

# **WPC-95**

# **SCHEMATIC MANUAL**

WILLIAMS ELECTRONICS GAMES, INC.  
3401 NORTH CALIFORNIA AVENUE  
CHICAGO, ILLINOIS 60618

16-10159.3  
July 1, 1997

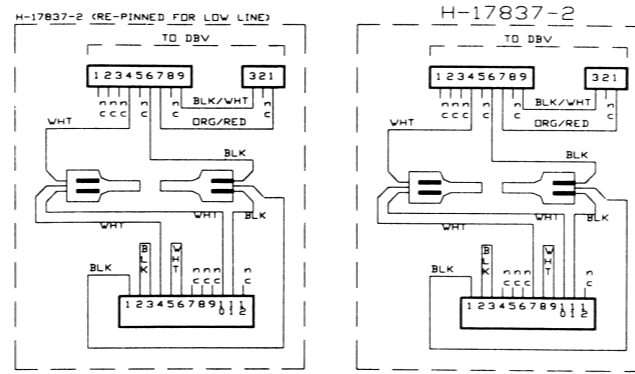
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**(Manual revised 7/1/97.)**

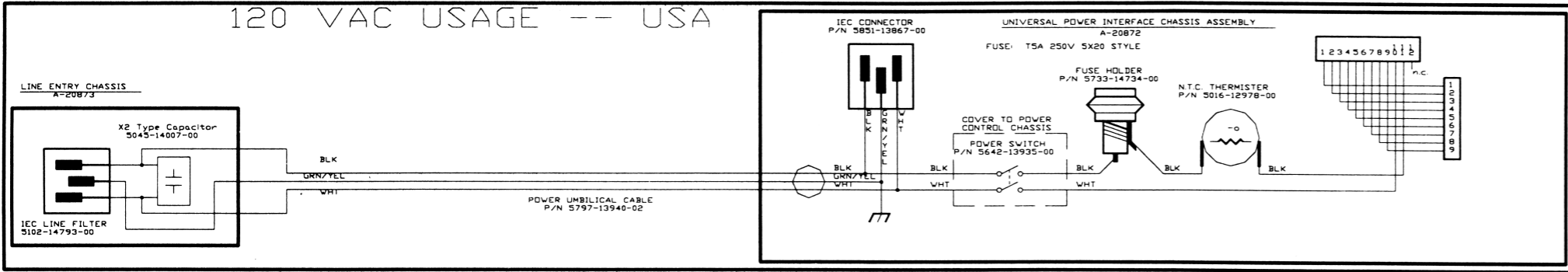
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The specifications and parts identified in this manual are subject to change without notice**

