

JVC

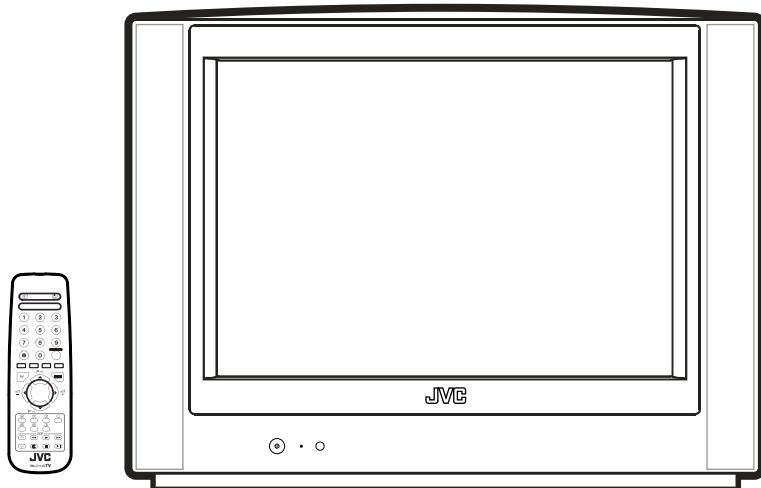
SCHEMATIC DIAGRAMS

COLOUR TELEVISION

AV-28KT1BUF_{/A, /B, /C,}

AV-28KT1SUF_{/A, /B, /C}

CD-ROM No.SML200310



AV-28KT1BUF/A/B/C

AV-28KT1SUF/A/B/C

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 manufacturers 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 | :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 | :Metallized mylar capacitor |
| PP | :Polypropylene capacitor |
| MPP | :Metalized polypropylene capacitor |
| MF | :Metalized film capacitor |
| TF | :Thin film capacitor |
| BP | :Bipolar electrolytic capacitor |
| TAN | :Tantalum capacitor |

● Coils

- | | |
|---------|---------------|
| No unit | :[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.
- ◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

NOTE

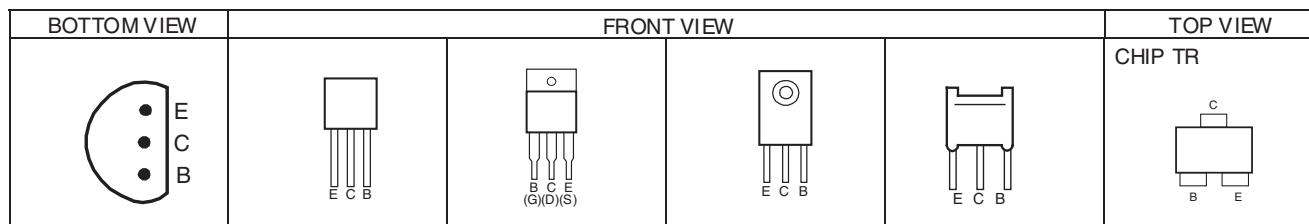
- ◇ Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.
When ordering parts, please use the numbers that appear in the Parts List.

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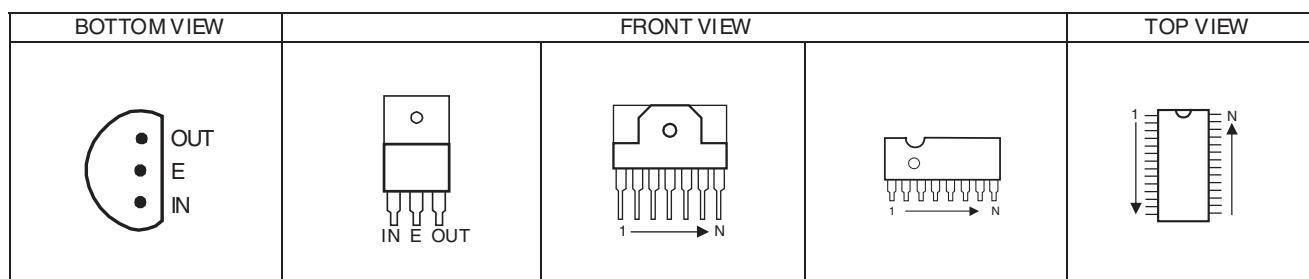
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SEMICONDUCTOR SHAPES

