

KV-27XBR95S / 32XBR95S

RM-Y114

SERVICE MANUAL



(Photo : KV-32XBR95S)

US Model

KV-27XBR95S

Chassis No. SCC-F16G-A

KV-32XBR95S

Chassis No. SCC-F16C-A

Canadian Model

KV-27XBR95S

Chassis No. SCC-F17F-A

KV-32XBR95S

Chassis No. SCC-F17B-A

FN CHASSIS

MODELS OF THE SAME SERIES

KV-27XBR95S/32XBR95S	
KV-27XBR25/32XBR25	
KV-27XBR35/32XBR35	

SPECIFICATIONS

Television system American TV standards
 Channel coverage VHF: 2-13
 UHF: 14-69
 CABLE TV: 1-125

Picture tube Microblack™ Trinitron® tube
 27-inch picture measured diagonally
 29-inch picture tube measured diagonally
 (KV-27XBR95S)
 32-inch picture measured diagonally
 34-inch picture tube measured diagonally
 (KV-32XBR95S)

Antenna 75 ohm external antenna
 terminal for VHF/UHF

Input jacks VIDEO IN 1, 2 and 3
 S VIDEO IN (4-pin mini DIN)
 Y: 1 Vp-p, 75-ohms unbalanced,
 sync negative
 C: 0.286 Vp-p (Burst signal)
 75-ohms
 Video (phono jacks): 1 Vp-p, 75-ohms
 unbalanced, sync negative
 Audio (phono jacks):
 500 mVrms (100% modulation)
 Impedance: 47 kilohms
 SIRCS (mini jack) 5 Vp-p

Output jacks

MONITOR OUT

S VIDEO MONITOR OUT

(4-pin mini DIN)

Y: 1 Vp-p, 75-ohms

unbalanced, sync negative

Video (phono jacks): 1 Vp-p, 75-ohms

unbalanced, sync negative

Audio (phono jacks): 500 mVrms

(100% modulation)

Impedance: 10 kilohms

SIRCS (mini jack) 5 Vp-p

AUDIO OUT (VARIABLE)

(phono jacks)

More than 900 mVrms (100% modulation) at the maximum volume setting (variable)

Impedance: 5 kilohms

AUDIO OUT

(phono jacks)

900 mVrms (100% modulation)

Impedance: 5 kilohms

- Continued on next page -

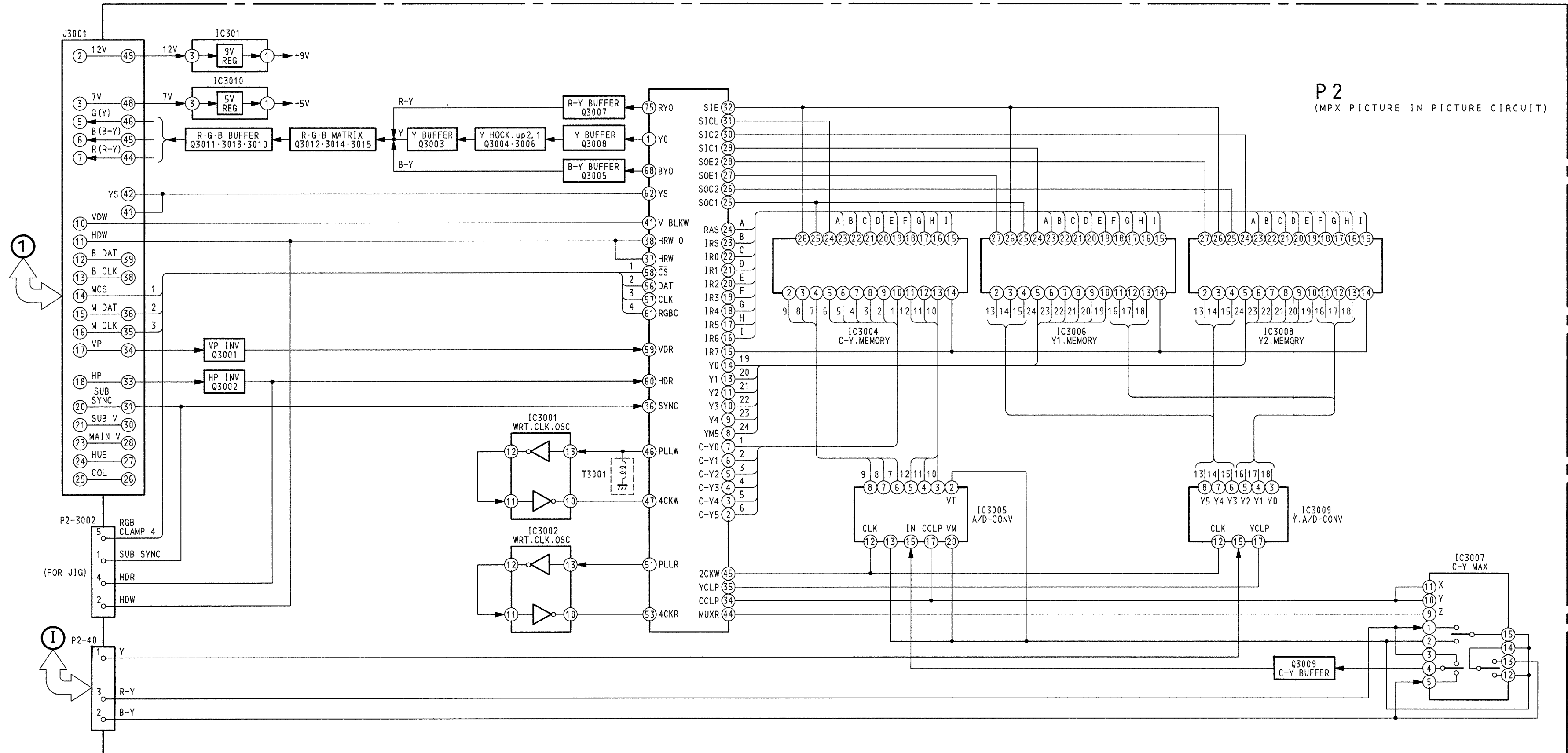
TRINITRON® COLOR TV

SONY®



SECTION 6
DIAGRAMS

6-1. BLOCK DIAGRAMS (1)



P 2
(MPX PICTURE IN PICTURE CIRCUIT)

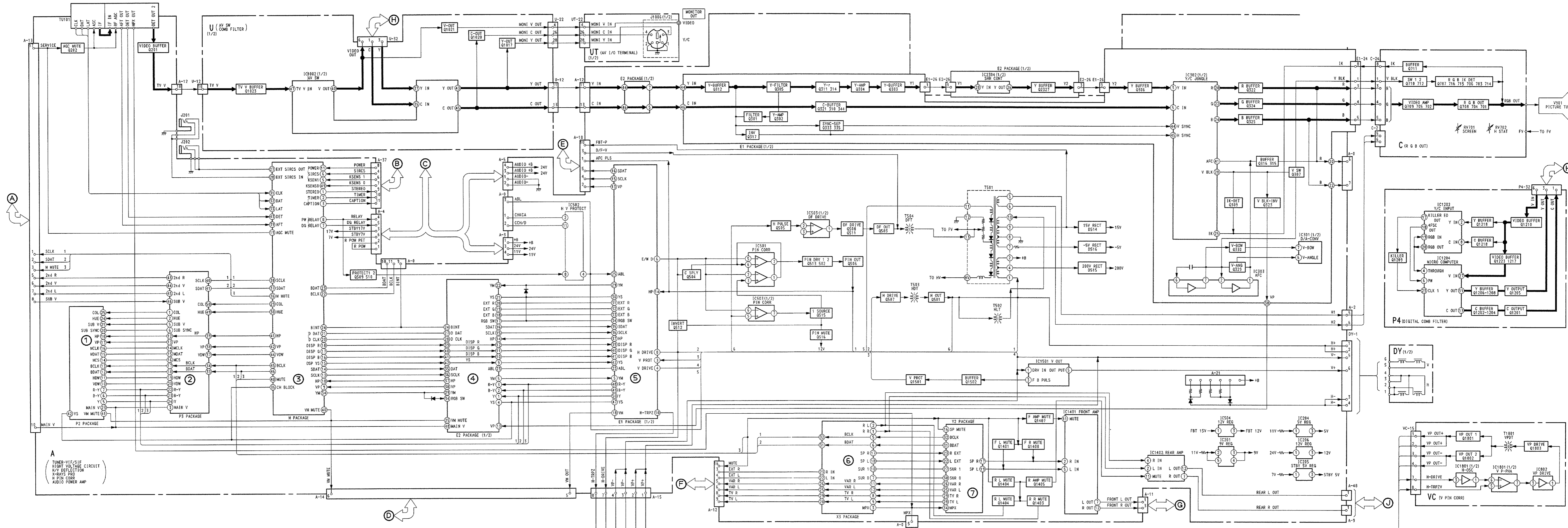
6-4. BLOCK DIAGRAMS (4)

KV-27XBR95S/32XBR95S
RM-Y114

KV-27XBR95S/32XBR95S
RM-Y114

KV-27XBR95S/32XBR95S
RM-Y114

KV-27XBR95S/32XBR95S
RM-Y114

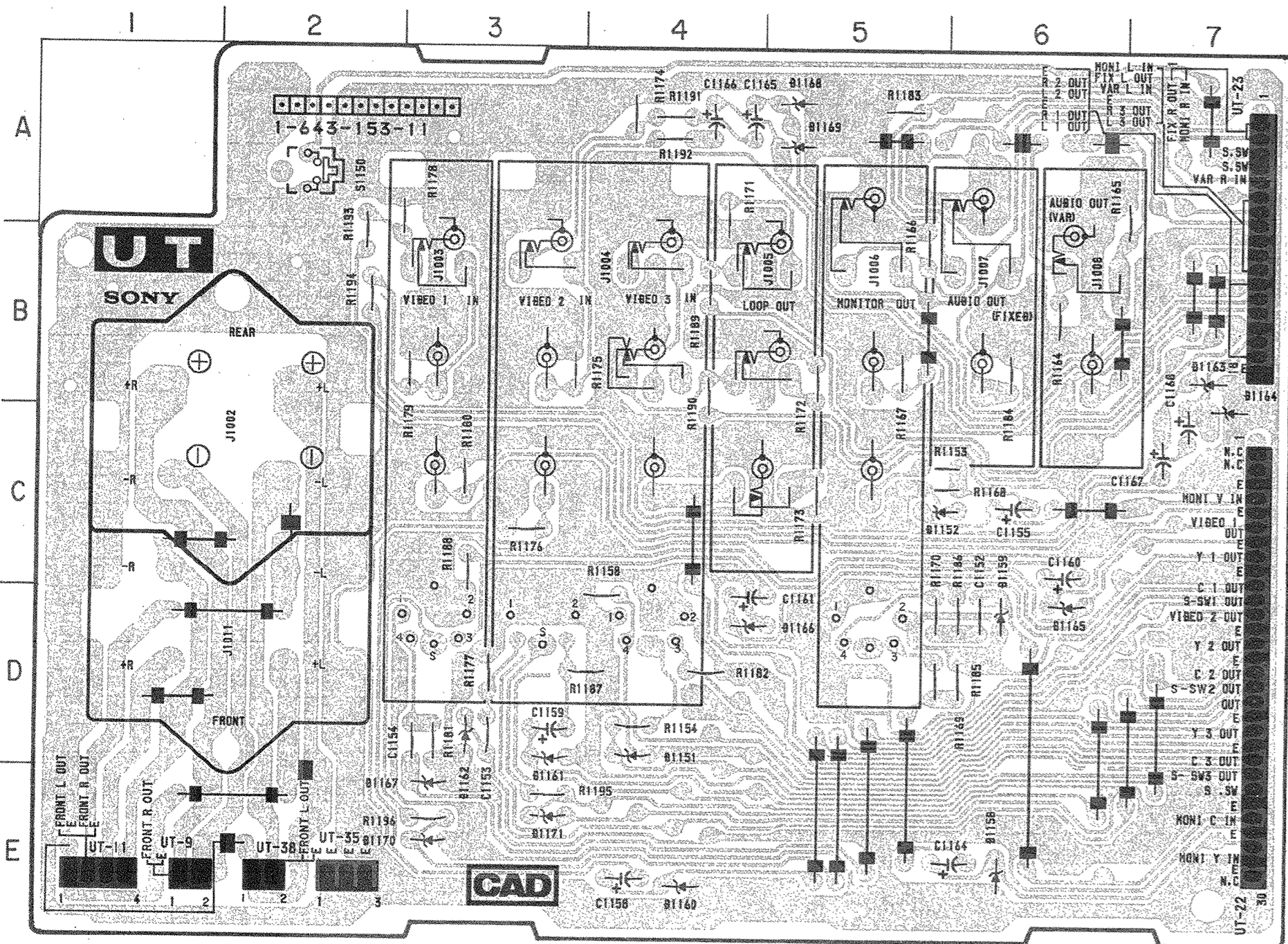


UT [AV I/O TERMINAL]

U [AV SW]

