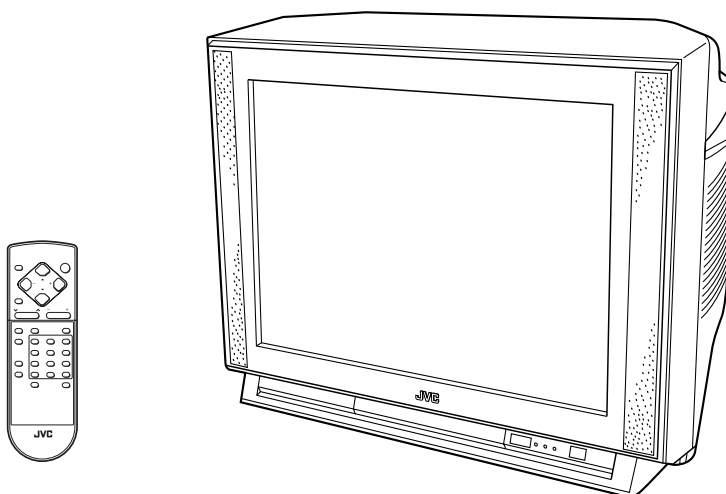


JVC

SCHEMATIC DIAGRAMS

COLOUR TELEVISION

AV-21PX



■ APPLICABLE MODELS

This standard circuit diagram is applicable to the following models.

However, there will be differences between this model and the following applicable models. For the differences, please refer to "PARTS DIFFERENCE TABLE" in the service manual of the following applicable models.

Basic Model (this Model)	Applicable Models
AV-21PX (Service Manual: No. 56039, Jul. 2000)	AV-21PX(-A) (Service Manual: No. 56040, Jul. 2000)

STANDARD CIRCUIT DIAGRAM

NOTE ON USING CIRCUIT DIAGRAMS

1. SAFETY

The components identified by the Δ 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. INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board : R1209 \rightarrow 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 : 1/4 [W]
 - Others : As specified
 - Type
 - No indication : Carbon resistor
 - OMR : Oxide metal film resistor
 - MFR : Metal film resistor
 - MPR : Metal plate resistor
 - UNFR : Non-flammable 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]
 - AC indicated : AC withstand voltage [V]
 - Others : DC withstand voltage [V]
- * Electrolytic Capacitors
47/50 [Example]: Capacitance value [μ F]/withstand voltage [V]

- Type
 - No indication : Ceramic capacitor
 - MY : Mylar 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) Power Supply




-  : B1
-  : 12V
-  : 9V
-  : 5V

* Respective voltage values are indicated.

(5) Test point

-  : Test point
-  : Only test point display

(6) Connecting method

-  : Connector
-  : Wrapping or soldering
-  : Receptacle

(7) Ground symbol

- \perp : LIVE side ground
- ∇ : ISOLATED (NEUTRAL) side ground
- \perp with a horizontal line : EARTH ground
- ∇ with a horizontal line : 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 (\perp) 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 (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.

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SEMICONDUCTOR SHAPES

TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR

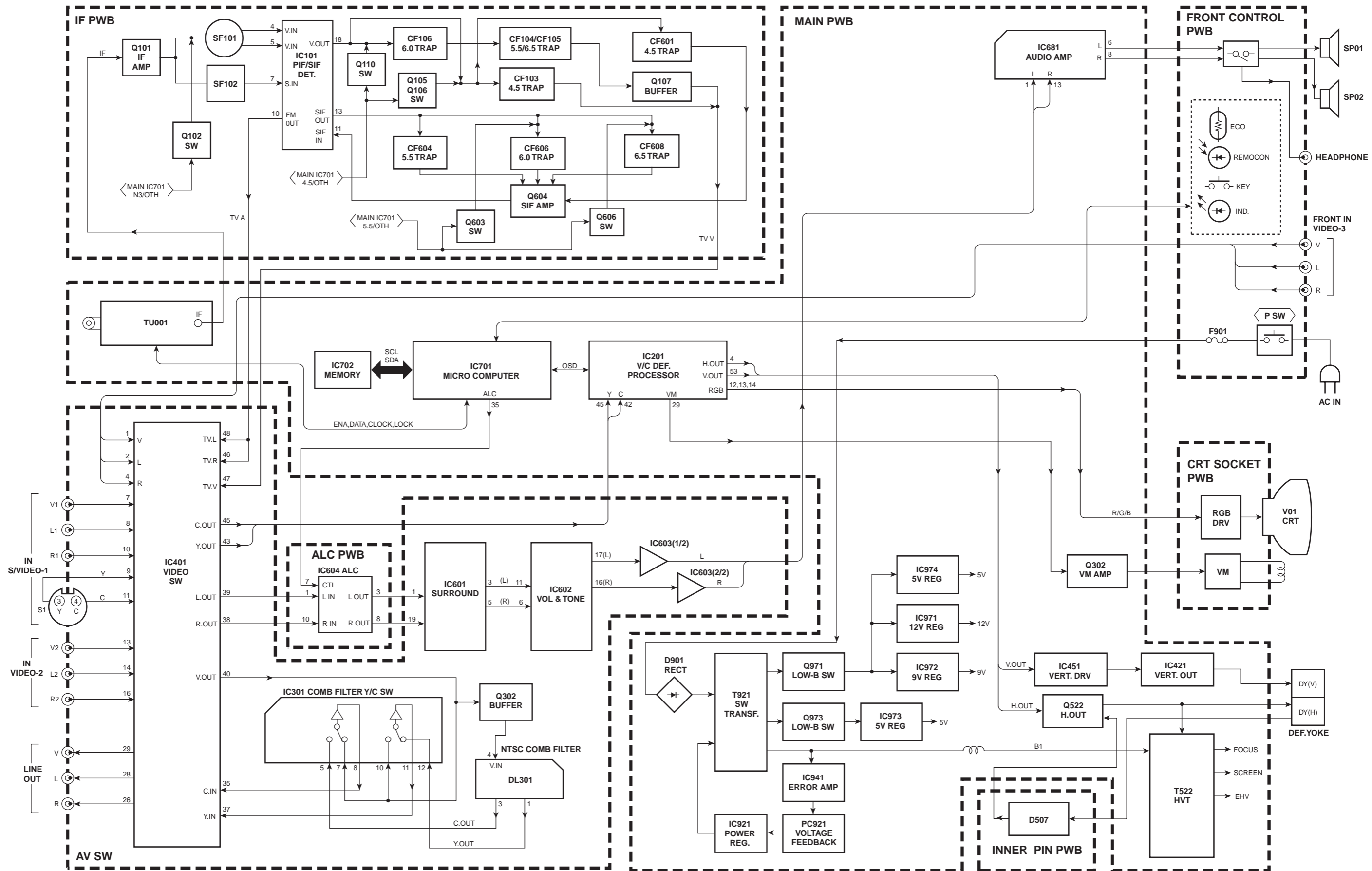
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW

CHIP IC

TOP VIEW	

BLOCK DIAGRAM

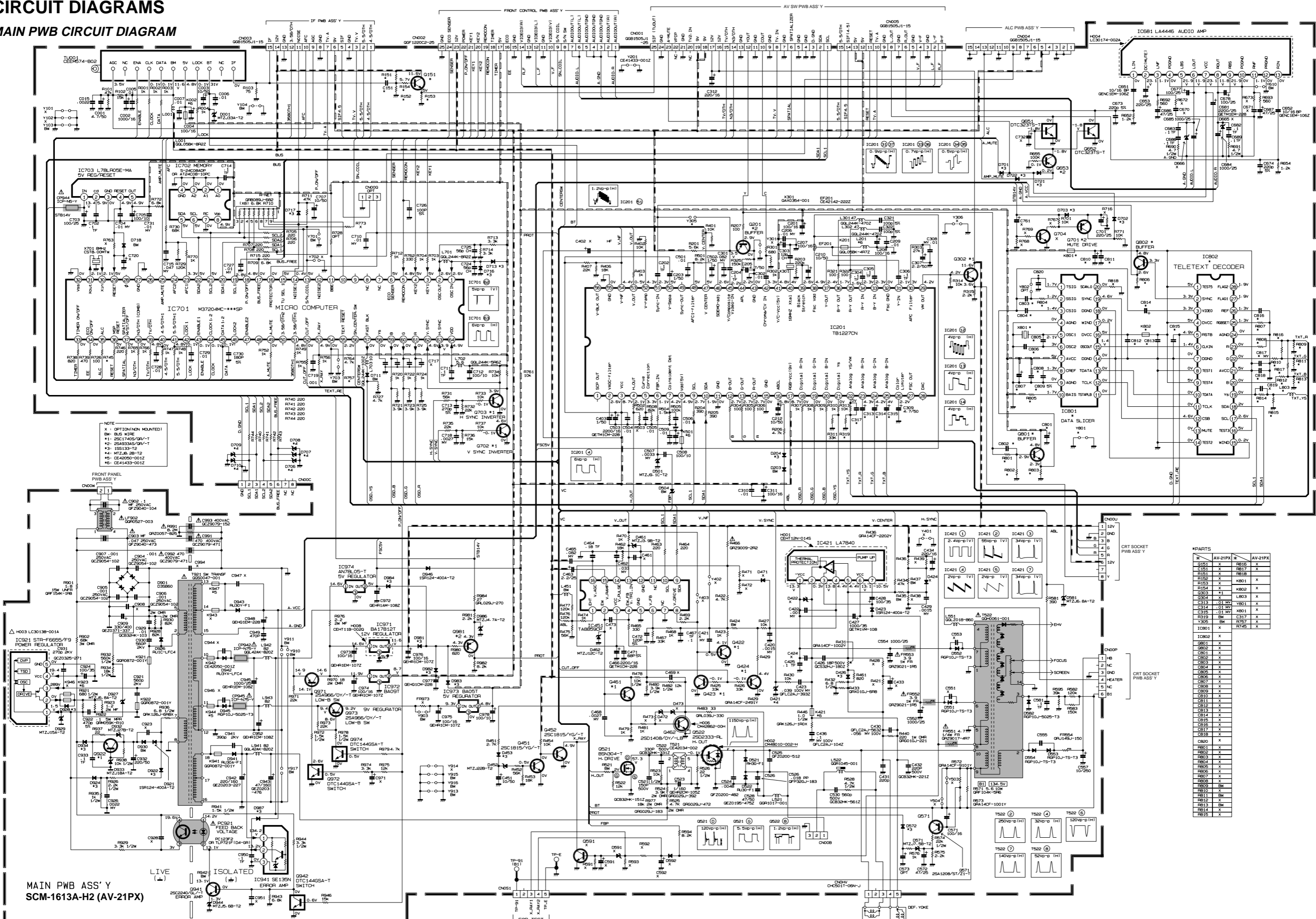


CIRCUIT DIAGRAMS

MAIN PWB CIRCUIT DIAGRAM

AV-21PX

AV-21PX



MAIN PWB ASS'Y
SCM-1613A-H2 (AV-21PX)

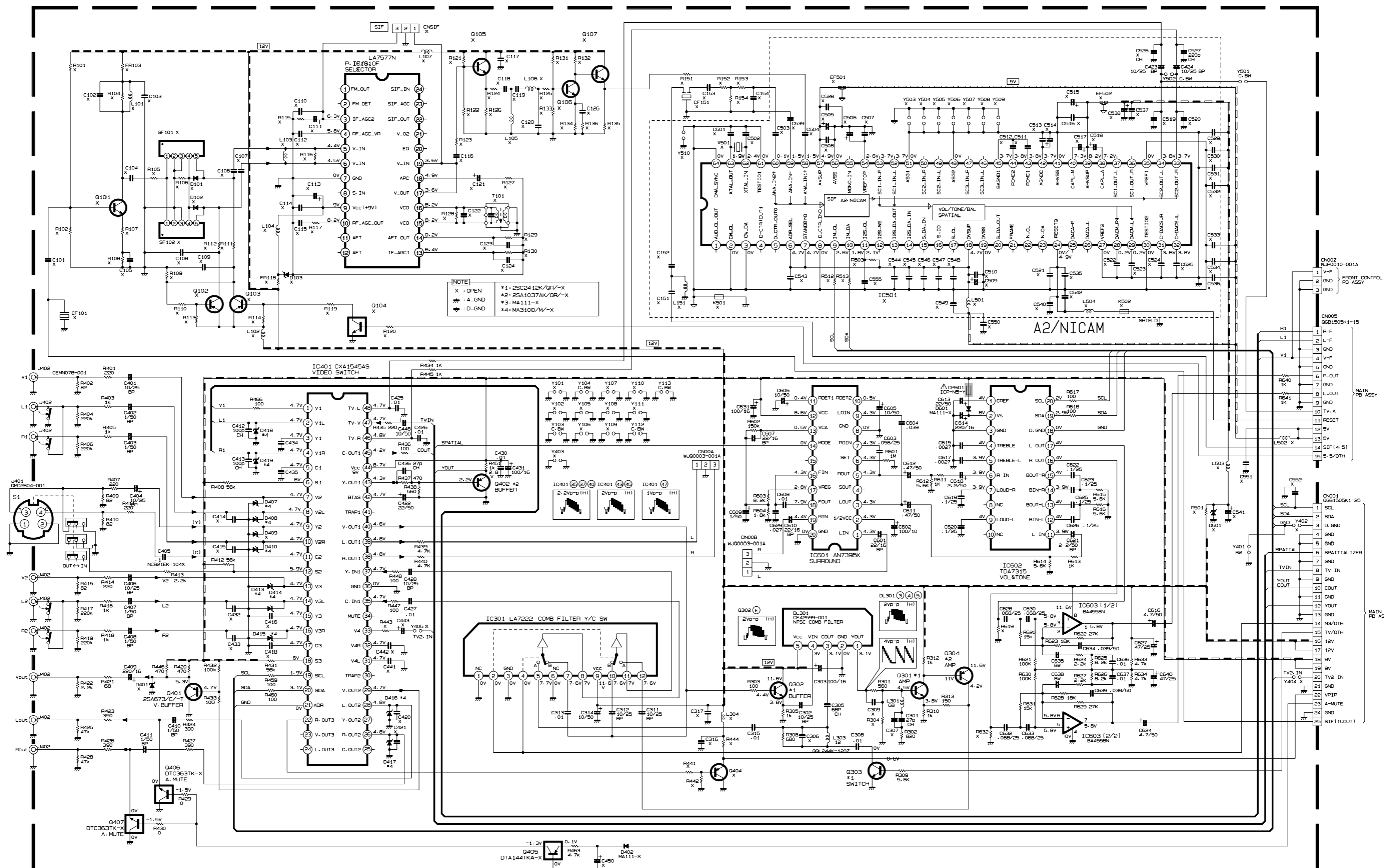
No. 56039

2-7

2-8

No. 56039

AV SW PWB CIRCUIT DIAGRAM



AV SW PWB ASS'Y
SCM0Y502A-H2 (AV-21PX)

