

# JVC

## SCHEMATIC DIAGRAMS

COLOUR TELEVISION

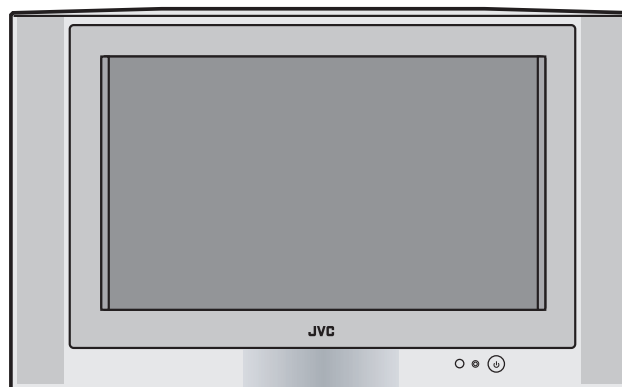
### HV-32D25EUW

### HV-32D25EJW

CD-ROM No.SML200301

BASIC CHASSIS

MK



**D.I.S.T. 1250i**

InteriArt

*Natural Vision*

**T-V LINK**

# HV-32D25EUW / HV-32D25EJW STANDARD CIRCUIT DIAGRAM

## NOTE ON USING CIRCUIT DIAGRAMS

### 1.SAFETY

The components identified by the  $\triangle$  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 $\Omega$  /V
- (4)Oscilloscope sweeping time :H  $\Rightarrow$  20 $\mu$ 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 :[  $\Omega$  ]
- K :[K  $\Omega$  ]
- M :[M  $\Omega$  ]

##### ● 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 :[ $\mu$ 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 [ $\mu$ F]/withstand voltage[V]

##### ● Type

- No indication :Ceramic 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 :[  $\mu$ H]
- Others :As specified

#### (4)Power Supply



\* 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) : (  $\perp\perp$  ) 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 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






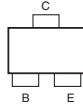
- ◇ Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list. When ordering parts, please use the numbers that appear in the Parts List.

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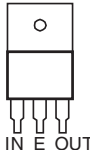
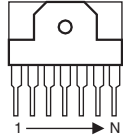
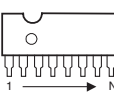
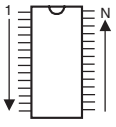
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## SEMICONDUCTOR SHAPES

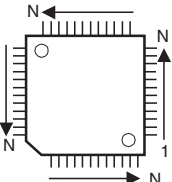
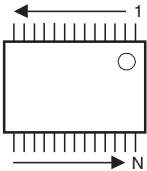
### TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

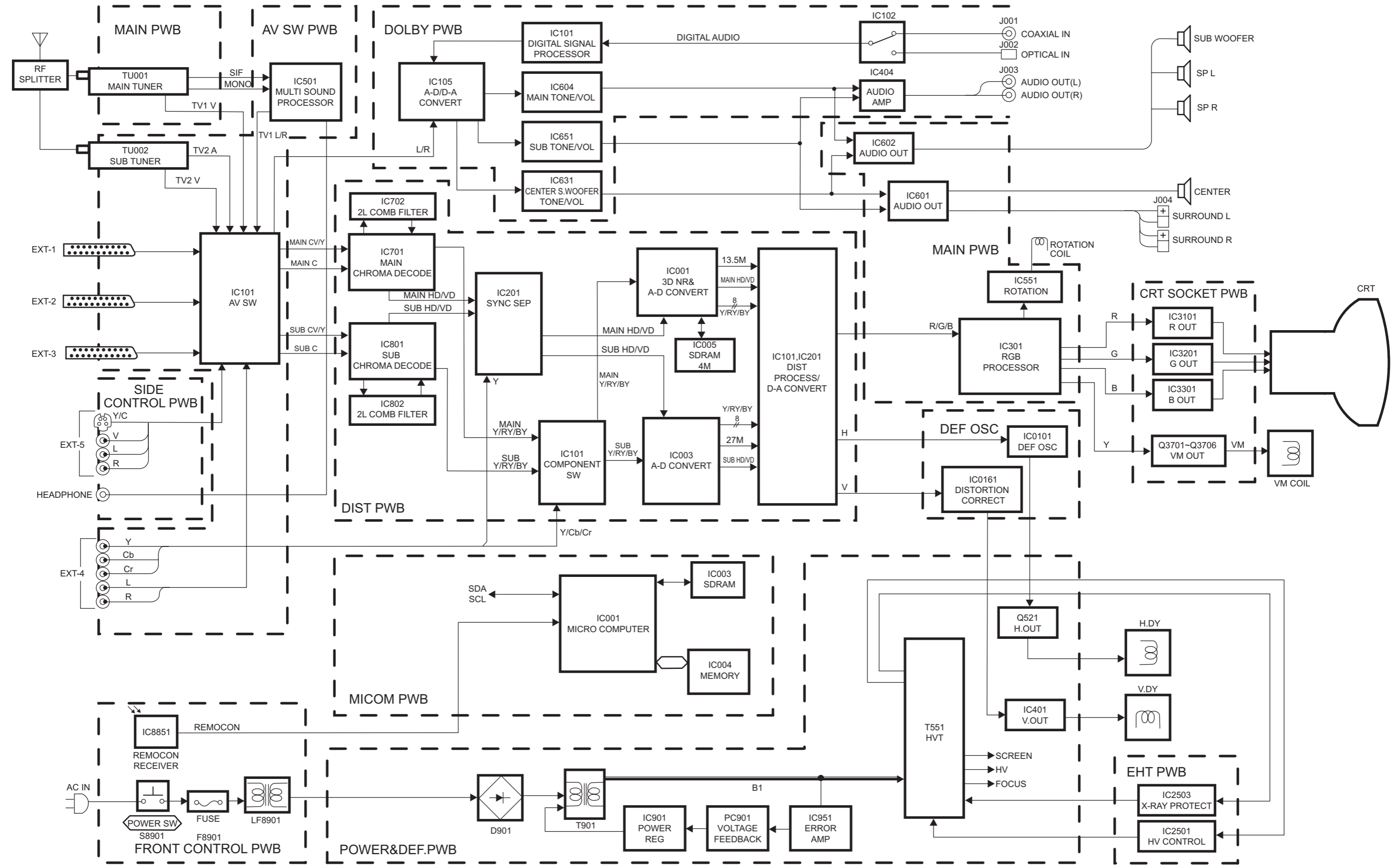
### IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

