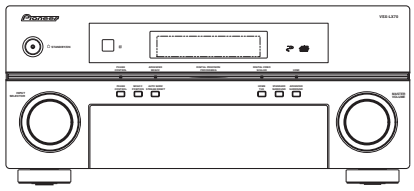
Pioneer sound.vision.soul

Service Manual



VSX-LX70

ORDER NO.
RRV3653

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-LX70
VSX-LX60

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	The voltage can be converted by the following method.
VSX-LX70	HYXJ5	AC 220 V to 230 V	AC240V,*
VSX-LX60	HYXJ5	AC 220 V to 230 V	AC240V,*

***:Alter the wiring of the power-supply block at the primary winding of Power transformer referring to the Line Voltage Selection described in this Service Manual ("11.18 TRANS1 and PRIMARY ASSYS").**



For details, refer to "Important Check Points for good servicing".

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ⓒ**PIONEER CORPORATION 2007**

T-FZV AUG. 2007 printed in Japan

SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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1. SERVICE PRECAUTIONS

1.1 NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.
  Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.

- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40 ºC.
  Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373 ºC in general, although the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Do NOT use a soldering iron whose tip temperature cannot be controlled.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

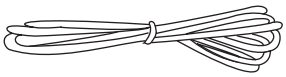
The following lead-free solders are available as service parts:
- Parts numbers of lead-free solder:
  GYP1006 1.0 in dia.
  GYP1007 0.6 in dia.
  GYP1008 0.3 in dia.

2. SPECIFICATIONS

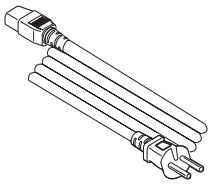
2.1 ACCESSORIES



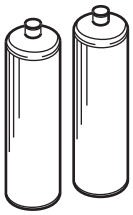
AM Loop Antenna
(ATB7013)



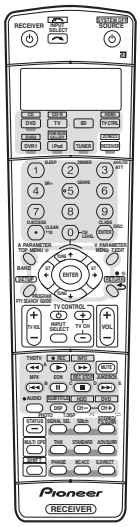
FM Wire Antenna
(ADH7030)



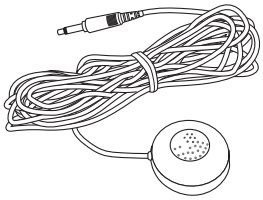
AC Power Cord
(ADG7062)



AA/IEC R6P Dry Cell Batteries
(VEM1031)



Remote Control Unit
(VSX-LX70 : AXD7505)
(VSX-LX60 : AXD7502)



Setup Microphone
(for Auto MCACC setup)
(APM7008)

2.2 SPECIFICATIONS

Amplifier Section

Continuous Power Output (Stereo)

Front ..... 180 W + 180 W (LX70), 170 W + 170 W (LX60)
(DIN 1 kHz, THD 1 %, 6 Ω)
Front ..... 150 W + 150 W (LX70), 140 W + 140 W (LX60)
(DIN 1 kHz, THD 1 %, 8 Ω)

Continuous Power Output (Multichannel)
(DIN 1 kHz, THD 1 %, 6 Ω)

Front ..... 180 W + 180 W (LX70), 170 W + 170 W (LX60)
Center ..... 180 W (LX70), 170 W (LX60)
Surround ..... 180 W + 180 W (LX70)
170 W + 170 W (LX60)
Surround back ..... 180 W + 180 W (LX70)
170 W + 170 W (LX60)
(DIN 1 kHz, THD 1 %, 8 Ω)
Front ..... 150 W + 150 W (LX70), 140 W + 140 W (LX60)
Center ..... 150 W (LX70), 140 W (LX60)
Surround ..... 150 W + 150 W (LX70)
140 W + 140 W (LX60)
Surround back ..... 150 W + 150 W (LX70)
140 W + 140 W (LX60)

Rated Power Output – Stereo (20 Hz to 20 kHz, 0.09 %, 8 Ω)
..... 140 W+140 W (LX70), 130 W+130 W (LX60)

- The above specifications are applicable when the power supply is 230V.

Audio Section

Input (Sensitivity/Impedance)
LINE ..... 335 mV/47 kΩ
Frequency Response (LINE) ..... 5 Hz to 100 000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)
REC ..... 335 mV/2.2 kΩ
Tone Control
BASS ..... ± 6 dB (100 Hz)
TREBLE ..... ± 6 dB (10 kHz)
LOUDNESS ..... +4 dB/+2 dB (100 Hz/10 kHz)
(at volume position –40 dB)
Signal-to-Noise Ratio (IHF, short circuited, A network)
LINE ..... 103 dB
Signal-to-Noise Ratio
[DIN (continuous rated power output/50 mW)]
LINE ..... 92 dB/65 dB

Composite Video / S-Video Section

Input (Sensitivity/Impedance) ..... 1 Vp-p/75 Ω
Output (Level/Impedance) ..... 1 Vp-p/75 Ω
Signal-to-Noise Ratio ..... 65 dB
Frequency Response ..... 5 Hz to 10 MHz

Component Video Section

Input (Sensitivity/Impedance) ..... 1 Vp-p/75 Ω
Output (Level/Impedance) ..... 1 Vp-p/75 Ω
Signal-to-Noise Ratio ..... 65 dB
Frequency Response ..... 5 Hz to 100 MHz

FM Tuner Section

Frequency Range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... Mono: 15.2 dBf, IHF (1.6 µV/75 Ω)
50 dB Quieting Sensitivity ..... Mono: 20.2 dBf
Stereo: 41.2 dBf
Sensitivity (DIN) ..... Mono: 1.1 µV (S/N 26 dB)
Stereo: 50 µV (S/N 46 dB)
Signal-to-Noise Ratio ..... Mono: 76 dB (at 85 dBf)
Stereo: 72 dB (at 85 dBf)
Signal-to-Noise Ratio (DIN) ..... Mono: 62 dB
Stereo: 58 dB
Distortion ..... Stereo: 0.6 % (1 kHz)
Alternate Channel Selectivity ..... 70 dB (400 kHz)
Stereo Separation ..... 40 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz ± 1dB
Antenna Input ..... 75 Ω unbalanced

AM Tuner Section

Frequency Range ..... 531 kHz to 1602 kHz (9 kHz step)
Sensitivity (IHF, Loop antenna) ..... 350 µV/m
Selectivity ..... 30 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... Loop antenna

Miscellaneous

Power Requirements ..... AC 220 V to 230 V, 50 Hz/60 Hz
Power Consumption ..... 460 W
In standby ..... 0.6 W (HDMI Control OFF)
0.8 W (HDMI Control ON)
AC Outlet ..... (switched) 100 W/0.4 A MAX.
Dimensions ..... 420 (W) mm x 187 (H) mm x 459 (D) mm
Weight (without package) ..... 17.0 kg

Furnished Parts

Setup microphone (for Auto MCACC setup) 1
AA/IEC R6P dry cell batteries 2
Remote control unit 1
AM loop antenna 1
FM wire antenna 1
Power cord 1
Warranty card 1
Operating instructions
Operating instructions for HOME MEDIA GALLERY
(VSX-LX70 only)

Note

- Specifications and the design are subject to possible modifications without notice, due to improvements.

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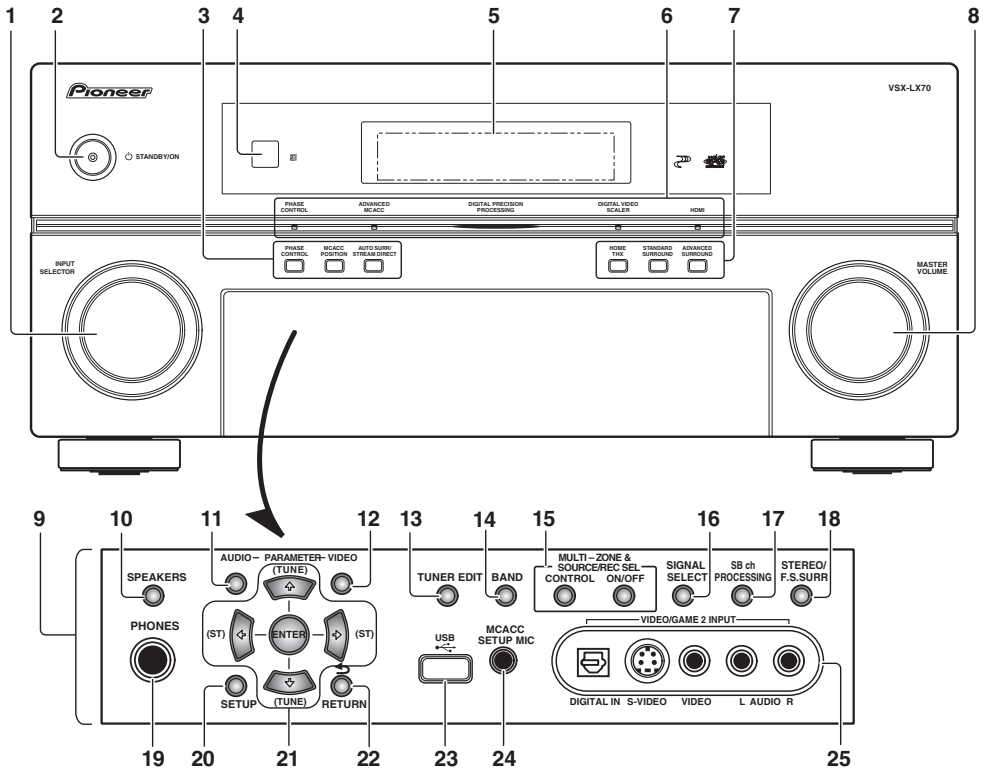
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2.3 PANEL FACILITIES

● Front Panel

Illustration shows the VSX-LX70 front panel



1 INPUT SELECTOR dial
Use to select an input source.

2 ⏻ STANDBY/ON
Switches the receiver between on and standby. Power indicator lights when the receiver is on.

3 PHASE CONTROL – Press to switch on/off Phase Control or Full Band Phase Control.

MCACC POSITION – Press to switch between MCACC presets.

AUTO SURR/STREAM DIRECT – Press to select Auto Surround or Stream Direct listening.

4 Remote sensor
Receives the signals from the remote control.

5 Character display

6 PHASE CONTROL indicator – Lights to indicate Phase Control or Full Band Phase Control is selected.

ADVANCED MCACC indicator – Lights when one of the MCACC presets is selected.[1]

Digital Precision Processing indicator – Lights to indicate digital processing (for example, it disappears when Pure Direct is on, or when listening through the multichannel analog inputs).

Note
1 The MCACC indicator does not light when the MCACC preset memory currently being selected has not been corrected with Acoustic Calibration EQ Professional or when **EQ** is set to **OFF** in the Audio parameter menu.

DIGITAL VIDEO SCALER indicator – Lights when Resolution is set to a setting other than **PURE** (for example, when the video input signal is upscaled).

HDMI indicator – Blinks when connecting an HDMI-equipped component; lights when the component is connected.

7 Listening mode buttons

HOME THX – Press to select a Home THX listening mode.

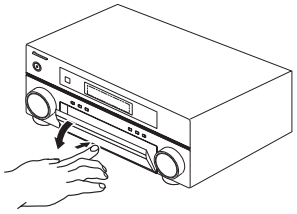
STANDARD SURROUND – Press for Standard decoding and to switch between the various DD Pro Logic IIx and Neo:6 options.

ADVANCED SURROUND – Use to switch between the various surround modes.

8 MASTER VOLUME dial

9 Front panel controls

To access the front panel controls, push gently on the lower third portion of the panel with your finger.



10 SPEAKERS

Use to change the speaker system.

11 AUDIO PARAMETER

Use to access the Audio options.

12 VIDEO PARAMETER

Use to access the Video options.

13 TUNER EDIT

Use with ⬅/➡ to memorize and name stations for recall.

14 BAND

Switches between AM and FM radio bands.

15 MULTI-ZONE & SOURCE/REC SEL controls

If you've made MULTI-ZONE connections use these controls to control the sub zone from the main zone. You will also need to use the **REC SEL** controls when recording a source.

16 SIGNAL SELECT

Use to select an input signal.

17 SBch PROCESSING

Selects the surround back channel mode or virtual surround back mode .

18 STEREO/F.S.SURR

Switches between the stereo playback mode and the Front Stage Surround Advance mode.

