

JVC

SCHEMATIC DIAGRAMS

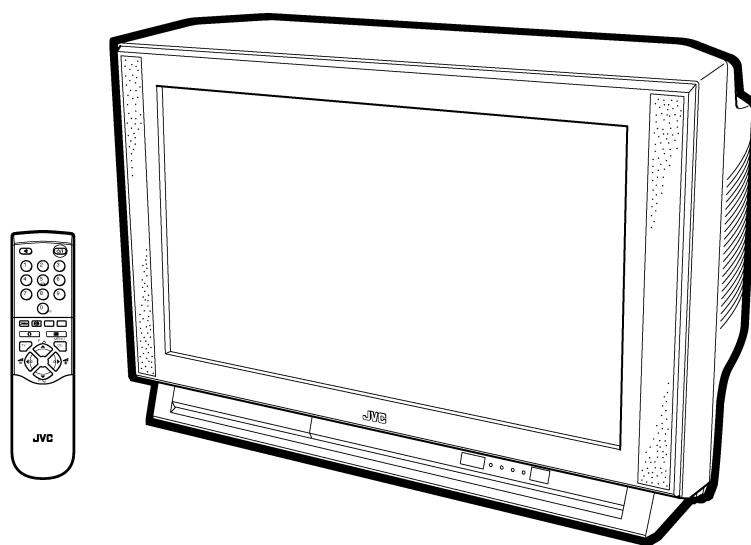
COLOUR TELEVISION

AV32H10EUS AV28H10EUS

BASIC CHASSIS

MF

CD-ROM No.SML200109



CONTENTS

■ NOTE ON USING CIRCUIT DIAGRAMS	2-1
■ SEMICONDUCTOR SHAPES	2-2
■ BLOCK DIAGRAM	2-3
■ CIRCUIT DIAGRAMS	2-5
■ PATTERN DIAGRAMS	2-21

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 :Uninflamable 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.

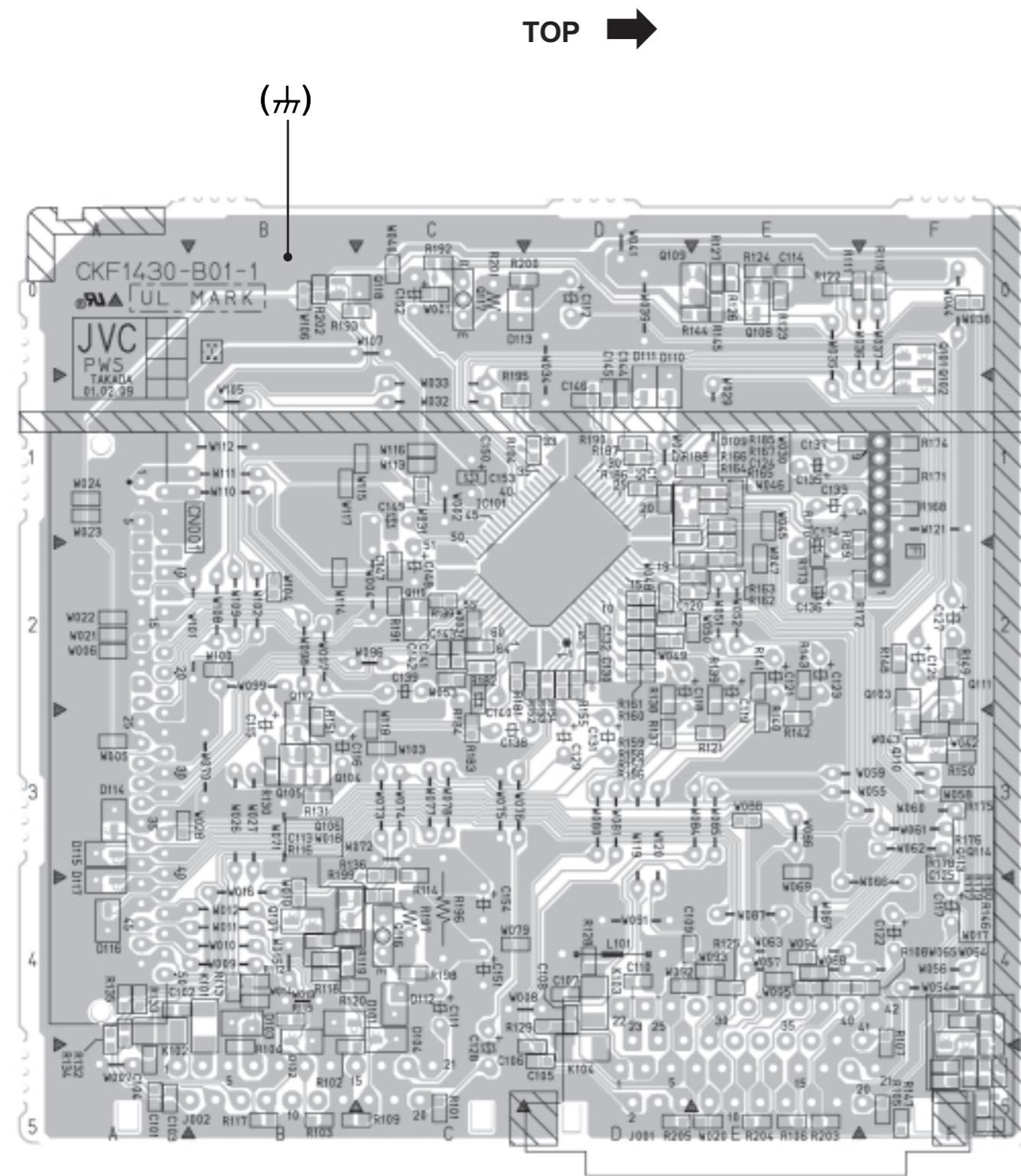
- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (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.



CONTENTS

SEMICONDUCTOR SHAPES 2-2

BLOCK DIAGRAM 2-3

CIRCUIT DIAGRAMS

MAIN PWB CIRCUIT DIAGRAM 2-5
POWER & DEF PWB CIRCUIT DIAGRAM 2-9
100Hz PWB CIRCUIT DIAGRAM 2-11
MICON PWB CIRCUIT DIAGRAM 2-13
FRONT CONTROL PWB CIRCUIT DIAGRAM 2-15
CRT SOCKET PWB CIRCUIT DIAGRAM 2-17
AV SW PWB CIRCUIT DIAGRAM 2-19

PATTERN DIAGRAMS

MAIN PWB PATTERN 2-21
POWER & DEF PWB PATTERN 2-23
100Hz PWB PATTERN 2-25
MICON PWB PATTERN 2-27
FRONT CONTROL PWB PATTERN 2-29
CRT SOCKET PWB PATTERN 2-31
AV SW PWB PATTERN 2-32

SEMICONDUCTOR SHAPES

TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR

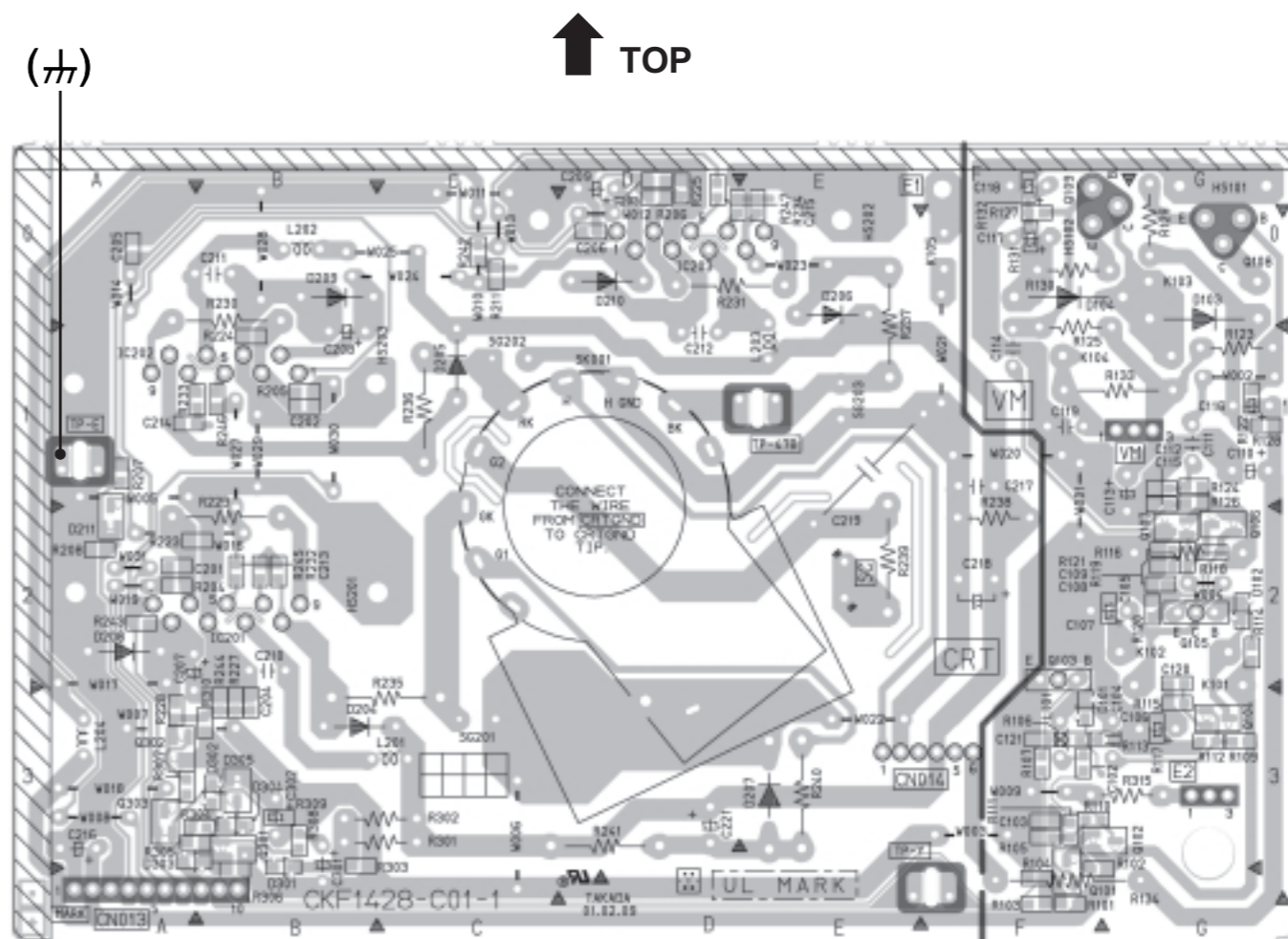
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW

