

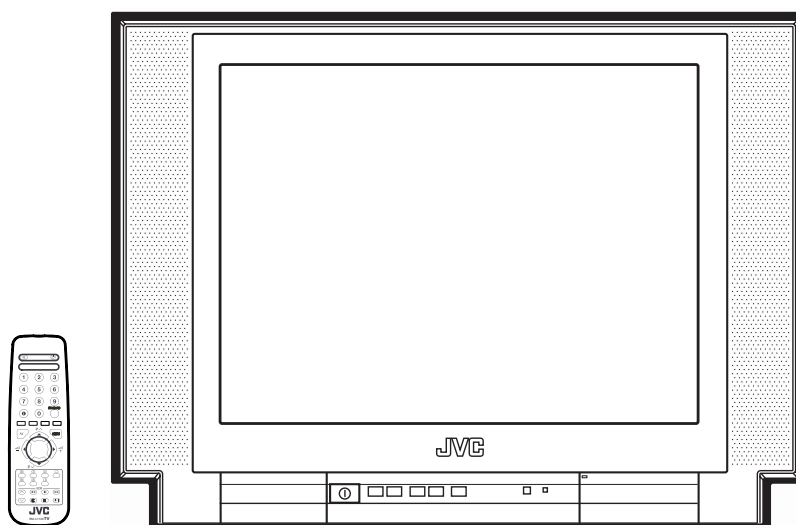
JVC

SCHEMATIC DIAGRAMS

COLOUR TELEVISION

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

CD-ROM No.SML200207



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SEMICONDUCTOR SHAPES

TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR

IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW

CHIP IC

TOP VIEW		

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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 : Colour 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.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 :Uninflamable 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 capacitor

(3)Coils

- No unit :[μH]
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.

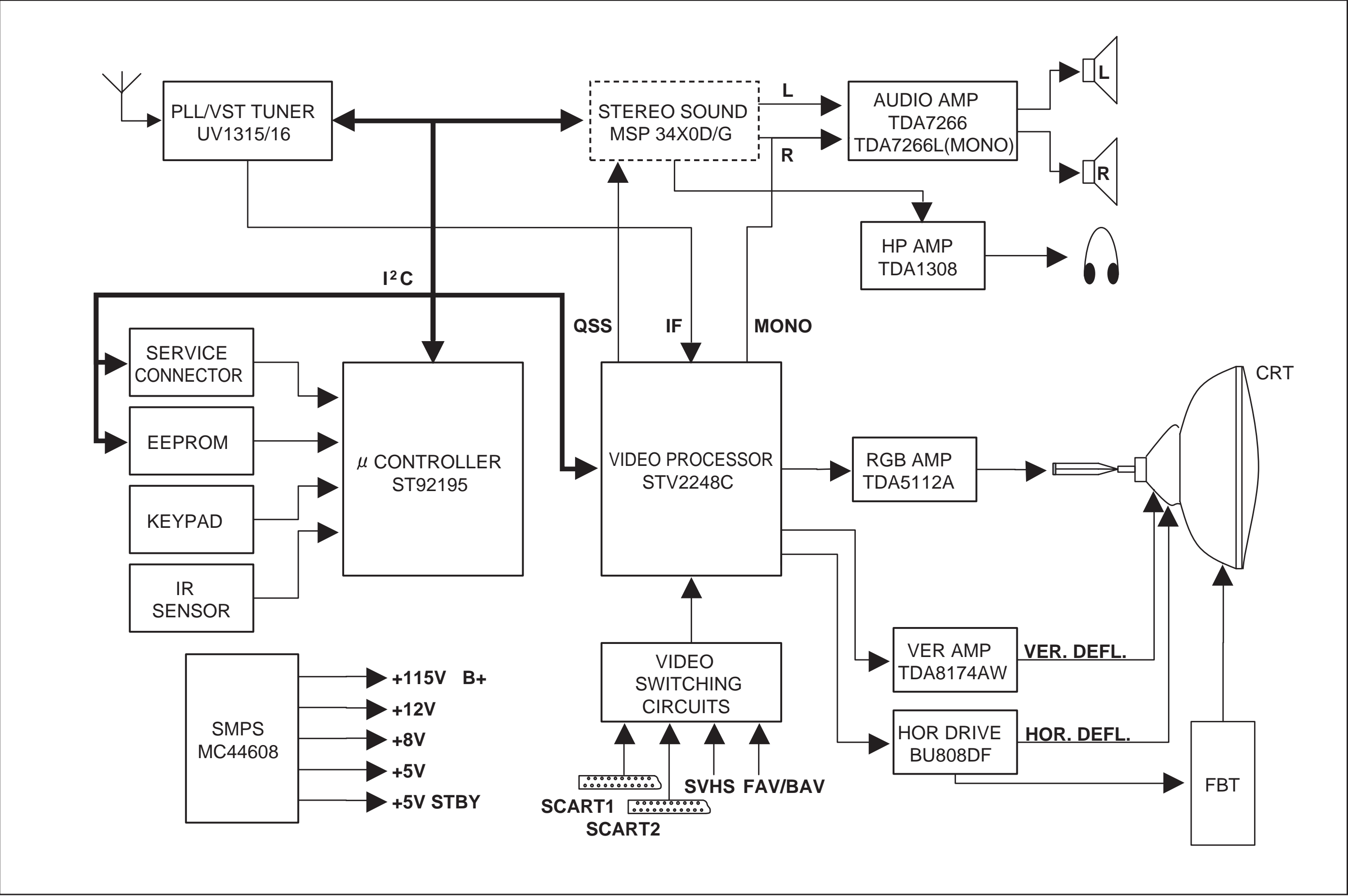
- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.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