19 PHONES jack

Use to connect headphones. When the headphones are connected, there is no sound output from the speakers.

20 SETUP

Press to access the System Setup menu.

21 ⬆/⬇/⬅/➡ (TUNE/ST) /ENTER

Use the arrow buttons when setting up your surround sound system. Use the **TUNE** ⬆/⬇ buttons to find radio frequencies and use **ST** ⬅/➡ to find preset stations.

22 RETURN

Press to confirm and exit the current menu screen.

23 USB interface

Connect a USB audio device for playback.

24 MCACC SETUP MIC jack

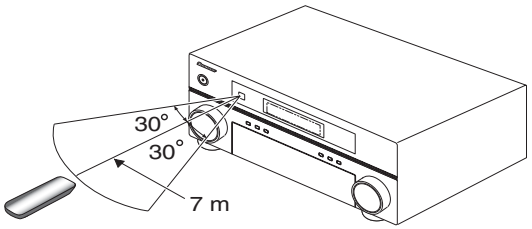
Use to connect the supplied microphone.

25 VIDEO/GAME 2 INPUT

Operating range of remote control unit

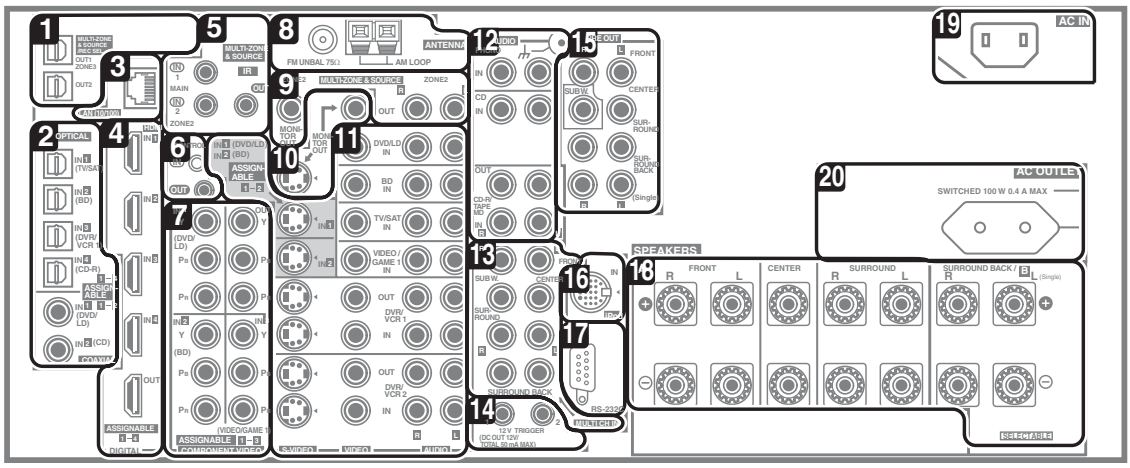
The remote control may not work properly if:

- There are obstacles between the remote control and the receiver's remote sensor.
- Direct sunlight or fluorescent light is shining onto the remote sensor.
- The receiver is located near a device that is emitting infrared rays.
- The receiver is operated simultaneously with another infrared remote control unit.



Rear Panel

This illustration shows the VSX-LX70, however connections for the VSX-LX60 are the same except where noted.



Caution

- Before making or changing the connections, switch off the power and disconnect the power cord from the power outlet. Plugging in should be the final step.

1 Optical digital audio output(s)
Use the **OUT1** and (VSX-LX70 only) **OUT2** jack for recording to a CD or MiniDisc recorder.
The **OUT1** jack is also used for MULTI-ZONE connections.

2 Optical and coaxial digital audio inputs (x6)
Use for digital audio sources, including DVD players/ recorders, digital satellite receivers, CD players, etc.

3 LAN (10/100) terminal (VSX-LX70 only)

4 HDMI connectors (x4) (VSX-LX60) **(x5)** (VSX-LX70)
Multiple inputs and one output for high-quality audio/ video connection to compatible HDMI devices.

5 Remote inputs (MULTI-ZONE and source)
Use for connection to an external remote control sensor for use in a MULTI-ZONE setup, for example.

6 Control input/output
Use to connect other Pioneer components so that you can control all your equipment from a single IR remote sensor.

7 Component video connections (x4)
Use the inputs to connect any video source that has component video output, such as a DVD recorder. Use the output for connection to a monitor or TV.

8 AM and FM antenna terminals
Use to connect indoor or outdoor antennas for radio broadcasts.

9 MULTI-ZONE and source outputs
Use to connect a second amplifier in a separate room.

10 Composite and S-video monitor outputs
Use to connect monitors and TVs.

11 Audio/video source inputs/(outputs) (x6)
Use for connection to audio/visual sources, such as DVD players/recorders, VCRs, etc. Each set of inputs has jacks for composite video, S-video[1] and stereo analog audio.

12 Stereo analog audio source inputs/(outputs) (x3)
Use for connection to audio sources such as CD players, tape decks, turntables, etc.

13 Multichannel analog audio inputs
7.1 channel inputs for connection to a DVD player with multichannel analog outputs.

14 12 V trigger jacks (total 50 mA max.) **(x2)**
Use to switch components in your system on and off according to the input function of the receiver.

15 Multichannel pre-amplifier outputs
Use to connect separate amplifiers for center, surround, surround back and subwoofer channels.

16 iPod input terminal
Use to connect your Apple iPod as an audio or video source.

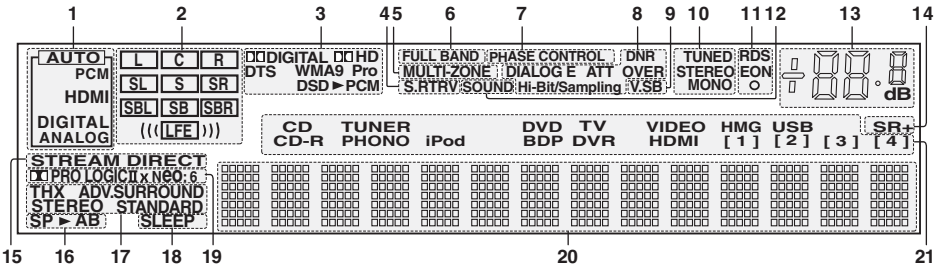
17 RS-232C connector
Use for connection to a PC for graphical output when using Advanced MCACC or Full Band Phase Control.

18 Speaker terminals
Use for connection to the main front, center, surround and surround back speakers.

19 AC IN inlet
Connect the supplied power cord here.

20 Switched AC power outlet (100 W/0.4 A max.)
Use to power another component in the system. Power to the outlet switches on and off with the receiver.

● Display



1 SIGNAL indicators
Light to indicate the currently selected input signal. **AUTO** lights when the receiver is set to select the input signal automatically.

2 Program format indicators
These change according to which channels are active in digital sources.

L – Left front channel
C – Center channel
R – Right front channel
SL – Left surround channel
S – Surround channel (mono)
SR – Right surround channel
SBL – Left surround back channel
SB – Surround back channel (mono)
SBR – Right surround back channel
LFE – Low frequency effects channel (the **((( )))** indicators light when an LFE signal is being input)

3 Digital format indicators
Light when a signal encoded in the corresponding format is detected (**DSD►PCM** lights during DSD (Digital Stream Direct) to PCM conversion with SACDs).

4 S.RTRV
Lights when the Sound Retriever is switched on.

5 MULTI-ZONE
Lights when the MULTI-ZONE feature is active.

6 FULL BAND
Lights when the Full Band Phase Control is switched on.

7 PHASE CONTROL
Lights when the Phase Control or Full Band Phase Control is switched on.

8 Sound processing indicators
Light according to the active Audio parameter(s) and/or **ANALOG ATT**.

9 V.SB
Lights during Virtual surround back processing.

10 TUNER indicators
TUNED – Lights when a broadcast is being received.
STEREO – Lights when a stereo FM broadcast is being received in auto stereo mode.
MONO – Lights when the mono mode is set using the **MPX** button.

11 EON/RDS indicators
EON – Lights when the EON mode is set (flashes during EON reception). The ○ indicator lights when the current station carries the EON service.
RDS – Lights when an RDS broadcast is received.

12 SOUND
Lights when any of the Midnight, Loudness or tone controls feature is selected.

13 Master volume level
Shows the overall volume level. **–80dB** indicates the minimum level, and **+12dB** indicates the maximum level.

14 SR+
Lights when the SR+ mode is switched on.

15 STREAM DIRECT
Lights when Direct/Pure Direct is selected.

16 Speaker indicators
Lights to indicate the current speaker system, A and/or B.

17 Listening mode indicators
THX – Lights when one of the Home THX modes is selected.
ADV.SURROUND – Lights when one of the Advanced Surround modes has been selected.
STEREO – Lights when stereo listening is switched on.
STANDARD – Lights when one of the Standard Surround modes is switched on.

18 SLEEP
Lights when the receiver is in sleep mode.

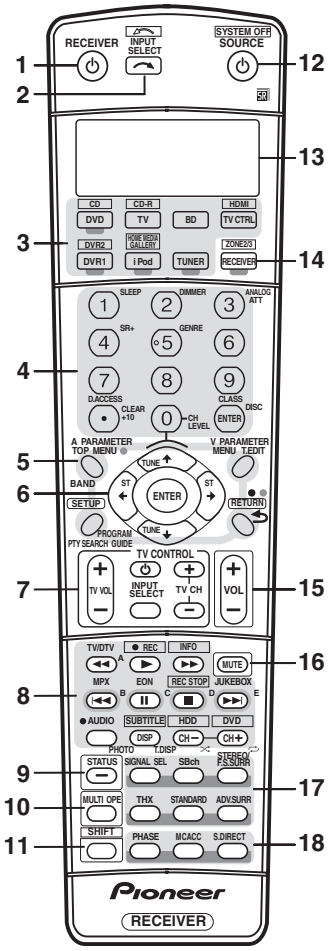
19 Matrix decoding format indicators
PRO LOGIC IIx – This lights to indicate Pro Logic II / Pro Logic IIx decoding.
Neo:6 – When one of the Neo:6 modes of the receiver is on, this lights to indicate Neo:6 processing.

20 Character display
Displays various system information.

21 Input source indicators
Light to indicate the input source you have selected.

● Remote Control

Illustration shows the VSX-LX70 remote control



The remote has been conveniently color-coded according to component control using the following system (press the corresponding input source button to access):

- **Green** – Receiver controls (see below)
- **Red** – DVD controls
- **Blue** – Tuner controls
- **Yellow** – iPod controls
- **White** – Other controls

1 RECEIVER⏻
This switches between standby and on for this receiver.

2 INPUT SELECT
Use to select the input source (use **SHIFT** for **INPUT SELECT**⏏).

3 Input source buttons
Press to select control of other components.

4 Number buttons and other receiver/component controls
Use the number buttons to directly select a radio frequency or the tracks on a CD, DVD, etc.

DISC (ENTER) can be used to enter commands for TV or DTV, and also to select a disc in a multi-CD player.

Press **RECEIVER** first to access:

SLEEP – Use to put the receiver in sleep mode and select the amount of time before sleep.

DIMMER – Dims or brightens the display.

ANALOG ATT – Attenuates (lowers) the level of an analog input signal to prevent distortion.

SR+ – Switches the SR+ mode on/off.

GENRE – Automatically selects the most appropriate Advanced Surround mode for the genre of the source currently being played back (this feature is available only when a Pioneer DVD recorder supporting HDMI Control is connected to this receiver via HDMI).

CH LEVEL – Press repeatedly to select a channel, then use ⬅/➡ to adjust the level.

Press **TUNER** first to access:

D.ACCESS – After pressing, you can access a radio station directly using the number buttons.

CLASS – Switches between the three banks (classes) of radio station presets.

5 Tuner/component control buttons/SETUP
These button controls can be accessed after you have selected the corresponding input source button (**DVD**, **DVR1**,**TV**, etc.). The **BAND**,**T.EDIT** and **PTY SEARCH** tuner controls. Press **RECEIVER** first to access the following controls:

A PARAMETER – Use to access the Audio options.

V PARAMETER – Use to access the Video options.

SETUP – Use to access the System Setup menu.

RETURN – Press to confirm and exit the current menu screen (also use to return to the previous menu with DVDs or to select closed captioning with DTV).

