

# Service Manual

AETZ • GRAF STRACHWITZ • GRUNDIG • GRUNDIG ELEKTRONIC • H  
AMEG • HAMMANN • HECHT • HENNIG • HES • HITACHI • IS • IFT • JESK  
O • JVC • K **Schaltungsdienst** • LOEWE •  
LUX • LUXMANN • MABA • MARANTZ • MATSUSHITA • METZ • MITSU  
BISHI • NAKA **Lange** • NAL PANASONIC • NEC • NECKERMAN  
N • NIKKO • NORDMEYER • ONKYO • ORBITER • ORION • PALADIU  
M • PANAS **Circuit-Diagram-Service in Germany** • P  
NEER • PONDY • RANK • RAYO • RICOADSTAR • ROSITA • ROTEL • SA  
BA • SALORA • SAMSUNG • SANKI • SANSUI • SANWA • SANYO • S  
CHNEIDER **P.O.-Box: 4710653** • HEISER • SHARP • SIEMENS • SILVER  
• SONY • S **Mohrner Allee 30** • TANDBERG • TEAC • TEC • TEC  
HNICS • TELD-1000 Berlin 47 • TENSAT • THOMSON • TOSHIBA • UH  
ER • UNISEE • UNITRA • VIDEOTON • VISONIK • VIVA - NCO • WEGA •  
AEG • AIAW • AKATI • AKUSTIK • ALPINE • ANITA ELEKTRO-TEX •  
ASC • ATAF • ATAK • BIRD • BASE • BLAUPUNKT • BOSCH • BRAUN  
• BRUNS • CARRON • CHRYSLER • CROWIN • CYBERNET • DUA  
L • ELAC • FISHER • FLURE • GOLD STAR • GO RENJE KÖRTEG • GR  
Telefon 0 30 / 7 03 60 60  
Telefax 184 339  
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Telefax 0 30 / 7 03 60 77

## ATARI

### MEGA ST 4

MEGA ST 2

PREISGRUPPE 20

FACH 1217

40 10 90

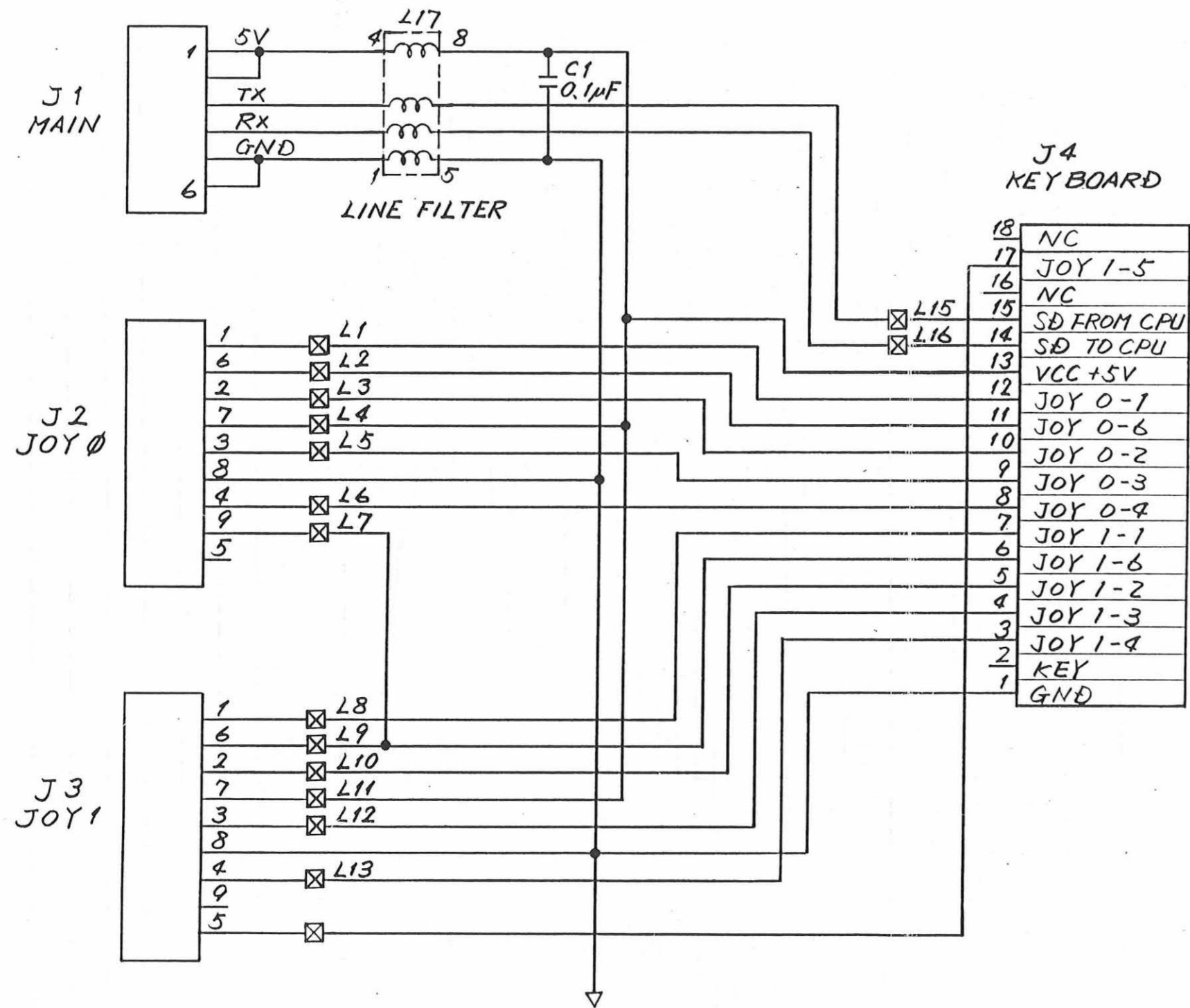
40 21 90

40 35 90

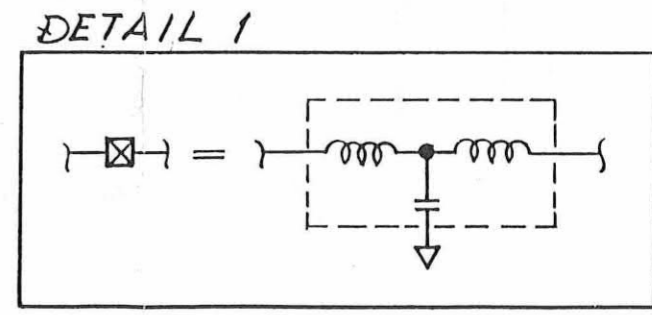
40 51 90

REV	REVISIONS DESCRIPTION	DATE	APPROVED
1	PRELIMINARY RELEASE	2/19/87	JHll
2	DELETE RES. & CAP. (R1, C2)	1-9-87	
3	REVISED	2/19/87	JHll

REFERENCE ONLY



T x DATA  
R x DATA  
+5V  
XB/UP  
L BUTTON/FIRE BUTTON  
XA/DOWN  
YA/LEFT  
YB/RIGHT  
UP  
R BUTTON/FIRE BUTTON  
DOWN  
LEFT  
RIGHT  
KEY  
KEY  
GND