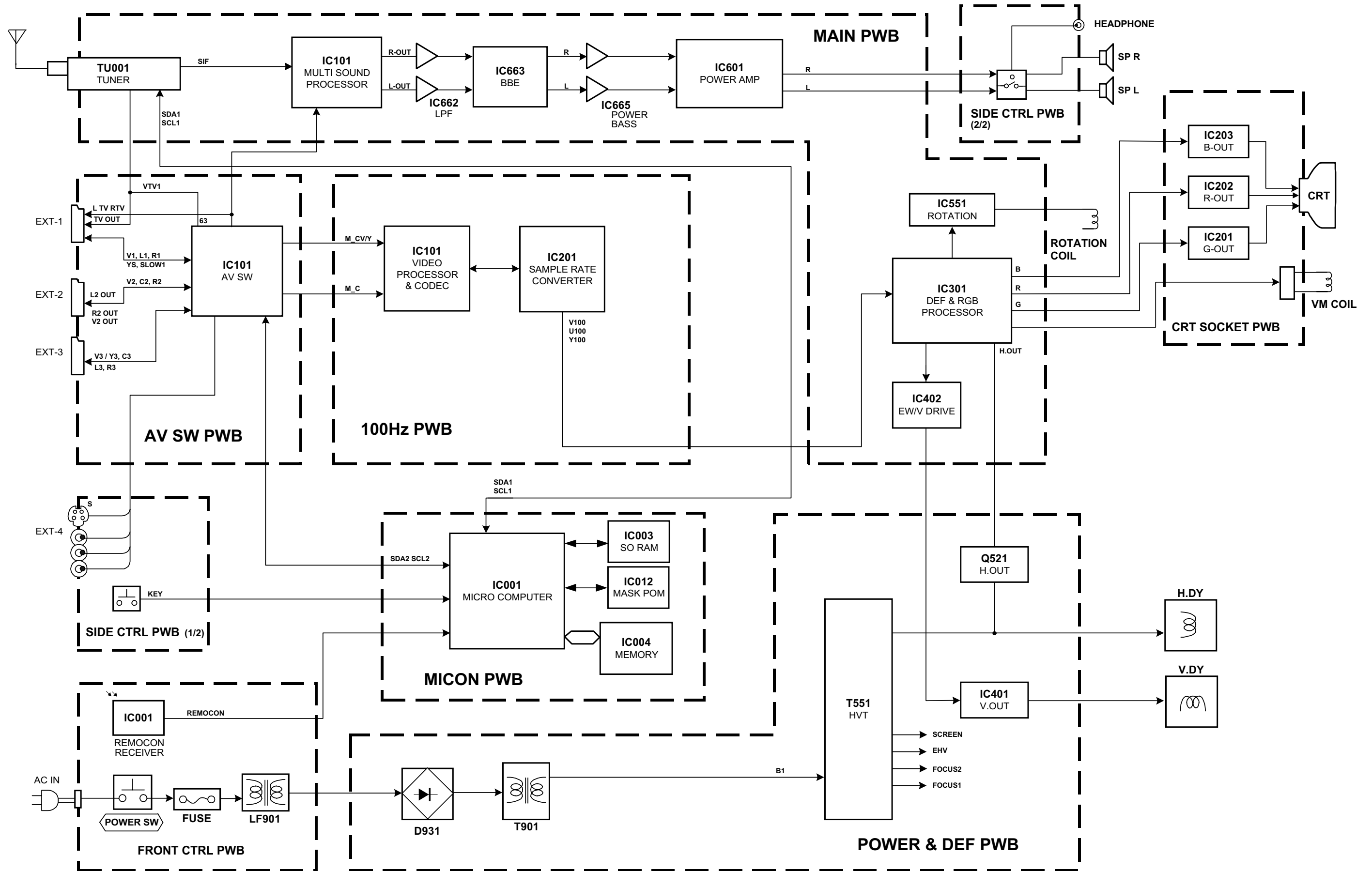
CHIP IC

TOP VIEW	

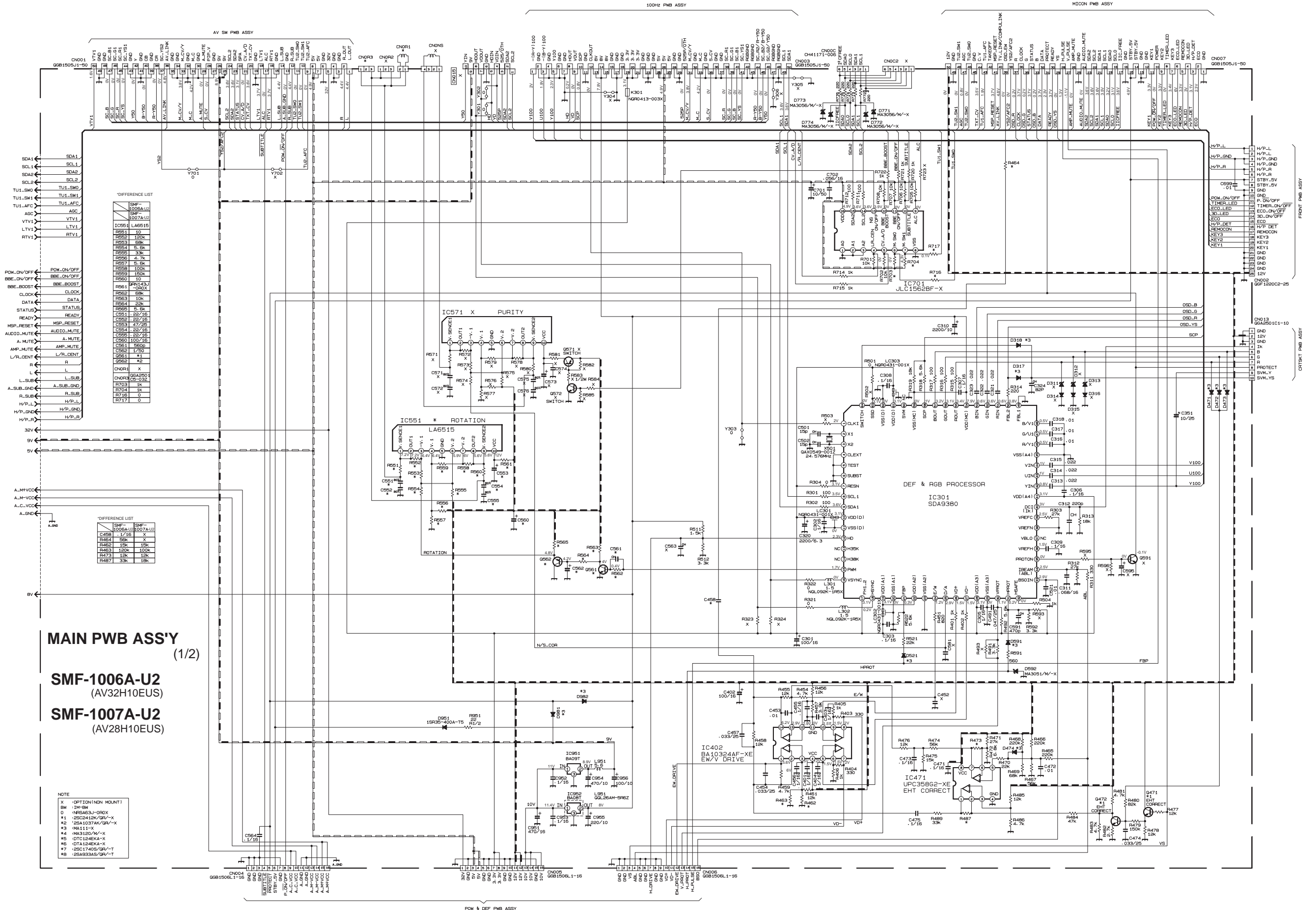
CRT SOCKET PWB PATTERN



BLOCK DIAGRAM



CIRCUIT DIAGRAMS MAIN PWB CIRCUIT DIAGRAM

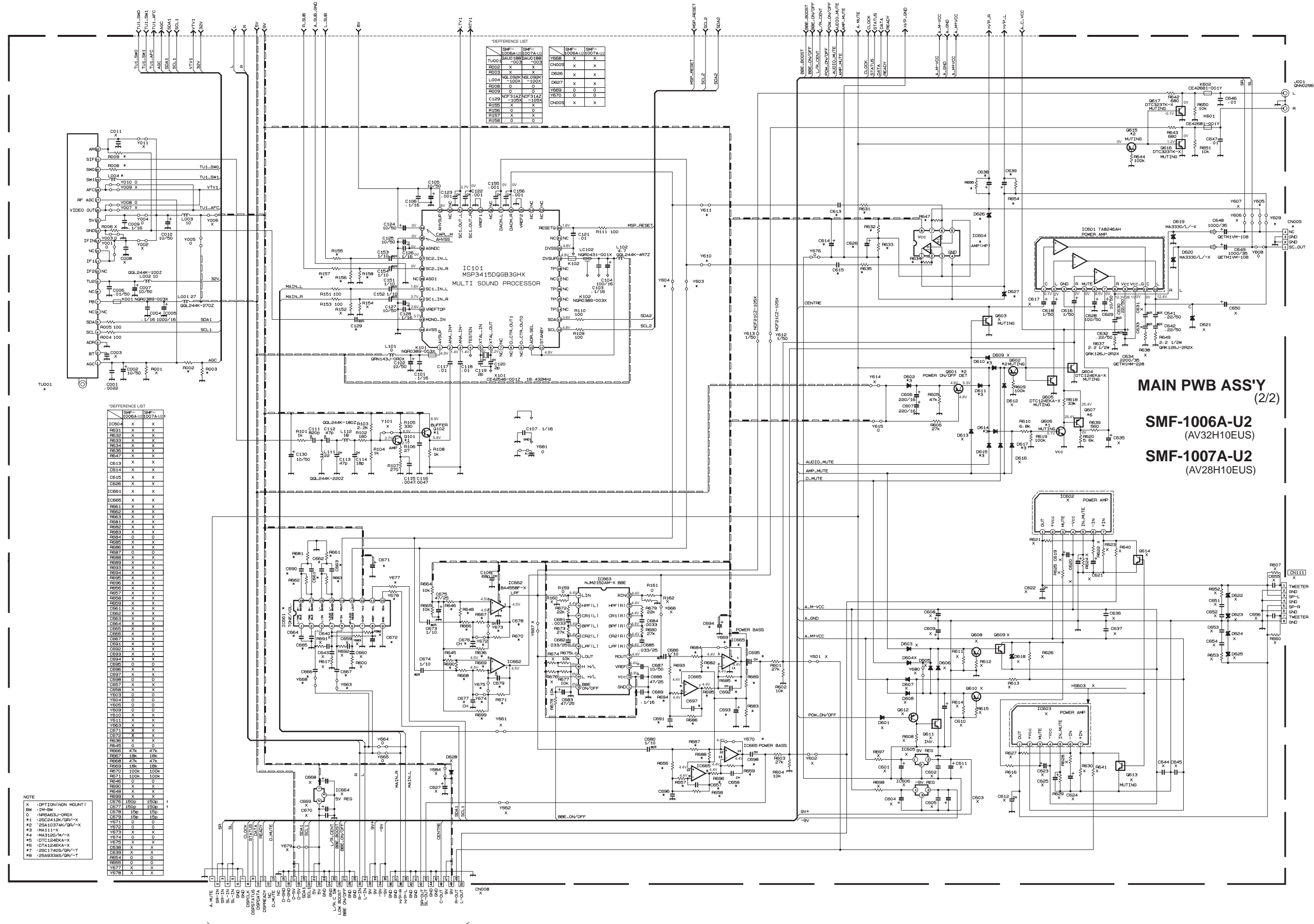


MAIN PWB ASS'Y (1/2)

SMF-1006A-U2 (AV32H10EUS)

SMF-1007A-U2 (AV28H10EUS)

- NOTE
- X - OPTION(NON MOUNT)
 - BW - IM-BW
 - #1 - 25C2412K/GR/-X
 - #2 - 25A1037AK/GR/-X
 - #3 - MA111-X
 - #4 - MA3120V/-X
 - #5 - DTC124EKA-X
 - #6 - DTA124EKA-X
 - #7 - 08C17405/GR/-T
 - #8 - 25A933AS/GR/-T



DIFFERENCE LIST

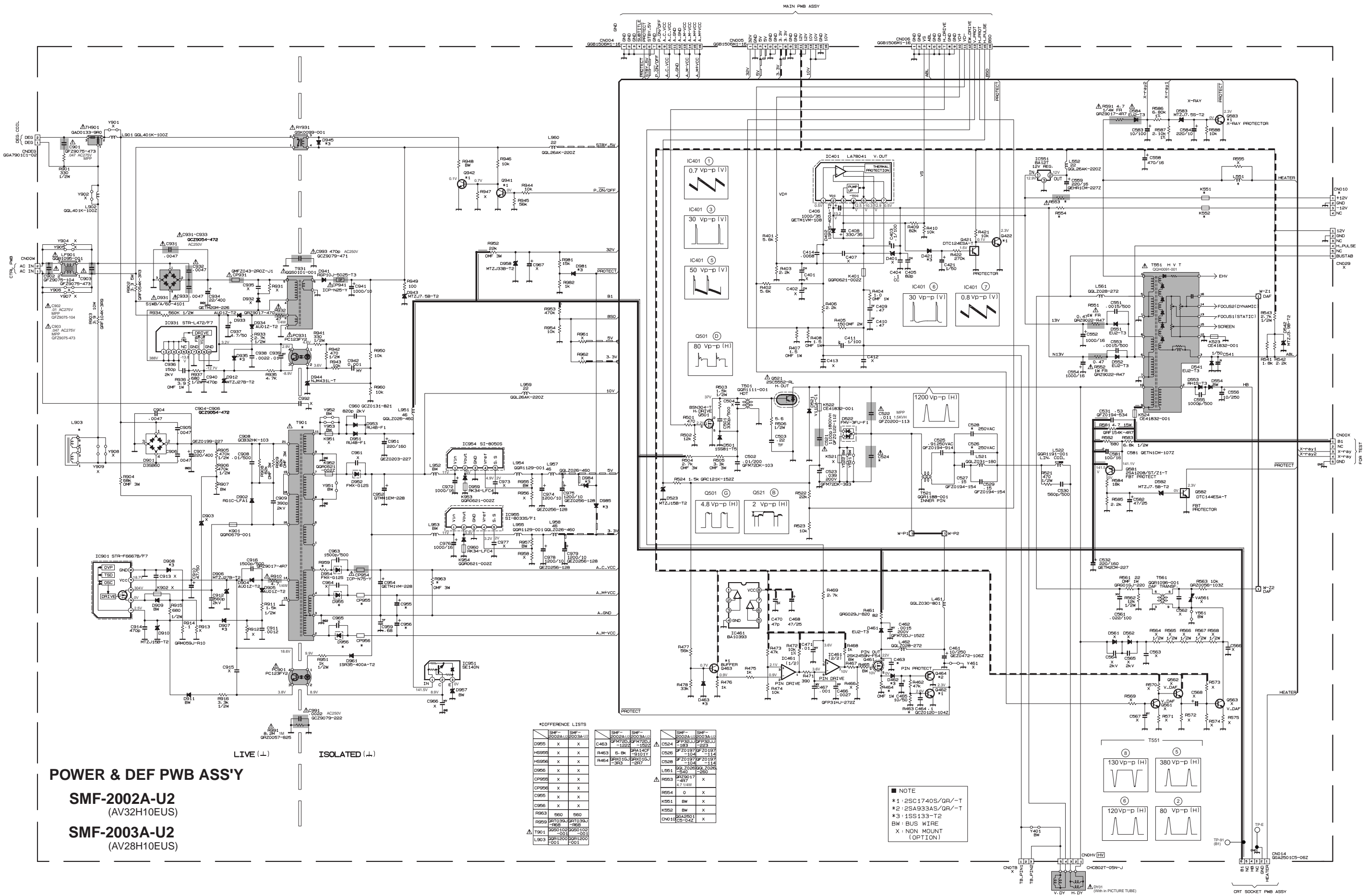
REF	SMF-1006A-U2	SMF-1007A-U2
IC604	X	X
R631	X	X
R632	X	X
R633	X	X
R634	X	X
R635	X	X
R636	X	X
R637	X	X
R638	X	X
R639	X	X
R640	X	X
R641	X	X
R642	X	X
R643	X	X
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R745	X	X
R746	X	X
R747	X	X
R748	X	X
R749	X	X
