



... wir machen Spitzentechnologie preiswert.

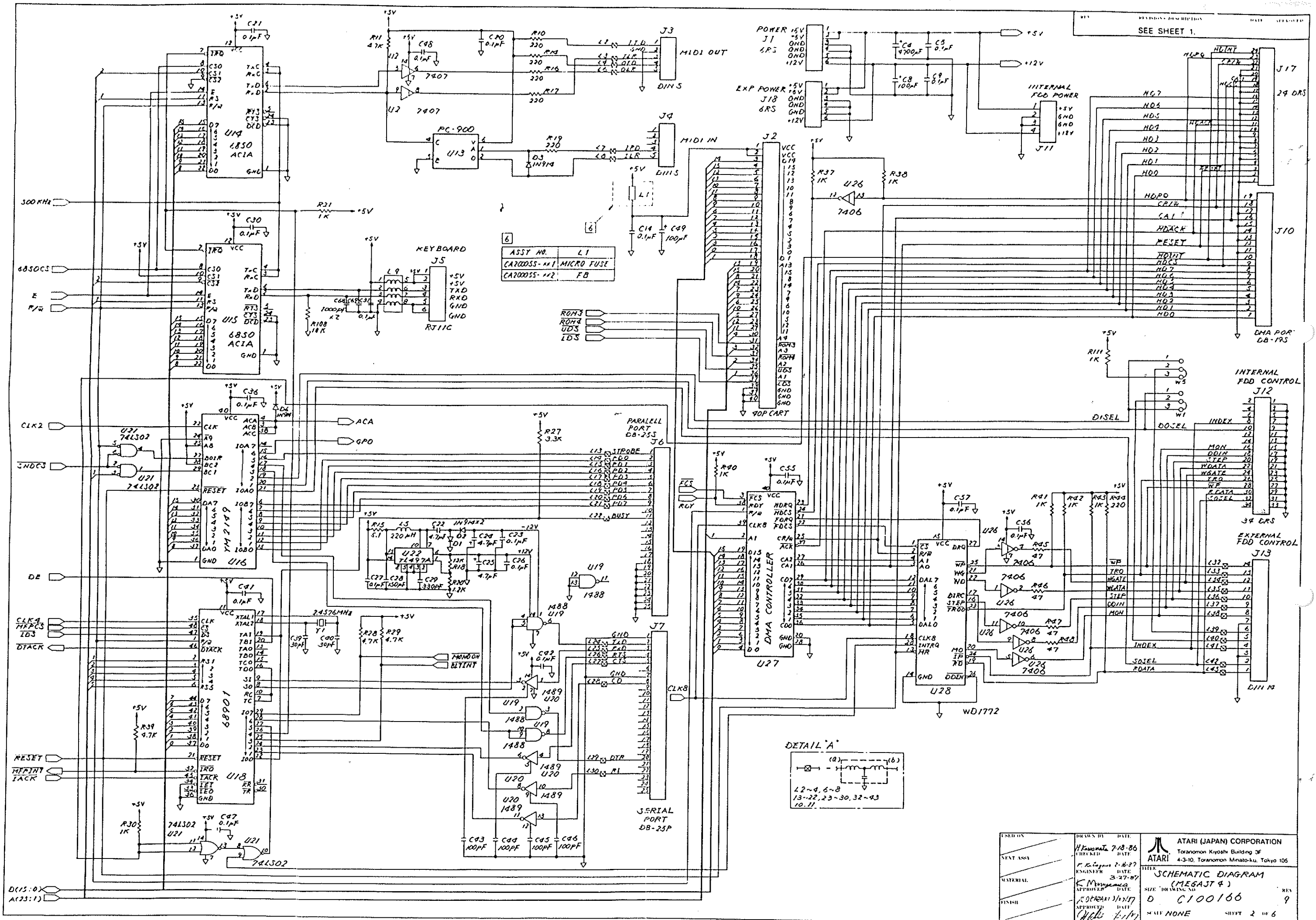
SERVICE – MANUAL

MEGA ST 2

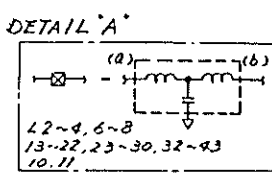
MEGA ST 4

NETZTEIL

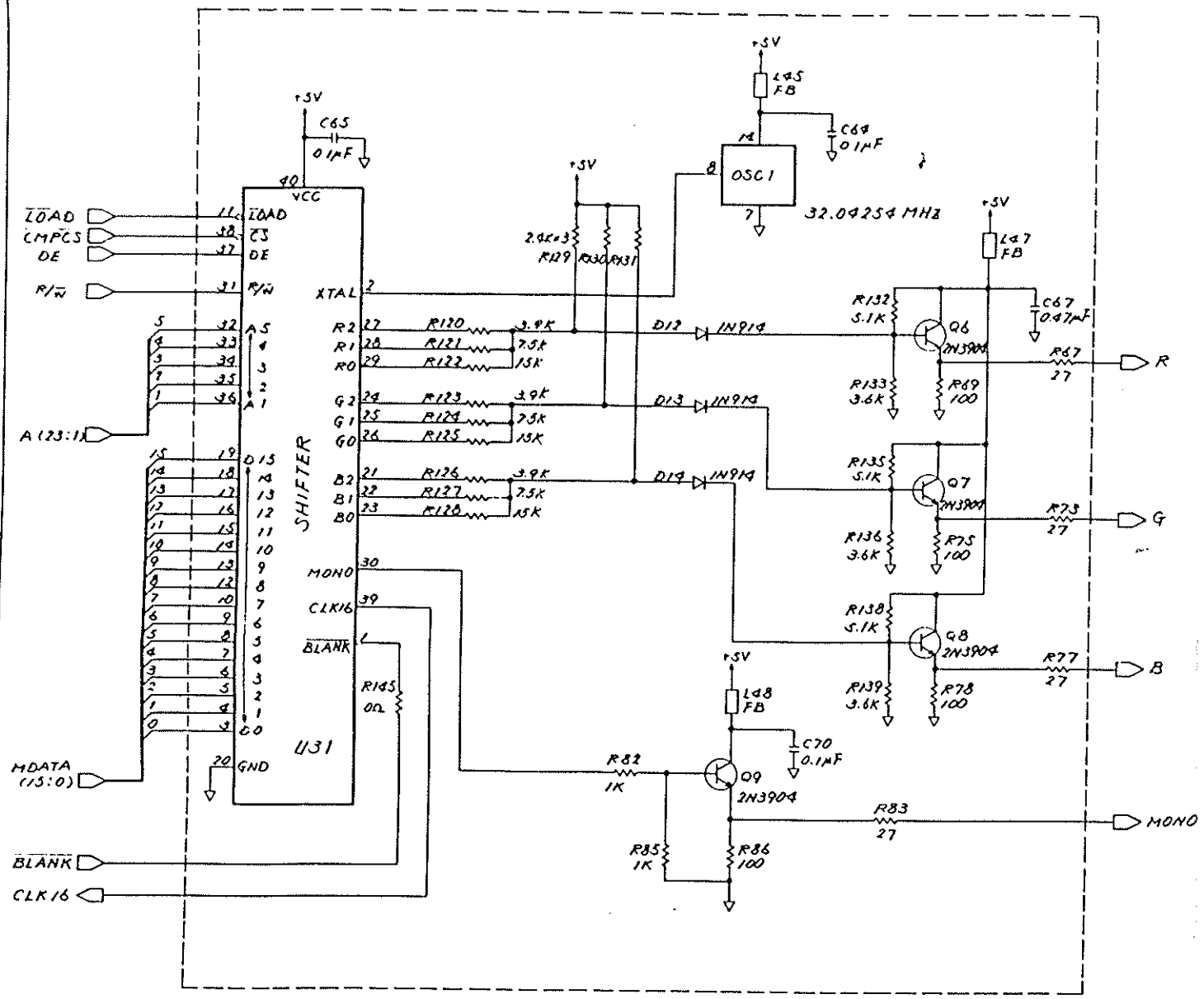
Service Manual
MEGA ST 2
MEGA ST 4
NETZTEIL