◇ 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

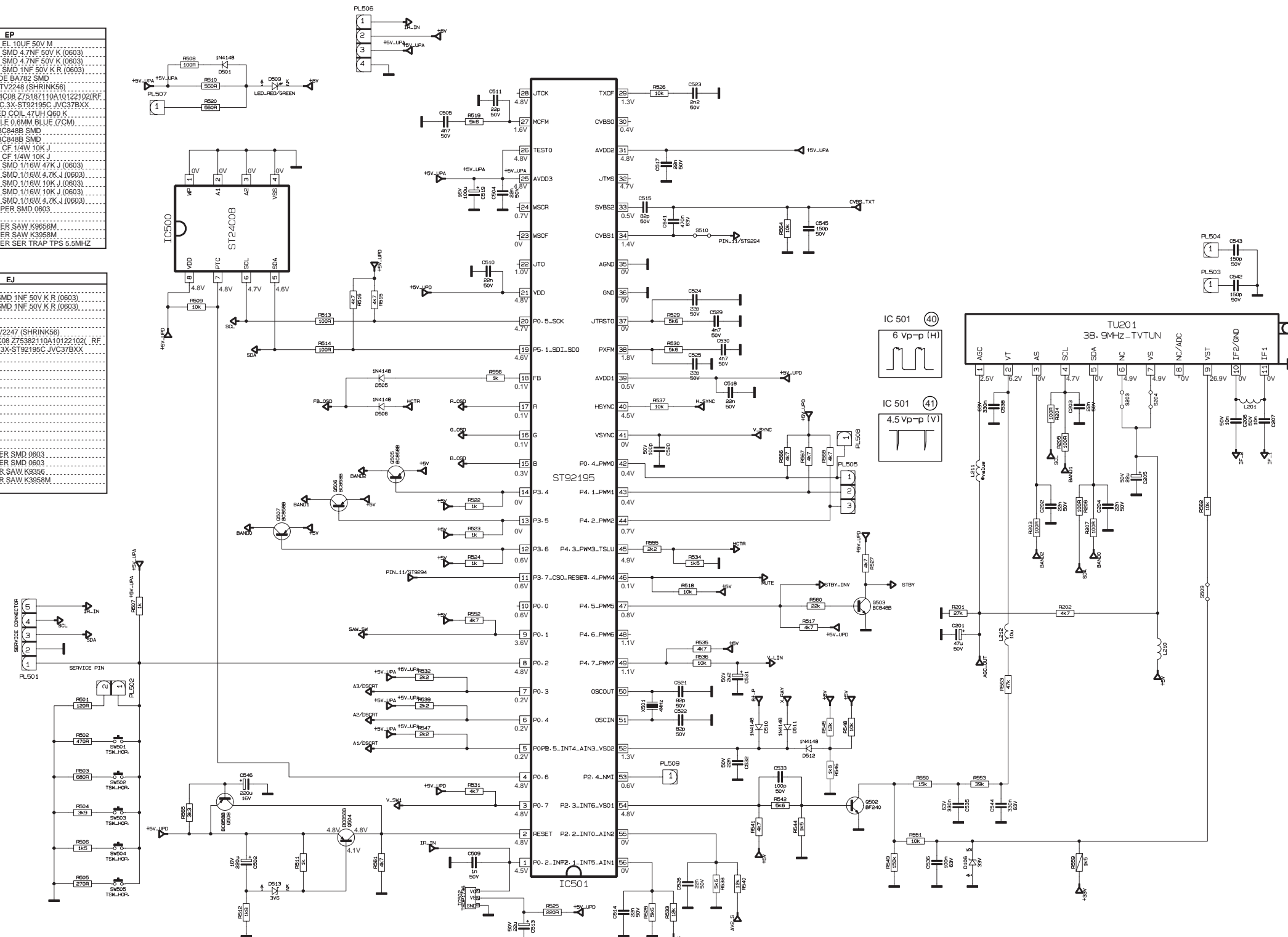


CIRCUIT DIAGRAMS *MAIN PWB CIRCUIT DIAGRAM [1/6]*

DIFFERENCE LIST

EN			EP		
C446	---	---	C446	30000345	CAP EL 10UF 50V M
C451	30012581	CAP SMD 1NF 50V K R (0603)	C451	30012589	CAP SMD 4.7NF 50V K (0603)
C452	30012581	CAP SMD 1NF 50V K R (0603)	C452	30012589	CAP SMD 4.7NF 50V K (0603)
C453	---	---	C453	30012581	CAP SMD 1NF 50V K R (0603)
D402	---	---	D402	30012411	DIODE BAT82 SMD
IC403	30014521	IC STV2247 (SHRINK56)	IC403	401451010	IC STV2248 (SHRINK56)
IC500	20103782	IC 24C08 274581110A10122102(RF	IC500	20103788	IC 24C08 274581110A10122102(RF
IC500	20090938	PR IC 3X-ST92195C JVC37BXX	IC500	20090938	PR IC 3X-ST92195C JVC37BXX
L407	---	---	L407	30002002	FIXED COIL 7UH 60K
PL703	---	---	PL703	30008949	CABLE 6.0MM BLUE (7CM)
Q402	---	---	Q402	30001457	TR BC848B SMD
Q405	---	---	Q405	30001457	TR BC848B SMD
R407	---	---	R407	30000471	RES CF 14W 10K J
R410	---	---	R410	30000471	RES CF 14W 10K J
R412	---	---	R412	30012686	RES SMD 1/16W 47K J (0603)
R465	---	---	R465	30012692	RES SMD 1/16W 47K J (0603)
R467	---	---	R467	30012641	RES SMD 1/16W 10K J (0603)
R468	---	---	R468	30012641	RES SMD 1/16W 10K J (0603)
R552	---	---	R552	30012692	RES SMD 1/16W 47K J (0603)
S410	30012985	JUMPER SMD 0603	S410	30012985	JUMPER SMD 0603
S411	30012985	JUMPER SMD 0603	S411	---	---
Z401	30001705	FILTER SAW OFWG9353M	Z401	30012545	FILTER SAW K9565M
Z402	30015581	FILTER SAW G3967	Z402	30014261	FILTER SAW K3958M
Z404	---	---	Z404	30001271	FILTER SER TRAP TS5 5.5MHZ

