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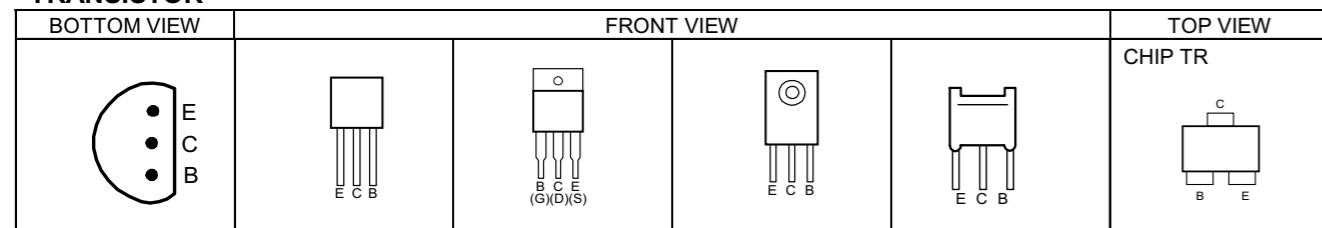
PIP PWB PATTERN [SOLDER SIDE] 2-48

SUB MICON & AUTO PANORAMA PWB PATTERN 2-49

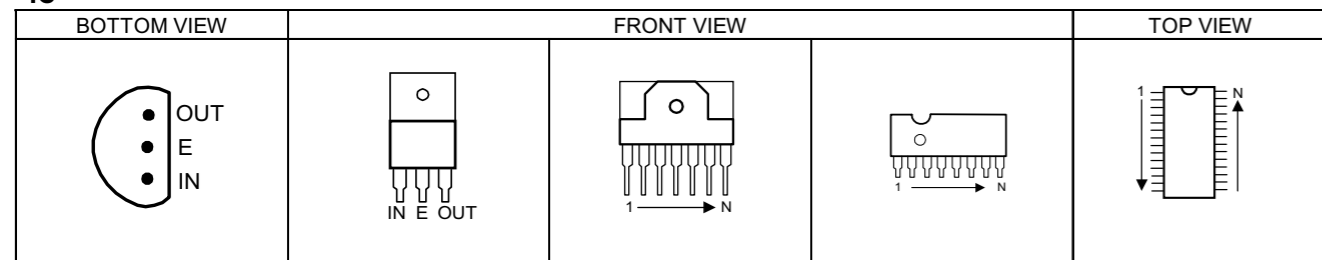
AUDIO PWB PATTERN 2-50

SEMICONDUCTOR SHAPES

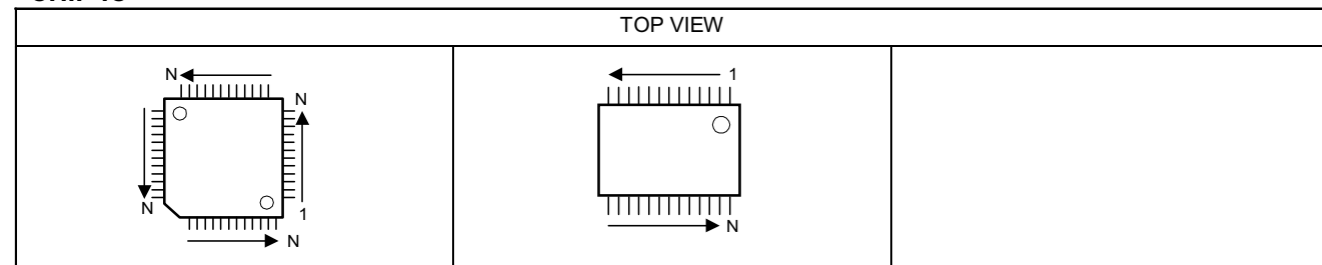
TRANSISTOR



IC



CHIP IC



AV-32WFP1EU(A) AV-32WFP1EUI(A) STANDARD CIRCUIT DIAGRAM AV-32WFP1EK(A)

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 :PAL 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→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 :1/10[W]
 - Others :As specified

●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]
 - 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
- :B2
- :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

- :LIVE side ground
- :ISOLATED(NEUTRAL) side ground
- :EARTH ground
- :DIGITAL ground

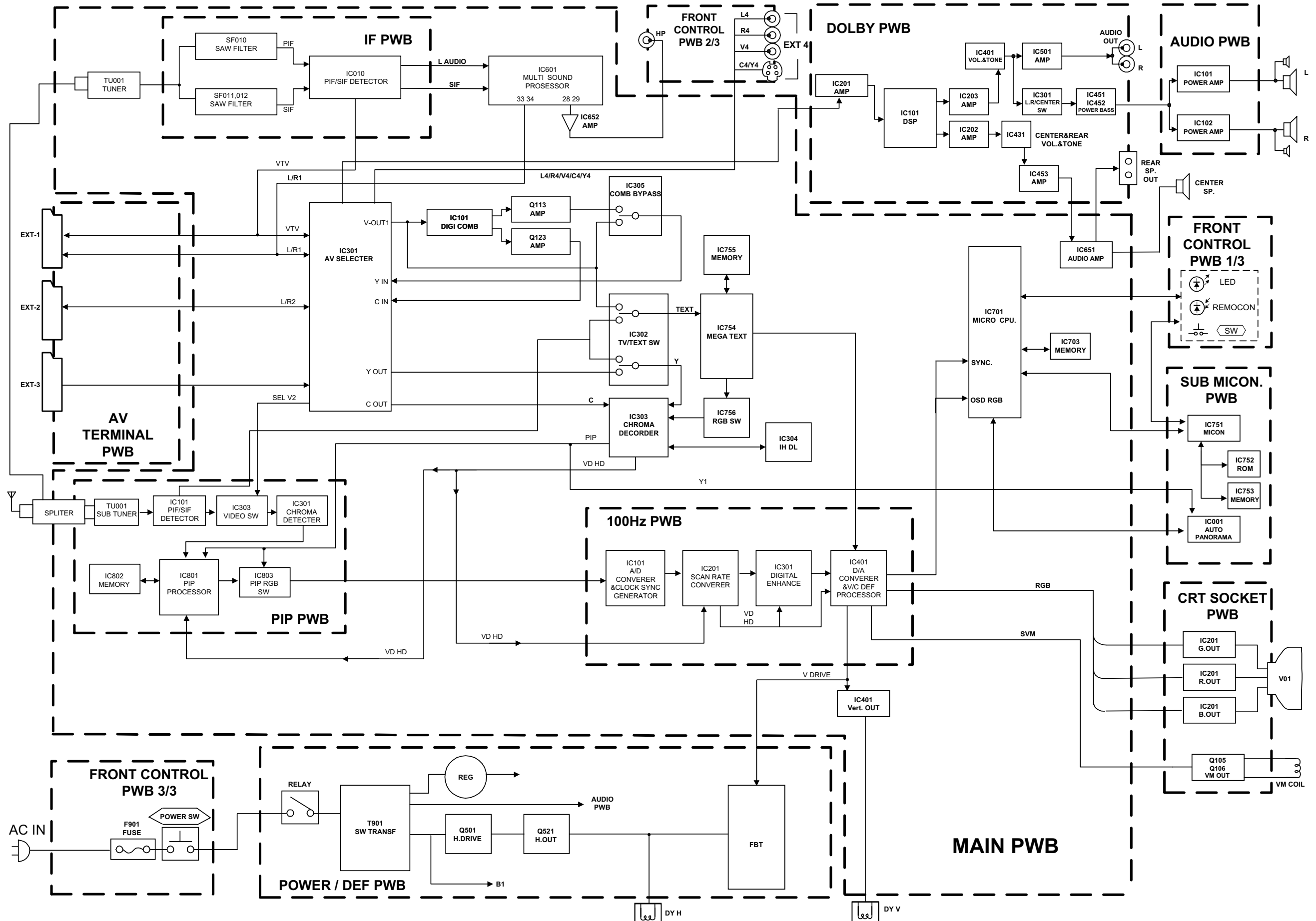
5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (L) side GND and the ISOLATED(NEUTRAL) : (N) 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.

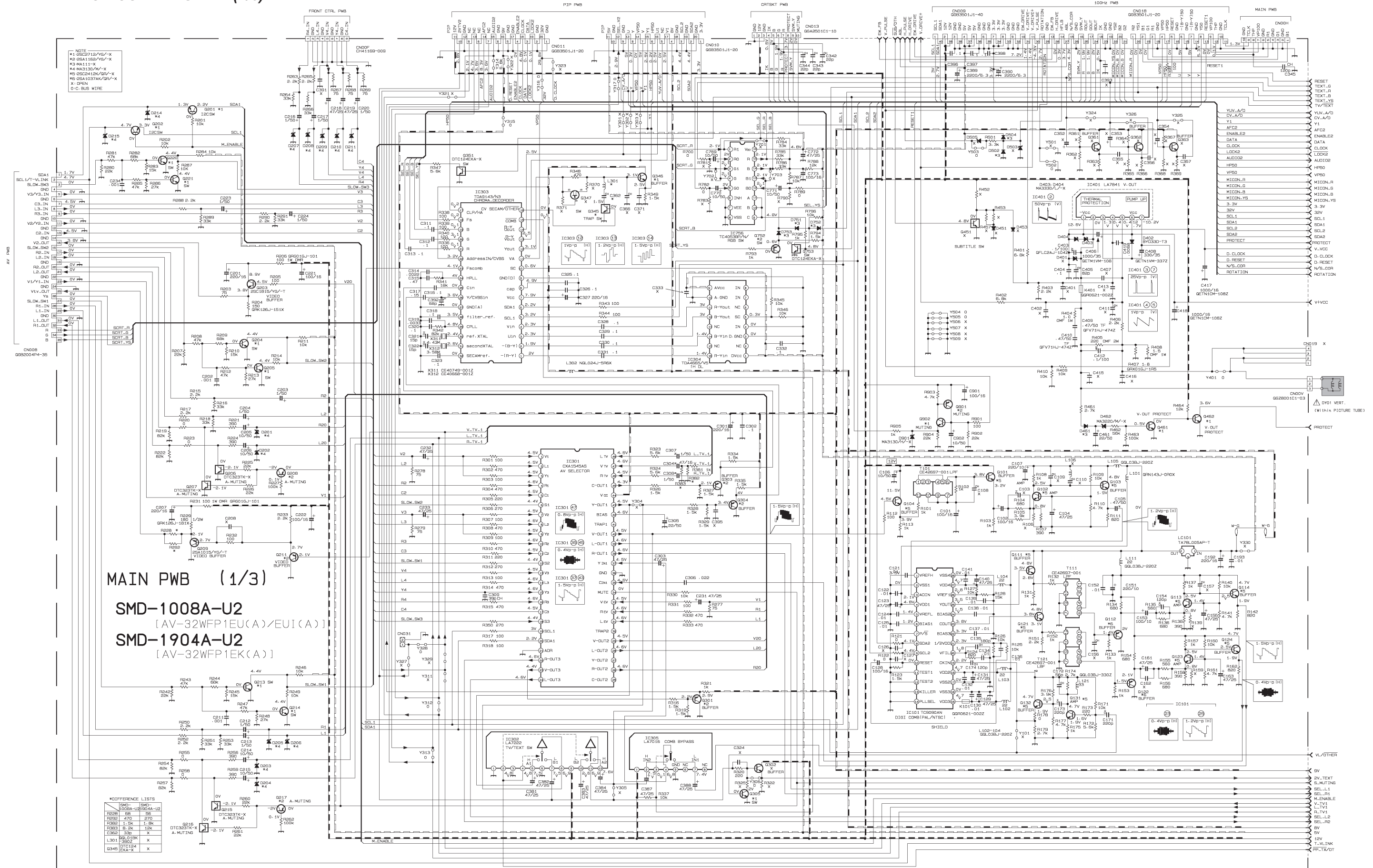
BLOCK DIAGRAM



CIRCUIT DIAGRAMS

MAIN PWB CIRCUIT DIAGRAM (1/3)

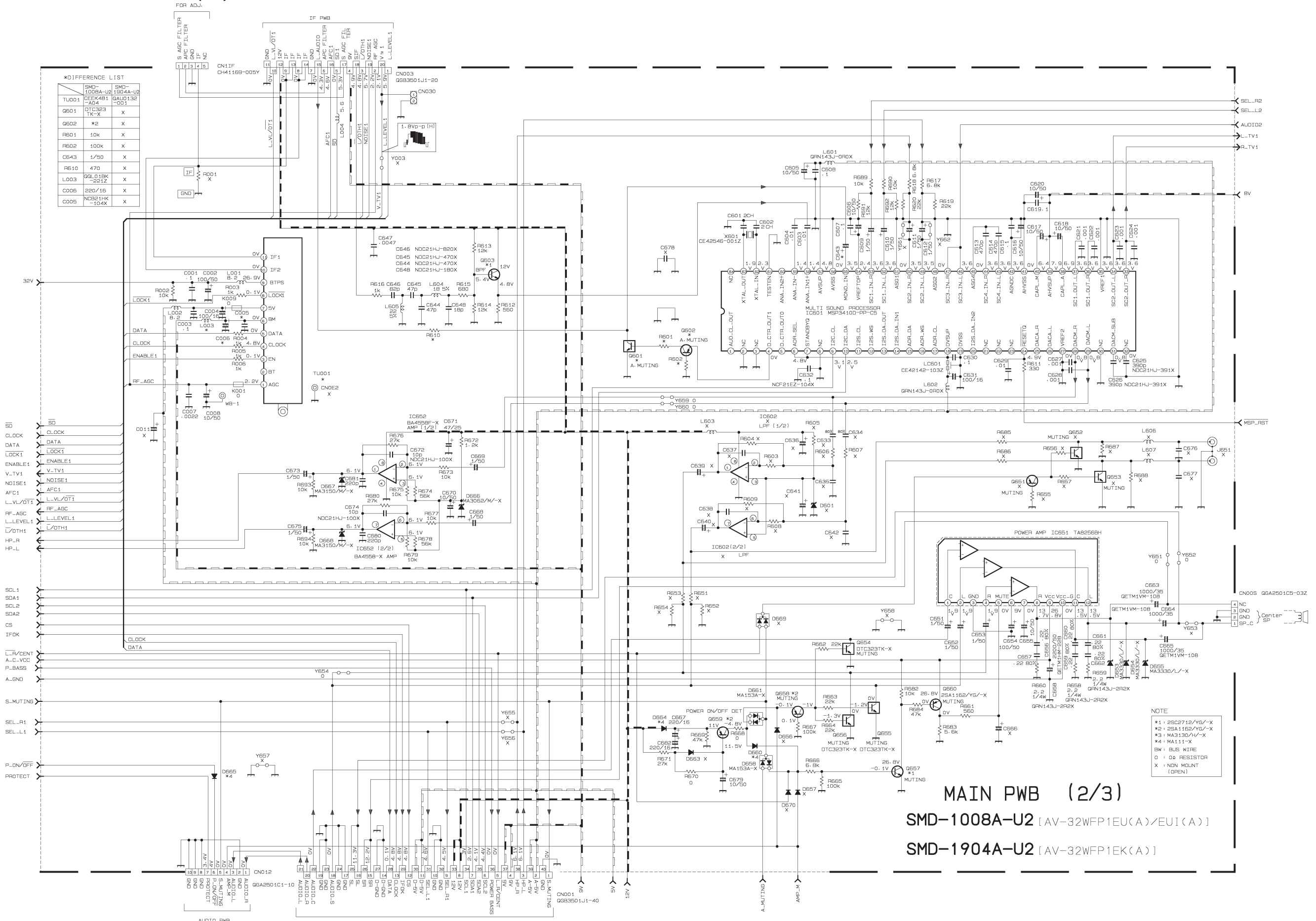
AV-32WFP1EU
AV-32WFP1EU
AV-32WFP1EK
AV-32WFP1EU
AV-32WFP1EU
AV-32WFP1EK



MAIN PWB CIRCUIT DIAGRAM (2/3)

