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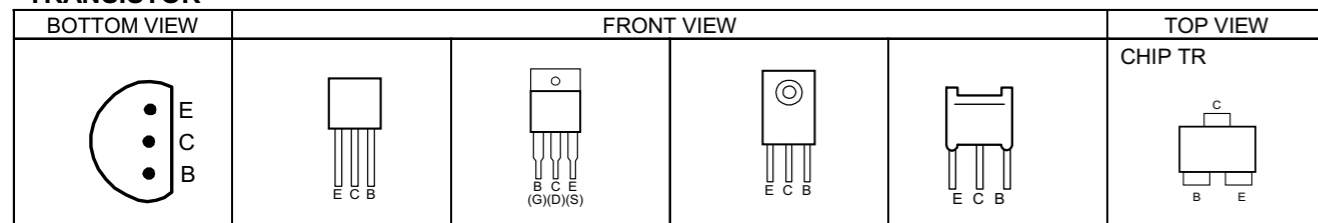
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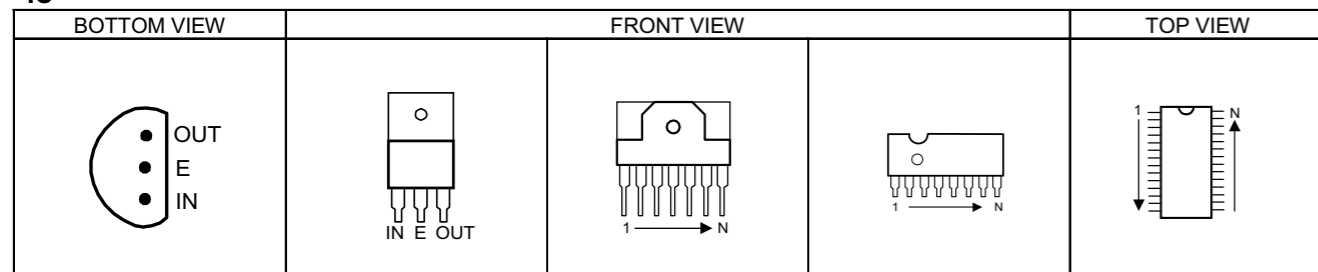
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SEMICONDUCTOR SHAPES

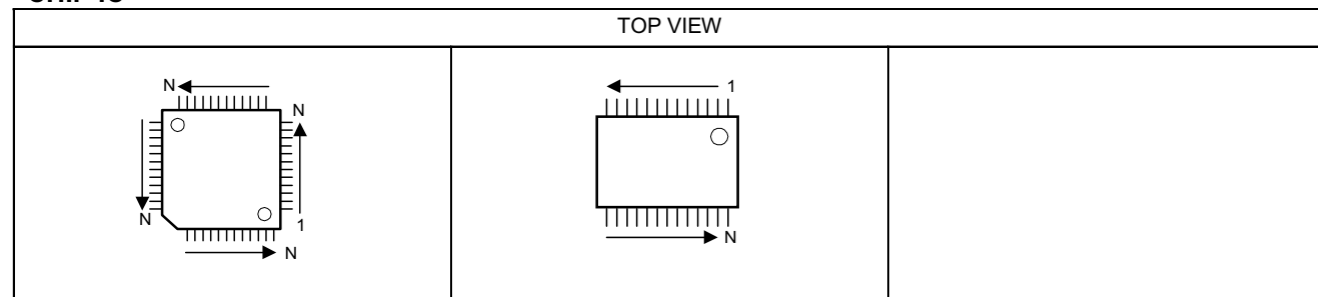
TRANSISTOR



IC



CHIP IC



AV28WT5EPS / EIS / EKS AV24WT5EPS / EIS / EKS 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 : 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 \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 : 1/10[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