EE			EJ		
C446	---	---	C446	---	---
C451	30012581	CAP SMD 1NF 50V K R (0603)	C451	30012581	CAP SMD 1NF 50V K R (0603)
C452	30012581	CAP SMD 1NF 50V K R (0603)	C452	30012581	CAP SMD 1NF 50V K R (0603)
C453	---	---	C453	---	---
D402	---	---	D402	---	---
IC403	30014510	IC STV2248 (SHRINK56)	IC403	30014521	IC STV2247 (SHRINK56)
IC500	20103787	IC 24C08 Z75086110B1102122102 RF	IC500	20103790	IC 24C08 Z75382110A1102122102 RF
IC501	20104642	PR IC 307-7P STR 92195C 64K S	IC501	20099539	PR IC 3X-3192195C JVC37BXX
LC501	---	---	LC501	---	---
PL703	---	---	PL703	---	---
Q402	---	---	Q402	---	---
Q405	---	---	Q405	---	---
R407	---	---	R407	---	---
R410	---	---	R410	---	---
R412	---	---	R412	---	---
R465	---	---	R465	---	---
R467	---	---	R467	---	---
R468	---	---	R468	---	---
R552	---	---	R552	---	---
S410	30012985	JUMPER SMD 0603	S410	30012985	JUMPER SMD 0603
S411	30012985	JUMPER SMD 0603	S411	30012985	JUMPER SMD 0603
Z401	30013163	FILTER SAW K9356	Z401	30013163	FILTER SAW K9356
Z402	30014261	FILTER SAW K3856M	Z402	30014261	FILTER SAW K3856M
Z404	30001724	FILTER SER TRAP TFS 5.5MHZ	Z404	---	---



MAIN PWB (1/6)

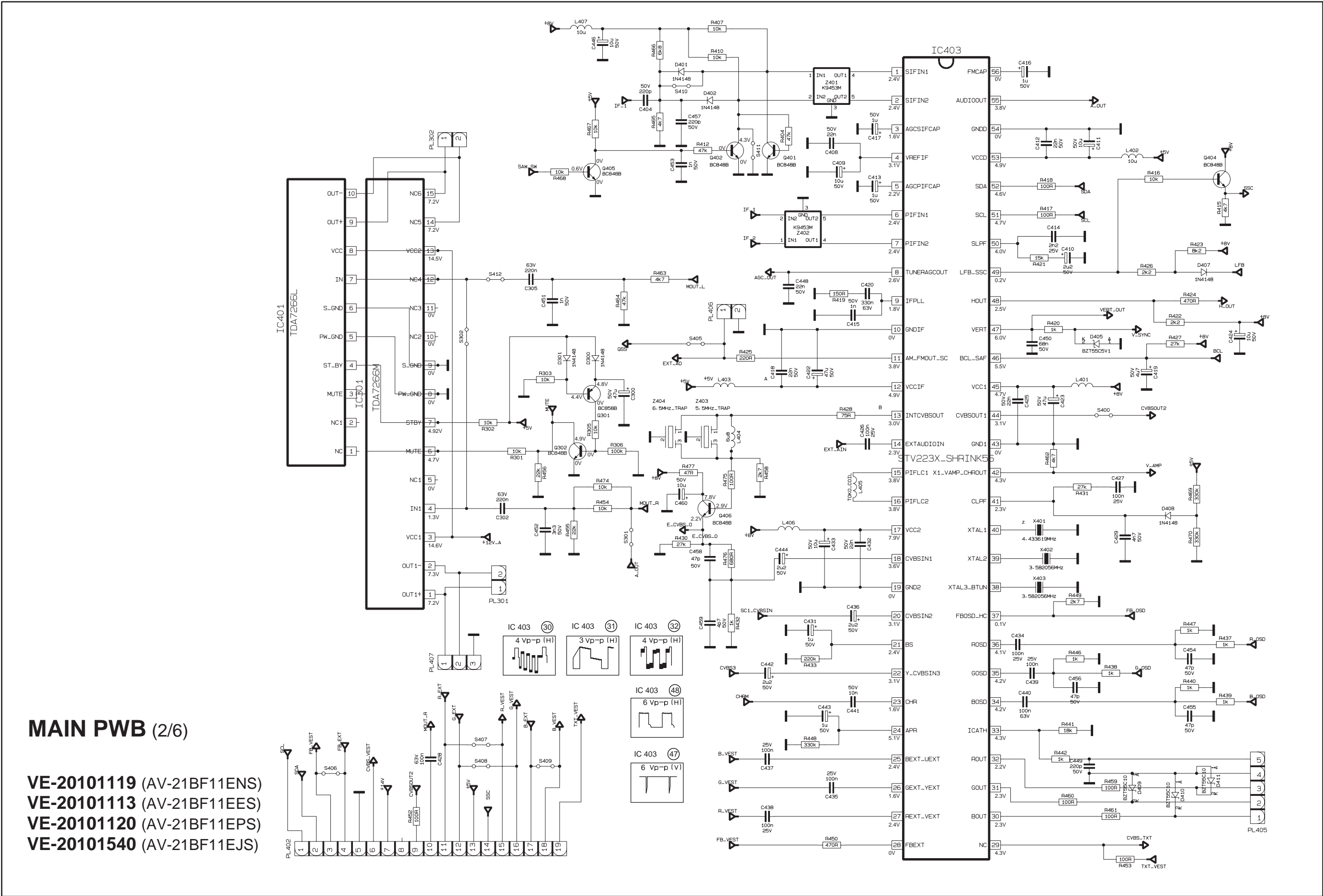
VE-20101119 (AV-21BF11ENS)

