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SEMICONDUCTOR SHAPES

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR

IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW

CHIP IC

TOP VIEW	

AV-N29703/s
STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the 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 20kΩ /V
(4)Oscilloscope sweeping time	:H ⇒ 20μS/div :V ⇒ 5mS/div :Others ⇒ 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 → 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	:Uninflammable 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	:{μF}

● Withstand voltage

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

* Electrolytic Capacitors

47/50[Example]:Capacitance value [μF]/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 capactor

(3)Coils

No unit	:[μH]
Others	:As specified

(4)Power Supply

	:B1		:B2 (12V)
	:9V		:5V

* Respective voltage values are indicated

(5)Test point

	:Test point		:Only test point display
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(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

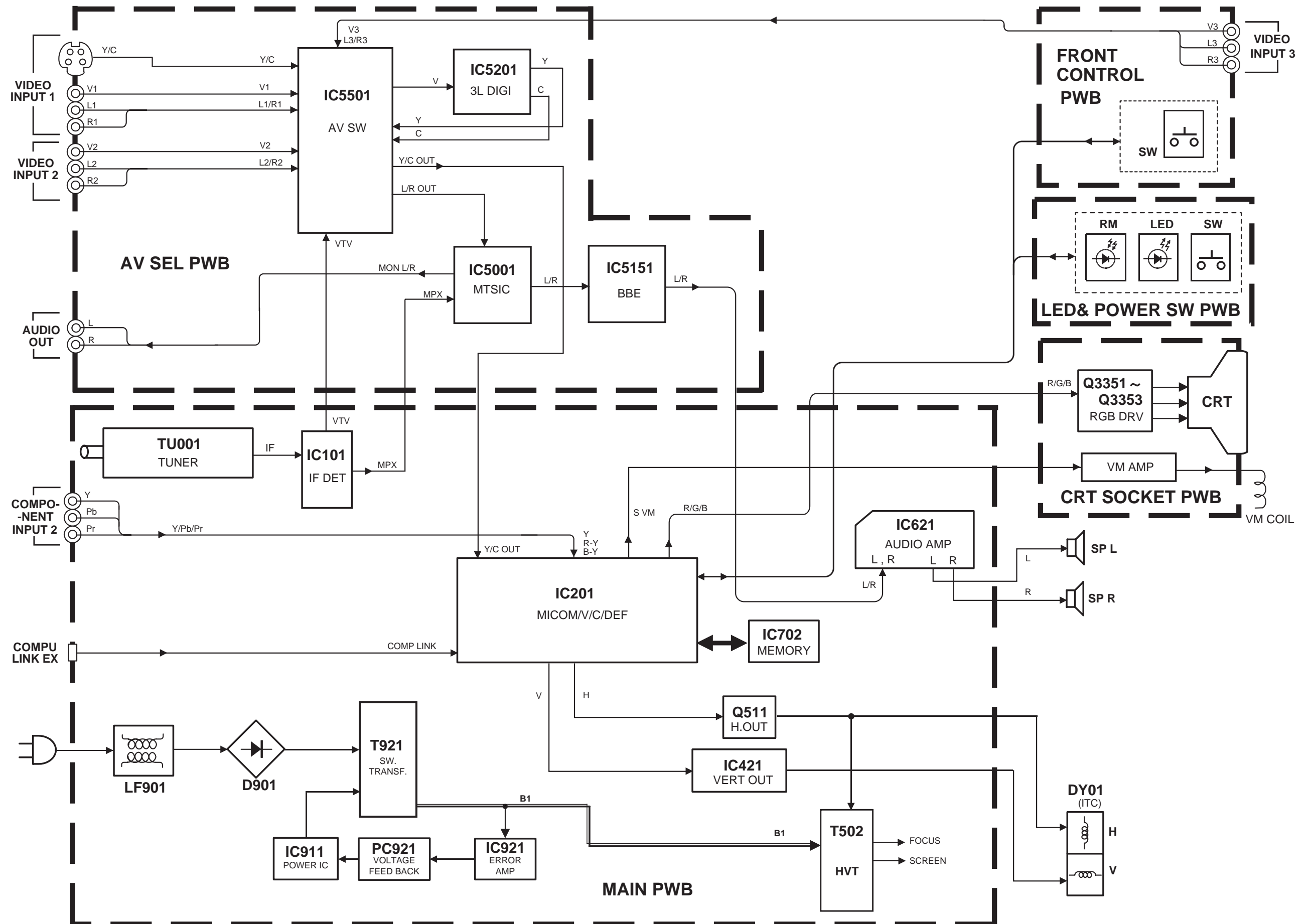
This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : () side GND and the ISOLATED(NEUTRAL) : () side GND.Therefore, care must be taken for the following points.

- (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.

