

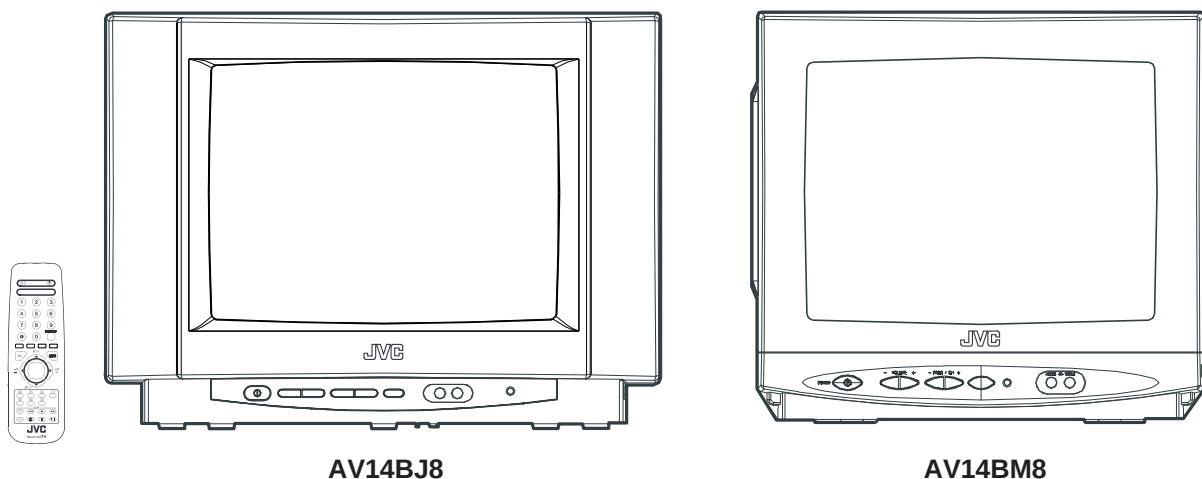
JVC

SCHEMATIC DIAGRAMS

COLOUR TELEVISION

AV14BJ8ENS / AV14BM8ENS
AV14BJ8EPS / AV14BM8EPS
AV14BJ8EES / AV14BM8EES

CD-ROM No.SML200204



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DIFFERENCE LIST

EN			EP	
SYMBOL	VESTEL CODE	DESCRIPTION	VESTEL CODE	DESCRIPTION
Z402	30001724	FILTER SER TRAP TPS 5.5MHZ	--	--
S406	30012985	JUMPER SMD 0603	--	--
S407	30012985	JUMPER SMD 0603	--	--
Z403	30012622	FILTER SAW G1975M	30001690	FILTER SAW K2962M
IC403	30014522	IC STV2246 (SHRINK56)	30014510	IC STV2248 (SHRINK56)
Q455	--	--	30001457	TR BC848B SMD
Q456	--	--	30001457	TR BC848B SMD
Q457	--	--	30001457	TR BC848B SMD
Z401	--	--	30001728	TRIPLE TRAP TPT02B
Z404	--	--	30001707	FILTER SAW L9453M
D404	--	--	30012411	DIODE BA782 SMD
D405	--	--	30012411	DIODE BA782 SMD
R465	--	--	30012508	RES SMD 1/16W 1.8K J (0603)
C451	--	--	30012567	CAP SMD 220PF 50V J (0603)
R461	--	--	30012641	RES SMD 1/16W 10K J (0603)
R462	--	--	30012641	RES SMD 1/16W 10K J (0603)
R467	--	--	30012641	RES SMD 1/16W 10K J (0603)
R468	--	--	30012641	RES SMD 1/16W 10K J (0603)
R563	--	--	30012692	RES SMD 1/16W 4.7K J (0603)
R463	--	--	30012696	RES SMD 1/16W 47K J (0603)
R464	--	--	30012696	RES SMD 1/16W 47K J (0603)

EN			EE	
SYMBOL	VESTEL CODE	DESCRIPTION	VESTEL CODE	DESCRIPTION
Z401	--	--	30001728	TRIPLE TRAP TPT02B
Z402	30001724	FILTER SER TRAP TPS 5.5MHZ	--	--
Z403	30012622	FILTER SAW G1975M	30012544	FILTER SAW K2966
IC403	30014522	IC STV2246 (SHRINK56)	30014510	IC STV2248 (SHRINK56)

AV14BJ8ENS / AV14BM8ENS
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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.

- 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.

