

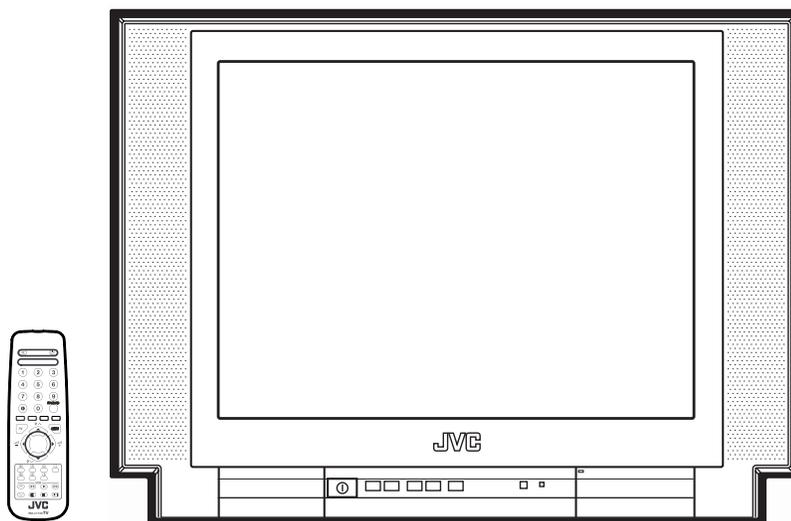
JVC

SCHEMATIC DIAGRAMS

COLOUR TELEVISION

AV-21BF11ENS
AV-21BF11EES
AV-21BF11EPS
AV-21BF11EJS

CD-ROM No.SML200207



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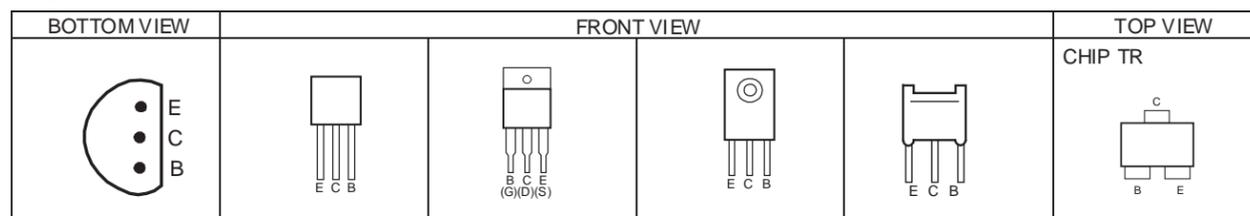
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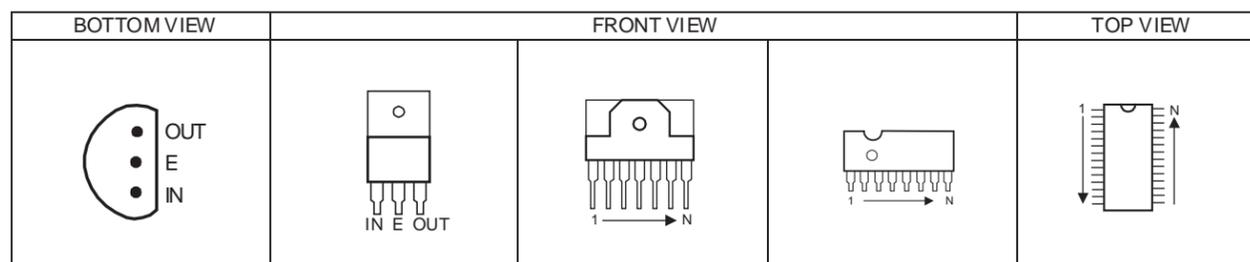
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SEMICONDUCTOR SHAPES

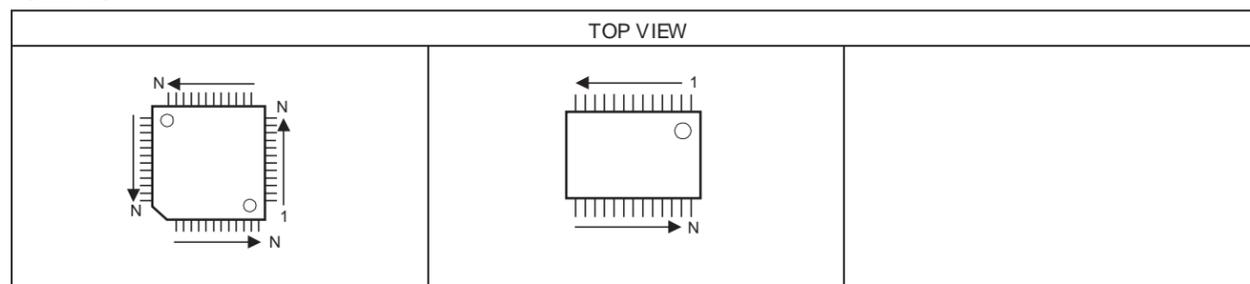
TRANSISTOR



IC



CHIP IC



AV-21BF11ENS AV-21BF11EES AV-21BF11EPS AV-21BF11EJS

STANDARD CIRCUIT DIAGRAM

NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the \triangle 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 : Colour 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.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

- No unit : [Ω]
- K : [K Ω]
- M : [M Ω]

● 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 :[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.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.