IF PWB CIRCUIT DIAGRAM

*PARTS

* /	AV-21PX
C113	.01
C124	.01
CF102	QAX0358-001
Q111	*5
R113	X
SF102	QAX0325-001
C601	10/50
C602	.022
C603	47p
C604	47p
C606	.01
C607	100/16
C608	.01
C609	.01
C610	.01
C611	.01
C612	.01

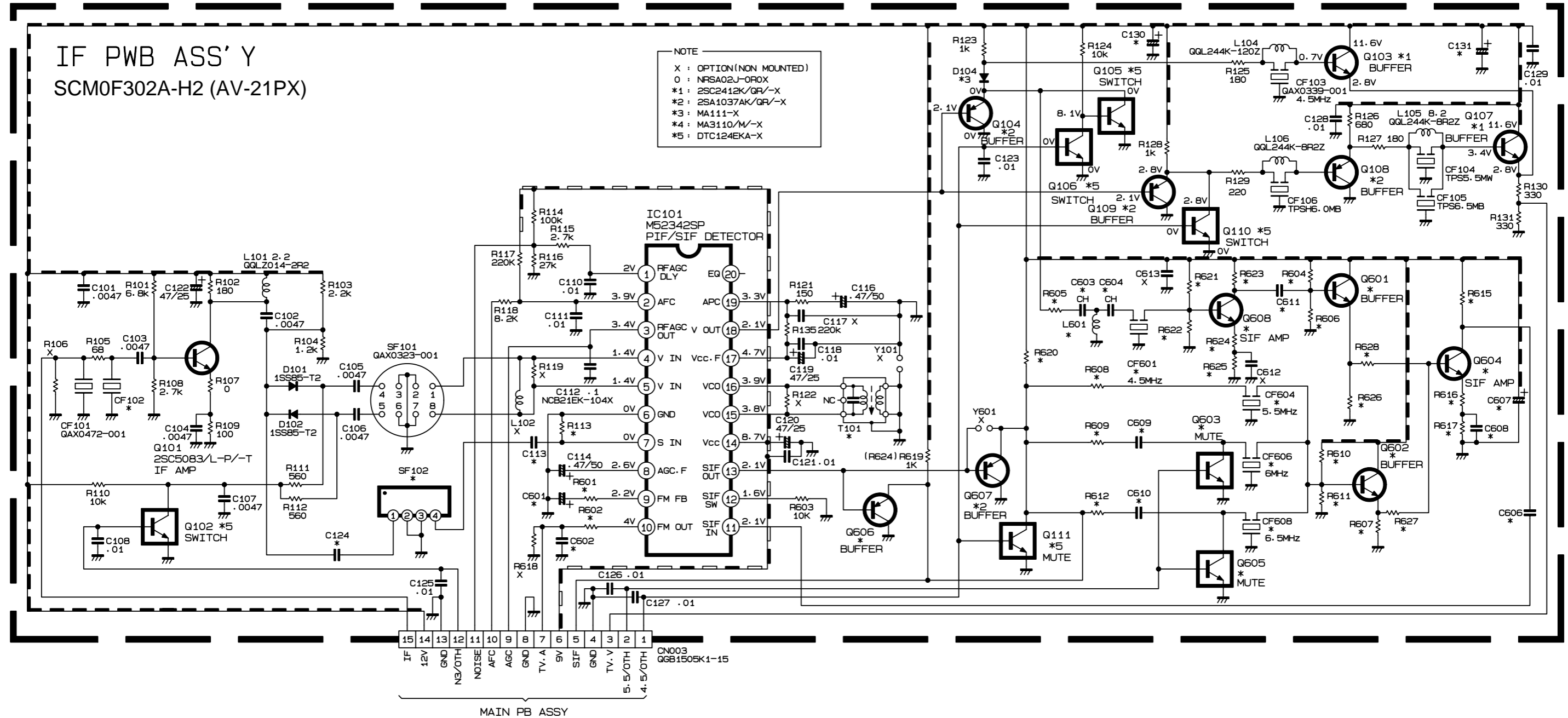
* /	AV-21PX
CF601	SFSH4.5 MCB
CF604	QAX0336-001
CF606	QAX0337-001
CF608	QAX0338-001
L601	QQL244K-120Z
Q601	*1
Q602	*1
Q603	*5
Q604	*1
Q605	*5
Q606	X
Q608	*1

* /	AV-21PX
R601	2.2k
R602	3.3k
R604	2.2k
R605	220
R606	1.5k
R607	1.8k
R608	560
R609	470
R610	2.2k
R611	1.5k
R612	470
R615	180
R616	22
R617	820
R619	X
R620	1k

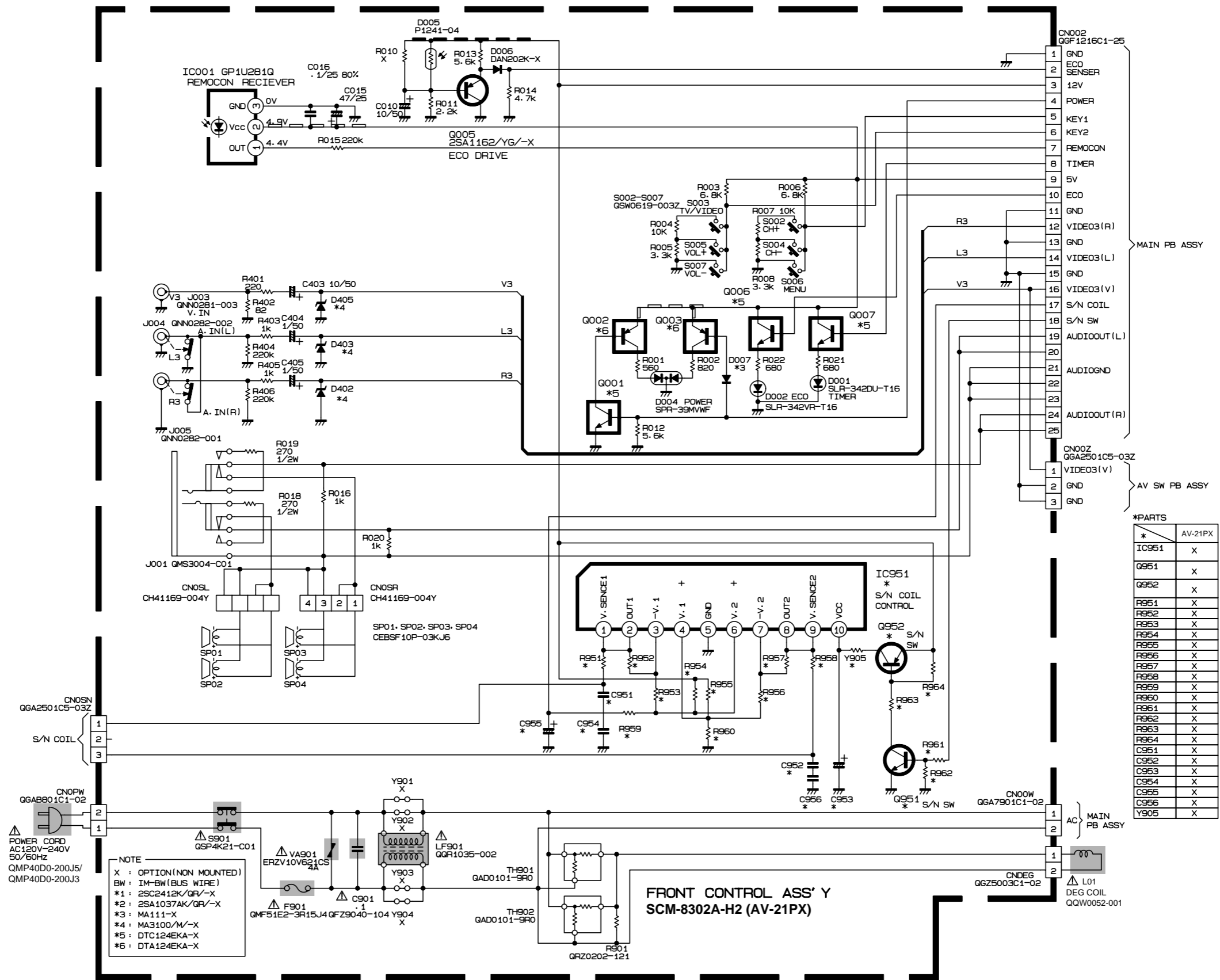
* /	AV-21PX
R621	39k
R622	10k
R623	390
R624	100
R625	560
R626	1.8k
R627	560
R628	560
C130	100/16
C131	100/16
T101	CEL T001-303J3