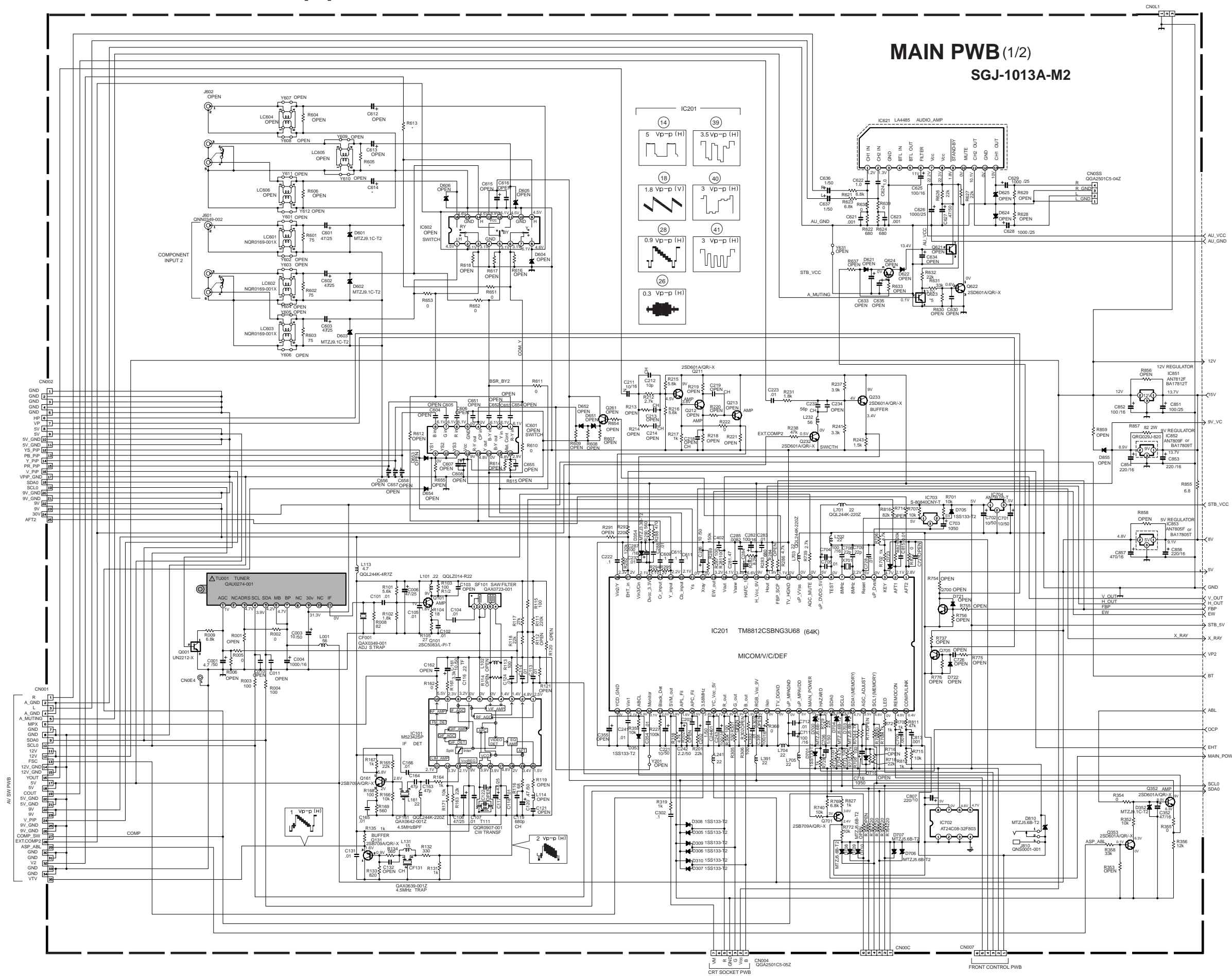
◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

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.