UNIVERSAL POWER INTERFACE ASSEMBLY  
A-20871

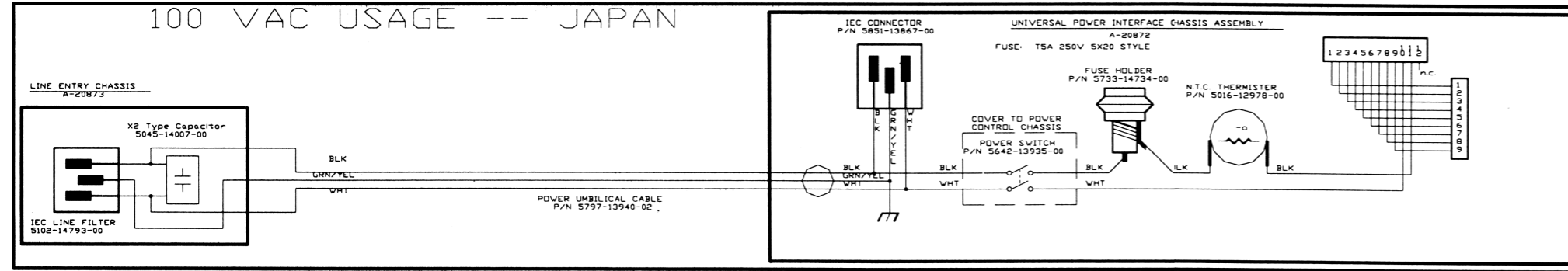


120 VAC USAGE -- USA

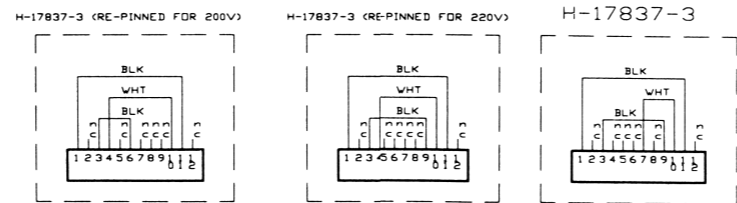


UNIVERSAL POWER INTERFACE ASSEMBLY  
A-20871

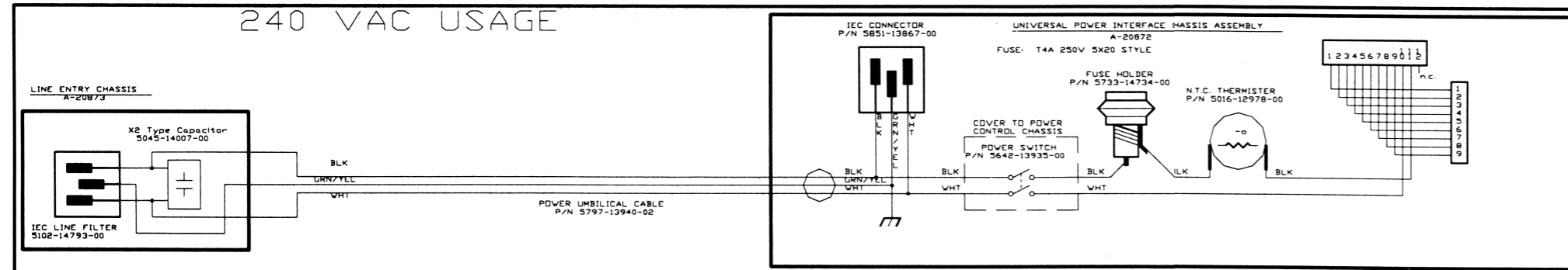
100 VAC USAGE -- JAPAN



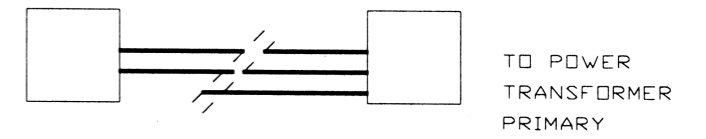
UNIVERSAL POWER INTERFACE ASSEMBLY  
A-20871



240 VAC USAGE



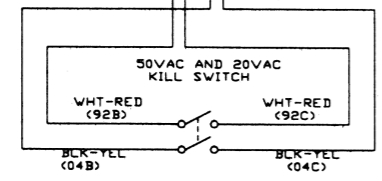
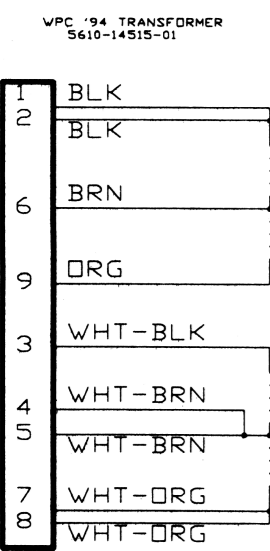
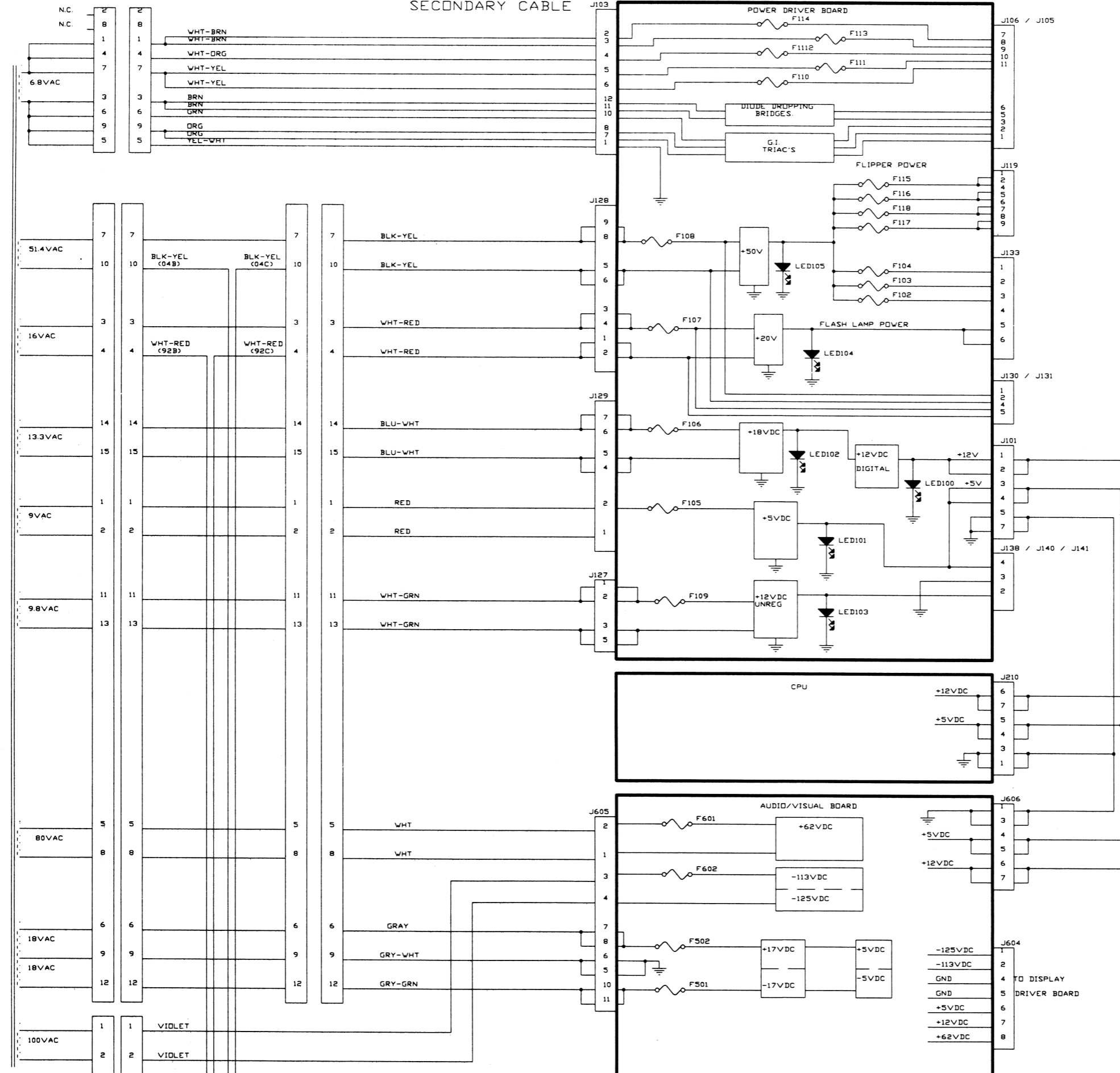
Extension  
Cable Assembly  
# H-19601-1  
(on most games)



**Note: See Game Manual for Fuse Value.**

Williams Electronics Games, Inc, 3401 N. California Avenue, Chicago, Illinois 60618	
Description:	Power Wiring Diagram
Schematic Part Number:	None
	Sheet 1 of 2
	Revision Level 7

SECONDARY CABLE



A-18249-3  
A-18249-2 (JAPAN ONLY)

Note: See Game Manual for Fuse Value.

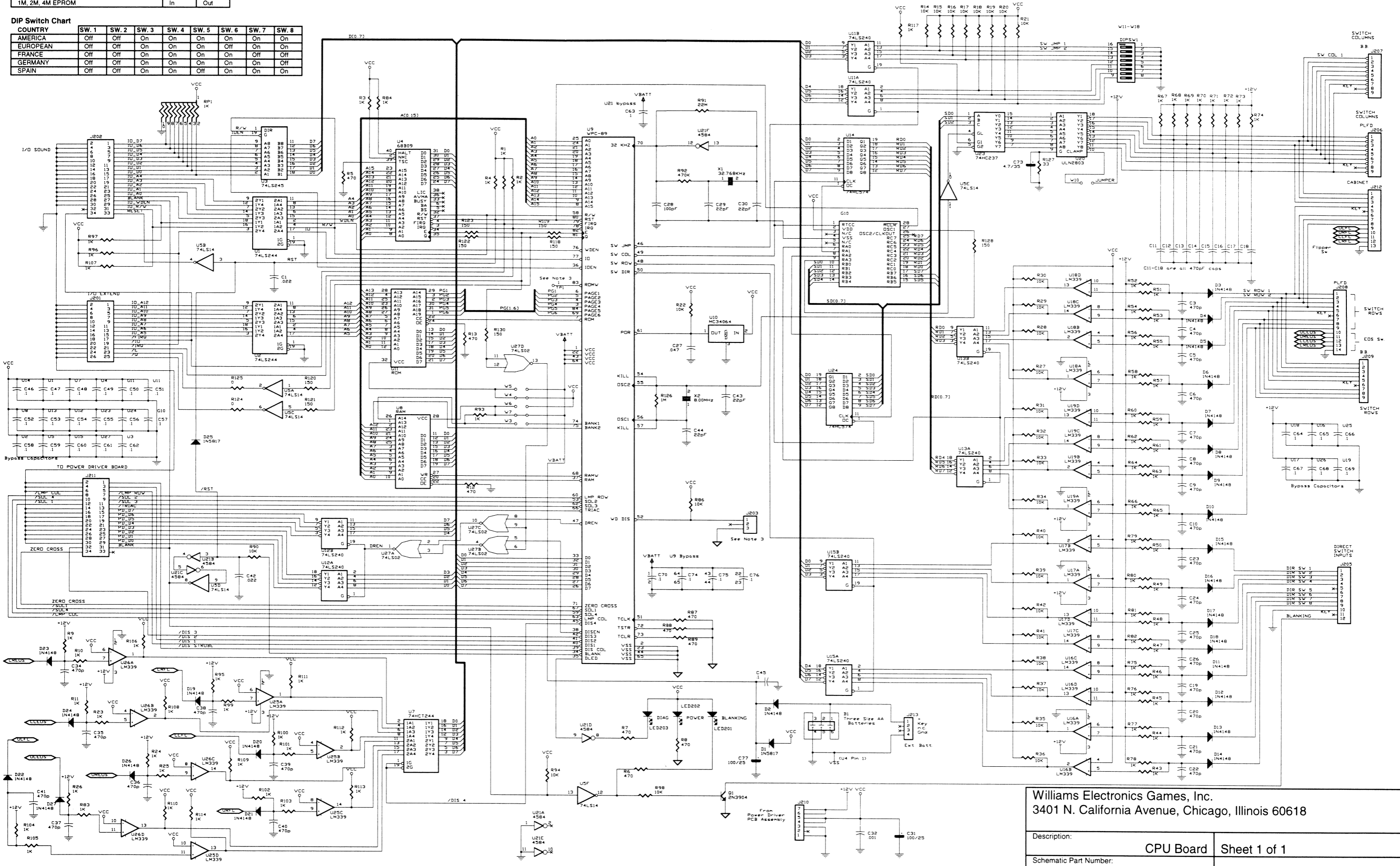
Williams Electronics Games, Inc. 3401 N. California Avenue, Chicago, Illinois 60618	
Description:	Power Wiring Diagram
Schematic Part Number:	None
	Revision Level 7
	Sheet 2 of 2
	Page 2

