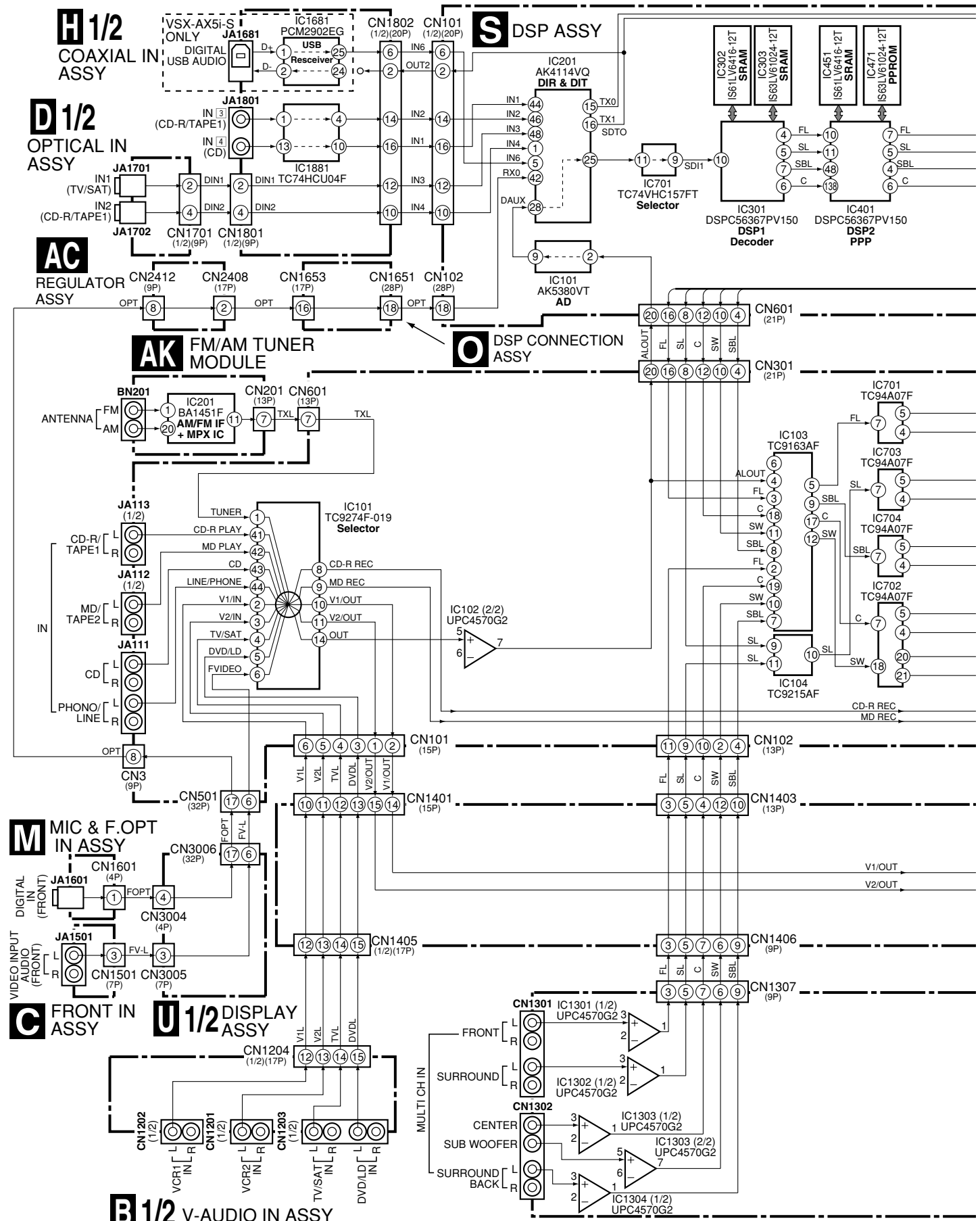
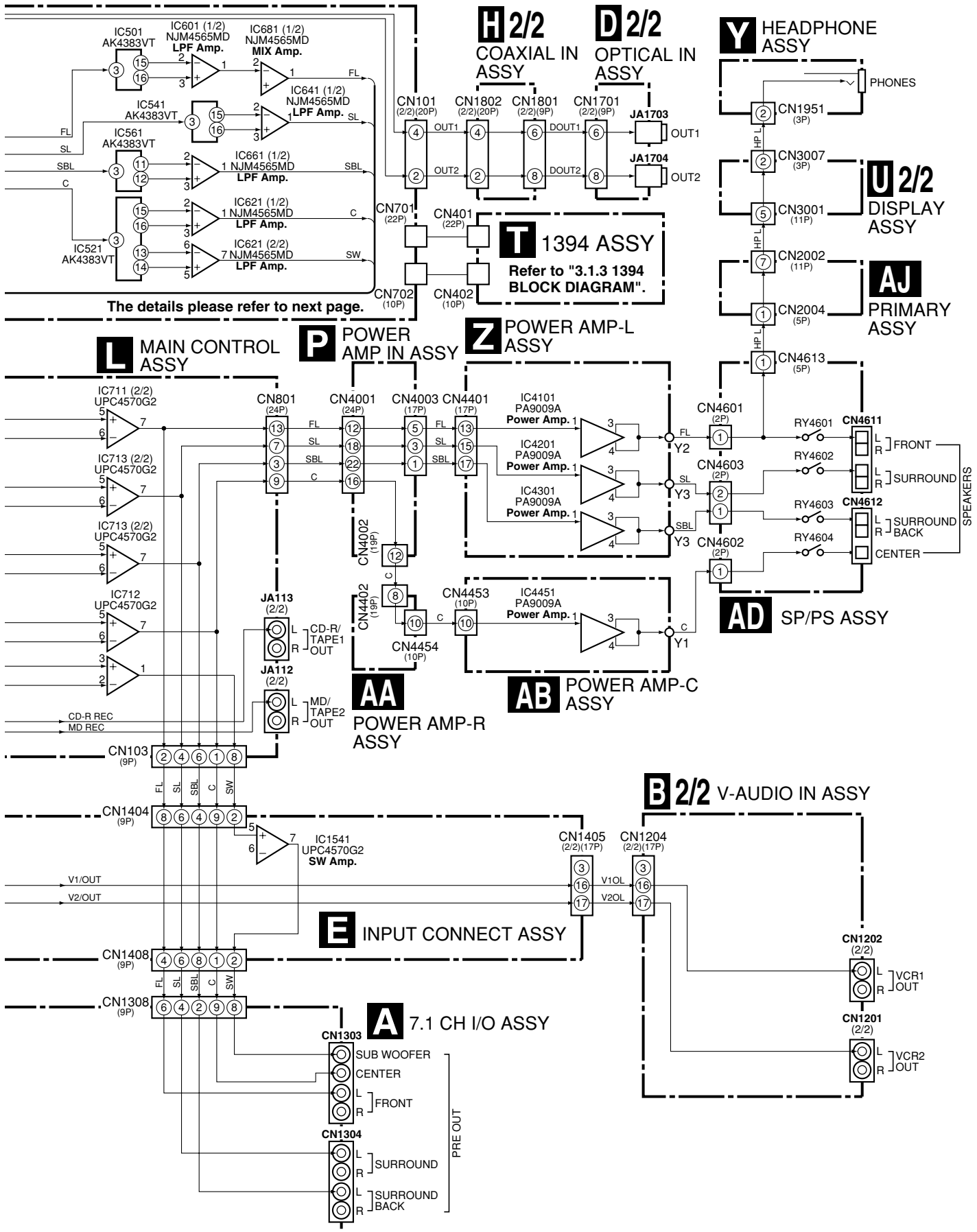


# 3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

## 3.1 BLOCK DIAGRAM

### 3.1.1 AUDIO BLOCK DIAGRAM

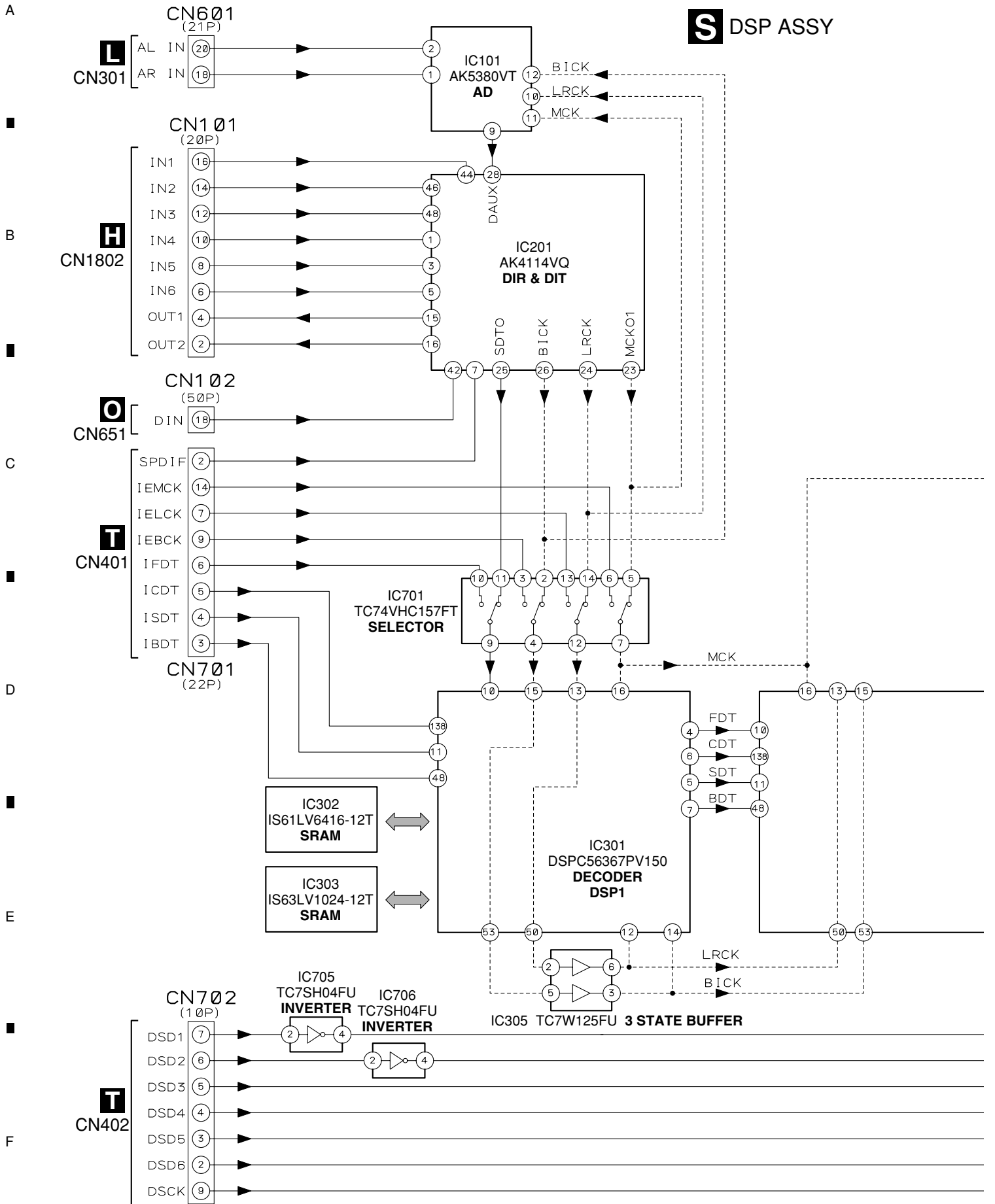




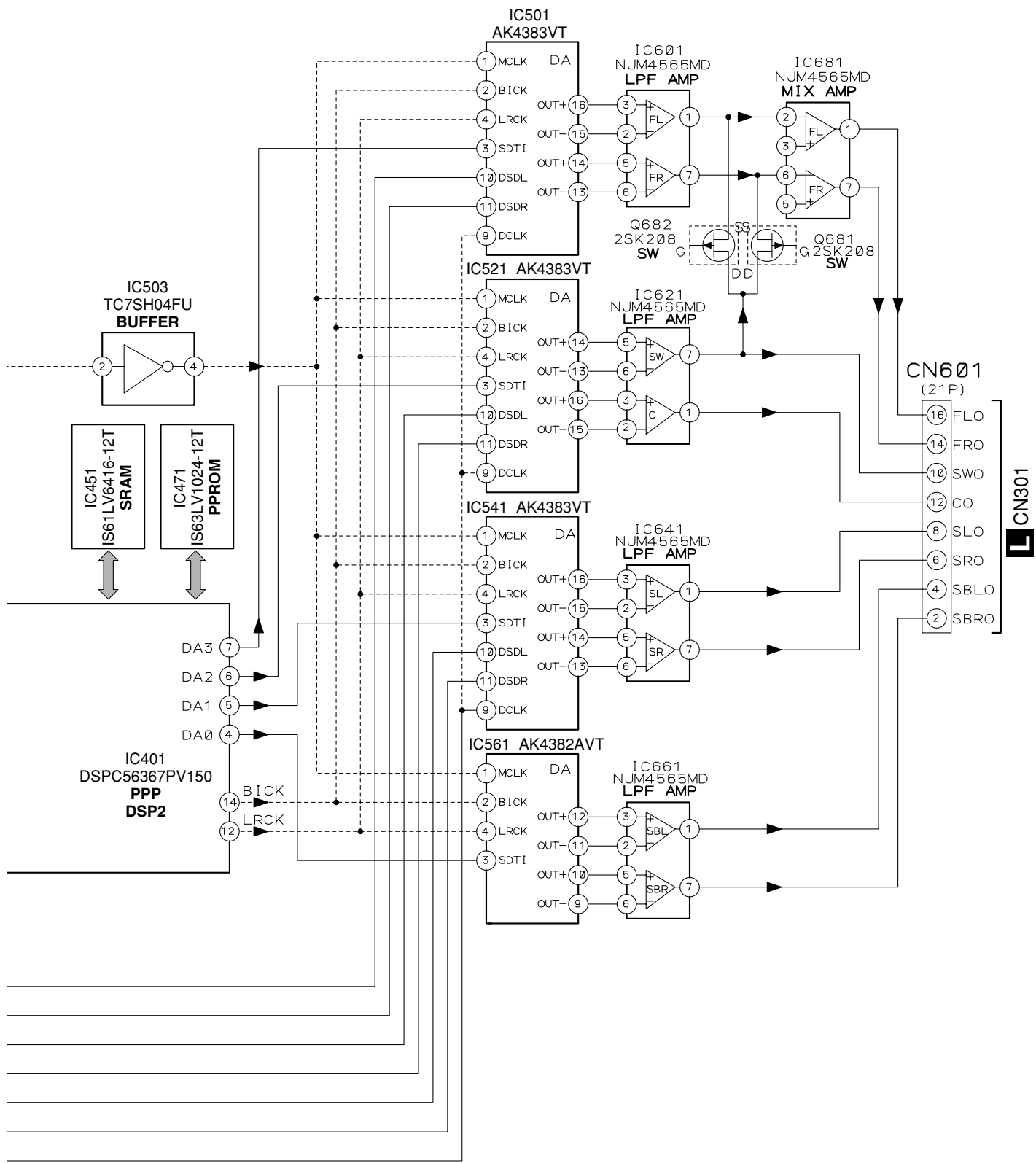
The details please refer to next page.