VE-20101113 (AV-21BF11EES)

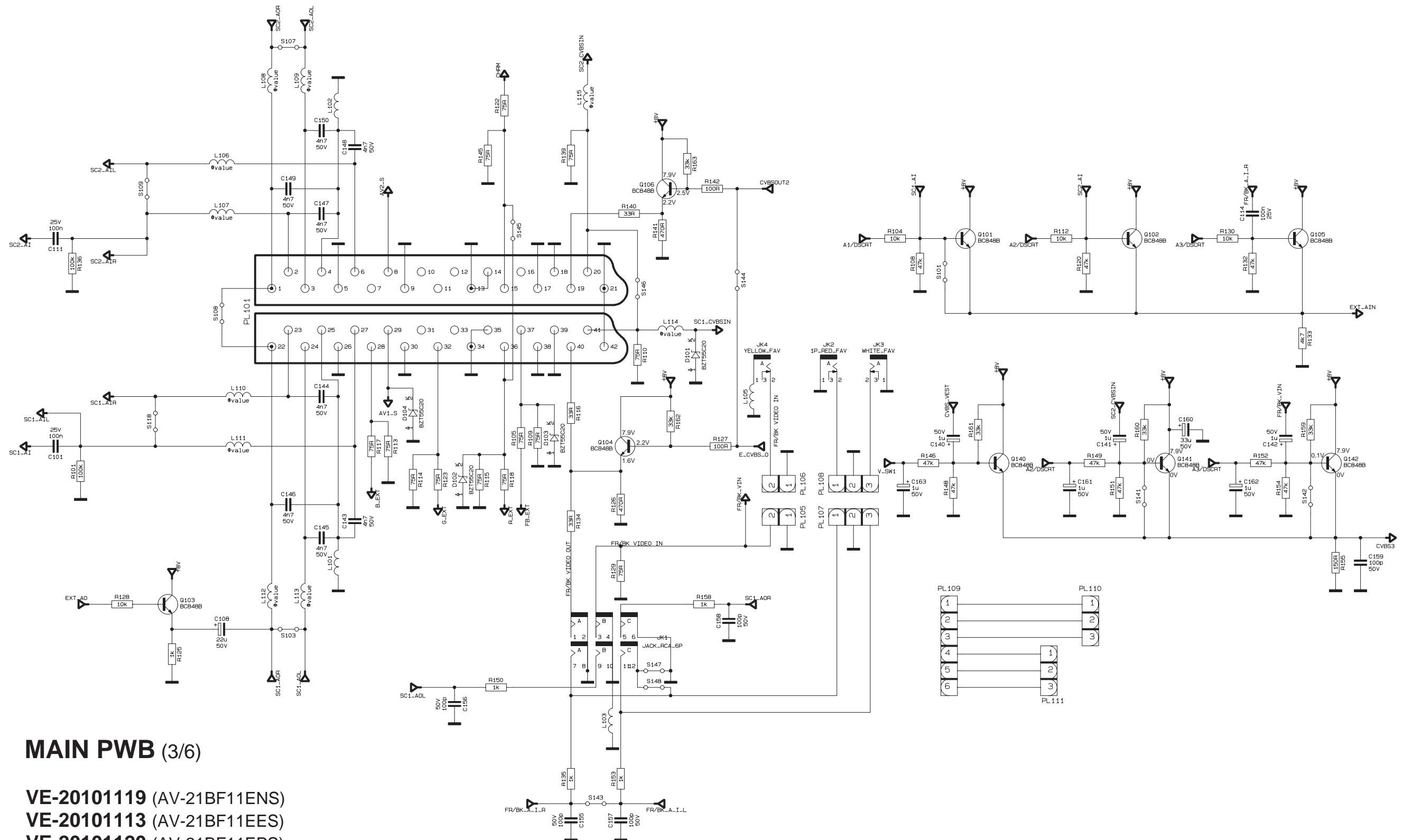
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VE-20101540 (AV-21BF11EJS)