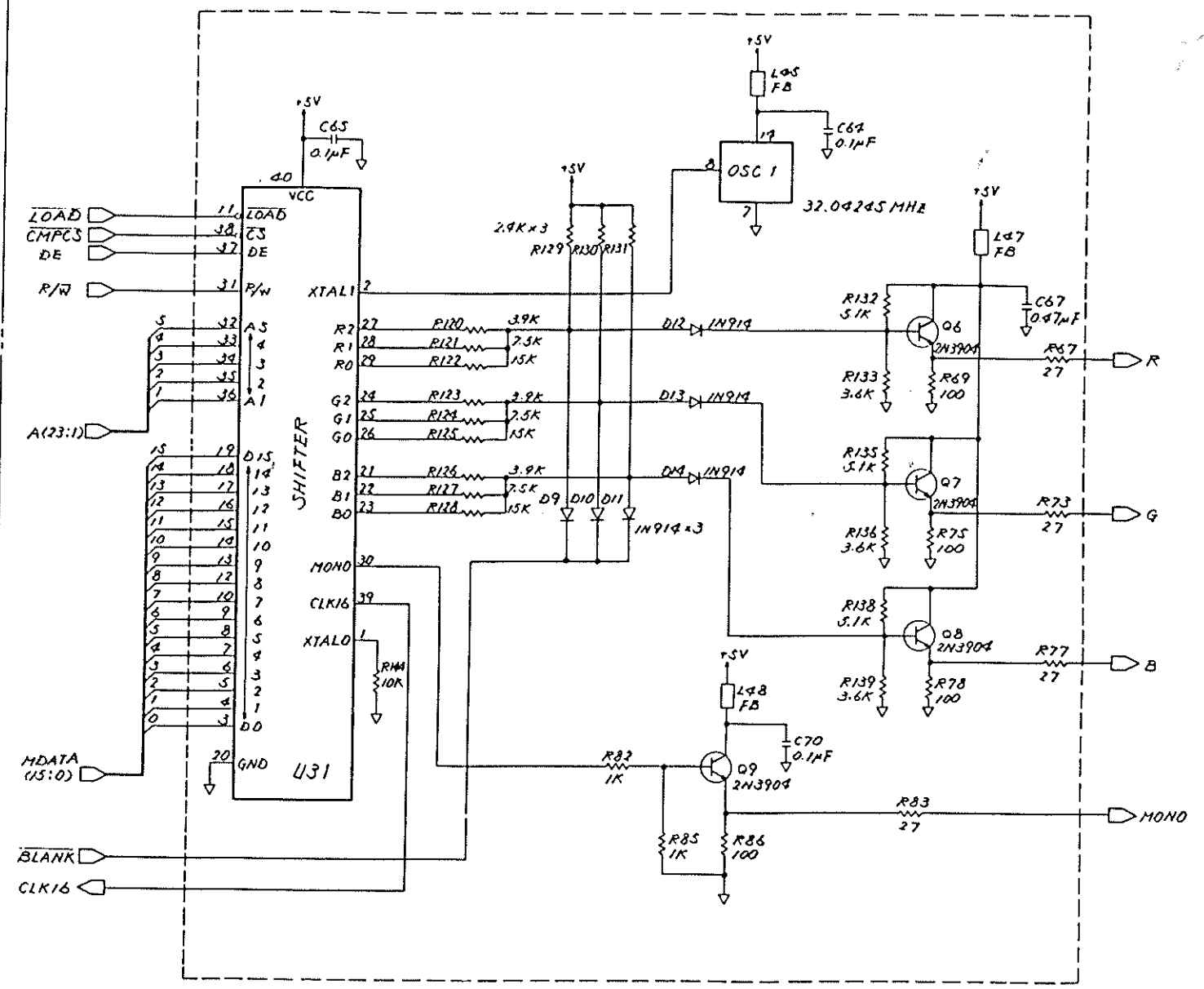
ASSY NO.	L1
CA700055-#1	MICRO FUSE
CA700055-#2	FB



USED ON	DRAWN BY	DATE	ATARI (JAPAN) CORPORATION Toranomon Kyushu Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105
SEAT ASSY	H. Kawanishi	7-18-86	
MATERIAL	ENGINEER	DATE	TITLE: SCHEMATIC DIAGRAM (MEGA1+) SIZE: DRAWING NO. 0 C100166 REV: 9
FINISH	K. Matsuura	3-27-87	
	APPROVED	DATE	APPROVED: (Signature) DATE: 1-11-87