**T 1394 ASSY**  
Refer to "3.1.3 1394 BLOCK DIAGRAM".

### 3.1.2 DSP BLOCK DIAGRAM

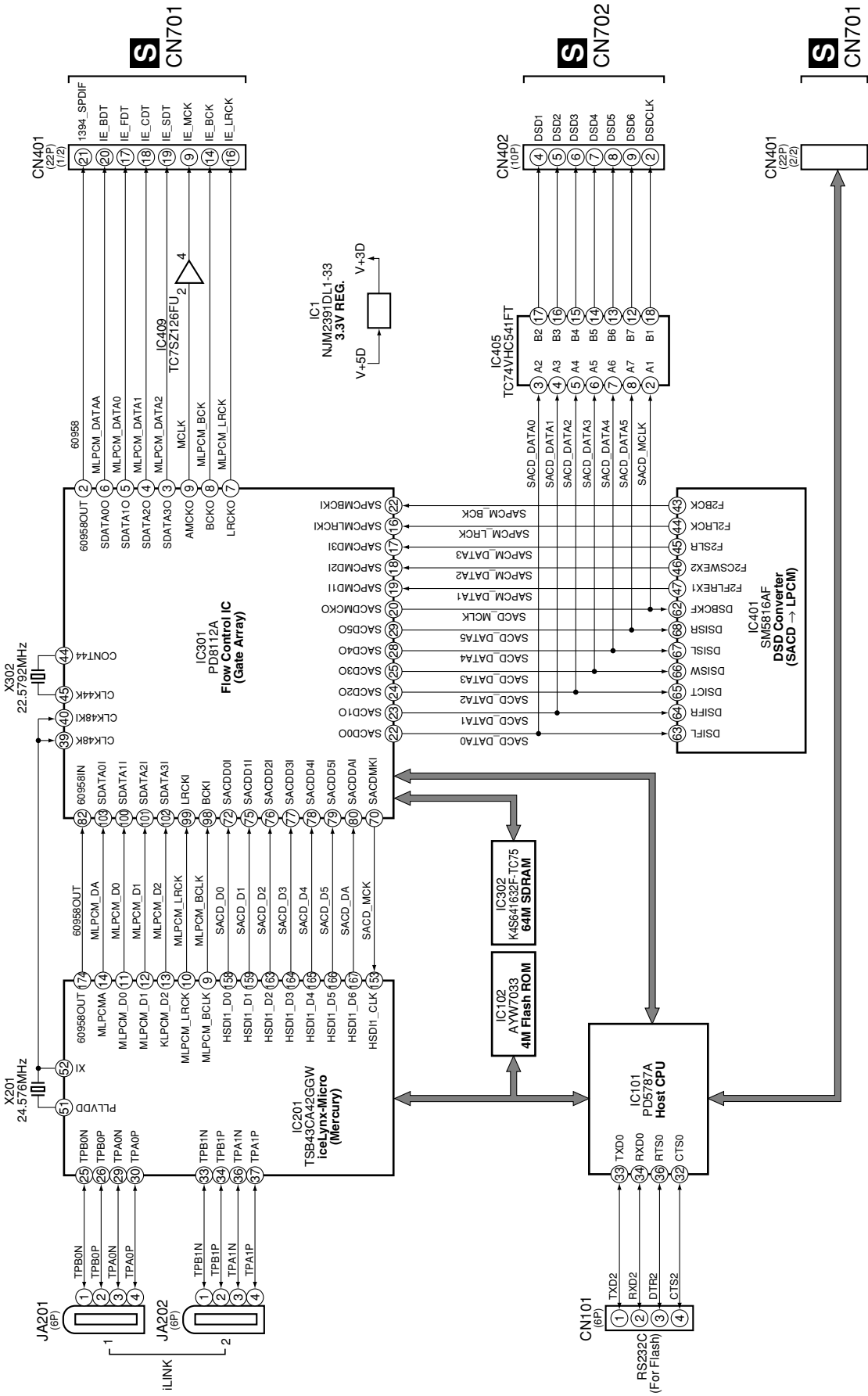


----- CLOCK LINE  
 \_\_\_\_\_ DATA LINE

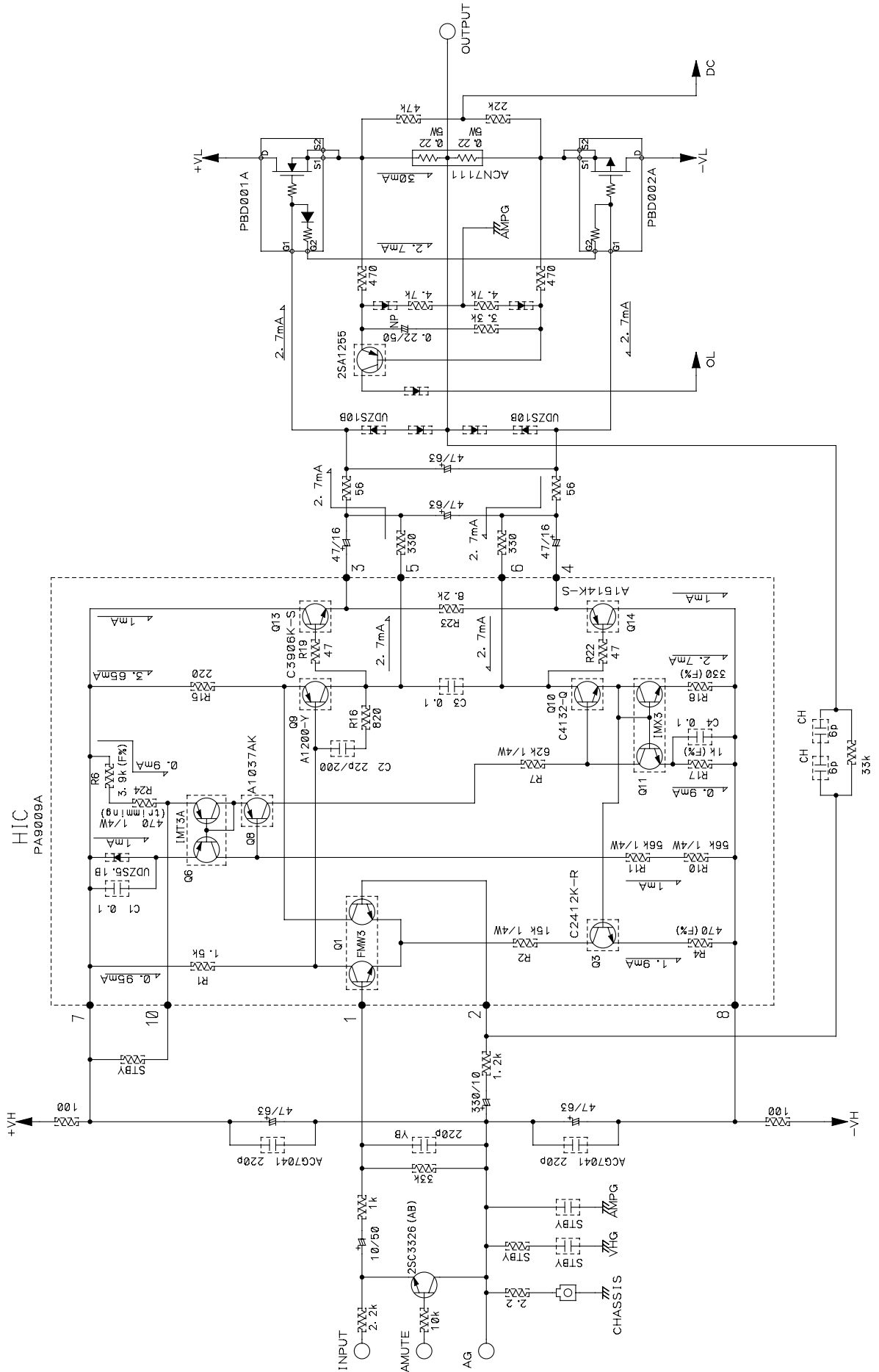


### 3.1.3 1394 BLOCK DIAGRAM

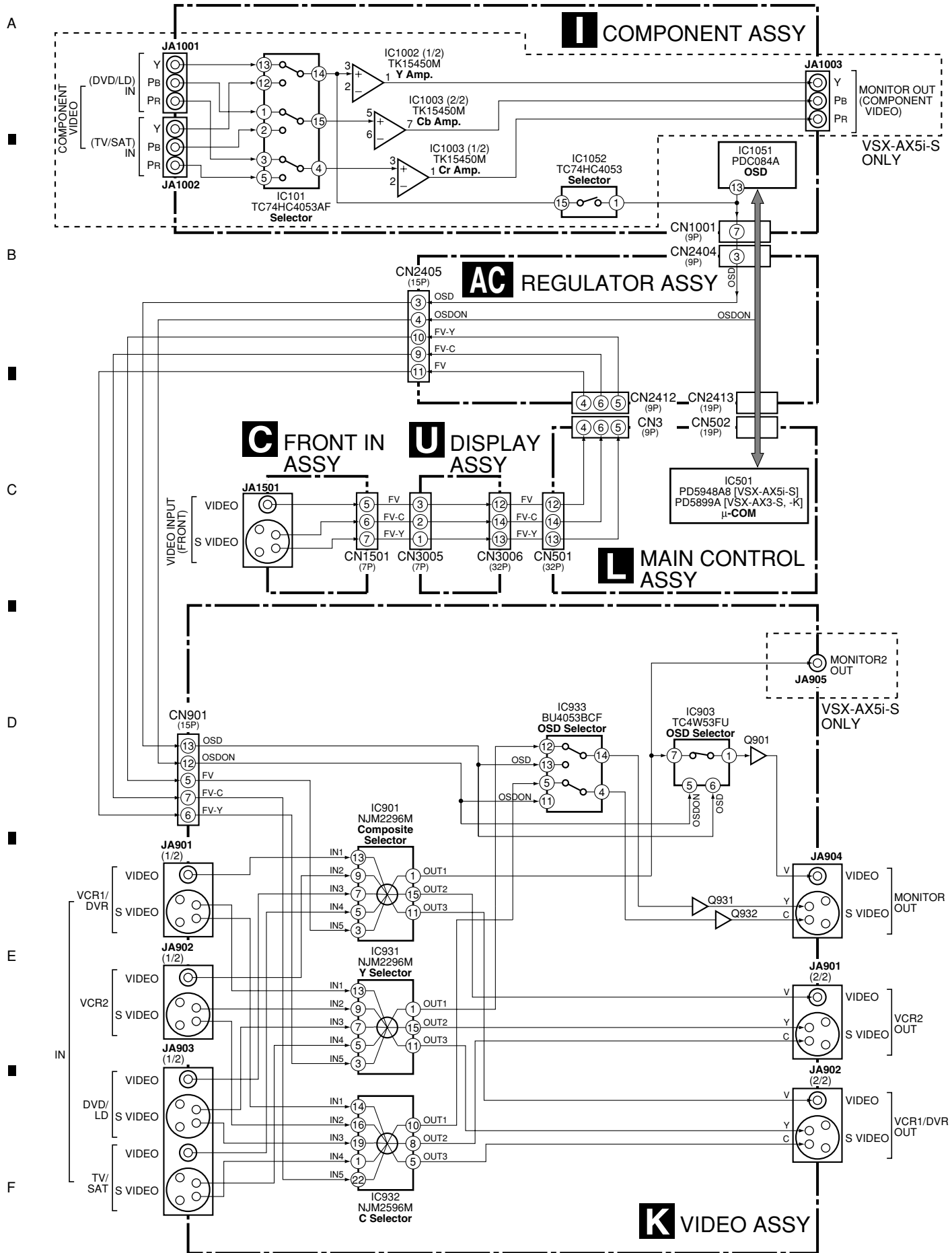
## T 1394 ASSY



### 3.1.4 POWER AMP BLOCK DIAGRAM



### 3.1.5 VIDEO BLOCK DIAGRAM





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F



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VSX-AX5i-S



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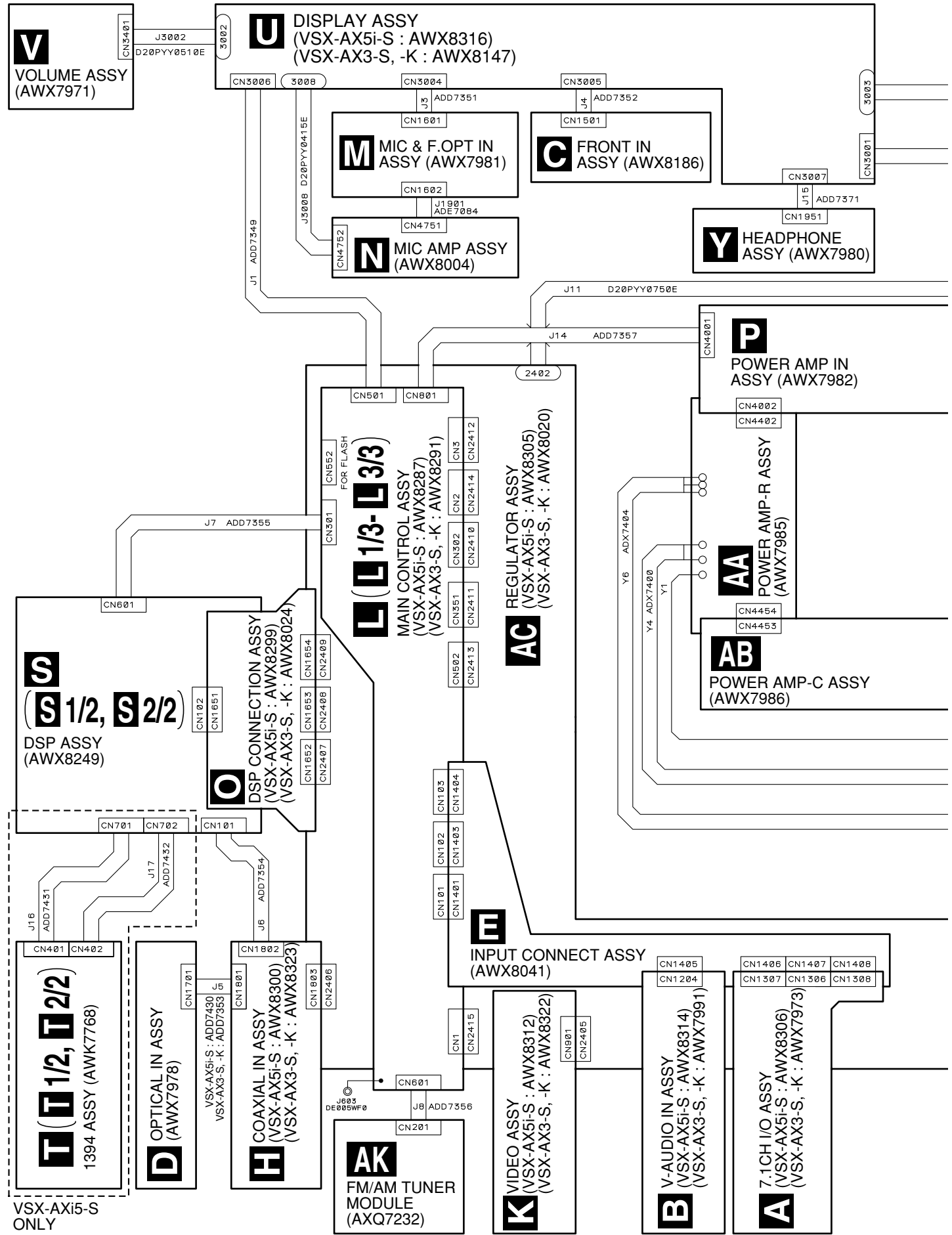


8

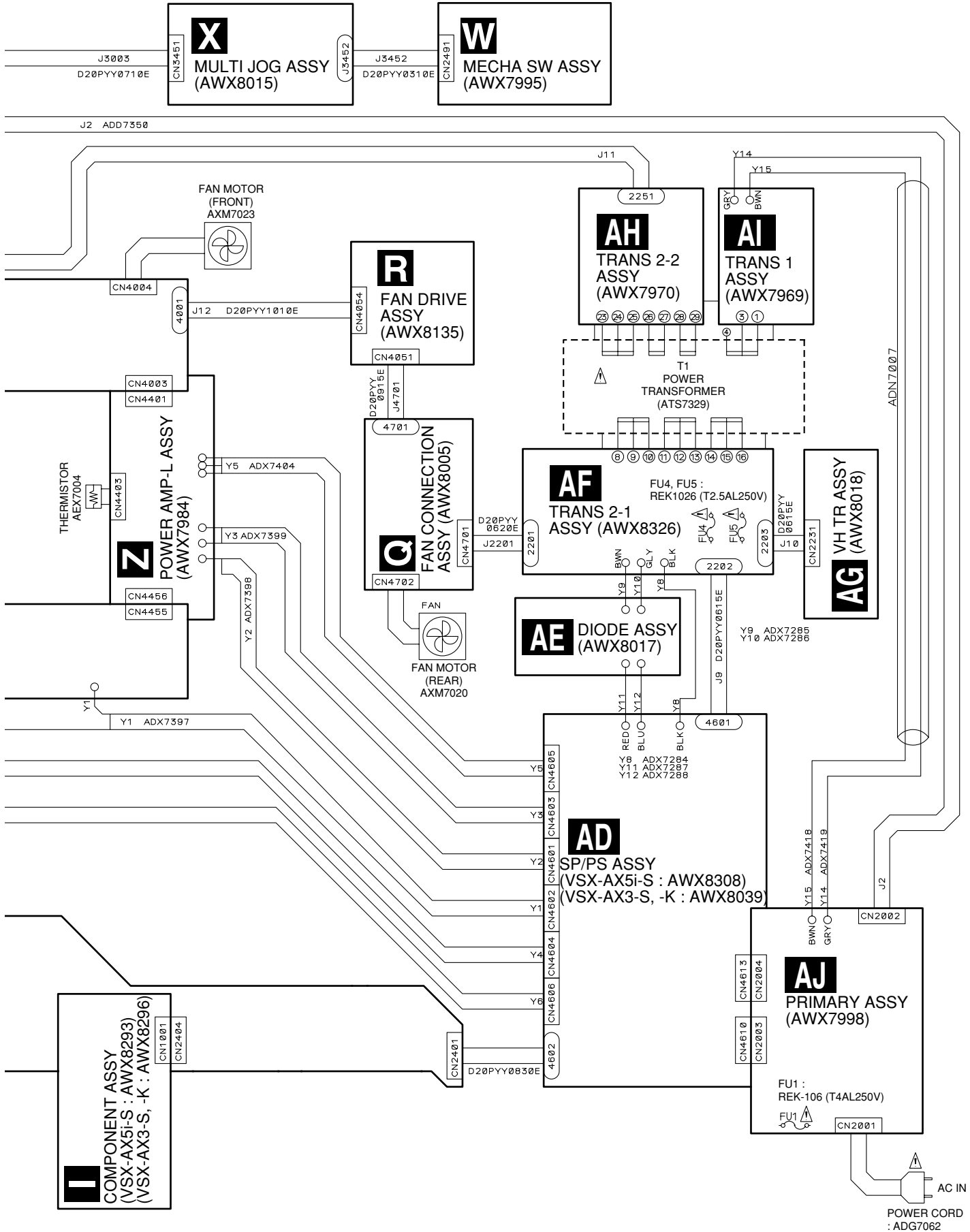




# 3.2 OVERALL WIRING DIAGRAM



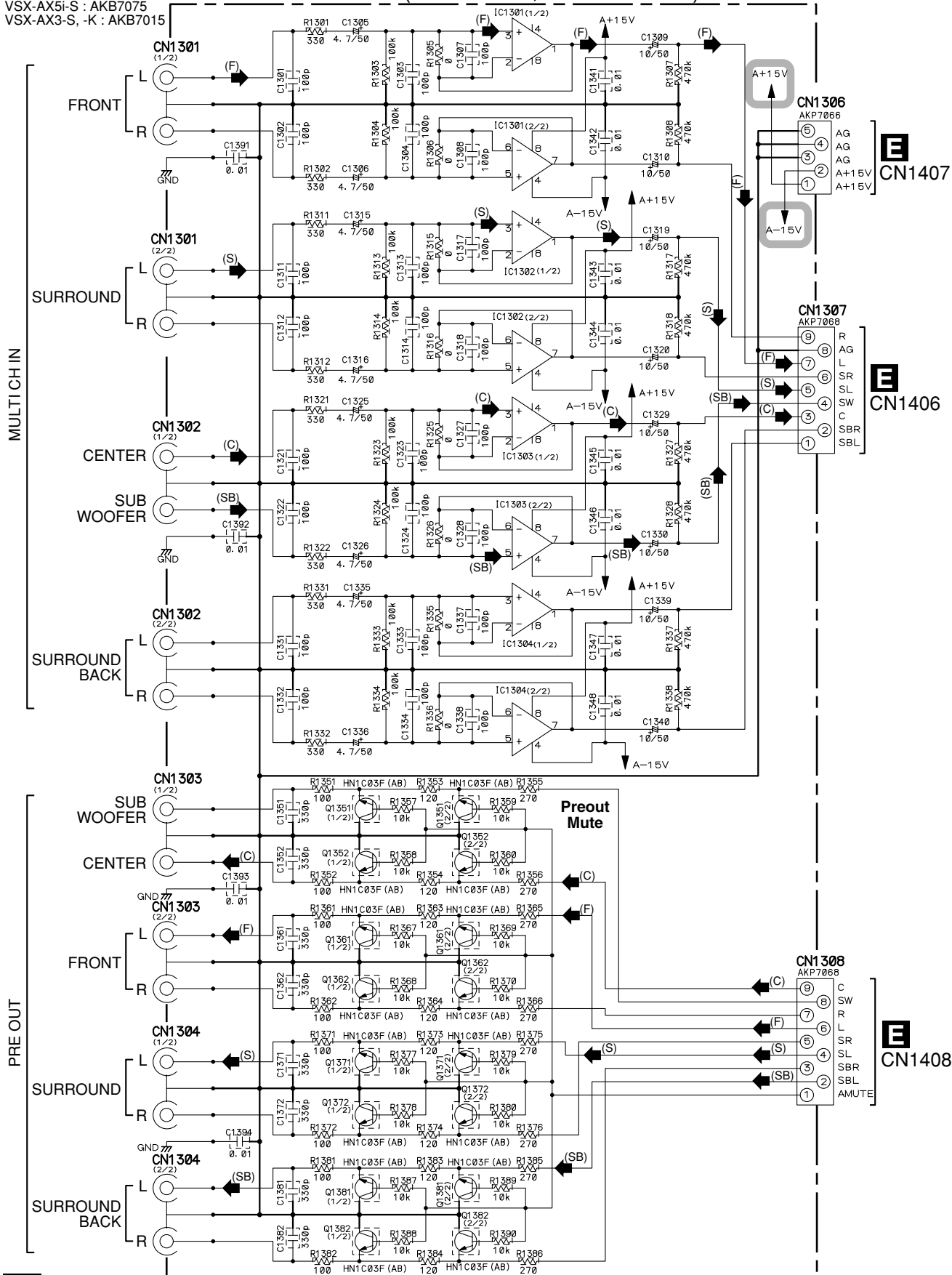
Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".



### 3.3 7.1 CH I/O, V-AUDIO, FRONT IN and OPTICAL IN ASSYS

#### **A** 7.1 CH I/O ASSY (VSX-AX5i-S : AWX8306) (VSX-AX3-S, -K : AWX7973)

CN1301-CN1304 ;  
VSX-AX5i-S : AKB7075  
VSX-AX3-S, -K : AKB7015

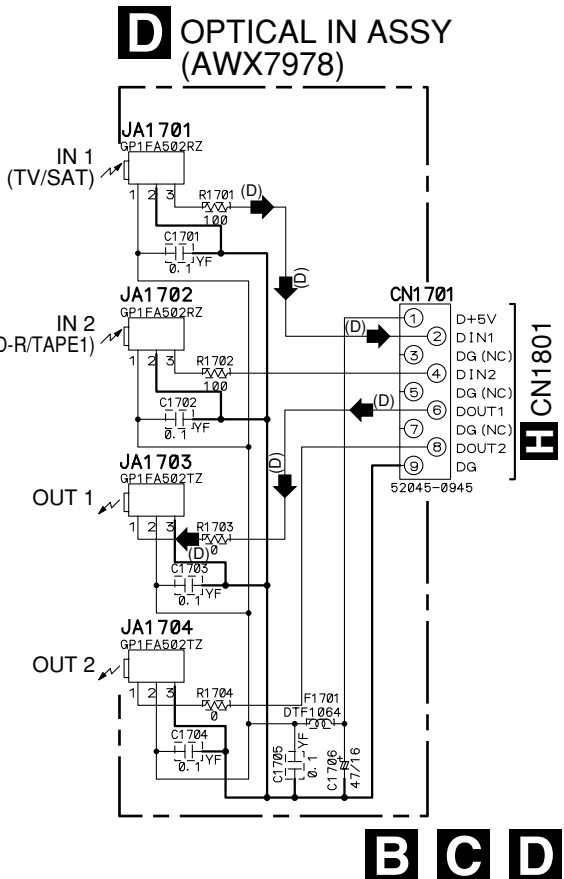
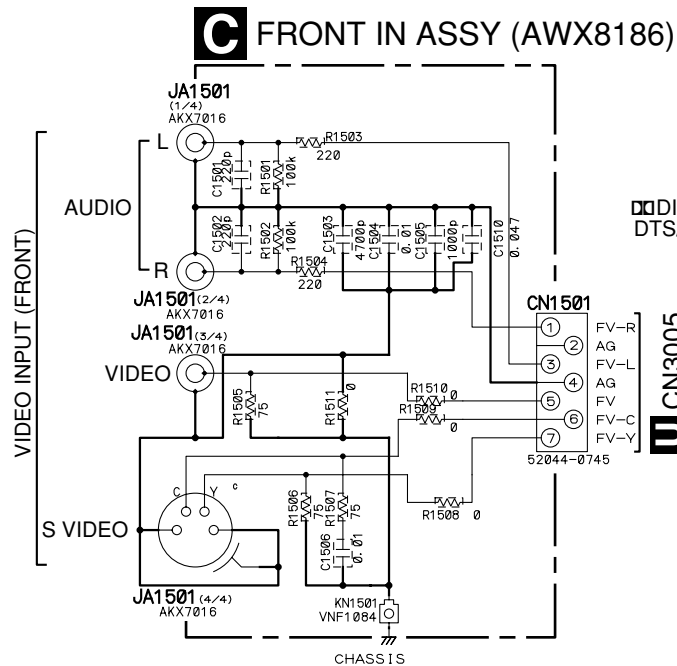
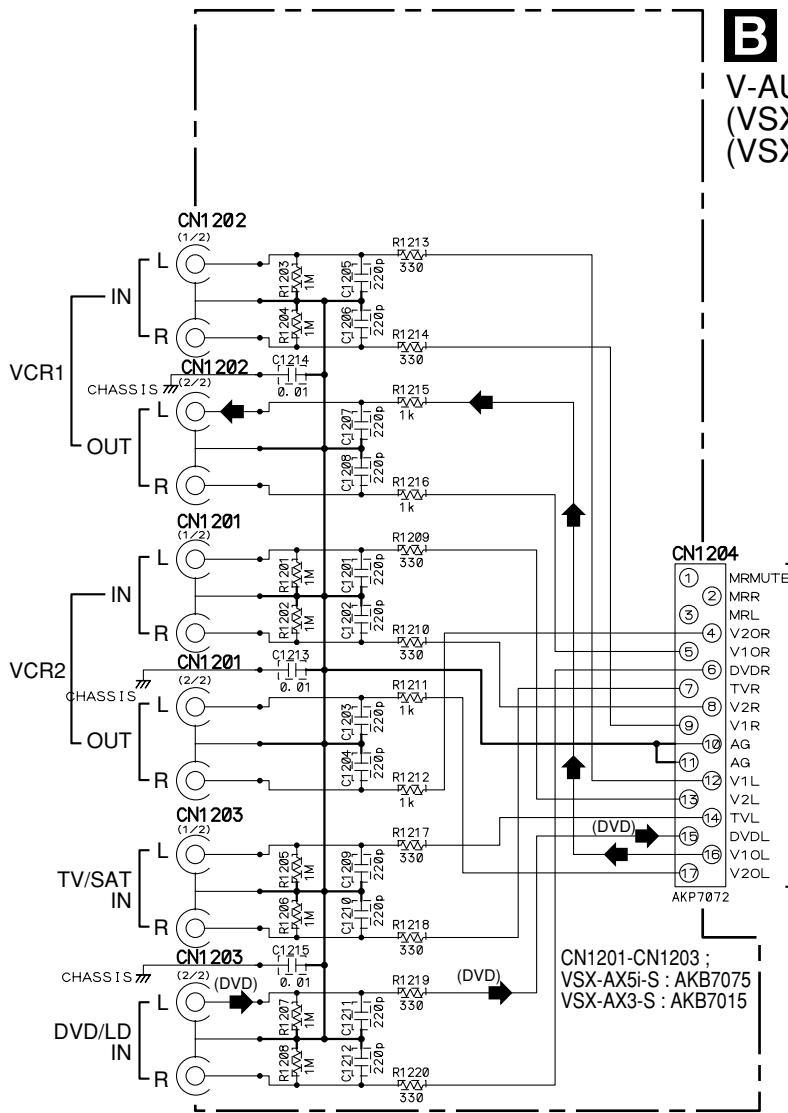


MULTICH IN

PRE OUT

**A**

: The power supply is shown with the marked box.