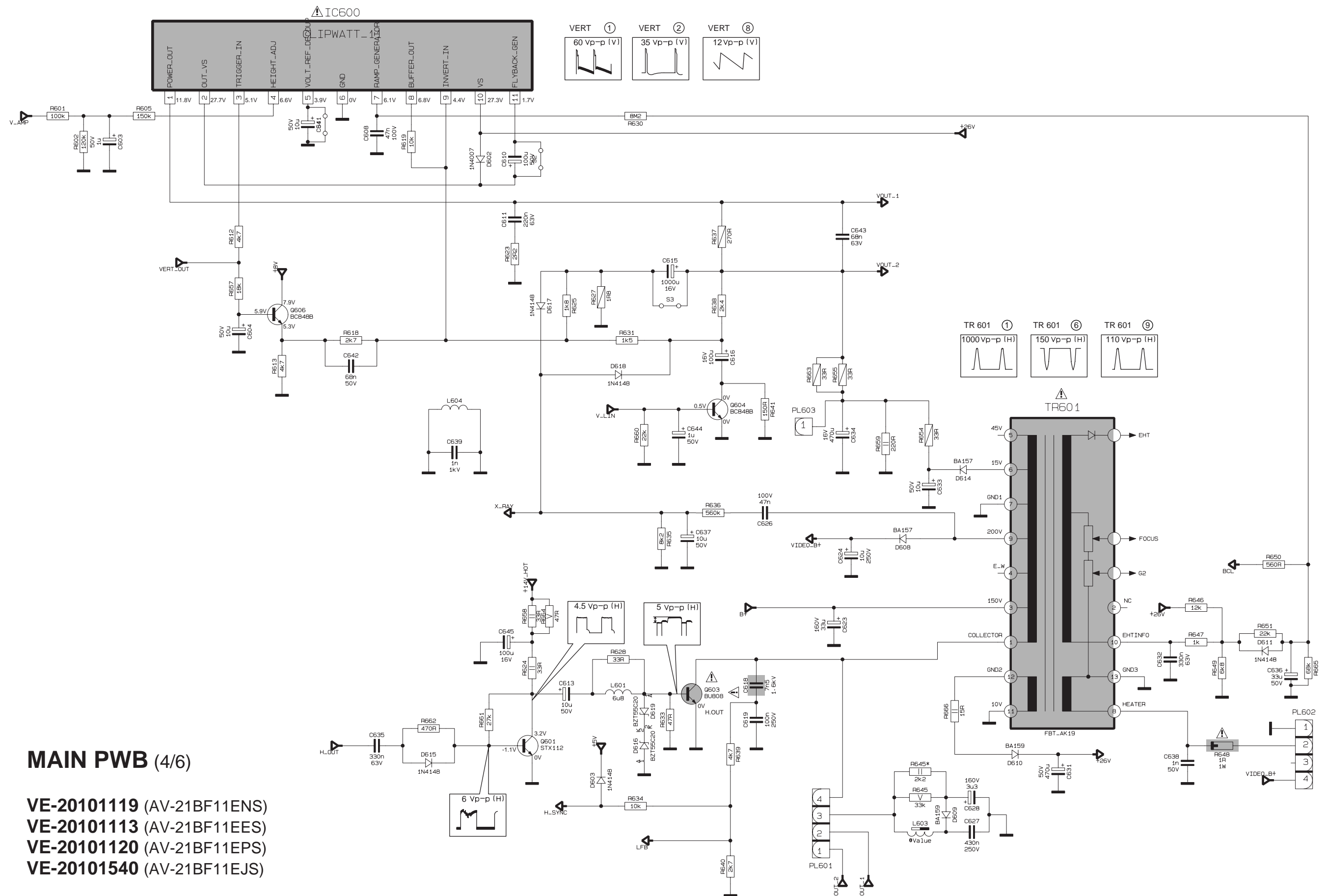
AV-21BF11ENS
AV-21BF11EES
AV-21BF11EPS
AV-21BF11EJS
AV-21BF11ENS
AV-21BF11EES
AV-21BF11EPS
AV-21BF11EJS



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



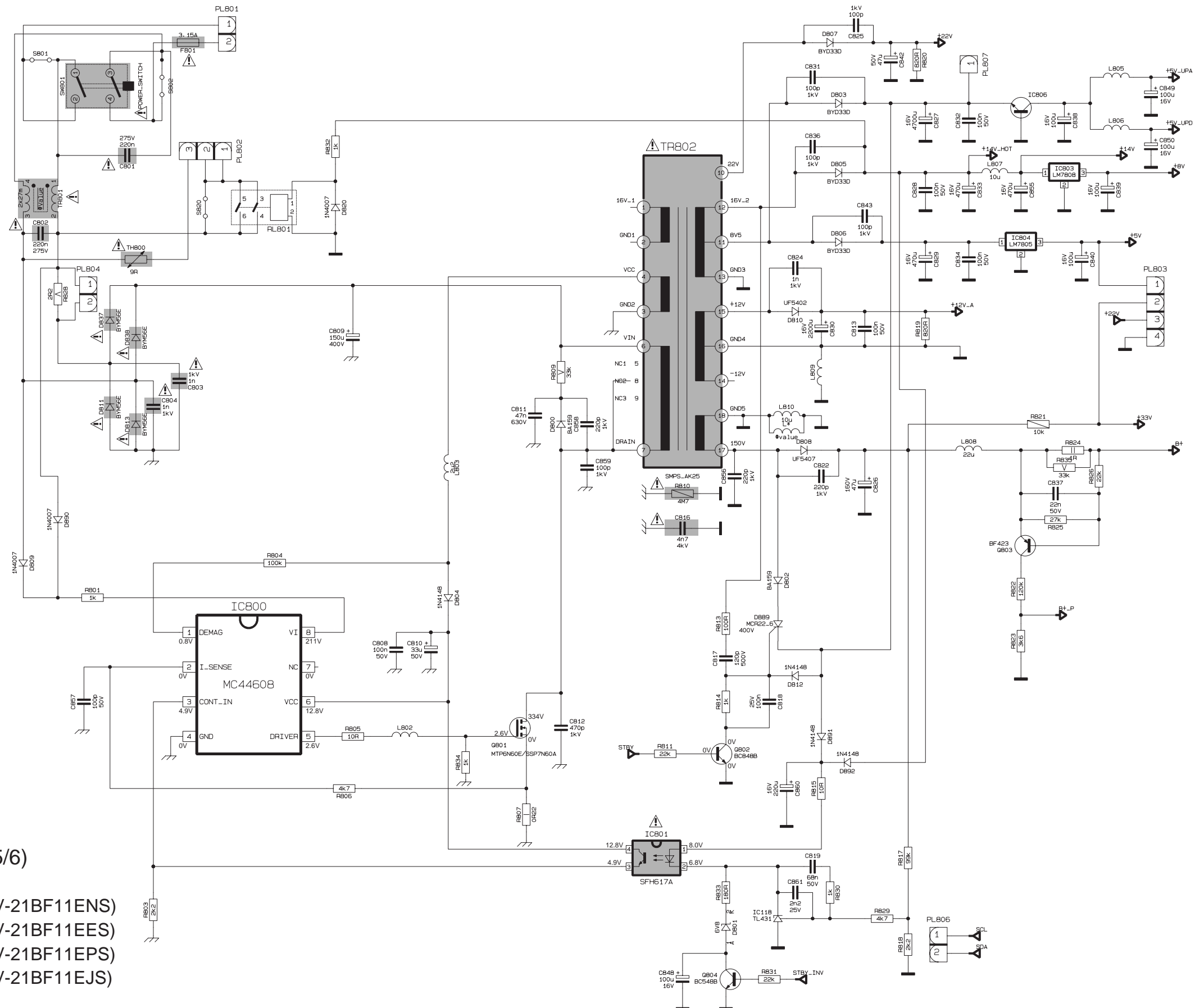
MAIN PWB CIRCUIT DIAGRAM [4/6]



