

JVC

SCHEMATIC DIAGRAMS

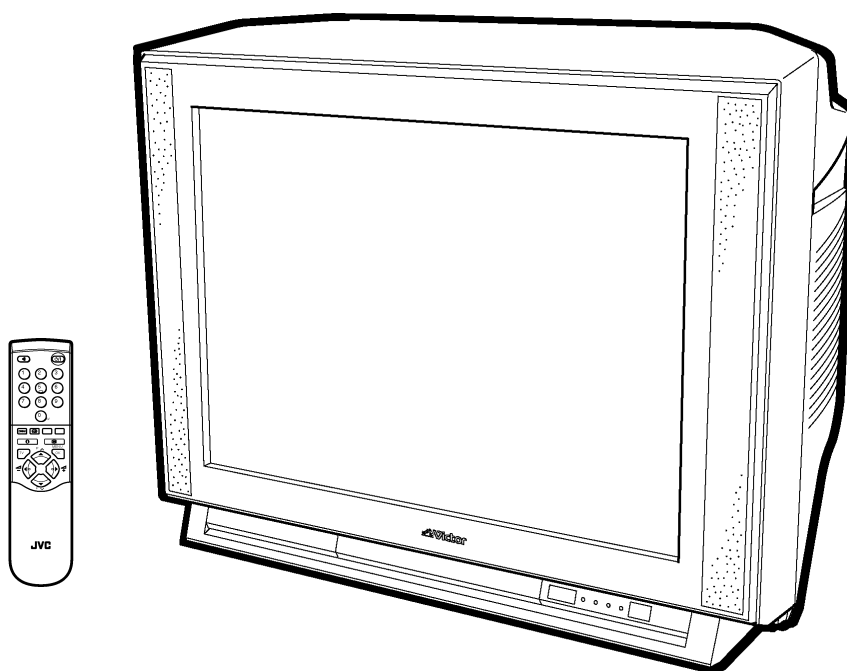
COLOUR TELEVISION

AV29A10EUS

BASIC CHASSIS

MF

CD-ROM No.SML200109



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AV SW PWB PATTERN

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 : Color 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 :1/16 [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]
 Others :DC withstand voltage [V]
 AC indicated :AC 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(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

- ⊥ :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 : (⊥) 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.

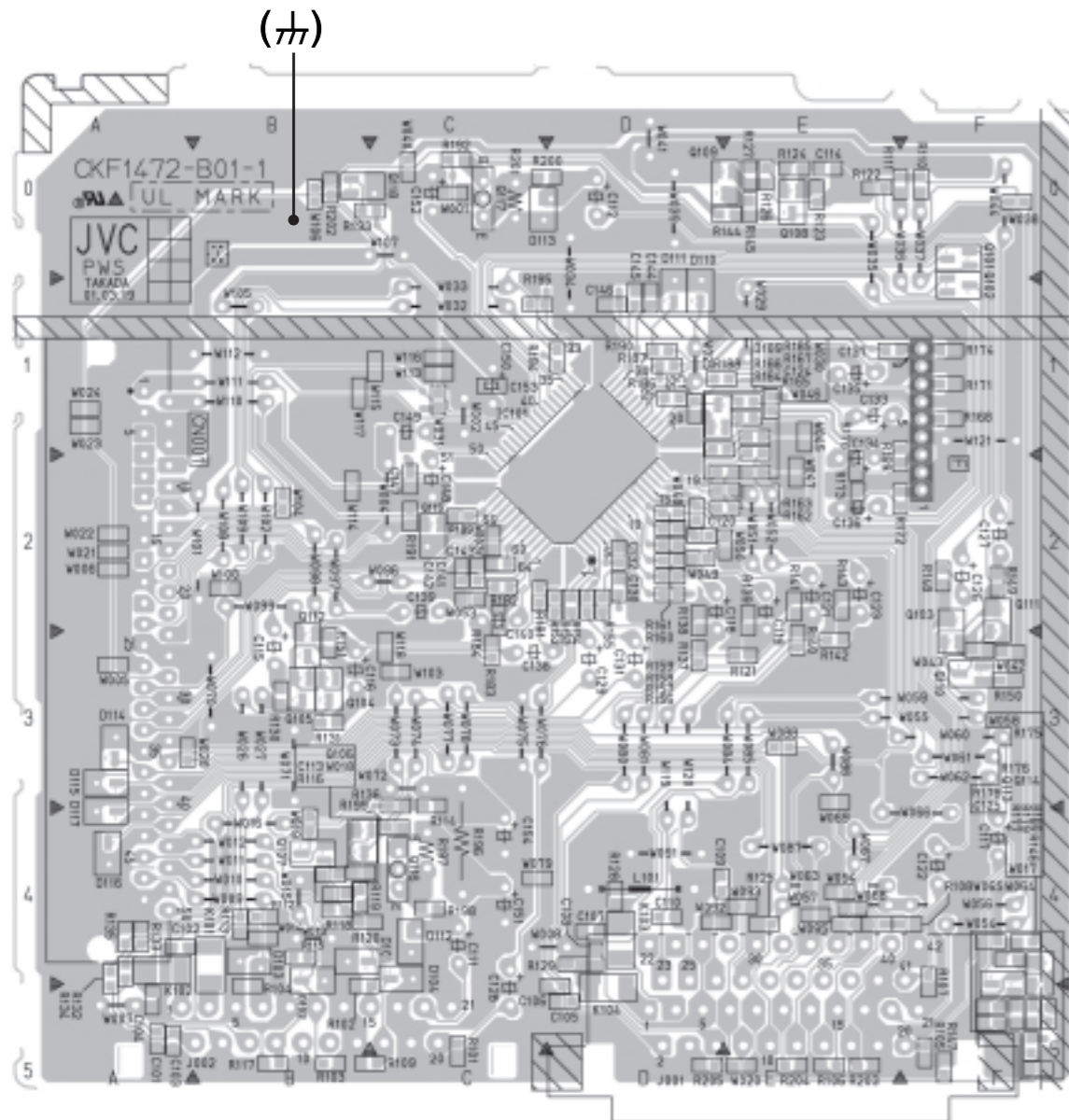
◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

◇ 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.

TOP →



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SEMICONDUCTOR SHAPES

TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR

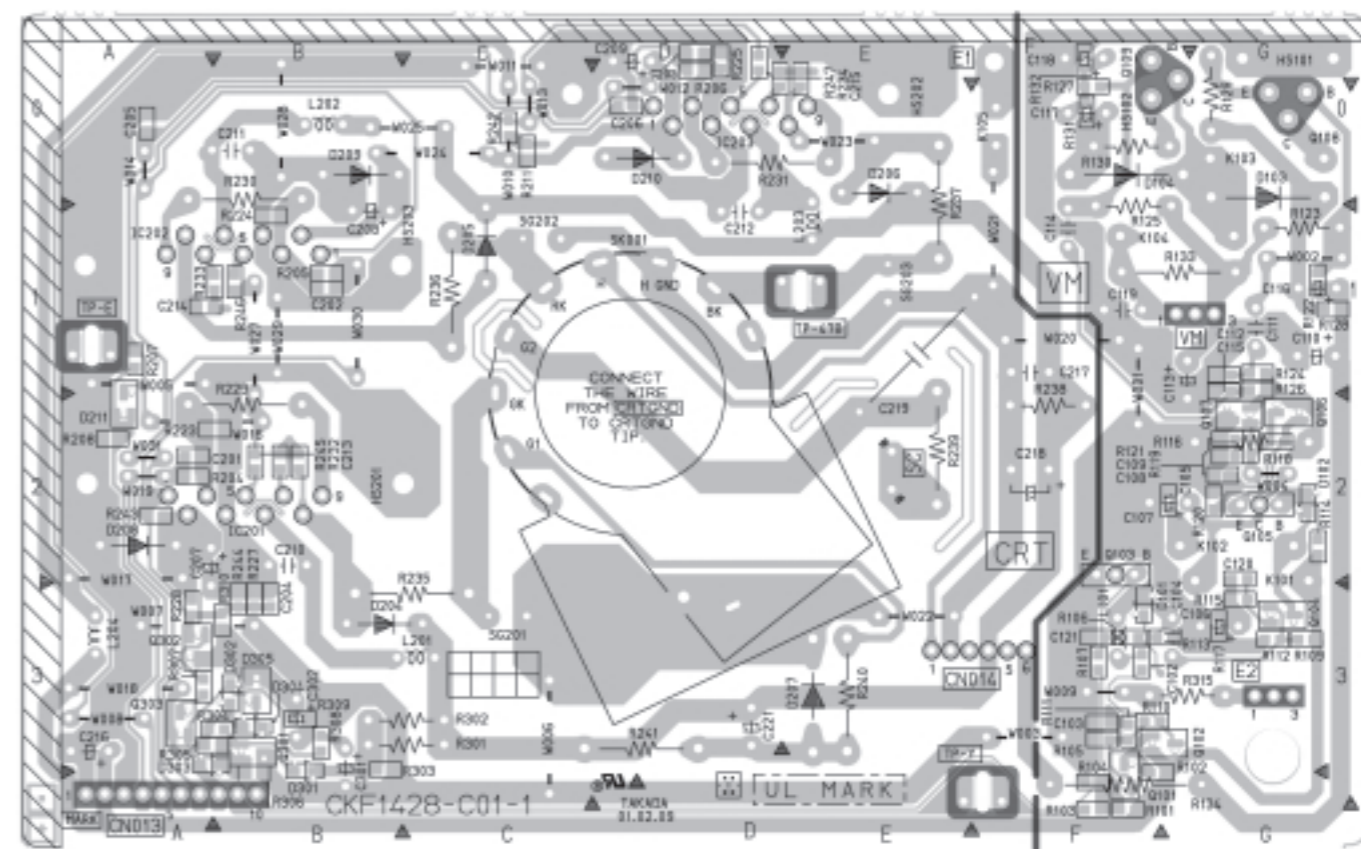
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW

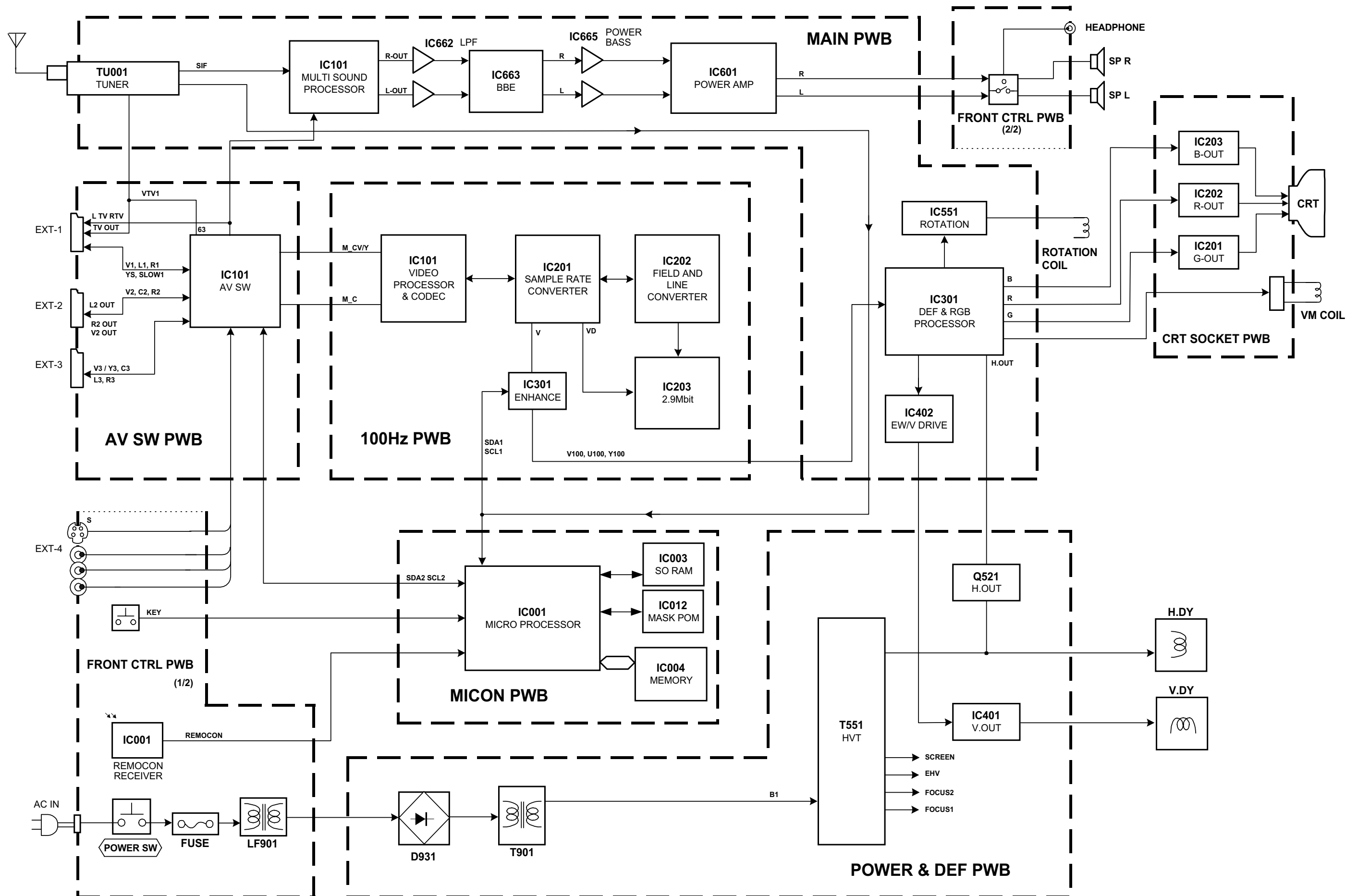
CHIP IC

TOP VIEW	

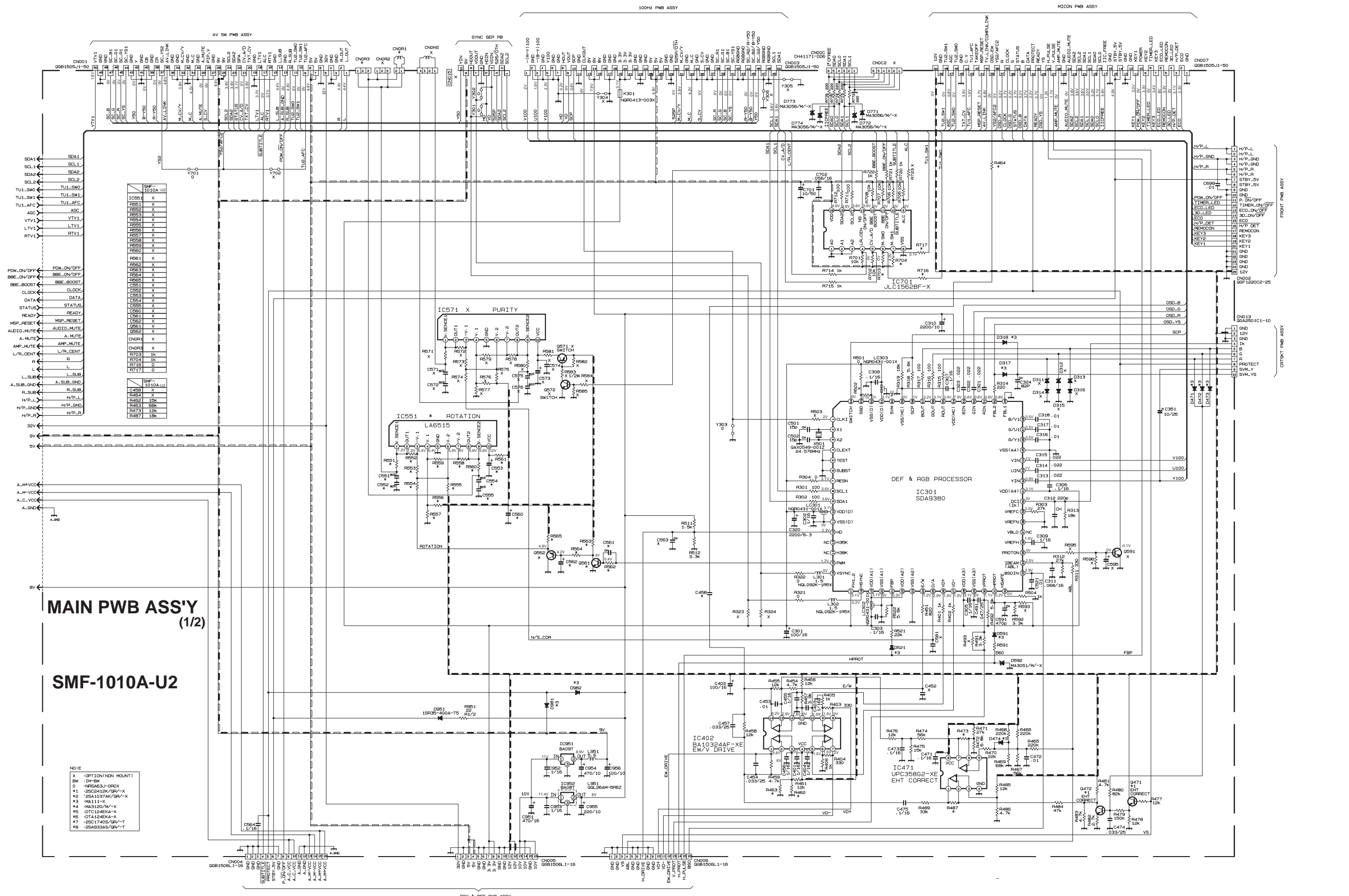
CRT SOCKET PWB PATTERN



BLOCK DIAGRAM



CIRCUIT DIAGRAMS MAIN PWB CIRCUIT DIAGRAM



SMF-1010A-U2	
IC351	X
R551	X
R552	X
R553	X
R554	X
R555	X
R556	X
R557	X
R558	X
R559	X
R560	X
R561	X
R562	X
R563	X
R564	X
R565	X
C551	X
C552	X
C553	X
C554	X
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C556	X
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C1000	X

