

INSTRUCTION MANUAL



DATA EAST USA, INC.

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780-0019-00

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COMMANDO[©]

GAME PLAY

YOU ARE ABOUT TO BEGIN A HIGHLY SECRET MISSION

You are a crack soldier with special training. You have been given a highly secret mission, and are about to enter into fierce guerrilla warfare! The mission is to annihilate the enemy and to rescue important captives. To do this you must destroy the enemy base, which is said to be impregnable.

The battles you will fight take place in several areas requiring various attack techniques. Your weapons consist of a machine gun with unlimited shots, and a limited supply of hand grenades, which you may replenish by taking from the enemy.

GOOD LUCK!

- * Use JOYSTICK to maneuver the soldier.
- * Use RIGHT BUTTON to fire Machine gun.
- * Use LEFT BUTTON to hurl hand grenades.
- * Dodge all bullets and grenades. Do not collide with enemy soldiers!
- * Destroy as many of the enemy as possible.
- * Pick up enemy grenades (one grenade per box) and use them against the enemy.
- * Extra 'lives' are awarded for exceeding certain scores.
- * Score higher points by destroying enemy leaders and enemy headquarters
- * Score bonus points by rescuing captives.
- * The arch bridge is a dangerous spot! Watch for attacks from above!
- * Be careful of trucks and jeeps that may try to ram you!
- * Do not fall into rivers or ponds.
- * Trees, walls and other obstacles can be used for cover.

C O M M A N D O
OPTION SWITCH SETTINGS

SWITCH A

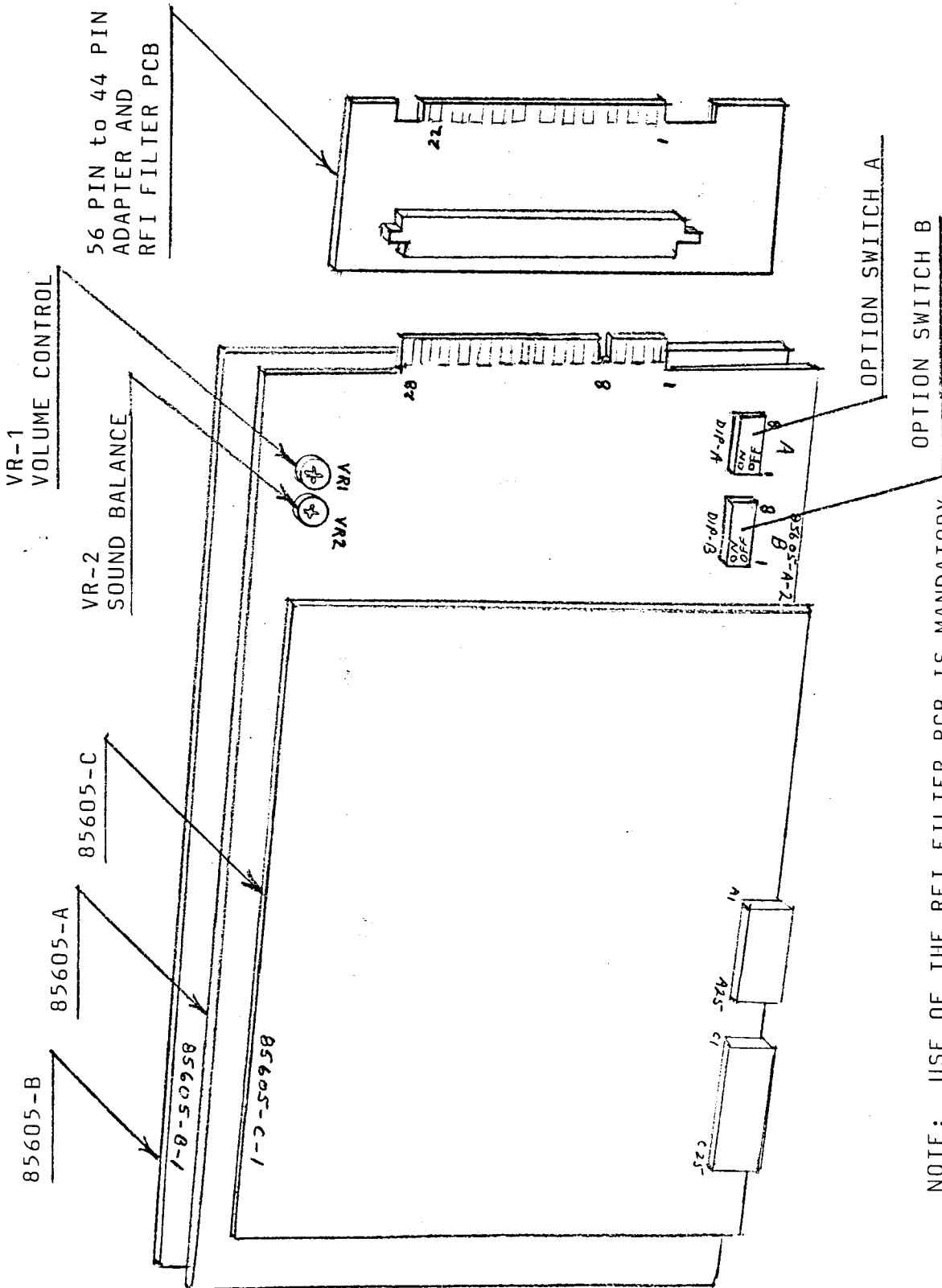
OPTION		1	2	3	4	5	6	7	8
COIN 1 1 WAY	1 Coin - 1 Credit	OFF	OFF						
	1 Coin - 2 Credit	ON	OFF						
	1 Coin - 3 Credit	OFF	ON						
	2 Coin - 1 Credit	ON	ON						
COIN 2 2 WAY	1 Coin - 1 Credit			OFF	OFF				
	2 Coin - 1 Credit			ON	OFF				
	3 Coin - 1 Credit			OFF	ON				
	4 Coin - 1 Credit			ON	ON				
NUMBER OF LIVES (FIGHTERS)	3					OFF	OFF		
	2					ON	OFF		
	4					OFF	ON		
	5					ON	ON		
STARTING AREA	0 (Forest 1)							OFF	OFF
	2 (Desert 1)							ON	OFF
	4 (Forest 2)							OFF	ON
	6 (Desert 2)							ON	ON

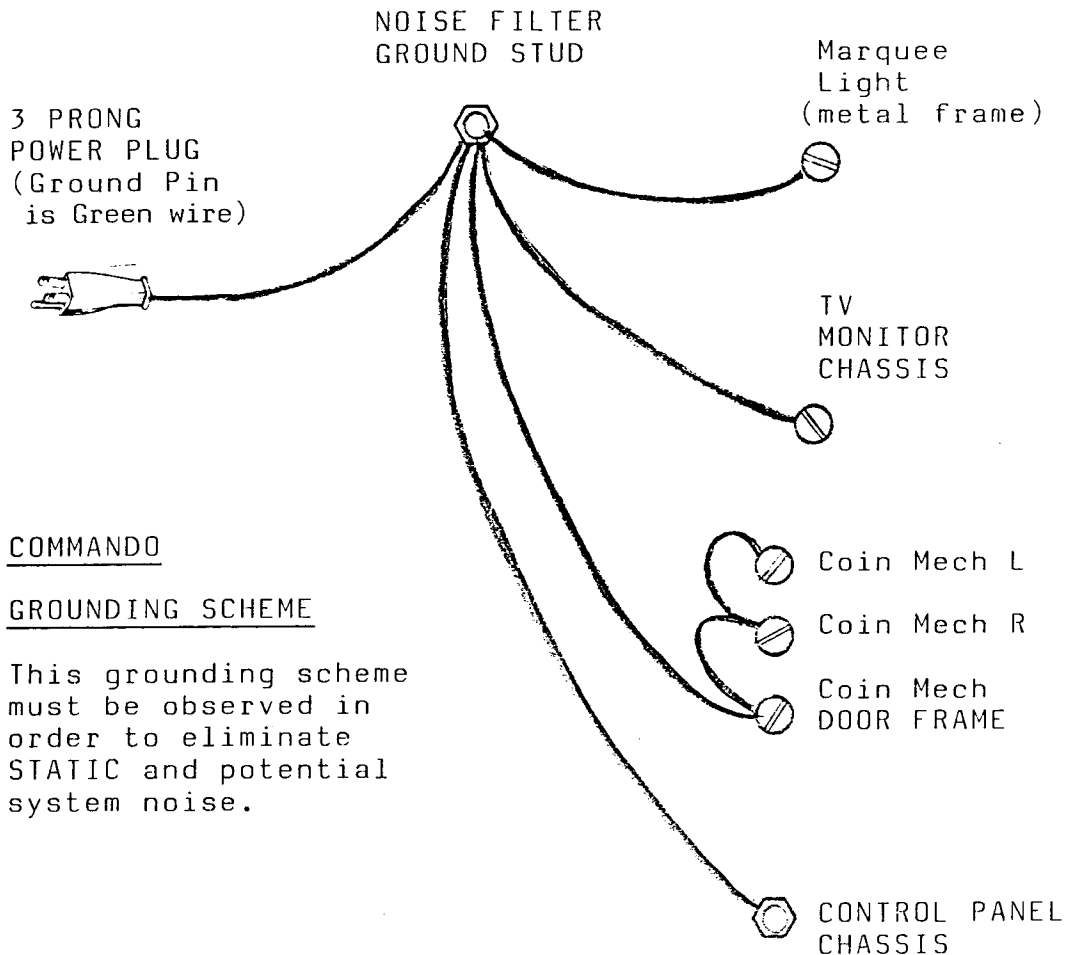
SWITCH B

OPTION		1	2	3	4	5	6	7	8
COCKTAIL TABLE UPRIGHT		OFF ON							
JOYSTICK 2 WAY JOYSTICK 1 WAY		ON ON	OFF ON						
MONITOR REVERSE SWITCH				OFF ON					
DIFFICULTY	NORMAL DIFFICULT				OFF ON				
ATTRACT MODE	SOUND ON SOUND OFF					OFF ON			
BONUS 'LIFE' AWARD	10,000 & after 50,000						OFF	OFF	OFF
	10,000 & after 60,000						ON	OFF	OFF
	20,000 & after 60,000						OFF	ON	OFF
	20,000 & after 70,000						ON	ON	OFF
	30,000 & after 70,000						OFF	OFF	ON
	30,000 & after 80,000						ON	OFF	ON
	40,000 & after 100,000						OFF	ON	ON
	NO BONUS LIVES GIVEN						ON	ON	ON

C O M M A N D O

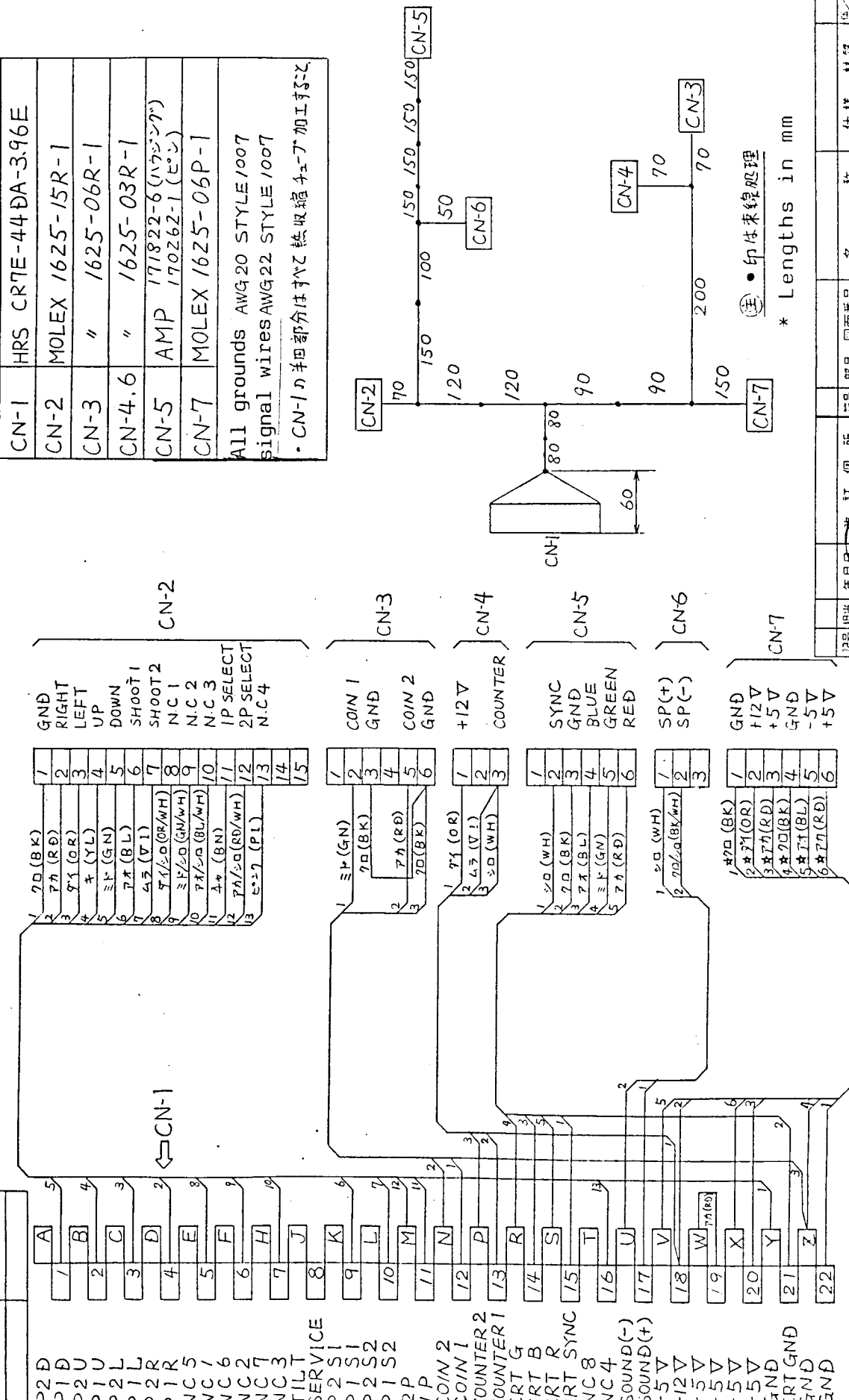
PCB IDENTIFICATION AND COMPONENT LOCATIONS





1. Ground wire of 3 prong power plug to be connected to Ground Stud on Noise Filter.
2. Marquee Light metal frame to be connected to ground stud on Noise Filter.
3. TV Monitor Chassis to be connected to ground stud on Noise Filter.
4. Coin Mech L, Coin Mech R and Coin Mech Door Frame to be connected to ground stud on Noise Filter.
5. Control Panel Chassis to be connected to ground stud on Noise Filter.
6. All connections must have good mechanical & electrical bond.
7. All connections to be made with #18 or larger green wire.