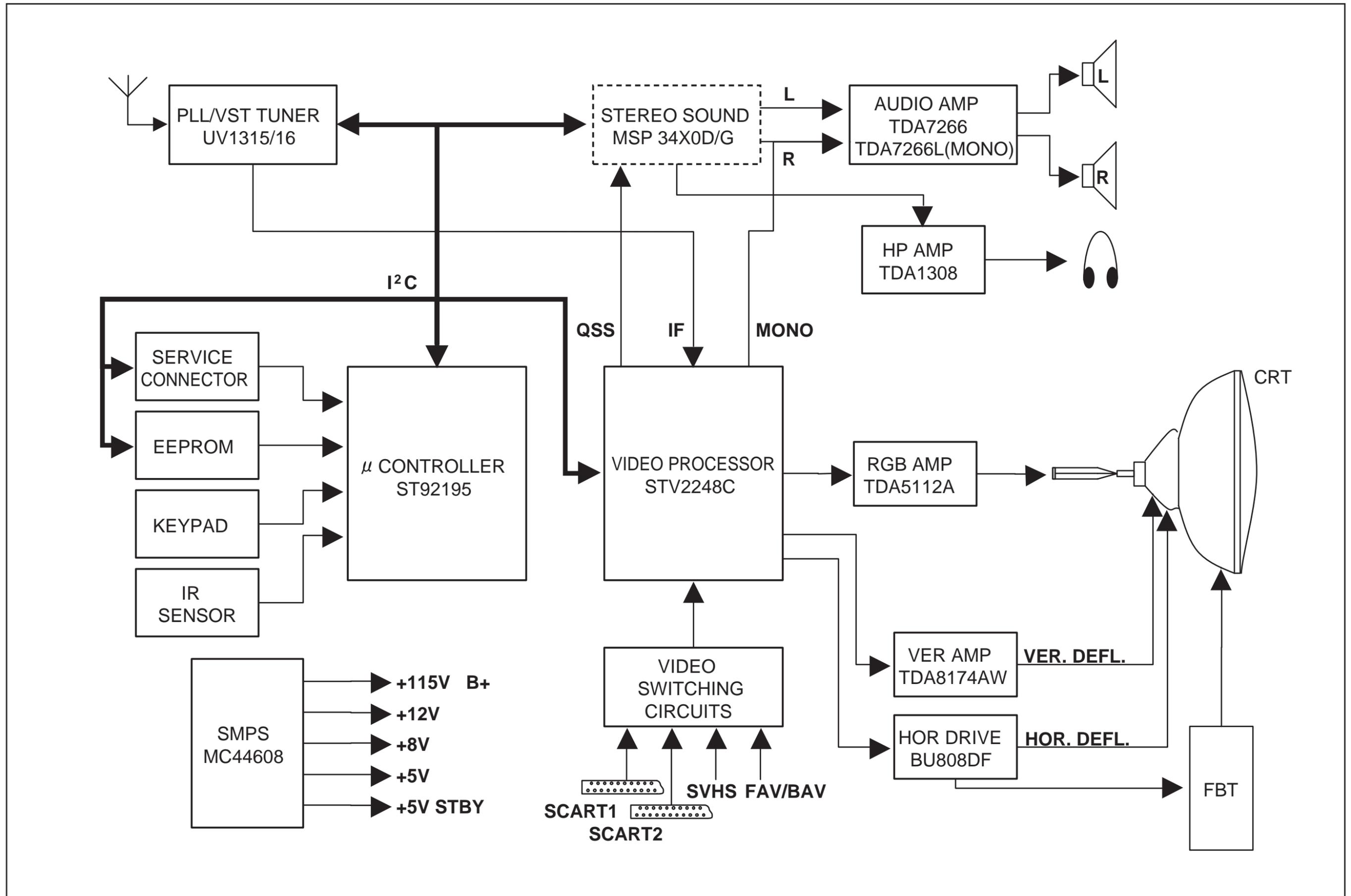
- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.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

