

JVC

SCHEMATIC DIAGRAMS

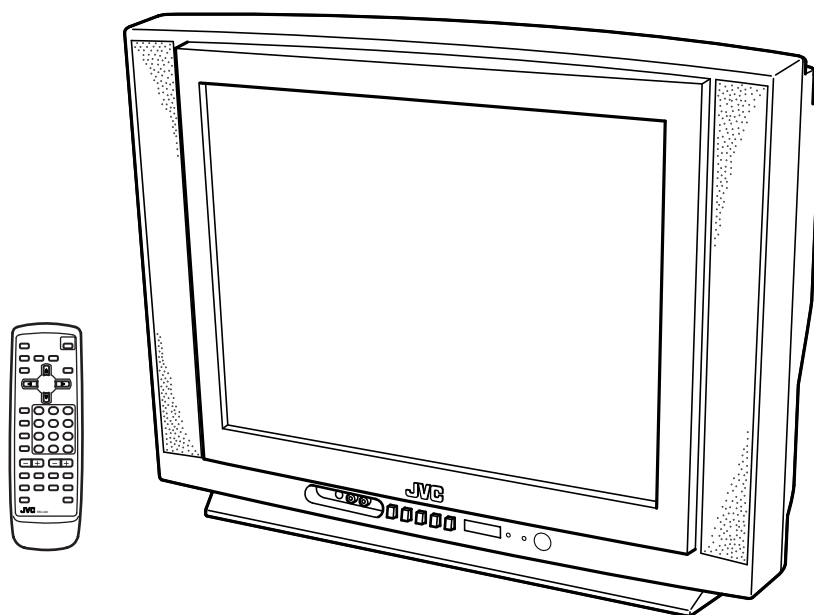
COLOUR TELEVISION

AV-21FR10 AV-21F10

BASIC CHASSIS

CG-F

CD-ROM No.SML200110



CONTENTS

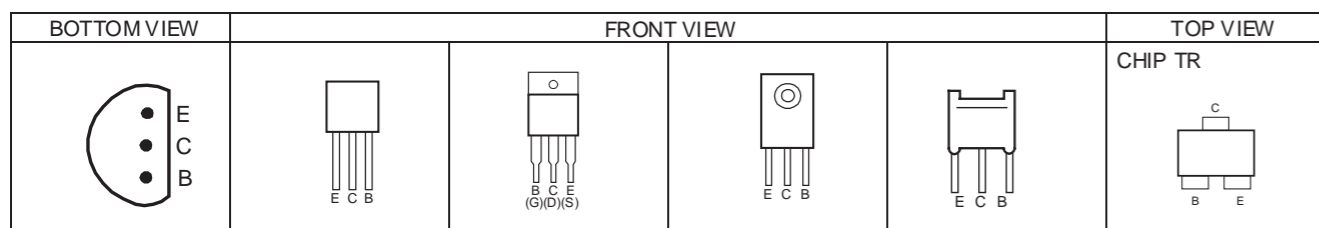
■ NOTE ON USING CIRCUIT DIAGRAMS	2-1
■ SEMICONDUCTOR SHAPES	2-2
■ BLOCK DIAGRAM	2-3
■ CIRCUIT DIAGRAMS	2-7
■ PATTERN DIAGRAMS	2-11

CONTENTS

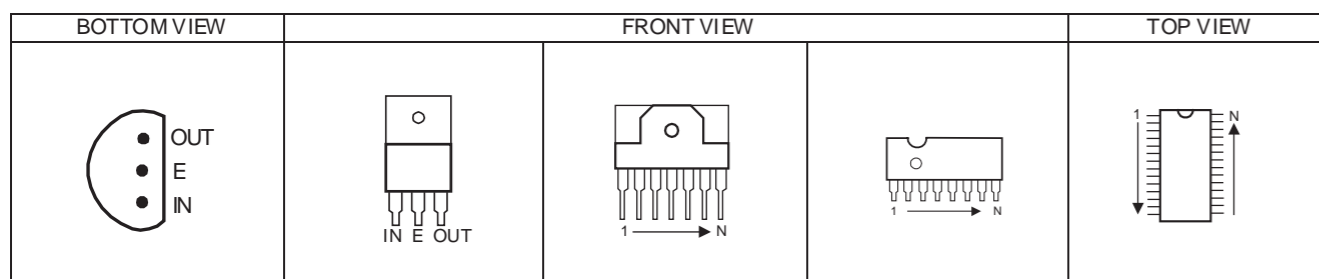
SEMICONDUCTOR SHAPES	2-2
BLOCK DIAGRAM	2-3
CIRCUIT DIAGRAMS	
MAIN PWB CIRCUIT DIAGRAM	2-7
PATTERN DIAGRAMS	
MAIN PWB PATTERN	2-11
CRT SOCKET PWB PATTERN	2-13

