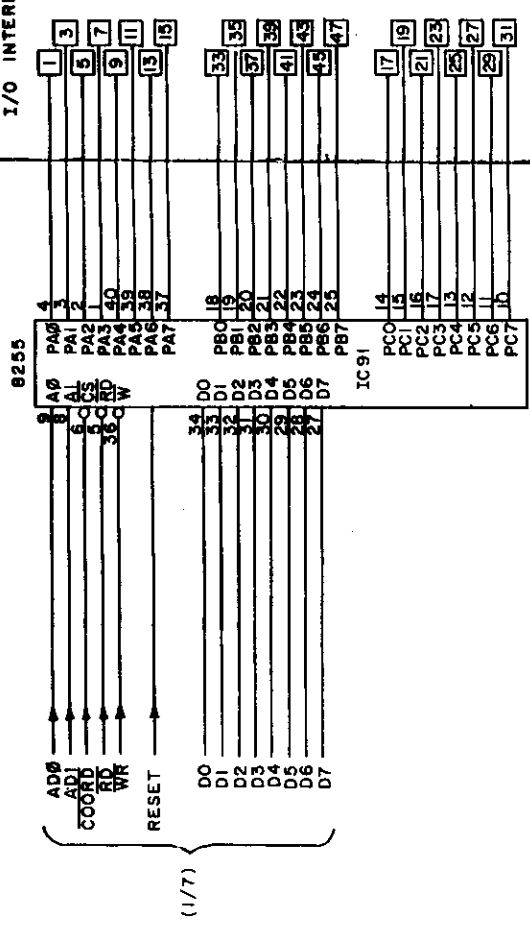
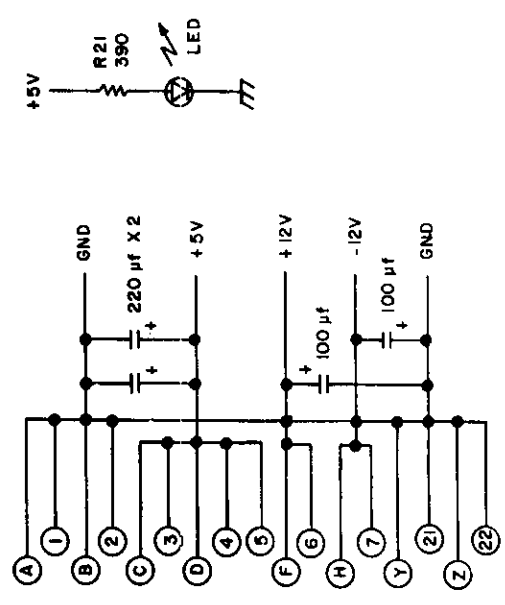


CN4 I/O INTERFACE



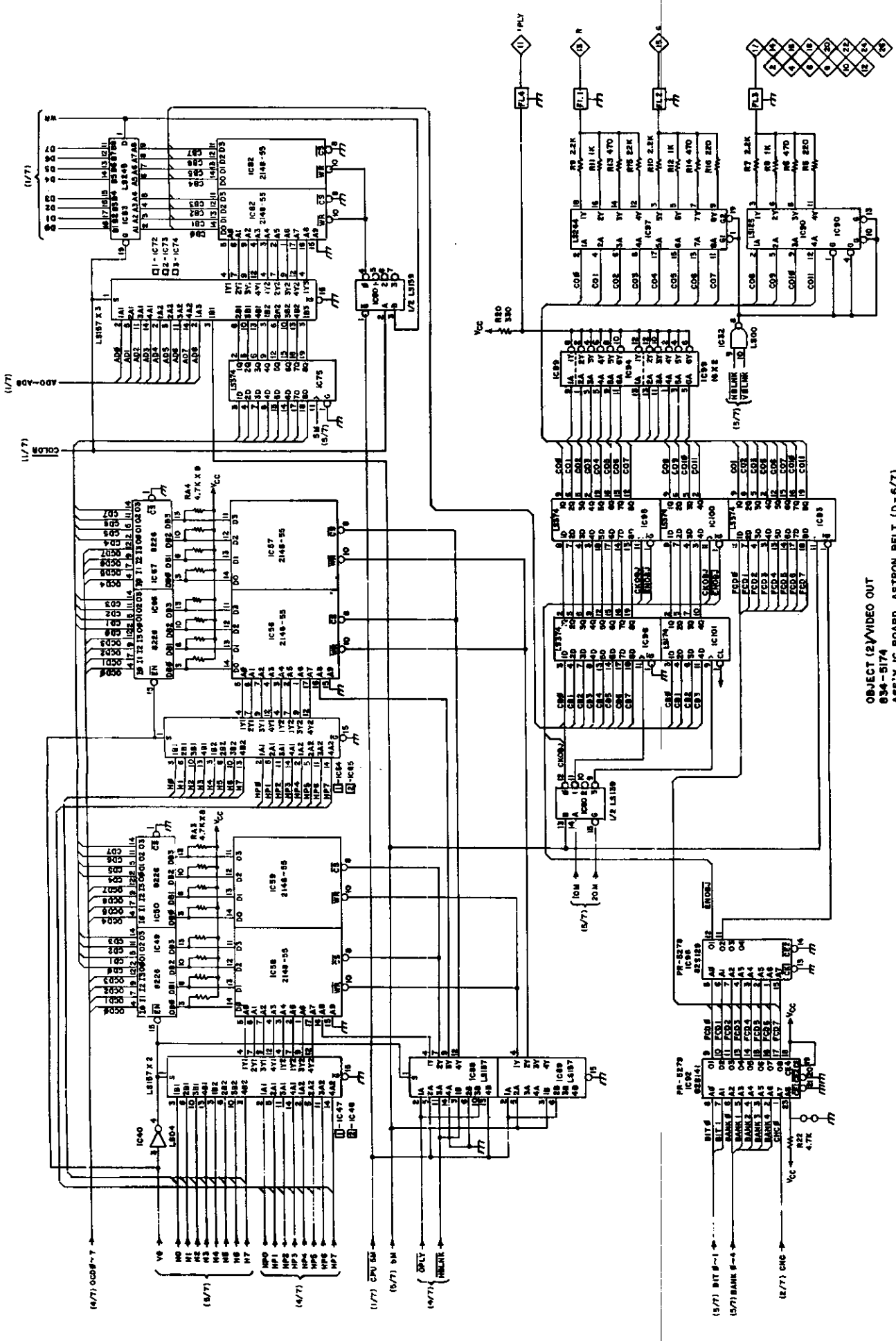
CN1 44P EDGE CONN



I/O - INTERFACE  
834-5174  
ASSY IC BOARD ASTRON BELT (D-7/7)