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R788	X	X
R789	X	X
R790	X	X
R791	X	X
R792	X	X
R793	X	X
R794	X	X
R795	X	X
R796	X	X
R797	X	X
R798	X	X
R799	X	X
R800	X	X

NOTE

- X : OPT10N(NON MOUNT)
- BM : 1M-BW
- 0 : NRG433J-ORX
- #1 : 25C2412K/GR-X
- #2 : 25A1037AK/GR-X
- #3 : #A111-X
- #4 : #A3120M-X
- #5 : DTC124EKA-X
- #6 : DTA124EKA-X
- #7 : 25C1740S/GR-T
- #8 : 25A933AS/GR-T

MAIN PWB ASS'Y (2/2)
SMF-1006A-U2 (AV32H10EUS)
SMF-1007A-U2 (AV28H10EUS)

POWER & DEF PWB CIRCUIT DIAGRAM



POWER & DEF PWB ASS'Y

SMF-2002A-U2
(AV32H10EUS)

SMF-2003A-U2
(AV28H10EUS)

*DIFFERENCE LISTS

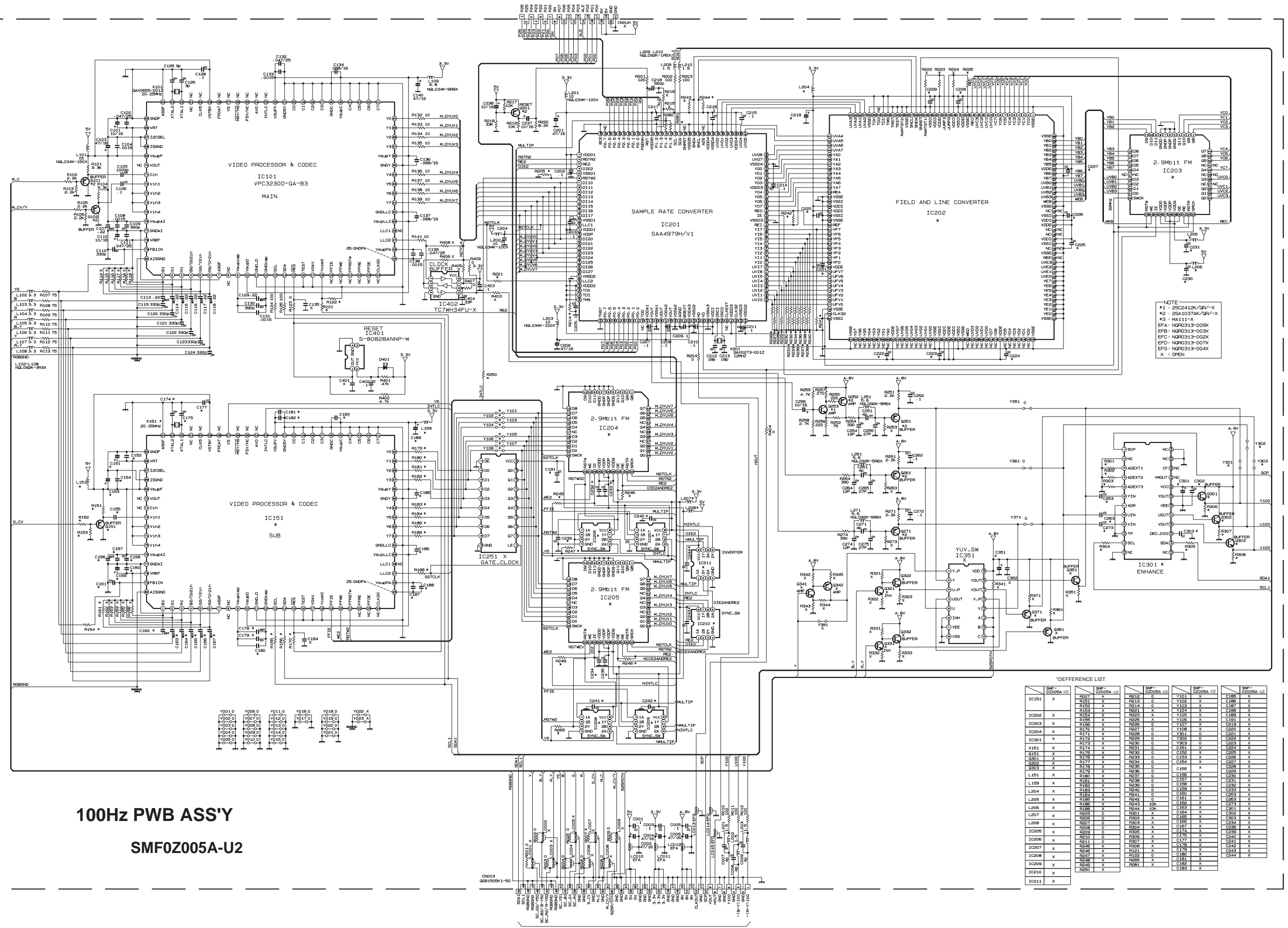
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D955	X	X
H959	X	X
H959	X	X
D956	X	X
CP956	X	X
CP956	X	X
CP956	X	X
CP956	X	X
R963	560	560
R959	2R1039J	2R1039J
T901	2R9102D	2R9102D
L903	2R11004	2R11004