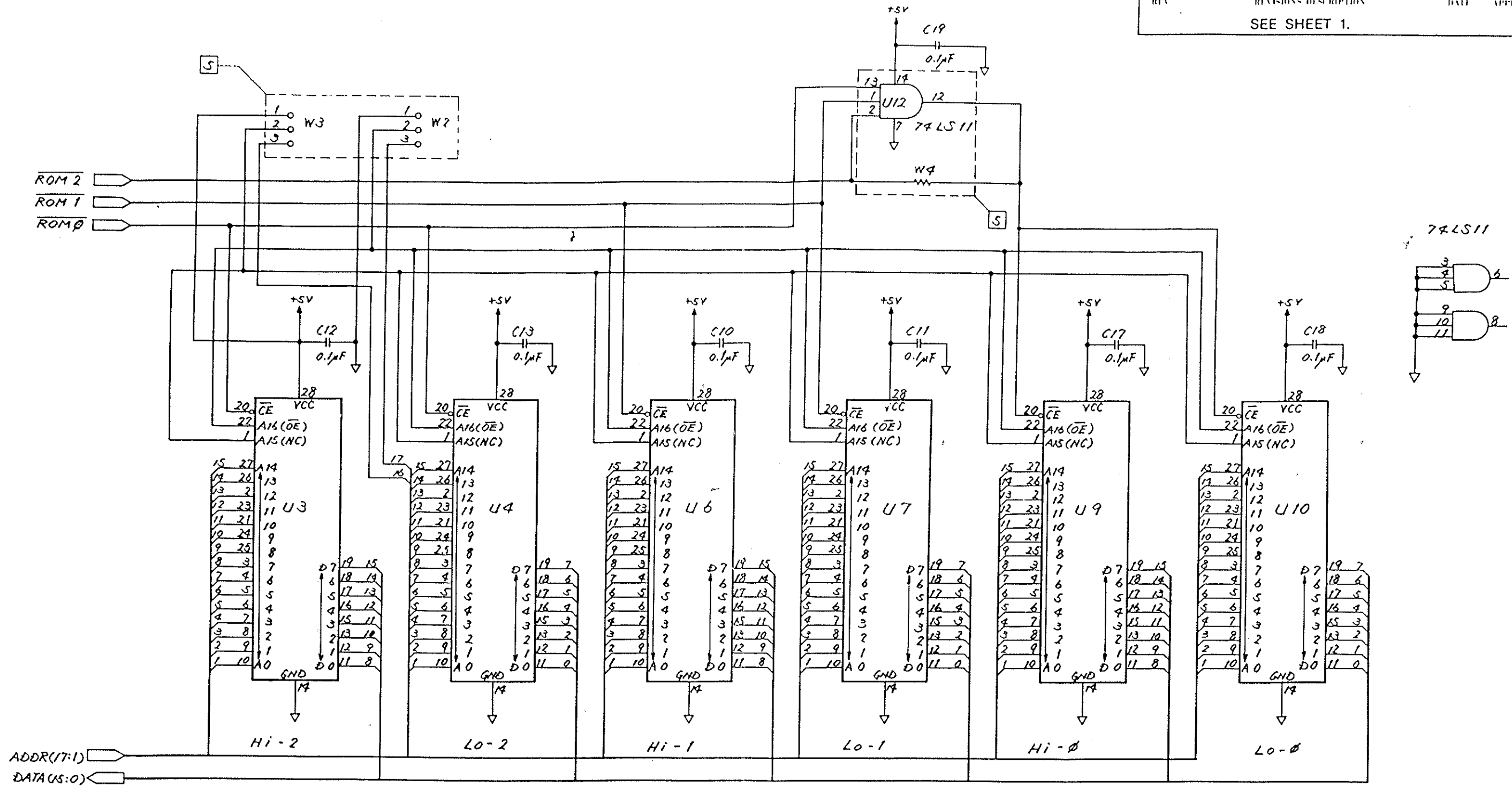


PIN C070713 FULL CUSTOM W/O D TO A CONVERTER



PIN C025914 GATE ARRAY W/O D TO A CONVERTER

DESIGNED BY	DRAWN BY	DATE	ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105 TITLE: SCHEMATIC DIAGRAM (MEGAST 4) SIZE: DRAWING NO. D C100166 REV: 9 SCALE: NONE SHEET 4 OF 6
CHECKED	H. Kawano	3-5-87	
ENGINEER	K. K. K.	3-28-87	
APPROVED	K. N. N.	3-27-87	
APPROVED	T. O. O.	3-27-87	

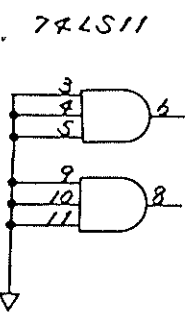


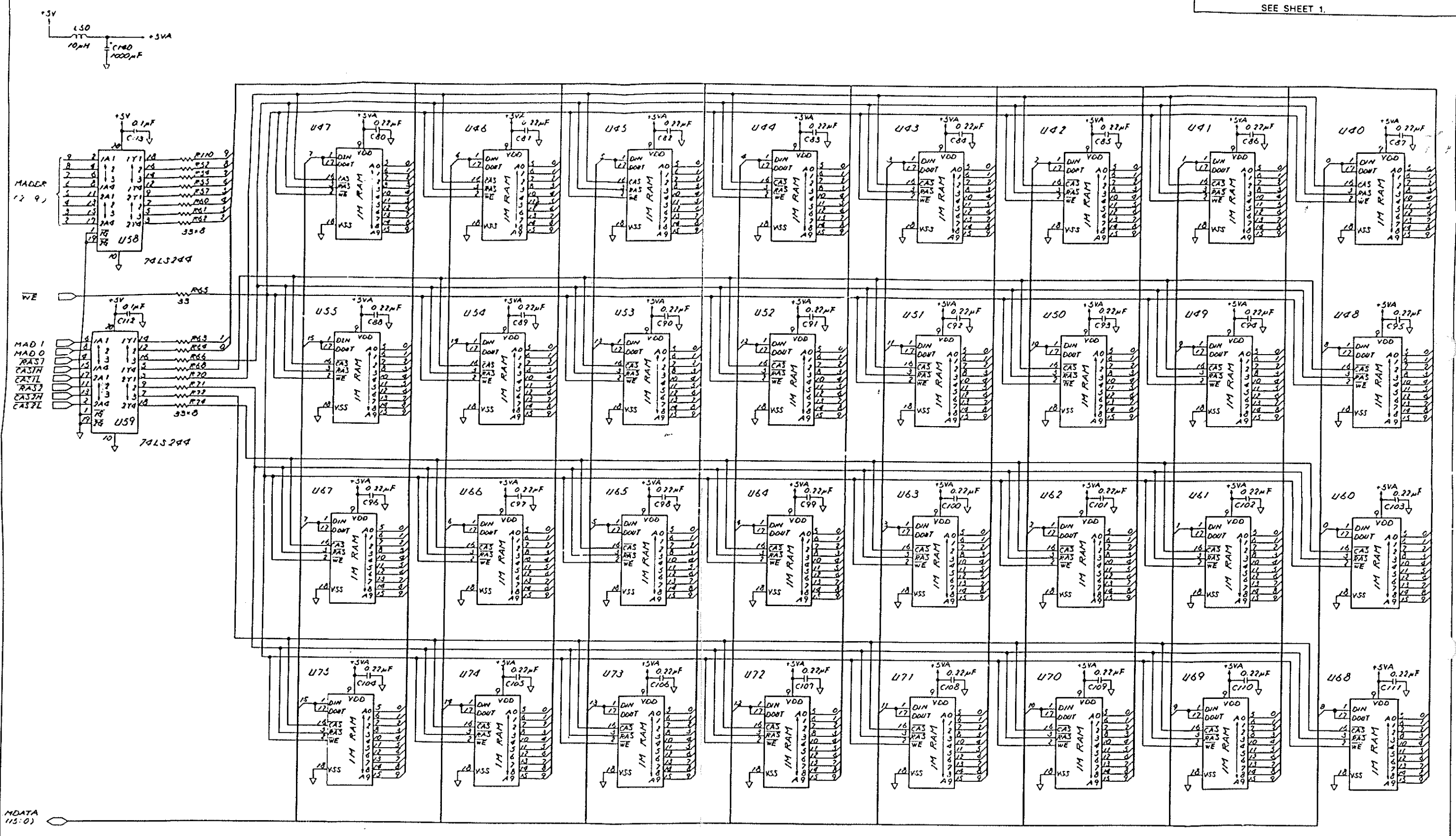
ROM TABLE
IC ; U12 (74LS11)
JUMPER ; W2, W3, W4