AV-32WFP1EU
AV-32WFP1EUI
AV-32WFP1EK

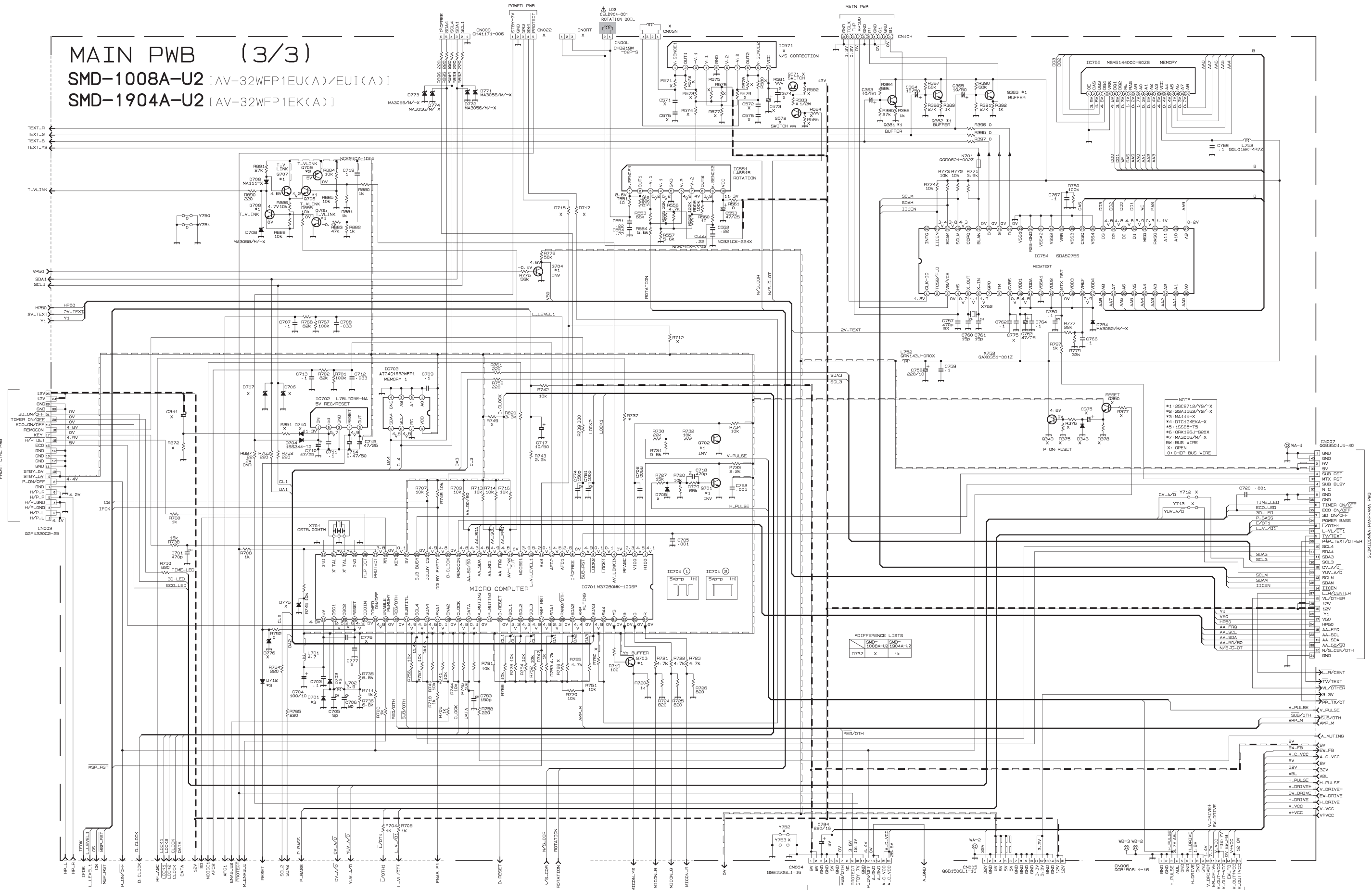
AV-32WFP1EU
AV-32WFP1EUI
AV-32WFP1EK



MAIN PWB (2/3)
SMD-1008A-U2 [AV-32WFP1EU(A)/EUI(A)]
SMD-1904A-U2 [AV-32WFP1EK(A)]

MAIN PWB (3/3)

SMD-1008A-U2 [AV-32WFP1EU(A)/EUI(A)]
SMD-1904A-U2 [AV-32WFP1EK(A)]



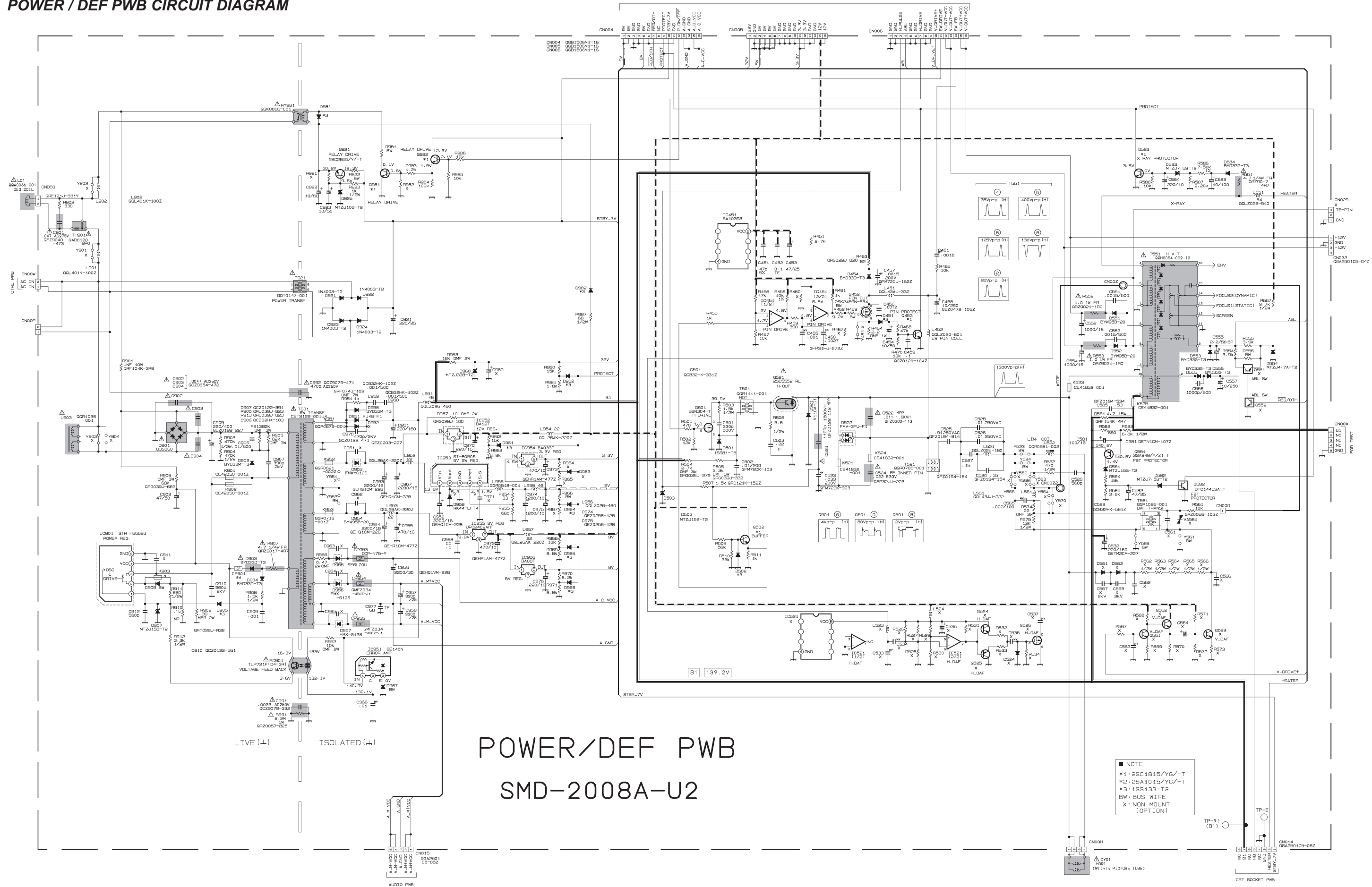
NOTE
#1: 88C2718/PV/-X
#2: 88C1448/VB/-X
#3: MA111-X
#4: DT124EKA-X
#5: 18888-TS
#6: GR126J-B20X
#7: MA3056/N/-X
#8: BUS WIRE
X: OPEN
O: CHIP BUS WIRE

DIFFERENCE LISTS
SMT 1008A-U2
SMT 1904A-U2
R737 X 1k

POWER / DEF PWB CIRCUIT DIAGRAM

AV-32WFP1EU
AV-32WFP1EU
AV-32WFP1EK

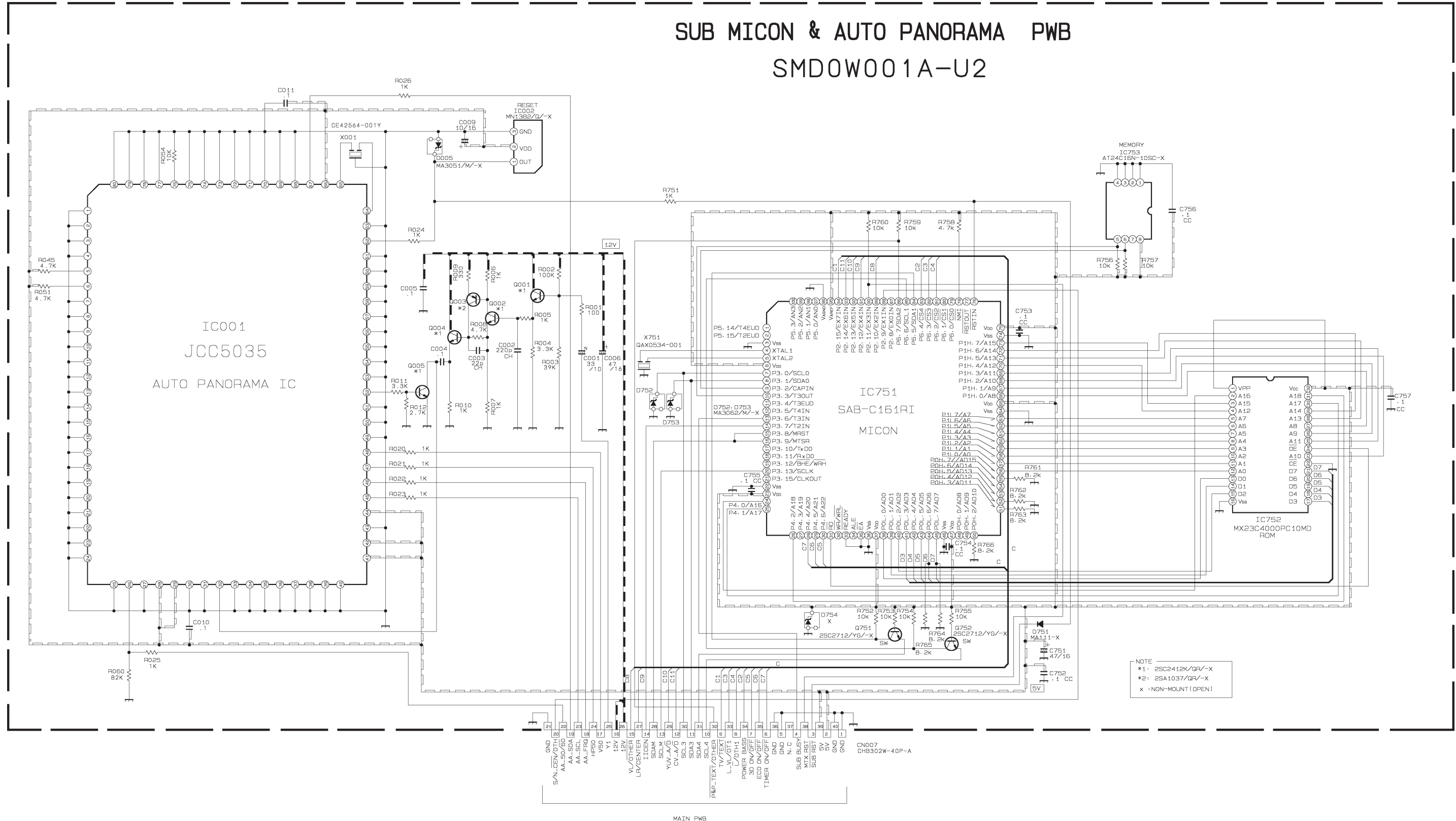
AV-32WFP1EU
AV-32WFP1EU
AV-32WFP1EK



POWER/DEF PWB
SMD-2008A-U2

NOTE
*1: 2SC1815/YG/-T
*2: 2SA1015/YG/-T
*3: 1SS133-T2
BW: BUS WIRE
X: NON MOUNT (OPTION)