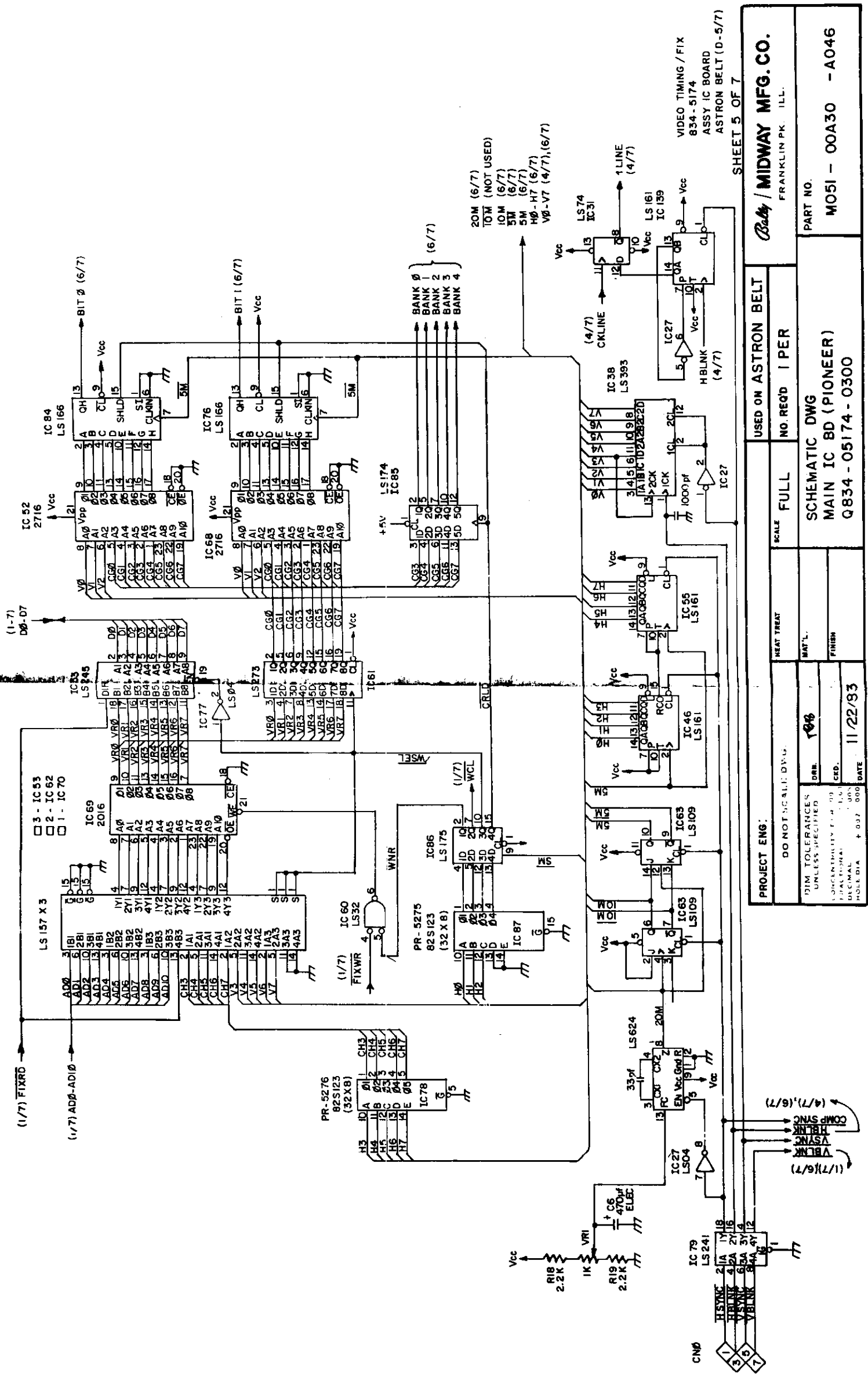
SHEET 7 OF 7	
REVISIONS	

PROJECT ENG: J. SZERSZEN		USED ON ASTRON BELT	
DO NOT SCALE DWG.		SCALE FULL	NO. REQ'D 1 PER
DIM TOLERANCES UNLESS SPECIFIED		SCHEMATIC DWG	
DATE 11/16/83	DRN 100	MAIN IC BD (PIONEER)	
DESIGNED BY	CED.	Q834-05174-0300	
CHECKED BY	DATE	PART NO. MO51 - 00A30 - A046	
APPROVED BY	DATE	MIDWAY MFG. CO.	
		FRANKLIN PK. ILL.	



OBJECT (12) VIDEO OUT  
 834-5174  
 ASS'Y IC BOARD ASTRON BELT (D-6/7)

PROJECT ENG. J. SZERSZEN		USED ON ASTRON BELT		REVISIONS	
DESIGNER	DATE	SCALE	NO REQ'D	PART NO	
RW	11/21/83	FULL	1 PER	M051 - 00A30 - A046	
HEAT TREAT	FINISH	SCHEMATIC DWG.		FRANKLIN PK. ILL.	
		MAIN IC BD. (PIONEER)		MIDWAY MFG. CO.	
		Q834-05174-0300		M051 - 00A30 - A046	



PROJECT ENG:		SCALE FULL		HEAT TREAT	
DO NOT SCALE DWG.		NO. REQ'D 1 PER		MAT'L.	
DIM TOLERANCES UNLESS SPECIFIED		FULL		FINISH	
CONCENTRICITY F.U.M. 0.01		SCHEMATIC DWG		DATE 11/22/83	
FRACTIONAL DECIMAL TURNS		MAIN IC BD (PIONEER)		MO51 - OOA30 - A046	
HOLE DIA + 0.02 0.000		Q834 - 05174 - 0300		ASTRON BELT (D-5/7)	

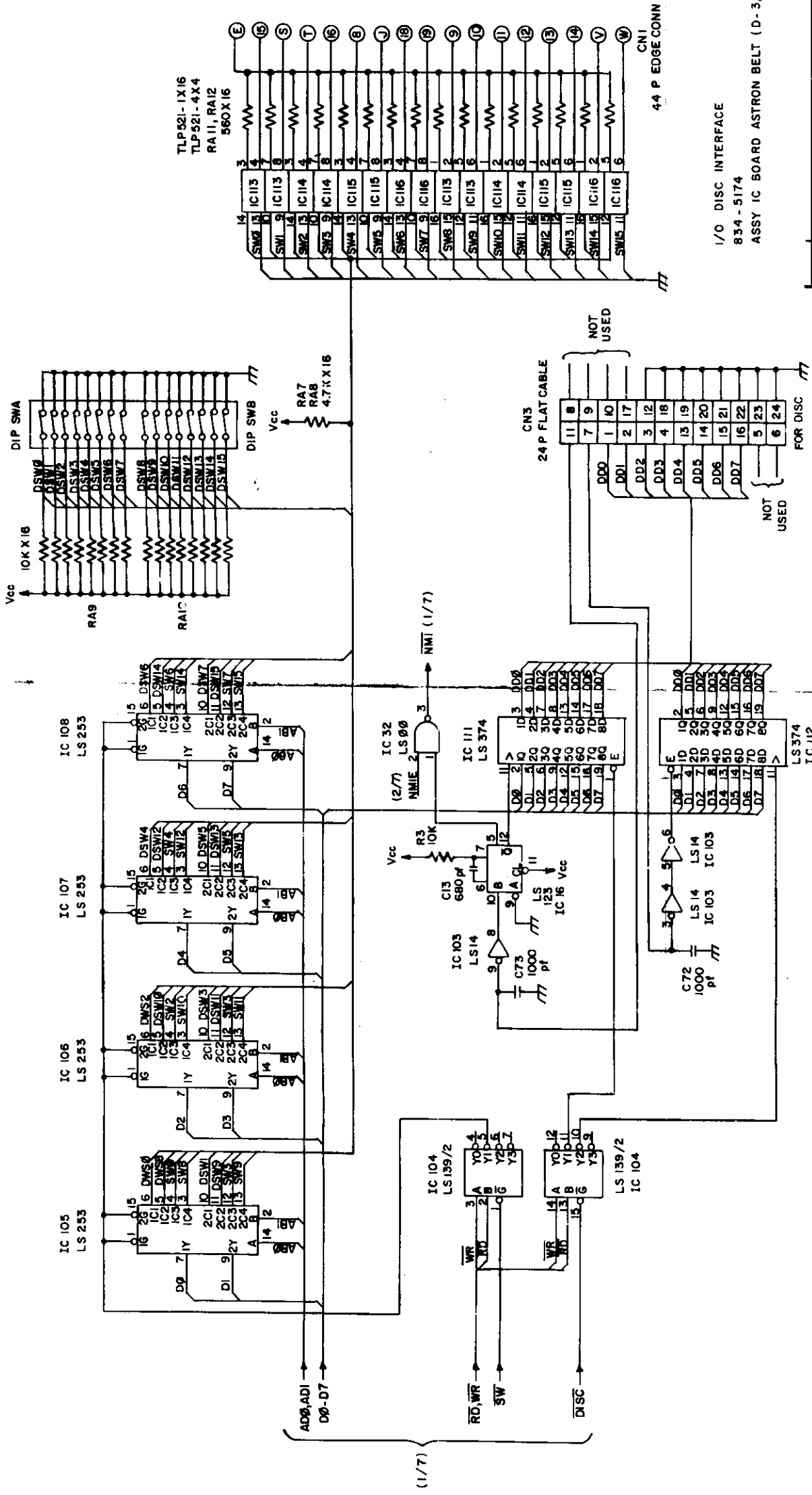
USED ON ASTRON BELT

**Bady / MIDWAY MFG. CO.**  
FRANKLIN PK. ILL.

PART NO. MO51 - OOA30 - A046

VIDEO TIMING / FIX  
834 - 5174  
ASSY IC BOARD  
ASTRON BELT (D-5/7)

SHEET 5 OF 7

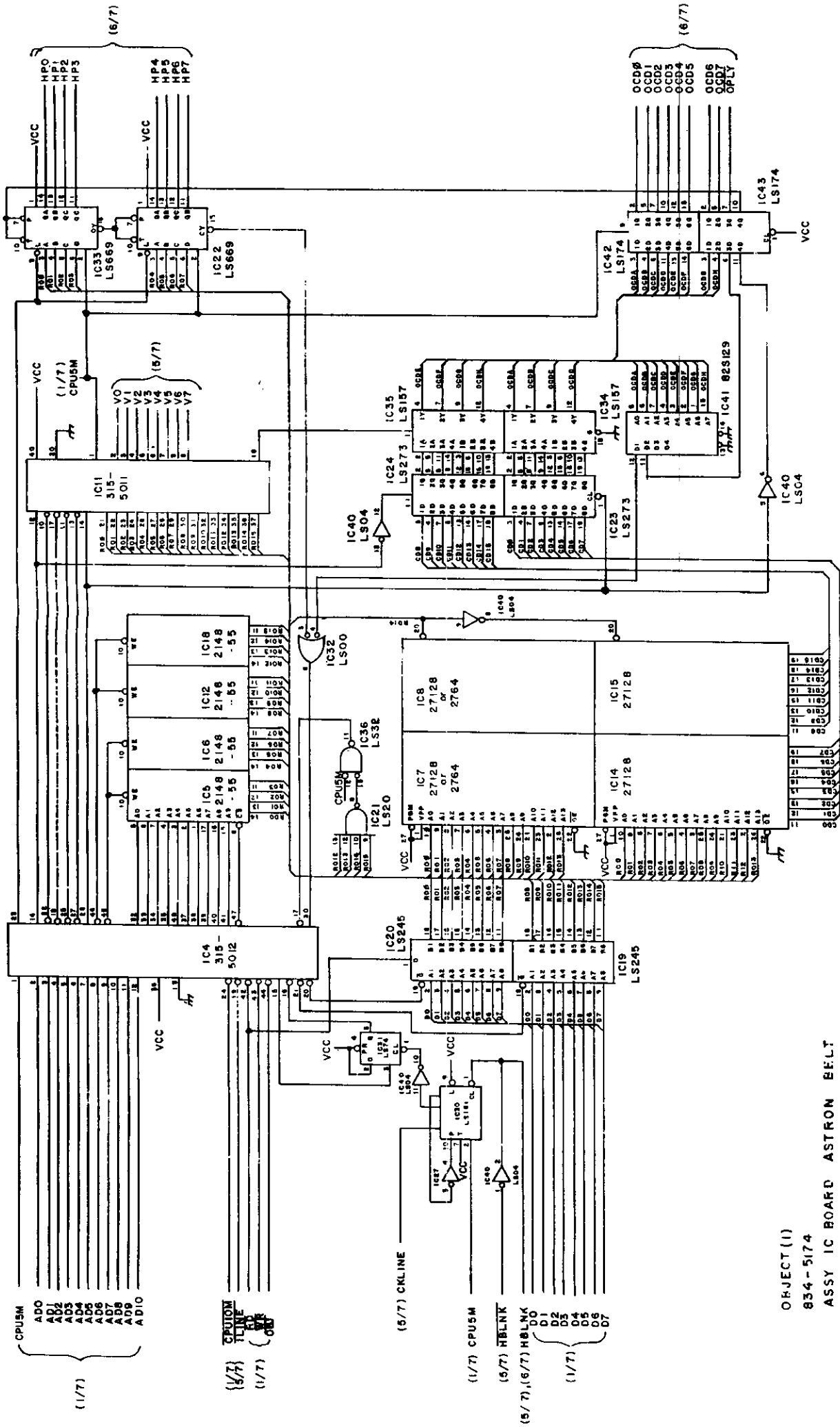


TLP521-1X16  
TLP521-4X4  
RA11, RA12  
560X16

I/O DISC INTERFACE  
834-5174  
ASSY IC BOARD ASTRON BELT (D-3/7)