MAIN I/O V-200471-0



記号	相当	年月日	訂	個	所	行号	部品、図面番号	名	称	仕	様、材	質
							公差					
出図												
60.4.17												
生技課												
COMANDO MAIN HARNESS												

SOLDER SIDE				COMPONENT SIDE	
GND	A	1	GND		
GND	B	2	GND		
+5	C	3	+5		
+5	D	4	+5		
Ⓞ	E	5	Ⓞ		
SYNC.	F	6	Ⓞ		
GND	H	7	GND		
KEYWAY		J	8	KEYWAY	
2P	SHOT 2	K	9	SHOT 2	IP
	SHOT 1	L	10	SHOT 1	
	UP 1	M	11	UP 1	
	DOWN 1	N	12	DOWN 1	
	LEFT 1	P	13	LEFT 1	
	RIGHT 1	R	14	RIGHT 1	
GND	S	15	GND		
2P SELECT	T	16	IP SELECT		
(D5)	U	17	(D4)		
COIN 2	V	18	COIN 1		
GND	W	19	GND		
	X	20			
	Y	21			
+12V COMMON	Z	22	+12V COMMON		
COUNTER 2	a	23	COUNTER 1		
SP ⊖	b	24	SP ⊕		
+12	c	25	+12		
GND (12V)	d	26	GND (12V)		
GND	e	27	GND		
GND	f	28	GND		

CONNECTOR TYPES

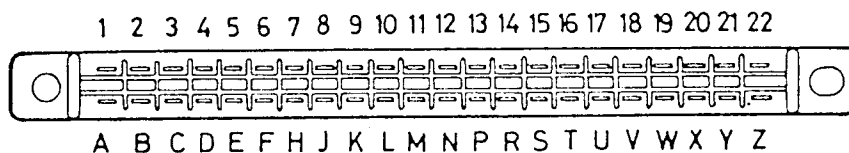
CR7E - 56DA - 3.96E : HIROSE
 of
 1168 - 056 - 009 : KEL

EDGE CONNECTOR

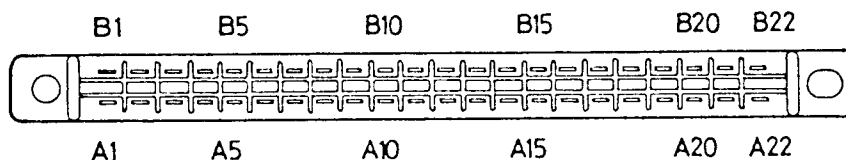
C O M M A N D O

56 PIN TO 44 PIN ADAPTOR & RFI FILTER PCB
MAIN HARNESS CONNECTIONS

a) CONNECTOR CR7E-44DA-3.96E (HIROSE) 3.96mm



b) CONNECTOR 1168-044-009 (KEL) 3.96mm



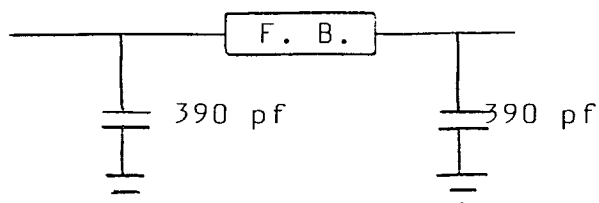
56 PIN to 44 PIN ADAPTER AND RFI FILTER PCB
MAIN HARNESS CONNECTIONS

COMPONENT SIDE			SOLDER SIDE		
Pin Nos		Signal	Pin Nos		Signal
	KEL			KEL	
1	B1	1P DOWN	A	A1	2P DOWN
2	B2	1P UP	B	A2	2P UP
3	B3	1P LEFT	C	A3	2P LEFT
4	B4	1P RIGHT	D	A4	2P RIGHT
5	B5		E	A5	
6	B6		F	A6	
7	B7		H	A7	
8	B8		J	A8	
9	B9	1P SHOOT 1	K	A9	2P SHOOT 1
10	B10	1P SHOOT 2	L	A10	2P SHOOT 2
11	B11	1P GAME SELECT	M	A11	2P GAME SELECT
12	B12	COIN 1	N	A12	COIN 2
13	B13	COIN COUNTER 1	P	A13	COIN COUNTER 2
14	B14	TV.B	R	A14	TV.G
15	B15	SYNC.	S	A15	TV.R
16	B16		T	A16	
17	B17	SPEAKER +	U	A17	SPEAKER -
18	B18	+12V	V	A18	
19	B19	+5V	W	A19	+5V
20	B20	+5V	X	A20	+5V
21	B21	TV.GND	Y	A21	GND
22	B22	GND	Z	A22	GND

56 PIN to 44 PIN ADAPTER & RFI FILTER PCB

The COMMANDO game was developed by CAPCOM CO. Ltd., who also produces the PC Board. The game developer has made no provision for compliance with Federal Communication Commission Rules and Regulations regarding Radio Frequency Interference generated by Class A computing devices. In order to ensure compliance with those regulations, DATA EAST has designed adequate RFI Filtering into the adapter PC Board. This PCB also serves as the interface between the COMMANDO 56 pin edge connector and the DATA EAST 44 pin connector.

All signals and voltages entering or leaving the COMMANDO PCB pass through a 'PI' filter network, with the exception of the ground connections and the R,G,B, & Sync signals for the Monitor, which are routed through a ferrite bead, in order to suppress unwanted radiation. Refer to the pin-out tables on pages 6 and 7 for guidance in tracing signals through this Adapter/Filter PCB.



TYPICAL FILTER NETWORK

CN - 2

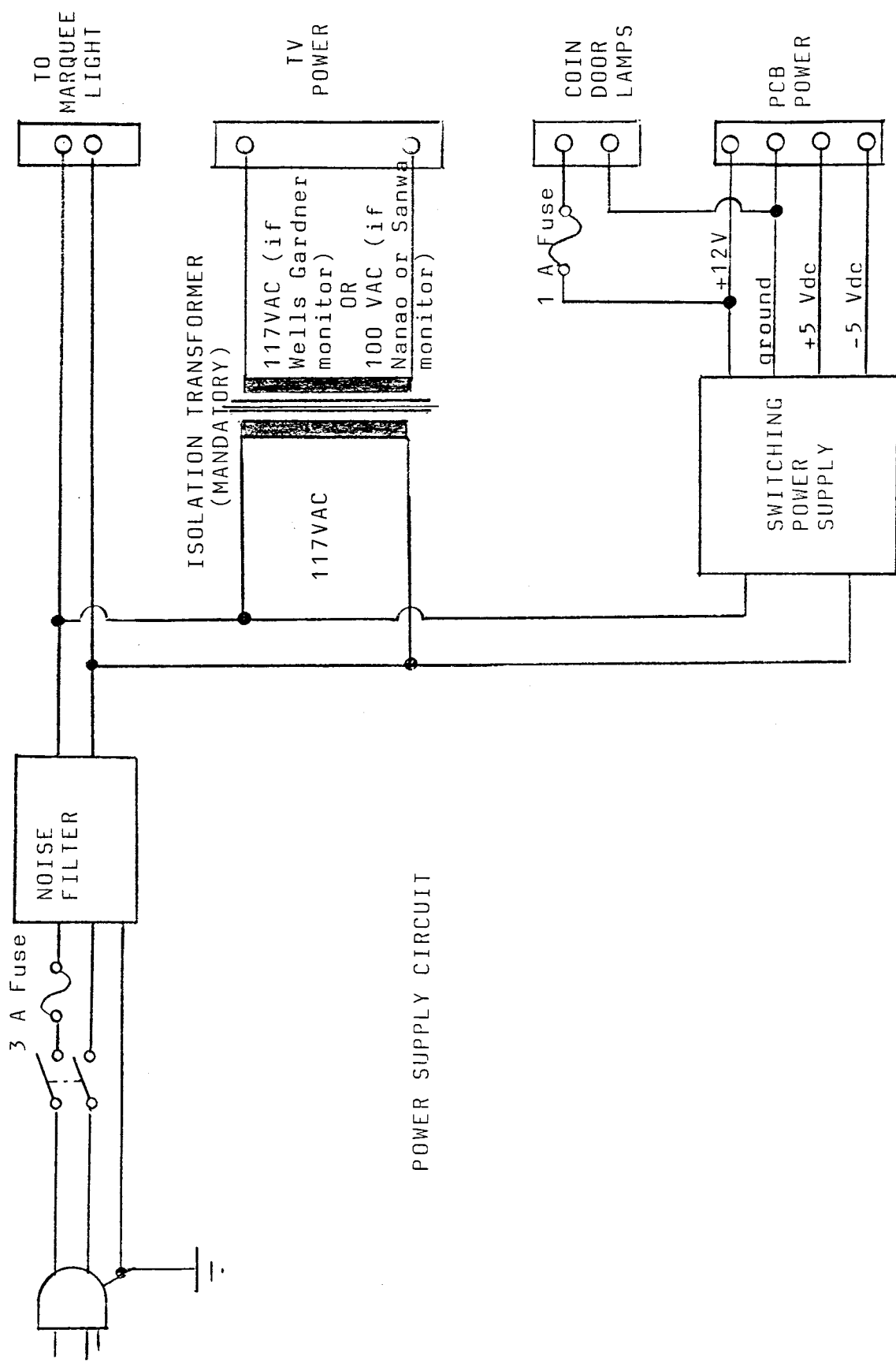
D		C
SCR B	1	SCR C
FLIP	2	SCR A
OH	3	6M
4H	4	4-3H
H2	5	H1
H8	6	H4
H32	7	H16
H128	8	H64
LHBL	9	H256
V2	10	V1
V8	11	V4
V32	12	V16
V128	13	V64
OBJ G	14	OBJ H
OBJ E	15	OBJ F
OBJ C	16	OBJ D
OBJ A	17	OBJ B
	18	$\overline{\text{HINIT}}$
	19	
	20	
	21	
+5V	22	+5V
	23	
	24	
	25	

CN - 1

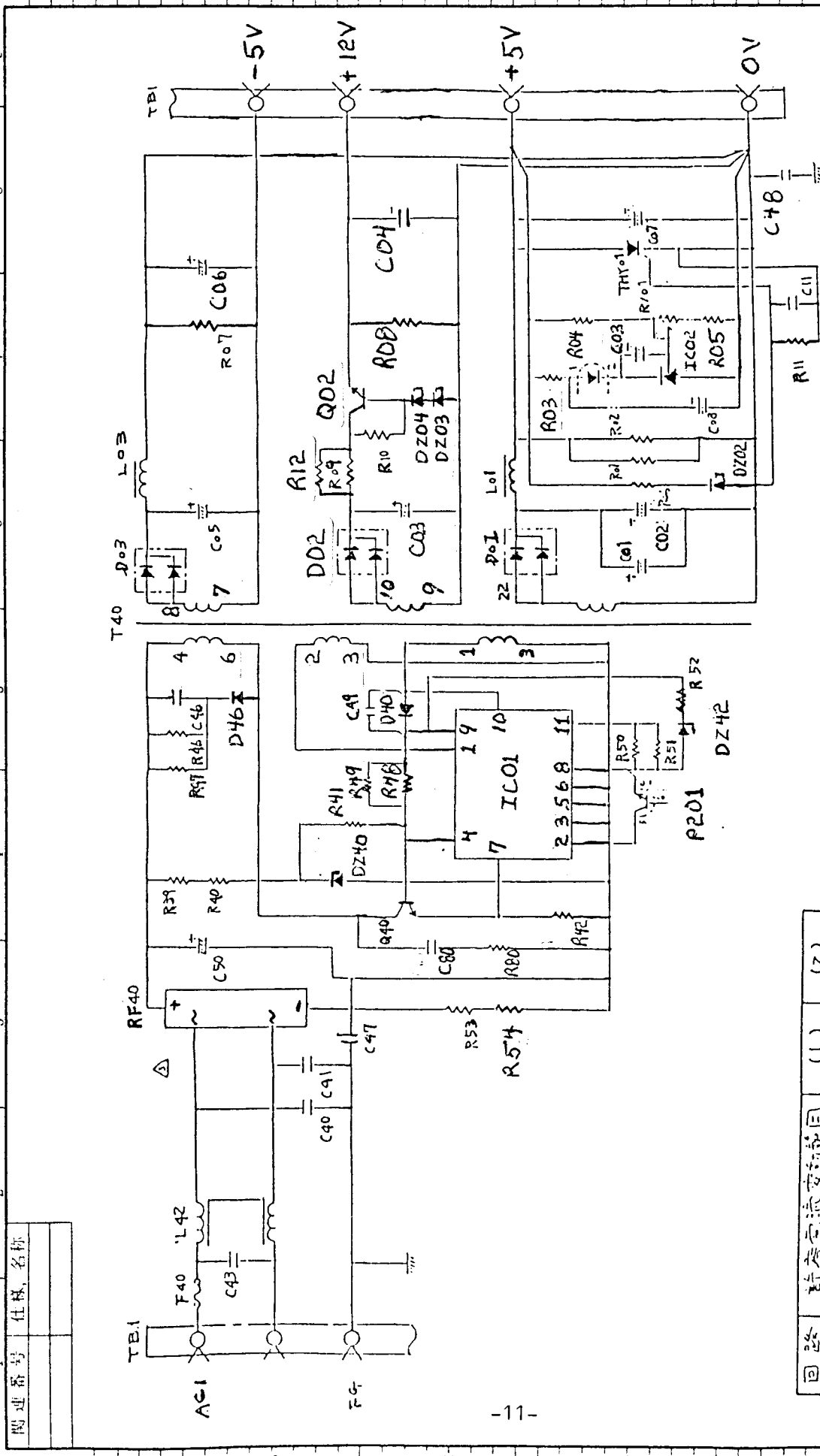
B		A
	1	DB0
	2	DB1
	3	DB2
	4	DB3
	5	DB4
GND	6	DB5
	7	DB6
	8	DB7
	9	GND
	10	
	11	
SCR G	12	
$\overline{\text{C8CS}}$	13	AB0
$\overline{\text{D8CS}}$	14	AB1
$\phi \text{ SC}$	15	AB2
SCR D	16	AB3
SCR E	17	AB4
SCR F	18	AB5
$\overline{\text{ACL 2}}$	19	AB6
$\overline{\text{OKOUT}}$	20	AB7
$\overline{\text{AKB}}$	21	AB8
$\overline{\text{RQB}}$	22	AB9
$\overline{\text{BLCNTEN}}$	23	AB10
$\overline{\text{WRB}}$	24	AB11
$\overline{\text{RDB}}$	25	AB12

