

Table of Contents

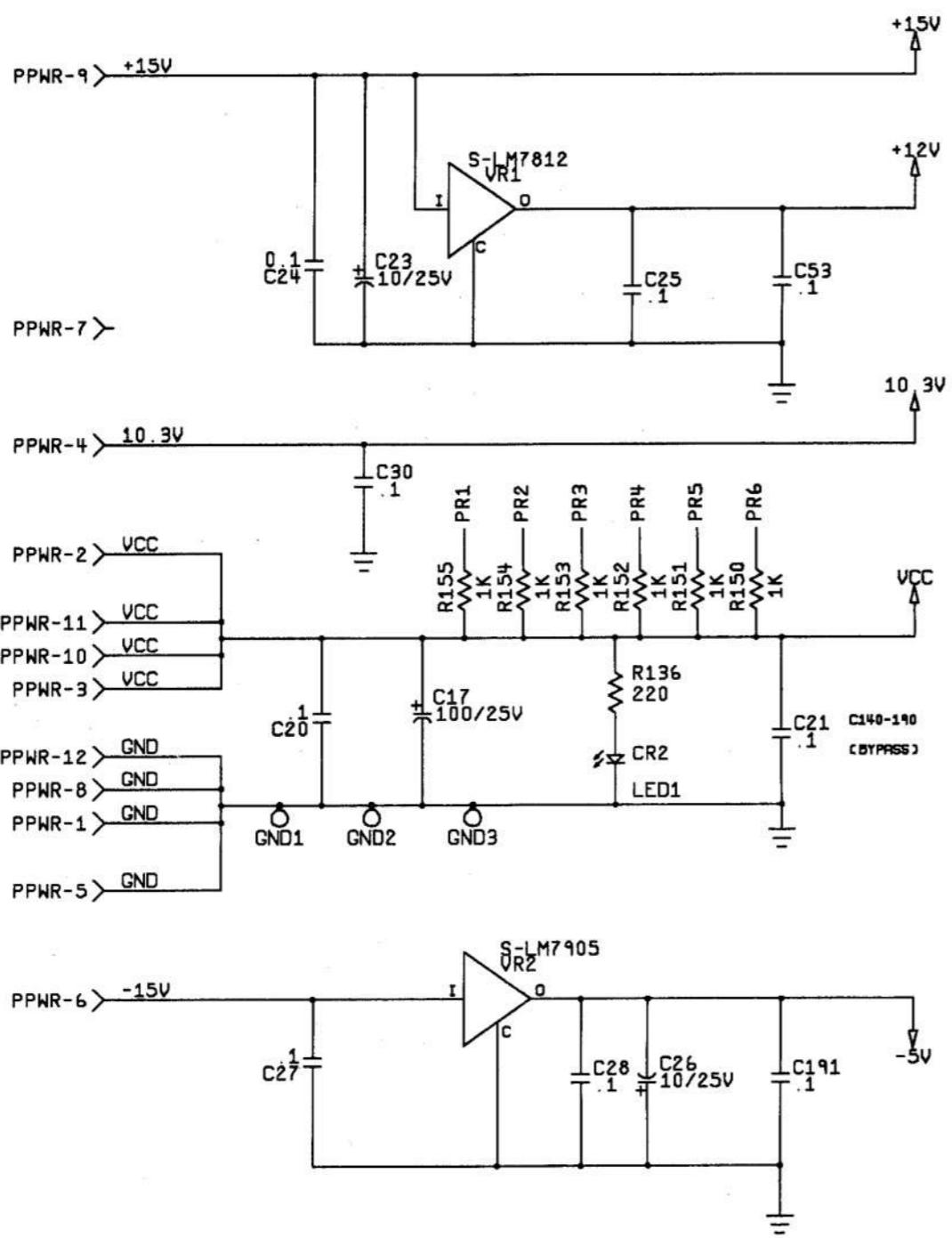
Gauntlet™ PCB Schematic Diagram	Sheets 1-16
Audio PCB Assembly Schematic Diagram (U.S.)	Sheet 17
Regulator/Audio III PCB Schematic Diagram (Ireland)	Sheet 18
Switching/Linear (SL) Power Supply Wiring Diagram (U.S.)	Sheet 19
Linear Power Supply Wiring Diagram (Ireland)	Sheet 20
Gauntlet Game Wiring Diagram	Sheet 21
Coin Door Wiring Diagram	Sheet 22
Gauntlet 68010 and 6502 Microprocessor Memory Maps	Sheet 23
Gauntlet Signal Name Glossary	Sheets 24-25