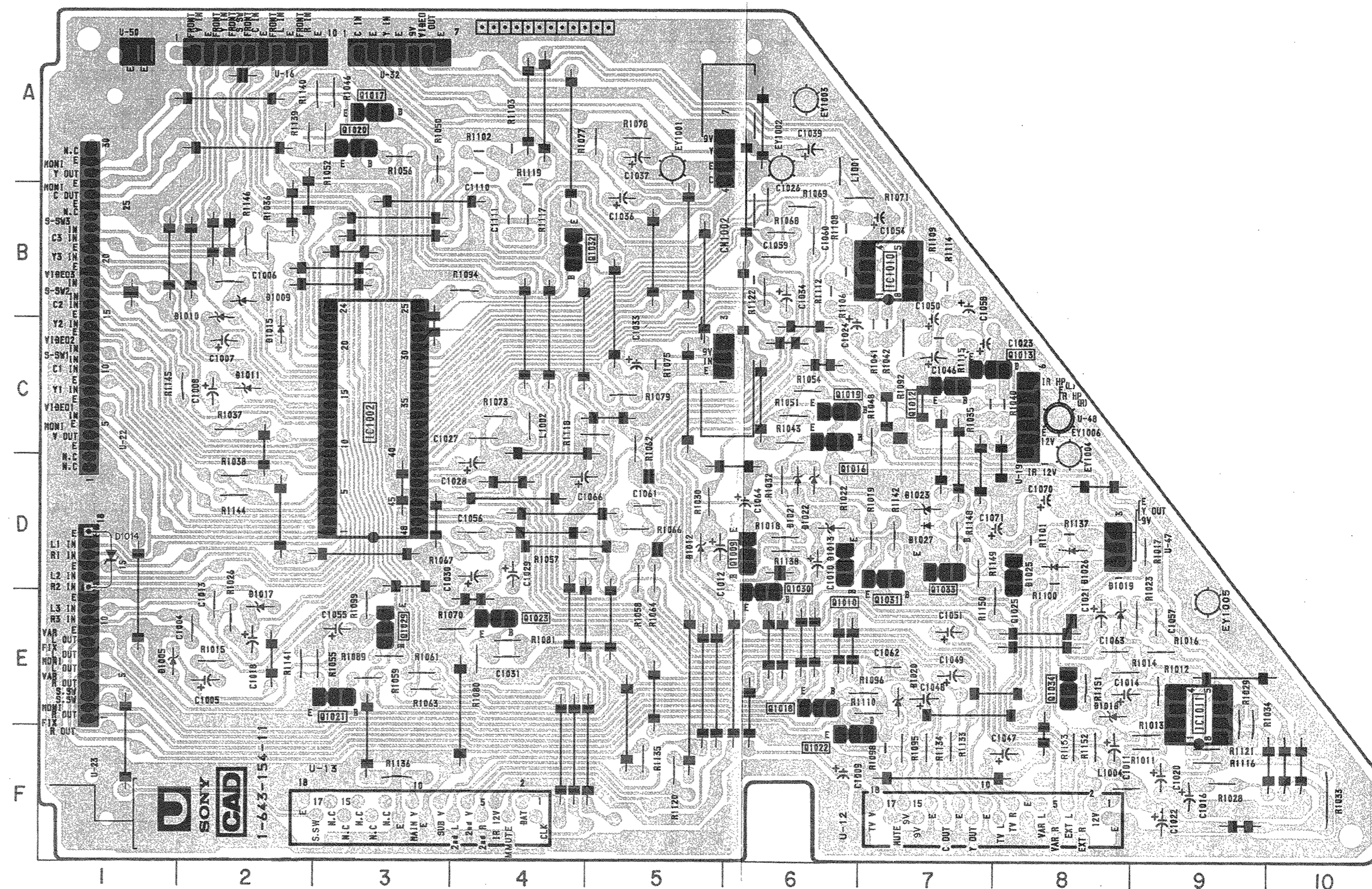
— UT Board —

— U Board —



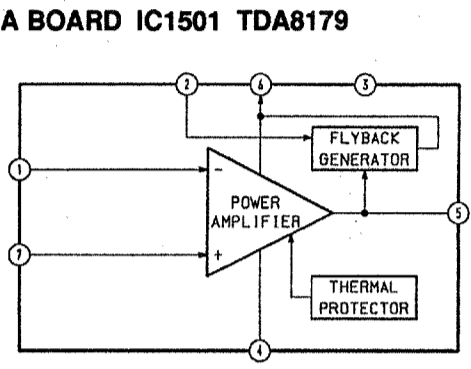
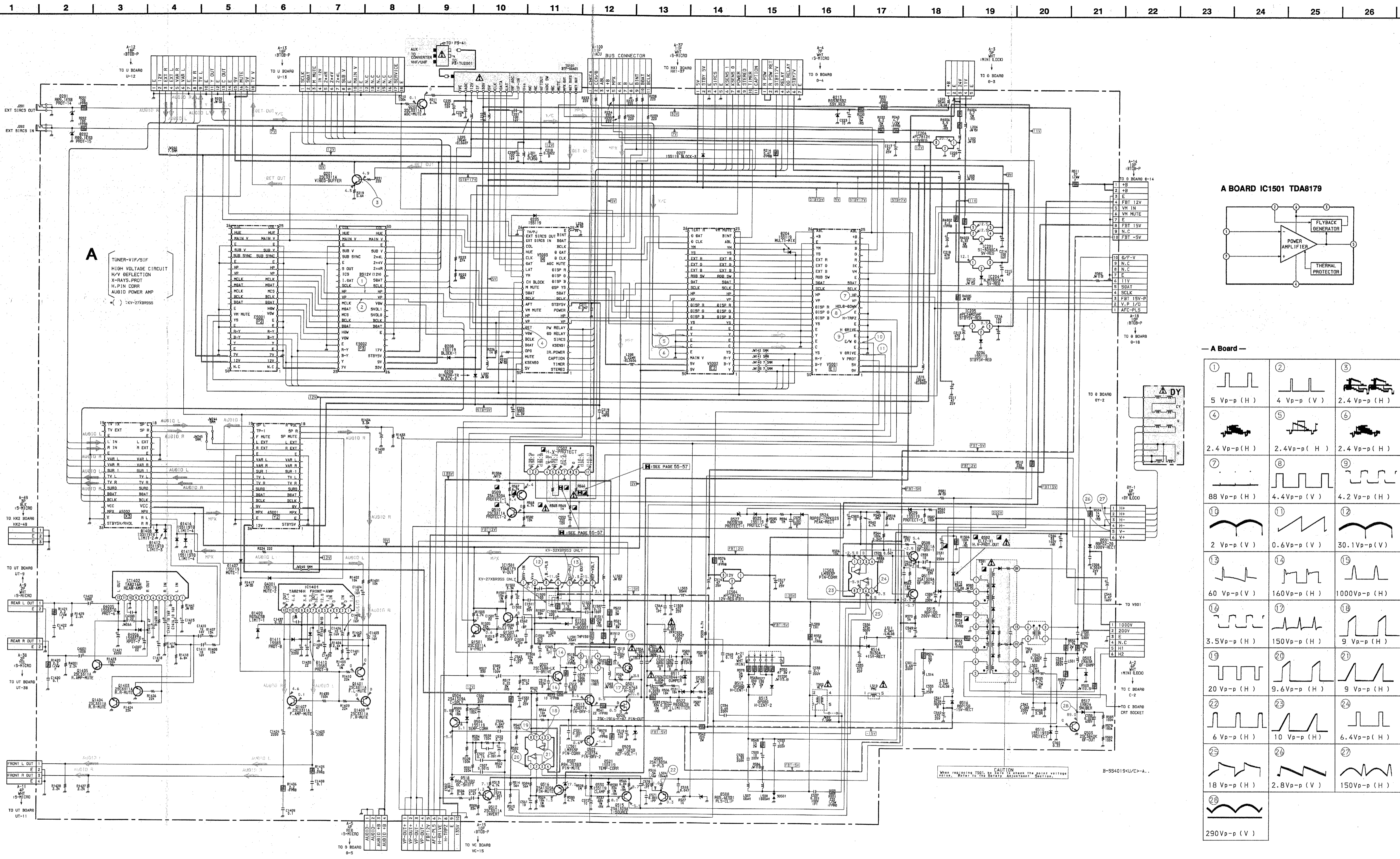
DIODE

Ø1151	Ø-4
1152	C-5
1158	E-6
1159	Ø-6
1160	E-4
1161	Ø-3
1162	Ø-3
1163	B-7
1164	B-7
1165	Ø-6
1166	Ø-4
1167	E-3
1168	A-5
1169	A-5
1170	E-3
1171	E-3
1172	
1173	
1174	
1175	
1176	
1177	
1178	
1179	



— U Board —

IC	
IC1002	C-3
1011	E-9
TRANSISTOR	
Q1009	D-6
1010	D-6
1016	C-6
1017	A-3
1018	E-6
1019	C-6
1020	A-3
1021	E-3
1022	F-6
1023	E-4
1025	D-8
1029	E-3
1030	D-6
1031	D-7
1032	B-4
1033	D-7
1034	D-7
DIODE	
Ø1005	E-1
1009	B-2
1010	B-2
1011	C-2
1012	D-5
1013	D-6
1014	D-1
1017	E-2
1018	E-8
1019	E-8
1020	E-7
1021	D-6
1022	D-6
1025	D-8
1026	D-8
1027	D-7



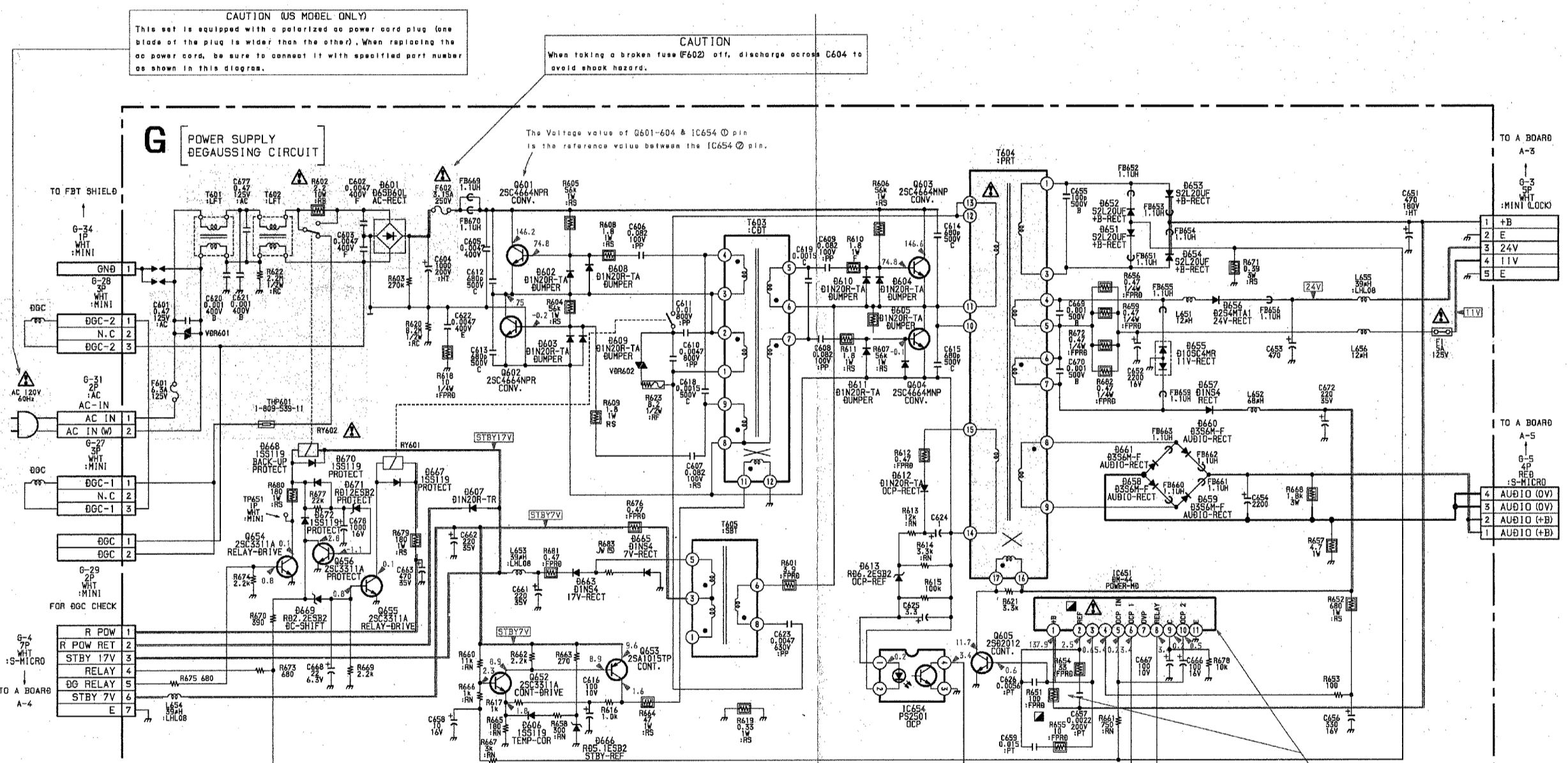
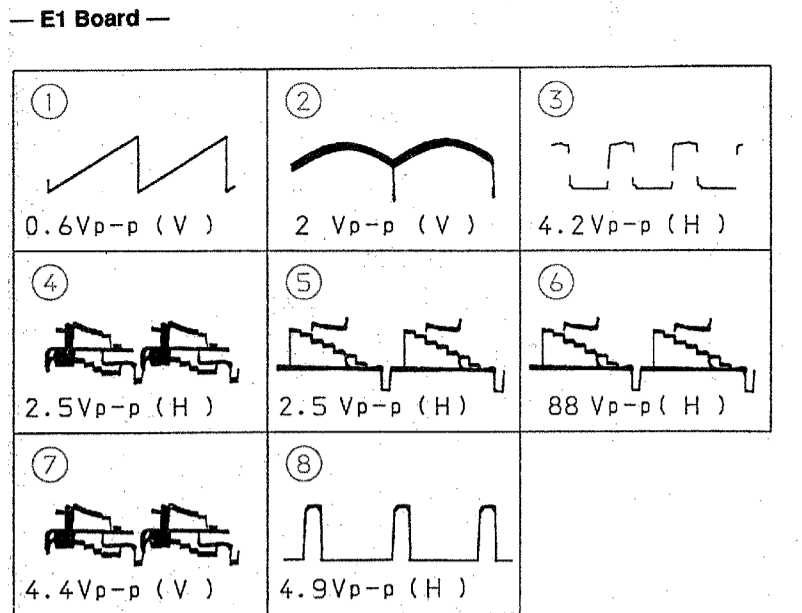
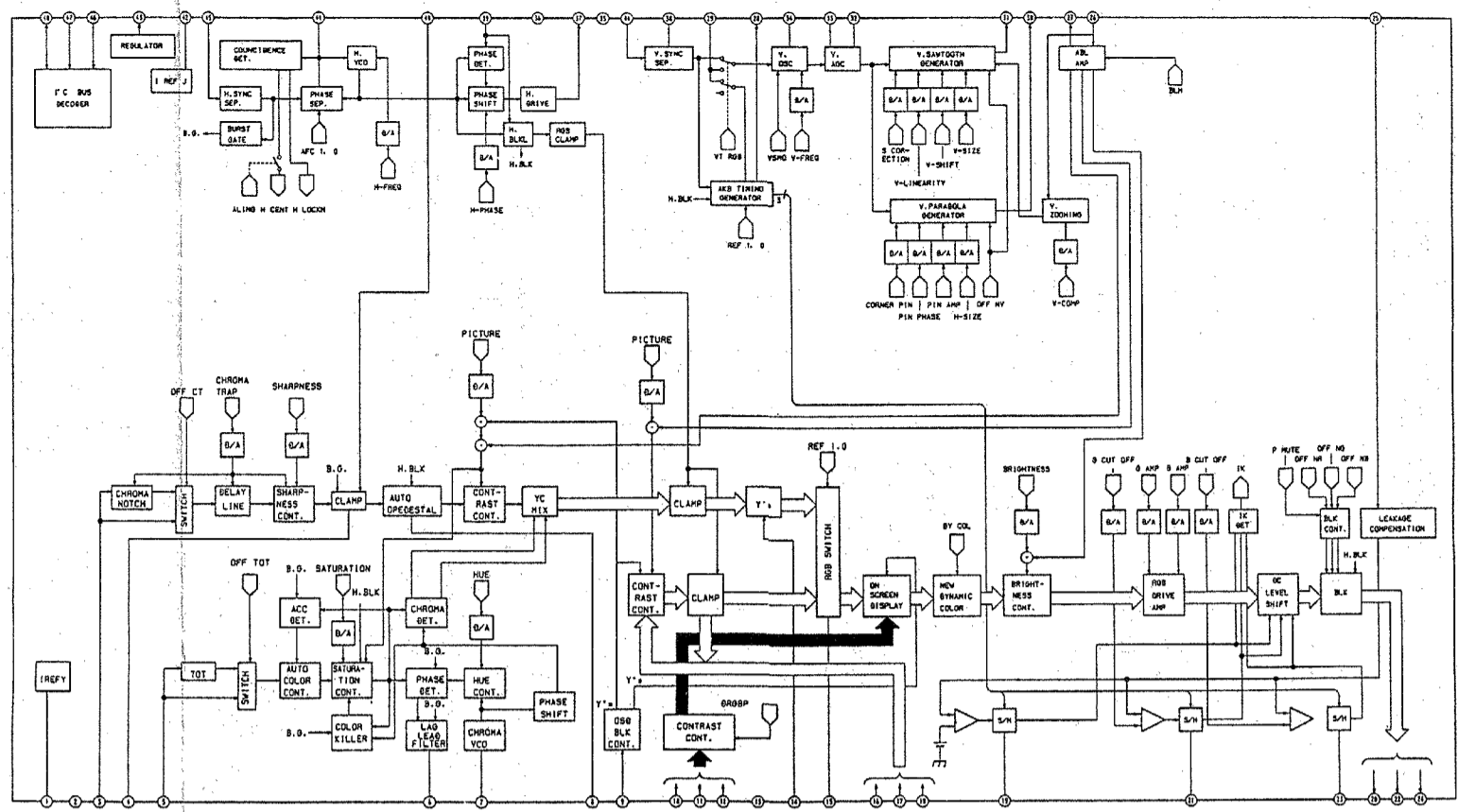
- A Board -

①	②	③
5 Vp-p (H)	4 Vp-p (V)	2.4 Vp-p (H)
④	⑤	⑥
2.4 Vp-p (H)	2.4 Vp-p (H)	2.4 Vp-p (H)
⑦	⑧	⑨
88 Vp-p (H)	4.4 Vp-p (V)	4.2 Vp-p (H)
⑩	⑪	⑫
2 Vp-p (V)	0.6 Vp-p (V)	30.1 Vp-p (V)
⑬	⑭	⑮
60 Vp-p (V)	160 Vp-p (H)	1000 Vp-p (H)
⑯	⑰	⑱
3.5 Vp-p (H)	150 Vp-p (H)	9 Vp-p (H)
⑲	⑳	㉑
20 Vp-p (H)	9.6 Vp-p (H)	9 Vp-p (H)
㉒	㉓	㉔
6 Vp-p (H)	10 Vp-p (H)	6.4 Vp-p (H)
㉕	㉖	㉗
18 Vp-p (H)	2.8 Vp-p (V)	150 Vp-p (H)
㉘		
290 Vp-p (V)		

A BOARD * MARK NOTE # : NOT MOUNTED

	KV-27XBR95S	KV-32XBR95S
△ T501	NX-3000A2	NX-3000A3

E1 BOARD IC302 CXA1465AS



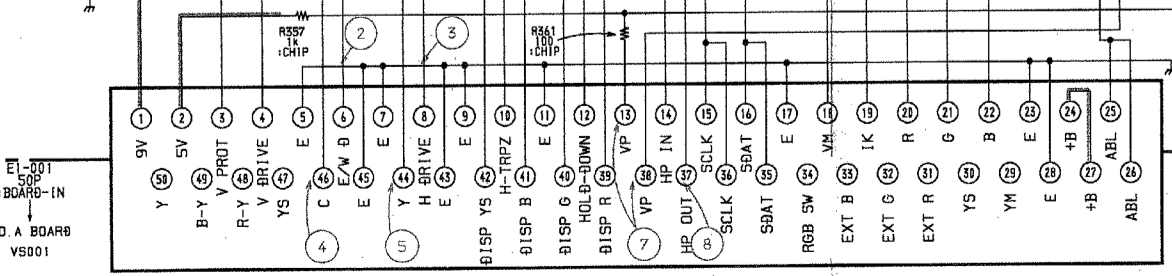
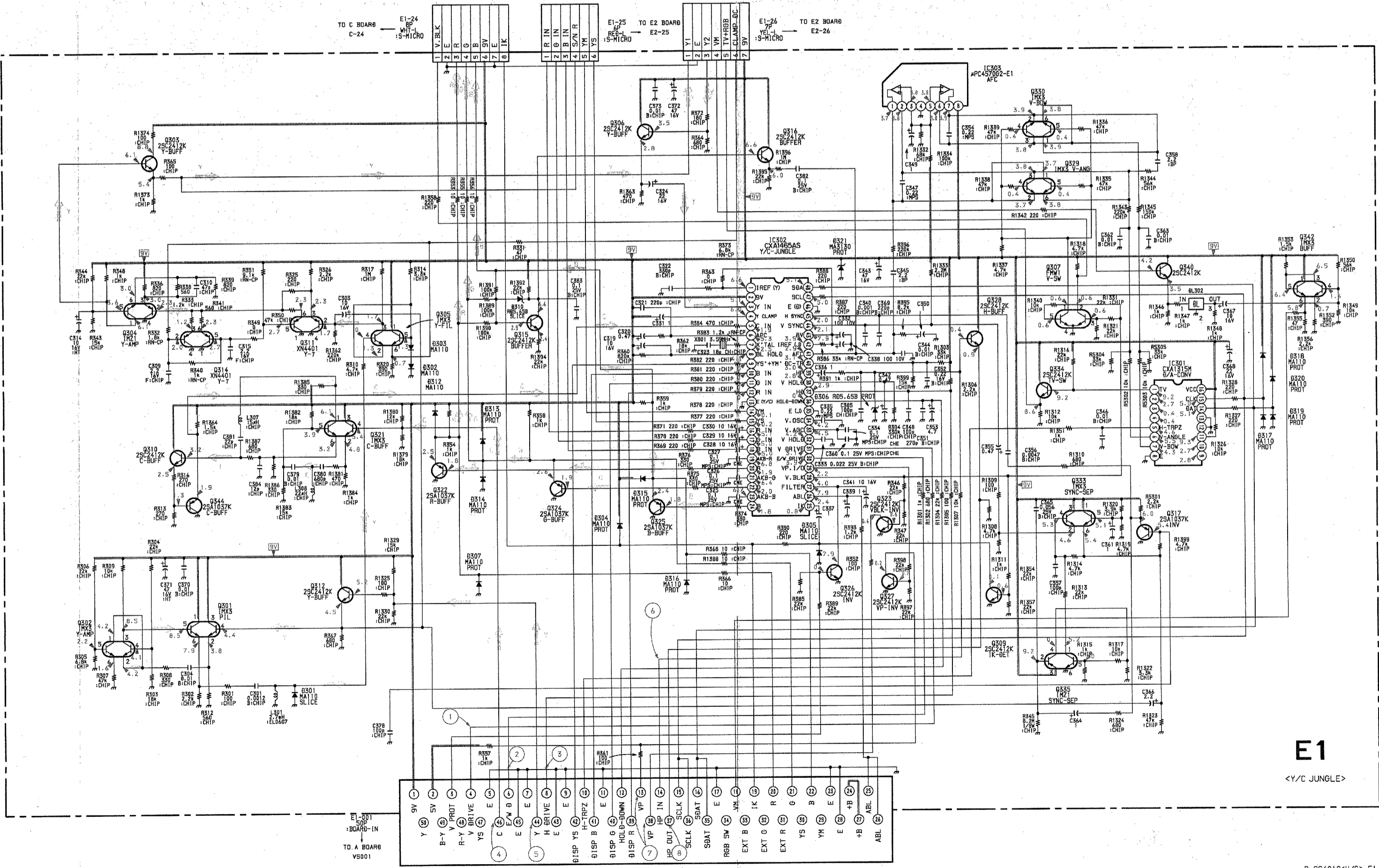
CAUTION (US MODEL ONLY) This set is equipped with a polarized power cord plug. See inside of the plug to identify the ground. When replacing the power cord, be sure to connect it with electrical polarity as shown in this diagram.