### CHIP IC

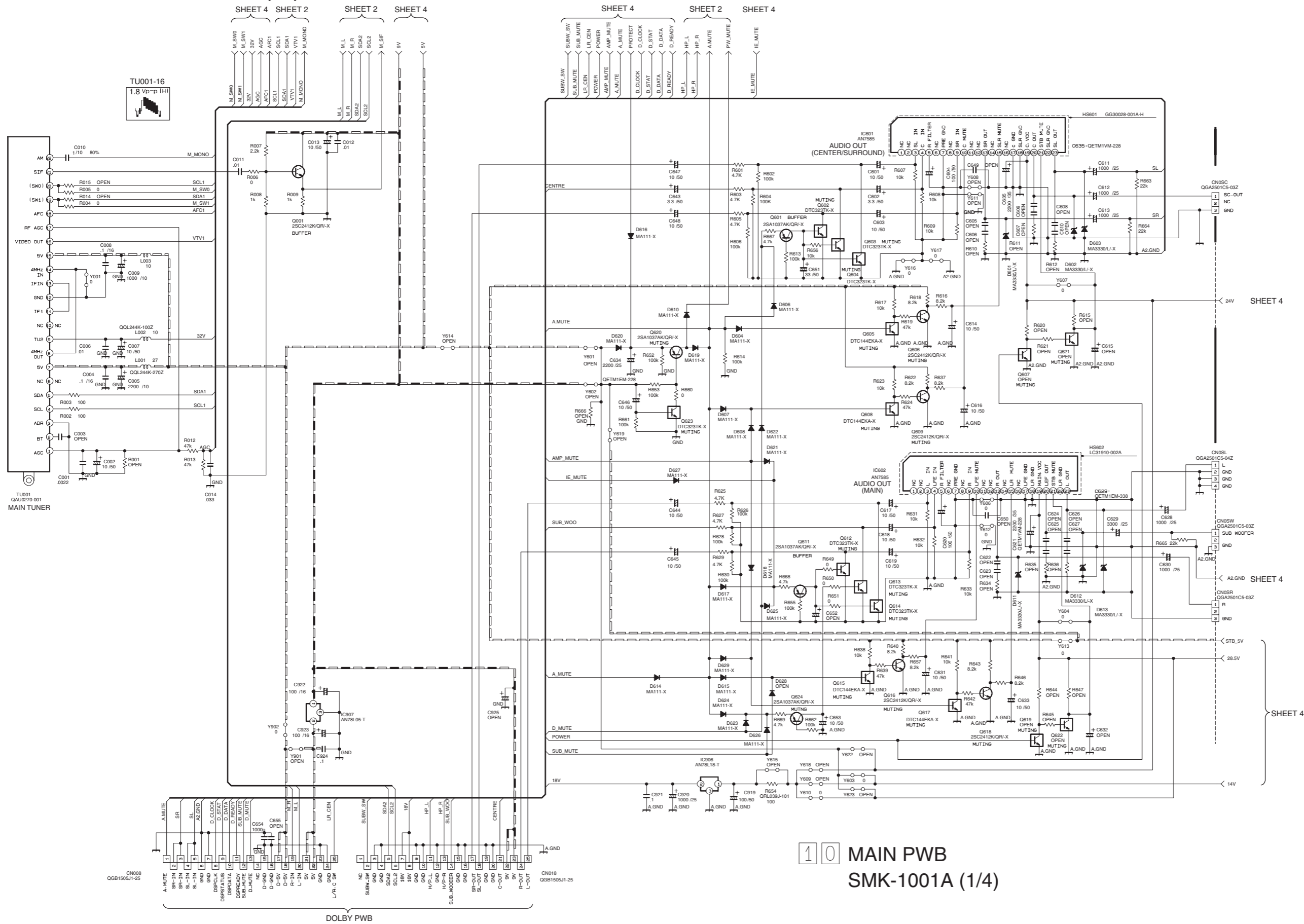
TOP VIEW	
	

# BLOCK DIAGRAM



# CIRCUIT DIAGRAM

## MAIN PWB CIRCUIT DIAGRAM (1/4) SHEET1

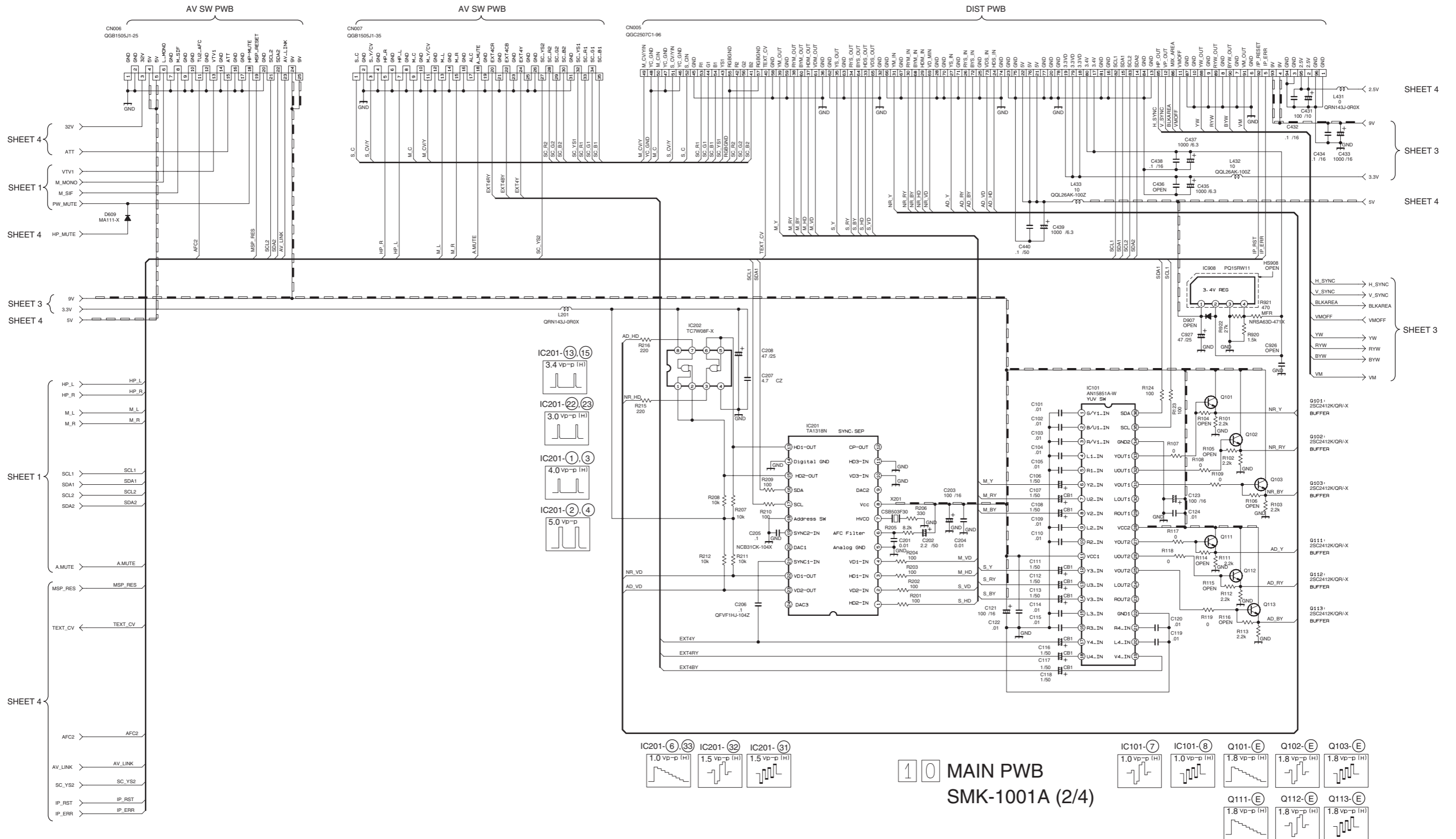


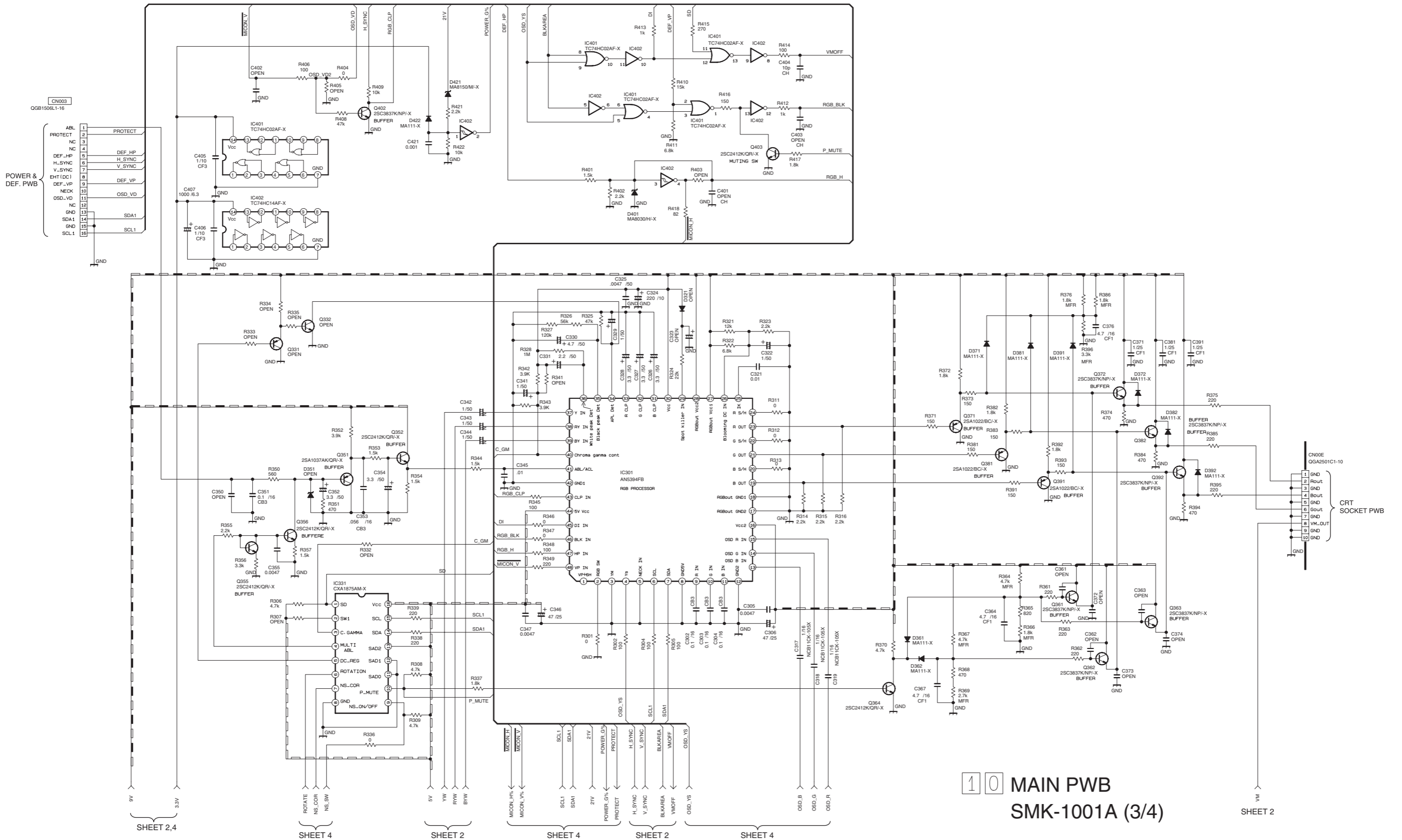
10 MAIN PWB  
SMK-1001A (1/4)

MAIN PWB CIRCUIT DIAGRAM (2/4)

SHEET2

SHEET2

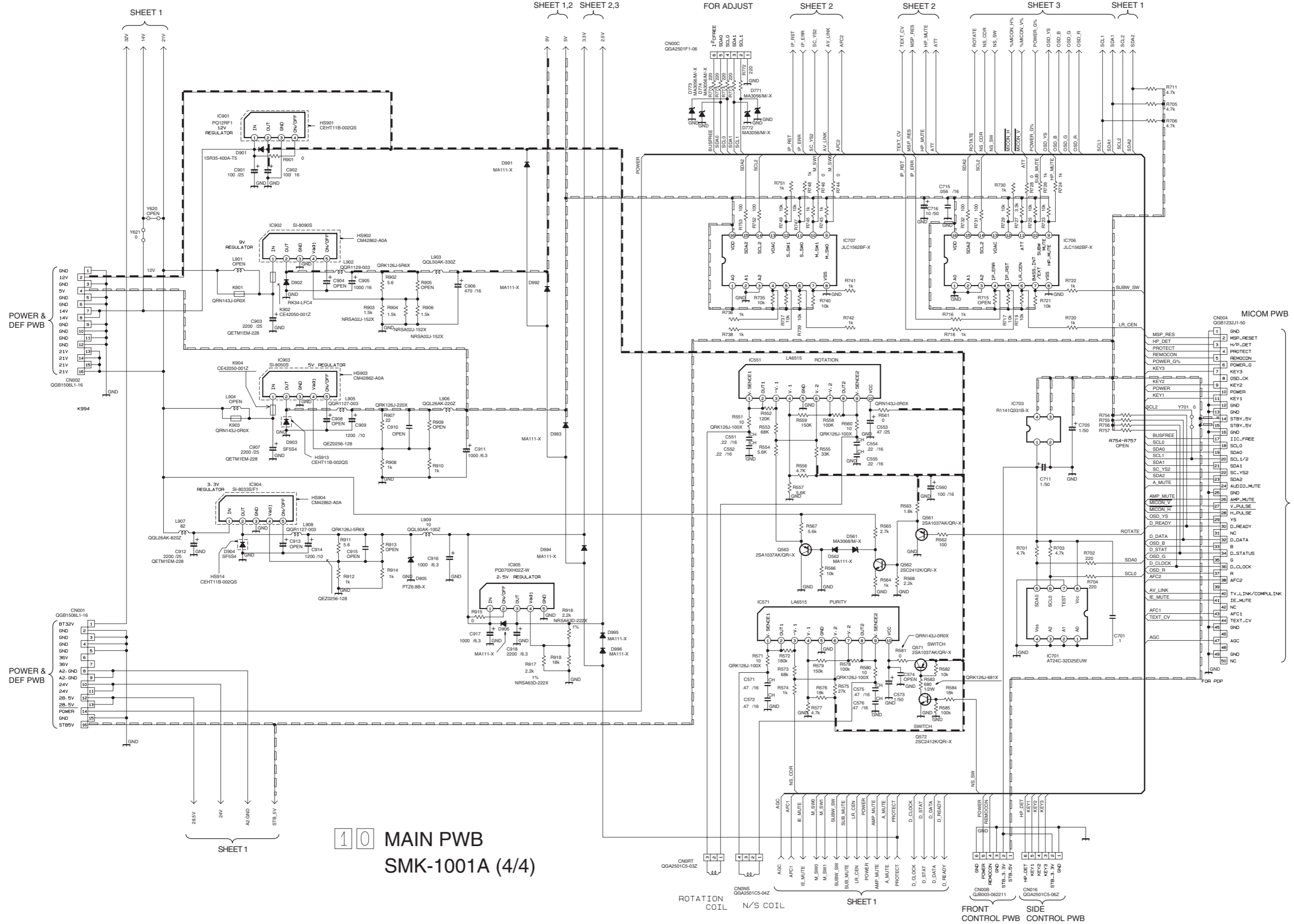




10 MAIN PWB  
SMK-1001A (3/4)

MAIN PWB CIRCUIT DIAGRAM (4/4) SHEET4

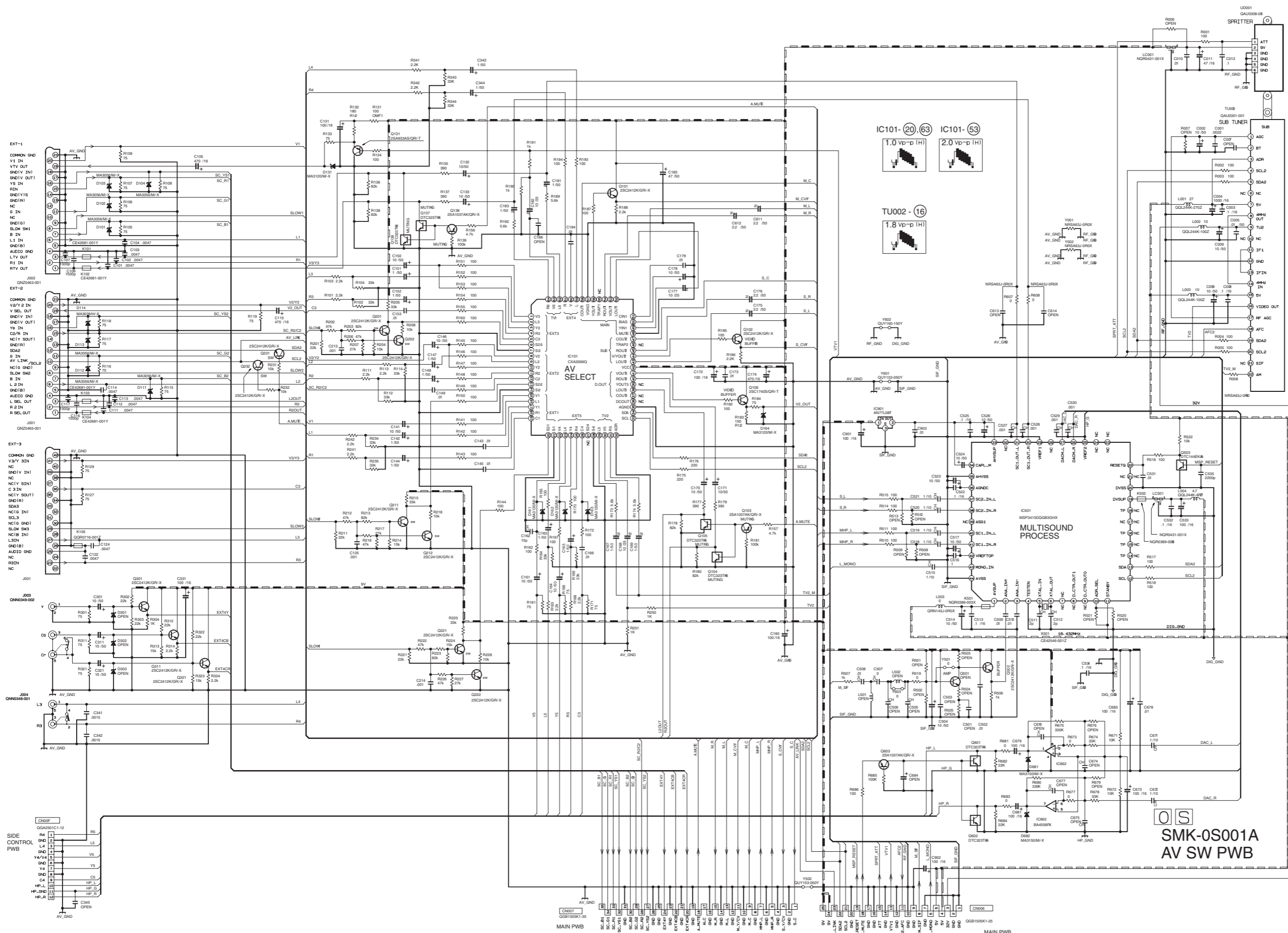
SHEET4



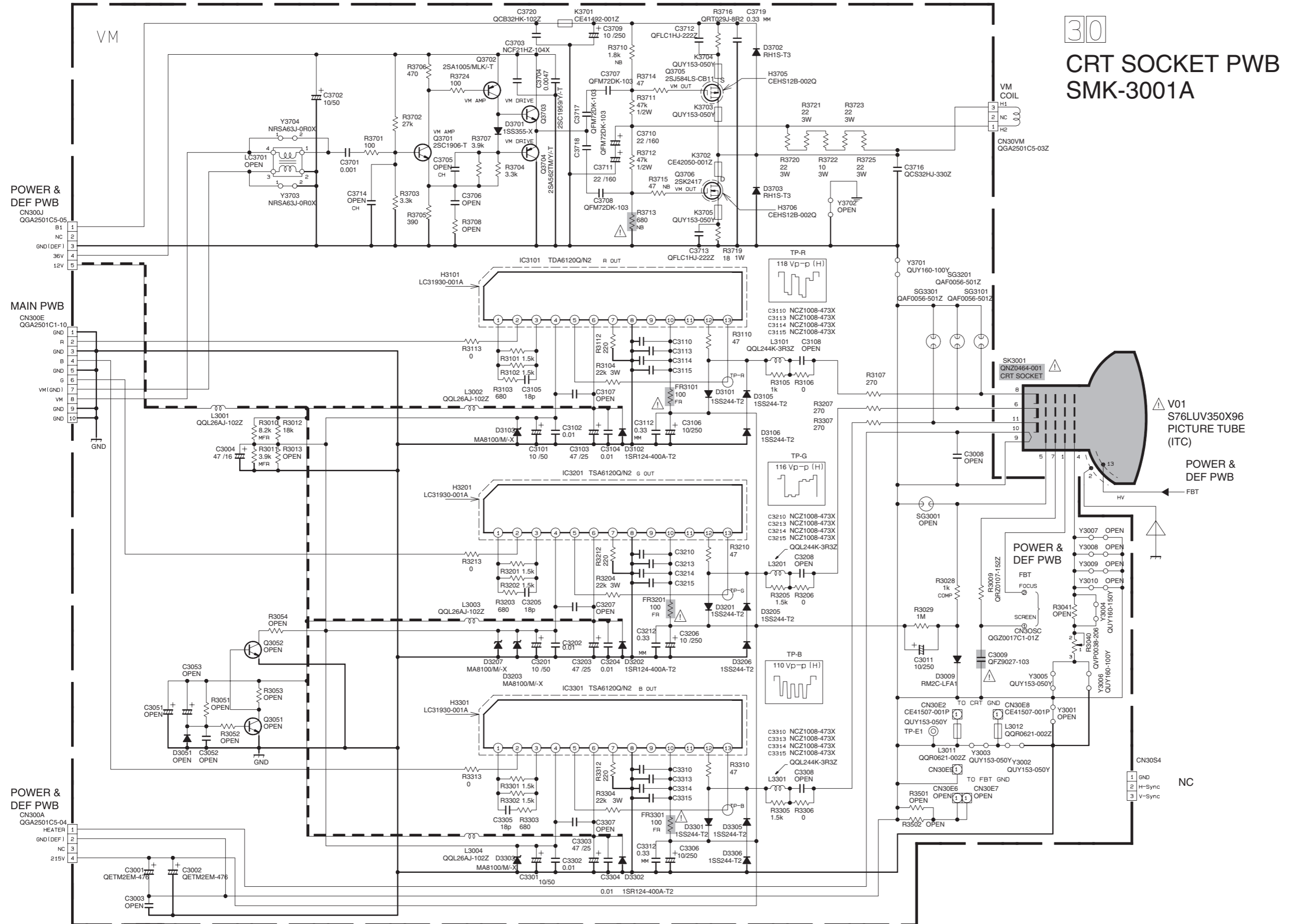
10 MAIN PWB  
SMK-1001A (4/4)