IF PWB ASS'Y
SCM0F302A-H2 (AV-21PX)

NOTE
 X : OPTION(NON MOUNTED)
 0 : NRS02J-0ROX
 *1 : 2SC2412K/QR/-X
 *2 : 2SA1037AK/QR/-X
 *3 : MA111-X
 *4 : MA3110/M/-X
 *5 : DTC124EKA-X



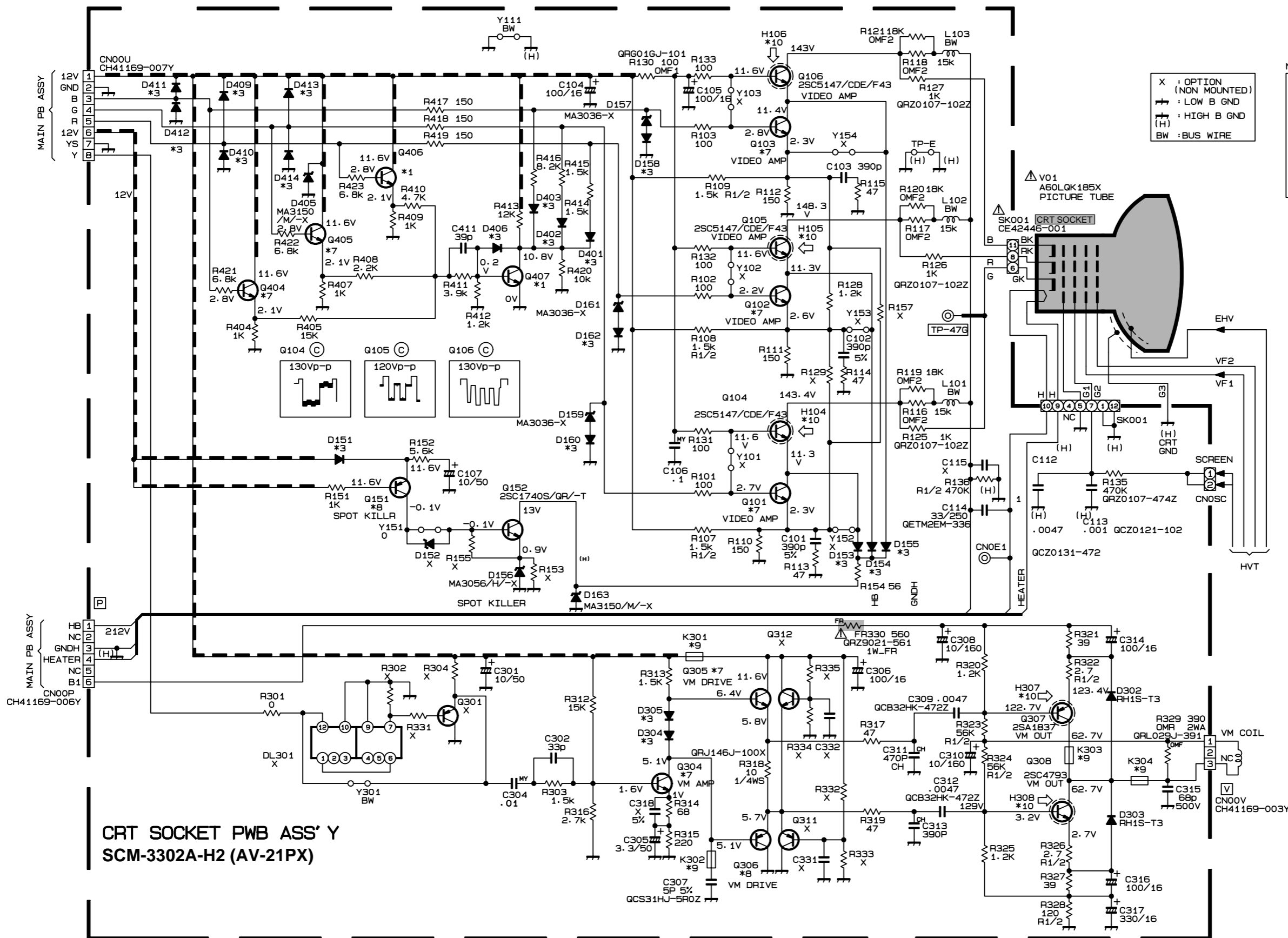
FRONT CONTROL PWB CIRCUIT DIAGRAM



***PARTS**

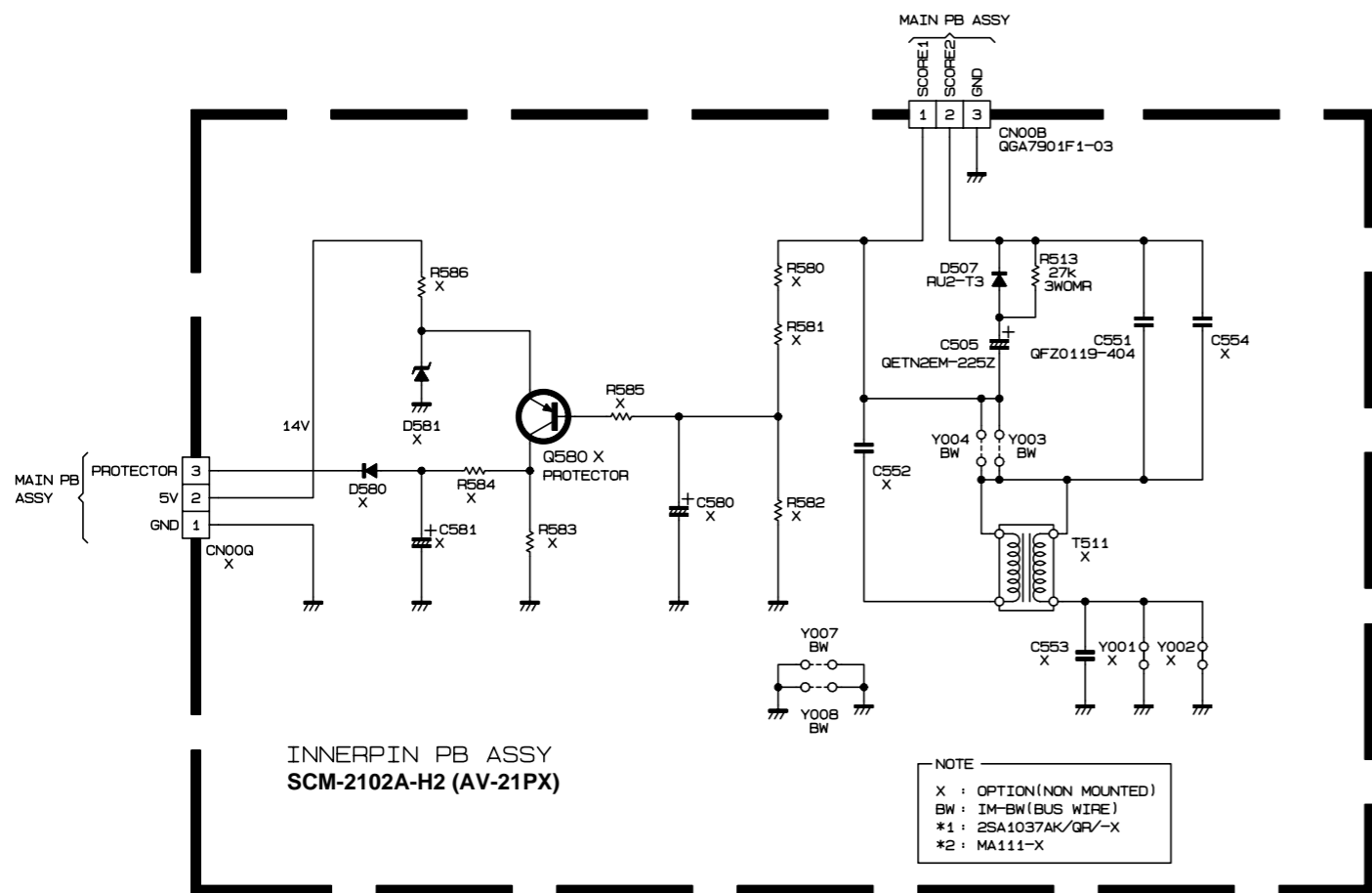
* /	AV-21PX
IC951	X
Q951	X
Q952	X
R951	X
R952	X
R953	X
R954	X
R955	X
R956	X
R957	X
R958	X
R959	X
R960	X
R961	X
R962	X
R963	X