**DIP SWITCH SETTINGS AND JUMPERS**

EPROM Jumper Settings for G11		W1	W2
1M, 2M, 4M EPROM		In	Out

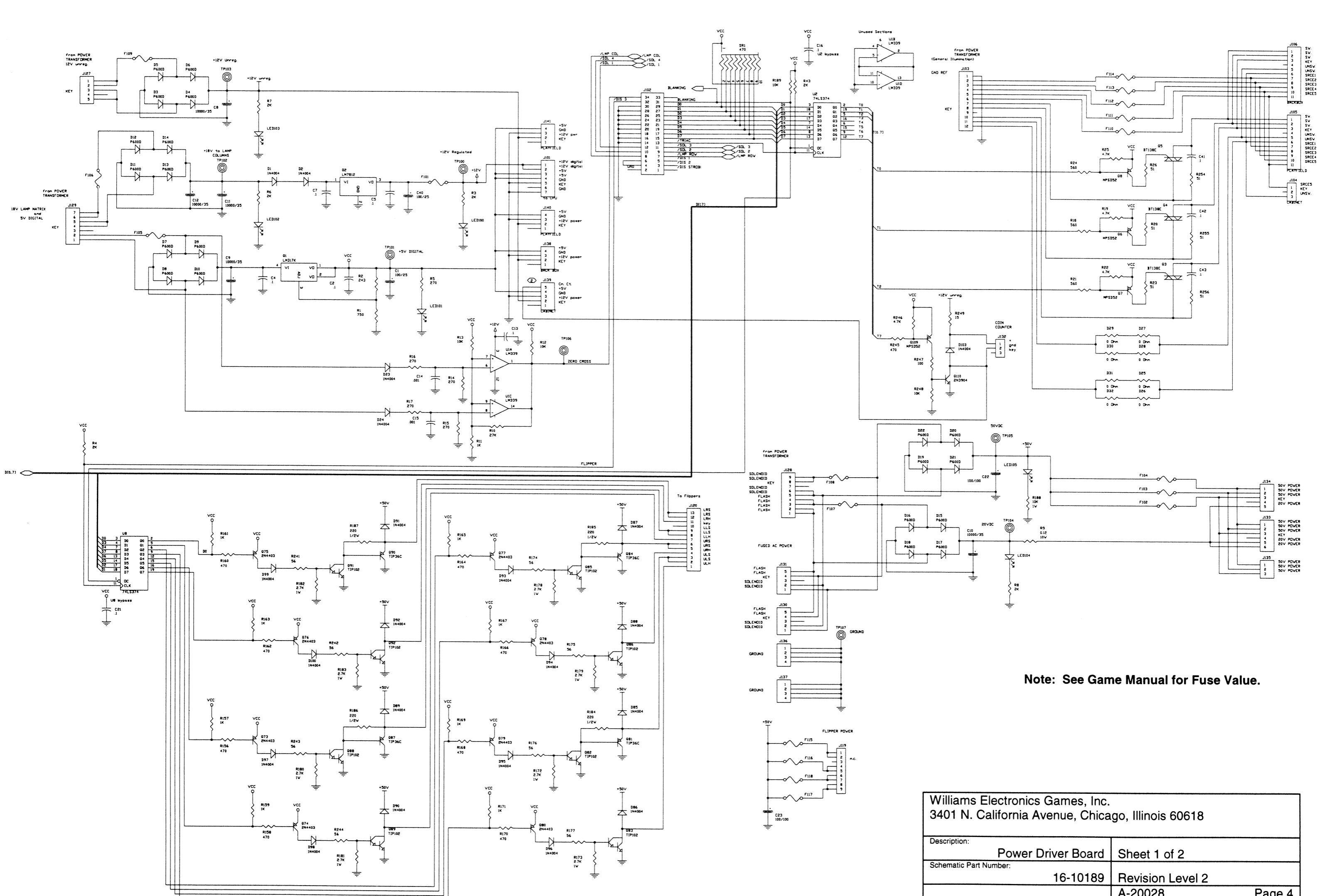
**DIP Switch Chart**

COUNTRY	SW. 1	SW. 2	SW. 3	SW. 4	SW. 5	SW. 6	SW. 7	SW. 8
AMERICA	Off	Off	On	On	On	On	On	On
EUROPEAN	Off	Off	On	On	On	On	On	On
FRANCE	Off	Off	On	On	On	Off	Off	Off
GERMANY	Off	Off	On	On	On	On	On	Off
SPAIN	Off	Off	On	On	Off	On	On	On