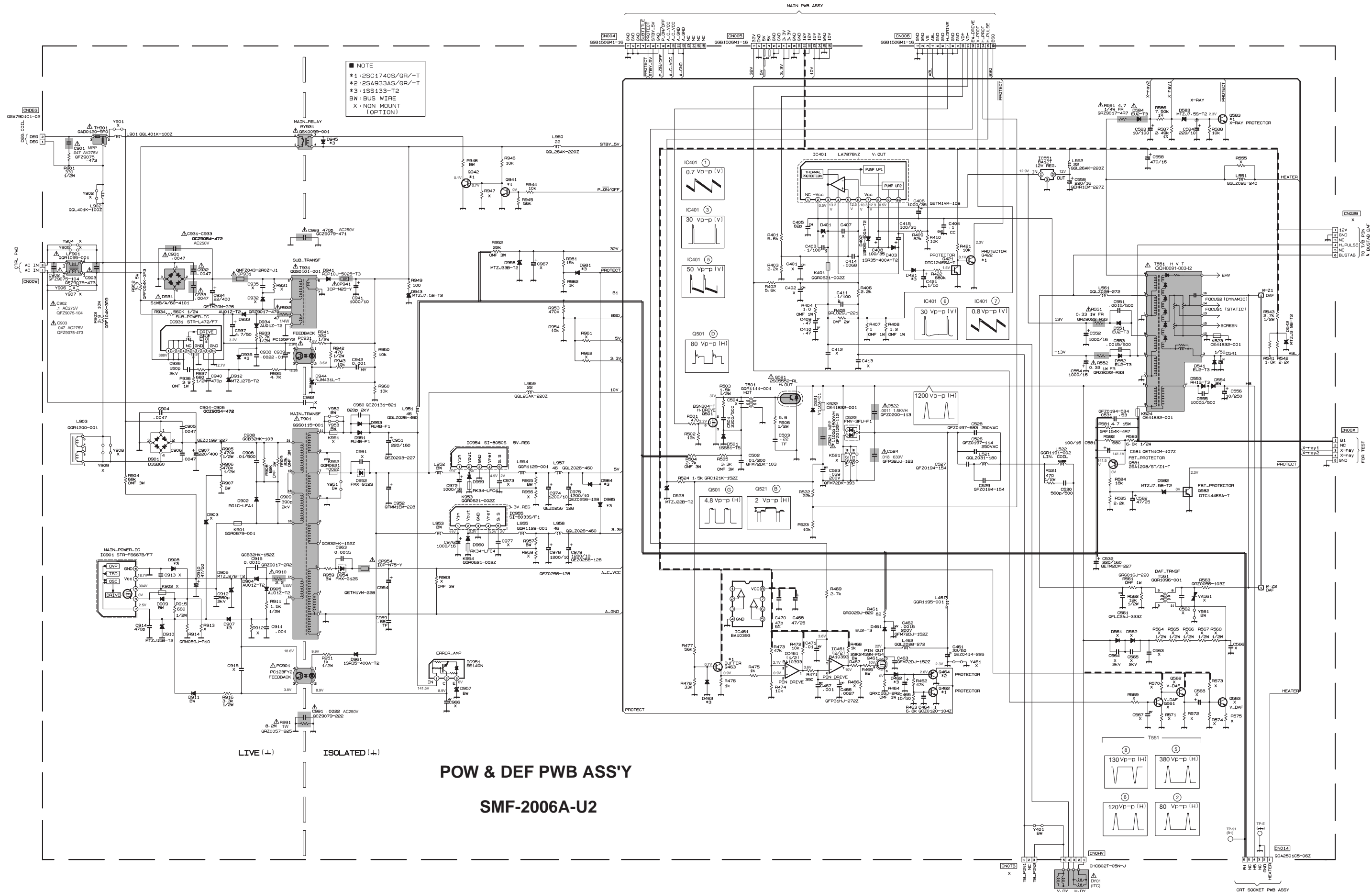
MAIN PWB ASSY (1/2)

SMF-1010A-U2

NOTE

X	OPTION (NON MOUNT)
BN	1M-SM
0	NR8A63J-DROX
#1	2SC2419K/9V-T
#2	2SA1037AK/9V-T
#3	MA111-X
#4	MA3120/W-X
#5	1DT124EKA-X
#6	1DT124EKA-X
#7	2SC1740S/9V-T
#8	1S8A93AS/9V-T

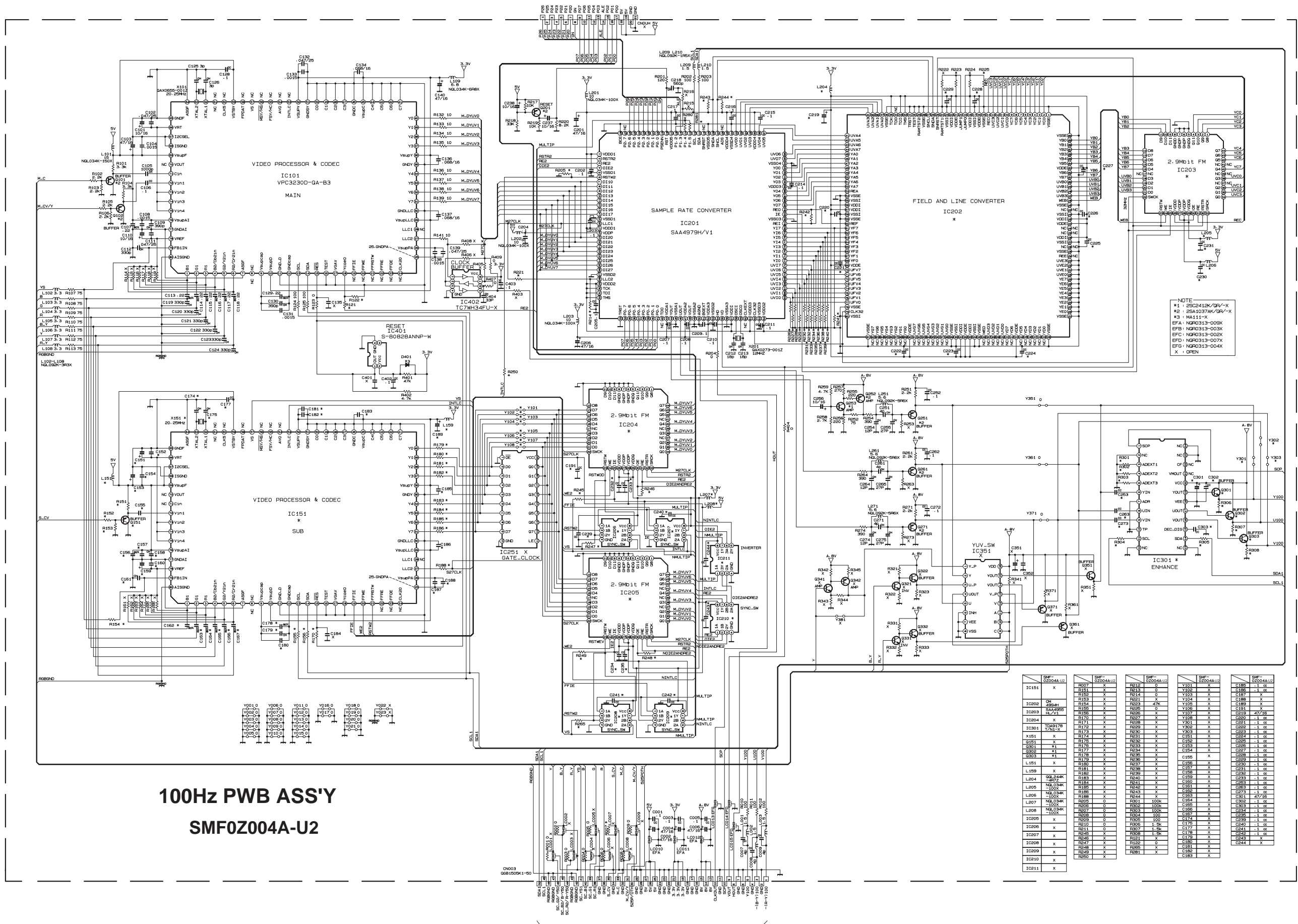
POWER & DEF PWB CIRCUIT DIAGRAM



NOTE
 *1: 2SC1740S/QR/-T
 *2: 2SA933AS/QR/-T
 *3: 1SS133-T2
 BW: BUS WIRE
 X: NON MOUNT (OPTION)