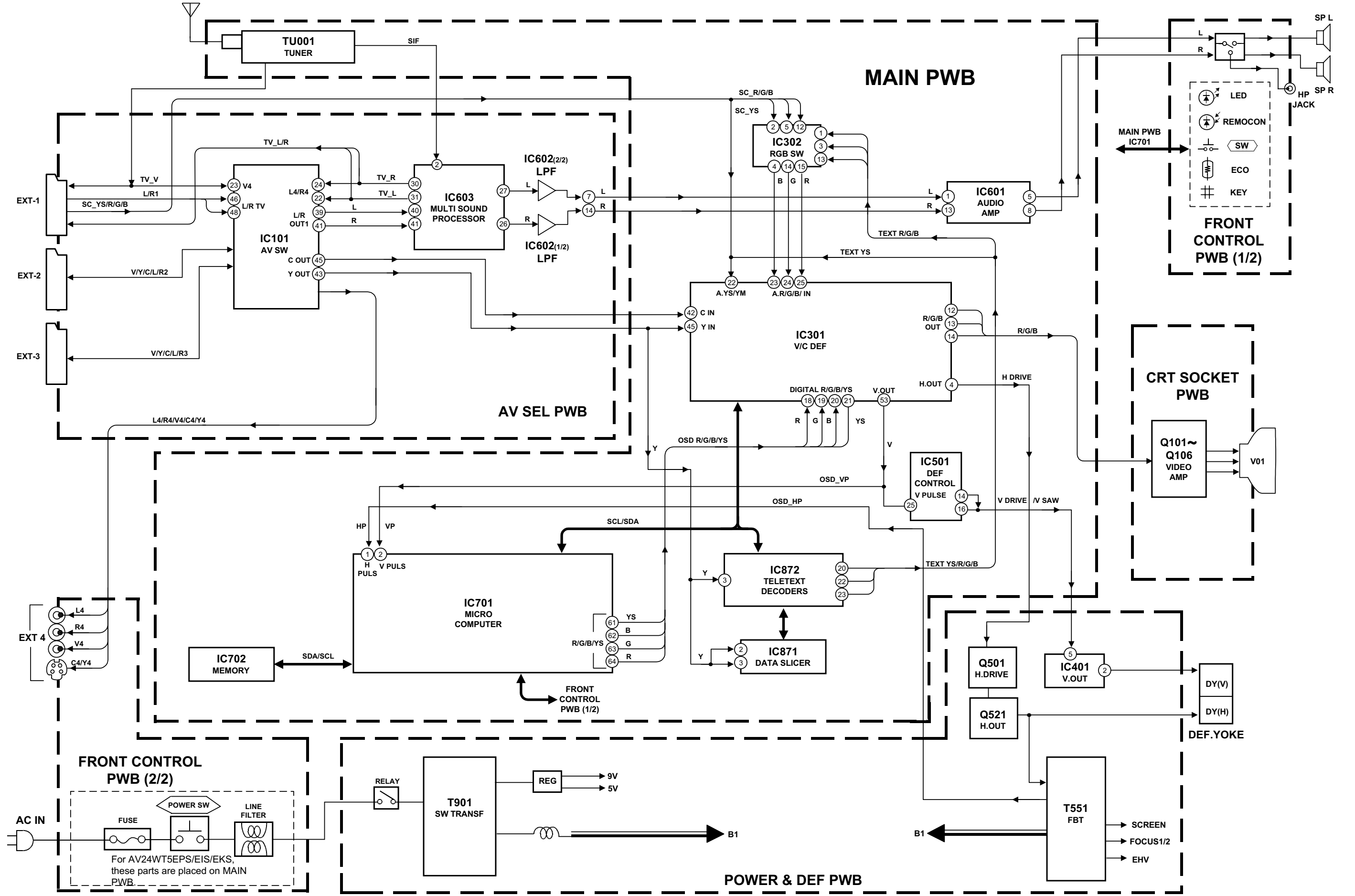
5. NOTE FOR REPAIRING SERVICE

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

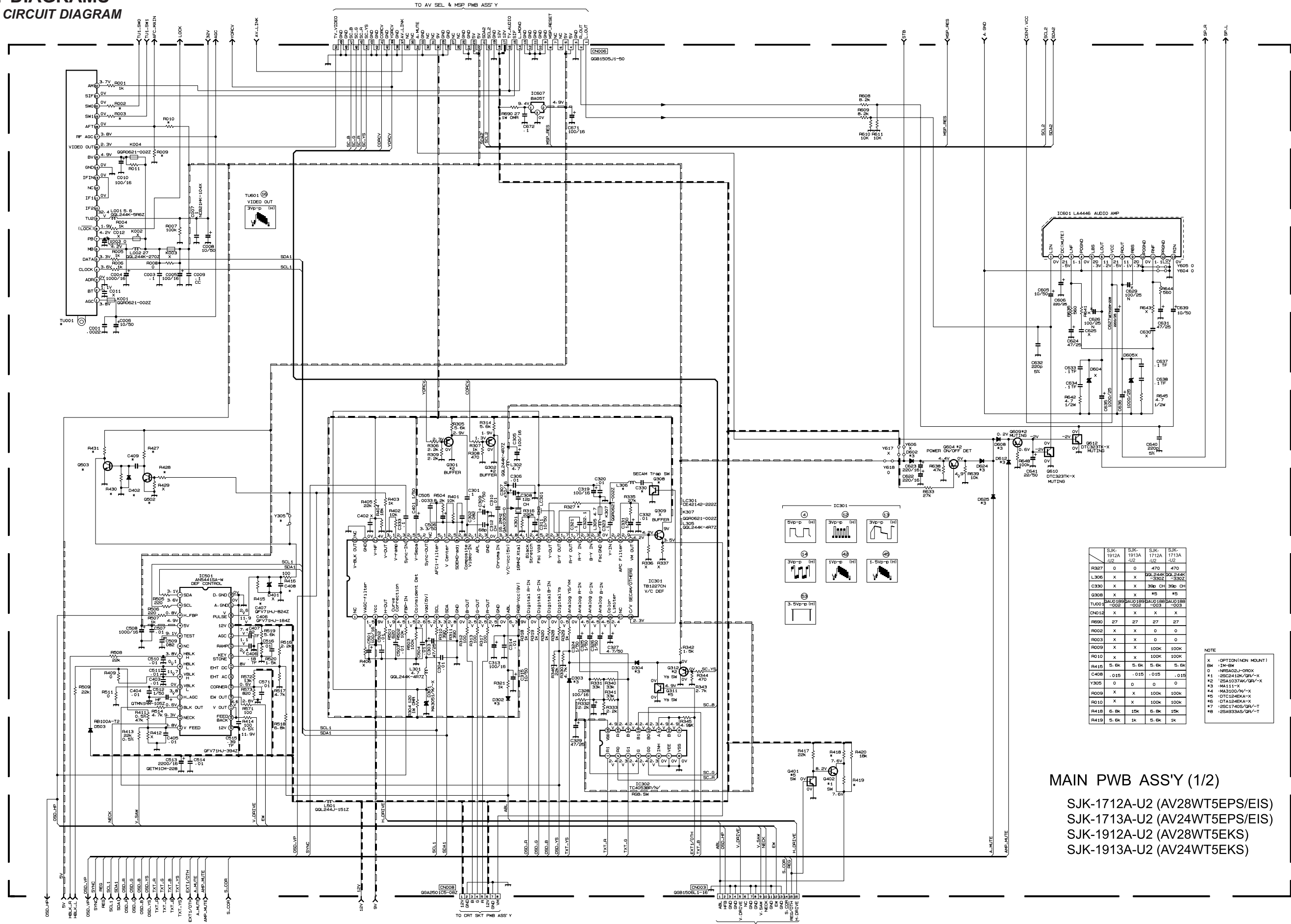
BLOCK DIAGRAM



CIRCUIT DIAGRAMS
MAIN PWB CIRCUIT DIAGRAM

AV28WT5EPS AV24WT5EPS
 AV28WT5EIS AV24WT5EIS
 AV28WT5EKS AV24WT5EKS

AV28WT5EPS AV24WT5EPS
 AV28WT5EIS AV24WT5EIS
 AV28WT5EKS AV24WT5EKS



	SJK-1912A-U2	SJK-1913A-U2	SJK-1712A-U2	SJK-1713A-U2
R327	0	0	470	470
L306	X	X	DL244K-3302	DL244K-3302
C330	X	X	390 CH	390 CH
Q308	X	X		
TU001	DA118P	DA118P	DA118P	DA118P
CN012	X	X	X	X
R990	27	27	27	27
R002	X	X	0	0
R003	X	X	0	0
R009	X	X	100K	100K
R010	X	X	100K	100K
R415	5.6K	5.6K	5.6K	5.6K
C408	.015	.015	.015	.015
Y305	0	0	0	0
R009	X	X	100K	100K
R010	X	X	100K	100K
R418	5.6K	15K	5.6K	15K
R419	5.6K	1K	5.6K	1K

NOTE
 X : (OPTION/NOT MOUNT)
 BW : 1M-BW
 0 : NFR8A02J-OROX
 #1 : 25C241K/GR-V-X
 #2 : 25A1037K/GR-V-X
 #3 : MA111-X
 #4 : MA3100/M-V-X
 #5 : DT1248KA-X
 #6 : DT1248KA-X
 #7 : 25C1740S/GR-V-T
 #8 : 25A933AS/GR-V-T

MAIN PWB ASS'Y (1/2)
 SJK-1712A-U2 (AV28WT5EPS/EIS)
 SJK-1713A-U2 (AV24WT5EPS/EIS)
 SJK-1912A-U2 (AV28WT5EKS)
 SJK-1913A-U2 (AV24WT5EKS)

AV28WT5EPS AV24WT5EPS
 AV28WT5EIS AV24WT5EIS
 AV28WT5EKS AV24WT5EKS

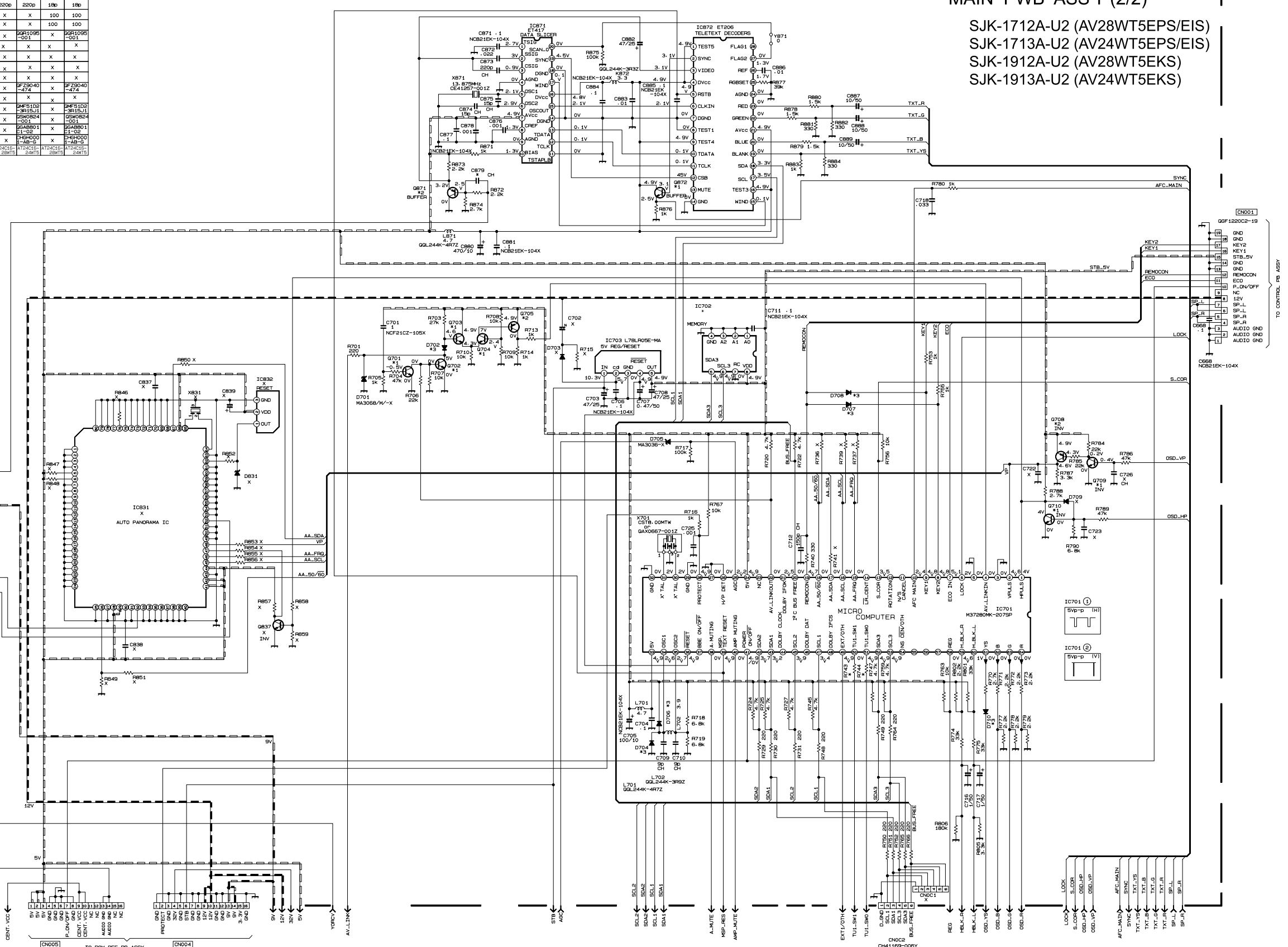
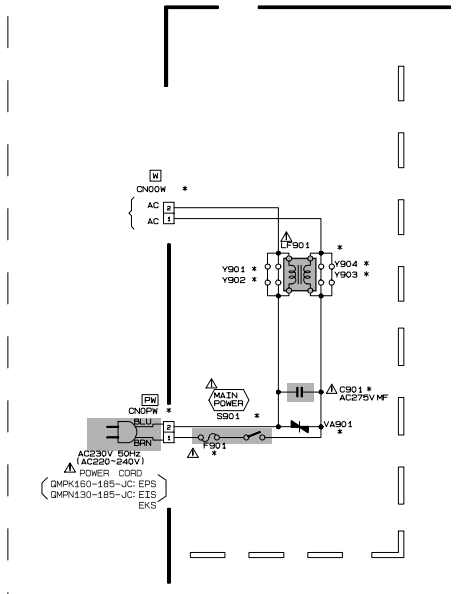
AV28WT5EPS AV24WT5EPS
 AV28WT5EIS AV24WT5EIS
 AV28WT5EKS AV24WT5EKS