SHEET 3 OF 7  
REVISIONS

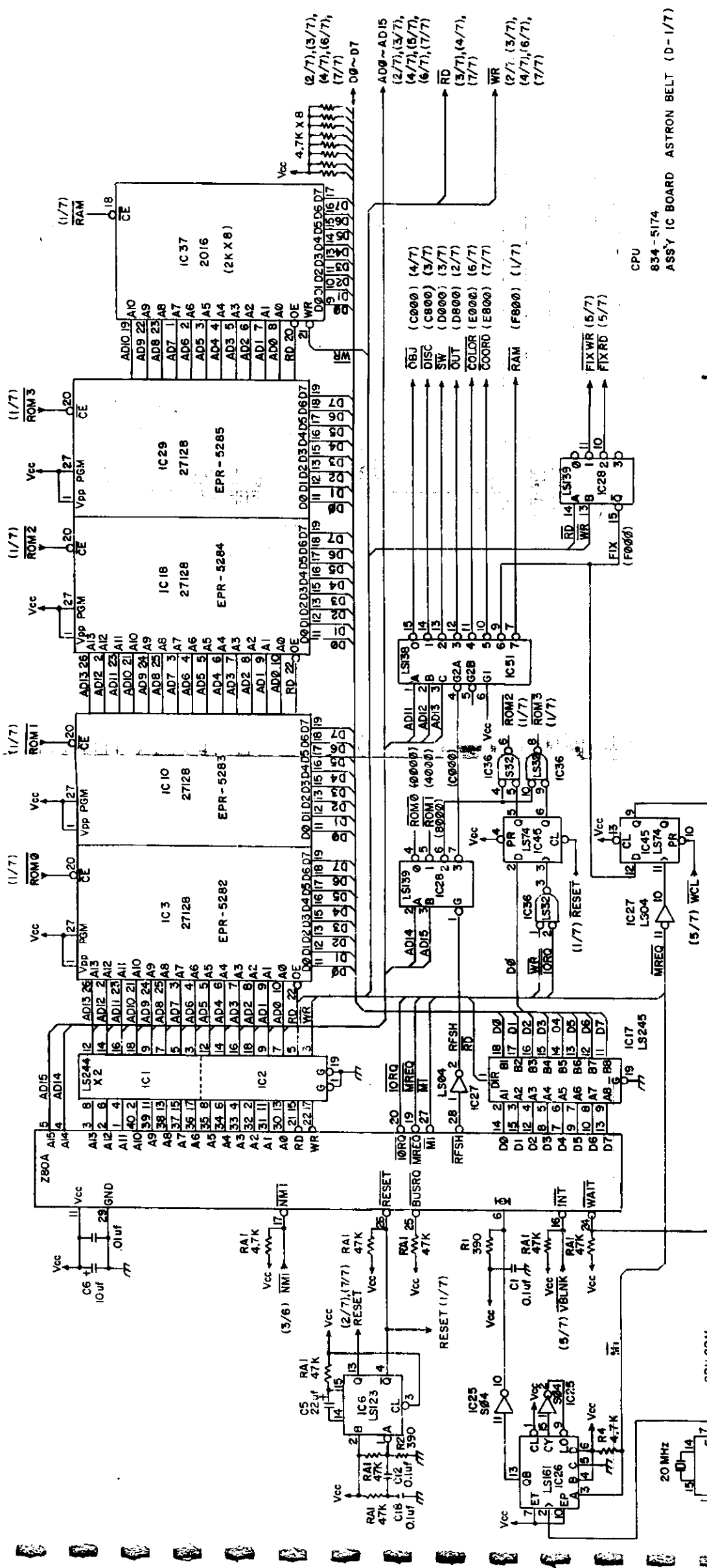
PROJECT ENG: J. SZPFSZEN		USED ON ASTRON BELT	
DATE: 11/17/83		NO. REQ'D: 1 PER	
DRAWN: [Signature]		SCALE: FULL	
CHECKED: [Signature]		HEAT TREAT: [ ]	
DATE: 11/17/83		FINISH: [ ]	
PART NO. MO51 - 00A30 - A046		SCHEMATIC DWG. MAIN IC BD. (PIONEER)	
PART NO. MO51 - 00A30 - A046		Q534-05174-0300	
MFG. CO. MIDWAY MFG. CO.		FRANKLIN, PA.	



OBJECT (1)  
834-5174  
ASSY IC BOARD ASTRON BELT  
(D-4/7)

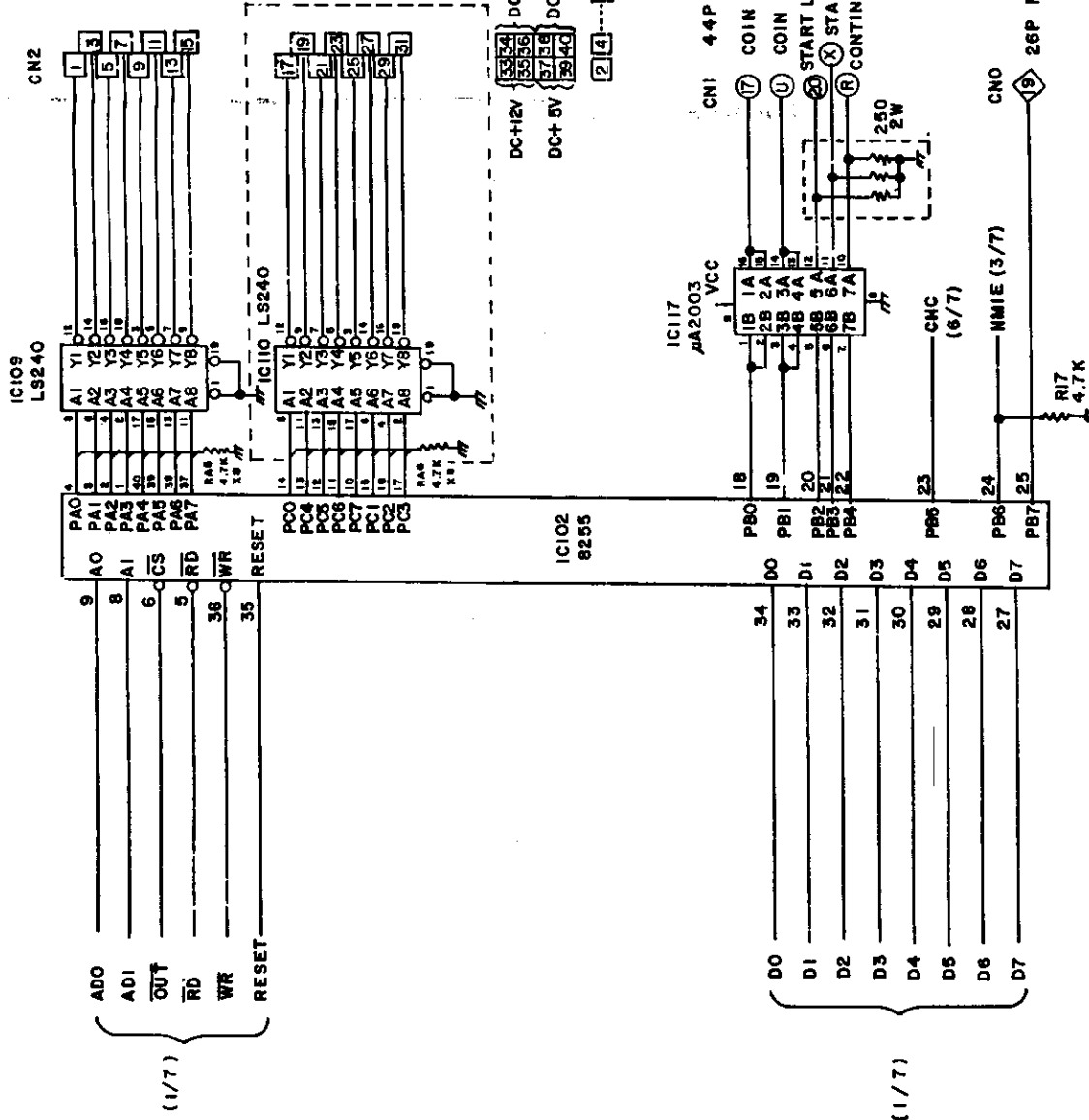
SHEET 4 OF 7

PROJECT ENG:		USED ON ASTRON BELT	
DO NOT REBUILD DWG.	SCALE	NO. RECD 1 PER	
DIM TOLERANCES UNLESS SPECIFIED	HEAT TREAT	FULL	
CONFORM TO MIL-STD-200	FINISH	MAIN IC BD. (PIONEER)	
DATE 11/22/83		Q834-05174-0300	
DRN. BAK		PART NO. MO51-00A30 - A046	
DATE 11/22/83		FRANKLIN PK. ILL.	
		MIDWAY MFG. CO.	