SUB MICON & AUTO PANORAMA PWB
SMD0W001A-U2

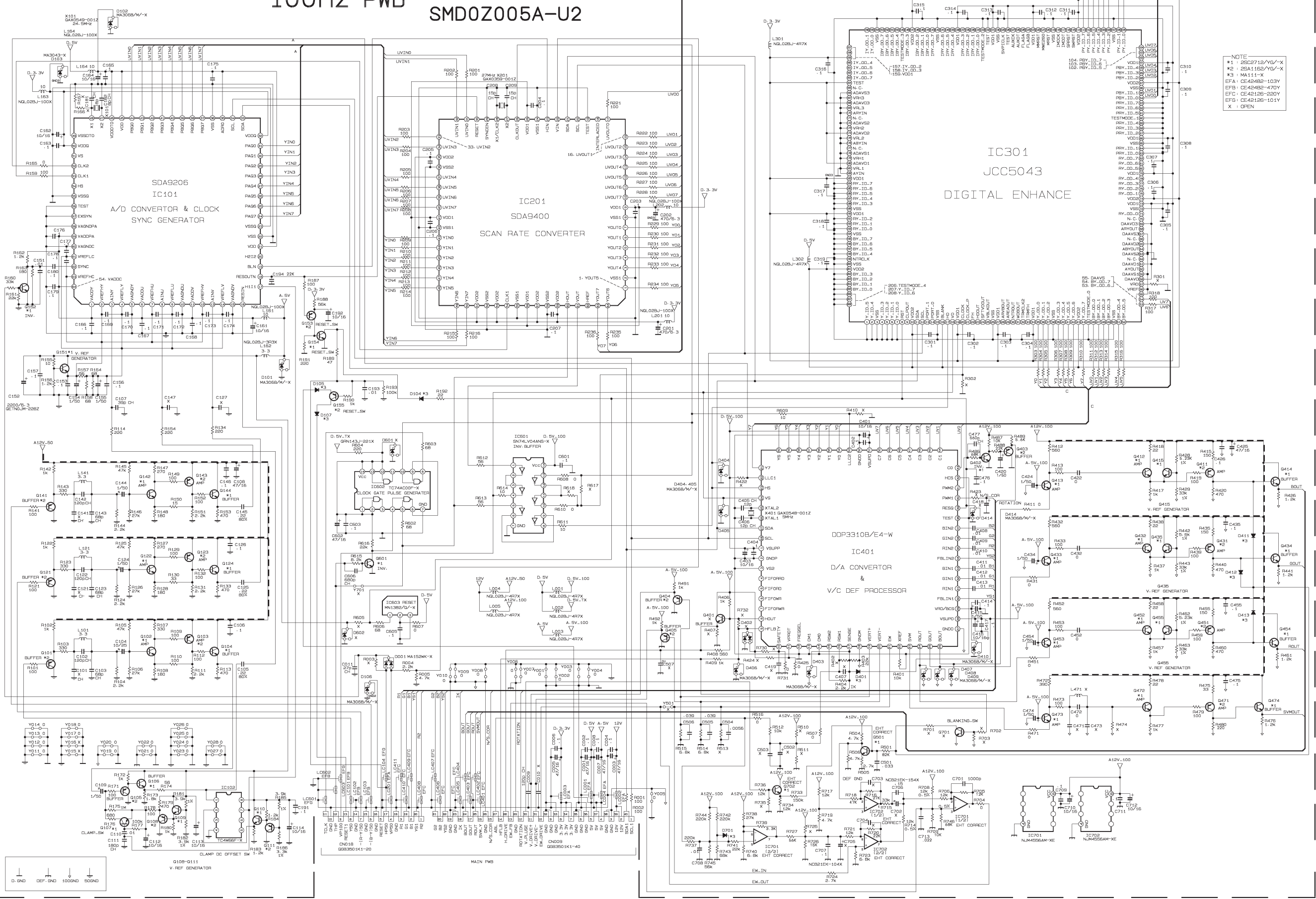


100Hz PWB CIRCUIT DIAGRAM

AV-32WFP1EU
AV-32WFP1EUI
AV-32WFP1EK

AV-32WFP1EU
AV-32WFP1EUI
AV-32WFP1EK

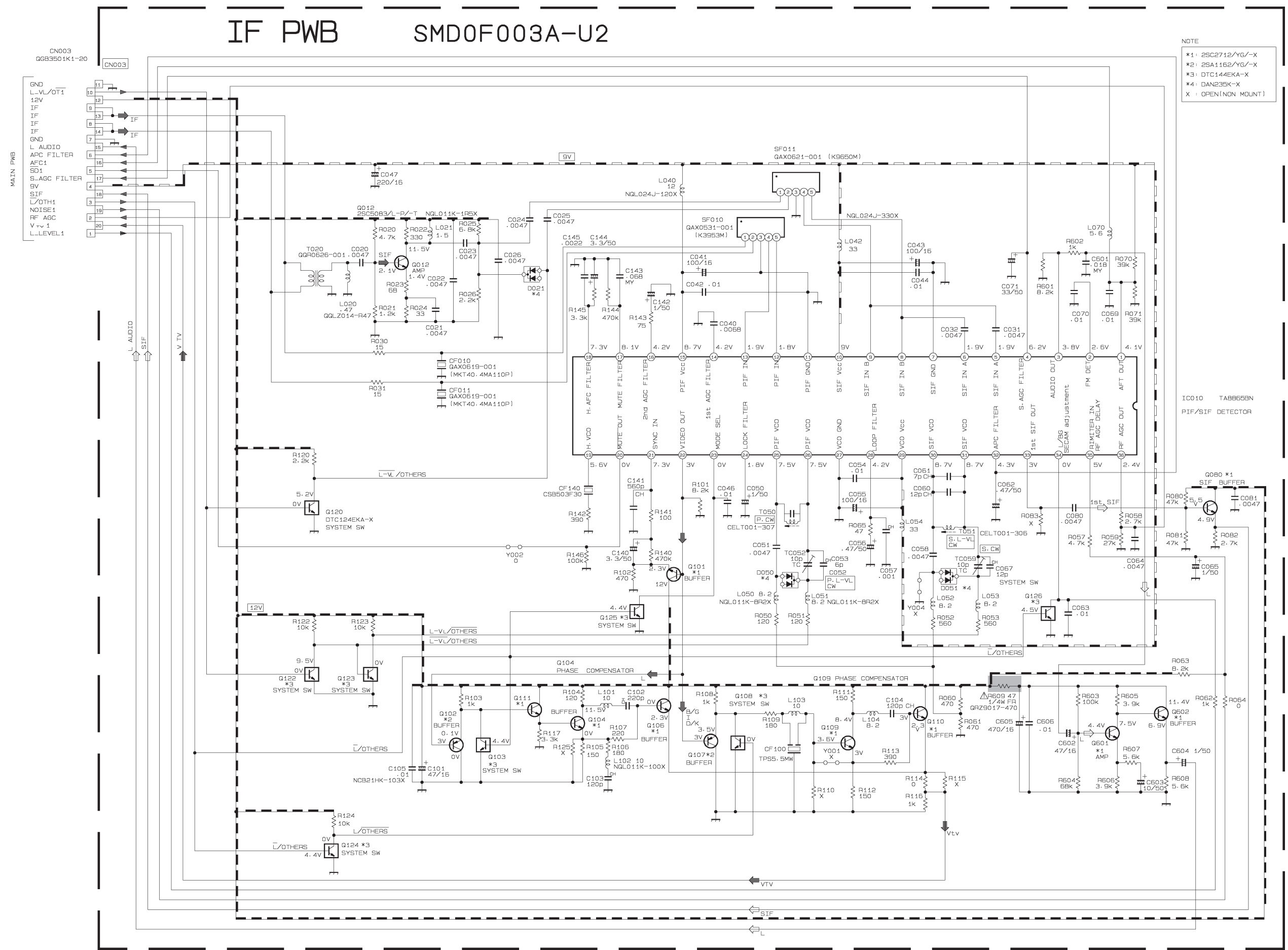
100HZ PWB SMD0Z005A-U2



NOTE
*1 : 2SC2712/YG-X
*2 : 2SA1162/YG-X
*3 : MA1111-X
EFA : CE42482-103Y
EFC : CE42126-202Y
EFG : CE42126-101Y
X : OPEN

IF PWB CIRCUIT DIAGRAM [AV-32WFP1EU(A) / AV-32WFP1EU(A)]

IF PWB SMD0F003A-U2



NOTE
 *1: 2SC2712/YG/-X
 *2: 2SA1162/YG/-X
 *3: DTC144KA-X
 *4: DAN235K-X
 X : OPEN (NON MOUNT)

IC1010 TAB855BN
 PIF/SIF DETECTOR

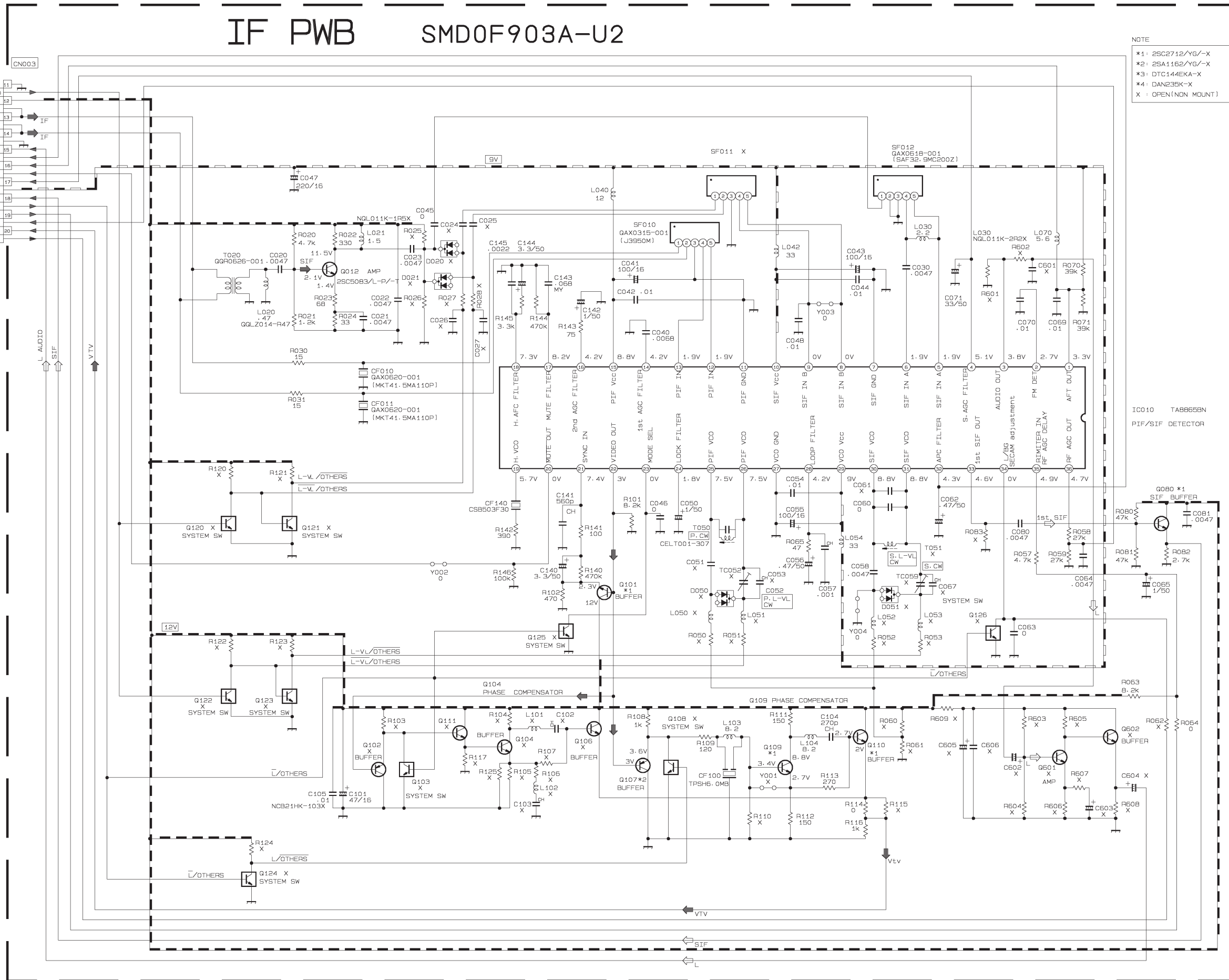
IF PWB CIRCUIT DIAGRAM [AV-32WFP1EK(A)]

IF PWB SMD0F903A-U2

CN003
GGB3501K1-20

MAIN PWB

- 11 GND
- 10 L-VL/OT1
- 9 12V
- 8 IF
- 7 IF
- 6 IF
- 5 IF
- 4 GND
- 3 L AUDIO
- 2 APC FILTER
- 1 AFC1
- SD1
- S.AGC FILTER
- 9V
- SIF
- L/OTH1
- NOISE1
- RF AGC
- V~1
- L-LEVEL1

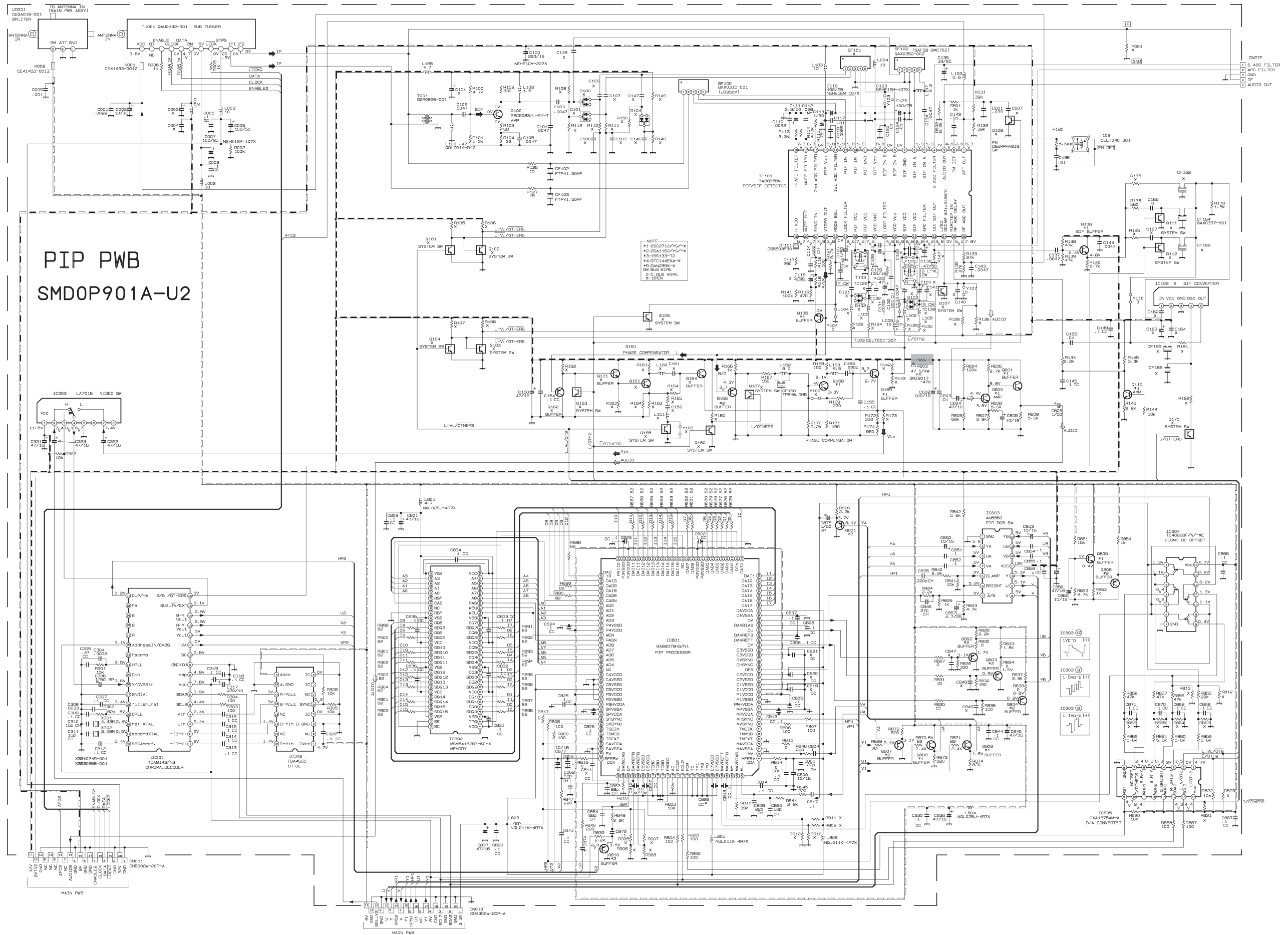


NOTE

- *1: 2SC2712/YG/-X
- *2: 2SA1162/YG/-X
- *3: DTC144EKA-X
- *4: DAN235K-X
- X : OPEN (NON MOUNT)

IC010 TAB8658N
PIF/SIF DETECTOR

PIP PWB CIRCUIT DIAGRAM [AV-32WFP1EK(A)]