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

NOTE

\diamond 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

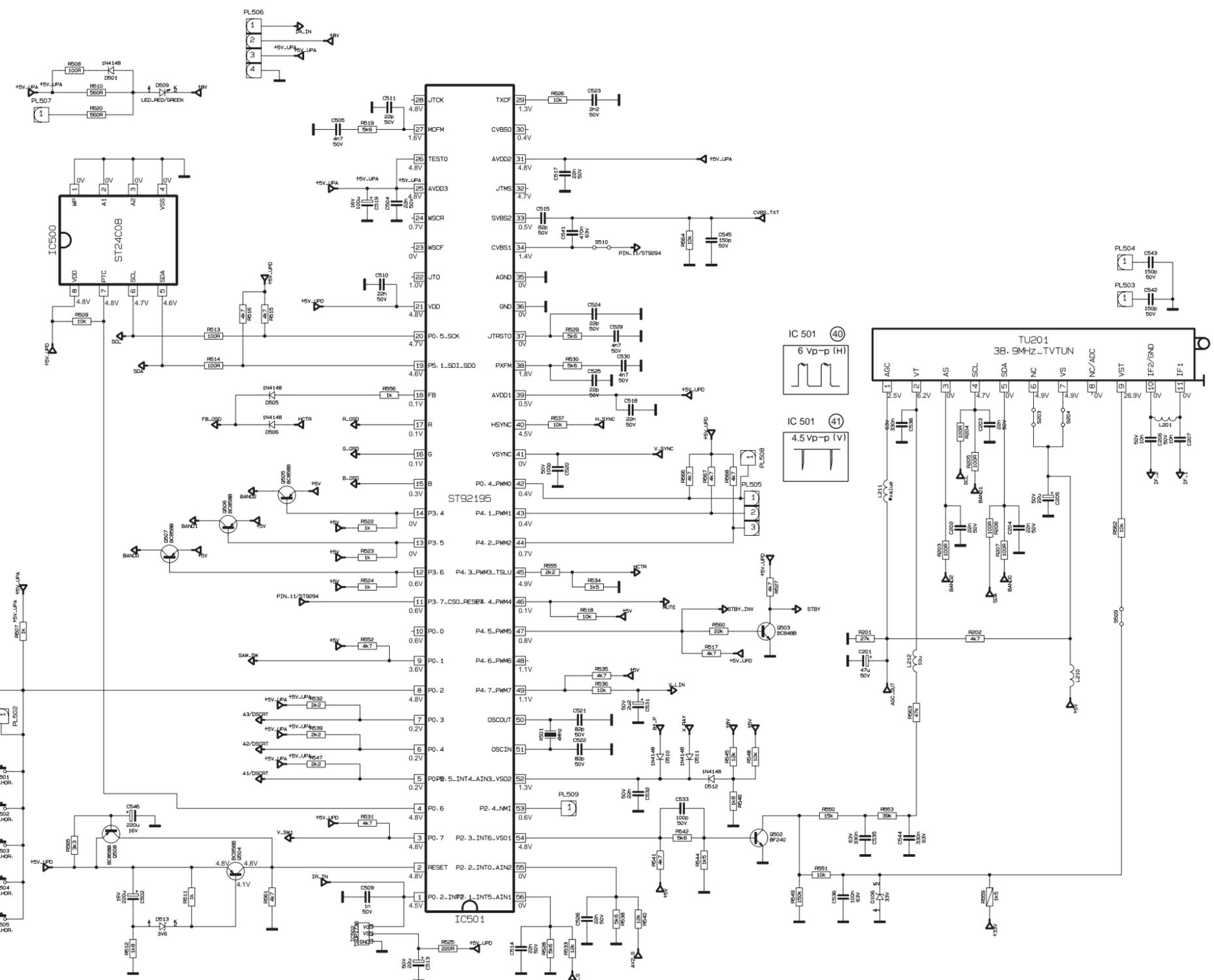


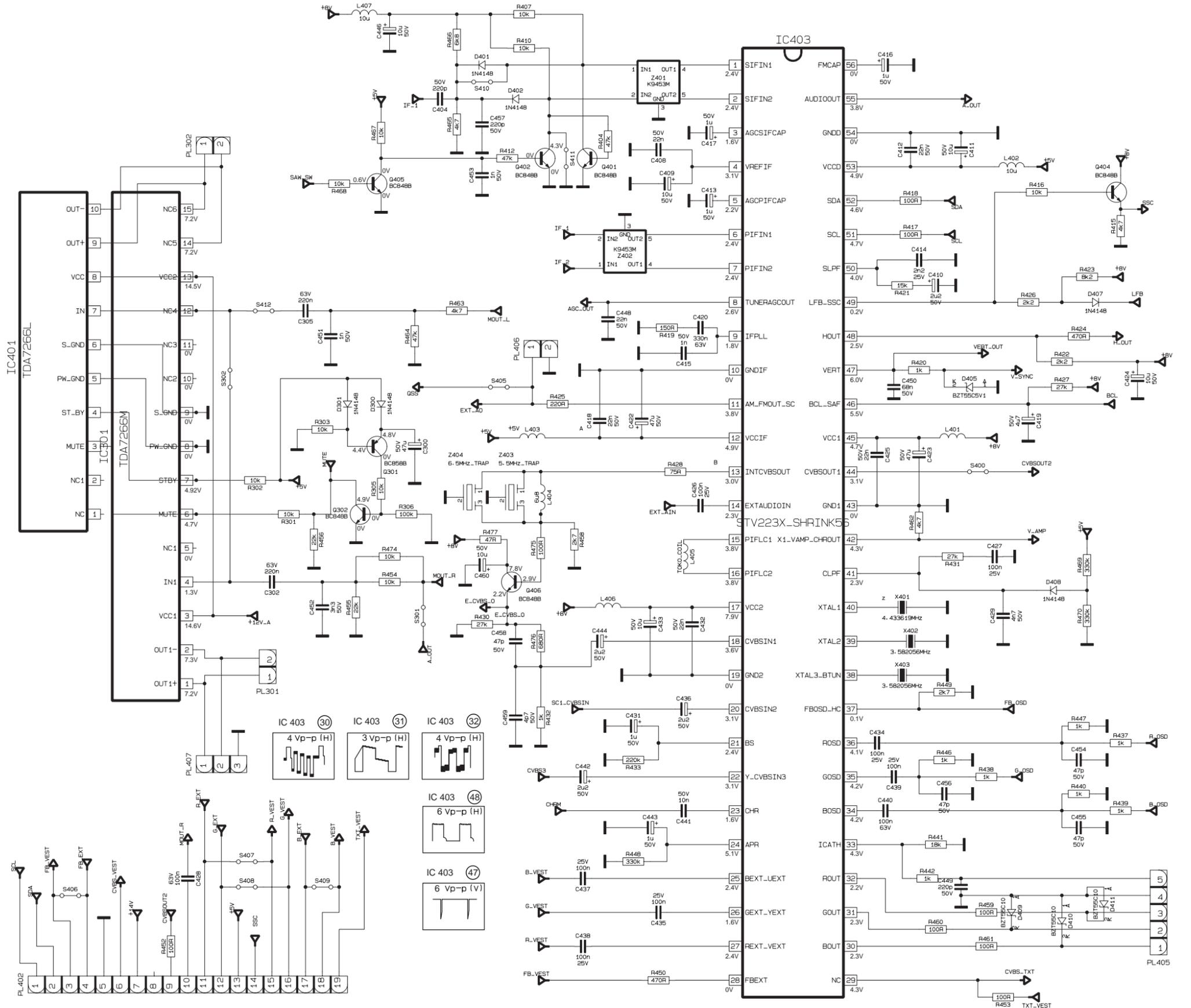
CIRCUIT DIAGRAMS MAIN PWB CIRCUIT DIAGRAM [1/6]

DIFFERENCE LIST

EN		EP	
C446	...	C446	30000345
C451	30012581	C451	30012589
C452	30012581	C452	30012589
C453	30012581	C453	30012589
D402	...	D402	30012411
IC403	30014521	IC403	30014510
IC500	20103782	IC500	20103788
IC501	20099539	IC501	20099539
L407	...	L407	30002002
PL703	...	PL703	30009849
Q402	...	Q402	30001457
Q405	...	Q405	30001457
R407	...	R407	30000471
R410	...	R410	30000471
R412	...	R412	30012696
R465	...	R465	30012692
R467	...	R467	30012641
R468	...	R468	30012641
R552	...	R552	30012692
S410	30012985	S410	30012985
S411	30012985	S411	30012985
Z401	30001795	Z401	300012945
Z402	30015581	Z402	30014261
Z404	...	Z404	30001724

EE		EJ	
C446	...	C446	...
C451	30012581	C451	30012581
C452	30012581	C452	30012581
C453	30012581	C453	30012581
D402	...	D402	...
IC403	30014510	IC403	30014521
IC500	20103782	IC500	20103790
IC501	20104642	IC501	20099539
L407	...	L407	...
PL703	...	PL703	...
Q402	...	Q402	...
Q405	...	Q405	...
R407	...	R407	...
R410	...	R410	...
R412	...	R412	...
R465	...	R465	...
R467	...	R467	...
R468	...	R468	...
R552	...	R552	...
S410	30012985	S410	30012985
S411	30012985	S411	30012985
Z401	30013163	Z401	30013163
Z402	30014261	Z402	30014261
Z404	30001724	Z404	...