POW & DEF PWB ASS'Y
 SMF-2006A-U2

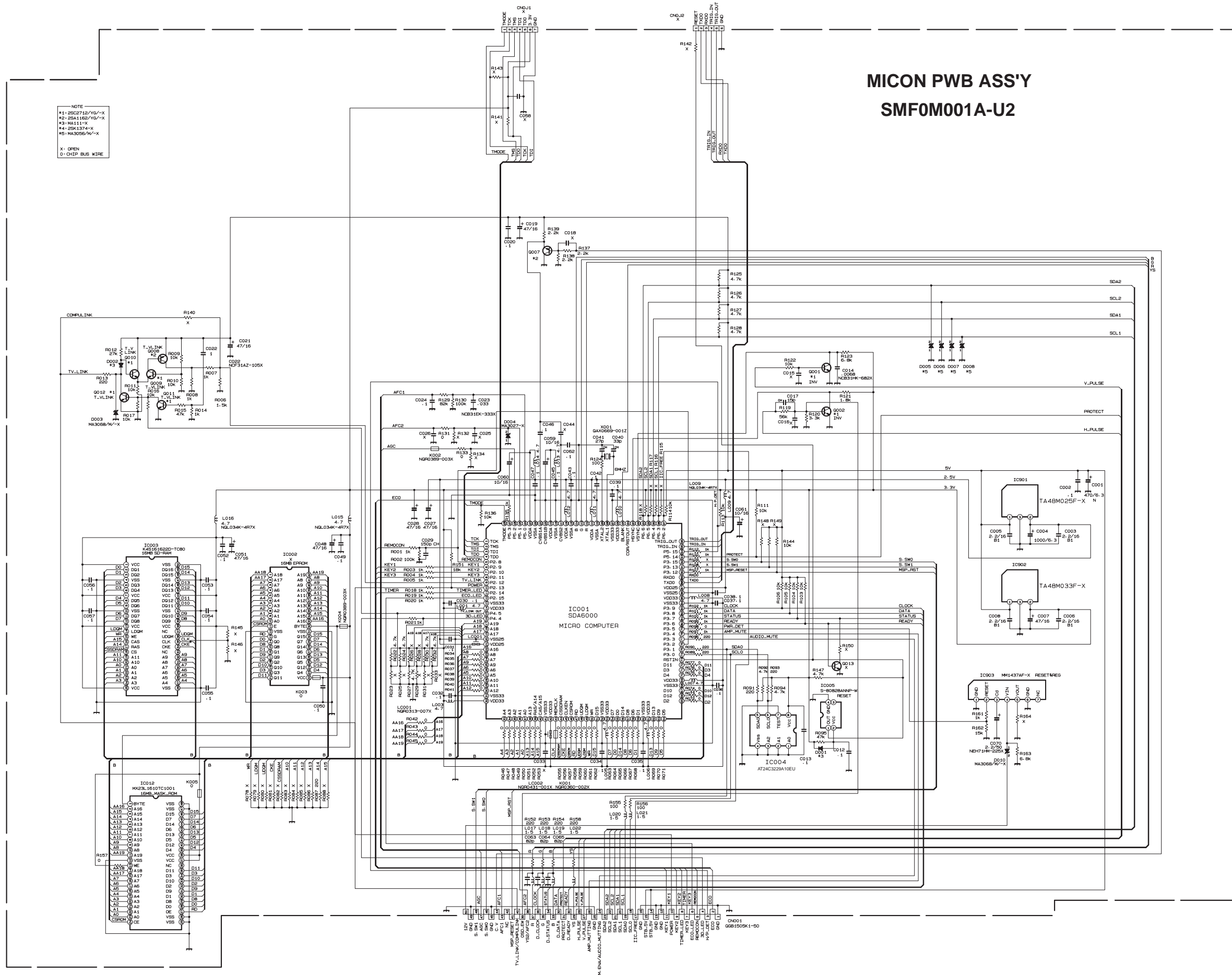
100Hz PWB CIRCUIT DIAGRAM



MICON PWB CIRCUIT DIAGRAM

MICON PWB ASS'Y
SMF0M001A-U2

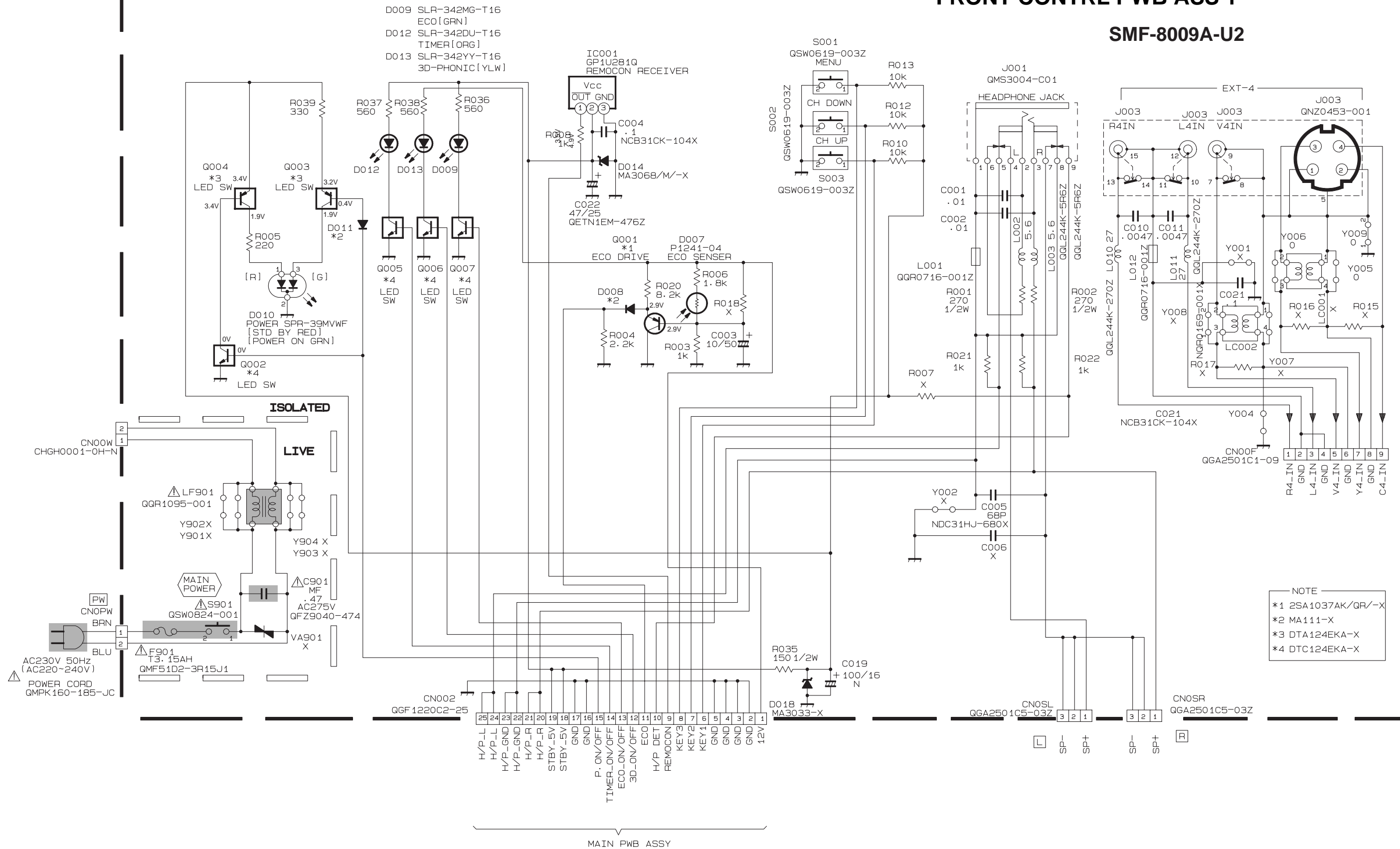
NOTE
 #1: 25C2718/V16~X
 #2: 25A1185/V16~X
 #3: MA111~X
 #4: 25K1374~X
 #5: MA3068/V~X
 X: OPEN
 O: CHIP BUS WIRE