CAUTION When taking a broken tube #602 out, disconnect before C604 to avoid shock hazard.

The Voltage value of 0601-604 & IC654 @ pin is the reference value between the IC654 @ pin.

CAUTION As there are two kinds of ground on this board, be careful when measuring the voltages.

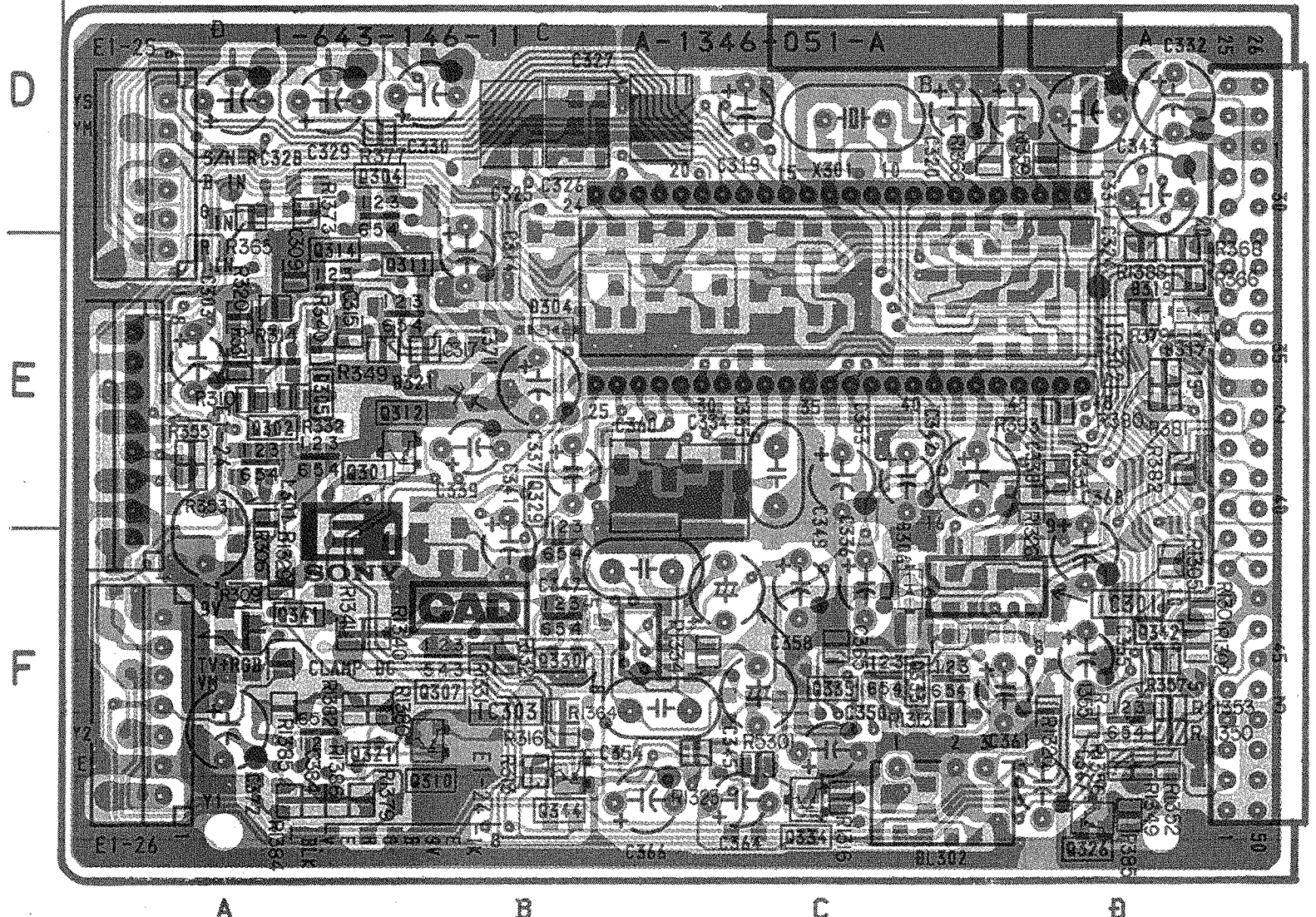
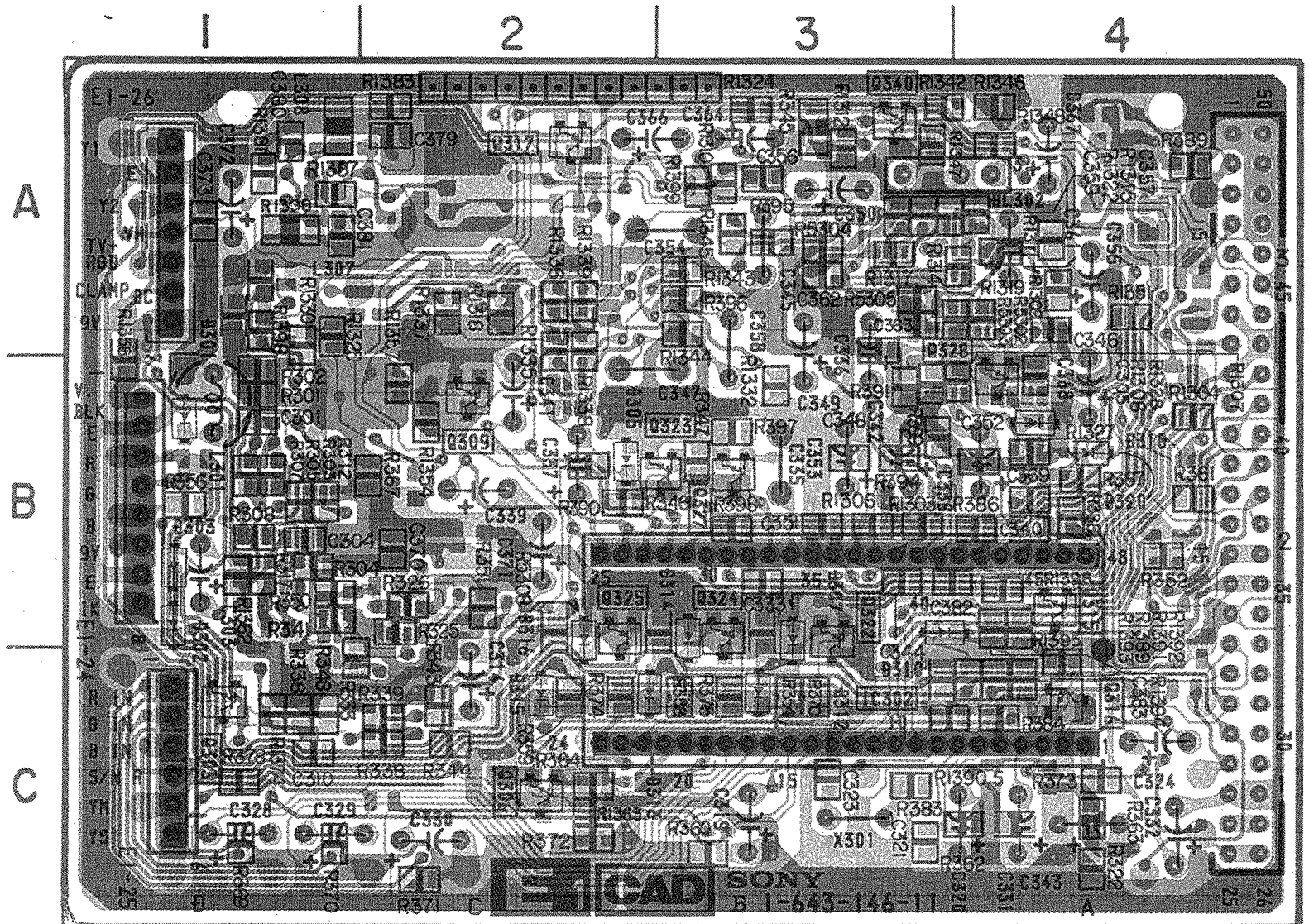
CAUTION When replacing IC651 and RS1, be sure to check the B+ line voltage value. Refer to the Safety Adjustment Section. SEE PAGE 55-57.



E1 <Y/C JUNGLE>

E1 [Y/C JUNGLE]

— E1 Board —



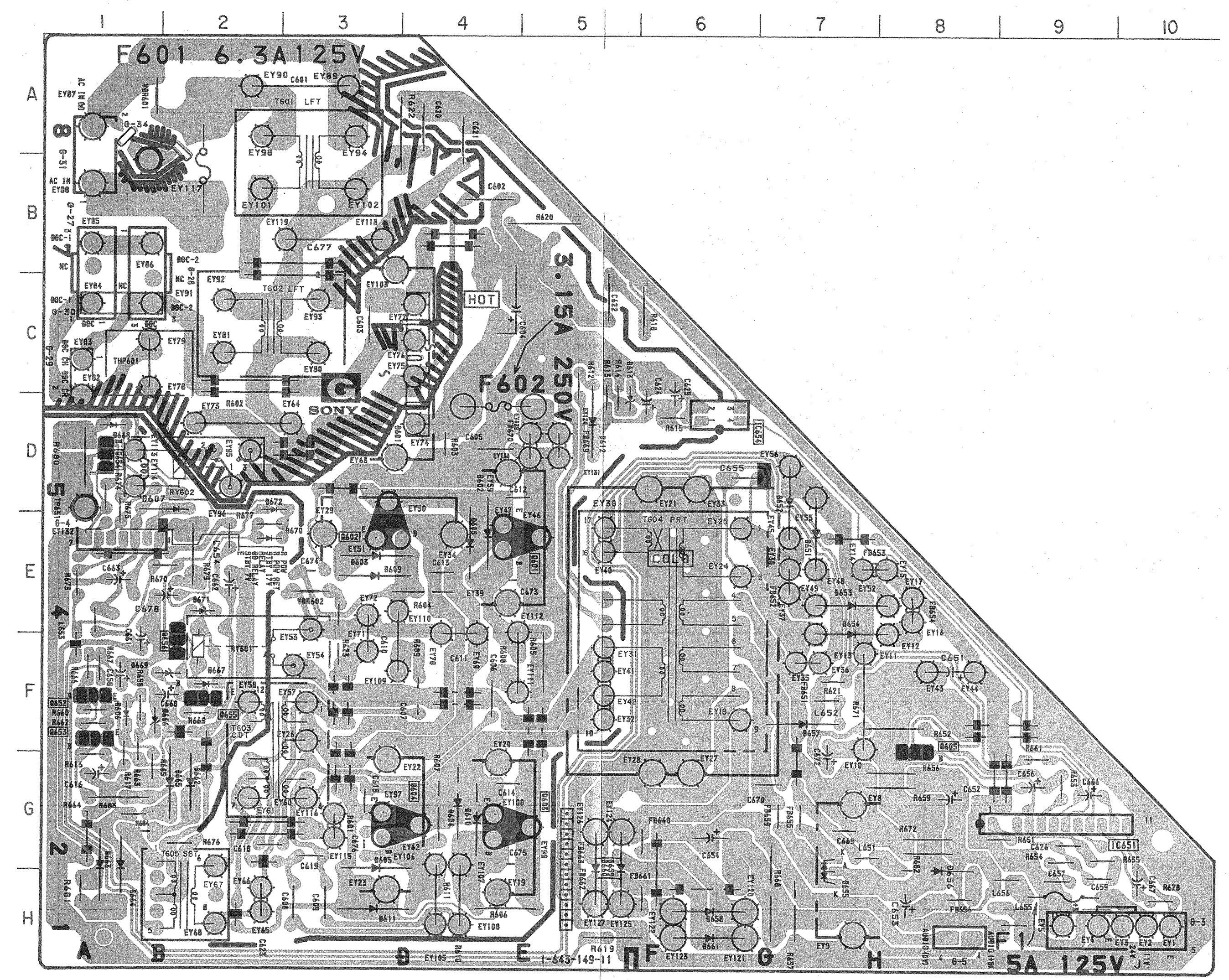
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

— E1 Board —

IC		Ø319	E-4
IC301	F-4	320	B-4
302	B-3	321	E-2
303	F-2		
TRANSISTOR			
Q301	E-2		
302	E-1		
303	C-1		
304	D-2		
305	E-1		
306	C-2		
307	F-2		
309	B-2		
310	F-2		
311	E-2		
312	E-2		
314	E-1		
315	B-4		
316	C-4		
317	A-2		
321	F-1		
322	B-3		
323	B-3		
324	B-3		
325	B-2		
326	F-4		
327	B-3		
328	B-4		
329	F-2		
330	F-2		
333	F-4		
334	F-3		
335	F-3		
340	A-3		
342	F-4		
344	F-2		
DIODE			
Ø301	B-1		
302	B-1		
303	B-1		
304	E-2		
305	B-2		
306	F-3		
307	B-3		
310	B-3		
312	C-3		
313	C-2		
314	B-3		
315	C-2		
316	B-2		
317	E-4		
318	B-4		

G [POWER SUPPLY, DEGAUSSING CIRCUIT]

— G Board —



— G Board —

IC	
IC651	G-9
654	D-6
TRANSISTOR	
Q601	E-4
602	E-3
603	G-4
604	G-3
605	F-8
652	F-1
653	F-1
654	D-1
655	F-2
656	F-2
DIODE	
Ø601	C-4
602	E-4
603	E-3
604	G-4
605	G-3
606	F-1
607	D-2
608	E-4
609	E-3
610	G-4
611	H-3
612	D-5
613	D-5
651	E-7
652	D-7
653	E-7
654	E-7
655	G-7
656	G-8
657	F-7
658	H-6
659	G-5
660	G-5
661	H-6
663	G-1
665	G-2
666	F-1
667	F-2
668	D-1
669	F-2
670	E-2
671	E-2
672	D-2
TEST POINT	
TP651	D-1

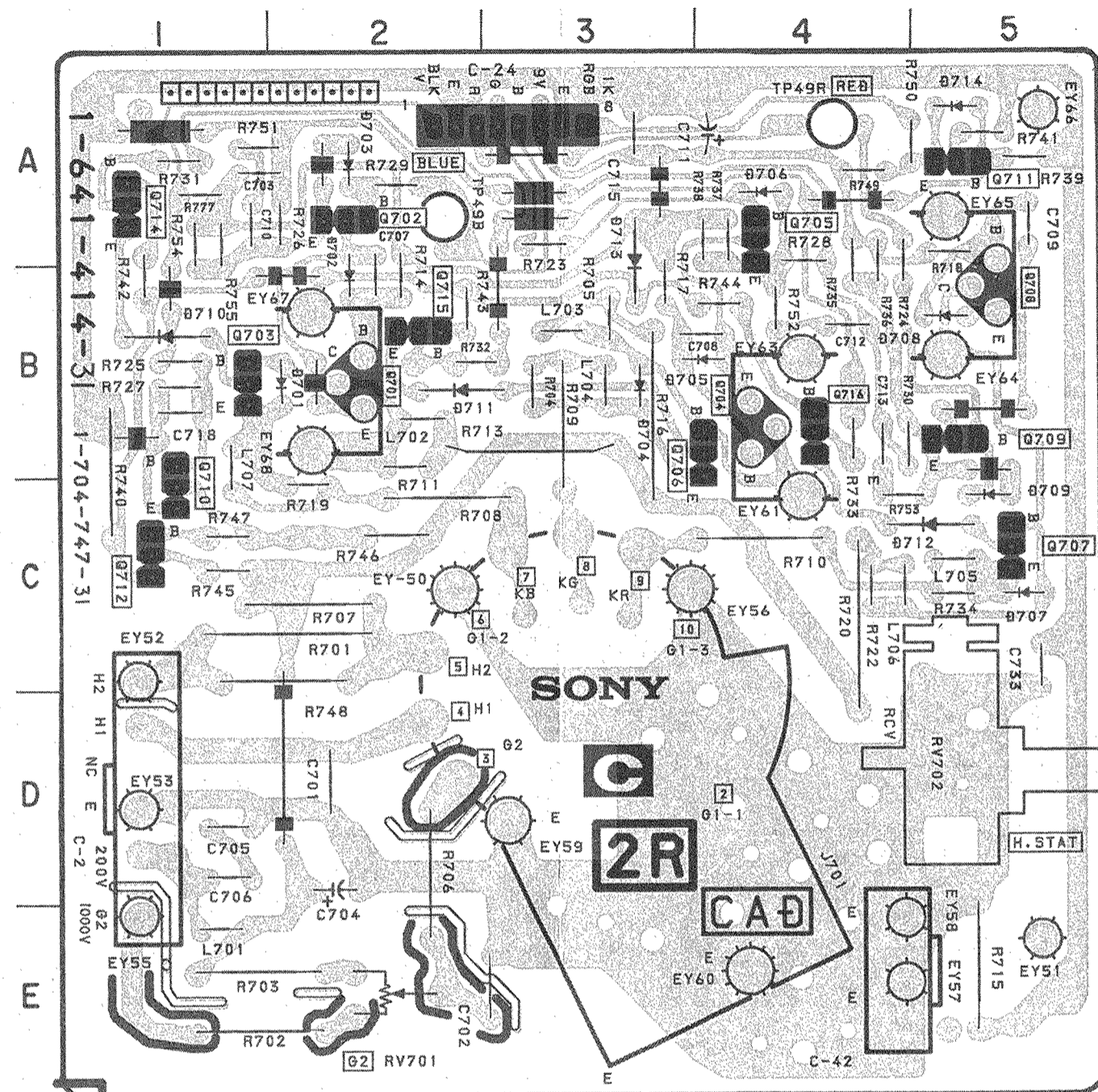
HX1

[USER CONT. SW, RC SENSOR, LED]