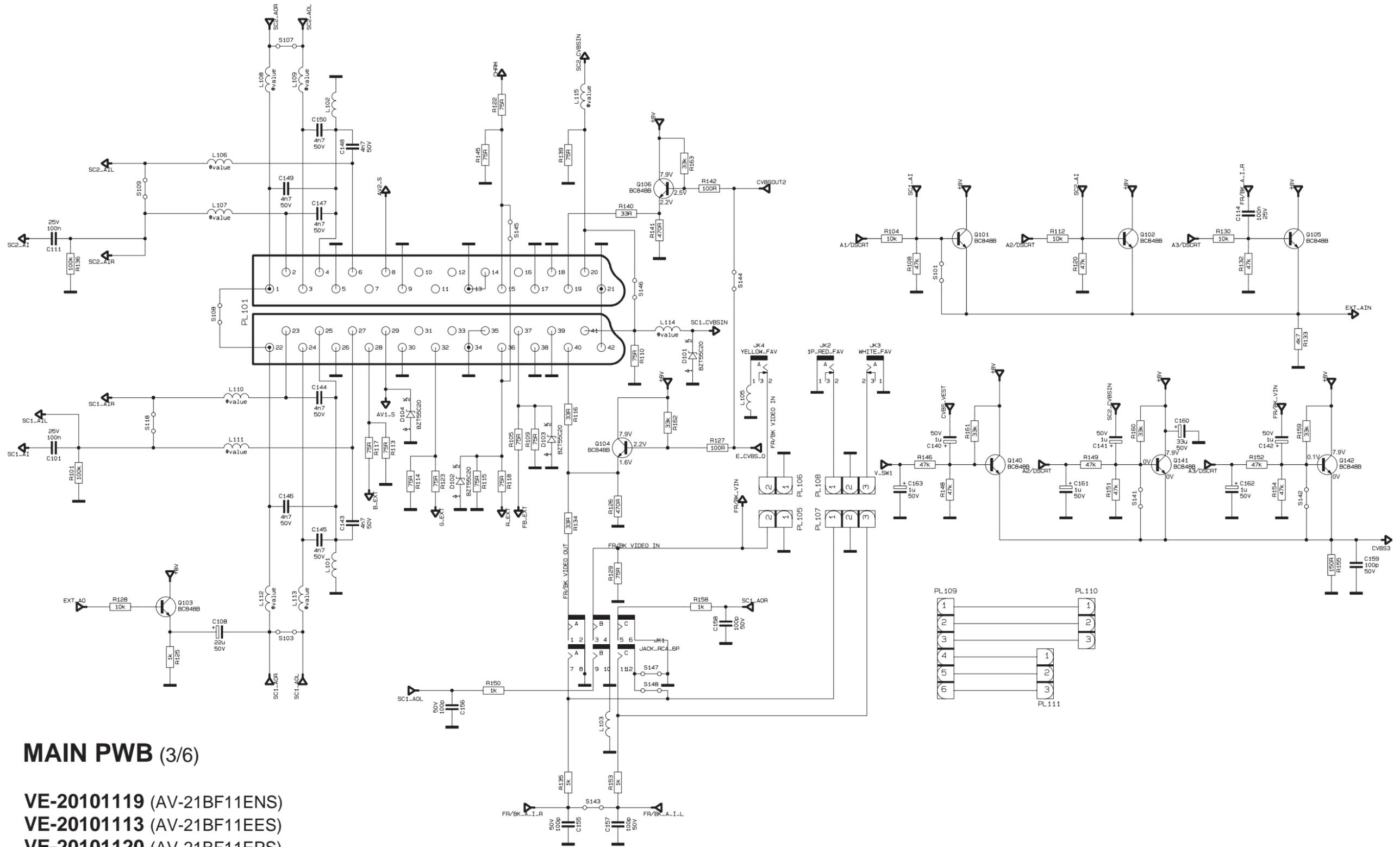




MAIN PWB (2/6)

- VE-20101119 (AV-21BF11ENS)
- VE-20101113 (AV-21BF11EES)
- VE-20101120 (AV-21BF11EPS)
- VE-20101540 (AV-21BF11EJS)

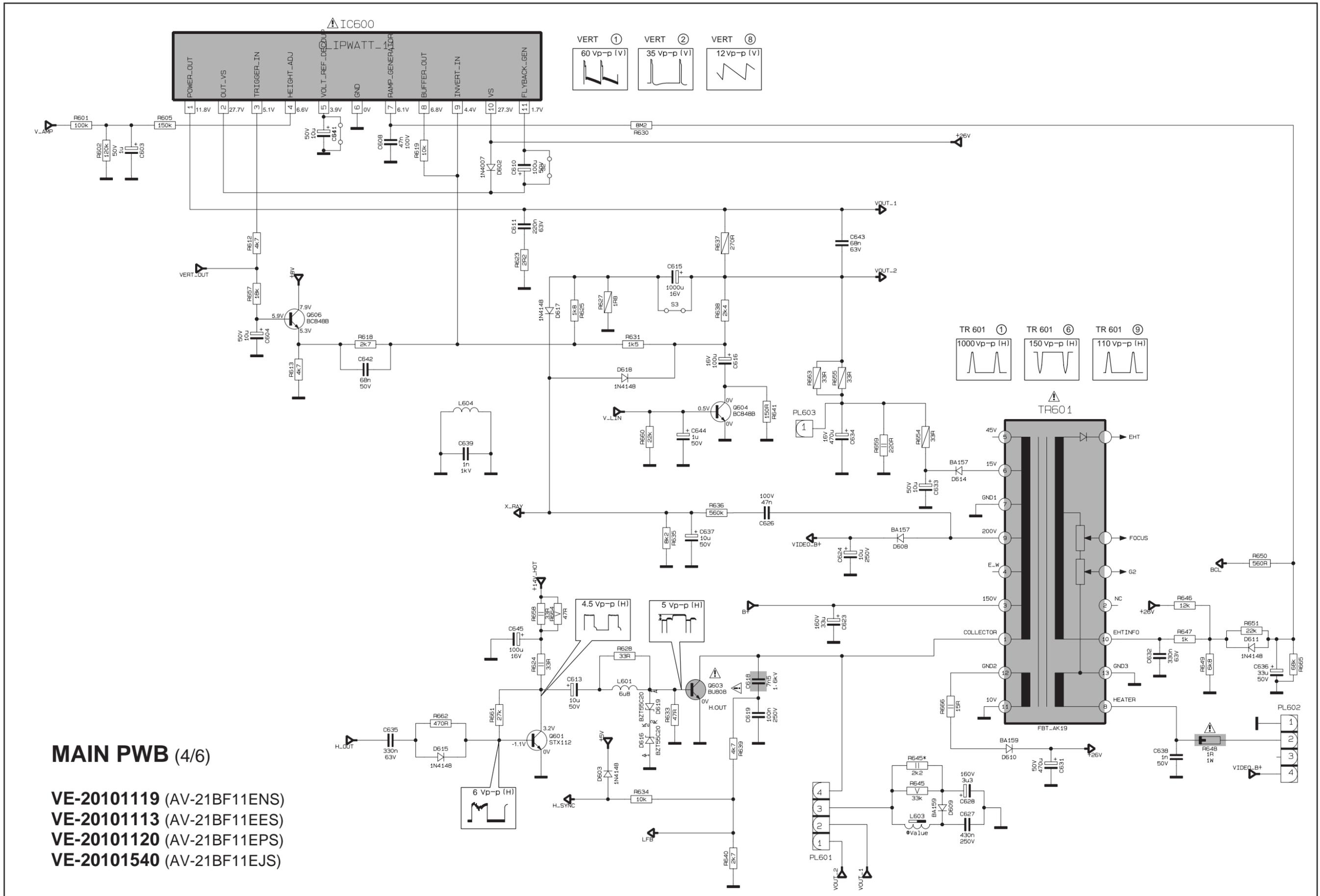
MAIN PWB CIRCUIT DIAGRAM [3/6]