JOINT CONNECTOR

85605 - 连接器 - 1 - 2/2



图号	名称



回路	許容電流交換率	(1)	(2)
+5V	1A ~	7A	6A
+12V	0.2A ~	1.5A	1.5A
-5V	0.2A ~	0.5A	0.5A

但し出力容量は T40L 2.50W

C49は実装しない。

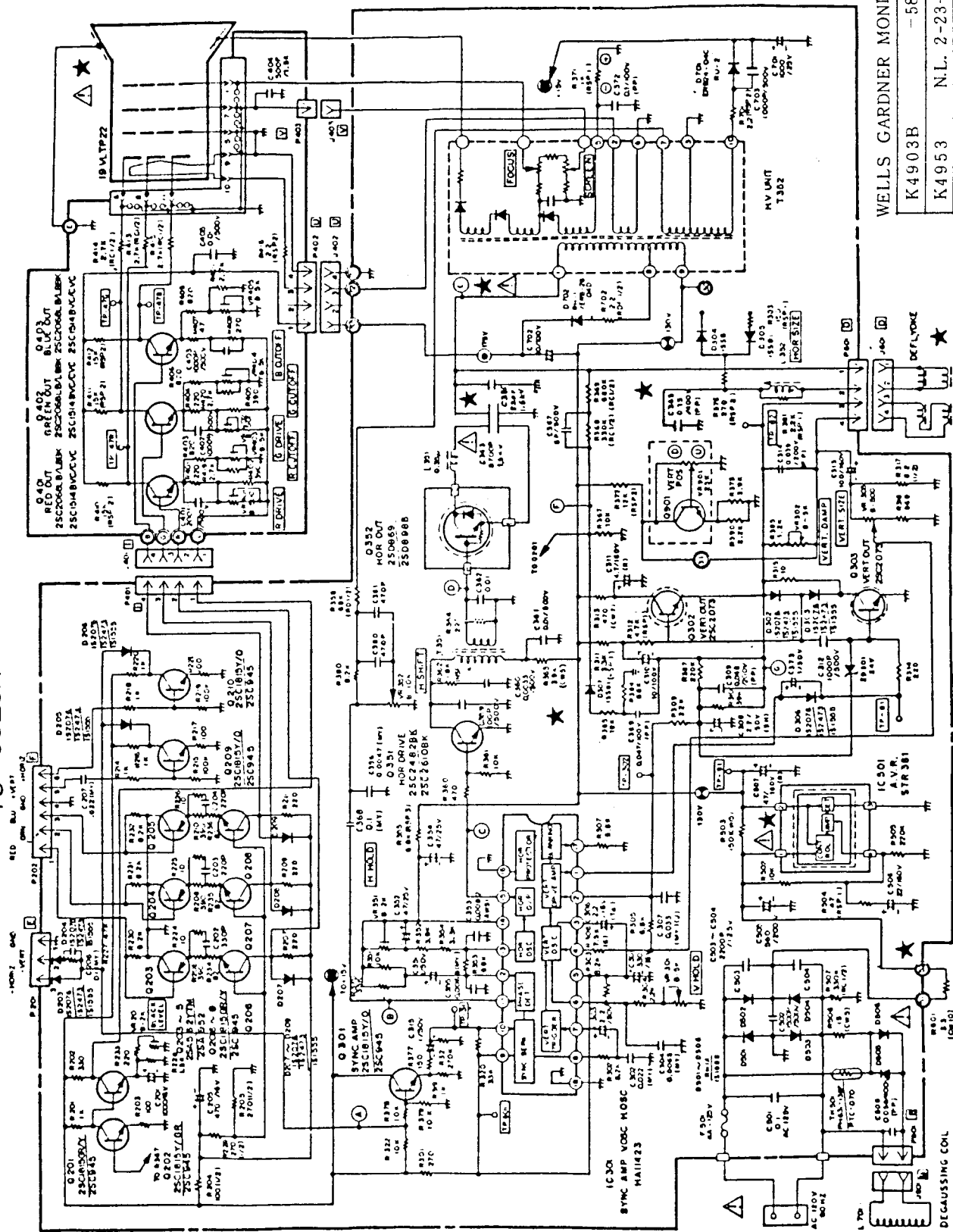
名称 KGD23SMKII-3ch
POWER SUPPLY
図番 WM-830066

POWER SUPPLY Model KGD23SMK-II

Item	Parts Nos	Description	Specification	Q'ty	Manufacturer
1.	F40	Fuse	GHS 5	1	Nagasawa
2.	T40	Transformer		1	Shindengen
3.	L42	Common Mode Choke	UF327S 602YIRO	1	TDK
4.	Q40	Transistor	2SC3306	1	Toshiba
5.	RF40	Bridge Rectifier	S3WB 40	1	Shindengen
6.	D40	Diode	V19C	1	Hitachi
7.	D46	Diode	V19G	1	Hitachi
8.	DZ40	Zener Diode	HZ16-1	1	Hitachi
9.	IC01	HB IC	RHD01-2	1	Nichi-con
10.	PC01	Photo Coupler	PS 2018	1	Nichiden (NEC)
11.	C40, 41	Ceramic Capacitor	DE7090B 102KVAI 125V 1,000pf	2	Murata
12.	C47	Ceramic Capacitor	- ditto -	1	Murata
13.	C80	Ceramic Capacitor	DE0707B 681K 2KV DC 680p	1	Murata
14.	C42	Film Capacitor			
15.	C43	Film Capacitor	QXM2G 104KT 400V 0.1 μ f	1	Nichi-con
16.	C46	Film Capacitor	ECQ-E2 104KS 200V 0.1 μ f	1	Matsushita
17.	C48	Film Capacitor	ECQ-E6 473KZ 400V 0.047 μ f	1	Matsushita
18.	C50	Electrode Capacitor	LJA2D471 THSCBV 200V 470 μ f	1	Nichi-con
19.	R37, 40	Resistor	ERG-1SJ 393H	2	Matsushita
20.	R47, 46	Resistor	ERG-2SJ 223H	2	Matsushita
21.	R48, 49	Resistor	ERG-3SJ 560H	2	Matsushita
22.	R80	Resistor	ERG-2SJ 330H	1	Matsushita
23.	R42	Metal Plate Resistor	MFC 70 0.22 ohm	1	Fukushima Futaba
24.	R53, 54	Coil Resistor	MNS 05N 1ROJ	2	Micron
25.	R41	Carbon Resistor	1/4W 10K ohm	1	
26.	R50	Carbon Resistor	1/4W 680 ohm	1	
26.	R51	Carbon Resistor	1/4W 12K ohm	1	
28.	R52	Carbon Resistor			
29.	L01	Choke	RD1113A 3J 3uH 10A	1	Hokkoh
30.	L03	Choke	RD810A 3F 3uH 5A	1	Hokkoh
31.	Q02	Transistor	2SD1022 or 2SD1308	1	Shindengen
32.	D01	Diode	ESAC 83-004	1	Fuji Denki
33.	D02	Diode	5CH2M or ESAC25-020	1	Fuji Denki or NEC
34.	D03	Diode	- ditto -	1	Fuji Denki
35.	DZ02	Zener Diode	HZ 6B-2	1	Hitachi
36.	DZ03	Zener Diode	HZ 12B-1L	1	Hitachi
37.	THY01	Thyristor	5PIM or SF5B41	1	NEC or Toshiba
38.	IC02	I.C.	TL431 CLP	1	T.I.
39.	C01, 02	Capacitor	SXA 16VB 2200	2	Nichi-Chemi
40.	C03, 05	Capacitor	CEUSM 1V 471 35V 470 μ f	2	Nichi-con

Item	Parts Nos	Description	Specification	Q'ty	Manufacturer
41.	C04	Capacitor	CEUSM 1E 331 25V 330 μ F	1	Nichi-con
42.	C07, 06	Capacitor	CEUSM 1E 331 25V 330 μ f	2	Nichi-con
43.	C08	Capacitor	CEUSM 1H 010	1	Nichi-con 50V 1 μ f
44.	C09	Capacitor	CEUSM 1V 4R7 35V 4.7 μ f	1	Nichi-con
45.	C11	Film Capacitor	TDY1H/2A 104K 50V 0.1 μ f	1	Nichi-con
46.	R01, 13	Resistor	ERG 3SJ 680H	2	Matsushita 3W 68 Ω
47.	R08	Resistor	ERG3SJ 271H	1	Matsushita 3W 270 Ω
48.	R09	Resistor	ERG 2SJ R68 2W 0.68 ohm	1	Matsushita
49.	R10	Resistor	ERG 1SJ 271 1W 270 ohm	1	Matsushita
50.	RV01	Volume	EVM38GA 00B52 500 ohm	1	Matsushita
51.	R03	Carbon Resistor	1/4W 68 ohm	1	
52.	R04, 11	Carbon Resistor	1/4W 560 ohm	2	
53.	R05	Carbon Resistor	1/4W 390 ohm	1	
54.	R06	Carbon Resistor	1/4W 15 ohm	1	
55.	R02				
56.		P.C. Board		1	
57.	TB1	Terminal Strip		1	
58.		Terminal	Faston	7	

19" COLOR GAME MONITOR SCHEMATIC DIAGRAM

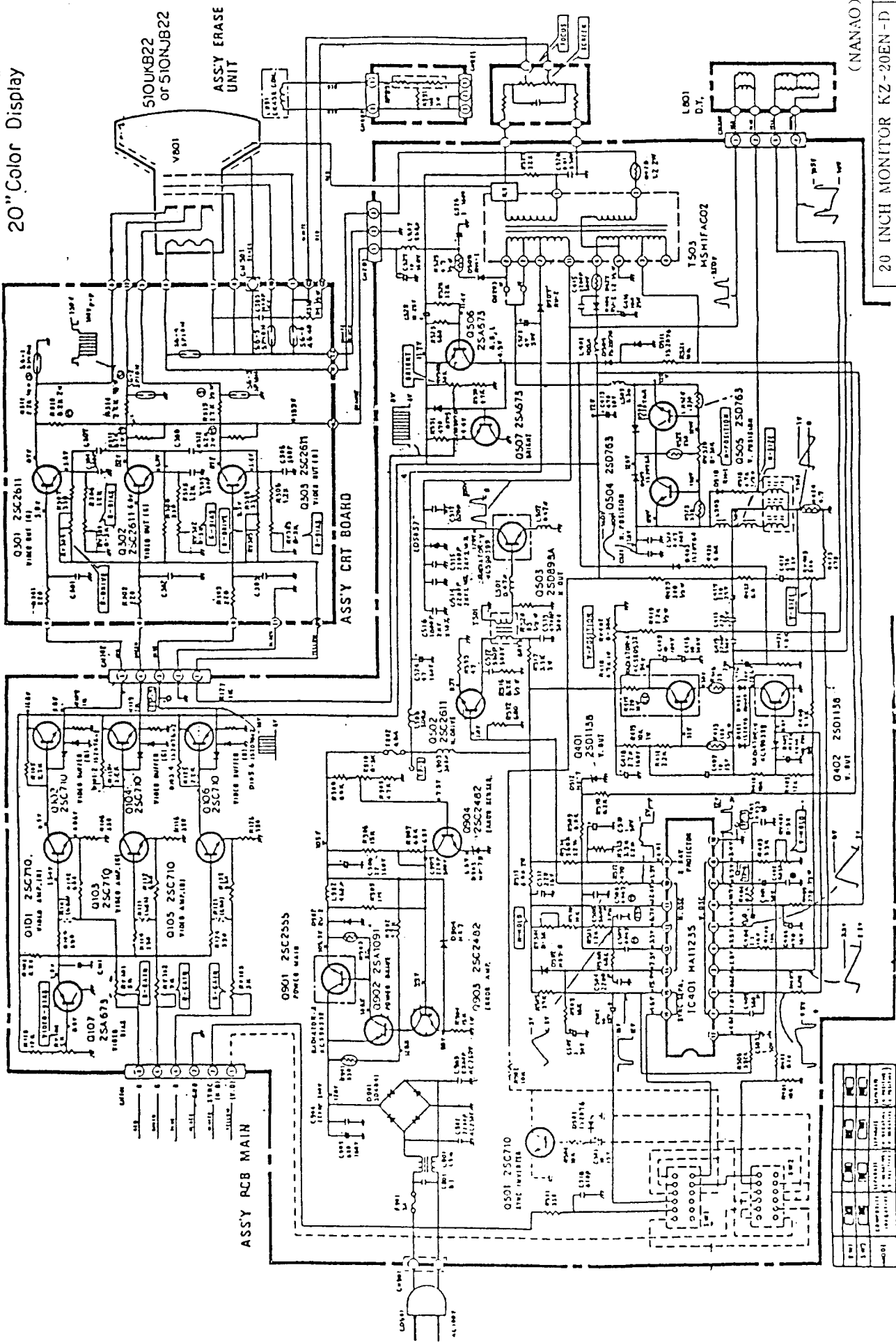


WELLS GARDNER MONITOR

K4903B
K4953

-5844
N.L. 2-23-84

20" Color Display



510UKB22
or 510NJB22

ASSY ERASE
UNIT

ASSY CRT BOARD

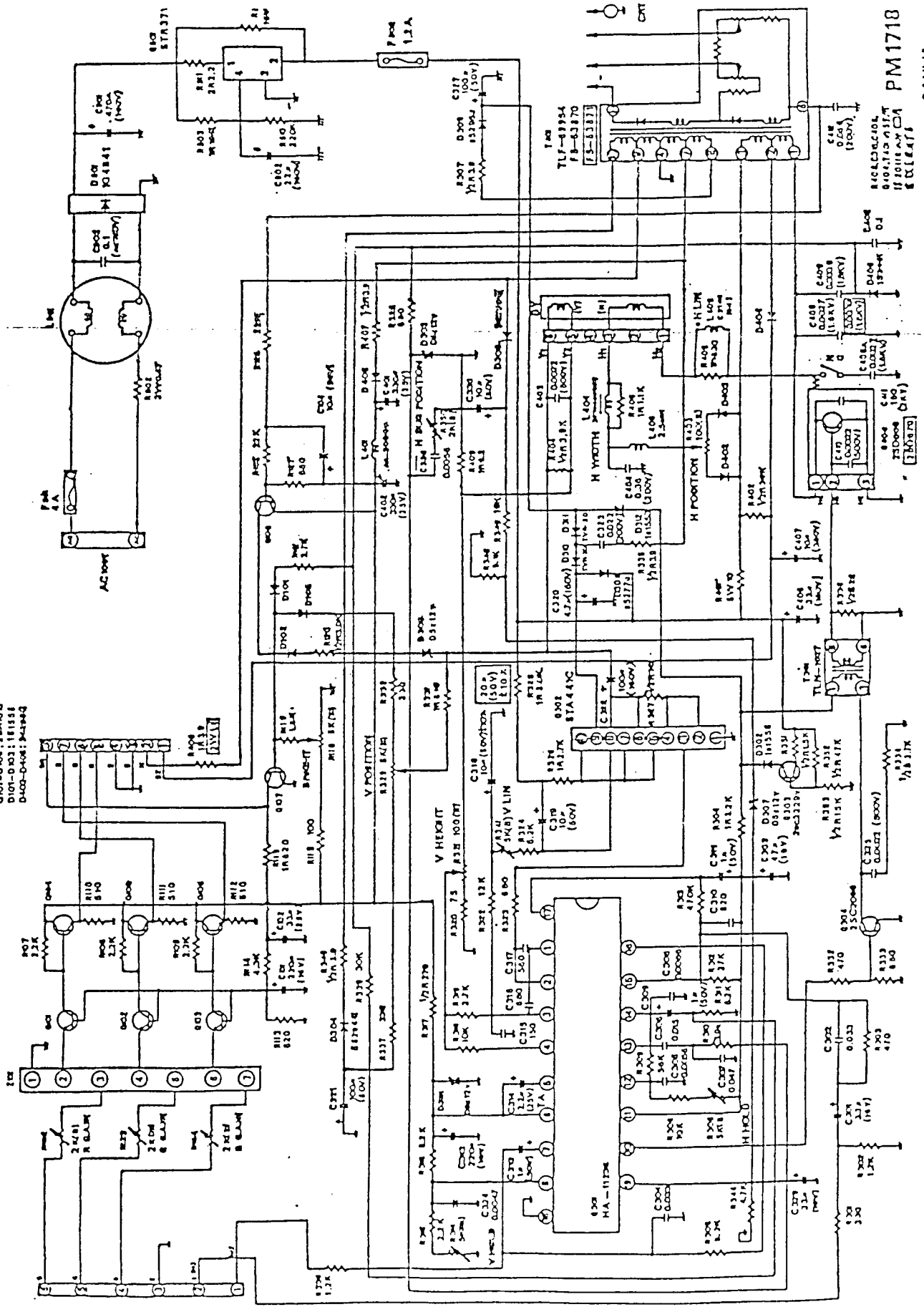
ASSY RCB MAIN

(NANA0)