REF	SMF-2002A-U2	SMF-2003A-U2
C463	GM720L	GM720L
R463	6.8k	6.8k
R464	3R010J	3R010J

REF	SMF-2002A-U2	SMF-2003A-U2
C524	2R1039J	2R1039J
C528	2R1039J	2R1039J
C528	2R1039J	2R1039J
L951	2R1039J	2R1039J
R953	2R1039J	2R1039J
R954	0	X
K551	BW	X
K552	BW	X
CN010	2R1039J	2R1039J

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

100Hz PWB CIRCUIT DIAGRAM



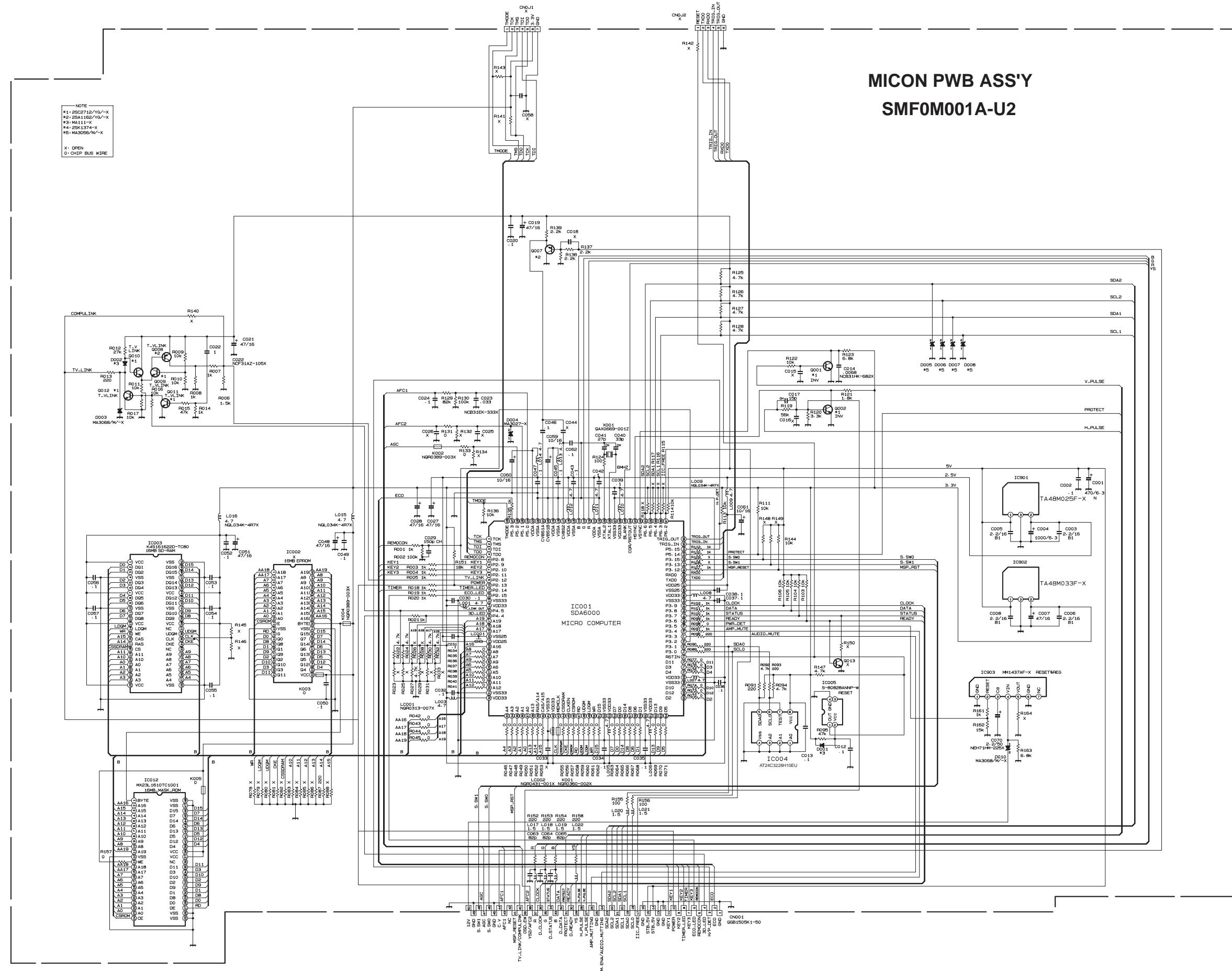
100Hz PWB ASS'Y
SMF0Z005A-U2

DIFFERENCE LIST

REF	SHF-02008A-U2	SHF-02008A-U2	SHF-02008A-U2	SHF-02008A-U2	SHF-02008A-U2
IC101	X	R007 X	R212 X	Y101 X	C195 X
		R101 X	R213 X	Y102 X	C196 X
		R102 X	R214 X	Y103 X	C197 X
		R103 X	R215 X	Y104 X	C198 X
IC202	X	R104 X	R216 X	Y105 X	C199 X
		R105 X	R217 X	Y106 X	C200 X
IC203	X	R106 X	R218 X	Y107 X	C201 X
		R107 X	R219 X	Y108 X	C202 X
IC204	X	R108 X	R220 X	Y109 X	C203 X
		R109 X	R221 X	Y110 X	C204 X
IC301	X	R110 X	R222 X	Y111 X	C205 X
		R111 X	R223 X	Y112 X	C206 X
X151	X	R112 X	R224 X	Y113 X	C207 X
		R113 X	R225 X	Y114 X	C208 X
Q301	X	R114 X	R226 X	Y115 X	C209 X
		R115 X	R227 X	Y116 X	C210 X
Q302	X	R116 X	R228 X	Y117 X	C211 X
		R117 X	R229 X	Y118 X	C212 X
L151	X	R118 X	R230 X	Y119 X	C213 X
		R119 X	R231 X	Y120 X	C214 X
L159	X	R120 X	R232 X	Y121 X	C215 X
		R121 X	R233 X	Y122 X	C216 X
L204	X	R122 X	R234 X	Y123 X	C217 X
		R123 X	R235 X	Y124 X	C218 X
L205	X	R124 X	R236 X	Y125 X	C219 X
		R125 X	R237 X	Y126 X	C220 X
L206	X	R126 X	R238 X	Y127 X	C221 X
		R127 X	R239 X	Y128 X	C222 X
L207	X	R128 X	R240 X	Y129 X	C223 X
		R129 X	R241 X	Y130 X	C224 X
L208	X	R130 X	R242 X	Y131 X	C225 X
		R131 X	R243 X	Y132 X	C226 X
IC206	X	R132 X	R244 X	Y133 X	C227 X
		R133 X	R245 X	Y134 X	C228 X
IC206	X	R134 X	R246 X	Y135 X	C229 X
		R135 X	R247 X	Y136 X	C230 X
IC207	X	R136 X	R248 X	Y137 X	C231 X
		R137 X	R249 X	Y138 X	C232 X
IC208	X	R138 X	R250 X	Y139 X	C233 X
		R139 X	R251 X	Y140 X	C234 X
IC209	X	R140 X	R252 X	Y141 X	C235 X
		R141 X	R253 X	Y142 X	C236 X
IC210	X	R142 X	R254 X	Y143 X	C237 X
		R143 X	R255 X	Y144 X	C238 X
IC211	X	R144 X	R256 X	Y145 X	C239 X
		R145 X	R257 X	Y146 X	C240 X