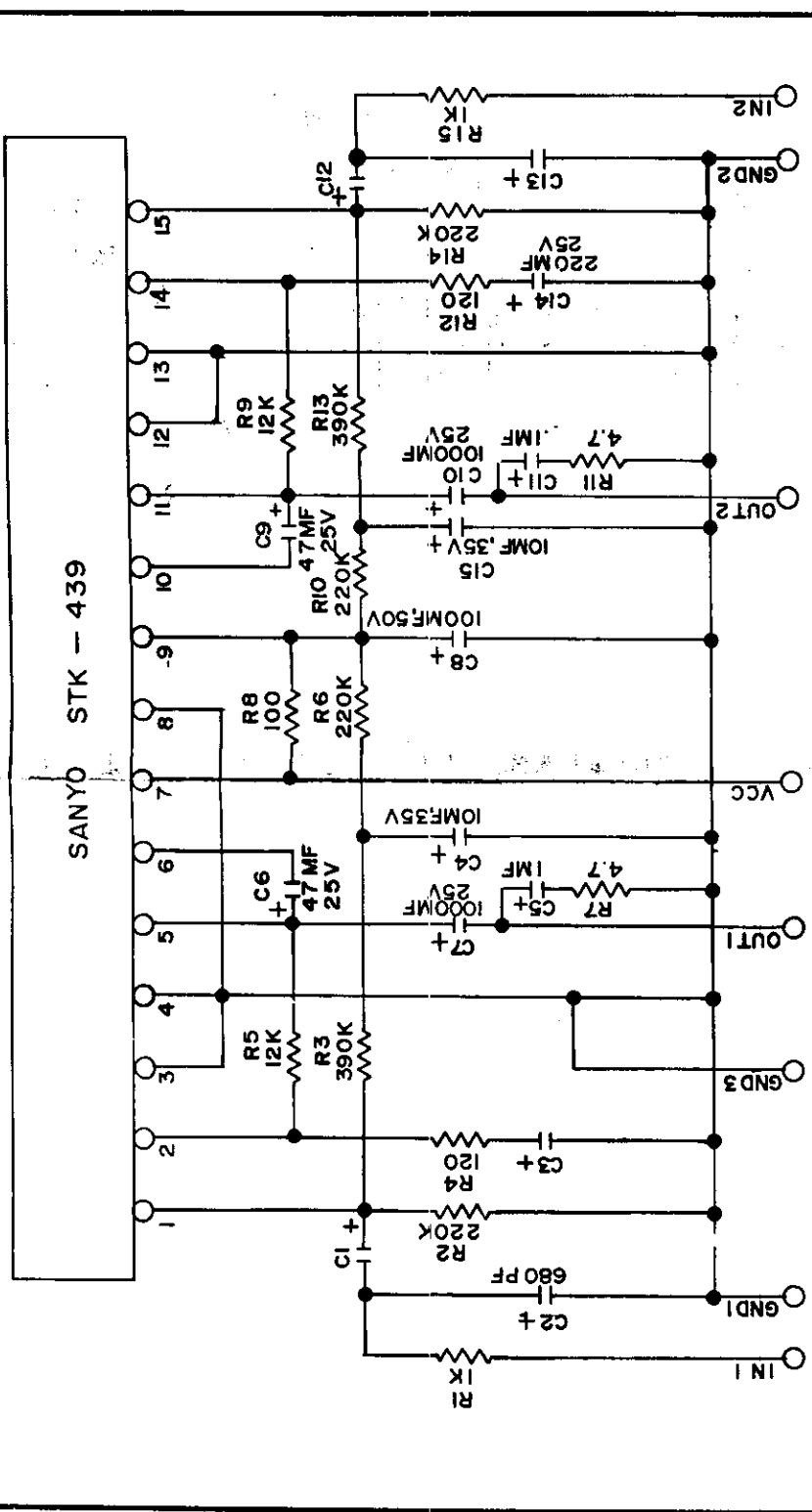
PROJECT ENG. J. SZERSZEN		USED ON ASTRON BELT		REVISIONS	
DATE	BY	SCALE	NO. RECD	PER	
11-21-83	R.L.W.	FULL	1		
SHEET 1 OF 7		ASTRON BELT			
MIDWAY MFG. CO.		FRANKLIN PK. ILL.			
PART NO. M051 - 00A30 - A046		SCHEMATIC DWG. MAIN IC BD. (PIONEER) Q834-05174-0300			

FOR SOUND  
40P FLAT CABLE



OUTPUT  
834-5174  
ASSY IC BOARD ASTRON BELT  
(D-2/7)

USED ON ASTRON BELT		NO. RECD 1 PER	
SCALE FULL		SCHEMATIC DWG.	
PROJECT ENG: J. SZERSZEN		MAIN IC BD. (PIONEER)	
DO NOT SCALE DWG.		Q834-05174-0300	
DIM. TOLERANCES UNLESS SPECIFIED		HEAT TREAT	
PRECISIONITY ± 0.005		MATERIAL	
DECIMAL		FINISH	
HOLE DIA ± 0.02 0.00		DATE 11/16/83	
DR. GAK		PART NO. M051 - 00A30 - A046	
CER.		FRANKLIN PK. ILL.	
DECIMAL		Midway / MIDWAY MFG. CO.	
HOLE DIA ± 0.02 0.00		REVISIONS	
		SHEET 2 OF 7	



SANYO STK - 439

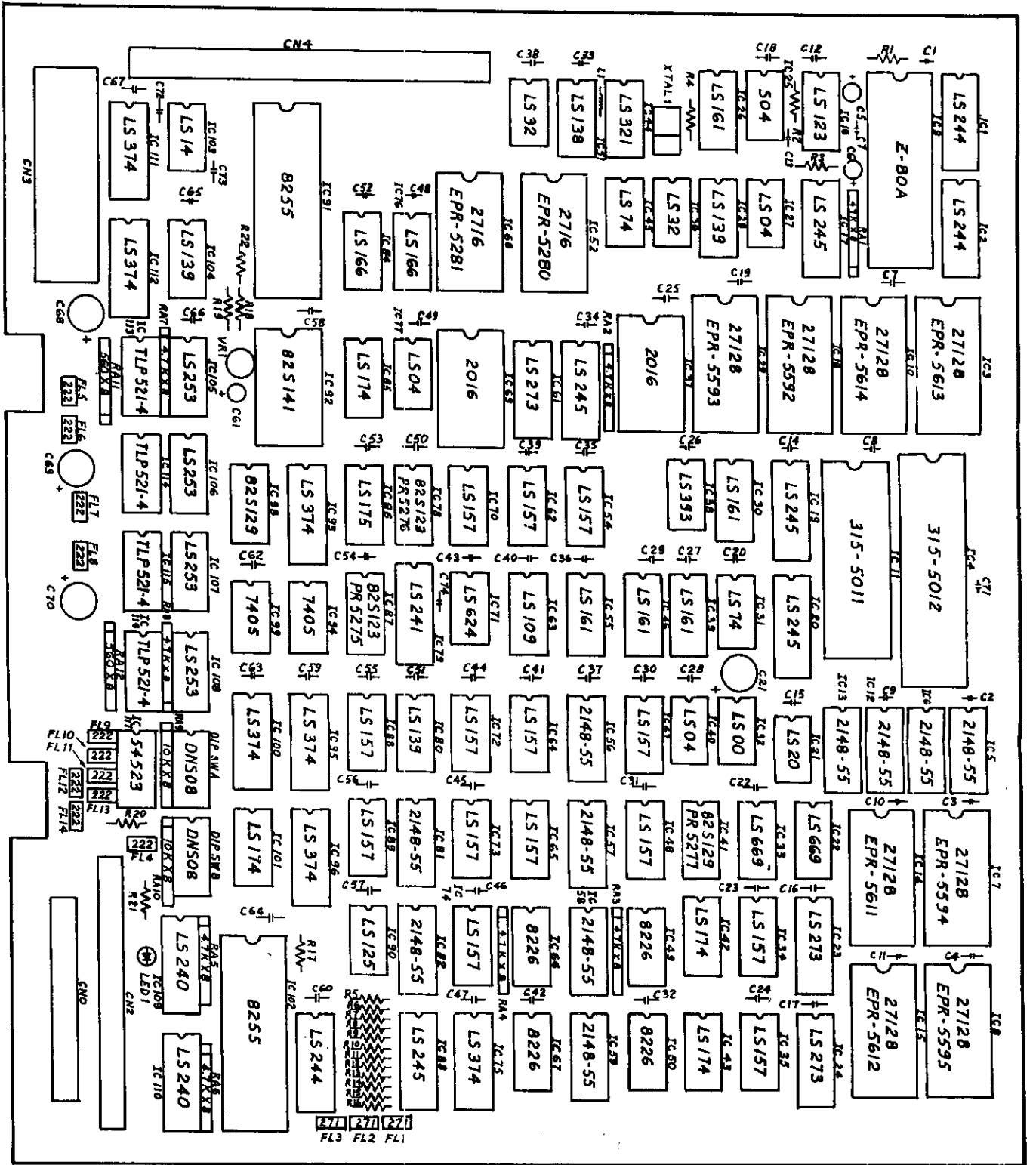
THIS DWG. IS CONFIDENTIAL & PROPERTY OF MIDWAY MFG. CO.