R964	X
C951	X
C952	X
C953	X
C954	X
C955	X
C956	X
Y905	X

CRT SOCKET PWB CIRCUIT DIAGRAM

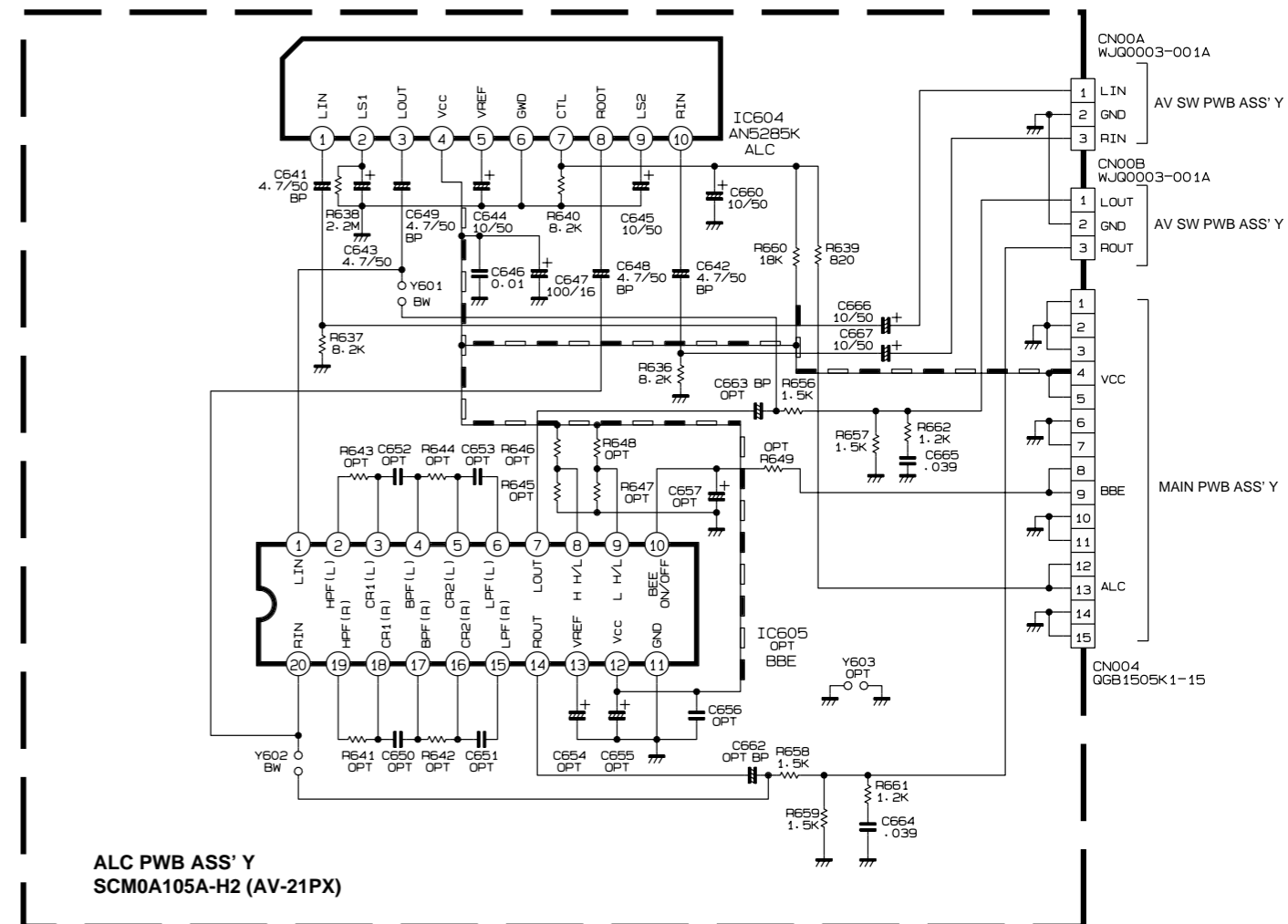


- NOTE
- X : OPTION (NON MOUNTED)
 - ⊥ : LOW B GND
 - (H) : HIGH B GND
 - BW : BUS WIRE
- *1 : 2SC2412K/QR/-X
 - *2 : 2SA1037AK/QR/-X
 - *3 : MA111-X
 - *4 : MA3100/M/-X
 - *5 : DTC124EKA-X
 - *6 : DTA124EKA-X
 - *7 : 2SC1740S/QR/-T
 - *8 : 2SA933AS/QR/-T
 - *9 : CE41492-001Z
 - *10 : CEHP00N-001Q