MICON PWB ASS'Y
SMF0M001A-U2

NOTE
#1: 68271E/YG/-X
#2: 68416E/YG/-X
#3: MA111-X
#4: 68137A-X
#5: MA306E/W/-X
X: OPEN
O: ON/1P BUS WIRE



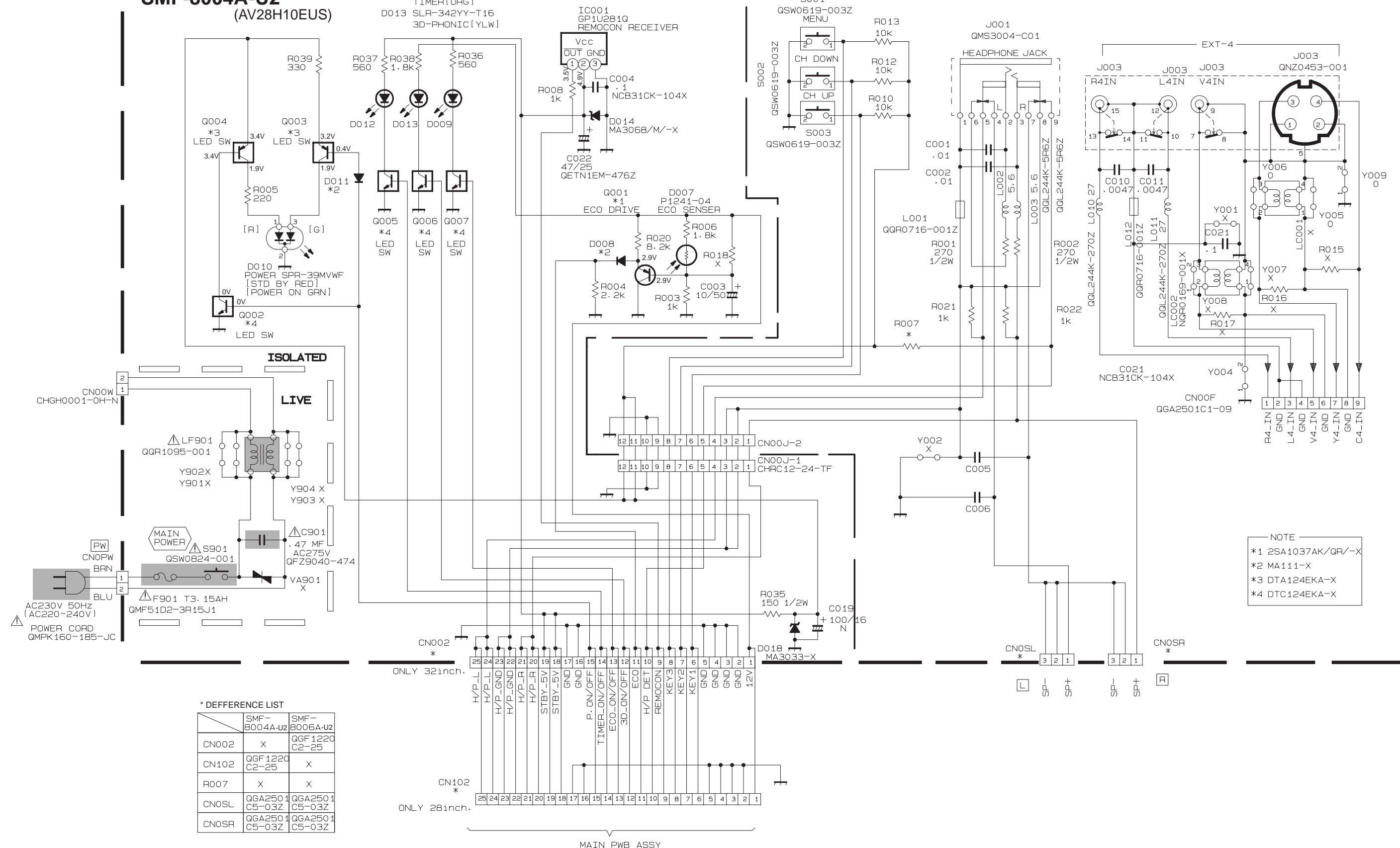
FRONT CONTROL CIRCUIT DIAGRAM

FRONT CONTROL PWB ASS'Y (1/2)

SMF-8006A-U2
(AV32H10EUS)
SMF-8004A-U2
(AV28H10EUS)

D009 SLR-342MG-T16
ECO [GRN]
D012 SLR-342DU-T16
TIMER [ORG]
D013 SLR-342YY-T16
3D-PHONIC [YLW]

FRONT CONTROL PWB ASS'Y (2/2)



* DIFFERENCE LIST

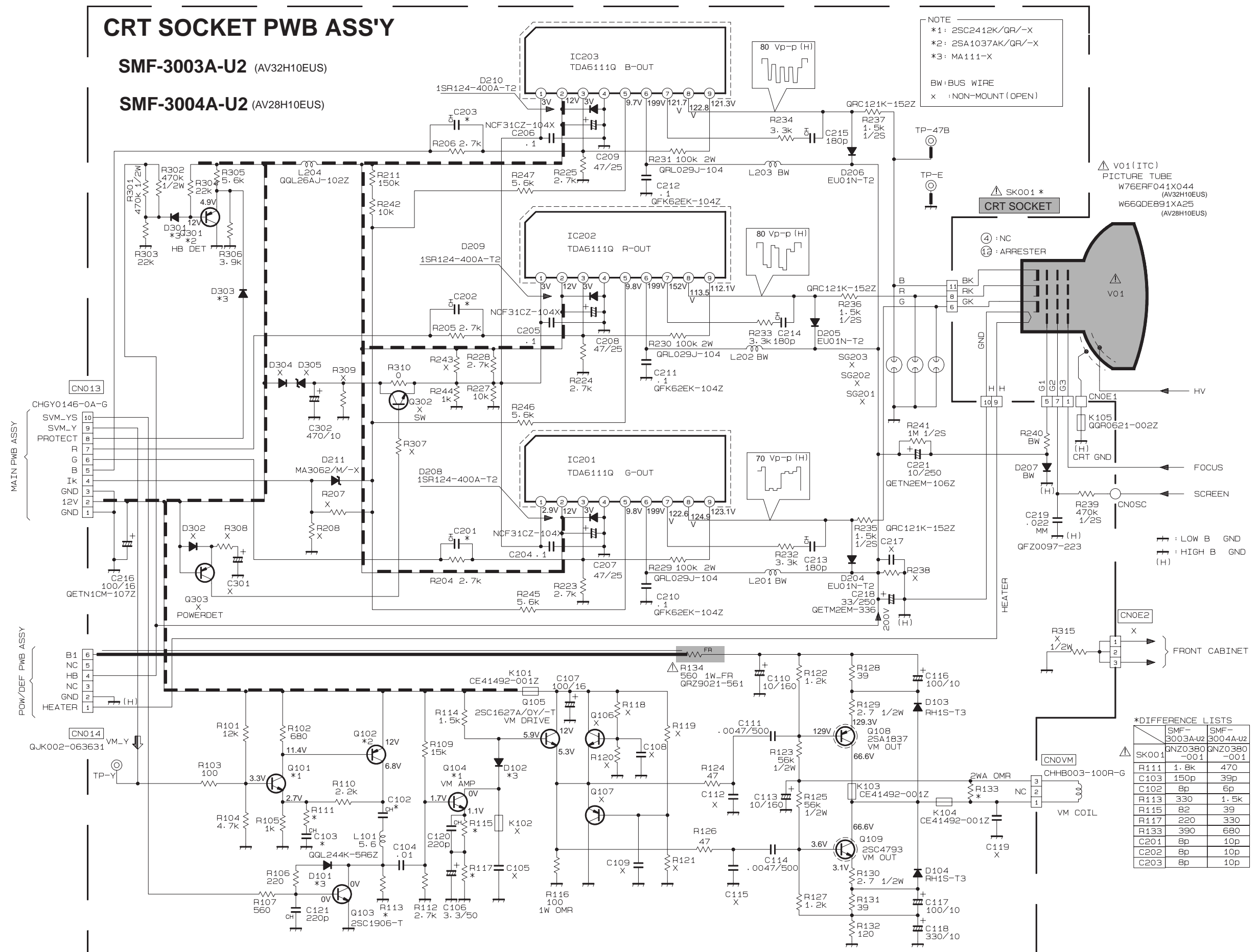
	SMF-8004A-U2	SMF-8006A-U2
CN002	X	GGF1220 C2-25
CN102	GGF1220 C2-25	X
R007	X	X
CN0SL	GGA2501 C5-03Z	GGA2501 C5-03Z
CNOSR	GGA2501 C5-03Z	GGA2501 C5-03Z

CRT SOCKET PWB ASS'Y

SMF-3003A-U2 (AV32H10EUS)

SMF-3004A-U2 (AV28H10EUS)

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

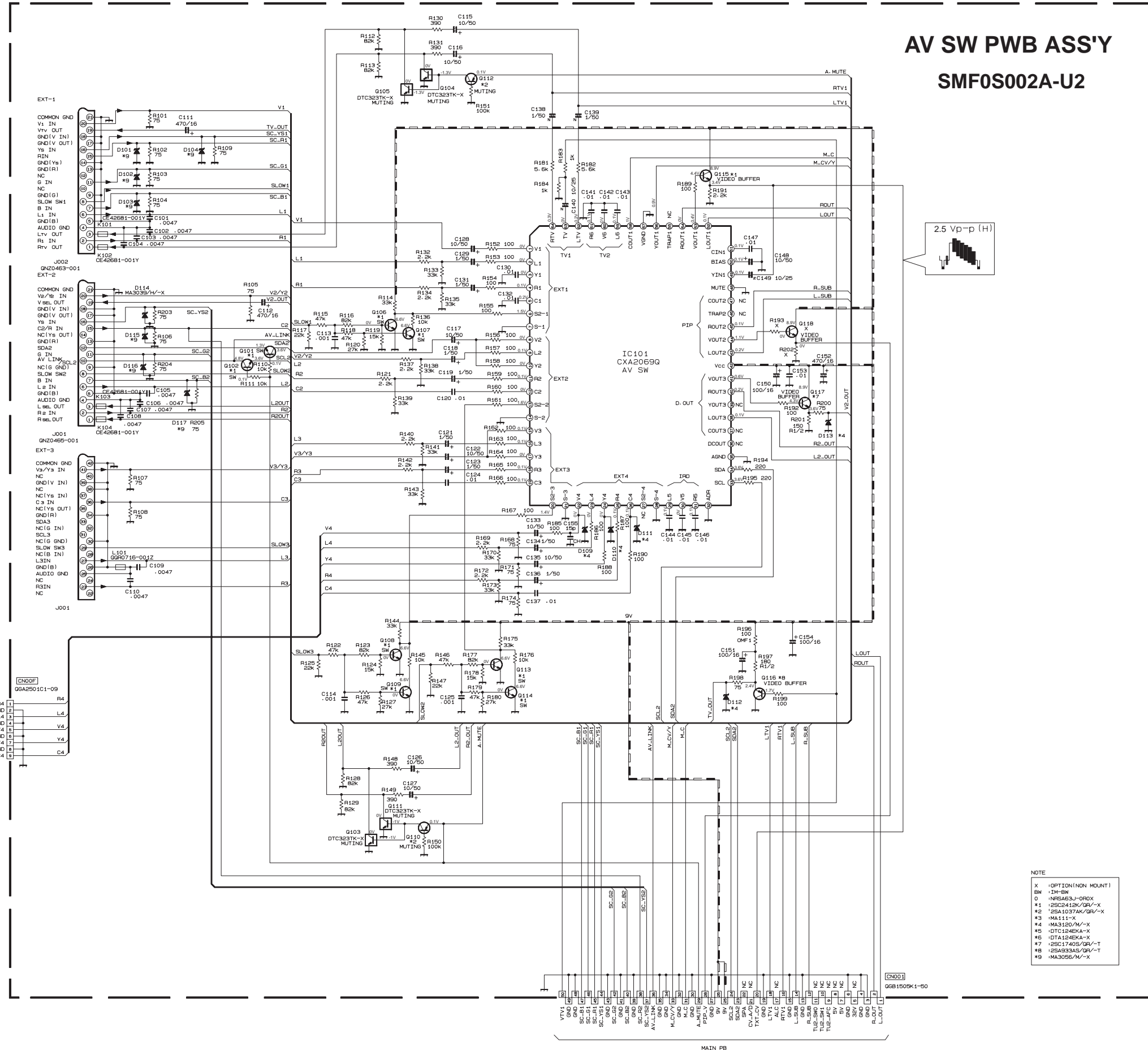


*DIFFERENCE LISTS

	SMF-3003A-U2	SMF-3004A-U2
SK001	QNZ0360-001	QNZ0360-001
R111	1.8k	470
C103	150p	39p
C102	8p	6p
R113	330	1.5k
R115	82	39
R117	220	330
R133	390	680
C201	8p	10p
C202	8p	10p
C203	8p	10p