### 3.4 INPUT CONNECT ASSY

A

**E** INPUT CONNECT ASSY (AWX8041)

**L** 1/3 CN101

**B** CN1204

B

C

- ➡ : AUDIO SIGNAL ROUTE (Lch)
- (DVD) ➡ : AUDIO SIGNAL ROUTE (DVD Lch)
- (F) ➡ : AUDIO SIGNAL ROUTE (FRONT Lch)
- (S) ➡ : AUDIO SIGNAL ROUTE (SURROUND Lch)
- (SB) ➡ : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)
- (C) ➡ : AUDIO SIGNAL ROUTE (CENTER ch)

D

**L** 1/3 CN102

**A** CN1307

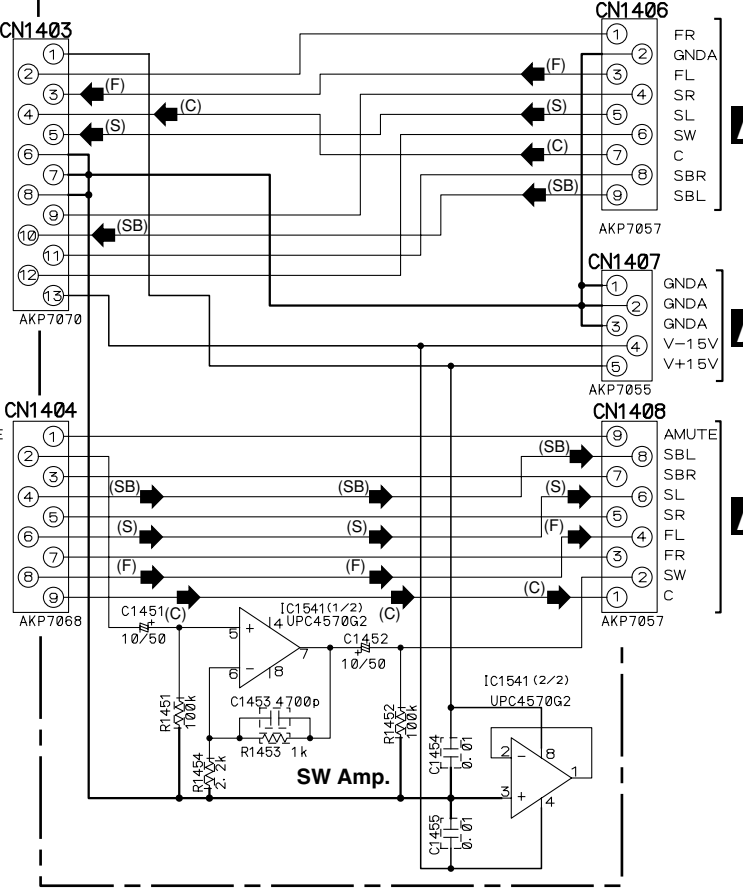
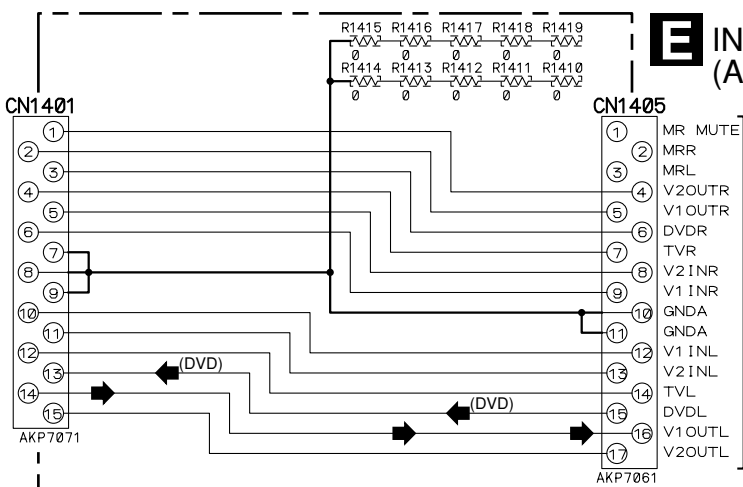
**A** CN1306

E

**L** 2/3 CN103

**A** CN1308

F



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■

A

B

C

D

E

F

■

5

■

6

VSX-AX5i-S

■

7

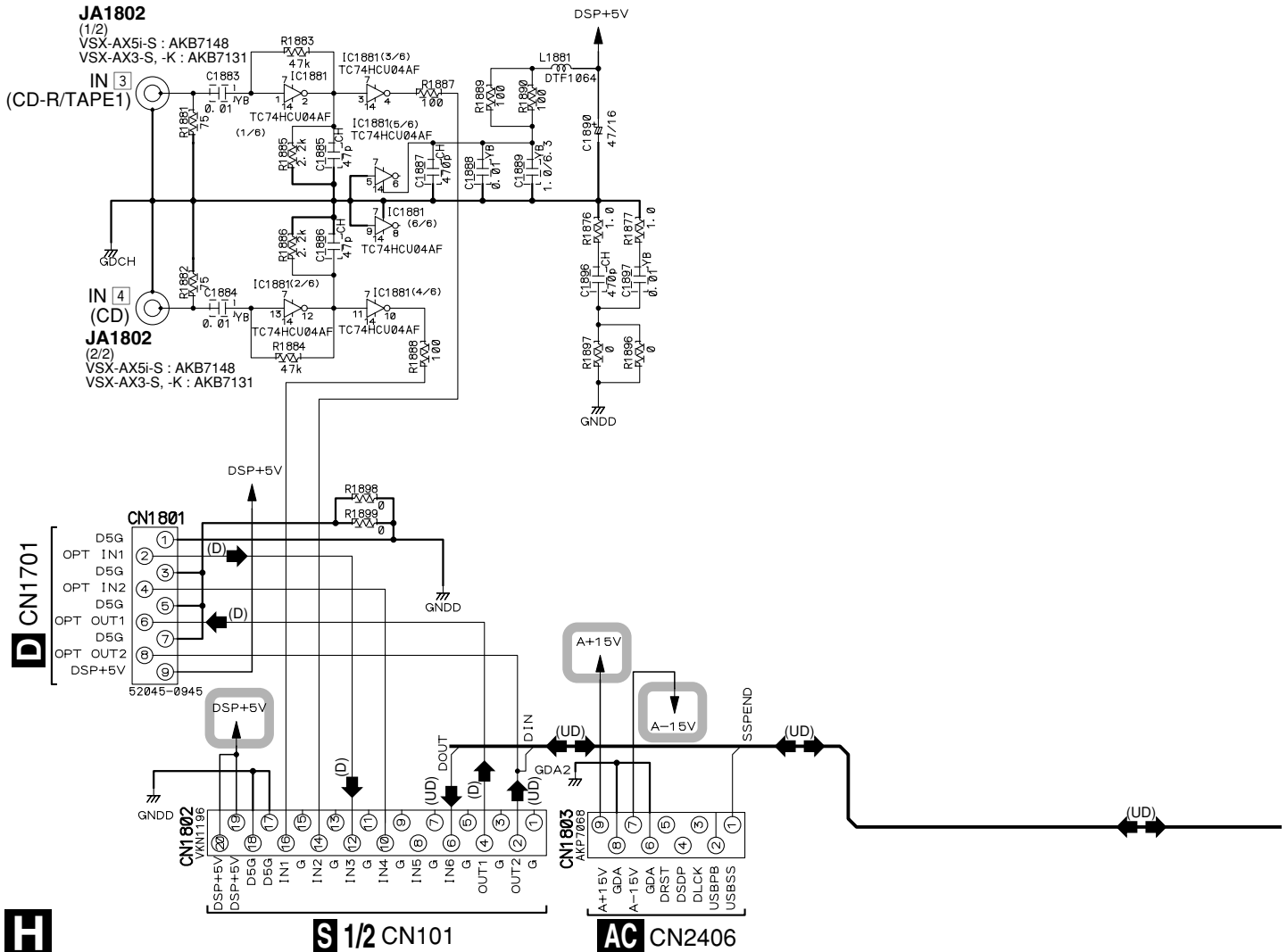
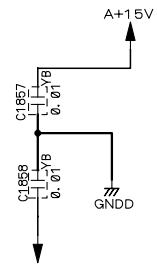
■

8

■

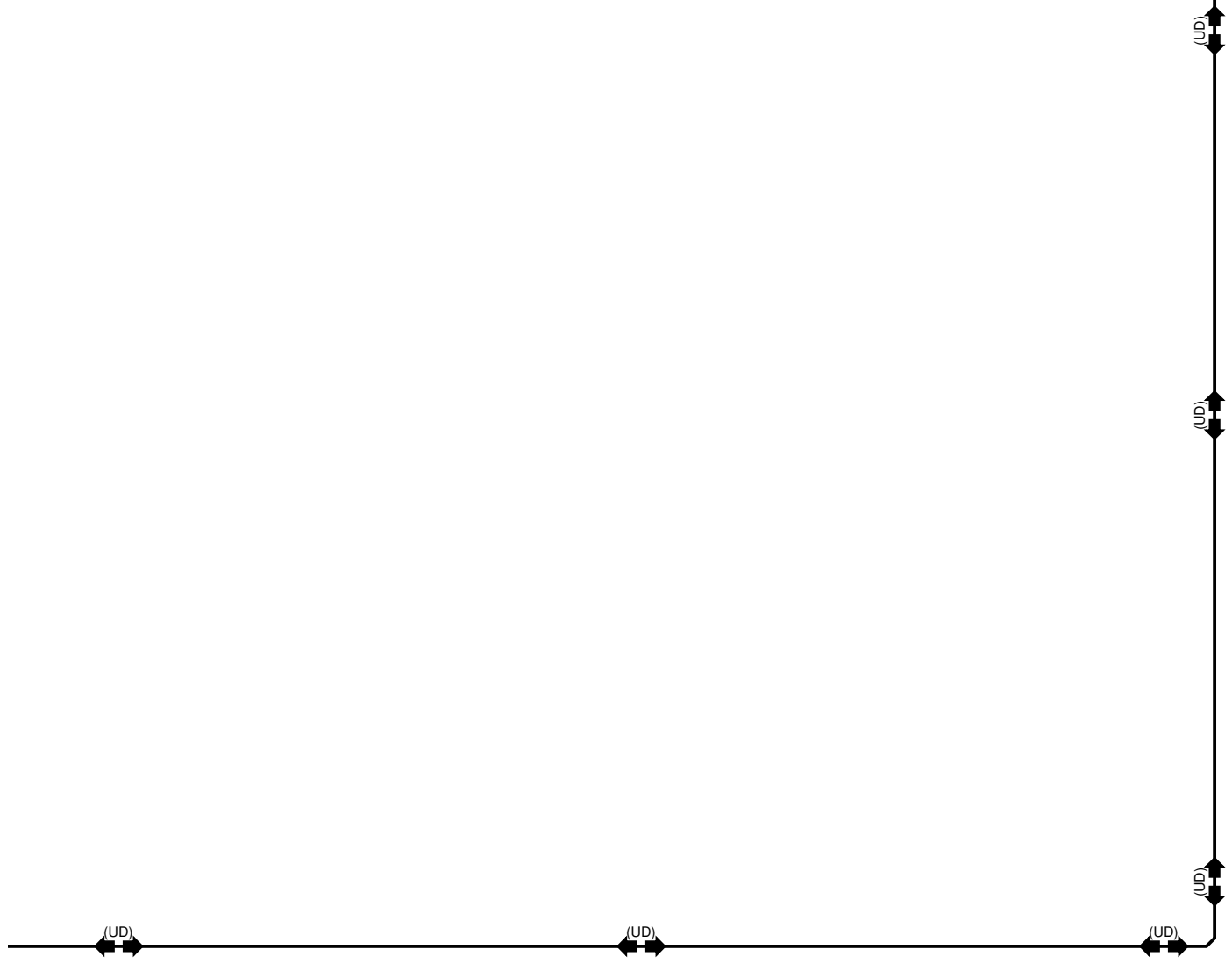
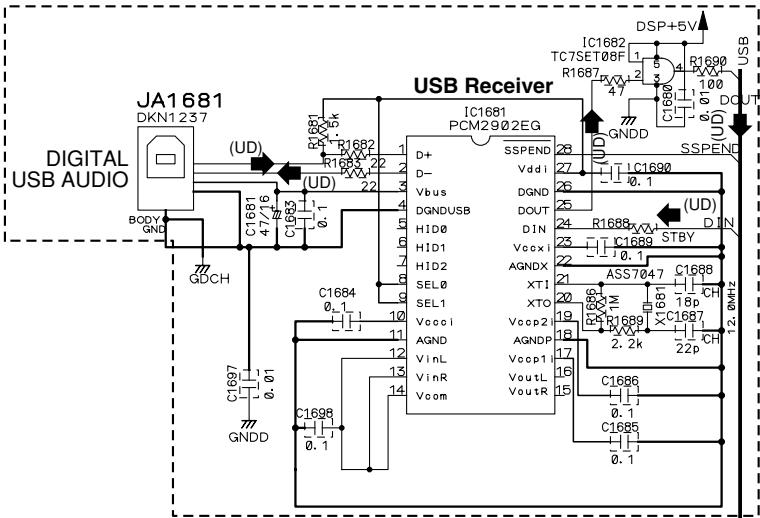
### 3.5 COAXIAL IN ASSY


**H** COAXIAL IN ASSY  
 (VSX-AX5i-S : AWX8300)  
 (VSX-AX3-S, -K : AWX8323)



(D) : AUDIO SIGNAL ROUTE (DIGITAL)  
 (UD) : AUDIO SIGNAL ROUTE (USB DIGITAL)

VSX-AX5i-S ONLY

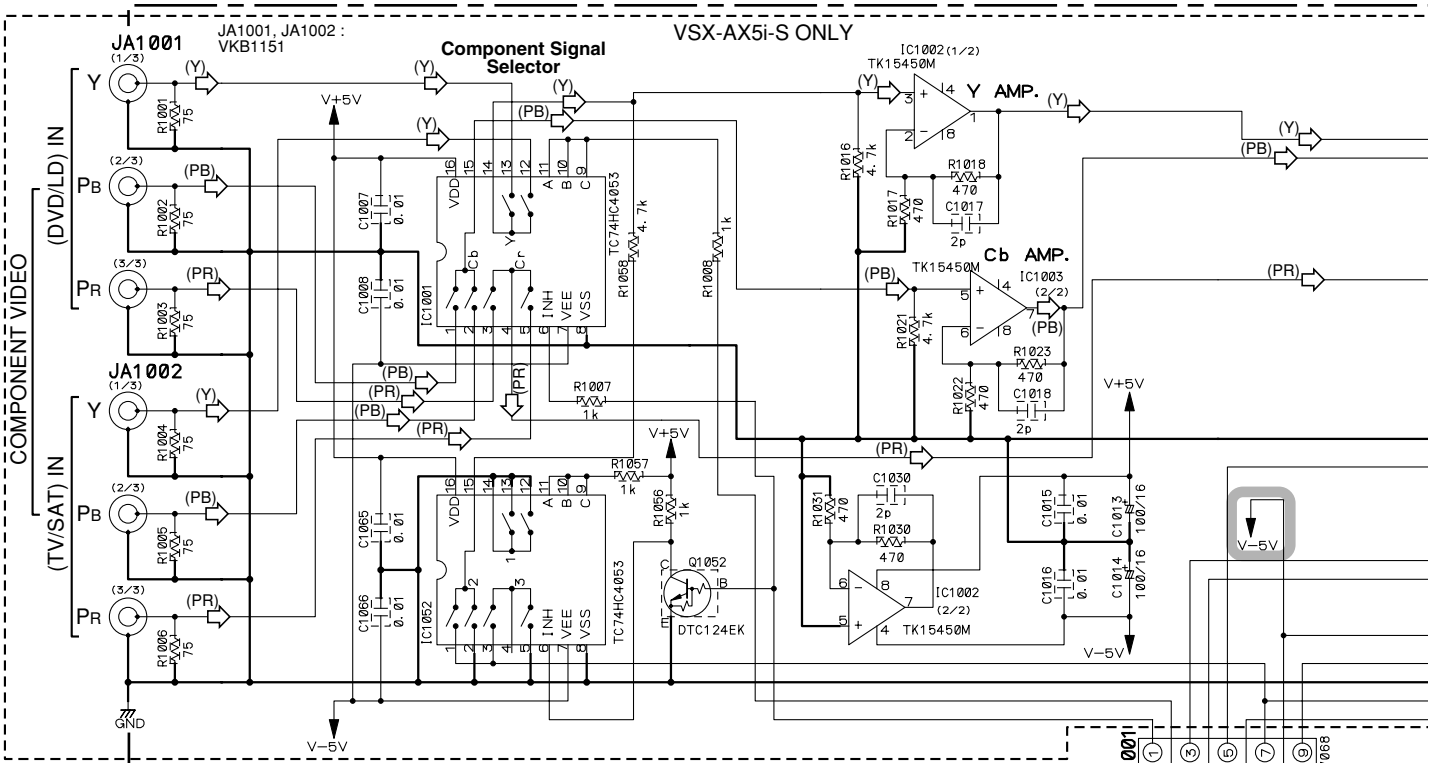


 : The power supply is shown with the marked box.





# 3.6 COMPONENT ASSY



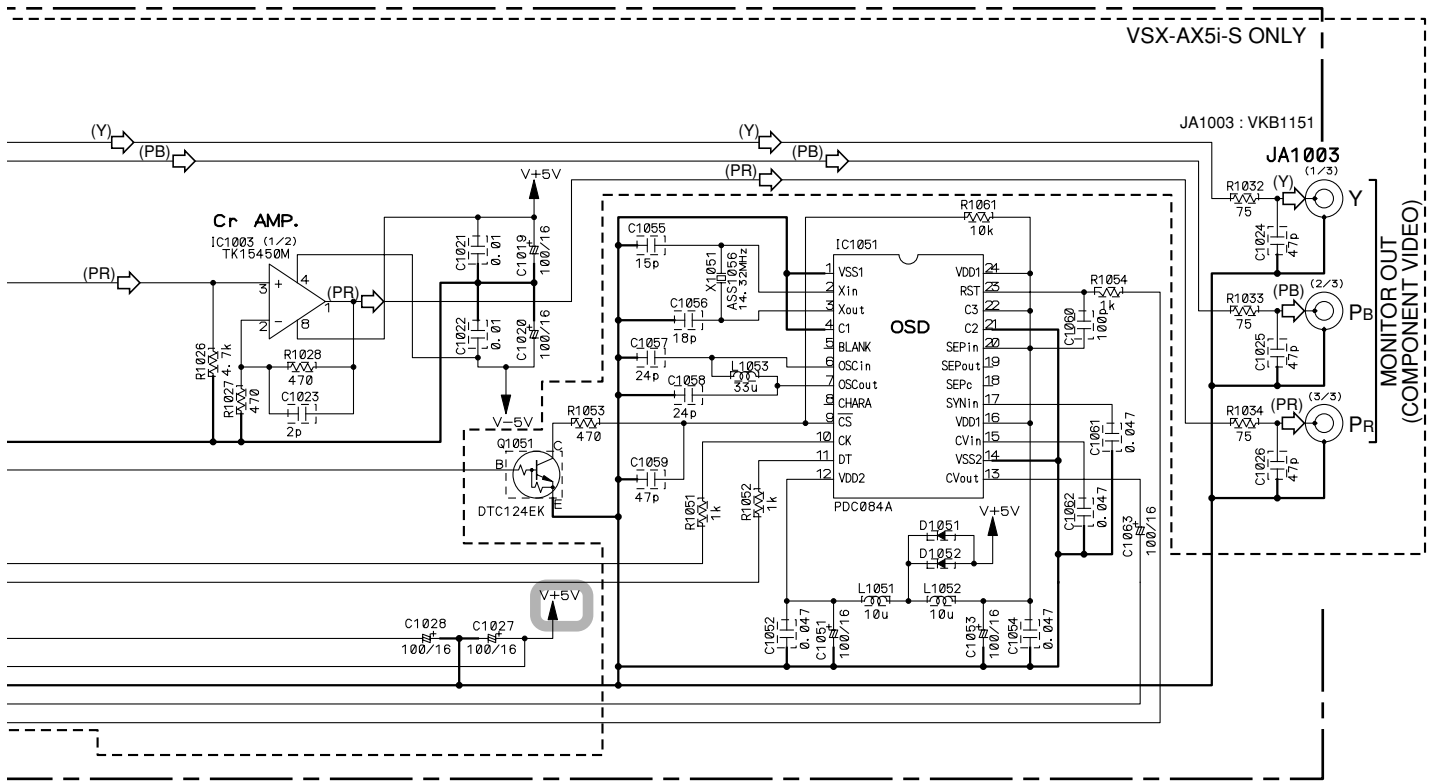
**I** COMPONENT ASSY (VSX-AX5i-S : AWX8293)  
 (VSX-AX3-S, -K : AWX8296)

CN1001

1	4053 INH
2	4053 A
3	OSD CK
4	OSD DT
5	OSD CS
6	OSD RT
7	OSD OUT
8	V-5V
9	V+5V

AMP7066

**AC** CN2404

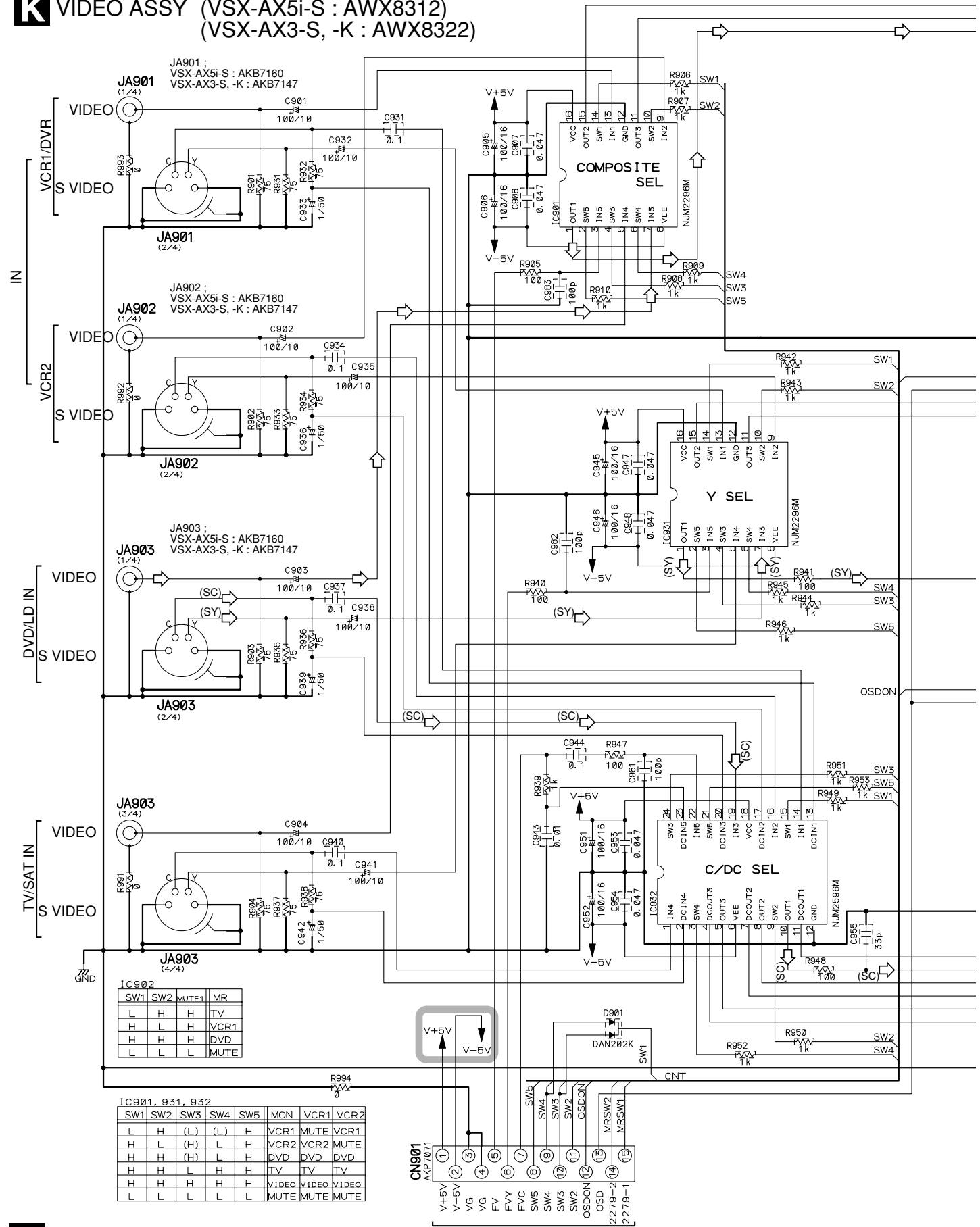


- (Y) : VIDEO SIGNAL ROUTE (Y)
- (PB) : VIDEO SIGNAL ROUTE (PB)
- (PR) : VIDEO SIGNAL ROUTE (PR)

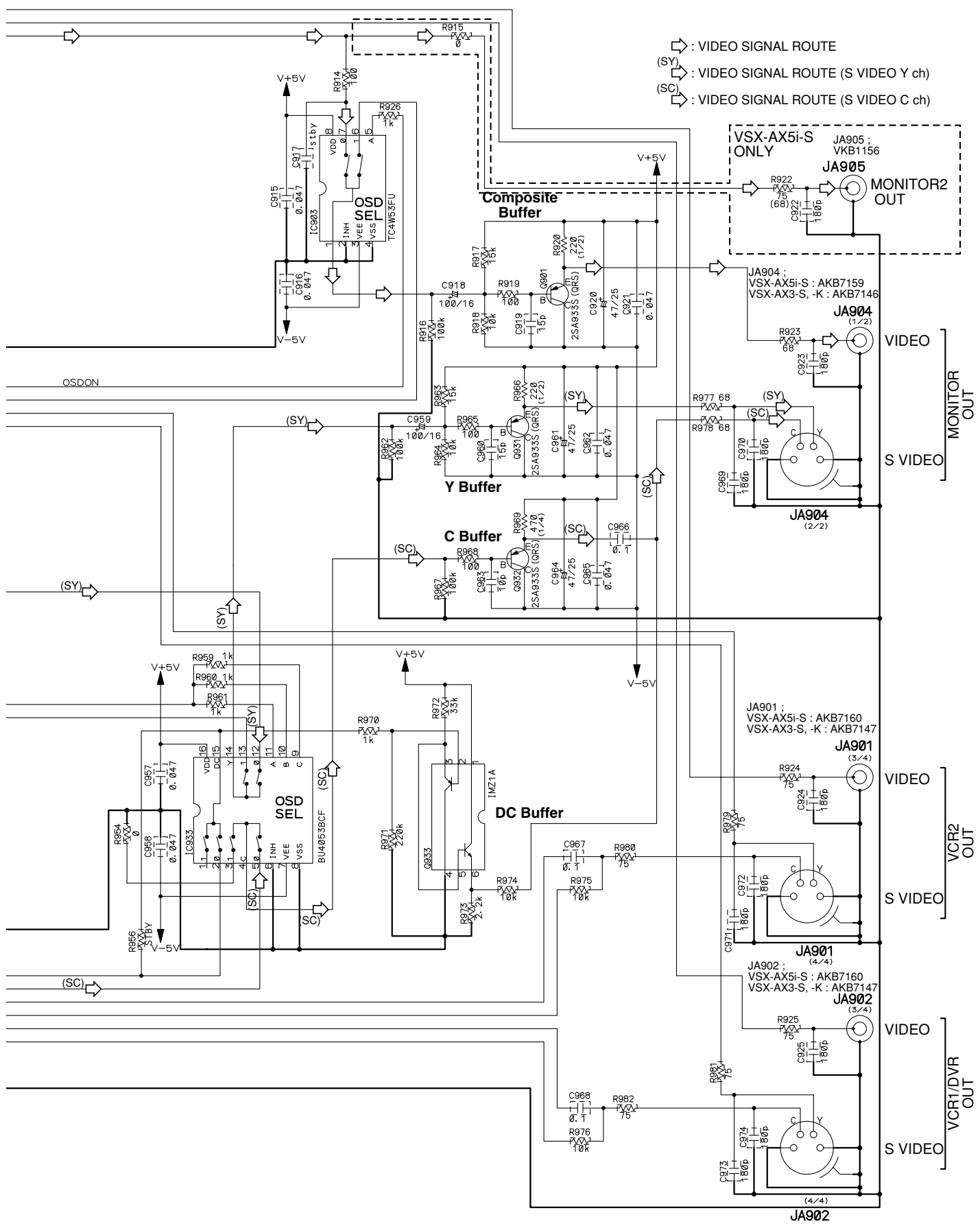
: The power supply is shown with the marked box.