MAIN PWB (4/6)

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

MAIN PWB CIRCUIT DIAGRAM [5/6]



MAIN PWB (5/6)

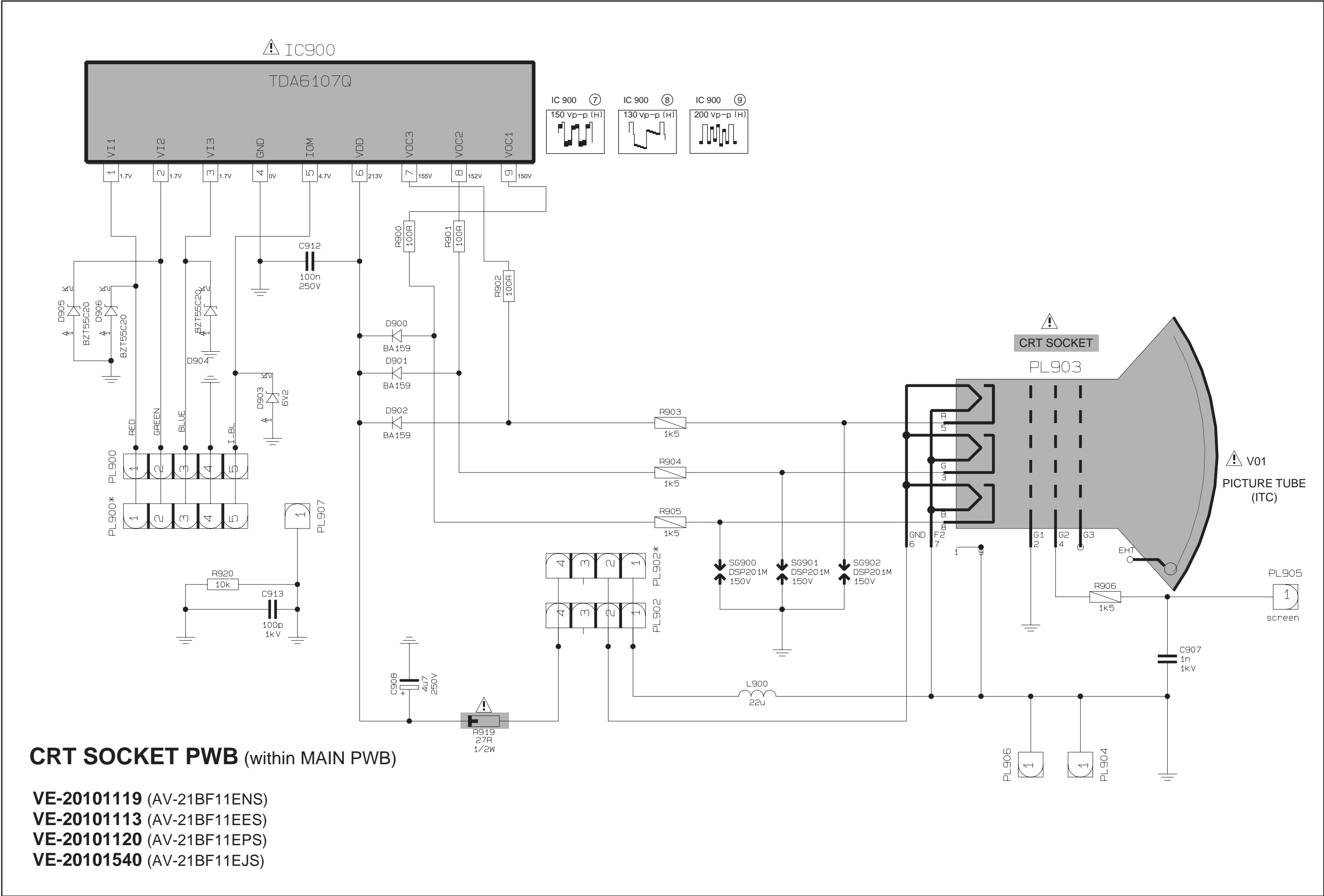
VE-20101119 (AV-21BF11ENS)
VE-20101113 (AV-21BF11EES)
VE-20101120 (AV-21BF11EPS)
VE-20101540 (AV-21BF11EJS)