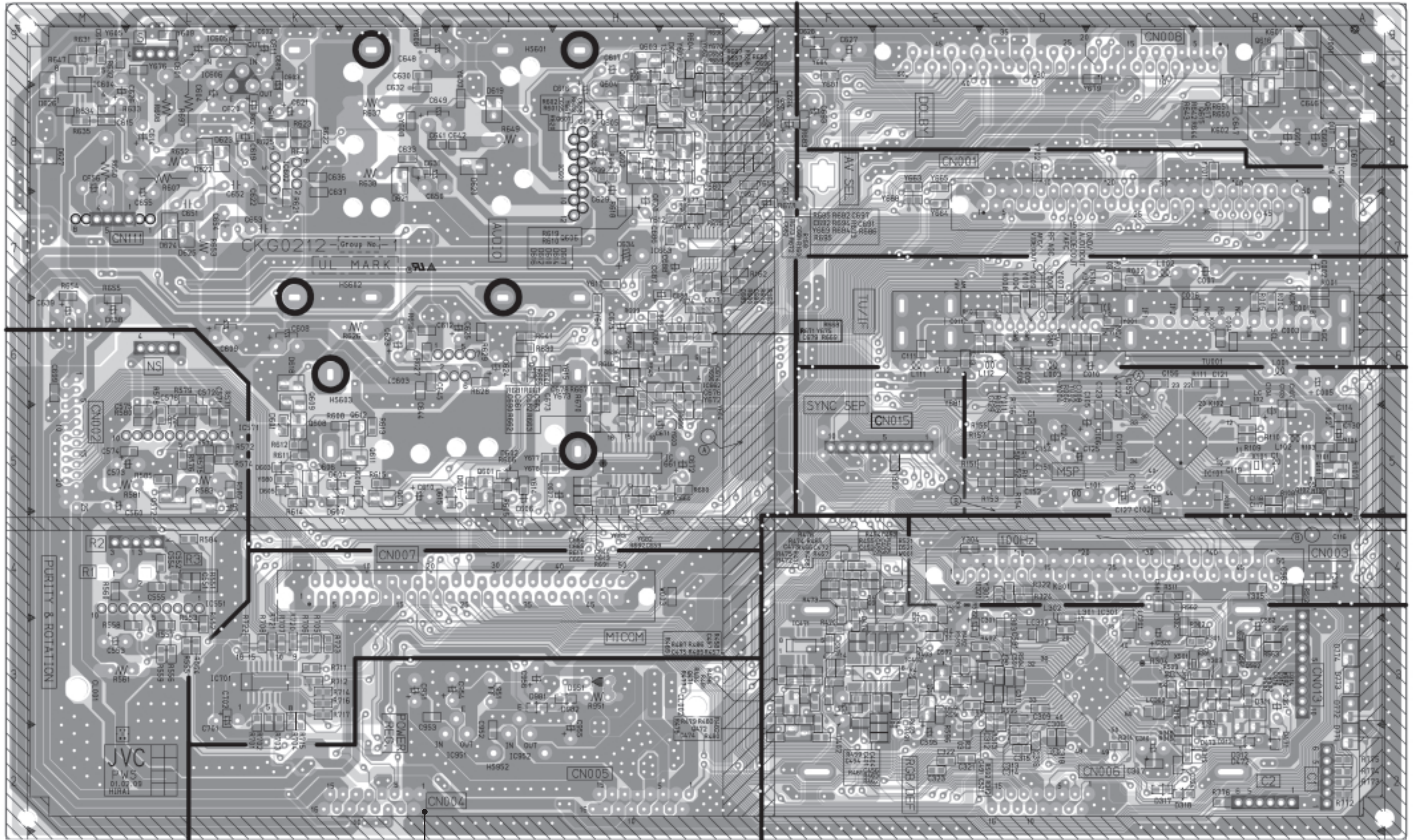
AV SW PWB CIRCUIT DIAGRAM

AV SW PWB ASS'Y
SMF0S002A-U2



PATTERN DIAGRAM MAIN PWB PATTERN

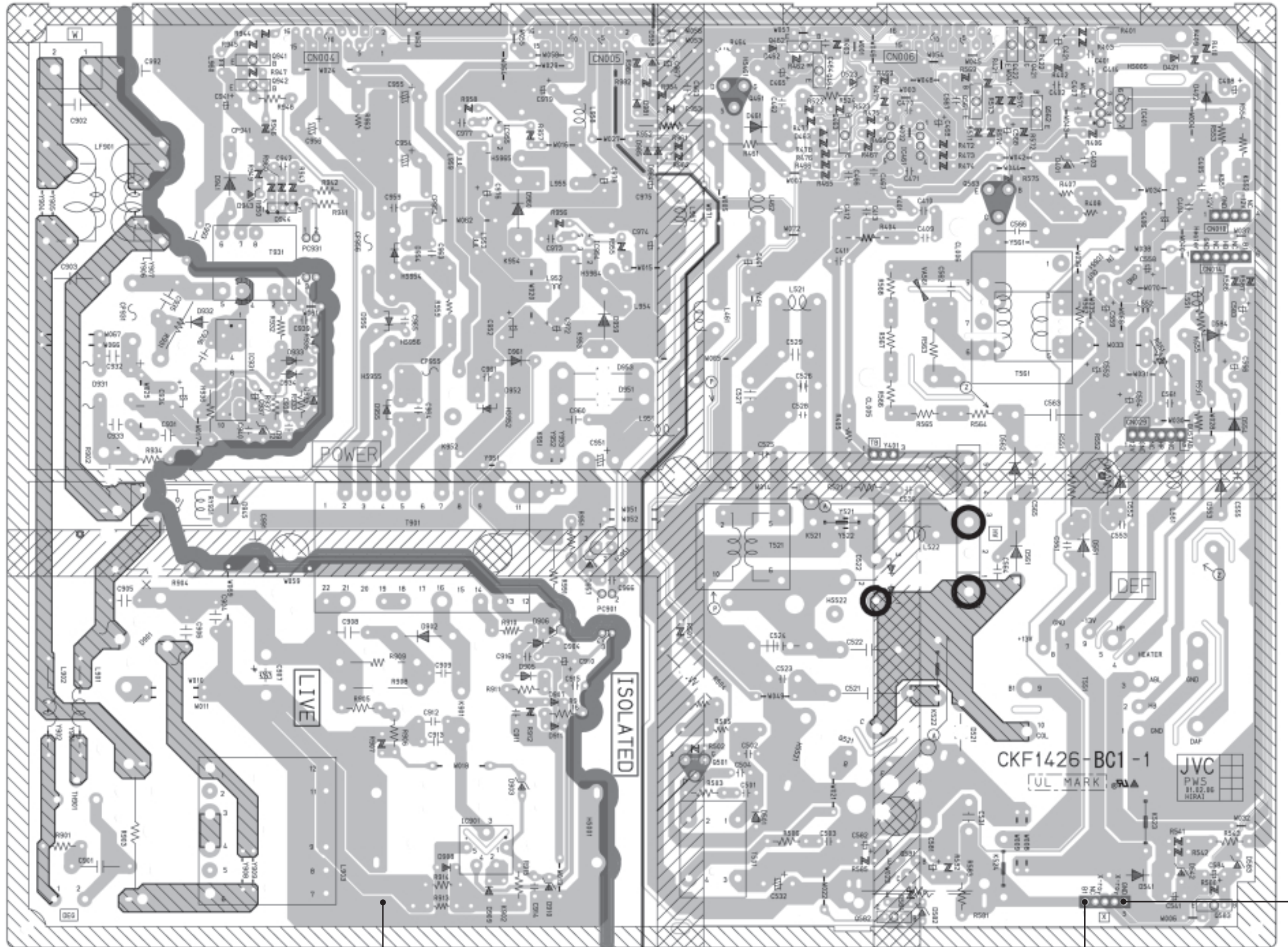
← FRONT



(77)

POWER & DEF PWB PATTERN

←
FRONT



No.51819

(T)