Only
 AV24WT5EPS/EIS/EKS

MAIN PWB ASS'Y (2/2)

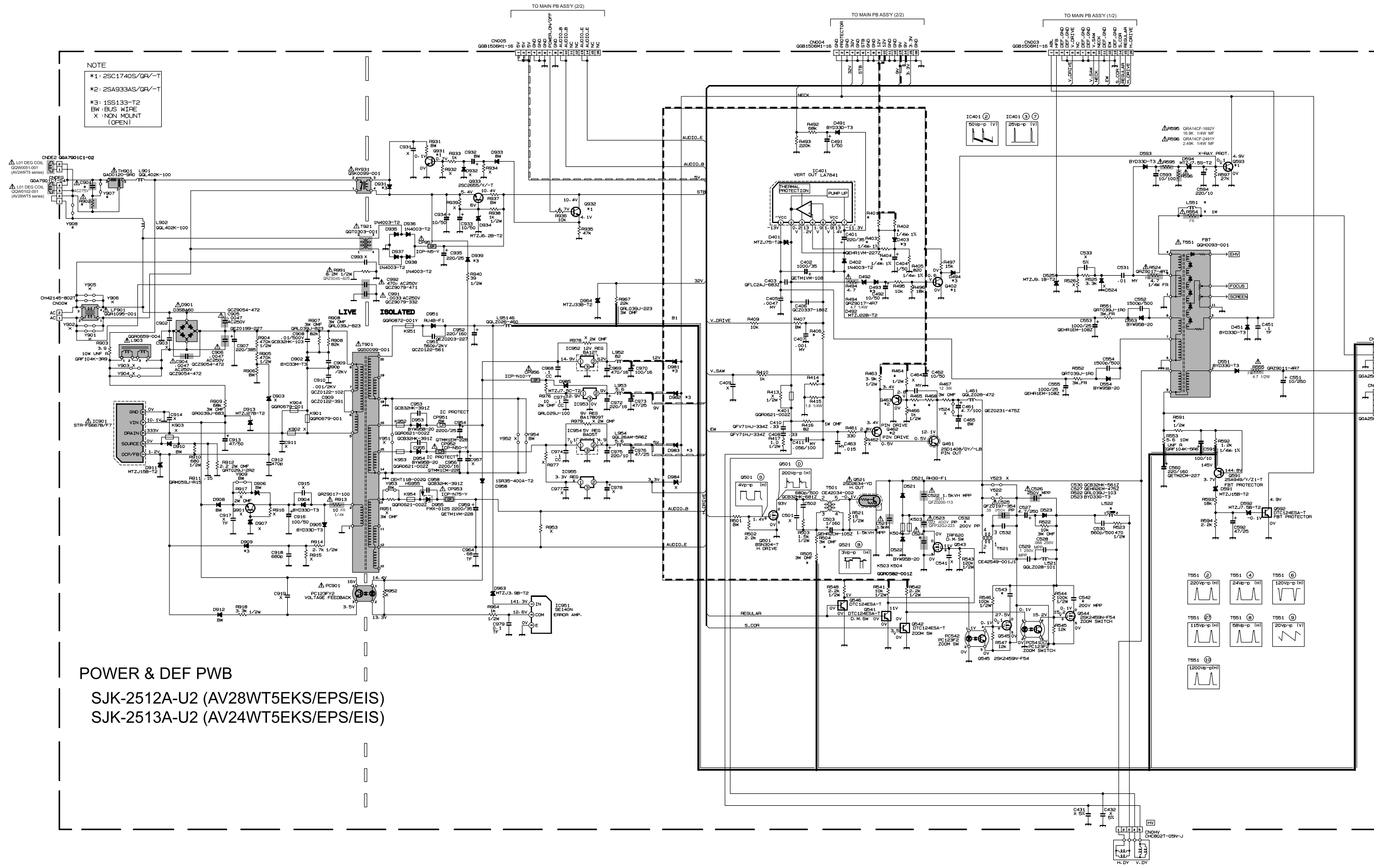
SJK-1712A-U2 (AV28WT5EPS/EIS)
 SJK-1713A-U2 (AV24WT5EPS/EIS)
 SJK-1912A-U2 (AV28WT5EKS)
 SJK-1913A-U2 (AV24WT5EKS)

	SJK-1912A-U2	SJK-1913A-U2	SJK-1712A-U2	SJK-1713A-U2
C879	X	X	1ND	1ND
R743	X	X	100	100
R744	X	X	100	100
ALF901	X	X	X	X
Y901	X	X	X	X
Y902	X	X	X	X
Y903	X	X	X	X
Y904	X	X	X	X
AV901	X	X	X	X
AV901	X	X	X	X
AV901	X	X	X	X
CNDPW	X	X	X	X
CNDOW	X	X	X	X
TC702	X	X	X	X



NOTE
 X OPTION(MOUNT)
 BW IM-BW
 #1 NRS402J-0R0X
 #2 S2C2412K/GRV-X
 #3 S2A1037AK/GRV-X
 #4 MA3100/M-X
 #5 DTC124EKA-X
 #6 DTA114EKA-X
 #7 S2C17495B/GRV-T
 #8 S2A933AS/GRV-T