6 ↑/↓/←/→ (TUNE/ST) /ENTER
Use the arrow buttons when setting up your surround sound system and the Audio or Video options.
Also used to control DVD menus/options and for deck 1 of a double cassette deck player. Use the **TUNE ↑/↓** buttons to find radio frequencies and use **ST ←/→** to find preset stations.

7 TV CONTROL buttons
These buttons are dedicated to control the TV assigned to the **TV CTRL** button. Thus if you only have one TV to hook up to this system assign it to the **TV CTRL** input source button. If you have two TVs, assign the main TV to the **TV CTRL** button.

TV⏻ – Use to turn on/off the power of the TV.

TV VOL +/– – Use to adjust the volume on your TV.

INPUT SELECT – Use to select the TV input signal.

TV CH +/– – Use to select channels.

8 Component control buttons
The main buttons (►,■, etc.) are used to control a component after you have selected it using the input source buttons.

The controls above these buttons can be accessed after you have selected the corresponding input source button (for example **DVD**,**DVR1** or **TV**). The following controls can be accessed when listening to the built-in tuner:

MPX – Switches between stereo and mono reception of FM broadcasts. If the signal is weak then switching to mono will improve the sound quality.

DISP – Switches between named station presets and radio frequencies. Also used to display RDS information.

EON – Use to search for programs that are broadcasting traffic or news information.

9 STATUS
Press to check selected receiver settings.

10 MULTI OPE
Use this button to perform multi operations.

11 SHIFT
Press to access the controls outlined in white boxes (for example, **INPUT SELECT**), or to display the currently selected input source in the remote control LCD.

12 SOURCE⏻
Press to turn on/off other components connected to the receiver.

13 Character display (LCD)
This display shows information when transmitting control signals.

The following commands are shown when you're setting the remote to control other components:

SETUP – Indicates the setup mode, from which you choose the options below.

PRESET

LEARNING

MULTI OP

SYS OFF

DIRECT F

RENAME

ERASE

RESET

READ ID

14 RECEIVER
Switches the remote to control the receiver (used to select the green commands above the number buttons (**ANALOG ATT**, etc.)). Also use this button to set up surround sound. With **SHIFT**, this selects the MULTI-ZONE control, shown in the display as **RCV/Z2**, **RCV/Z3** .

15 VOL +/–
Use to set the listening volume.

16 MUTE
Mutes the sound or restores the sound if it has been muted (adjusting the volume also restores the sound).

17 Receiver controls
SIGNAL SEL – Use to select an input signal.

SBch – Use to select the surround/virtual back channel mode.

STEREO/F.S.SURR – Switches between the stereo playback mode and the Front Stage Surround Advance mode.

THX – Press to select a Home THX listening mode.

STANDARD – Press for Standard decoding and to switch between the various ◻◻ Pro Logic IIx and Neo:6 options.

ADV.SURR – Use to switch between the various surround modes.

18 PHASE – Press to switch on/off Phase Control or Full Band Phase Control.
MCACC – Press to switch between MCACC presets

S.DIRECT – Press to select Auto Surround or Stream Direct listening.

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

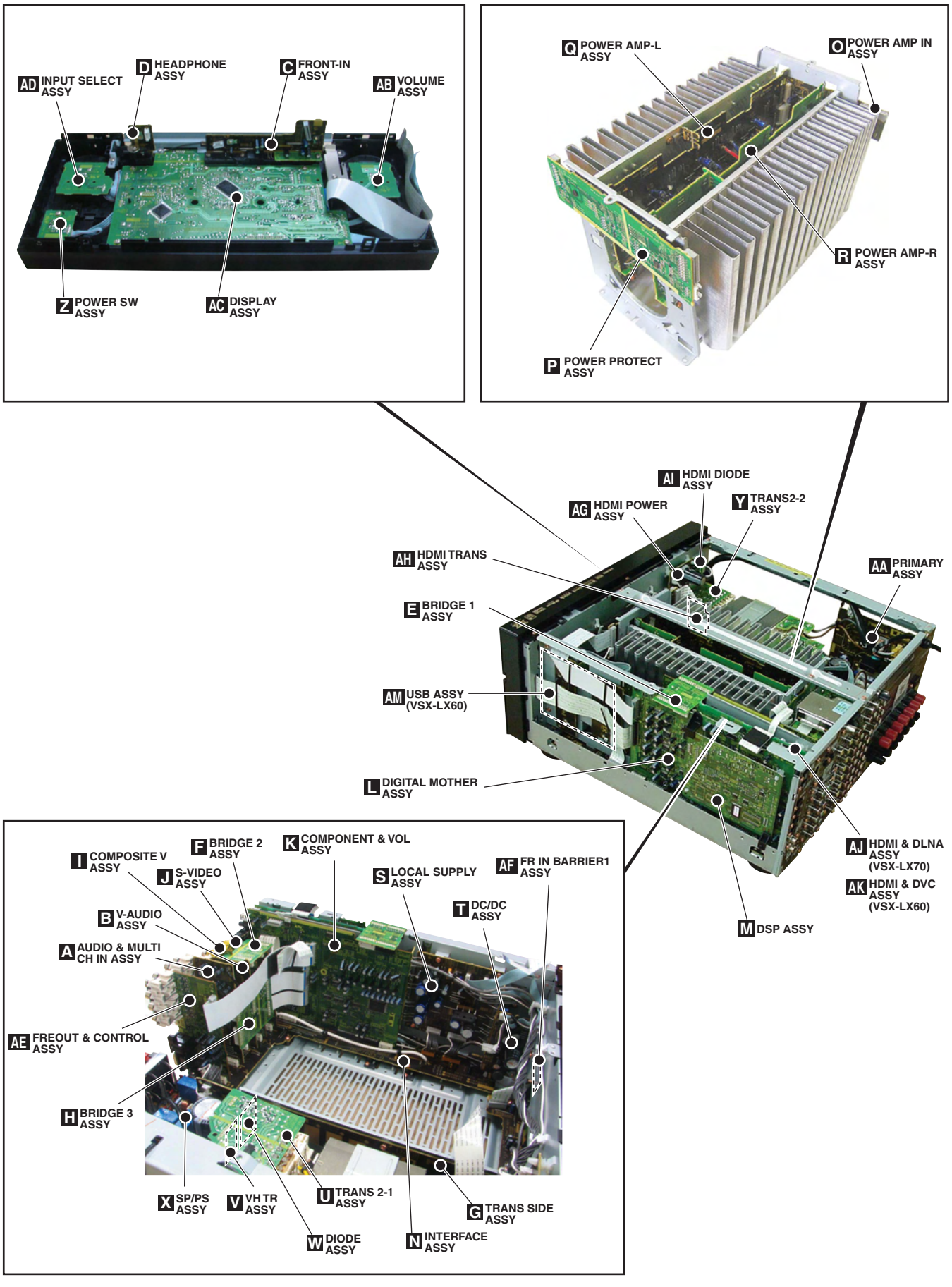
To keep the product quality after servicing, confirm recommended check points shown below.

No.	Procedure	Check points
1	Confirm whether the customer complain has been solved. If the customer complain occurs with the particular source, such as Dolby Digital, DTS, AAC, DVD-A and HDMI, input it for the operation check.	The customer complain must not be reappeared. Video, Audio and operations must be normal.
2	Check the analog audio playback. (Make the analog connections with a DVD player.)	Each channel audio and operations must be normal.
3	Check the digital audio playback. (Make the digital connections with a DVD player.)	Each channel audio and operations must be normal.
4	Check surround playback. (Select Surround mode and check the multichannel operations via the DSP circuit.)	Each channel audio and operations must be normal.
5	Check the video outputs. (Connect with a DVD player.)	Video and operations must be normal.
6	Check the sound from headphone output.	Sound must be normal, without noise.
7	Check the appearance of the product.	No scratches or dirt on its appearance after receiving it for service.

See the table below for the items to be checked regarding video and audio:

Items to be checked regarding video	Item to be checked regarding audio
Block noise	Distortion
Horizontal noise	Noise
Dot noise	Volume too low
Disturbed image (video jumpiness)	Volume too high
Too dark	Volume fluctuating
Too bright	Sound interrupted
Mottled color	

3.2 PCB LOCATIONS



NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

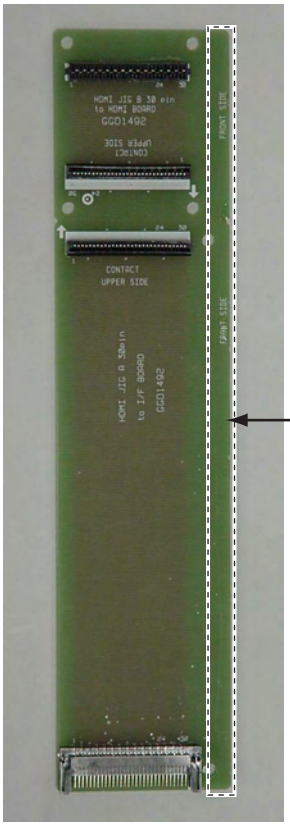
◆ LIST OF ASSEMBLIES

Mark	Symbol and Description	VSX-LX70 /HYXJ5	VSX-LX60 /HYXJ5
NSP	1..POWER AMP ASSY	AWH7012	AWH7012
	2..POWER AMP-L ASSY	AWX8655	AWX8655
	2..POWER AMP-R ASSY	AWX8657	AWX8657
	2..POWER PROTECT ASSY	AWX8659	AWX8659
	2..POWER AMP IN ASSY	AWX8662	AWX8662
NSP	1..COMPLEX ASSY	AWM8082	AWM8087
	2..TRANS 2-2 ASSY	AWX8891	AWX8891
	2..PRIMARY ASSY	AWX8895	AWX8895
NSP	2..FFC GUARD (FRONT) ASSY	AWX8899	AWX8899
	2..DISPLAY ASSY	AWX8900	AWX8900
	2..FRONT-IN ASSY	AWX8902	AWX8904
	2..HEADPHONE ASSY	AWX8905	AWX8905
	2..INPUT SELECT ASSY	AWX8906	AWX8906
	2..VOLUME ASSY	AWX8907	AWX8907
	2..POWER SW ASSY	AWX8908	AWX8908
	1..DIGITAL MOTHER ASSY	AWP7047	AWP7053
NSP	1..VIDEO ASSY	AWQ7056	AWQ7056
	2..COMPOSITE V ASSY	AWX8972	AWX8972
	2..S VIDEO ASSY	AWX8973	AWX8973
	2..PREOUT & CONTROL ASSY	AWX8889	AWX8889
NSP	2..FR IN BARRIER1 ASSY	AWX8948	AWX8948
	1..COMPONENT & VOL ASSY	AWQ7042	AWQ7047
NSP	1..SECONDARY ASSY	AWR7054	AWR7058
	2..SP/PS ASSY	AWX8910	AWX8912
	2..TRANS 2-1 ASSY	AWX8914	AWX8914
NSP	2..DIODE ASSY	AWX8915	AWX8915
	2..VH TR ASSY	AWX8916	AWX8916
	2..DC/DC ASSY	AWX8917	AWX8918
	2..INTERFACE ASSY	AWX8949	AWX8941
NSP	2..TRANS SIDE ASSY	AWX8921	AWX8921
NSP	1..AUDIO ASSY	AWR7062	AWR7065
	2..LOCAL SUPPLY ASSY	AWX8924	AWX8924
	2..AUDIO & MULTI CH IN ASSY	AWX8927	AWX8927
	2..V-AUDIO ASSY	AWX8931	AWX8931
NSP	2..HDMI POWER ASSY	AWX8933	AWX8933
NSP	2..BRIDGE 1 ASSY	AWX8934	AWX8934
NSP	2..BRIDGE 2 ASSY	AWX8935	AWX8935
NSP	2..BRIDGE 3 ASSY	AWX8936	AWX8936
NSP	2..FFC GUARD (SIDE) ASSY	AWX8937	AWX8938
	2..HDMI TRANS ASSY	AWX8939	AWX8939
	2..HDMI DIODE ASSY	AWX8940	AWX8940
	1..DSP ASSY	AWX8869	AWX8869
	1..HDMI & DLNA ASSY	AWX8974	Not used
	1..HDMI & DVC ASSY	Not used	AWX8975
	1..USB ASSY	Not used	AWX8944
	1..FM/AM TUNER MODULE	AXX7248	AXX7248

3.3 JIGS LIST

■ Jigs list

Name	Jig No.	Remarks
Audio control cable for iPod	XDE7025	Check of iPod
30pin board to board extension cable	GGD1492 (x2)	Diagnosis of HDMI & DLNA Assy
7-pin FFC	VDA1681	Diagnosis of the Network block of HDMI & DLNA Assy
22-pin FFC	GGD1387	Diagnosis of the Network block of HDMI & DLNA Assy



Before using GGD1492, it is necessary to cut this part.