SEMICONDUCTOR SHAPES

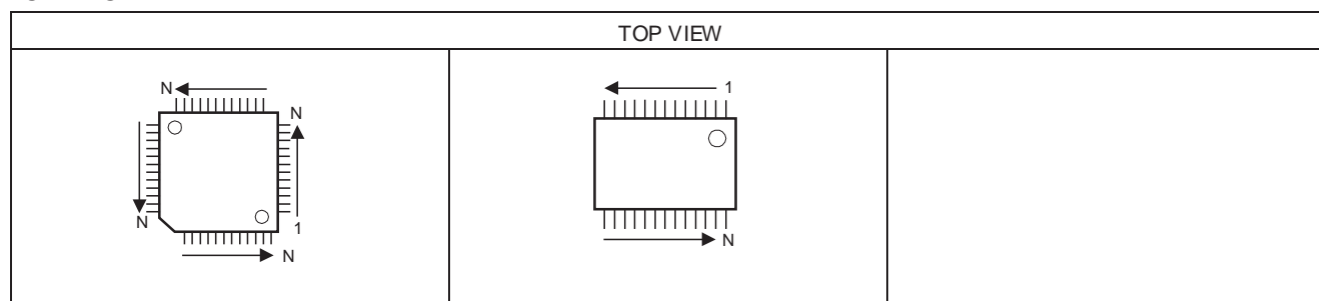
TRANSISTOR



IC



CHIP IC



STANDARD CIRCUIT DIAGRAM

NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the Δ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1)Input signal : Color bar signal
- (2)Setting positions of each knob/button and variable resistor : Original setting position when shipped
- (3)Internal resistance of tester :DC 20k Ω /V
- (4)Oscilloscope sweeping time :H \Rightarrow 20 μ S/div
:V \Rightarrow 5mS/div
:Others \Rightarrow Sweeping time is specified
- (5)Voltage values :All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board :R1209 \rightarrow R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

- Resistance value

- No unit :[Ω]
- K :[K Ω]
- M :[M Ω]

- Rated allowable power

- No indication :1/ 16 [W]
- Others :As specified

- Type

- No indication :Carbon resistor
- OMR :Oxide metal film resistor
- MFR :Metal film resistor
- MPR :Metal plate resistor
- UNFR :Unflammable resistor
- FR :Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

- Capacitance value

- 1 or higher :[pF]
- less than 1 :[μ F]

- Withstand voltage

- No indication :DC50[V]
- Others :DC withstand voltage [V]
- AC indicated :AC withstand voltage [V]

- * Electrolytic Capacitors

47/50[Example]:Capacitance value [μ F]/withstand voltage[V]

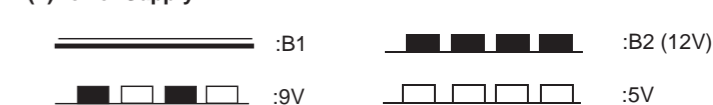
- Type

- No indication :Ceramic capacitor
- MM :Metalized mylar capacitor
- PP :Polypropylene capacitor
- MPP :Metalized polypropylene capacitor
- MF :Metalized film capacitor
- TF :Thin film capacitor
- BP :Bipolar electrolytic capacitor
- TAN :Tantalum capacitor

(3)Coils

- No unit :[μ H]
- Others :As specified

(4)Power Supply



* Respective voltage values are indicated

(5)Test point

- :Test point
- :Only test point display

(6)Connecting method

- :Connector
- :Wrapping or soldering
- :Receptacle

(7)Ground symbol

- :LIVE side ground
- :ISOLATED(NEUTRAL) side ground
- :EARTH ground
- :DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE (\perp) side GND and the ISOLATED(NEUTRAL) (\perp) side GND. Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