POWER & DEF PWB CIRCUIT DIAGRAM



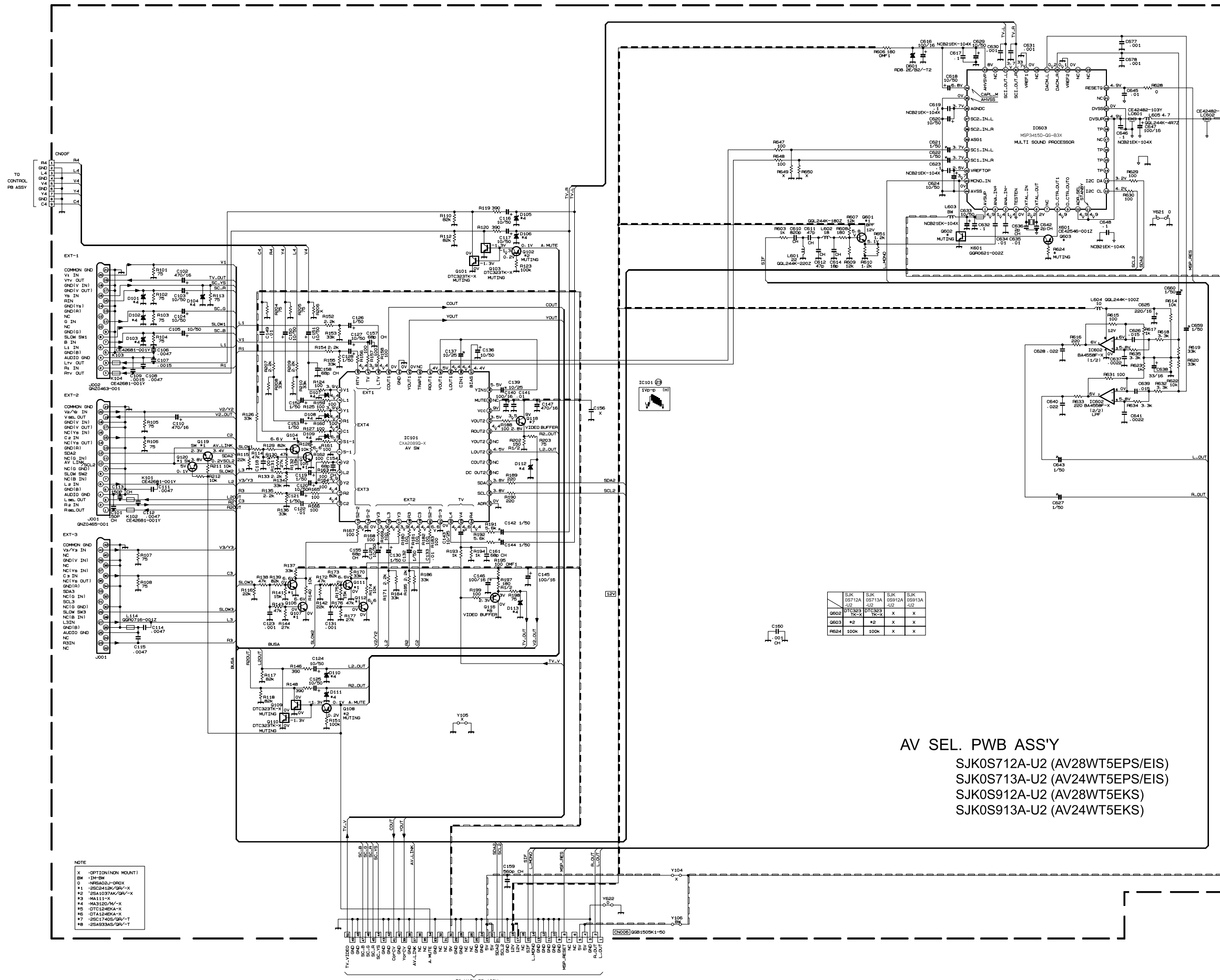
NOTE
 *1: 2SC1740S/QR/-T
 *2: 2SA933AS/QR/-T
 *3: 1SS133-T2
 BW : BUS WIRE
 X : NON MOUNT
 (OPEN)

DIFFERENCE LIST (#PARTS)

	28WT5	24WT5
*1	SJK-2512A	SJK-2513A
*2	SJK-2512A	SJK-2513A
*3	SJK-2512A	SJK-2513A
*4	SJK-2512A	SJK-2513A
*5	SJK-2512A	SJK-2513A
*6	SJK-2512A	SJK-2513A
*7	SJK-2512A	SJK-2513A
*8	SJK-2512A	SJK-2513A
*9	SJK-2512A	SJK-2513A
*10	SJK-2512A	SJK-2513A
*11	SJK-2512A	SJK-2513A
*12	SJK-2512A	SJK-2513A
*13	SJK-2512A	SJK-2513A
*14	SJK-2512A	SJK-2513A
*15	SJK-2512A	SJK-2513A
*16	SJK-2512A	SJK-2513A
*17	SJK-2512A	SJK-2513A
*18	SJK-2512A	SJK-2513A
*19	SJK-2512A	SJK-2513A
*20	SJK-2512A	SJK-2513A
*21	SJK-2512A	SJK-2513A
*22	SJK-2512A	SJK-2513A
*23	SJK-2512A	SJK-2513A
*24	SJK-2512A	SJK-2513A
*25	SJK-2512A	SJK-2513A
*26	SJK-2512A	SJK-2513A
*27	SJK-2512A	SJK-2513A
*28	SJK-2512A	SJK-2513A
*29	SJK-2512A	SJK-2513A
*30	SJK-2512A	SJK-2513A
*31	SJK-2512A	SJK-2513A
*32	SJK-2512A	SJK-2513A
*33	SJK-2512A	SJK-2513A
*34	SJK-2512A	SJK-2513A
*35	SJK-2512A	SJK-2513A
*36	SJK-2512A	SJK-2513A
*37	SJK-2512A	SJK-2513A
*38	SJK-2512A	SJK-2513A
*39	SJK-2512A	SJK-2513A
*40	SJK-2512A	SJK-2513A
*41	SJK-2512A	SJK-2513A
*42	SJK-2512A	SJK-2513A
*43	SJK-2512A	SJK-2513A
*44	SJK-2512A	SJK-2513A
*45	SJK-2512A	SJK-2513A
*46	SJK-2512A	SJK-2513A
*47	SJK-2512A	SJK-2513A
*48	SJK-2512A	SJK-2513A
*49	SJK-2512A	SJK-2513A
*50	SJK-2512A	SJK-2513A
*51	SJK-2512A	SJK-2513A
*52	SJK-2512A	SJK-2513A
*53	SJK-2512A	SJK-2513A
*54	SJK-2512A	SJK-2513A
*55	SJK-2512A	SJK-2513A
*56	SJK-2512A	SJK-2513A
*57	SJK-2512A	SJK-2513A
*58	SJK-2512A	SJK-2513A
*59	SJK-2512A	SJK-2513A
*60	SJK-2512A	SJK-2513A
*61	SJK-2512A	SJK-2513A
*62	SJK-2512A	SJK-2513A
*63	SJK-2512A	SJK-2513A
*64	SJK-2512A	SJK-2513A
*65	SJK-2512A	SJK-2513A
*66	SJK-2512A	SJK-2513A
*67	SJK-2512A	SJK-2513A
*68	SJK-2512A	SJK-2513A
*69	SJK-2512A	SJK-2513A
*70	SJK-2512A	SJK-2513A
*71	SJK-2512A	SJK-2513A
*72	SJK-2512A	SJK-2513A
*73	SJK-2512A	SJK-2513A
*74	SJK-2512A	SJK-2513A
*75	SJK-2512A	SJK-2513A
*76	SJK-2512A	SJK-2513A
*77	SJK-2512A	SJK-2513A
*78	SJK-2512A	SJK-2513A
*79	SJK-2512A	SJK-2513A
*80	SJK-2512A	SJK-2513A
*81	SJK-2512A	SJK-2513A
*82	SJK-2512A	SJK-2513A
*83	SJK-2512A	SJK-2513A
*84	SJK-2512A	SJK-2513A
*85	SJK-2512A	SJK-2513A
*86	SJK-2512A	SJK-2513A
*87	SJK-2512A	SJK-2513A
*88	SJK-2512A	SJK-2513A
*89	SJK-2512A	SJK-2513A
*90	SJK-2512A	SJK-2513A
*91	SJK-2512A	SJK-2513A
*92	SJK-2512A	SJK-2513A
*93	SJK-2512A	SJK-2513A
*94	SJK-2512A	SJK-2513A
*95	SJK-2512A	SJK-2513A
*96	SJK-2512A	SJK-2513A
*97	SJK-2512A	SJK-2513A
*98	SJK-2512A	SJK-2513A
*99	SJK-2512A	SJK-2513A
*100	SJK-2512A	SJK-2513A