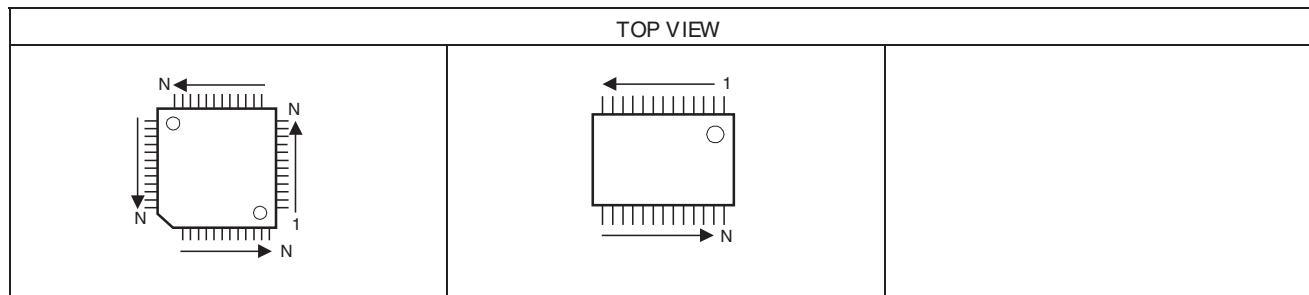
TRANSISTOR

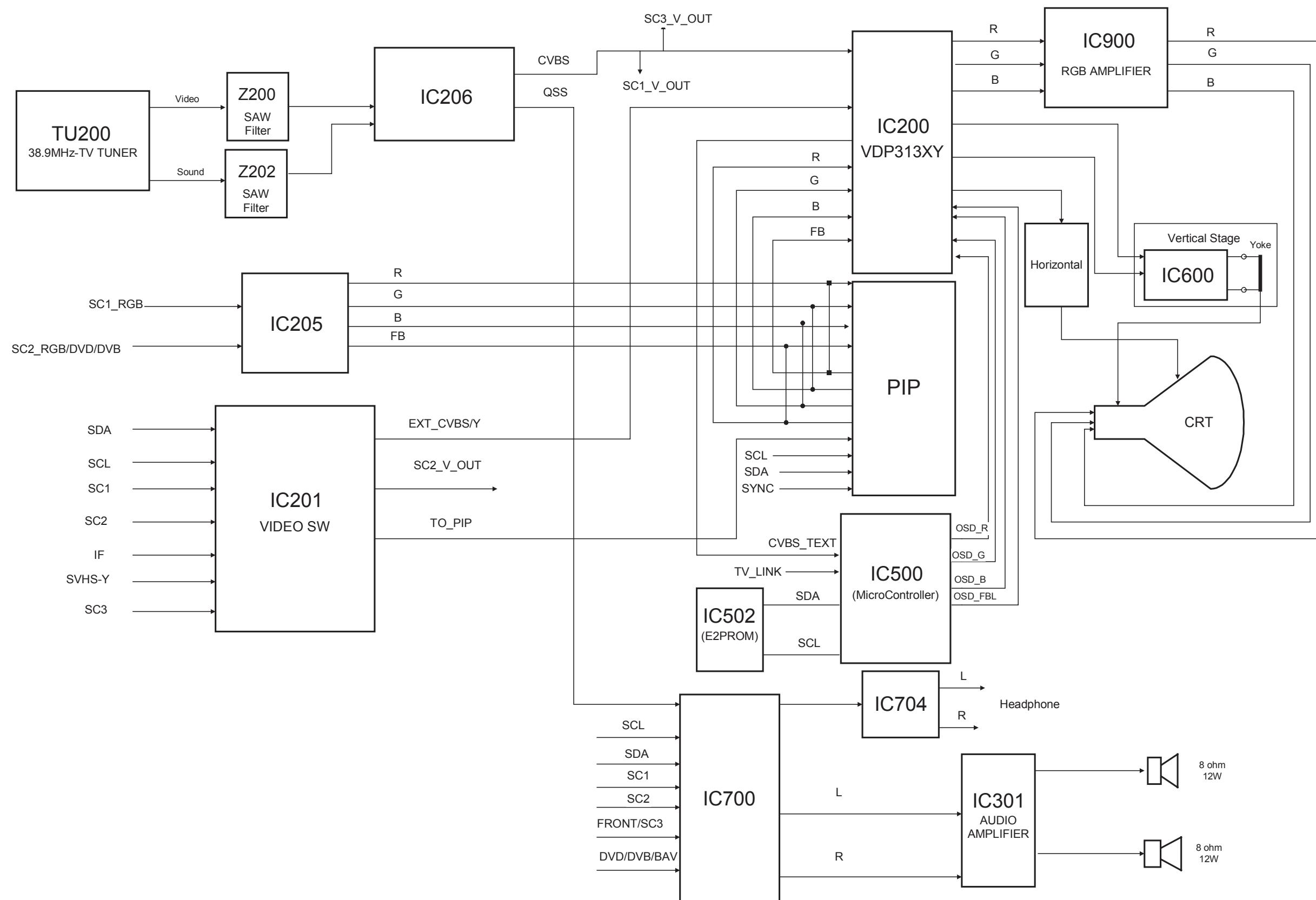


IC

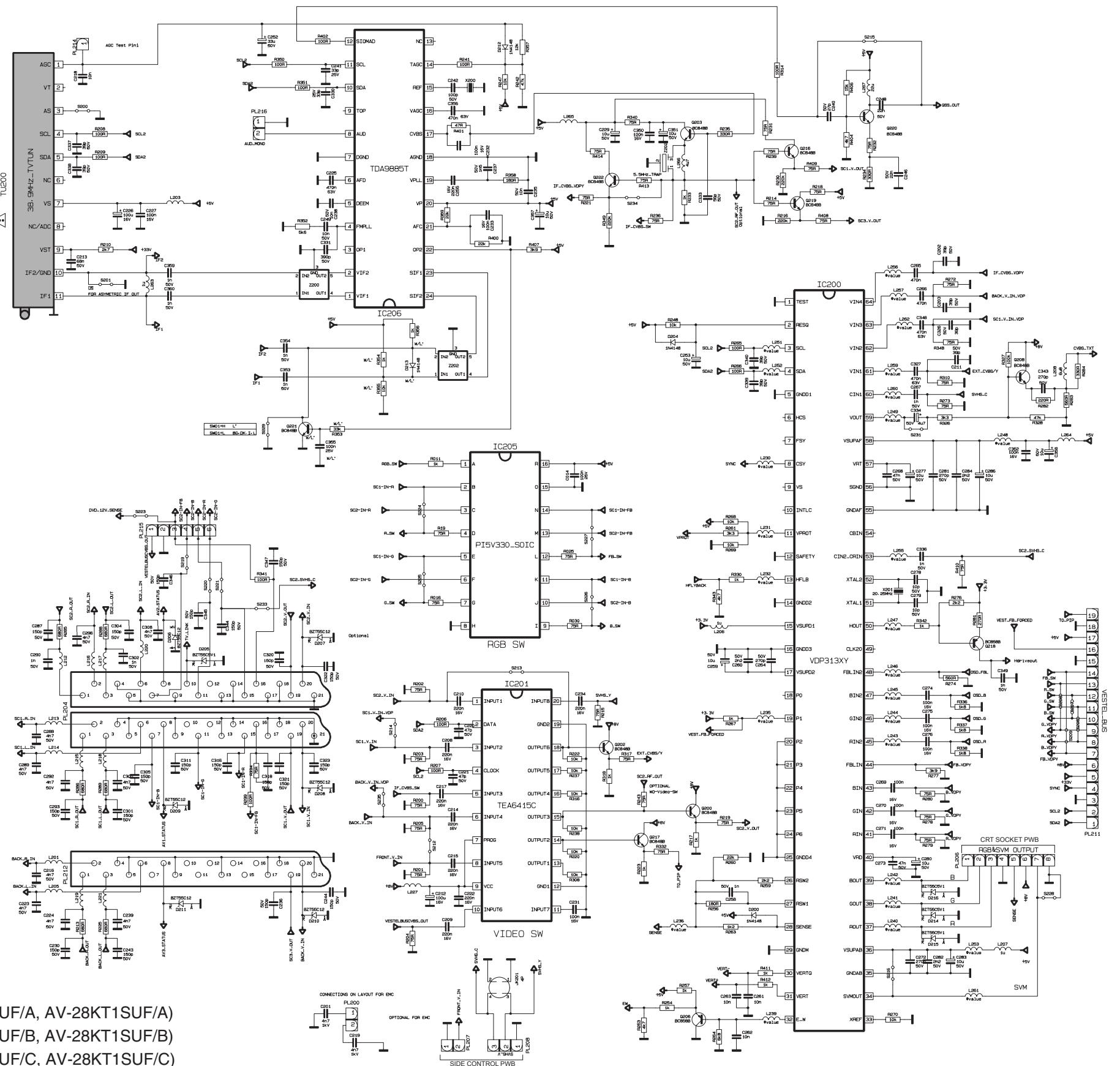


CHIP IC



BLOCK DIAGRAM

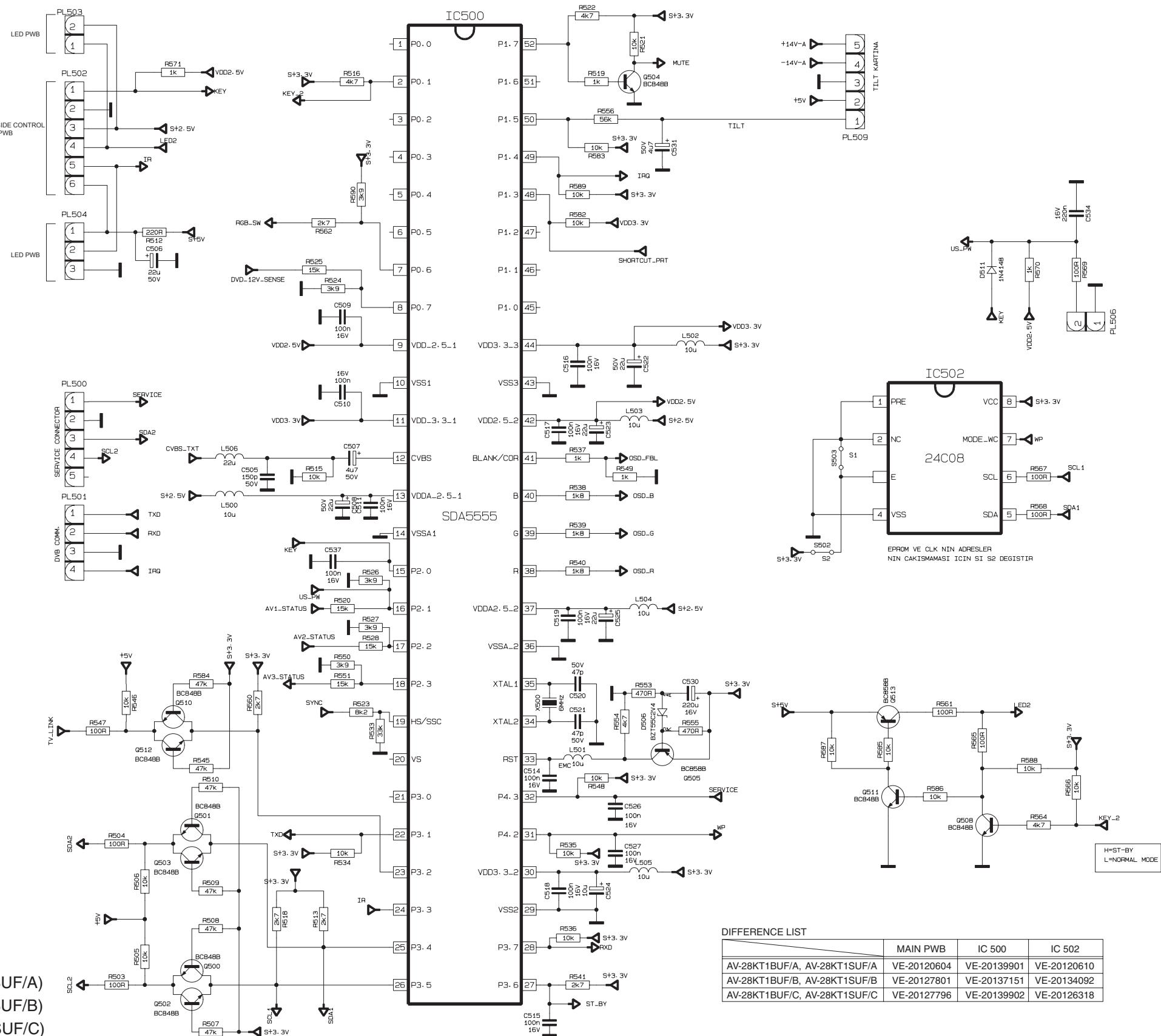
CIRCUIT DIAGRAMS MAIN PWB CIRCUIT DIAGRAM [1/5]



MAIN PWB (1/5)

VE-20120604 (AV-28KT1BUF/A, AV-28KT1SUF/A)
VE-20127801 (AV-28KT1BUF/B, AV-28KT1SUF/B)
VE-20127796 (AV-28KT1BUF/C, AV-28KT1SUF/C)

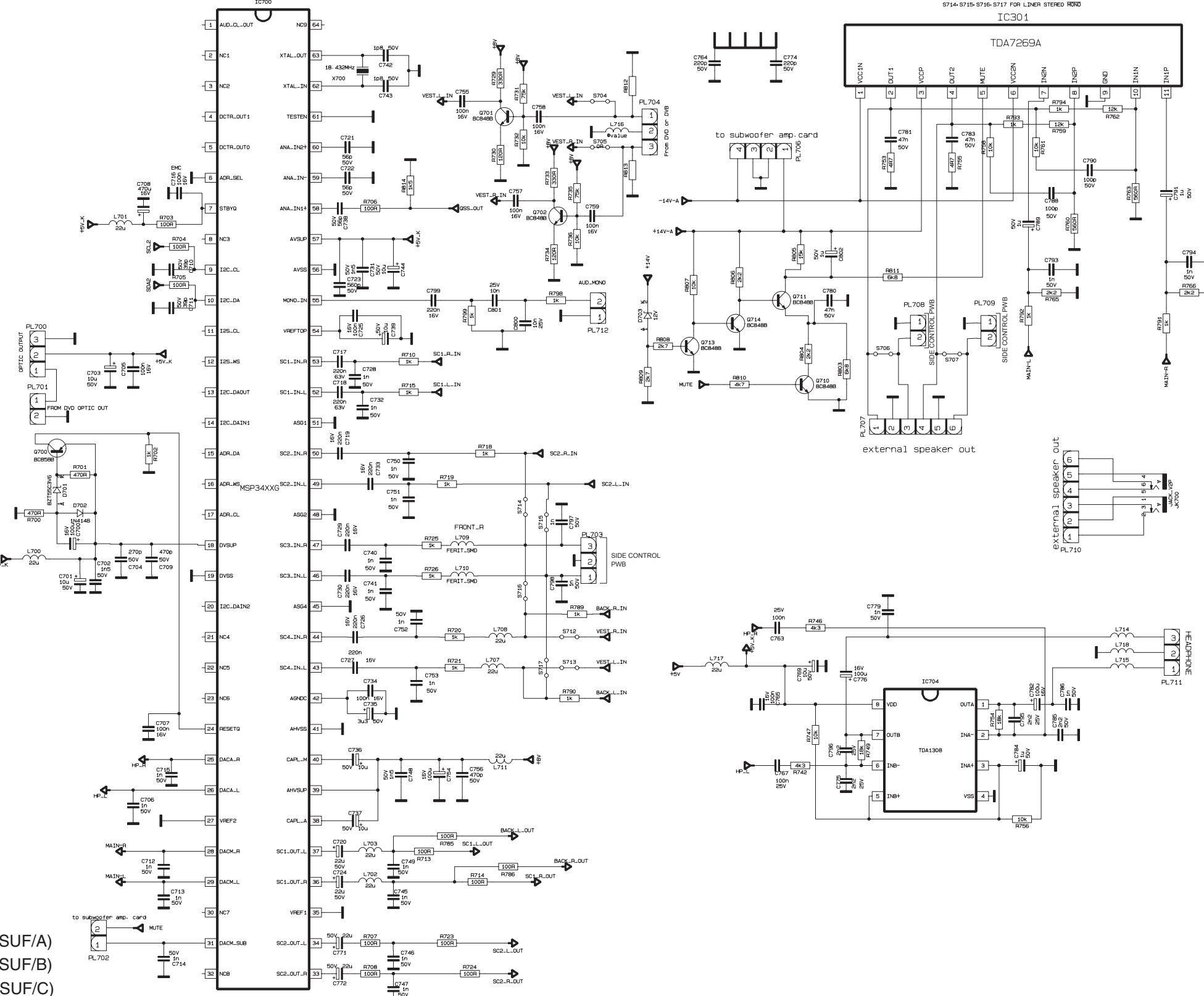
MAIN PWB CIRCUIT DIAGRAM [2/5]