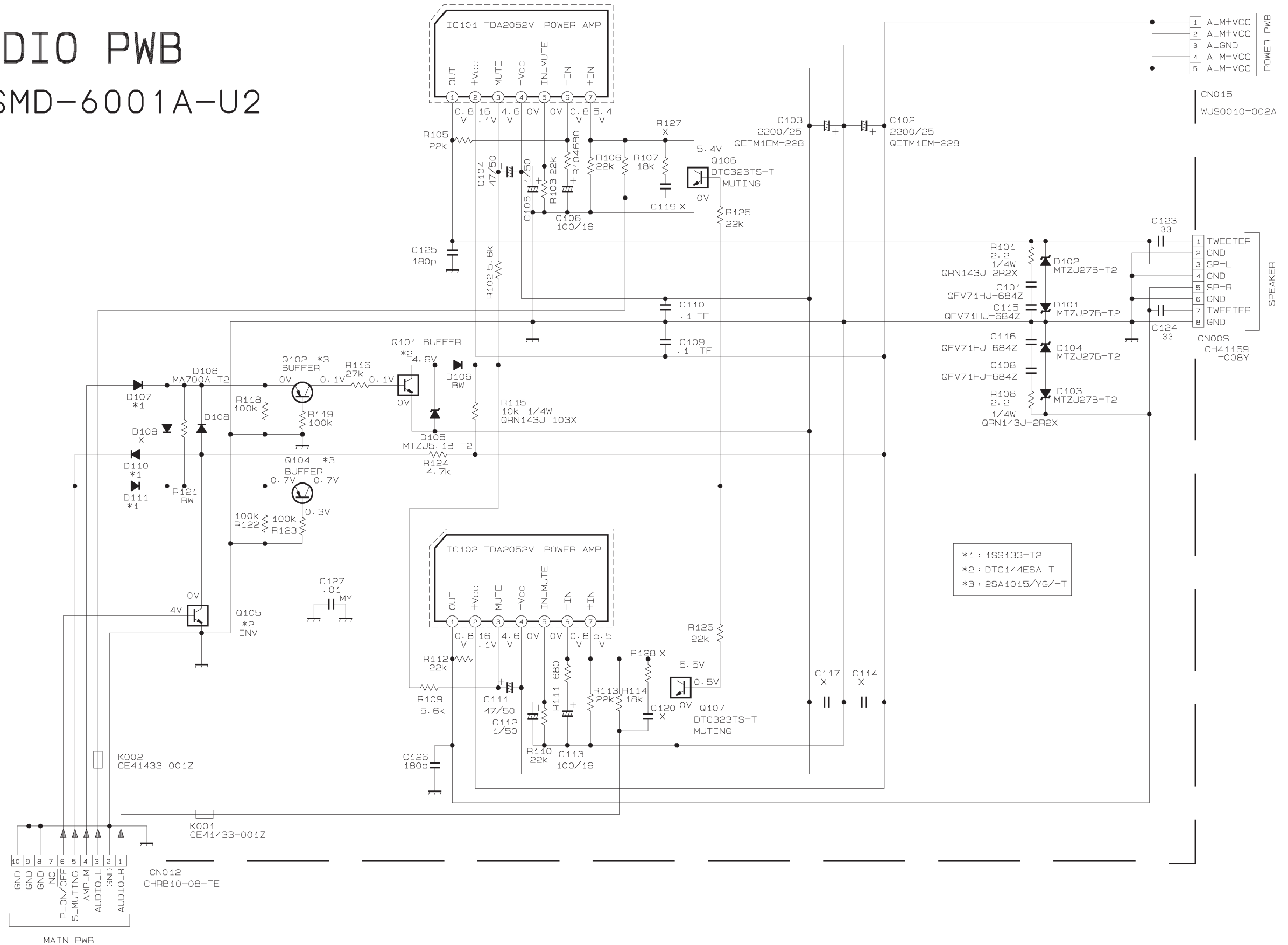
PIP PWB
SMD0P901A-U2

NOTE:

- #1 252712/VA-X
- #2 150133-72
- #3 150133-72
- #4 0314484A-X
- #5 042325C-X
- #6 042325C-X
- #7 042325C-X
- #8 042325C-X
- #9 042325C-X
- #10 042325C-X
- #11 042325C-X
- #12 042325C-X
- #13 042325C-X
- #14 042325C-X
- #15 042325C-X
- #16 042325C-X
- #17 042325C-X
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- #97 042325C-X
- #98 042325C-X
- #99 042325C-X
- #100 042325C-X