■ CLEANING

Before shipping out the product, be sure to clean the following positions by using the prescribed cleaning tools:

Position to be cleaned	Cleaning tools
Fans	Cleaning paper : GED-008

A

B

C

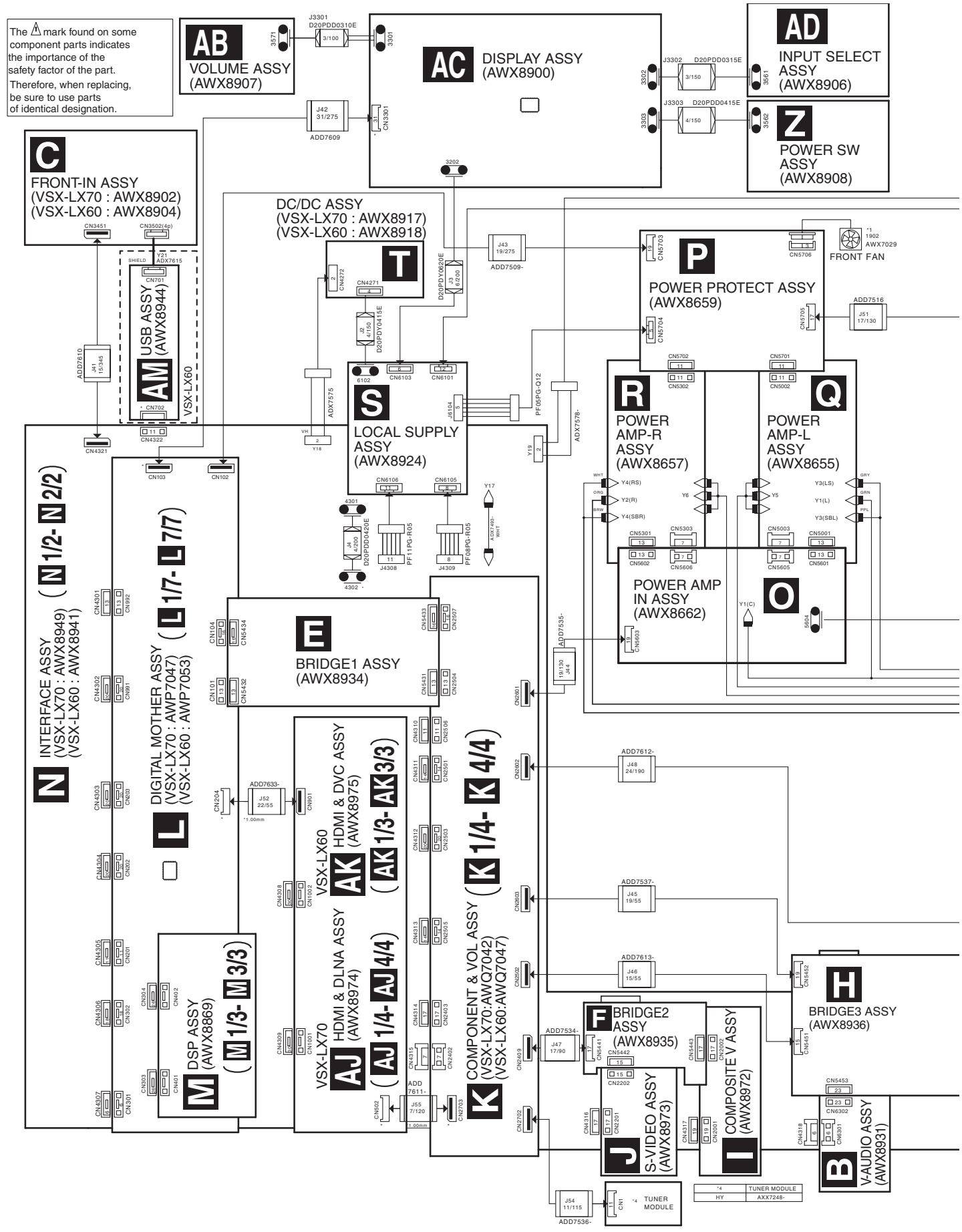
D

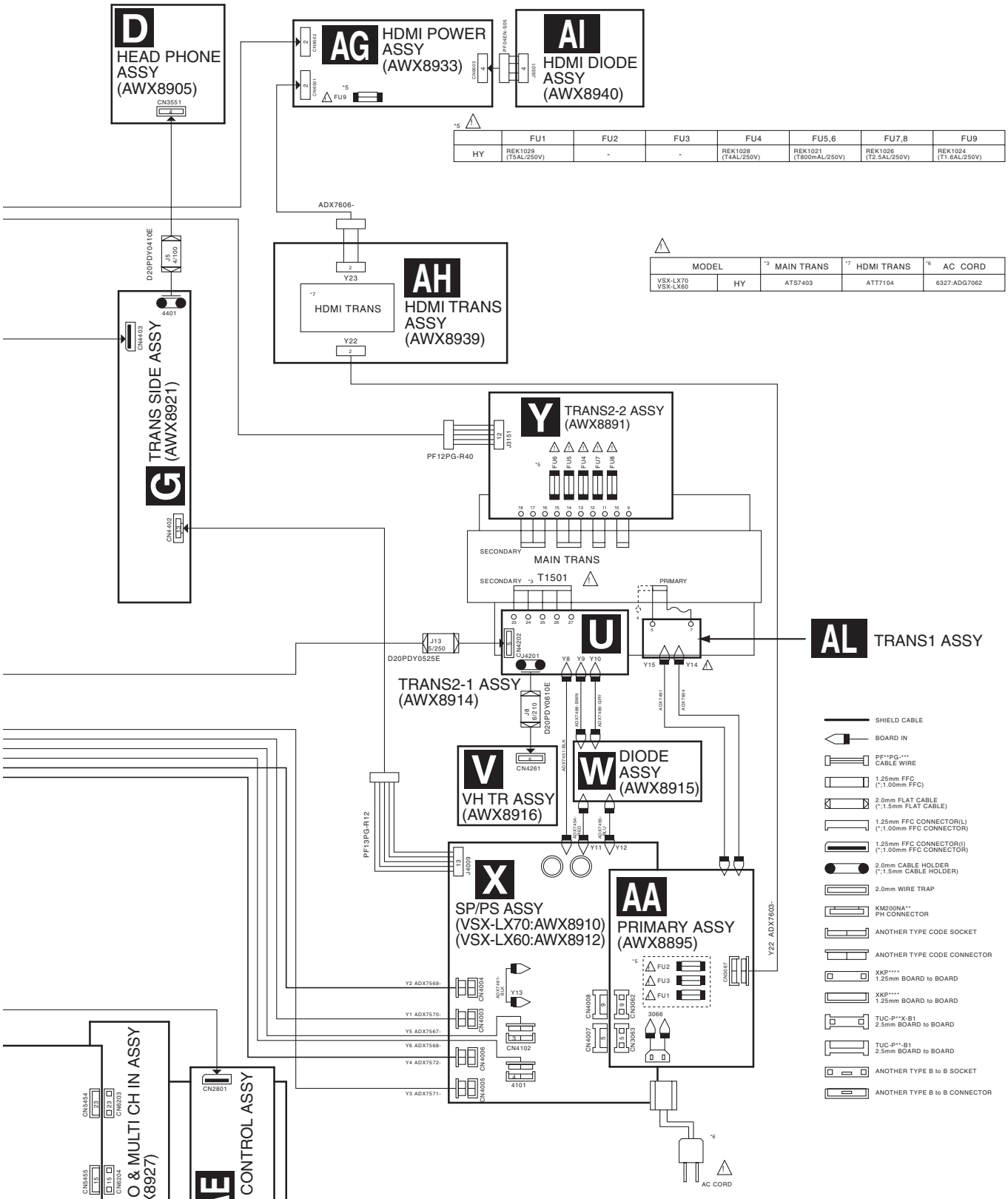
E

F

4. BLOCK DIAGRAM

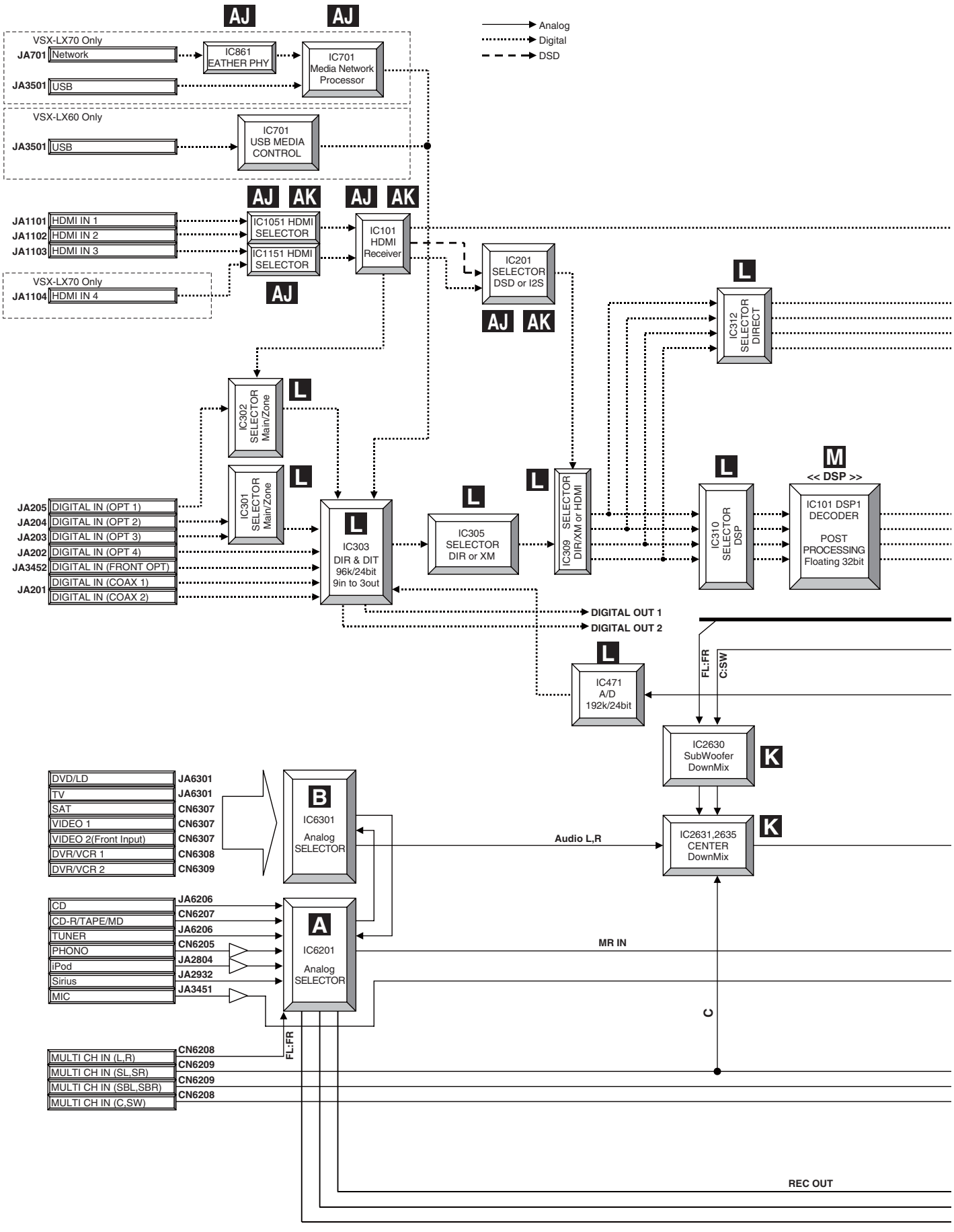
4.1 OVERALL WIRING DIAGRAM

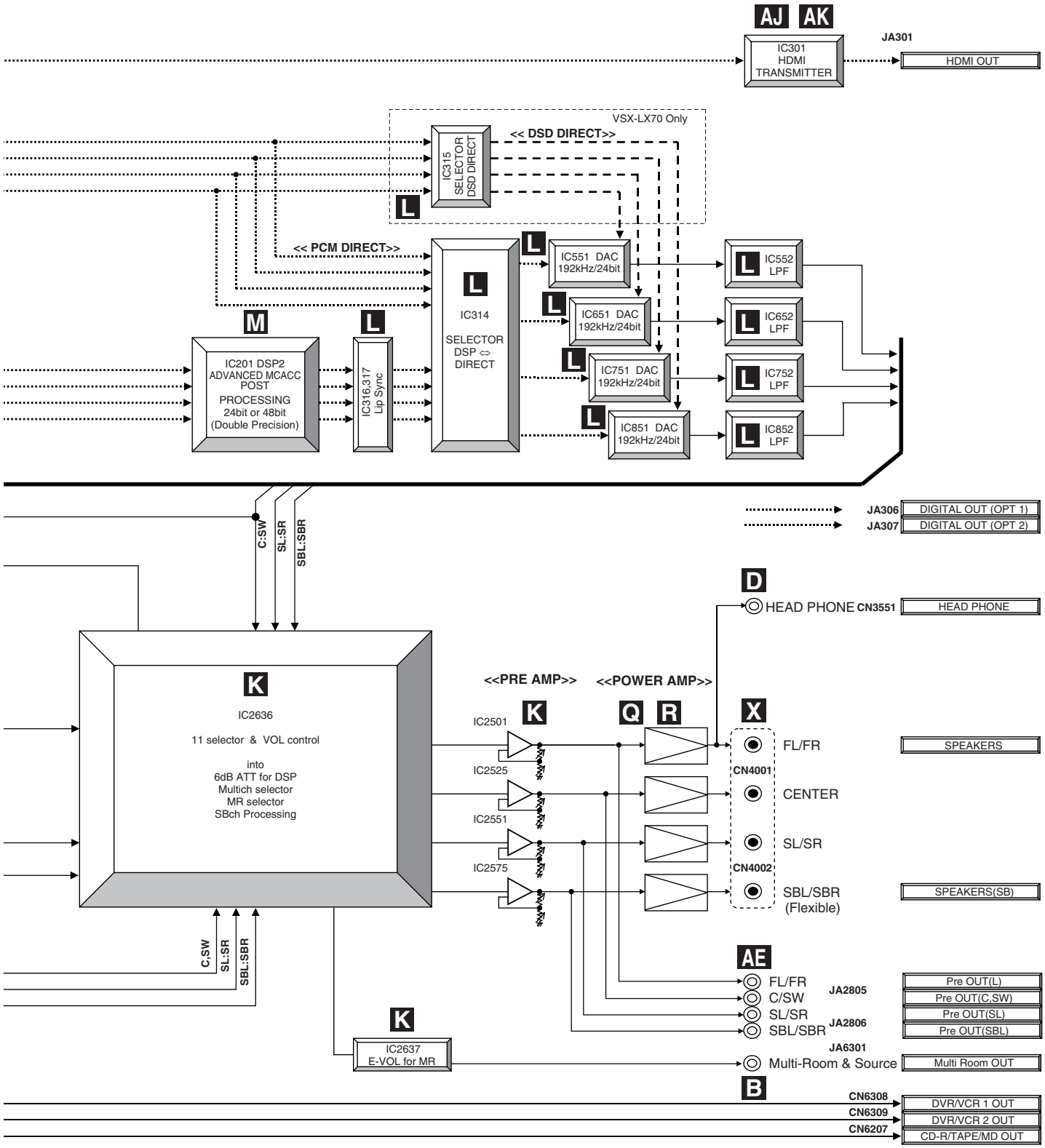




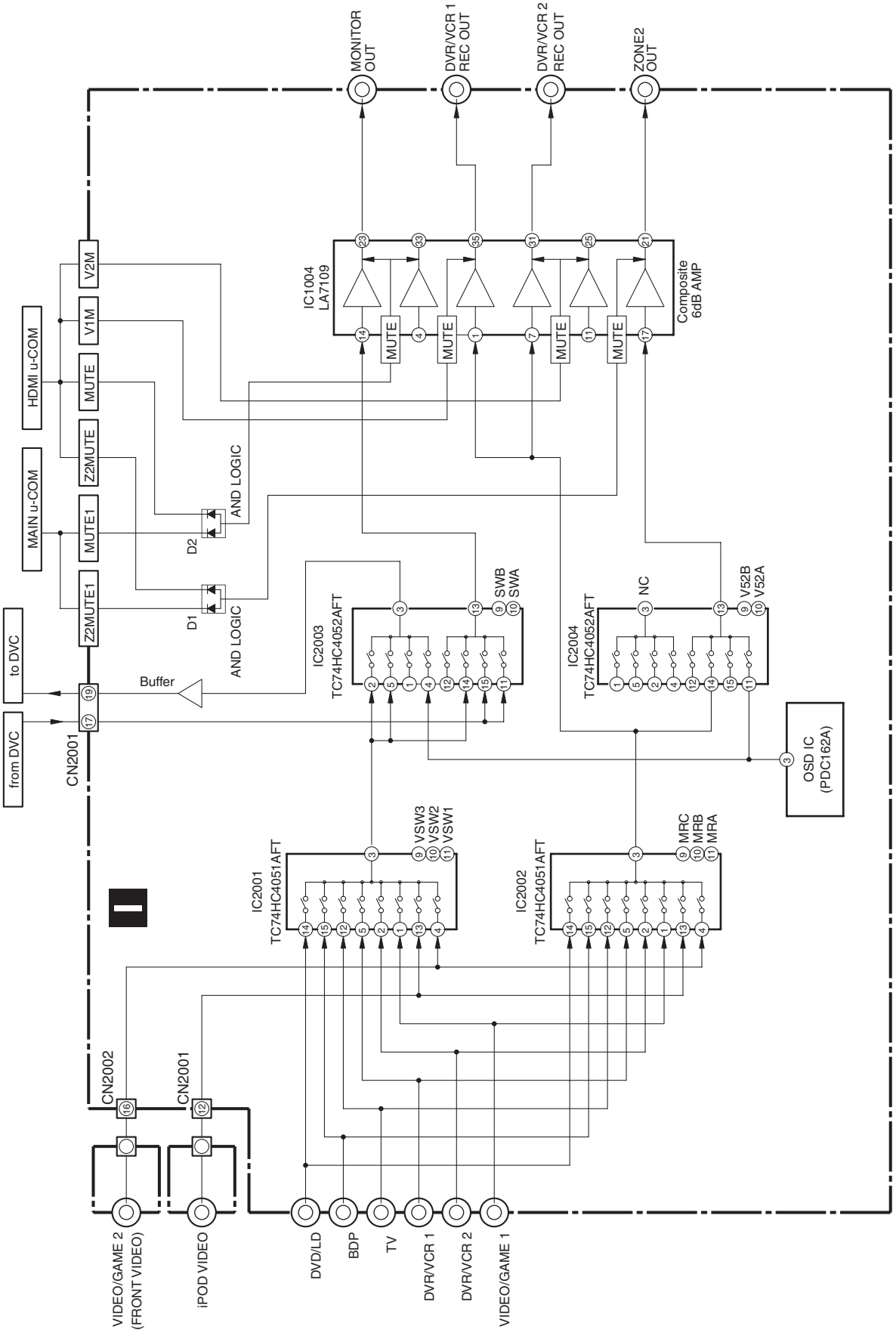
NOTES:
- *When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *: The power supply is shown with the marked box.*

4.2 AUDIO BLOCK DIAGRAM

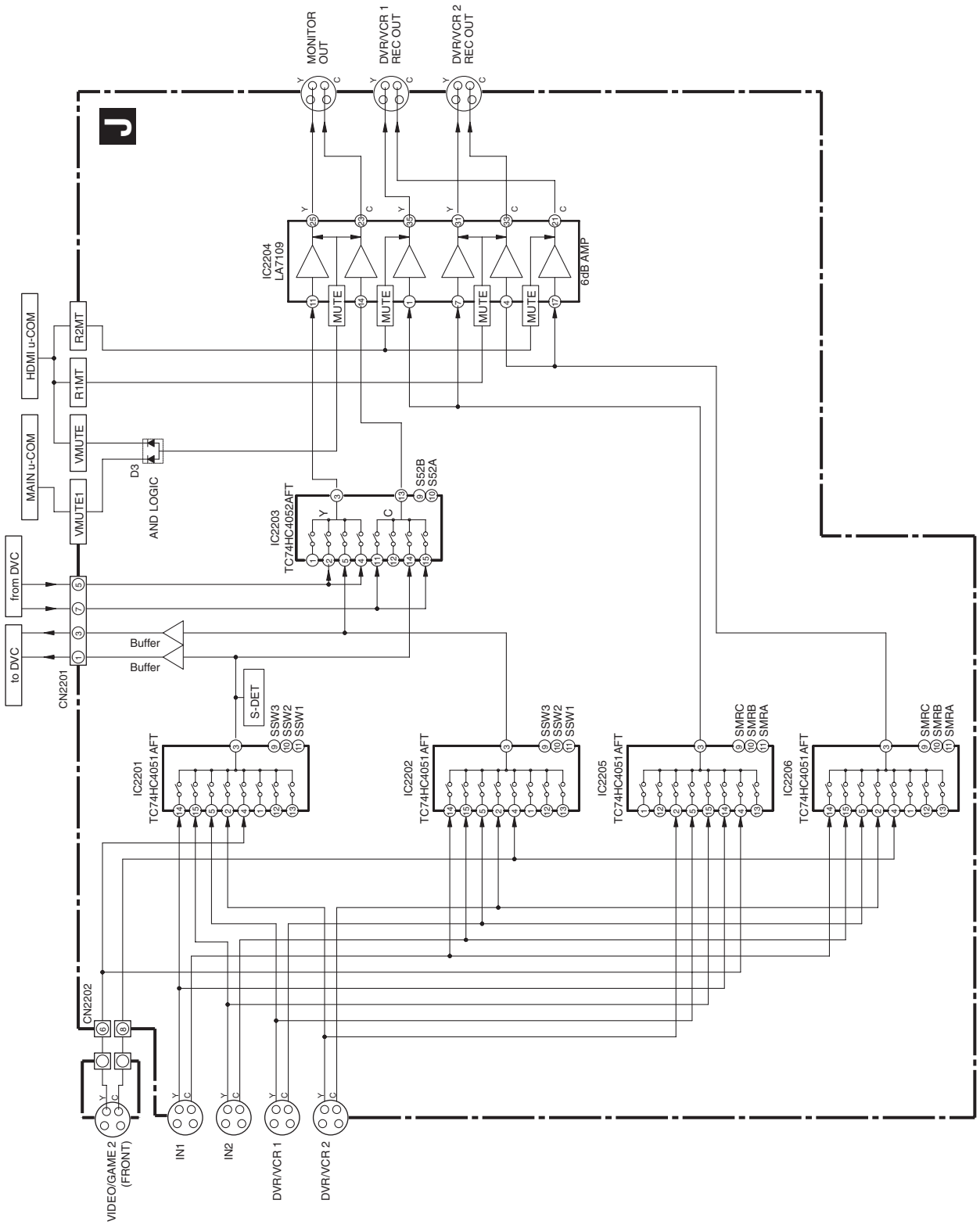



AJ AK
IC301
HDMI
TRANSMITTER
JA301
HDMI OUT
VSX-LX70 Only
<< DSD DIRECT>>
IC315
SELECTOR
DSD DIRECT
L
<< PCM DIRECT>>
IC551 DAC
192kHz/24bit