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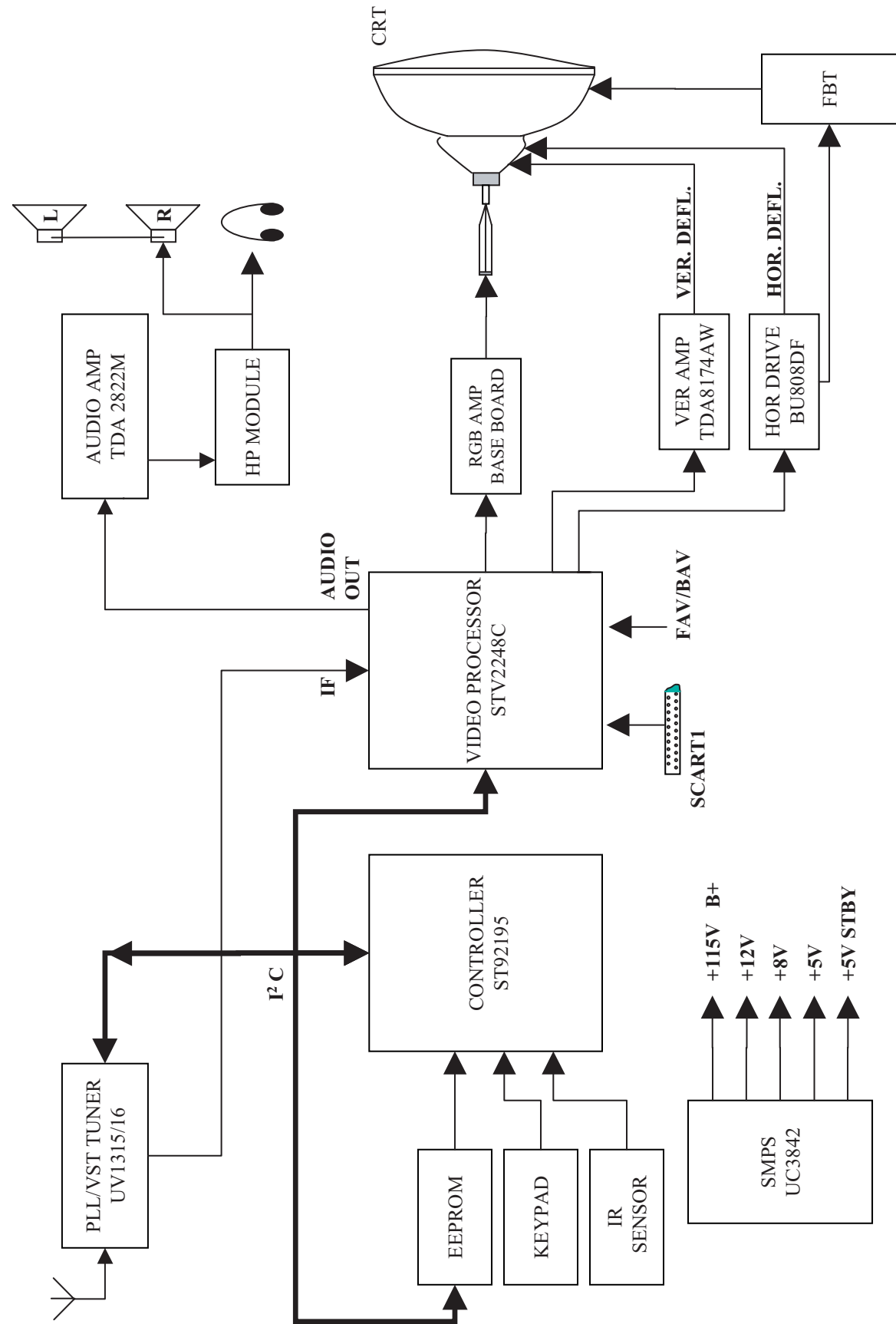
SEMICONDUCTOR SHAPES