FRONT CONTROL CIRCUIT DIAGRAM

FRONT CONTRL PWB ASS'Y

SMF-8009A-U2

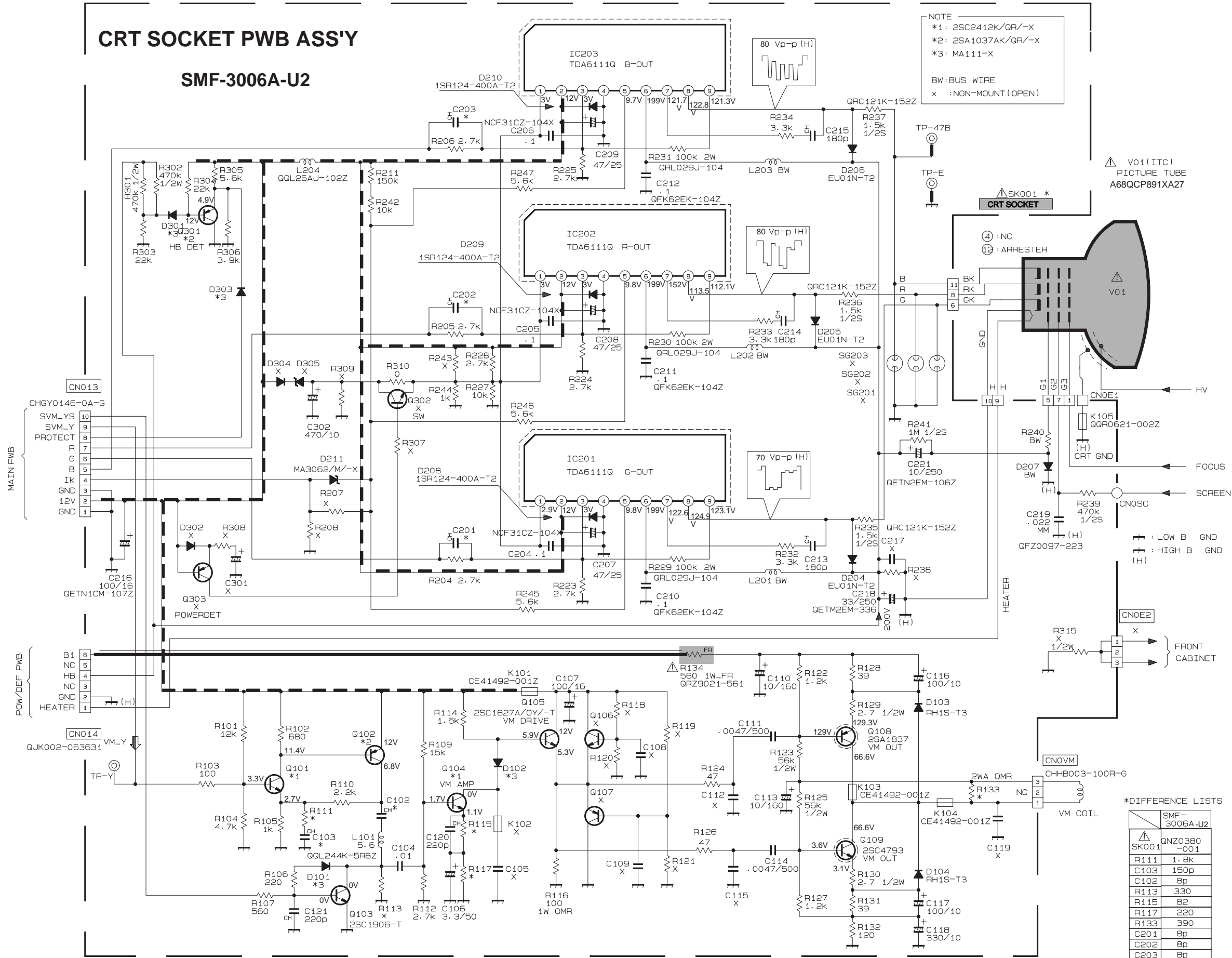


CRT SOCKET PWB CIRCUIT DIAGRAM

CRT SOCKET PWB ASS'Y

SMF-3006A-U2

NOTE
 *1: 2SC2412K/QR/-X
 *2: 2SA1037AK/QR/-X
 *3: MA111-X
 BW: BUS WIRE
 X : NON-MOUNT (OPEN)

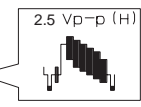
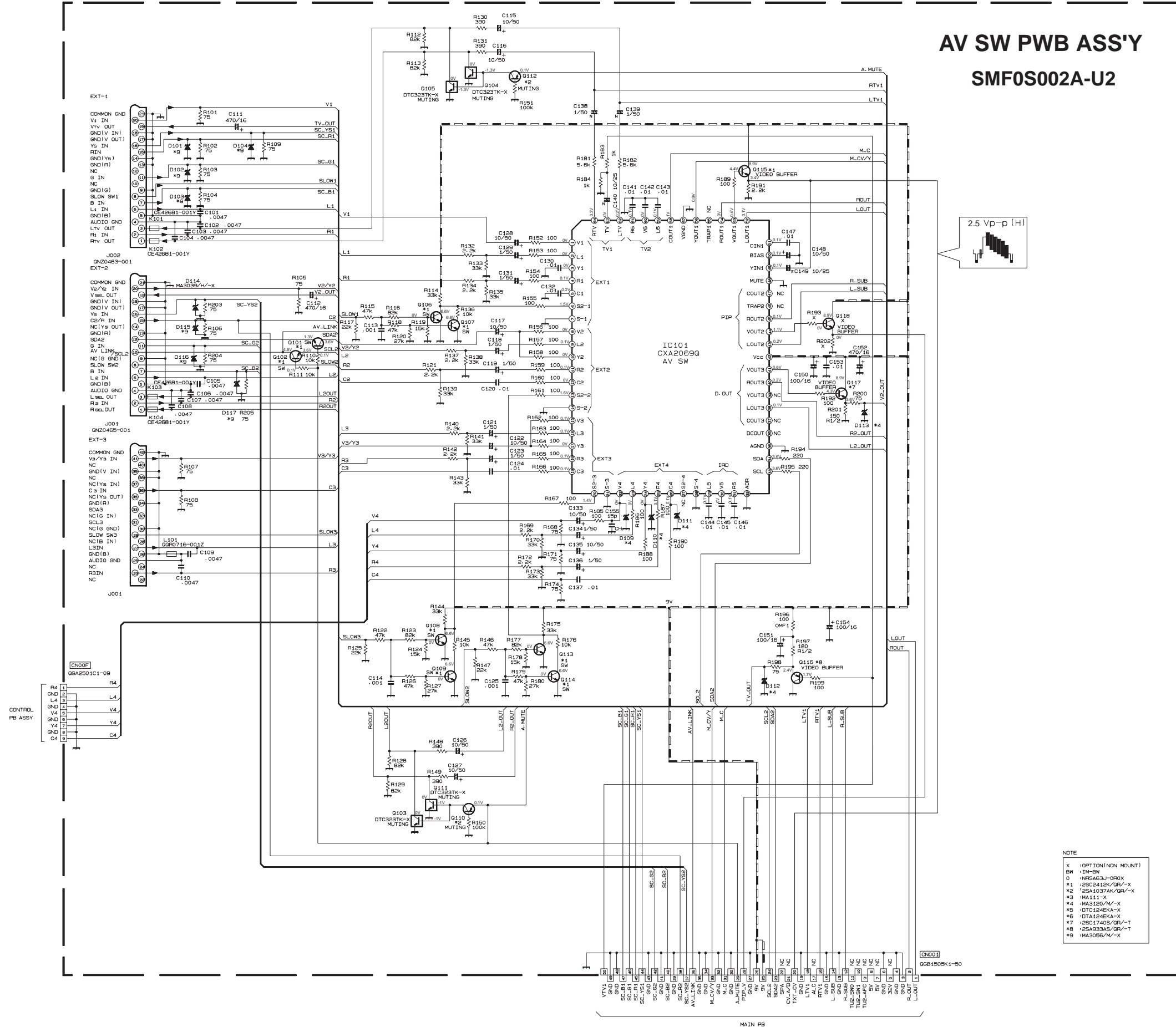


*DIFFERENCE LISTS

SMF-3006A-U2	QNZ0380-001
SK001	QNZ0380-001
R111	1.8k
C103	150p
C102	8p
R113	330
R115	82
R117	220
R133	390
C201	8p
C202	8p
C203	8p