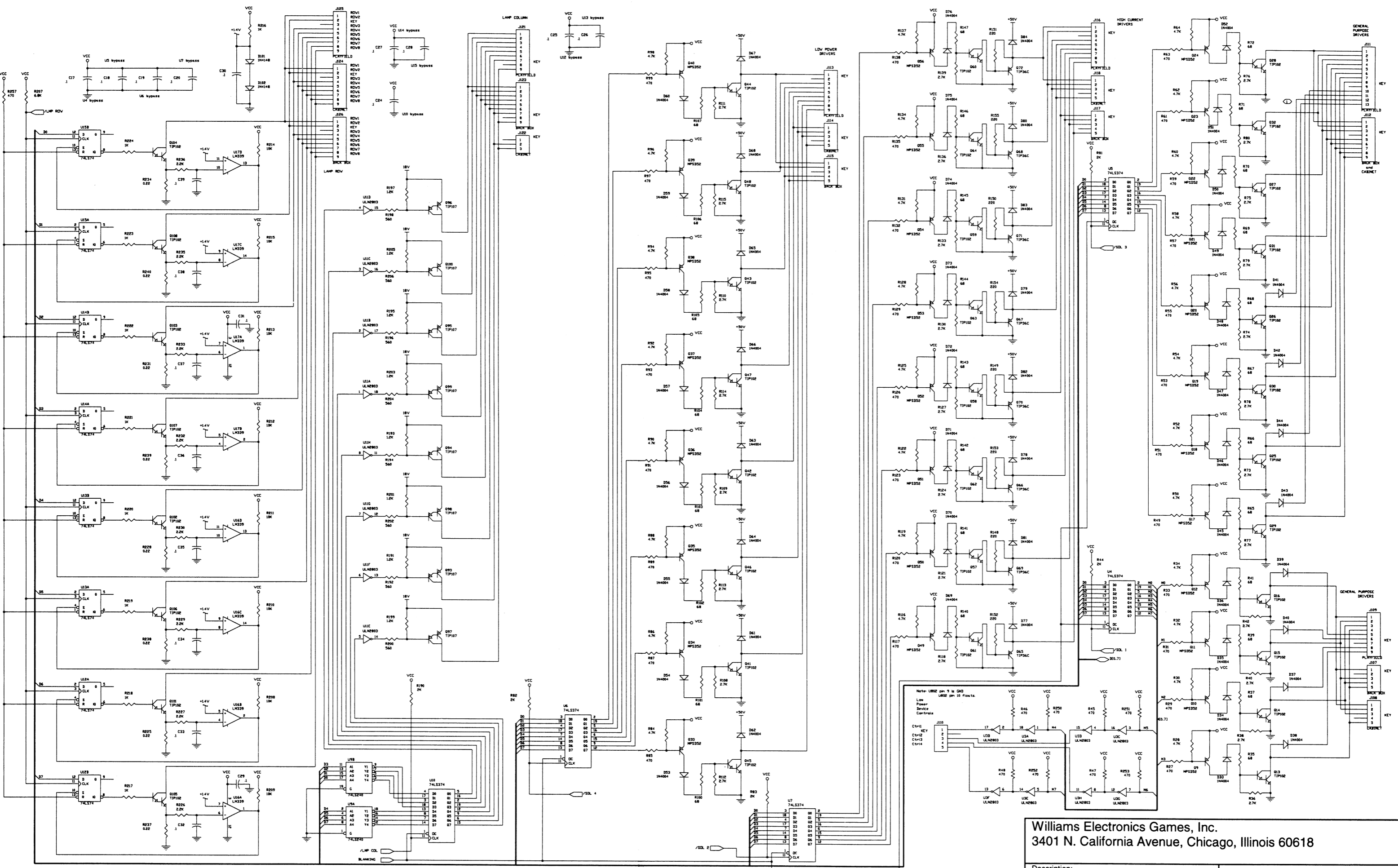
**Williams Electronics Games, Inc.**  
 3401 N. California Avenue, Chicago, Illinois 60618

Description:	CPU Board	Sheet 1 of 1
Schematic Part Number:	16-10296	Revision Level 0
	A-21377-XXXXX	Page 3



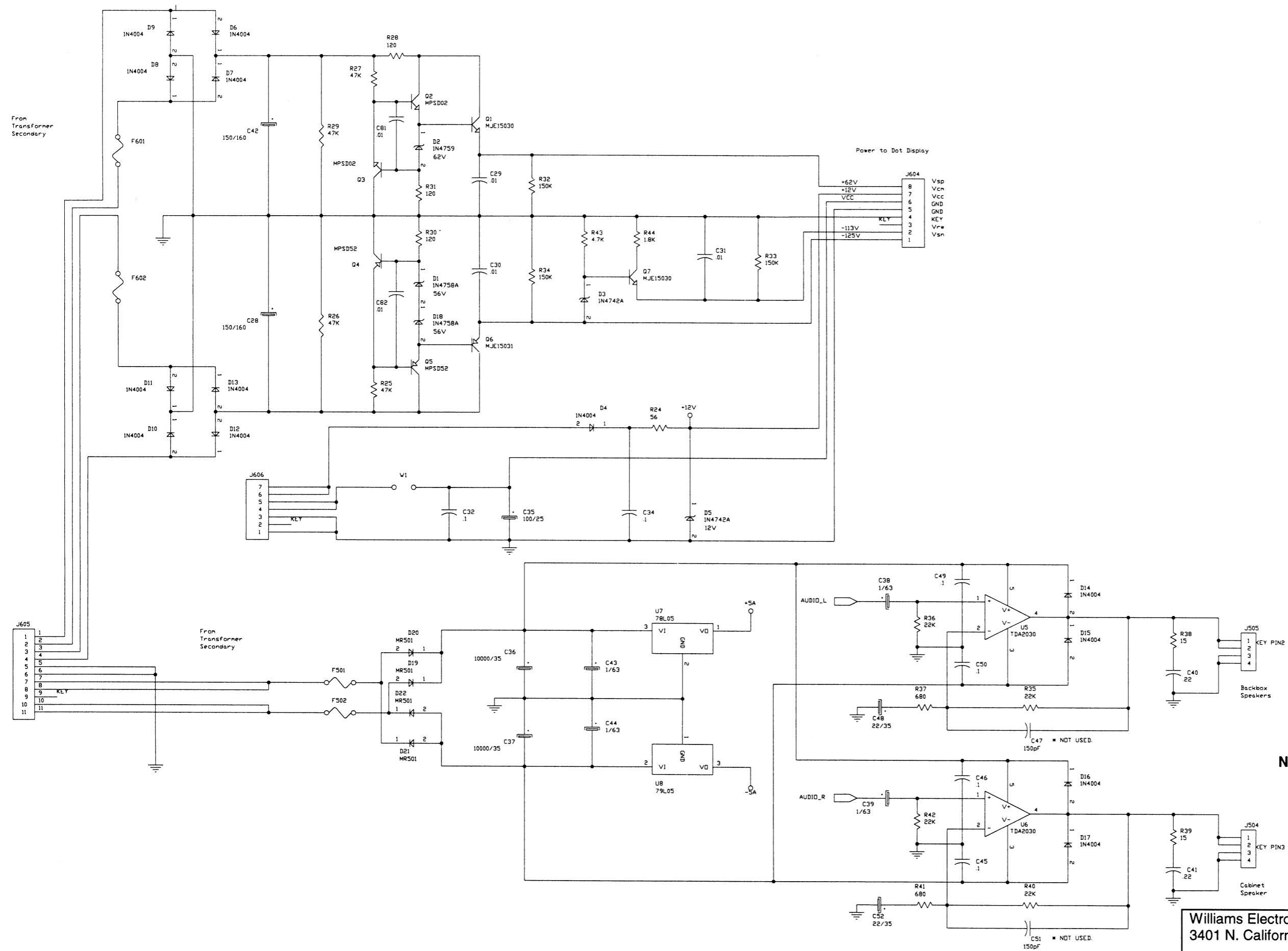
Note: See Game Manual for Fuse Value.