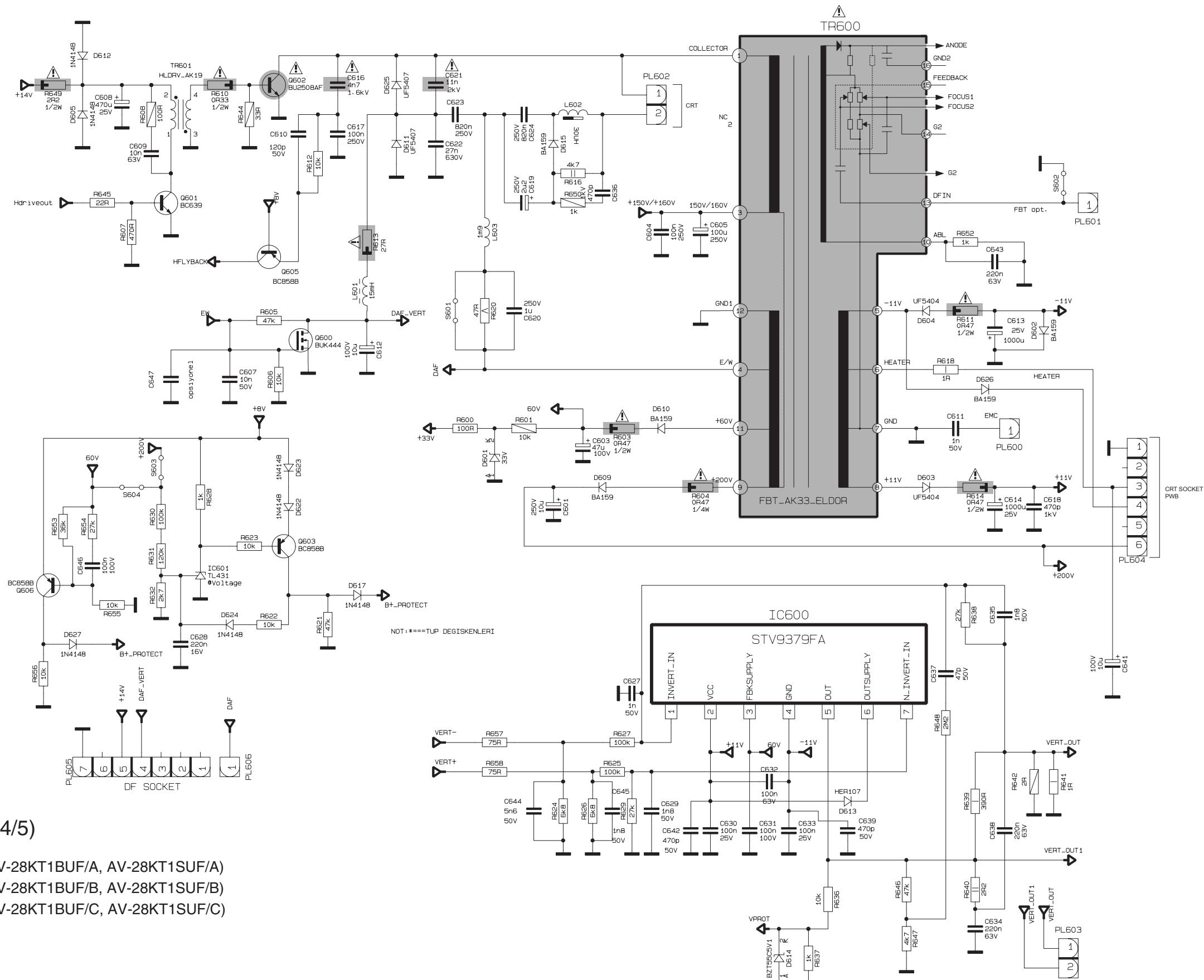
MAIN PWB CIRCUIT DIAGRAM [3/5]

AV-28KT1BUF
AV-28KT1SUF

AV-28KT1BUF
AV-28KT1SUF



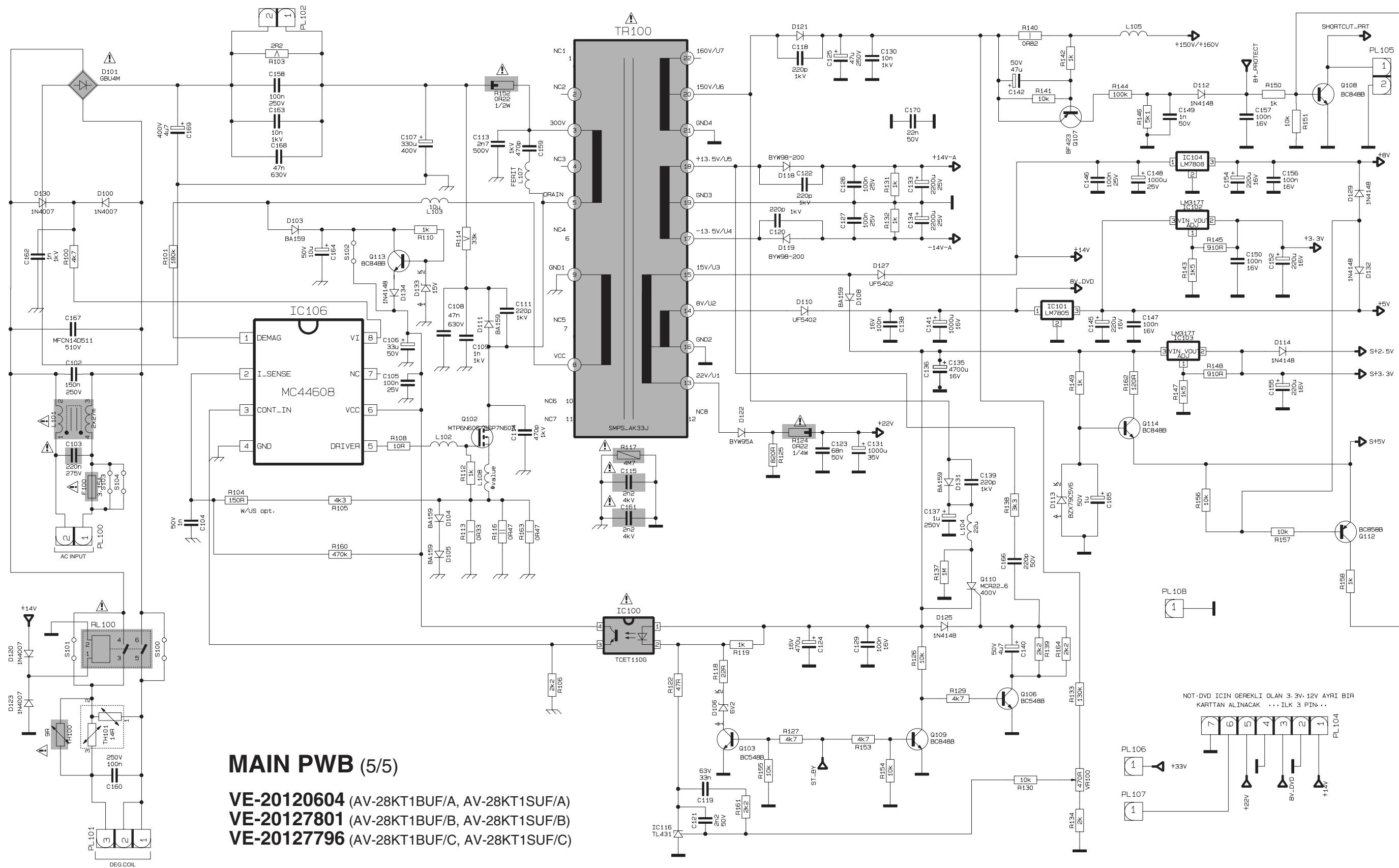
MAIN PWB CIRCUIT DIAGRAM [4/5]



MAIN PWB (4/5)

VE-20120604 (AV-28KT1BUF/A, AV-28KT1SUF/A)
 VE-20127801 (AV-28KT1BUF/B, AV-28KT1SUF/B)
 VE-20127796 (AV-28KT1BUF/C, AV-28KT1SUF/C)