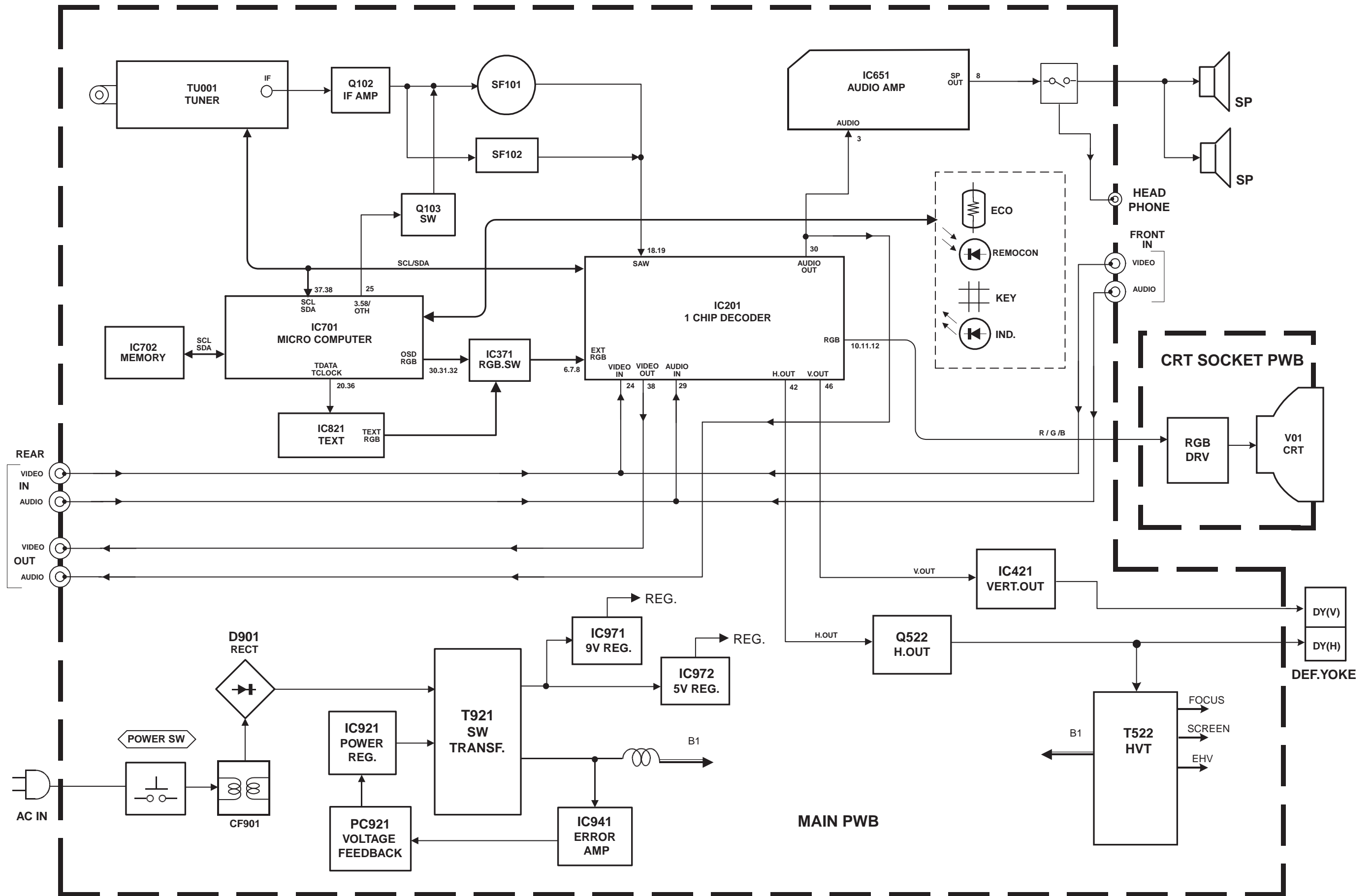
(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