POWER & DEF PWB
 SJK-2512A-U2 (AV28WT5EKS/EPS/EIS)
 SJK-2513A-U2 (AV24WT5EKS/EPS/EIS)

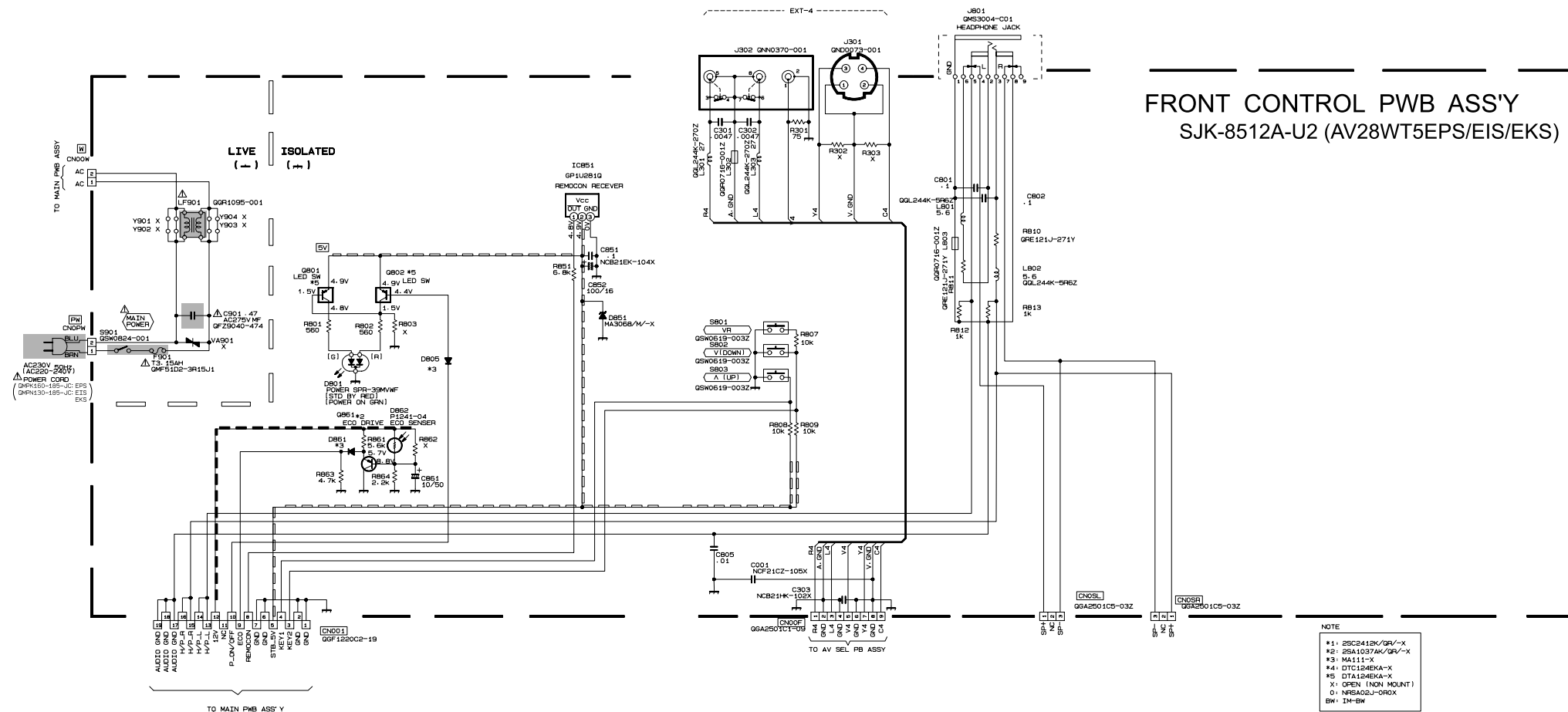
AV SEL. PWB CIRCUIT DIARAM



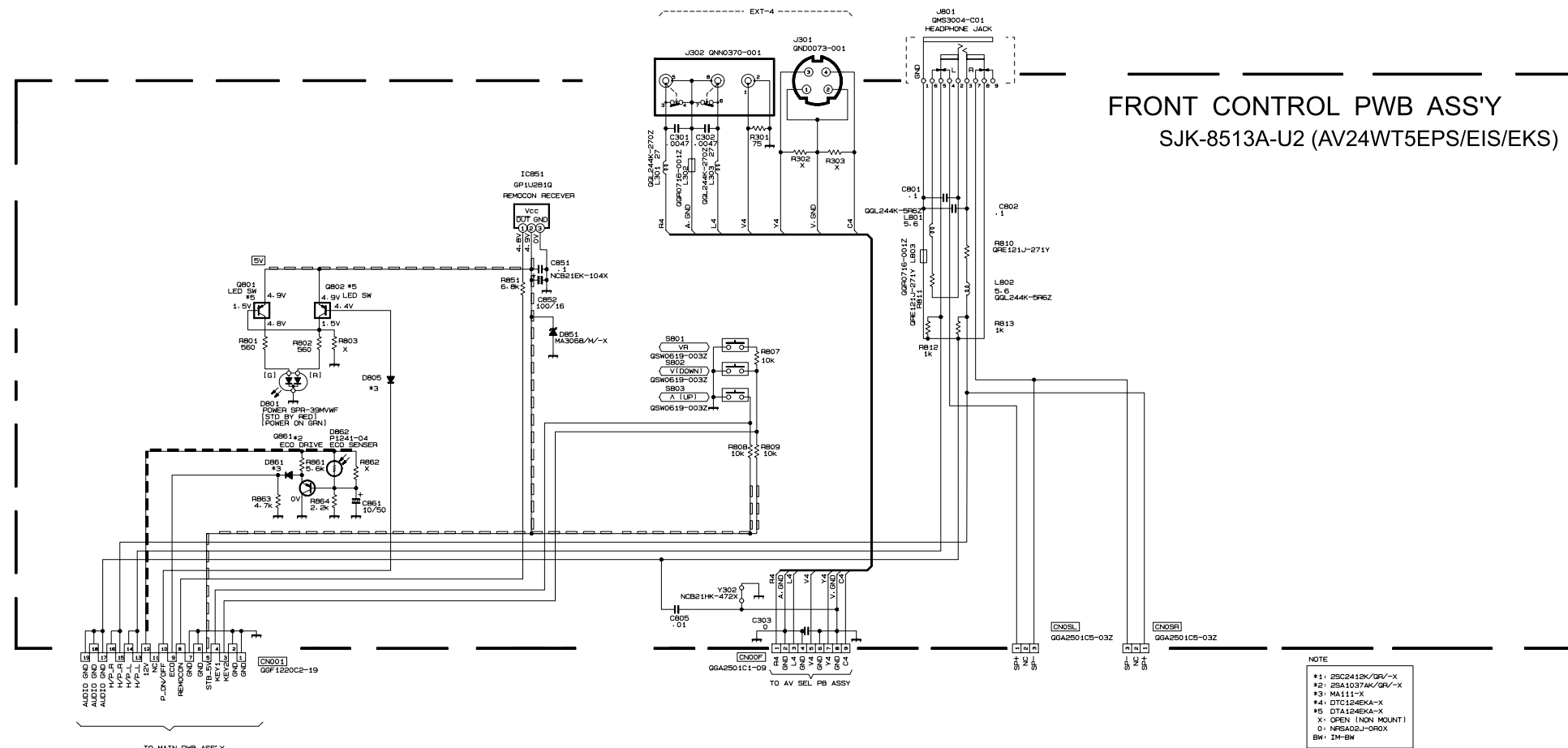
AV SEL. PWB ASS'Y
 SJK05712A-U2 (AV28WT5EPS/EIS)
 SJK05713A-U2 (AV24WT5EPS/EIS)
 SJK05912A-U2 (AV28WT5EKS)
 SJK05913A-U2 (AV24WT5EKS)