Williams Electronics Games, Inc. 3401 N. California Avenue, Chicago, Illinois 60618	
Description:	Power Driver Board
Schematic Part Number:	16-10189
	Sheet 1 of 2
	Revision Level 2
	A-20028
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 3401 N. California Avenue, Chicago, Illinois 60618

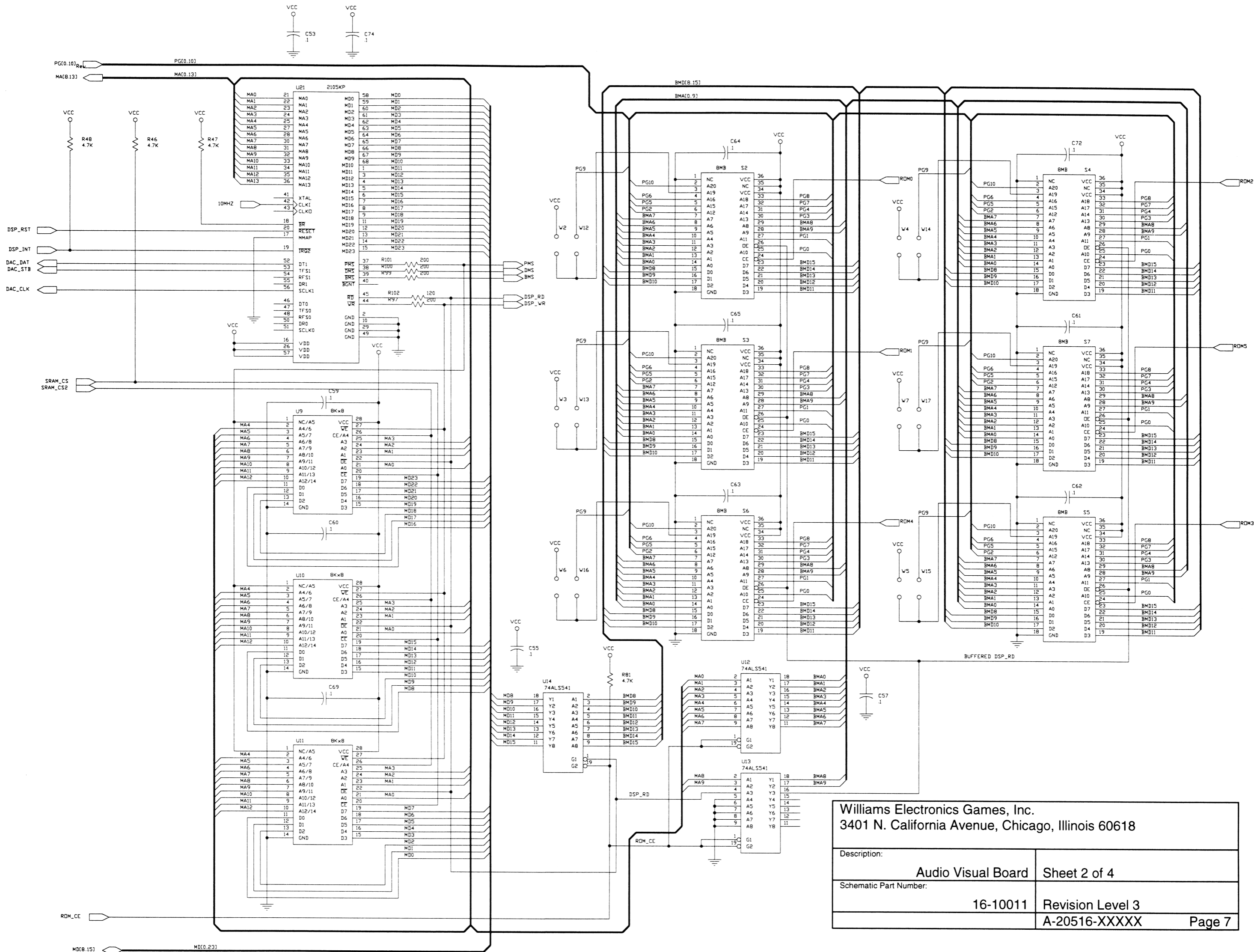
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Schematic Part Number:	16-10189	Revision Level 2
	A-20028	Page 5



Note: See Game Manual for Fuse Value.