<b>DIM. TOLERANCES</b> UNLESS OTHERWISE SPEC.	<b>FIRST USED ON</b> ASTRON	<b>DATE</b> 11 / 9 / 83	<b>SCALE</b> FULL
CONCENTRICITY T.I.R. .002	<b>DRN</b> M M	<b>MAT'L</b>	<b>FINISH</b>
FRACTIONAL ± .005	<b>MECH CHK</b>	<b>ELEC CHK</b>	
DECIMAL ± .002 - .000			
HOLE DIA. + .002 - .000			
ANGLE ± 1/2°			
<b>DO NOT SCALE DWG.</b>			

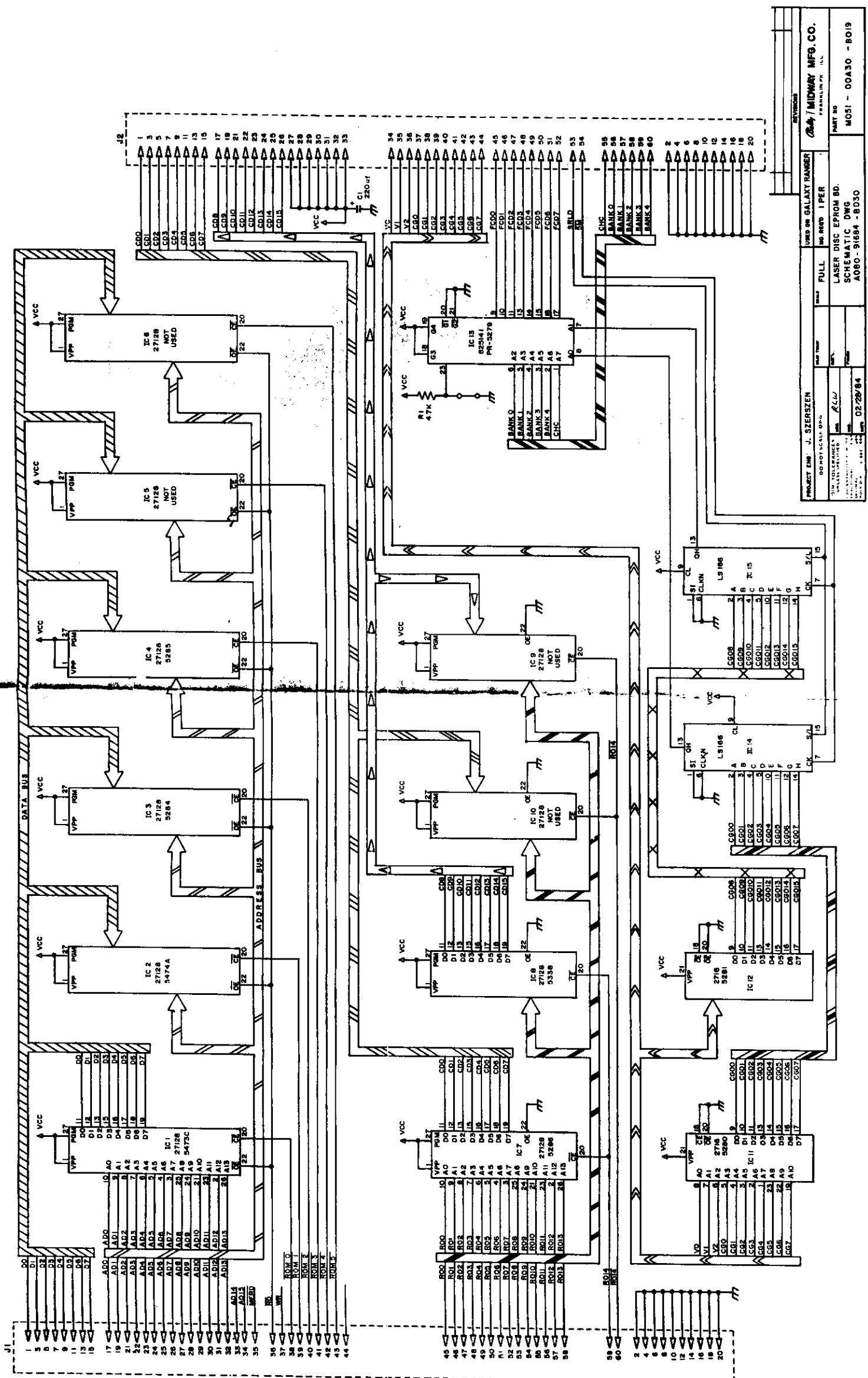
<b>MIDWAY MFG. CO.</b> FRANKLIN PK., ILL. 60131 A BALLY CO.	<b>REVISIONS</b>
<b>POWER AMPLIFIER</b> Q 834 - 00513 - 0000	<b>PART NO.</b> MO51 - 00A30 - A034

BRUNING - 40-107

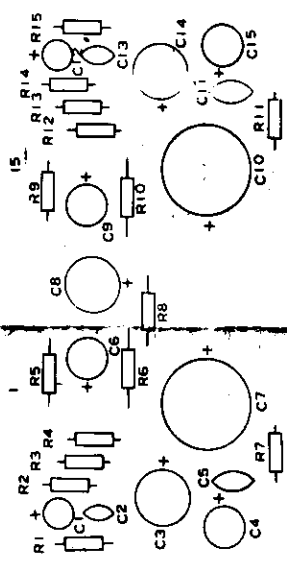




PROJECT ENG: J. SZERSZEN		USED ON		REVISIONS	
DO NOT SCALE DWG		NO. REQ'D PER		Baby   MIDWAY MFG. CO. FRANKLIN PK. ILL.	
DIM. TOLERANCES UNLESS SPECIFIED		SCALE FULL		PART NO.	
DRG. <i>td</i>		MAIN I.C. BD (PIONEER) ASSEMBLY DWG Q834 - 05174 - 0300		M051 - 00A30 - A045	
UNCONCENTRICITY 1/8 00 FRACTIONAL 1/16 DECIMAL .003 HOLE DIA. + .002 000		DATE 3/9/84			



PROJECT ENG: J. SZERZEN  
 DO NOT SCALE THIS DRAWING  
 DATE: 02/29/84  
 DRAWN BY: J. SZERZEN  
 CHECKED BY: J. SZERZEN  
 PART NO: M051 - 00A30 - 8019  
 LASER DISC EPROM BD.  
 SCHEMATIC DWG  
 A080-91684 - B030  
 USED ON GALAXY RAMBER  
 NO. REPS: 1 PER  
 FULL  
 MIDWAY MFG. CO.  
 FRANKLIN, PA.