NOTE
 X - OPTION(MOUNT)
 IM-BW
 0 - NPSA023-OROX
 #1 - S5C419/GRV-X
 #2 - S5A1037AK/GRV-X
 #3 - HA1117-X
 #4 - HA3120/NV-X
 #5 - DTC1248A-X
 #6 - DT1428A-X
 #7 - S5C17405/GRV-T
 #8 - S5A933A5/GRV-T

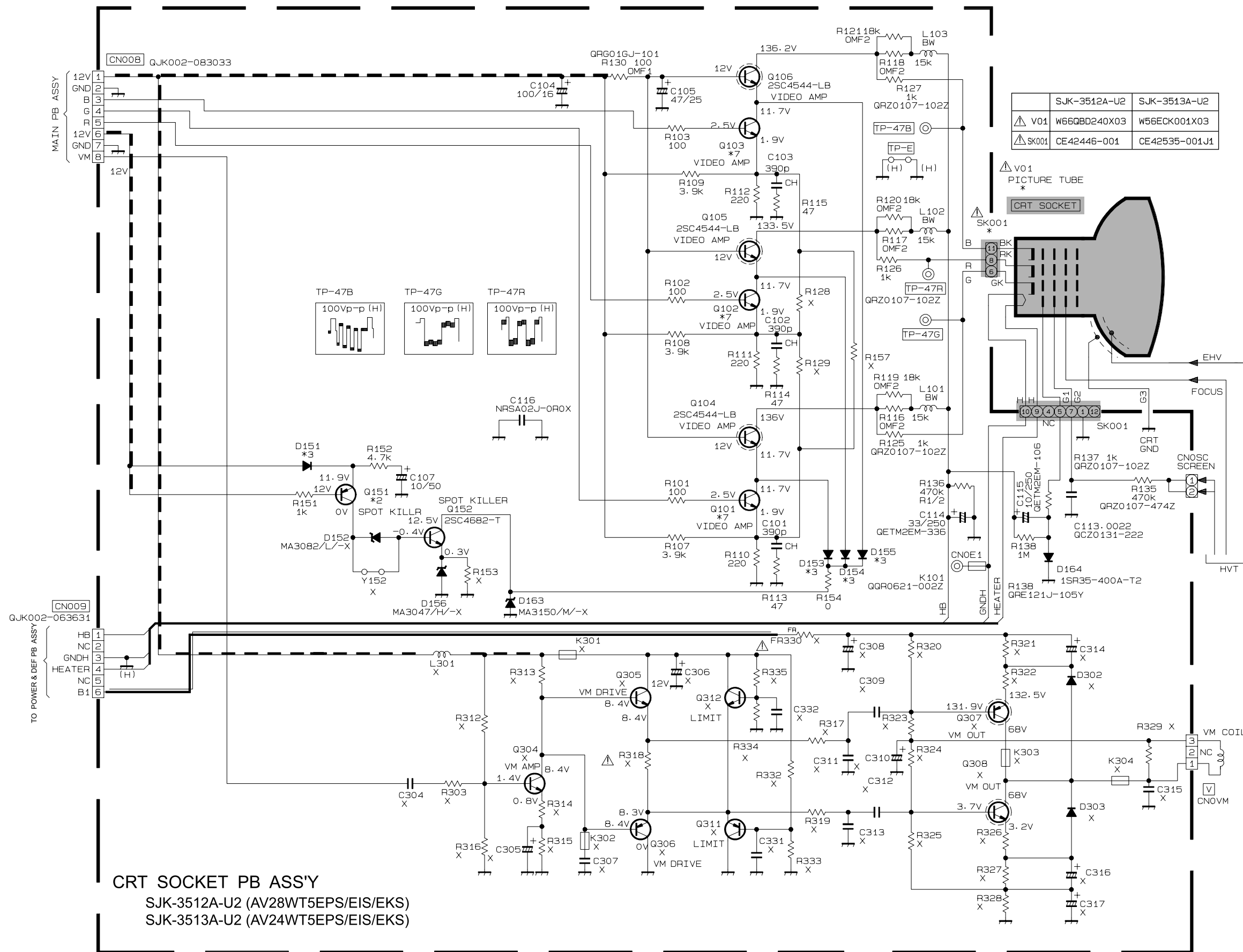
FRONT CONTROL PWB CIRCUIT DIAGRAM [AV28WT5EPS / EIS / EKS]



FRONT MAIN CONTROL PWB CIRCUIT DIAGRAM [AV24WT5EPS / EIS / EKS]



CRT SOCKET PWB CIRCUIT DIAGRAM



NOTE

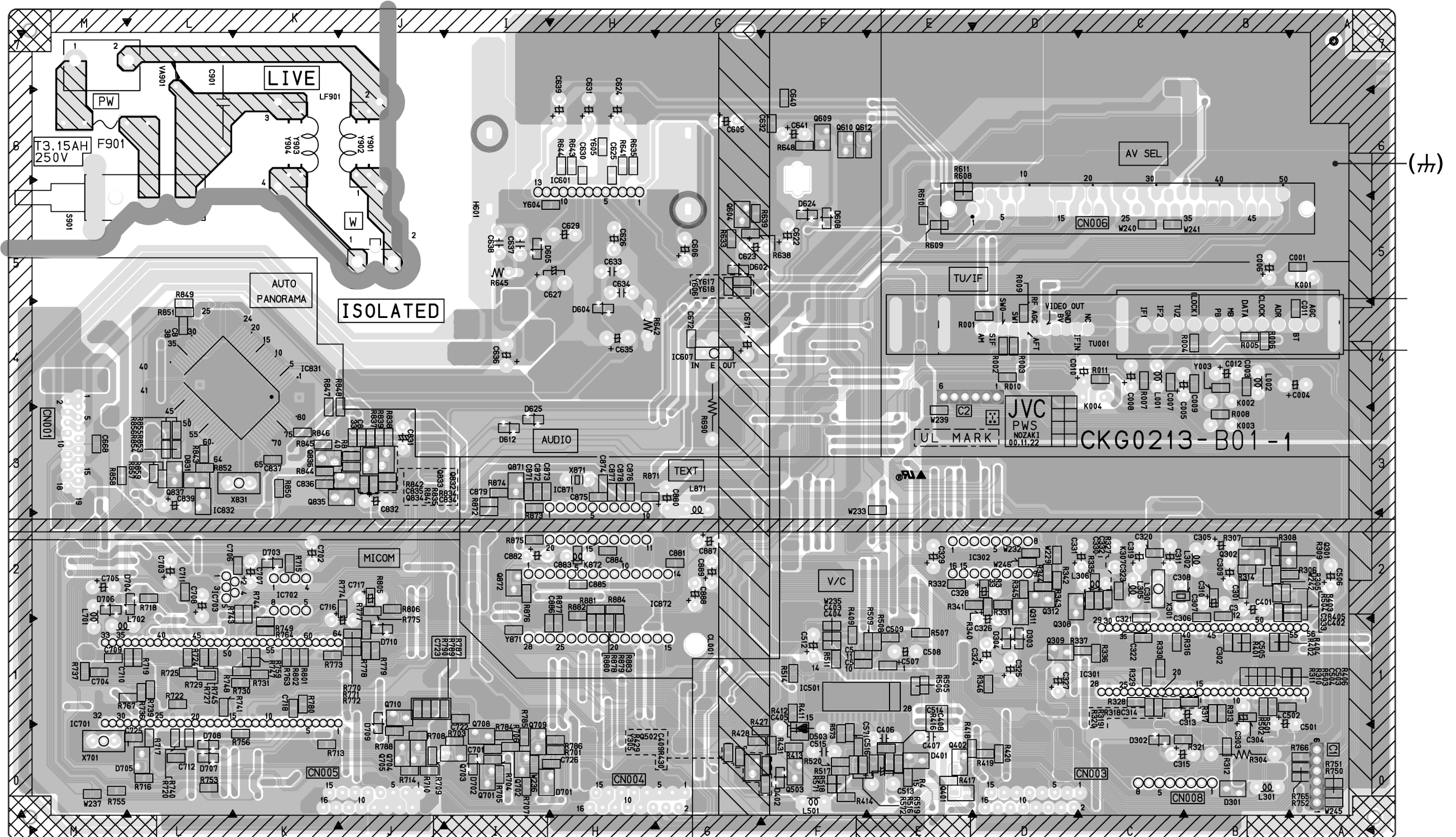
- X : OPTION (NON MOUNTED)
- BW : IM-BW
- 0 : NRSA02J-0R0X
- *1 : 2SC2412K/QR/-X
- *2 : 2SA1037AK/QR/-X
- *3 : MA111-X
- *4 : MA3100/M/-X
- *5 : DTC124EKA-X
- *6 : DTA124EKA-X
- *7 : 2SC1740S/QR/-T
- *8 : 2SA933AS/QR/-T
- *9 : CE41492-001Z
- *10 : CEHP00N-001Q
- ⊥ : LOW B GND
- (H) : HIGH B GND