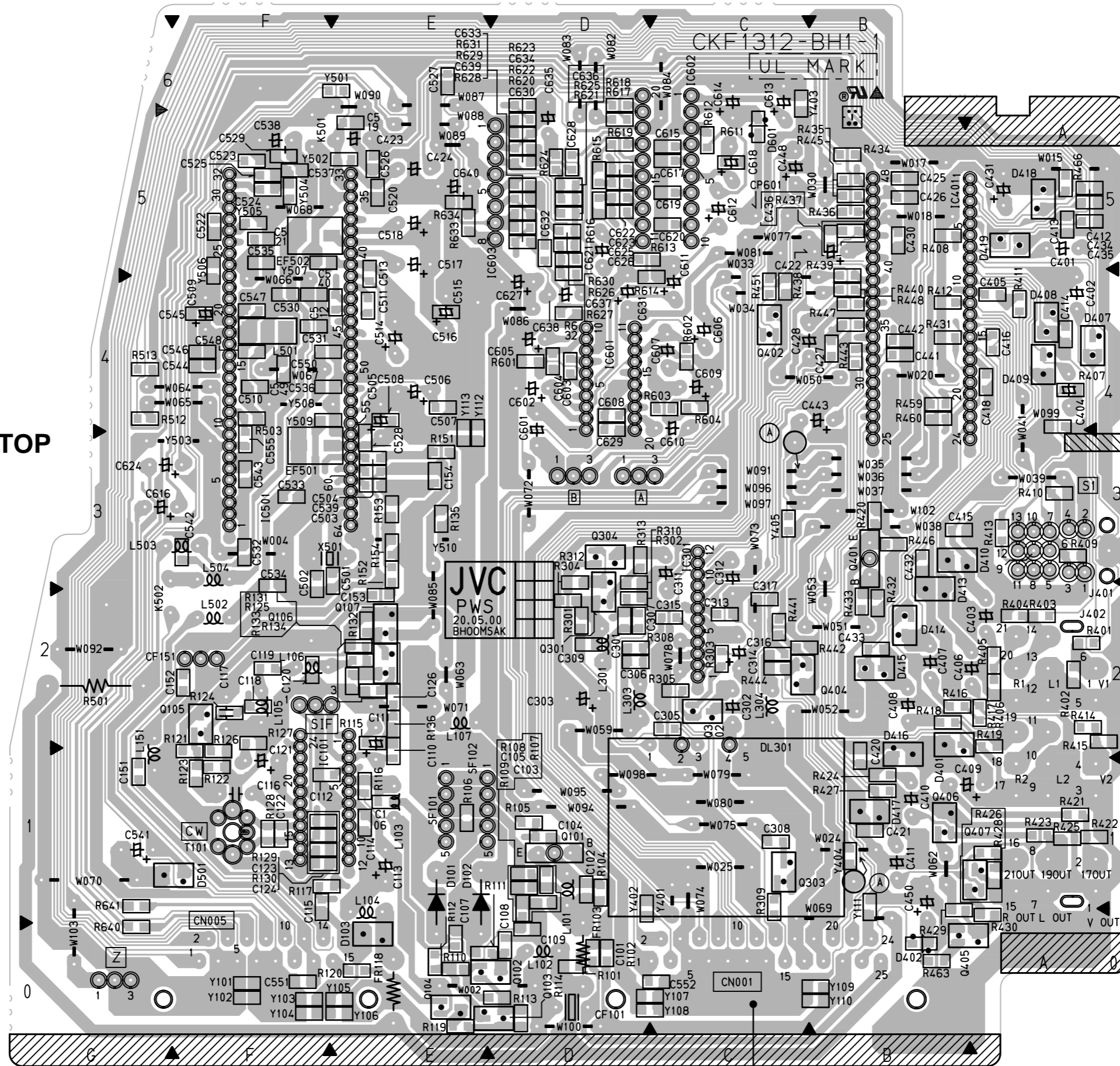
INNER PIN PWB CIRCUIT DIAGRAM



ALC PWB CIRCUIT DIAGRAM