20 INCH MONITOR KZ-20EN-D

K-10364

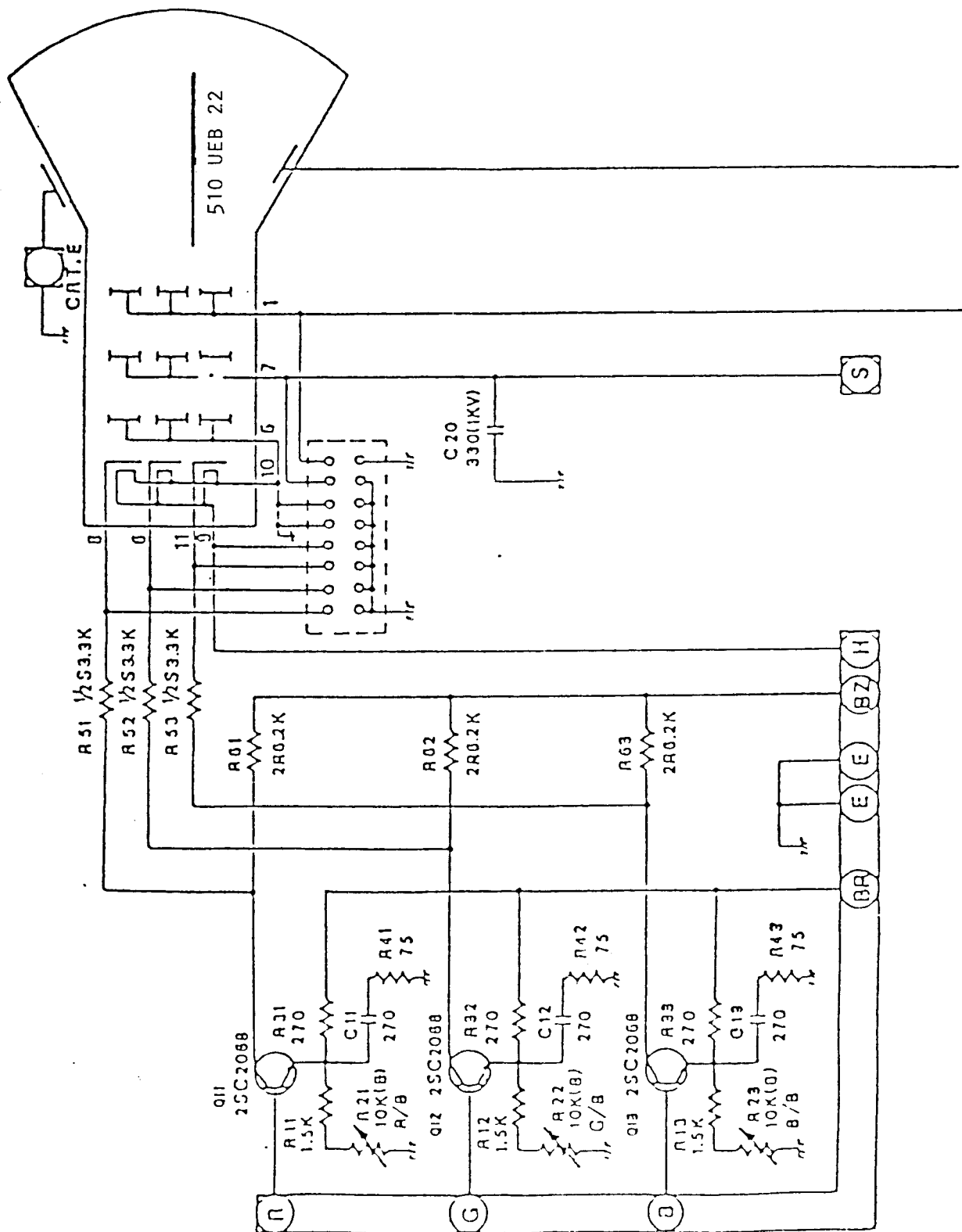
D107-D108: 22PC1816.
 D107-D108: 22AA00
 D107-D108: 181818
 D107-D108: 2-3-4-5

