D D D D</td>
<td>3rd Priority Z80 CPU ROM (4K)</td>
</tr>
<tr>
<td>6800-680F</td>
<td>W</td>
<td>D D D D D D D D</td>
<td>Audio Control</td>
</tr>
<tr>
<td>6810-681F</td>
<td>W</td>
<td>D D D D D D D D</td>
<td>Audio Control</td>
</tr>
<tr>
<td>6820</td>
<td>W</td>
<td></td>
<td>D 0 = Reset IRQ1 (Latched)</td>
</tr>
<tr>
<td>6821</td>
<td>W</td>
<td></td>
<td>D 0 = Reset IRQ2 (Latched)</td>
</tr>
<tr>
<td>6822</td>
<td>W</td>
<td></td>
<td>D 0 = Enable NM3 (Latched)</td>
</tr>
<tr>
<td>6823</td>
<td>W</td>
<td></td>
<td>D 0 = Reset 2nd and 3rd Z80 CPUs (Latched)</td>
</tr>
<tr>
<td>6825</td>
<td>W</td>
<td></td>
<td>Custom Chip 53 Mode Control (Latched)</td>
</tr>
<tr>
<td>6826</td>
<td>W</td>
<td></td>
<td>Custom Chip 53 Mode Control (Latched)</td>
</tr>
<tr>
<td>6827</td>
<td>W</td>
<td></td>
<td>Custom Chip 53 Mode Control (Latched)</td>
</tr>
<tr>
<td>6830</td>
<td>W</td>
<td></td>
<td>Watchdog Reset</td>
</tr>
<tr>
<td>7000 R/W</td>
<td>D D D D D D D D</td>
<td>Custom Chip 06—Data</td>
<td></td>
</tr>
<tr>
<td>7100 R/W</td>
<td>D D D D D D D D</td>
<td>Custom Chip 06—Command</td>
<td></td>
</tr>
<tr>
<td>8000-87FF</td>
<td>R/W</td>
<td>D D D D D D D D</td>
<td>2K Playfield RAM</td>
</tr>
<tr>
<td>8800-8BFF</td>
<td>R/W</td>
<td>D D D D D D D D</td>
<td>1K Motion RAM (PIC)</td>
</tr>
<tr>
<td>9000-93FF</td>
<td>R/W</td>
<td>D D D D D D D D</td>
<td>1K Motion RAM (HPOS, VPOS)</td>
</tr>
<tr>
<td>9800-9BFF</td>
<td>R/W</td>
<td>D D D D D D D D</td>
<td>1K Motion RAM (FLIP)</td>
</tr>
<tr>
<td>A000 W</td>
<td>D</td>
<td>Playfield Select (Latched)</td>
<td></td>
</tr>
<tr>
<td>A001 W</td>
<td>D</td>
<td>Playfield Select (Latched)</td>
<td></td>
</tr>
<tr>
<td>A002 W</td>
<td>D</td>
<td>Playfield Color Select (Latched)</td>
<td></td>
</tr>
<tr>
<td>A003 W</td>
<td>D</td>
<td>Alphanumeric Color Select (Latched)</td>
<td></td>
</tr>
<tr>
<td>A004 W</td>
<td>D</td>
<td>Playfield Color Select (Latched)</td>
<td></td>
</tr>
<tr>
<td>A005 W</td>
<td>D</td>
<td>Playfield Color Select (Latched)</td>
<td></td>
</tr>
<tr>
<td>A007 W</td>
<td>D</td>
<td>Flip Video</td>
<td></td>
</tr>
<tr>
<td>B800-B83F</td>
<td>W</td>
<td>D D D D D D D D</td>
<td>Write EROM Address and Data</td>
</tr>
<tr>
<td>B800 R</td>
<td>D</td>
<td>D D D D D D D D</td>
<td>Read EROM Data</td>
</tr>
<tr>
<td>B840 W</td>
<td>D</td>
<td>D D D D</td>
<td>Write EROM Control</td>
</tr>
</tbody>
</table>

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**Dig Dug CPU PCB Schematic Diagram:**

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Dig Dug CPU PCB Schematic Diagram:

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SP-203 Sheet 3A

1st printing 3L
CPU PCB Power Input, Clock, NMI, and Watchdog
Dig Dug Video PCB Schematic Diagram

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SP-203  Sheet 5B
1st printing  3L

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Playfield Generator
Motion Object Address Generator, Decoder, and Match Line Flag
MOBJ0 through MOBJ3 - Motion Object Output.

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Dig Dug Video PCB Schematic Diagram

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SP-203  Sheet 7A
1st printing  3L
MOP0 through MOP7 – Motion Object
V and H Position Data.
MOBJA0 through MOBJA7 – Motion
Object Picture Address.
Schematic Notes
Unless otherwise specified
Resistance: (Ω) (K→Ω1, M→MΩ), 1/4 (W) carbon resistor
Capacity: 1 or higher → (μF), less than 1 → (μF)
working voltage → 50 (V)
ceramic capacitor
Inductance: (μH)
Electrolytic Cap. Capacitance Value (μF)/working voltage (V).
NP → 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)
Δ replace all components marked with safety symbol with
identical type.
NOTE: FR → fusible resistor

Parts identification on circuit boards:
e.g. SU1126A (R107 = R1107)
SU3030A (R113 = R3113)