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

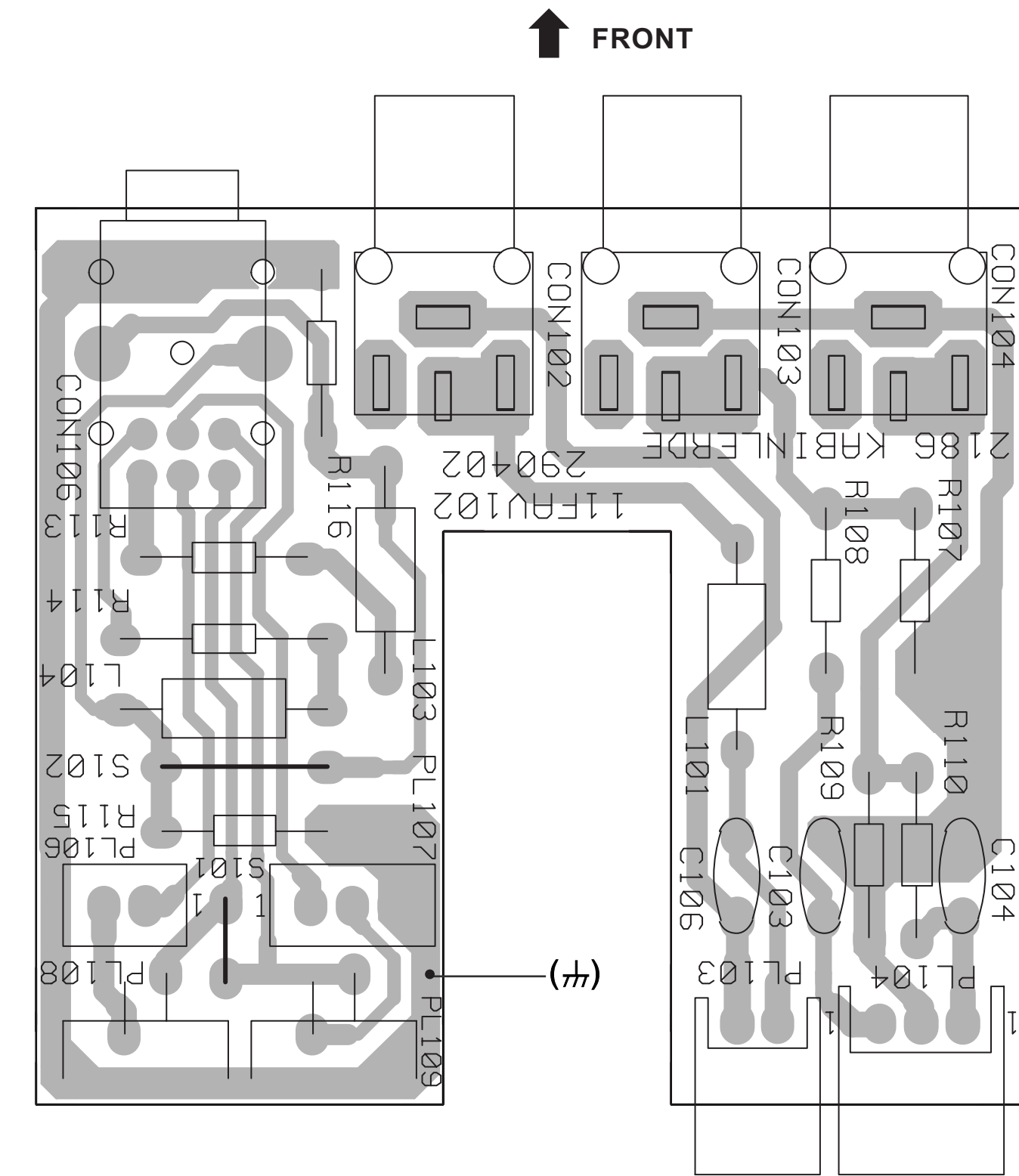


AV-21BF11ENS
AV-21BF11EES
AV-21BF11EPS
AV-21BF11EJS

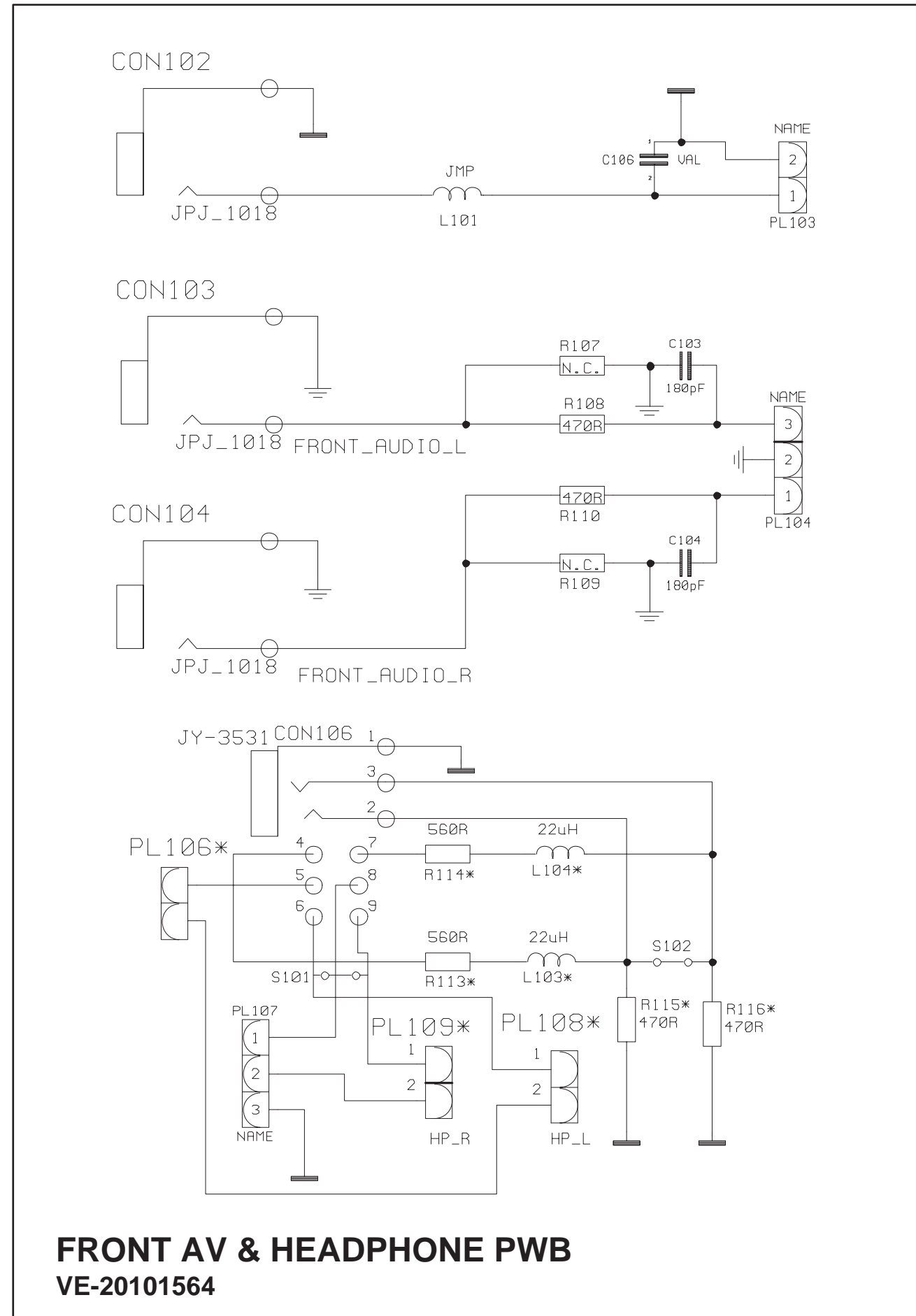
AV-21BF11ENS
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AV-21BF11EPS
AV-21BF11EJS