AUDIO PWB

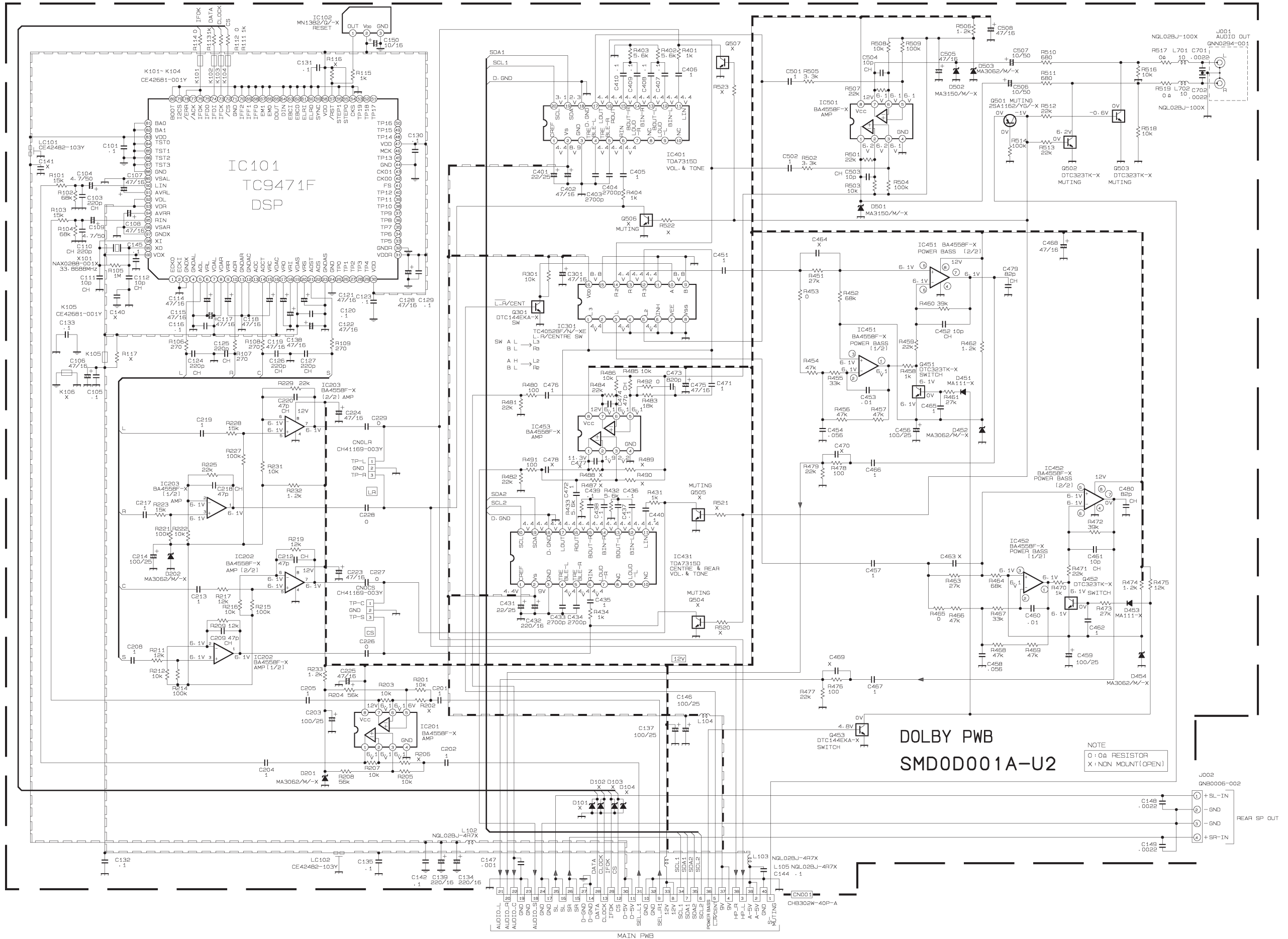
SMD-6001A-U2



DOLBY PWB CIRCUIT DIAGRAM

AV-32WFP1EU
AV-32WFP1EUI
AV-32WFP1EK

AV-32WFP1EU
AV-32WFP1EUI
AV-32WFP1EK

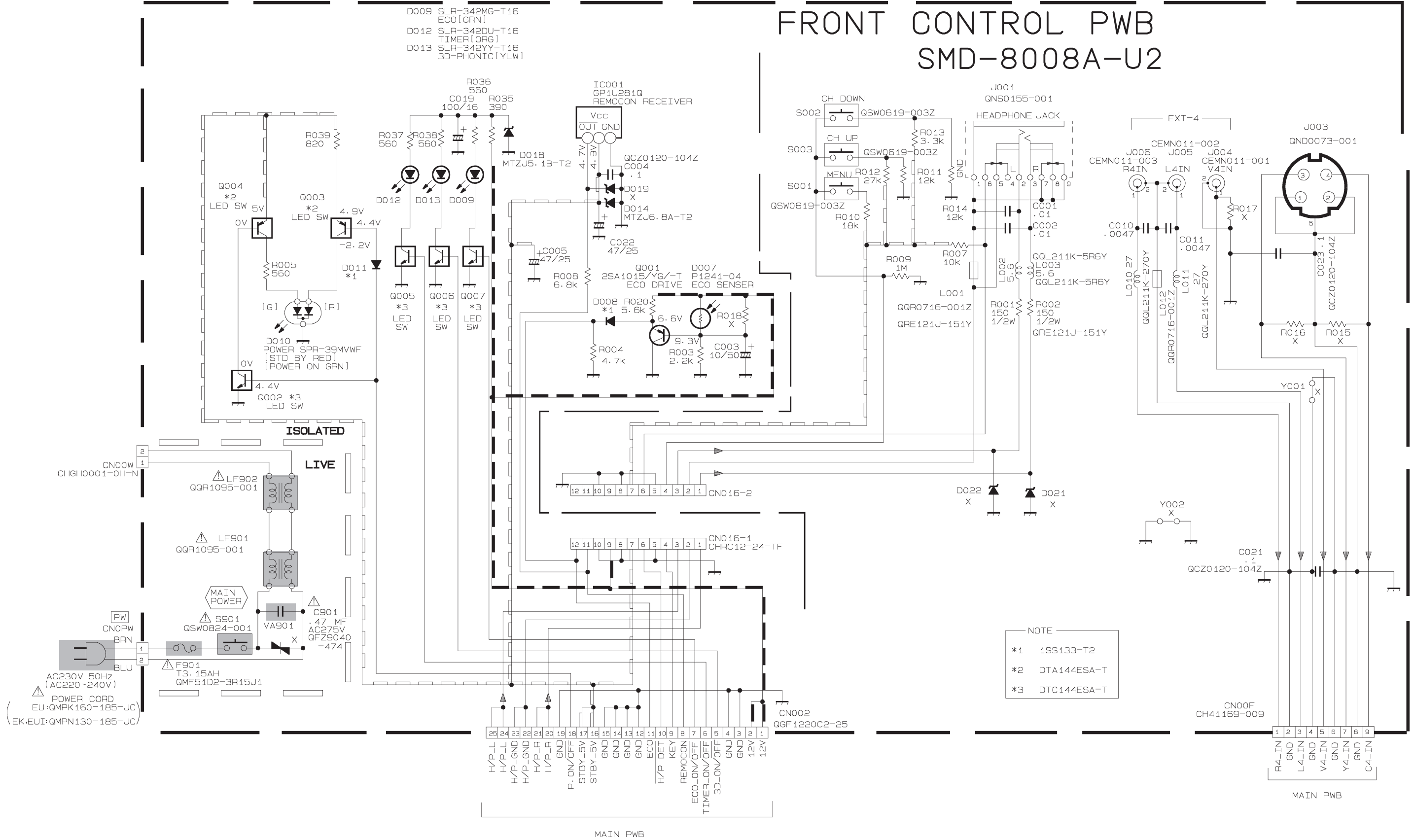


FRONT CONTROL PWB CIRCUIT DIAGRAM

AV-32WFP1EU
AV-32WFP1EUI
AV-32WFP1EK

AV-32WFP1EU
AV-32WFP1EUI
AV-32WFP1EK

FRONT CONTROL PWB
SMD-8008A-U2

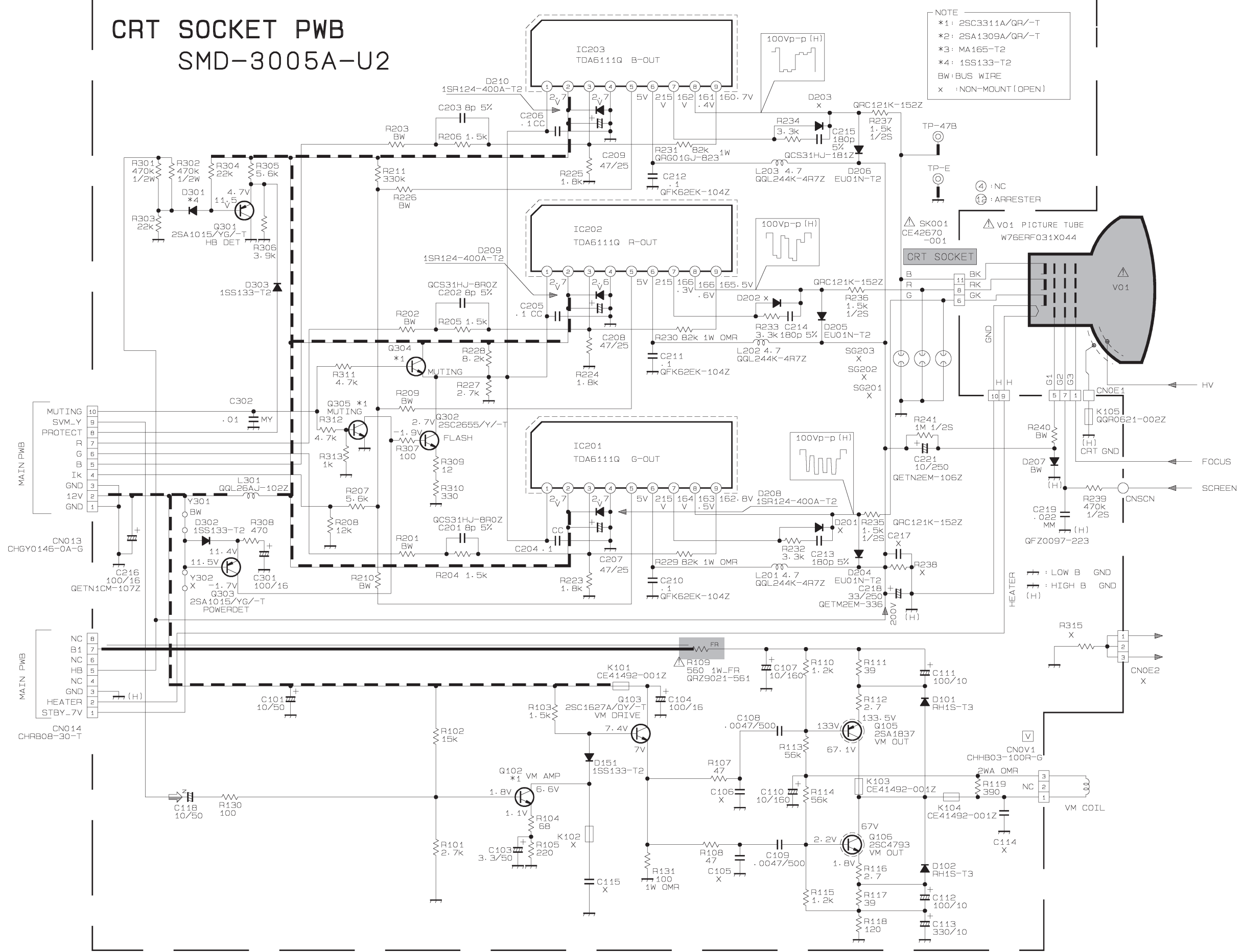


CRT SOCKET PWB CIRCUIT DIAGRAM

AV-32WFP1EU
AV-32WFP1EUI
AV-32WFP1EK

AV-32WFP1EU
AV-32WFP1EUI
AV-32WFP1EK

CRT SOCKET PWB
SMD-3005A-U2



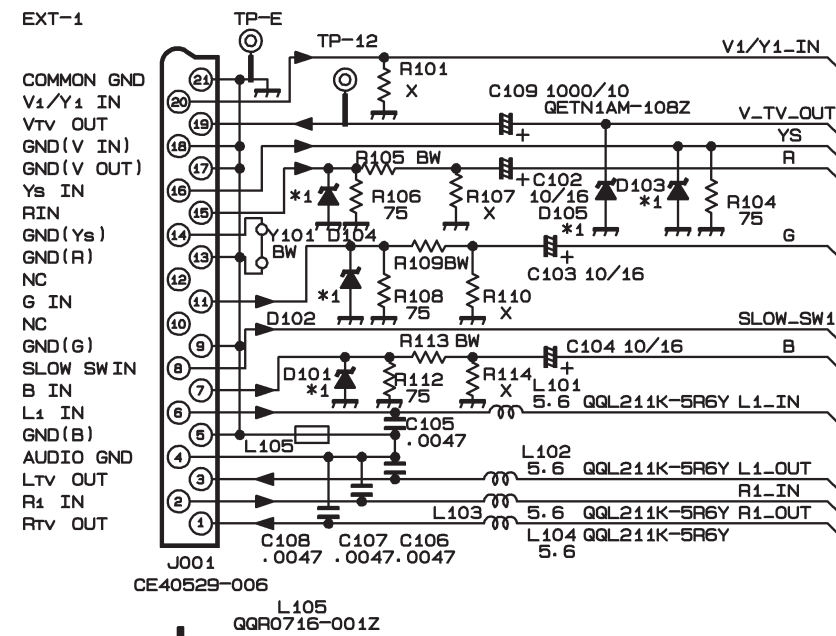
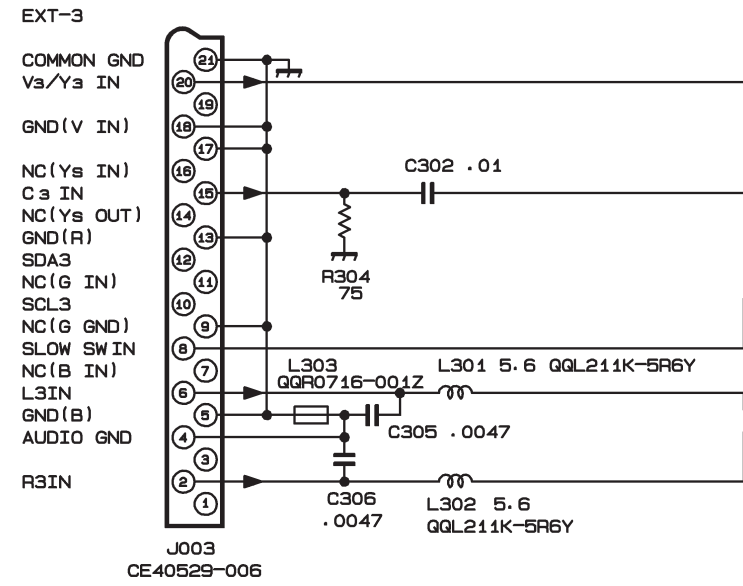
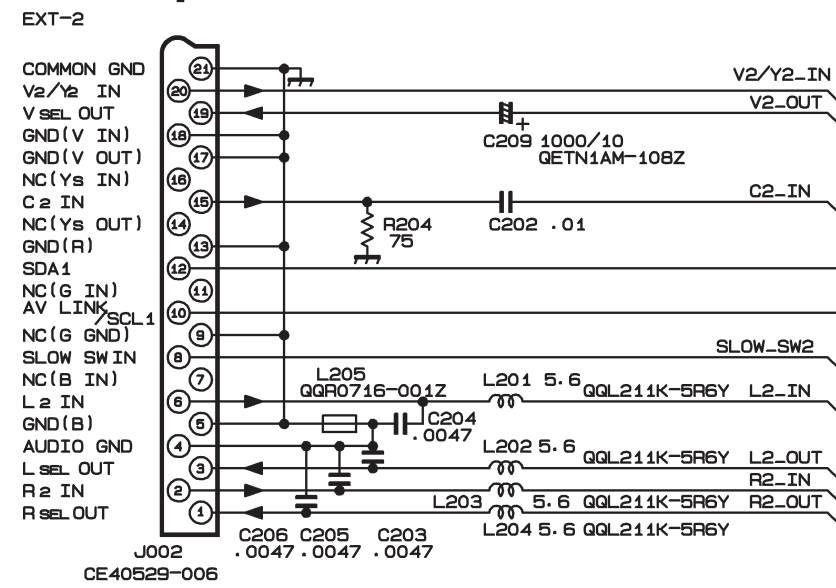
NOTE
*1: 2SC3311A/QR/-T
*2: 2SA1309A/QR/-T
*3: MA165-T2
*4: 1SS133-T2
BW: BUS WIRE
X: NON-MOUNT (OPEN)

MAIN PWB
MUTING SVM_Y
PROTECT R
G B
IK
GND
12V
GND

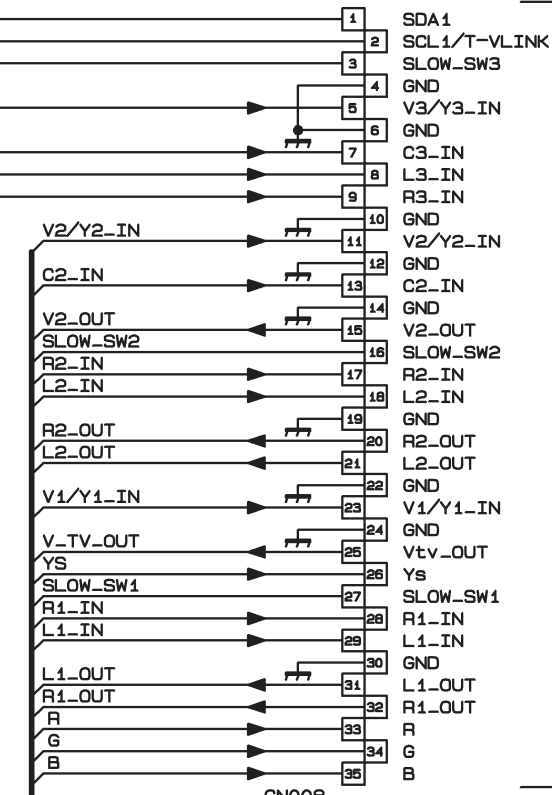
MAIN PWB
NC
B1
NC
HB
NC
GND
HEATER
STBY_7V

AV TERMINAL PWB CIRCUIT DIAGRAM

NOTE
*1: MTZJ13B-T2
BW: BUS WIRE
x :NON-MOUNT (OPEN)