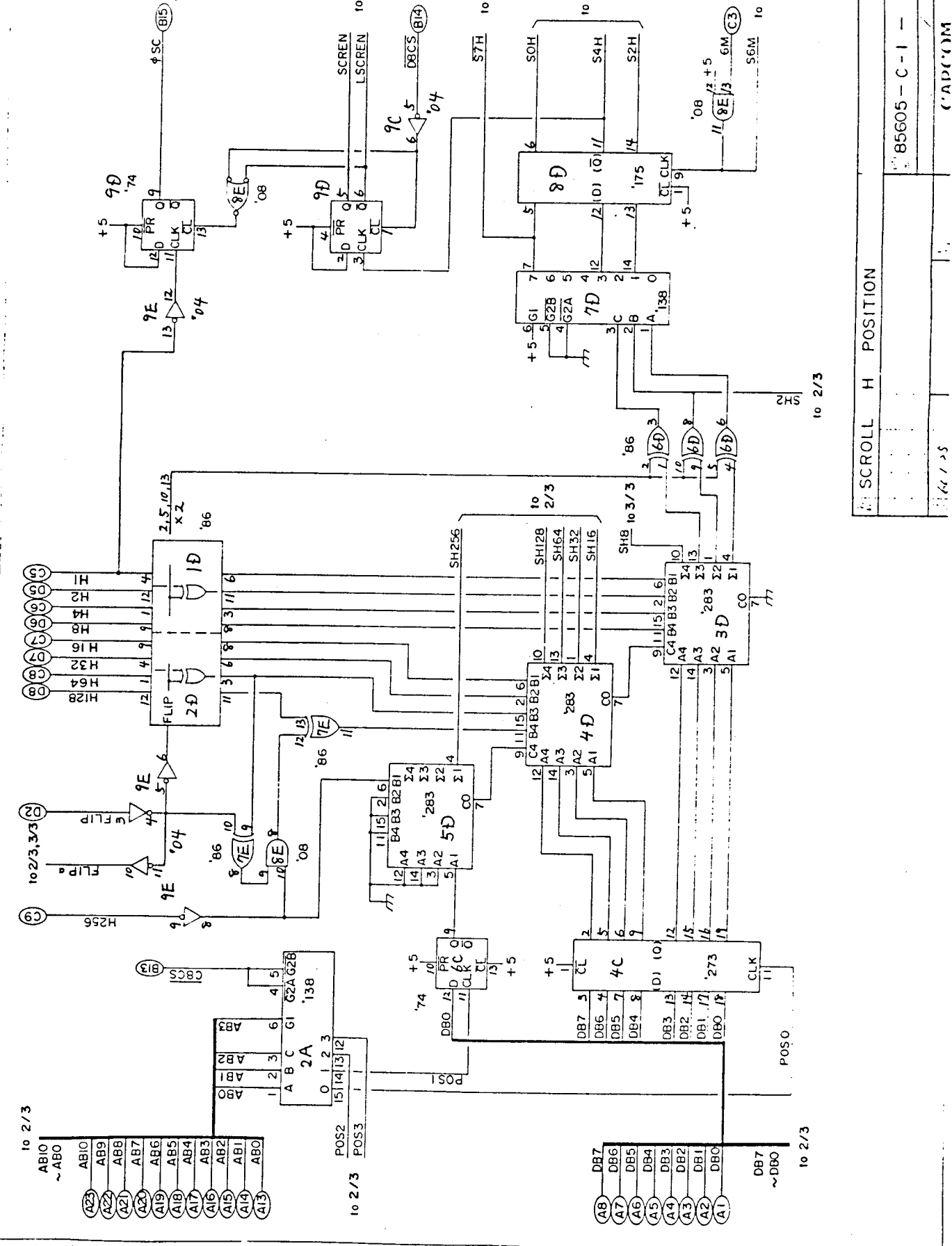


RECORDER
 010110117
 110111111
 110111111
 110111111

PM1718

SANWA

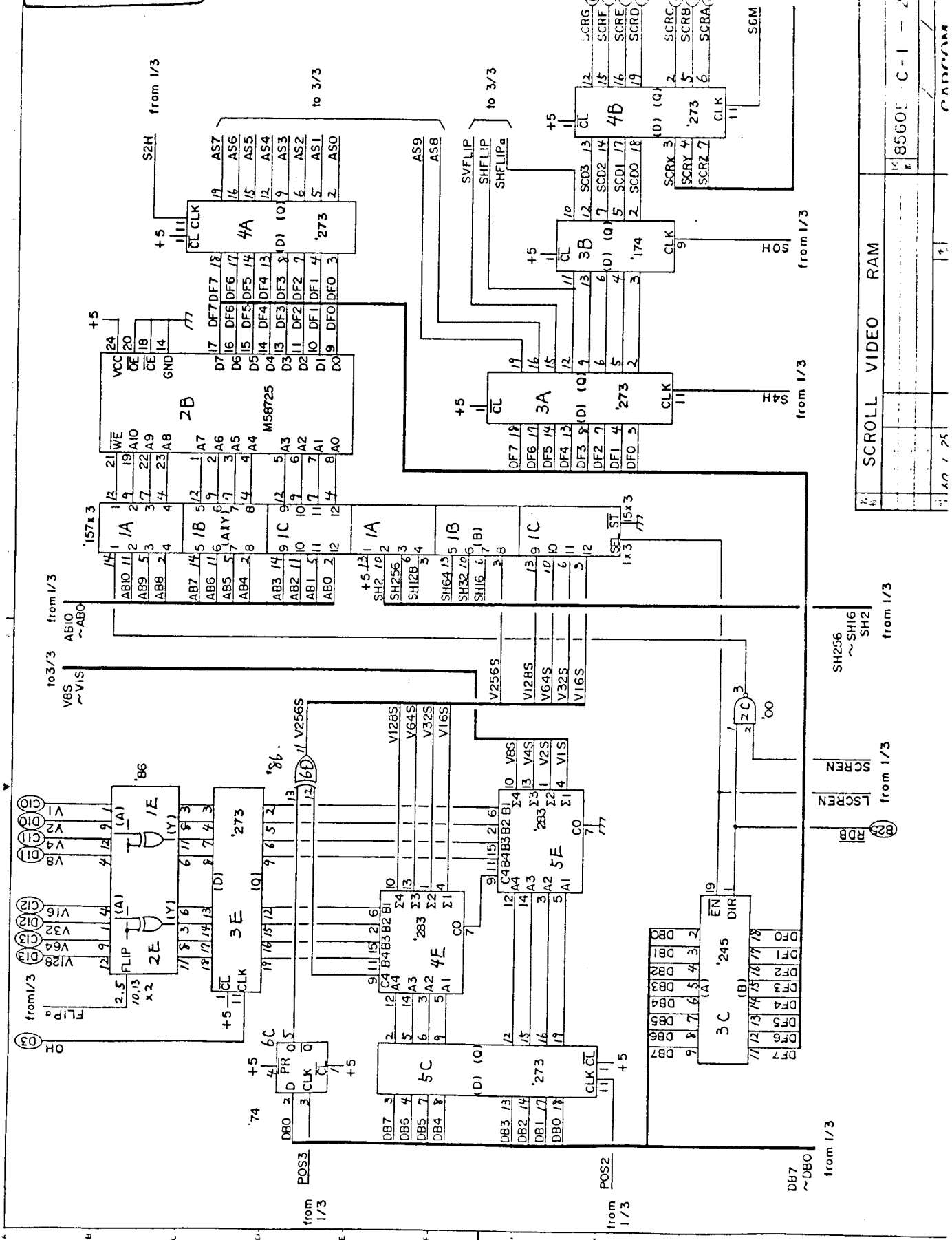




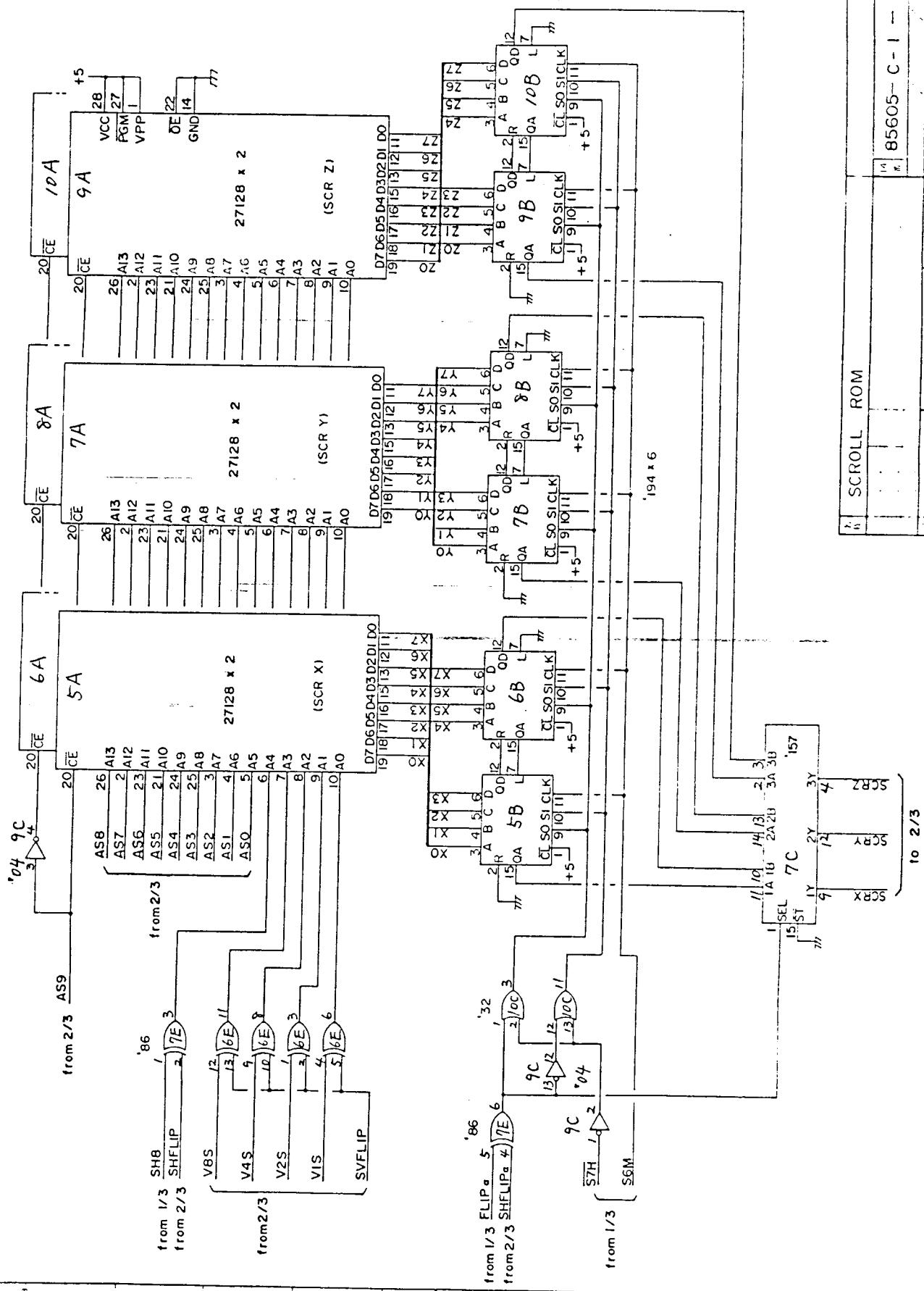
SCROLL H POSITION

85605-C-1 - 1/3

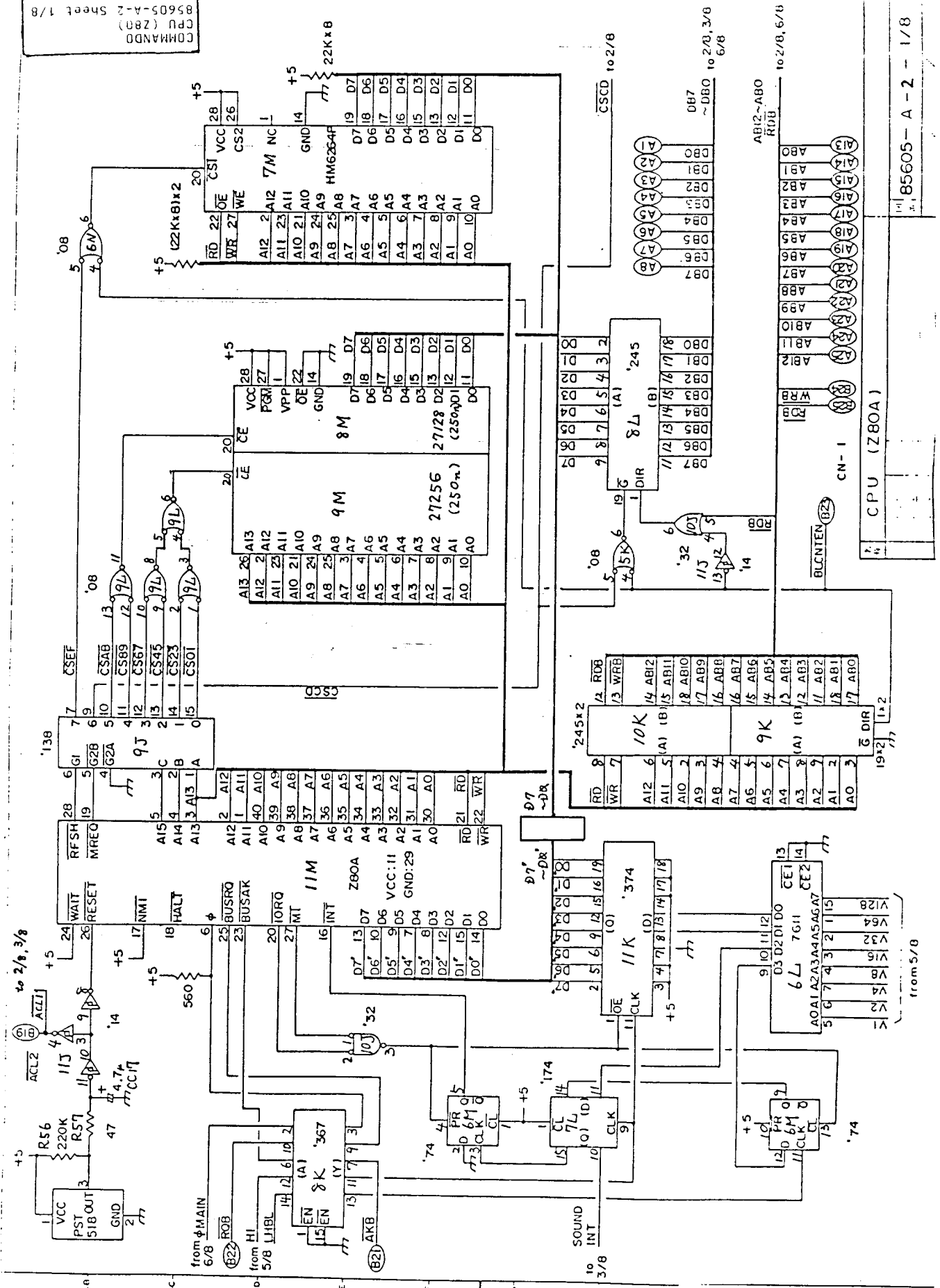
COMMANDO

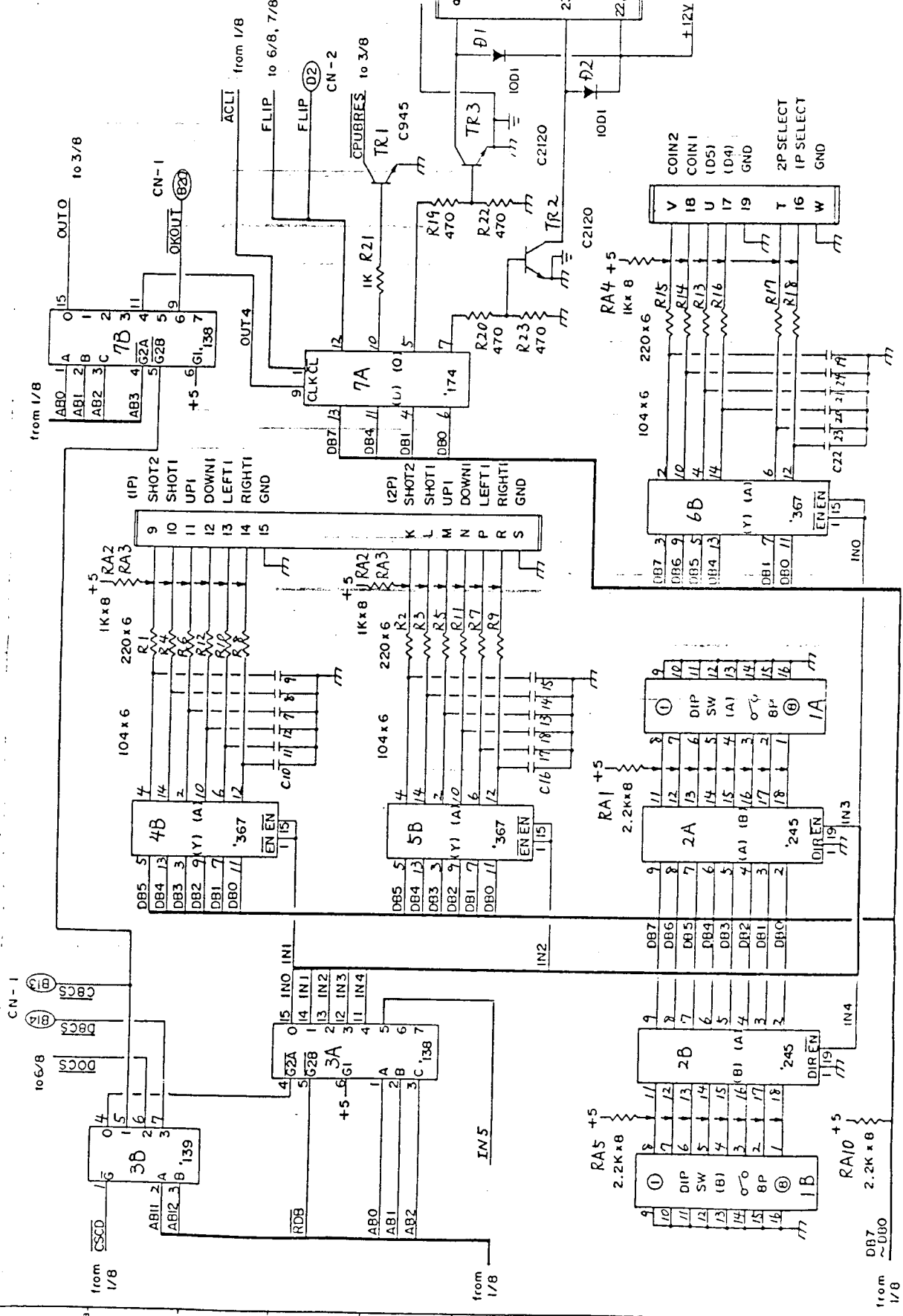


Pin	Signal	Source
1	VBS	to 3/3
2	VIBS	to 3/3
3	V256S	to 3/3
4	V128S	to 3/3
5	V64S	to 3/3
6	V32S	to 3/3
7	V16S	to 3/3
8	V8S	to 3/3
9	V4S	to 3/3
10	V2S	to 3/3
11	V1S	to 3/3
12	SH256	to 3/3
13	SH128	to 3/3
14	SH64	to 3/3
15	SH32	to 3/3
16	SH16	to 3/3
17	SH8	to 3/3
18	SH4	to 3/3
19	SH2	to 3/3
20	SH1	to 3/3
21	SH256	to 3/3
22	SH128	to 3/3
23	SH64	to 3/3
24	SH32	to 3/3
25	SH16	to 3/3
26	SH8	to 3/3
27	SH4	to 3/3
28	SH2	to 3/3
29	SH1	to 3/3
30	SH256	to 3/3
31	SH128	to 3/3
32	SH64	to 3/3
33	SH32	to 3/3
34	SH16	to 3/3
35	SH8	to 3/3
36	SH4	to 3/3
37	SH2	to 3/3
38	SH1	to 3/3
39	SH256	to 3/3
40	SH128	to 3/3
41	SH64	to 3/3
42	SH32	to 3/3
43	SH16	to 3/3
44	SH8	to 3/3
45	SH4	to 3/3
46	SH2	to 3/3
47	SH1	to 3/3
48	SH256	to 3/3
49	SH128	to 3/3
50	SH64	to 3/3
51	SH32	to 3/3
52	SH16	to 3/3
53	SH8	to 3/3
54	SH4	to 3/3
55	SH2	to 3/3
56	SH1	to 3/3
57	SH256	to 3/3
58	SH128	to 3/3
59	SH64	to 3/3
60	SH32	to 3/3
61	SH16	to 3/3
62	SH8	to 3/3
63	SH4	to 3/3
64	SH2	to 3/3
65	SH1	to 3/3
66	SH256	to 3/3
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70	SH16	to 3/3
71	SH8	to 3/3
72	SH4	to 3/3
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74	SH1	to 3/3
75	SH256	to 3/3
76	SH128	to 3/3
77	SH64	to 3/3
78	SH32	to 3/3
79	SH16	to 3/3
80	SH8	to 3/3
81	SH4	to 3/3
82	SH2	to 3/3
83	SH1	to 3/3
84	SH256	to 3/3
85	SH128	to 3/3
86	SH64	to 3/3
87	SH32	to 3/3
88	SH16	to 3/3
89	SH8	to 3/3
90	SH4	to 3/3
91	SH2	to 3/3
92	SH1	to 3/3
93	SH256	to 3/3
94	SH128	to 3/3
95	SH64	to 3/3
96	SH32	to 3/3
97	SH16	to 3/3
98	SH8	to 3/3
99	SH4	to 3/3
100	SH2	to 3/3
101	SH1	to 3/3
102	SH256	to 3/3
103	SH128	to 3/3
104	SH64	to 3/3
105	SH32	to 3/3
106	SH16	to 3/3
107	SH8	to 3/3
108	SH4	to 3/3
109	SH2	to 3/3
110	SH1	to 3/3
111	SH256	to 3/3
112	SH128	to 3/3
113	SH64	to 3/3
114	SH32	to 3/3
115	SH16	to 3/3
116	SH8	to 3/3
117	SH4	to 3/3
118	SH2	to 3/3
119	SH1	to 3/3
120	SH256	to 3/3
121	SH128	to 3/3
122	SH64	to 3/3
123	SH32	to 3/3
124	SH16	to 3/3
125	SH8	to 3/3
126	SH4	to 3/3
127	SH2	to 3/3
128	SH1	to 3/3
129	SH256	to 3/3
130	SH128	to 3/3
131	SH64	to 3/3
132	SH32	to 3/3
133	SH16	to 3/3
134	SH8	to 3/3
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137	SH1	to 3/3
138	SH256	to 3/3
139	SH128	to 3/3
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141	SH32	to 3/3
142	SH16	to 3/3
143	SH8	to 3/3
144	SH4	to 3/3
145	SH2	to 3/3
146	SH1	to 3/3
147	SH256	to 3/3
148	SH128	to 3/3
149	SH64	to 3/3
150	SH32	to 3/3
151	SH16	to 3/3
152	SH8	to 3/3
153	SH4	to 3/3
154	SH2	to 3/3
155	SH1	to 3/3
156	SH256	to 3/3
157	SH128	to 3/3
158	SH64	to 3/3
159	SH32	to 3/3
160	SH16	to 3/3
161	SH8	to 3/3
162	SH4	to 3/3
163	SH2	to 3/3
164	SH1	to 3/3
165	SH256	to 3/3
166	SH128	to 3/3
167	SH64	to 3/3
168	SH32	to 3/3
169	SH16	to 3/3
170	SH8	to 3/3
171	SH4	to 3/3
172	SH2	to 3/3
173	SH1	to 3/3
174	SH256	to 3/3
175	SH128	to 3/3
176	SH64	to 3/3
177	SH32	to 3/3
178	SH16	to 3/3
179	SH8	to 3/3
180	SH4	to 3/3
181	SH2	to 3/3
182	SH1	to 3/3
183	SH256	to 3/3
184	SH128	to 3/3
185	SH64	to 3/3
186	SH32	to 3/3
187	SH16	to 3/3
188	SH8	to 3/3
189	SH4	to 3/3
190	SH2	to 3/3
191	SH1	to 3/3
192	SH256	to 3/3
193	SH128	to 3/3
194	SH64	to 3/3
195	SH32	to 3/3
196	SH16	to 3/3
197	SH8	to 3/3
198	SH4	to 3/3
199	SH2	to 3/3
200	SH1	to 3/3

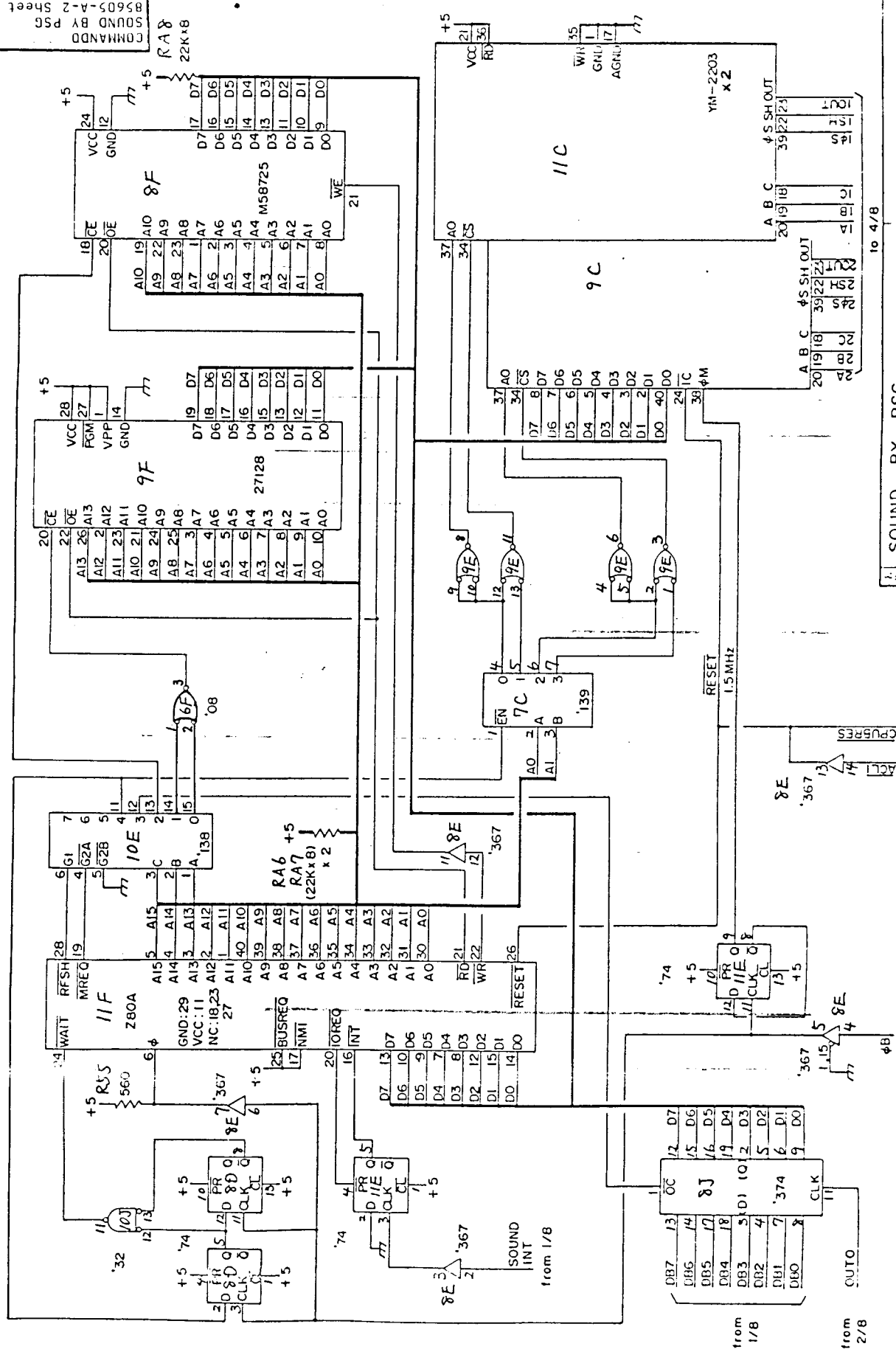


14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
85605-C-1 - 3/3														
COMMAND SCROLL ROM														