IC552
LPF
IC651 DAC
192kHz/24bit
IC652
LPF
IC751 DAC
192kHz/24bit
IC752
LPF
IC851 DAC
192kHz/24bit
IC852
LPF
IC314
SELECTOR
DSP ⇔
DIRECT
M
IC201 DSP2
ADVANCED MCACC
POST
PROCESSING
24bit or 48bit
(Double Precision)
IC316,317
Lip Sync
JA306
DIGITAL OUT (OPT 1)
JA307
DIGITAL OUT (OPT 2)
C:SW
SL:SR
SBL:SBR
D
HEAD PHONE CN3551
HEAD PHONE
K
IC2636
11 selector & VOL control
into
6dB ATT for DSP
Multich selector
MR selector
SBch Processing
<<PRE AMP>>
<<POWER AMP>>
IC2501
IC2525
IC2551
IC2575
Q R
X
CN4001
CN4002
FL/FR
CENTER
SL/SR
SBL/SBR
(Flexible)
SPEAKERS
SPEAKERS(SB)
AE
FL/FR
C/SW
SL/SR
SBL/SBR
JA2805
JA2806
Pre OUT(L)
Pre OUT(C,SW)
Pre OUT(SL)
Pre OUT(SBL)
IC2637
E-VOL for MR
JA6301
Multi-Room & Source
Multi Room OUT
B
CN6308
CN6309
CN6207
DVR/VCR 1 OUT
DVR/VCR 2 OUT
CD-R/TAPE/MD OUT