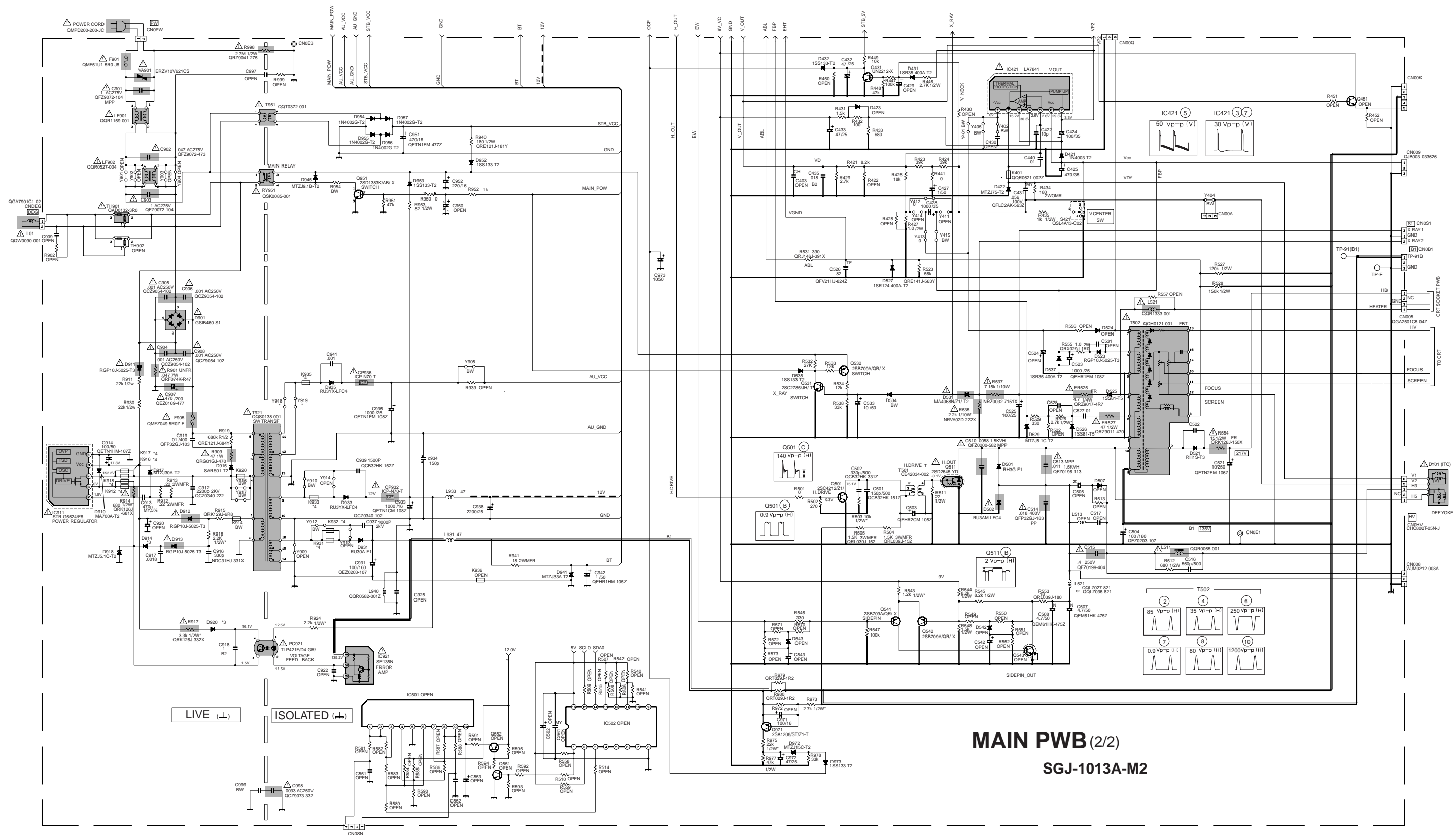
BLOCK DIAGRAM



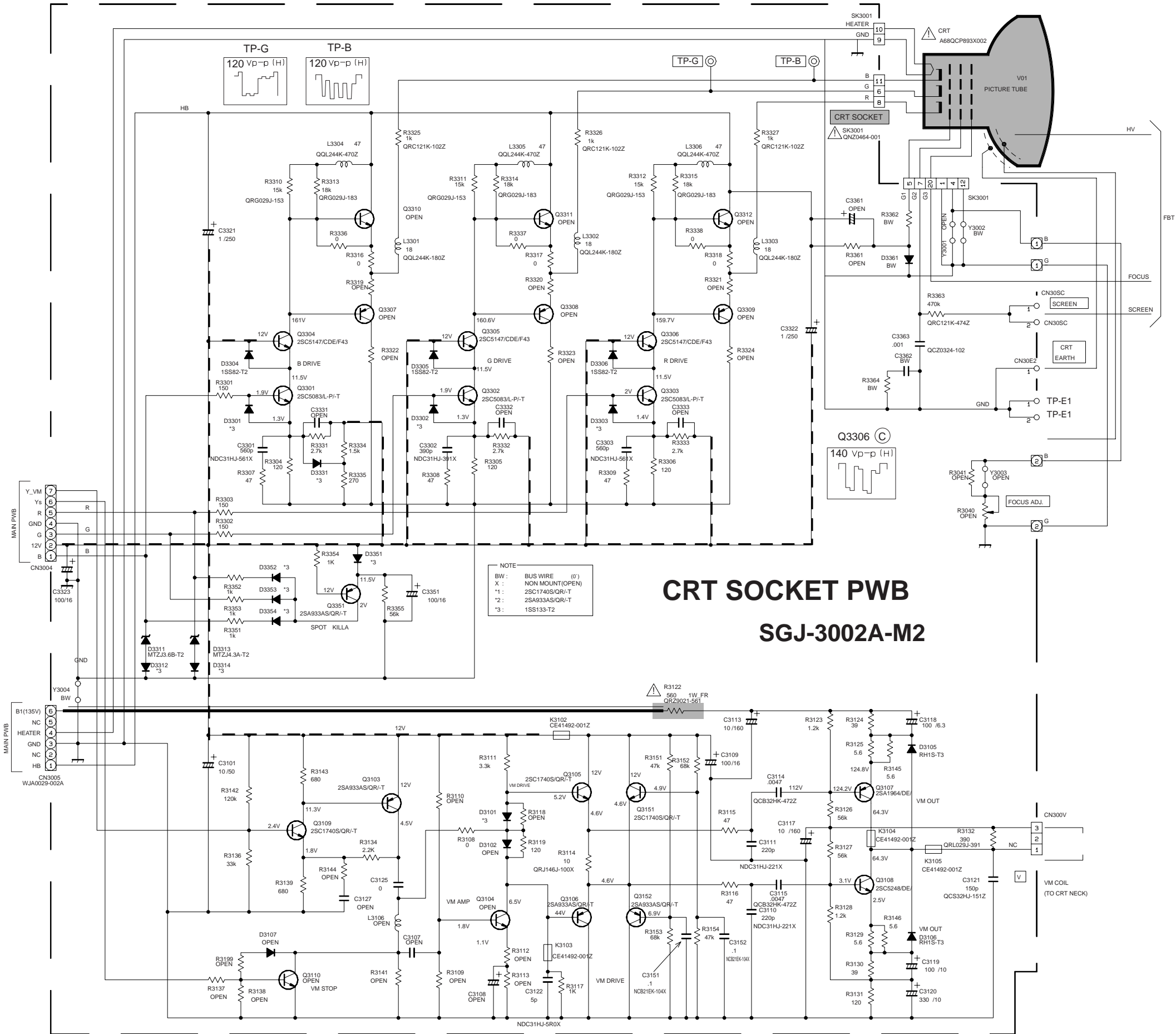
CIRCUIT DIAGRAMS MAIN PWB CIRCUIT DIAGRAM [1/2]