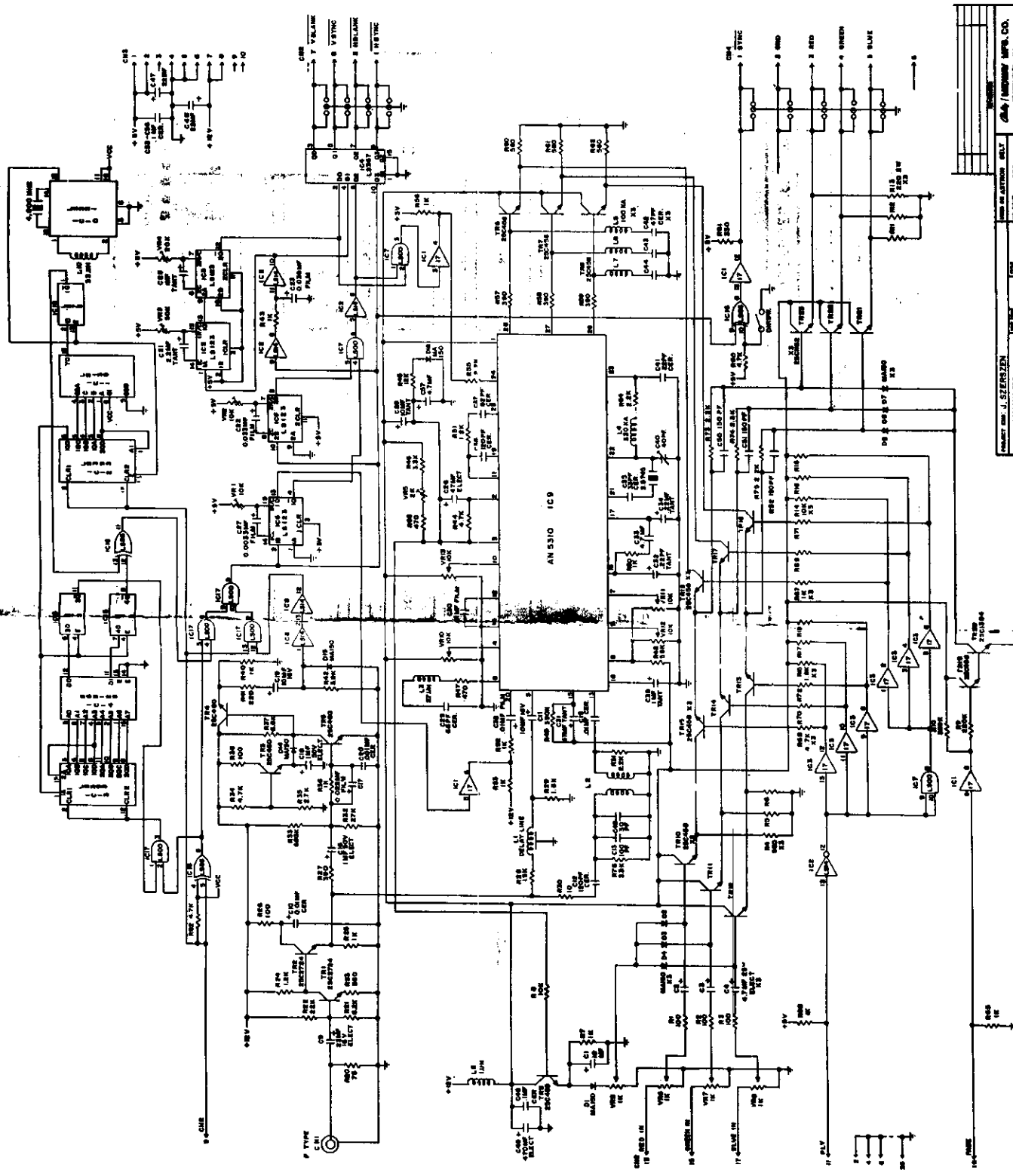


SGGA MADE IN JAPAN 834-0121

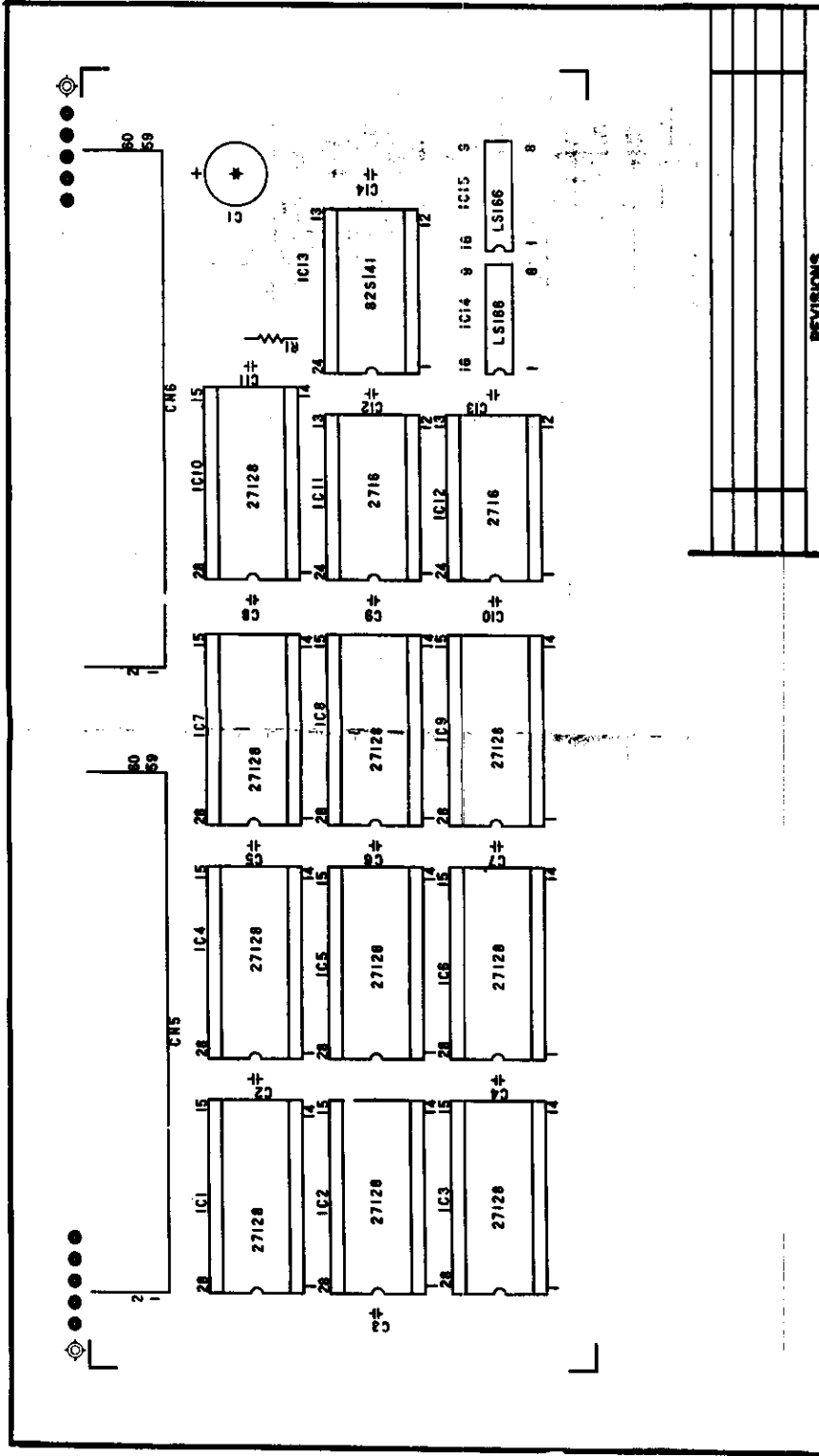


REVISIONS	

PROJECT ENG:		USED ON ASTRON BELT		<i>Bally / MIDWAY MFG. CO.</i> FRANKLIN PK. ILL.	
DO NOT SCALE DWG.		SCALE	FULL	NO. RECD	1 PER
DIM. TOLERANCES UNLESS SPECIFIED		AUDIO POWER AMP P.C. ASSEMBLY DWG		PART NO. MO51 - 00A30 - A033	
CONCENTRICITY T.I.R. 0.02		Q834 - 00513 - 0000			
FRACTIONAL 1/16					
HOLE DIA. ±.002-0.00					
DATE 11/9/83					

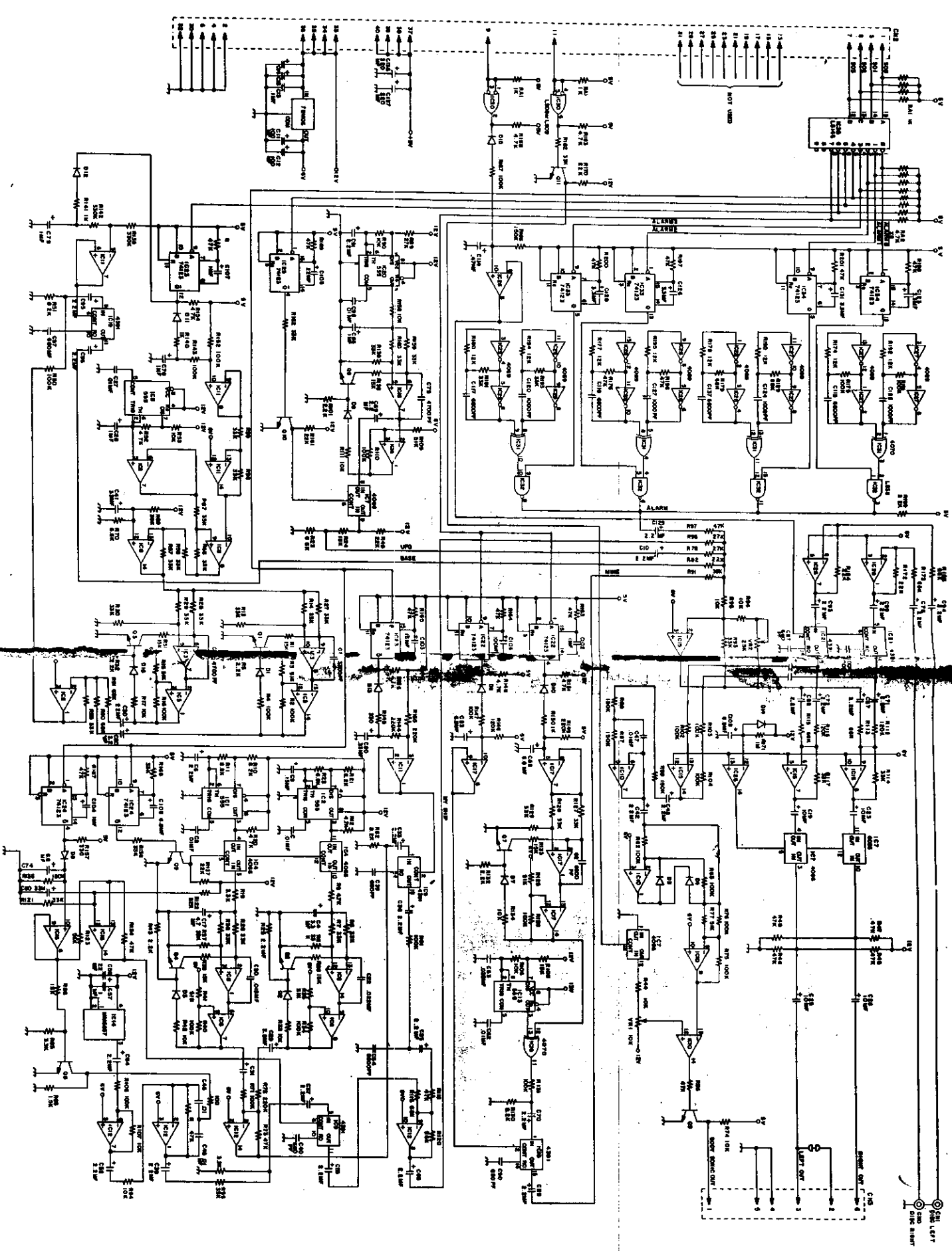


DESIGNED BY: J. SEEBERGER	CHECKED BY: J. SEEBERGER	DATE: 11/27/68
PROJECT: DEMODULATOR P.C.	WORK CENTER: 11/27/68	REV: 1
ISSUED BY: J. SEEBERGER	DATE: 11/27/68	REV: 1
MOSI - 00430 - A036		