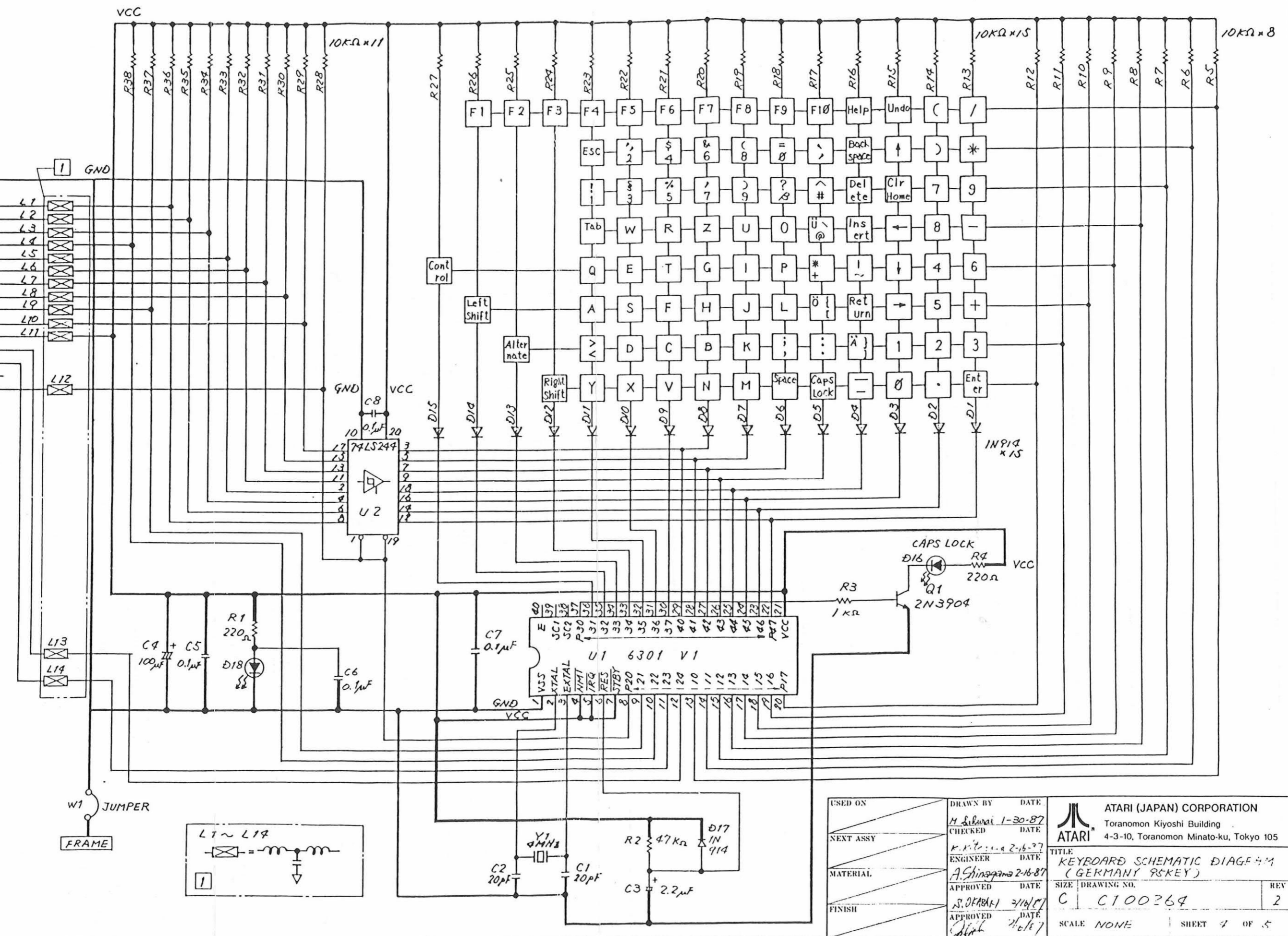


2. USE SUPPLIED P.C.B. C100063, REV. 1  
1. NOISE FILTER: SEE DETAIL 1.  
NOTES—UNLESS OTHERWISE SPECIFIED:

TOLERANCES		DRAWN BY	DATE	ATARI (JAPAN) CORPORATION	
UNDER 30	±0.1	I. Yoshida	10-24-86	Toranomom Kiyoshi Building 3F	
30 THRU 300	±0.2	CHECKED	DATE	4-3-10, Toranomom Minato-ku, Tokyo 105	
OVER 300	±0.4	K. Kitagawa	10-27-86	TITLE	
MATERIAL		ENGINEER	DATE	SCHEMATIC DIAGRAM FOR SUB P.C.B.	
FINISH		A. Shinagawa	2-16-87	(MEGA ST KEYBOARD)	
APPLICATION		APPROVED	DATE	SIZE	DRAWING NO.
CA200042-XXX	MEGA ST KEYBOARD	S. OKAZAKI	2/18/87	B	C100069
NEXT ASSY	USED ON	APPROVED	DATE	SCALE	SHEET 1 OF 1
		JHll	2/19/87	NONE	

CONNECTOR

NO.	SIGNAL
1	GND
2	KEY
3	JOY1-4
4	JOY1-3
5	JOY1-2
6	JOY1-6
7	JOY1-1
8	JOY0-4
9	JOY0-3
10	JOY0-2
11	JOY0-6
12	JOY0-1
13	VCC +5V
14	SD TO CPU
15	SD FROM CPU
16	NC
17	JOY1-5



USED ON	DRAWN BY	DATE
NEXT ASSY	M. Sawai	1-30-87
MATERIAL	CHECKED	DATE
FINISH	K. K. ...	2-16-87
	ENGINEER	DATE
	A. Shingama	2-16-87
	APPROVED	DATE
	S. OFABAKI	2/16/87
	APPROVED	DATE
		2/16/87

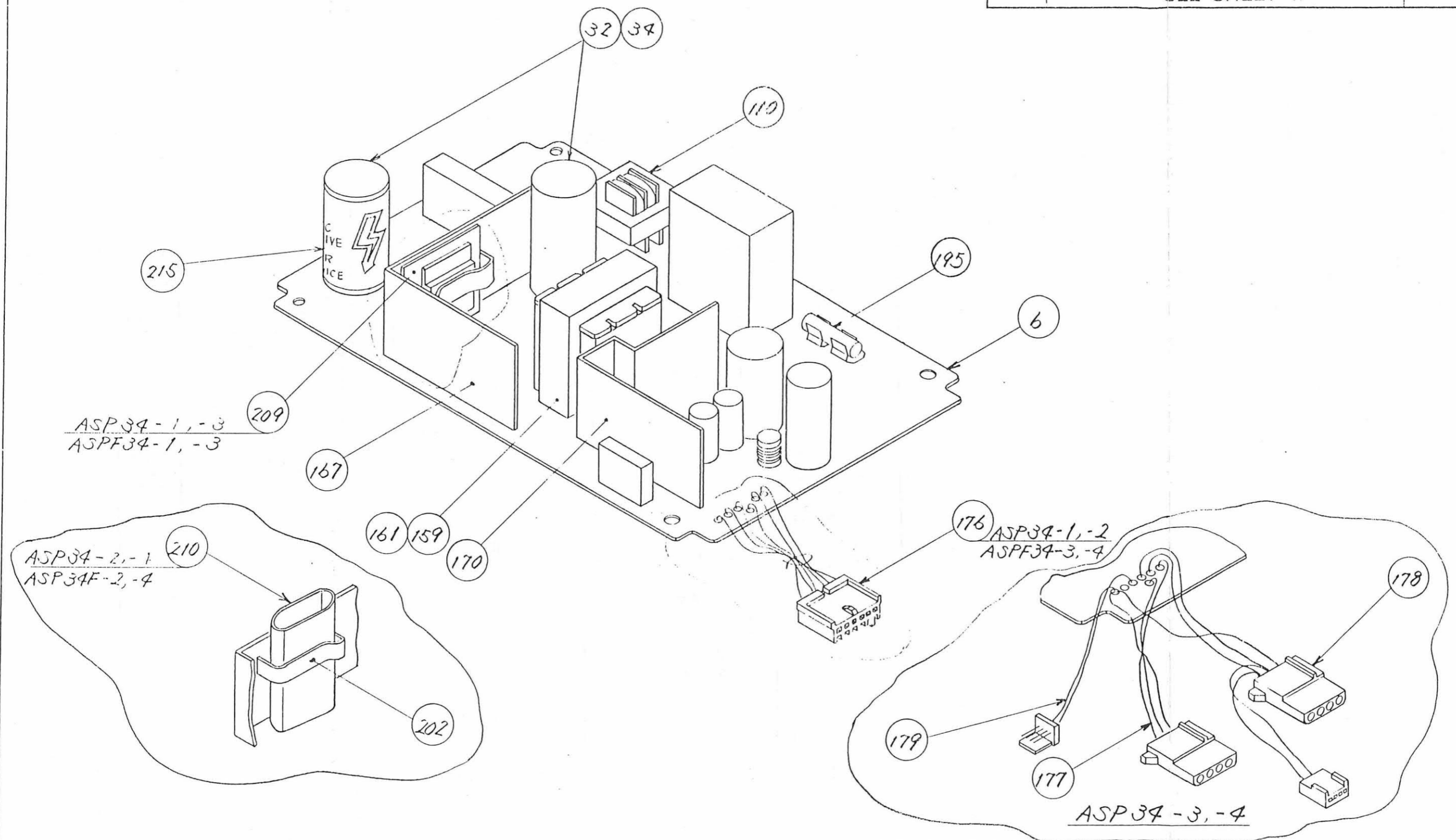
ATARI (JAPAN) CORPORATION  
 Toranomon Kiyoshi Building  
 4-3-10, Toranomon Minato-ku, Tokyo 105