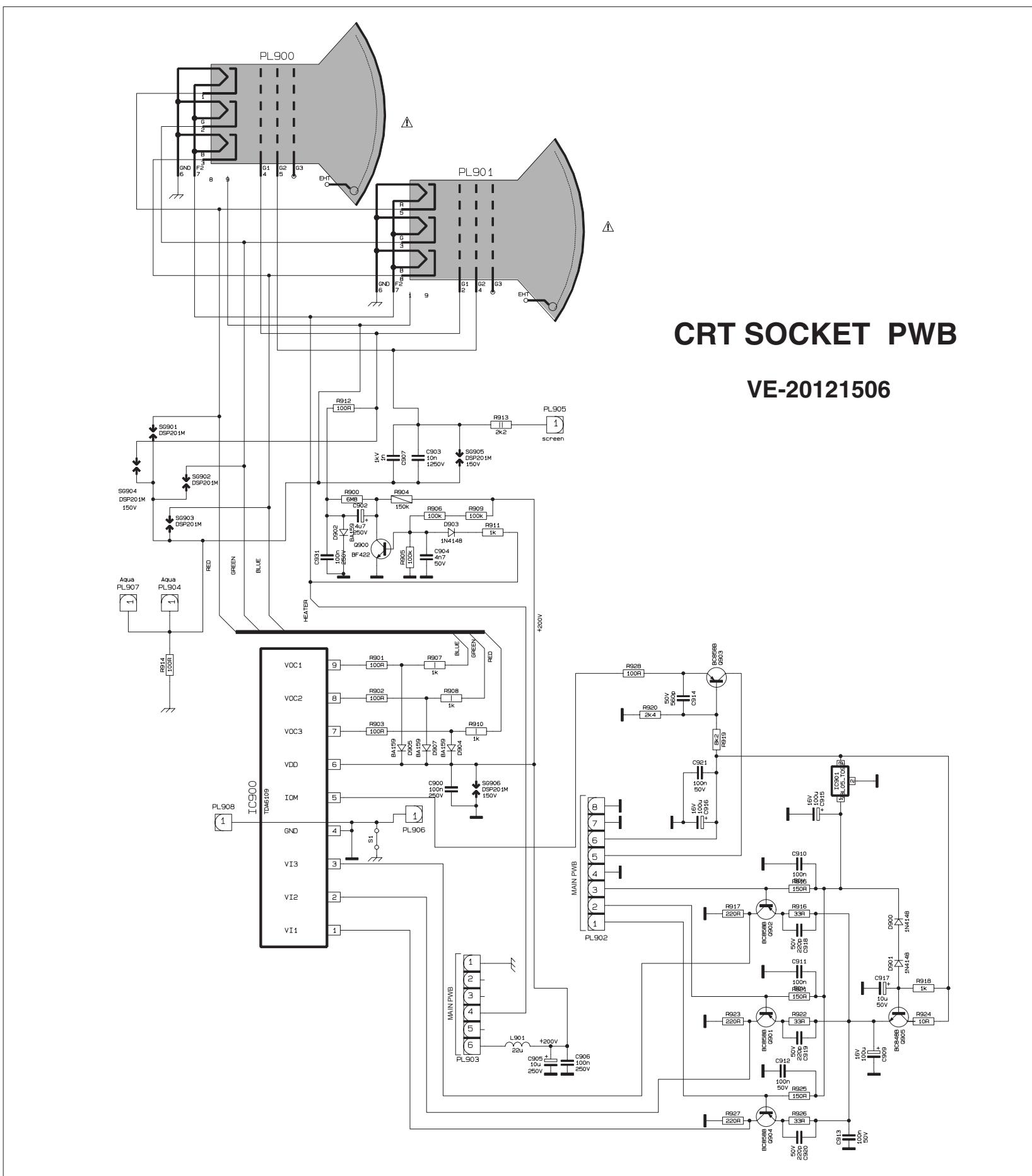
MAIN PWB CIRCUIT DIAGRAM [5/5]