2-23

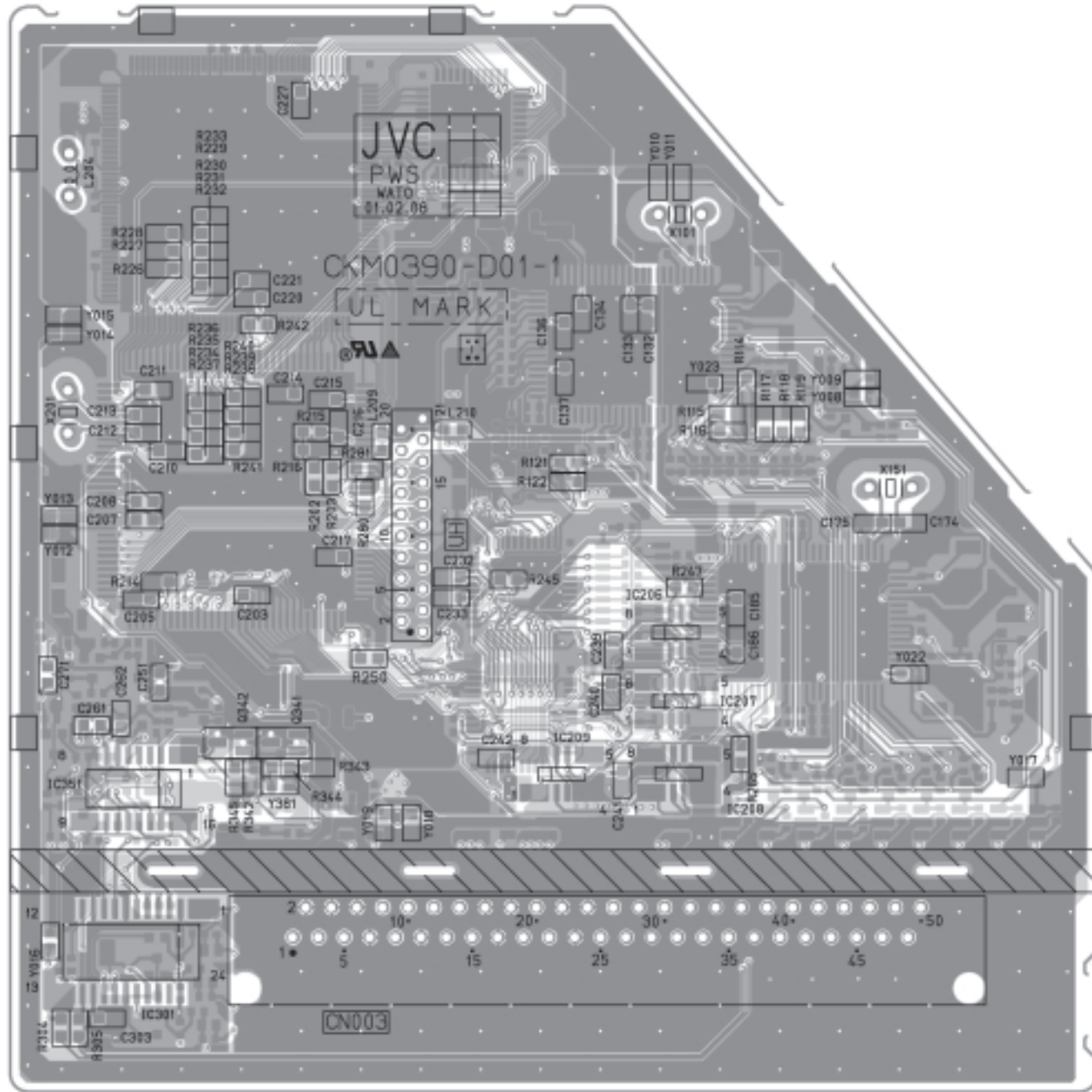
2-24

No.51819

TP-91(B1)

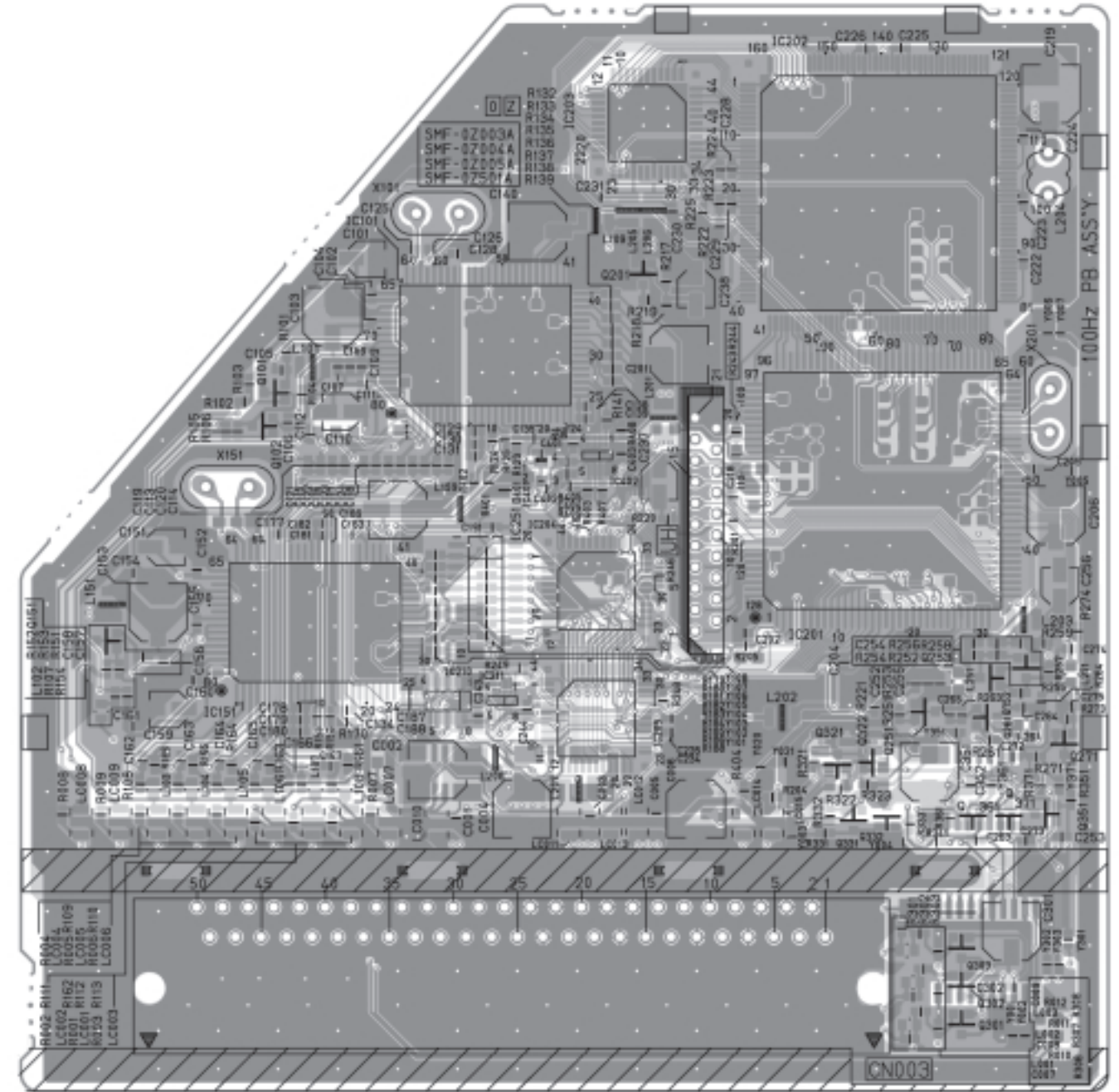
TP-E
(⚡)

100Hz PWB PATTERN (SOLDER SIDE)