MAIN PWB (3/6)

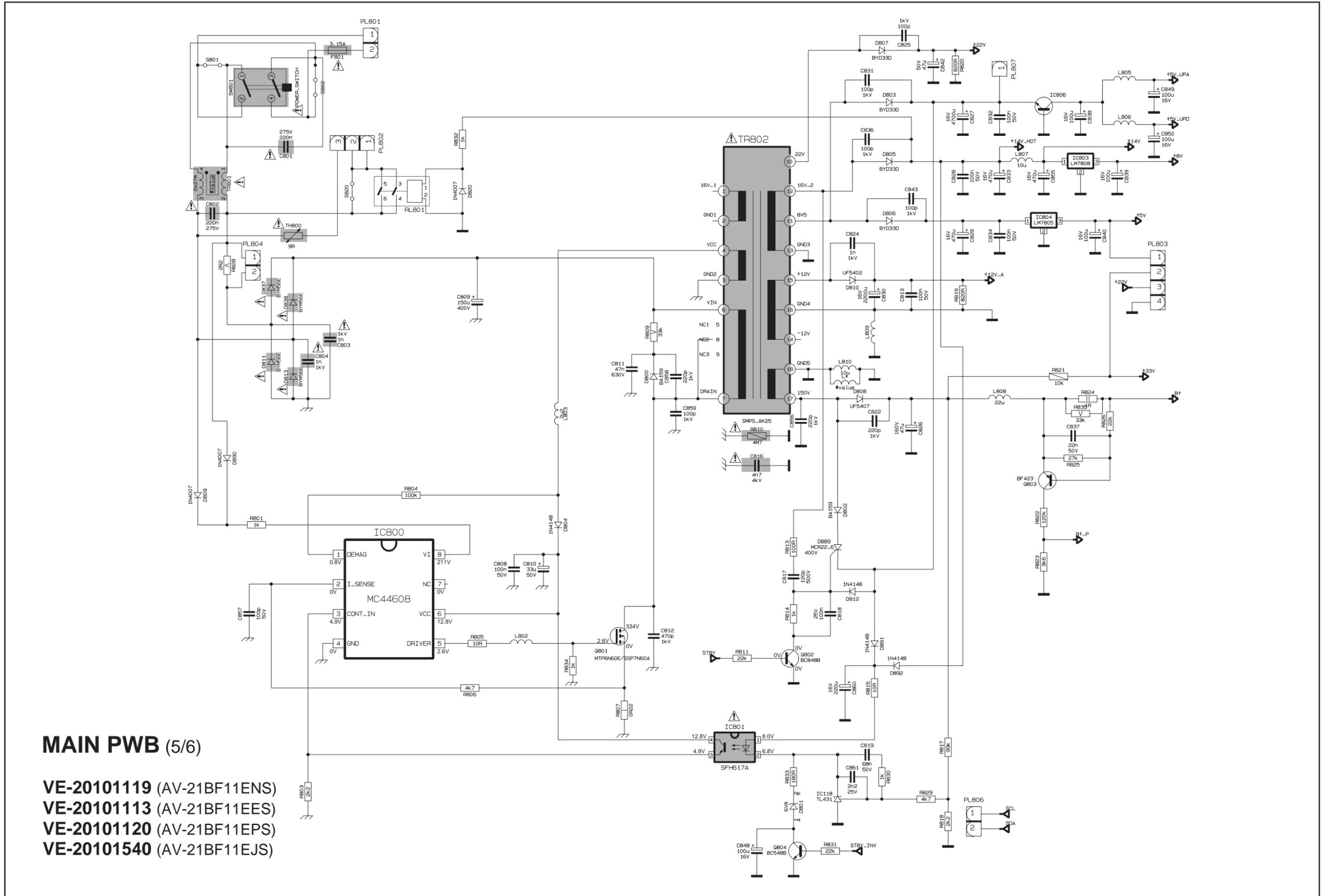
- VE-20101119 (AV-21BF11ENS)
- VE-20101113 (AV-21BF11EES)
- VE-20101120 (AV-21BF11EPS)
- VE-20101540 (AV-21BF11EJS)

MAIN PWB CIRCUIT DIAGRAM [4/6]



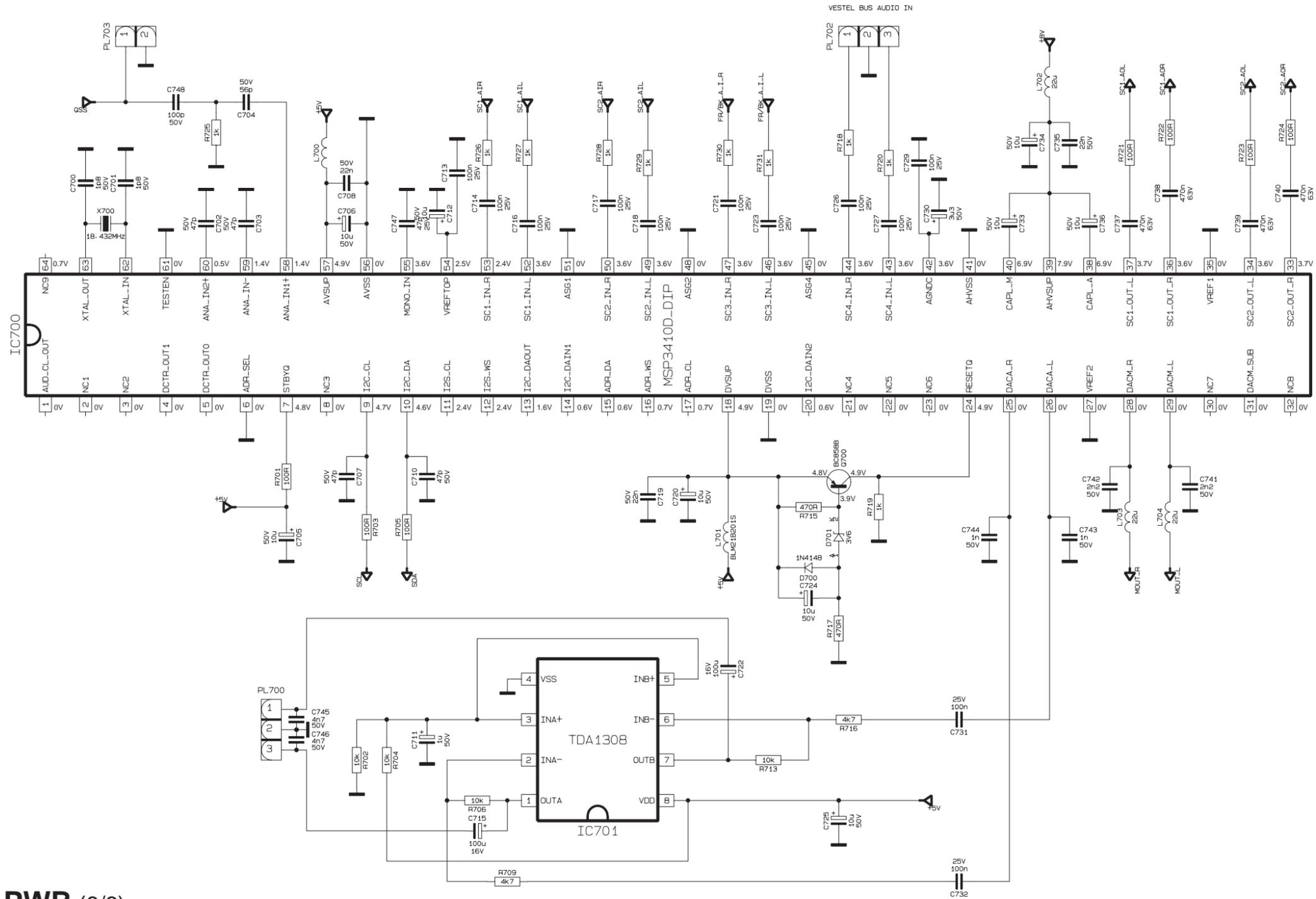
MAIN PWB (4/6)