TITLE  
 KEYBOARD SCHEMATIC DIAGRAM  
 (GERMANY PSKEY)

SIZE	DRAWING NO.	REV
C	C100264	2

SCALE NONE SHEET 2 OF 5

REV	REVISIONS DESCRIPTION	DATE	APPROVED
	SEE SHEET 1.		

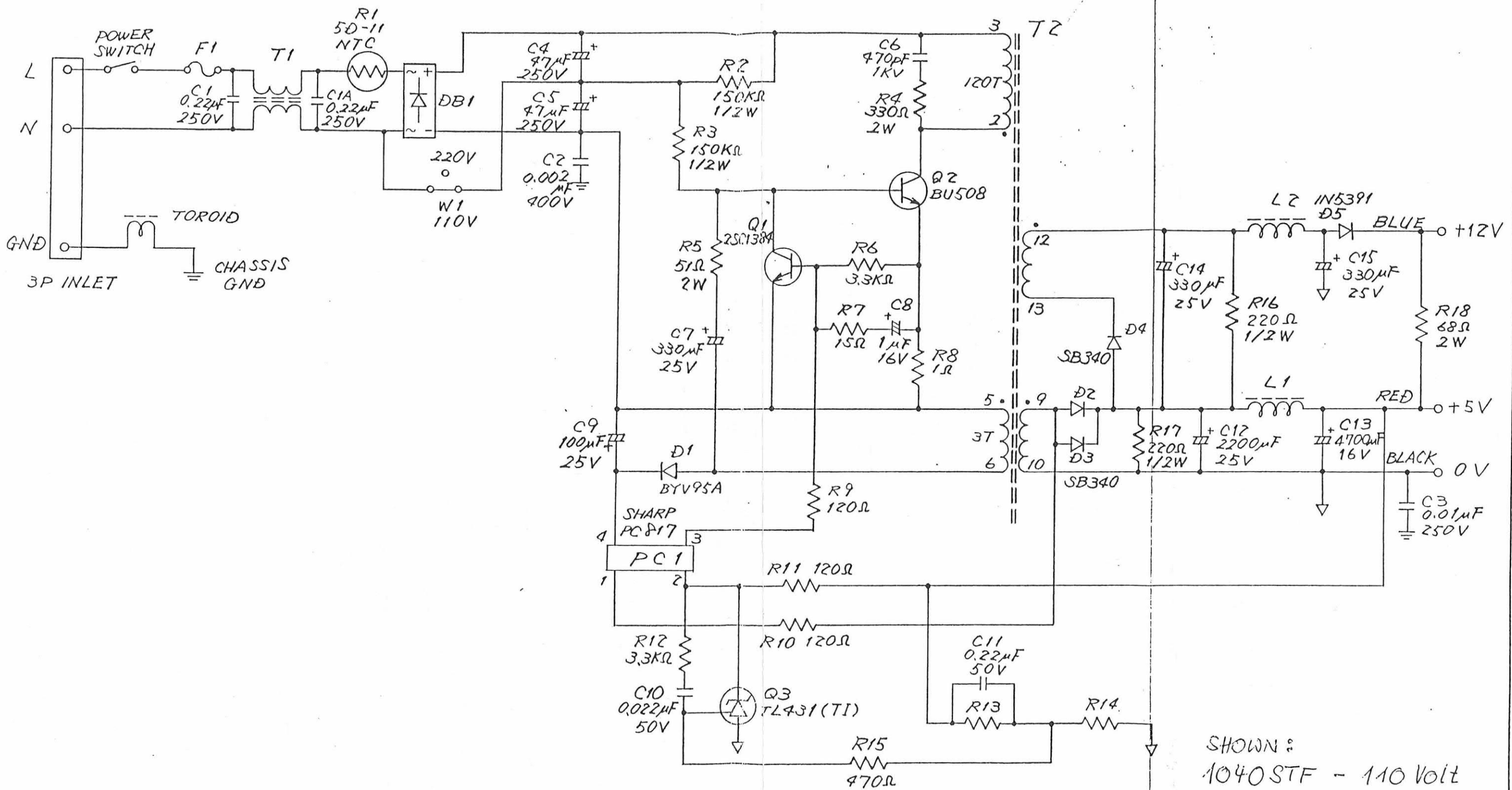


NOTES—UNLESS OTHERWISE SPECIFIED:

TOLERANCES		DRAWN BY	DATE	ATARI (JAPAN) CORPORATION	
UNDER 30	± 0.1	H. Kawamata	8-25-86	Toranomon Kiyoshi Building 3F	
30 THRU 300	± 0.2	CHECKED	DATE	4-3-10, Toranomon Minato-ku, Tokyo 105	
OVER 300	± 0.4	K. Kitagawa	9-4-86	TITLE	
		ENGINEER	DATE	PCB ASSY	
CA200003-xxx	ASP34-31-4	A. Shinagawa	2-16-87	SIZE	DRAWING NO.
CA200000-xxx	ASP34-X	APPROVED	DATE	B	CA2000001-xxx
NEXT ASSY	USED ON	S. OKAZAKI	2/17/87	REV	B
APPLICATION		APPROVED	DATE	SCALE	NONE
		J.M.C.	7-30/87	SHEET	7 OF 7