AV TERMINAL PWB
SMD0J001A-U2

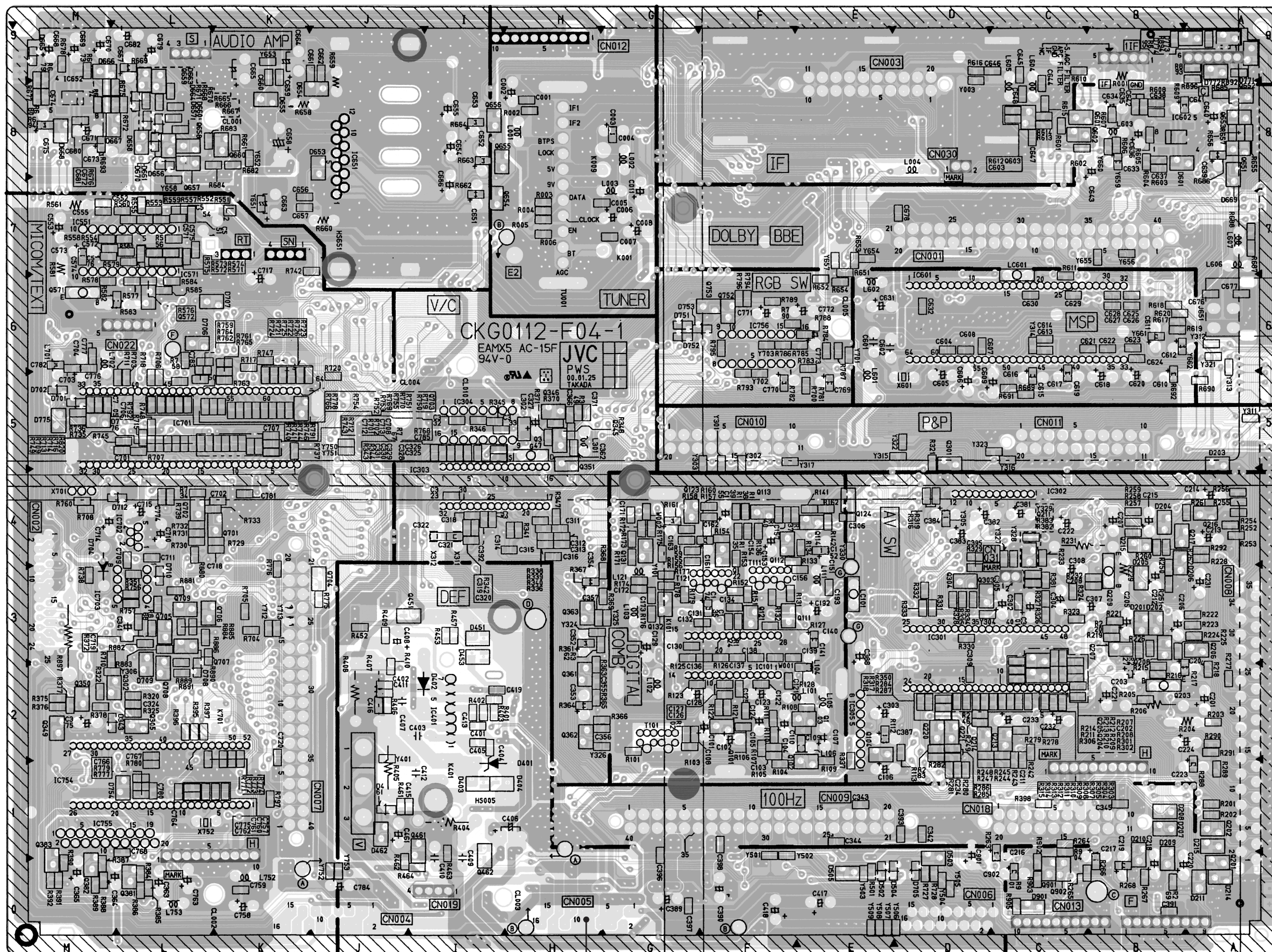


PATTERN DIAGRAMS MAIN PWB PATTERN

AV-32WFP1EU
AV-32WFP1EU
AV-32WFP1EK

AV-32WFP1EU
AV-32WFP1EU
AV-32WFP1EK

FRONT

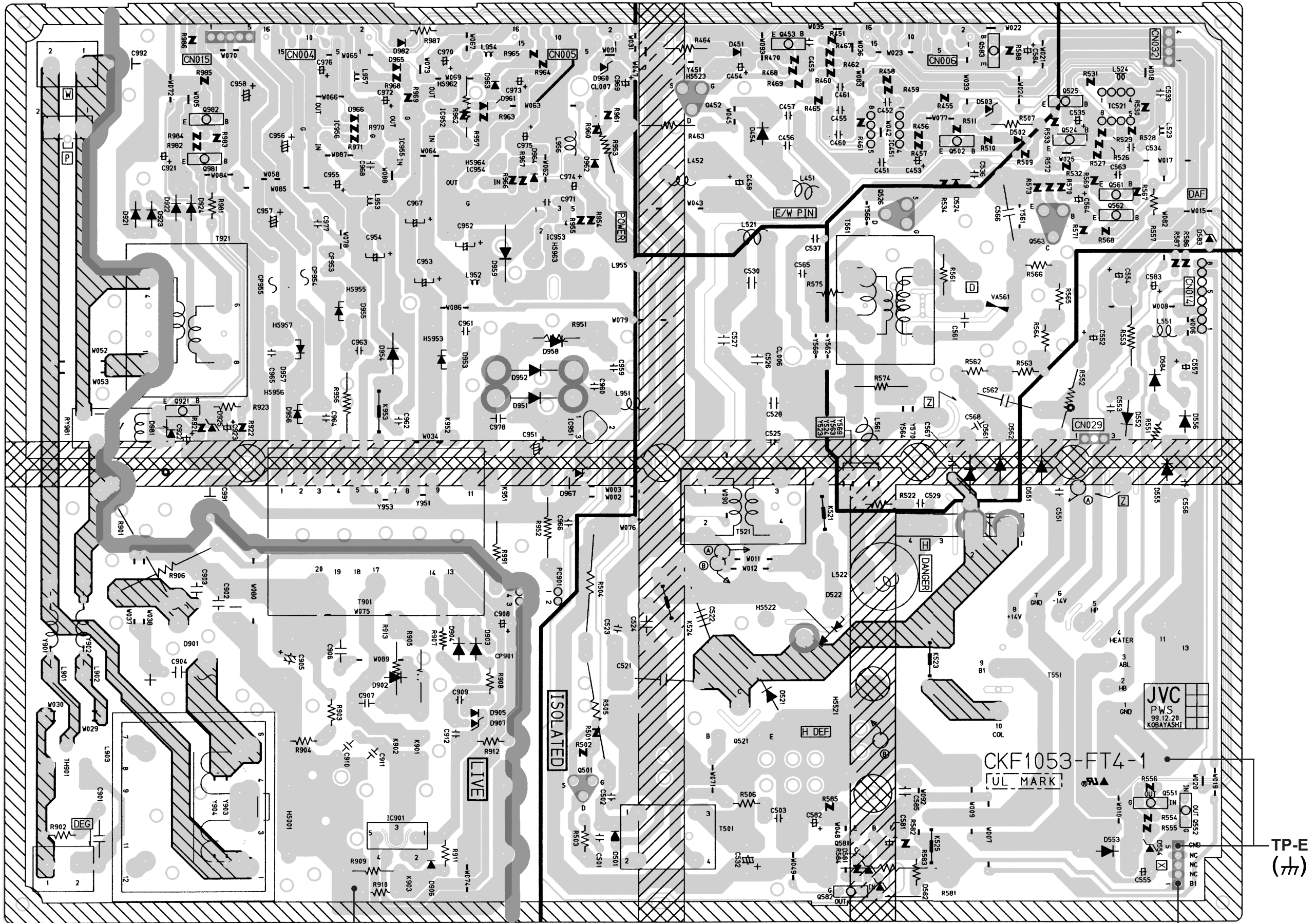


POWER / DEF PWB PATTERN

AV-32WFP1EU
AV-32WFP1EUI
AV-32WFP1EK

AV-32WFP1EU
AV-32WFP1EUI
AV-32WFP1EK

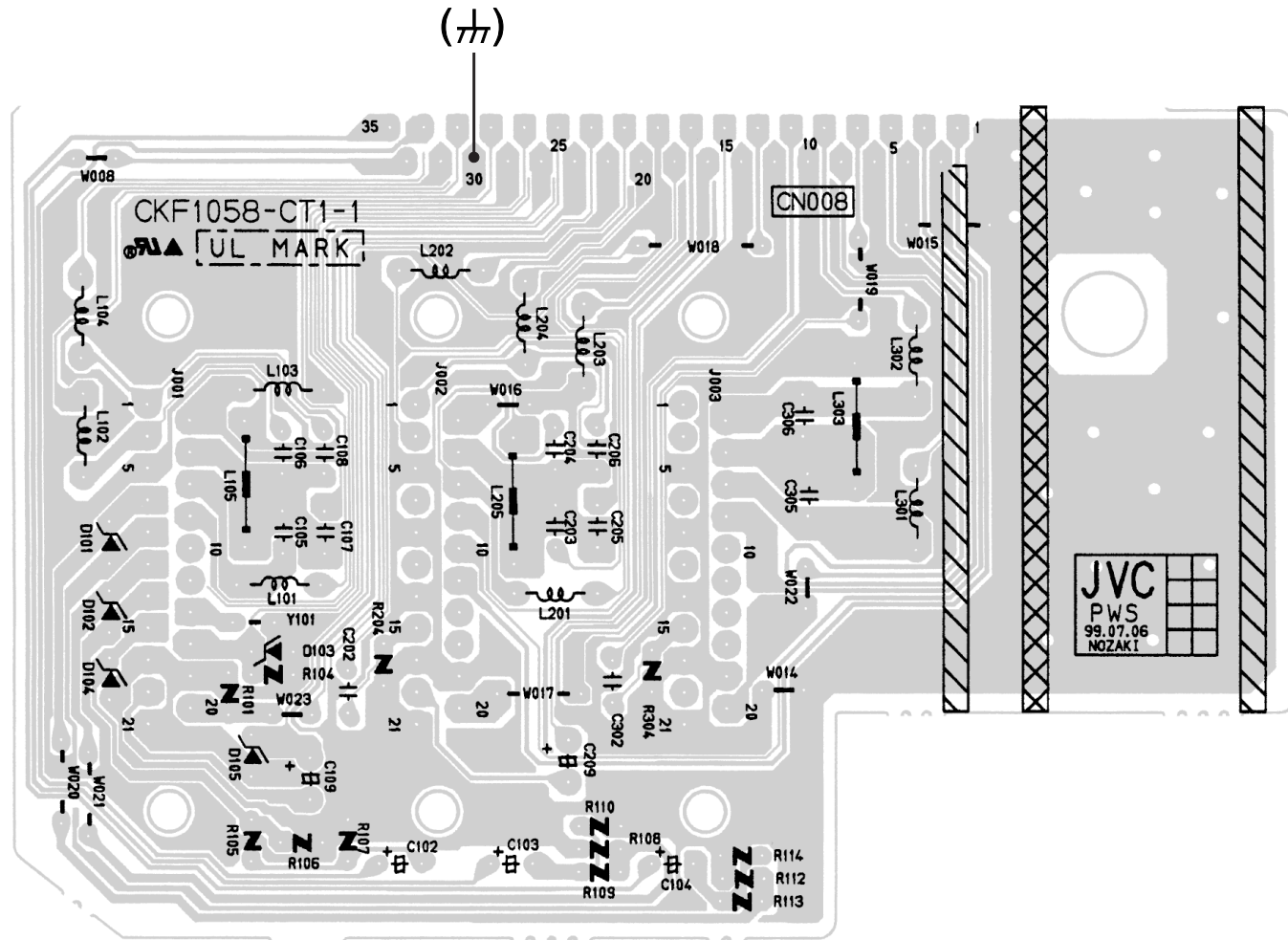
FRONT



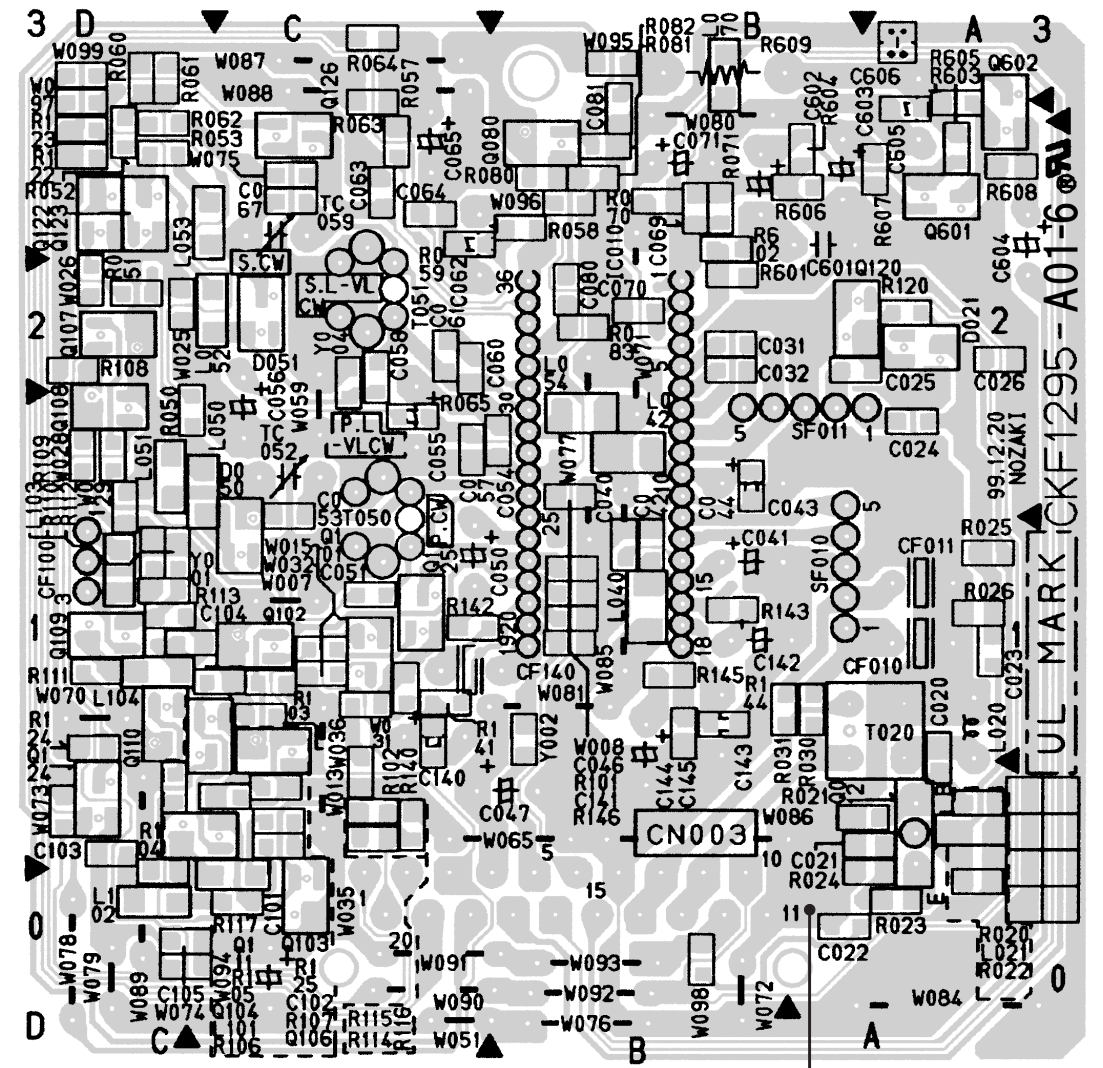
AV TERMINAL PWB PATTERN

IF PWB PATTERN

TOP

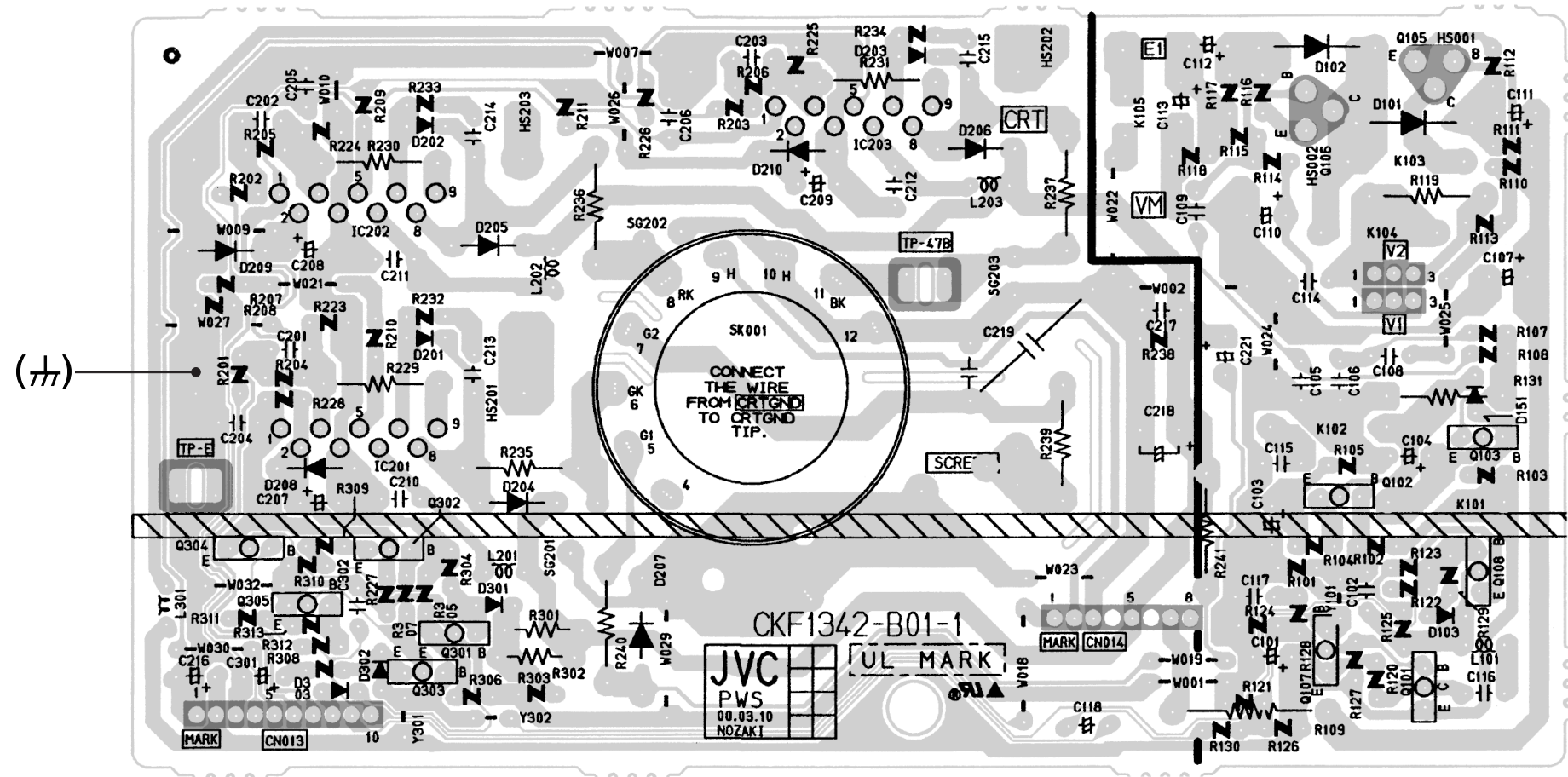


TOP



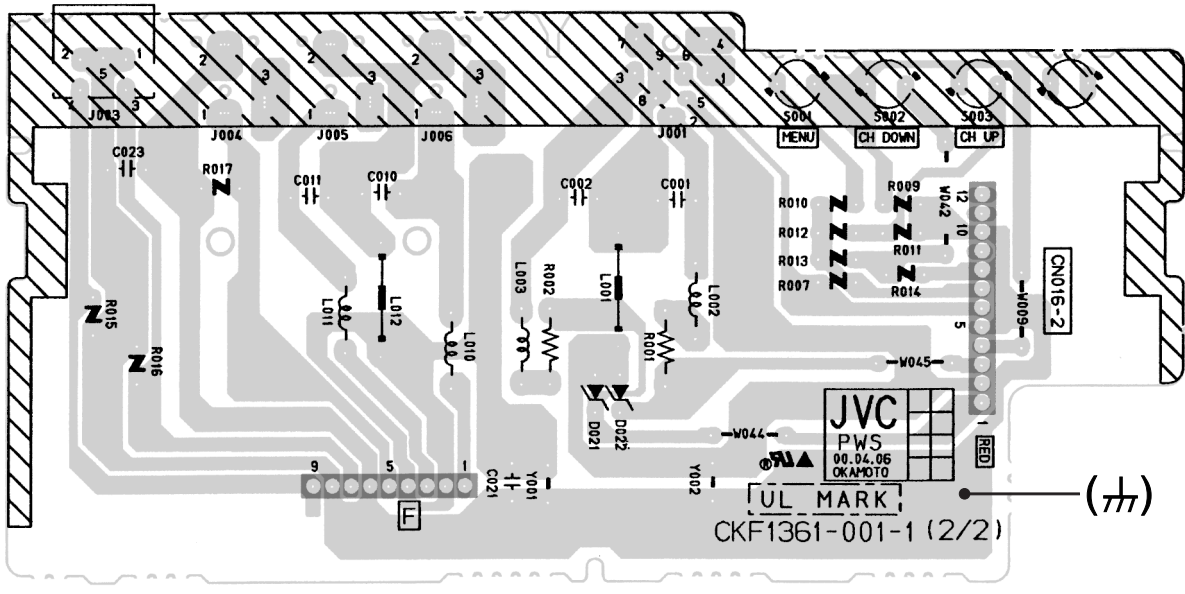
CRT SOCKET PWB PATTERN

↑ TOP



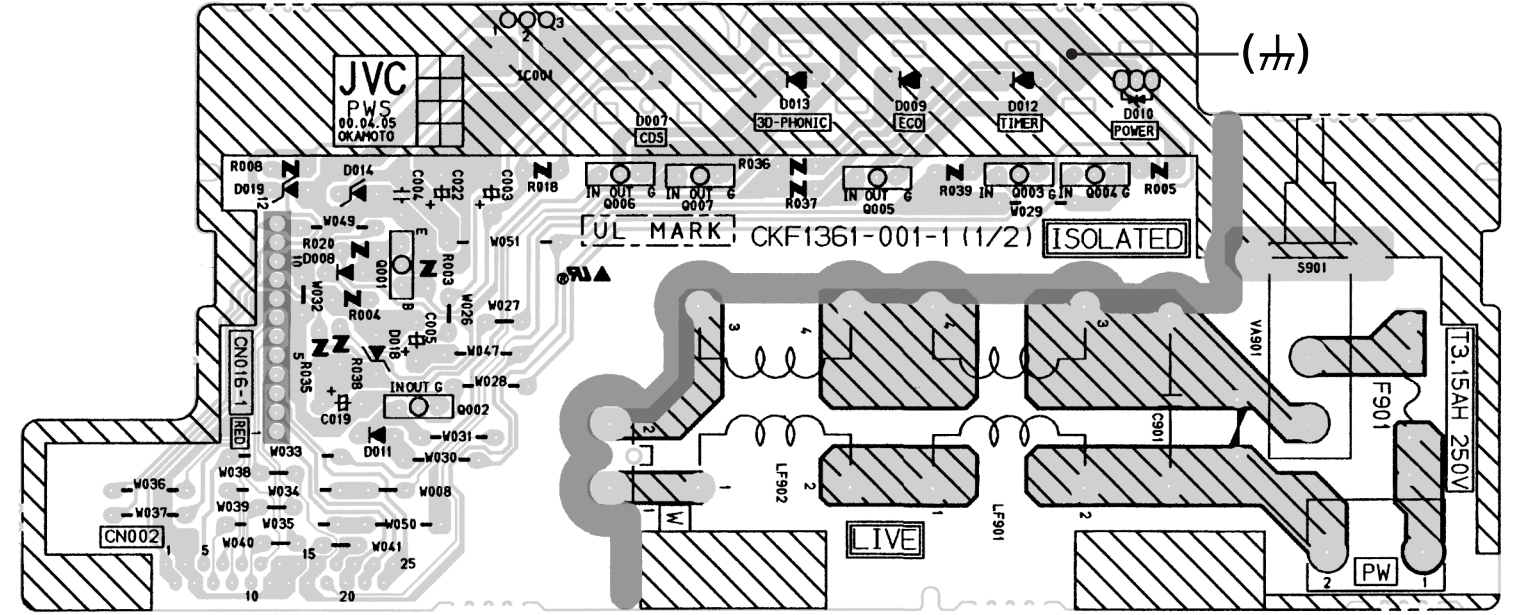
FRONT CONTROL PWB PATTERN (1/2)