Schematic Package Supplement to the Gauntlet™ Operators Manual

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

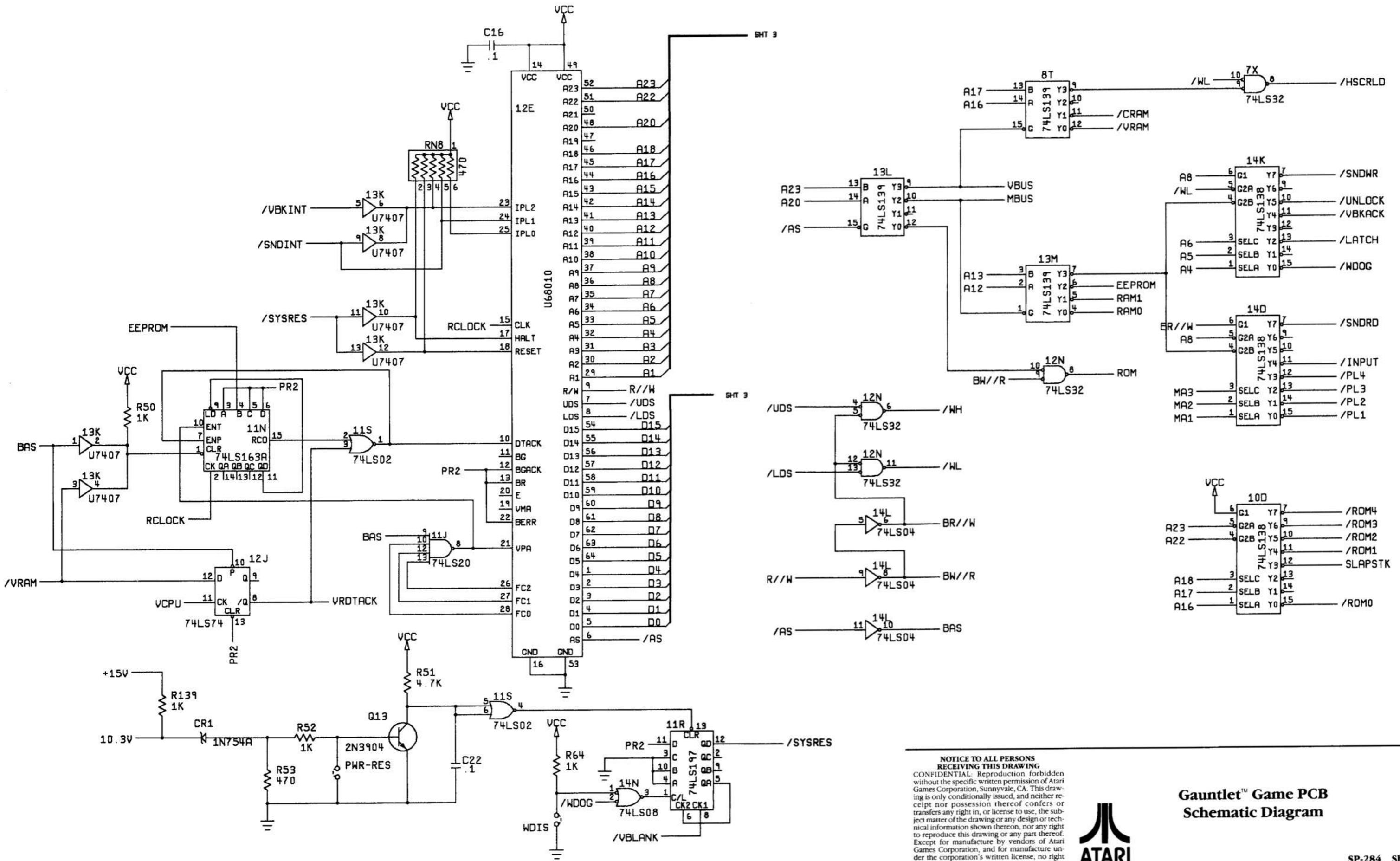




NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

Gauntlet™ Game PCB Schematic Diagram



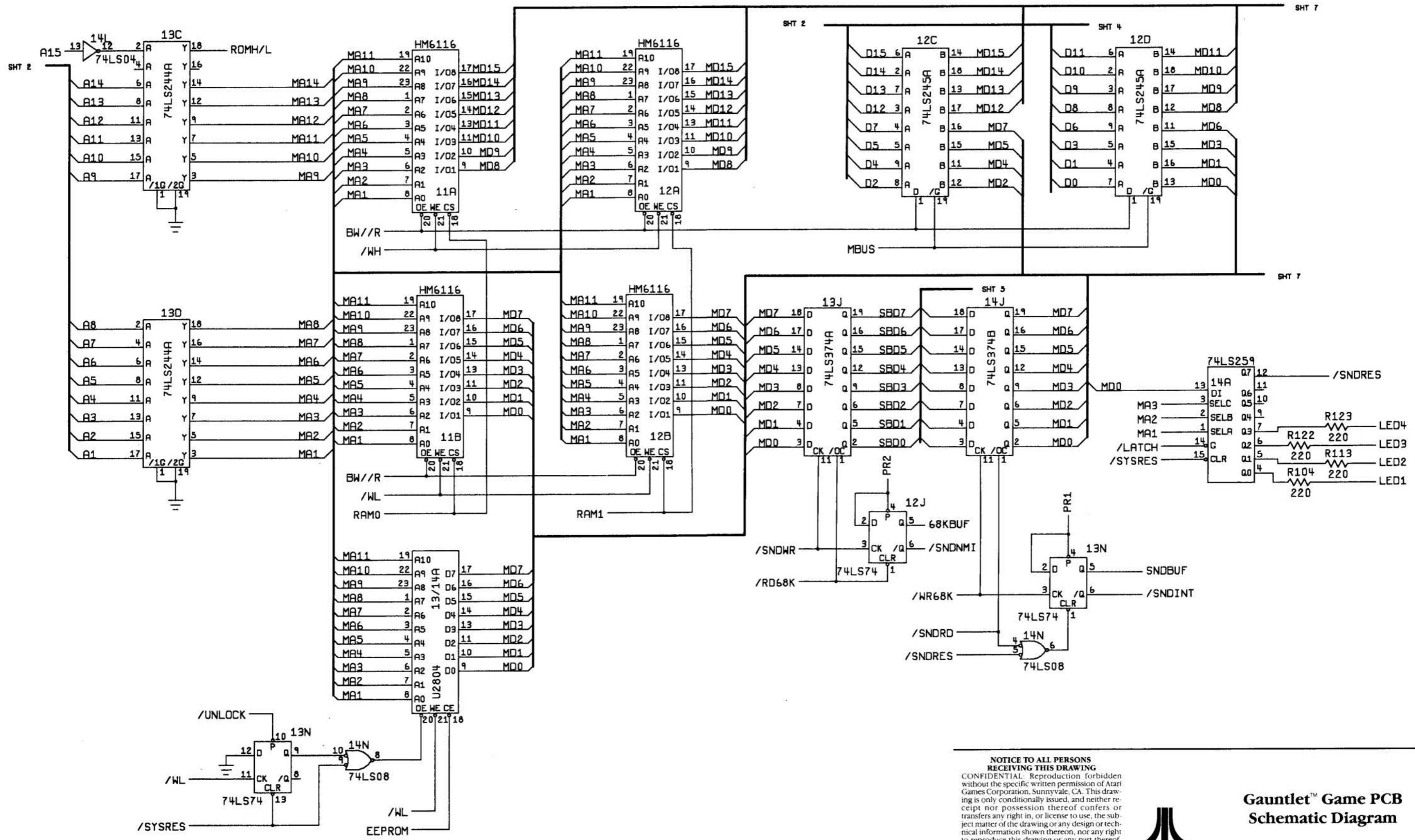


NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

Gauntlet™ Game PCB
Schematic Diagram



© 1985 Atari Games Corporation

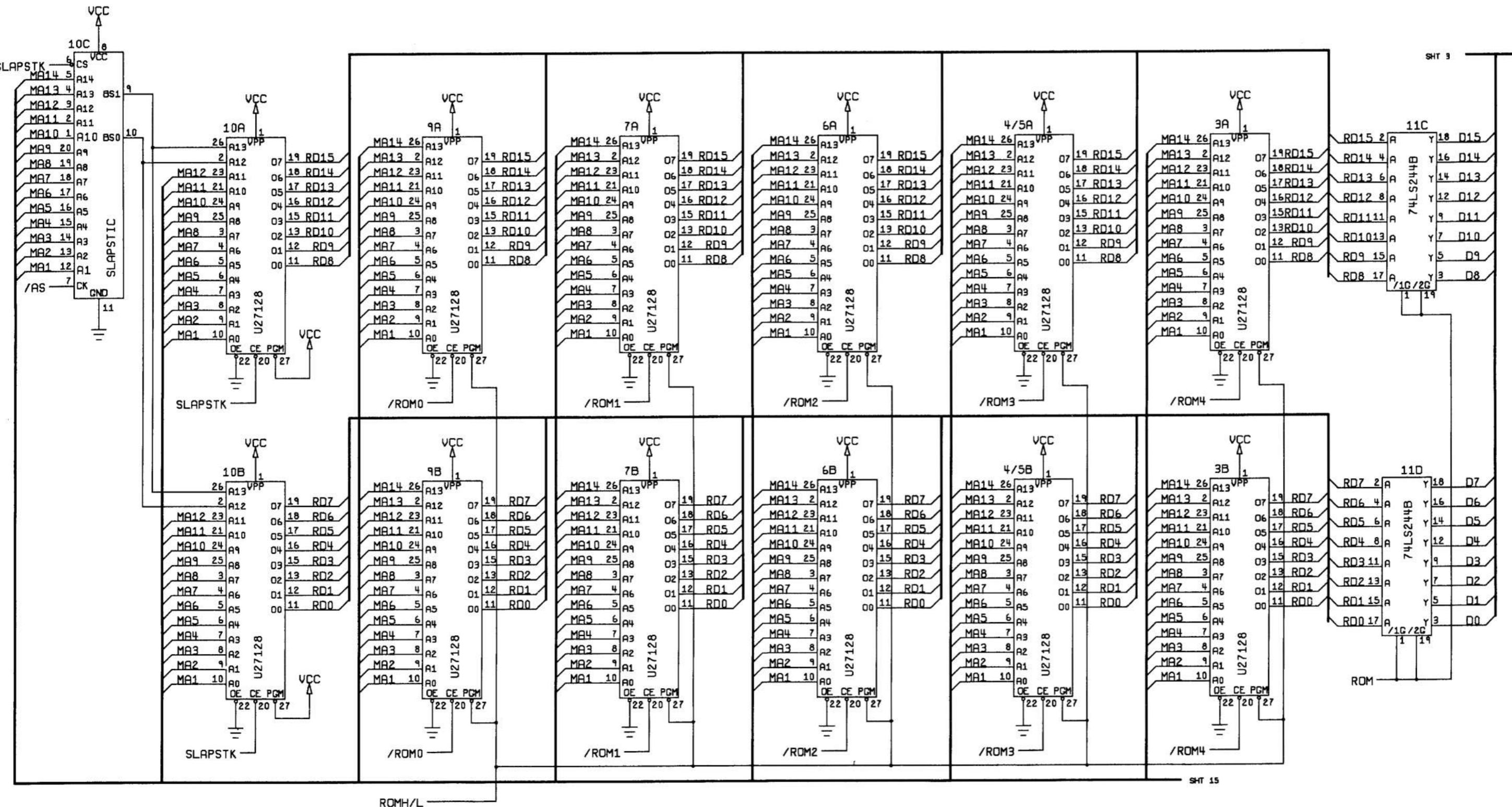


NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

Gauntlet™ Game PCB Schematic Diagram



© 1985 Atari Games Corporation

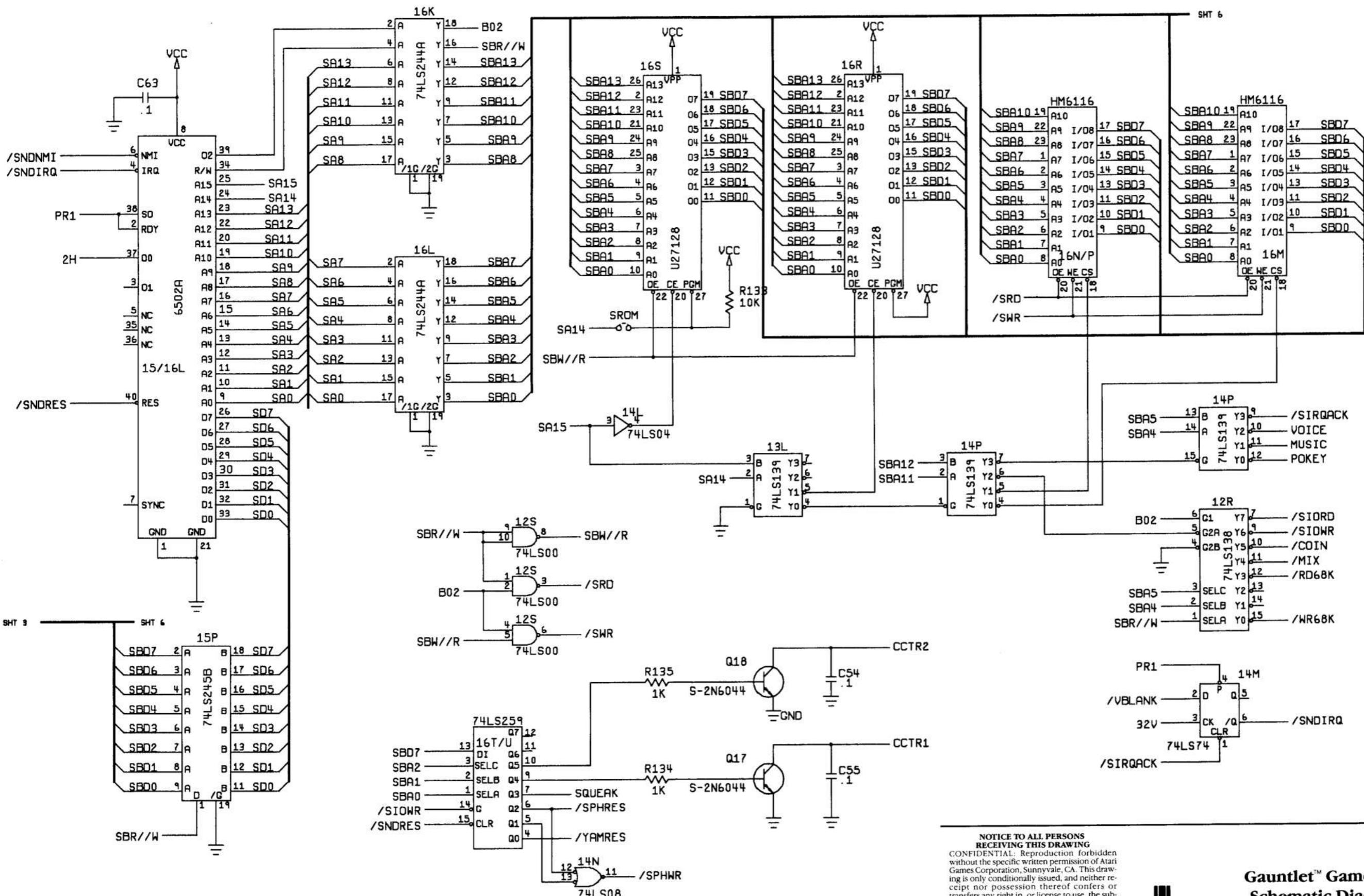


NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

Gauntlet™ Game PCB Schematic Diagram



© 1985 Atari Games Corporation

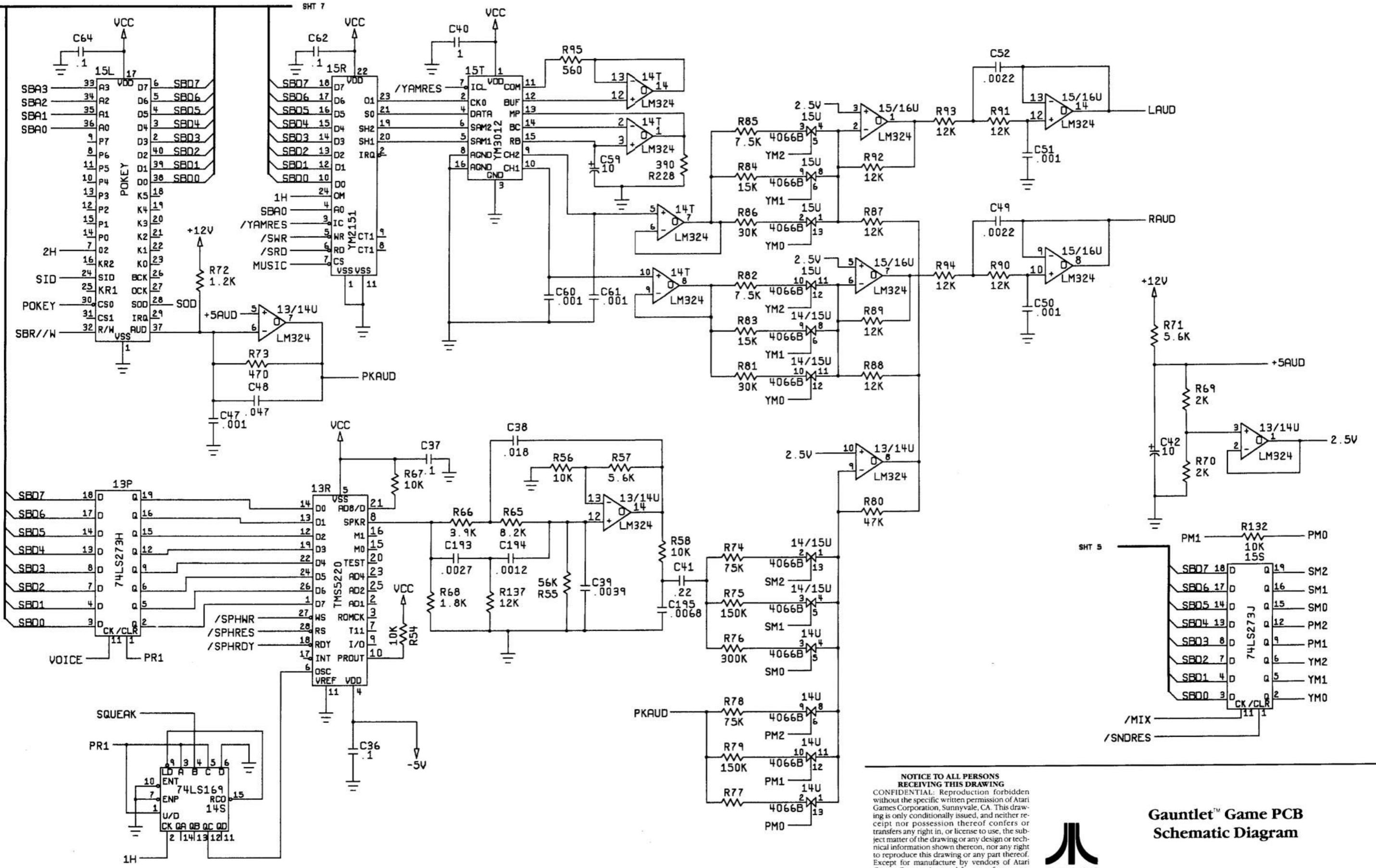


NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
 CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof conveys any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except as manufactured by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

**Gauntlet™ Game PCB
Schematic Diagram**



© 1985 Atari Games Corporation

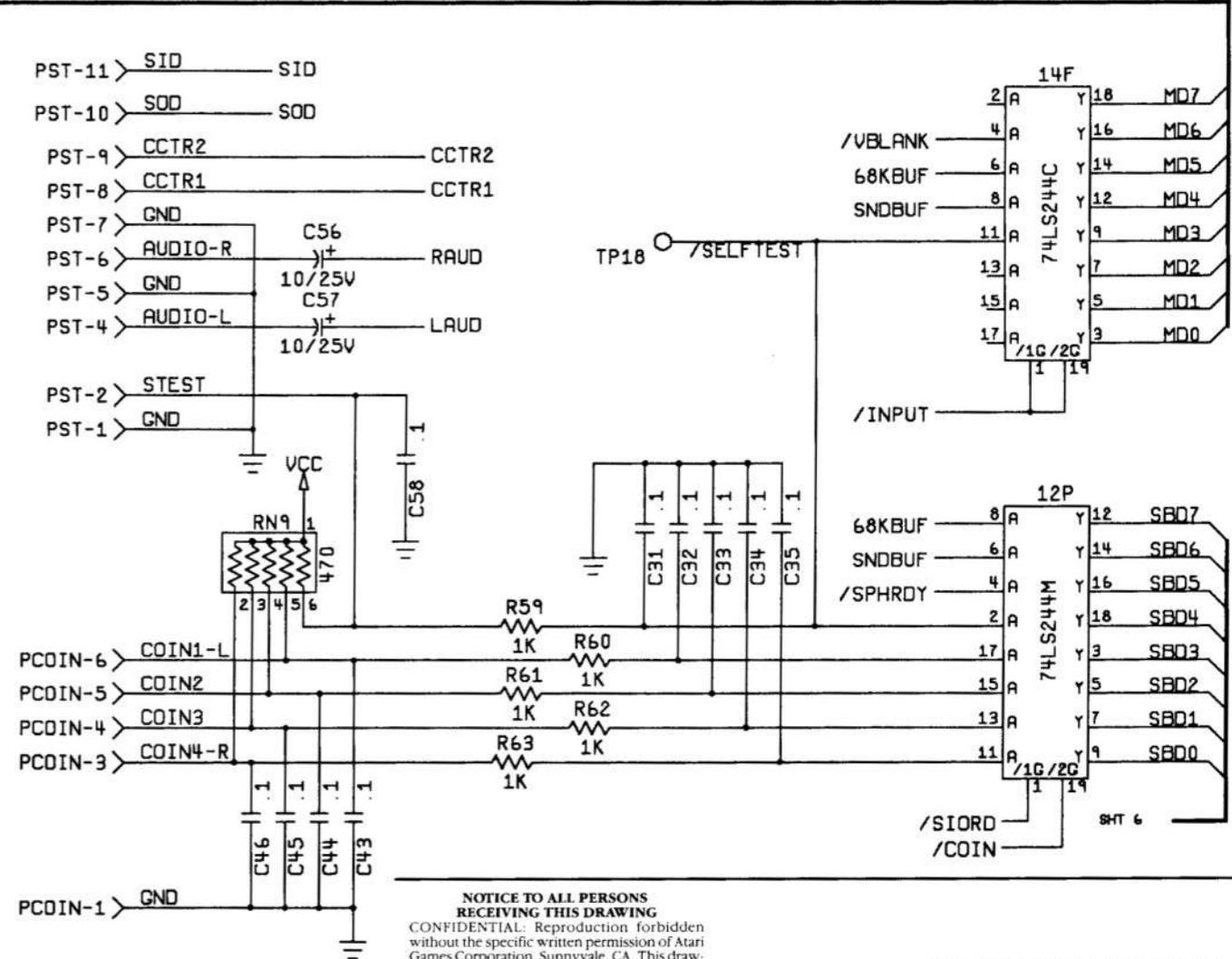
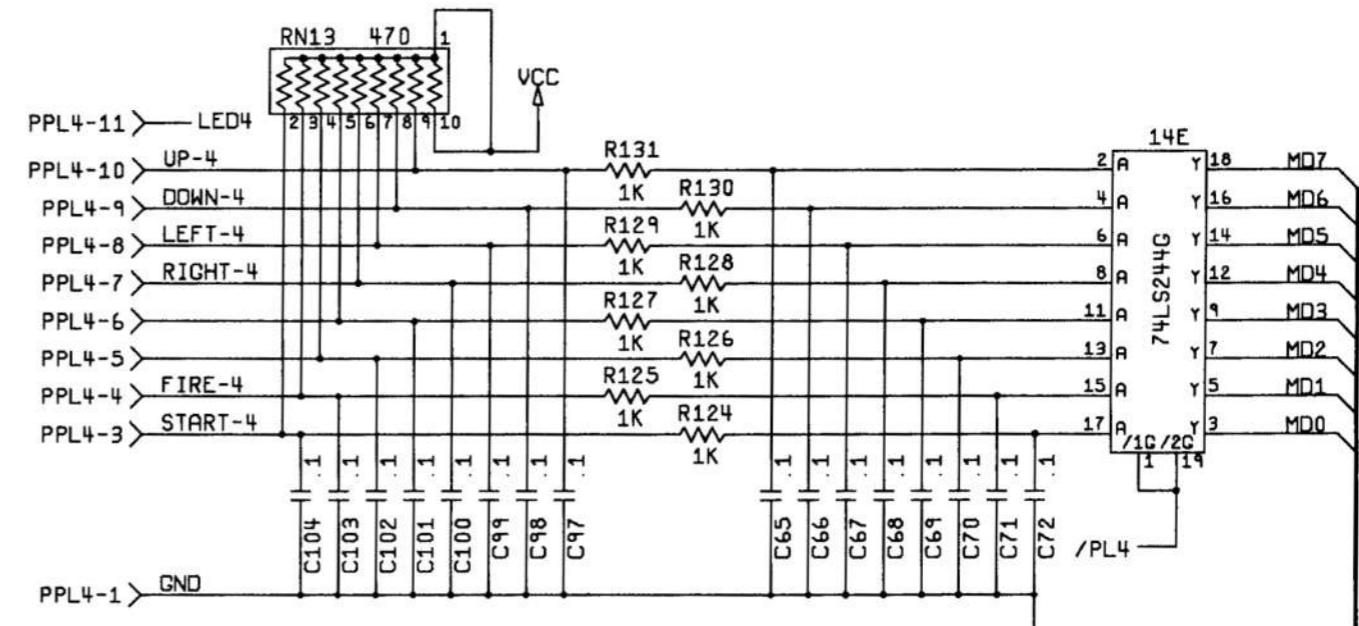
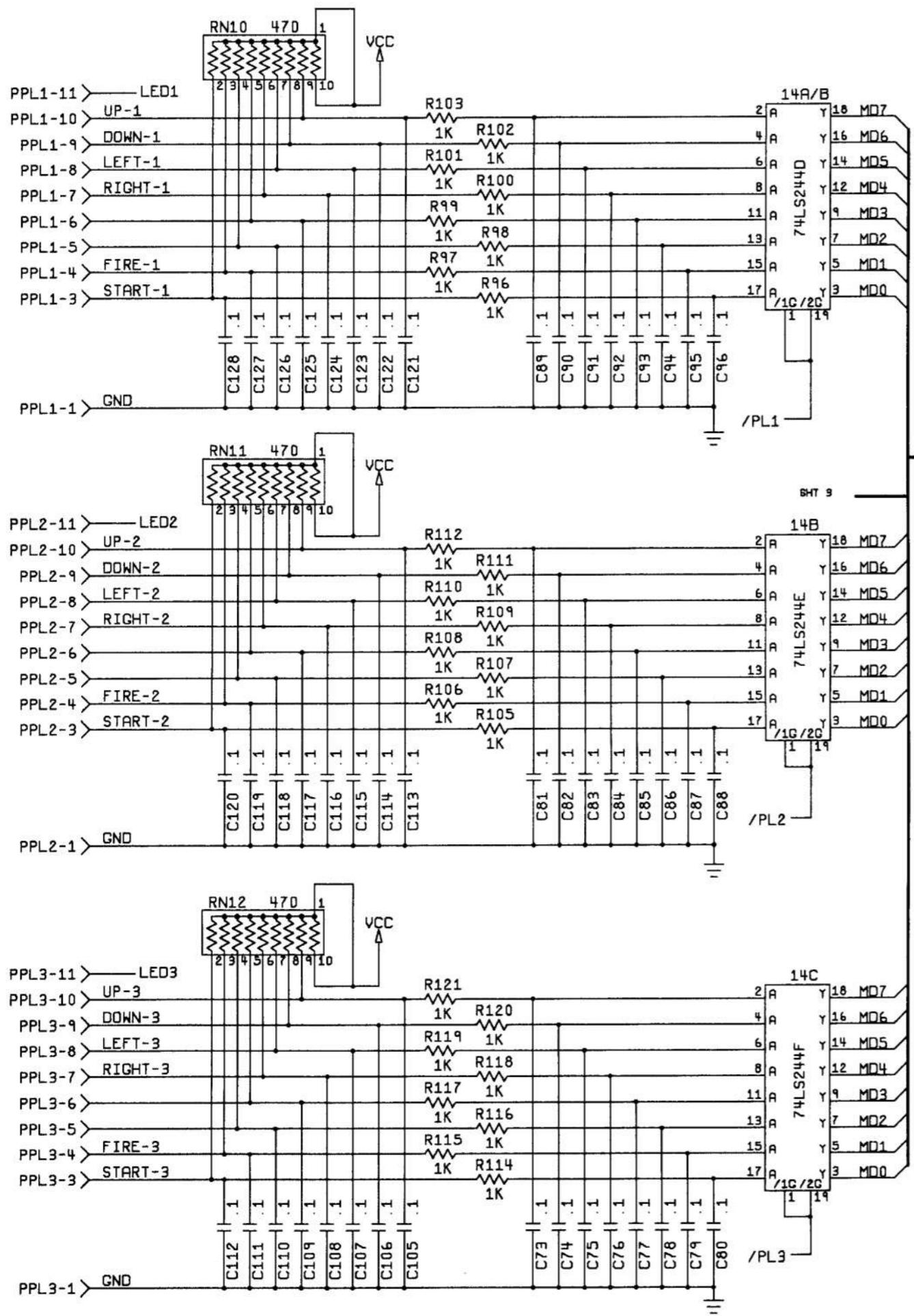


NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

**Gauntlet™ Game PCB
Schematic Diagram**



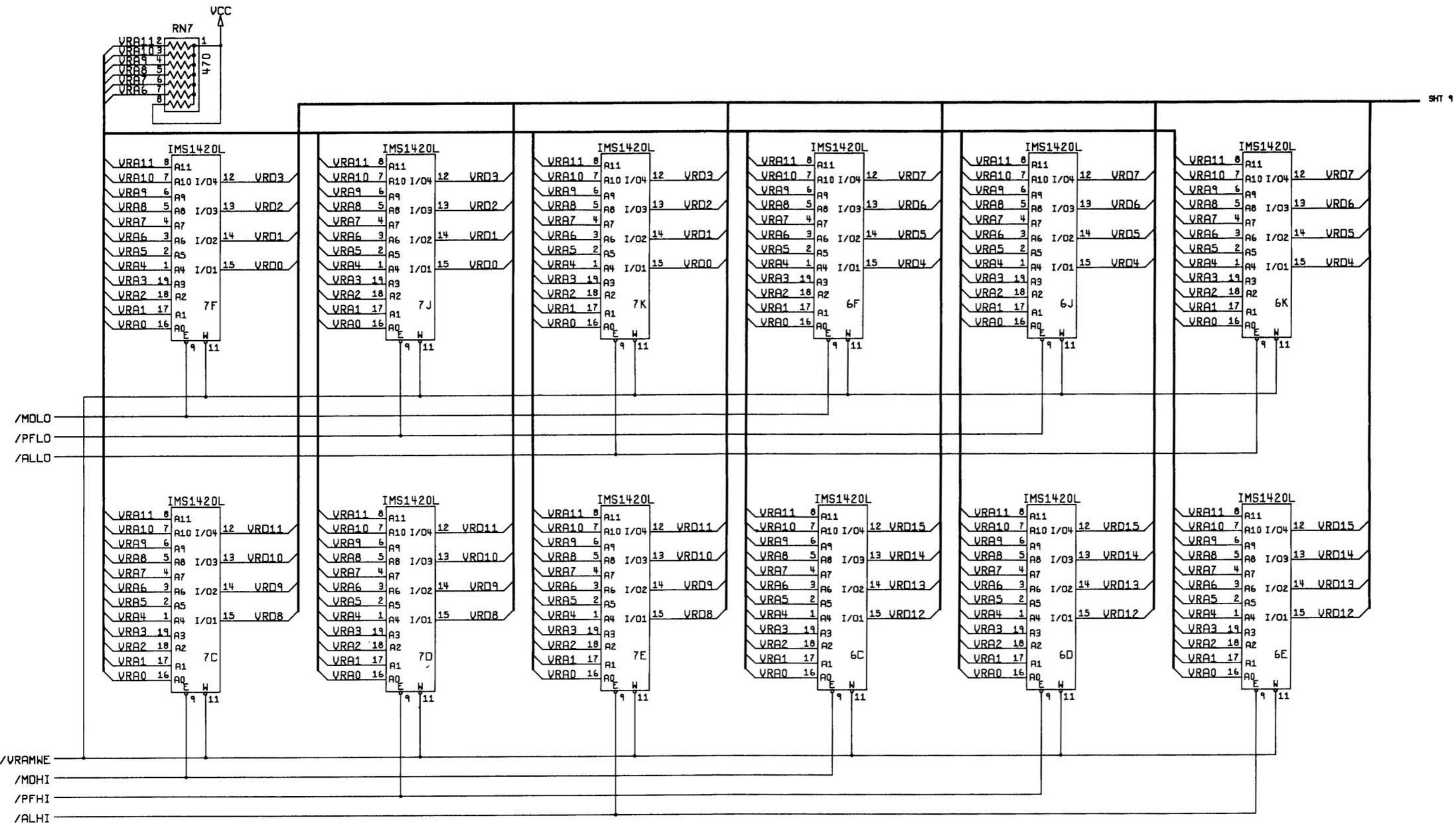
© 1985 Atari Games Corporation



NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
 CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

Gauntlet™ Game PCB Schematic Diagram





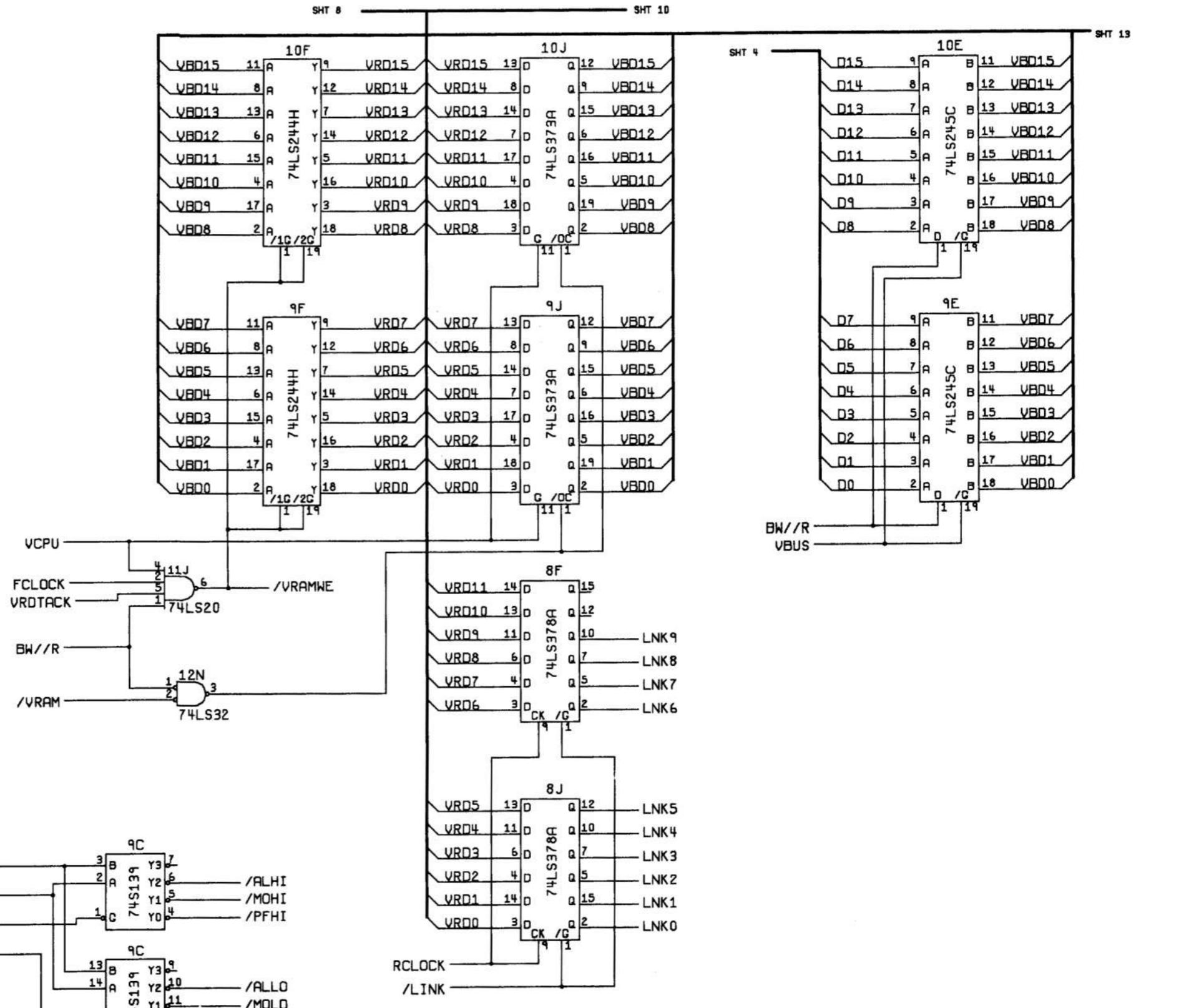
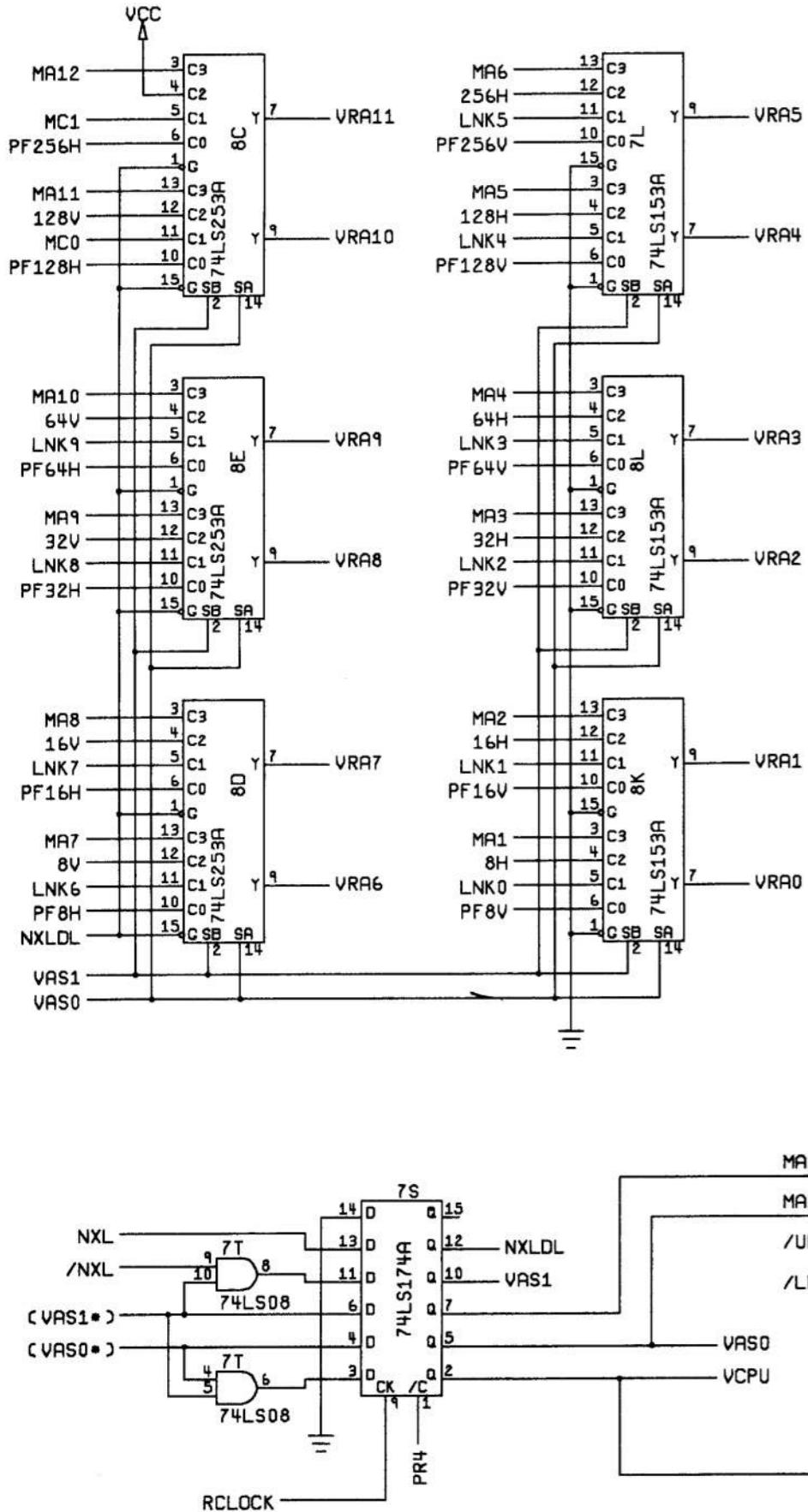
NOTICE TO ALL PERSONS RECEIVING THIS DRAWING

CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

Gauntlet™ Game PCB Schematic Diagram



© 1985 Atari Games Corporation

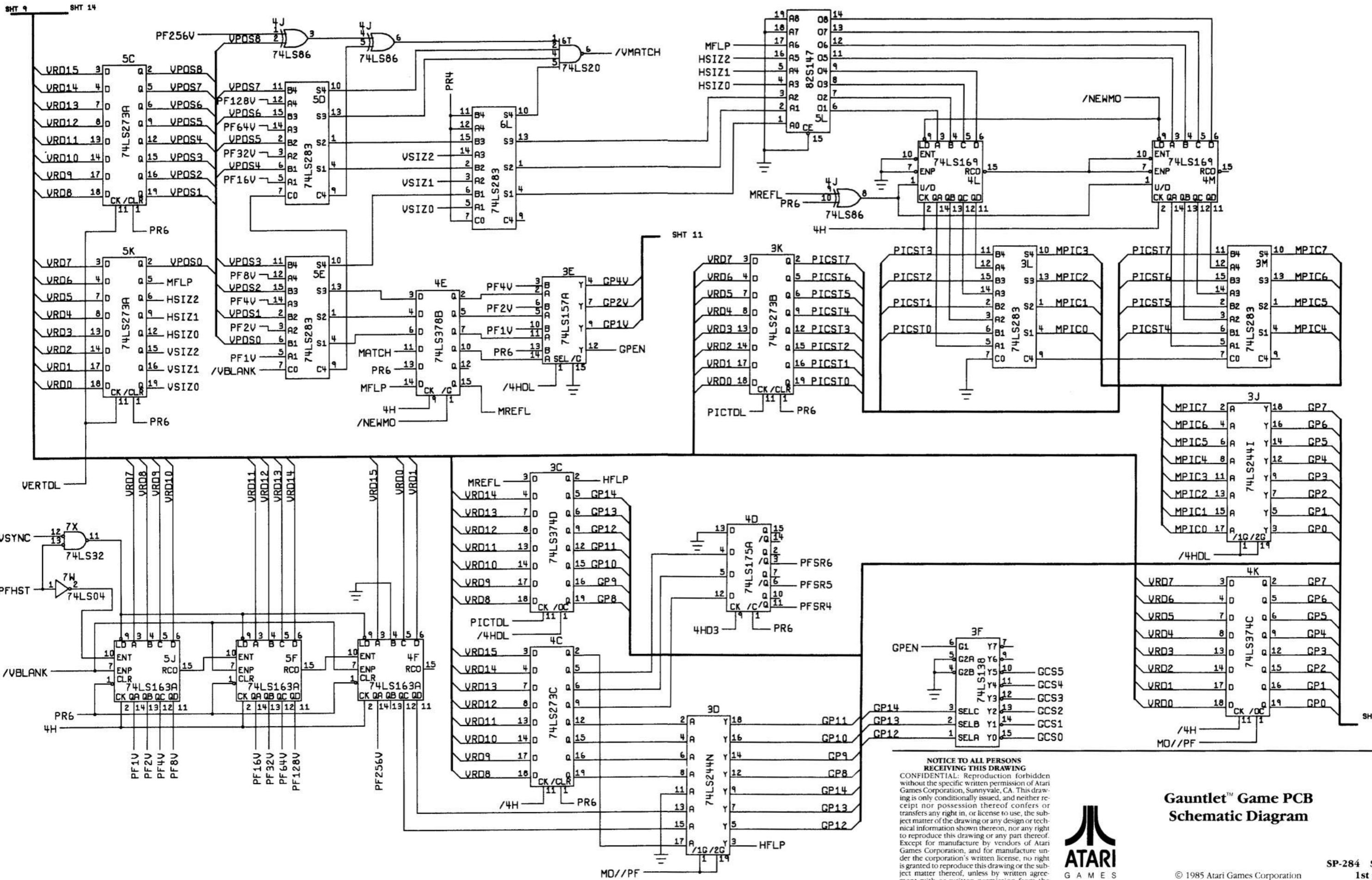


NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

**Gauntlet™ Game PCB
Schematic Diagram**



© 1985 Atari Games Corporation

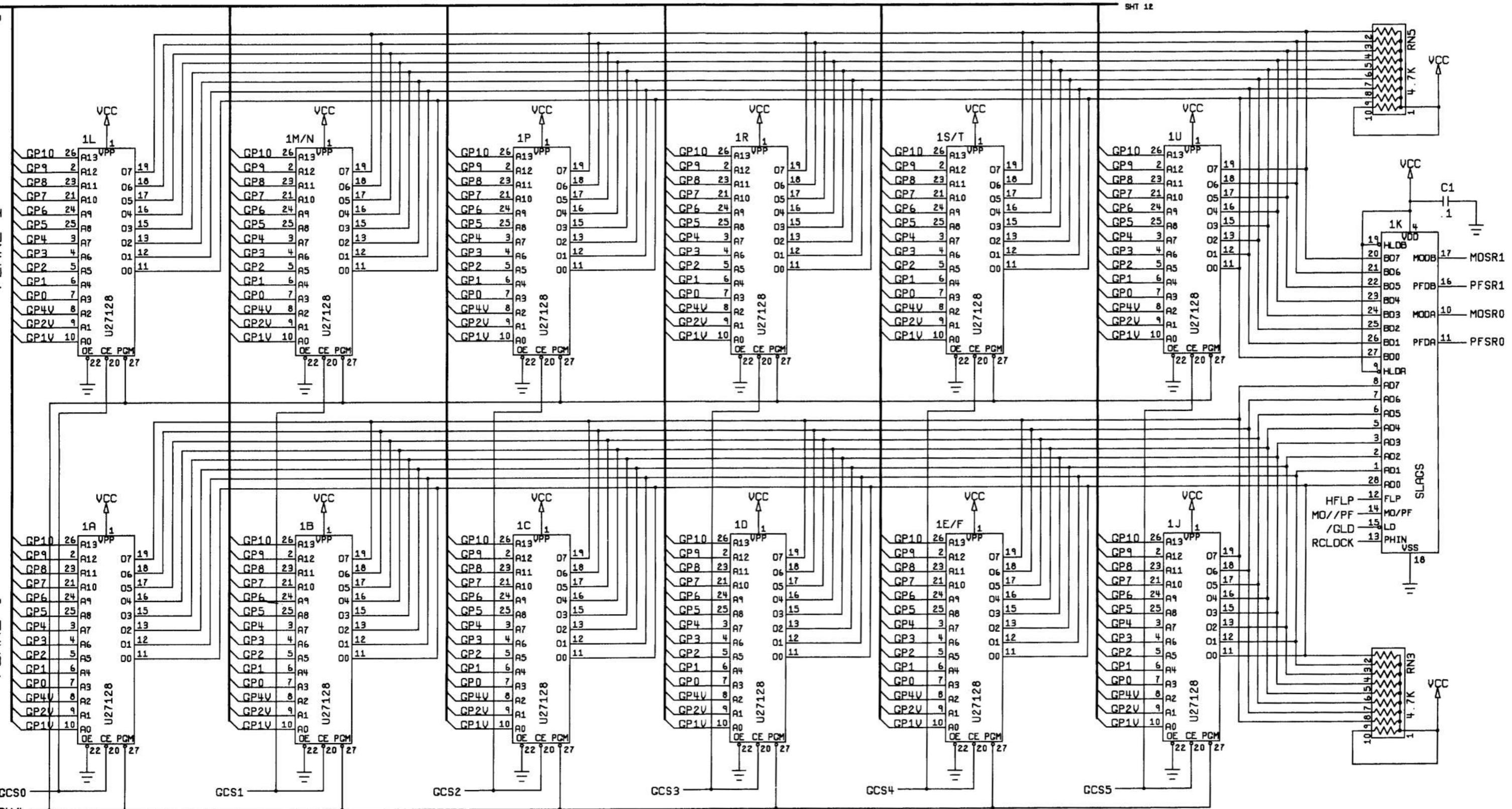


NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither recipient nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.



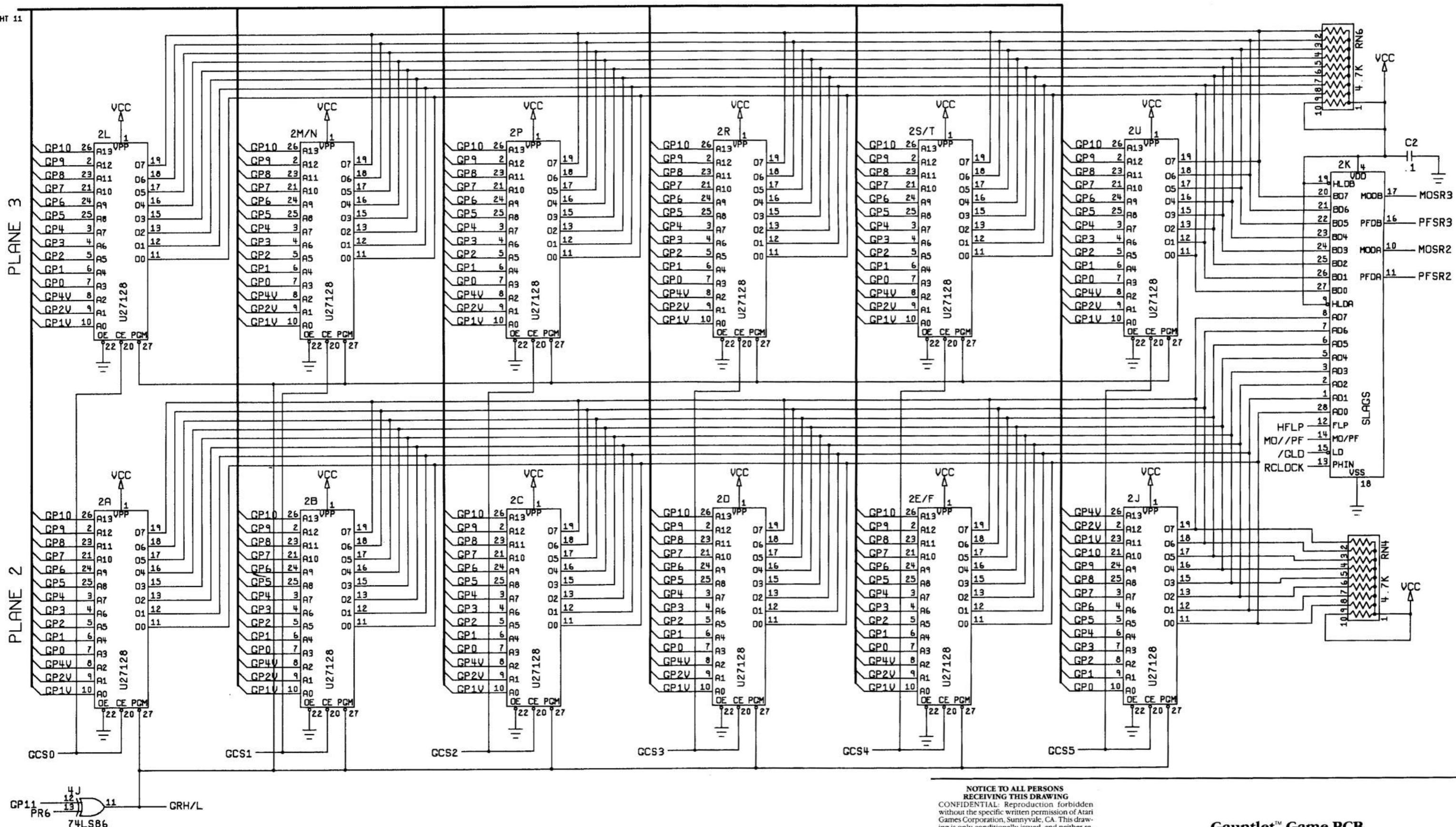
**Gauntlet™ Game PCB
Schematic Diagram**

© 1985 Atari Games Corporation


NOTICE TO ALL PERSONS RECEIVING THIS DRAWING

CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

Gauntlet™ Game PCB Schematic Diagram

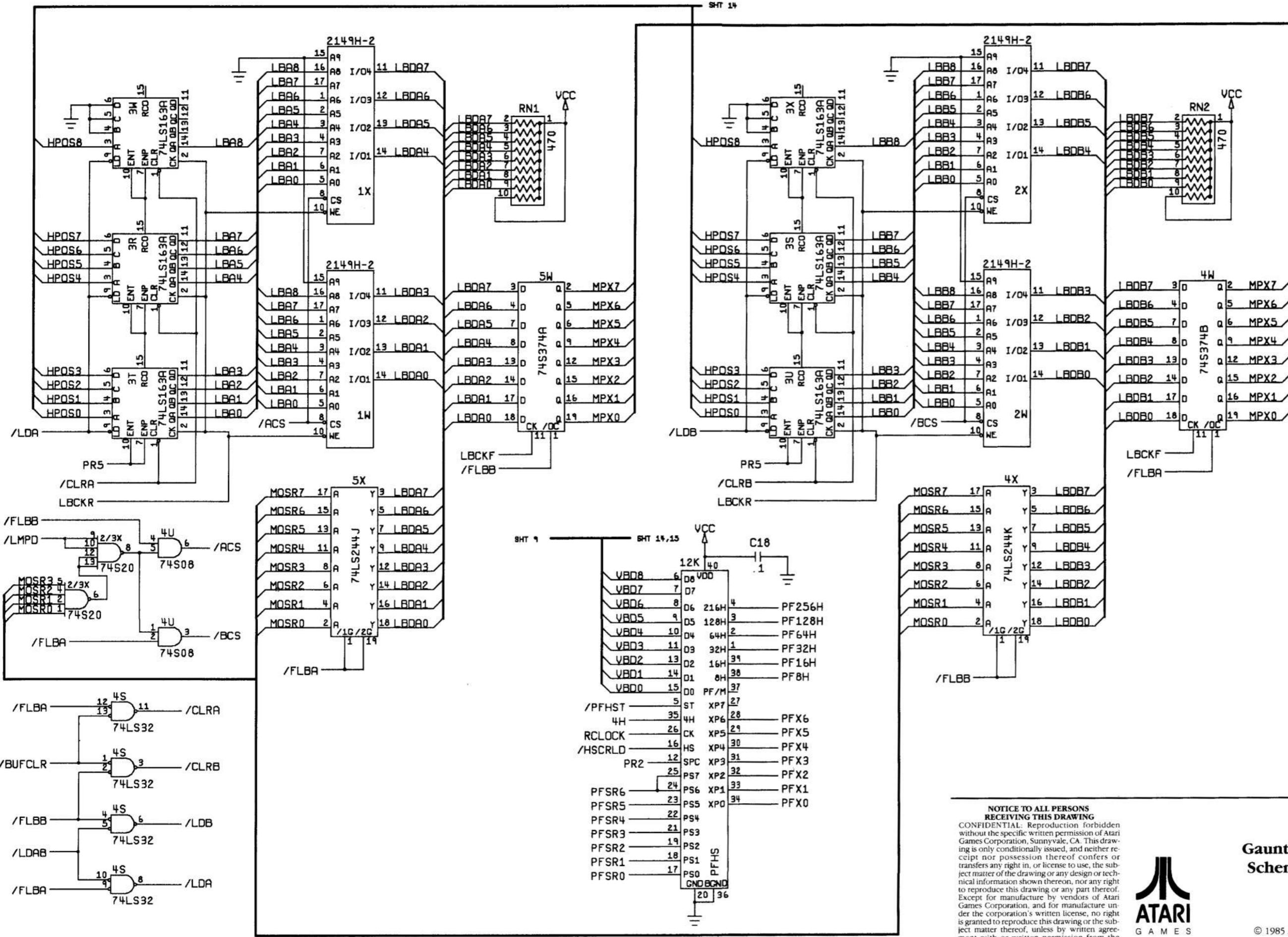



NOTICE TO ALL PERSONS
RECEIVING THIS DRAWING

CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.