AV SW PWB CIRCUIT DIAGRAM

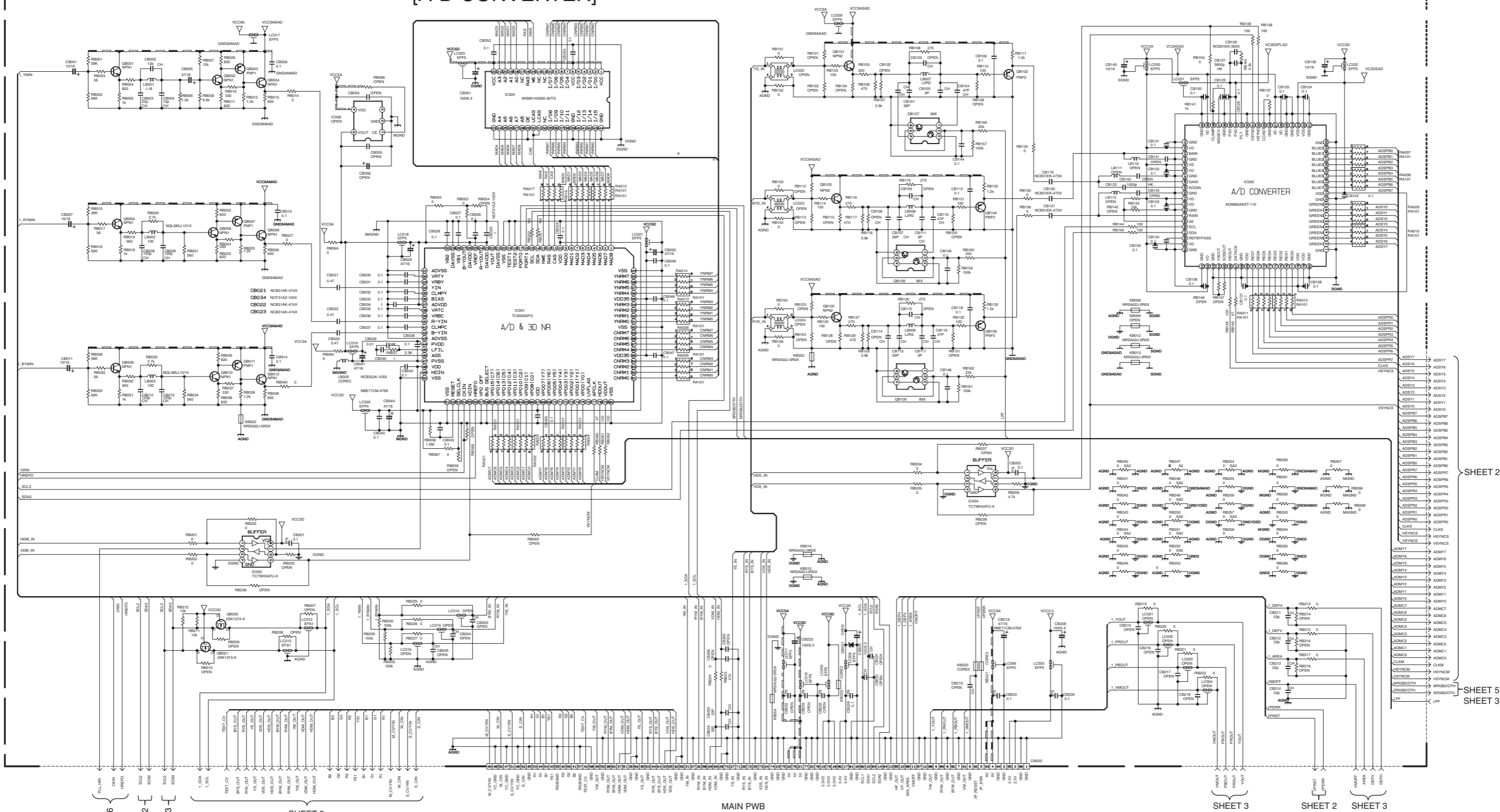


■ CRT SOCKET PWB CIRCUIT DIAGRAM



30  
CRT SOCKET PWB  
SMK-3001A

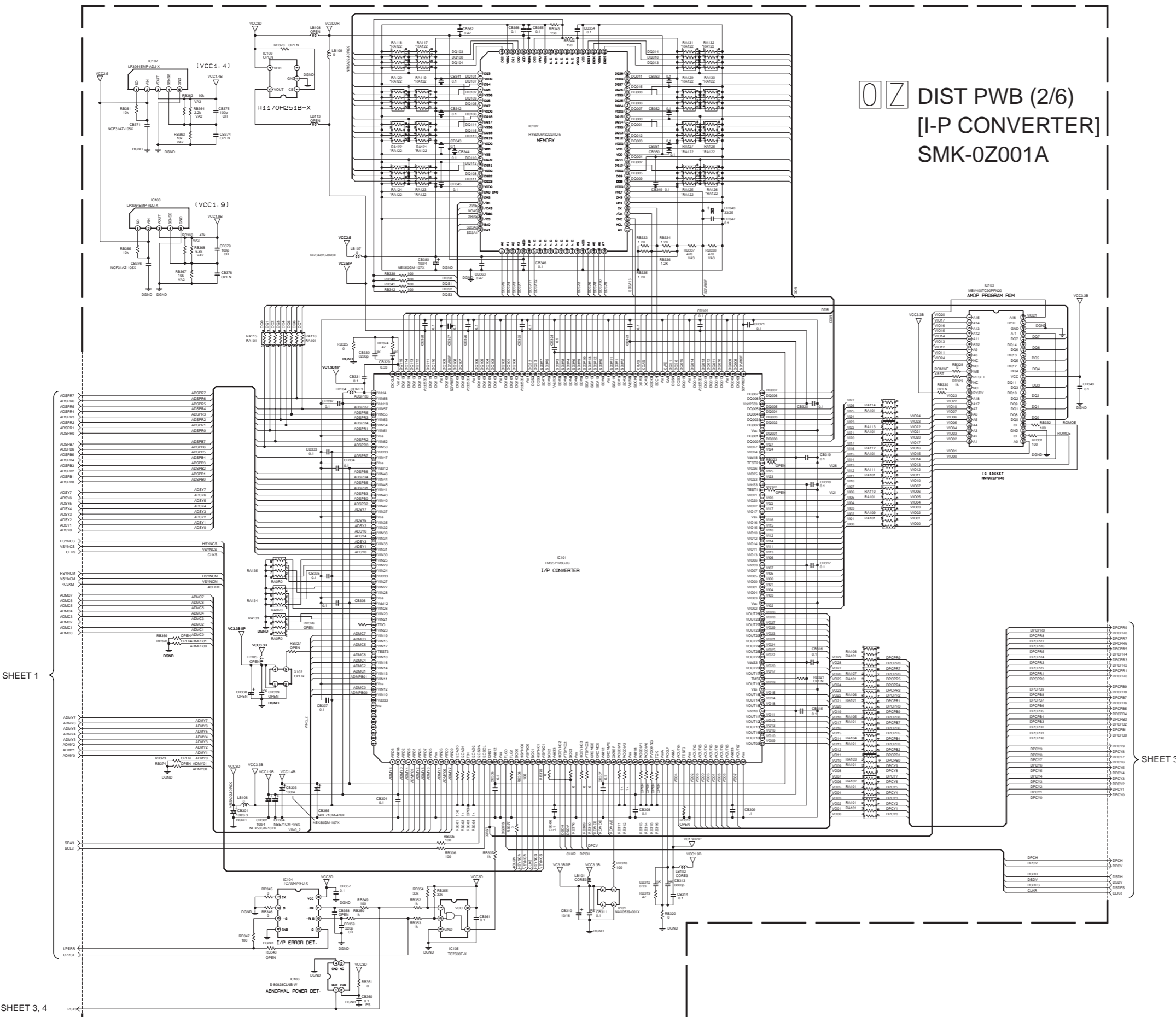
07 DIST PWB (1/6) SMK-0Z001A  
[A-D CONVERTER]



MAIN PWB

SHEET 2

SHEET 3  
SHEET 5  
SHEET 6

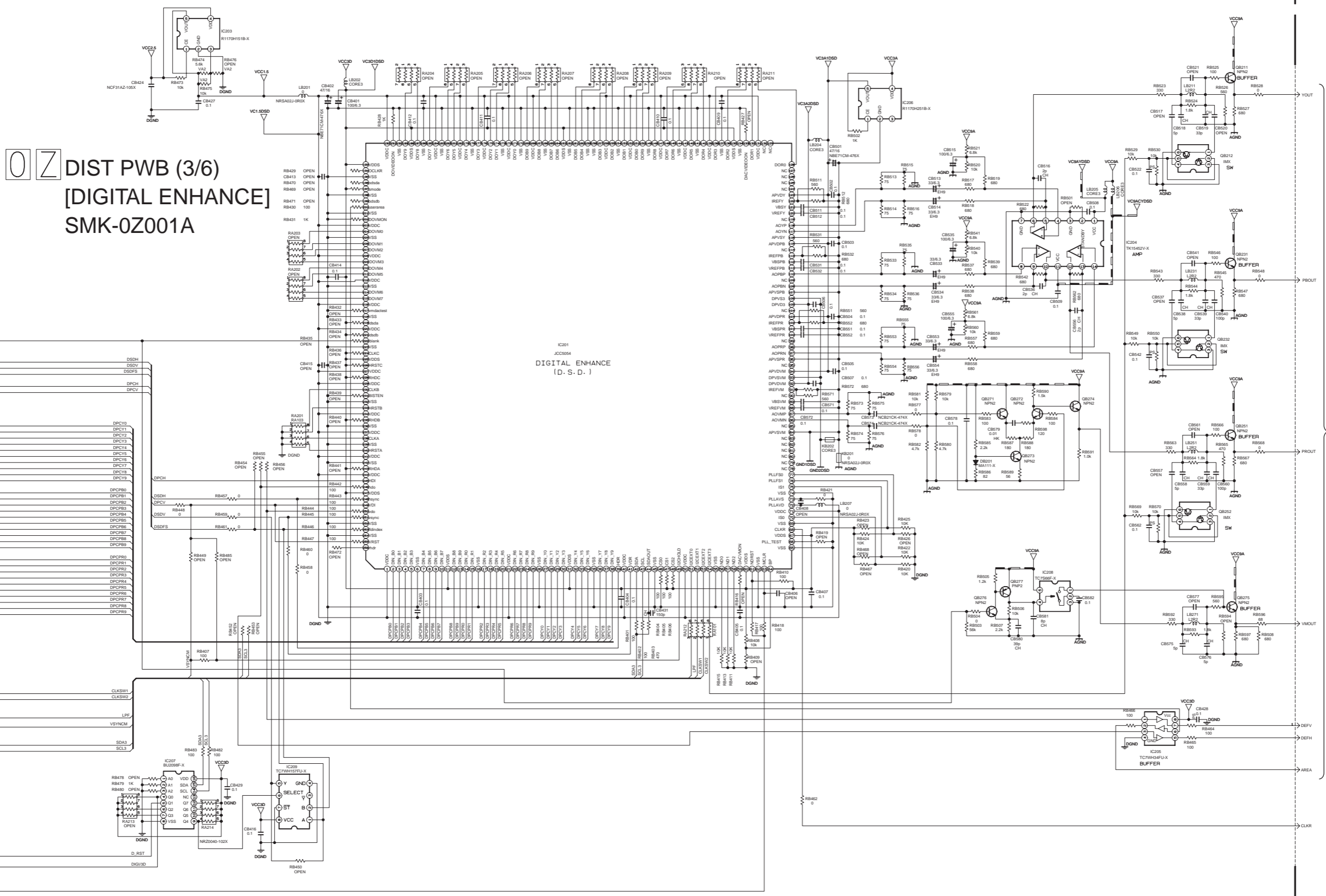


0 Z DIST PWB (2/6)  
[I-P CONVERTER]  
SMK-0Z001A

SHEET 1

SHEET 3

SHEET 3, 4



**0 Z** DIST PWB (3/6)  
[DIGITAL ENHANCE]  
SMK-0Z001A

SHEET 1 { VMOFF  
DSM0  
DSM1  
DPC0  
DPC1  
DPC2  
DPC3  
DPC4  
DPC5  
DPC6  
DPC7  
DPC8  
DPC9  
DPC00  
DPC01  
DPC02  
DPC03  
DPC04  
DPC05  
DPC06  
DPC07  
DPC08  
DPC09  
DPCP00  
DPCP01  
DPCP02  
DPCP03  
DPCP04  
DPCP05  
DPCP06  
DPCP07  
DPCP08  
DPCP09  
DPCPR0  
DPCPR1  
DPCPR2  
DPCPR3  
DPCPR4  
DPCPR5  
DPCPR6  
DPCPR7  
DPCPR8  
DPCPR9  
CLKSW1  
CLKSW2  
LFP  
VSNM0  
SDA3  
SCL3  
D\_RST  
DNGD3D  
RST3