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

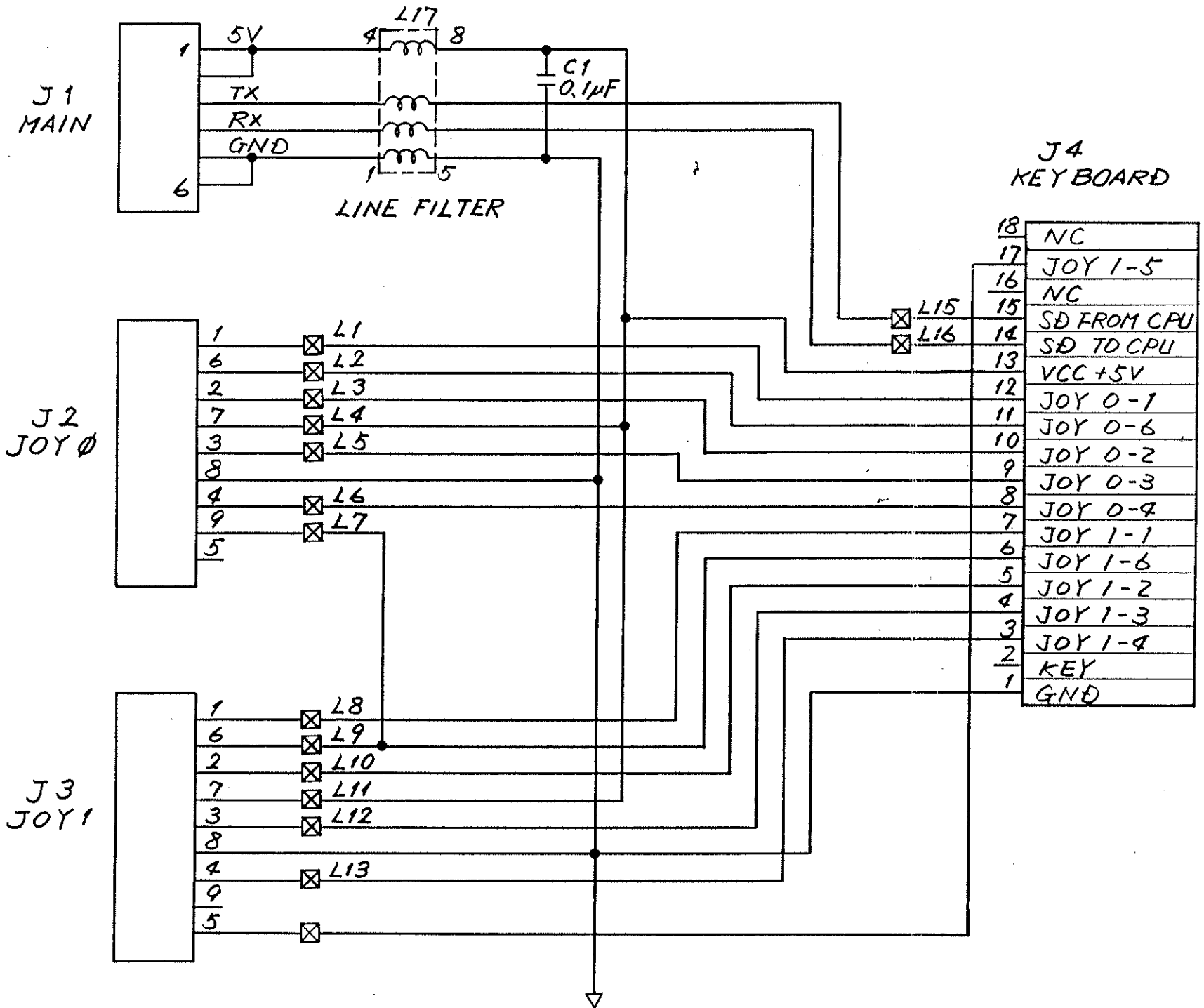




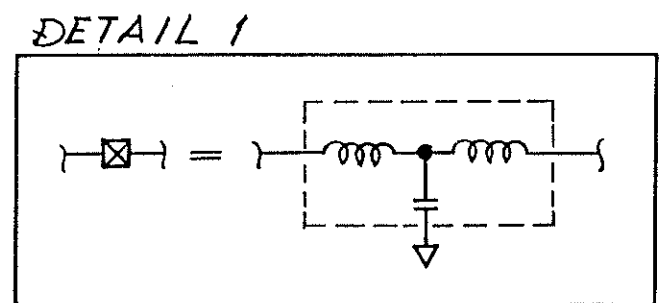
USED IN	DRAWN BY	DATE	ATARI (JAPAN) CORPORATION Toranomon Kiyashi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105
NEXT ASSY	Checked	11/28/86	
MATERIAL	ENGINEER	DATE	ATARI SCHEMATIC DIAGRAM (MEGAST 4)
FINISH	APPROVED	3-27-87	
	DATE	11/27/87	SIZE: DRAWING SIZE D C100166
	DATE	7/27/87	SCALE: NONE
			SHEET 6 OF 6

REV	REVISIONS DESCRIPTION	DATE	APPROVED
1	PRELIMINARY RELEASE	7/19/87	JHh
2	DELETE RES. & CAP. (R1, C2)	1-9-87	
3	REVISED	2/19/87	JHh