AV SW PWB CIRCUIT DIAGRAM

AV SW PWB ASS'Y
SMF0S002A-U2

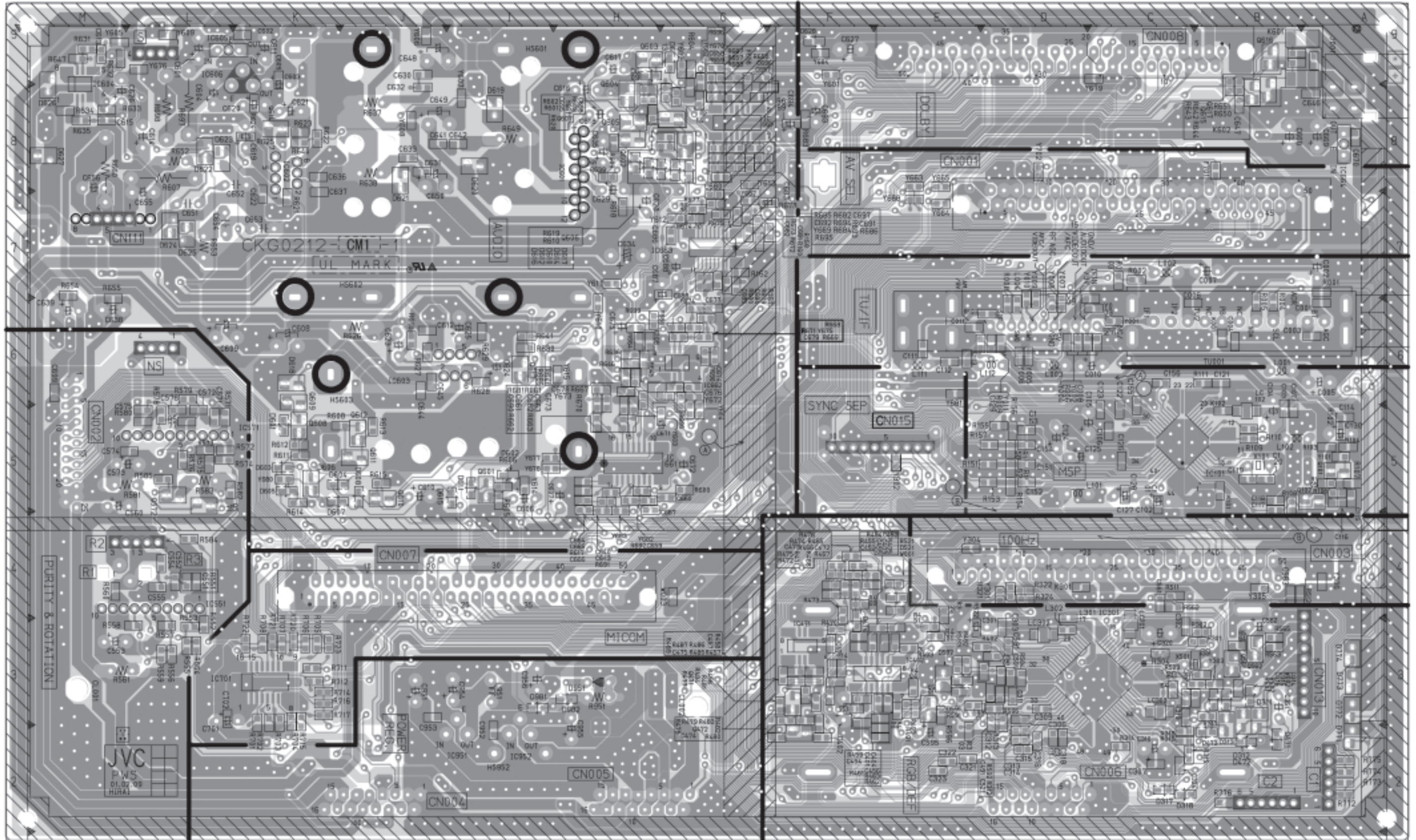


NOTE

X	(OPTION (NON MOUNT))
BW	13M-BW
0	1NRS463J-OROX
#1	2SC2412K/GR/-X
#2	2SA1037AK/GR/-X
#3	MA4111-X
#4	MA3120/M/-X
#5	DTC124EKA-X
#6	DTA124EKA-X
#7	2SC1740S/GR/-T
#8	2SA933AS/GR/-T
#9	MA3056/M/-X