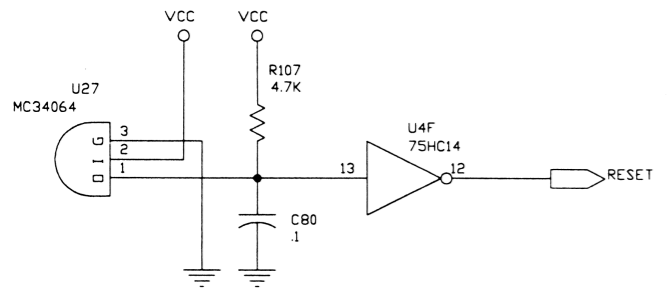
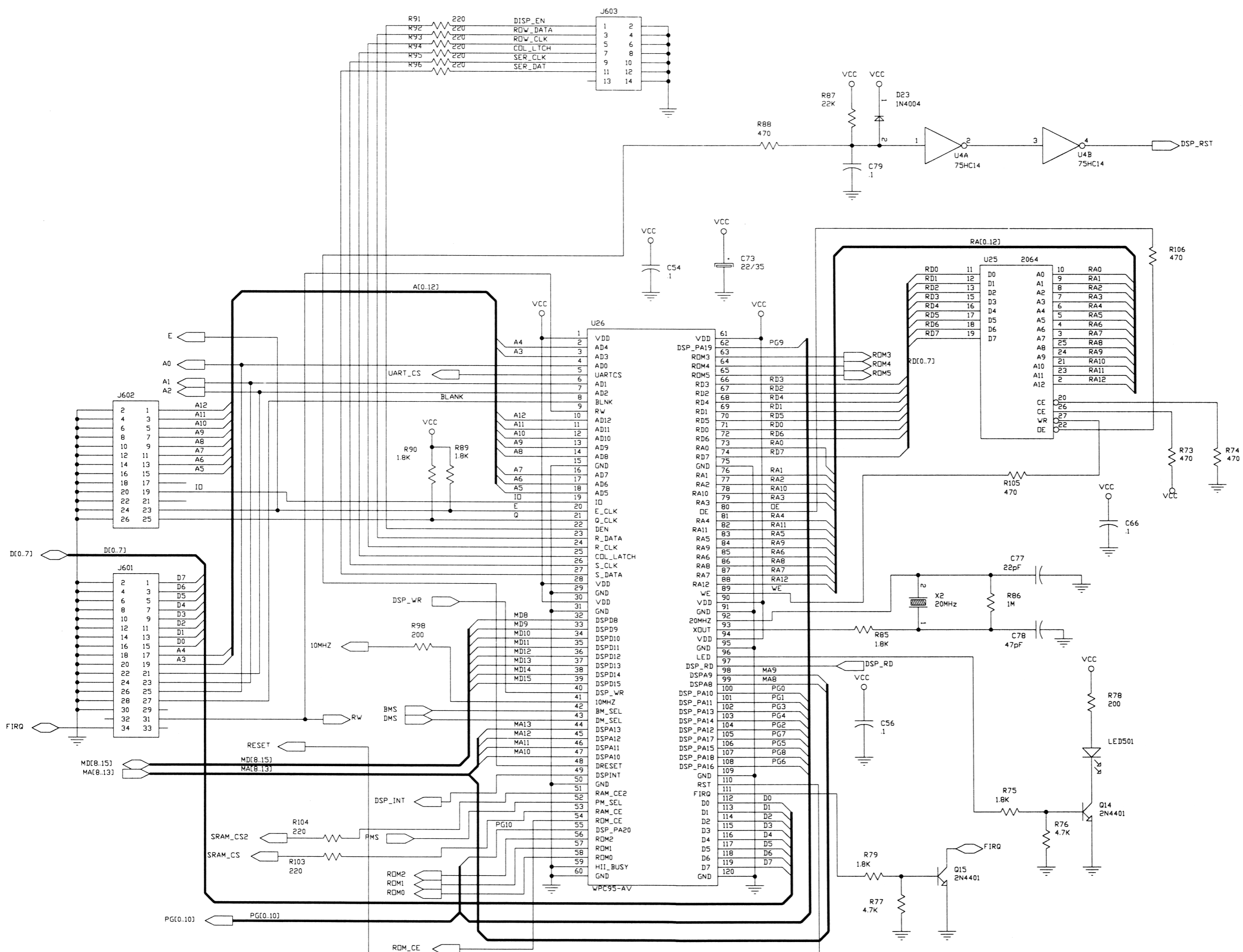
Williams Electronics Games, Inc. 3401 N. California Avenue, Chicago, Illinois 60618	
Description:	Audio Visual Board Sheet 1 of 4
Schematic Part Number:	16-10011 Revision Level 3
	A-20516-XXXXX Page 6