# 3.7 VIDEO ASSY

**K** VIDEO ASSY (VSX-AX5i-S : AWX8312)  
(VSX-AX3-S, -K : AWX8322)



**AC** CN2405

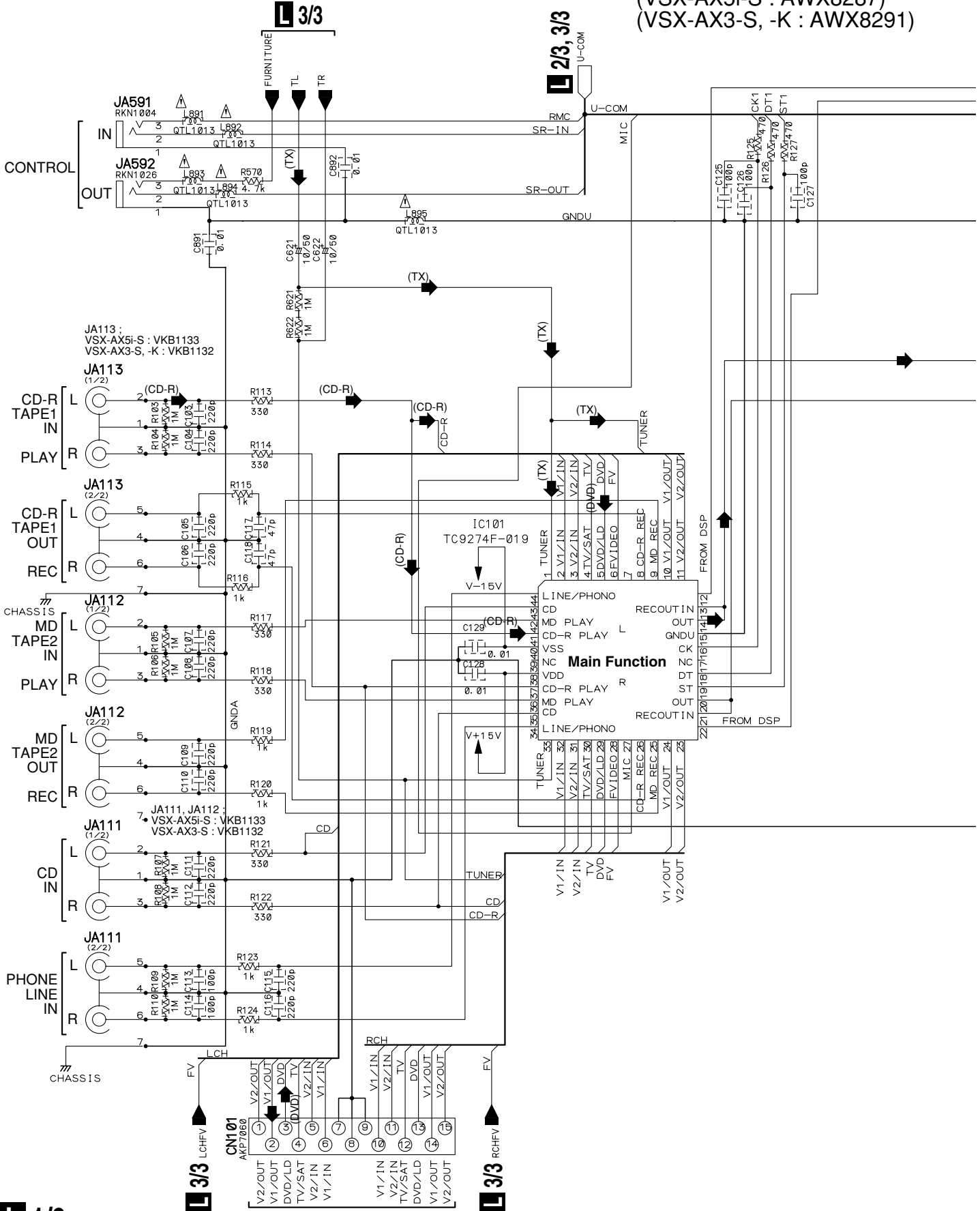


 : The power supply is shown with the marked box.



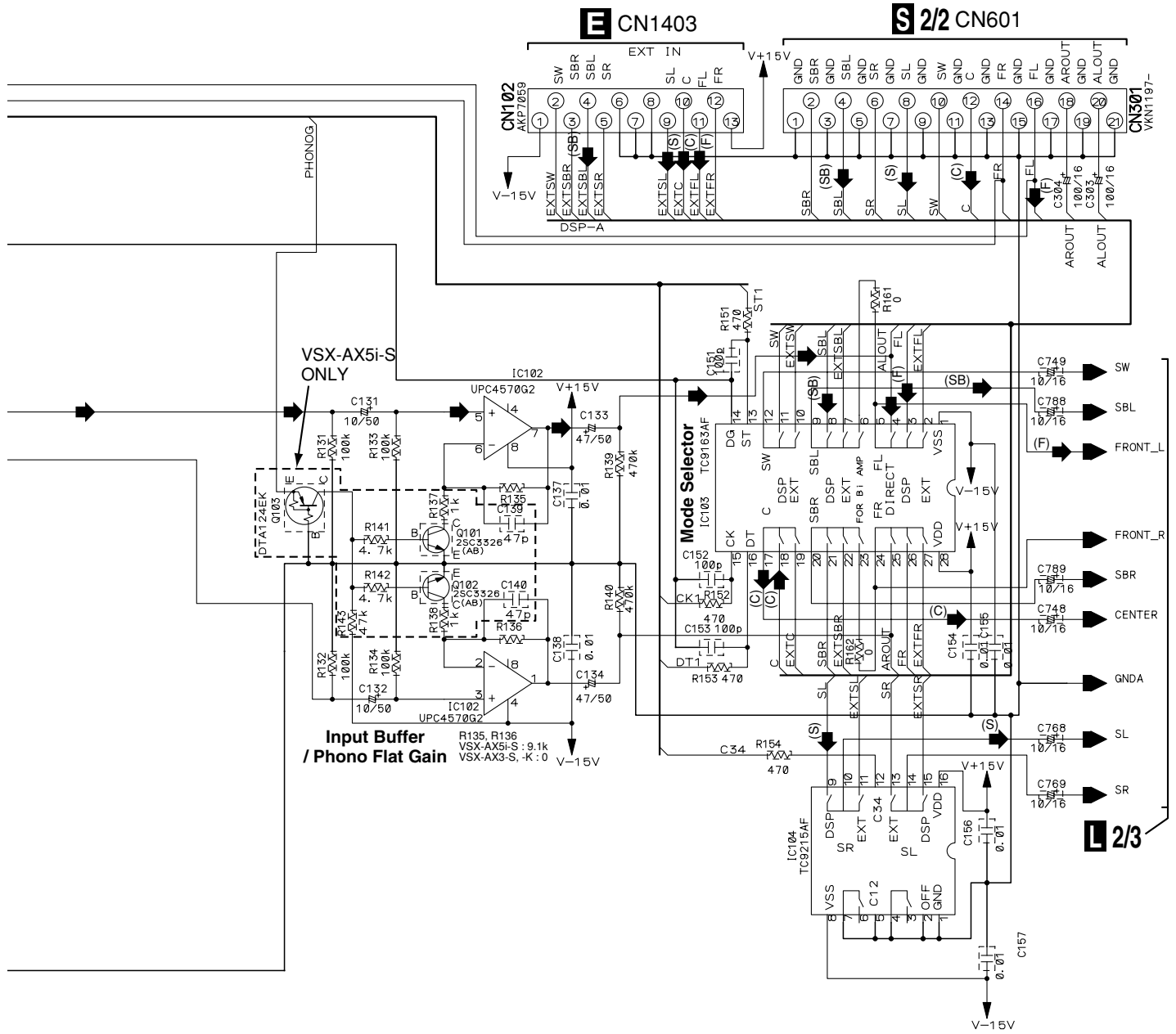
# 3.8 MAIN CONTROL ASSY (1/3)

**1/3** MAIN CONTROL ASSY  
 (VSX-AX5i-S : AWX8287)  
 (VSX-AX3-S, -K : AWX8291)



**1/3**

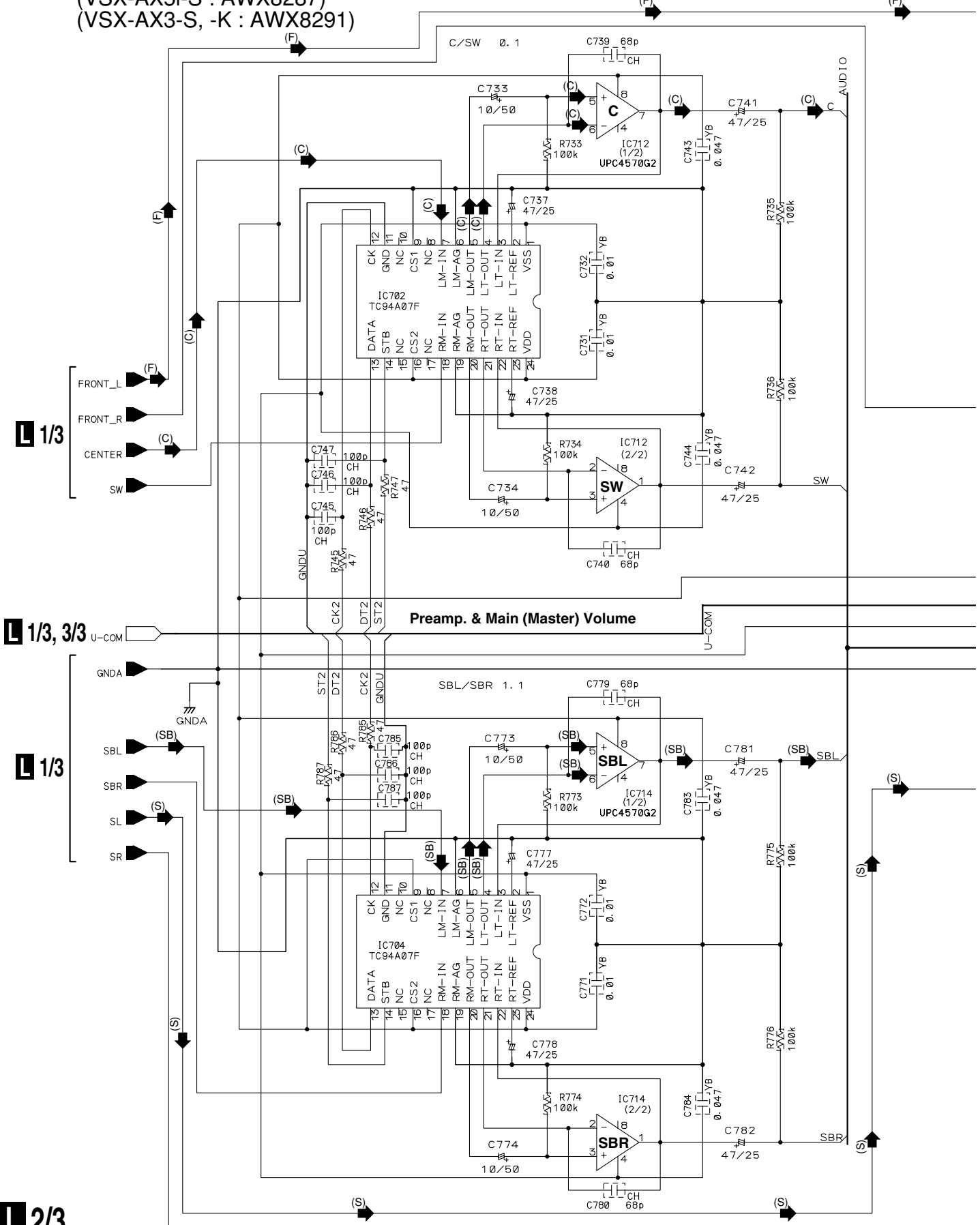
**E** CN1401 R



- ➔ : AUDIO SIGNAL ROUTE (Lch)
- (CD-R) ➔ : AUDIO SIGNAL ROUTE (CD-R Lch)
- (TX) ➔ : AUDIO SIGNAL ROUTE (TUNER Lch)
- (DVD) ➔ : AUDIO SIGNAL ROUTE (DVD Lch)
- (F) ➔ : AUDIO SIGNAL ROUTE (FRONT Lch)
- (S) ➔ : AUDIO SIGNAL ROUTE (SURROUND Lch)
- (SB) ➔ : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)
- (C) ➔ : AUDIO SIGNAL ROUTE (CENTER ch)

### 3.9 MAIN CONTROL ASSY (2/3)

**L 2/3** MAIN CONTROL ASSY  
 (VSX-AX5i-S : AWX8287)  
 (VSX-AX3-S, -K : AWX8291)

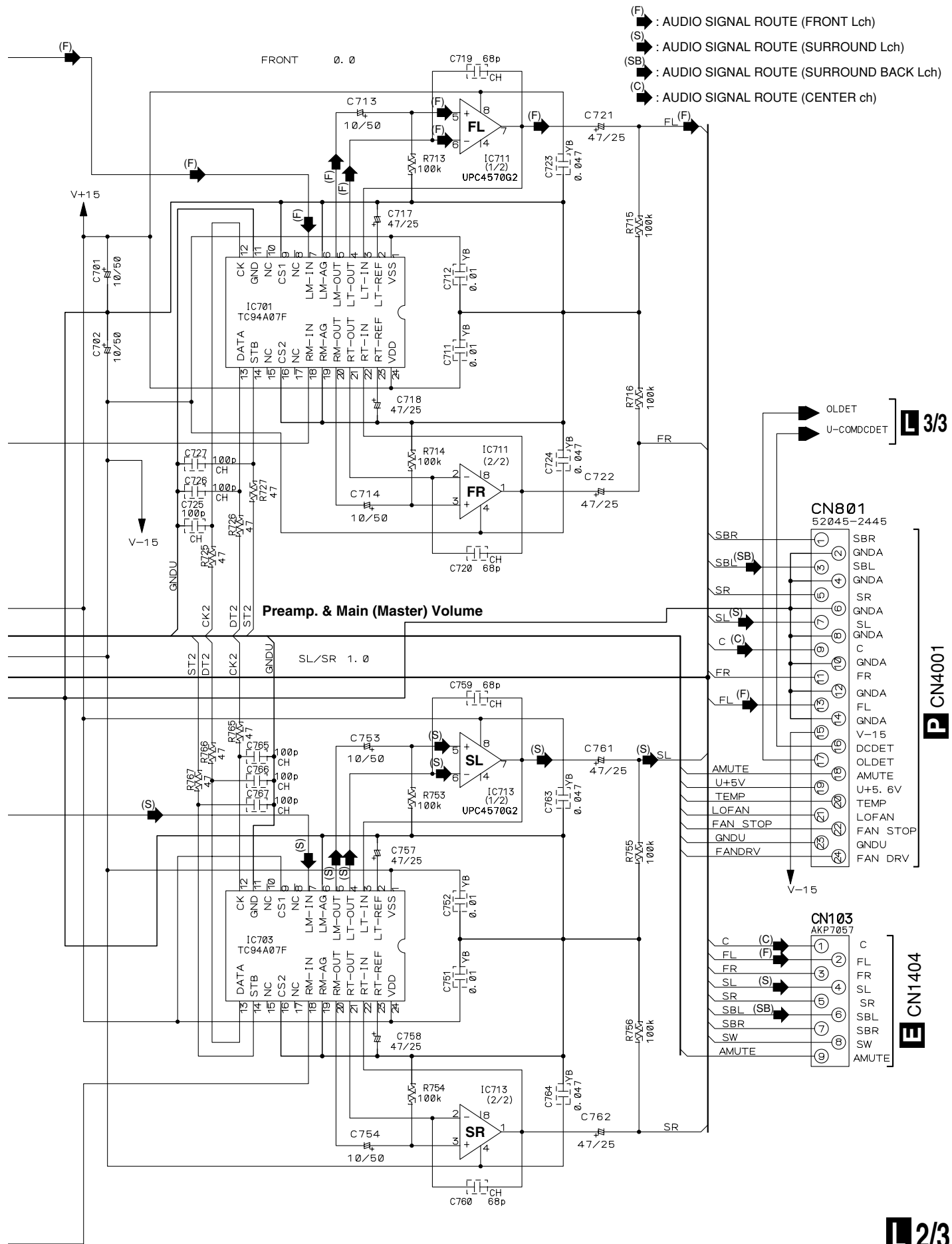


**L 1/3**

**L 1/3, 3/3**

**L 1/3**

**L 2/3**

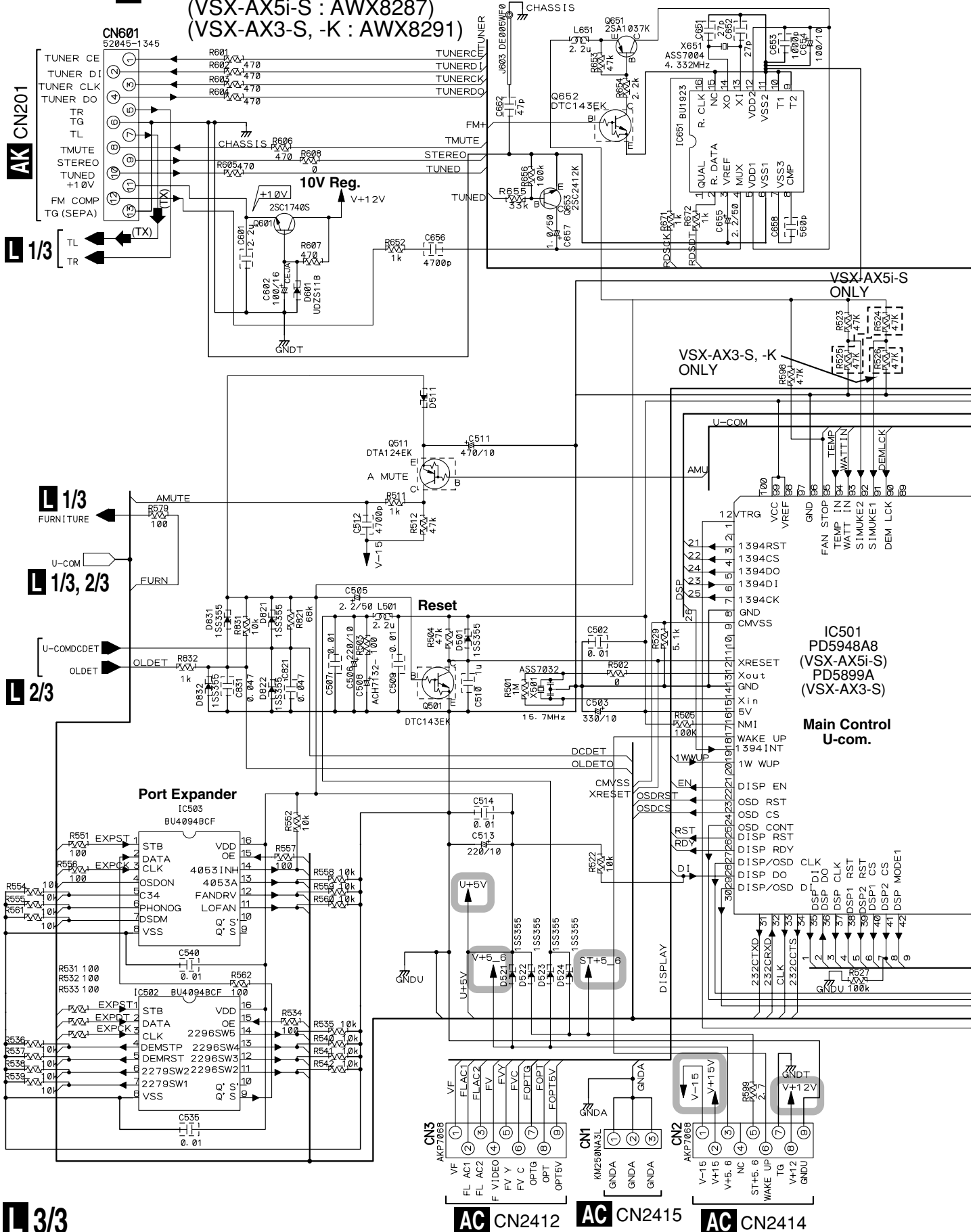


A  
B  
C  
D  
E  
F



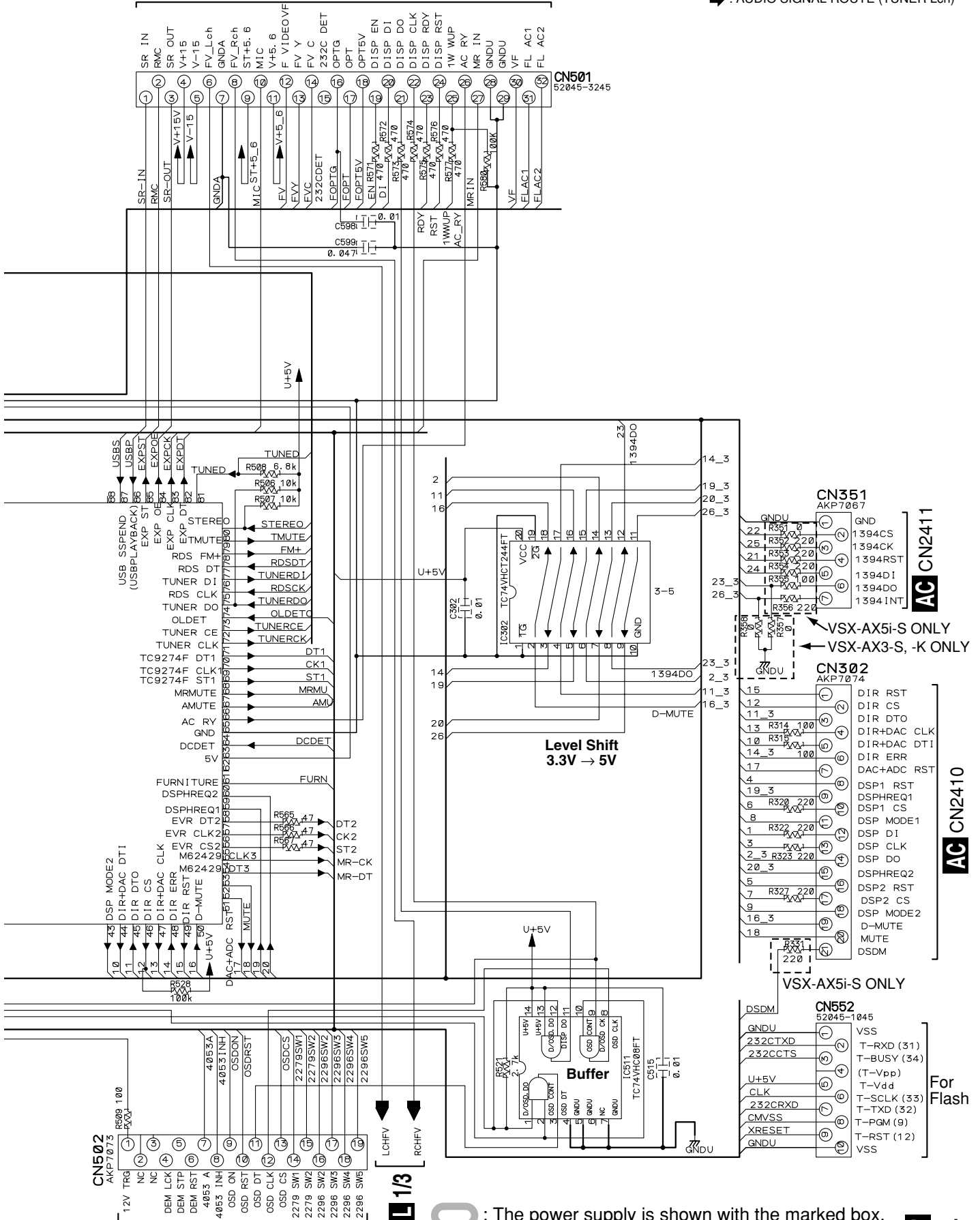
# 3.10 MAIN CONTROL ASSY (3/3)

## 3/3 MAIN CONTROL ASSY (VSX-AX5i-S : AWX8287) (VSX-AX3-S, -K : AWX8291)



# U CN3006

(TX) → : AUDIO SIGNAL ROUTE (TUNER Lch)



○ : The power supply is shown with the marked box.