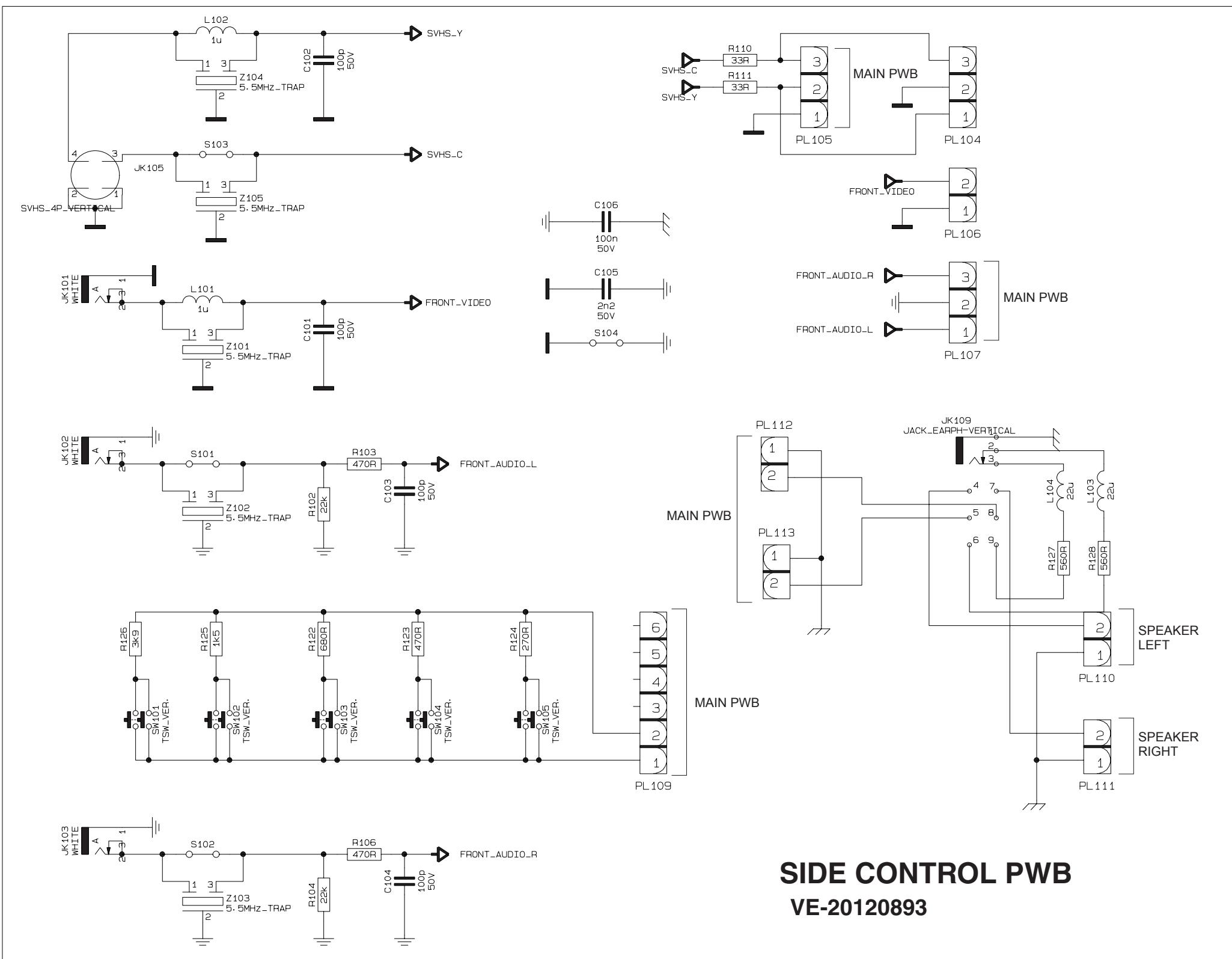
CRT SOCKET PWB CIRCUIT DIAGRAM

AV-28KT1BUF
AV-28KT1SUF

AV-28KT1BUF
AV-28KT1SUF



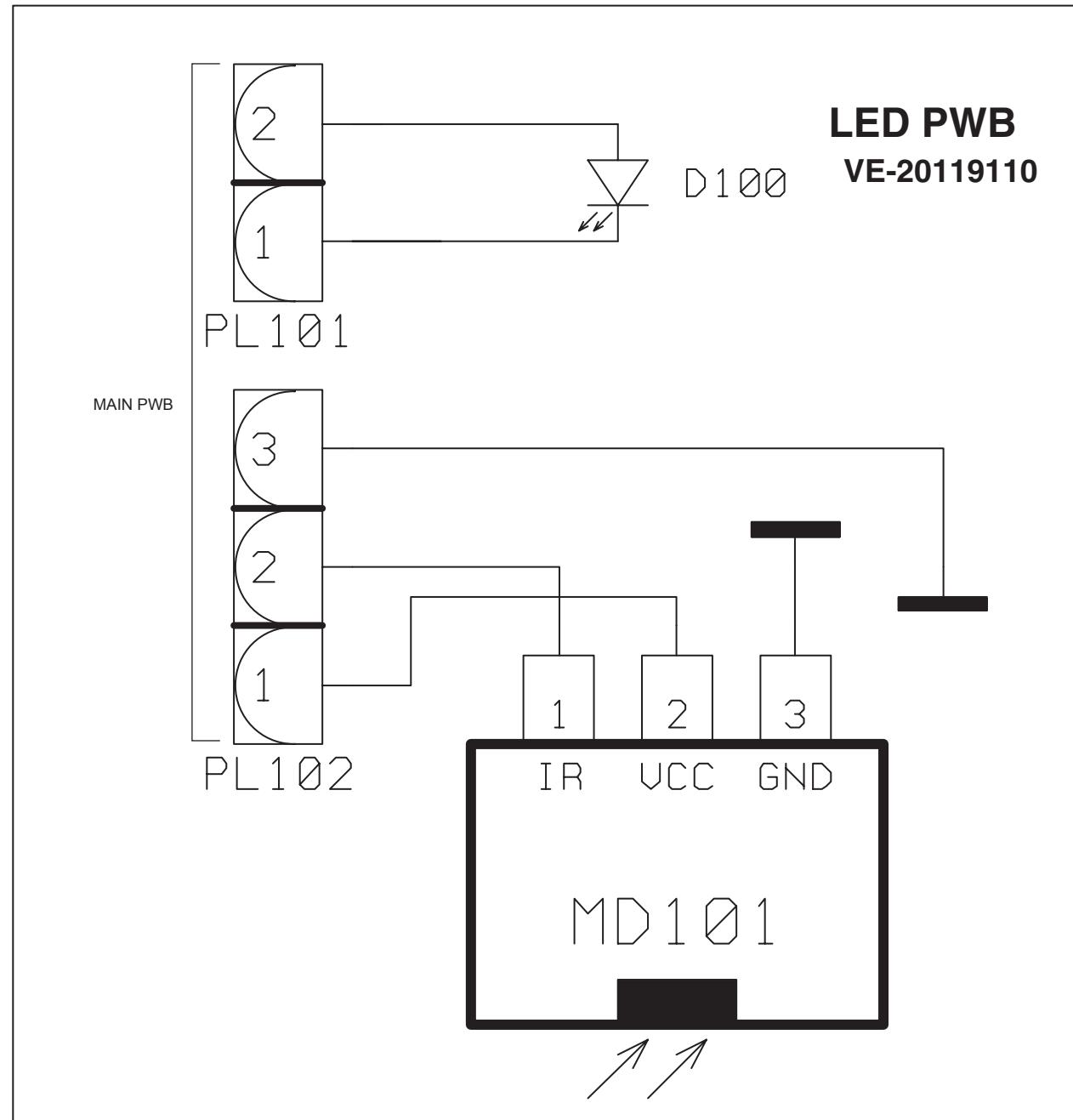
SIDE CONTROL PWB CIRCUIT DIAGRAM



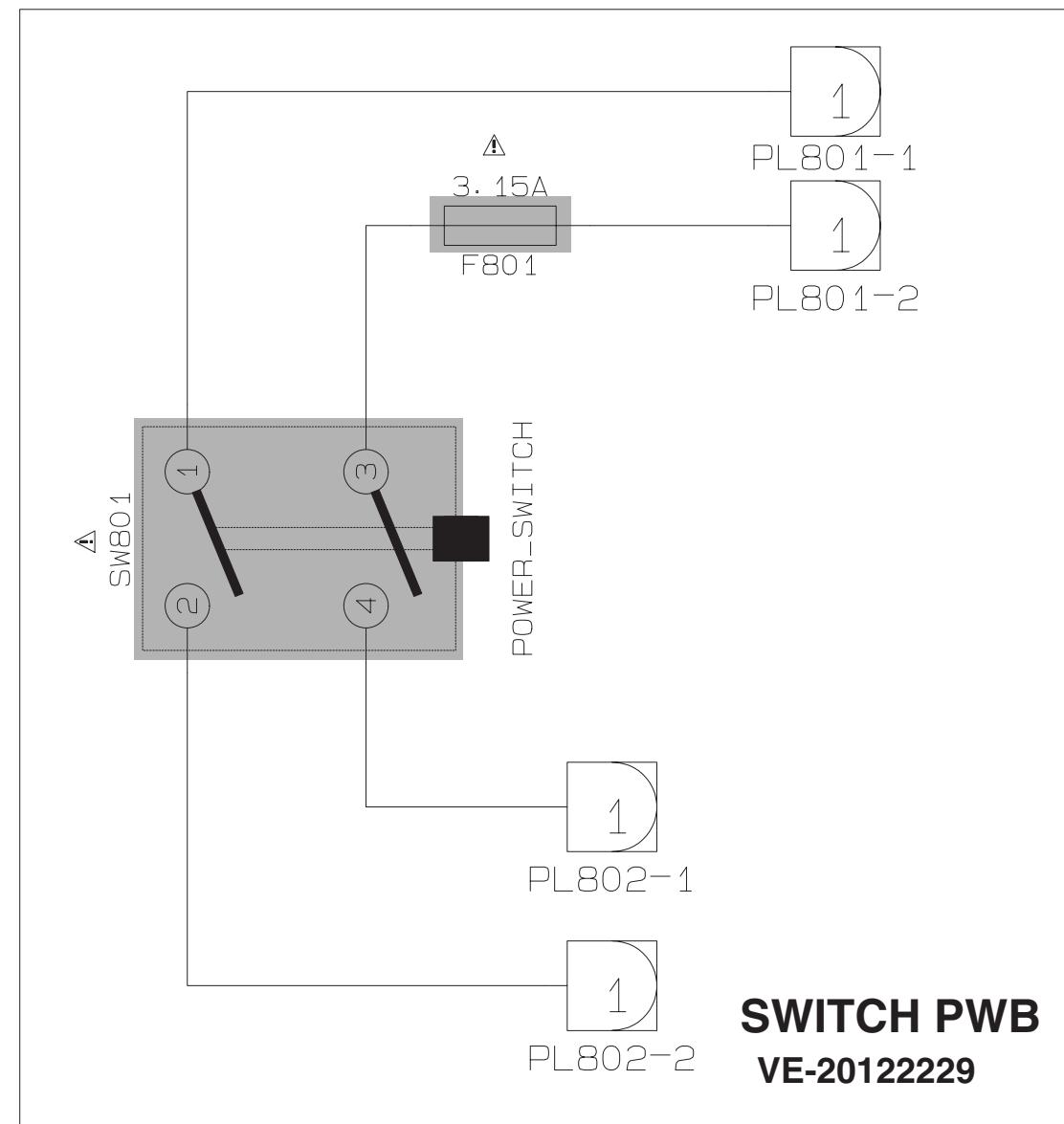
LED PWB CIRCUIT DIAGRAM

AV-28KT1BUF
AV-28KT1SUF

AV-28KT1BUF