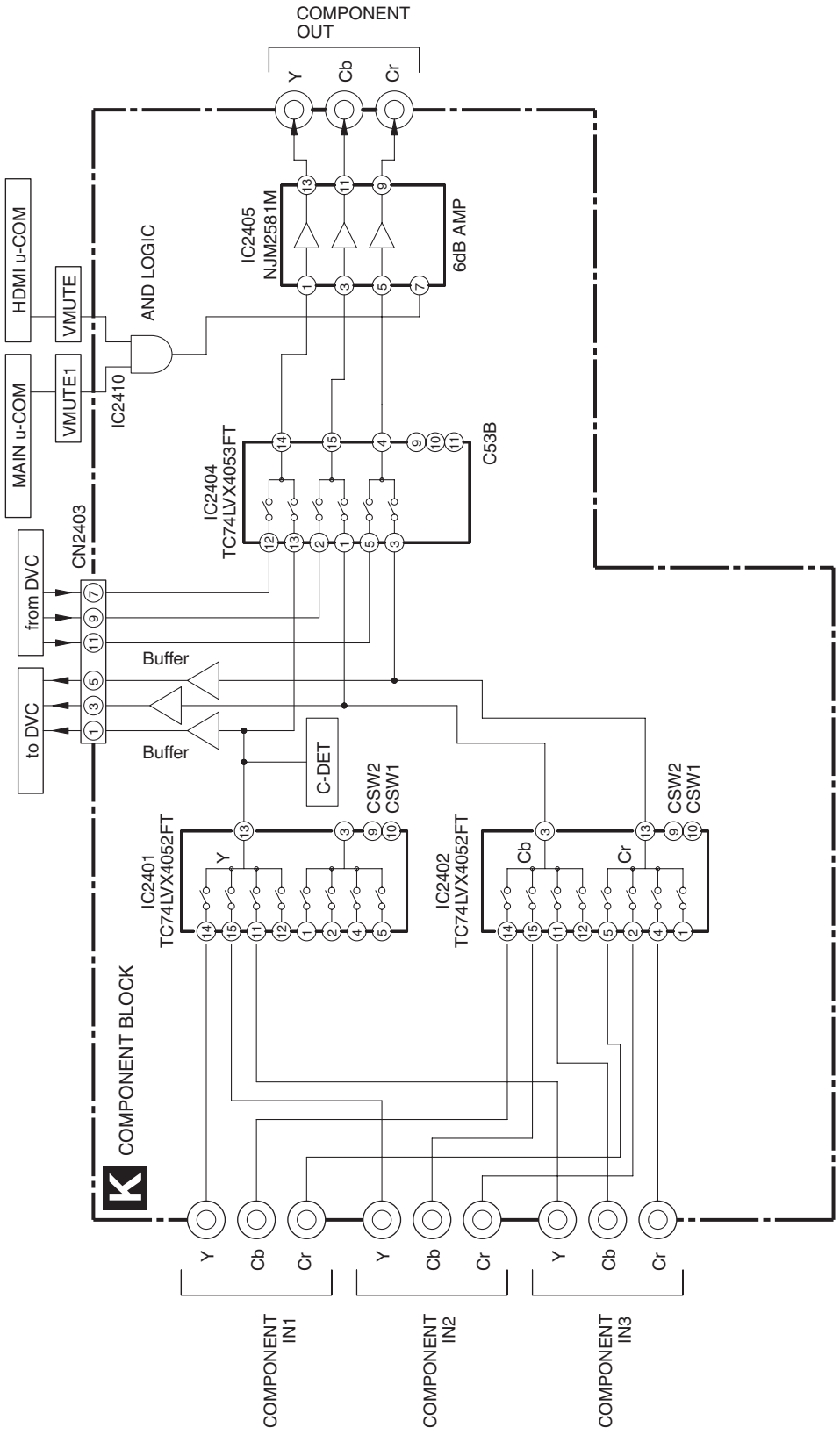
4.3 COMPOSITE V BLOCK DIAGRAM



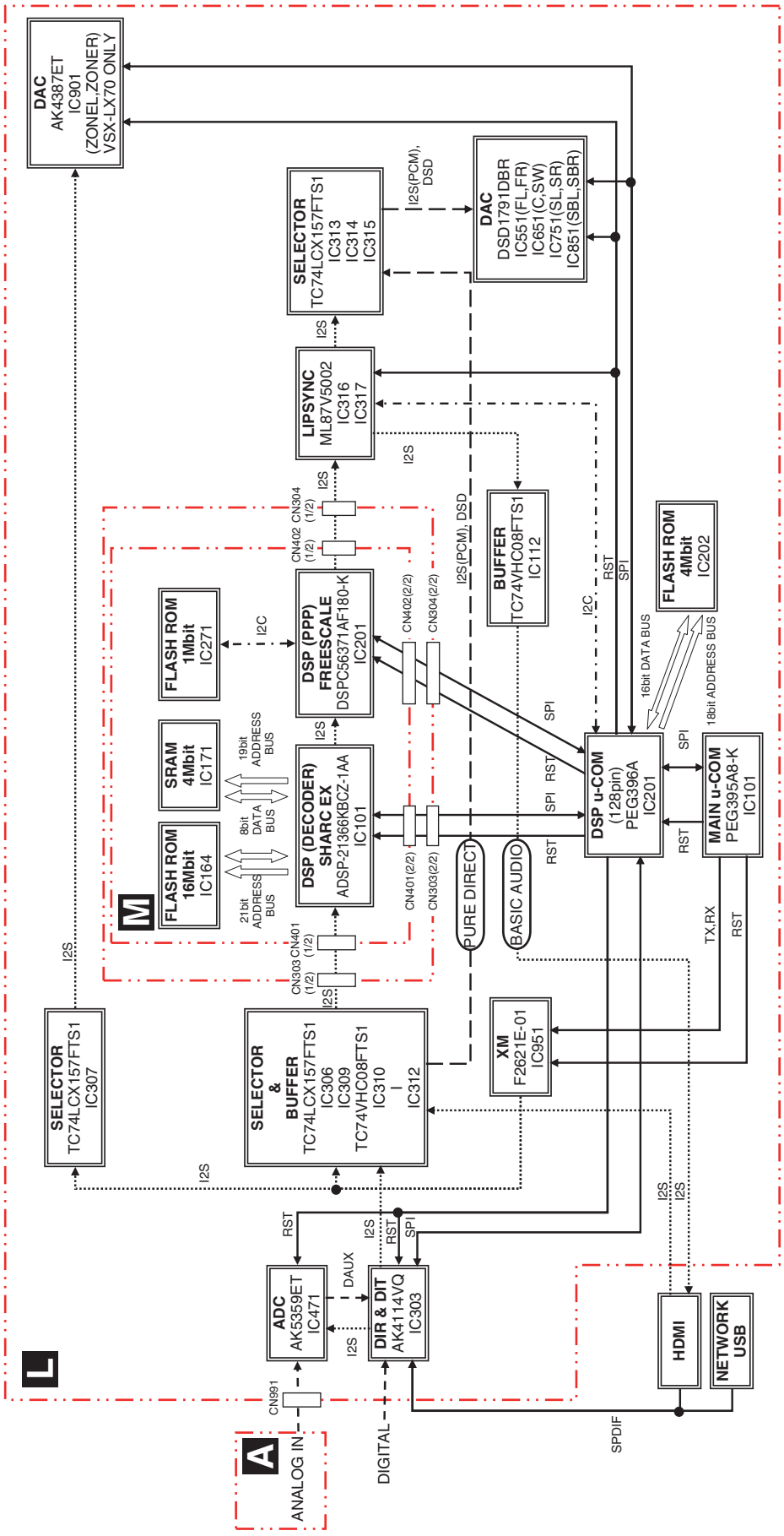
4.4 S-VIDEO BLOCK DIAGRAM



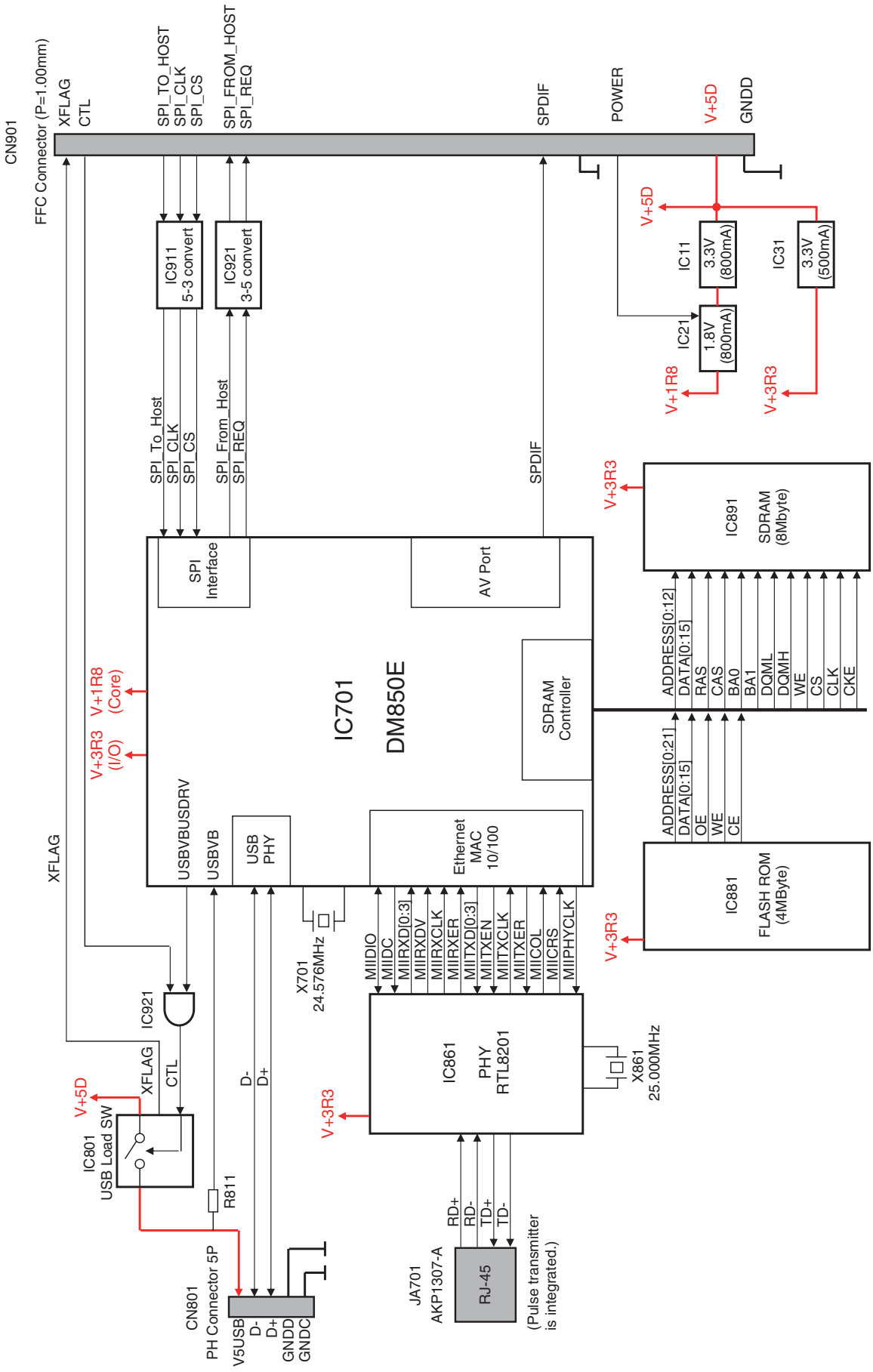
4.5 COMPONENT & VOL BLOCK DIAGRAM



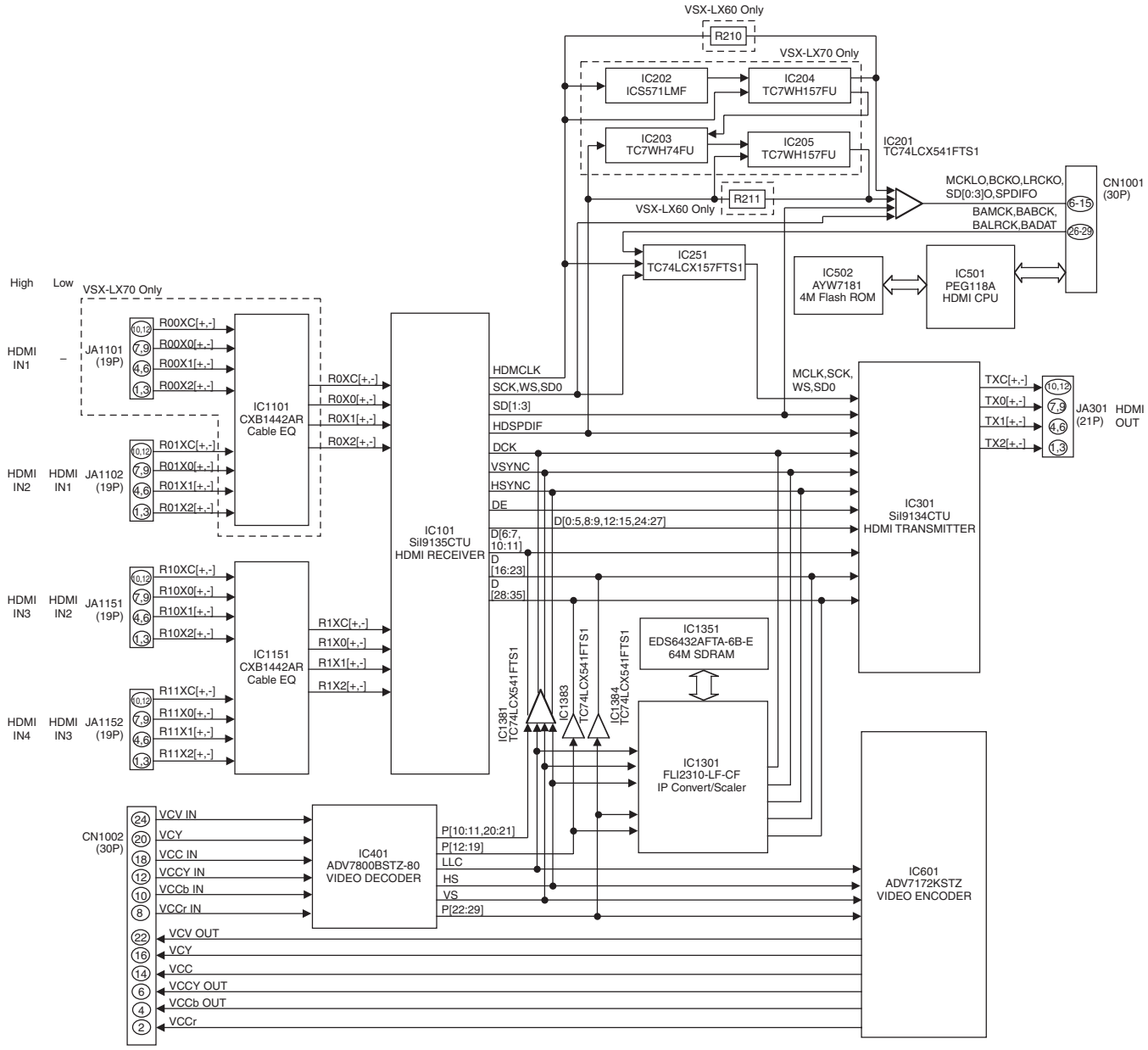
4.6 DSP BLOCK DIAGRAM



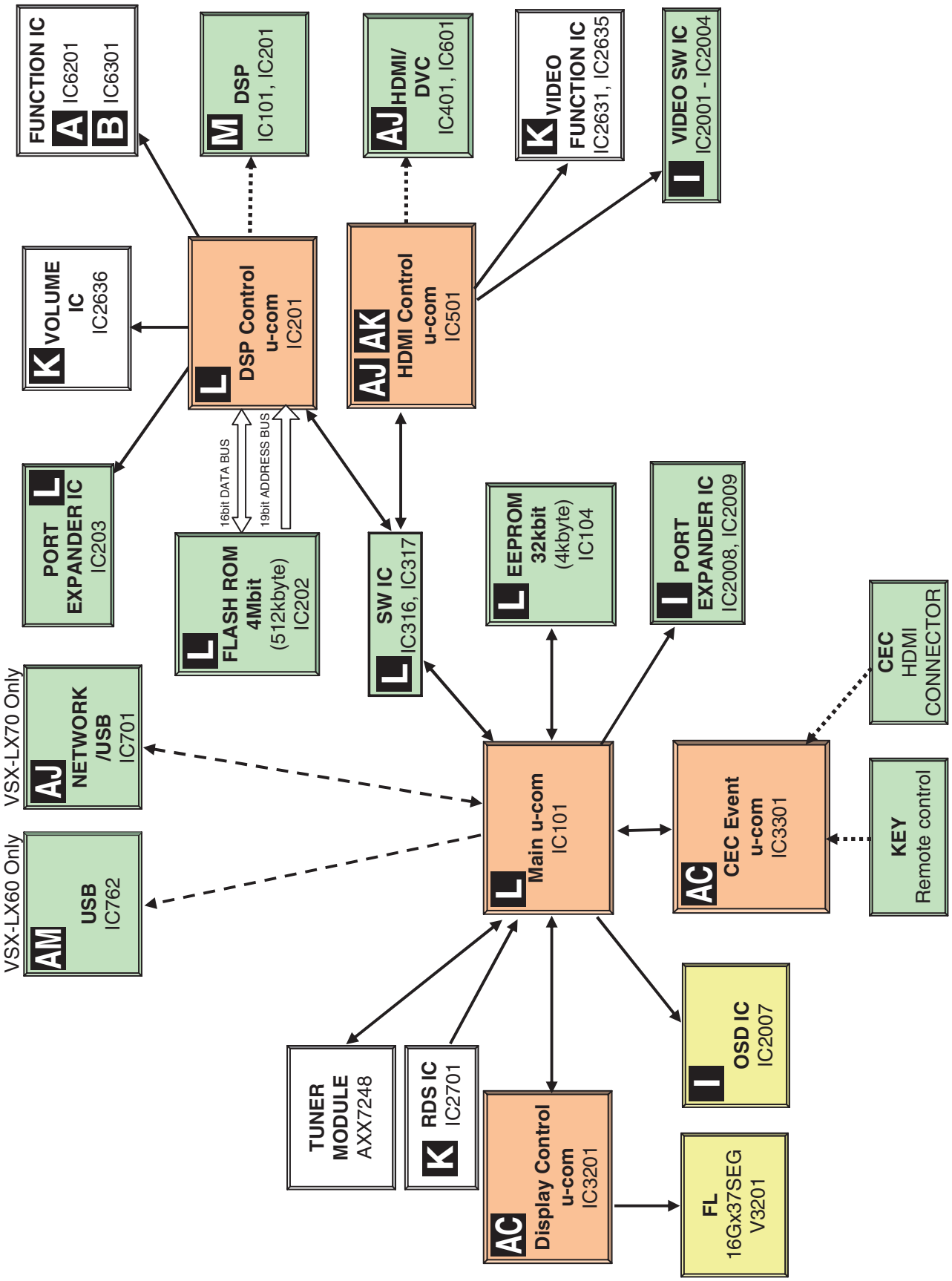
4.7 HDMI & DLNA BLOCK DIAGRAM (VSX-LX70)



4.8 HDMI & DVC BLOCK DIAGRAM



4.9 MICROCOMPUTER BLOCK DIAGRAM



5. DIAGNOSIS

5.1 DIAGNOSIS FLOWCHART

5.1.1 DSP TROUBLESHOOTING

■ Unsophisticated Diagnosis

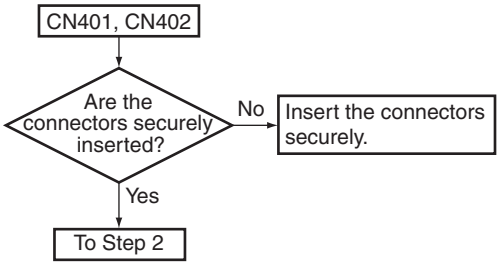
DSP Ass'y malfunction is detected
(The part can be roughly expected just by operation of the main unit.)

- **Has DSP Ass'y caused the malfunction?**
  Inputing a PCM (such as CD) digital signal, check if the sound plays by switching AUTO SURR / STREAM DIRECT. When the sound doesn't play in AUTO SURROUND or DIRECT MODE though it does in PURE DIRECT (PCM DIRECT) MODE, DSP Ass'y might be defective.