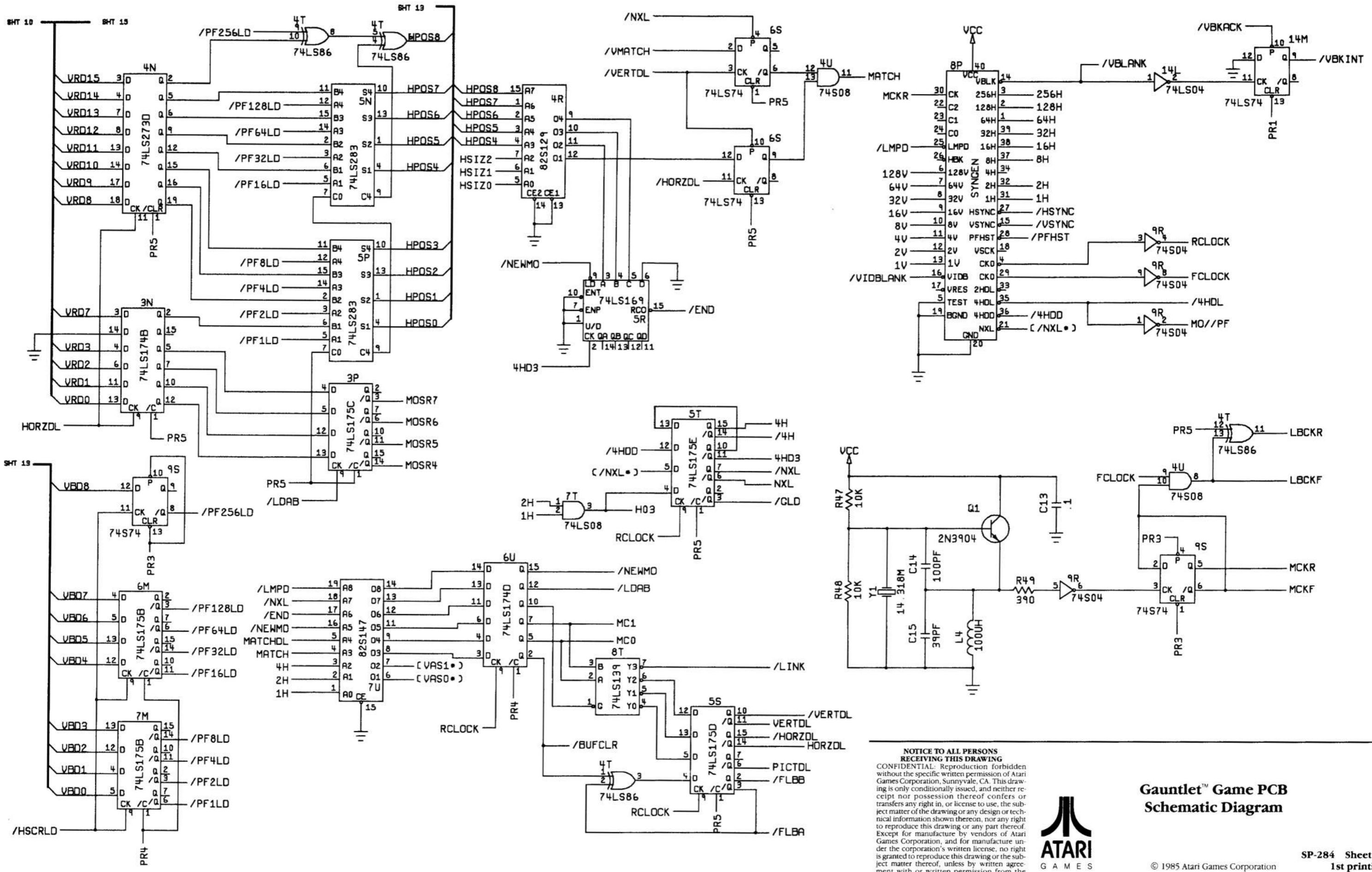
Gauntlet™ Game PCB
Schematic Diagram



**Gauntlet™ Game PCB
Schematic Diagram**



© 1985 Atari Games Corporation

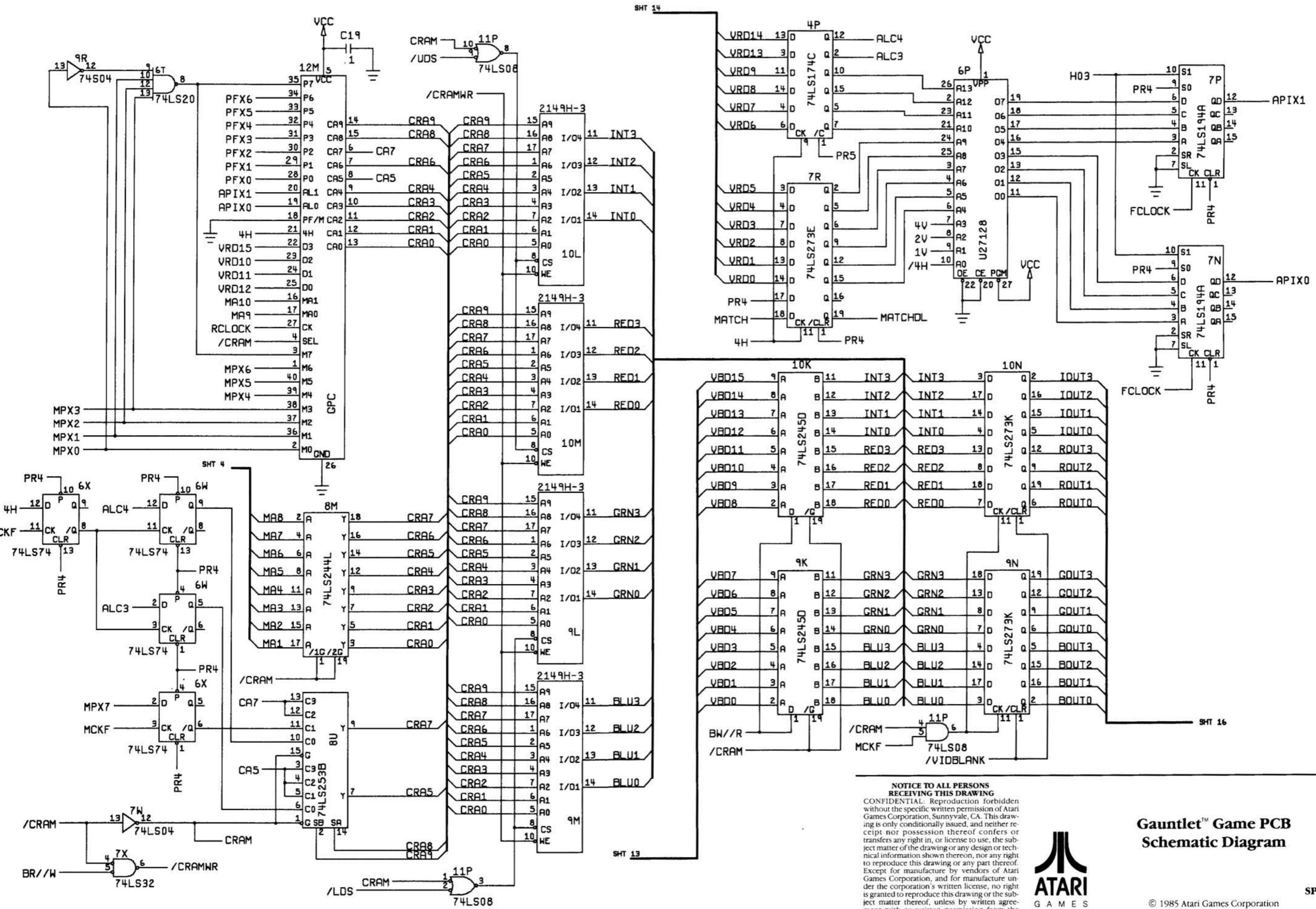


NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
 CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.



Gauntlet™ Game PCB
Schematic Diagram

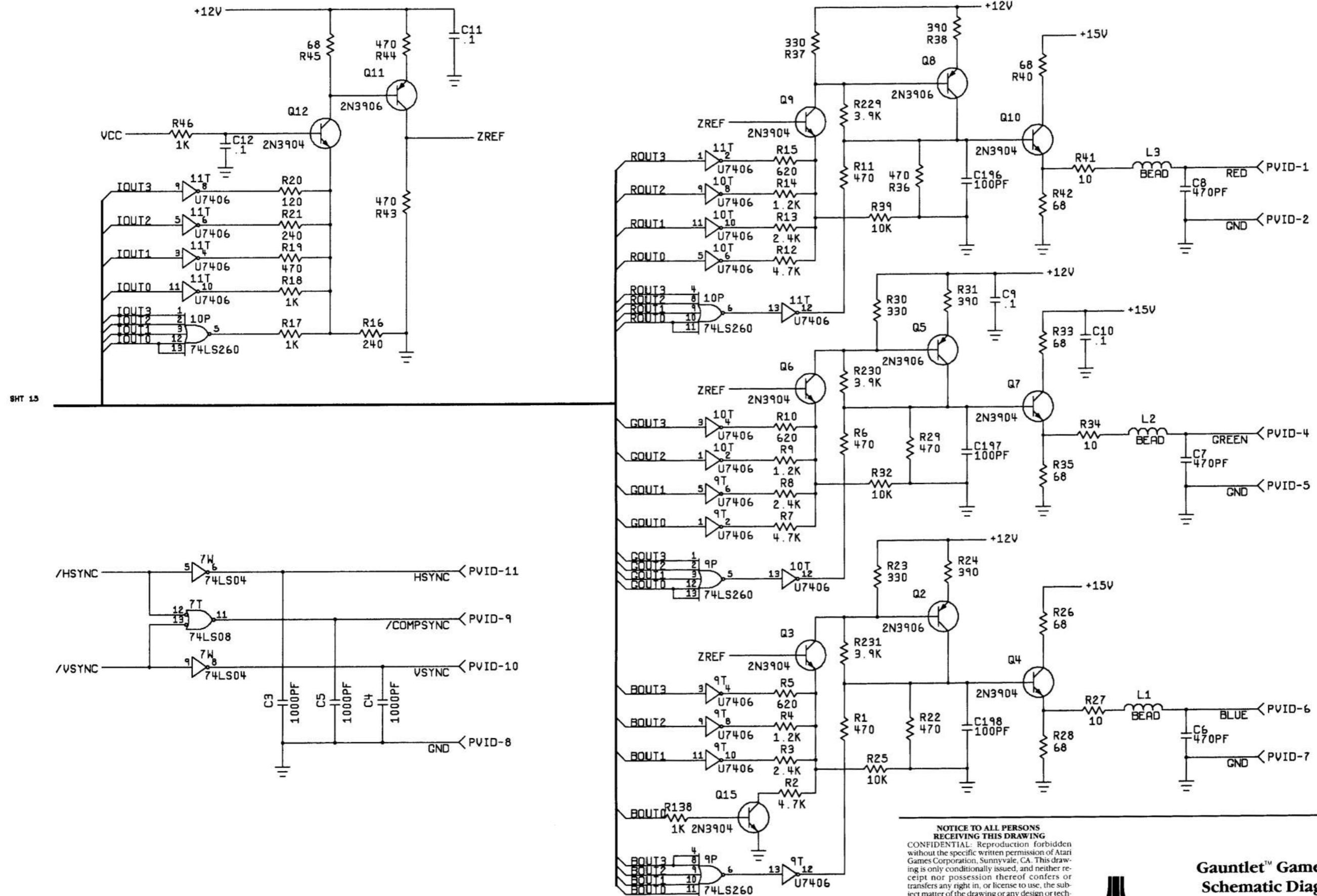
© 1985 Atari Games Corporation



**Gauntlet™ Game PCB
Schematic Diagram**



© 1985 Atari Games Corporation

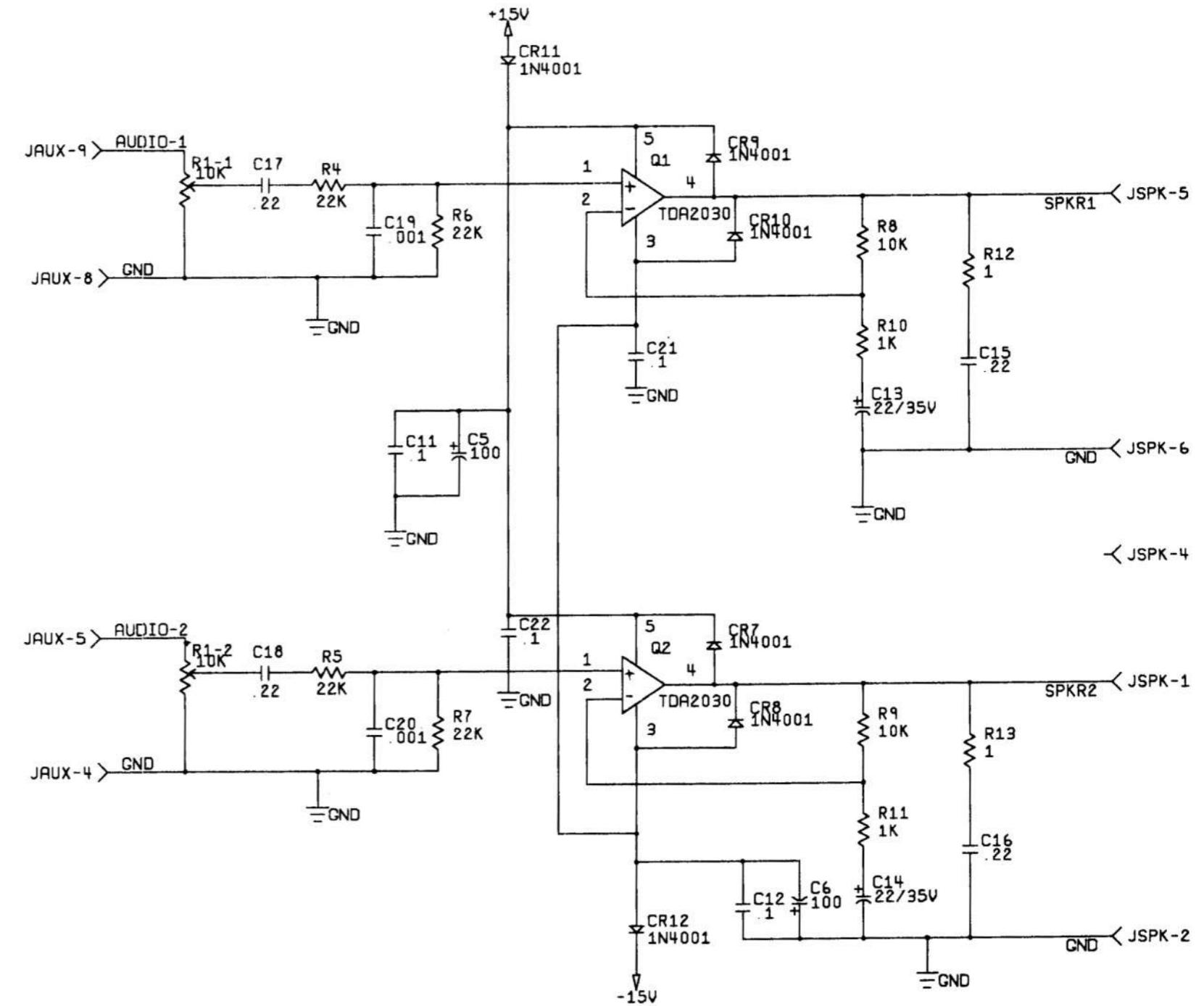
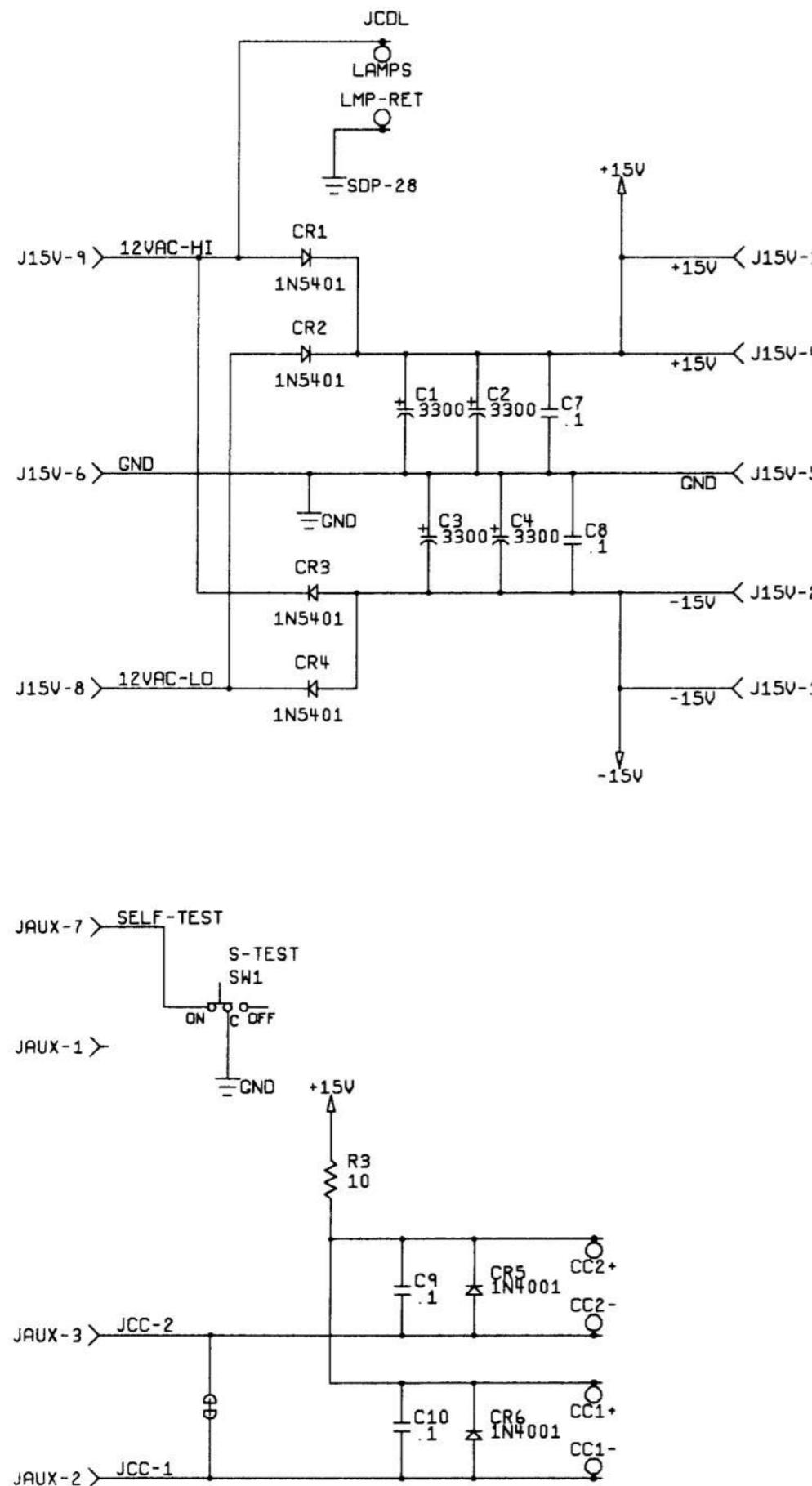


NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
 CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

**Gauntlet™ Game PCB
Schematic Diagram**



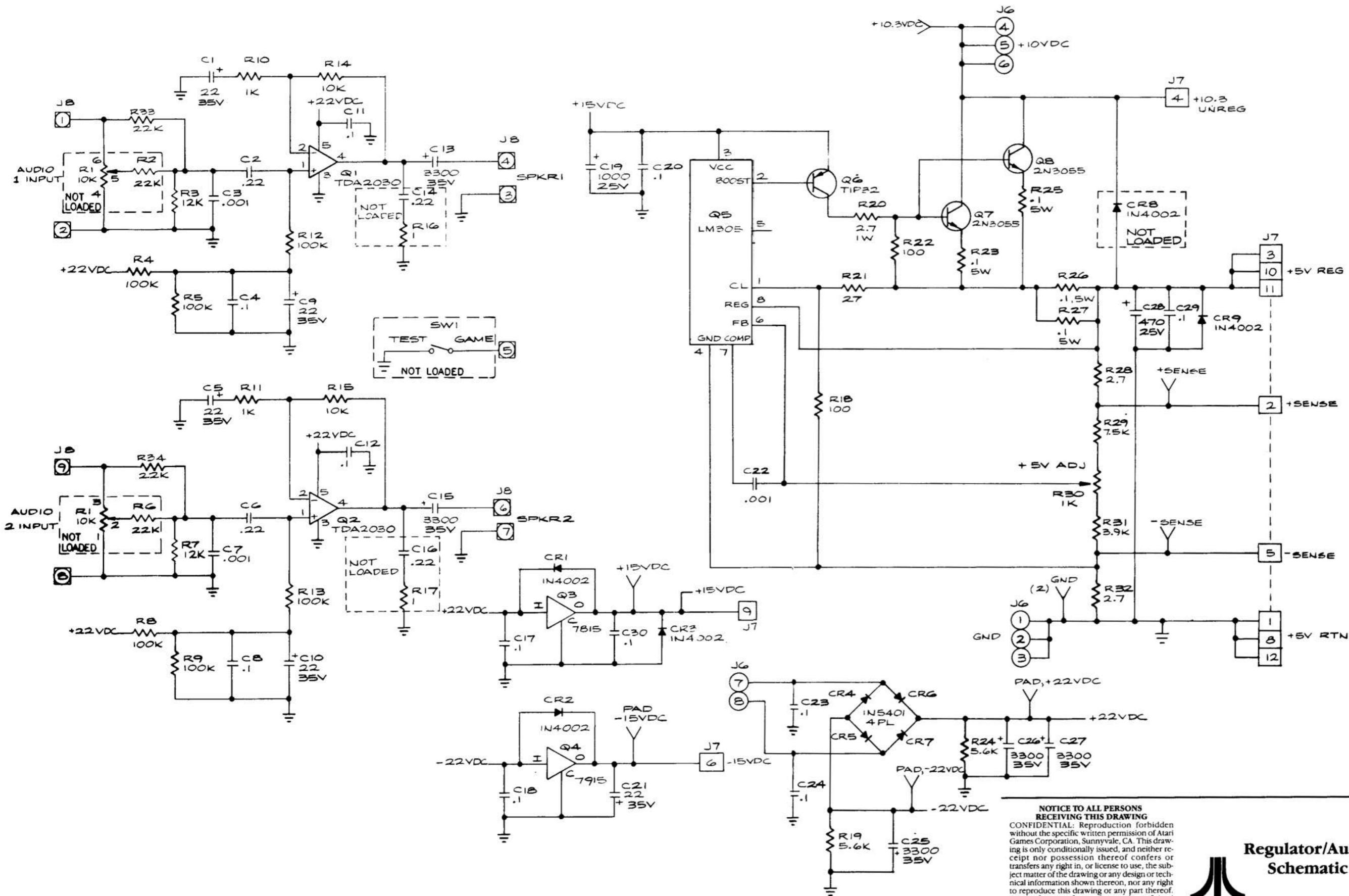
© 1985 Atari Games Corporation



NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

Audio PCB Assembly Schematic Diagram (U.S.)

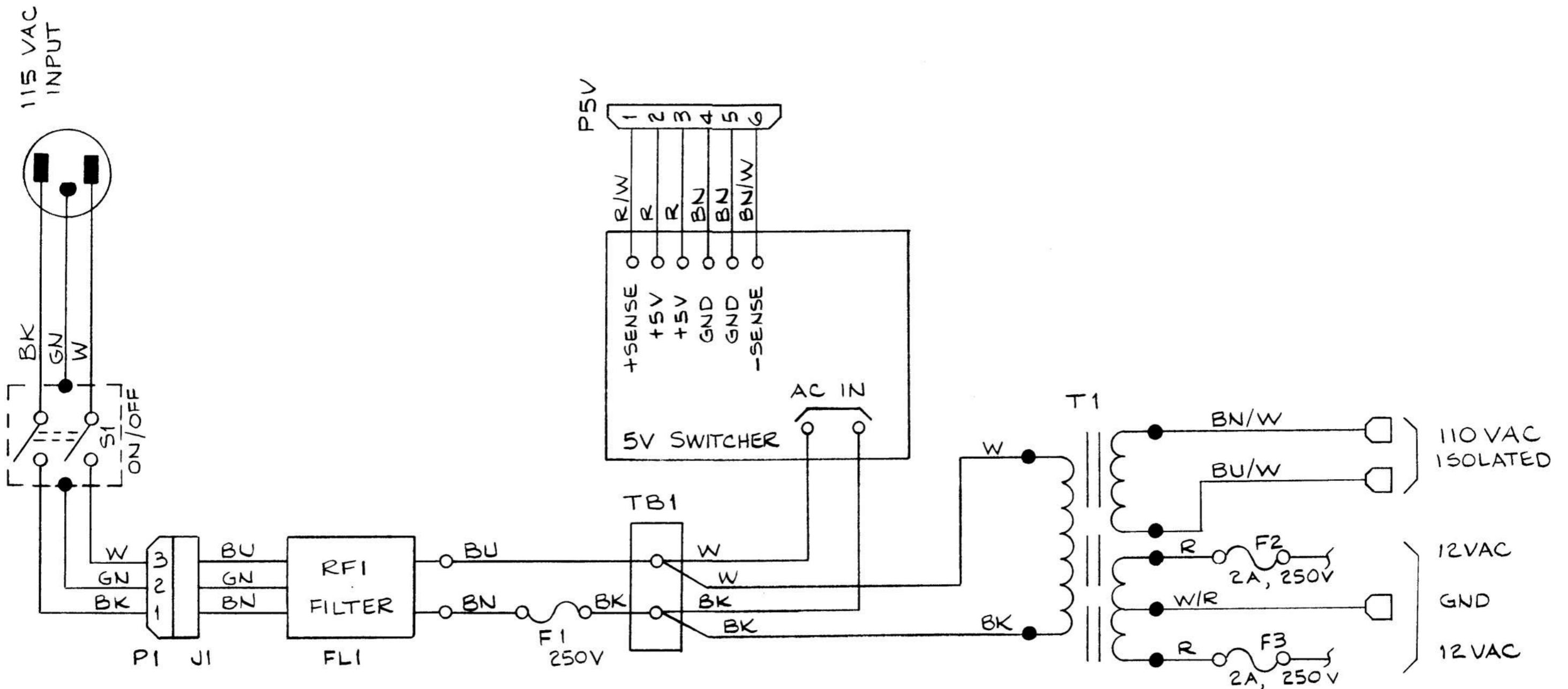




NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
 CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

Regulator/Audio III PCB Assembly
Schematic Diagram (Ireland)



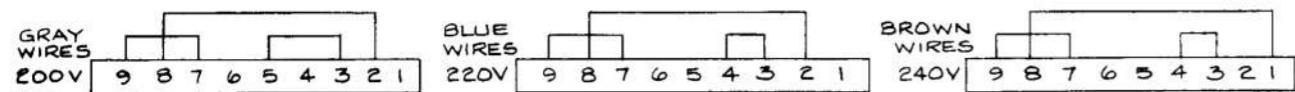


NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
 CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

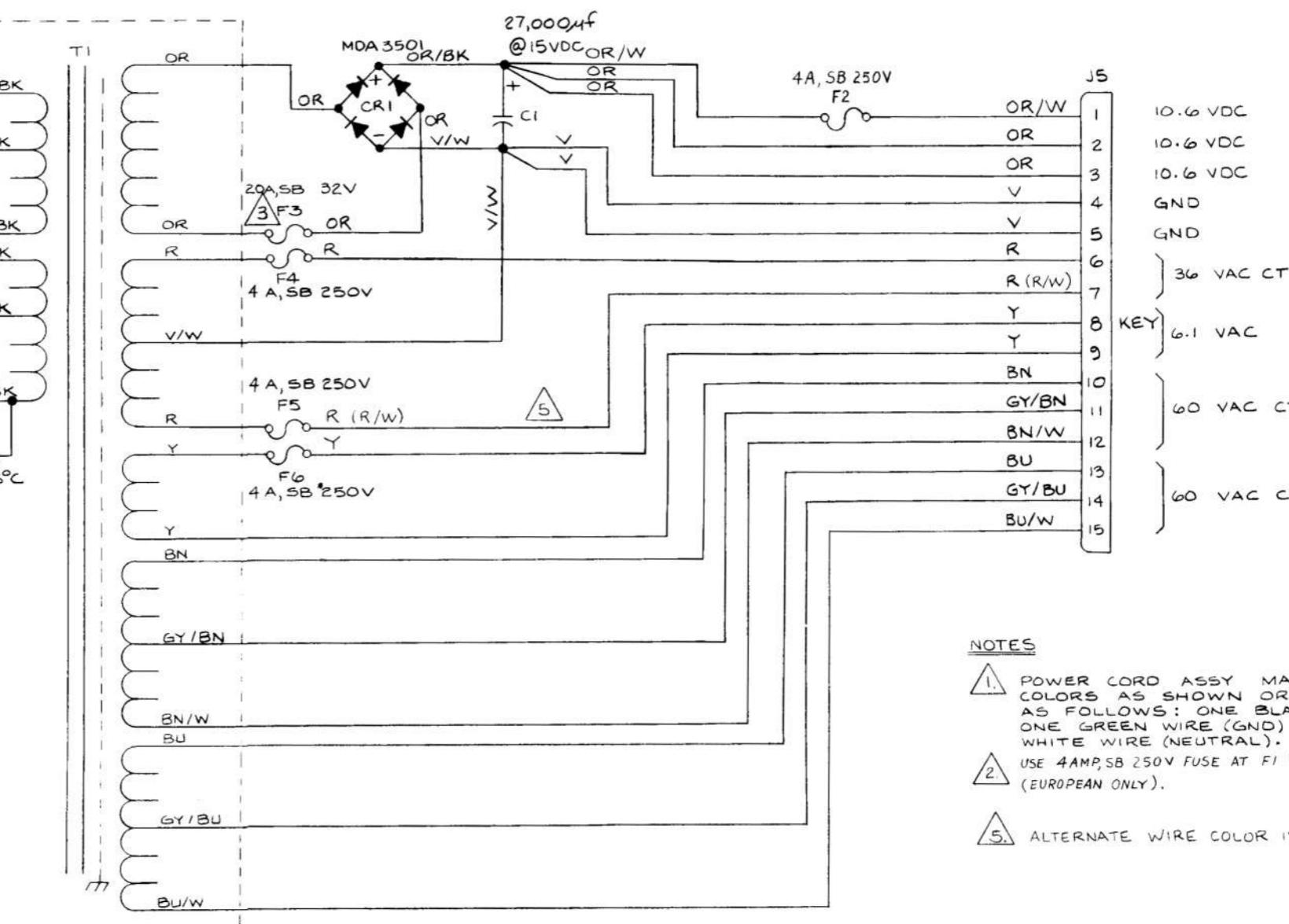
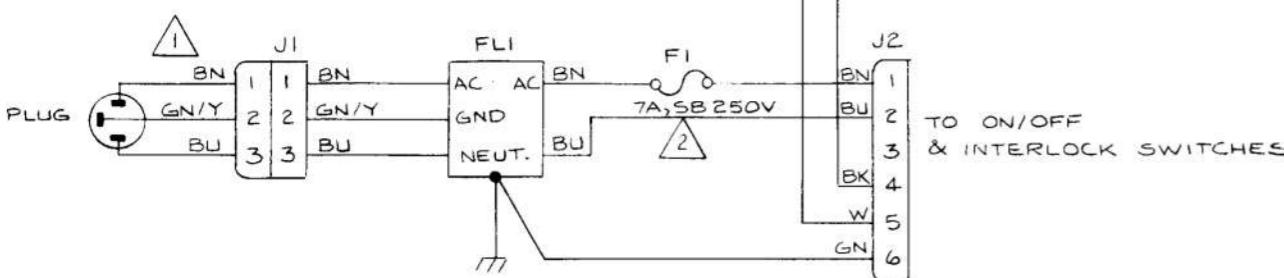
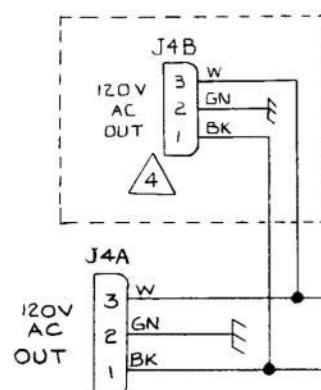
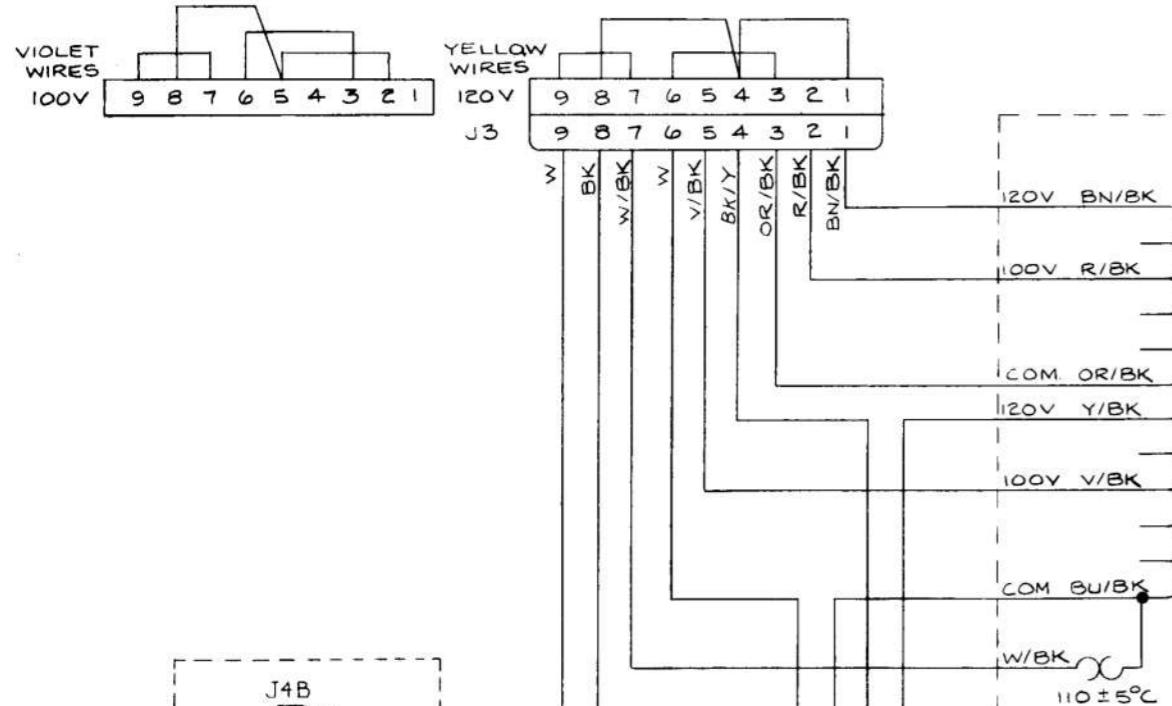


**Switching/Linear (SL) Power Supply
Wiring Diagram (U.S.)**

© 1985 Atari Games Corporation



VOLTAGE SELECTION BLOCKS



NOTES

1. POWER CORD ASSY MAY HAVE WIRE COLORS AS SHOWN OR WIRE COLORS AS FOLLOWS: ONE BLACK WIRE (AC), ONE GREEN WIRE (GND) AND ONE WHITE WIRE (NEUTRAL).