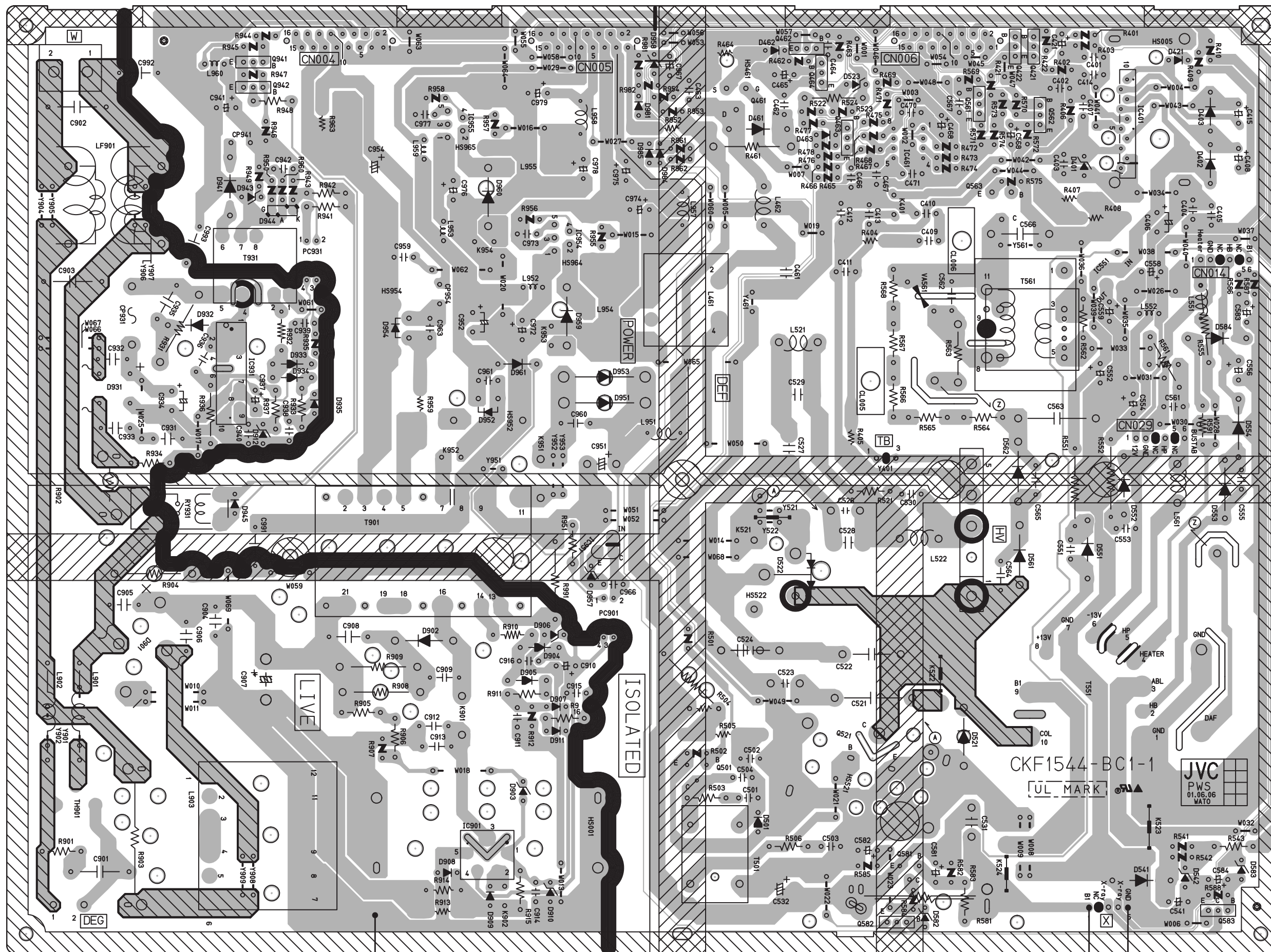
PATTERN DIAGRAM MAIN PWB PATTERN

← FRONT



POWER & DEF PWB PATTERN

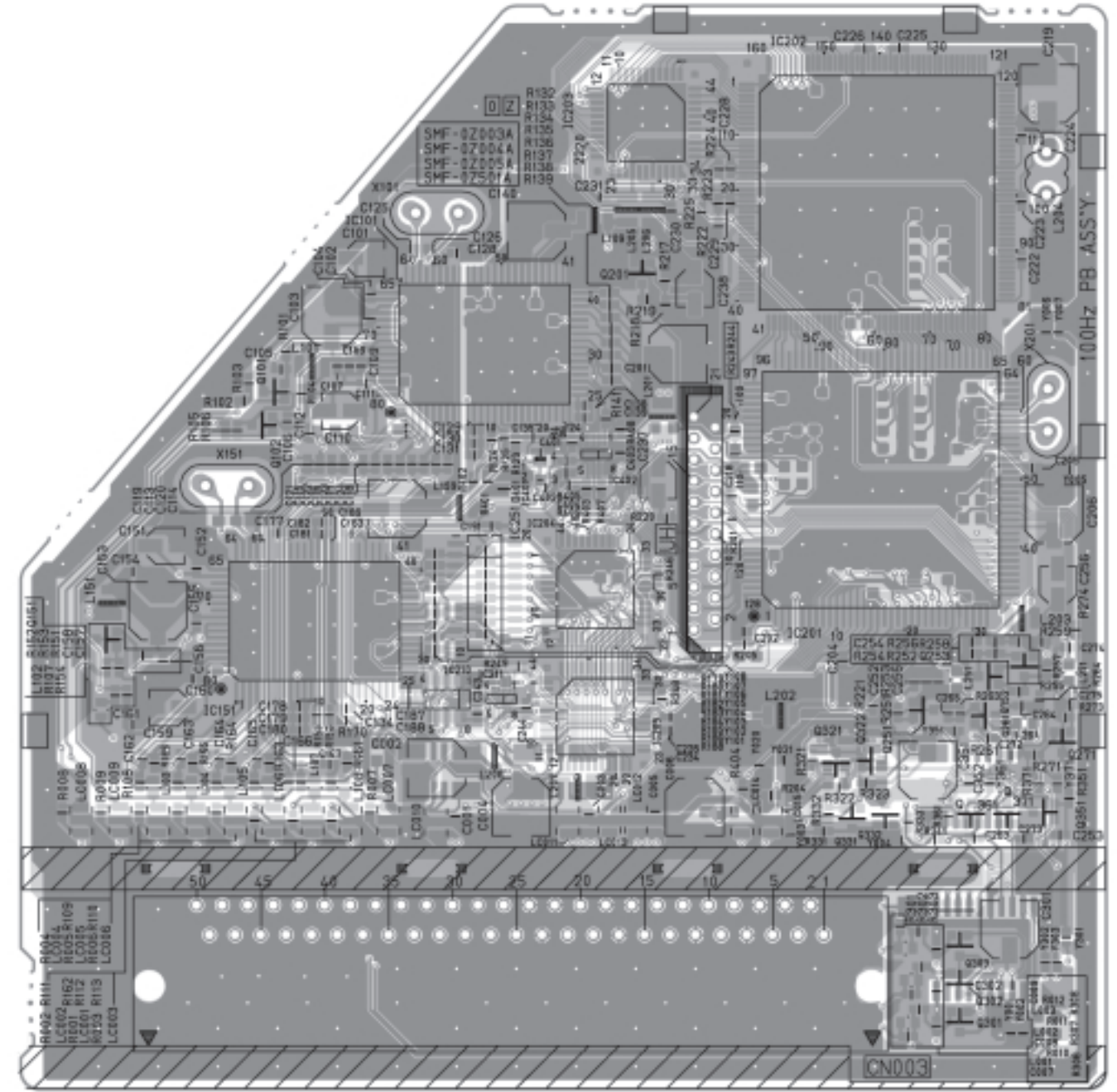
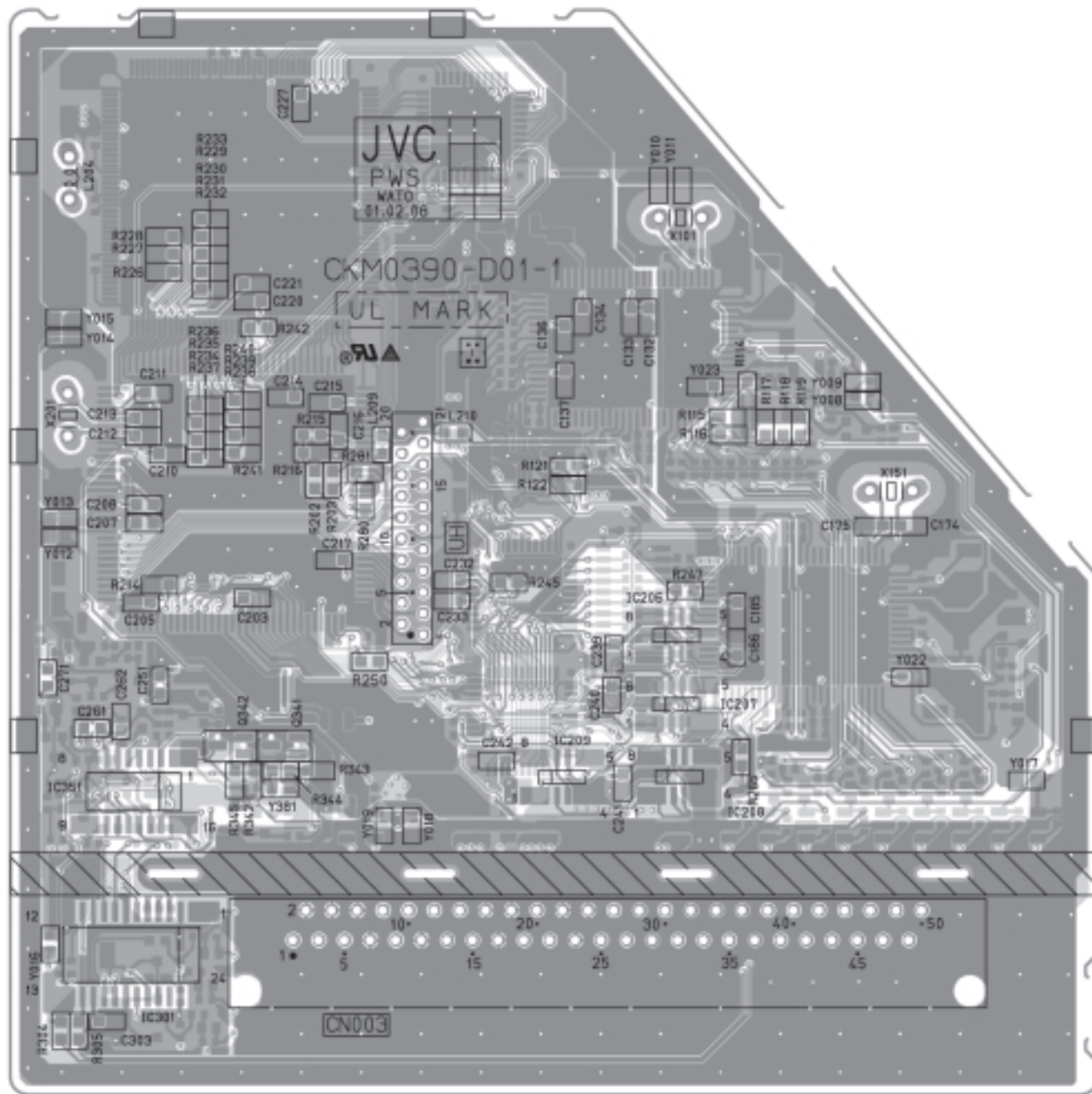
FRONT



CKF1544-BC1-1
 UL MARK
 JVC
 PWS
 01.06.06
 WATO

100Hz PWB PATTERN (SOLDER SIDE)

100Hz PWB PATTERN (PARTS SIDE)