SHEET 2 { DSBM0  
DSM0  
DPC0  
DPC1  
DPC2  
DPC3  
DPC4  
DPC5  
DPC6  
DPC7  
DPC8  
DPC9  
DPCP00  
DPCP01  
DPCP02  
DPCP03  
DPCP04  
DPCP05  
DPCP06  
DPCP07  
DPCP08  
DPCP09  
DPCPR0  
DPCPR1  
DPCPR2  
DPCPR3  
DPCPR4  
DPCPR5  
DPCPR6  
DPCPR7  
DPCPR8  
DPCPR9  
VSNM0  
D\_RST  
DNGD3D  
RST3

SHEET 6 { CLKSW1  
CLKSW2  
LFP  
VSNM0  
SDA3  
SCL3

SHEET 5 { D\_RST  
DNGD3D  
RST3

SHEET 2 { RST3

SHEET 1 { YOUT  
PROUT  
PROUT  
YOUT  
YOUT  
YOUT  
YOUT  
YOUT  
DEFW  
DEFW  
AREA  
CLKR

SHEET 6 { CLKR

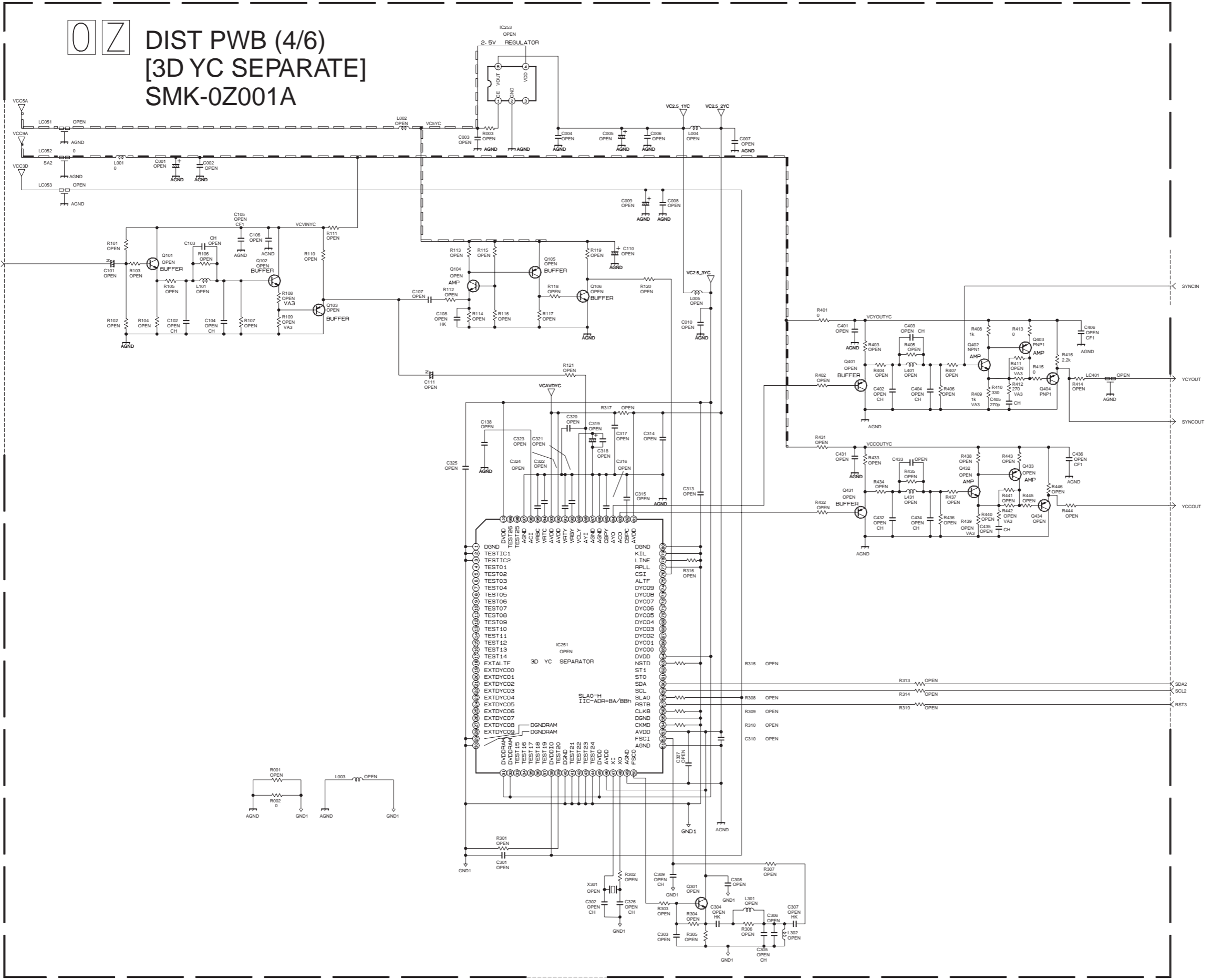


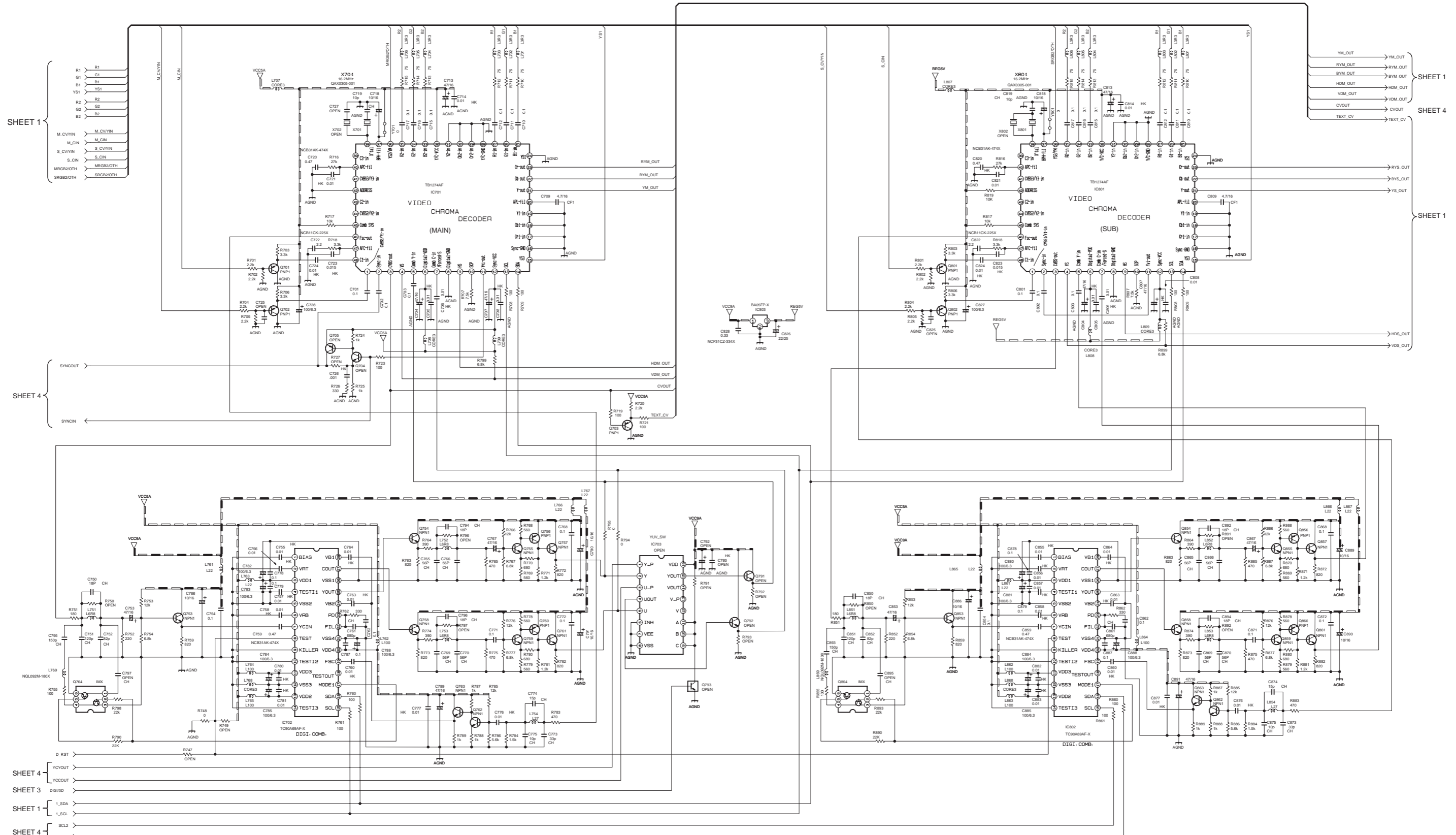
# DIST PWB (4/6) [3D YC SEPARATE] SMK-0Z001A

SHEET 3

SHEET 5

SHEET 2





- SHEET 1
- R1
- G1
- B1
- Y51
- R2
- G2
- B2
- M.CV1YN
- M.CN
- S.CV1YN
- S.CN
- MRGB2OTH
- SRGB2OTH

- YM\_OUT
- RYM\_OUT
- BYM\_OUT
- HDM\_OUT
- VDM\_OUT
- CVOUT
- TEXT\_CV
- RY5\_OUT
- BY5\_OUT
- YS\_OUT
- HDS\_OUT
- VDS\_OUT

- SHEET 4
- SYNOUT
- SYNIN

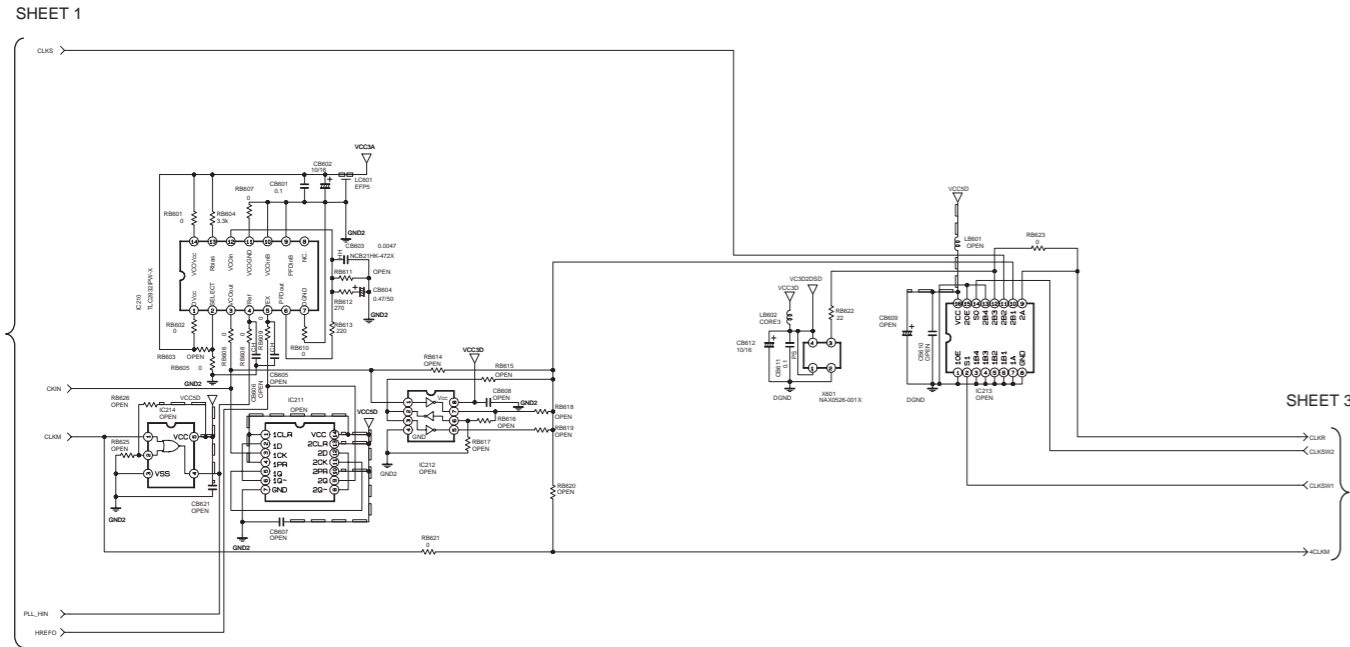
- SHEET 4
- YCOUOUT
- YCOUOUT
- DIGI3D
- SHEET 1
- 1.SDA
- 1.SCL
- SHEET 4
- SCL2
- SDA2