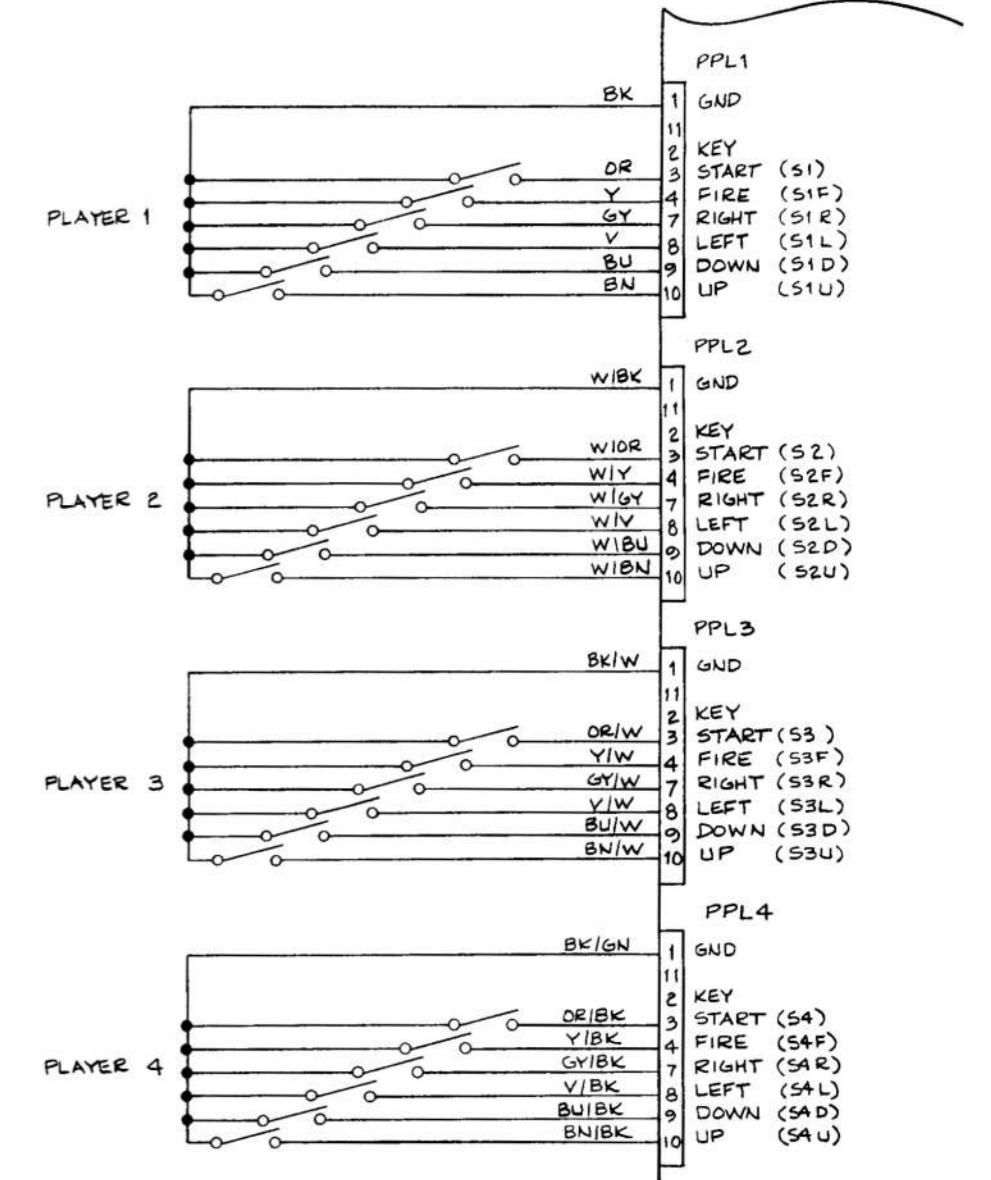
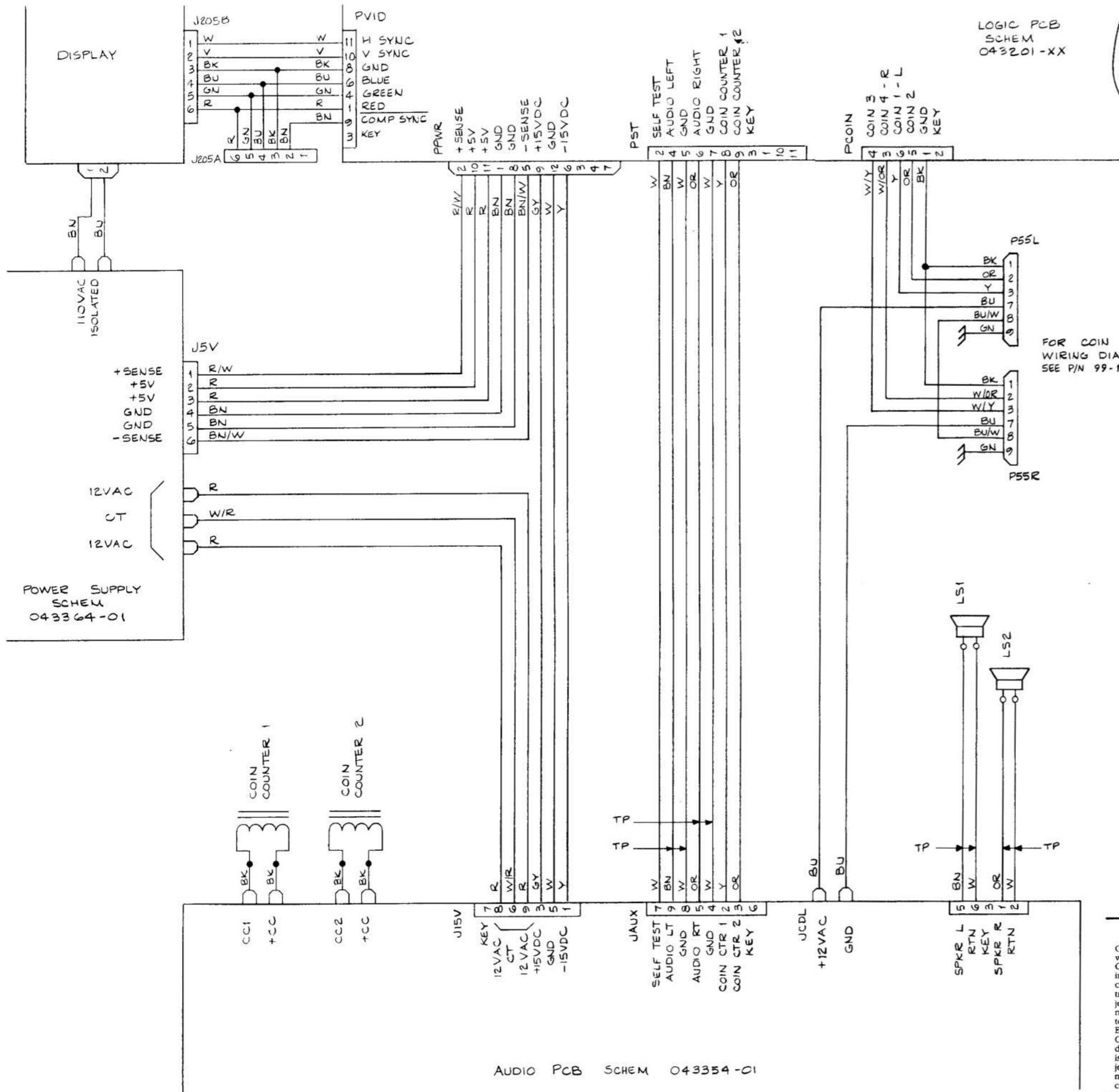
2. USE 4AMP,SB 250V FUSE AT F1 WITH 220V & 240V (EUROPEAN ONLY).

5. ALTERNATE WIRE COLOR IS IN PARENTHESES ().

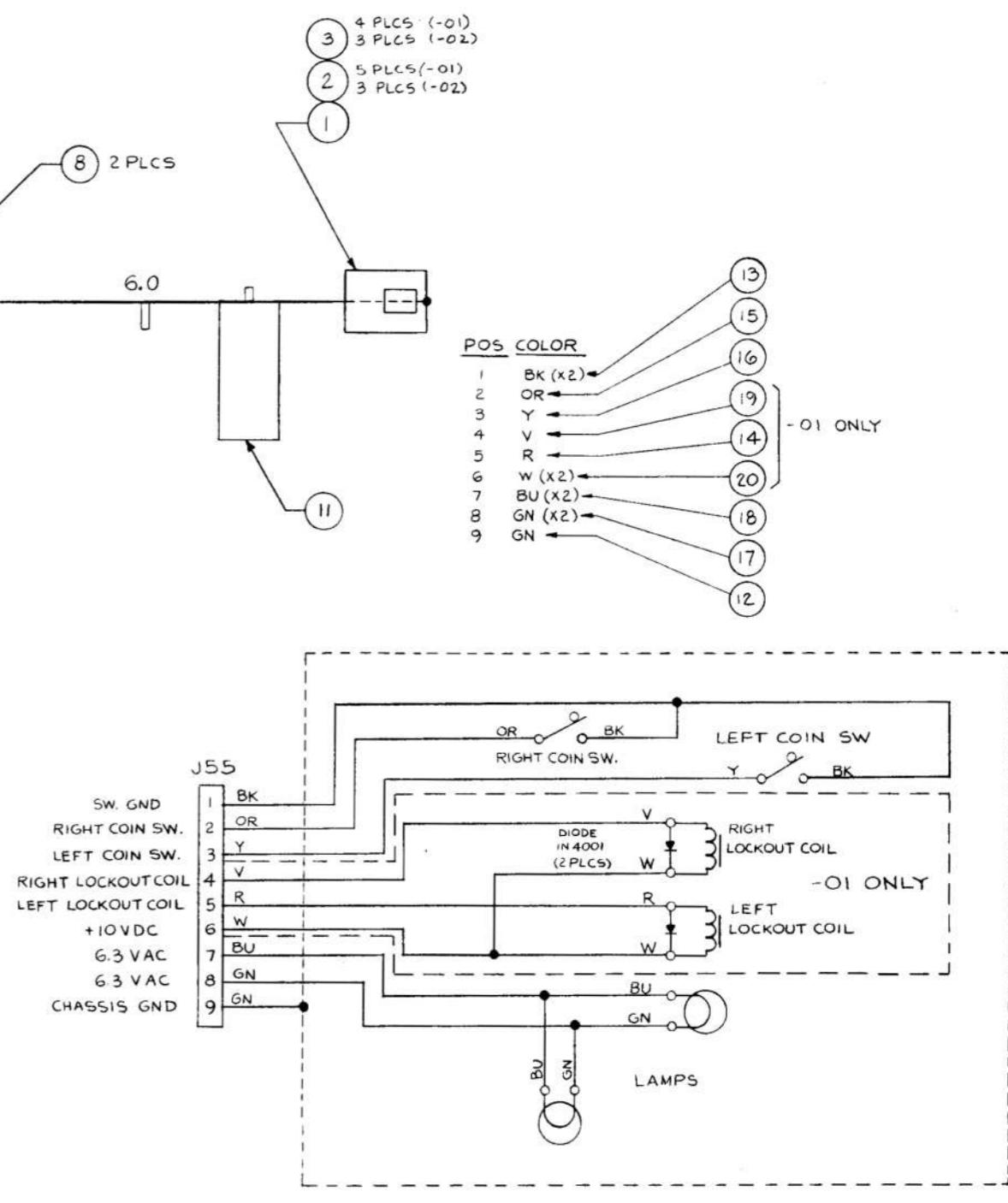
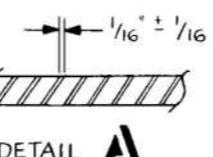
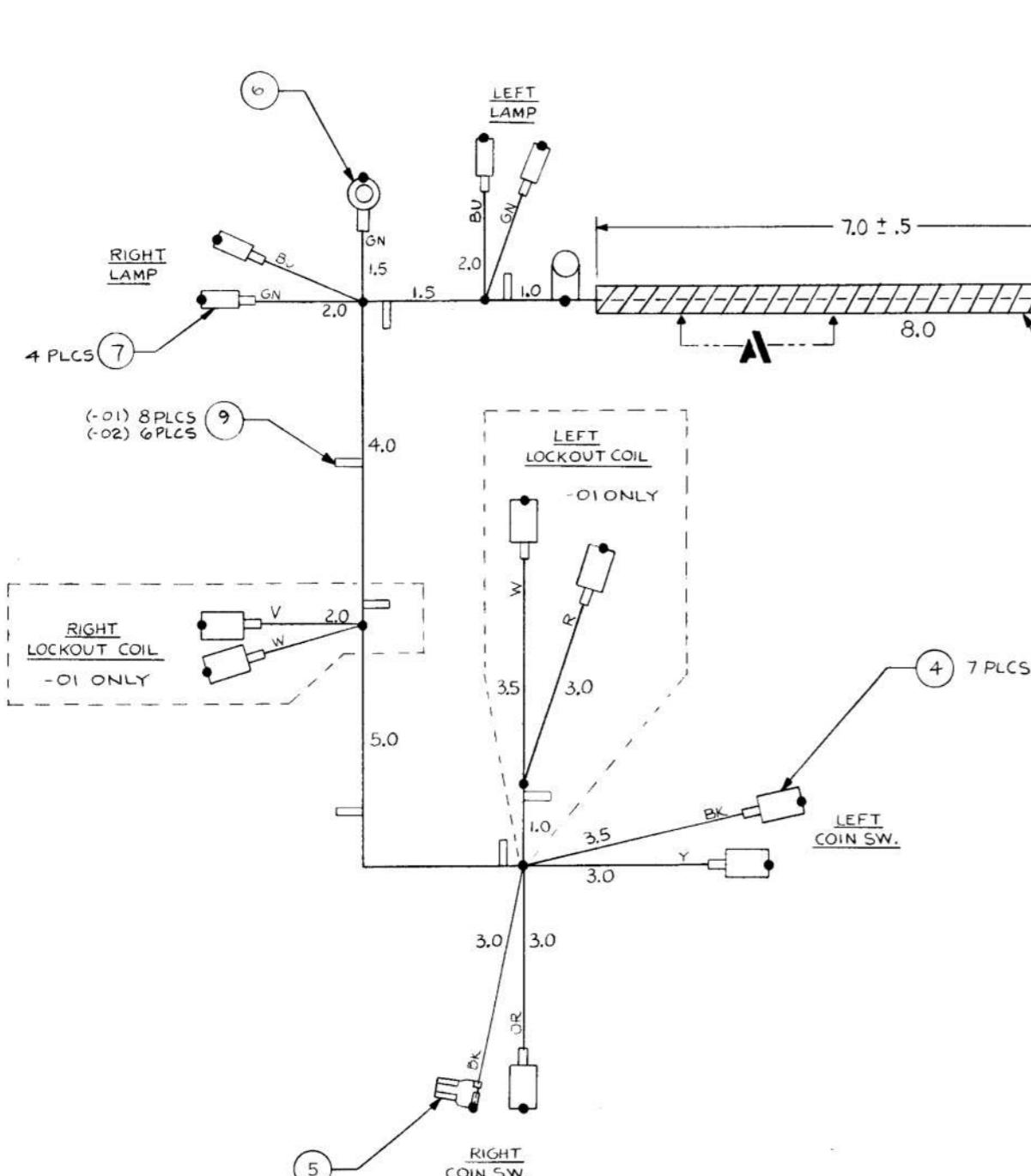
NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