TRANSISTOR		FRONT VIEW			TOP VIEW
BOTTOM VIEW					CHIP TR

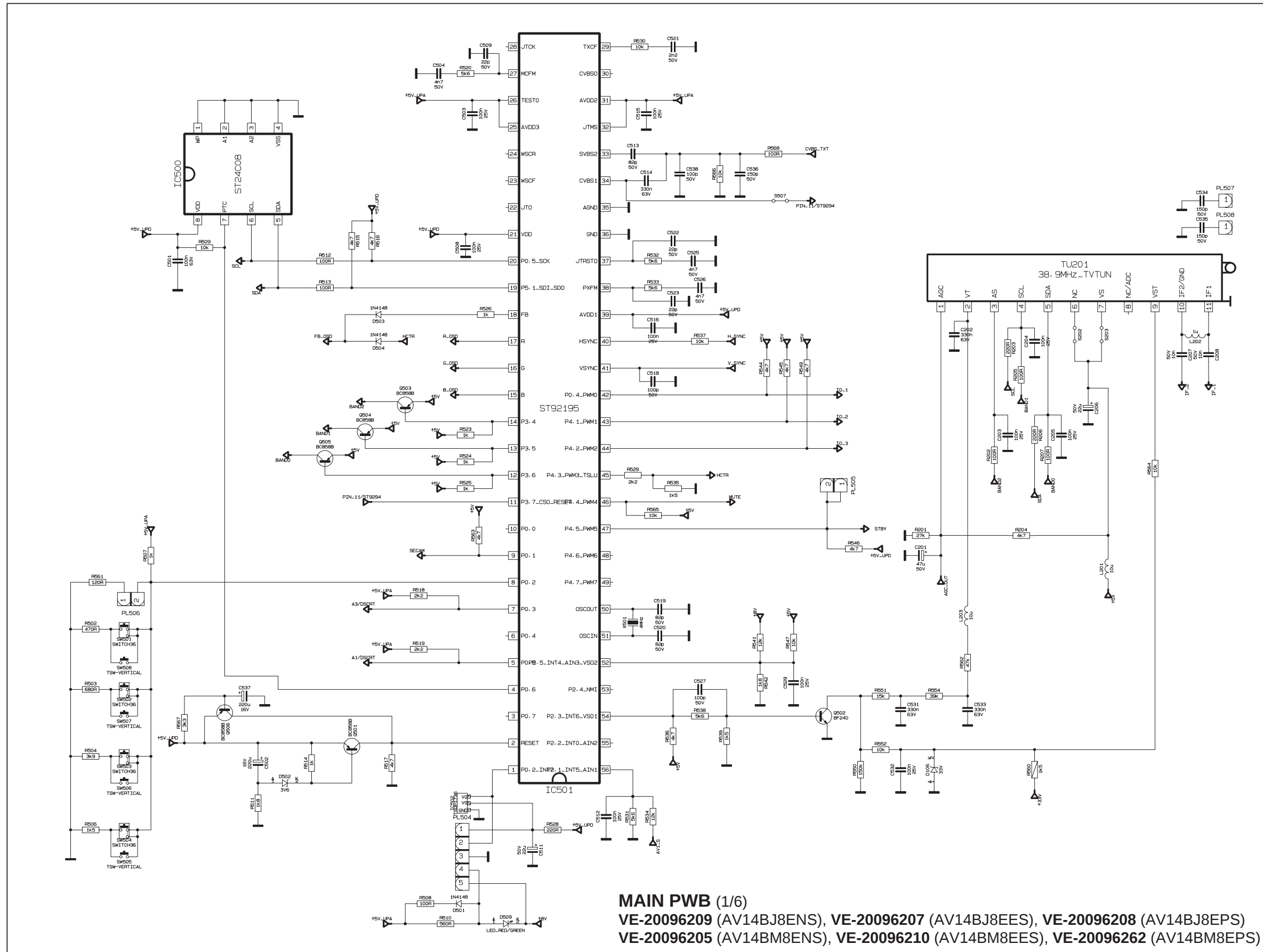
IC		FRONT VIEW			TOP VIEW
BOTTOM VIEW					

CHIP IC		
TOP VIEW		

BLOCK DIAGRAM

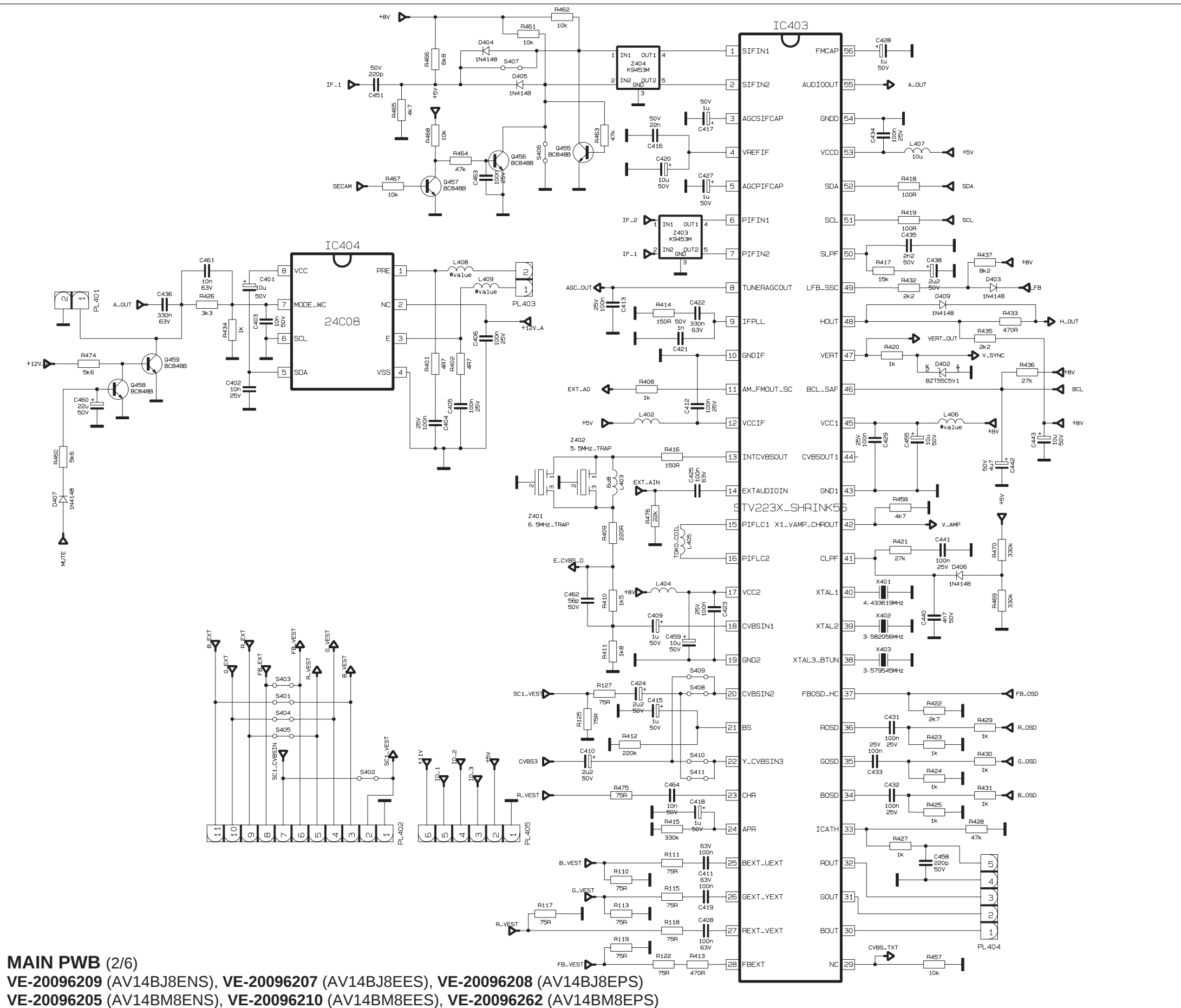


MAIN PWB (1/6)
VE-20096209 (AV14BJ8ENS), **VE-20096207** (AV14BJ8EES), **VE-20096208** (AV14BJ8EPS)
VE-20096205 (AV14BM8ENS), **VE-20096210** (AV14BM8EES), **VE-20096262** (AV14BM8EPS)