AV-28KT1SUF

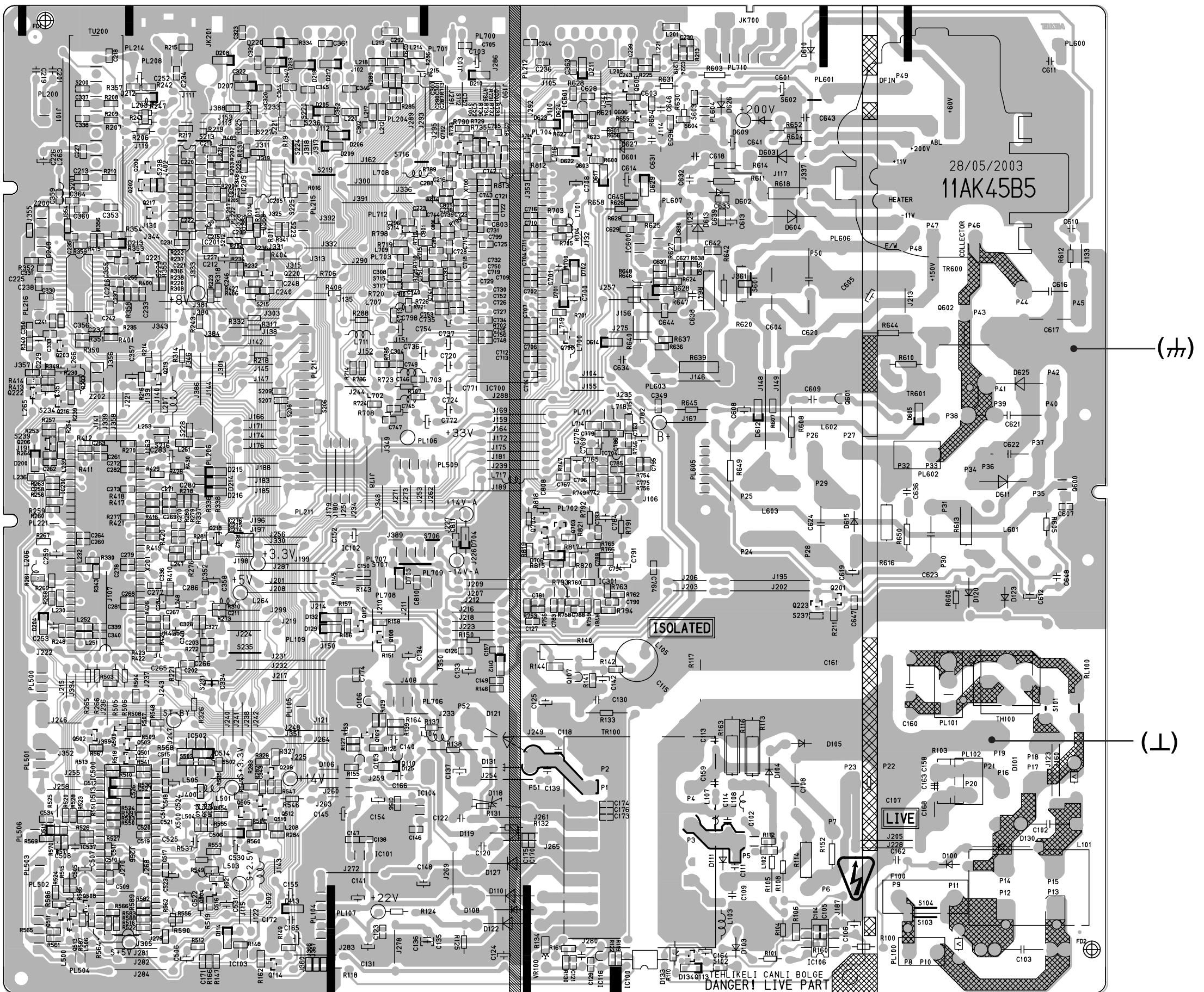


SWITCH PWB CIRCUIT DIAGRAM



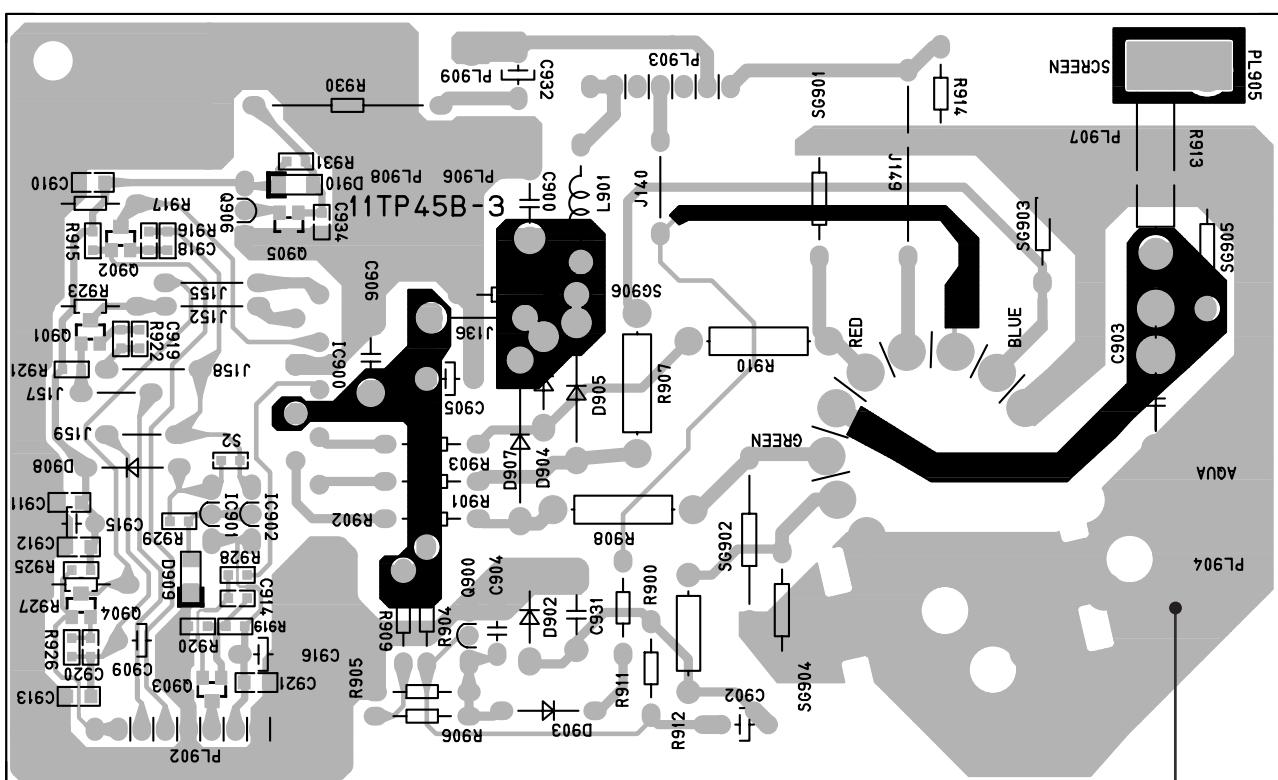
PATTERN DIAGRAMS MAIN PWB PATTERN

FRONT
↓



CRT SOCKET PWB PATTERN

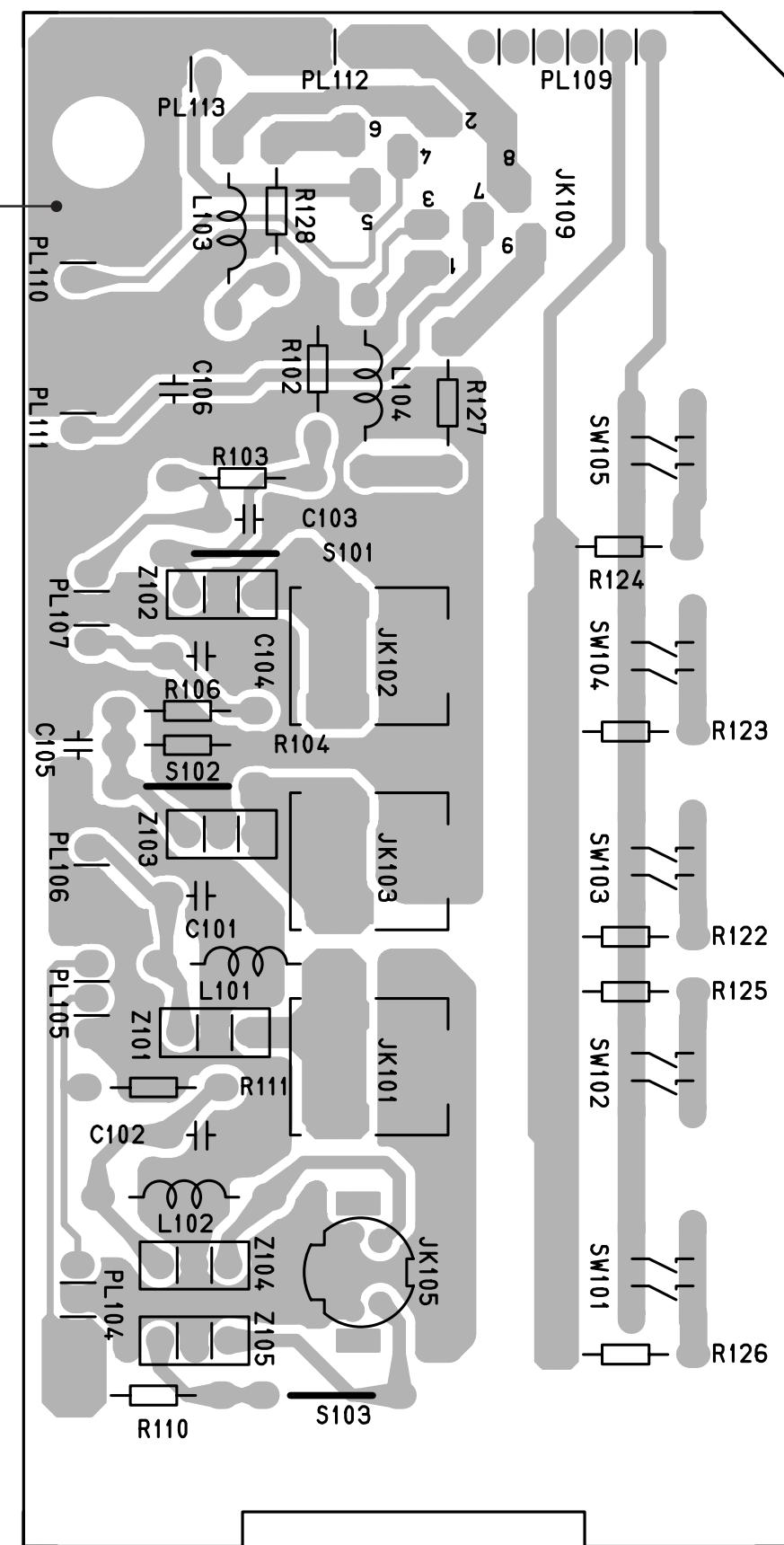
↑ TOP



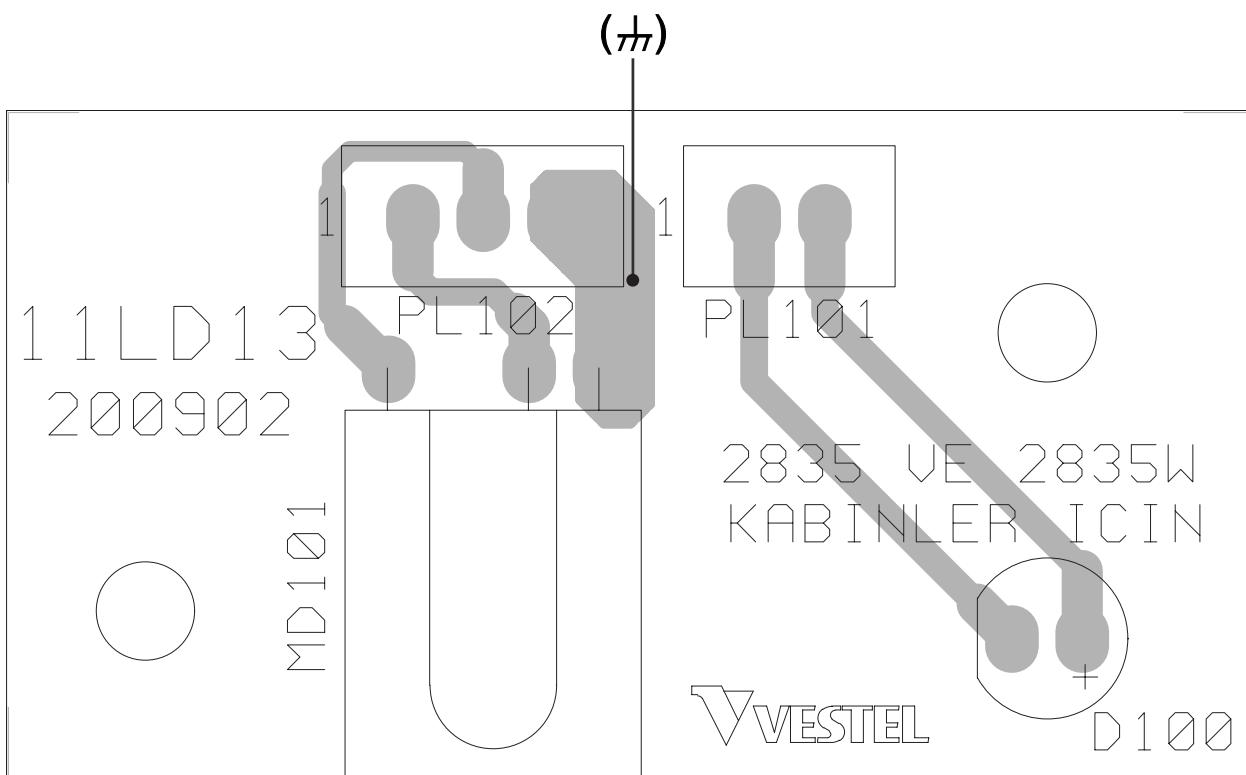
(+) (−)