PATTERN DIAGRAMS FRONT AV & HEADPHONE PWB PATTERN



FRONT AV & HEADPHONE PWB CIRCUIT DIAGRAM



FRONT AV & HEADPHONE PWB
VE-20101564

MAIN PWB PATTERN

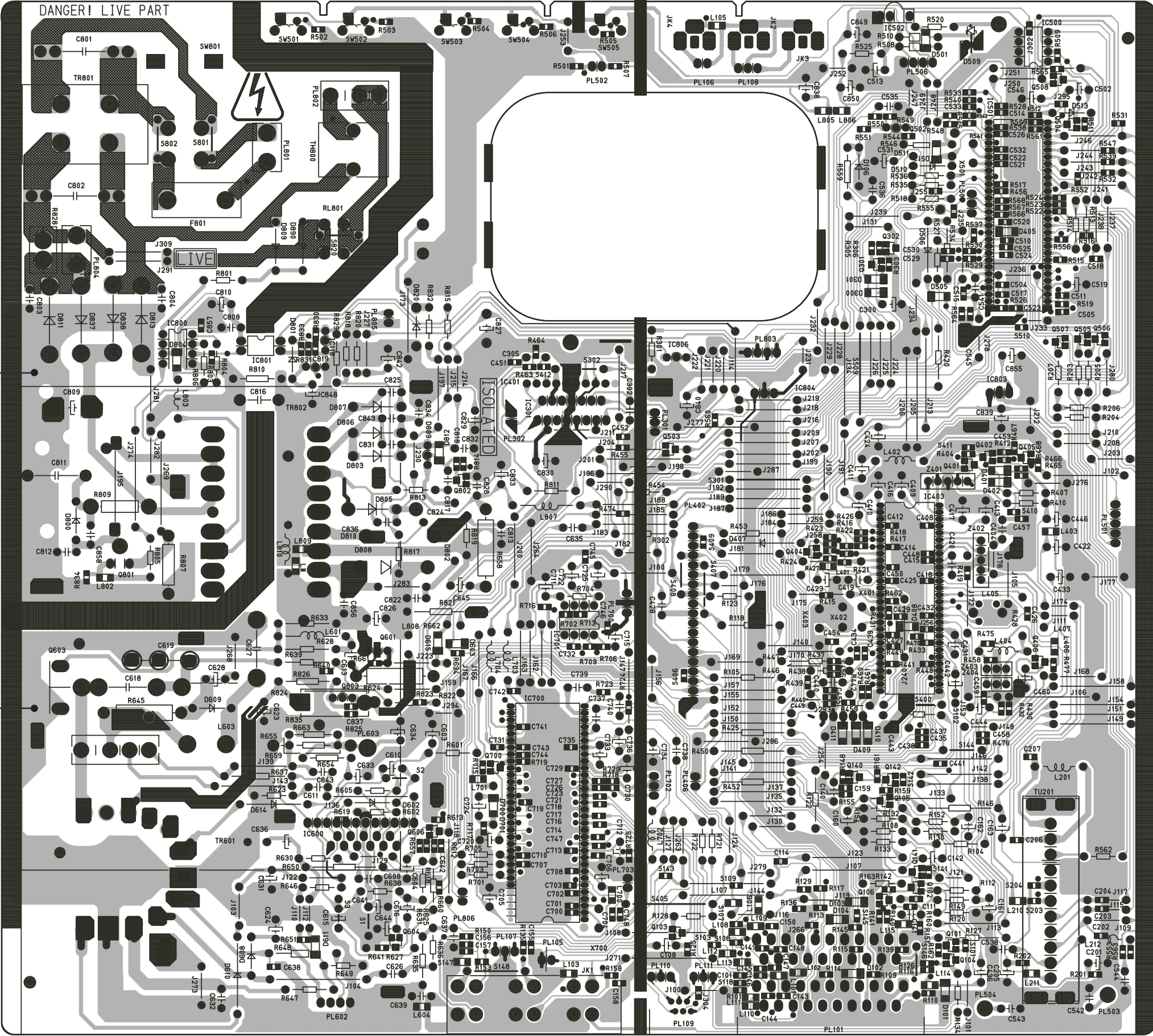
AV-21BF11ENS
AV-21BF11EES
AV-21BF11EPS
AV-21BF11EJS

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

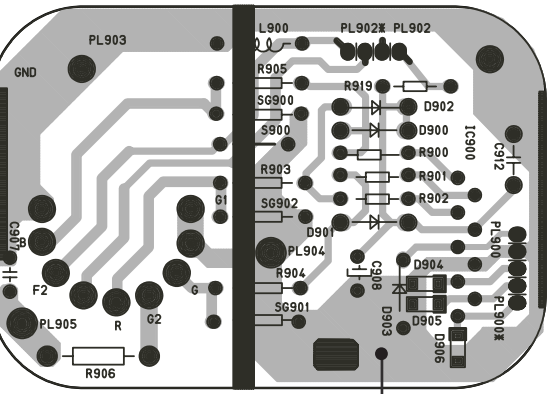
FRONT

(T)

(H)



CRT SOCKET PWB PATTERN
(within MAIN PWB)



TOP

(H)



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