	SJK-3512A-U2	SJK-3513A-U2
△ V01	W66QBD240X03	W56ECK001X03
△ SK001	CE42446-001	CE42535-001J1

CRT SOCKET PB ASS'Y
 SJK-3512A-U2 (AV28WT5EPS/EIS/EKS)
 SJK-3513A-U2 (AV24WT5EPS/EIS/EKS)

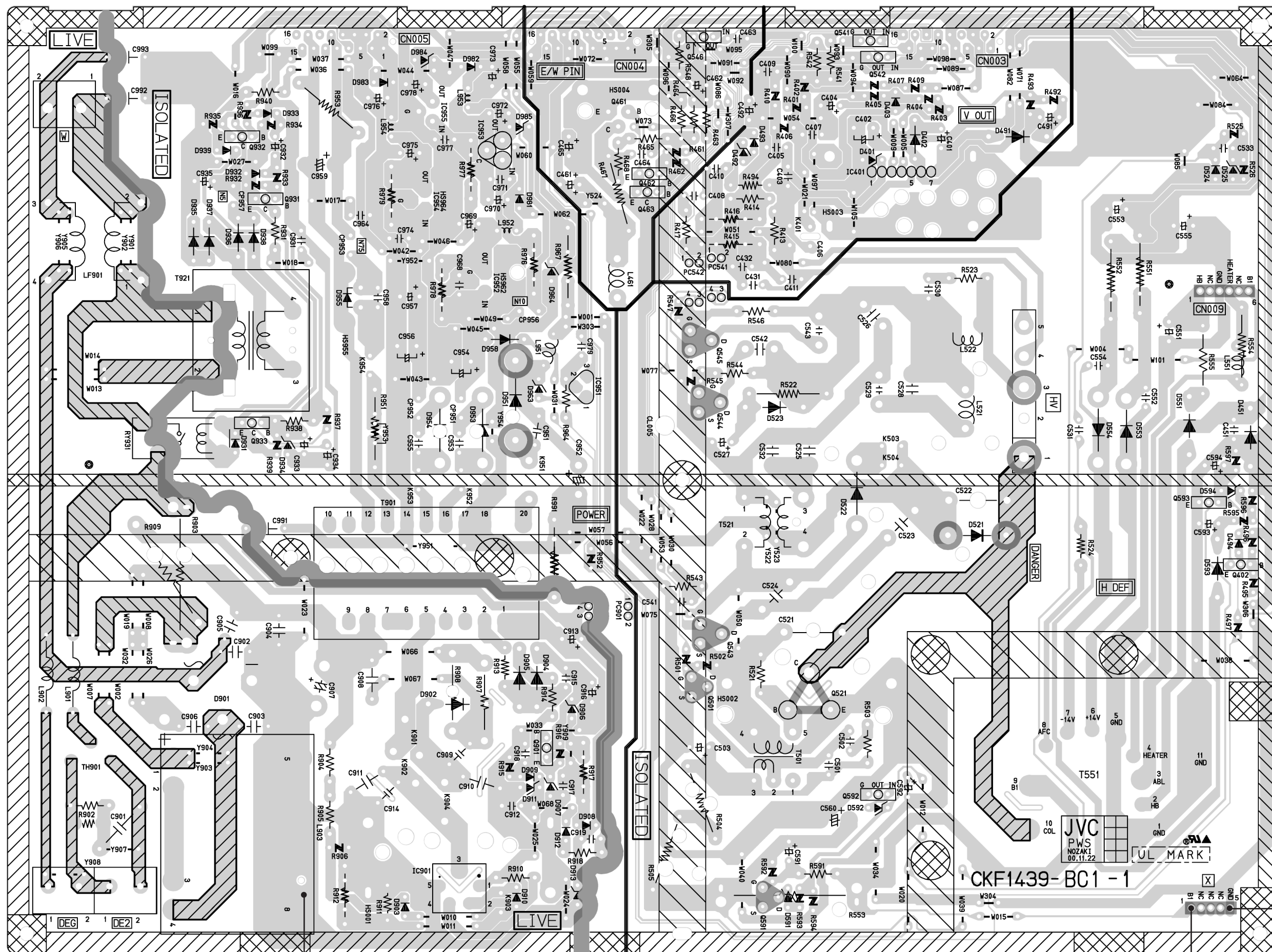
PATTERN DIAGRAMS
MAIN PWB PATTERN

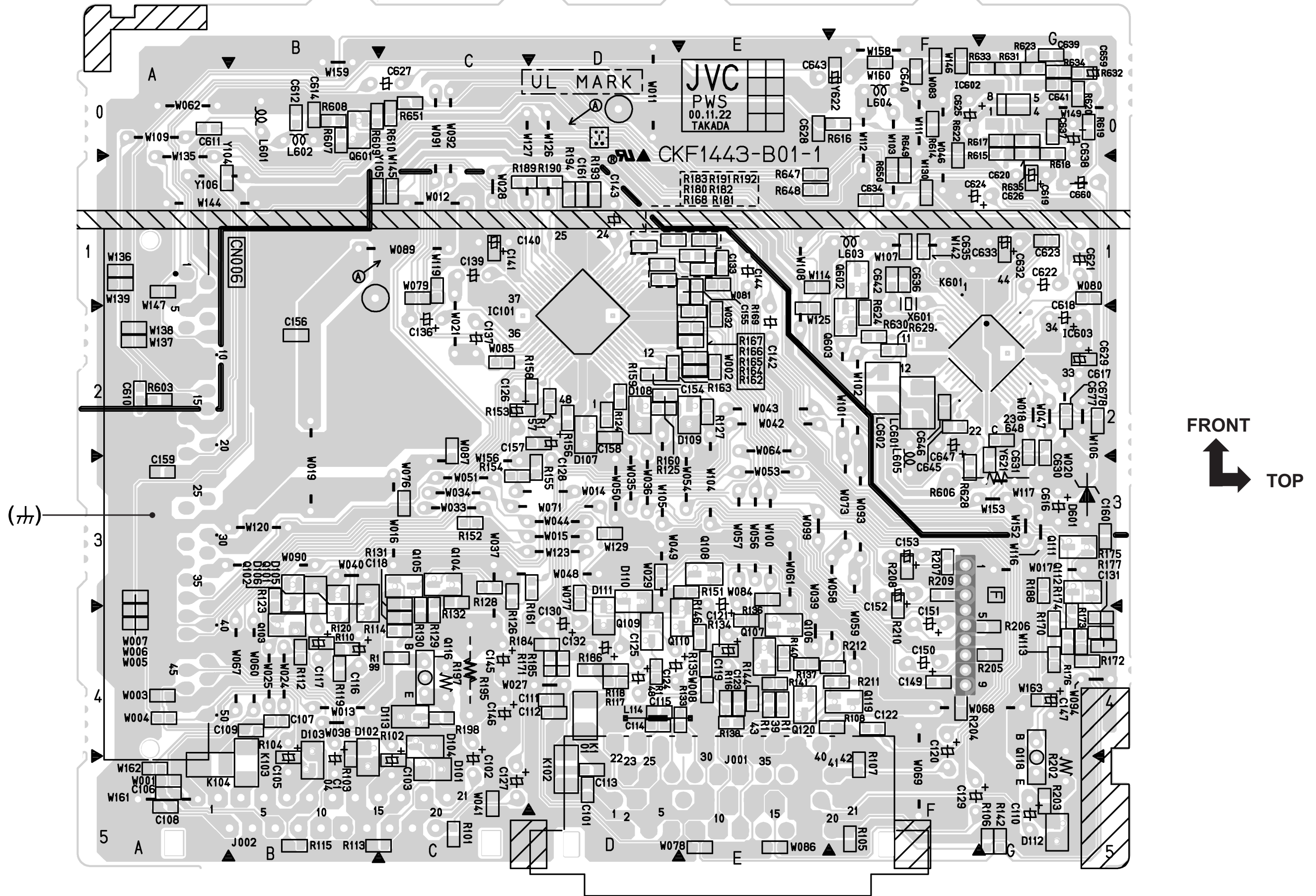
← FRONT



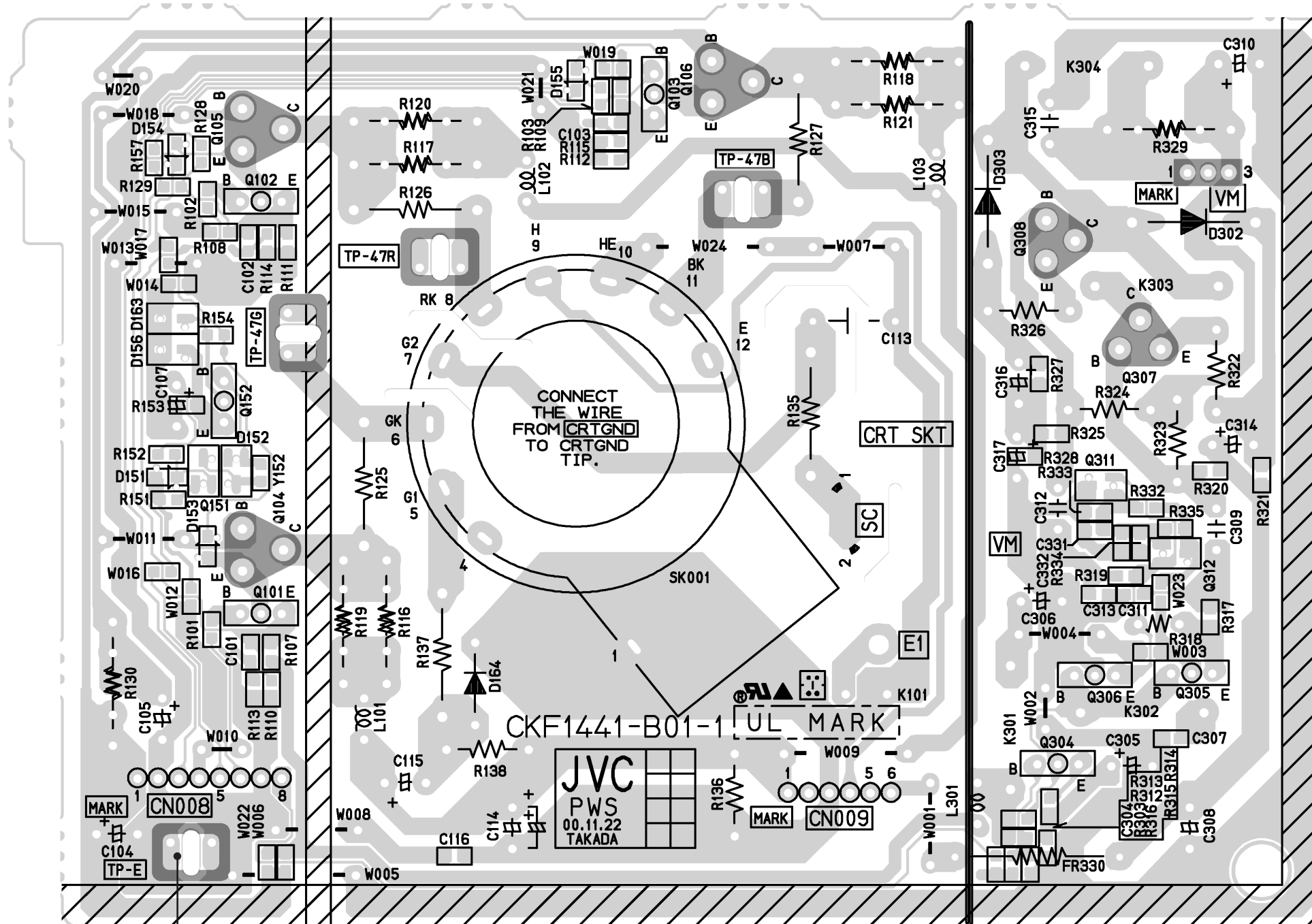