REFERENCE ONLY



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



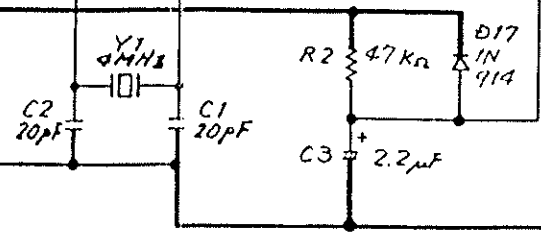
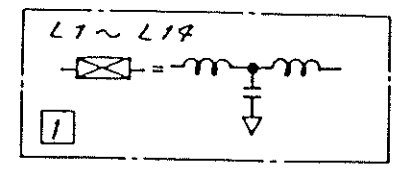
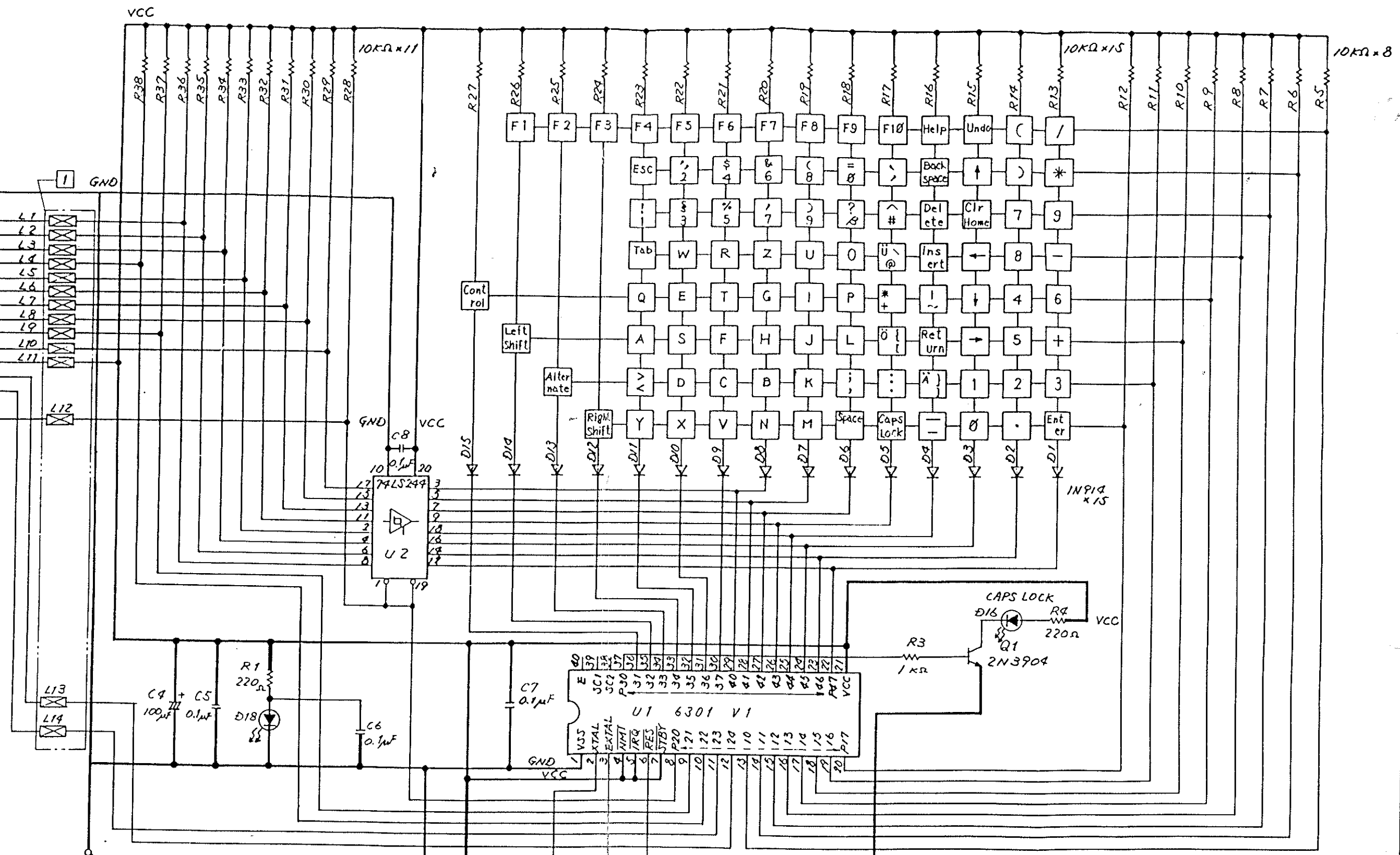
2. USE SUPPLIED P.C.B. C100063, REV. 1
 1. NOISE FILTER: SEE DETAIL 1.

NOTES—UNLESS OTHERWISE SPECIFIED:

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

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	ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 4-3-10, Toranomon Minato-ku, Tokyo 105 TITLE KEYBOARD SCHEMATIC DIAGRAM (GERMAN 95KEY) SIZE DRAWING NO. C C100264 SCALE NONE SHEET 1 OF 5
NEXT ASSY	H. Sekurai CHECKED K. ... ENGINEER APPROVED S. OFABAI APPROVED	1-30-87 DATE 2-15-87 DATE 1/19/87 DATE 2/6/87 DATE	
MATERIAL			
FINISH			

NA

ASSY NO.	DESCRIPTION
CA200001 - 001	120V FOR ST (ASP34-1)(ASPF34-1)
- 002	220V FOR ST (ASP34-2)(ASPF34-2)
- 003	120V FOR SH204 (ASP34-3)
- 004	220V FOR SH204 (ASP34-4)
- 005	120V FOR SH205 (ASPF34-3)
CA200001 - 006	220V FOR SH205 (ASPF34-4)