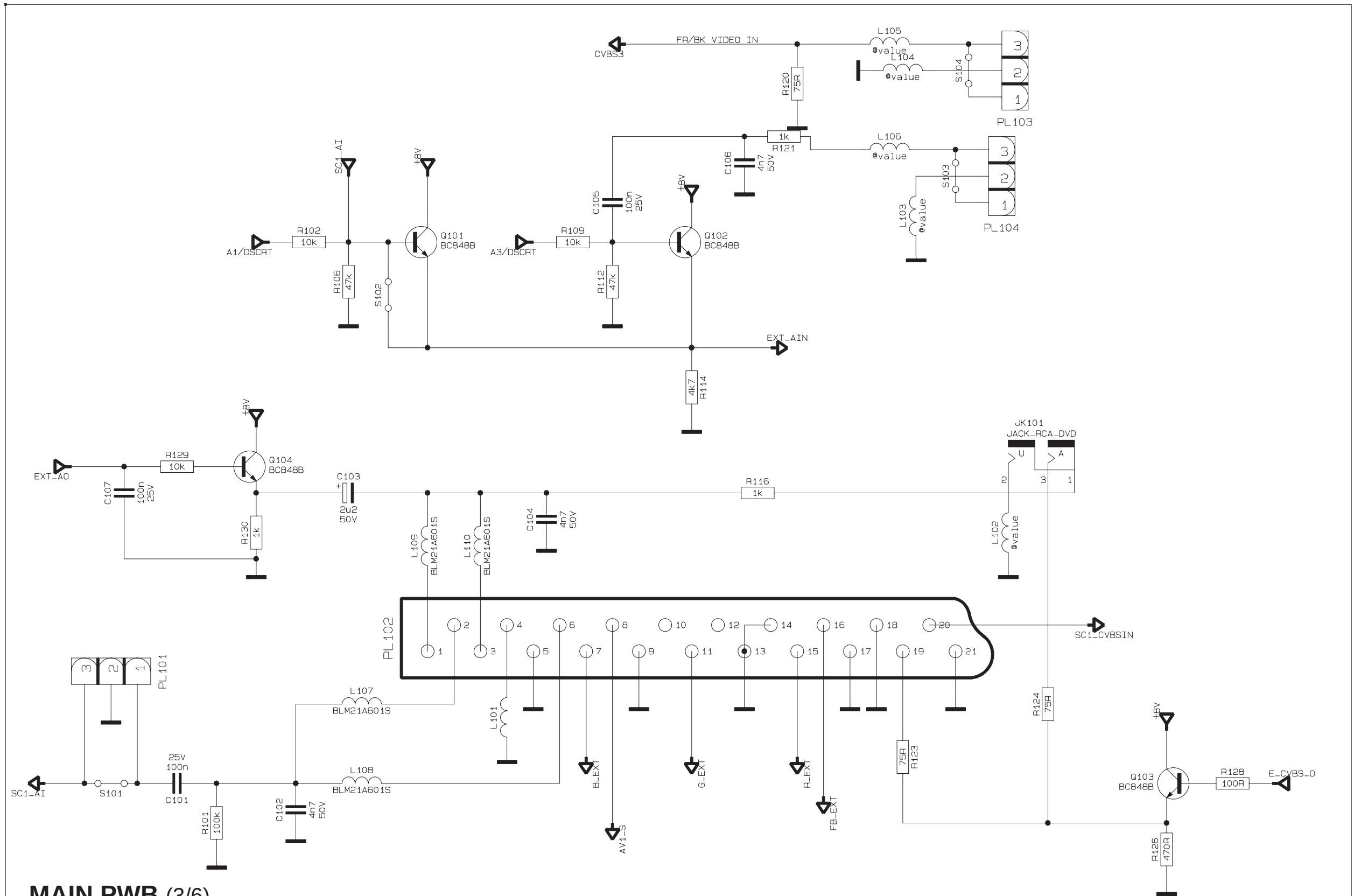


AV14BJ8ENS / AV14BM8ENS
AV14BJ8EPS / AV14BM8EPS
AV14BJ8EES / AV14BM8EES

AV14BJ8ENS / AV14BM8ENS
AV14BJ8EPS / AV14BM8EPS
AV14BJ8EES / AV14BM8EES



MAIN PWB (2/6)
VE-20096209 (AV14BJ8ENS), **VE-20096207** (AV14BJ8EES), **VE-20096208** (AV14BJ8EPS)
VE-20096205 (AV14BM8ENS), **VE-20096210** (AV14BM8EES), **VE-20096262** (AV14BM8EPS)



MAIN PWB (3/6)

VE-20096209 (AV14BJ8ENS), VE-20096207 (AV14BJ8EES), VE-20096208 (AV14BJ8EPS)

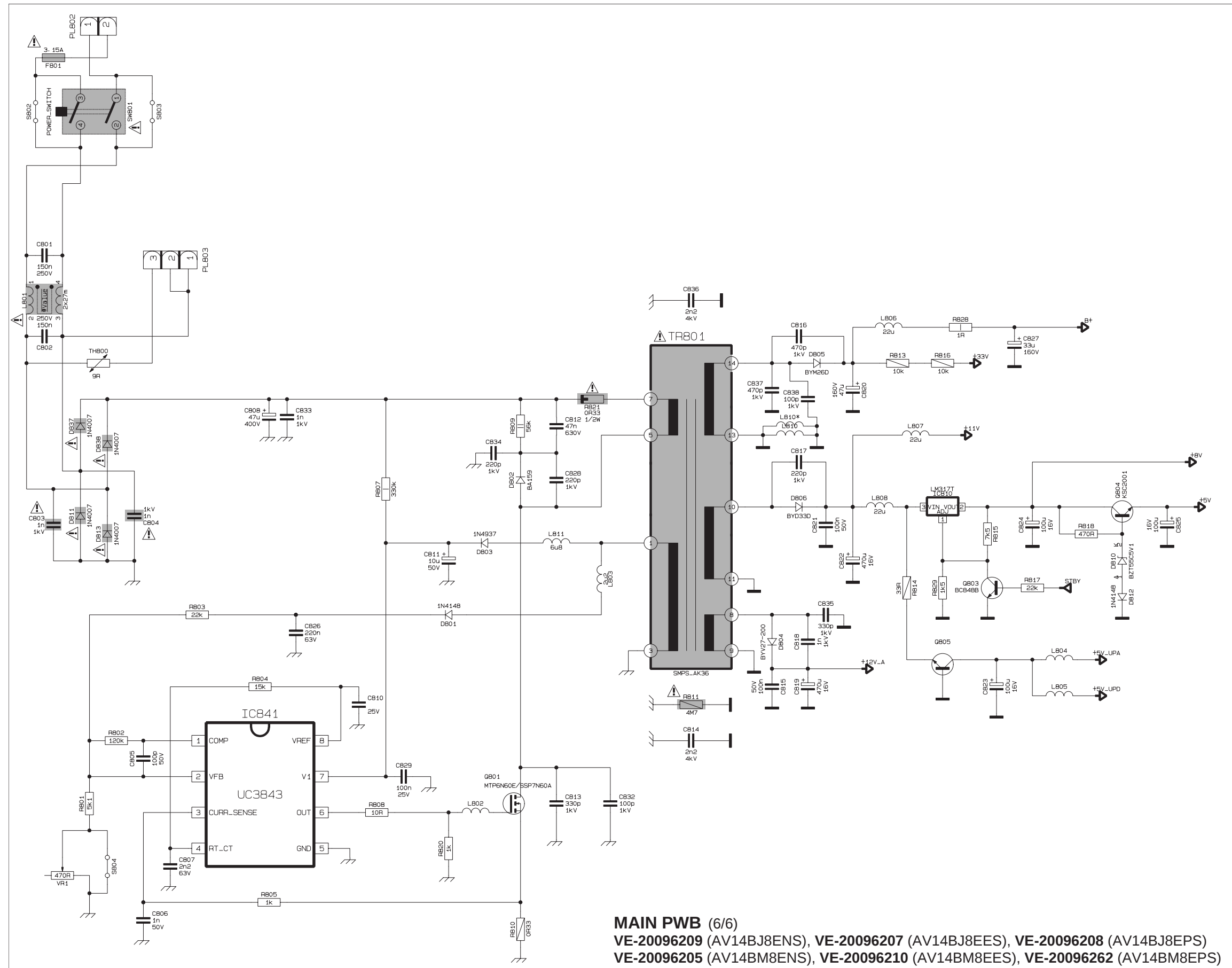
VE-20096205 (AV14BM8ENS), VE-20096210 (AV14BM8EES), VE-20096262 (AV14BM8EPS)