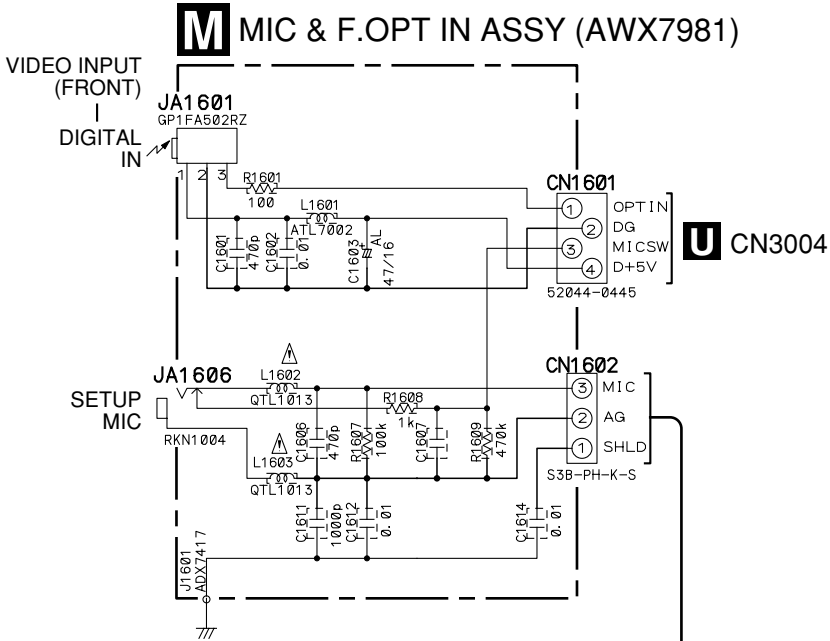
AC CN2413

For Flash 3/3

VSX-AX5-S

# 3.11 MIC & F.OPT IN, MIC AMP and DSP CONNECTION ASSYS

A



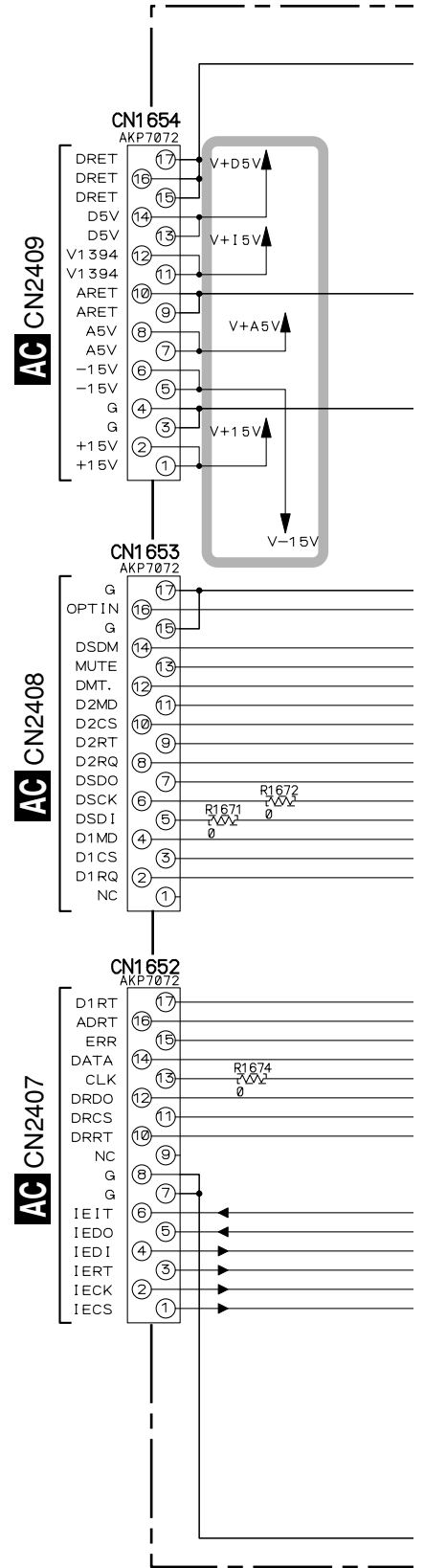
B

C

D

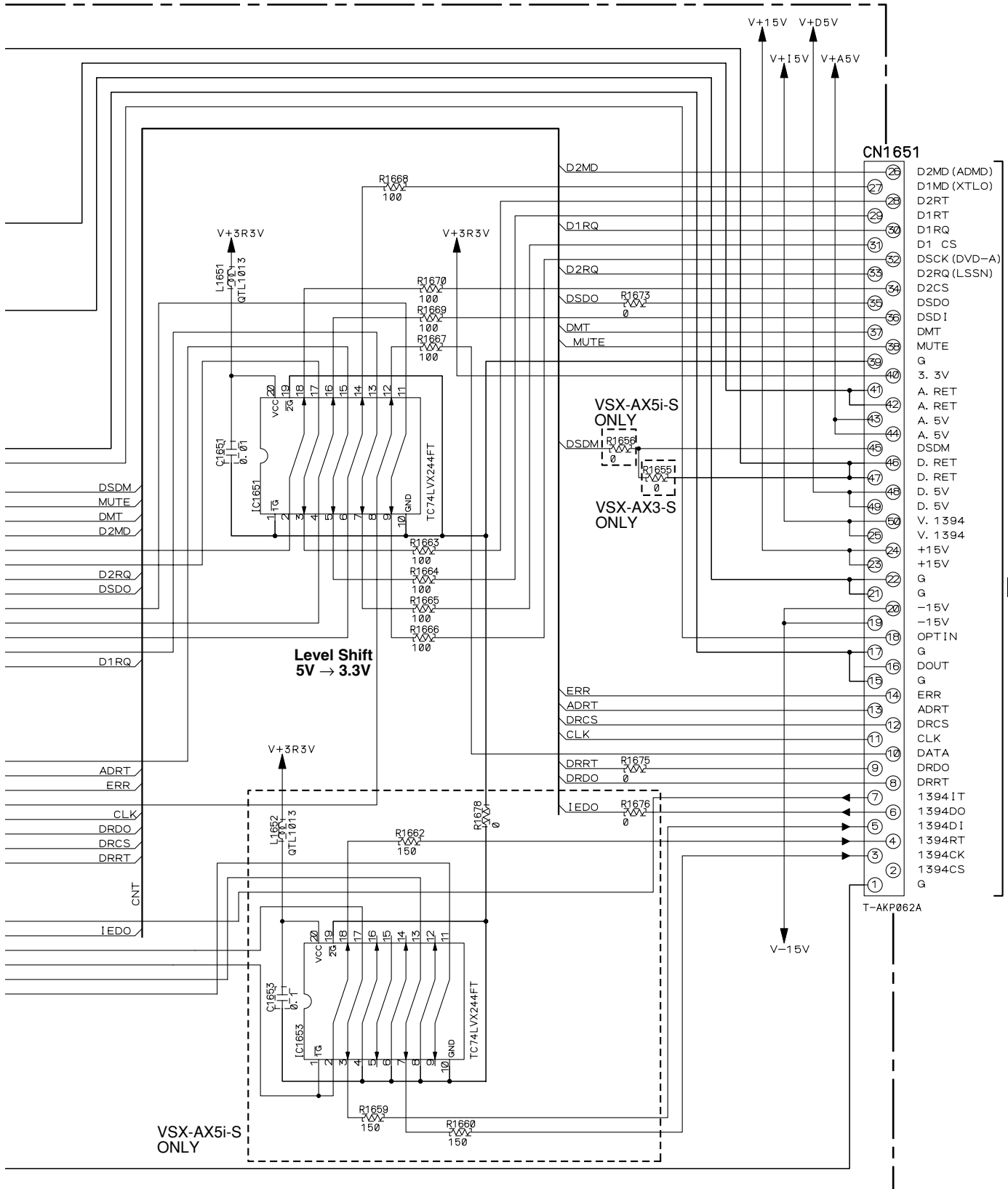
E

F



**M N O**

# DSP CONNECTION ASSY (VSX-AX5i-S : AWX8299) (VSX-AX3-S, -K : AWX8024)



**S 1/2** CN102

: The power supply is shown with the marked box.



### 3.12 POWER AMP IN, FAN CONNECTION and FAN DRIVE ASSYS

A

B

C

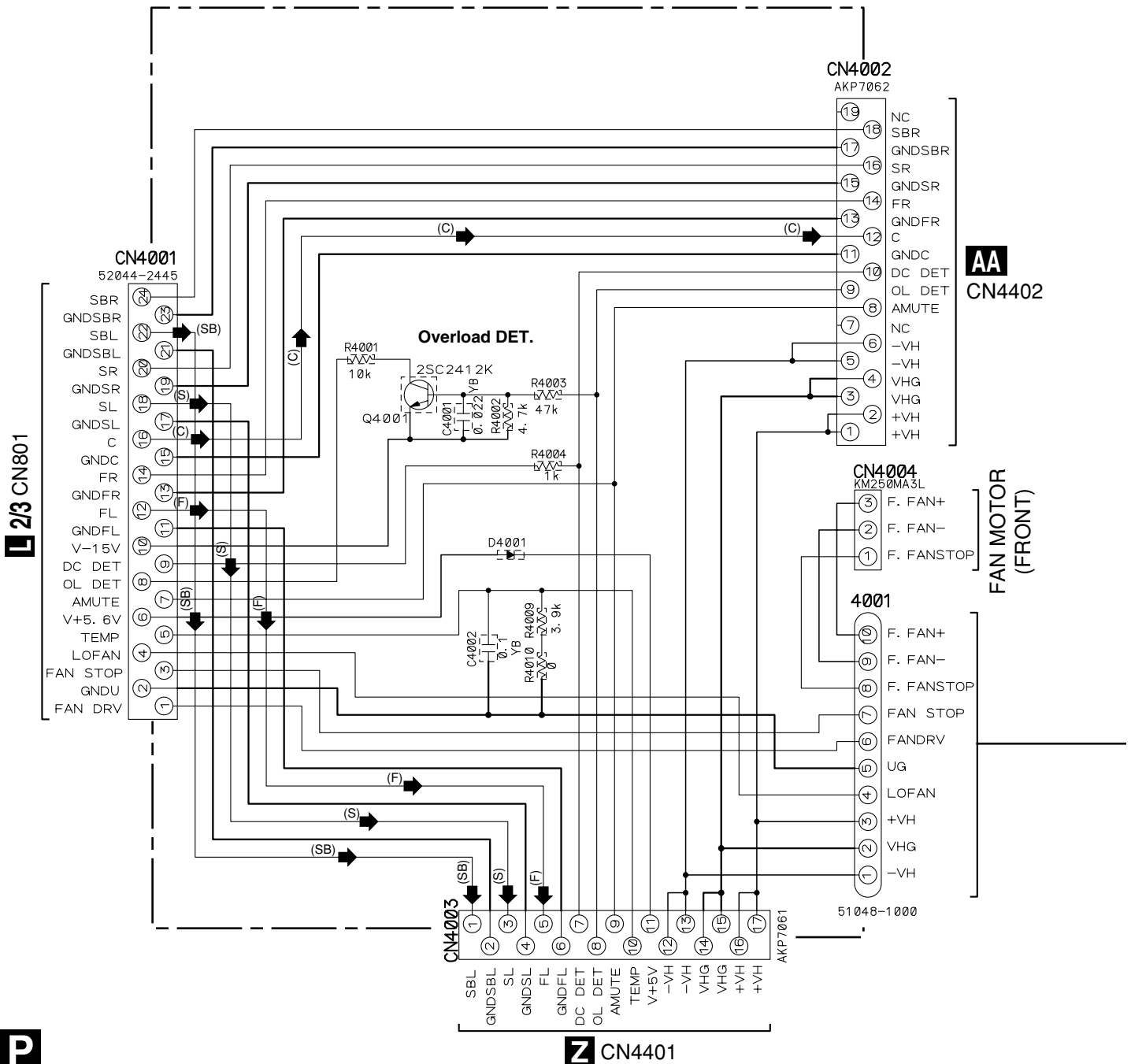
D

E

F

- (F) : AUDIO SIGNAL ROUTE (FRONT Lch)
- (S) : AUDIO SIGNAL ROUTE (SURROUND Lch)
- (SB) : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)
- (C) : AUDIO SIGNAL ROUTE (CENTER ch)

#### **P** POWER AMP IN ASSY (AWX7982)



**L** 2/3 CN801

**AA** CN4402

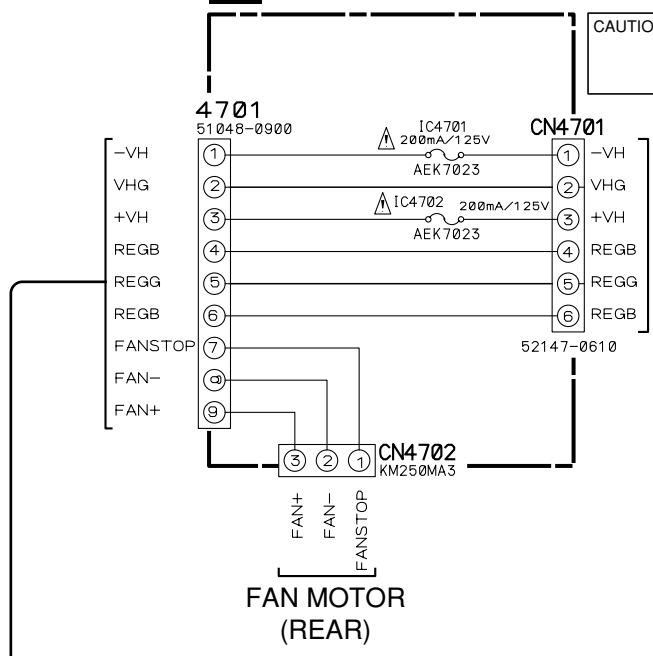
FAN MOTOR (FRONT)

**P**

**Z** CN4401

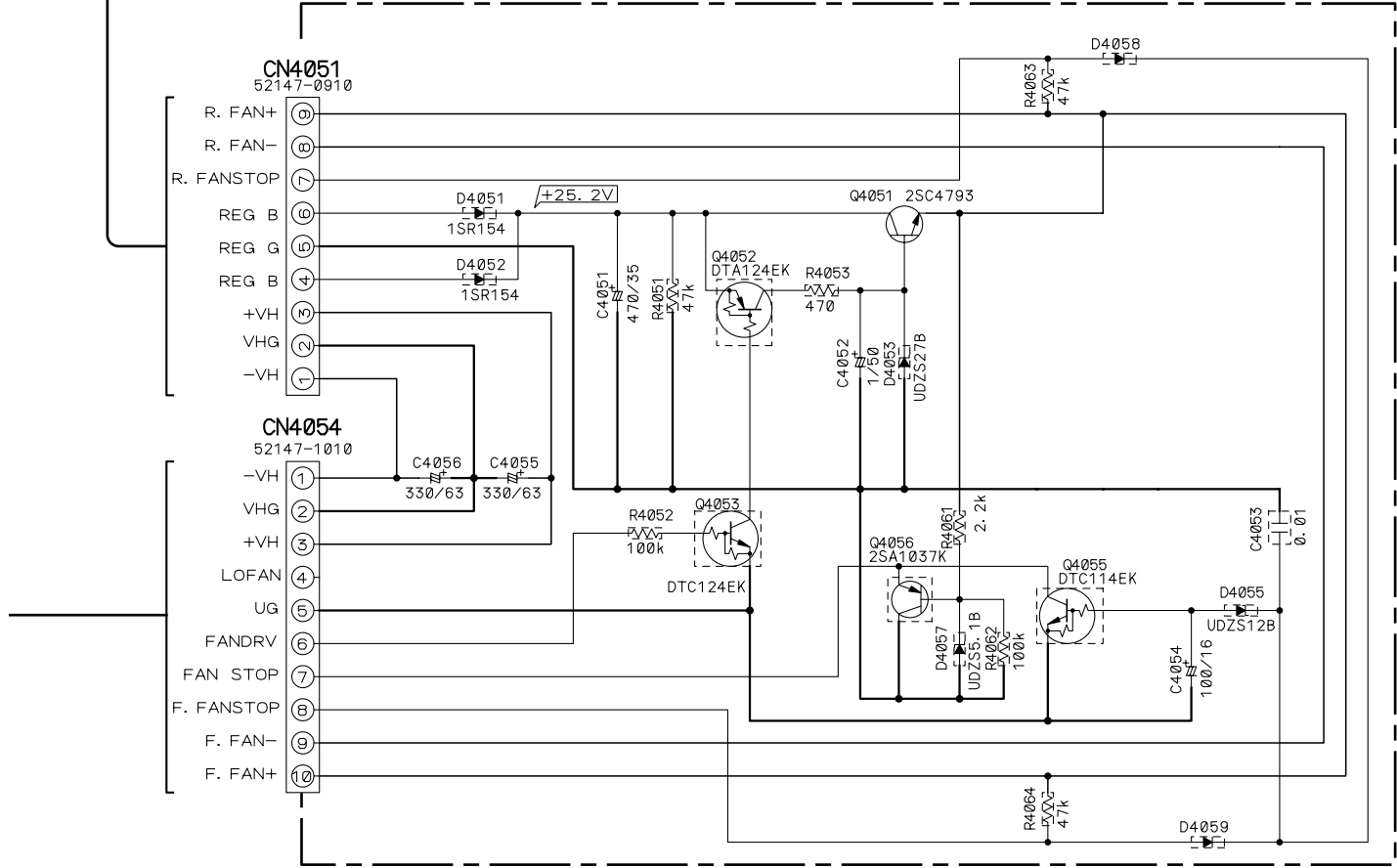
### Q FAN CONNECTION ASSY (AWX8005)

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.200 MFD, BY LITTELFUSE INK. FOR IC4701 AND IC4702.



- ⏏ YA CFTYA□□□J50-T
- ⏏ LA CFTLA□□□J2A-T
- ⏏ CH CCSRCH□□□J50-T
- ⏏ YB CKSRYB□□□K50-T
- ⏏ YF CKSRYF□□□Z25-T
- ⏏ 1SS355-TRB
- ⏏ RS1/16S□□□J-T
- ⏏ RDR1/4VM□□□J-T
- ⏏ (MUF) RD1/4MUF□□□J-T
- ⏏ 3W RS3LMF□□□J
- ⏏ F NON-FRAMABLE

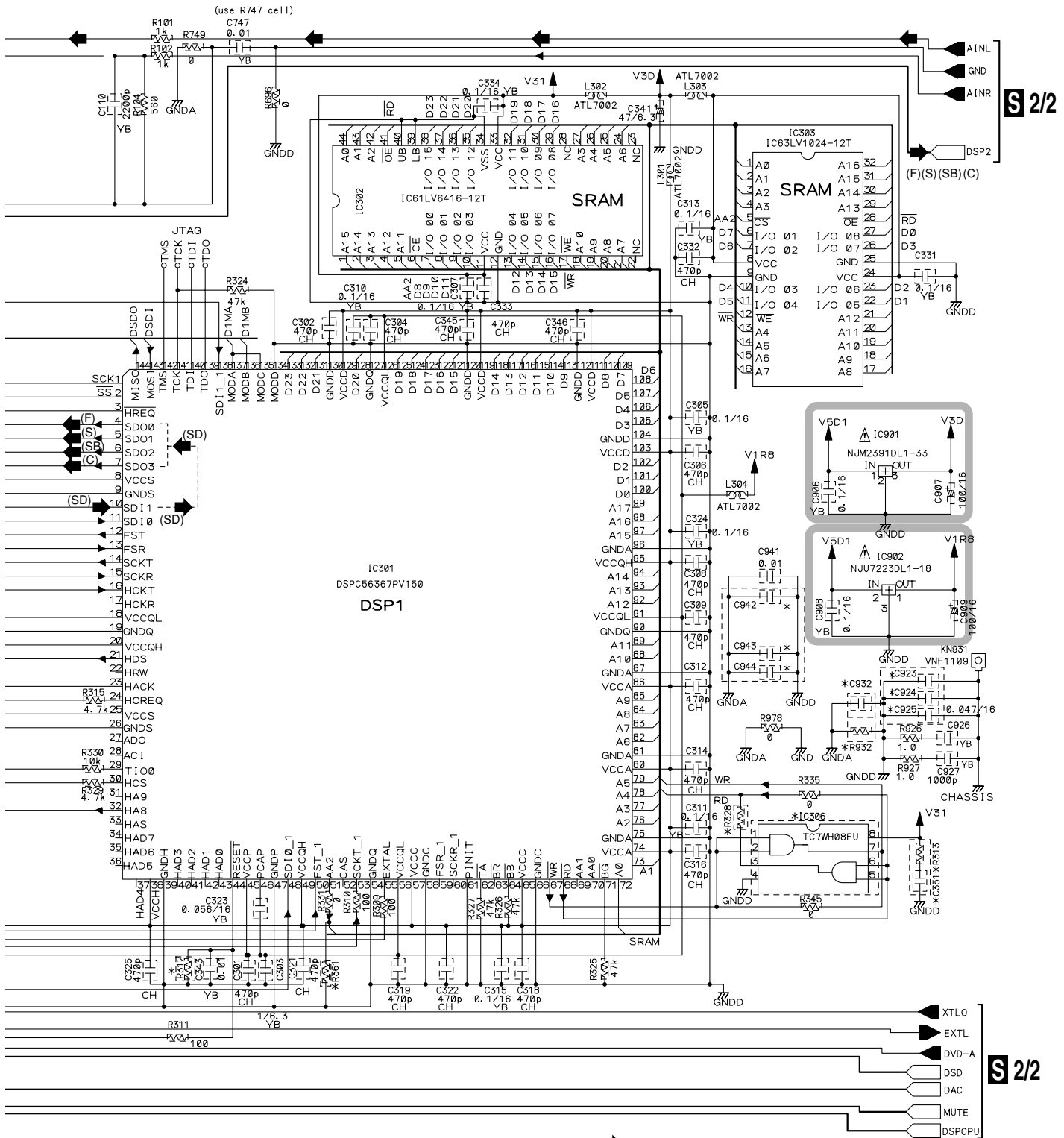
### R FAN DRIVE ASSY (AWX8135)