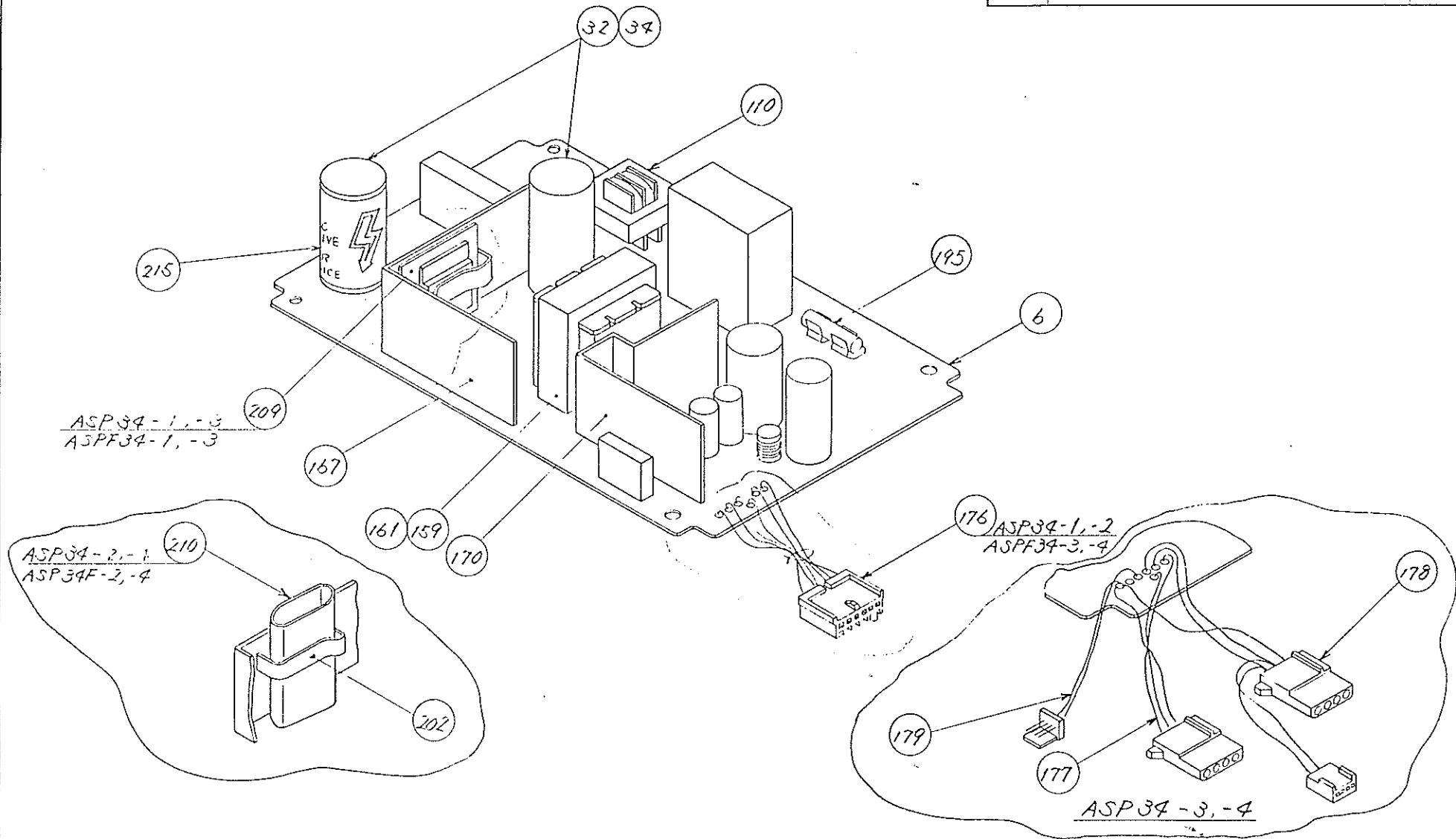
REV.	REVISIONS DESCRIPTION	DATE	APPROVED
A	PRODUCTION RELEASE	7/2/87	[Signature]
B	REVISED PER ECO NO. 00947	7/2/87	[Signature]

NOTES-UNLESS OTHERWISE SPECIFIED :

USED ON ASP34-X ASPF34-X NEXT ASSY CA200000-XXX CA200003-XXX MATERIAL	DRAWN BY H. Kawamata 8-11-86 CHECKED DATE K. Kitagawa 9-4-86 ENGINEER DATE A. Shinagawa 1-2-87 APPROVED DATE	 ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105
FINISH	APPROVED H. OKAZAKI 1/2/87 APPROVED DATE [Signature] 7/2/87	TITLE PCB ASSY SIZE DRAWING NO B CA200001-XXX SCALE SHEET 1 OF 7

N6

REV	REVISIONS DESCRIPTION	DATE	APPROVED
	SEE SHEET 1.		



NOTES—UNLESS OTHERWISE SPECIFIED:

CA200003-xxx	ASP34-31-4
CA200000-xxx	ASP34-X
NEXT ASSY	USED ON
APPLICATION	

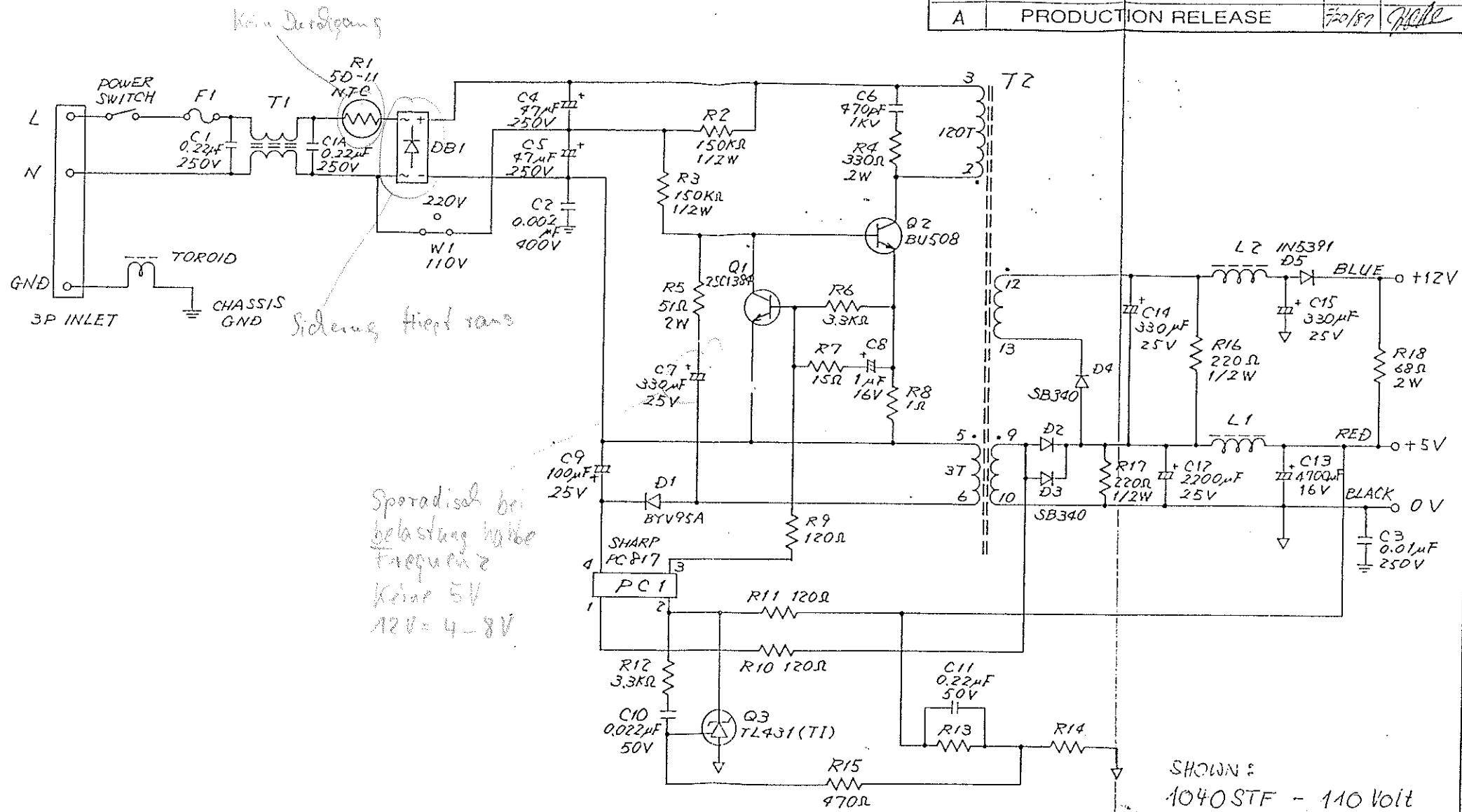
TOLERANCES	
UNDER 30	± 0.1
30 THRU 300	± 0.2
OVER 300	± 0.4
MATERIAL	
FINISH	

DRAWN BY	DATE
H. Kawamoto	8-25-86
CHECKED	DATE
K. Kitagawa	9-9-86
ENGINEER	DATE
A. Shinogawa	2-16-87
APPROVED	DATE
S. OKAZAKI	2/17/87
APPROVED	DATE
[Signature]	2/17/87

		ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105	
TITLE			
PCB ASSY			
SIZE	DRAWING NO.	REV	
B	CA200001-xxx	B	
SCALE NONE		SHEET 7 OF 7	

N7

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




Sporadisch bei
belastung halbe
Frequenz
kleiner 5V
12V = 4-8V

SHOWN :
1040 STF - 110 Volt


TOLERANCES UNDER 30 ±0.1 30 THRU 300 ±0.2 OVER 300 ±0.4	USED ON ASP34-1	DRAWN BY <i>I. Yoshida</i>	DATE 9/23/86	ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105	
	NEXT ASSY	CHECKED <i>K. Kiyama</i>	DATE 9-18-86		TITLE SCHEMATIC DIAGRAM (ASP34-1)
	MATERIAL	ENGINEER <i>A. Shinagawa</i>	DATE 10-23-86		SIZE DRAWING NO. B C070798
FINISH	APPROVED <i>[Signature]</i>	DATE 7/23/86	REV A	SCALE NONE	
				SHEET 1 OF 1	

A/N: CA200001-XXX REV. E TITLE: PCB ASSY MODEL: ASP34-1/-2/-3/-4 ASPF34-1/-2/-3/-4

A/N: CA200001-XXX SHEET 7 OF 7


REV	REVISION DESCRIPTION	DATE	APPROVED	 ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105		
	SEE SHEET 1.			VERSION	STANDARD	MARKET

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. REQUIRED PER VERSION						NOTE
			001	002	003	004	005	006	
49									
50									
51									
52									
53									
54									
55									
56									
57									
58									
59									
60									
61									
62									
63									
64	C070828-010	RES; 1Ω, 1W, ±5%, M.F.	1	1	1	1	1	1	
65		R8							
66	14-5150	RES; 15Ω, 1/4W, ±5%, C.F.	1	1	1	1	1	1	
67		R7							
68	C070829-510	RES; 51Ω, 2W, ±5%, M.F.	1	1	1	1	1	1	
69		R5							
70	C070829-680	RES; 68Ω, 2W, ±5%, M.F.	1	1	-	-	-	-	
71		R18							
72	14-5121	RES; 120Ω, 1/4W, ±5%, C.F.	3	3	3	3	3	3	
73		R9~11							
74	C070830-221	RES; 220Ω, 1/2W, ±5%, C.F.	1	1	1	1	1	1	
75		R17							
76	C070829-331	RES; 330Ω, 2W, ±5%, M.F.	1	1	1	1	1	1	
77		R4							
78	14-5471	RES; 470Ω, 1/4W, ±5%, C.F.	1	1	1	1	1	1	
79		R15							
80	C070830-102	RES; 1KΩ, 1/2W, ±5%, C.F.	-	1	1	1	1	1	
81		R16							
82	14-5332	RES; 3.3KΩ, 1/4W, ±5%, C.F.	2	2	2	2	2	2	
83		R6, 12							
84	14-5512	RES; 5.1KΩ, 1/4W, ±5%, C.F.	-	-	2	2	2	2	
85		R13, 14							
86	C070831-154	RES; 150KΩ, 1/2W, ±5%, M.F.	2	2	2	2	2	2	
87		R2, 3							
88	C070830-221	RES; 220Ω, 1/2W, ±5%, C.F.	1	-	-	-	-	-	
89		R16							
90									
91									
92									
93									
94									
95									
96									

A/N: CA200001-XXX	REV. 5	TITLE: PCB ASSY	MODEL: ASP34-1/-2/-3/-4 ASPF34-1/-2/-3/-4
REV	REVISION DESCRIPTION	DATE	APPROVED
	SEE SHEET 1.		
 ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105			
		VERSION	STANDARD
		MARKET	


A/N: CA200001-XXX
SHEET 4 OF 7

ITEM NO.	PART NUMBER	DESCRIPTION	QTY REQUIRED PER VERSION						NOTE
			001	002	003	004	005	006	
97									
98									
99	C070810	PHOTO COUPLER; PC817 (SHARP)	1	1	1	1	1	1	
100		PC1							
101	C070844	PHOTO COUPLER; CNY65	1	1	1	1	1	1	
102		PC1							
103									
104									
105	C070801	INDUCTOR; 1A, OUTPUT FILTER	1	1	1	1	1	1	
106		L2							
107	C070802	INDUCTOR; 3A, OUTPUT FILTER	1	1	1	1	1	1	
108		L1							
109									
110	C070803	LINE FILTER;	1	1	1	1	1	1	
111		T1							
112									
113									
114									
115	C070805	TRANSISTOR; 2SC1384	1	1	1	1	1	1	
116		Q1							
117	C070806	TRANSISTOR; BU508	1	1	1	1	1	1	
118		Q2							
119									
120									
121	C070807-001	THERMISTOR NTC; 5D-11	1	1	1	1	1	1	
122		R1							
123	C070807-002	THERMISTOR NTC; NTH11D5R0LA	ALT	ALT	ALT	ALT	ALT	ALT	
124		(ALTERNATE FOR ITEM #121)							
125	C070807-003	THERMISTOR NTC;	ALT	ALT	ALT	ALT	ALT	ALT	
126		(ALTERNATE FOR ITEM #121)							
127									
128									
129									
130									
131									
132									
133									
134									
135									
136									
137	C070811	RECTIFIER BRIDGE; GI, W08M	1	1	1	1	1	1	
138		DB1							
139									
140									
141	C070813	SHR; TL431(TI)	1	1	1	1	1	1	
142		Q3							
143									
144									

A/N: CA200001-XXX	REV. 2	TITLE: PCB ASSY	MODEL: ASP34 - 1/-2/-3/-4 ASPF34 - 1/-2/-3/-4
REV	REVISION DESCRIPTION	DATE	APPROVED
SEE SHEET 1.			
 ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105			
VERSION		STANDARD	MARKET