Linear Power Supply Wiring Diagram (Ireland)





Gauntlet™ Game Wiring Diagram



NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
 CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

Coin Door Wiring Diagram



Gauntlet™ 68010 Memory Map

FUNCTION	ADDRESS	R/W	DATA
Program ROM/Operating System	000000-00FFFF	R	D0-D15
Program ROM/SLAPSTIC	038000-03FFFF	R	D0-D15
Program ROM/Main	040000-07FFFF	R	D0-D15
Spare RAM	800000-801FFF	R/W	D0-D15
EEPROM	802001-802FFF	R/W	D7-D0
Player 1 Input (see detail below)	803001	R	D0-D71
Player 2 Input	803003	R	D0-D7
Player 3 Input	803005	R	D0-D7
Player 4 Input	803007	R	D0-D7
<i>Player Inputs:</i>			
Joystick Up			D7
Joystick Down			D6
Joystick Left			D5
Joystick Right			D4
Spare			D3
Spare			D2
Fire			D1
Magic/Start			D0
VBLANK (Active Low)	803009	R	D6
Output/Buffer Full (@ 803170) (Active High)	803009	R	D5
Input/Buffer Full (@ 80300F) (Active High)	803009	R	D4
Self-Test (Active Low)	803009	R	D3
Read Sound Processor (6502)	80300F	R	D0-D7
Watchdog (128 msec. timeout)	803100	W	xx
LED-1 (Low On)	803121	W	D0
LED-2 (Low On)	803123	W	D0
LED-3 (Low On)	803125	W	D0
LED-4 (Low On)	803127	W	D0
Sound Processor Reset (Low Reset)	80312F	W	D0
VBlank Acknowledge	803140	W	xx
Unlock EEPROM	803150	W	xx
Write Sound Processor (6502)	803171	W	D0-D7
Playfield RAM	900000-901FFF	R/W	D0-D15
Motion Object Picture	902000-9027FF	R/W	D0-D15
Motion Object Horizontal Position	902800-902FFF	R/W	D0-D15
Motion Object Vertical Position	903000-9037FF	R/W	D0-D15
Motion Object Link	903800-903FFF	R/W	D0-D15
Spare RAM	904000-904FFF	R/W	D0-D15
Alphanumerics RAM	905000-905FFF	R/W	D0-D15
Playfield Vertical Scroll	905F6E, 905F6F	R/W	D7-D15
Playfield ROM Bank Select	905F6F	R/W	D0, D1
Color RAM Alpha	910000-9101FF	R/W	D0-D15
Color RAM Motion Object	910200-9103FF	R/W	D0-D15
Color RAM Playfield Shadow	910400-9104FF	R/W	D0-D15
Color RAM Playfield	910500-9105FF	R/W	D0-D15
Color RAM (Spare)	910600-9107FF	R/W	D0-D15
Playfield Horizontal Scroll	930000, 930001	W	D0-D8

NOTE

All addresses can be accessed in byte or word mode.

Gauntlet™ 6502 Memory Map

FUNCTION	ADDRESS	R/W	DATA
Program RAM	0000-0FFF	R/W	D0-D7
Write 68010 Port (Output Buffer)	1000	W	D0-D7
Read 68010 Port (Input Buffer)	1010	R	D0-D7
<i>Audio Mix:</i>			
Speech Mix	1020	W	D5-D7
Effects Mix	1020	W	D3, D4
Music Mix	1020	W	D0-D2
Coin 1 (Left)	1020	R	D3
Coin 2	1020	R	D2
Coin 3	1020	R	D1
Coin 4 (Right)	1020	R	D0
Data Available (@ 1010) (Active High)	1030	R	D7
Output Buffer Full (@ 1000) (Active High)	1030	R	D6
Speech Ready (Active Low)	1030	R	D5
Self-Test (Active Low)	1030	R	D4
Music Reset (Low Reset)	1030	W	D7
Speech Write (Active Low)	1031	W	D7
Speech Reset (Active Low)	1032	W	D7
Speech Squeak (Low = 650KHz Clock)	1033	W	D7
Coin Counter Right (Active High)	1034	W	D7
Coin Counter Left (Active High)	1035	W	D7
Effects	1800-180F	R/W	D0-D7
Music	1810-1811	R/W	D0-D7
Speech	1820	W	D0-D7
Interrupt Acknowledge	1830	R/W	xx
Program ROM (48k bytes)	4000-FFFF	R	D0-D7

NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
 CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

Gauntlet™ 68010 and 6502 Microprocessor Memory Maps



Gauntlet Signal Name Glossary

2.5V	2.5 volts audio amplifier reference
+5AUD	5 volts audio amplifier reference
10.3V	Power-on-reset control voltage
+12V	+12 volts regulated
+15V	+15 volts unregulated
-15V	-15 volts unregulated
-5V	-5 volts regulated
1H-256H	Screen horizontal address counter chain
1V-128V	Screen vertical address counter chain
4H	Inverted 4H signal
4HD3, 4HD3	4H signal delayed three clock cycles
4HDD	4H signal delayed two clock cycles
4HDL	4H signal delayed one clock cycle
68KBUF	68010 output buffer full (to 6502)
A1-A23	68010 address bus unbuffered
ACS	"A" line buffer RAMs chip select
ALC3, ALC4	Alphanumeric palette data bits 3 and 4
ALHI, ALLO	Alphanumeric RAM chip selects
APIX0, APIX1	Alphanumeric pixel data
AS	68010 address strobe
AUDIO-L, AUDIO-R	Left and right audio outputs (5V peak-to-peak)
B02	6502 buffered phase 2 (Φ_2)
BAS	Buffered address strobe (see AS)
BCS	"B" line buffer RAMs chip select
BLU0-BLU3	Blue color RAM data
BLUE	Blue analog video output
BOUT0-BOUT3	Blue latched digital video output
BR/W	68010 read/write control, buffered
BUFCLR	Swap "A" and "B" line buffers, clear line buffer counter chain
BW/R	68010 read/write inverted, buffered
CA5, CA7	Color RAM address bits 5 and 7
CCTR1, CCTR2	Coin counter outputs 1 and 2.
CLRA	Clear line buffer "A" address counters
CLR8	Clear line buffer "B" address counters

NOTE

In this signal name glossary all active-low signals are over-scored, e.g., COMPSYNC. In the schematics printed on Sheets 1-16 a slash (/) in front of a signal name indicates an active-low signal.

Gauntlet Signal Name Glossary, continued

COIN	Coin input buffer chip select
COIN1-L, COIN2, COIN3, COIN4-R	Four coin switch inputs
COMPSYNC	Negative composite sync output
CRA0-CRA9	Color RAM address
CRAM, CRAM	68010 address decode for color RAM
CRAMWR	Color RAM write enable
D0-D15	68010 data bus, unbuffered
DOWN-1-, DOWN-4	Joystick down switch inputs, players 1-4
EEPROM	Electrically erasable PROM chip select
END	Current motion object finished
FCLOCK	System clock inverted phase
FIRE-1-FIRE-4	Fire switch inputs, players 1-4
FLBA	Line buffer "A" fill control
FLBB	Line buffer "B" fill control
GCS0-GCS5	Graphics ROMs chip select
GLD	Graphics load (to SLAGS chips)
GND	System ground
GOUT0-GOUT3	Green latched digital video output
GP0-GP14	Graphics picture address
GP1V, GP2V, GP4V	Graphics picture stamp sub-address
GPEN	Graphics picture enable
GREEN	Green analog video output
GRH/L	Graphics ROM high/low select (A14 on a 27256)
GRN0-GRN3	Green color RAM data
H03	Alphanumeric load (to shift registers)
HFLP	Graphics stamp horizontal flip
HORZ	Latch motion object horizontal data and palette data
HORZDL, HORZDL	HORZ delayed one clock cycle
HPOS0-HPOS8	Motion object horizontal position data
HSCRLD	Latch playfield horizontal scroll data
HSIZ0-HSIZ2	Motion object horizontal size
HSYNC, HSYNC	Horizontal sync output
INPUT	68010 miscellaneous inputs buffer select
INT0-INT3	Color intensity RAM data
IOUT0-IOUT3	Intensity latched digital video output
LATCH	68010 miscellaneous latched outputs chip select
LAUD	Summed left channel audio
LBA0-LBA8	Line buffer "A" address bus
LBB0-LBB8	Line buffer "B" address bus
LBCKF	Line buffer clock inverted phase
LBCKR	Line buffer clock
LBDA0-LBDA7	Line buffer "A" data bus
LBDB0-LBDB7	Line buffer "B" data bus
LDA	Load line buffer "A" address counters
LDA8	Load line buffer "A" or "B" address counters
LDB	Load line buffer "B" address counters
LDS	68010 lower data strobe
LED1-LED4	LED outputs, players 1-4
LEFT-1-LEFT-4	Joystick left switch inputs, players 1-4
LINK	Latch motion object link data
LMPD	Stop motion object processing for line buffer changeover
LNK0-LNK9	Motion object link data
MA1-MA14	68010 address bus buffered
MATCH	Motion object H and V data matches current playfield position
MATCHDL	Previous MATCH state
MBUS	68010 "M" data bus buffers enable
MCO, MC1	Motion object parameter control select
MCEN	Motion object parameter control enable
MCKF	Master clock, inverted phase
MCKR	Master clock
MDO-MD15	68010 "M" data bus
MFLP	Motion object horizontal flip parameter
MIX	Latch audio mix data
MO/PF	Motion object or playfield picture select
MOHI, MOLO	Motion object RAM chip selects
MOSR0-MOSR3	Motion object pixel data, before the line buffers
MOSR4-MOSR7	Motion object pixel palette data, before the line buffers
MPIC0-MPIC7	The lower 8 bits of the motion object picture address
MPX0-MPX7	Motion object pixel data, after the line buffers
MREFL	Motion object stamp horizontal flip state
MUSIC	Music chip select
NEWMO	Start a new motion object
NXL, NXL	Next line
(NXL*)	NXL one clock cycle early
NXLDL	NXL delayed one clock cycle
PFILD-PF256LD	Latched playfield horizontal scroll data
PF1V-PF256V	Playfield vertical address counter chain
PF8H-PF256H	Playfield horizontal address counter chain
PFBANK0, PFBANK1	Playfield picture bank select
PFHI, PFLO	Playfield RAM chip selects
PFHST	Playfield scroll control
PFSR0-PFSR3	Playfield pixel data, before PFHS
PFSR4-PFSR6	Playfield pixel palette data, before PFHS
PFX0-PFX6	Playfield pixel data after PFHS
PICST0-PICST7	Motion object picture start address
PICT	Latch motion object picture data
PICTDL	PICT delayed one clock cycle
PKAUD	Effects chip audio
PL1-PL4	Player input chip selects, players 1-4
PM0-PM2	Effects audio mix control bits
POKEY	Effects chip select
PR1-PR6	Pull-up resistors
R/W	68010 read/write control, unbuffered

NOTICE TO ALL PERSONS RECEIVING THIS DRAWING

CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.



Gauntlet™ Signal Name Glossary

Gauntlet Signal Name Glossary, continued

RAM0, RAM1	68010 working RAM chip selects
RAUD	Summed right channel audio
RCLOCK	System clock
RDO-RD15	68010 ROM data bus
RD68K	6502 read 68010 output buffer
RED	Red analog video output
RED0-RED3	Red color RAM data
RIGHT-1- RIGHT-4	Joystick right switch inputs, players 1-4
ROM	68010 ROM data bus enable
ROM0-ROM4	68010 program ROM chip selects
ROMH/L	68010 program ROM high/low select (A14 on a 27256)
ROUT0-ROUT3	Red latched digital video output
SA0-SA15	6502 address bus unbuffered
SBA0-SBA13	6502 buffered address bus
SBDO-SBD7	6502 buffered data bus
SBR/W	6502 buffered read/write control
SBW/R	6502 buffered read/write control inverted
SD0-SD7	6502 data bus unbuffered
SELFTEST	Self-test switch input test pad
SID	Serial input data
SIORD	6502 miscellaneous input read control
SIOWR	6502 output latch control
SIRQACK	6502 interrupt acknowledge
SLAPSTK	SLAPSTIC chip select
SM0-SM2	Speech audio mix control bits

Gauntlet Signal Name Glossary, continued

SNDBUF	6502 output buffer full (to 68010)
SNDINT	68010 interrupt from 6502
SNDIRQ	6502 4-millisecond interrupt
SNDNMI	6502 non-maskable interrupt
SNDRD	68010 read buffer from 6502
SNDRES	6502 master reset (controlled by 68010)
SNDWR	68010 write to output buffer (to 6502)
SOD	Serial output data
SPHRDY	Speech chip ready
SPHRES	Speech chip reset
SPHWR	Speech chip write
SQUEAK	Speech chip operating frequency control
SRD	6502 read phase
START-1-START-4	Start switch inputs, players 1-4
STEST	Self-test switch input
SWR	6502 write phase
SYSRES	System reset (power up)
UDS	68010 upper data strobe
UNLOCK	EEPROM write enable control
UP-1-UP-4	Joystick up switch inputs, players 1-4
VAS0, VAS1	Video RAM address control
(VAS0*), (VAS1*)	VAS0 and VAS1 before being latched
VBD0-VBD15	Video RAM buffered data bus
VBKACK	Vertical blank interrupt acknowledge
VBKINT	Vertical blank interrupt
VBLANK	Vertical blank
VBUS	68010 "V" bus enable (for video RAM)
VCC	System V _{cc} (5 volts regulated)
VCPU	68010-to-video-RAM synchronization control
VERT	Latch motion object vertical data and size data
VERTDL,	VERT delayed one clock cycle
VIDBLANK	Video blank (horizontal and vertical blank mixed)
VMATCH	Motion object vertical parameter matches current playfield vertical position
VOICE	Speech chip select
VPOS0-VPOS8	Motion object vertical position data
VRA0-VRA11	Video RAM address bus
VRAM	68010 address decode for video RAM
VRAMRD	68010 read from video RAM
VRAMWE	68010 write to video RAM
VRD0-VRD15	Video RAM data bus, unbuffered
VRDTACK	Video RAM to 68010 data acknowledge
VSIZ0-VSIZ2	Motion object vertical size parameter
VSYNC, <u>VSYNC</u>	Vertical sync
WDOG	Watchdog control
WH	68010 write high byte
WL	68010 write low byte
WR68K	6502 write to output buffer (to 68010)
YAMRES	Music chip reset
YMO-YM2	Music audio mix control bits
ZREF	Intensity reference for video output

NOTICE TO ALL PERSONS RECEIVING THIS DRAWING
CONFIDENTIAL: Reproduction forbidden without the specific written permission of Atari Games Corporation, Sunnyvale, CA. This drawing is only conditionally issued, and neither receipt nor possession thereof confers or transfers any right in, or license to use, the subject matter of the drawing or any design or technical information shown thereon, nor any right to reproduce this drawing or any part thereof. Except for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license, no right is granted to reproduce this drawing or the subject matter thereof, unless by written agreement with or written permission from the corporation.

**Gauntlet™ Signal
Name Glossary, Continued**