### Q R



**O** : The power supply is shown with the marked box.



- : AUDIO SIGNAL ROUTE (Lch)
- (F) ➤ : AUDIO SIGNAL ROUTE (FRONT Lch)
- (S) ➤ : AUDIO SIGNAL ROUTE (SURROUND Lch)
- (SB) ➤ : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)
- (C) ➤ : AUDIO SIGNAL ROUTE (CENTER ch)
- (SD) ➤ : SURROUND DATA SIGNAL ROUTE
- (D) ➤ : AUDIO SIGNAL ROUTE (DIGITAL)
- (UD) ➤ : AUDIO SIGNAL ROUTE (USB DIGITAL)

**S 2/2**

**S 2/2**

**S 1/2**



# 3.14 DSP ASSY (2/2)

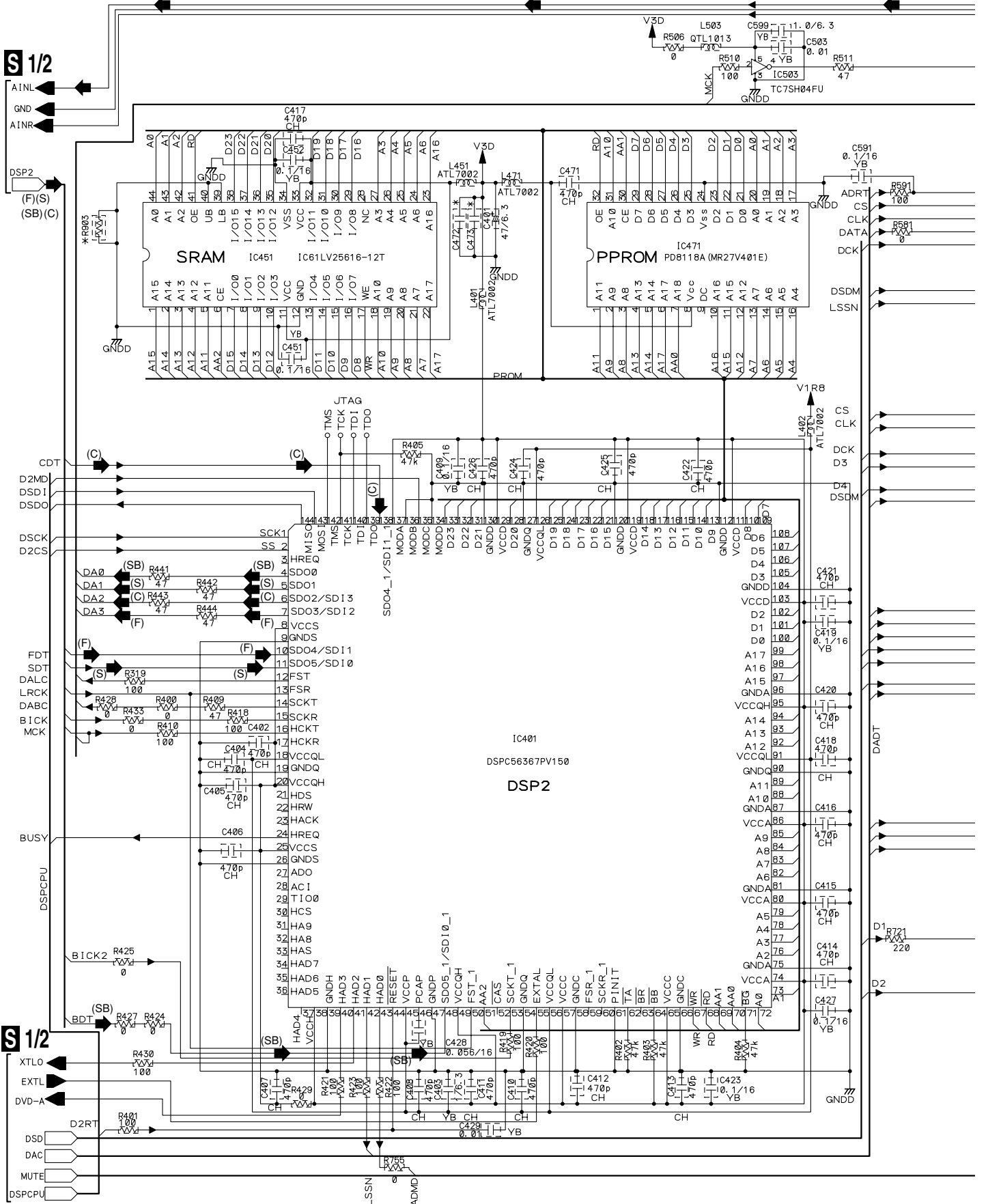
## S 2/2 DSP ASSY (AWX8249)

### S 1/2

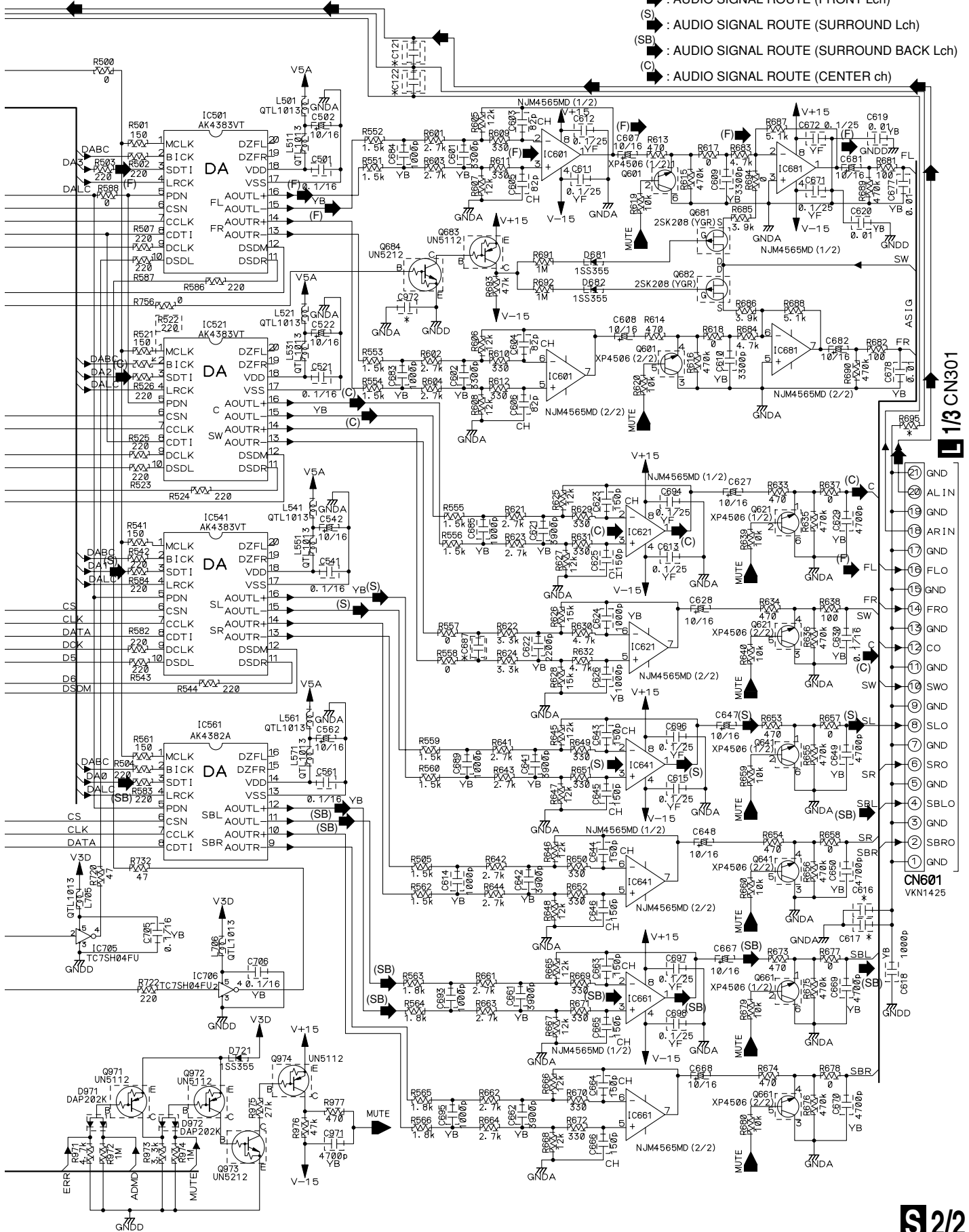
### S 1/2

### S 1/2

### S 2/2



- ◆ : AUDIO SIGNAL ROUTE (Lch)
- (F) : AUDIO SIGNAL ROUTE (FRONT Lch)
- (S) : AUDIO SIGNAL ROUTE (SURROUND Lch)
- (SB) : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)
- (C) : AUDIO SIGNAL ROUTE (CENTER ch)




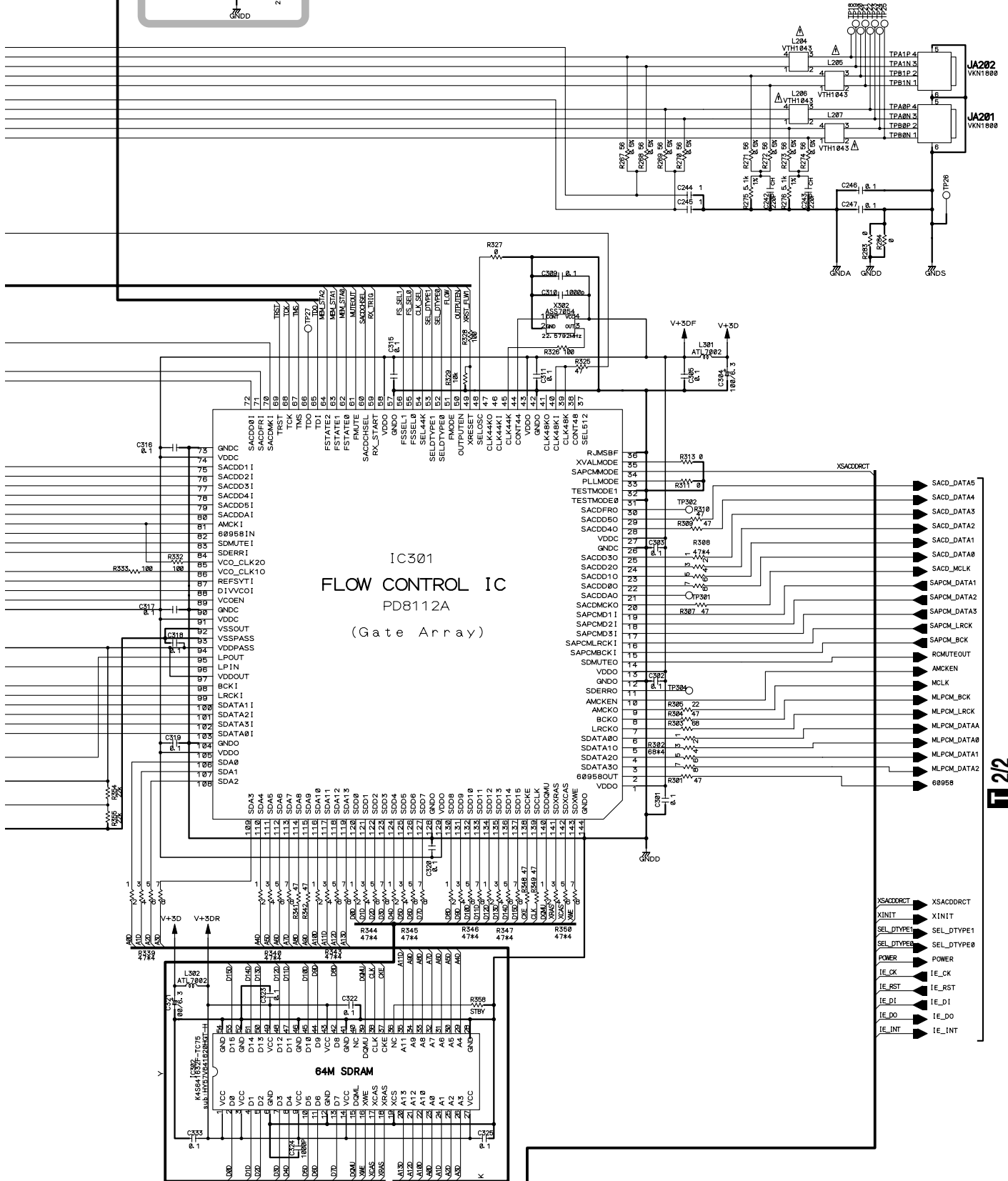
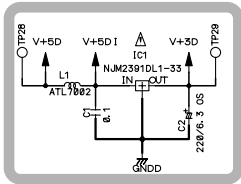
A  
B  
C  
D  
E  
F





# 1/2 1394 ASSY (AWK7768)

 : The power supply is shown with the marked box.



1/2 212

1/2

### 3.16 1394 ASSY (2/2) (VSX-AX5i-S ONLY)

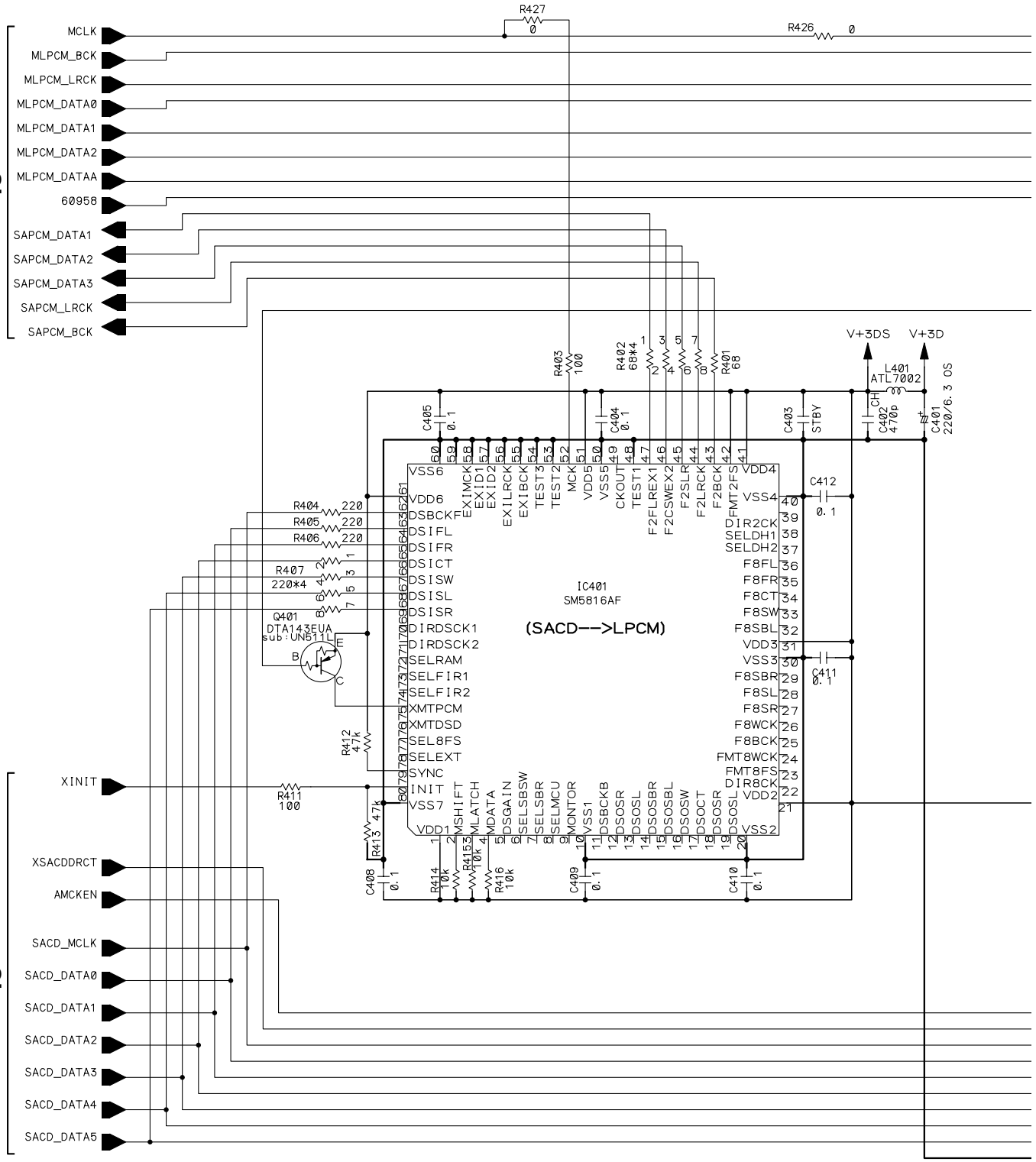
**T** 2/2 1394 ASSY (AWK7768)

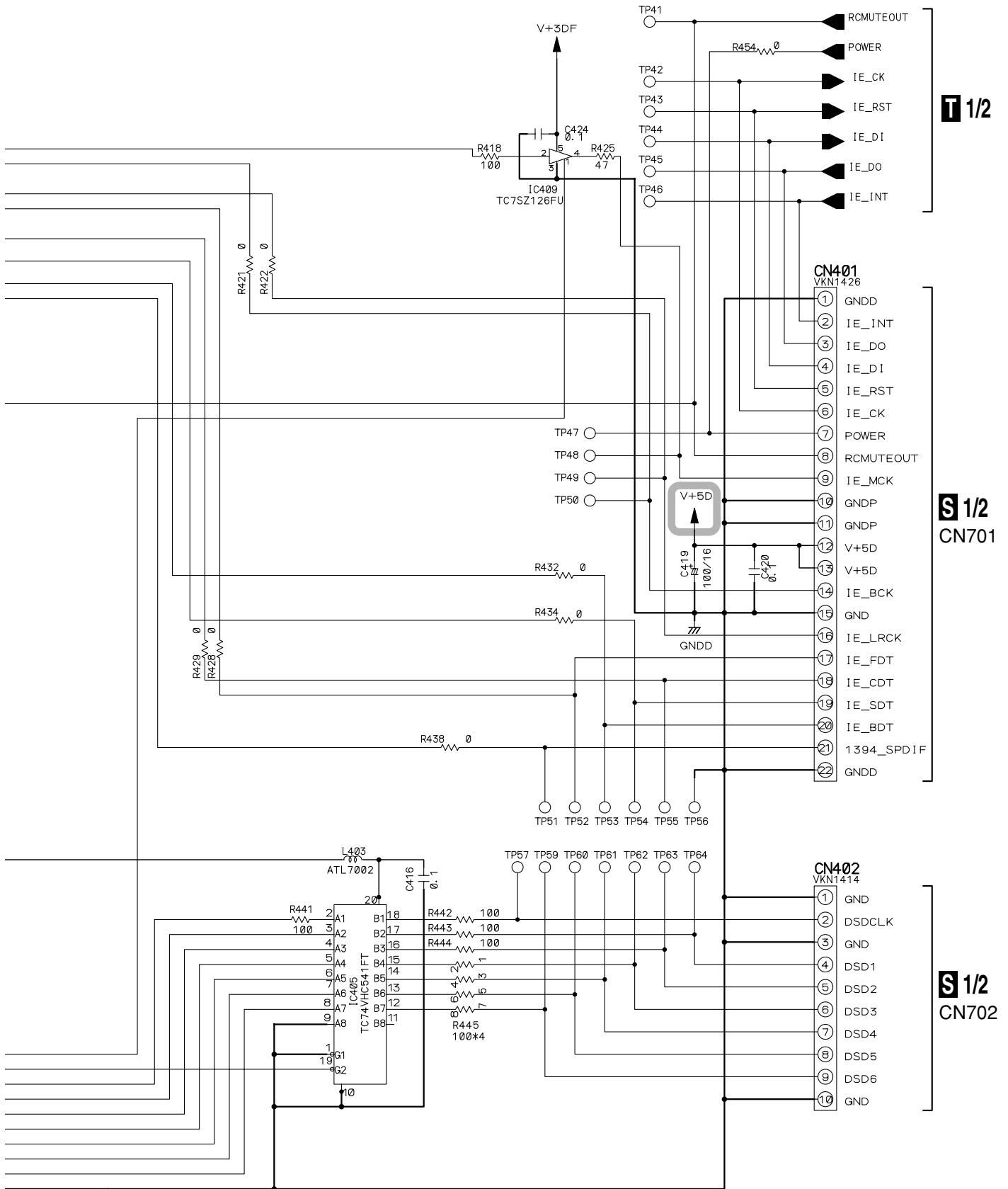
**T** 1/2


**T** 1/2

**T** 2/2

A  
B  
C  
D  
E  
F





 : The power supply is shown with the marked box.