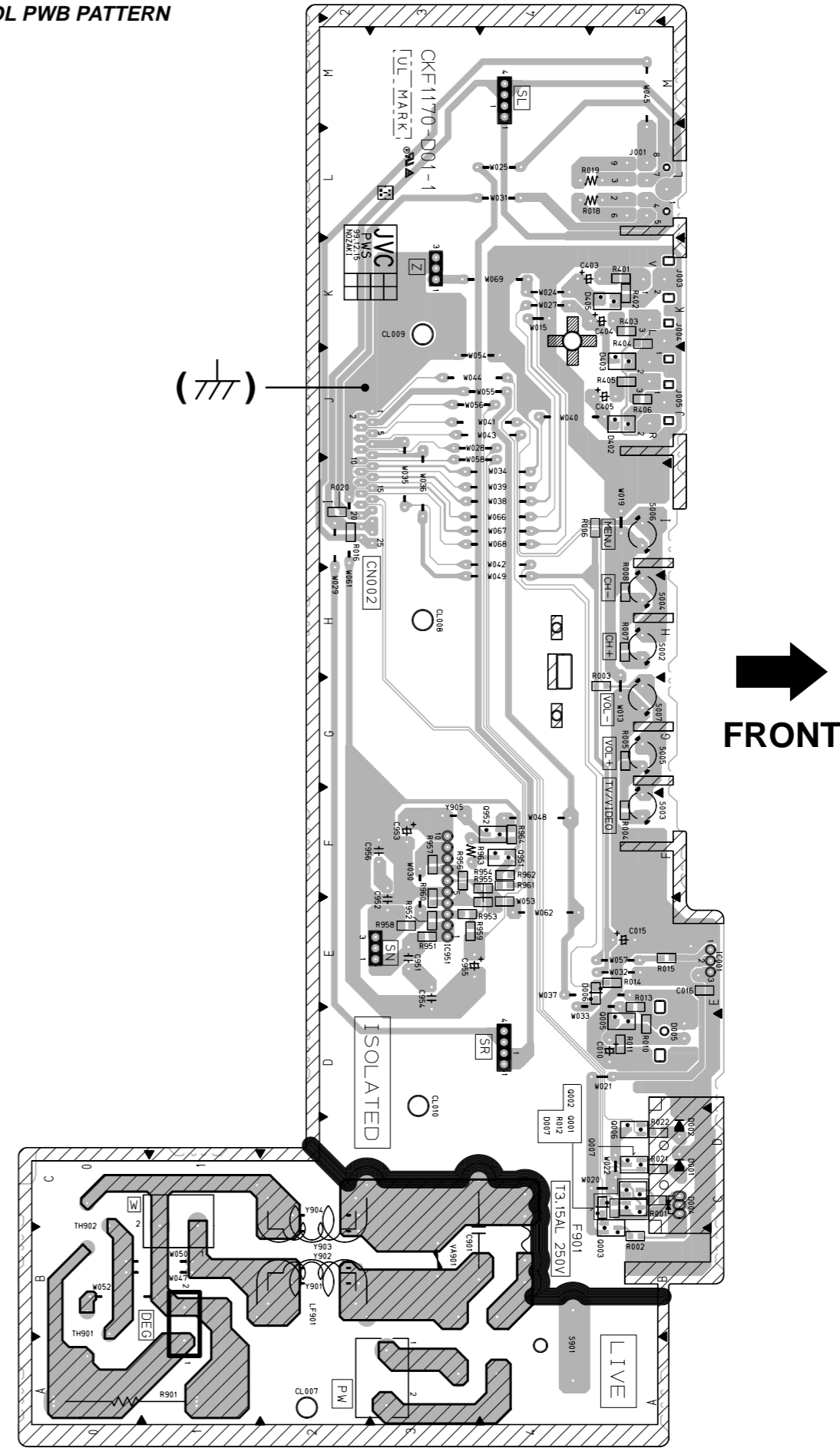
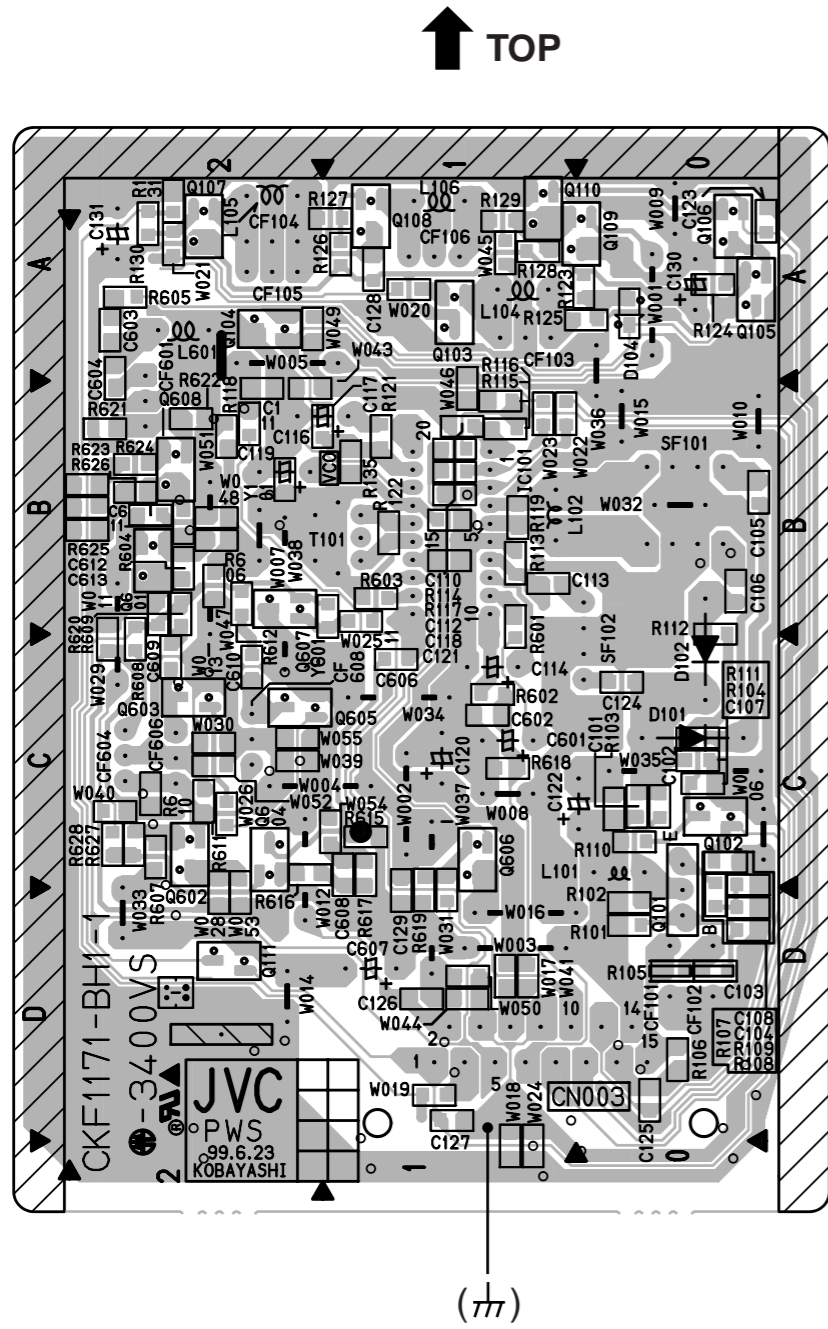