C

[R.G.B. OUT]

— C Board —



— C Board —

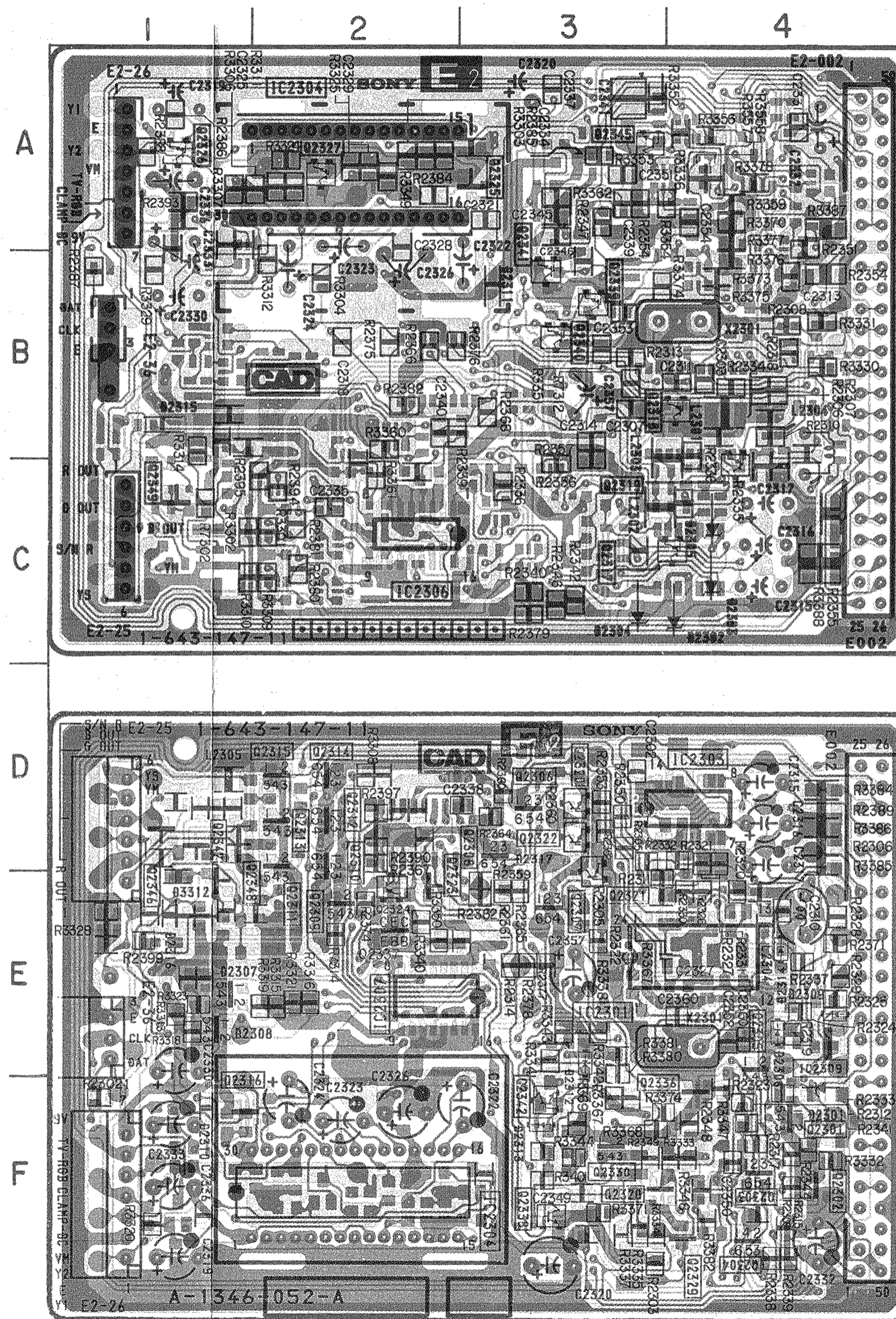
TRANSISTOR	VALIABLE RESISTOR
Q701	B-2
702	A-2
703	B-1
704	B-4
705	A-4
706	B-4
707	C-5
708	B-5
709	B-5
710	C-1
711	A-5
712	C-1
714	A-1
715	B-3
716	B-4

DIODE	TEST POINT
D701	B-2
702	B-2
703	A-2
704	B-3
705	B-4
706	A-4
707	C-5
708	B-5
709	B-5
710	B-1
711	B-3
712	C-5
713	B-3
714	A-5

E2

[SHARPNESS CONT., CHARACTOR GENERATOR]

— E2 Board —



- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

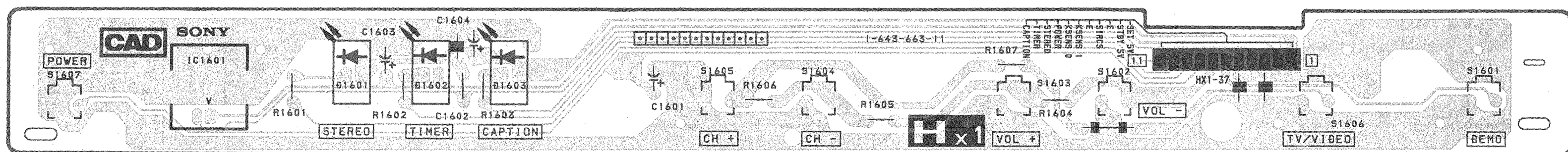
— E2 Board —

IC	
IC2301	E-4
2303	D-4
2304	A-2
2306	C-2
2307	E-2

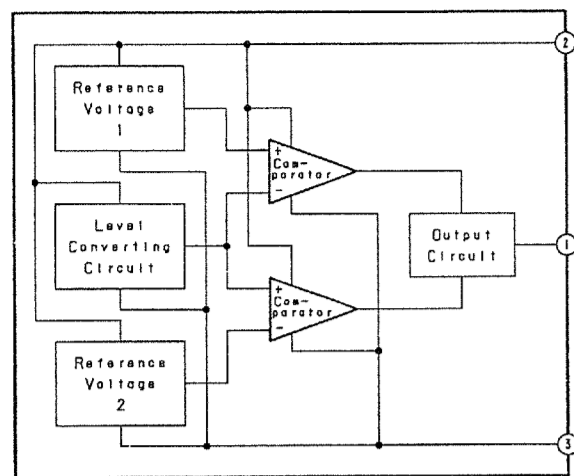
TRANSISTOR	
Q2301	F-4
2303	F-4
2304	F-4
2305	E-4
2306	D-3
2307	E-3
2308	D-3
2309	E-2
2310	D-2
2311	D-2
2312	D-2
2314	D-2
2315	D-2
2317	C-4
2318	B-4
2319	C-4
2320	D-3
2321	D-3
2322	D-3
2324	E-2
2326	A-1
2327	A-2
2330	F-3
2337	E-2
2338	F-3
2339	B-3
2340	B-3
2341	B-3
2342	F-3
2345	A-3

DIODE	
D2301	F-4
2302	C-4
2303	C-4
2304	C-3
2305	C-4
2306	F-4
2307	E-1
2308	E-1
2309	E-4
2312	E-3
2313	F-3
2314	E-4
2317	D-3

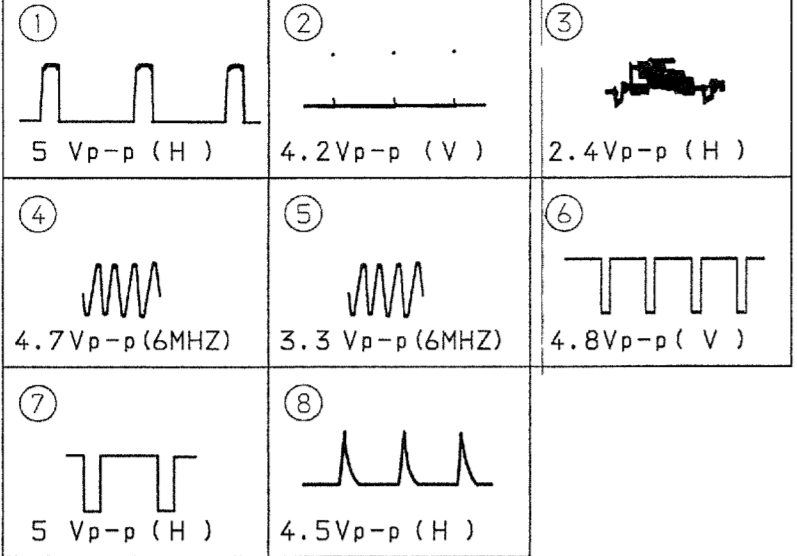
— HX1 Board —



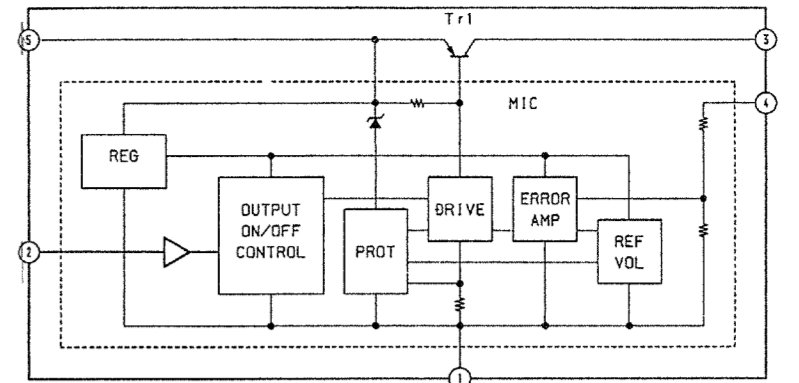
M BOARD IC002 MN1280-S



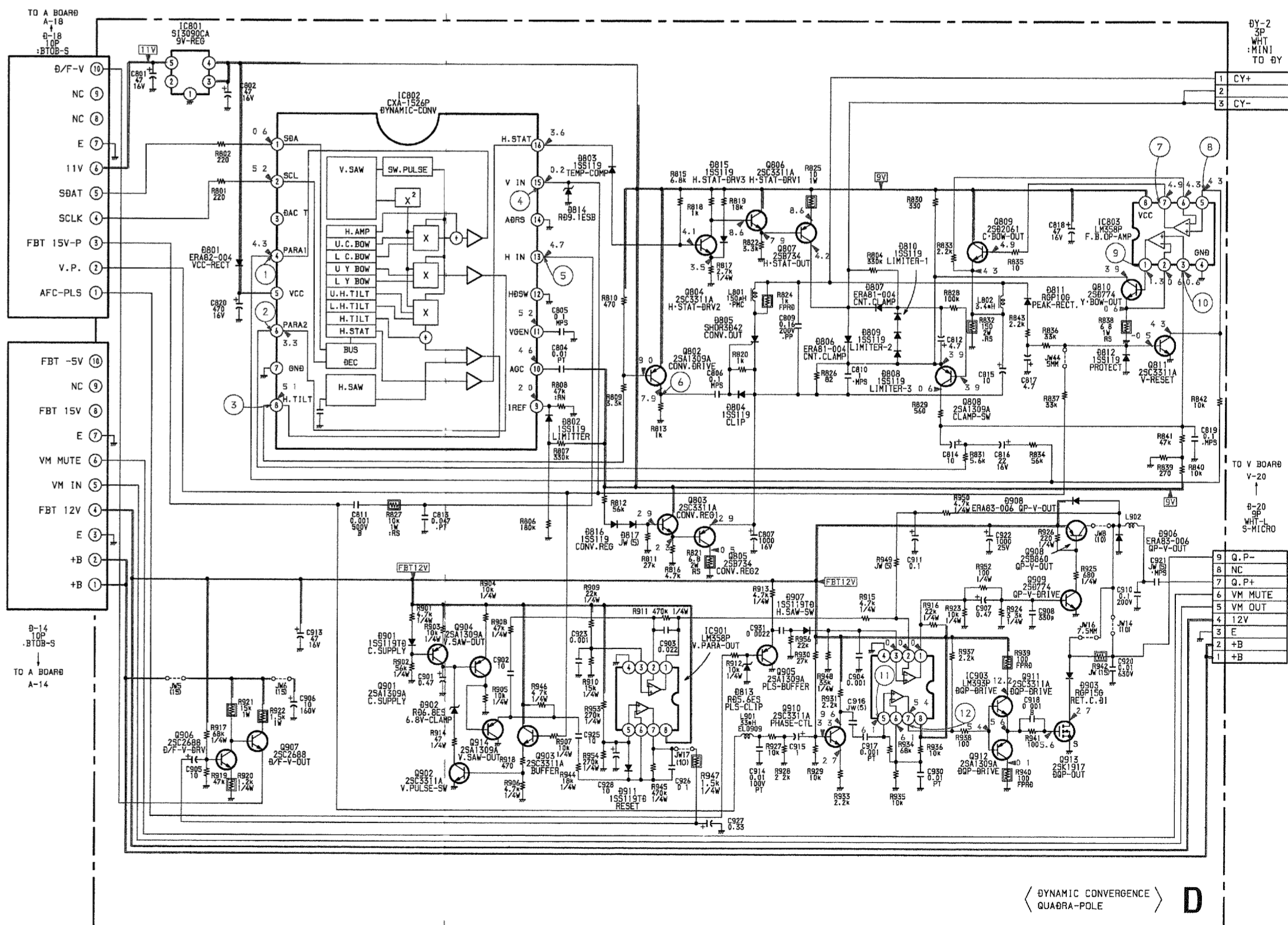
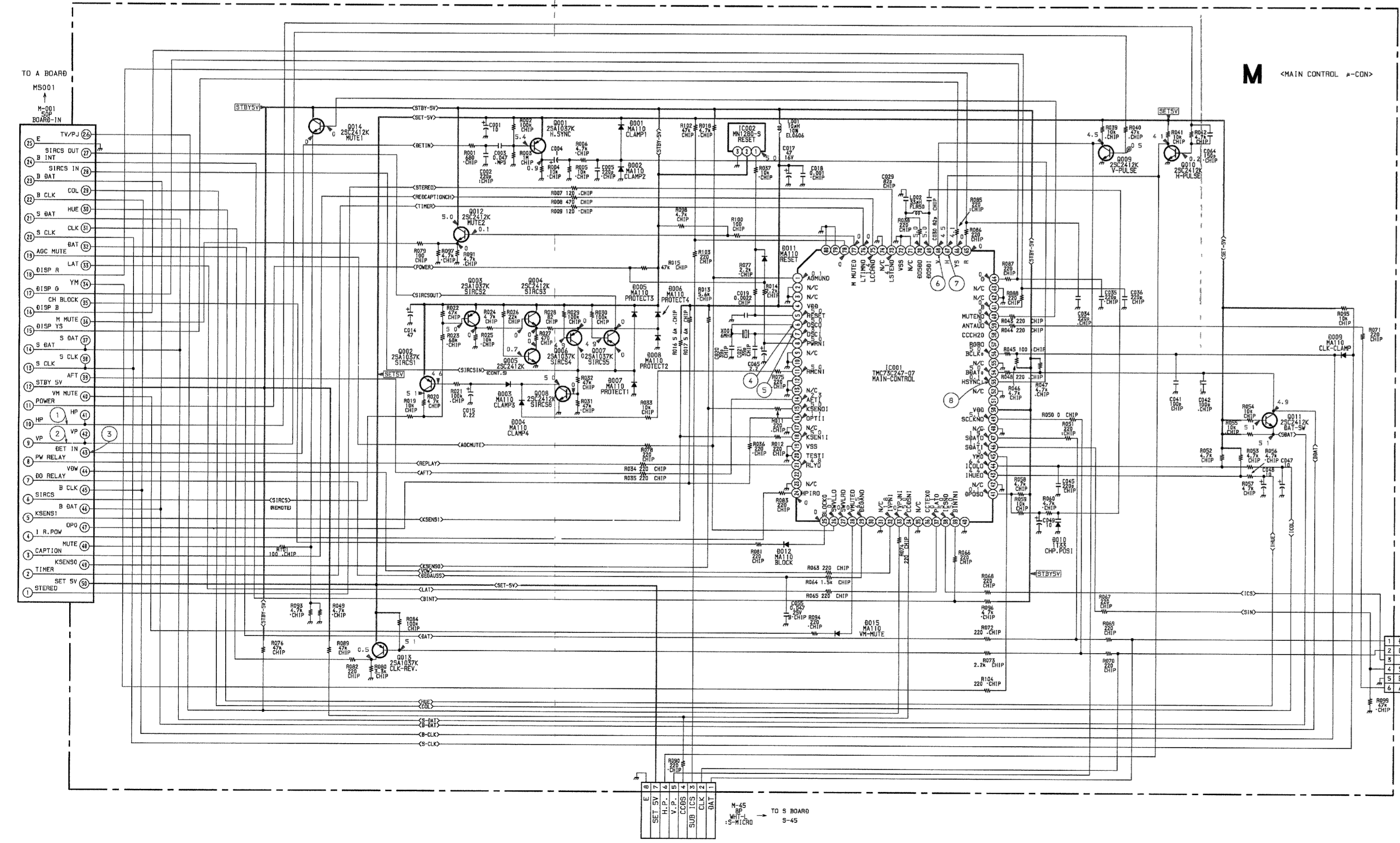
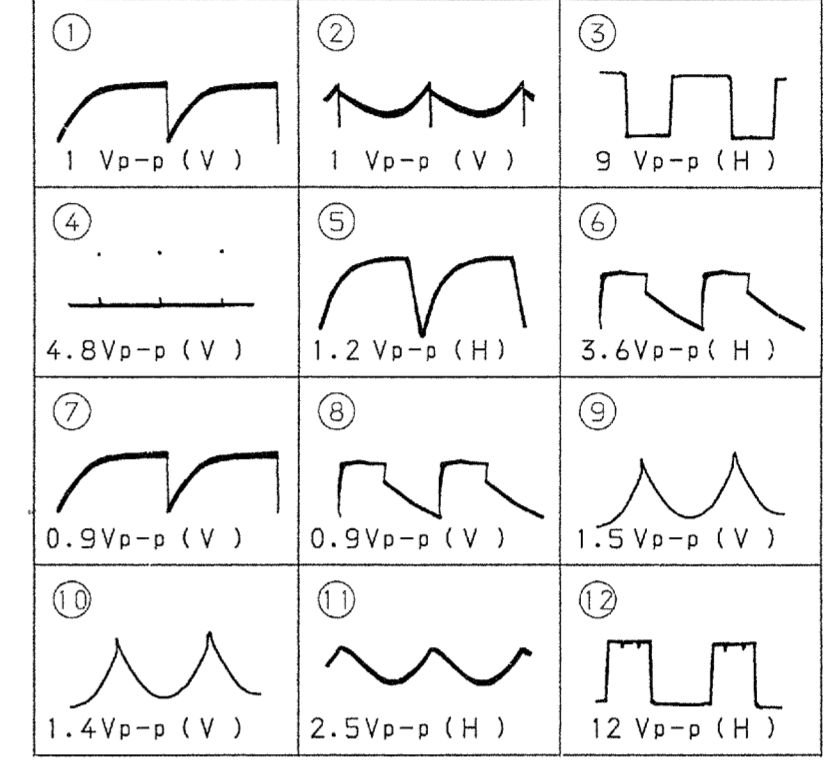
- M Board -