**T 1/2**





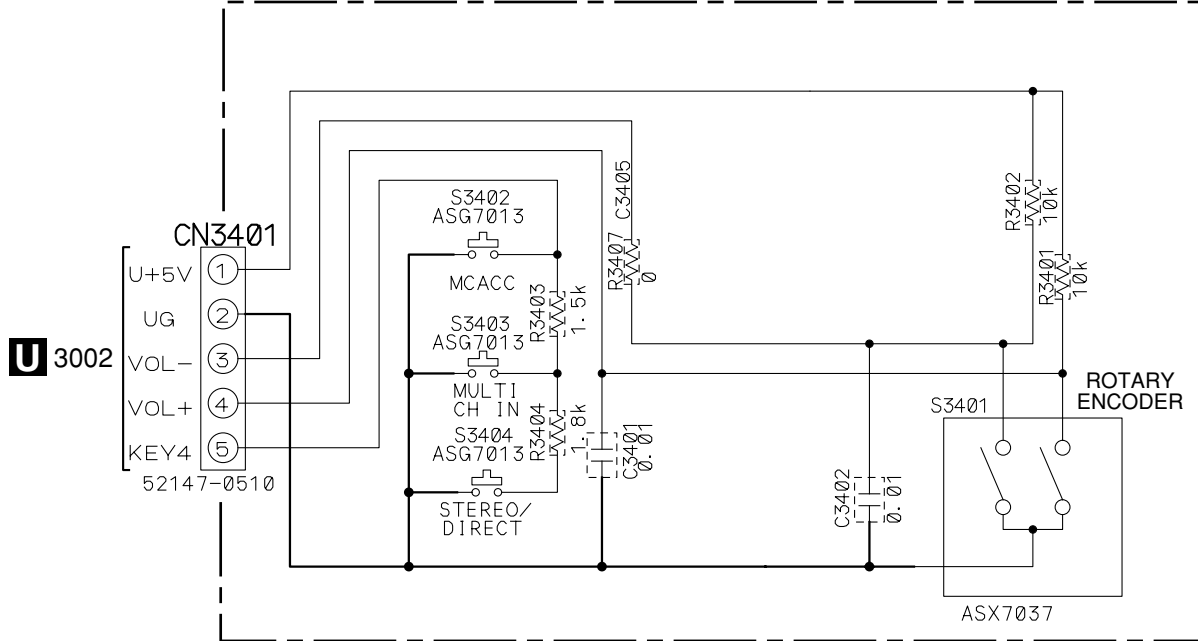




### 3.18 VOLUME, MECHA SW, MULTI JOG and HEADPHONE ASSYS

A

#### **V** VOLUME ASSY (AWX7971)

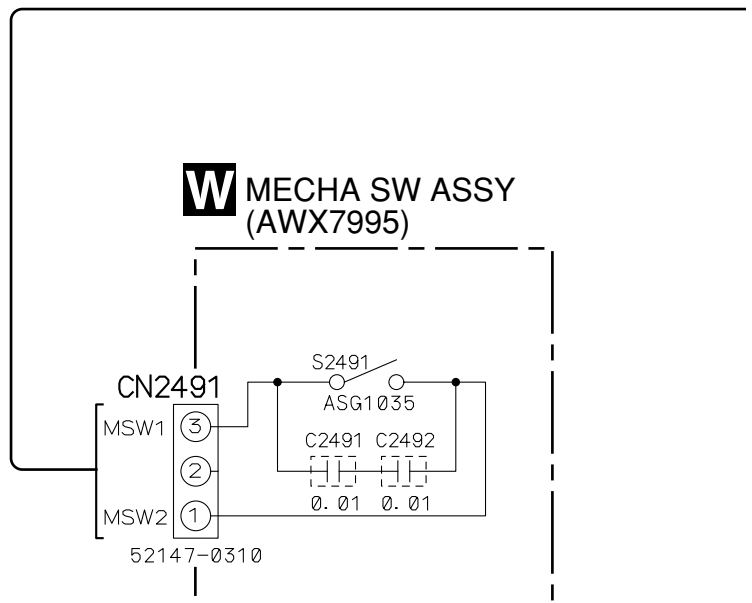


- S3401 : MASTER VOLUME
- S3402 : ACOUSTIC EQ
- S3403 : MULTI CH IN
- S3404 : STEREO/DIRECT

C

D

#### **W** MECHA SW ASSY (AWX7995)

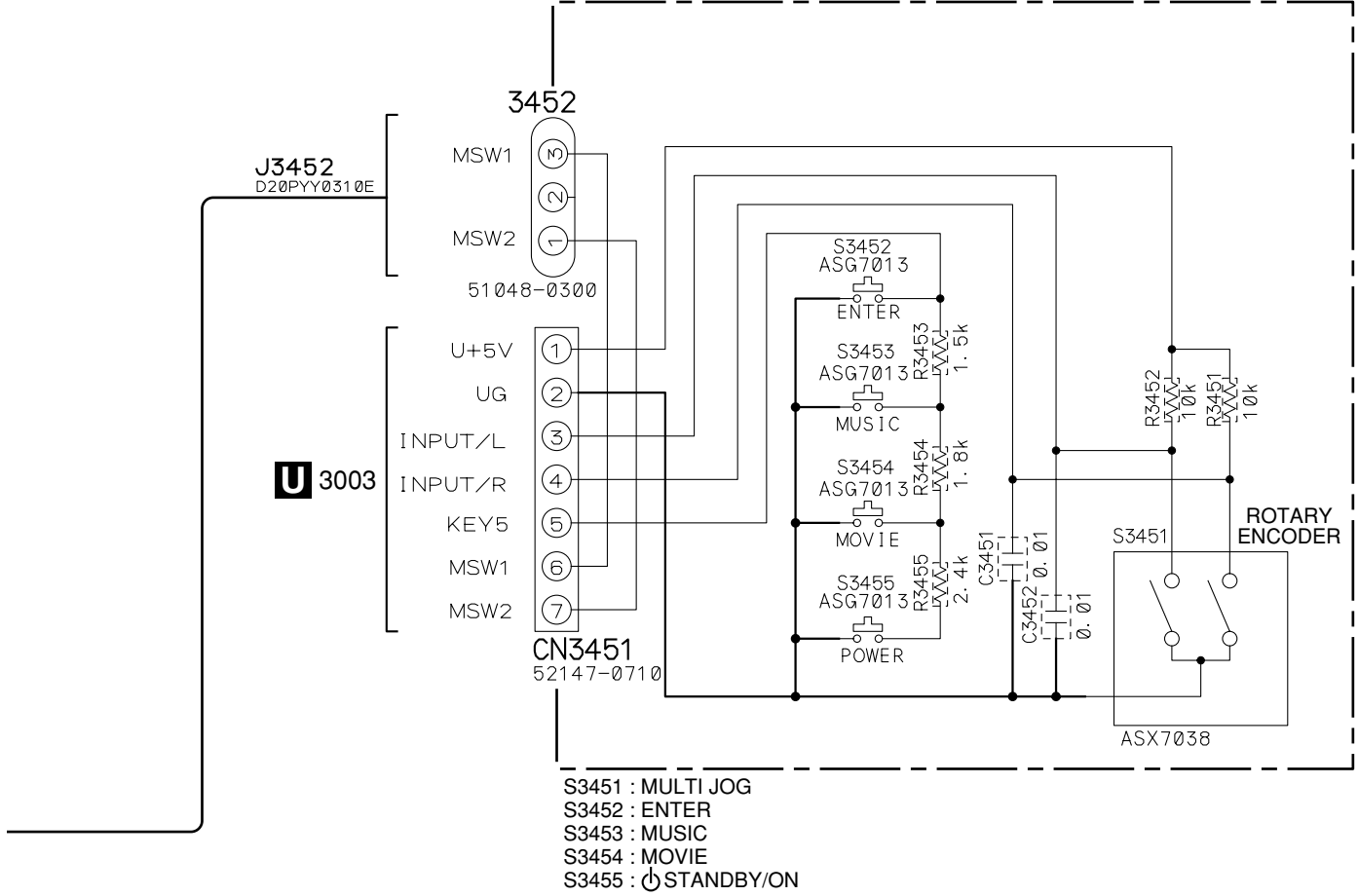


E

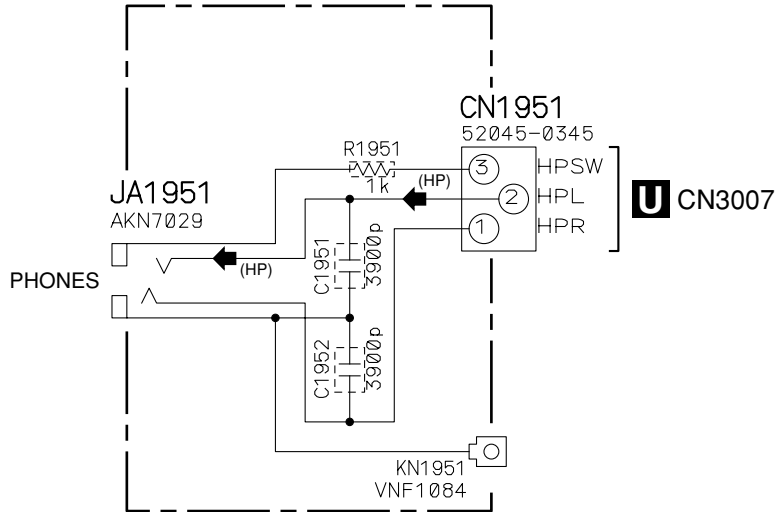
F



### X MULTI JOG ASSY (AWX8015)

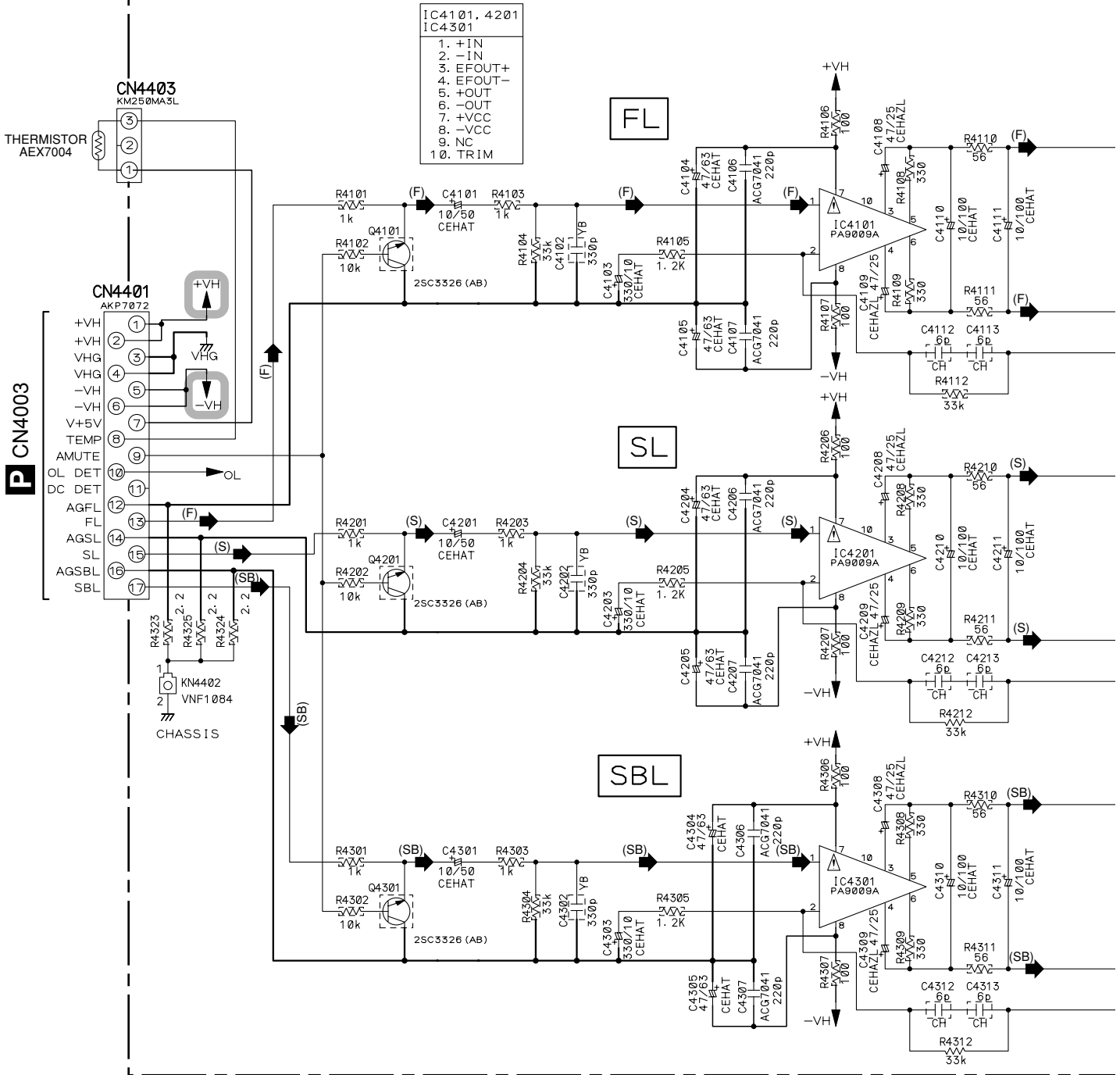


### Y HEADPHONE ASSY (AWX7980)




# 3.19 POWER AMP-L ASSY

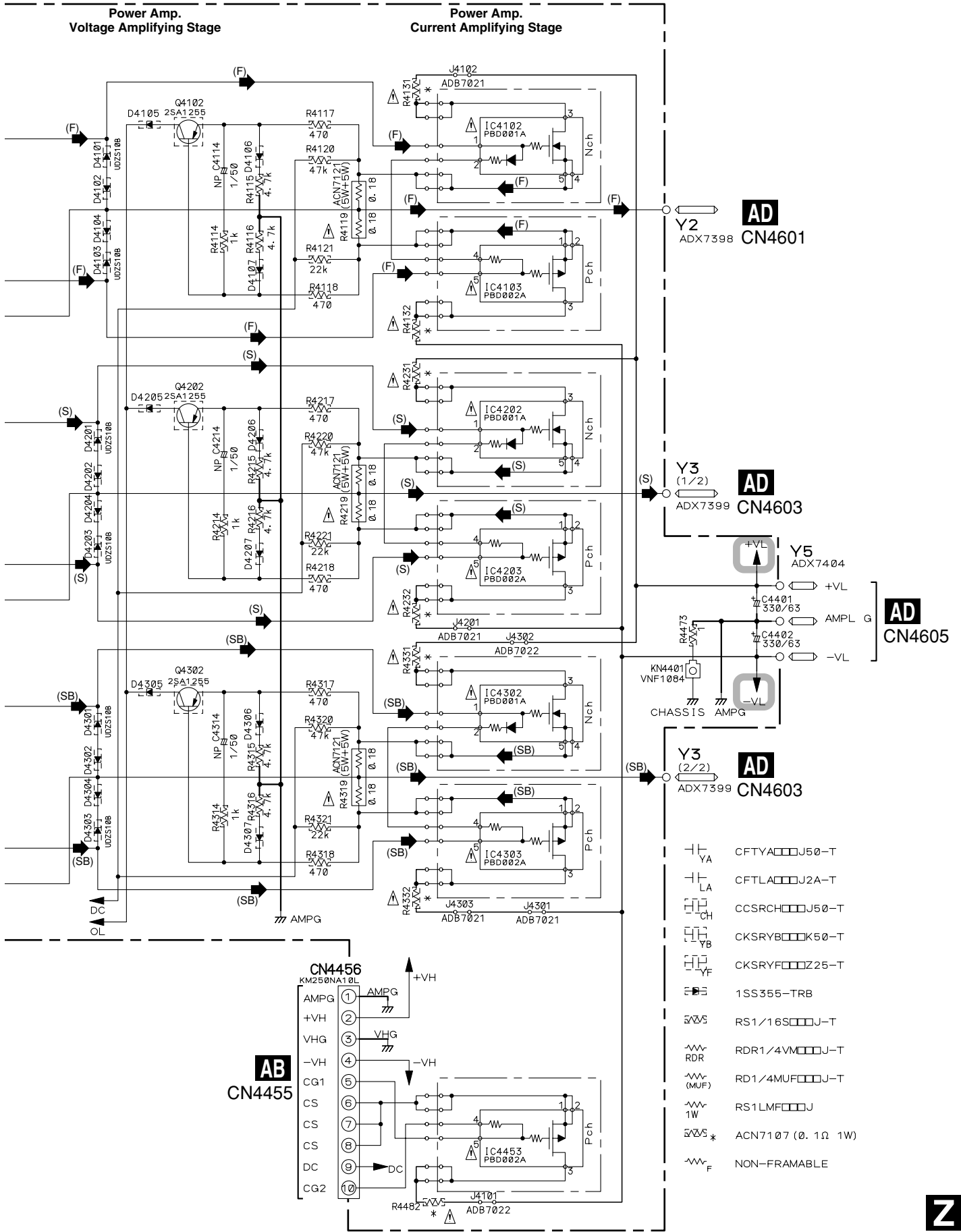
## POWER AMP-L ASSY (AWX7984)



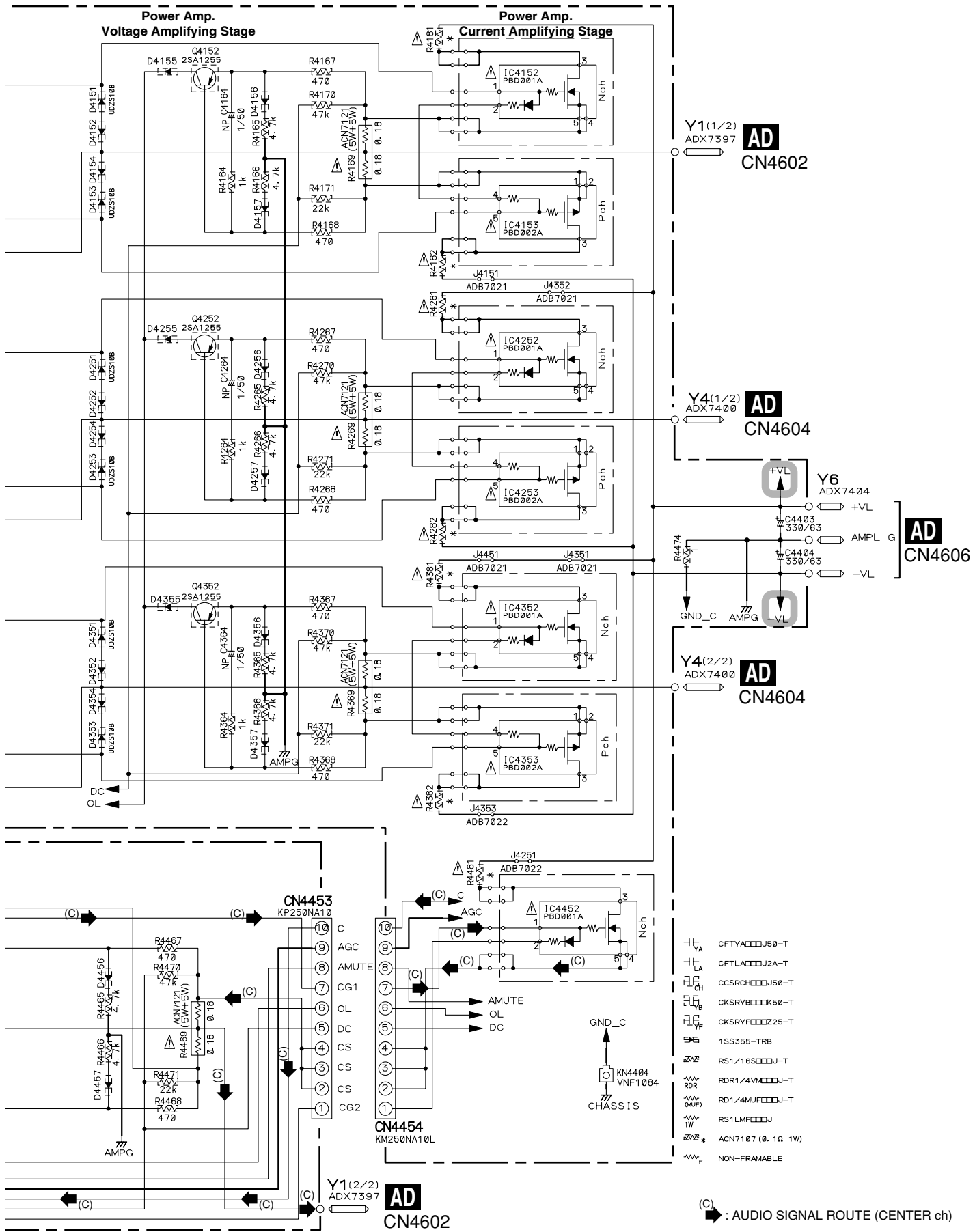
- (F) : AUDIO SIGNAL ROUTE (FRONT Lch)
- (S) : AUDIO SIGNAL ROUTE (SURROUND Lch)
- (SB) : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)



 : The power supply is shown with the marked box.







: The power supply is shown with the marked box.

**AA AB**

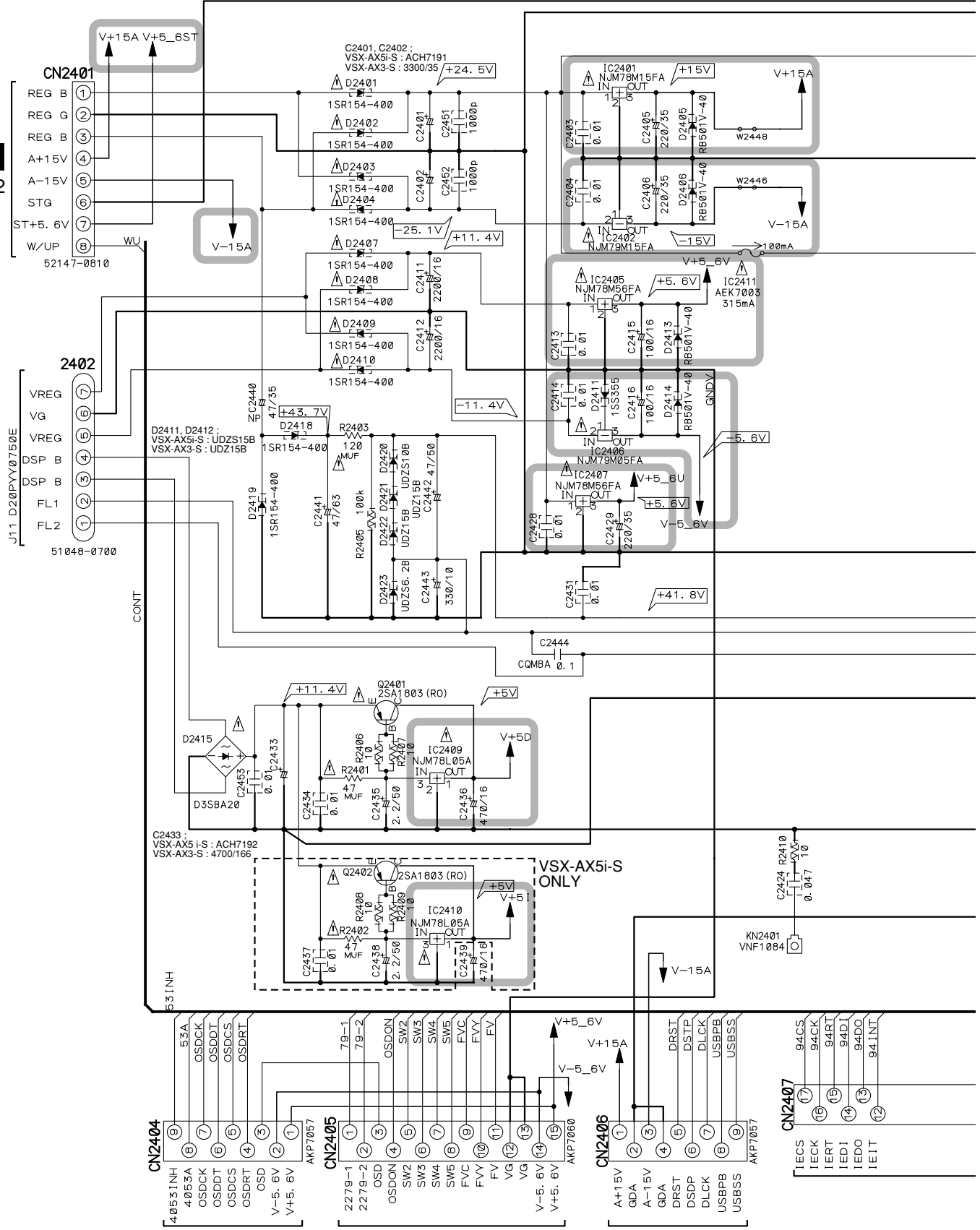
# 3.21 REGULATOR ASSY

**AC** REGULATOR ASSY  
 (VSX-AX5i-S : AWX8305)  
 (VSX-AX3-S, -K : AWX8020)

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.315 MFD, BY LITTELFUSE INK. FOR IC4701 AND IC2411.