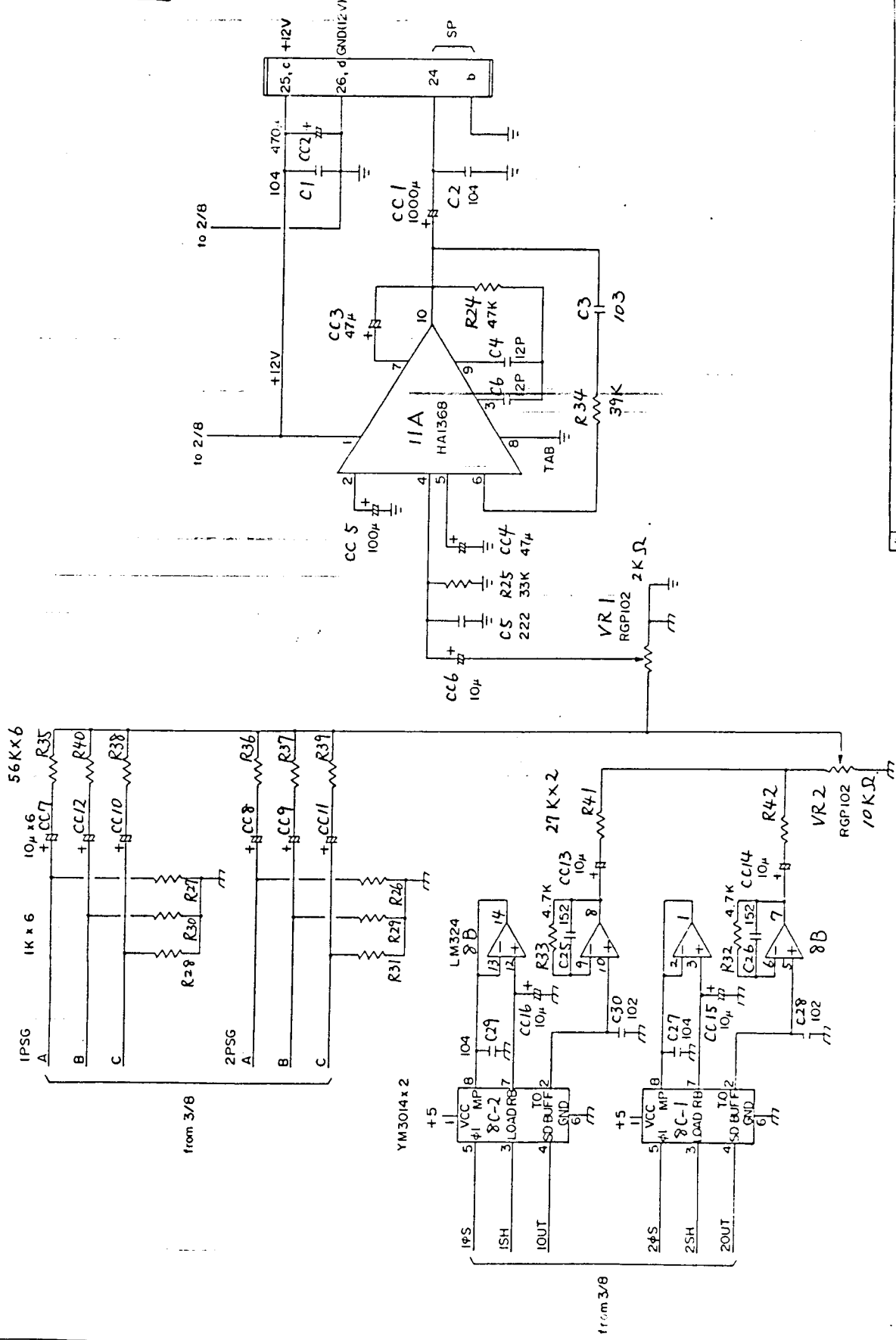
14	85605 A-2-2/8
I/O PORT	



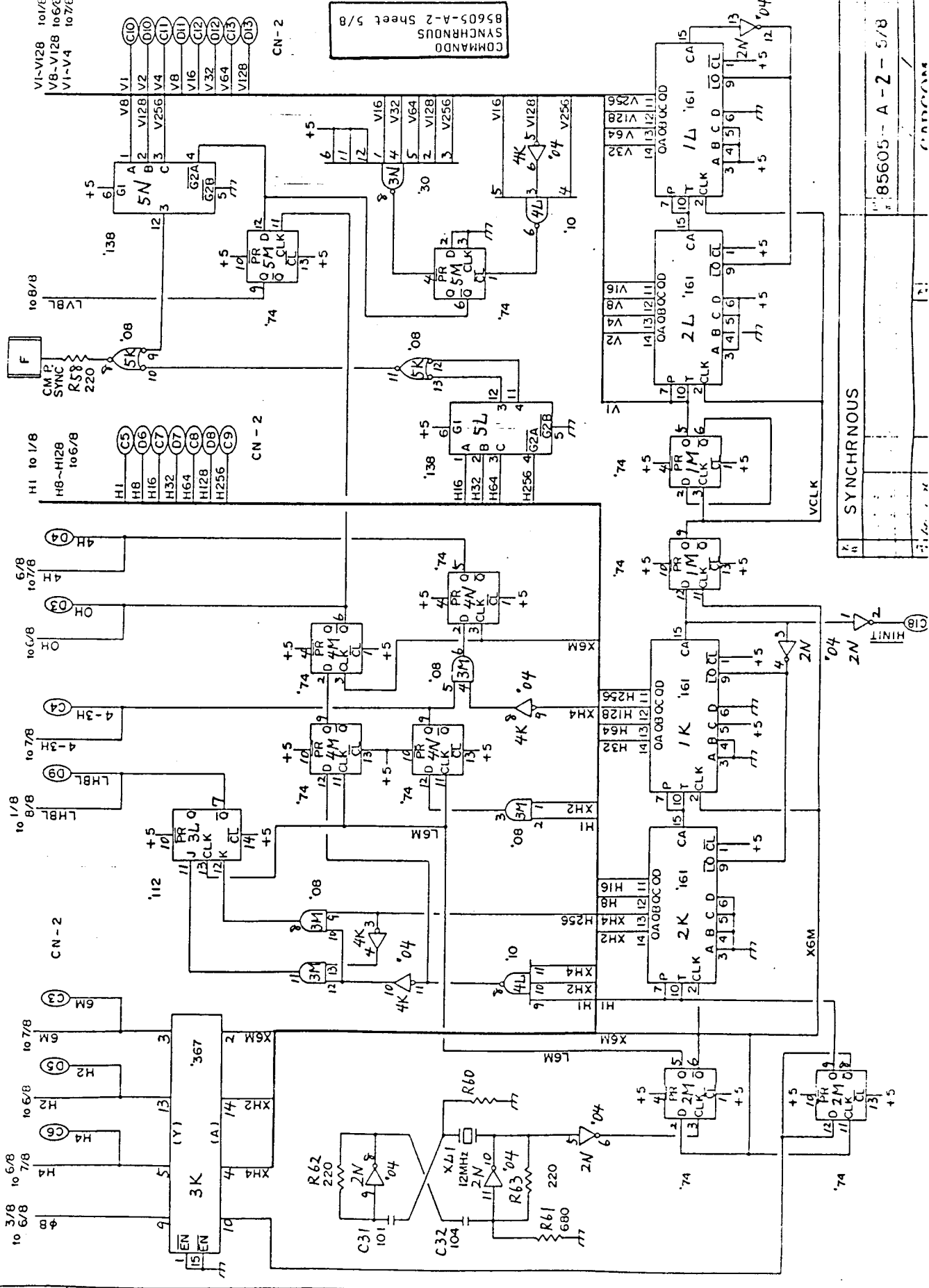
SOUND BY PSG

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

85605-A-2-3/8



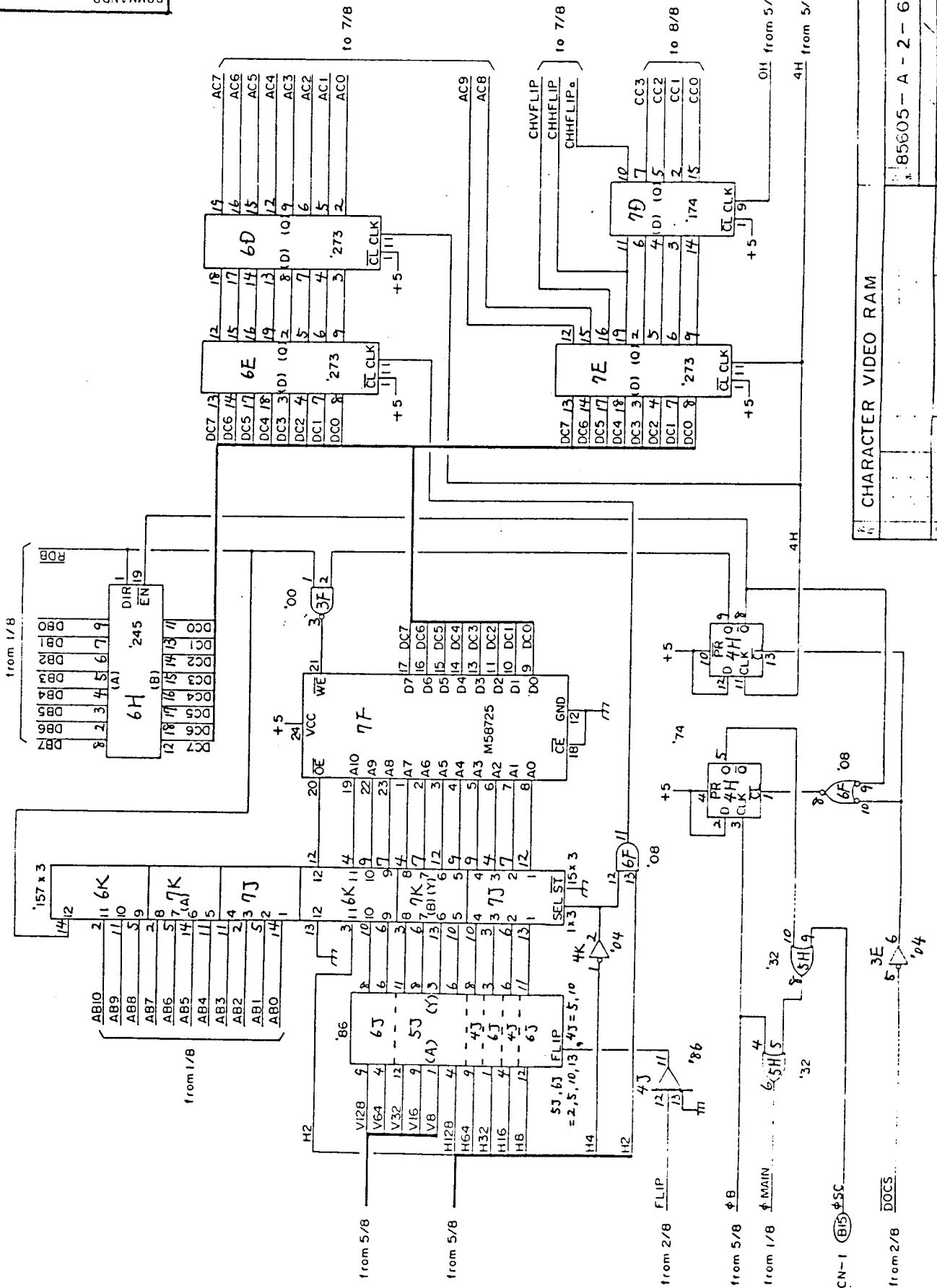
MAIN AMP	
10.4.1	R35 ~ R40 55K → 56K 替换值
4.1	R41, R42 33K → 27K 变更
85605-A-2-4/11	