MAIN PWB (2/2)
SGJ-1013A-M2

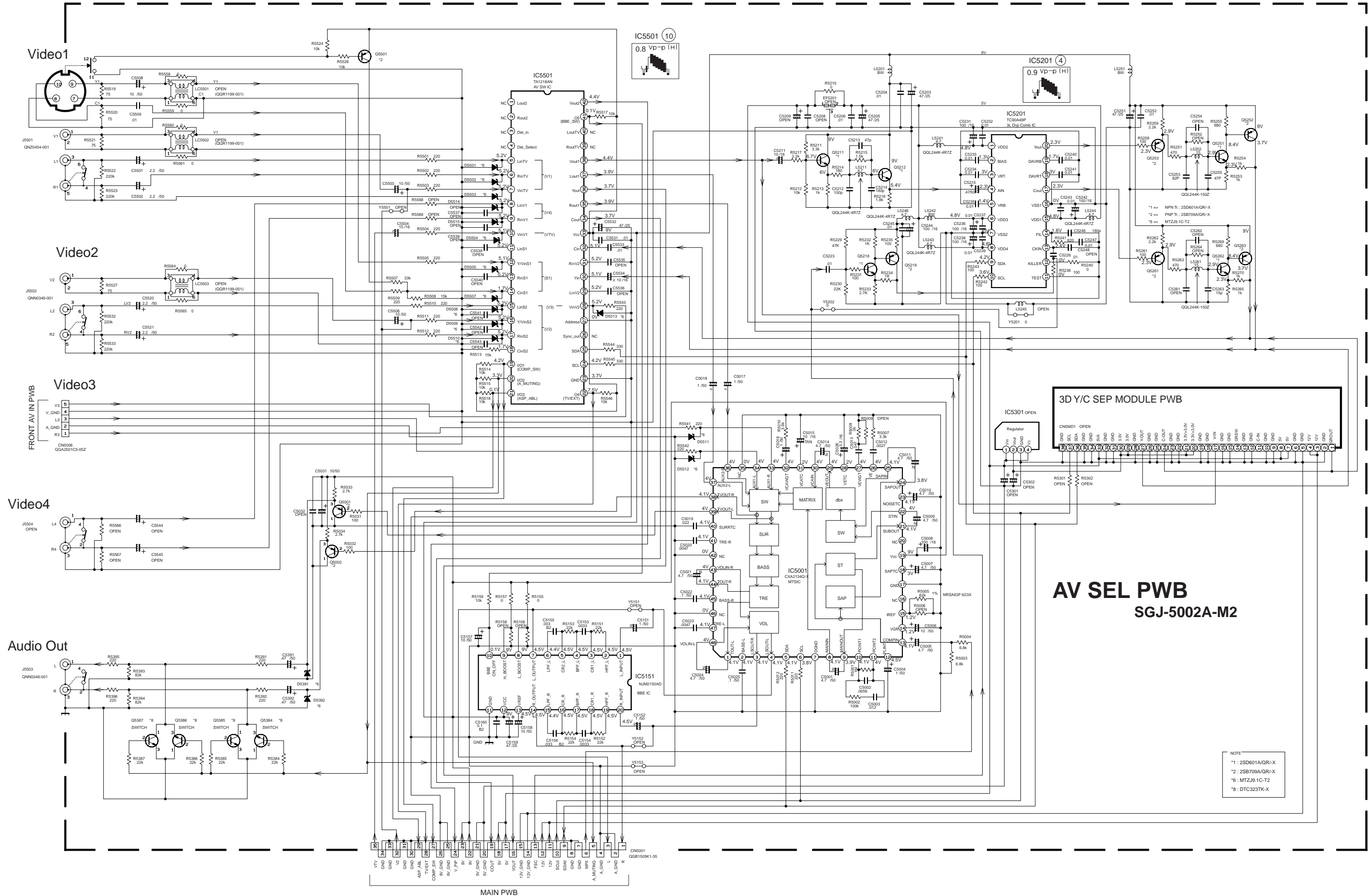


CRT SOCKET PWB CIRCUIT DIAGRAM

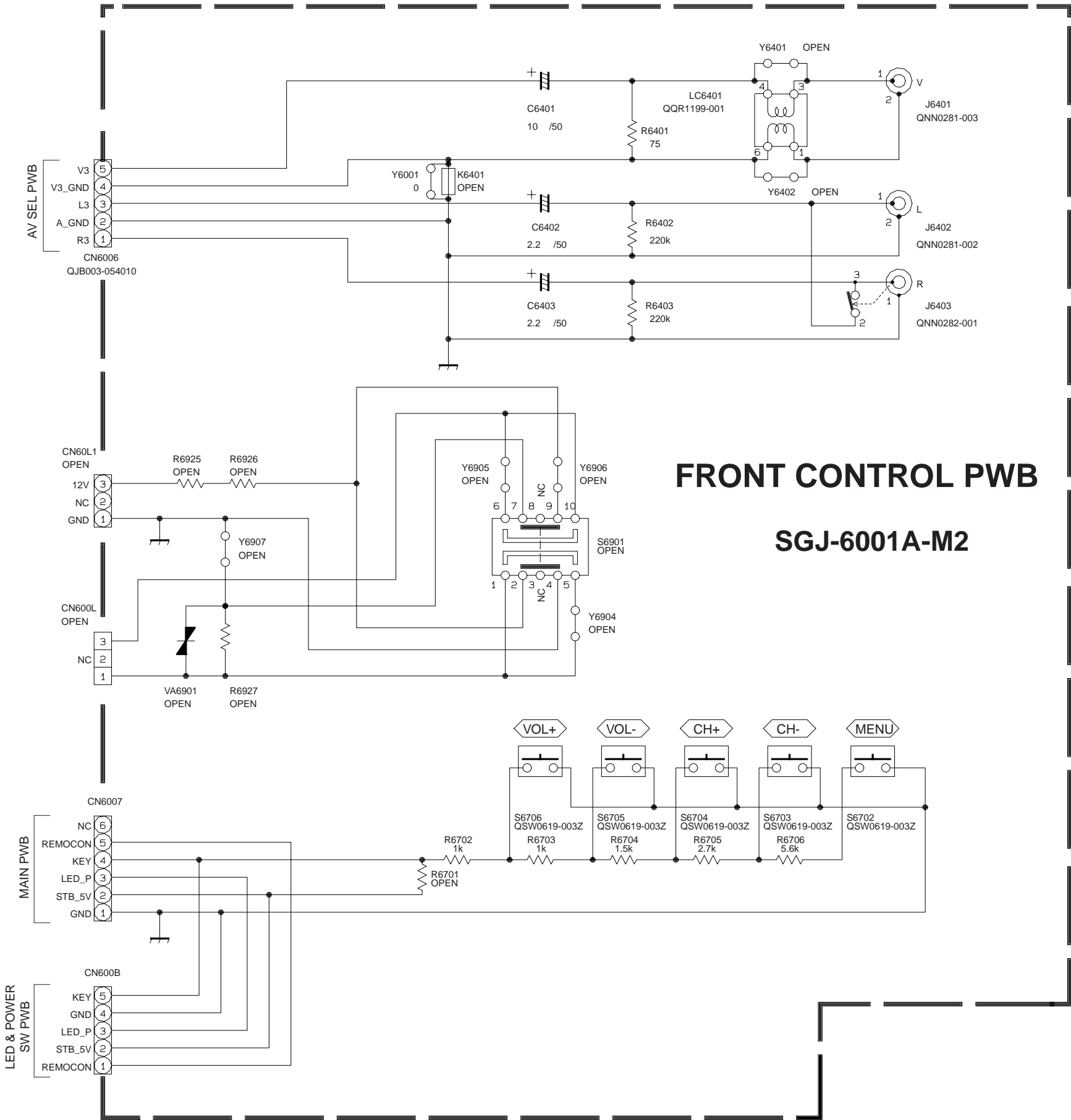


CRT SOCKET PWB
SGJ-3002A-M2

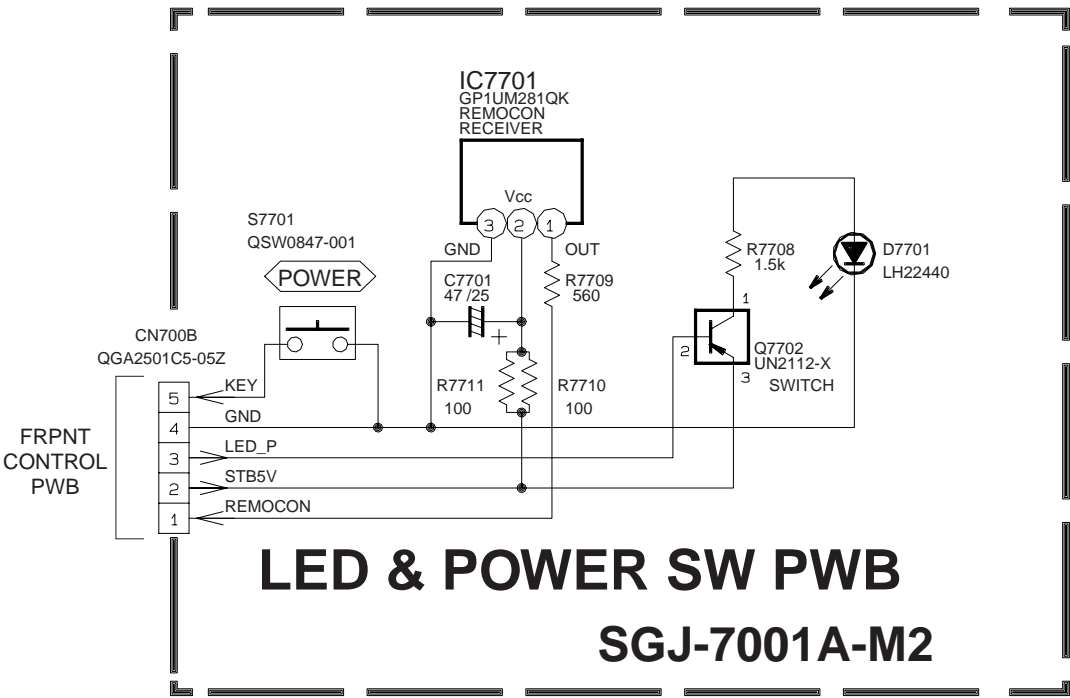
AV SEL PWB CIRCUIT DIAGRAM



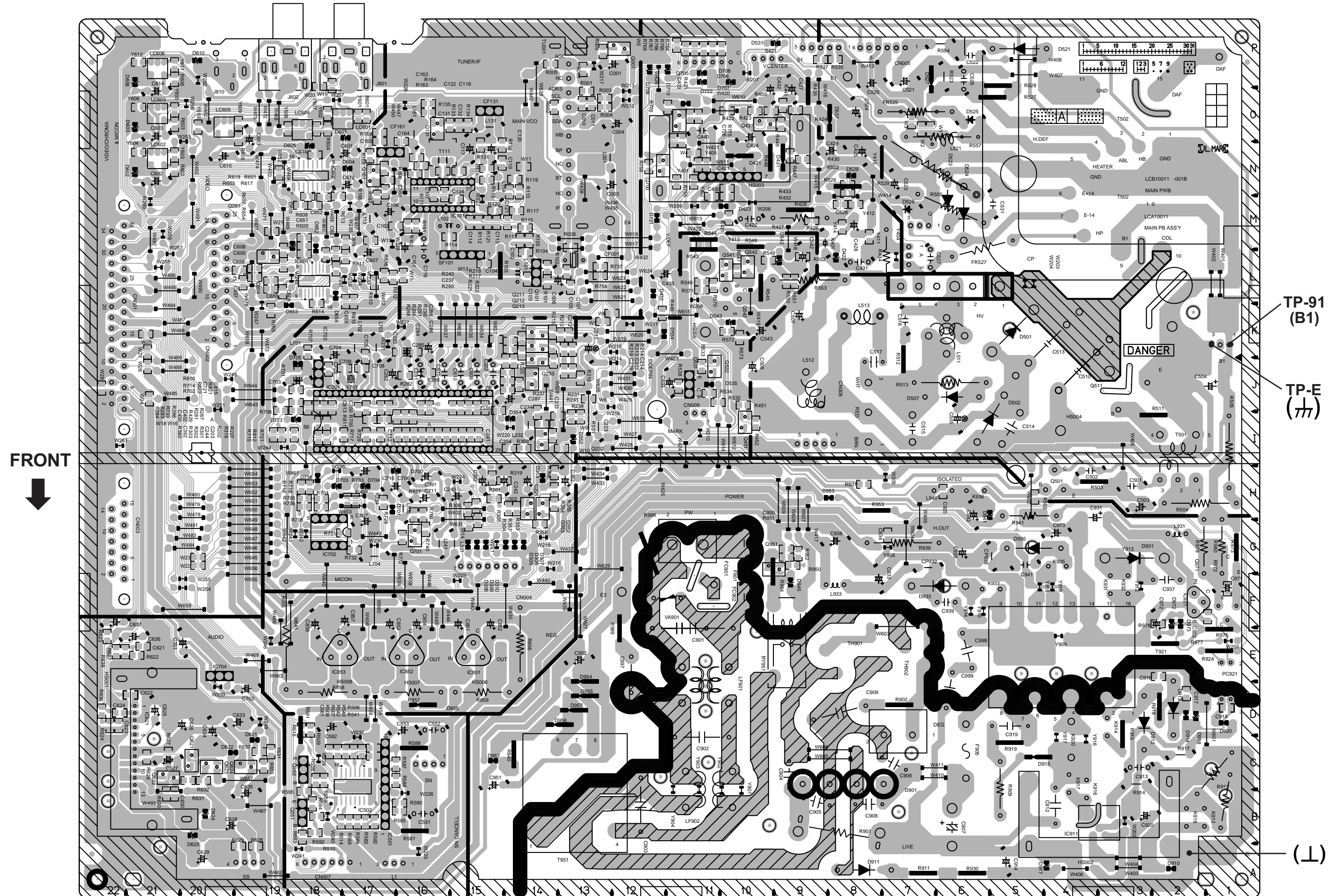
FRONT CONTROLPWB CIRCUIT DIAGRAM



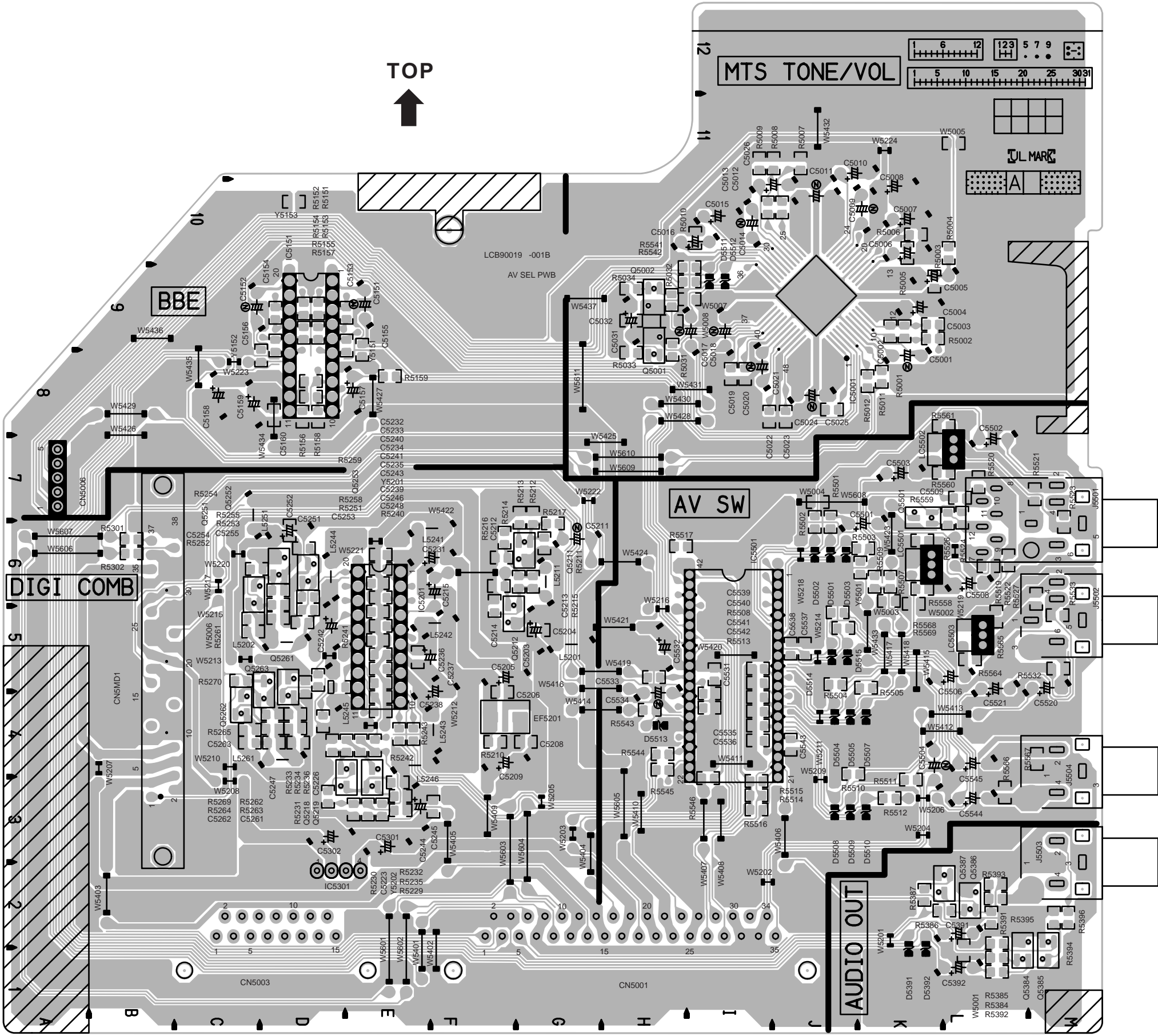