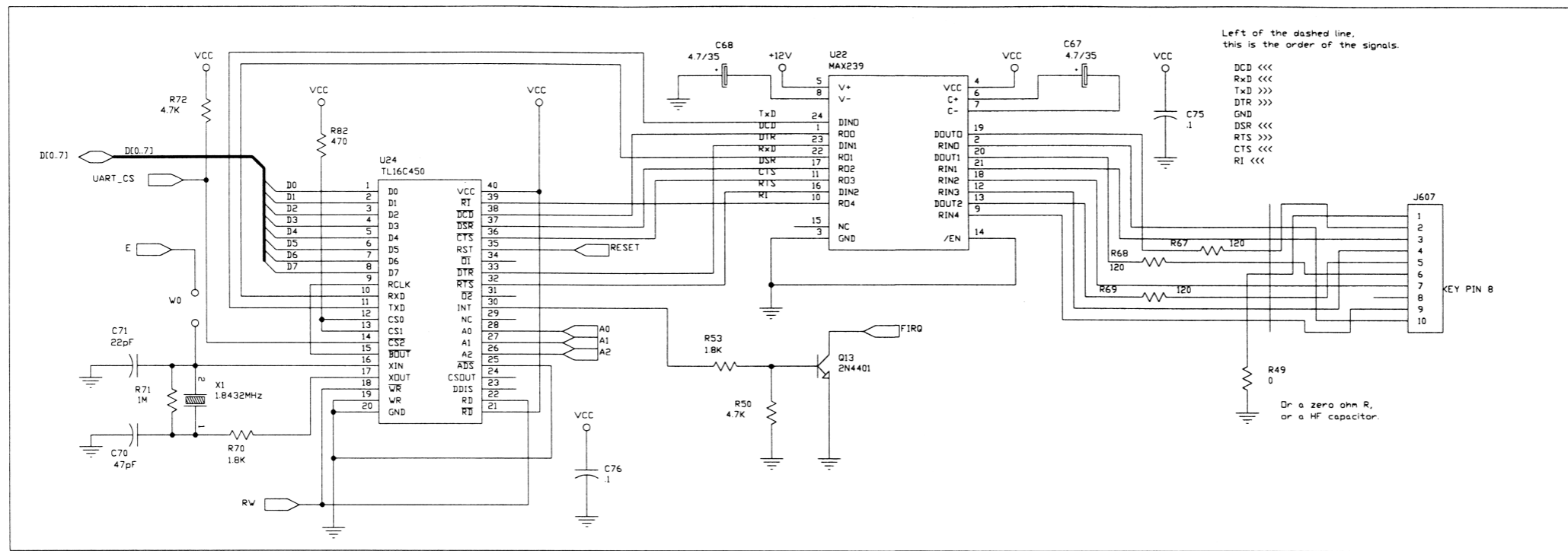


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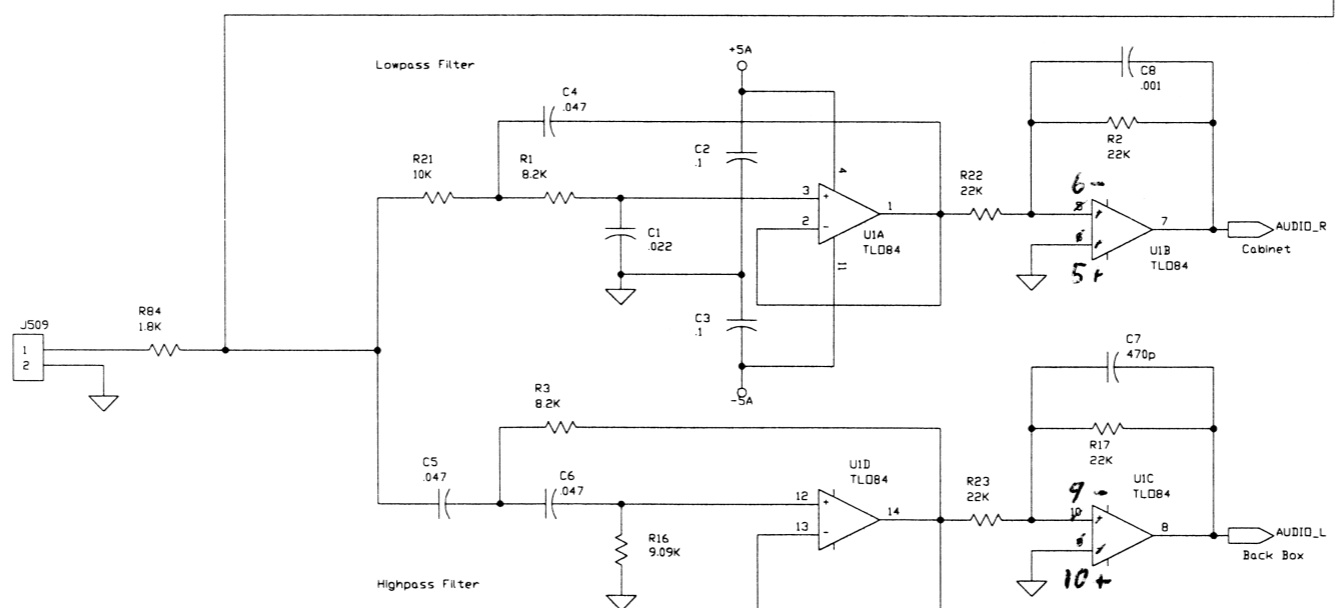
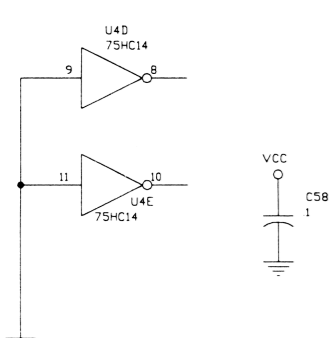
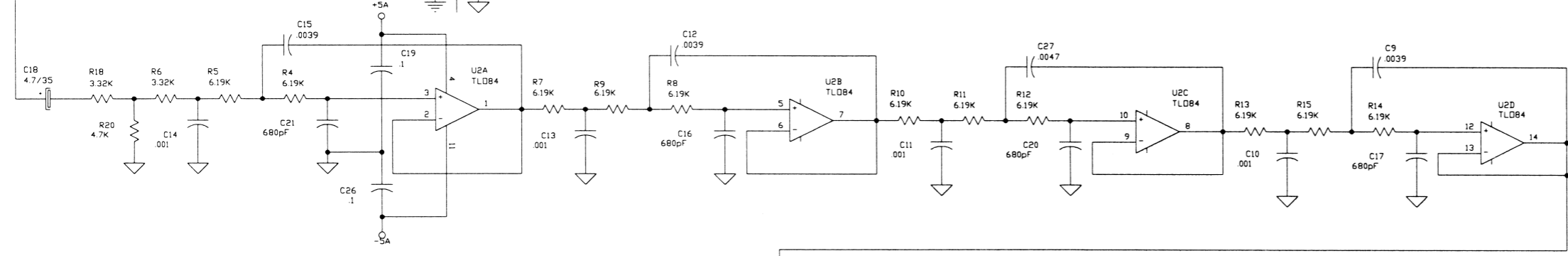
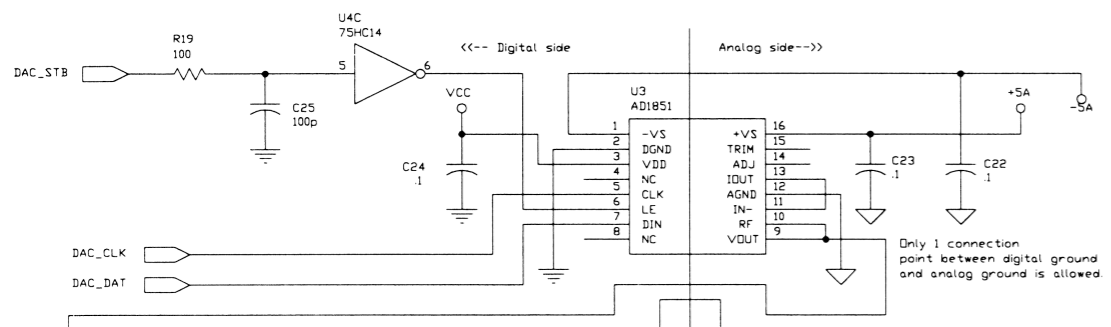
Description:		Audio Visual Board		Sheet 2 of 4	
Schematic Part Number:		16-10011		Revision Level 3	
				A-20516-XXXXX	
				Page 7	



<b>Williams Electronics Games, Inc.</b> 3401 N. California Avenue, Chicago, Illinois 60618	
Description:	Audio Visual Board
Schematic Part Number:	16-10011
	Revision Level 3
	A-20516-XXXXX
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Circuitry inside dotted box is RS232 option. The PC board requires U22 and U24 be added for the serial part to work.