COMMANDO
 SYNCHRONOUS
 85605-A-2 Sheet 5/8

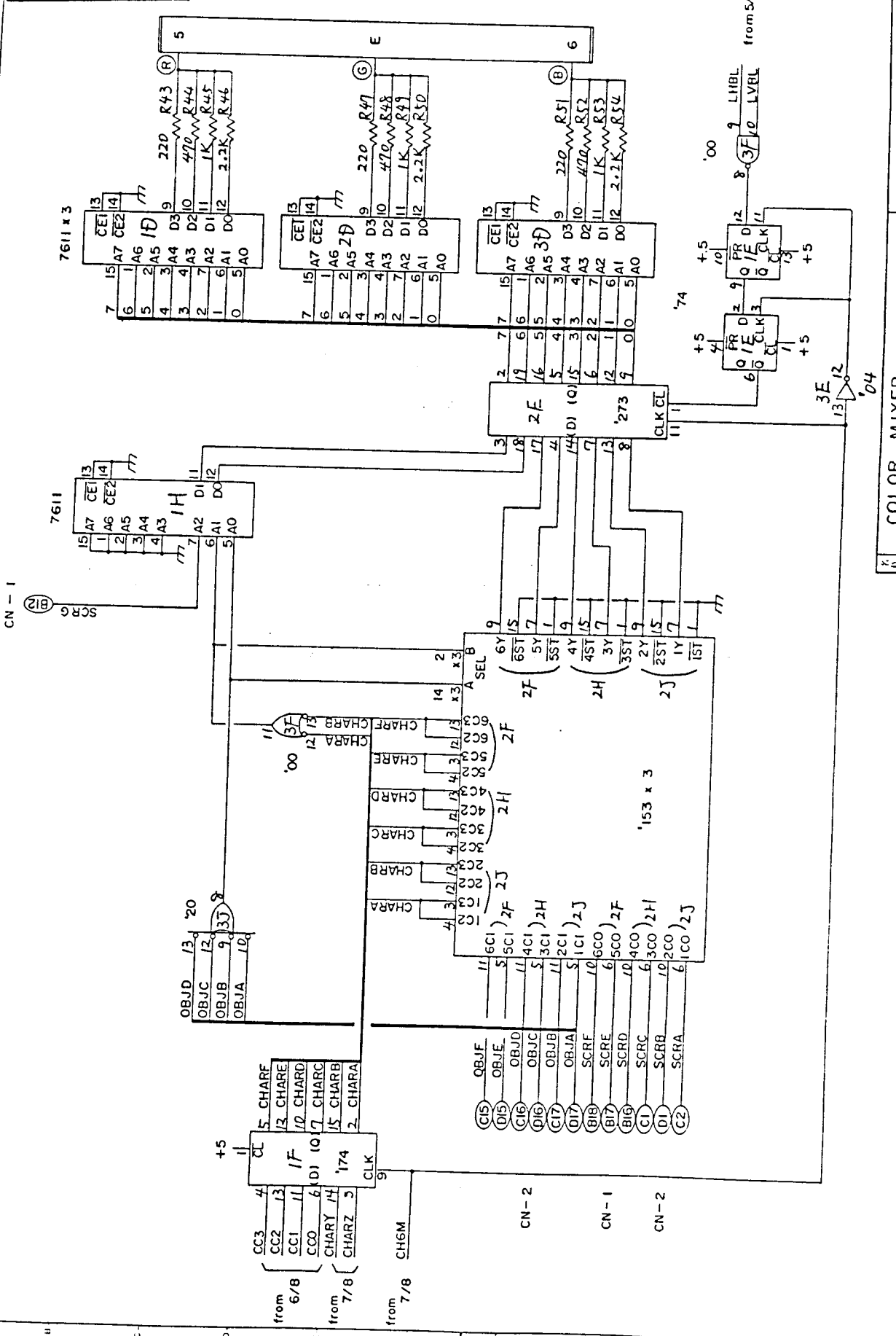
HI to 1/8
 H8-H128 106/8
 HI 10 1/8
 H1 H8 H16 H24 H32 H40 H48 H56 H64 H72 H80 H88 H96 H104 H112 H120 H128

V1-V128 101/8
 V8-V128 106/8
 V1-V4 107/8
 V1 V8 V16 V24 V32 V40 V48 V56 V64 V72 V80 V88 V96 V104 V112 V120 V128



CHARACTER VIDEO RAM

85605-A-2-6/8

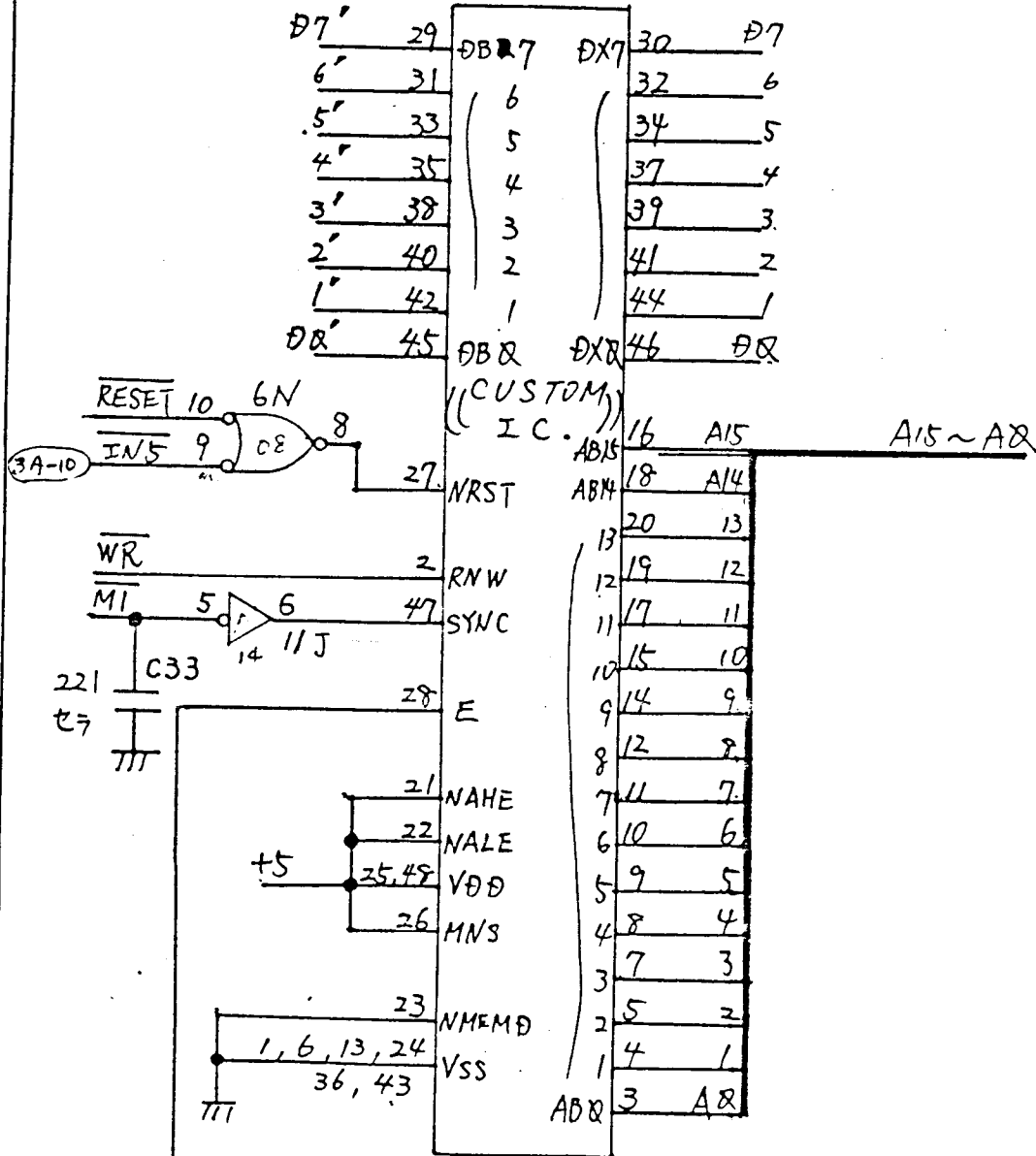


COLOR MIXER	
1	10
2	25
85606 - A - 2 - 8/8	

CPU側

10 M

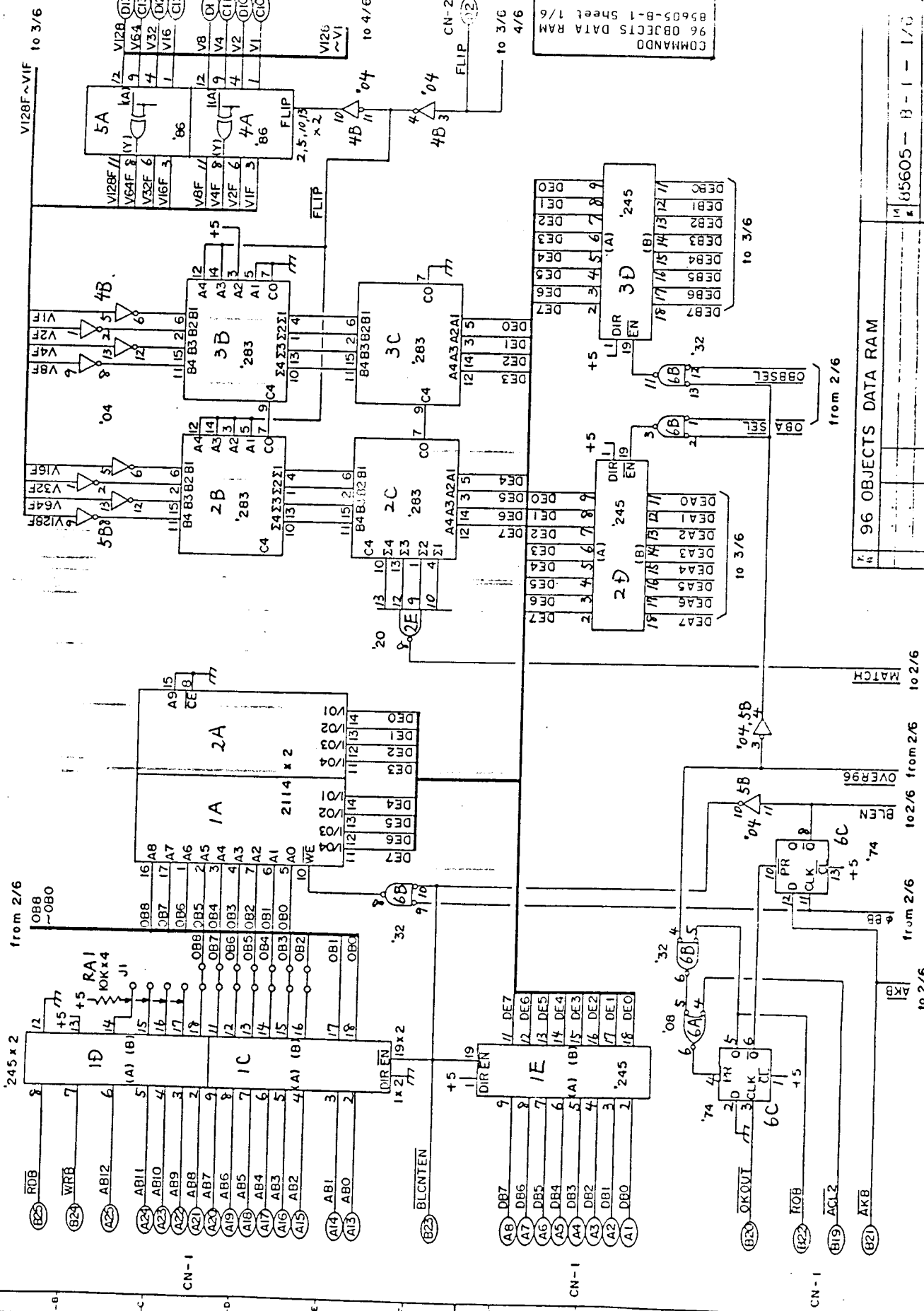
Memory側



(SIGNAL)

IN5 のみ 2/8 8')
(回番)

COMMANDO
CUSTOM CHIP
85605-A-2 Sheet 1/1



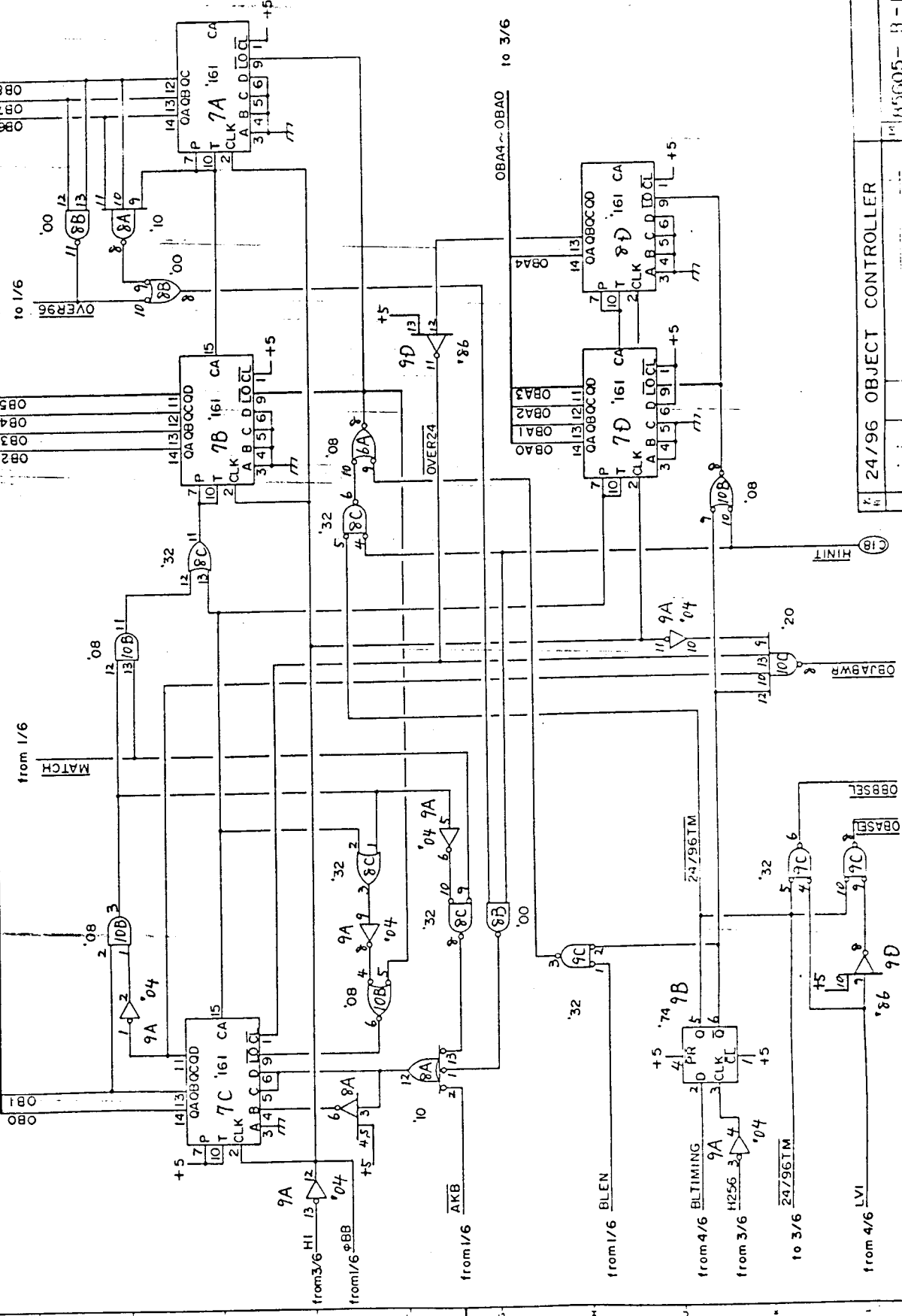
COMMANDO
96 OBJECTS DATA RAM
35605-B-1 Sheet 1/6