- VE-20101119 (AV-21BF11ENS)
- VE-20101113 (AV-21BF11EES)
- VE-20101120 (AV-21BF11EPS)
- VE-20101540 (AV-21BF11EJS)



MAIN PWB (5/6)

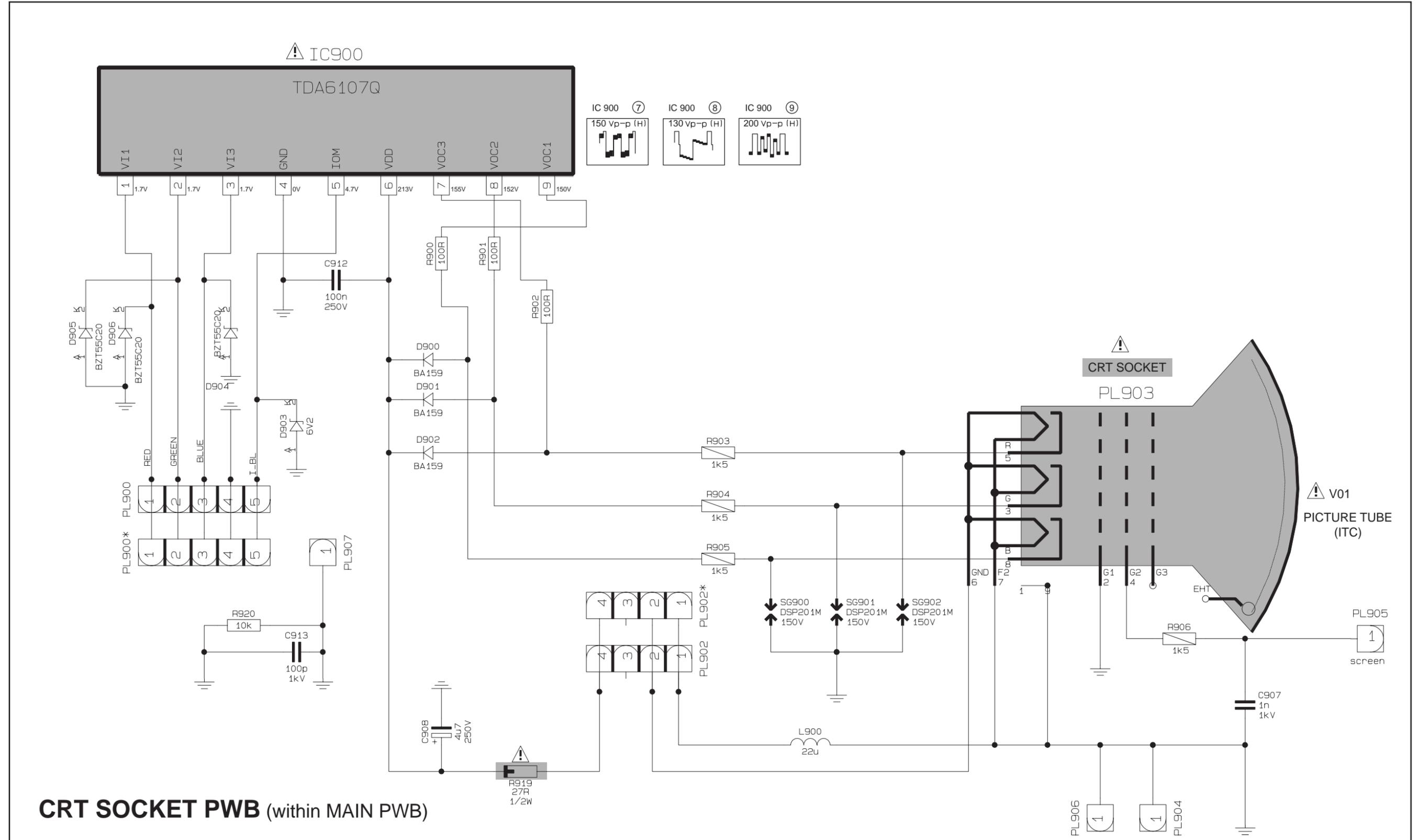
- VE-20101119 (AV-21BF11ENS)
- VE-20101113 (AV-21BF11EES)
- VE-20101120 (AV-21BF11EPS)
- VE-20101540 (AV-21BF11EJS)



MAIN PWB (6/6)

- VE-20101119 (AV-21BF11ENS)
- VE-20101113 (AV-21BF11EES)
- VE-20101120 (AV-21BF11EPS)
- VE-20101540 (AV-21BF11EJS)