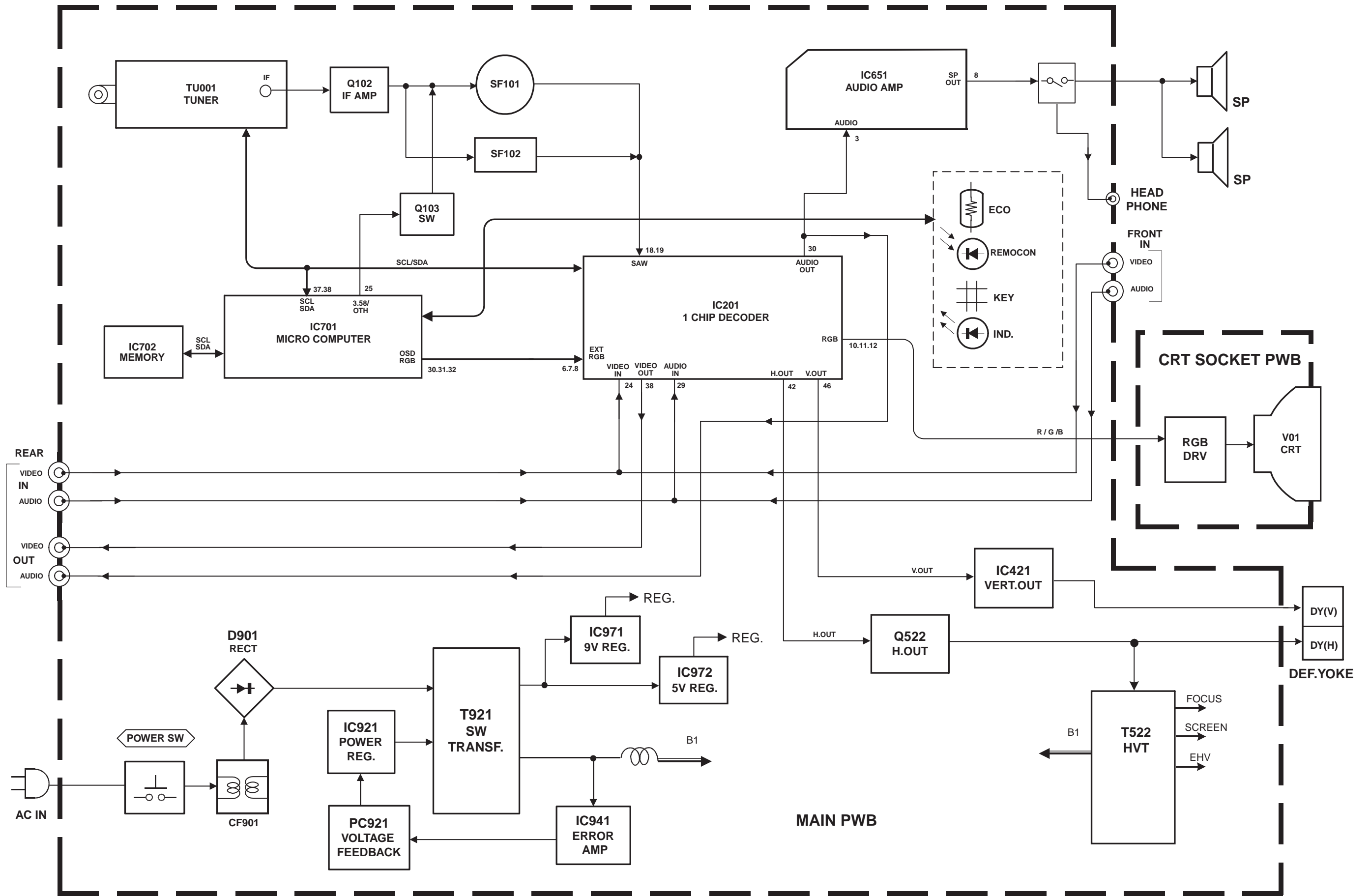
NOTE

◇ Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list. When ordering parts, please use the numbers that appear in the Parts List.