SIDE CONTROL PWB PATTERN

↑ TOP



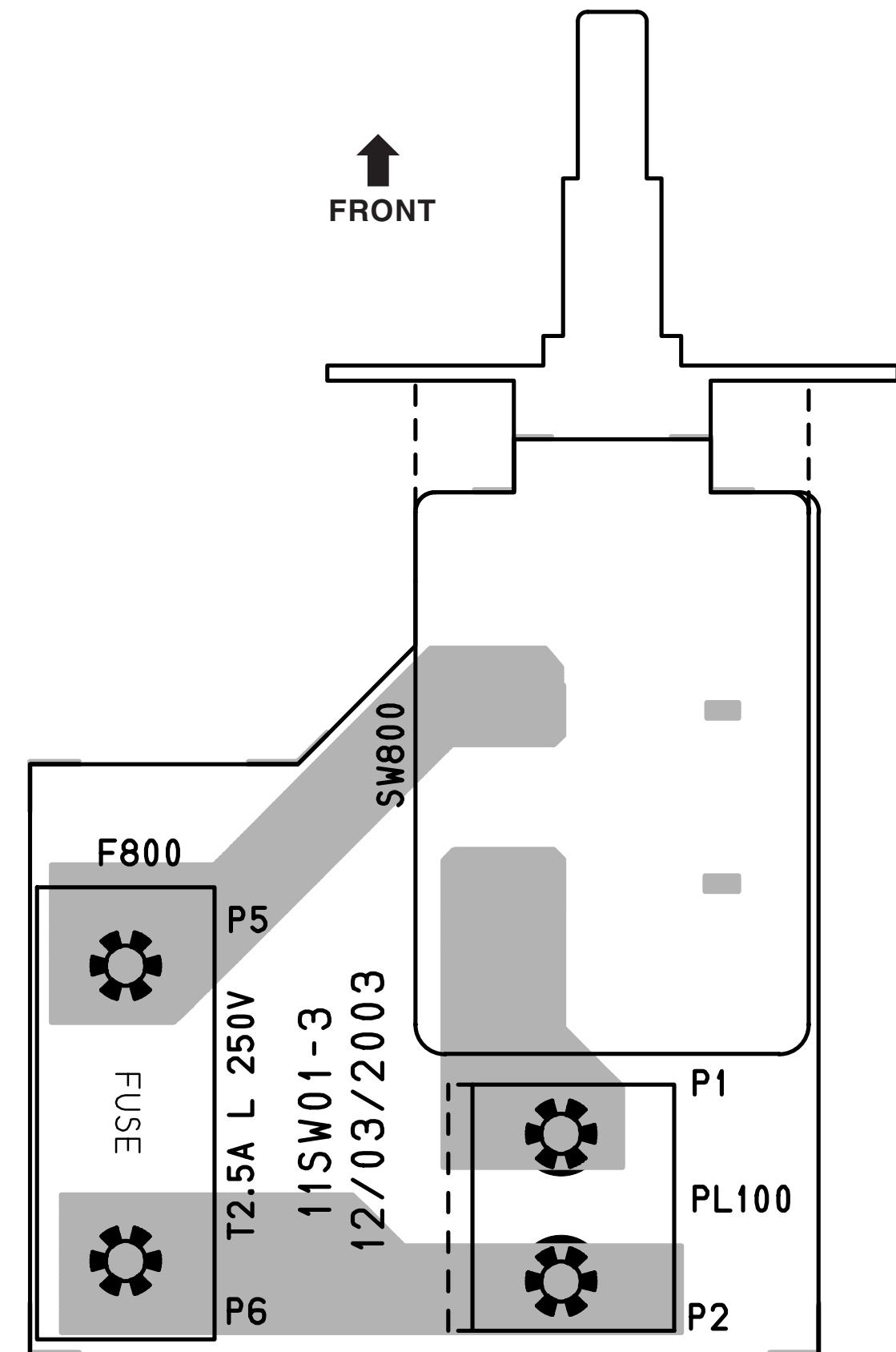
LED PWB PATTERN



AV-28KT1BUF
AV-28KT1SUF

AV-28KT1BUF
AV-28KT1SUF

POWER SWITCH PWB PATTERN



PARTS LIST

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USING PW BOARD & REMOTE CONTROL UNIT

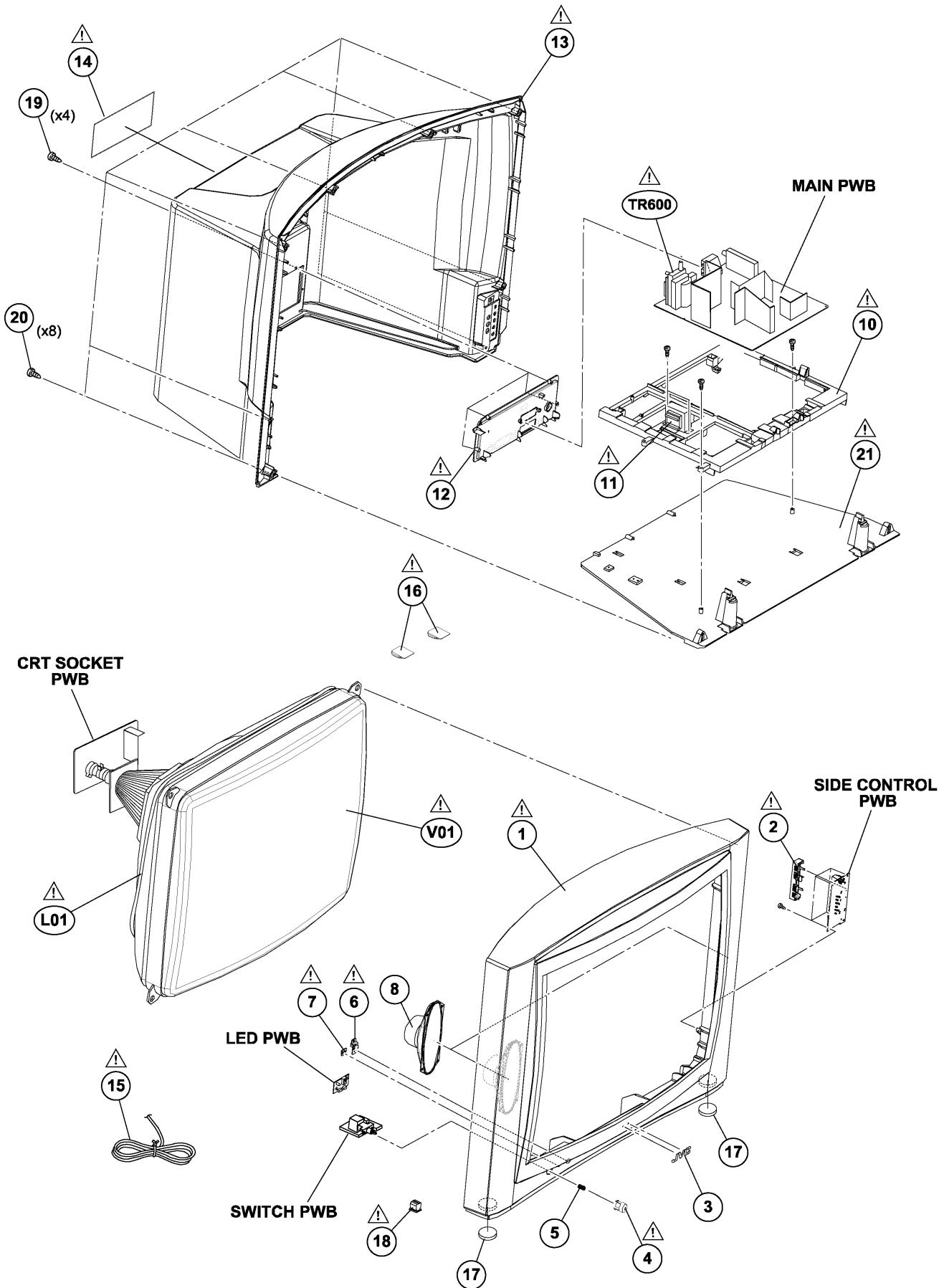
PWB ASS'Y \ Model	AV-28KT1BUF/A AV-28KT1SUF/A [A-VERSION]	AV-28KT1BUF/B AV-28KT1SUF/B [B-VERSION]	AV-28KT1BUF/C AV-28KT1SUF/C [C-VERSION]
MAIN PWB	VE-20120604	VE-20127801	VE-20127796
CRT SOCKET PWB	VE-20121506	←	←
SIDE CONTROL PWB	VE-20120893	←	←
LED PWB	VE-20129110	←	←
SWITCH PWB	VE-20122229	←	←
REMOTE CONTROL UNIT	VE-30017763 (RM-C1100)	←	←

EXPLODED VIEW PARTS LIST

△ Ref.No.	Part No.	Part Name	Description
[AV-28KT1BUF : BLACK model]			
△ V01	VE-30002751	PICTURE TUBE	Inc. DY, PC MAGNET
△ L01	VE-30002138	DEG COIL&EARTH	
△ TR600	VE-30021290	FB TRANSF.	Within MAIN PWB
△ 1	VE-20121492	FRONT CABINET	
△ 2	VE-20091798	FUNCTION BUTTON	
3	VE-40013592	LOGO JVC	
△ 4	VE-20111864	ON/OFF BUTTON (POWER)	
5	VE-35000013	SPRING (ON/OFF SWITCH)	
△ 6	VE-20094352	PRE-AMP LENS	
△ 7	VE-20056446	LED LENS	
8	VE-30001946	SPEAKER	(x2) 8R 15W 57*160
△ 10	VE-20093231	CHASSIS FRAME	
△ 11	VE-30015614	PFC TRANSF.	
△ 12	VE-20108124	BACK DOOR	
△ 13	VE-20121494	BACK COVER	
△ 14	VE-20127842	LABEL	[A-VERSION]
△ 14	VE-20127843	LABEL	[A-VERSION]
△ 14	VE-20127874	LABEL	[B-VERSION]
△ 14	VE-20127871	LABEL	[C-VERSION]
△ 15	VE-30016513	POWER CORD (2.2MT)	
△ 16	VE-20110931	BACK COVER HOLDER	(x2)
17	VE-40014391	FOOT RUBBER	(x2)
△ 18	VE-20004520	CABLE HOLDER	
19	VE-35000211	SCREW (2.9*9.5)	(x4) For BACK DOOR
20	VE-35004572	SCREW (4x20)	(x8) For BACK COVER
△ 21	VE-20081578	BASE	