AV SW PWB PATTERN



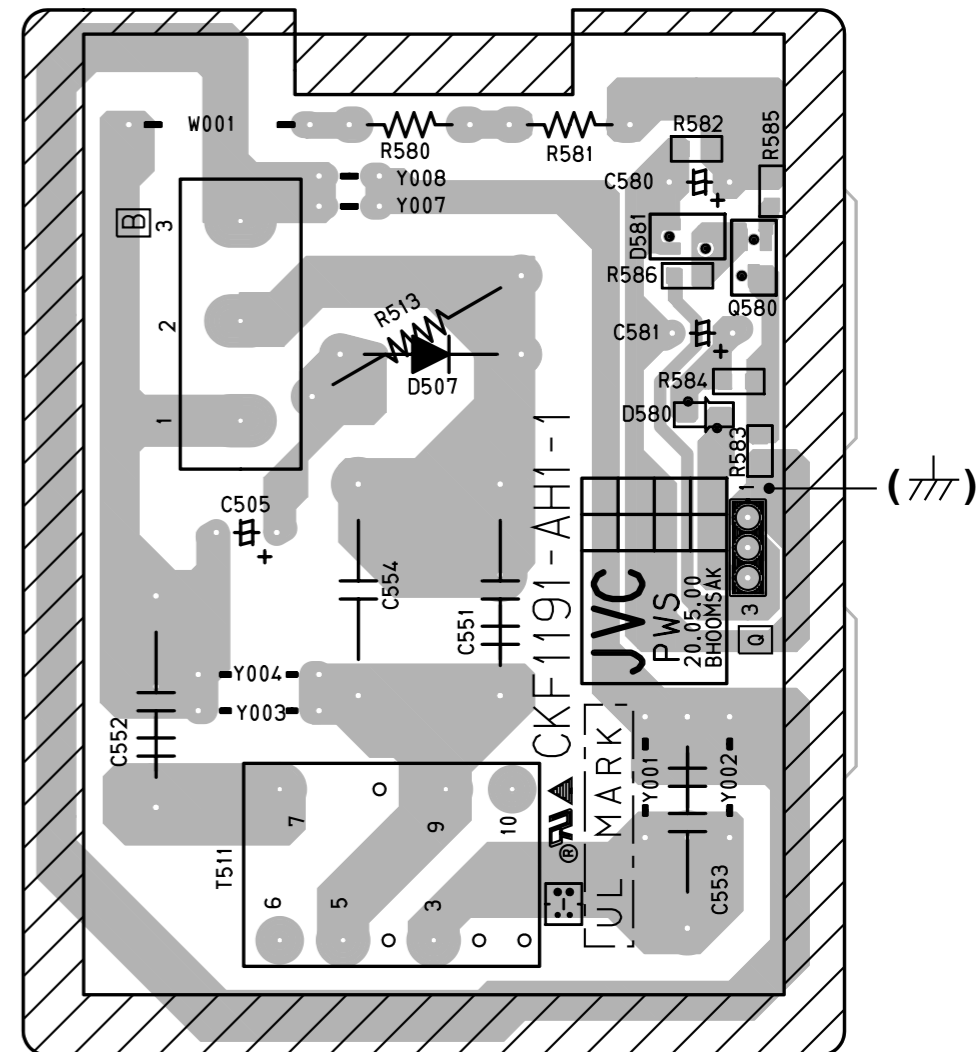
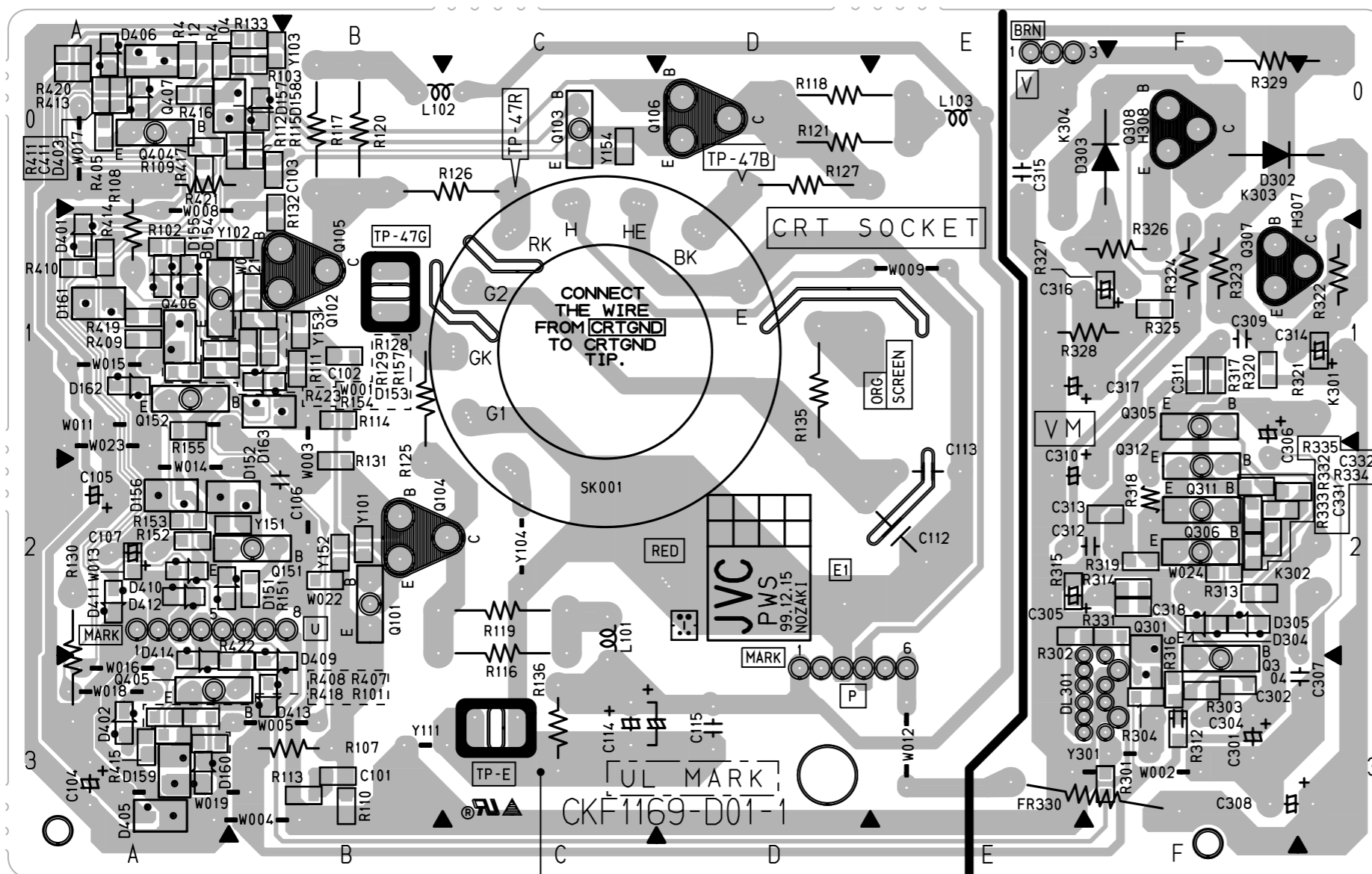
IF PWB PATTERN

FRONT CONTROL PWB PATTERN

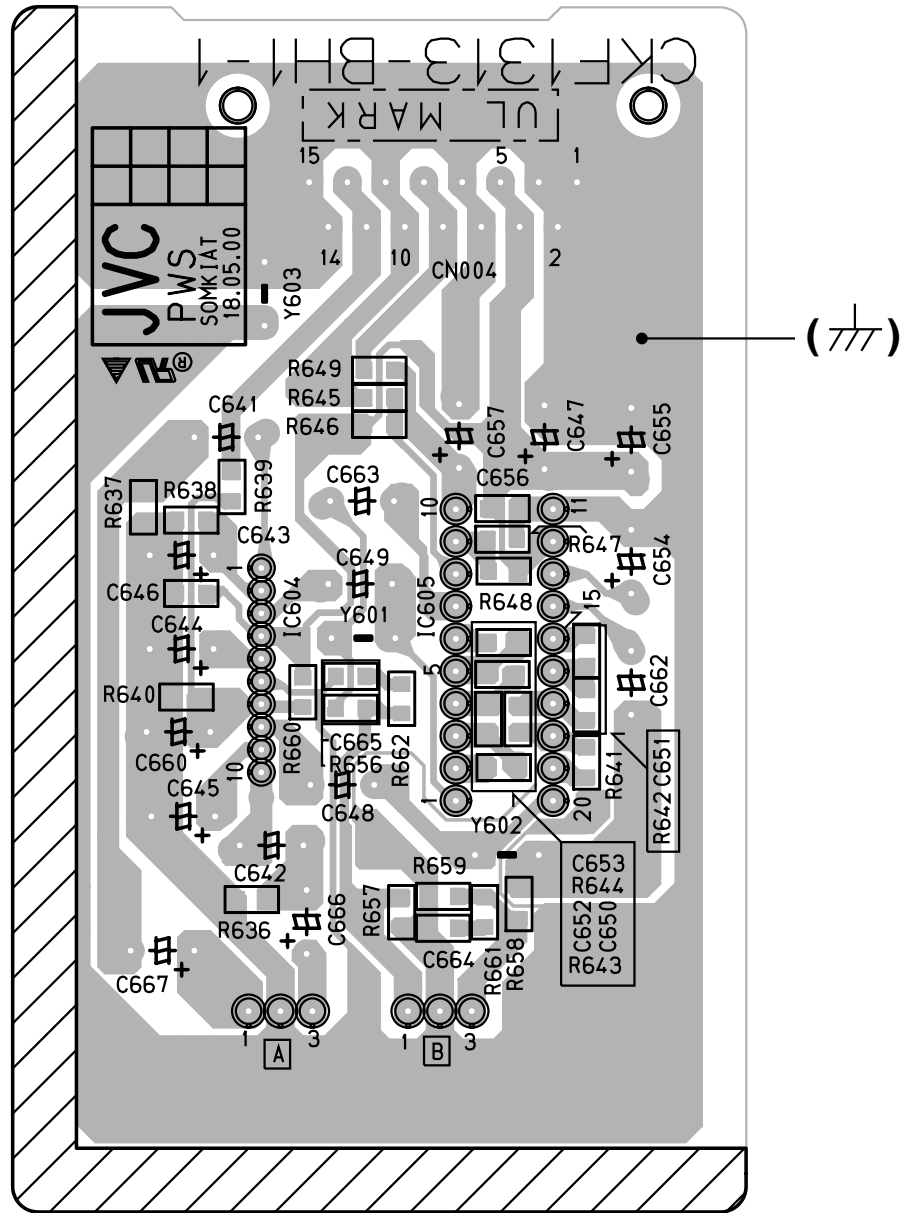


CRT SOCKET PWB PATTERN

INNER PIN PWB PATTERN



ALC PWB PATTERN



TOP



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