LED & POWER SW PWB CIRCUIT DIAGRAM



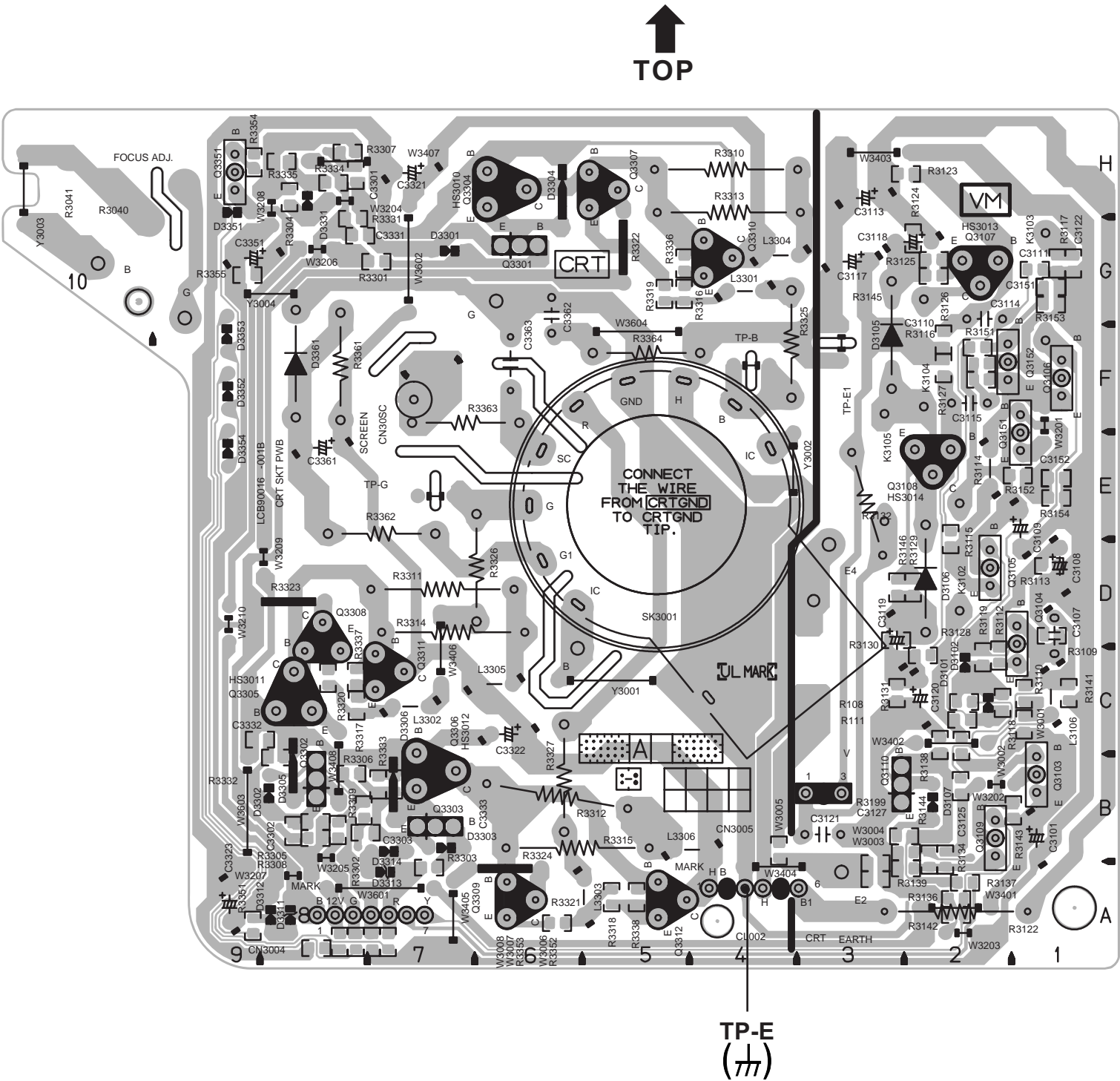
PATTERN DIAGRAMS *MAIN PWB PATTERN*



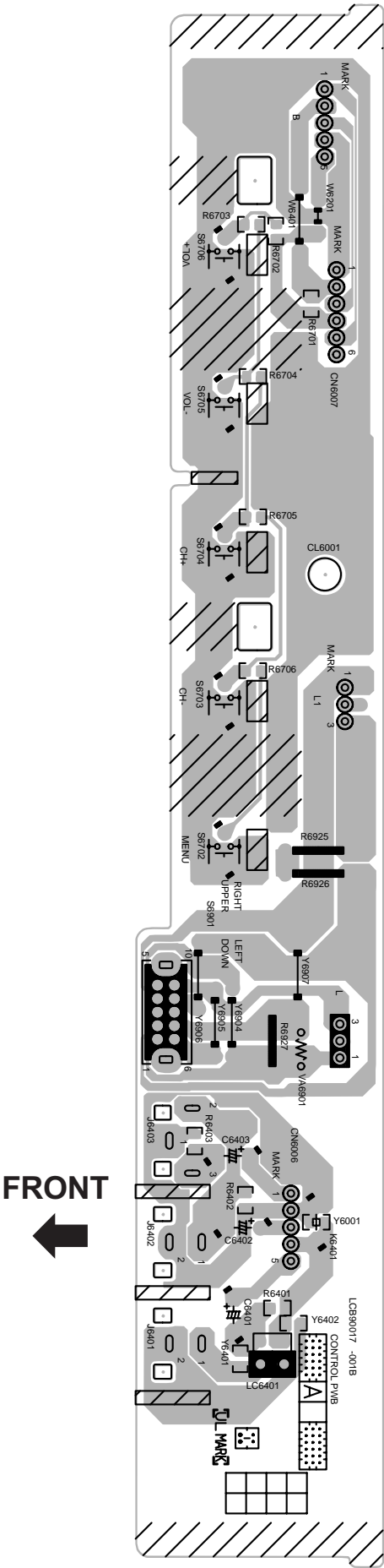
AV SEL PWB PATTERN



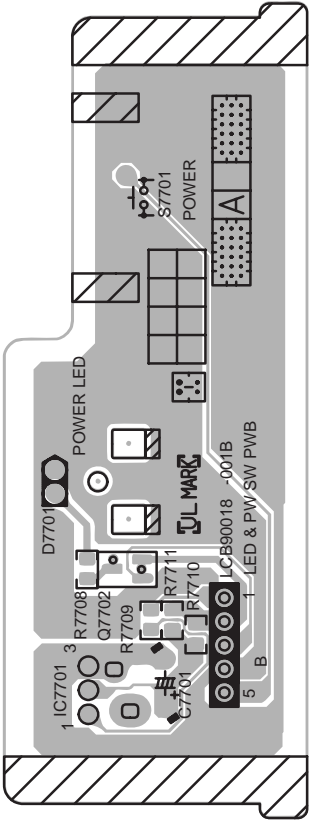
CRT SOCKET PWB PATTERN



FRONT CONTROL PWB PATTERN



LED & POWER SW PWB PATTERN



CHANNEL CHART