D BOARD IC801 SI-3090CA



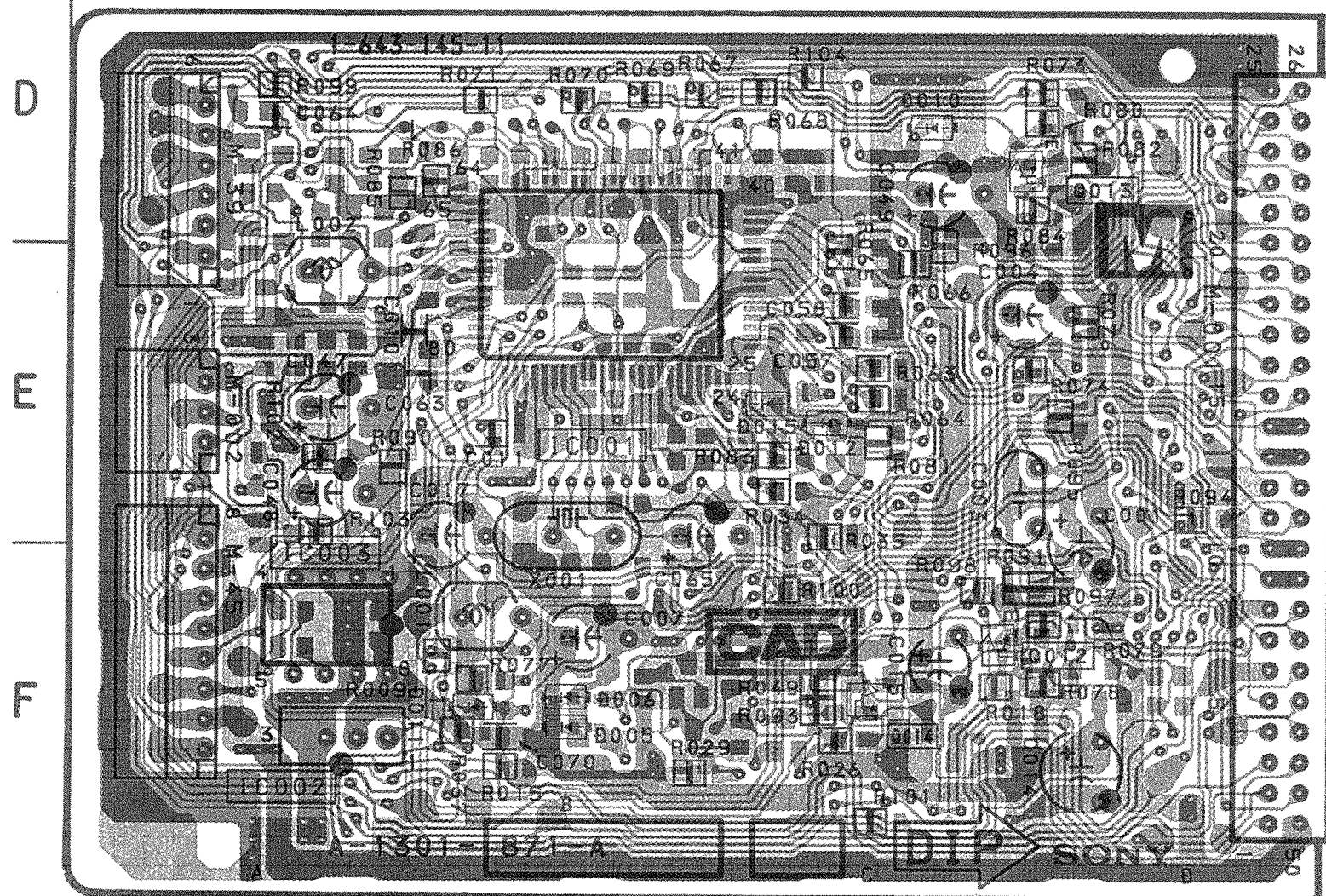
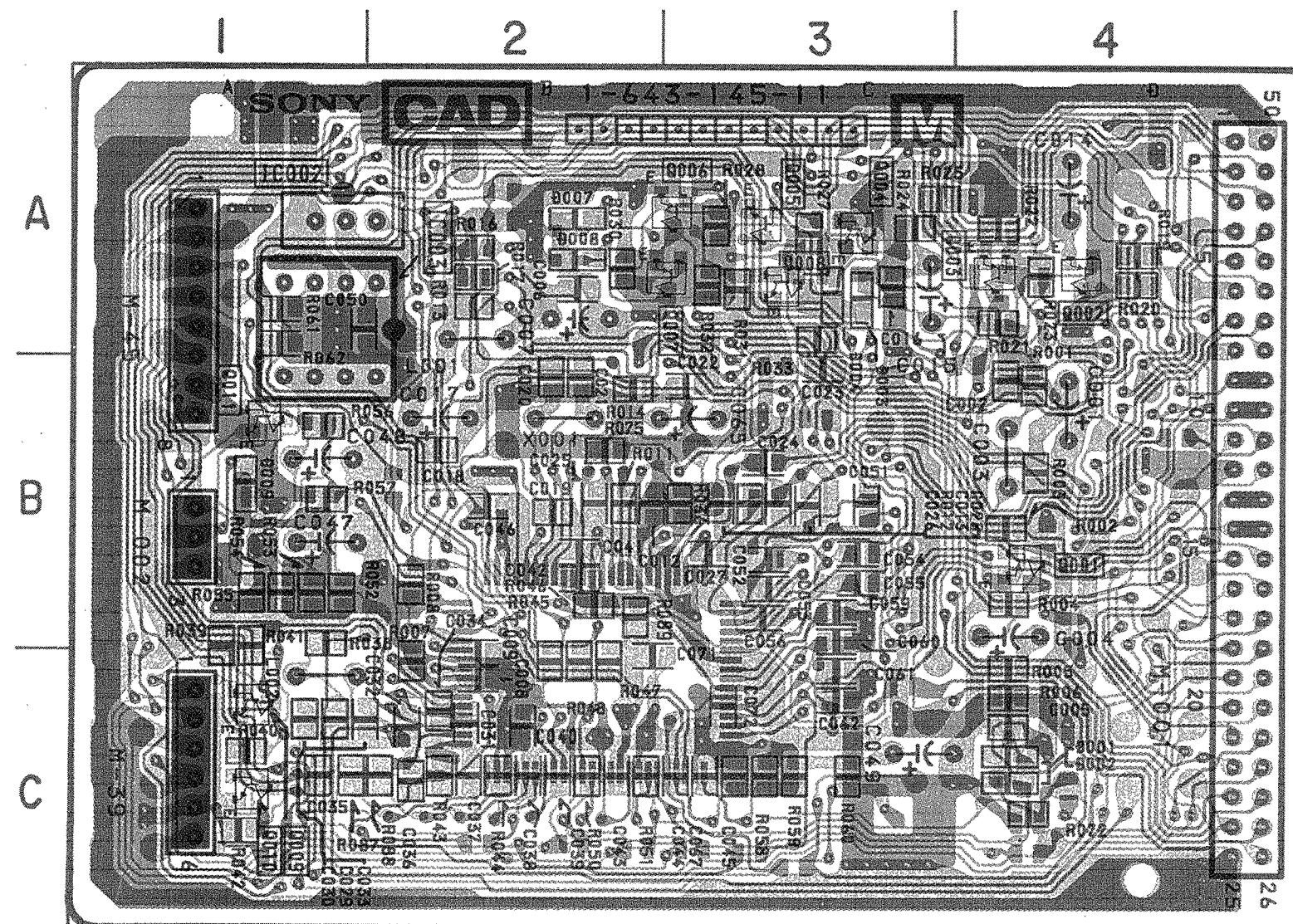
- D Board -



M [MAIN CONTROL μ-CON]

— M Board —

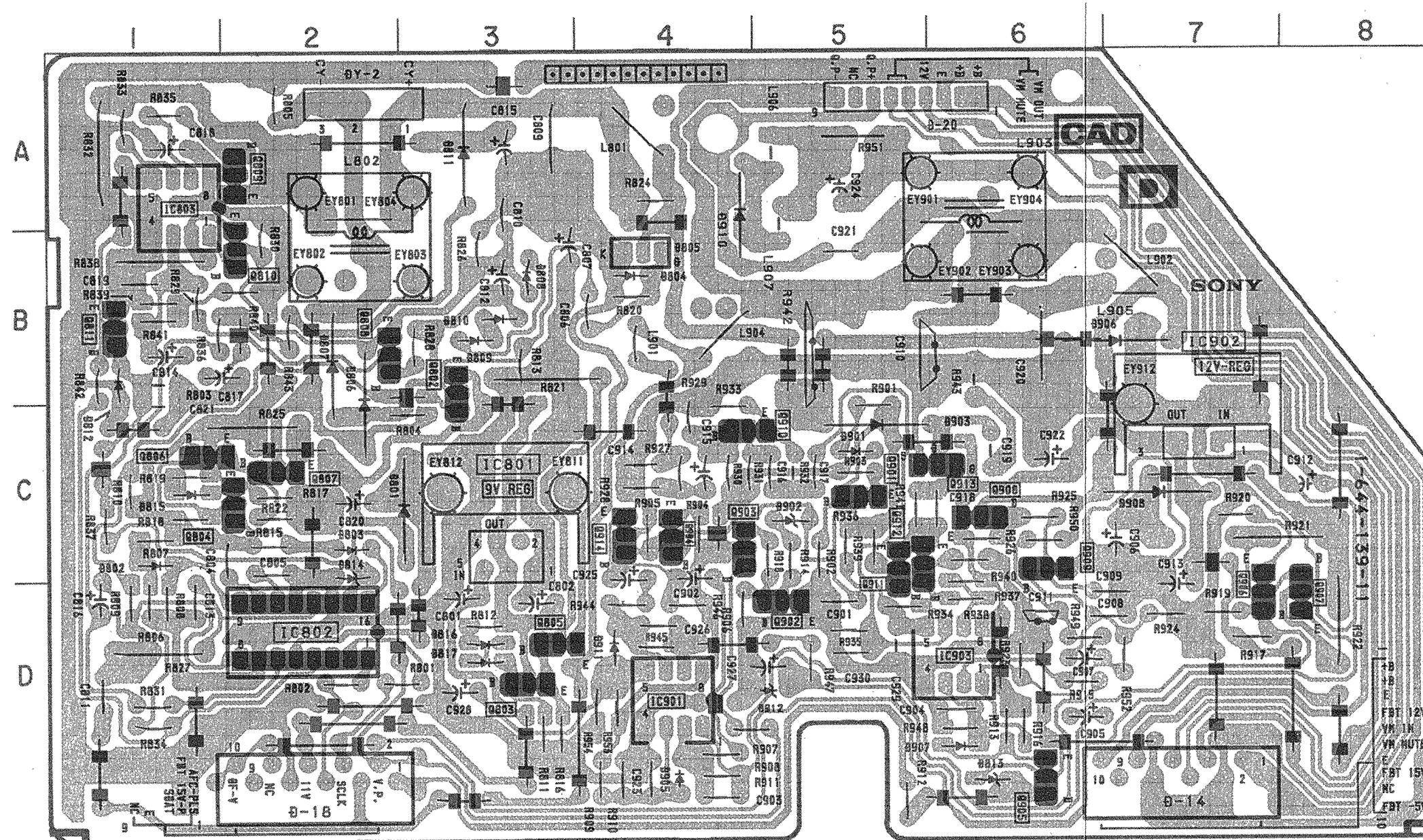
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.



IC	
IC001	E-2
002	A-1
TRANSISTOR	
Q001	B-4
002	A-4
003	A-4
004	A-3
005	A-3
006	A-3
007	A-3
008	A-3
009	C-1
010	C-1
011	B-1
012	F-4
013	D-4
014	F-3
DIODE	
D001	C-4
002	C-4
003	A-3
004	A-3
005	F-2
006	F-2
007	A-2
008	A-2
009	B-1
010	D-3
011	F-2
012	E-3
015	E-3

D [DYNAMIC CONVERGENCE, QUADRA-POLE]

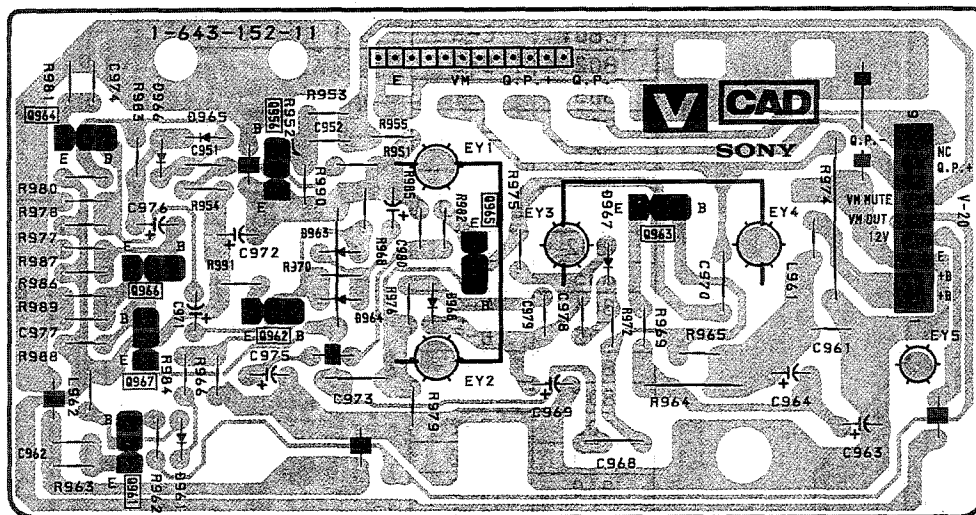
— D Board —



IC		D907	D-6
IC801	C-3	908	C-7
802	D-2	911	D-4
803	A-1		
901	D-4		
903	D-6		
TRANSISTOR			
Q802	B-3		
803	D-3		
804	C-2		
805	D-3		
806	C-1		
807	C-2		
808	B-2		
809	A-2		
810	B-2		
811	B-1		
901	C-5		
902	D-5		
903	C-4		
904	C-4		
905	D-6		
906	D-7		
907	D-8		
908	C-6		
909	C-6		
910	C-4		
911	C-5		
912	C-5		
913	C-6		
914	C-4		
DIODE			
D801	C-3		
802	C-1		
803	C-2		
804	B-4		
805	B-4		
806	B-2		
807	B-2		
808	B-3		
809	B-3		
810	B-3		
811	A-3		
812	B-1		
813	D-6		
814	C-2		
815	C-1		
816	D-3		
901	C-5		
902	C-5		
903	C-5		
906	B-7		