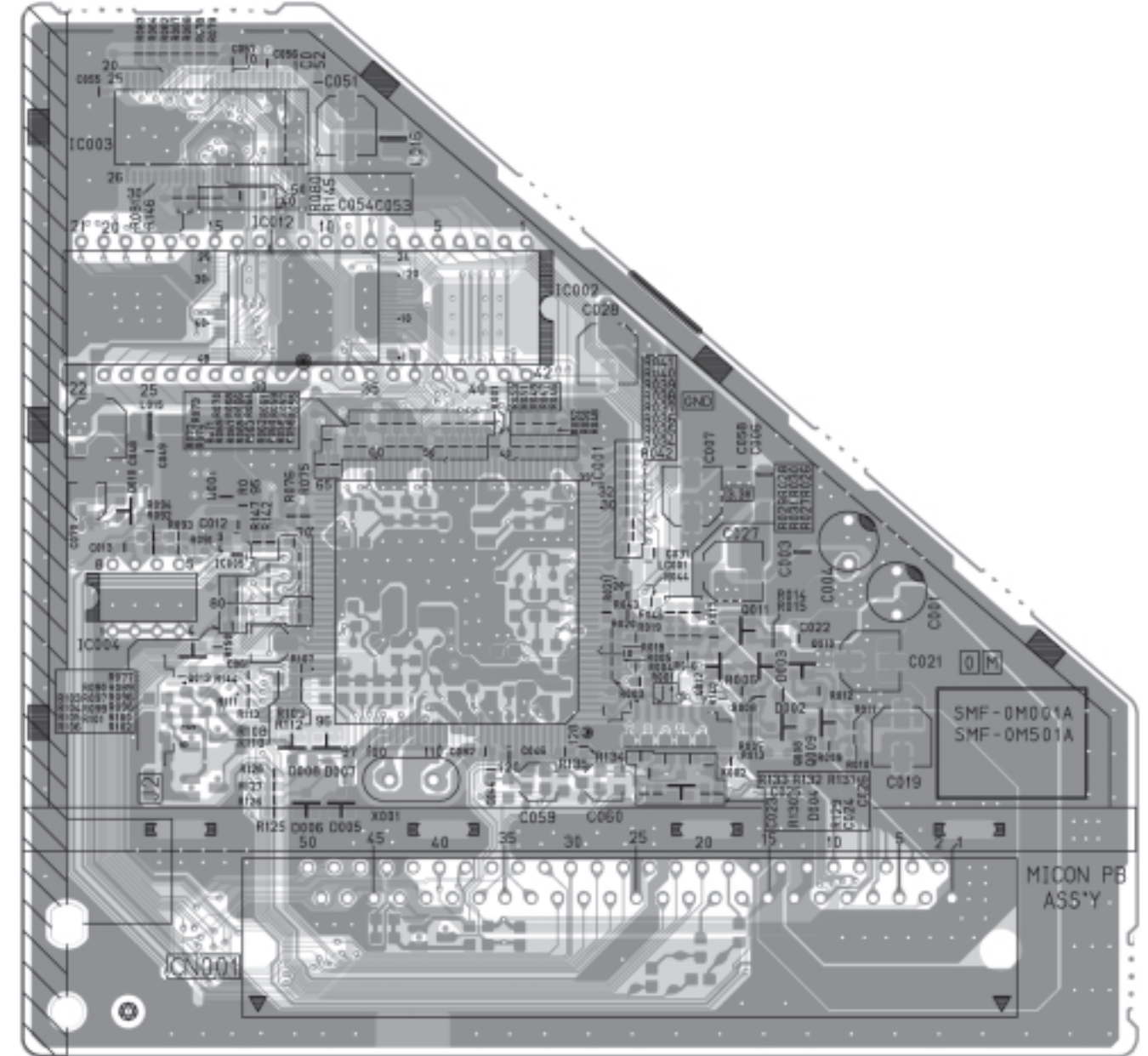
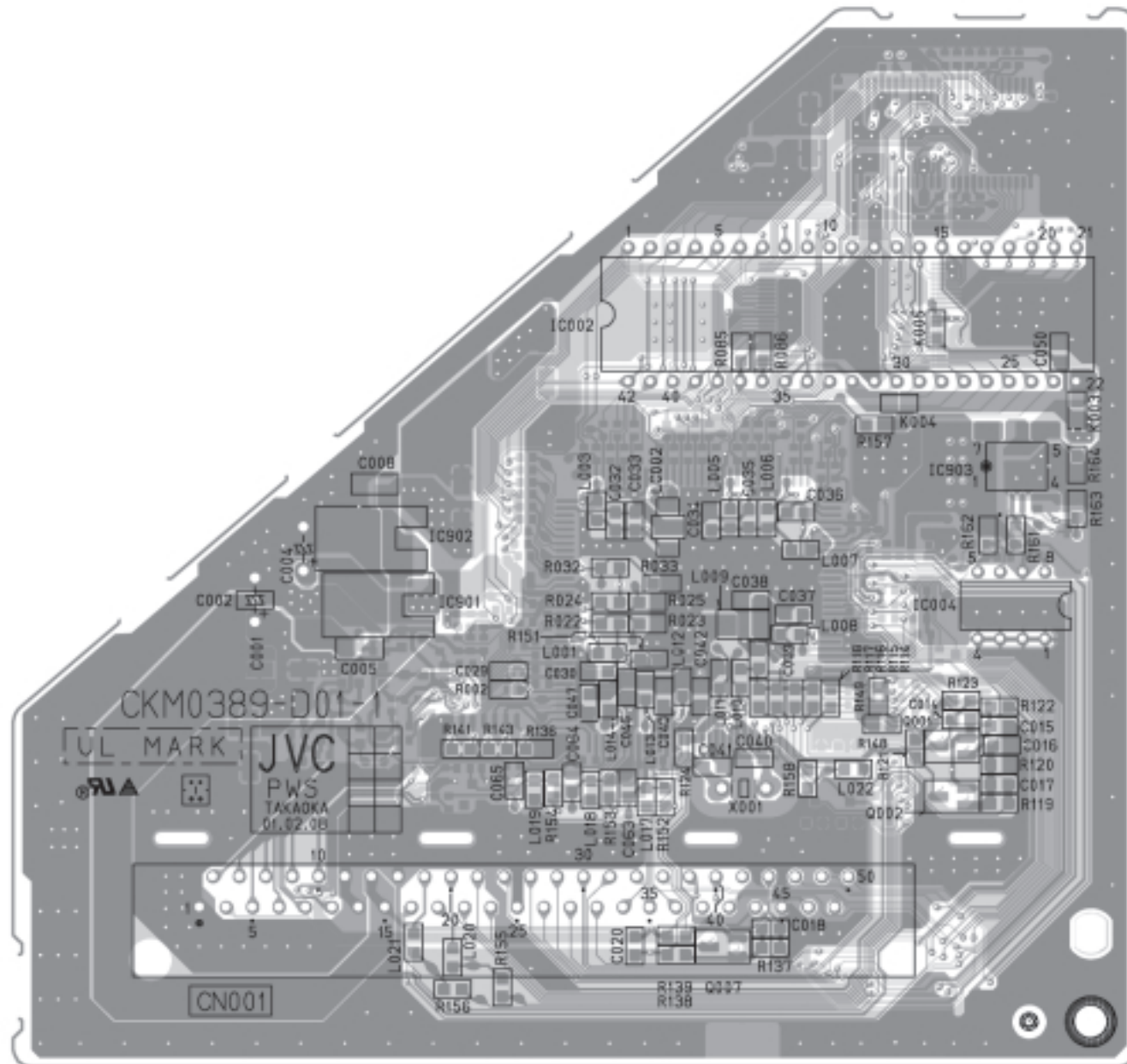


MICON PWB PATTERN (SOLDER SIDE)

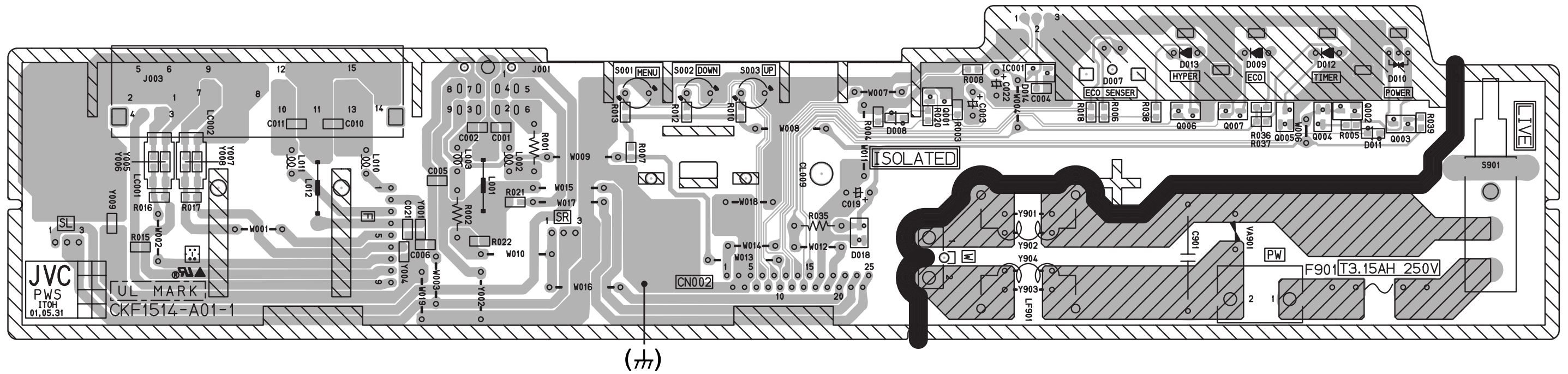
MICON PWB PATTERN (PARTS SIDE)

↑ TOP

↑ TOP



FRONT CONTROL PWB PATTERN



JVC

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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