AV14BJ8ENS / AV14BM8ENS
AV14BJ8EPS / AV14BM8EPS
AV14BJ8EES / AV14BM8EES

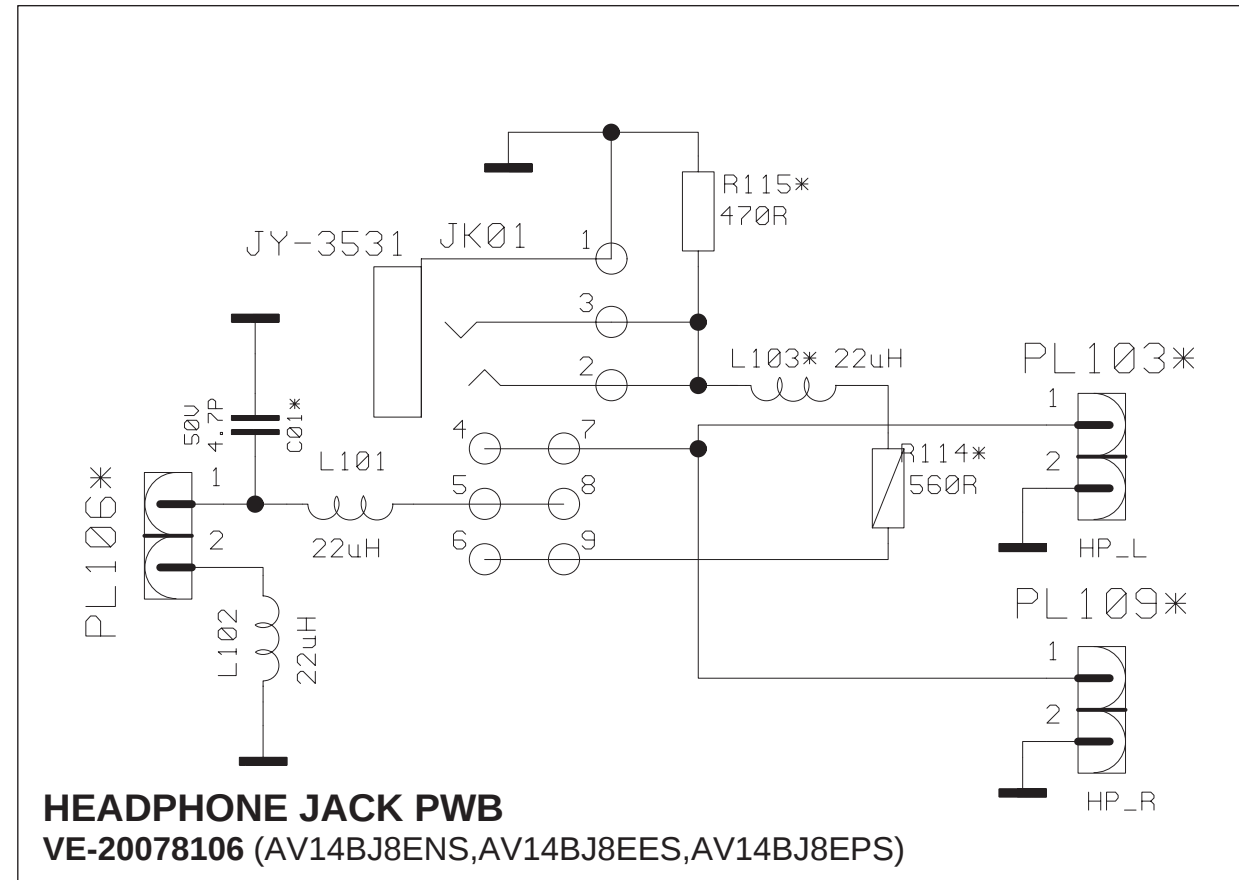


AV14BJ8ENS / AV14BM8ENS
AV14BJ8EPS / AV14BM8EPS
AV14BJ8EES / AV14BM8EES

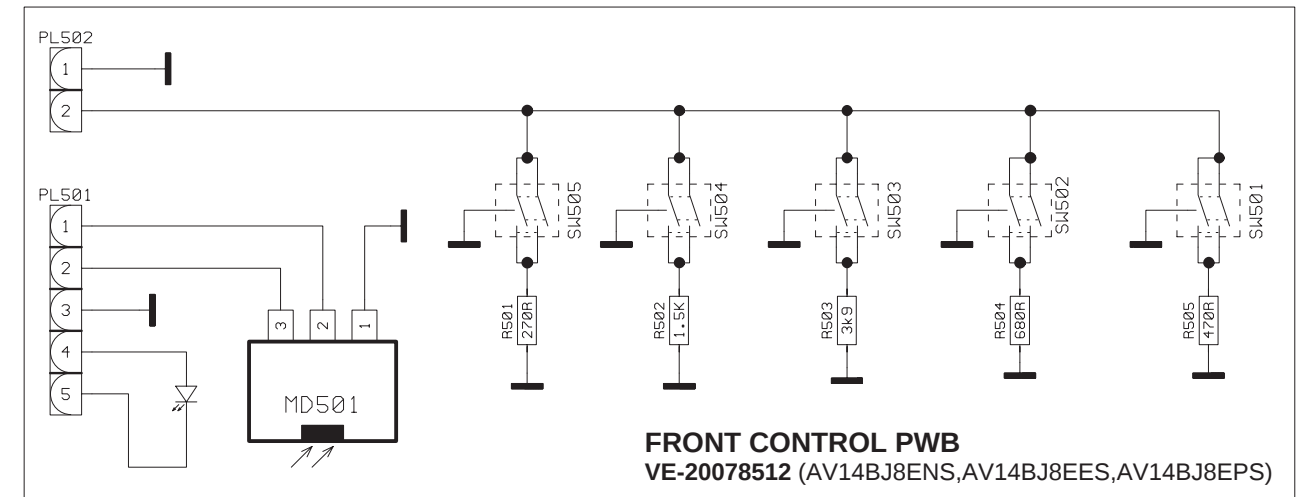