↑ FRONT

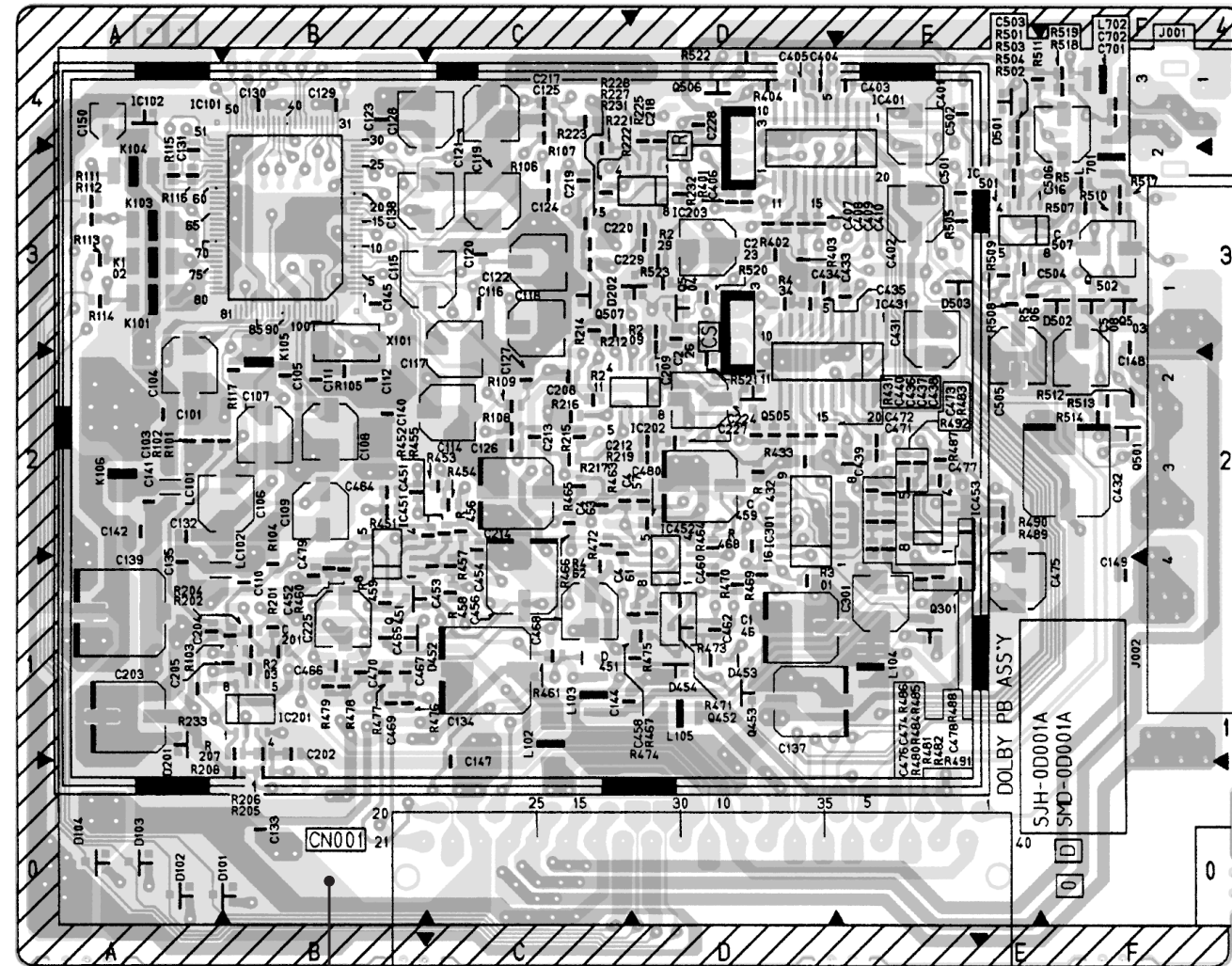


FRONT CONTROL PWB PATTERN (2/2)

↑ FRONT

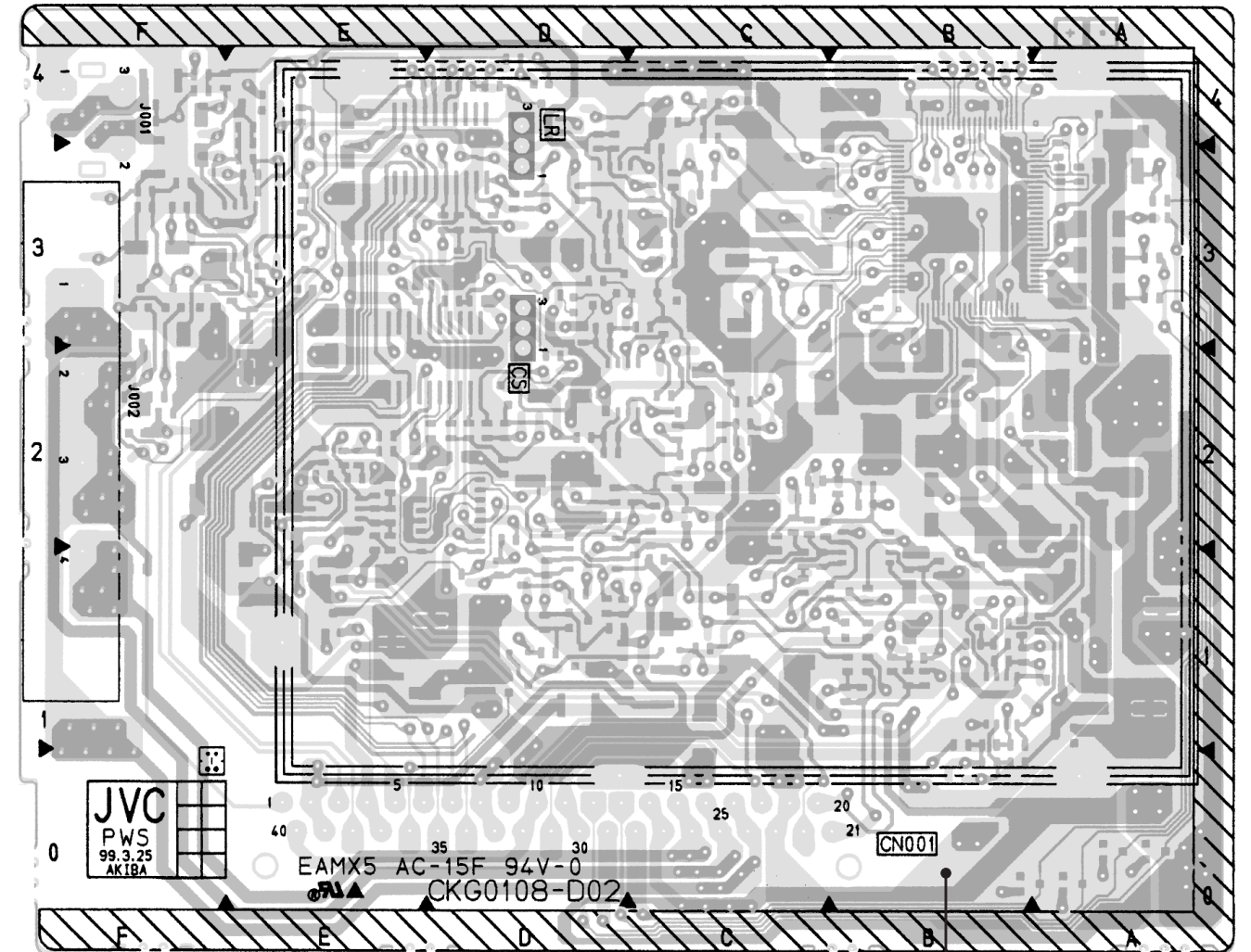


DOLBY PWB PATTERN (PARTS SIDE)



(TT)

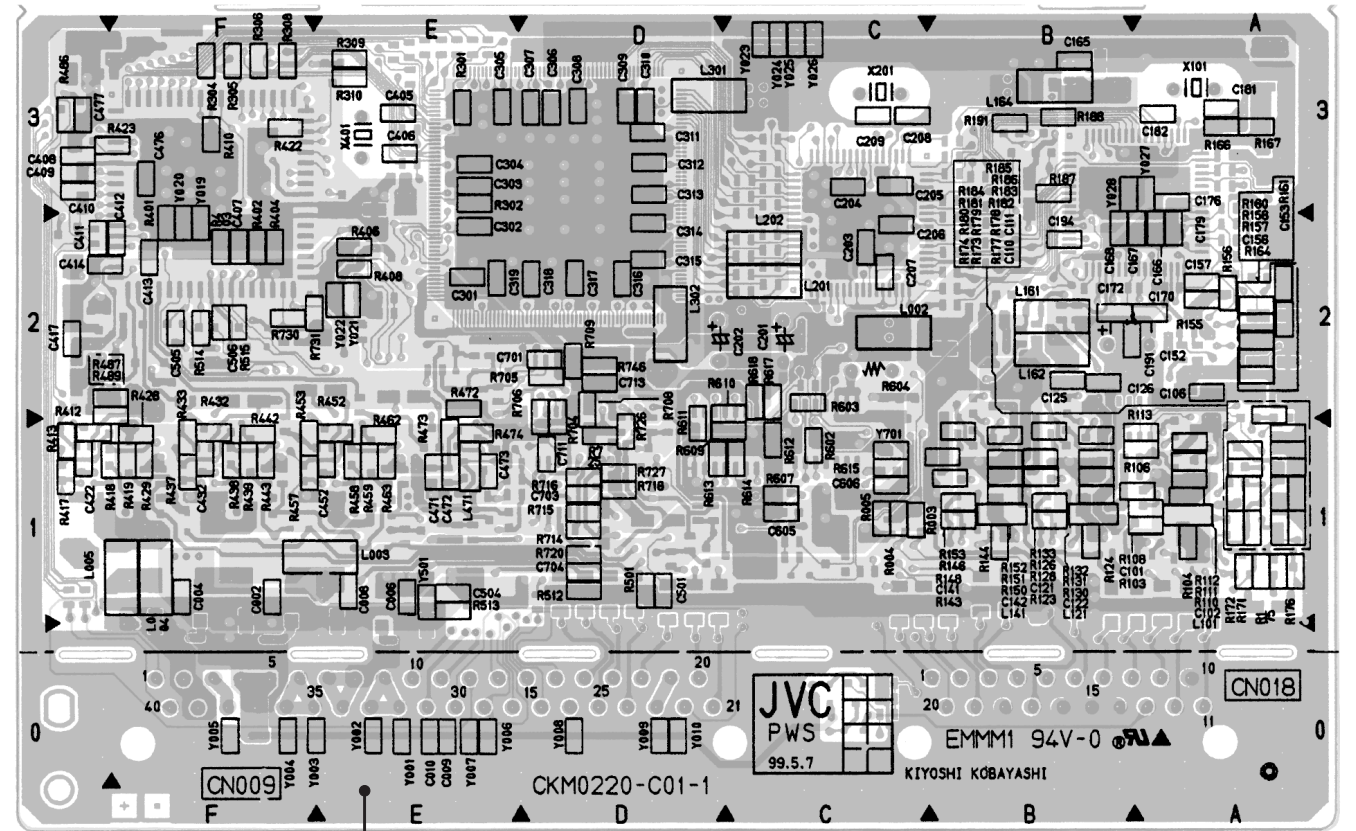
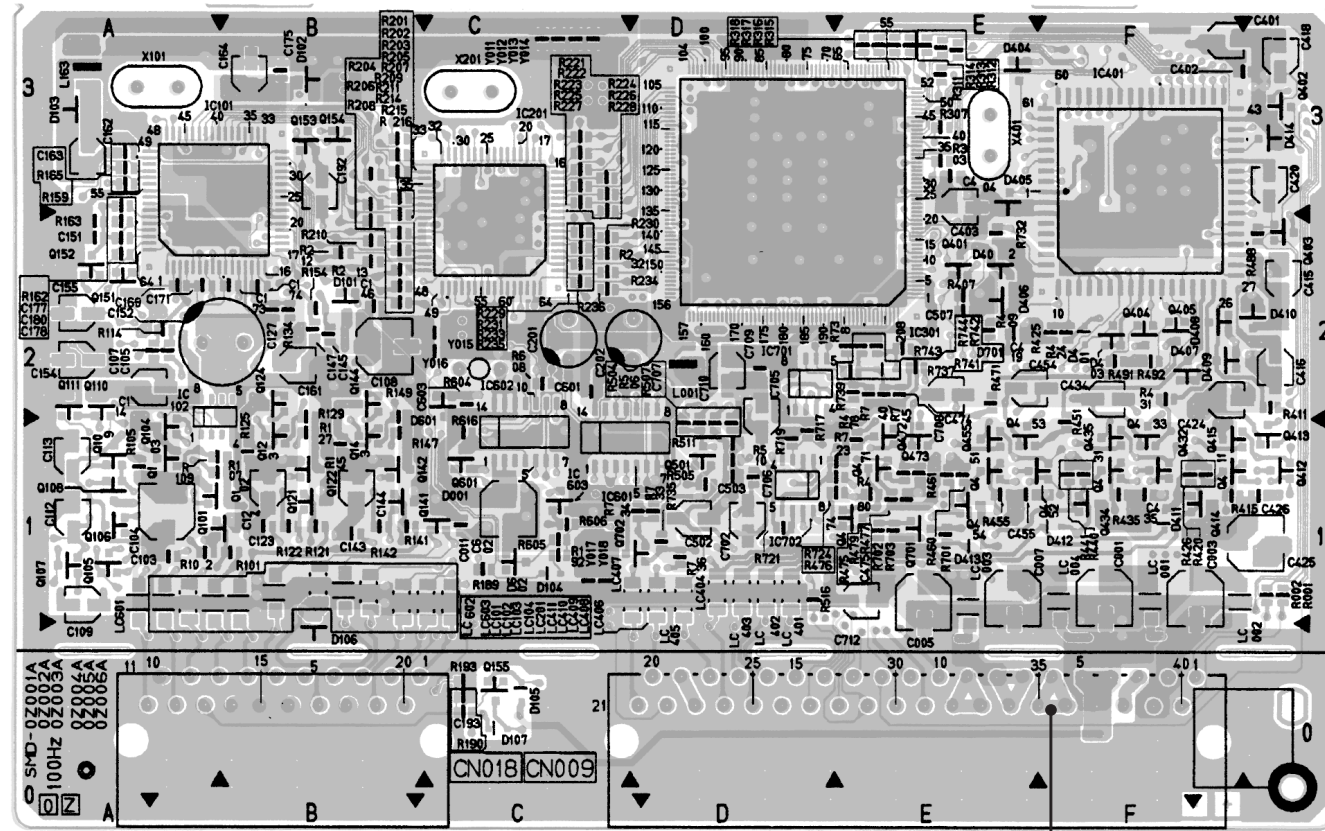
DOLBY PWB PATTERN (SOLDER SIDE)