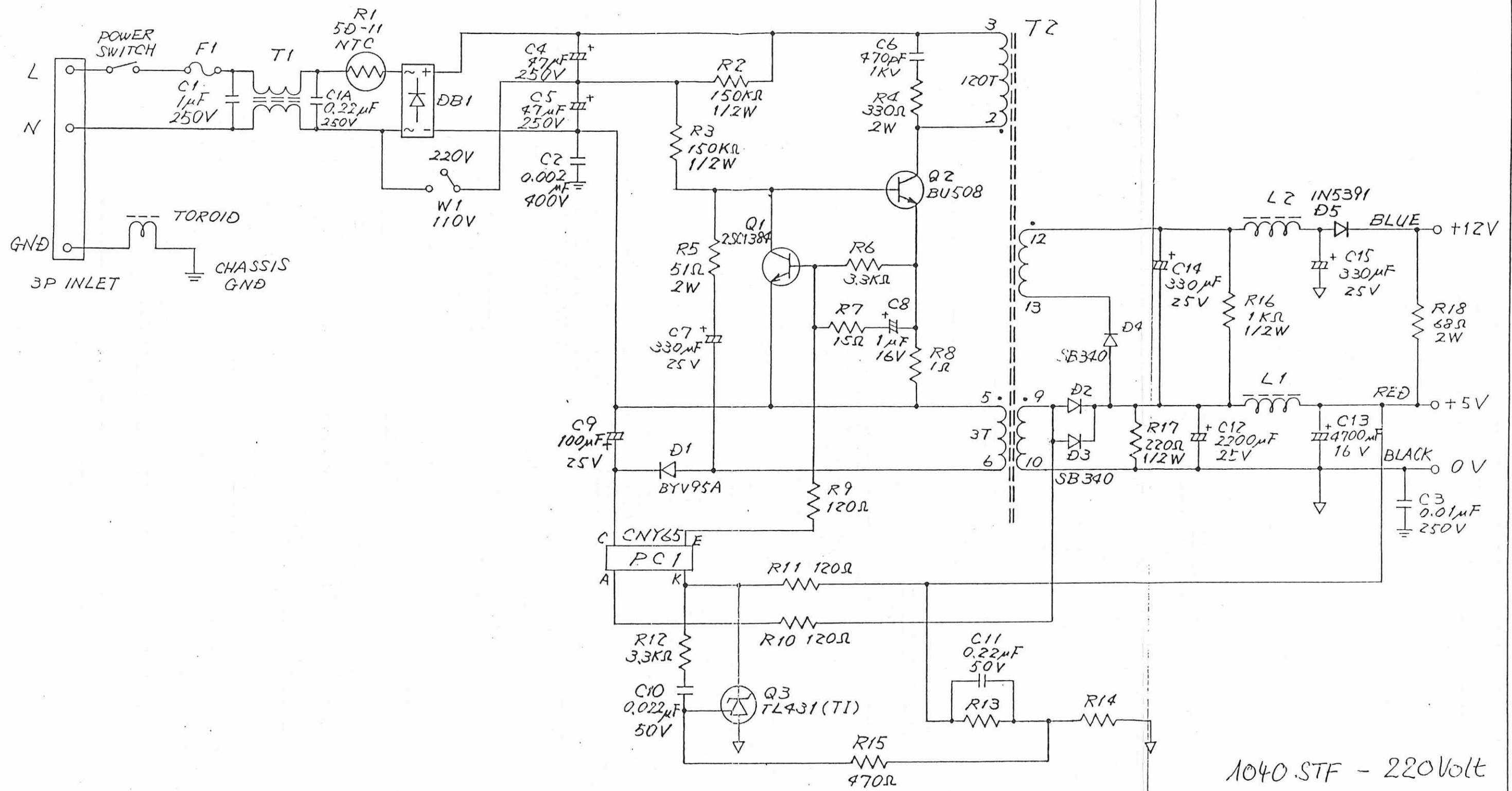
REV	REVISIONS DESCRIPTION	DATE	APPROVED
A	PRODUCTION RELEASE	7/20/87	<i>[Signature]</i>



SHOWN :  
1040 STF - 110 Volt

<b>TOLERANCES</b> UNDER 30 ±0.1 30 THRU 300 ±0.2 OVER 300 ±0.4	USED ON	DRAWN BY	DATE	<b>ATARI (JAPAN) CORPORATION</b> Toranomom Kiyoshi Building 3F 4-3-10, Toranomom Minato-ku, Tokyo 105	
	ASP34-1	I. Yoshida	4/23/86		
	NEXT ASSY	CHECKED	DATE	TITLE	
		K. Kitagawa	9-18-86	SCHMATIC DIAGRAM (ASP34-1)	
MATERIAL	ENGINEER	DATE	SIZE	DRAWING NO.	REV
	A. Shinagawa	10-23-86	B	C070798	A
FINISH	APPROVED	DATE	SCALE	SHEET	OF
	<i>[Signature]</i>	1/23/86	NONE	1	1

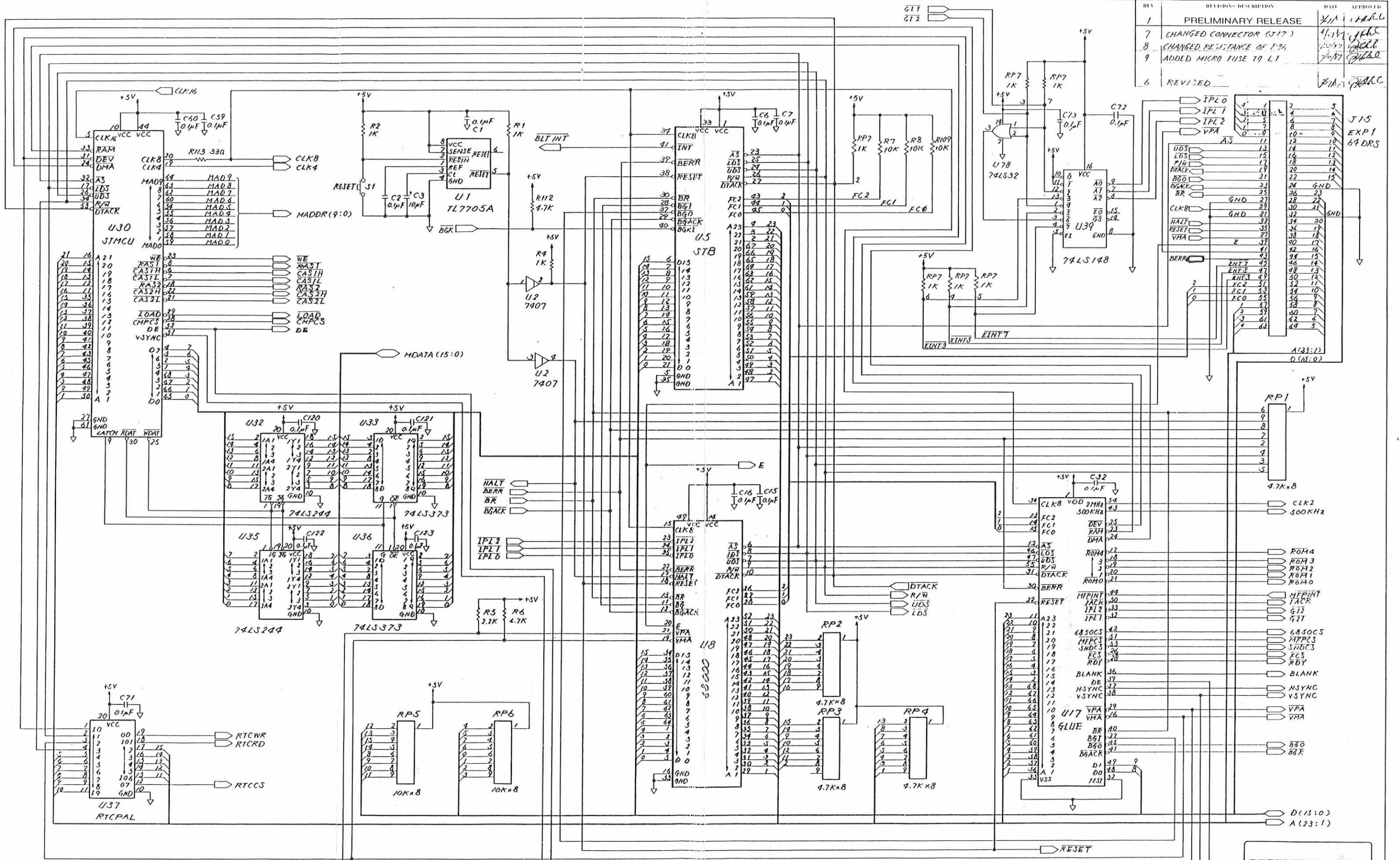
REV	REVISIONS DESCRIPTION	DATE	APPROVED
A	PRODUCTION RELEASE	7/20/86	[Signature]



1040.STF - 220VOLT

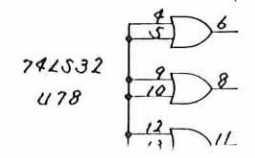
<b>TOLERANCES</b> UNDER 30 ±0.1 30 THRU 300 ±0.2 OVER 300 ±0.4	USED ON	ASP 34-2	DRAWN BY	I. Yoshida	DATE	4/23/86
	NEXT ASSY		CHECKED	K. Kitagawa	DATE	9-18-86
	MATERIAL		ENGINEER	A. Shinagawa	DATE	10-23-86
	FINISH		APPROVED	[Signature]	DATE	10/23/86
			<b>ATARI (JAPAN) CORPORATION</b> Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105			
			<b>TITLE</b> SCHEMATIC DIAGRAM (ASP34-2)			
			<b>SIZE DRAWING NO.</b> B C100114		<b>REV</b> A	
			<b>SCALE</b> NONE		<b>SHEET</b> 1 OF 1	

REV	REVISION DESCRIPTION	DATE	APPROVED
1	PRELIMINARY RELEASE	2/11	Y. I. C.
7	CHANGED CONNECTOR (J17)	4/14	J. H. S.
8	CHANGED RESISTANCE OF R34	4/17	J. H. S.
9	ADDED MICRO FUSE TO L1	4/17	J. H. S.
6	REVISED	2/11	Y. I. C.