△ Ref.No.	Part No.	Part Name	Description
[AV-28KT1SUF : SILVER model]			
△ V01	VE-30002751	PICTURE TUBE	Inc. DY, PC MAGNET
△ L01	VE-30002138	DEG COIL&EARTH	
△ TR600	VE-30021290	FB TRANSF.	Within MAIN PWB
△ 1	VE-20119985	FRONT CABINET	
△ 2	VE-20096498	FUNCTION BUTTON	
3	VE-40013593	LOGO JVC	
△ 4	VE-20120046	ON/OFF BUTTON (POWER)	
5	VE-35000013	SPRING (ON/OFF SWITCH)	
△ 6	VE-20094352	PRE-AMP LENS	
△ 7	VE-20056446	LED LENS	
8	VE-30001946	SPEAKER	(x2) 8R 15W 57*160
△ 10	VE-20093231	CHASSIS FRAME	
△ 11	VE-30015614	PFC TRANSF.	
△ 12	VE-20120043	BACK DOOR	
△ 13	VE-20111863	BACK COVER	
△ 14	VE-20127776	LABEL	[A-VERSION]
△ 14	VE-20127777	LABEL	[A-VERSION]
△ 14	VE-20127841	LABEL	[B-VERSION]
△ 14	VE-20127894	LABEL	[C-VERSION]
△ 15	VE-30016513	POWER CORD (2.2MT)	
△ 16	VE-20110931	BACK COVER HOLDER	(x2)
17	VE-40014391	FOOT RUBBER	(x2)
△ 18	VE-20004520	CABLE HOLDER	
19	VE-35000211	SCREW (2.9*9.5)	(x4) For BACK DOOR
20	VE-35004572	SCREW (4x20)	(x8) For BACK COVER
△ 21	VE-20081578	BASE	

EXPLODED VIEW



[AV-28KT1BUF/B / AV-28KT1SUF/B]**■ MAIN P.W. BOARD ASS'Y (VE-20127801)**

Regarding the parts list for the main PW board ass'y VE-20127801, only the different parts from those of the VE-20120604 are described, For further details regarding the other parts, refer to the parts list for the VE-20120604 described on page 4 through page 7.

⚠	Symbol No.	Part No.		Part Name	Description
		VE-20120604 [A-VERSION]	VE-20127801 [B-VERSION]		
	IC500	VE-20139901	VE-20137151	I.C. (MICOM)	[B-VERSION]
	IC502	VE-20120610	VE-20134092	I.C. (MEMORY)	[B-VERSION]

■ CRT SOCKET PW BOARD ASSY (VE-20121506)

Refer to PARTS LIST in page 8 for this P. W. board.

■ SIDE CONTROL PW BOARD ASSY(VE-20120893)

Refer to PARTS LIST in page 8 for this P. W. board.

■ LED PW BOARD ASSY (VE-20119110)

Refer to PARTS LIST in page 8 for this P. W. board.

■ SWITCH PW BOARD ASSY (VE-20122229)

Refer to PARTS LIST in page 8 for this P. W. board.

[AV-28KT1BUF/c / AV-28KT1SUF/c]**■ MAIN P.W. BOARD ASS'Y (VE-20127796)**

Regarding the parts list for the main PW board ass'y VE-20127796, only the different parts from those of the VE-20120604 are described, For further details regarding the other parts, refer to the parts list for the VE-20120604 described on page 4 through page 7.

⚠	Symbol No.	Part No.		Part Name	Description
		VE-20120604 [A-VERSION]	VE-20127796 [C-VERSION]		
	IC500	VE-20139901	VE-20139902	I.C. (MICOM)	[C-VERSION]
	IC502	VE-20120610	VE-20126318	I.C. (MEMORY)	[C-VERSION]

■ CRT SOCKET PW BOARD ASSY (VE-20121506)

Refer to PARTS LIST in page 8 for this P. W. board.

■ SIDE CONTROL PW BOARD ASSY(VE-20120893)

Refer to PARTS LIST in page 8 for this P. W. board.

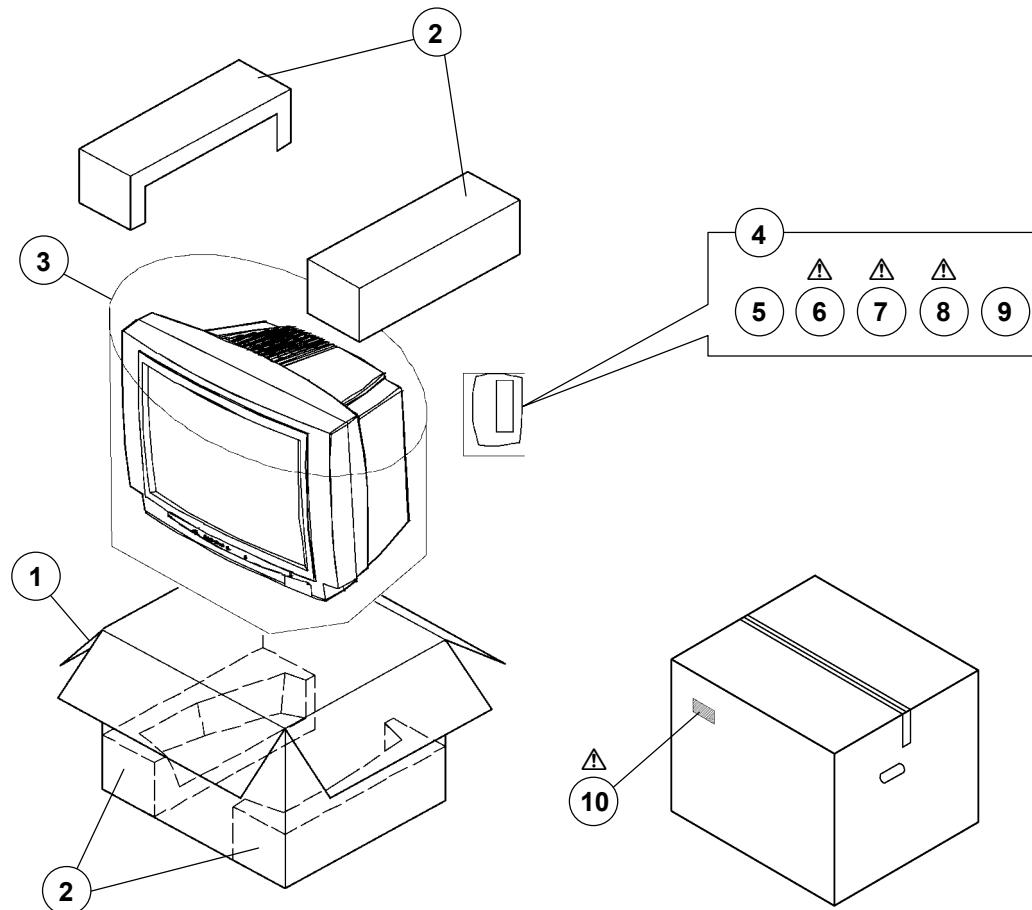
■ LED PW BOARD ASSY (VE-20119110)

Refer to PARTS LIST in page 8 for this P. W. board.

■ SWITCH PW BOARD ASSY (VE-20122229)

Refer to PARTS LIST in page 8 for this P. W. board.

PACKING



PACKING PARTS LIST

Ref.No.	Part No.	Part Name	Description
---------	----------	-----------	-------------

[AV-28KT1BUF : BLACK model]

1	VE-50038917	CARTON BOX	[A-VERSION]
1	VE-50038933	CARTON BOX	[B-VERSION]
2	VE-50038949	CARTON BOX	[C-VERSION]
3	VE-20116671	SNOW BOX ASSY	4 pcs in 1set
4	VE-50026637	POLY BAG (1250*1000)	
5	VE-70000587	POLY BAG	
5	VE-30017763	REMOTE CONTROL UNIT	(RM-C1100)
6	VE-50038905	INST BOOK	[A-VERSION]
7	VE-50038931	INST BOOK	[B-VERSION]
8	VE-50038935	INST BOOK	[C-VERSION]
9	BT-54013-2TK	WARRANTY CARD	
10	VE-20127842	LABEL	[A-VERSION]
10	VE-20127843	LABEL	[A-VERSION]
10	VE-20127874	LABEL	[B-VERSION]
10	VE-20127871	LABEL	[C-VERSION]

[AV-28KT1SUF : SILVER model]

1	VE-50038907	CARTON BOX	[A-VERSION]
1	VE-50038933	CARTON BOX	[B-VERSION]
2	VE-50038950	CARTON BOX	[C-VERSION]
3	VE-20116671	SNOW BOX ASSY	4 pcs in 1set
4	VE-50026637	POLY BAG (1250*1000)	
5	VE-70000587	POLY BAG	
5	VE-30017763	REMOTE CONTROL UNIT	(RM-C1100)
6	VE-50038905	INST BOOK	[A-VERSION]
7	VE-50038931	INST BOOK	[B-VERSION]
8	VE-50038935	INST BOOK	[C-VERSION]
9	BT-54013-2TK	WARRANTY CARD	
10	VE-20127776	LABEL	[A-VERSION]
10	VE-20127777	LABEL	[A-VERSION]
10	VE-20127841	LABEL	[B-VERSION]
10	VE-20127894	LABEL	[C-VERSION]



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