96 OBJECTS DATA RAM

35605-B-1-1/6

0B8~0B0 to 1/6
0B1,0B0 to 3/6

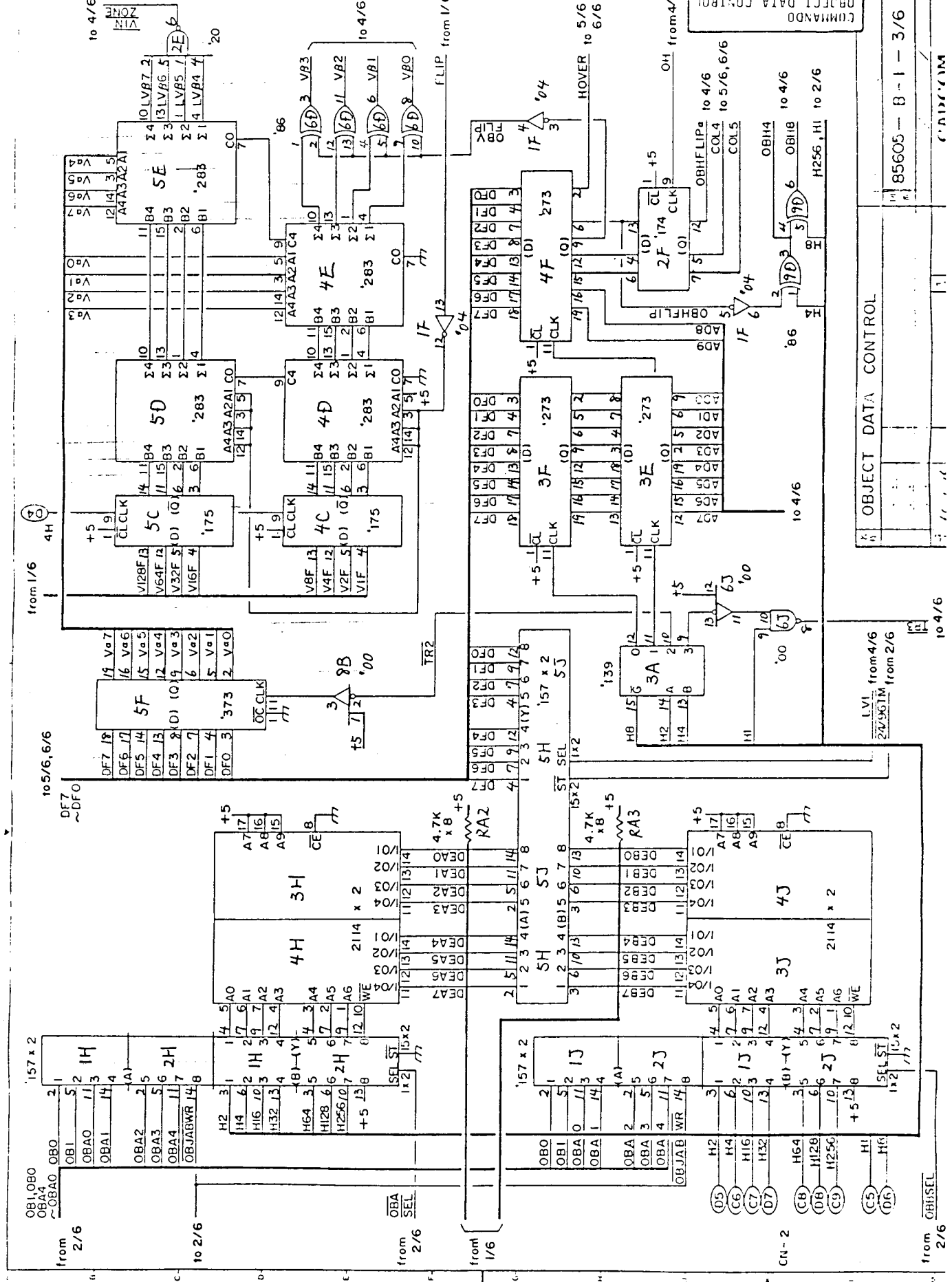
COMMANDS
24/96 OBJECT CONTROLLER
85605-B-1 Sheet 2/6



to 1/6
to 3/6
to 1/6, 3/6

24/96 OBJECT CONTROLLER	
85605-B-1	2/6
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
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83	83
84	84
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86	86
87	87
88	88
89	89
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91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

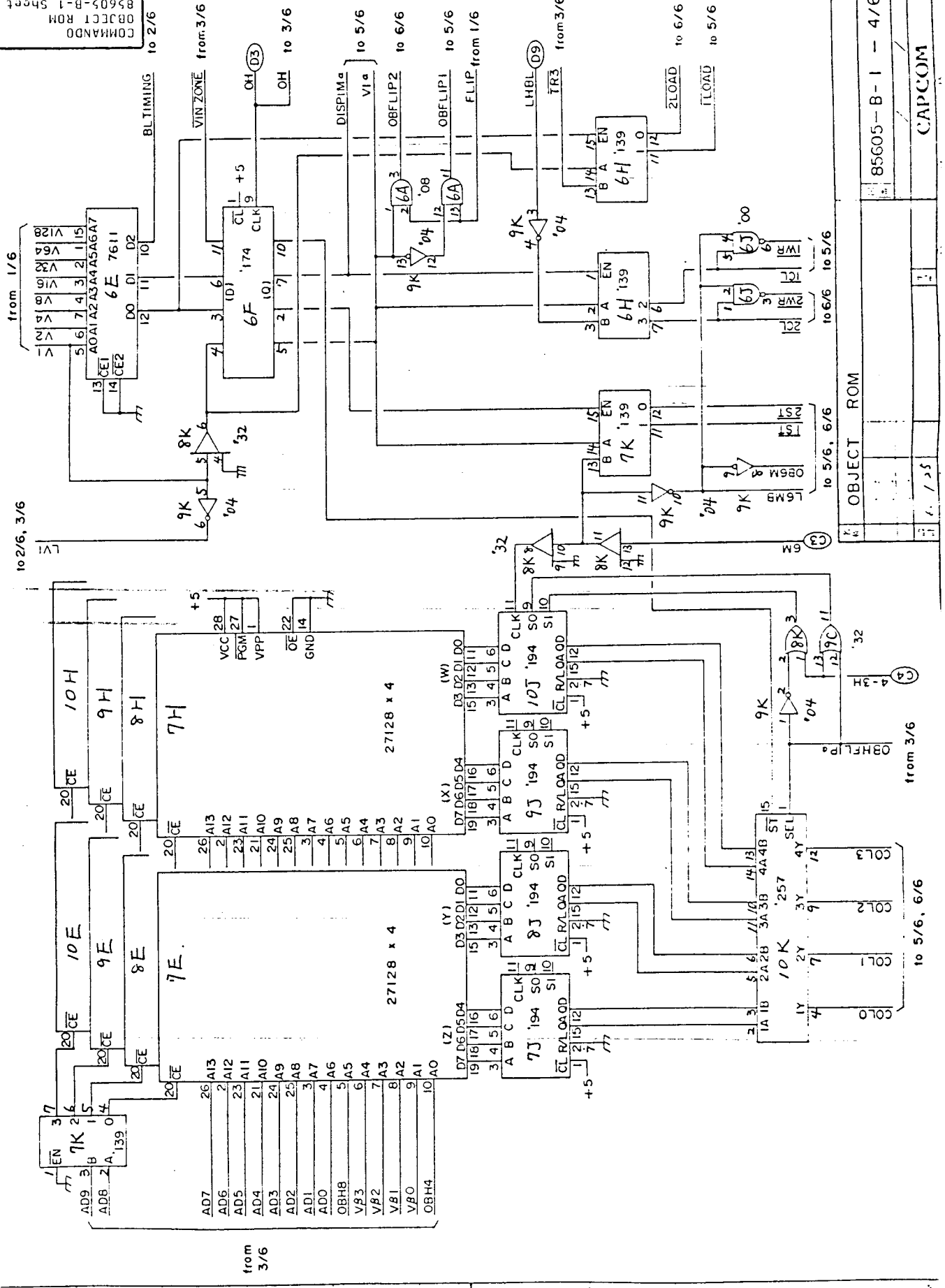
CAPCOM



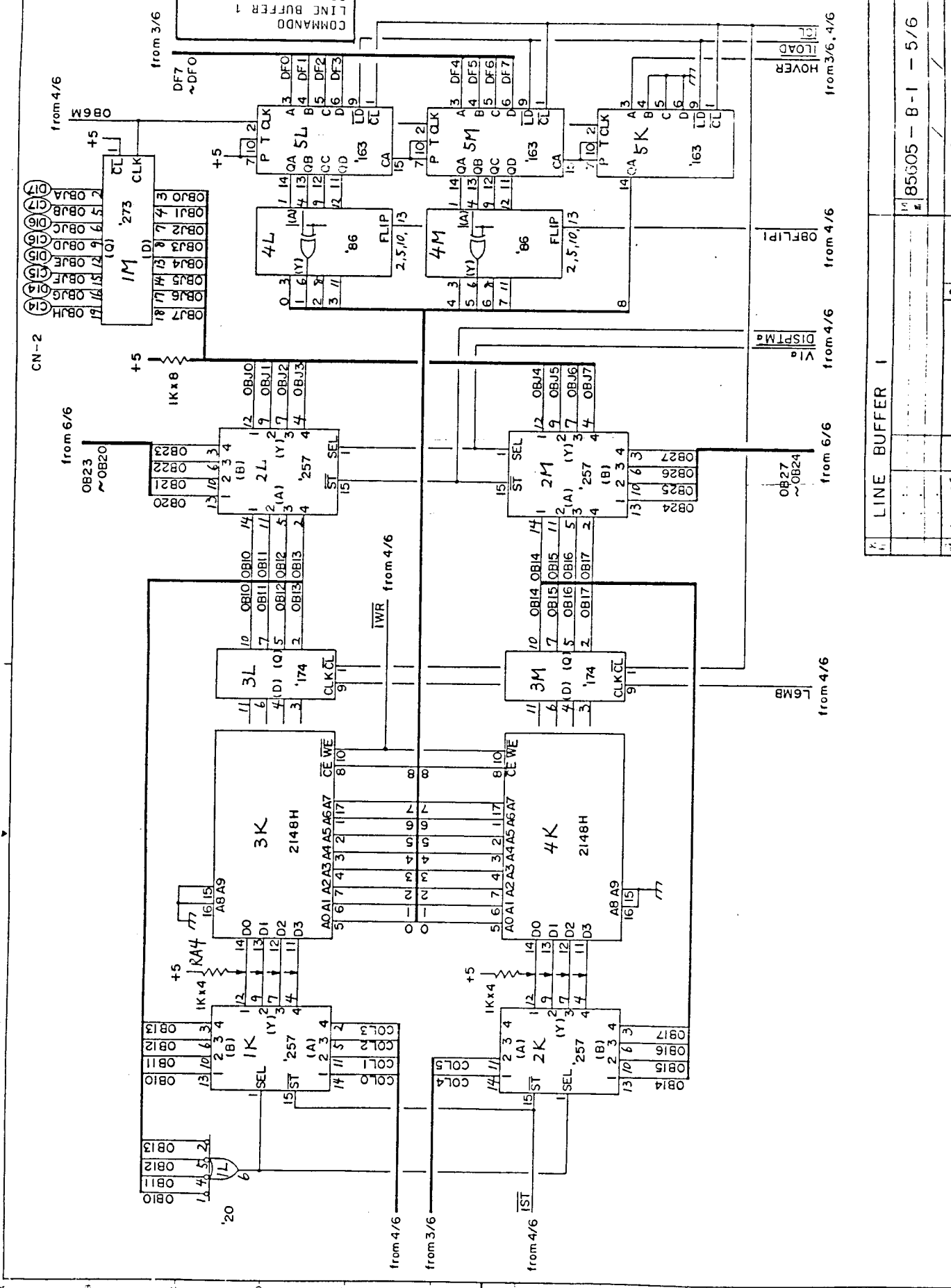
OBJECT DATA CONTROL	
1	85605-B-1-3/6

LVI from 4/6
24/561M from 2/6

from 2/6



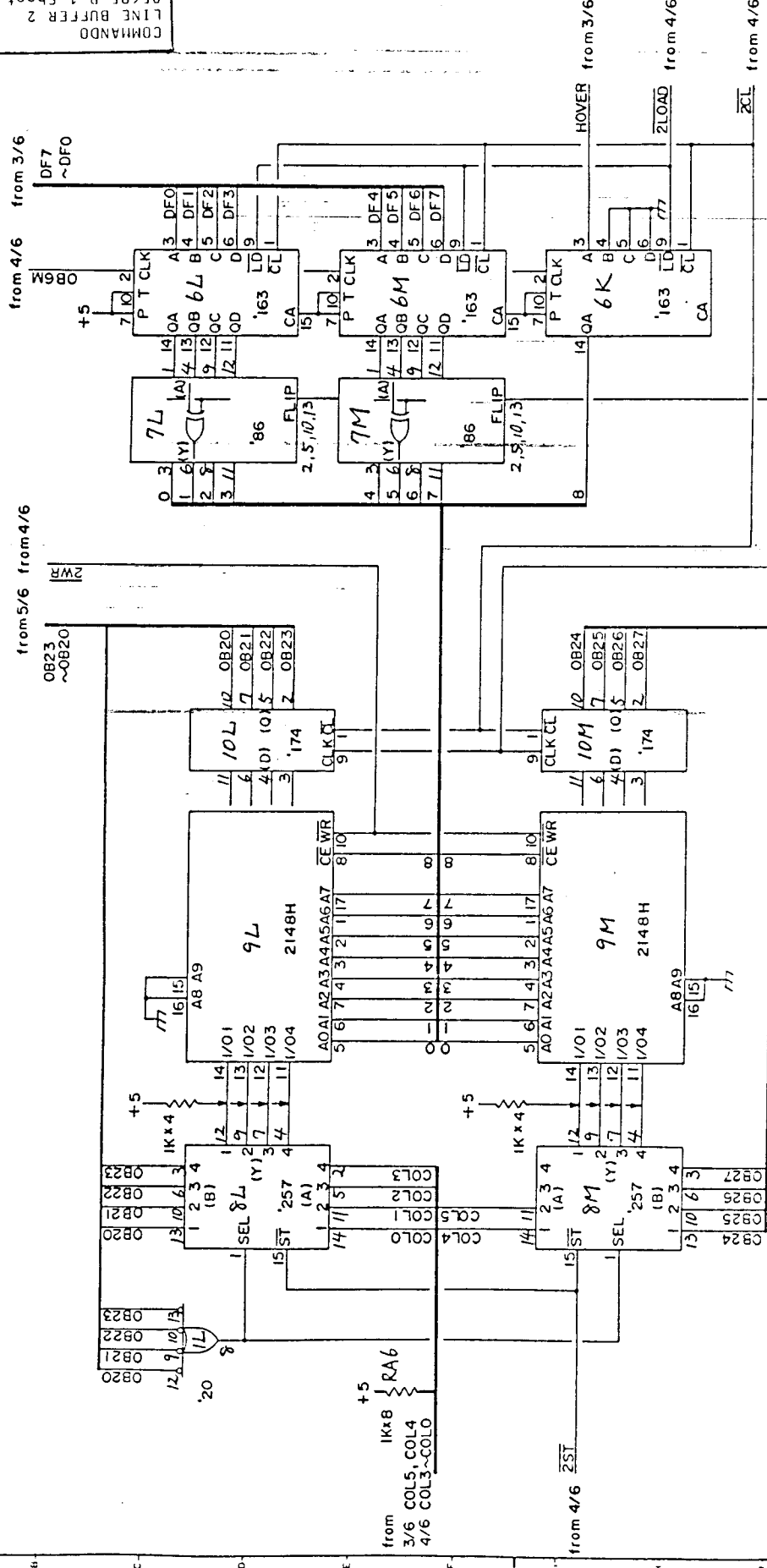
OBJECT ROM		85605-B-1 - 4/6	
		CAPCOM	



1	LINE BUFFER 1	10	85605 - B-1 - 5/6
2		11	
3		12	
4		13	
5		14	
6		15	
7		16	
8		17	
9		18	
10		19	
11		20	
12		21	
13		22	
14		23	
15		24	
16		25	
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19		28	
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81		90	
82		91	
83		92	
84		93	
85		94	
86		95	
87		96	
88		97	
89		98	
90		99	
91		100	

85605 - B-1 - 5/6

CAPCOM



7	LINE BUFFER 2	14	85605-B-1 - 6/6
8		15	CAPCOM