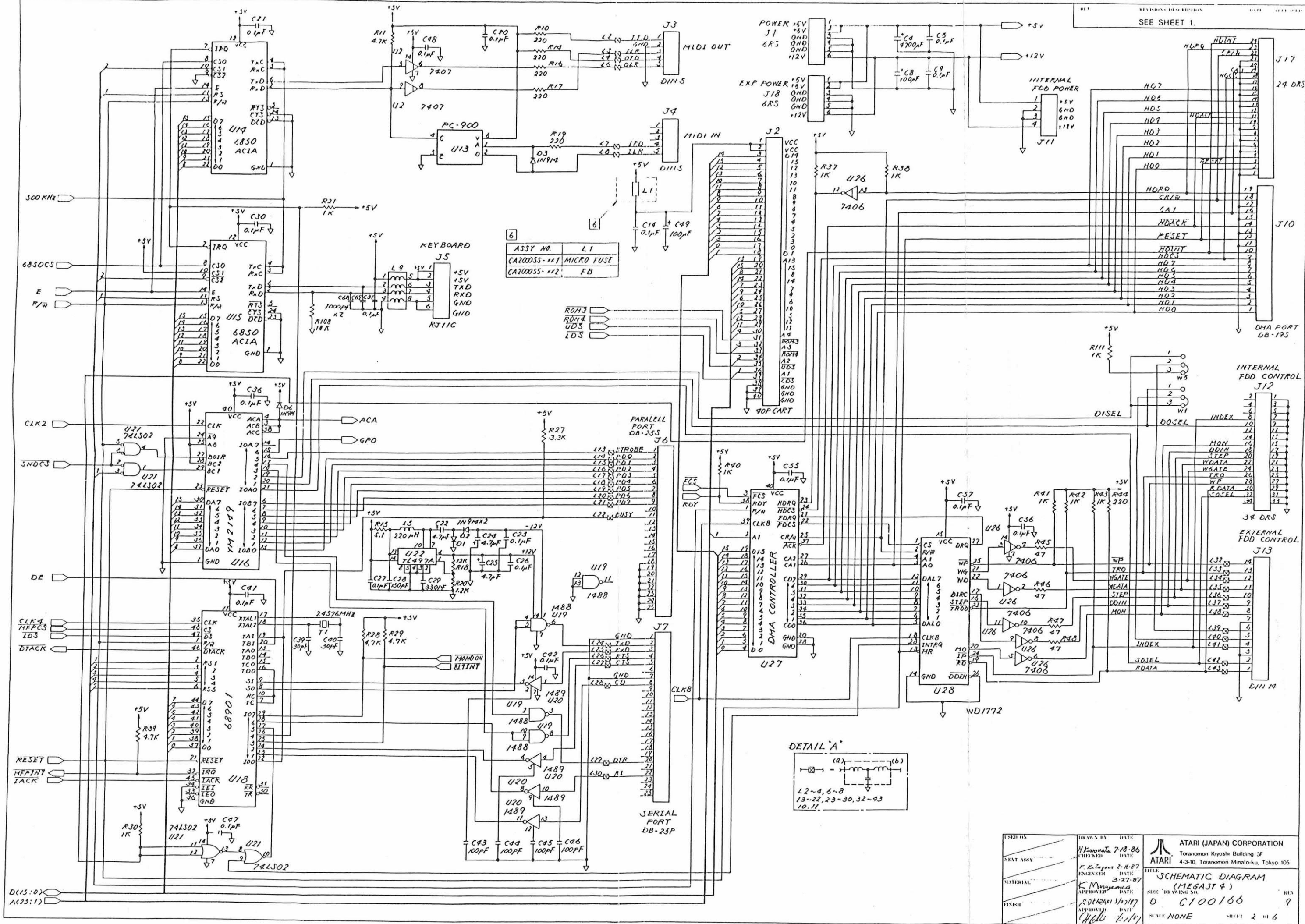
REFERENCE ONLY

- 5. ROM TABLE ; SEE SHEET 5 OF 6
- 7. NOT REQUIRED FOR ASSY NO. CA2000SS-XX1.
- 3. PUT JUMPER WIRE FROM (A) TO (B) (IN DETAIL A' L2~4, 6~8, 13~22, 24~30, 32~43) ASSY NO. CA2000SS-XX2.
- 2. NOISE FILTER : SEE DETAIL 1.
- 1. RESISTORS ARE MEASURED IN OHMS, 5%, 1/4 WATT.

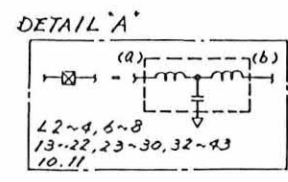


USED ON MEGA ST 4	DRAWN BY H. Kawano	DATE 7.18.86	ATARI (JAPAN) CORPORATION Toranomon Kyosho Building 3F 4-3-10 Toranomon, Minato-ku Tokyo 105
NEXT ASSY CA2000SS-XXX	ENGINEER K. A. Kawanishi	DATE 3-27-87	
TITLE SCHEMATIC DIAGRAM (MEGA ST 4)			SIZE DRAWING NO. 1100166