BLOCK DIAGRAM [AV-21FR10]



BLOCK DIAGRAM [AV-21F10]

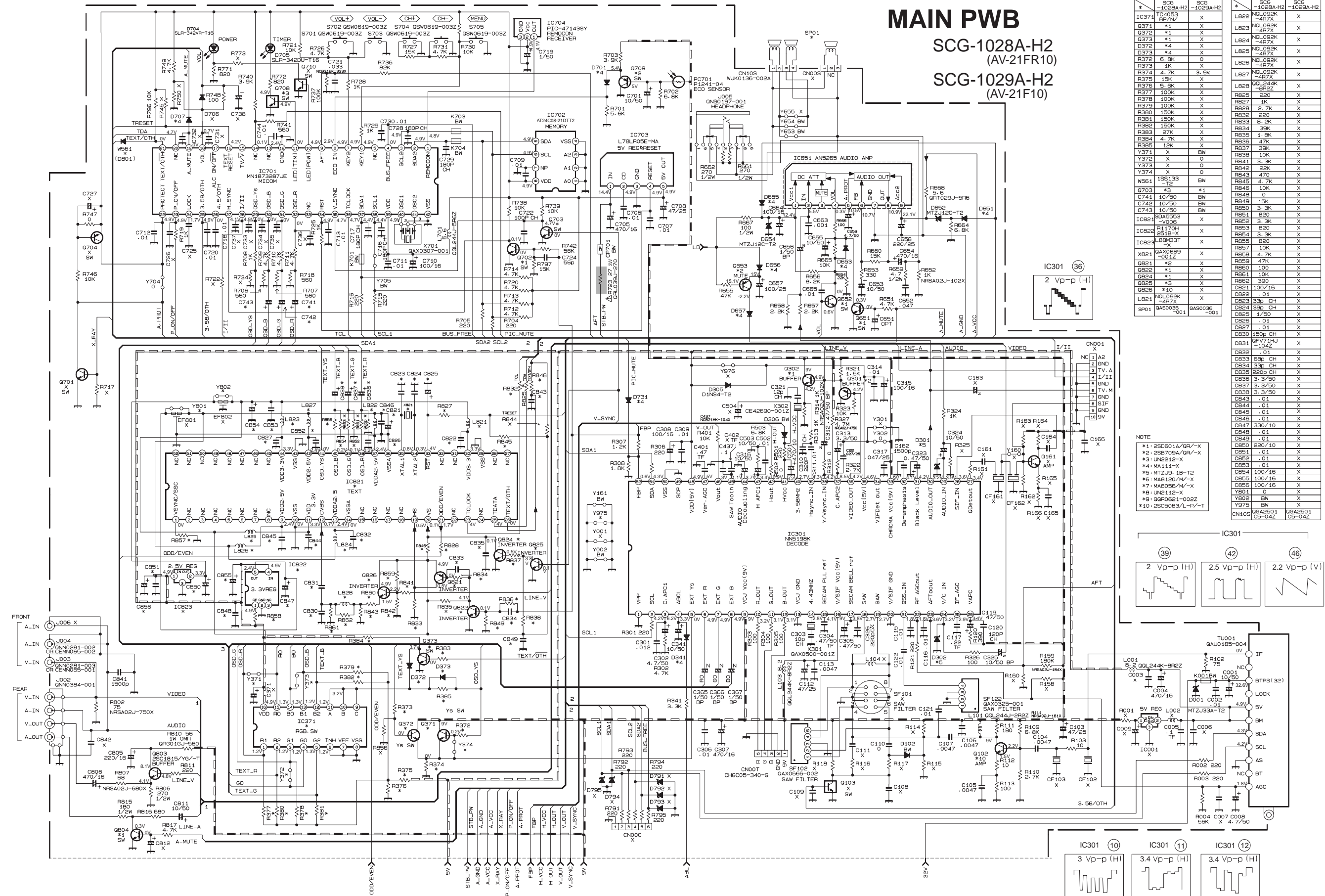
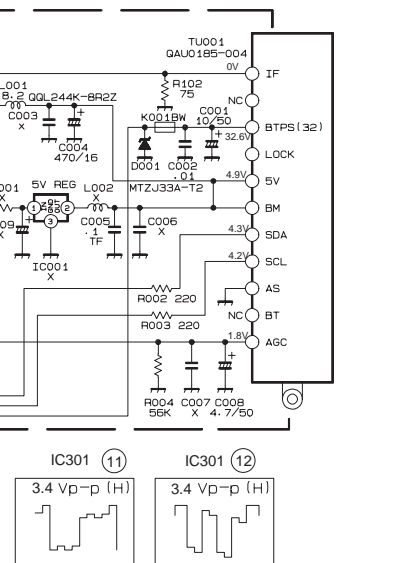
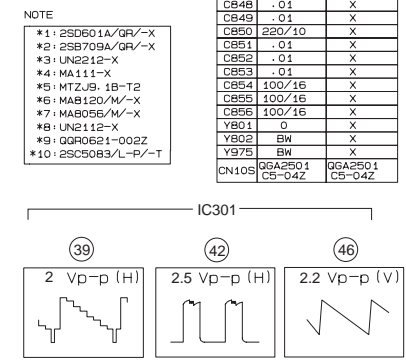