CRT SOCKET PWB CIRCUIT DIAGRAM

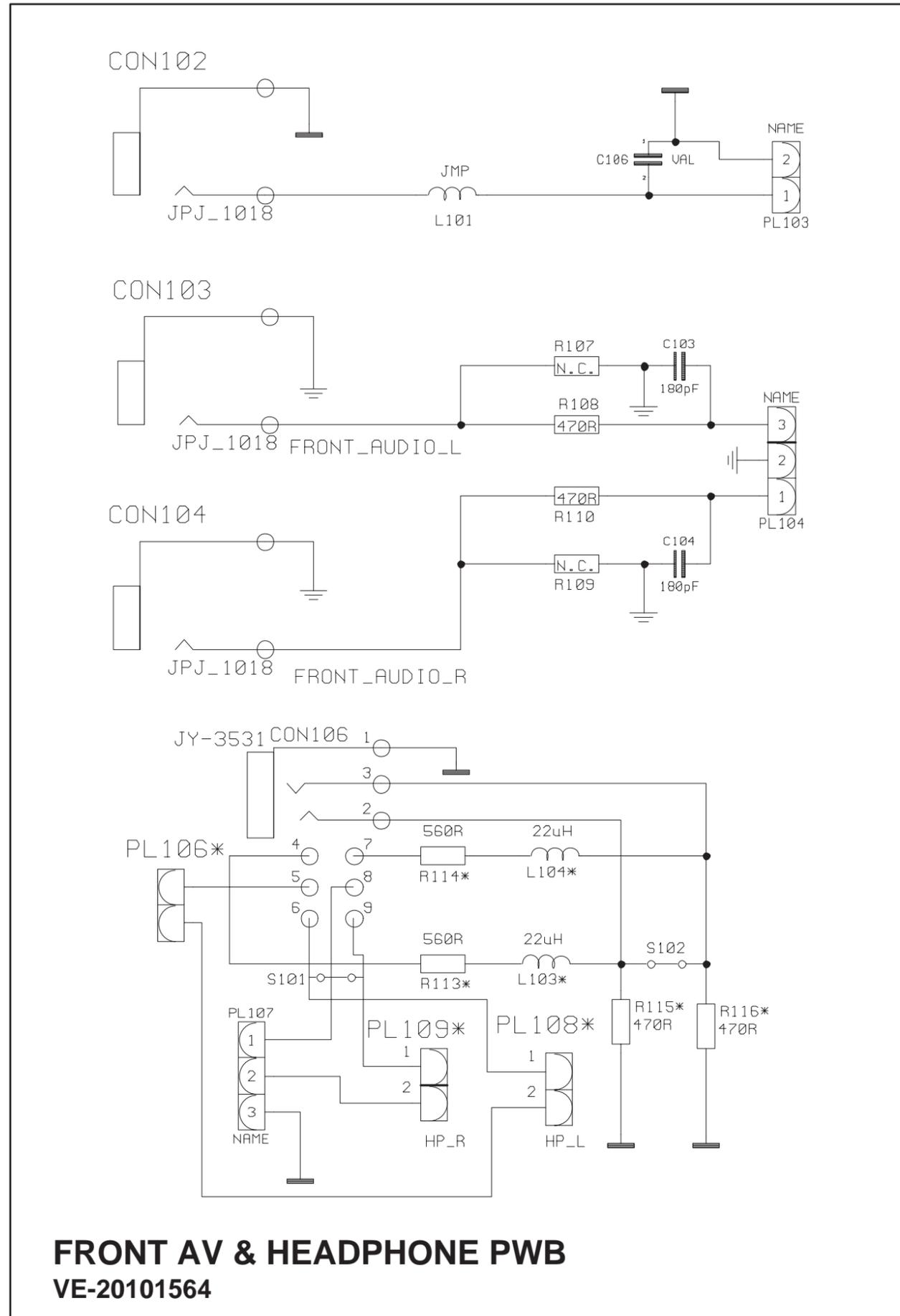


CRT SOCKET PWB (within MAIN PWB)

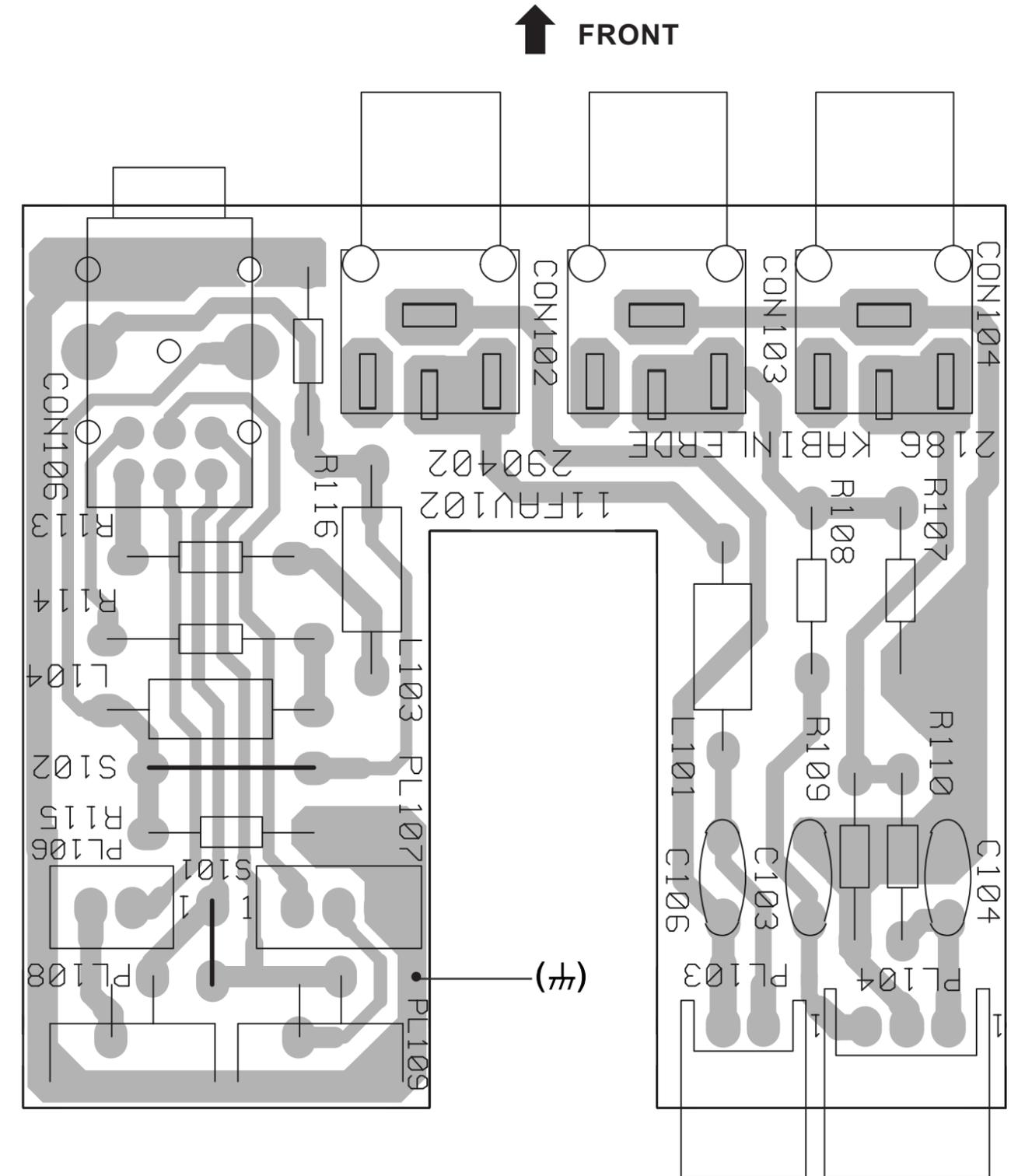
- VE-20101119** (AV-21BF11ENS)
- VE-20101113** (AV-21BF11EES)
- VE-20101120** (AV-21BF11EPS)
- VE-20101540** (AV-21BF11EJS)