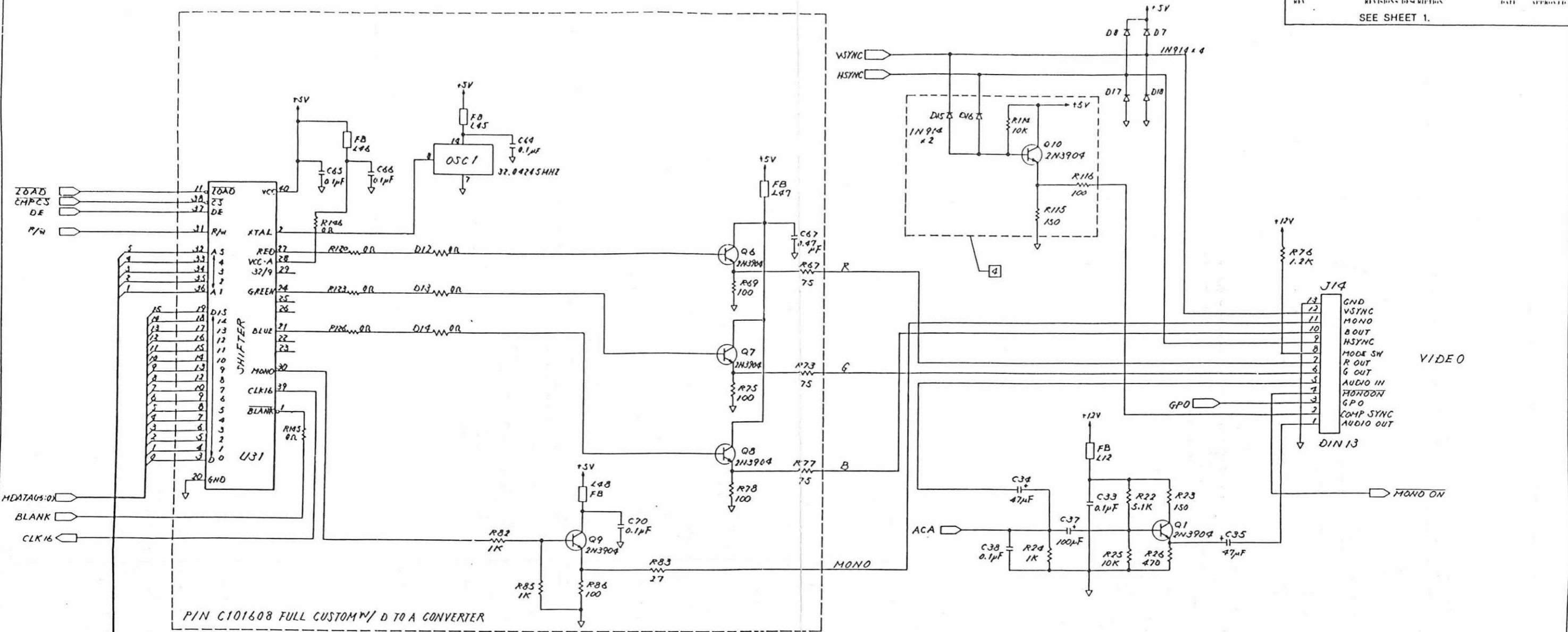


ASSY. NO.	L1
CA20055-111	MICRO FUSE
CA20055-112	FB

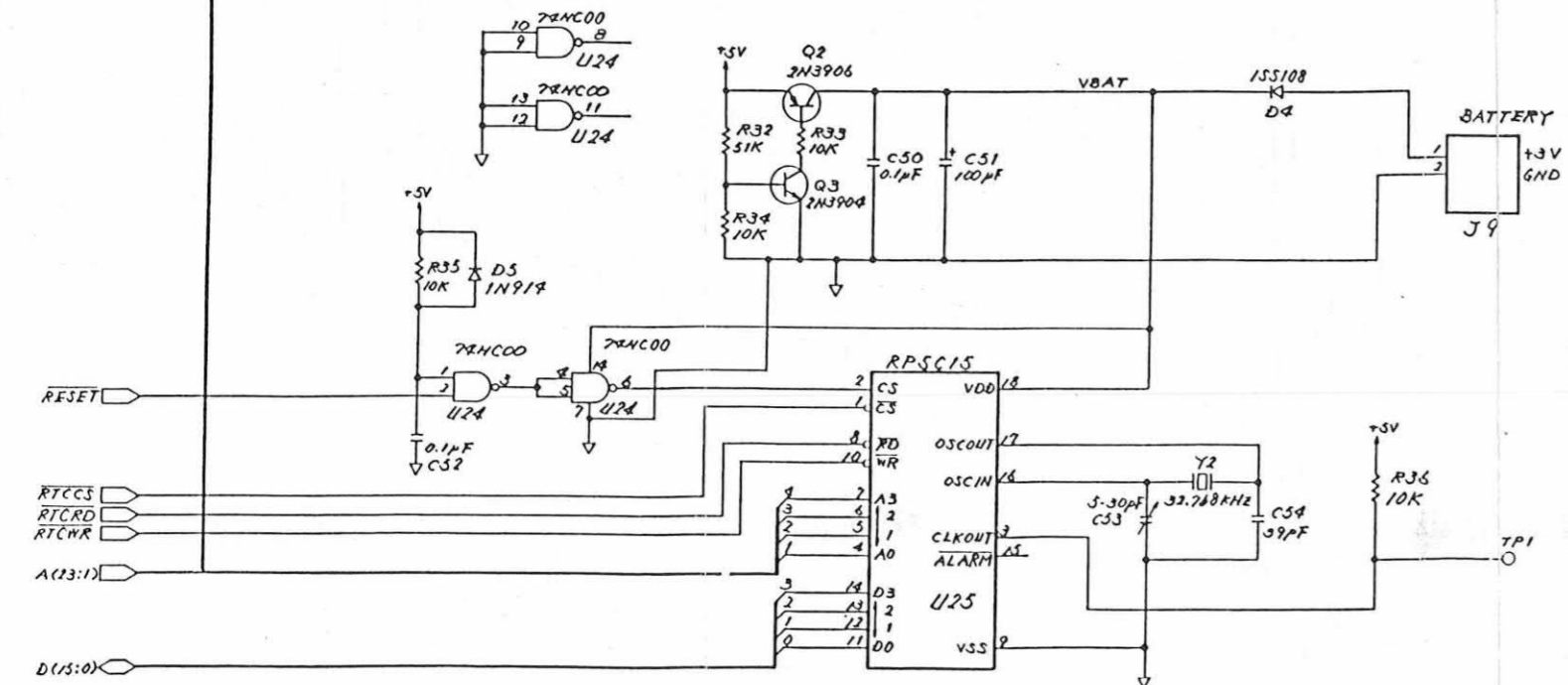


DESIGNED BY	DATE	ATARI (JAPAN) CORPORATION
CHECKED	7/18/86	Toranomon Kiyoshi Building 3F
ENGINEER	3-27-87	4-3-10, Toranomon Minato-ku, Tokyo 105
APPROVED		TITLE
		SCHMATIC DIAGRAM
		(MEGAST 4)
		SIZE
		D 0100166
		SHEET 2 of 6