0 Z DIST PWB (5/6)  
[VIDEO/CHROMA DECODER]  
SMK-0Z001A

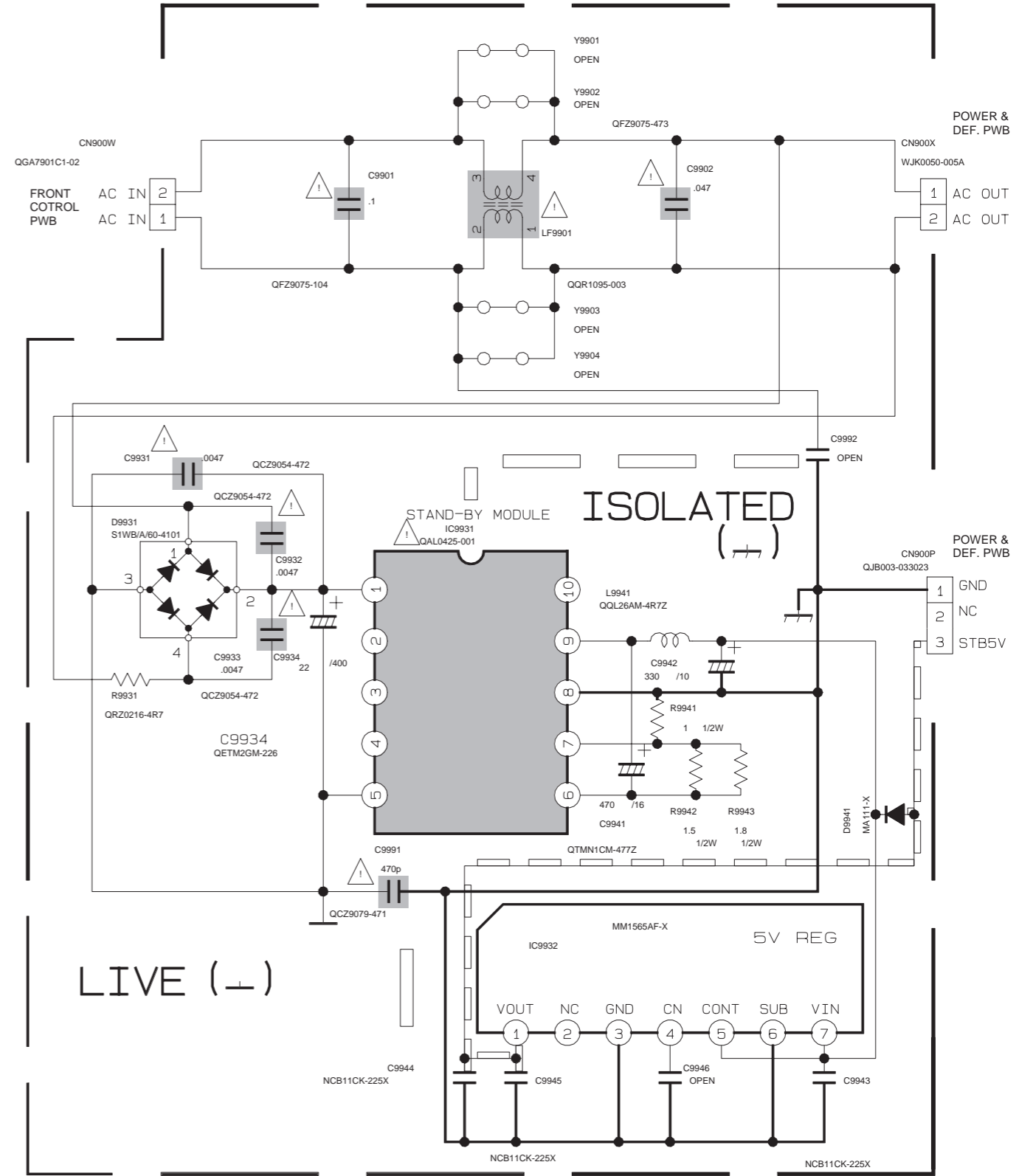
■ DIST PWB CIRCUIT DIAGRAM (6/6) SHEET6

SHEET6

**0Z** DIST PWB (6/6)  
[H\_PLL]  
SMK-0Z001A



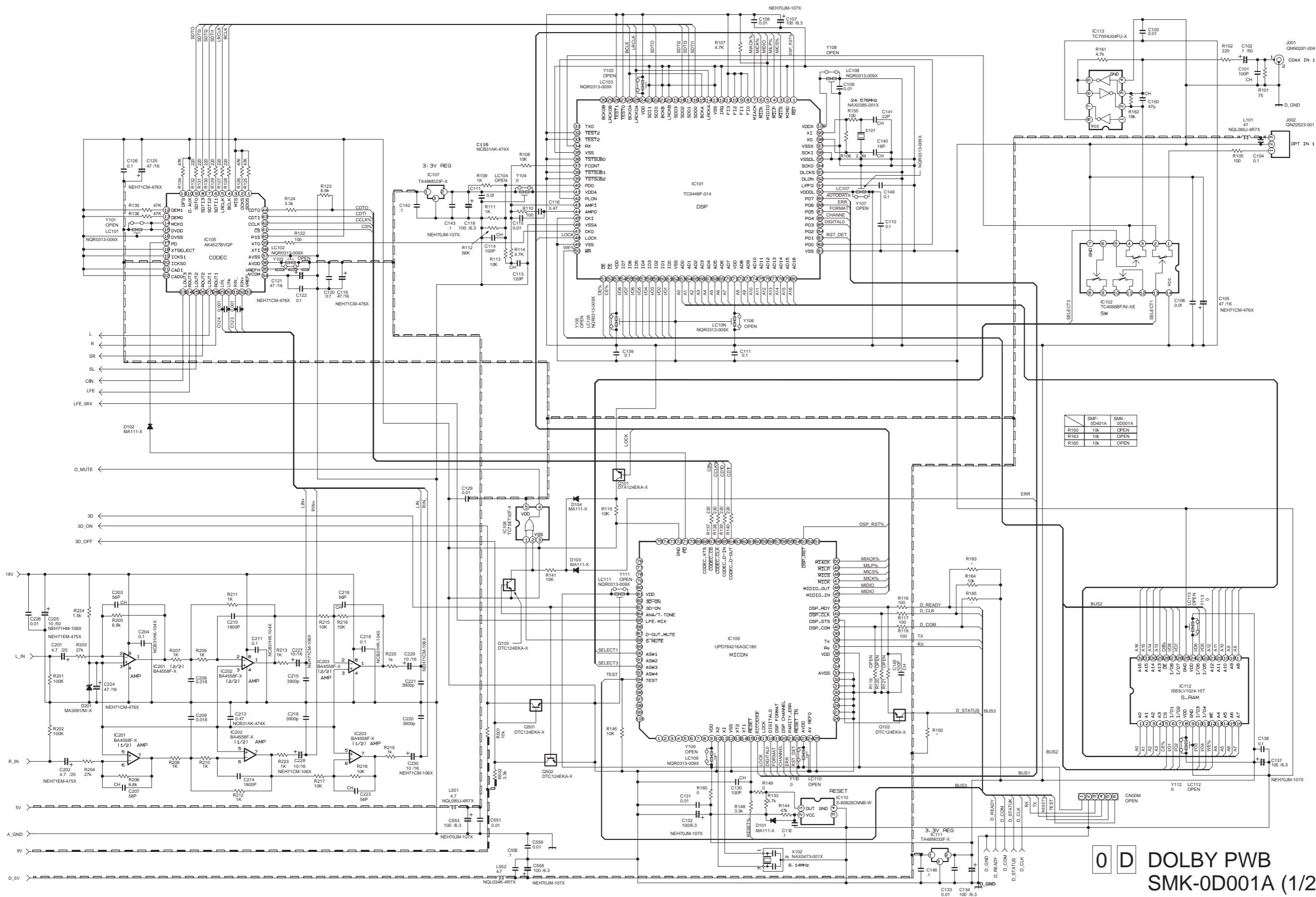
■ LINE FILTER PWB CIRCUIT DIAGRAM



**90** LINE FILTER PWB  
SMK-9001A



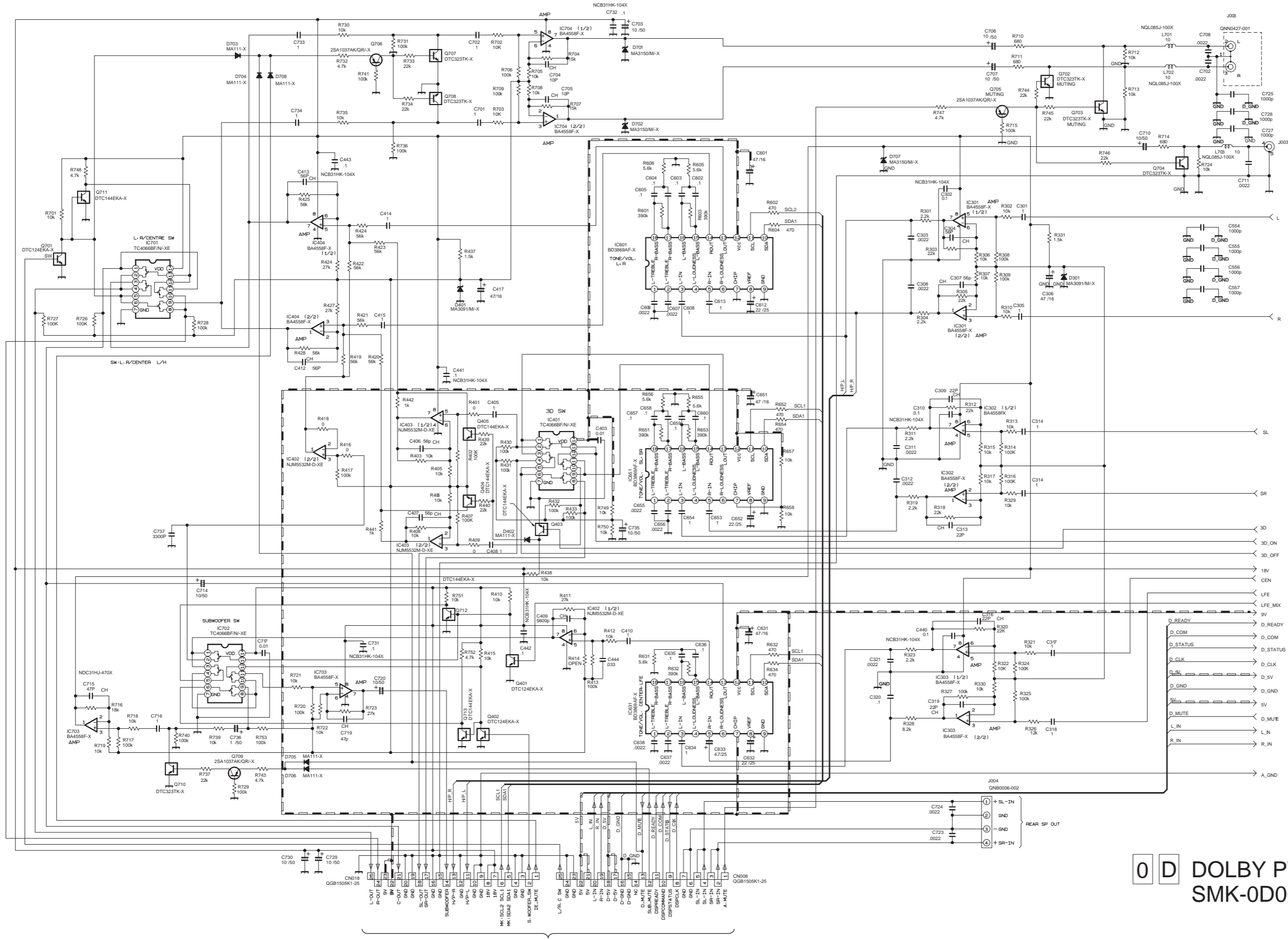
■ DOLBY PWB CIRCUIT DIAGRAM (1/2)



REF	SMF-0D401A	SMK-0D001A
R150	10k	OPEN
R163	10k	OPEN
R165	10k	OPEN

0 D DOLBY PWB  
SMK-0D001A (1/2)

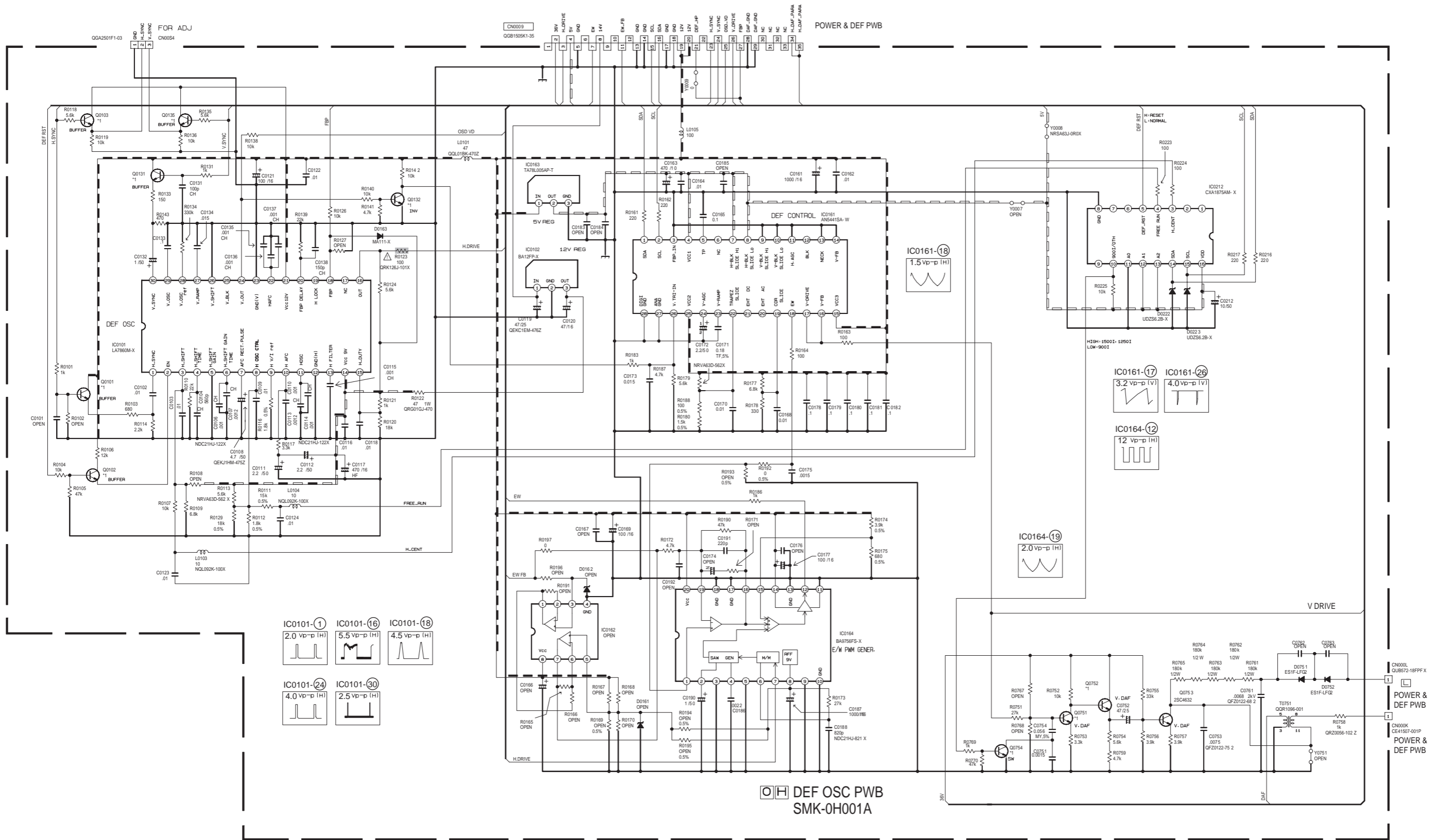
■ DOLBY PWB CIRCUIT DIAGRAM (2/2)