— V Board —

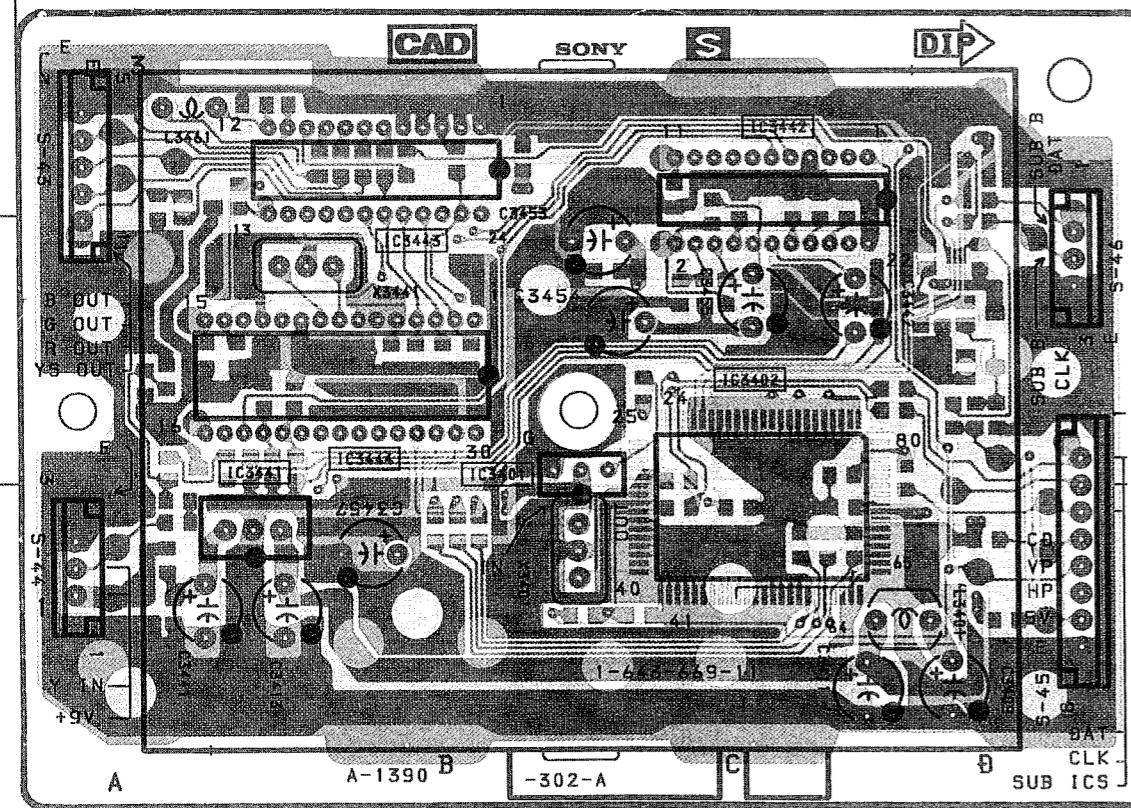
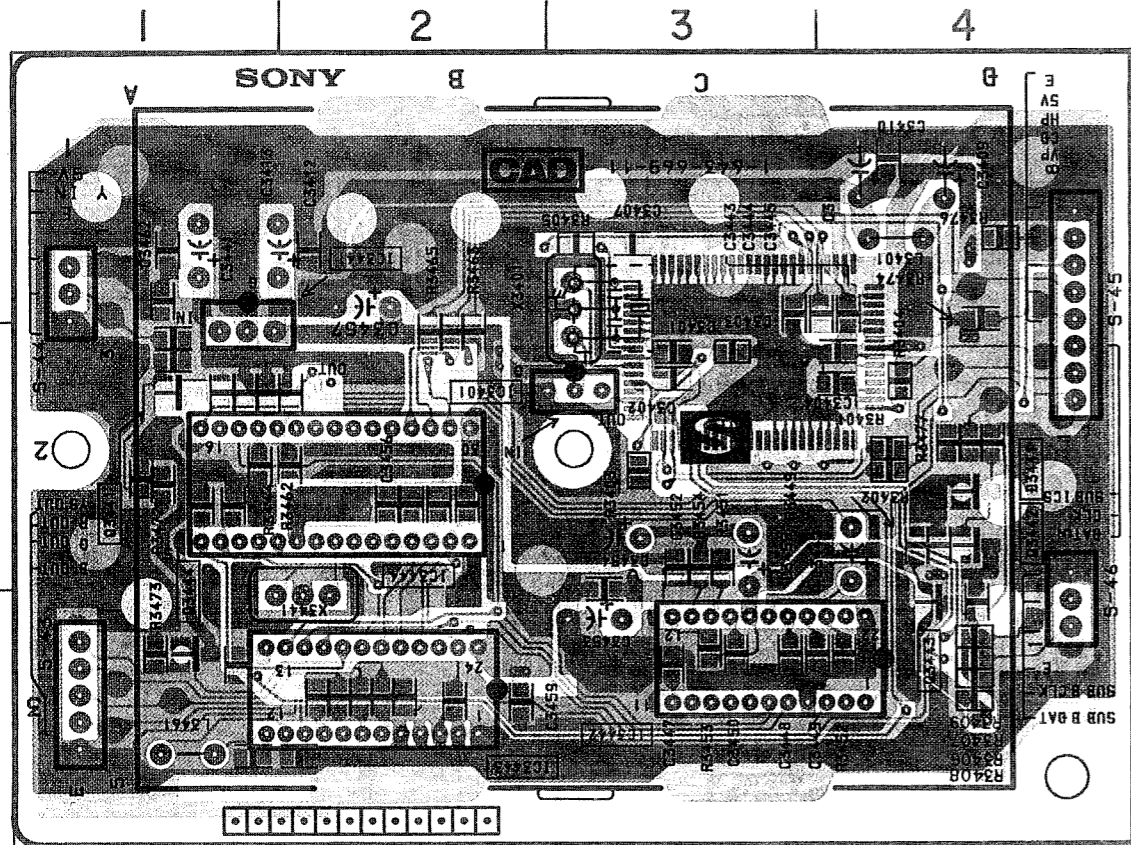


S

[SUB-CONTROL u-CON, CLOSED CAPTION DECODER]

- [Pattern from the side which enables seeing.]
- [Pattern of the rear side.]

— S Board —

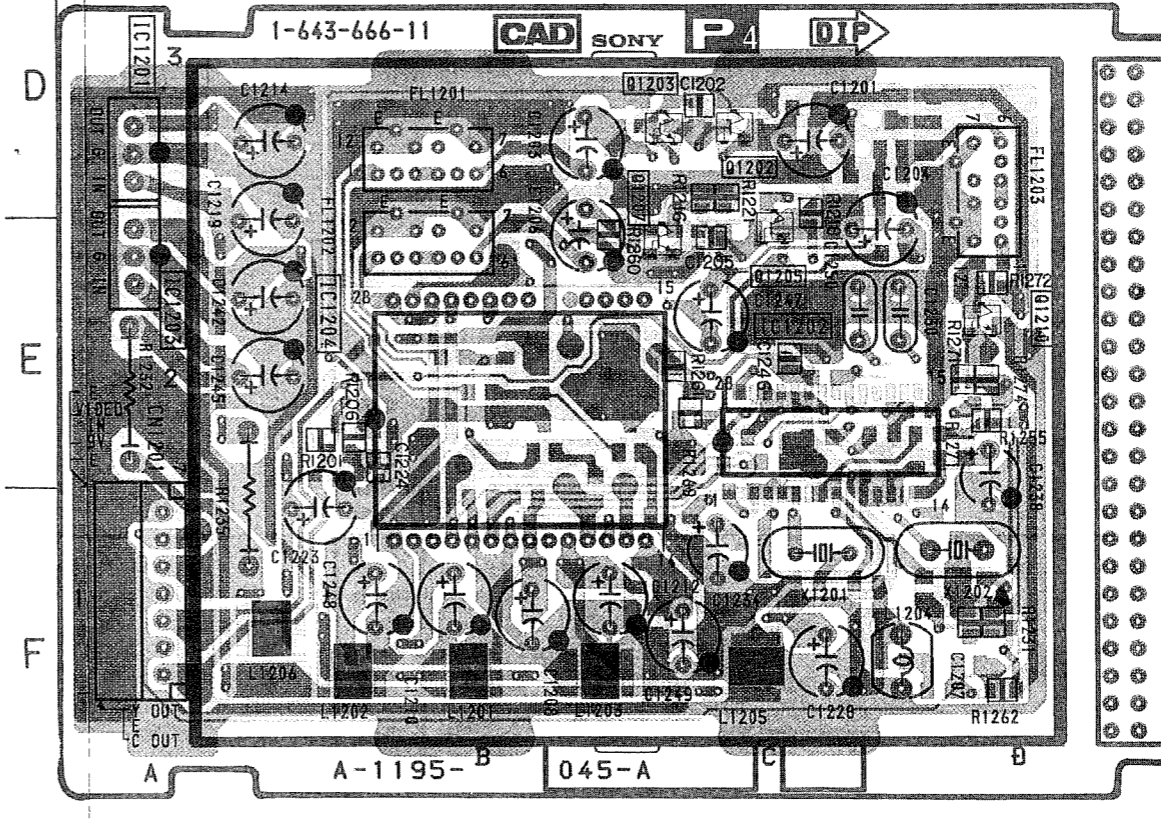
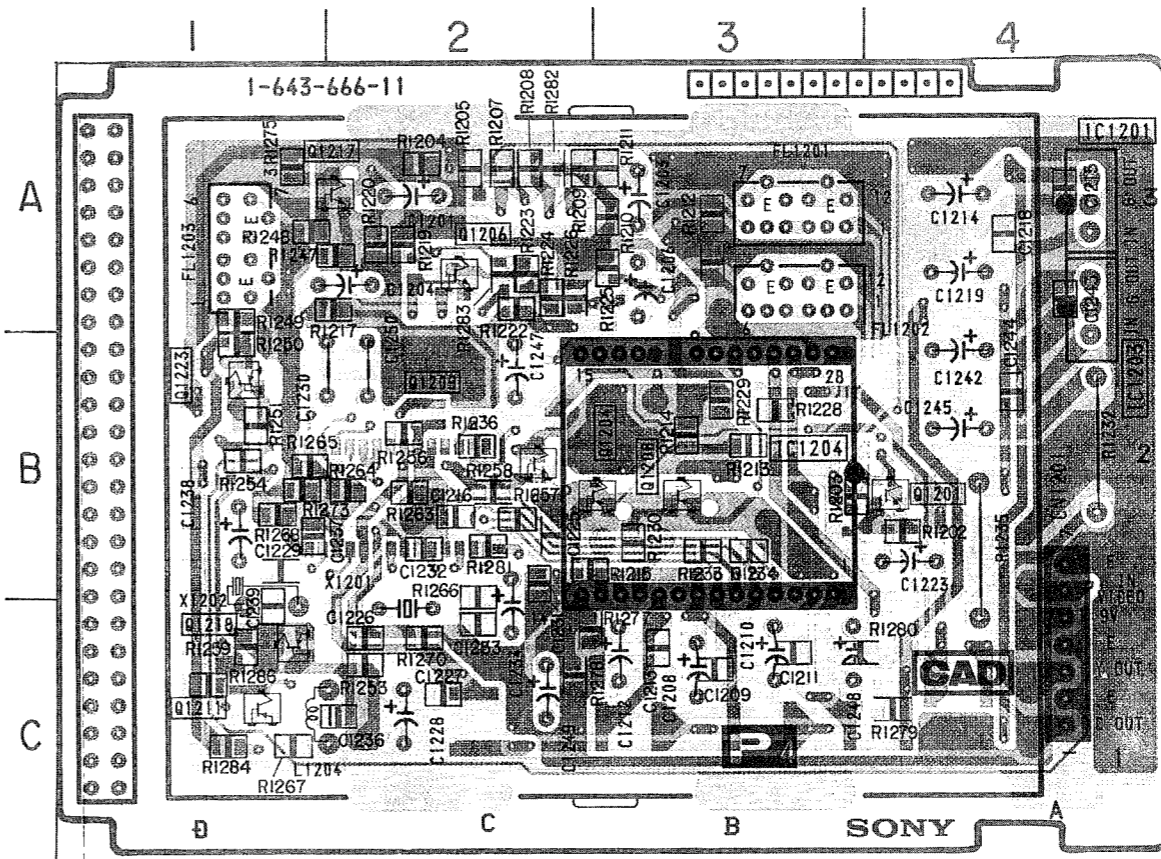


P4

[DIGITAL COMB FILTER]

- [Pattern from the side which enables seeing.]
- [Pattern of the rear side.]

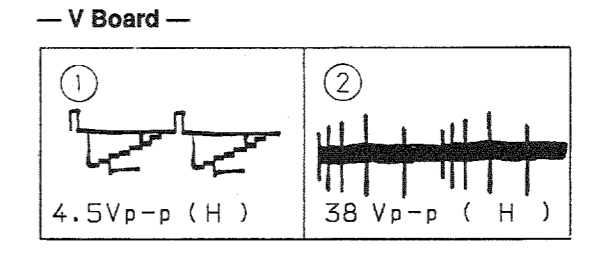
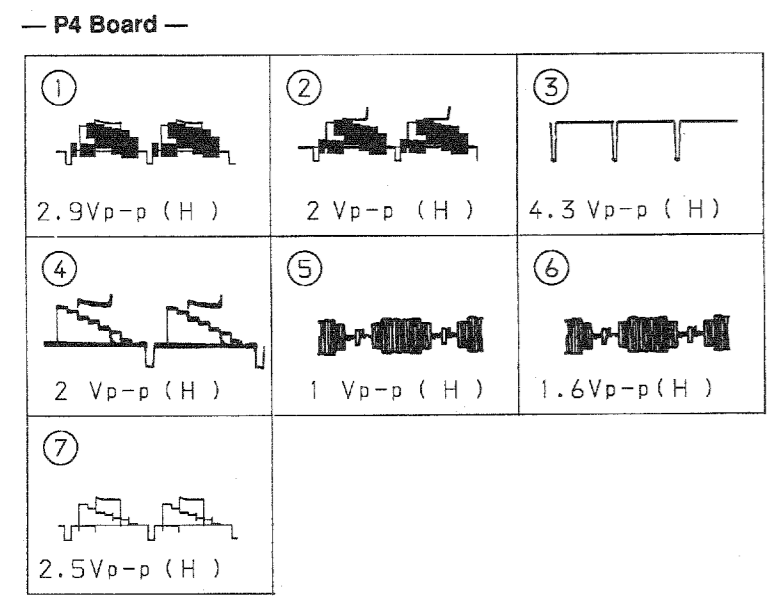
— P4 Board —