(TT)

100Hz PWB PATTERN (PARTS SIDE)

100Hz PWB PATTERN (SOLDER SIDE)

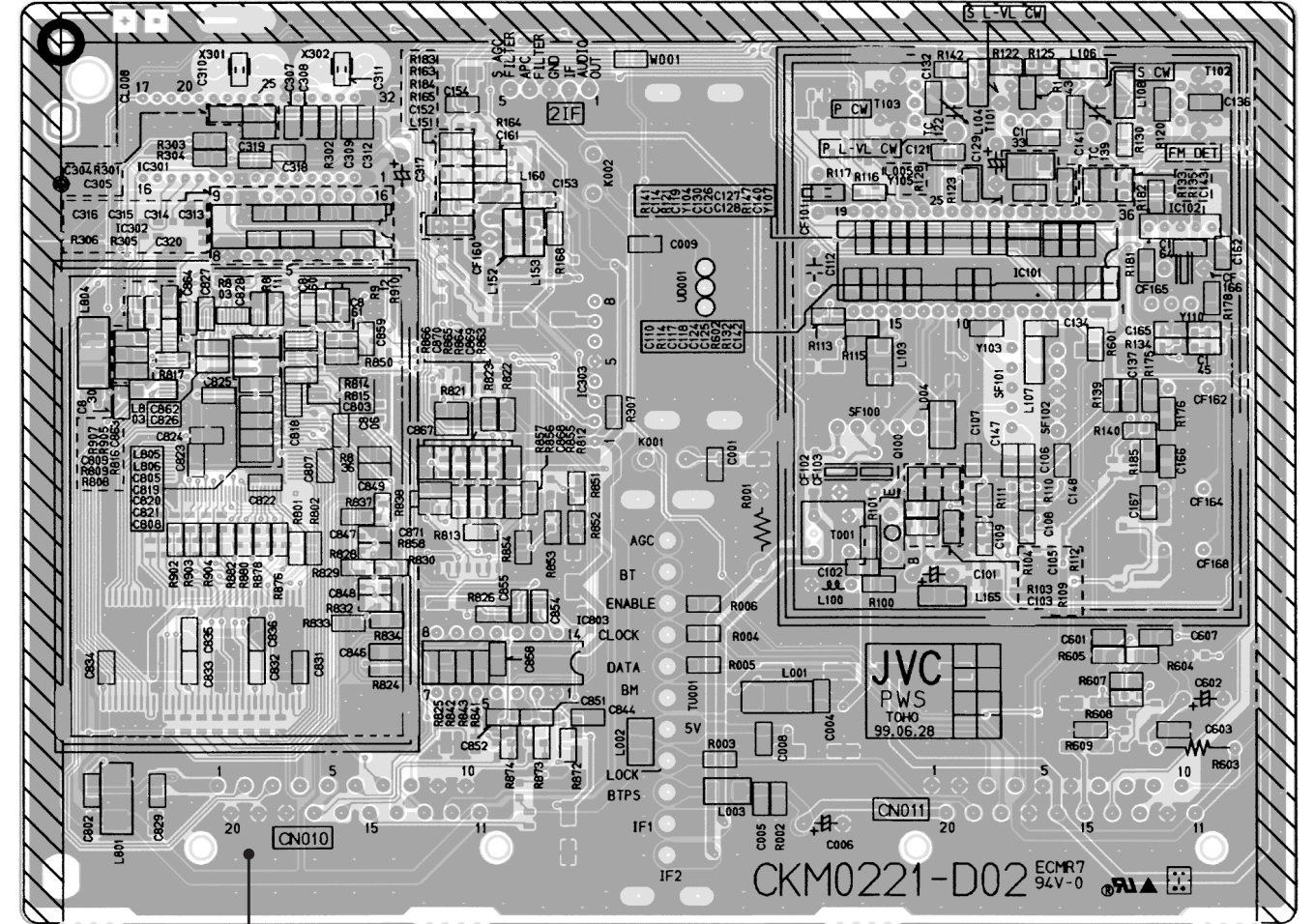
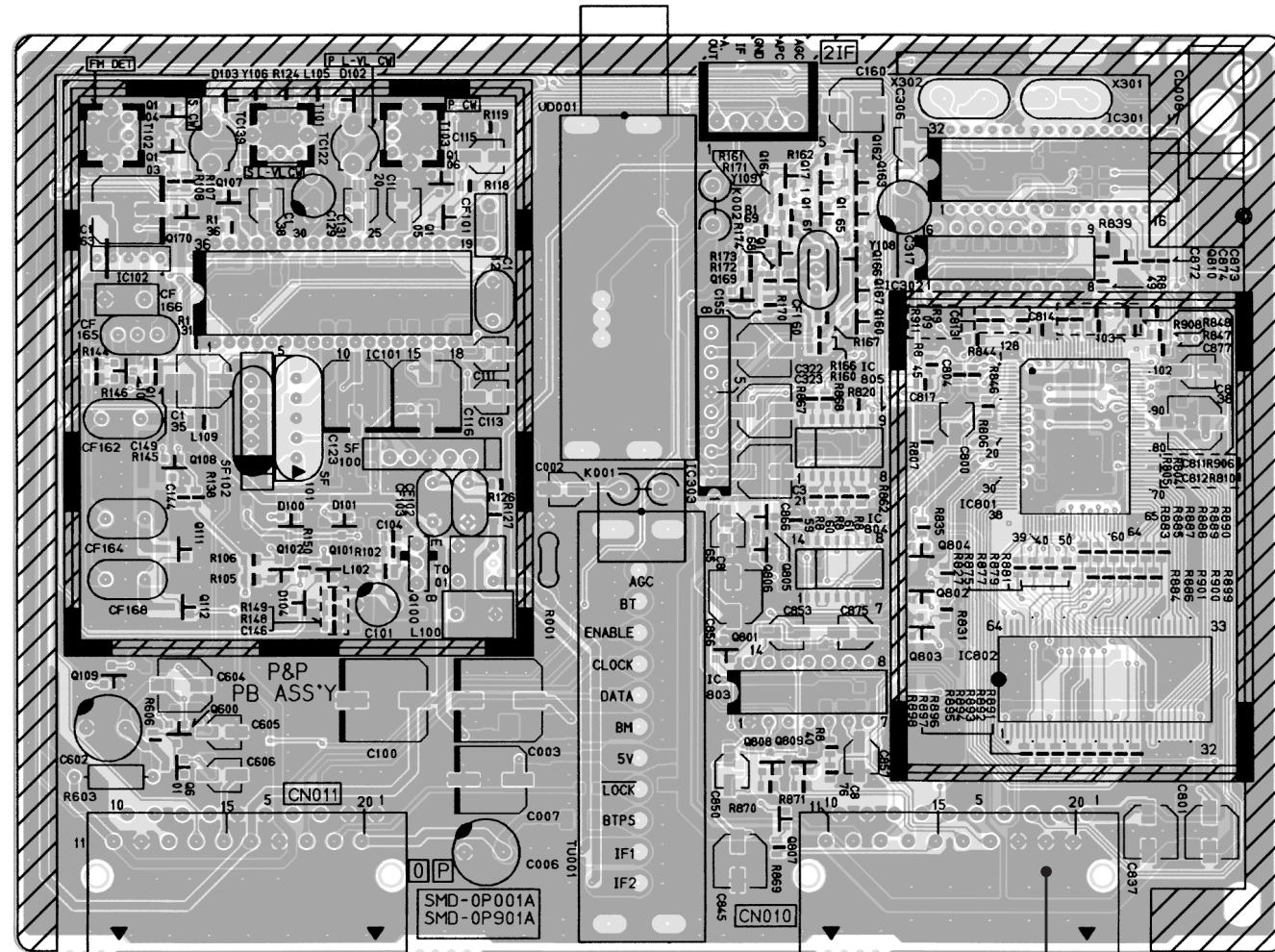


(77)

(77)

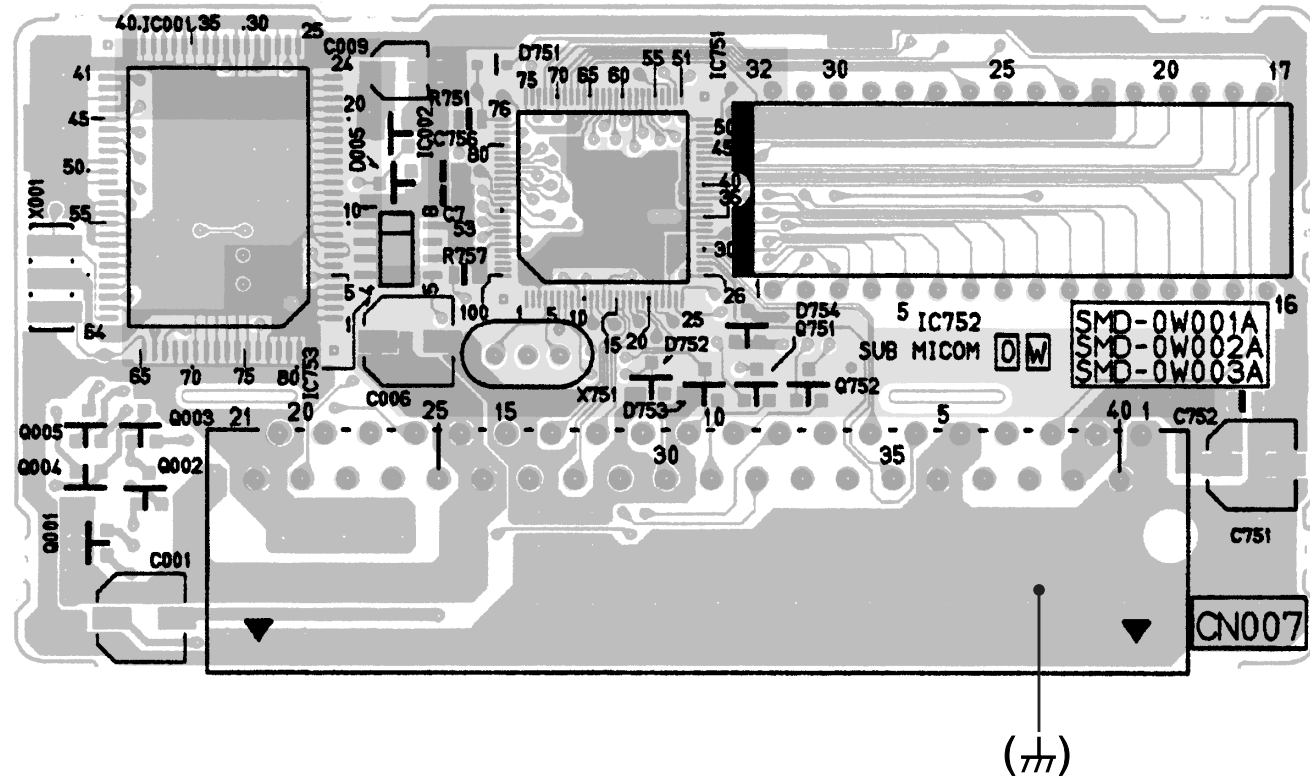
PIP PWB PATTERN (PARTS SIDE)

PIP PWB PATTERN (SOLDER SIDE)



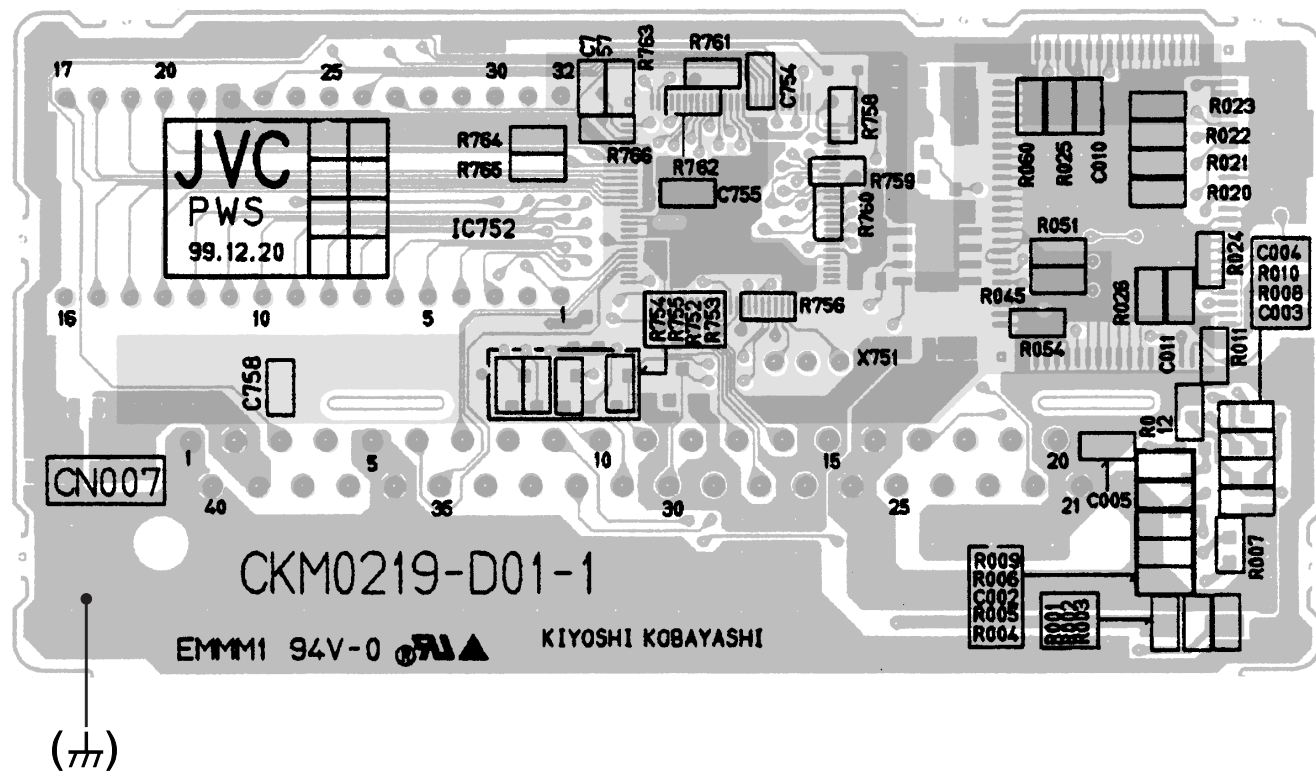
SUB MICON & AUTO PANORAMA PWB PATTERN (PARTS SIDE)

↑ TOP



SUB MICON & AUTO PANORAMA PWB PATTERN (SOLDER SIDE)

↑ TOP



AUDIO PWB PATTERN

FRONT