A/N: CA200001-XXX
SHEET 5 OF 7

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. REQUIRED PER VERSION						NOTE
			001	002	003	004	005	006	
145	C070814	FUSE CLAMP	2	2	2	2	2	2	
146									
147	C070809-001	SCHOTTKY DIODE; SB340	1	1	1	1	1	1	
148		D2							
149	C070809-002	SCHOTTKY DIODE; SB340	1	1	1	1	1	1	
150		D3							
151	C070809-003	SCHOTTKY DIODE; SB340	1	1	1	1	1	1	
152		D4							
153	C070808	SCHOTTKY DIODE; BYV95A	1	1	1	1	1	1	
154		D1							
155	C017988	DIODE; IN5391	1	1	-	-	-	-	
156		D5							
157									
158									
159	C070804-001	TRANSFORMER EI-33, UL, CSA	1	-	1	-	1	-	
160		T2							
161	C070804-002	TRANSFORMER	-	1	-	1	-	1	
162		T2							
163									
164									
165									
166									
167	C070819	HEAT SINK, TR	1	1	1	1	1	1	
168									
169									
170	C070845	HEAT SINK, DIODE	1	1	1	1	1	1	
171									
172									
173									
174									
175									
176	C070822	DC O/P. PLUG ASSY, 6 WIRE	1	1	-	-	1	1	
177	C026189-002	DC O/P. POWER HARNESS (3 WIRE)	-	-	1	1	-	-	
178	C026190-002	DC O/P. POWER HARNESS (5 WIRE)	-	-	1	1	-	-	
179	C070921	DC O/P. POWER HARNESS (2 WIRE)	-	-	1	1	-	-	
180									
181									
182									
183									
184									
185									
186									
187									
188									
189									
190									
191									
192									

A/N: CA200055-XXX		REV. 5	TITLE: PCB SUB ASSY	MODEL: MEGAST 4
RE/	REVISION DESCRIPTION	DATE	APPROVED	 ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105
	SEE SHEET 1.			
				VERSION
				STANDARD
				MARKET

A/N: CA200055-XXX
SHEET OF 26

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. REQUIRED PER VERSION						NOTE
			001	002	101	102	103		
193									
194									
195									
196									
197									
198									
199	3 4 - 2 N 3 9 0 4	TRANSISTOR; 2N3904	6	6	6	6	6	6	
200		Q1, 3, 6~9							
201	3 4 - 2 N 3 9 0 4	TRANSISTOR; 2N3904	1	1	1	1	1	1	
202		Q10							
203									
204									
205	3 3 - 2 N 3 9 0 6	TRANSISTOR; 2N3906	1	1	1	1	1	1	
206		Q2							
207									
208									
209									
210									
211									
212									
213	C 0 2 5 9 9 3	CRYSTAL; 2.4576 MHz	1	1	1	1	1	1	
214		Y1							
215	C 1 0 0 2 3 2	CRYSTAL; 32.768 KHz	1	1	1	1	1	1	
216		Y2							
217	C 1 0 0 2 8 1	CRYSTAL MODULE; 32.04245 MHz	1	1	1	1	1	1	
218		OSC1.							
219									
220									
221									
222									
223	C 1 0 1 6 4 3	IC; ST BLITTER, CUSTOM	1	1	1	1	1	1	
224		U5							
225	C 0 2 5 9 8 2	IC; 68000-8, CPU	1	1	1	1	1	1	
226		U8							
227	C 0 2 5 9 1 3	IC; DMA CONTROLLER, CUSTOM	1	1	1	1	1	1	
228		U27							
229	C 0 2 5 9 1 5	IC; GLUE, CUSTOM	1	1	1	1	1	1	
230		U17							
231	C 1 0 1 6 0 8	IC; FULL CUSTOM SHIFTER(WITH D-A)	1	1	1	1	1	1	
232		U31							
233	C 0 2 5 9 1 2	IC; MCU, CUSTOM	1	1	1	1	1	1	
234		U30							
235	C 0 2 5 9 8 3	IC; YM2149, SOUND	1	1	1	1	1	1	
236		U16							
237	C 0 2 5 9 8 5	IC; 6850, ACIA	2	2	2	2	2	2	
238		U14, 15							
239	C 0 2 5 9 8 4	IC; 68901, MFP	1	1	1	1	1	1	
240		U18							

A/N: CA200055 - XXX		REV. 5	TITLE: PCB SUB ASSY	MODEL: MEGAST 4	A/N: CA200055-XXX SHEET 7 OF 26	
REV	REVISION DESCRIPTION	DATE	APPROVED	 ATARI (JAPAN) CORPORATION Toranomon Kiyoshi Building 3F 4-3-10, Toranomon Minato-ku, Tokyo 105		
	SEE SHEET 1.			VERSION		STANDARD
						MARKET

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. REQUIRED PER VERSION					NOTE
			001	002	003	101	102	
241	C025986	IC; 1488, RS-232C, DRIVER	1	1	1	1	1	
242		U19						
243	C025987	IC; 1489, RS-232C, RECEIVER	1	1	1	1	1	
244		U20						
245	C026028	IC; WD1772, FDD CONTROLLER	1	1	1	1	1	
246		U28						
247	C101621	IC; TL7705A	1	1	1	1	1	
248		U1						
249	C025988	IC; PC900, PHOTO COUPLER	1	1	1	1	1	
250		U13						
251	C070447	IC; TL497A, SWITCHING REGULATOR	1	1	1	1	1	
252		U22						
253	C101614-000	IC; 74HC00 QUAD NAND GATE	1	1	1	1	1	
254		U24						
255	C101622	IC; RP5C15 REAL TIME CLOCK	1	1	1	1	1	
256		U25						
257	C101624-1XX	IC; DYNAMIC RAM 1Mx1 (120 ns)	32	32	32	32	32	
258		U40~55, 60~75						
259	C101625	IC; RTCPAL, PAL16L8	1	1	1	1	1	
260		U37						
261	C014340	IC; 74LS02, QUAD NOR	1	1	1	1	1	
262		U21						
263	C070210	IC; 7406, HEX INVERTER O.C	1	1	1	1	1	
264		U26						
265	C062080	IC; 7407, HEX, O.C. BUFFER	1	1	1	1	1	
266		U2						
267	C014362	IC; 74LS32, QUAD 2-INPUT OR GATE	1	1	1	1	1	
268		U78						
269	C101611-148	IC; 74LS148, 8 TO 3 PRIORITY ENCODER	1	1	1	1	1	
270		U39						
271	C014313	IC; 74LS244, 3-STATE LINE BUFFER	4	4	4	4	4	
272		U32, 35, 58, 59						
273	C025992	IC; 74LS373, LATCH	2	2	2	2	2	
274		U33, 36						
275	C070857	IC; 74LS11, TRIPLE 3-INPUT AND GATE	1	1	1	-	-	
276		U12						
277								
278								
279								
280								
281								
282								
283	C070129	CONN; 40PIN, RIGHT ANGLE	1	1	1	1	1	
284		J2						
285	C070130-002	CONN; DB-19S, HARD DISK	1	1	1	1	1	
286		J10 (HOOK TYPE)						
287	C070131	CONN; 14PIN, DIN, FLOPPY DISK	1	1	1	1	1	
288		J13						



... wir machen Spitzentechnologie preiswert.

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