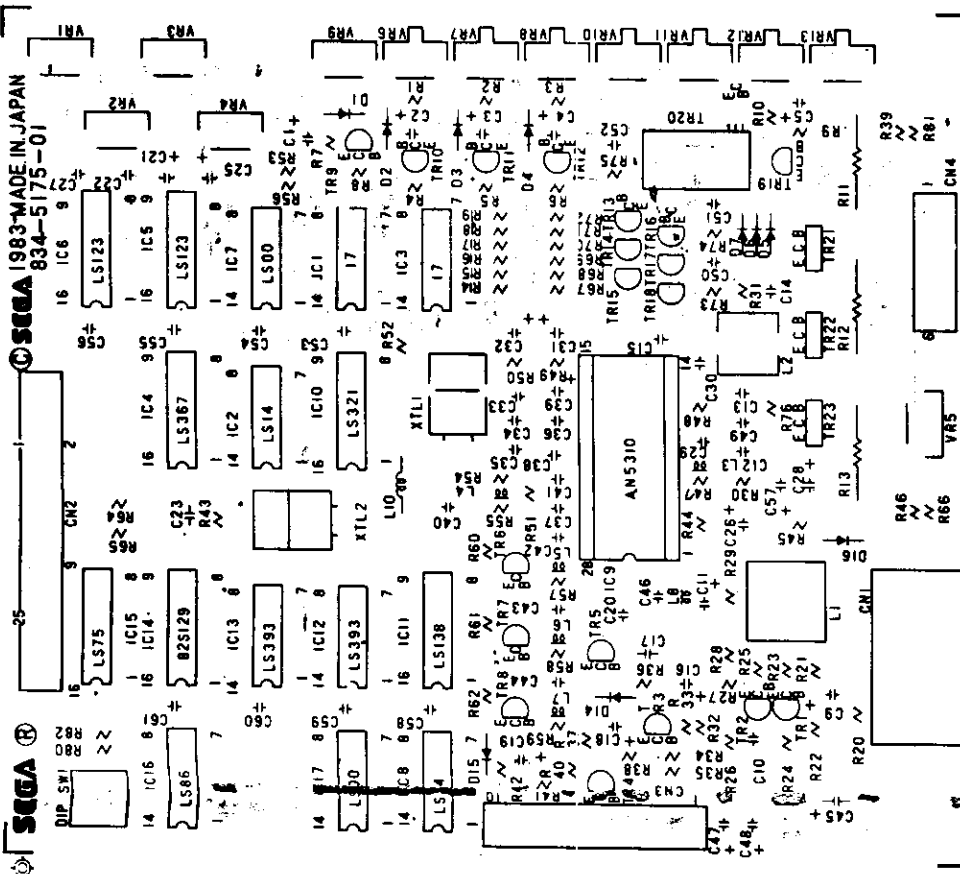


PROJECT ENG: J. SZERSZEN		USED ON GALAXY RANGER		<b>Bady / MIDWAY MFG. CO.</b> FRANKLIN PK. ILL.	
DO NOT SCALE DWG.		SCALE	NO. RECD	PART NO.	
DIM TOLERANCES UNLESS SPECIFIED		FULL	1 PER	M051 - 00A30 - B018	
CONCENTRICITY T.Y.R. 0.00		LASER DISC EPROM BD.		ASSEMBLY DWG	
FRACTIONAL 1/64		ASSY DWG		A080-91684-BA30	
DECIMAL 0.000		DATE		02/28/84	
HOLE DIA. ±.002 - .000		DRAWN		RW	
		CHECKED			
		MATERIAL			
		PART			
		FINISH			

REVISIONS

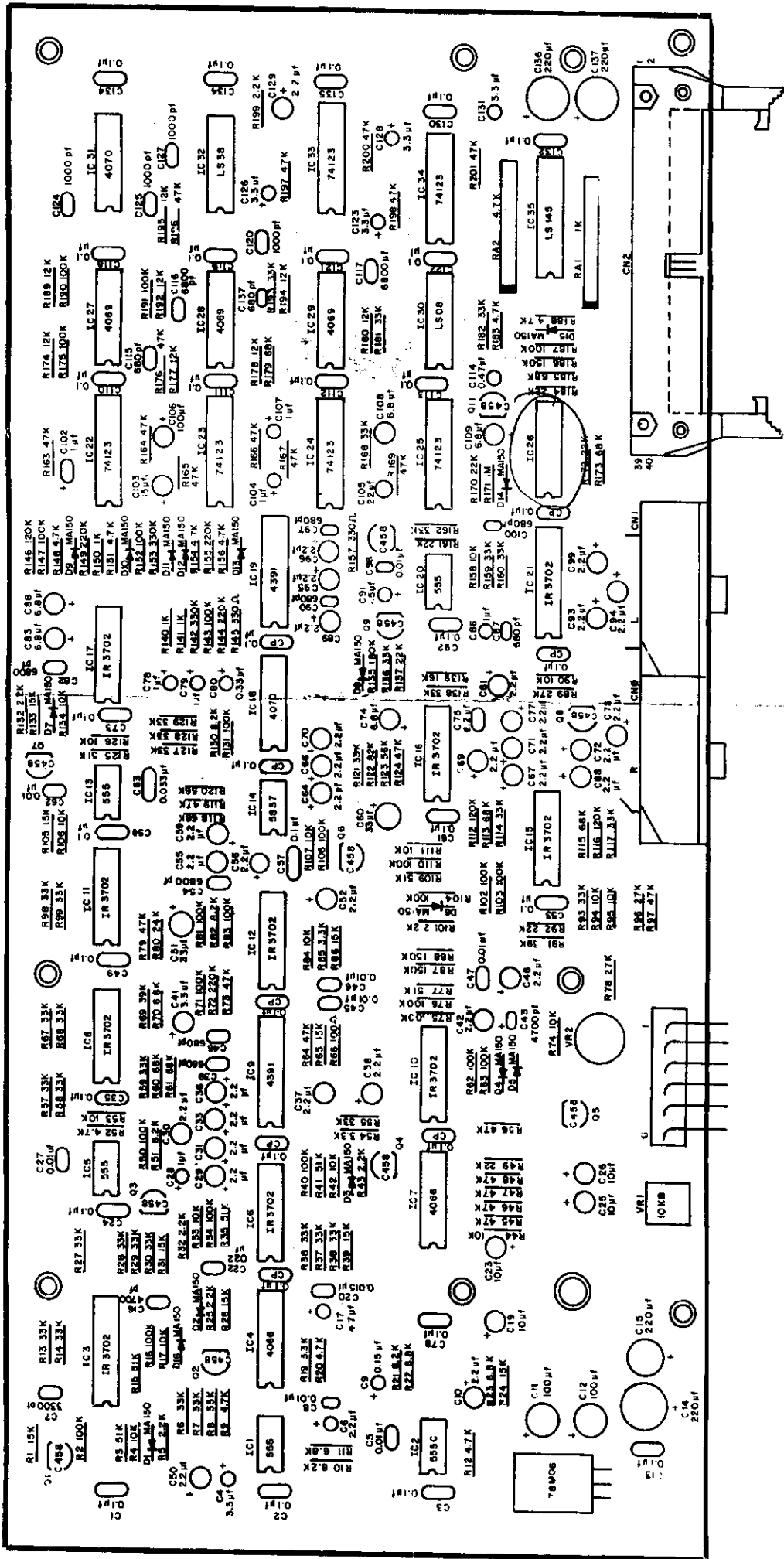
PRINCE EMI & STEINER 1000 10th St. N.W. Atlanta, GA 30309 TEL: 404/525-1111 FAX: 404/525-1112 E-MAIL: EMI@EMI.COM		USED IN GALAXY RANGER FULL 80 PAGES PER SCHEMATIC DRAWING GALAXY RANGER SOUND BOARD 0834-0835-0000		MOTOROLA MFG. CO. PART NO. MOSI - 00416 - A018	
--	--	--	--	--	--



SEGA 1983-MADE IN JAPAN  
834-5175-01

SEGA

PROJECT ENG:		USED ON ASTRON BELT	
DO NOT SCALE DWG.		SCALE	FULL
DIM. TOLERANCES UNLESS SPECIFIED		NO. REQ'D 1 PER	
CONCENTRICITY ± 0.03		DEMODULATOR P.C.	
FRACTIONAL ± 1/64		ASSEMBLY DWG	
DECIMAL ± 0.05		Q 834-05175-0000	
HOLE DIA ± 0.02		PART NO.	
DATE 11/9/83		M051 - 00A30 - A035	
		REVISIONS	
		Baby / MIDWAY MFG. CO.	
		FRANKLIN PK. ILL.	