CIRCUIT DIAGRAMS MAIN PWB CIRCUIT DIAGRAMS [1/2]

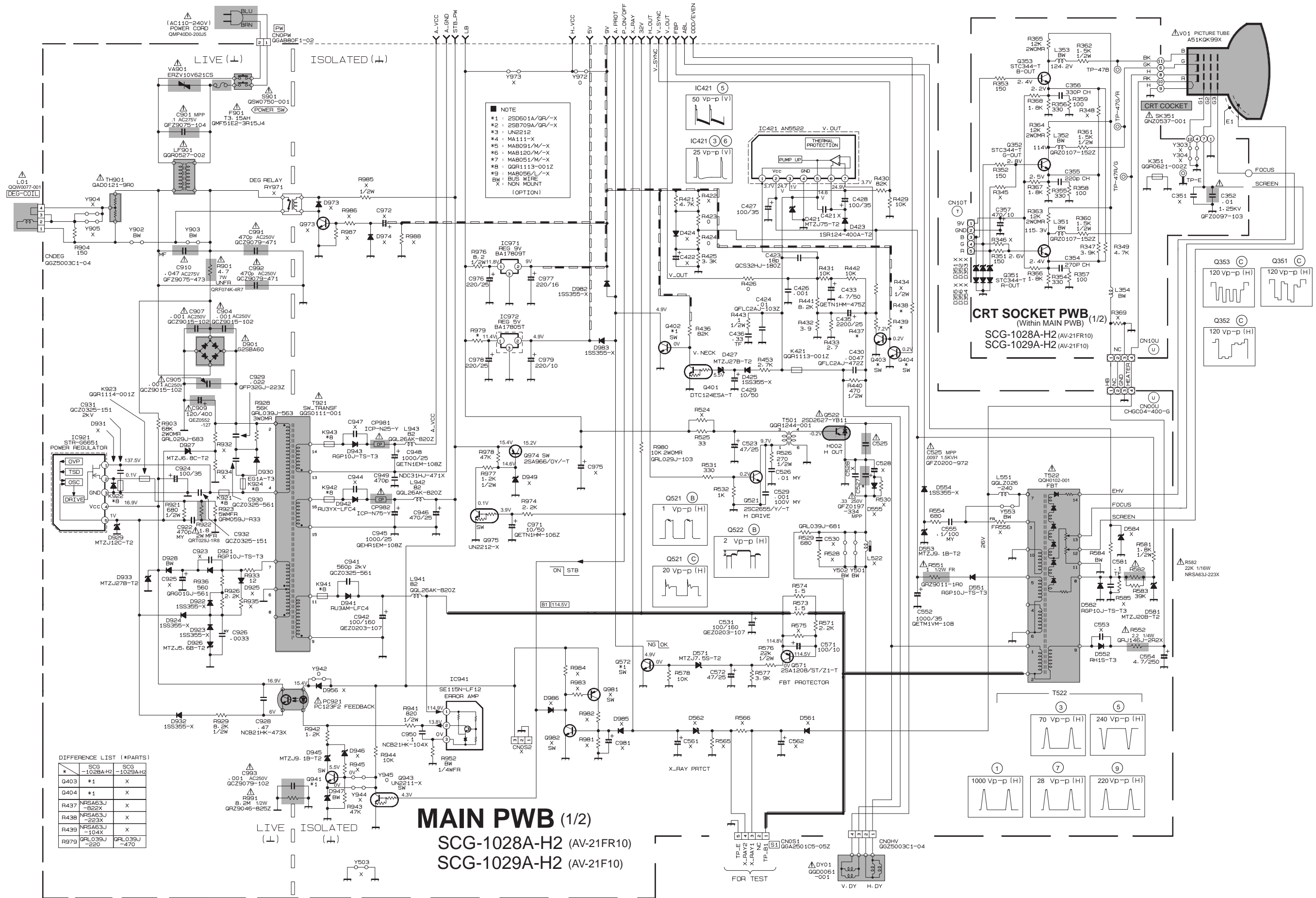
MAIN PWB
SCG-1028A-H2 (AV-21FR10)
SCG-1029A-H2 (AV-21F10)