— P4 Board —

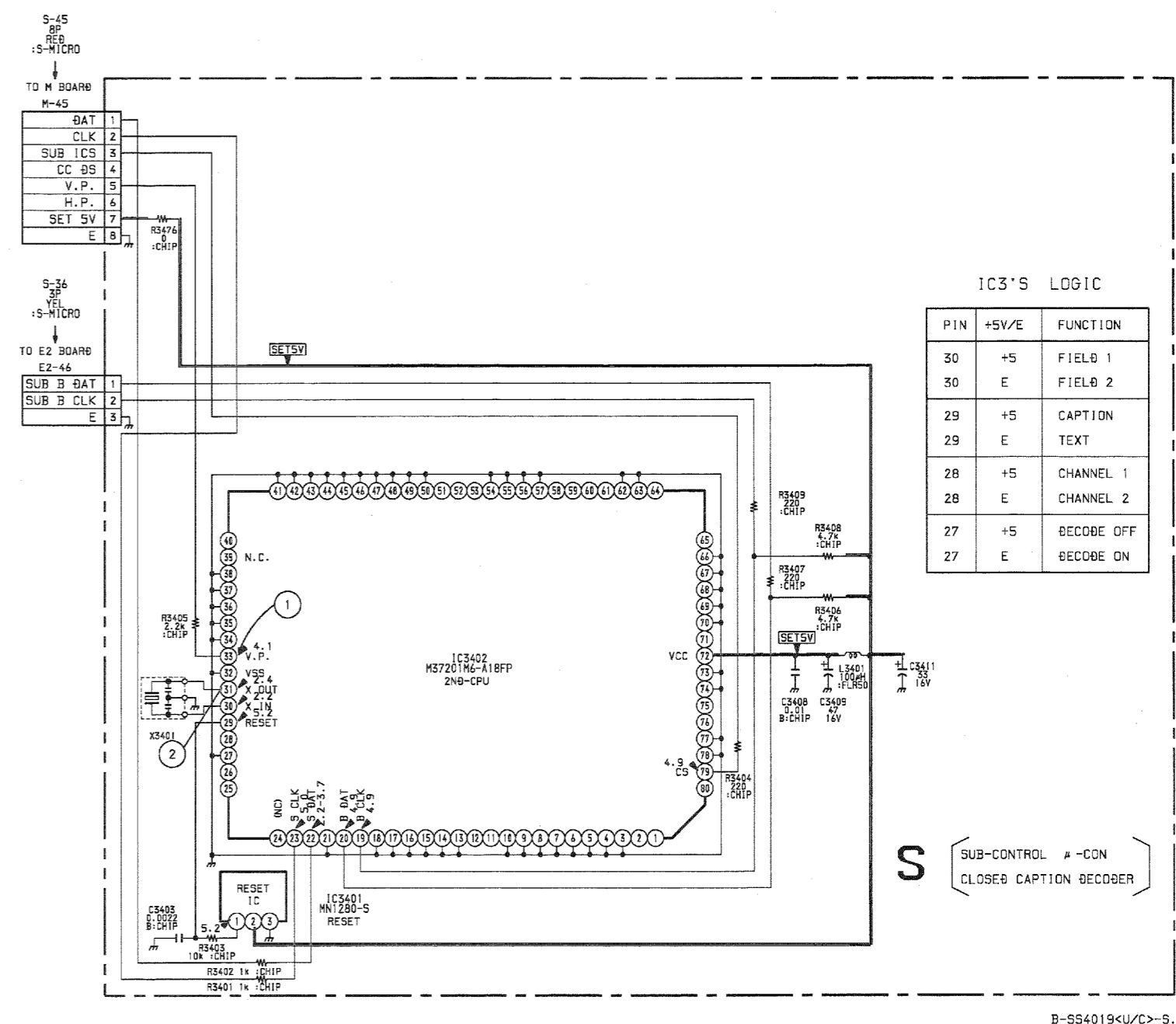
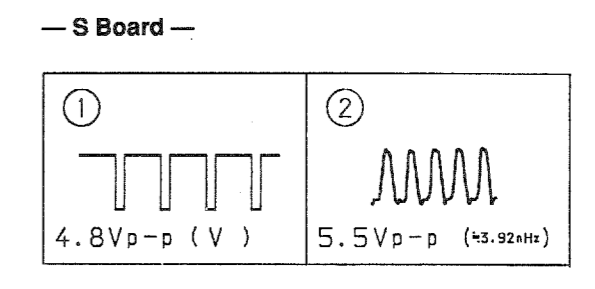
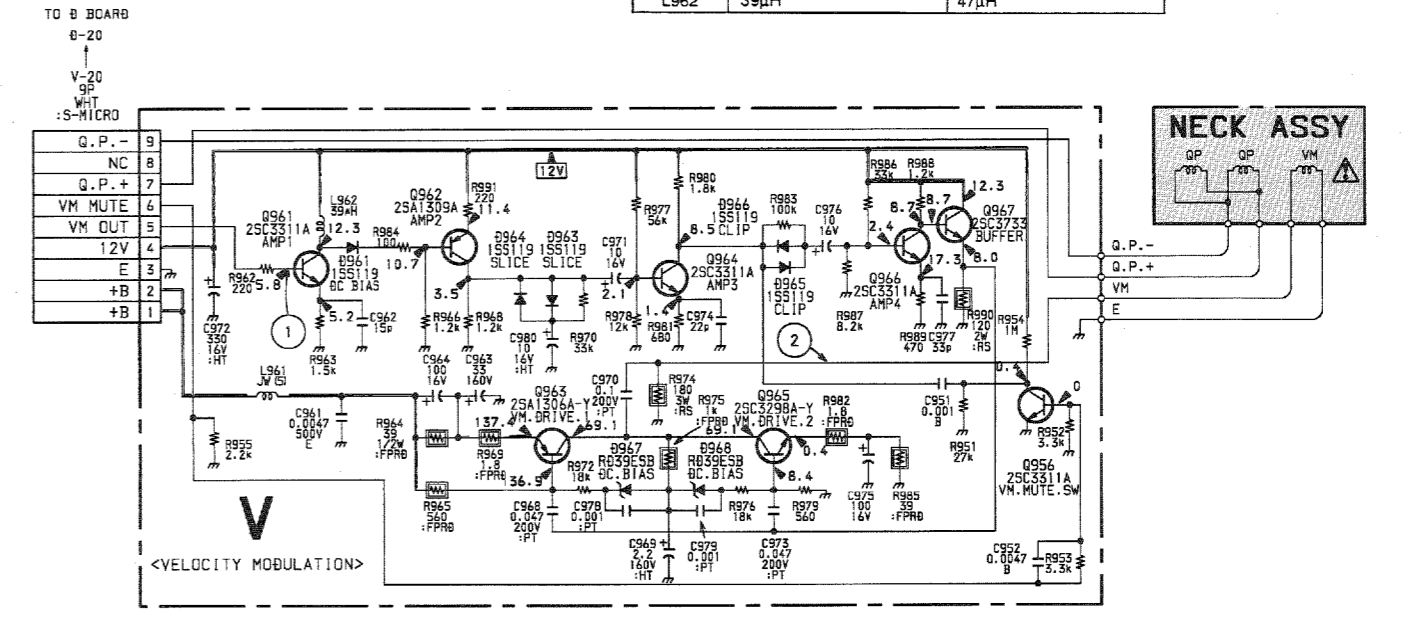
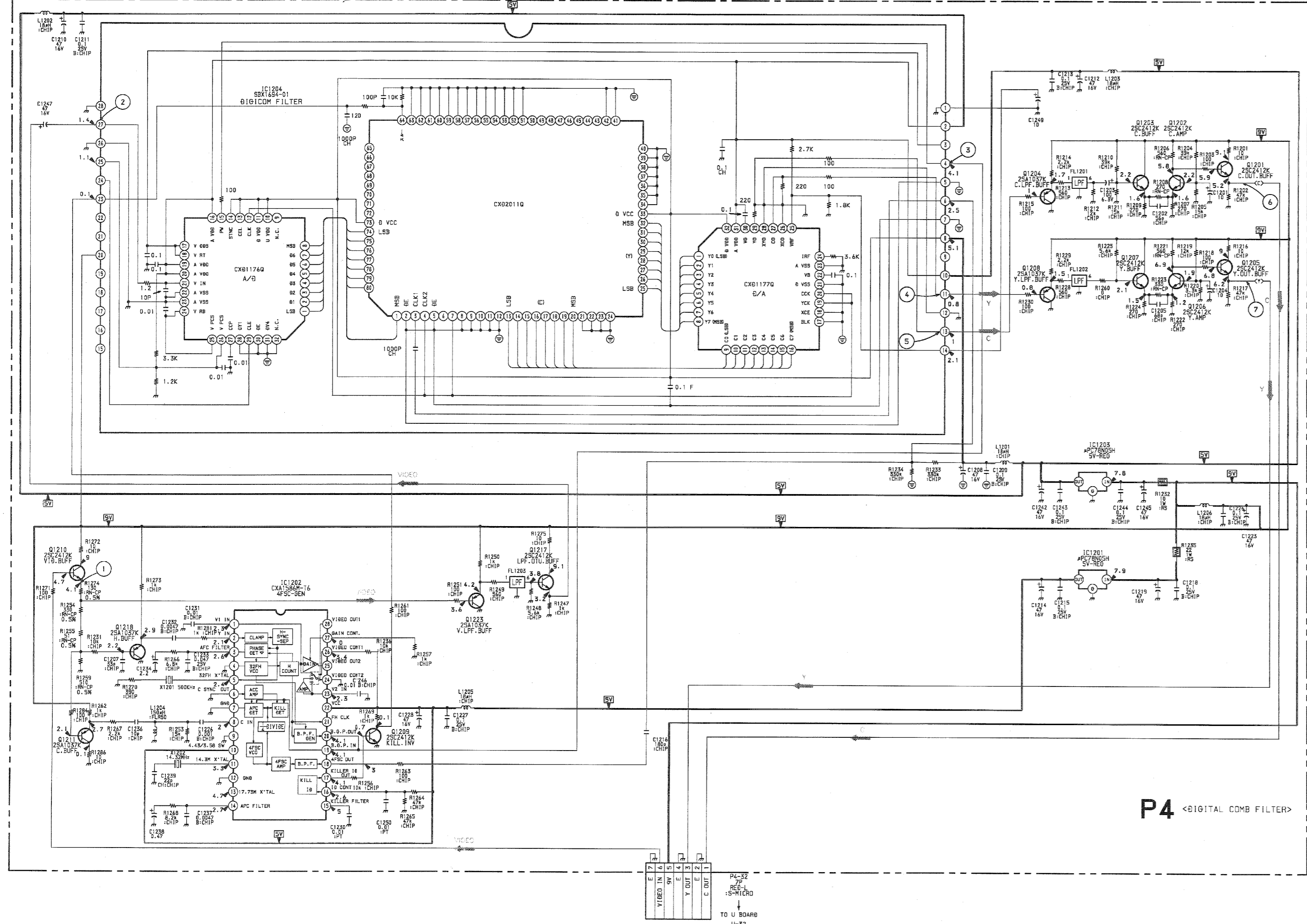
IC	
IC1201	A-4
1202	E-3
1203	A-4
1204	B-3
TRANSISTOR	
Q1201	B-4
1202	D-3
1203	D-3
1204	B-3
1205	E-3
1206	A-2
1207	E-3
1208	B-8
1209	B-2
1210	E-4
1211	C-1
1217	A-2
1218	C-1
1223	B-1

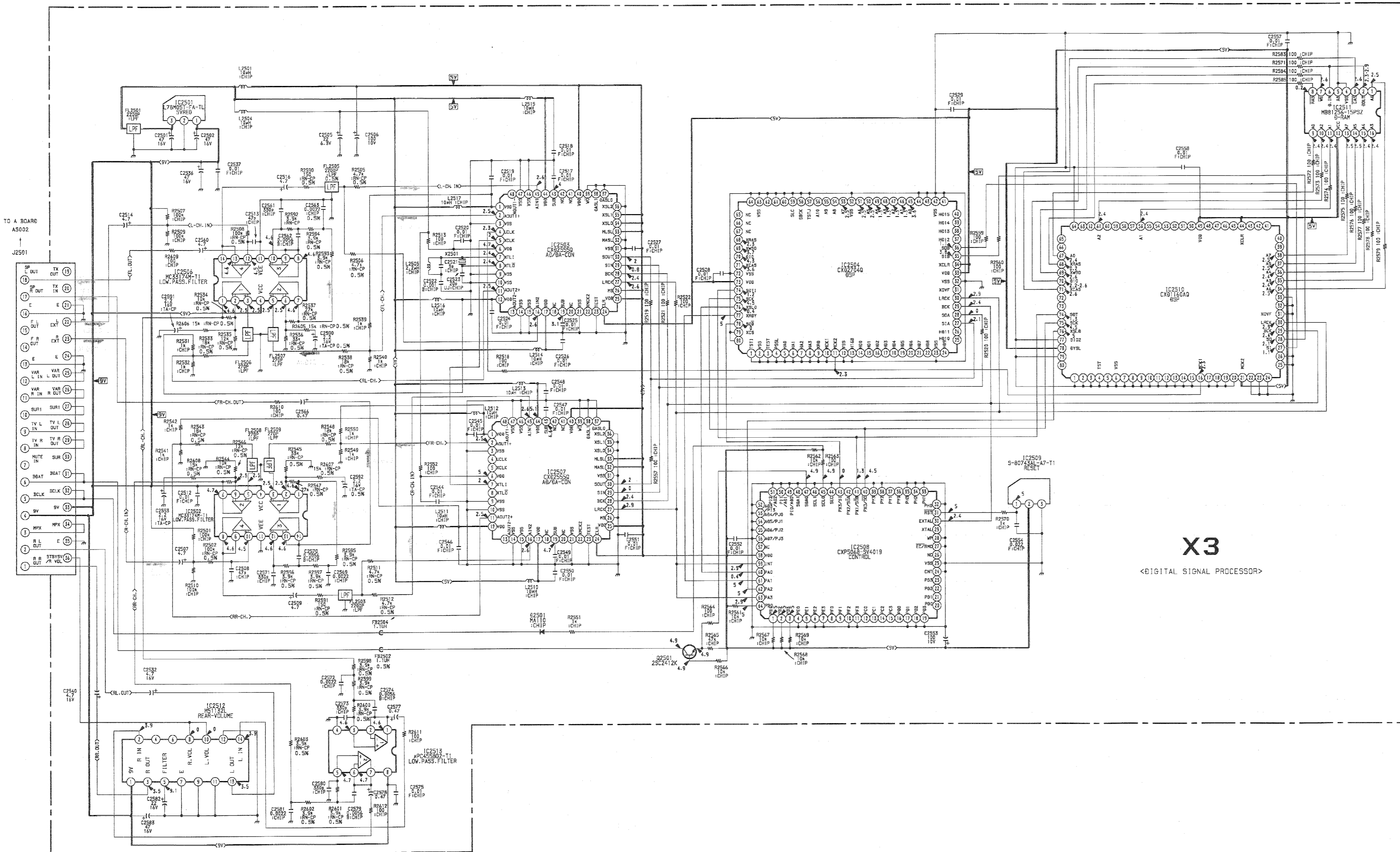
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P



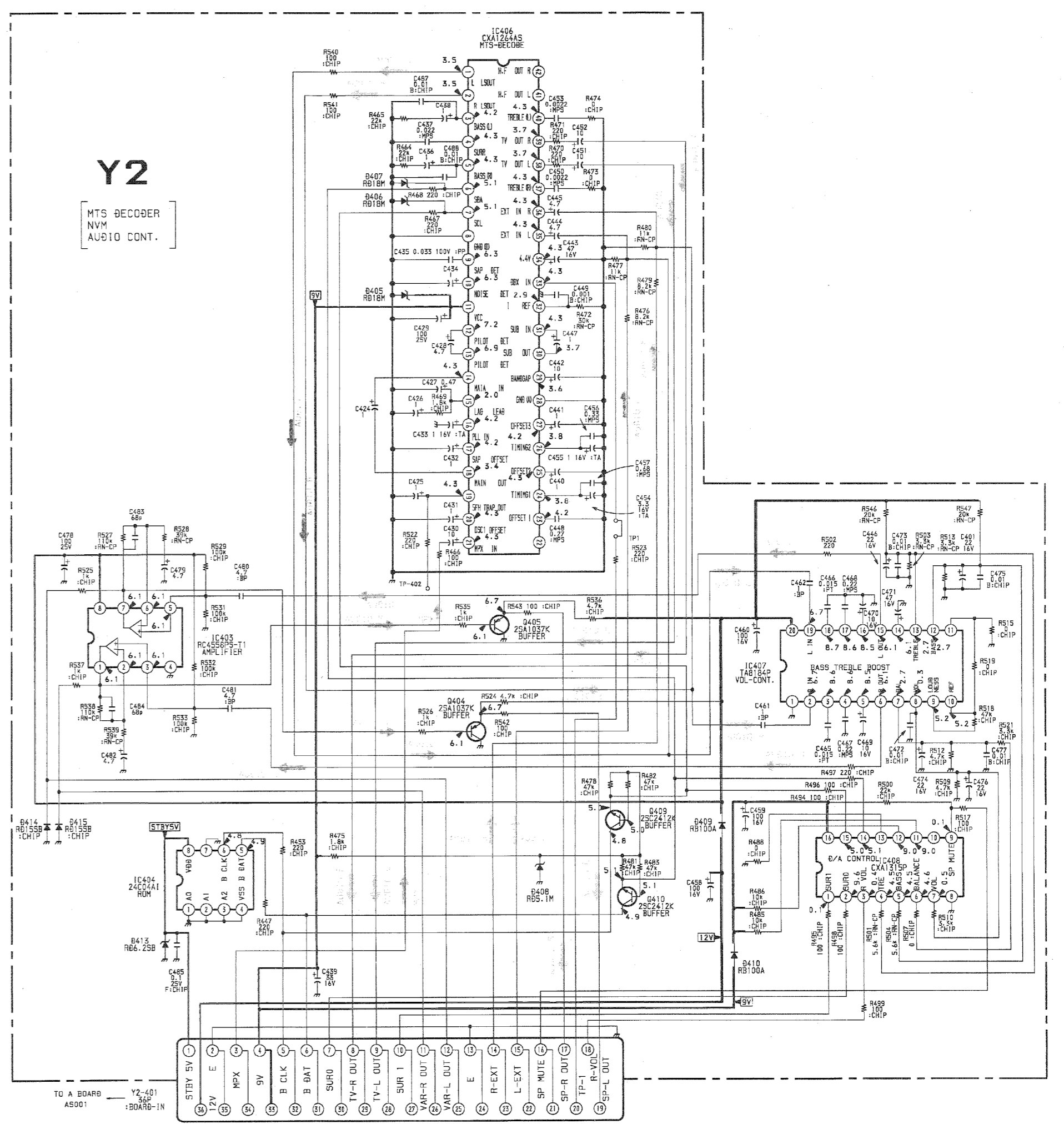
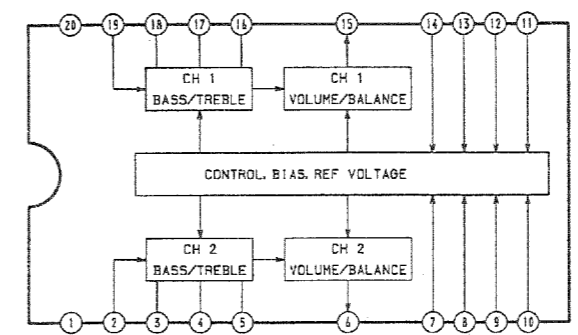
V BOARD * MARK NOTE

	KV-27XBR95S	KV-32XBR95S
L962	35uH	47uH





Y2 BOARD IC404 24C04A/P



X3

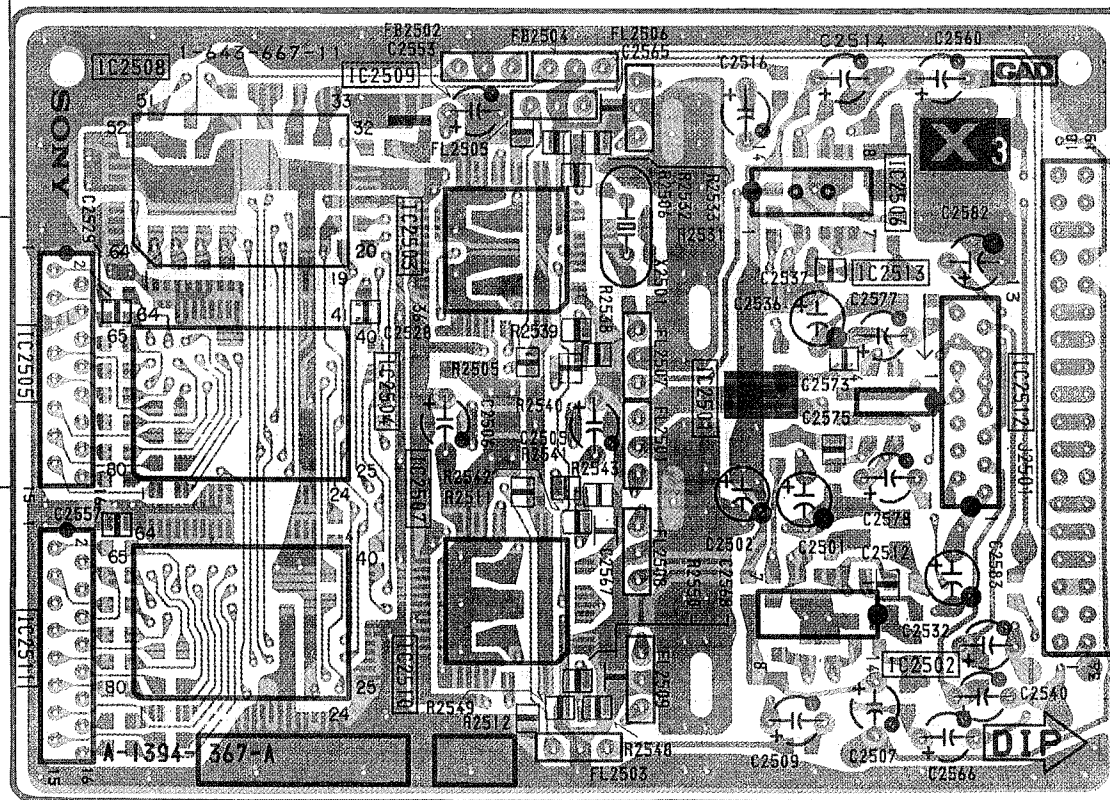
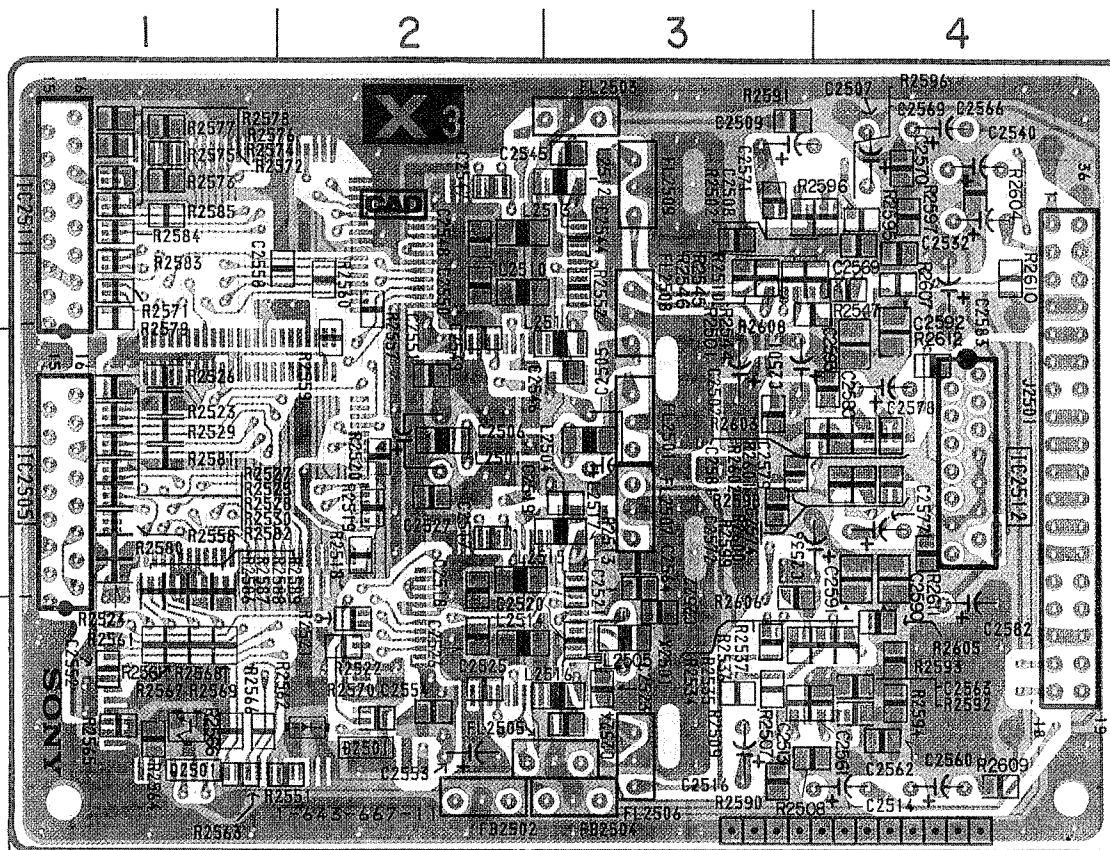
[DIGITAL SIGNAL PROCESSOR]