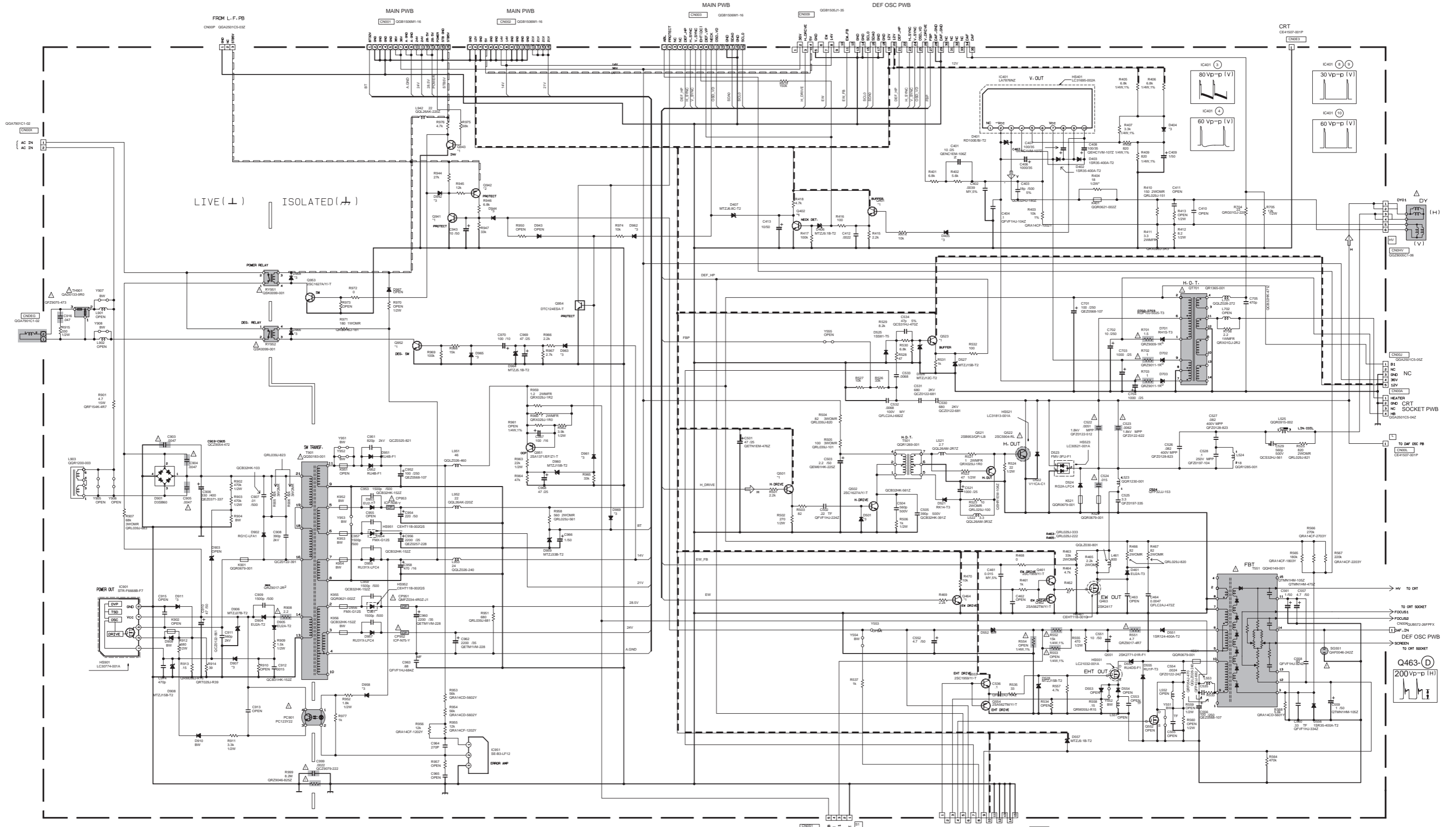
0 D DOLBY PWB  
SMK-0D001A (2/2)

DEF OSC PWB CIRCUIT DIAGRAM

- \*1: 2SC2412K/QR/-X
- \*2: 2SA1037AK/QR/-X
- \*3: MA111-X
- BW: IM-BW
- 0: NRSAG3J-OROX

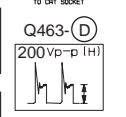
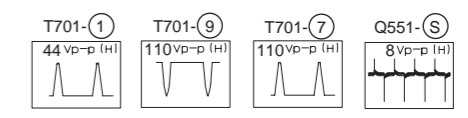


POWER & DEF PWB CIRCUIT DIAGRAM

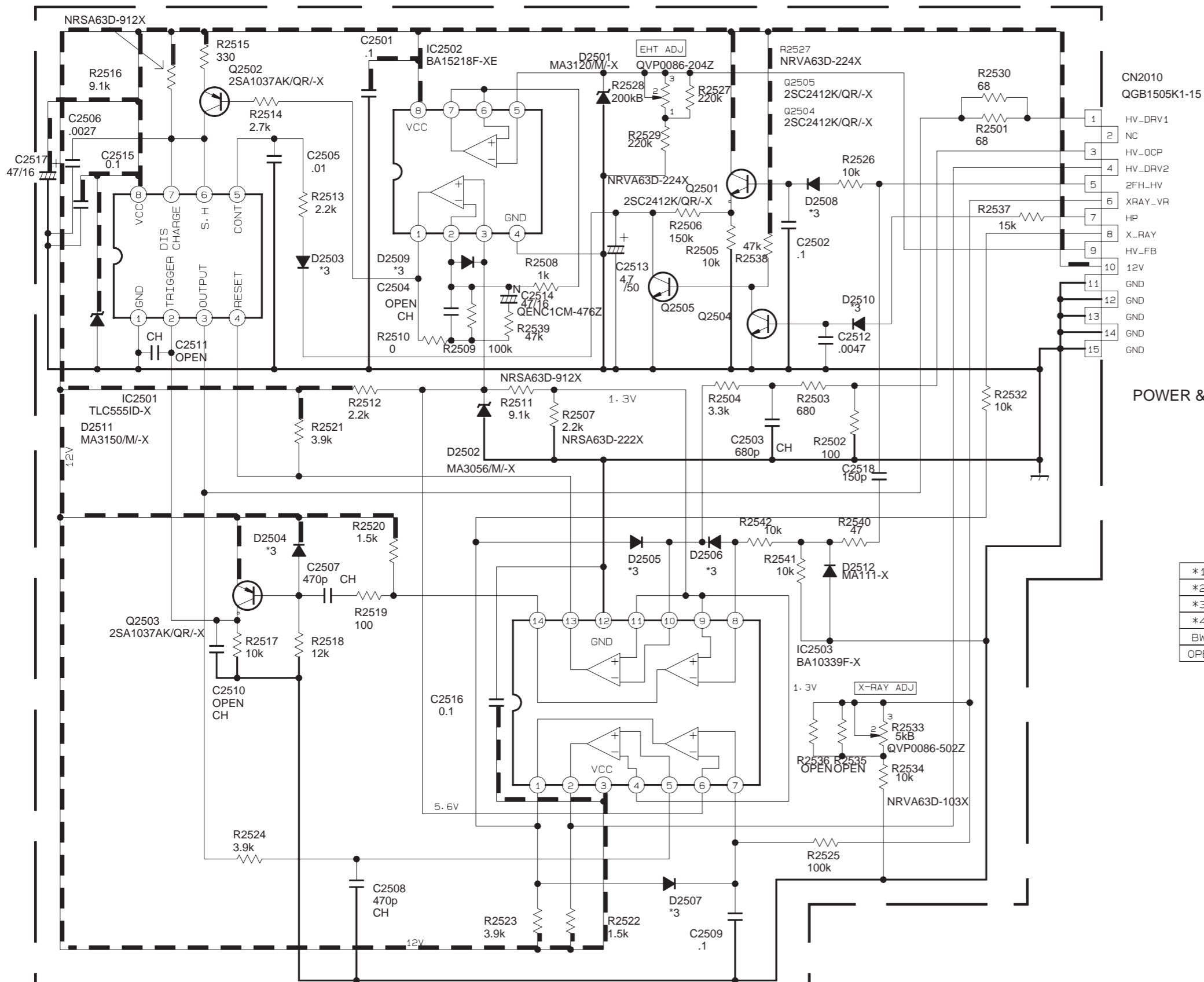


NOTE  
 BK BUS WIRE  
 OPT. OPTION (NON MOUNT)  
 #1 25C17405/0W-T  
 #2 25A4300/0W-T  
 #3 15B133-12

20 POW & DEF PWB  
SMK-2001A



■ EHT PWB CIRCUIT DIAGRAM



- CN2010  
QGB1505K1-15
- 1 HV\_DRV1
  - 2 NC
  - 3 HV\_OCP
  - 4 HV\_DRV2
  - 5 2FH\_HV
  - 6 XRAY\_VR
  - 7 HP
  - 8 X\_RAY
  - 9 HV\_FB
  - 10 12V
  - 11 GND
  - 12 GND
  - 13 GND
  - 14 GND
  - 15 GND