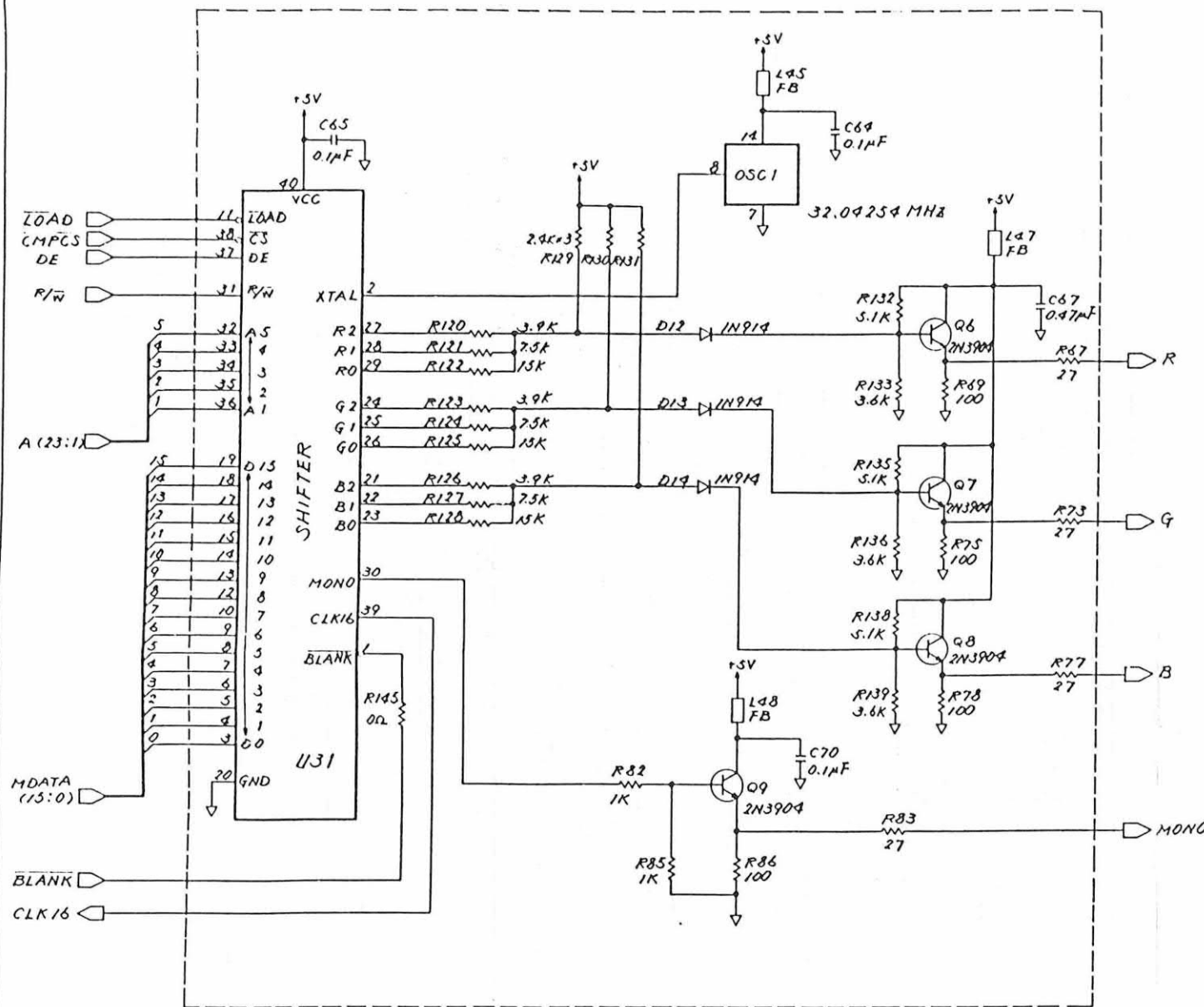




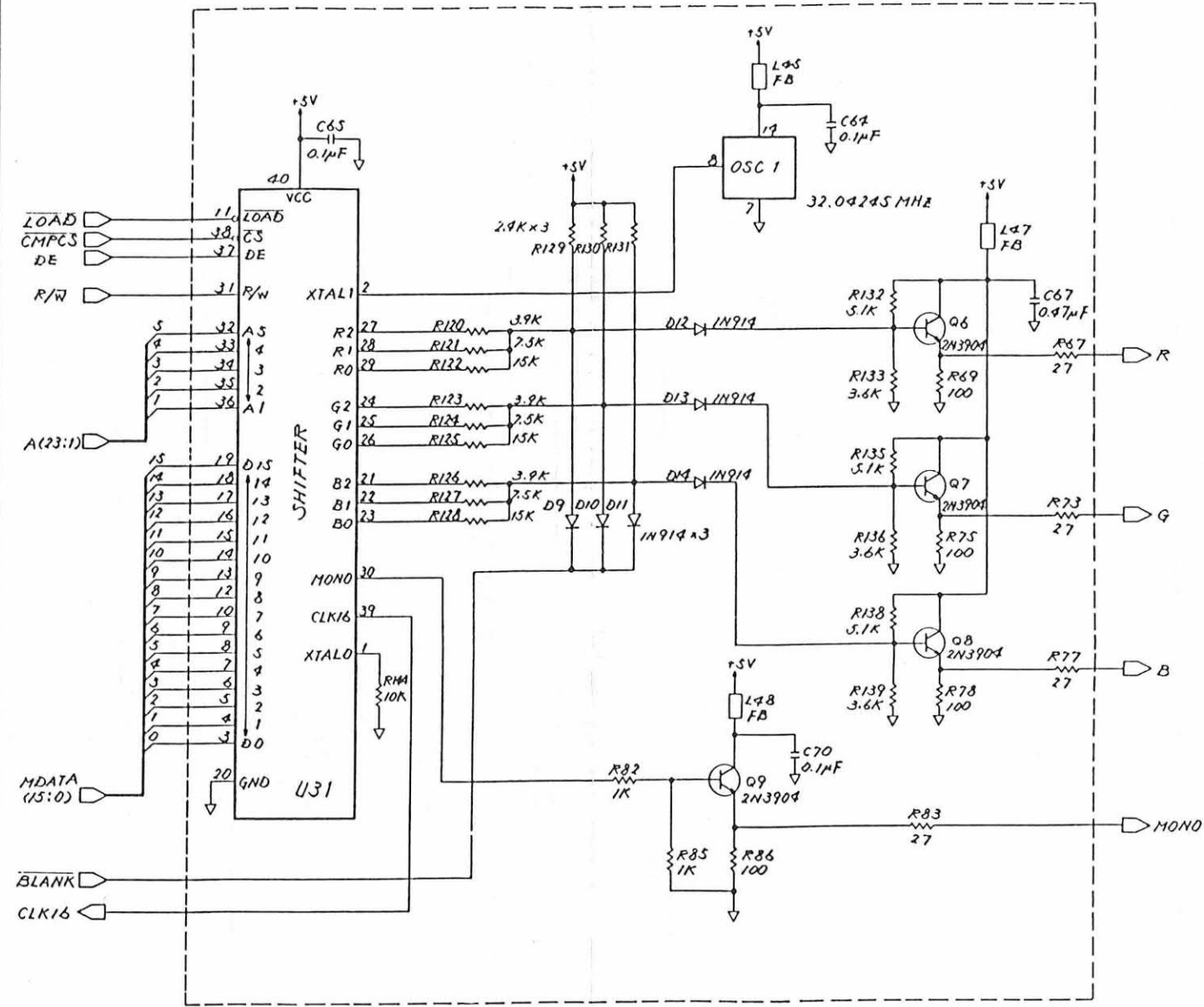
P/N C101608 FULL CUSTOM D TO A CONVERTER



USED ON	DRAWN BY H. Yamamoto 2/18/88	DATE	ATARI (JAPAN) CORPORATION
NEXT ASSY	CHECKED K. M. S. 2/16/87	DATE	Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105
MATERIAL	ENGINEER K. Masuyama	DATE	TITLE SCHEMATIC DIAGRAM (MEGAST. 9)
FINISH	APPROVED S. OKAZAKI 3/7/87	DATE	SIZE DRAWING NO. D C100166
			REV 9
			SCALE NONE
			SHEET 3 OF 6