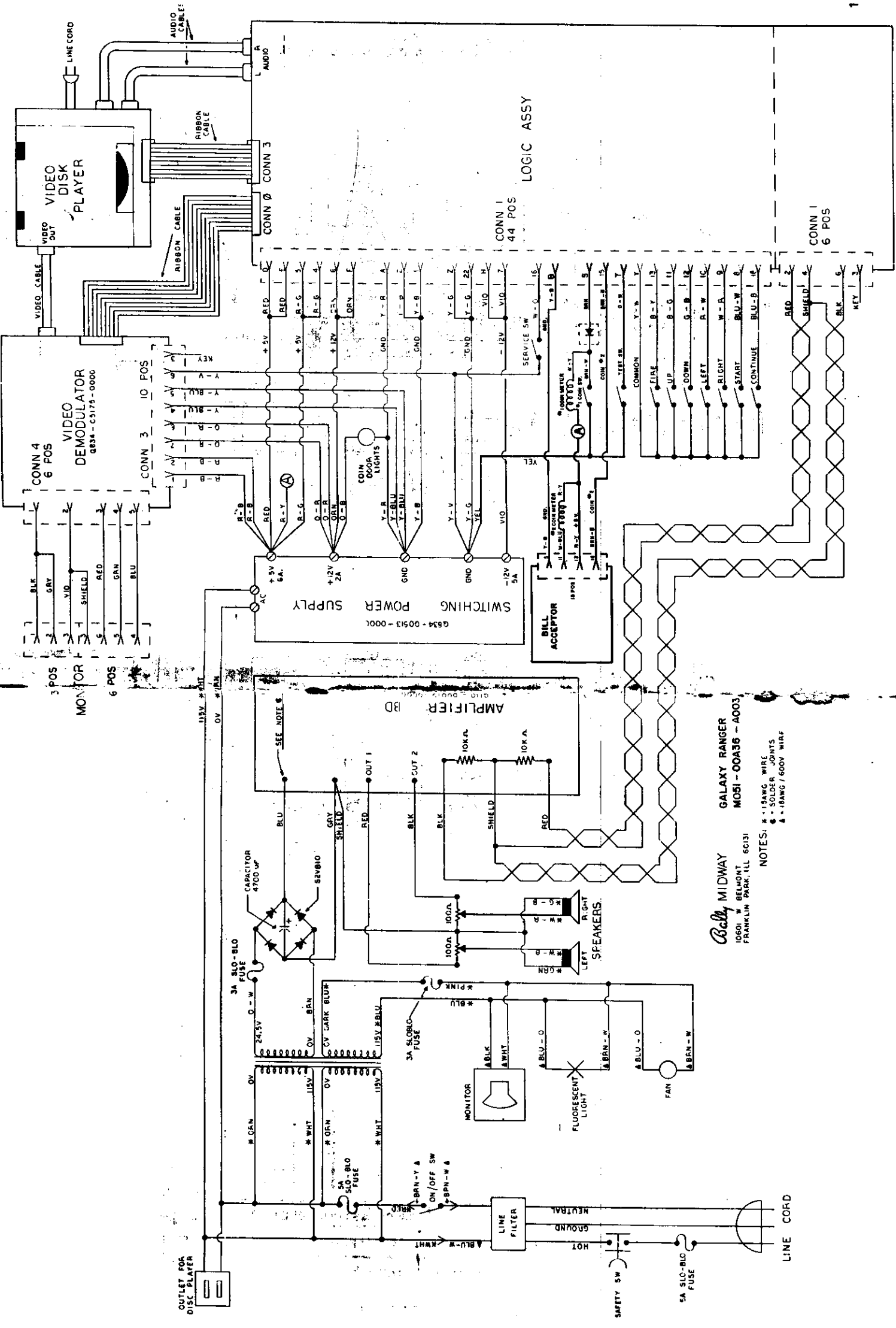


REVISIONS

PROJECT ENG: J. SZERSZEN		USED ON GALAXY RANGER	
DO NOT SCALE DWG.		SCALE	NO. REQ'D
DIM TOLERANCES UNLESS SPECIFIED		FULL	1 PER
UNCERTAINTY ± 0.005		HEAT TREAT	
DECIMAL		FINISH	
MOLD DIA ± 0.02 000		DATE 2/16/84	
SOUND BOARD ASSEMBLY DWG		PART NO	
Q834 - 05315 - 0000		M051 - 00A36 - A012	
Bally / MIDWAY MFG. CO.		FRANKLIN PK ILL	







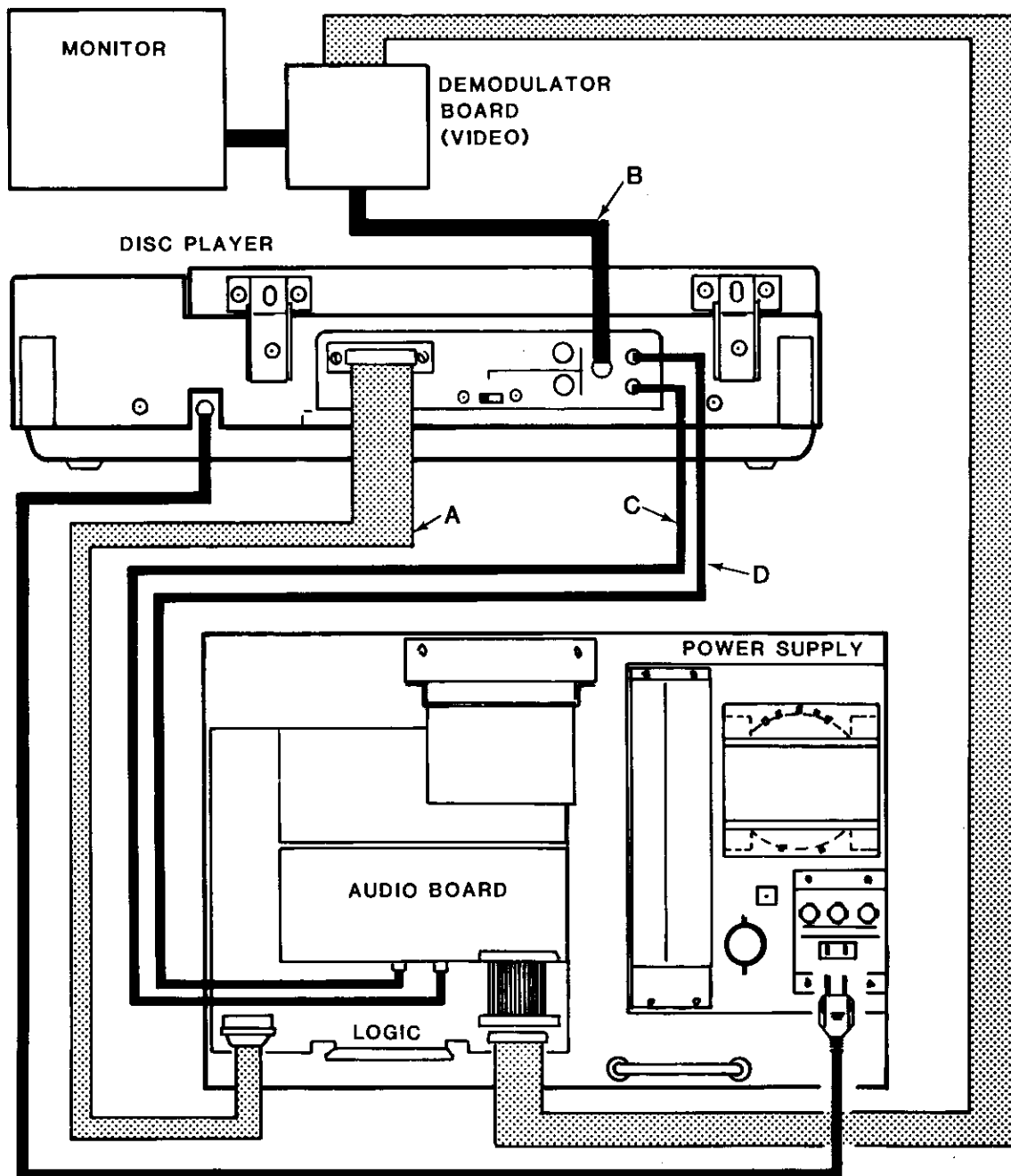
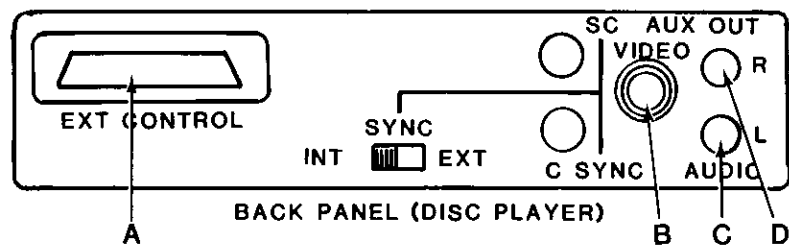
**Bally MIDWAY**  
**GALAXY RANGER**  
**MOSI-00A36-A003**  
 10601 W. BELMONT  
 FRANKLIN PARK, ILL 60131

NOTES:  
 \* - 15AWG WIRE  
 • - SOLDER JOINTS  
 ▲ - 16AWG / 600V WIRE

**BALLY/MIDWAY'S GALAXY RANGER**  
**U.R. #A36**  
**ROM/EPROM PART NUMBERS AND COMPATABILITY**

HITACHI SYSTEM EPROM BOARD LOCATION	PIONEER SYSTEM LOGIC BOARD LOCATION	MIDWAY PART NUMBER
IC 1	NOT USED	0A36-00803-0001
IC 2	NOT USED	0A36-00803-0002
IC 3	IC 18	0A36-00803-0003
IC 4	IC 29	0A36-00803-0004
IC 7	IC 7	0A36-00803-0005
IC 8	IC 8	0A36-00803-0006
IC 9	IC 15	0A36-00803-0007
IC 10	IC 14	0A36-00803-0008
NOT USED	IC 3	0A36-00803-0012
NOT USED	IC 10	0A36-00803-0013
IC 11	IC 52	0A36-00803-0009
IC 12	IC 68	0A36-00803-0010

# CONNECTION TO VIDEO DISC PLAYER



AMPLIFIER AND SPEAKERS (2) NOT SHOWN