AV14BJ8ENS / AV14BM8ENS
AV14BJ8EPS / AV14BM8EPS
AV14BJ8EES / AV14BM8EES



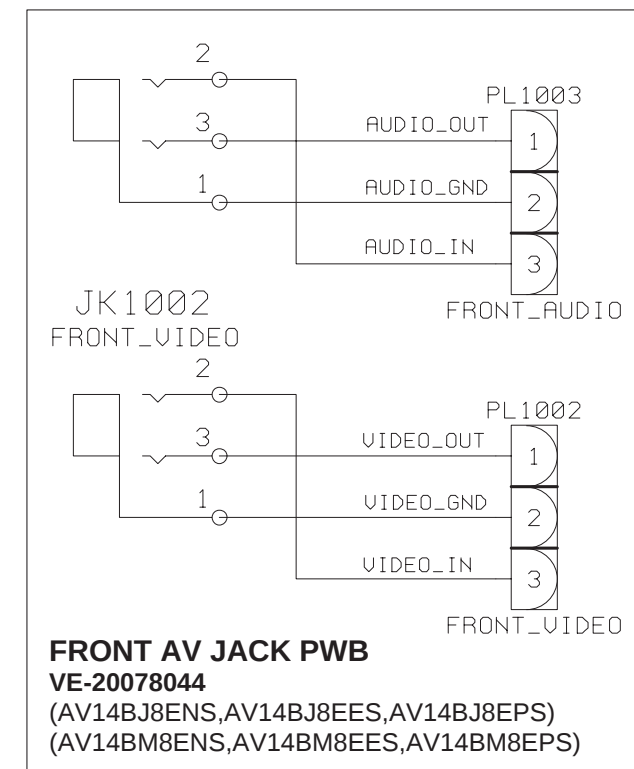
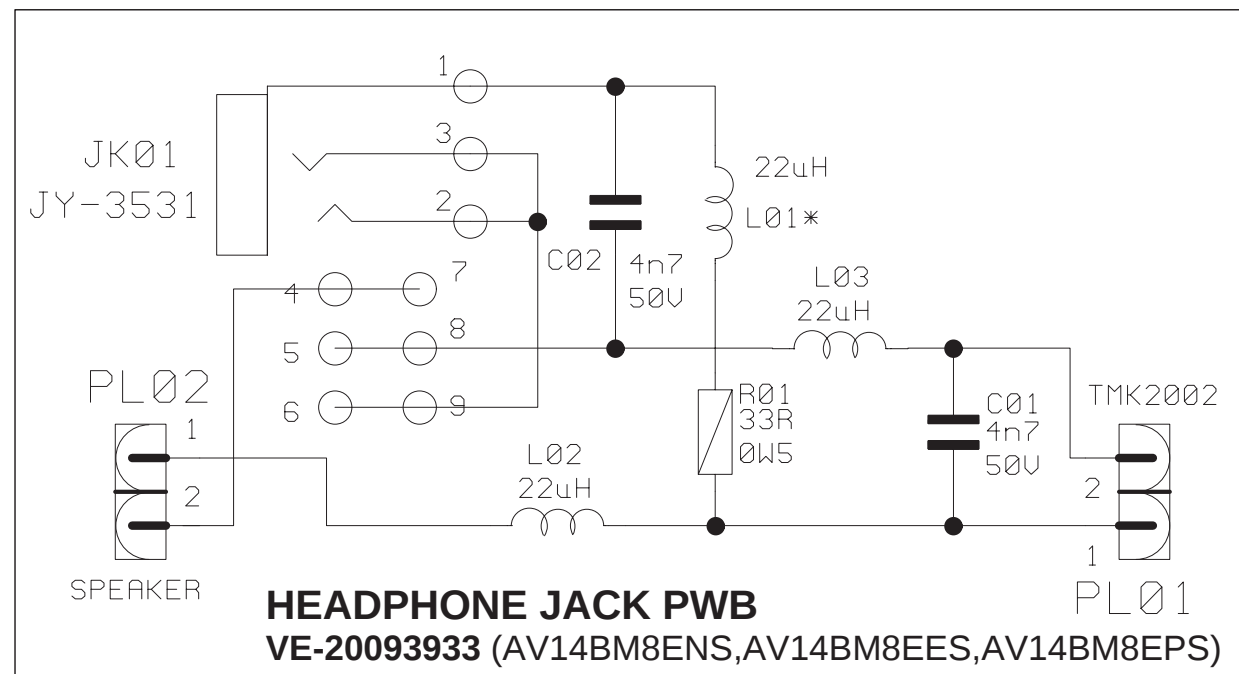
HEADPHONE JACK PWB CIRCUIT DIAGRAM