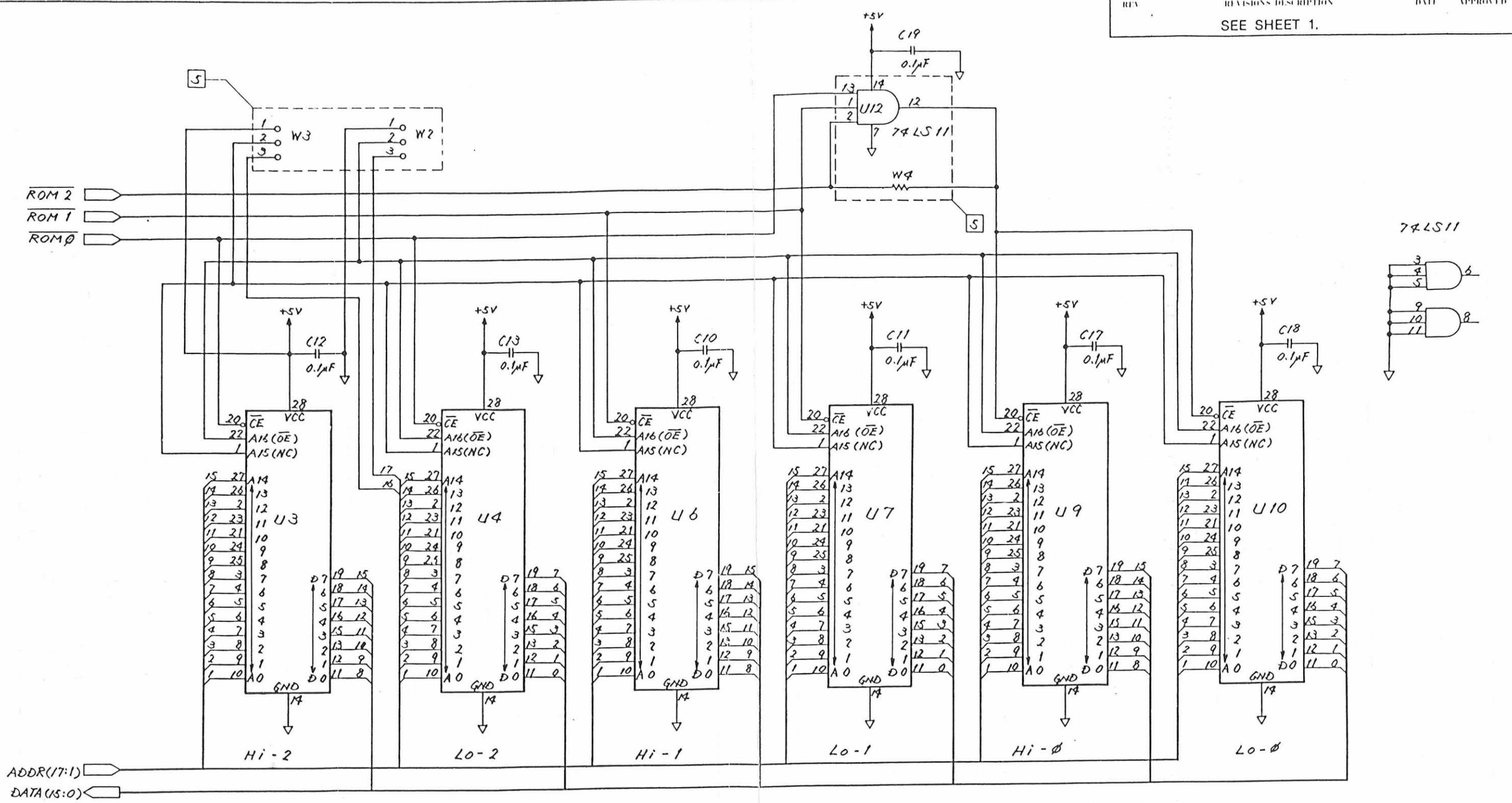


P/N C070713 FULL CUSTOM W/O D TO A CONVERTER



P/N C025914 GATE ARRAY W/O D TO A CONVERTER

USED ON	DRAWN BY	DATE	ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105
SEXT ASSY	CHECKED	DATE	
MATERIAL	ENGINEER	DATE	
FINISH	APPROVAL	DATE	
	APPROVED	DATE	
TITLE SCHEMATIC DIAGRAM (MEGAST 4)			REV 9
SIZE: DRAWING NO. D: C100166			SCALE: NONE
			SHEET 4 OF 6



ROM TABLE

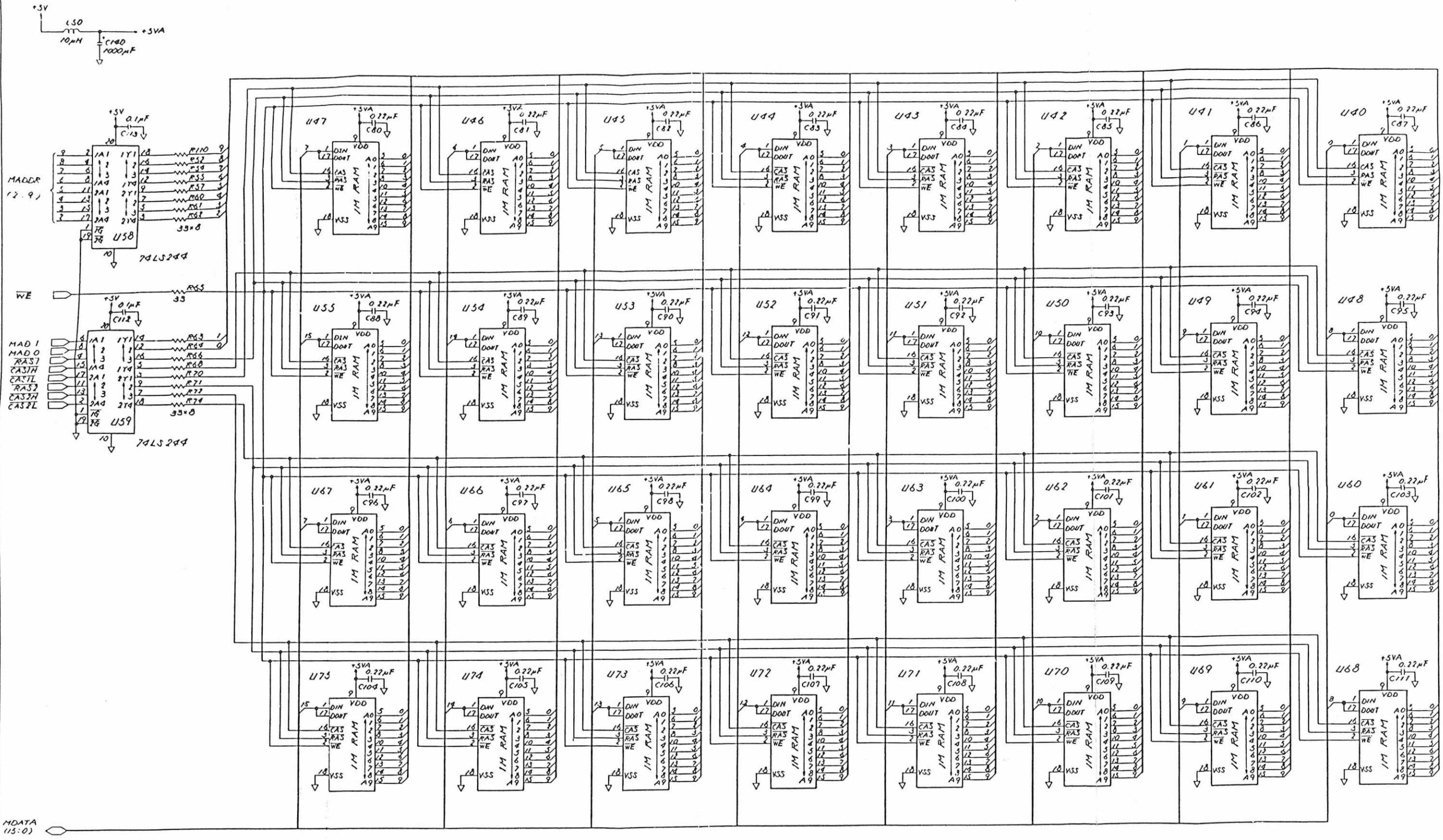
IC ; U12 (74LS11)  
JUMPER ; W2, W3, W4

ROM	LOCATION			
	W2	W3	W4	U12
256K	1-2	1-2	JUMPER	NO USE
1M x 2	2-3	2-3	NON	USE
1M x 6	2-3	2-3	JUMPER	NO USE

NOTES - UNLESS OTHERWISE SPECIFIED :

USED ON	DRAWN BY N. Yamamoto 11-27-86	DATE 11-27-86	ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105
NEXT ASSY	CHECKED K. Kitagawa 2-16-87	DATE 2-16-87	
MATERIAL	ENGINEER K. Maruyama 3-27-87	DATE 3-27-87	TITLE SCHEMATIC DIAGRAM (MEGAST 9)
FINISH	APPROVED S. OKAZAKI 3/27/87	DATE 3/27/87	SIZE C
			DRAWING NO. C100166
			REV 9
			SCALE NONE
			SHEET 5 OF 6





M0DATA (15:0)

USED ON	DRAWN BY	DATE	ATARI (JAPAN) CORPORATION Toranomon Kyushu Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105
SEAT ASSY	H. Yamamoto	11-28-86	
MATERIAL	ENGINEER	7-16-87	TITLE <b>SCHEMATIC DIAGRAM</b> (MEGAST 4)
FINISH	K. Maruyama	3-27-87	
APPROVED			SIZE (DRAWING NO.) D C100166
APPROVED			SCALE NONE
APPROVED			SHEET 8 OF 8