POWER & DEF PWB PATTERN

FRONT





↑
TOP

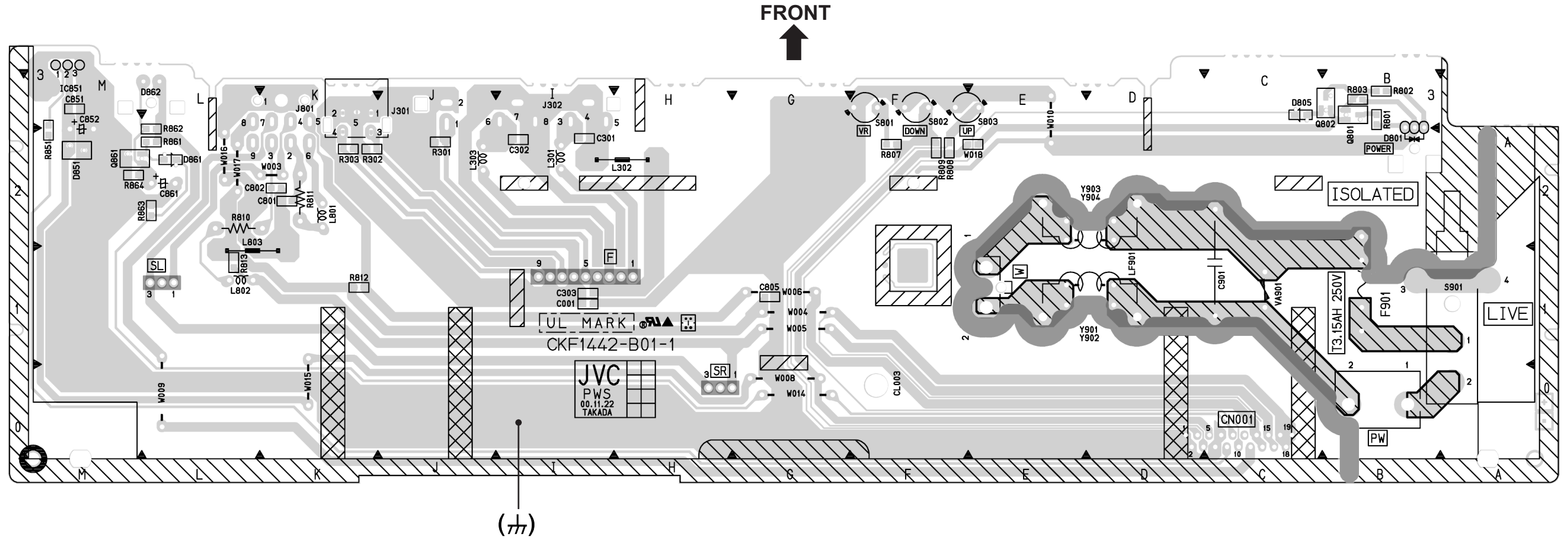


(77)

AV28WT5EPS AV24WT5EPS
 AV28WT5EIS AV24WT5EIS
 AV28WT5EKS AV24WT5EKS

AV28WT5EPS AV24WT5EPS
 AV28WT5EIS AV24WT5EIS
 AV28WT5EKS AV24WT5EKS

FRONT CONTROL PWB PATTERN [AV28WT5EPS / EIS / EKS]



FRONT CONTROL PWB PATTERN [AV24WT5EPS / EIS / EKS]