**AD**  
4602

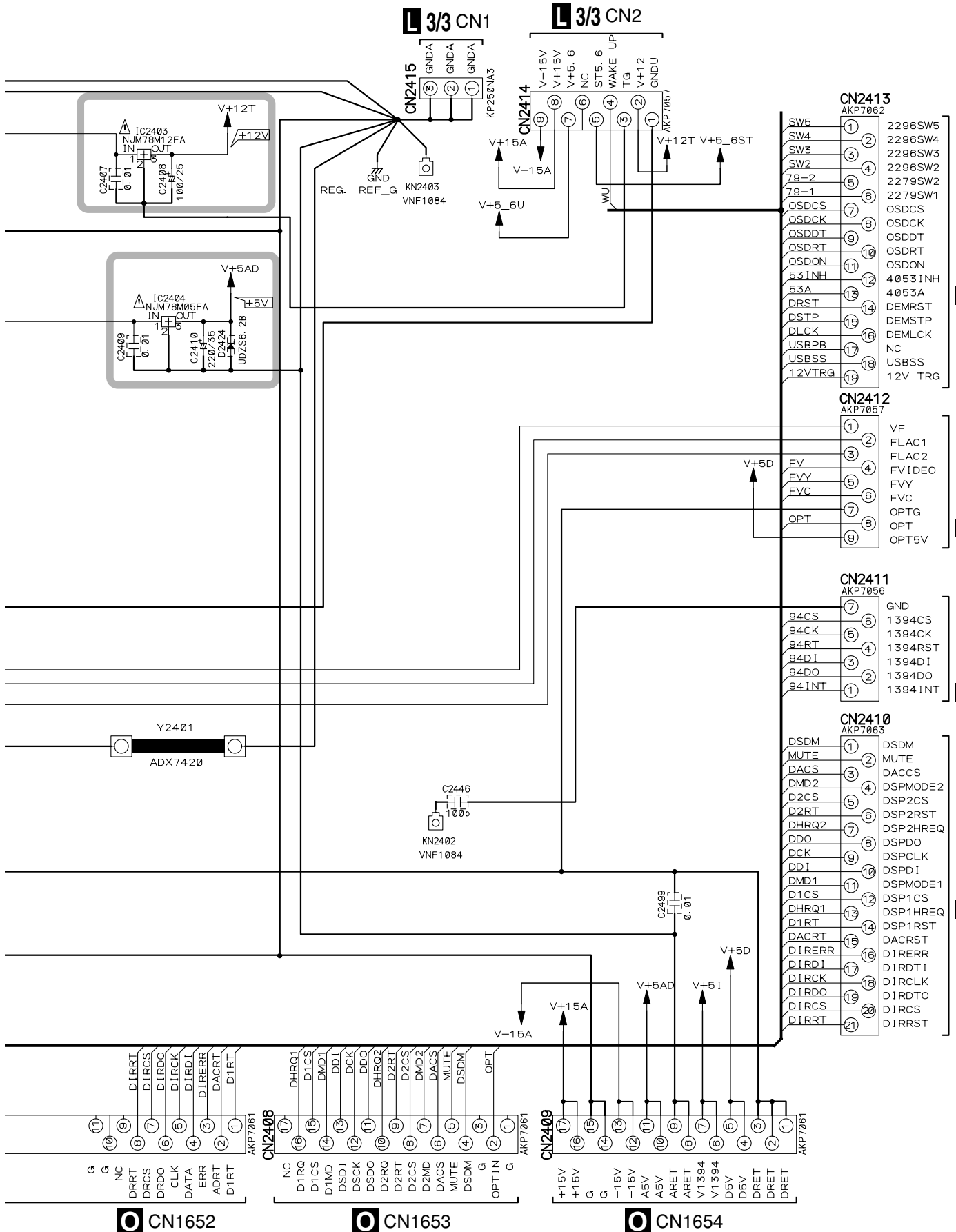
**AH**  
2251



**L** CN1001

**K** CN901

**H** CN1803

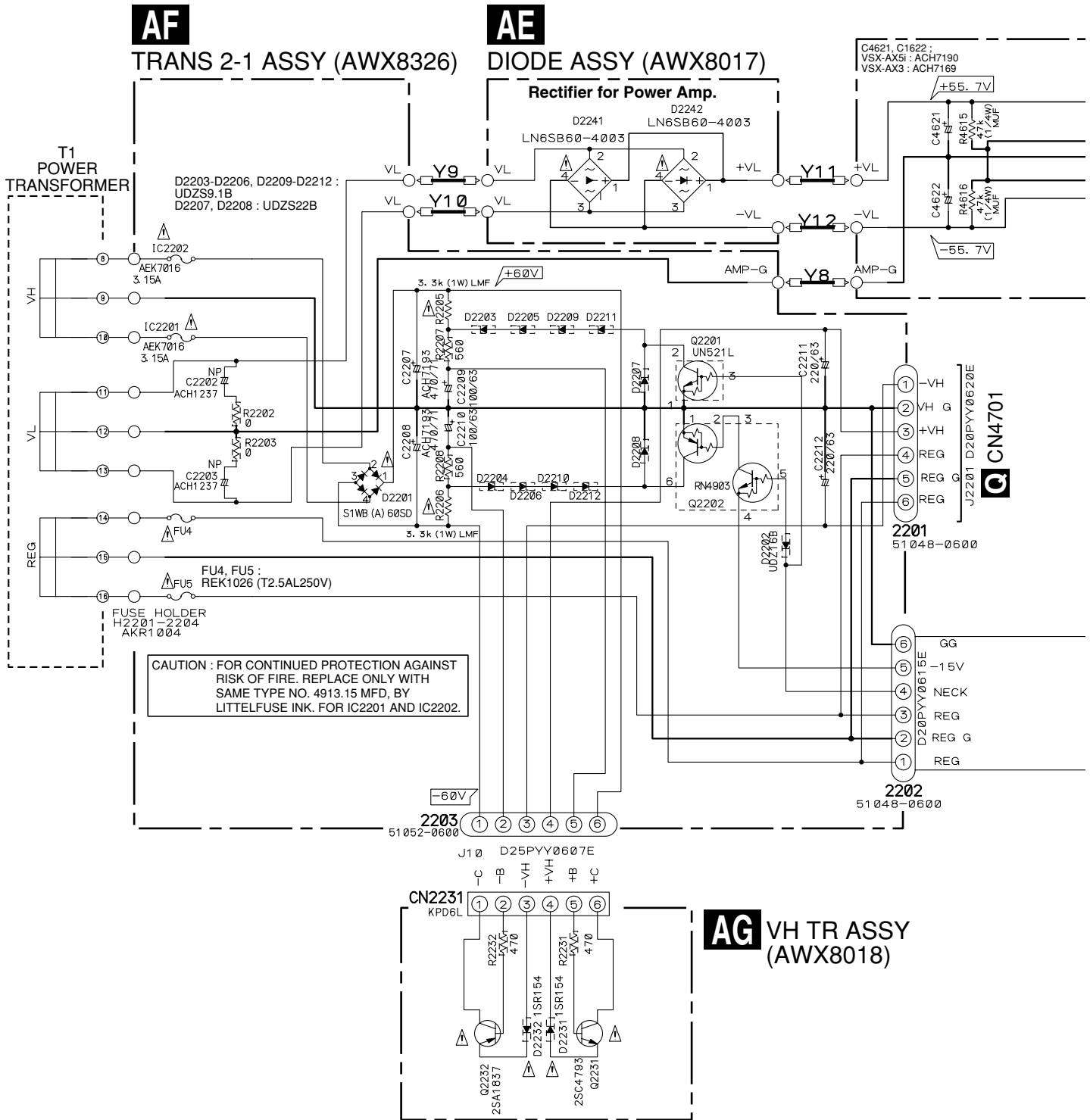


: The power supply is shown with the marked box.





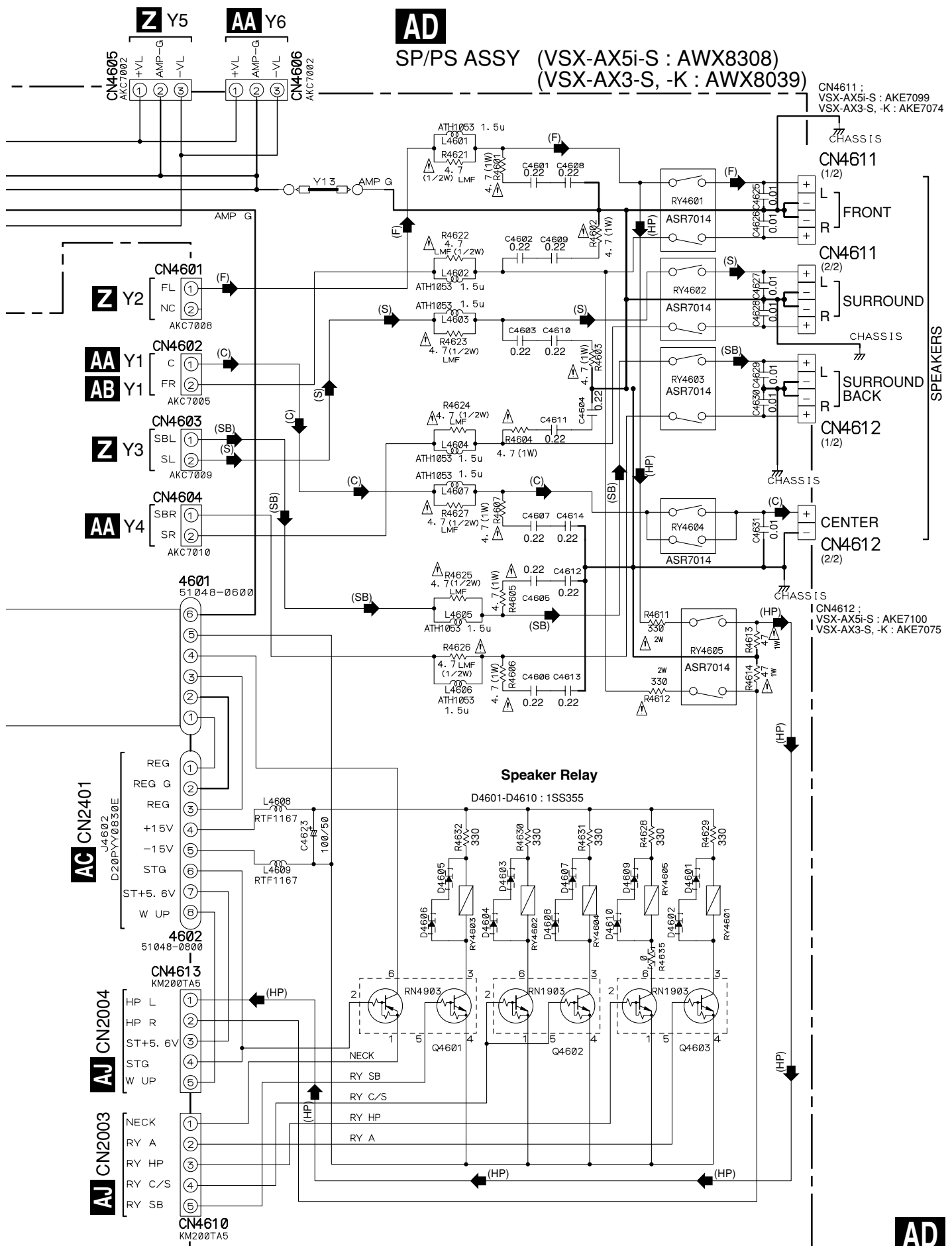
### 3.22 SP/PS, DIODE, TRANS 2-1 and VH TR ASSYS



- (F) : AUDIO SIGNAL ROUTE (FRONT Lch)
- (S) : AUDIO SIGNAL ROUTE (SURROUND Lch)
- (SB) : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)
- (C) : AUDIO SIGNAL ROUTE (CENTER ch)
- (HP) : AUDIO SIGNAL ROUTE (PHONES ch)

**AD AE AF AG**

**AD**  
 SP/PS ASSY (VSX-AX5i-S : AWX8308)  
 (VSX-AX3-S, -K : AWX8039)



CN4611 :  
 VSX-AX5i-S : AKE7099  
 VSX-AX3-S, -K : AKE7074

CN4612 :  
 VSX-AX5i-S : AKE7100  
 VSX-AX3-S, -K : AKE7075

A  
 B  
 C  
 D  
 E  
 F

SPEAKERS

**AC** CN2401

J4602  
 D20PY9830E

**AJ** CN2004

**AJ** CN2003

CN4610  
 KM200TA5

**Speaker Relay**

**AD**

### 3.23 TRANS 2-2, TRANS 1 and PRIMARY ASSYS

A

B

C

D

E

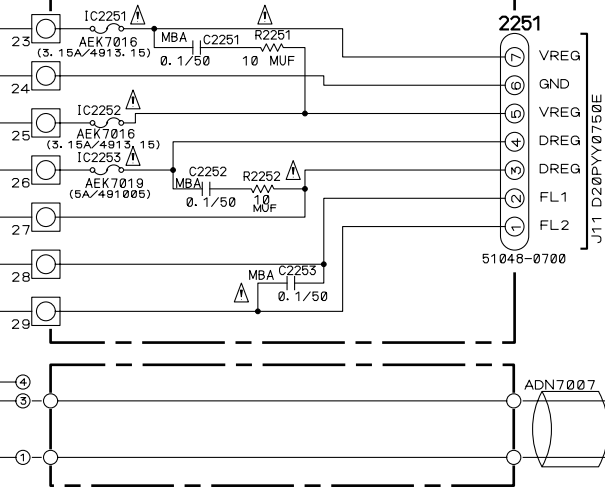
F

#### **AH** TRANS 2-2 ASSY (AWX7970)

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 4913.15 MFD, BY LITTELFUSE INK. FOR IC2251 AND IC2252.

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491005 MFD, BY LITTELFUSE INK. FOR IC2253.

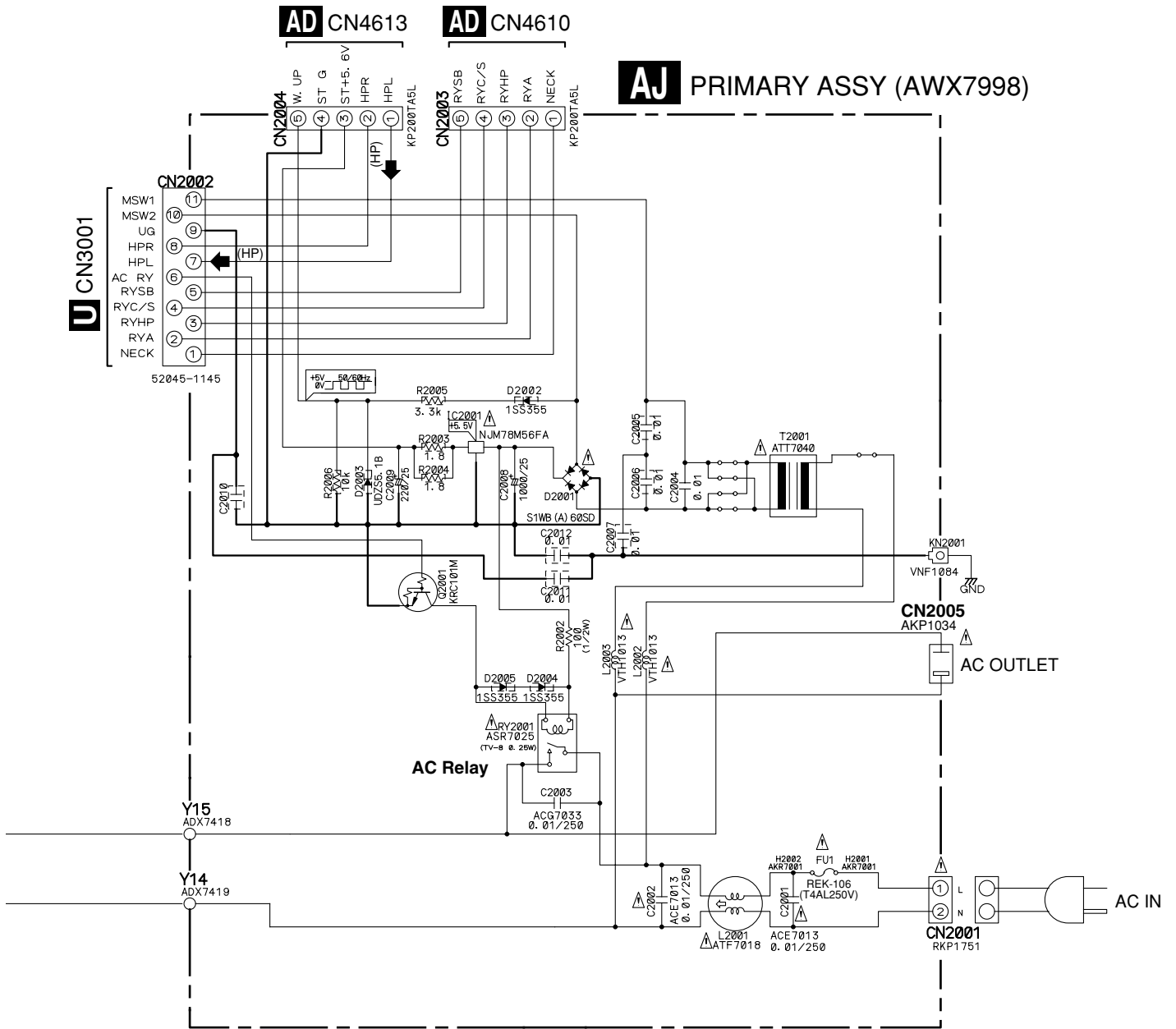
T1 POWER TRANSFORMER



#### **AC** 2402

#### **AI** TRANS 1 ASSY (AWX7969)

(HP) : AUDIO SIGNAL ROUTE (PHONES ch)



• NOTE FOR FUSE REPLACEMENT

**CAUTION** - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE AND RATINGS ONLY.

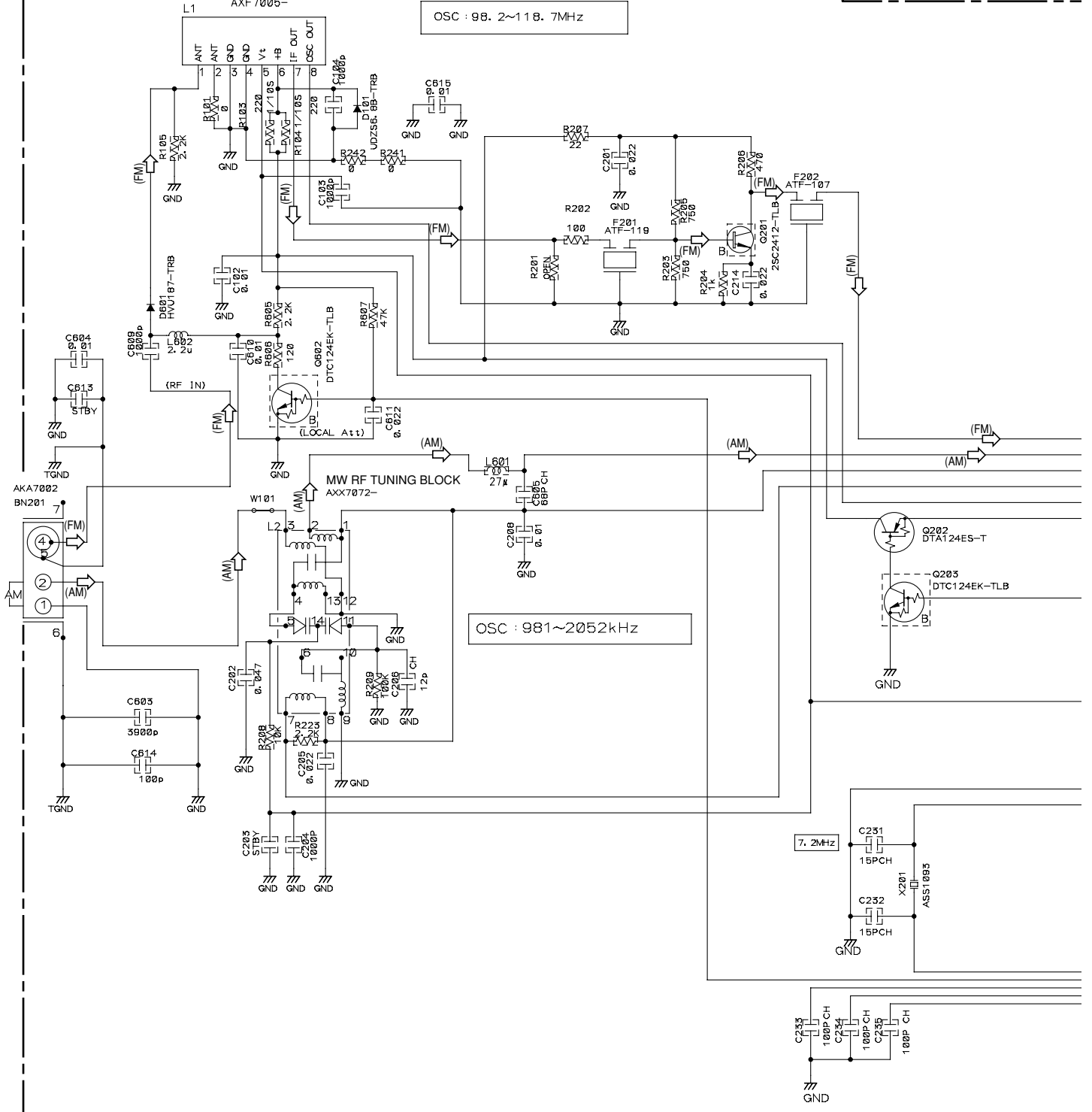
# 3.24 FM/AM TUNER MODULE

## AK FM/AM TUNER MODULE (AXQ7232)

MITSUMI FM FE

FM FRONT END  
AXF7005-

OSC : 98. 2~11 B. 7MHz



Notes

1. RESISTORS


Indicated in Ω, 1/16W±5% Tolerance unless otherwise noted K:KΩ, M:MΩ.




2. CAPACITORS

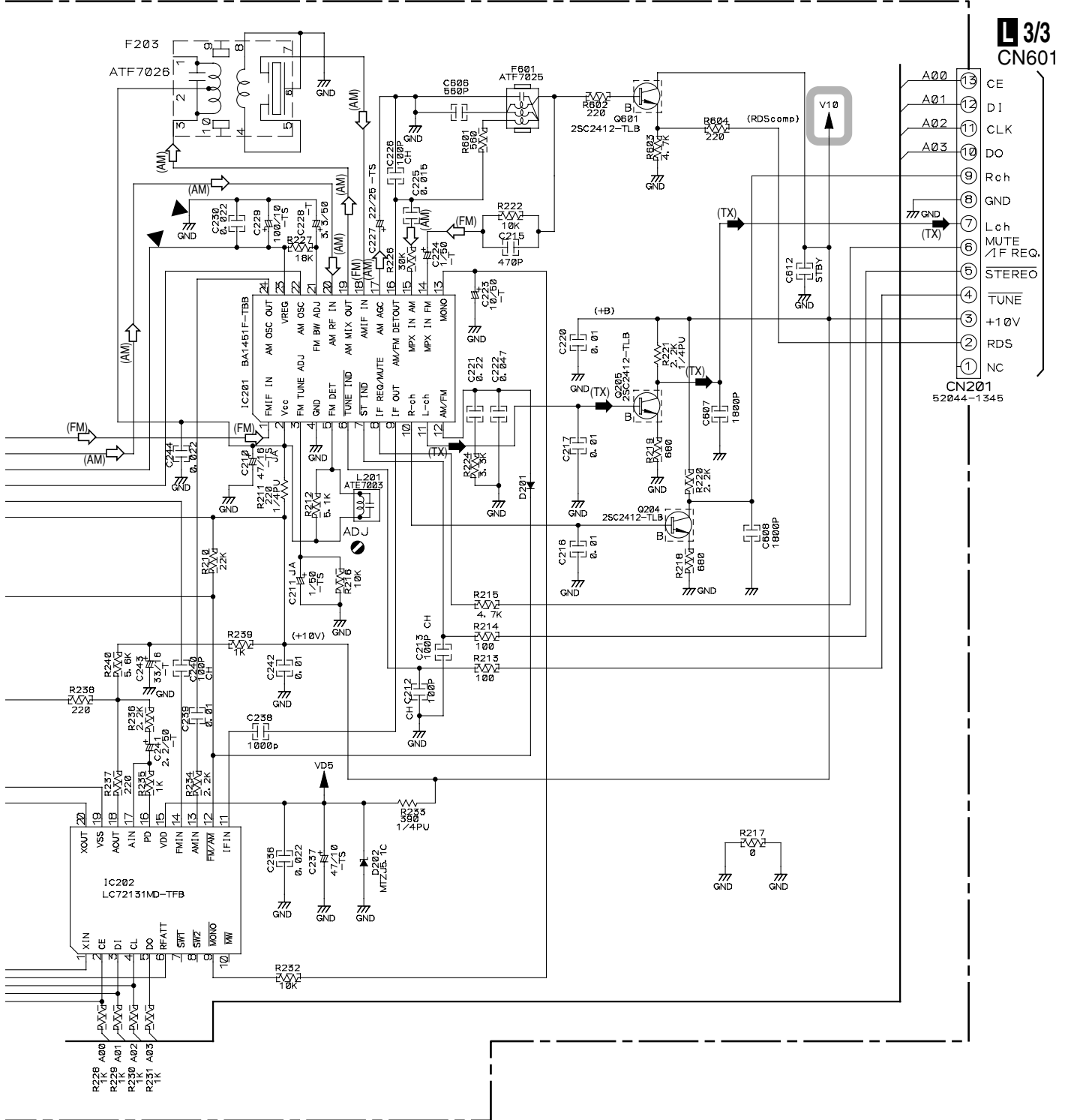
Indicated in Capacity (μF)/VOLTAGE (V) unless otherwise noted P:PF.

3. DIODES

No mark diode is 1SS133.

 : The power supply is shown with the marked box.

- (TX)  : AUDIO SIGNAL ROUTE (TUNER)
- (AM)  : AM SIGNAL ROUTE
- (FM)  : FM SIGNAL ROUTE



3/3  
CN601

- 13 CE
- 12 DI
- 11 CLK
- 10 DO
- 9 Rch
- 8 GND
- 7 Lch
- 6 MUTE
- 5 STEREO
- 4 TUNE
- 3 +10V
- 2 RDS
- 1 NC

CN201  
52044-1345