DIFFERENCE LIST (*PARTS)

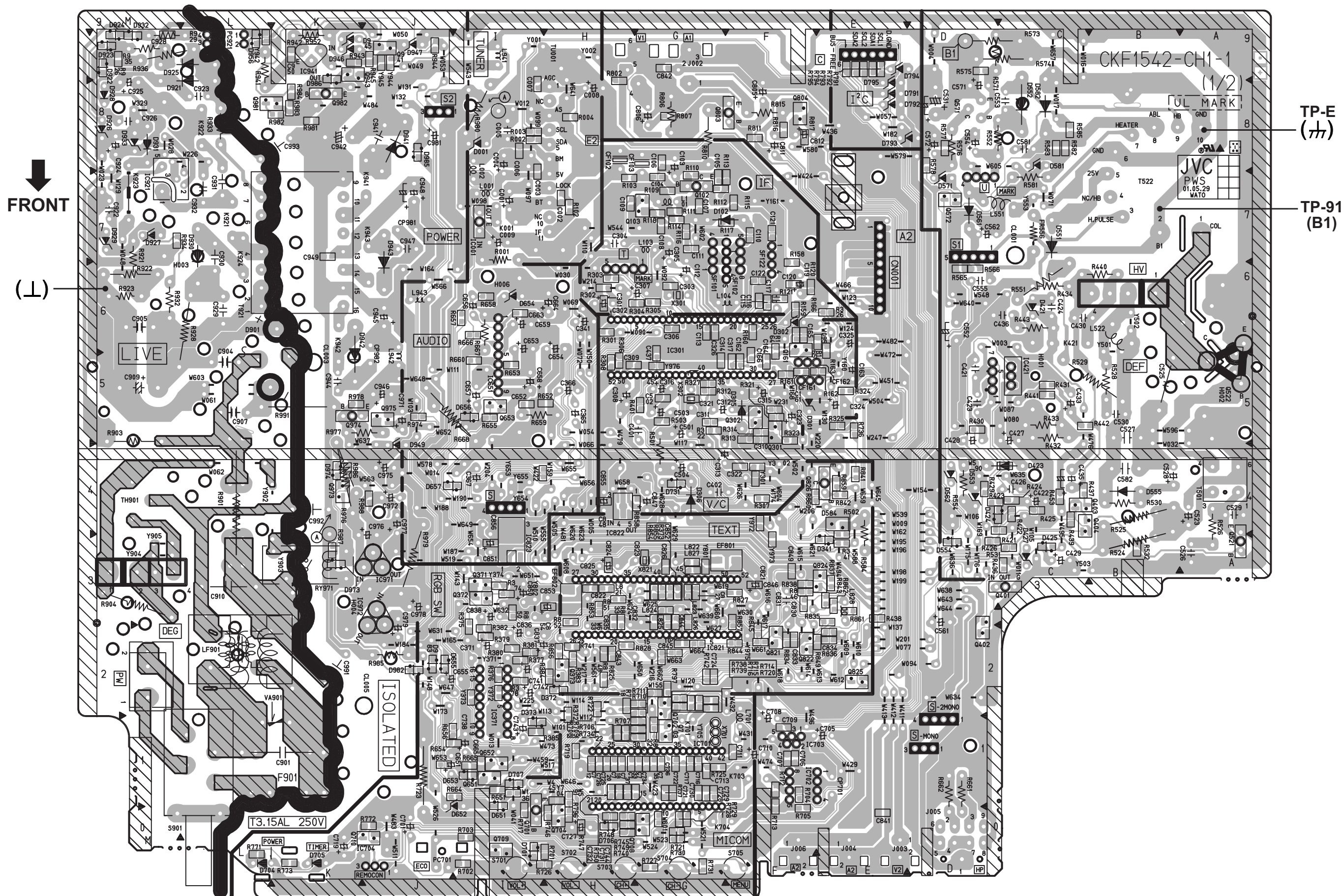
* IC371	SCG-1028A-H2	SCG-1029A-H2	* IC371	SCG-1028A-H2	SCG-1029A-H2
IC371	TC4053 BP/V	X	IC371	NL092K -4R7X	X
Q371	*1	X	LB22	NL092K	X
Q372	*1	X	LB23	NL092K	X
Q373	*1	X	LB24	NL092K	X
D372	*4	X	LB25	NL092K -4R7X	X
D373	*4	X	LB26	NL092K -4R7X	X
R372	6.8K	0	LB27	NL092K -4R7X	X
R373	1K	X	LB28	QGL244K-BR2Z	X
R374	4.7K	3.9K	LB29	QGL244K-BR2Z	X
R375	15K	X	LB30	QGL244K-BR2Z	X
R376	5.6K	X	LB31	QGL244K-BR2Z	X
R377	100K	X	LB32	QGL244K-BR2Z	X
R378	100K	X	LB33	QGL244K-BR2Z	X
R380	150K	X	LB34	QGL244K-BR2Z	X
R381	150K	X	LB35	QGL244K-BR2Z	X
R382	150K	X	LB36	QGL244K-BR2Z	X
R383	27K	X	LB37	QGL244K-BR2Z	X
R384	4.7K	X	LB38	QGL244K-BR2Z	X
R385	12K	X	LB39	QGL244K-BR2Z	X
Y371	X	BW	LB40	QGL244K-BR2Z	X
Y372	X	0	LB41	QGL244K-BR2Z	X
Y373	X	0	LB42	QGL244K-BR2Z	X
Y374	X	0	LB43	QGL244K-BR2Z	X
W561	1SS133	BW	LB44	QGL244K-BR2Z	X
Q703	*3	*1	LB45	QGL244K-BR2Z	X
C741	10/50	BW	LB46	QGL244K-BR2Z	X
C742	10/50	BW	LB47	QGL244K-BR2Z	X
C743	10/50	BW	LB48	QGL244K-BR2Z	X
IC821	SDA5553	X	LB49	QGL244K-BR2Z	X
IC822	R1170H	X	LB50	QGL244K-BR2Z	X
IC823	251B-X	X	LB51	QGL244K-BR2Z	X
IC824	BBM33T	X	LB52	QGL244K-BR2Z	X
XB21	QX0669	X	LB53	QGL244K-BR2Z	X
Q821	*2	X	LB54	QGL244K-BR2Z	X
Q822	*1	X	LB55	QGL244K-BR2Z	X
Q823	*3	X	LB56	QGL244K-BR2Z	X
Q824	*10	X	LB57	QGL244K-BR2Z	X
Q825	*3	X	LB58	QGL244K-BR2Z	X
Q826	*10	X	LB59	QGL244K-BR2Z	X
LB21	NL092K -4R7X	X	LB60	QGL244K-BR2Z	X
SP01	QAS0036 -001	QAS0036 -001	LB61	QGL244K-BR2Z	X
			LB62	QGL244K-BR2Z	X
			LB63	QGL244K-BR2Z	X
			LB64	QGL244K-BR2Z	X
			LB65	QGL244K-BR2Z	X
			LB66	QGL244K-BR2Z	X
			LB67	QGL244K-BR2Z	X
			LB68	QGL244K-BR2Z	X
			LB69	QGL244K-BR2Z	X
			LB70	QGL244K-BR2Z	X
			LB71	QGL244K-BR2Z	X
			LB72	QGL244K-BR2Z	X
			LB73	QGL244K-BR2Z	X
			LB74	QGL244K-BR2Z	X
			LB75	QGL244K-BR2Z	X
			LB76	QGL244K-BR2Z	X
			LB77	QGL244K-BR2Z	X
			LB78	QGL244K-BR2Z	X
			LB79	QGL244K-BR2Z	X
			LB80	QGL244K-BR2Z	X
			LB81	QGL244K-BR2Z	X
			LB82	QGL244K-BR2Z	X
			LB83	QGL244K-BR2Z	X
			LB84	QGL244K-BR2Z	X
			LB85	QGL244K-BR2Z	X
			LB86	QGL244K-BR2Z	X
			LB87	QGL244K-BR2Z	X
			LB88	QGL244K-BR2Z	X
			LB89	QGL244K-BR2Z	X
			LB90	QGL244K-BR2Z	X
			LB91	QGL244K-BR2Z	X
			LB92	QGL244K-BR2Z	X
			LB93	QGL244K-BR2Z	X
			LB94	QGL244K-BR2Z	X
			LB95	QGL244K-BR2Z	X
			LB96	QGL244K-BR2Z	X
			LB97	QGL244K-BR2Z	X
			LB98	QGL244K-BR2Z	X
			LB99	QGL244K-BR2Z	X
			LB100	QGL244K-BR2Z	X