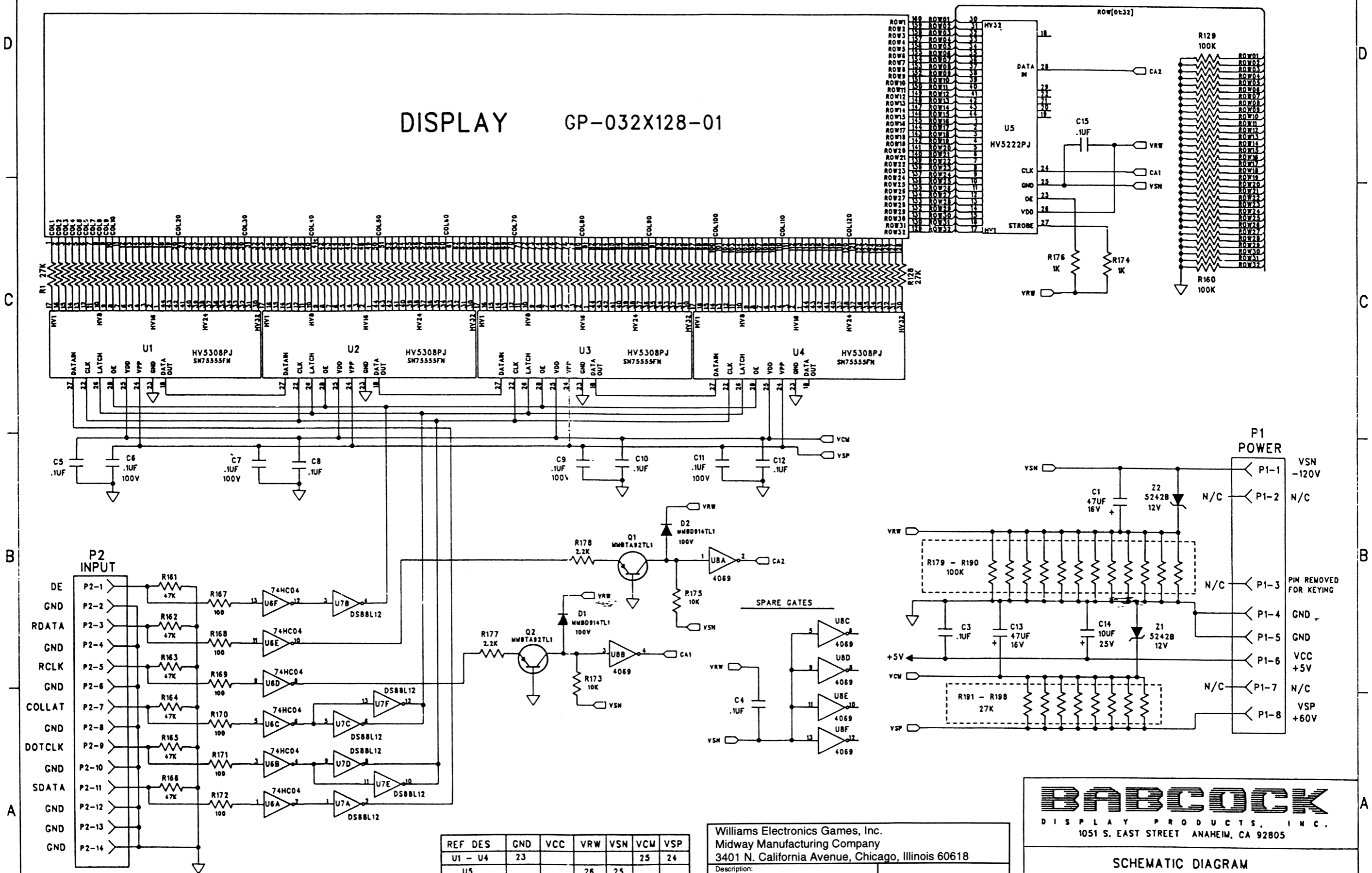


$f_c = 374 \text{ Hz}$

$f_c = 392 \text{ Hz}$

Williams Electronics Games, Inc. 3401 N. California Avenue, Chicago, Illinois 60618			
Description:	Audio Visual Board	Sheet 4 of 4	
Schematic Part Number:	16-10011	Revision Level 3	
		A-20516-XXXXX	Page 9

# DISPLAY GP-032X128-01



2. RESISTOR VALUES ARE IN OHMS, 1/8 WATT, 5%.  
 1. CAPACITOR VOLTAGES ARE 50V, 20%.  
 NOTES: UNLESS OTHERWISE SPECIFIED.

REF	DES	GND	VCC	VRW	VSN	VCM	VSP
U1 - U4		23			25	24	
U5			26	25			
U6		7	14				
U7		7				14	
U8				14	7		

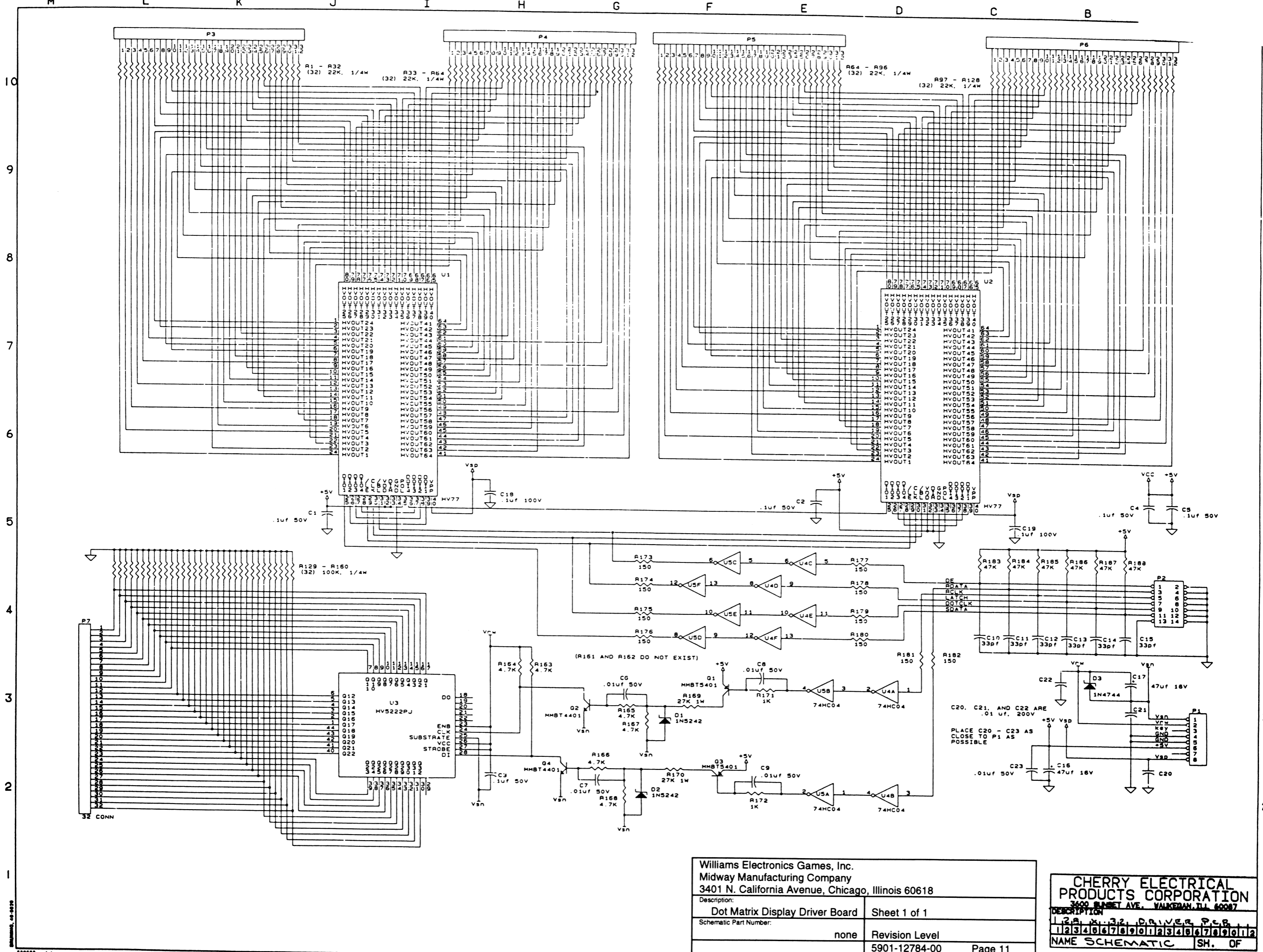
Williams Electronics Games, Inc.  
 Midway Manufacturing Company  
 3401 N. California Avenue, Chicago, Illinois 60618

Description:  
 Dot Matrix Display Driver Board Sheet 1 of 1

Schematic Part Number:  
 none Revision Level  
 5901-12784-00 Page 10

**BABCOCK**  
 DISPLAY PRODUCTS, INC.  
 1051 S. EAST STREET ANAHEIM, CA 92805

SCHMATIC DIAGRAM



Williams Electronics Games, Inc.  
 Midway Manufacturing Company  
 3401 N. California Avenue, Chicago, Illinois 60618

Description:	Dot Matrix Display Driver Board	Sheet 1 of 1
Schematic Part Number:	none	Revision Level
		5901-12784-00 Page 11

**CHERRY ELECTRICAL PRODUCTS CORPORATION**  
 3400 BUNNET AVE. WALKERDAN, ILL. 60087

DESCRIPTION:	128 x 32 DRIVER PCB
NAME SCHEMATIC	SH. OF

8390002