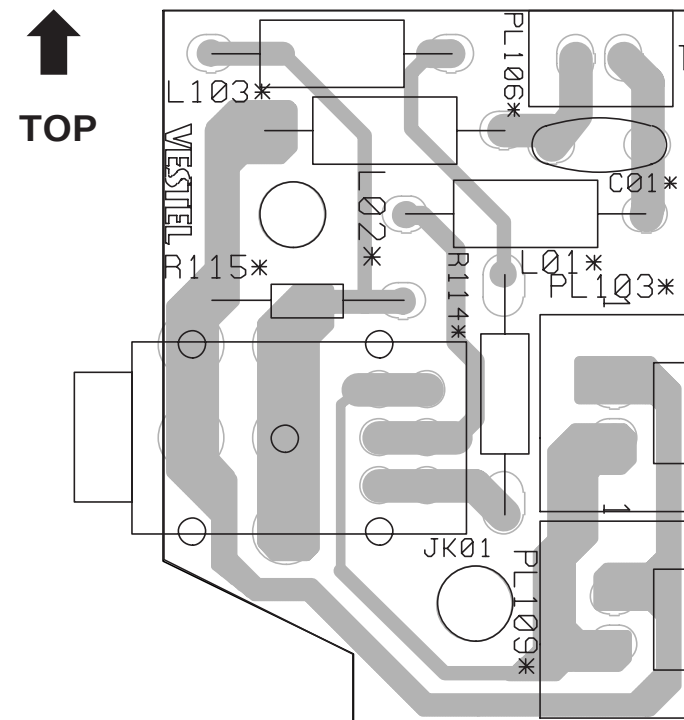
FRONT CONTROL PWB CIRCUIT DIAGRAM



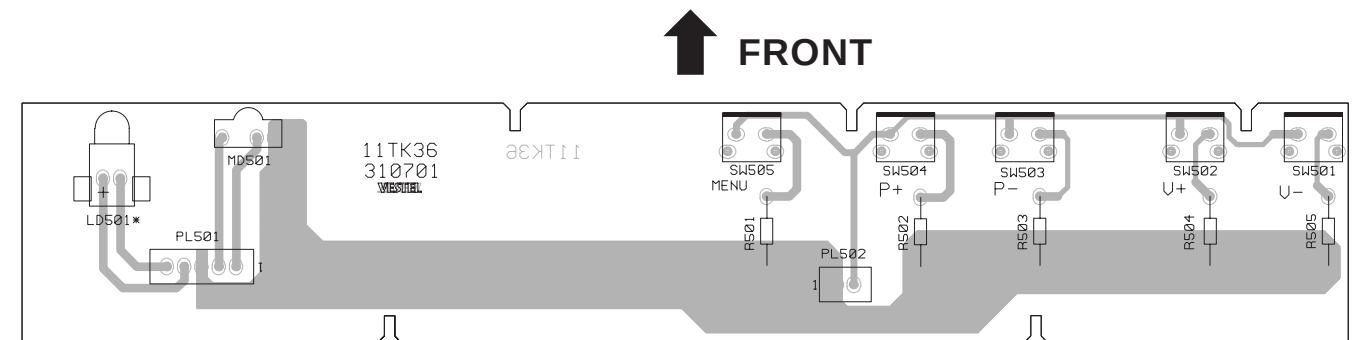
FRONT AV JACK PWB CIRCUIT DIAGRAM



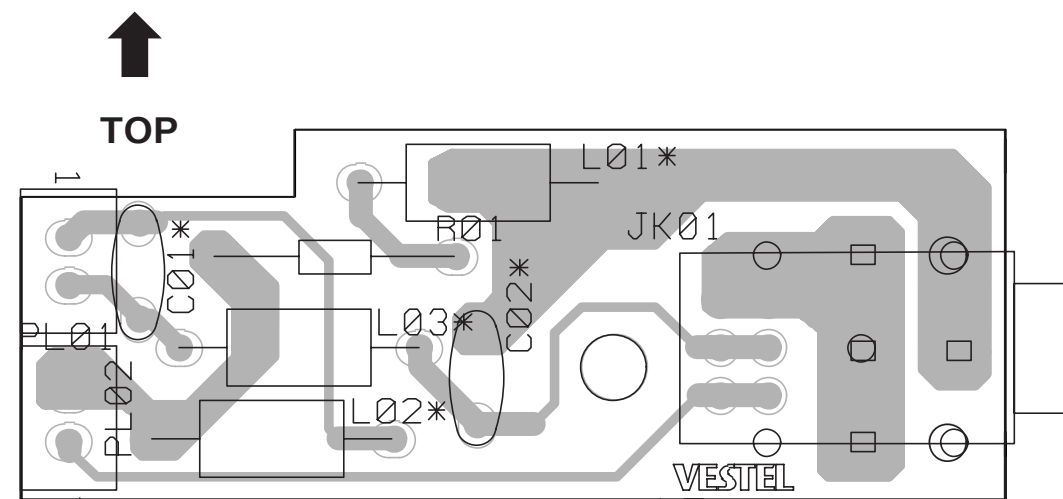
HEADPHONE JACK PWB PATTERN (AV14BJ8)