MAIN PWB CIRCUIT DIAGRAM [2/2]

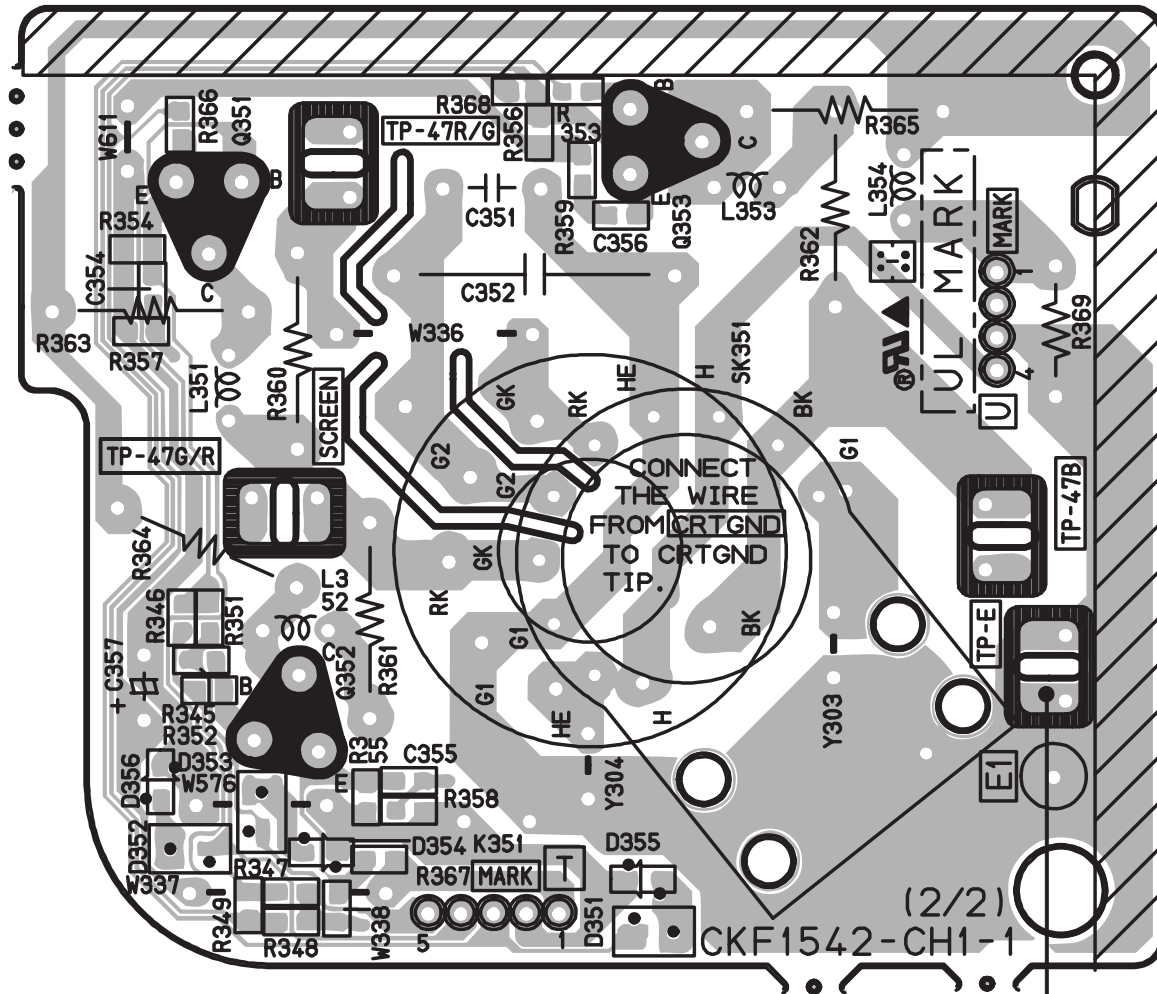


PATTERN DIAGRAMS MAIN PWB PWB PATTERN



CRT SOCKET PWB PATTERN

TOP
↑



TP-E
(||)

JVC

VICTOR COMPANY OF JAPAN, LIMITED

HOME AV NETWORK BUSINESS UNIT. 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama, Kanagawa-prefecture, 221-8528, Japan

AV21FR10-H #4
AV21F10-H #4



Printed in Japan
VP 0110
DP6060