MODE		BAND	CHANNEL	TUNER
TV	CATV		DISP.	BAND
○	○	VL	02	I
			03	
			04	
			05	
			06	
			07	
		VH	08	II
			09	
			10	
			11	
			12	
			13	
×	○		14	I
			15	
			16	
		MID	17	II
			18	
			19	
			20	
			21	
			22	
		SUPER	23	
			24	
			25	
			26	
			27	
			28	
			29	
			30	
			31	
			32	
			33	
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			38	
			39	
			40	
			41	
			42	
			43	
			44	
			45	
			46	
			47	
		HYPER	48	IV
			49	
			50	
			51	
			52	
			53	
			54	
			55	
		ULTRA	56	
			57	
			58	
			59	
			60	
			61	
			62	
			63	
			64	
			65	
			66	
			67	
			68	
			69	
			70	

MODE		BAND	CHANNEL	TUNER BAND
TV	CATV		DISP.	
×	○	ULTRA	71	IV
			72	
			73	
			74	
			75	
			76	
			77	
			78	
			79	
			80	
			81	
			82	
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		117		
		118		
		119		
		120		
		121		
		122		
		123		
		124		
		125		
		SUB MID	01	I
			96	
			97	
			98	
○	×	UHF	14	IV
			69	
TOTAL 180CH { VHF 124CH { UHF 56CH				
NOTE: TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES. SPECIAL ADAPTERS MAY BE REQUIRED.				

MEMO