— X3 Board —

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

— X3 Board —

IC	
IC2501	E-3
2502	F-4
2503	E-2
2504	E-1
2505	D-3
2506	F-2
2507	D-1
2508	D-2
2509	F-1
2510	A-1
2511	B-4
2512	F-4
2513	E-4
TRANSISTOR	
Q2501	C-1
DIODE	
D2501	C-2



Y2

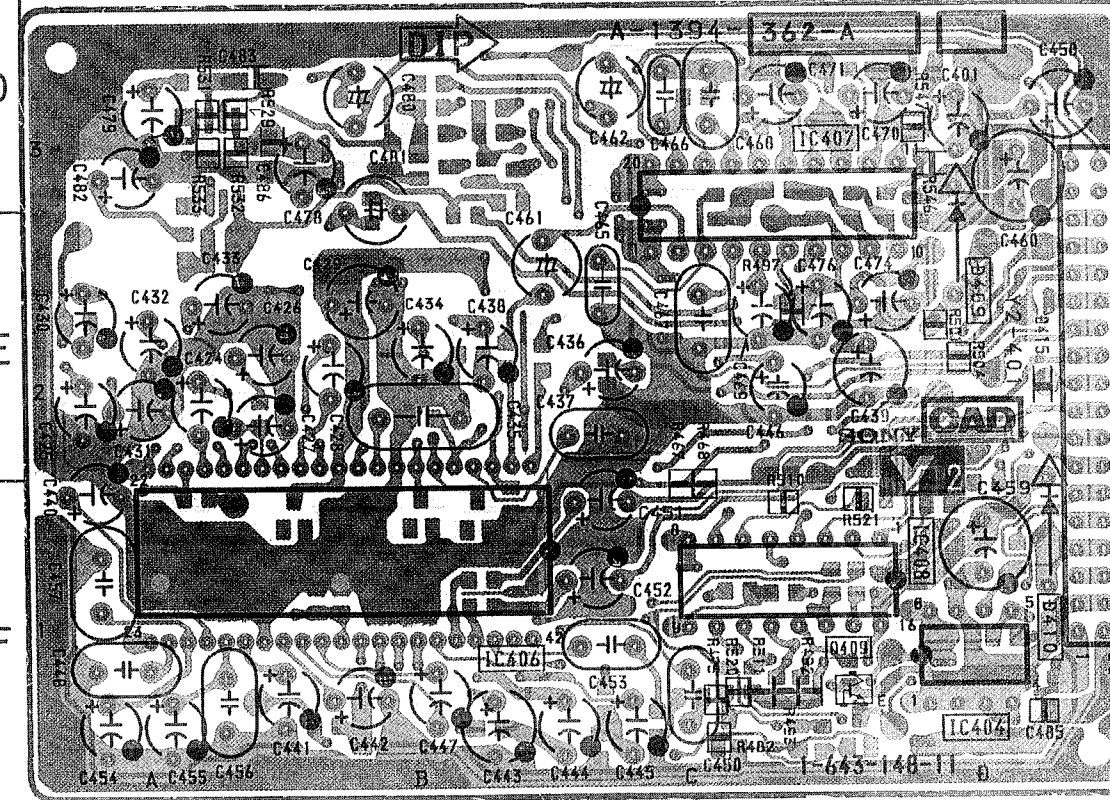
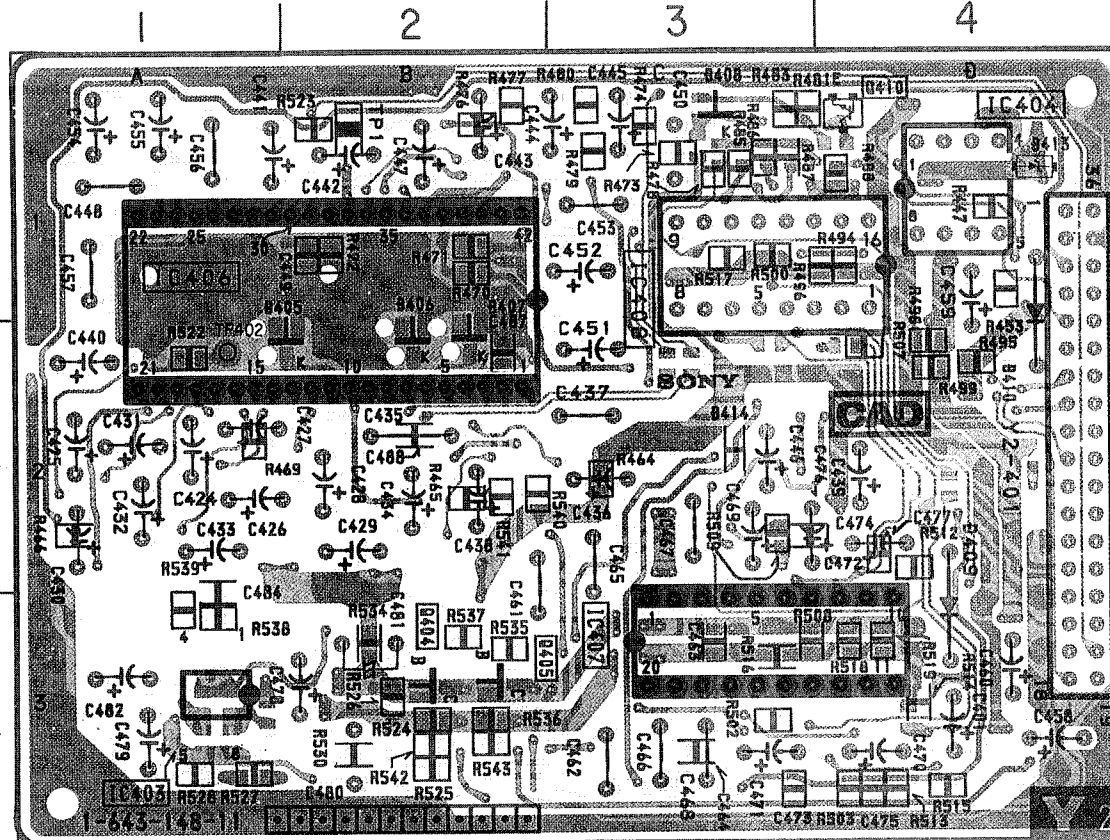
[MTS DECORDER, NVM, AUDIO CONT.]

— Y2 Board —

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

— Y2 Board —

IC	
IC403	C-1
404	A-4
406	A-2
407	C-3
408	A-3
TRANSISTOR	
Q404	C-2
405	C-2
409	F-4
410	A-4
DIODE	
D405	B-2
406	B-2
407	B-2
408	A-3
409	C-4
410	A-4
413	A-4
414	B-3
415	E-4
TEST POINT	
TP1	A-2



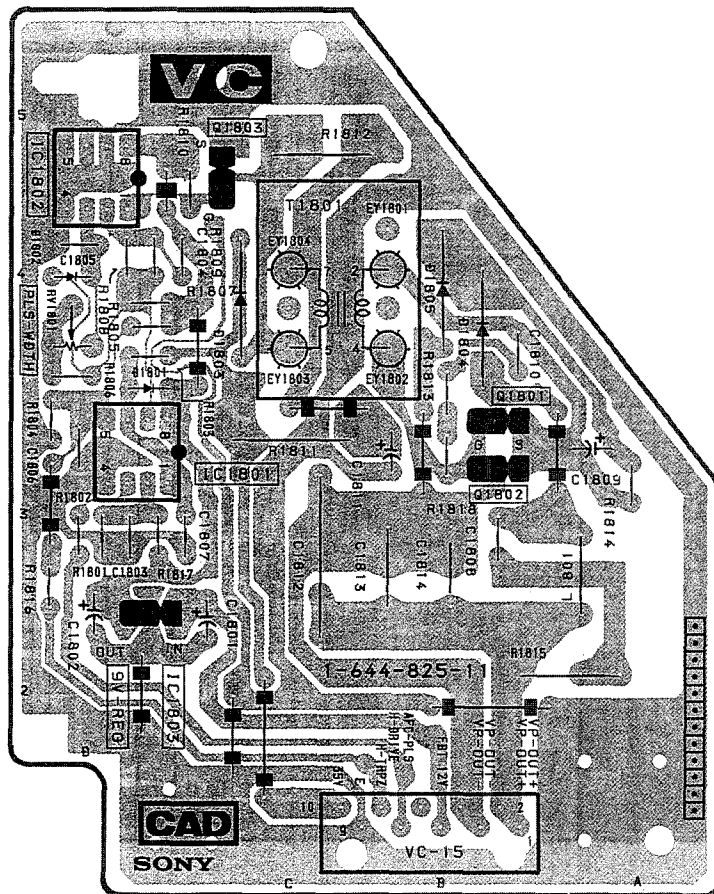
VC [V.PIN CORR.]

HX2 [VIDEO-3 FRONT TERMINAL]

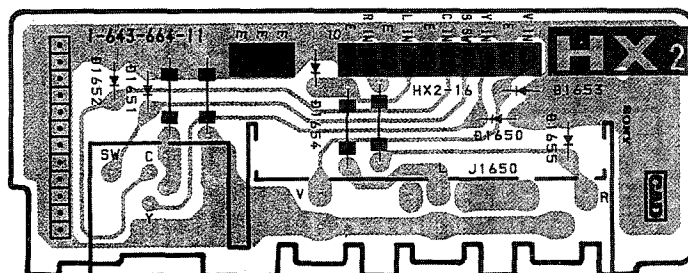
— P3 Board —

IC		TESTPOINT	
IC2001	F-1	TP1	C-2
2002	C-2	TP2	F-1
2003	D-3		
2004	B-3		
2005	C-3		
2006	F-4		
2007	E-4		
TRANSISTOR			
Q2001	E-2		
2002	F-2		
2003	E-2		
2004	D-2		
2005	B-4		
2006	A-3		
2007	A-3		
2008	E-2		
2009	B-4		
2010	B-4		
2011	B-5		
2012	A-5		
2015	E-3		
2016	E-3		
2017	F-3		
2018	F-3		
2019	F-3		
2020	F-3		
2021	E-3		
2022	D-4		
2023	D-4		
2024	C-4		
2025	B-4		
2026	C-4		
2027	C-4		
2028	C-4		
2029	C-4		
2030	D-1		
2031	F-2		
2032	E-3		
2034	E-3		
2036	C-4		
DIODE			
D2003	F-2		
2004	C-4		
2005	E-4		
VALIABLE RESISTOR			
RV2001	F-2		
2002	D-3		
2003	G-4		
2004	F-4		

— VC Board —

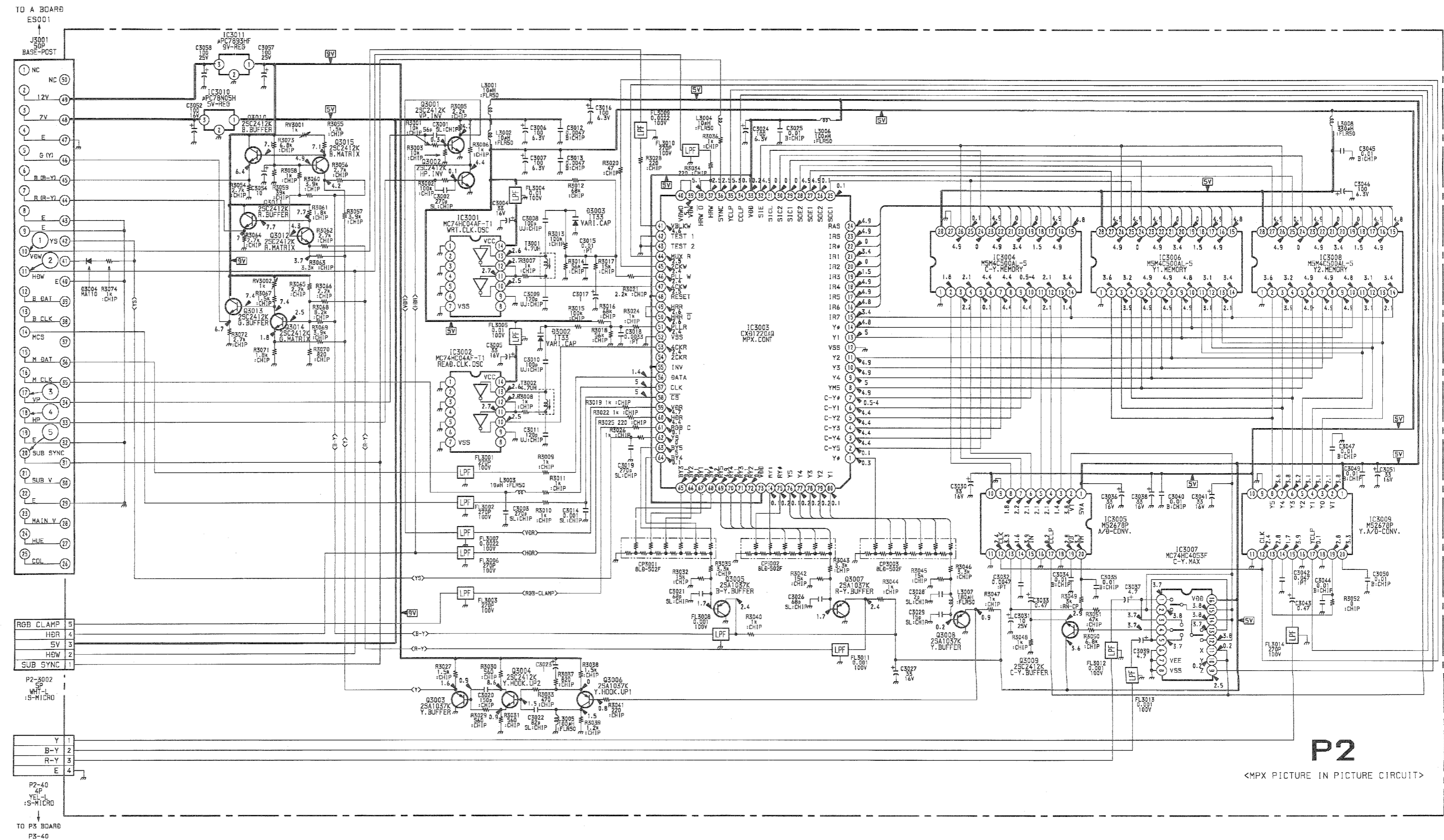
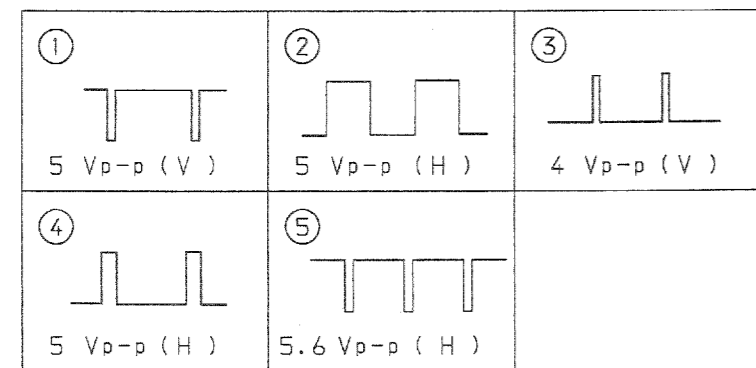


— HX2 Board —



A
B
C
D
E
F
G
H
I
J
K

- P2 Board -



P2
MPX PICTURE IN PICTURE CIRCUIT