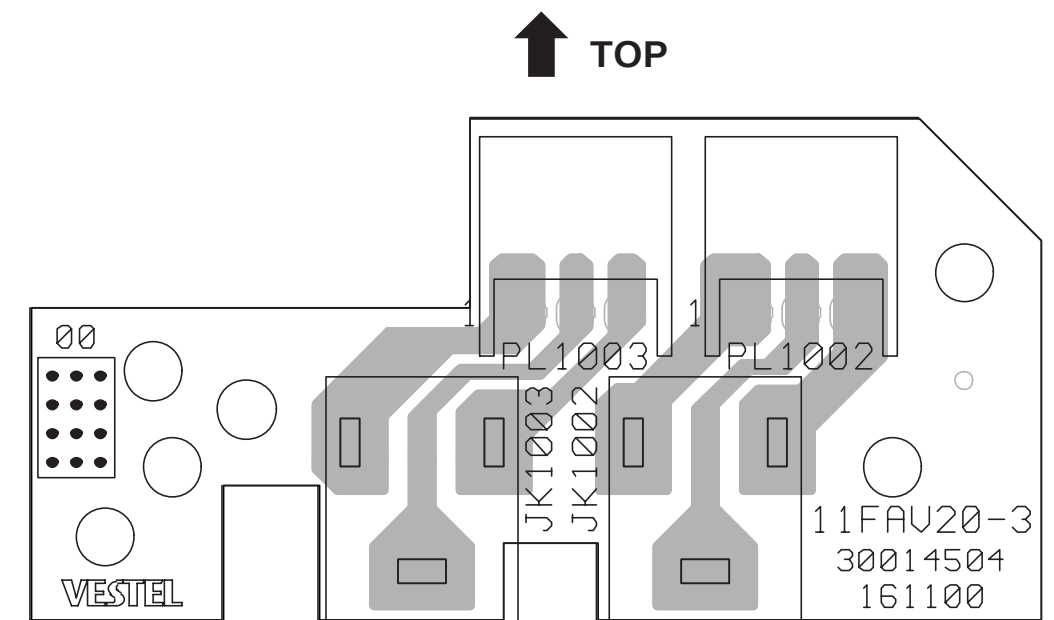
FRONT CONTROL PWB PATTERN (AV14BJ8)



HEADPHONE JACK PWB PATTERN (AV14BM8)



FRONT AV JACK PWB PATTERN



VOLTAGE TABLES

■ MAIN PWB

IC403

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0.9	29	4.3
2	0.9	30	2.2
3	0.1	31	2.2
4	3.2	32	2.3
5	2.5	33	4.5
6	2.5	34	4.3
7	2.5	35	4.2
8	2.3	36	4.2
9	1.9	37	0
10	0	38	0.1
11	3.0	39	1.2
12	5.1	40	
13	3.0	41	2.4
14	2.4	42	4.4
15	4.0	43	0
16	4.0	44	4.0
17	8.1	45	8.1
18	3.6	46	6.3
19	0	47	5.2
20	3.2	48	2.5
21	2.5	49	1.5
22	3.2	50	4.1
23	1.7	51	4.6
24	2.7	52	4.6
25	2.4	53	5.1
26	1.7	54	0
27	2.4	55	4.0
28	0	56	1.2

	E(D)	C(S)	B(G)
Q101	0	8.1	0.2
Q102	0	8.1	0.2
Q104	2.4	8.1	2.9
Q455	0	0	0.5
Q457	0	0	0.6
Q463	0	1.7	0
Q501	4.7	4.7	4.7
Q502	0	0	0.7
Q602	0	138	-0.1
Q603	4.5	8.1	5.1
Q801	0	4.5	2.7
Q803	7.1	4.8	0
Q804	5.2	5.8	8.1

IC501

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	4.5	29	2.1
2	4.7	30	1.1
3	1.1	31	4.8
4	4.7	32	4.8
5	0.2	33	0.8
6	0	34	1.3
7	0.2	35	0
8	4.8	36	0
9	3.7	37	0
10	0.9	38	2.0
11	0.9	39	4.7
12	5.1	40	1.4
13	0.5	41	4.5
14	0.5	42	1.0
15	0.3	43	1.0
16	0.1	44	0.9
17	0.1	45	0
18	0	46	0.1
19	4.6	47	0.1
20	0	48	0.9
21	4.7	49	0
22	0.9	50	2.2
23	0	51	2.1
24	0	52	1.5
25	4.8	53	0.9
26	4.8	54	4.2
27	1.7	55	0.9
28	4.7	56	0

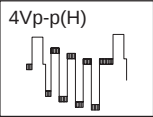
IC500

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0	5	4.6
2	0	6	4.6
3	0	7	4.7
4	0	8	4.7

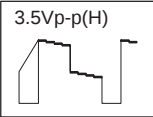
WAVEFORM DIAGRAMS

■ MAIN PWB

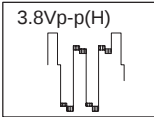
IC403 30pin



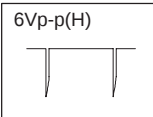
IC403 31pin



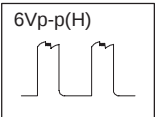
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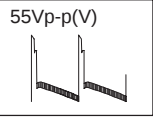
IC403 47pin



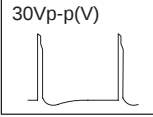
IC403 48pin



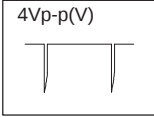
IC600 1pin



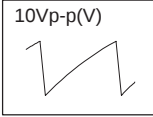
IC600 2pin



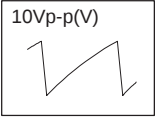
IC600 3pin



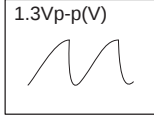
IC600 7pin



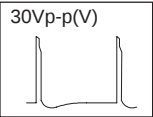
IC600 8pin



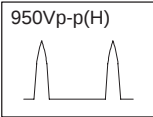
IC600 10pin



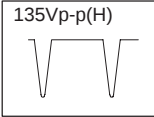
IC600 11pin



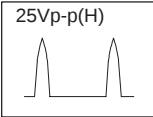
TR601 1pin



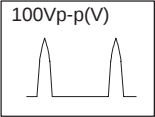
TR601 6pin



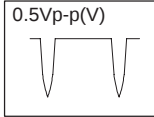
TR601 8pin



TR601 9pin



TR601 12pin





VICTOR COMPANY OF JAPAN, LIMITED

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



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