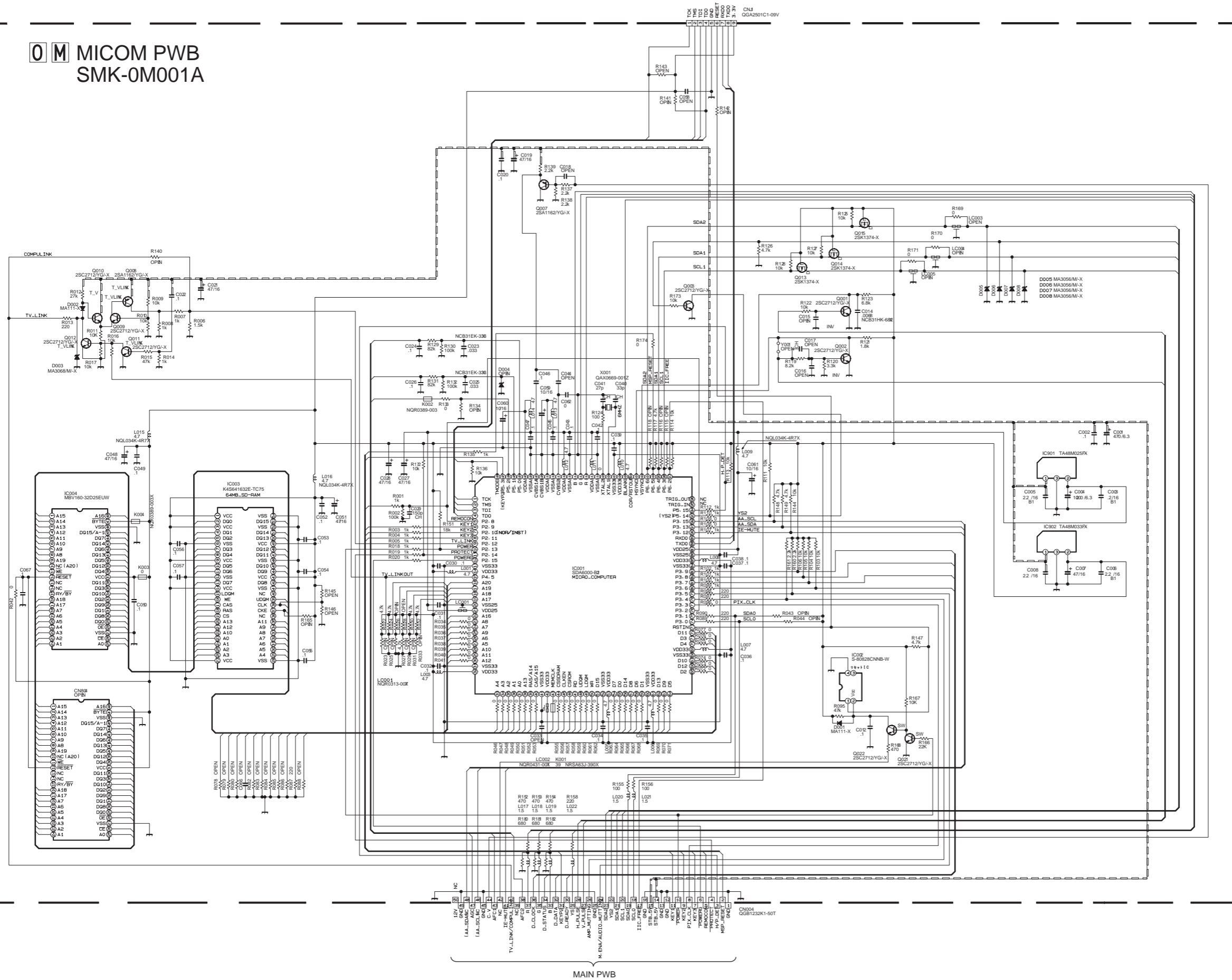
POWER & DEF. PWB

*1:	2SC2412/QR/-X
*2:	2SA1037AK/QR/-X
*3:	MA111-X
*4:	DTC124EKA-X
BW:	IB-BW
OPEN:	-

0 E SMK-0E001A EHT PWB

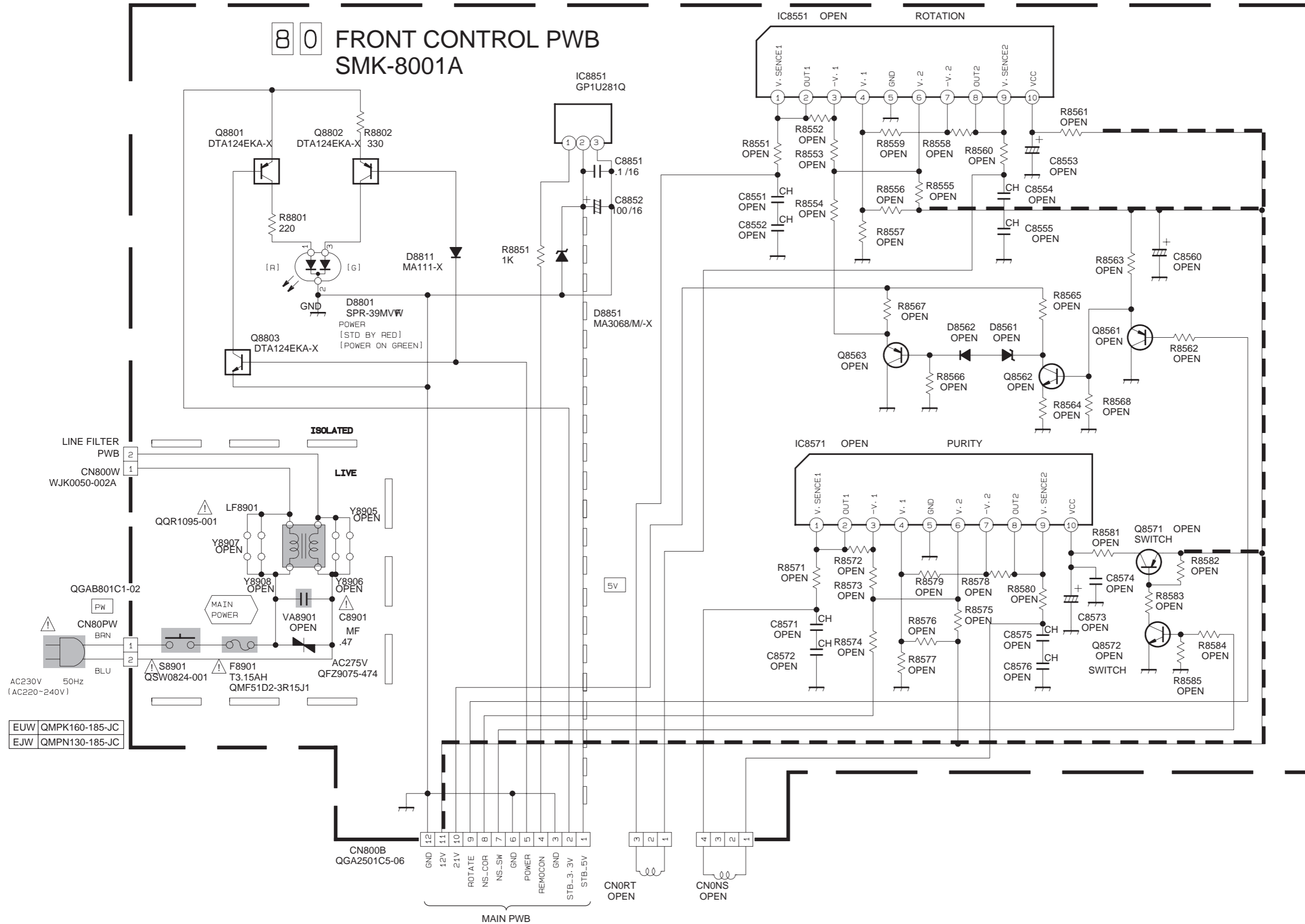
■ MICOM PWB CIRCUIT DIAGRAM

0 M MICOM PWB  
SMK-0M001A

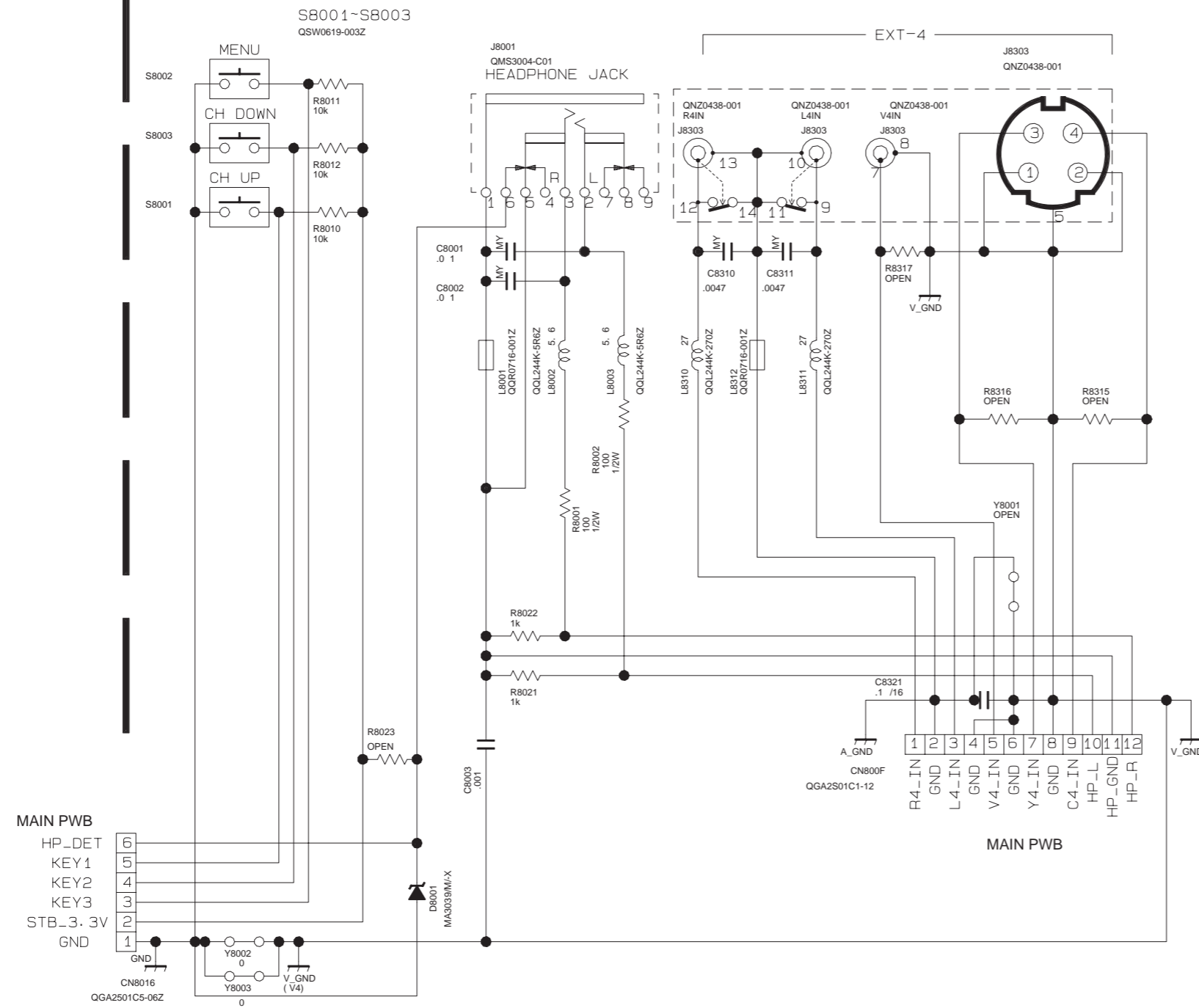


MAIN PWB

FRONT CONTROL PWB CIRCUIT DIAGRAM



■ SIDE CONTROL PWB CIRCUIT DIAGRAM



- \*1: 2SC2412K/QR/-X
- \*2: 2SA1037AK/QR/-X
- \*3: MA111-X
- \*4: DTC124EKA-X
- \*5: DTA124EKA-X
- 0: NRSA63J-0R0X
- BW: IM-BW