FRONT AV & HEADPHONE PWB CIRCUIT DIAGRAM

PATTERN DIAGRAMS FRONT AV & HEADPHONE PWB PATTERN



FRONT AV & HEADPHONE PWB
VE-20101564



MAIN PWB PATTERN

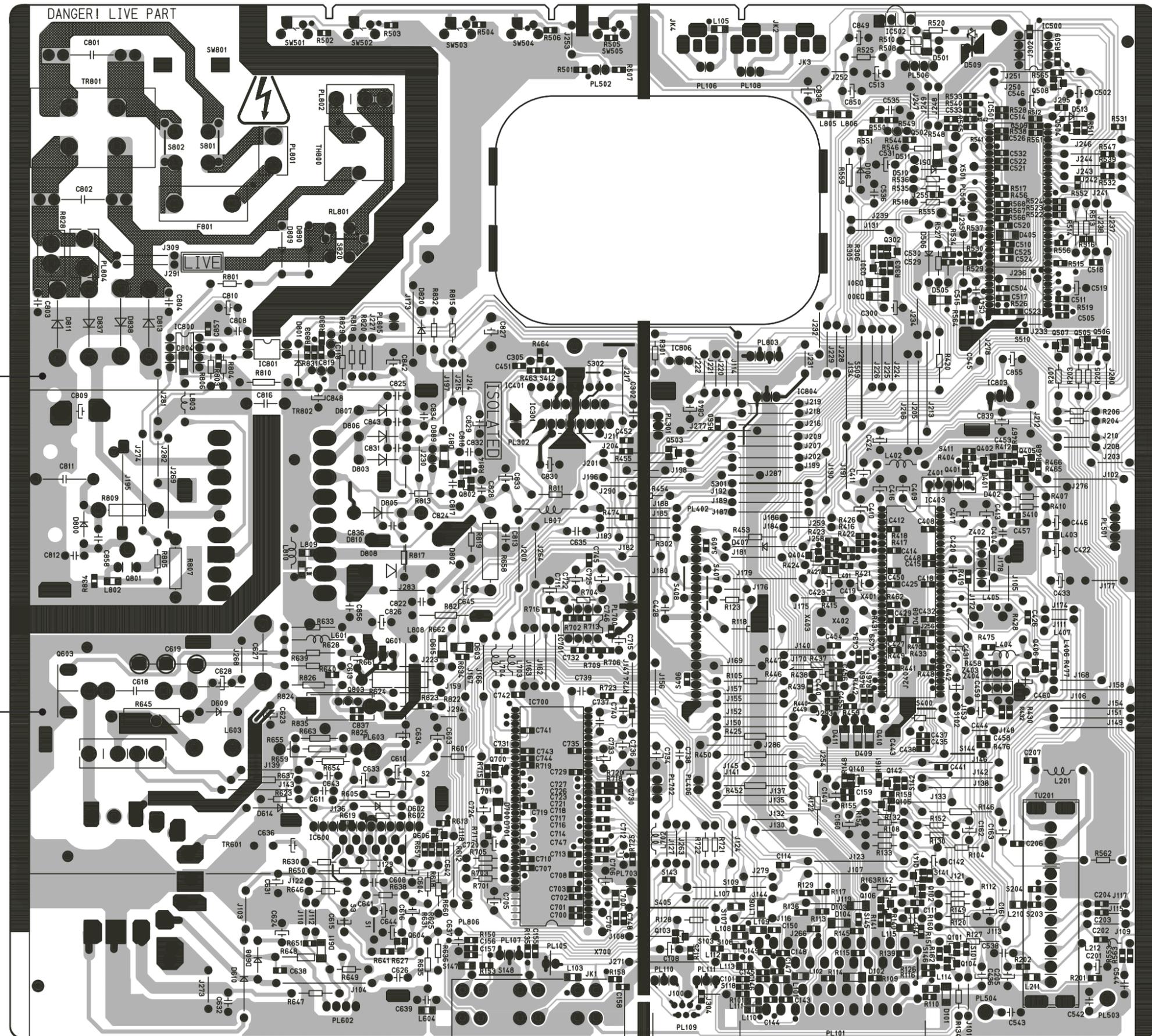
AV-21BF11ENS
AV-21BF11EES
AV-21BF11EPS
AV-21BF11EJS

AV-21BF11ENS
AV-21BF11EES
AV-21BF11EPS
AV-21BF11EJS

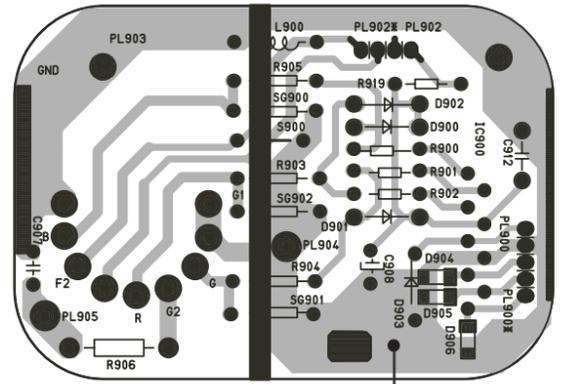
FRONT

(T)

(H)



CRT SOCKET PWB PATTERN
(within MAIN PWB)



TOP

(H)

JVC

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