AV32H10EUS
AV28H10EUS

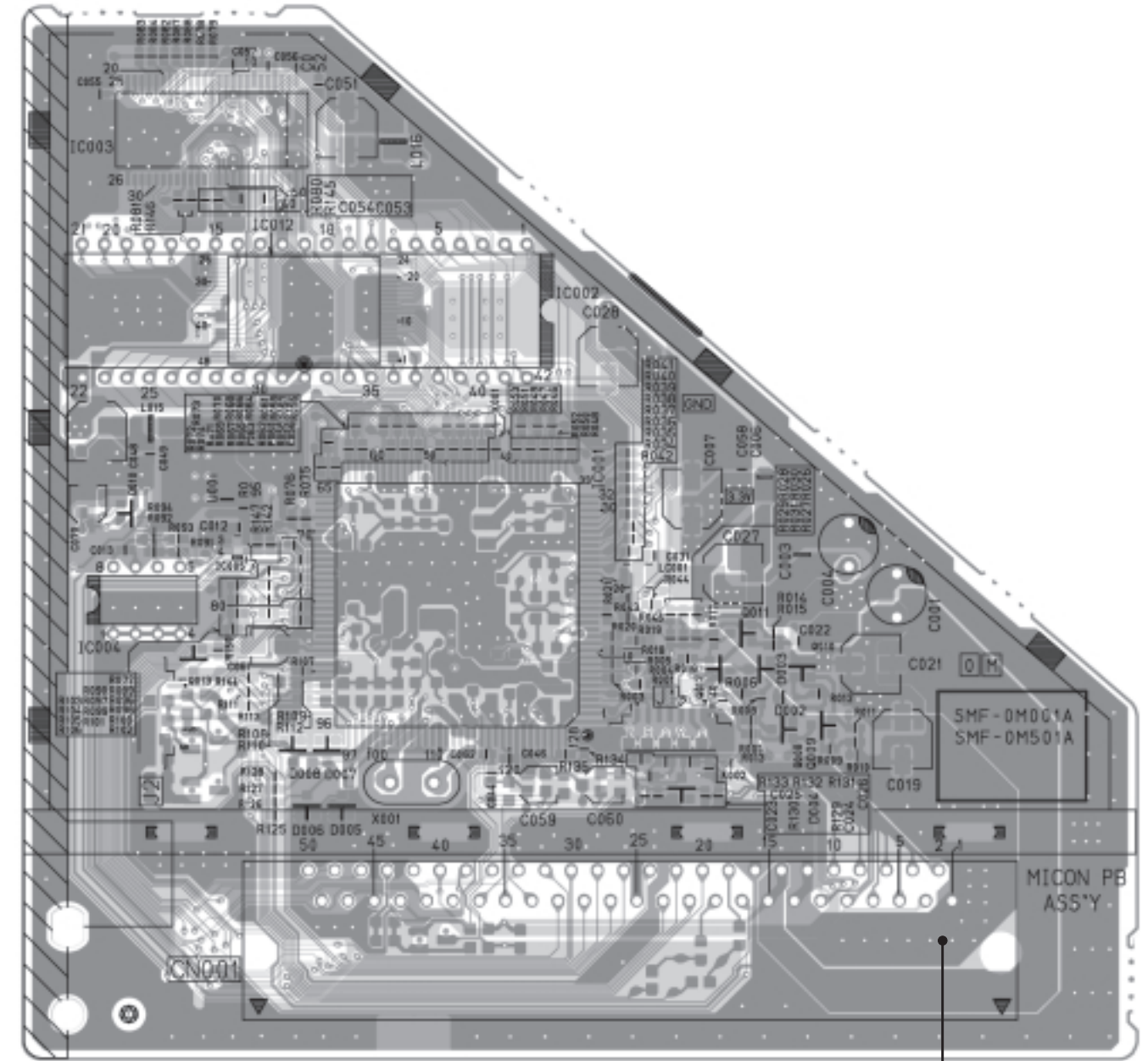
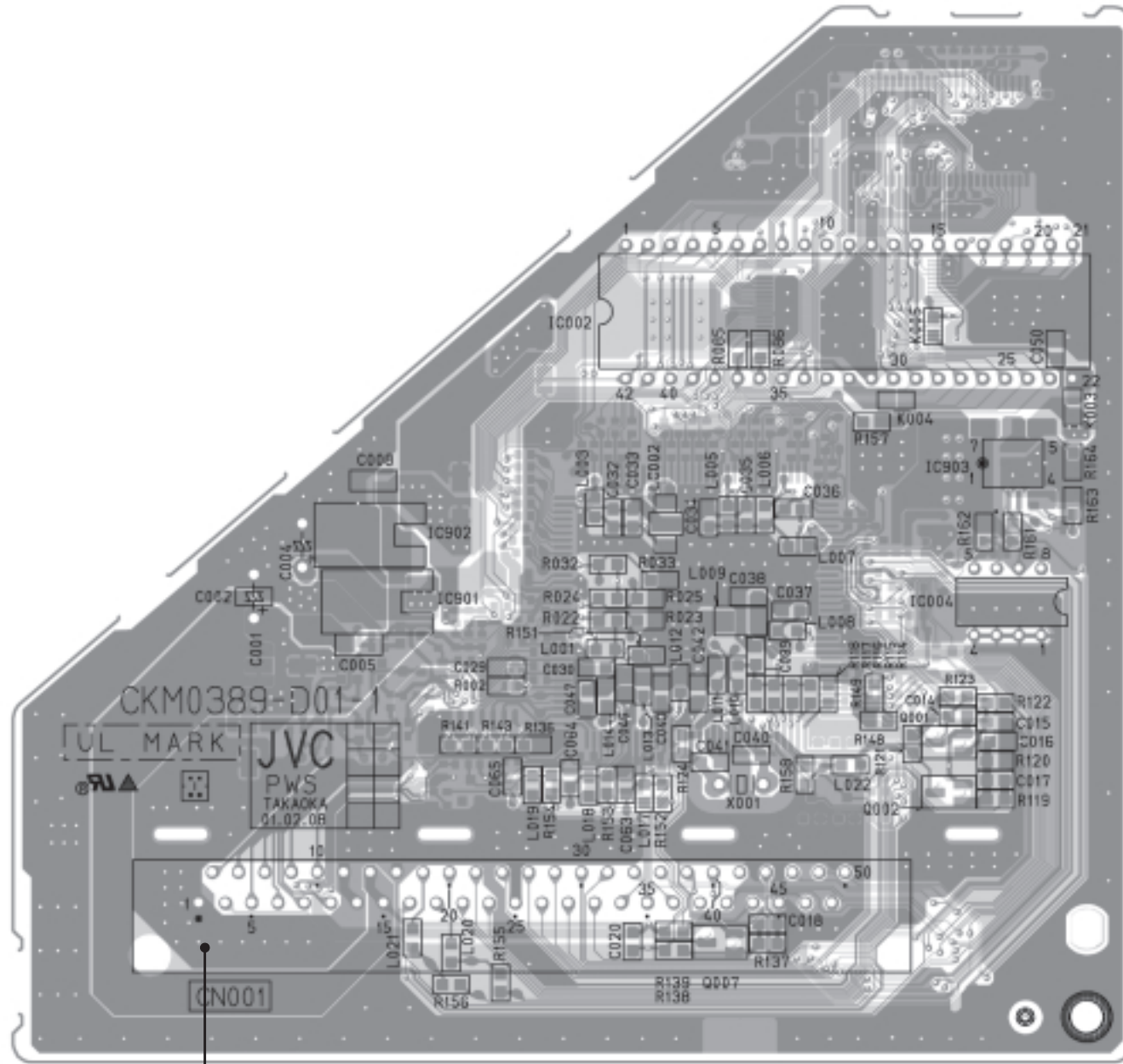
100Hz PWB PATTERN (PARTS SIDE)



AV32H10EUS
AV28H10EUS

MICON PWB PATTERN (SOLDER SIDE)

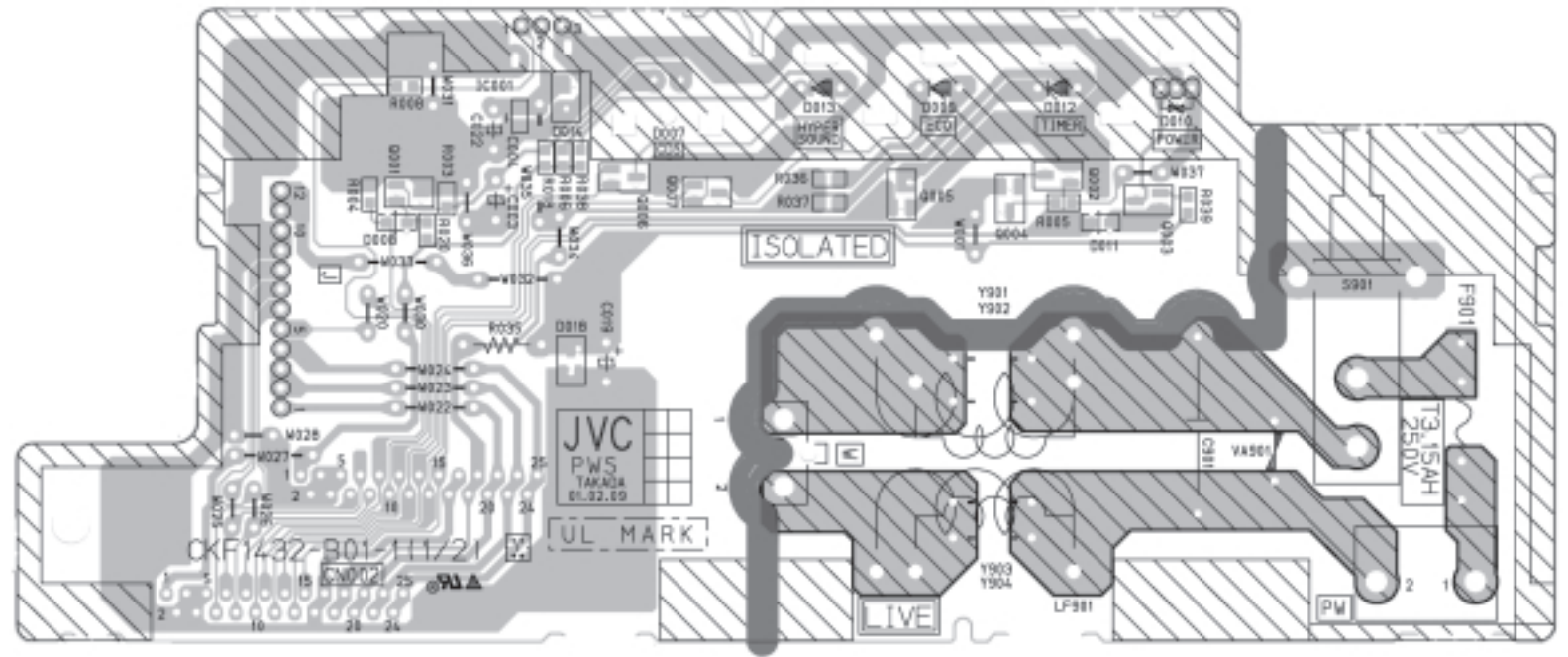
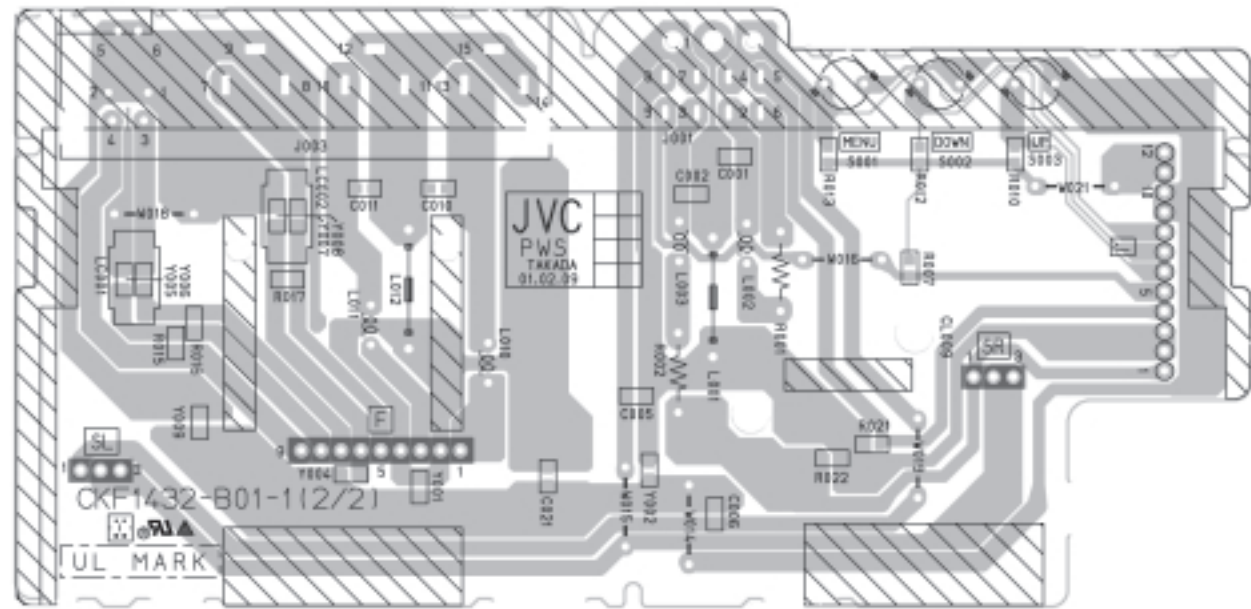
MICON PWB PATTERN (PARTS SIDE)



(77)

(77)

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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AV28H10EUS-U #3



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