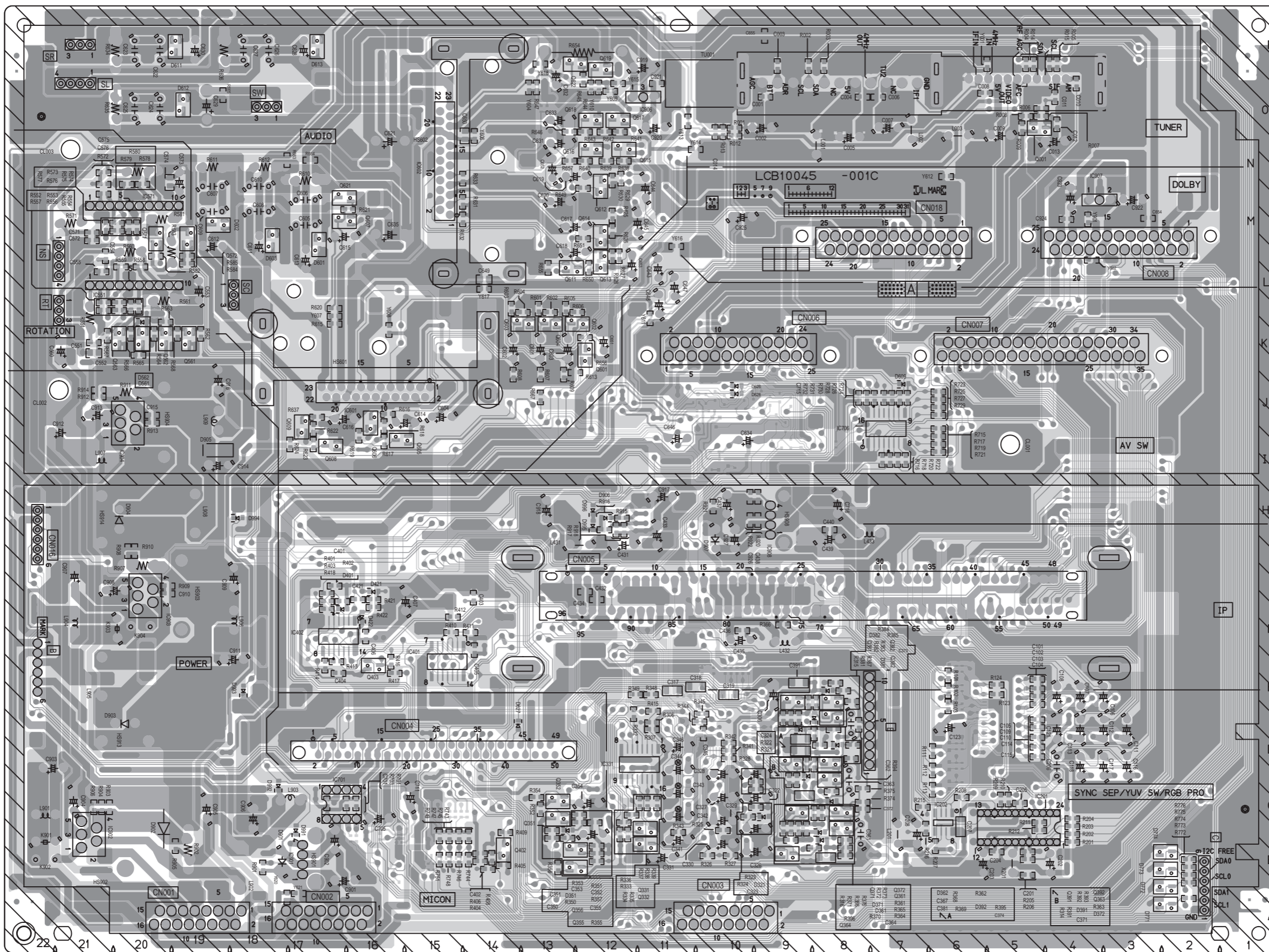
8 1 SIDE CONTROL PWB  
SMK-8101A



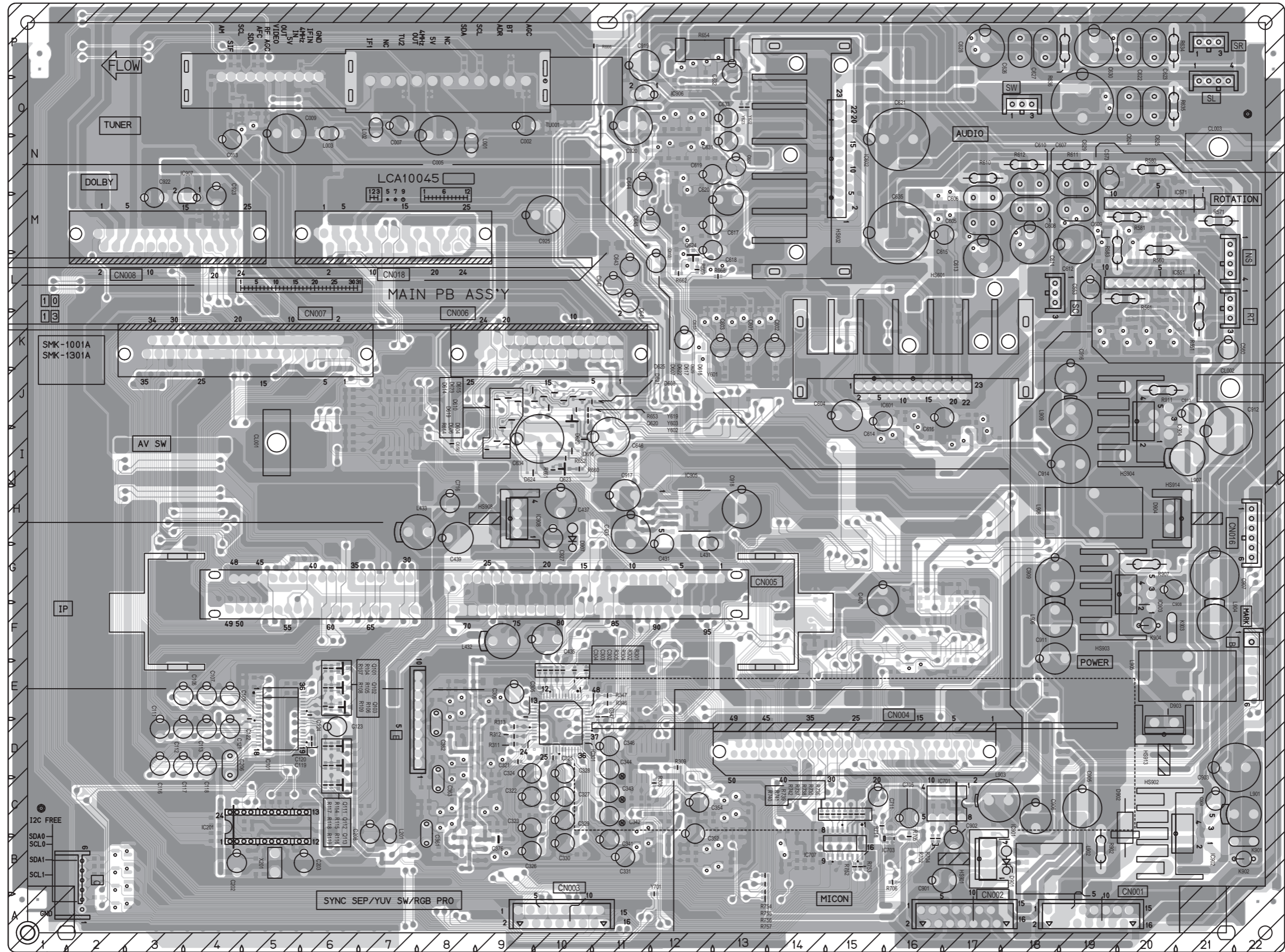
# PATTERN DIAGRAMS

## ■ MAIN PWB PATTERN [SOLDER SIDE]

FRONT



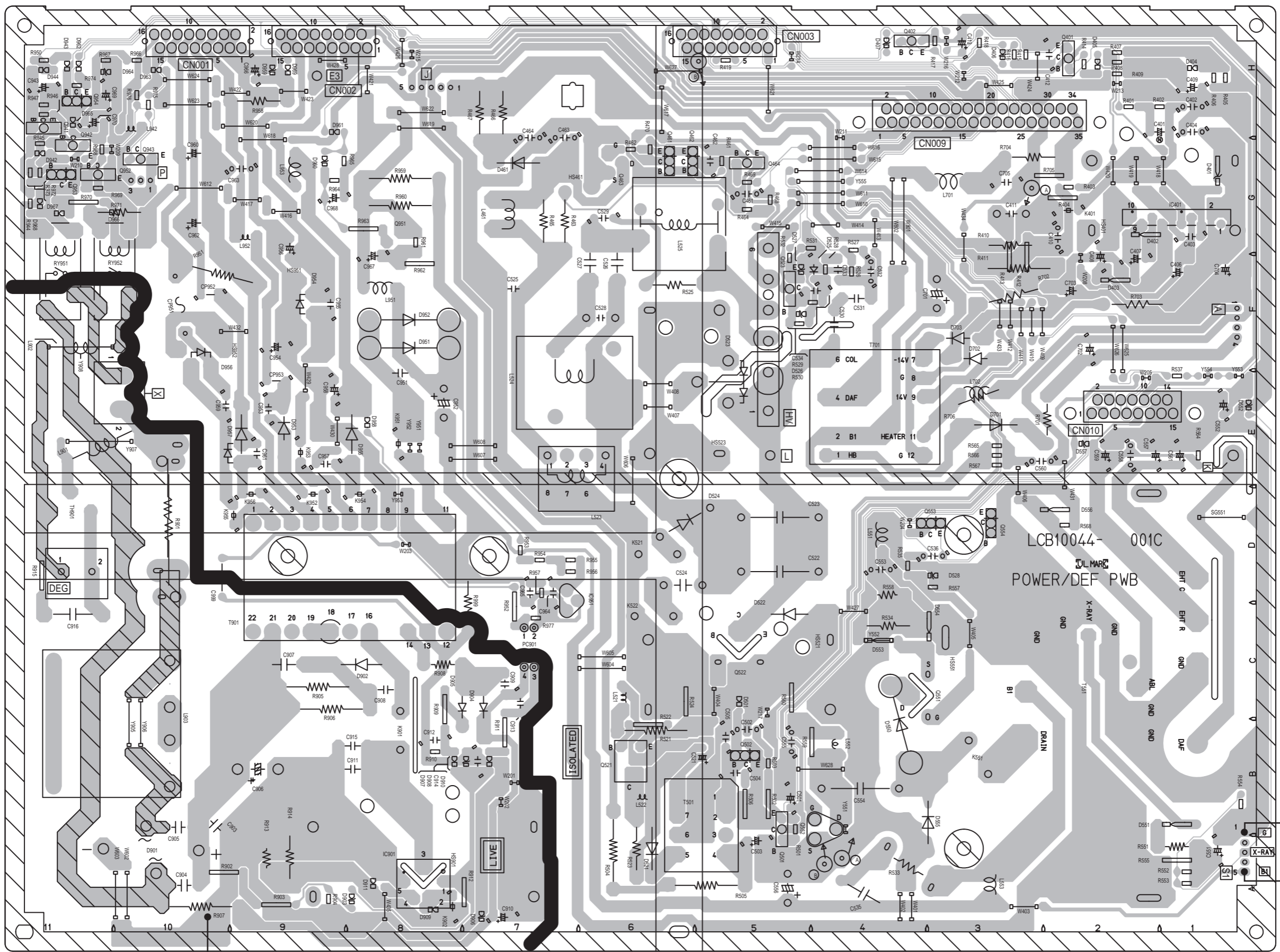
■ MAIN PWB PATTERN [PARTS SIDE]



FRONT  
➔

POWER&DEF PWB PATTERN

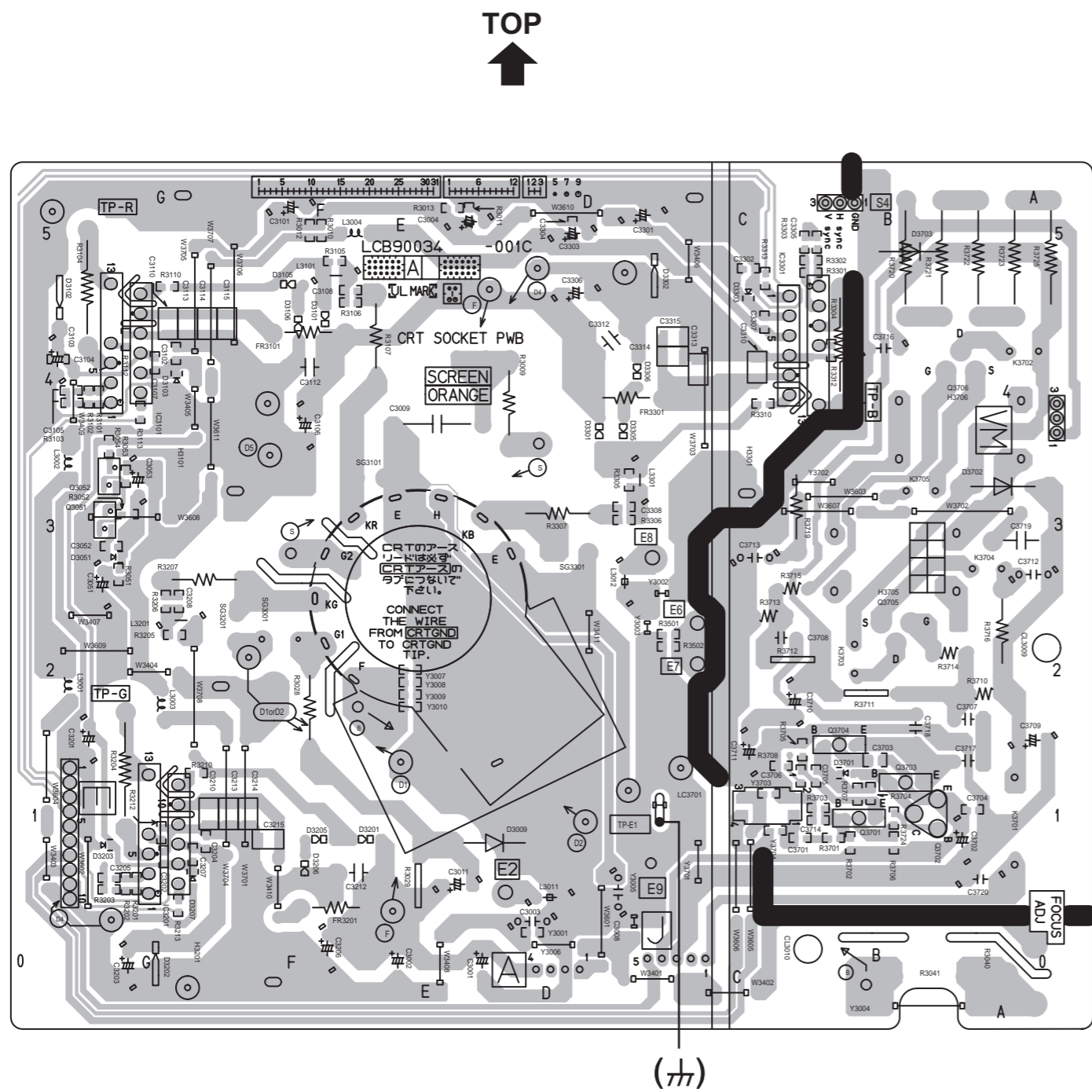
FRONT  
←



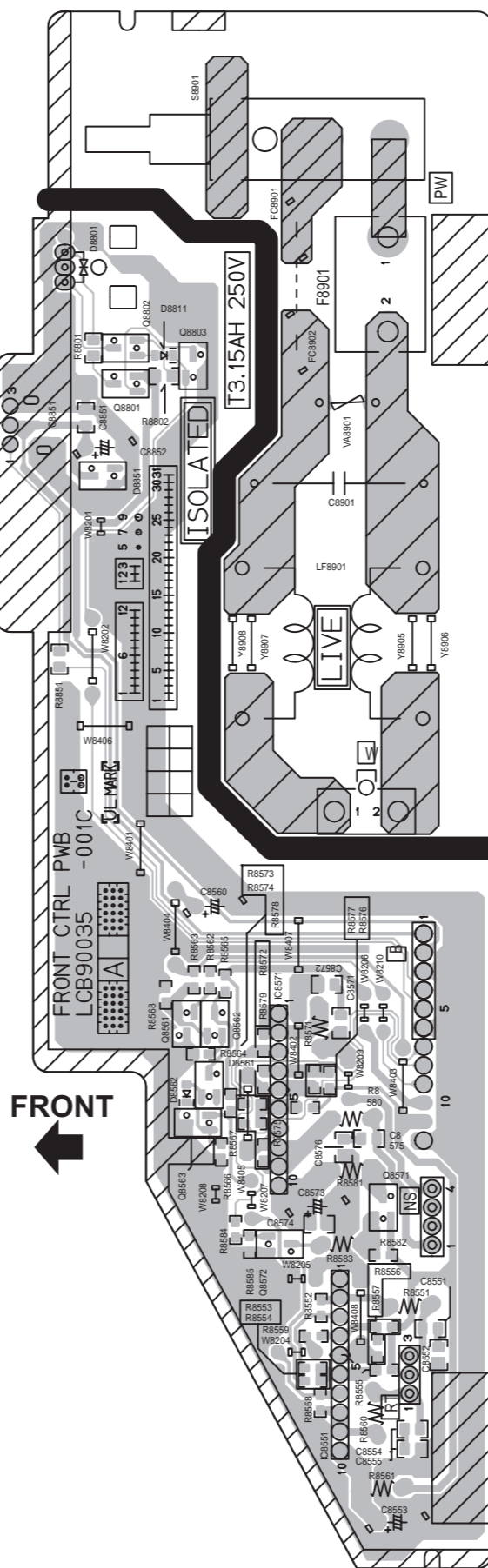
LCB10044-001C  
POWER/DEF PWB

TP-E  
(H)  
(B1)

■ CRT SOCKET PWB PATTERN



■ FRONT CONTROL PWB PATTERN



■ SIDE CONTROL PWB PATTERN