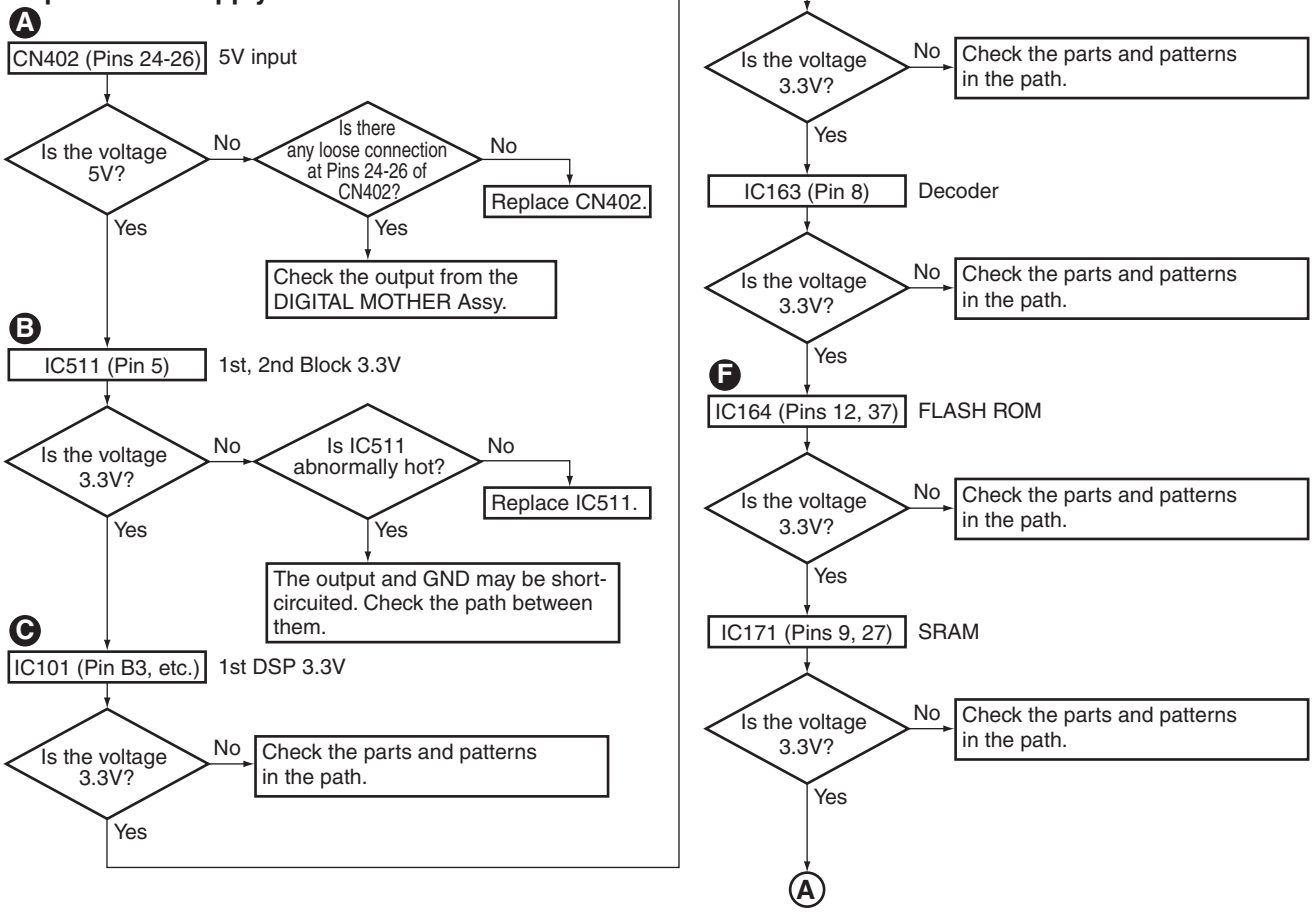
■ Troubleshooting

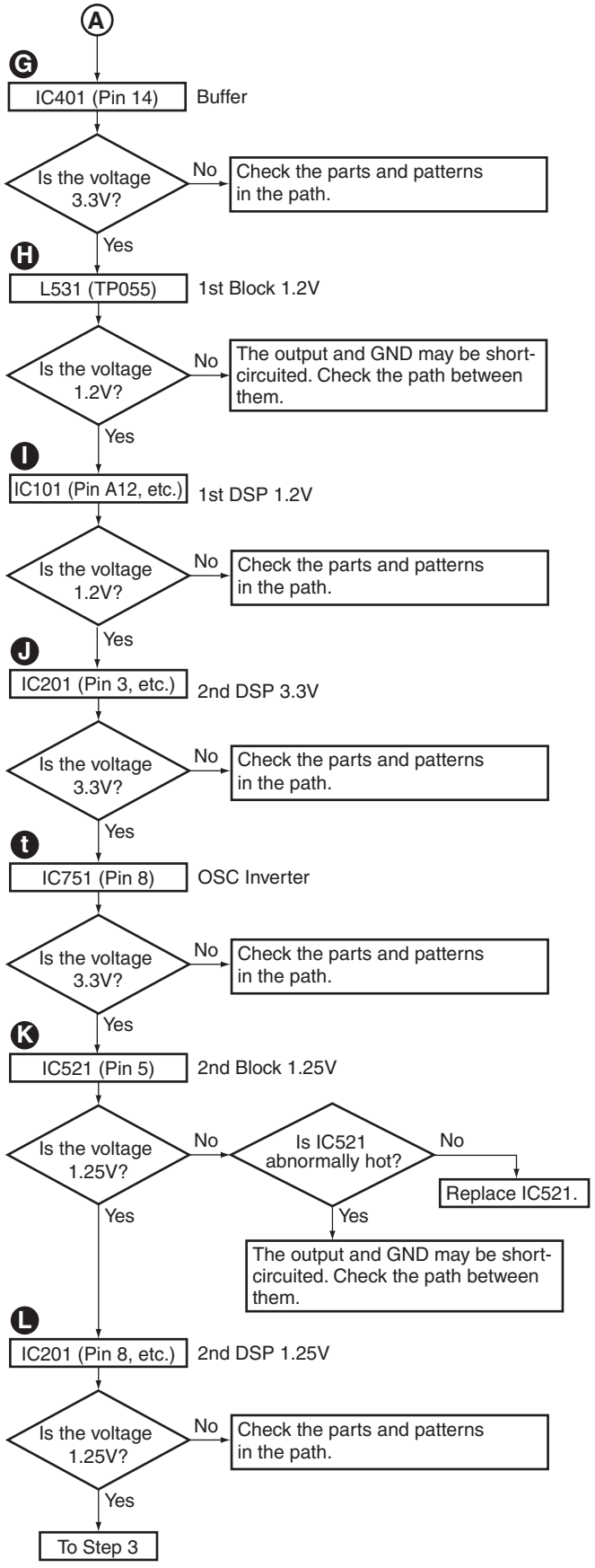
- It is assumed that there is no loose connection or damage in the LCRs.
- Refer to "DSP Block Diagram" and "DSP Assy check point" as the parts marked Ⓐ to ⒶⒻ in the troubleshooting are located.

Step 1: Connections

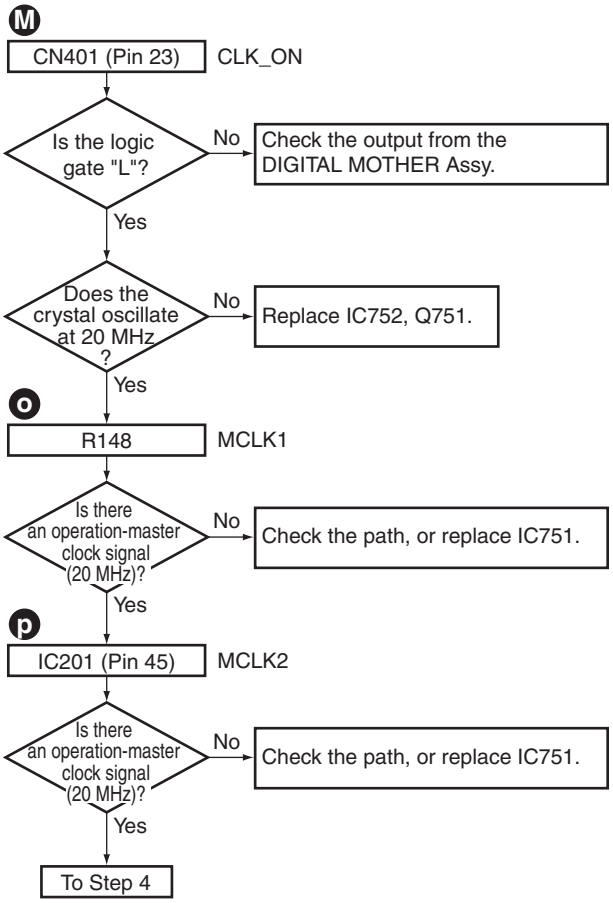


Step 2: Power supply

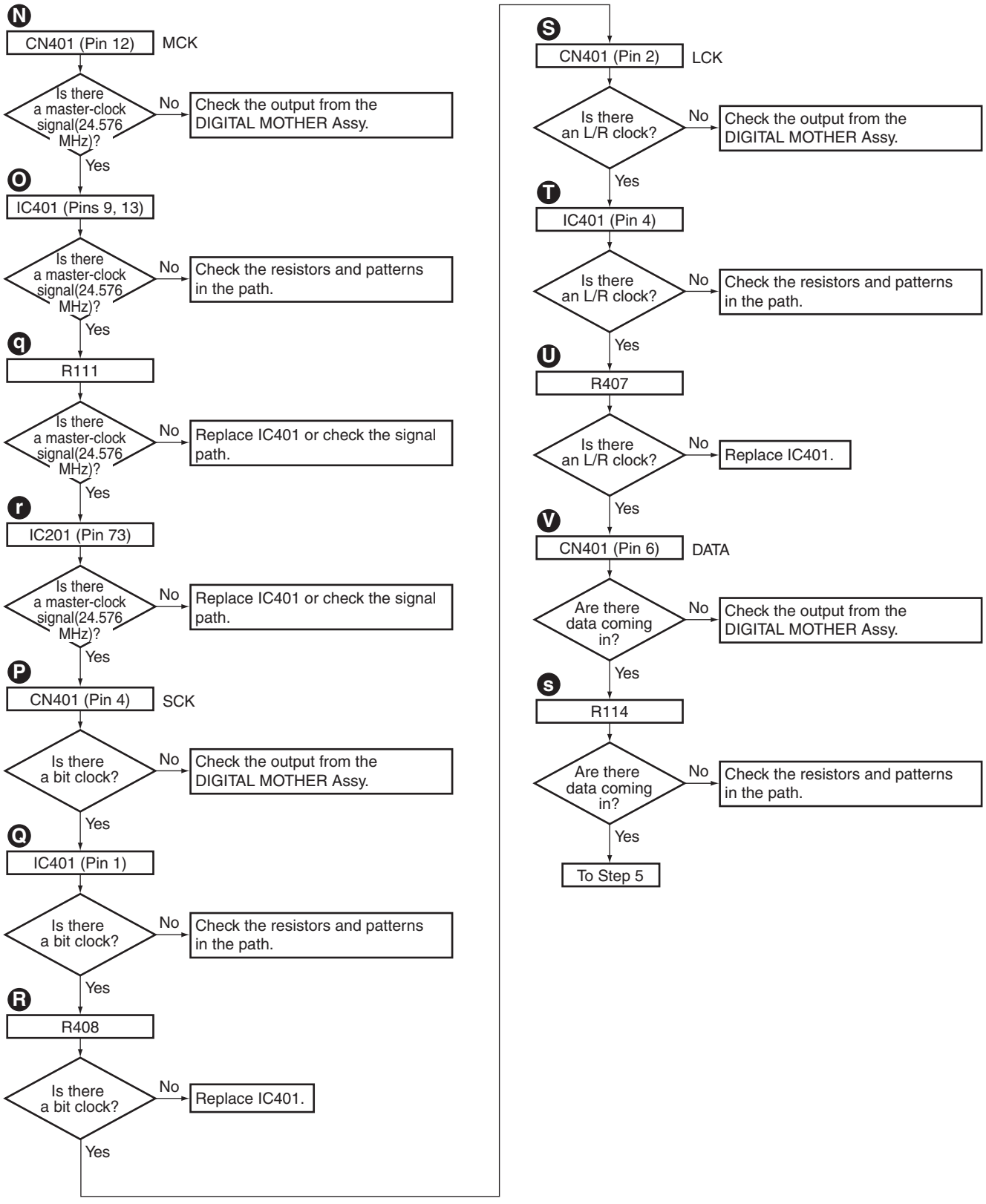




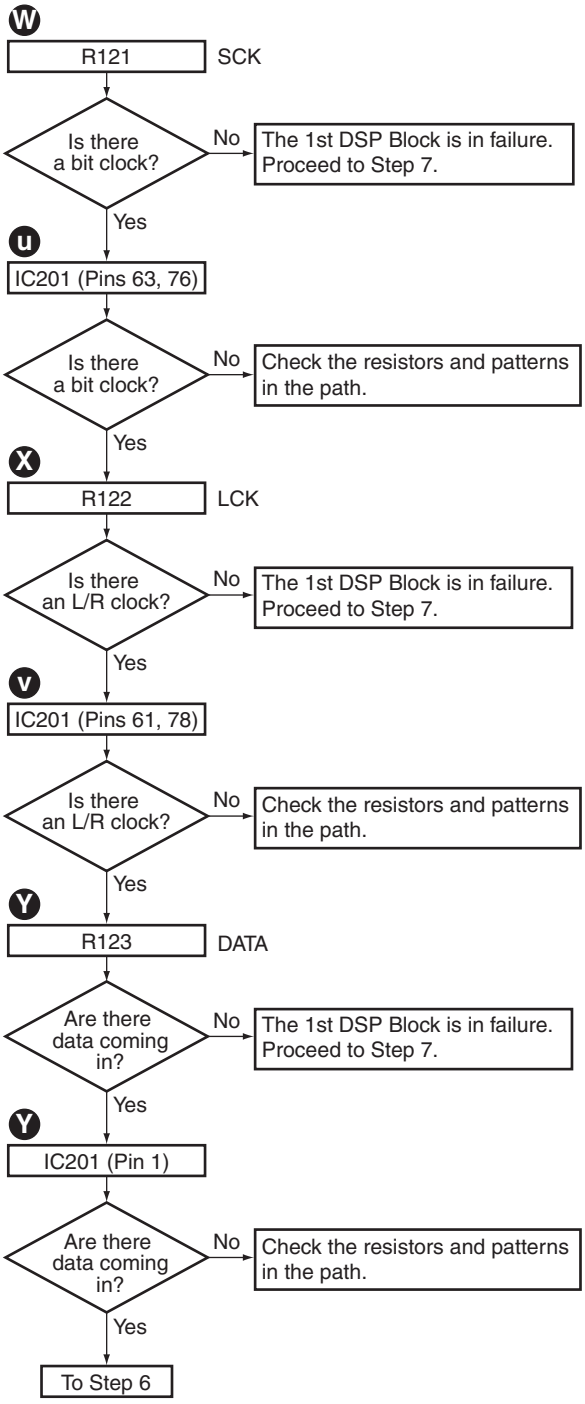
Step 3: Operation of the Master Clock



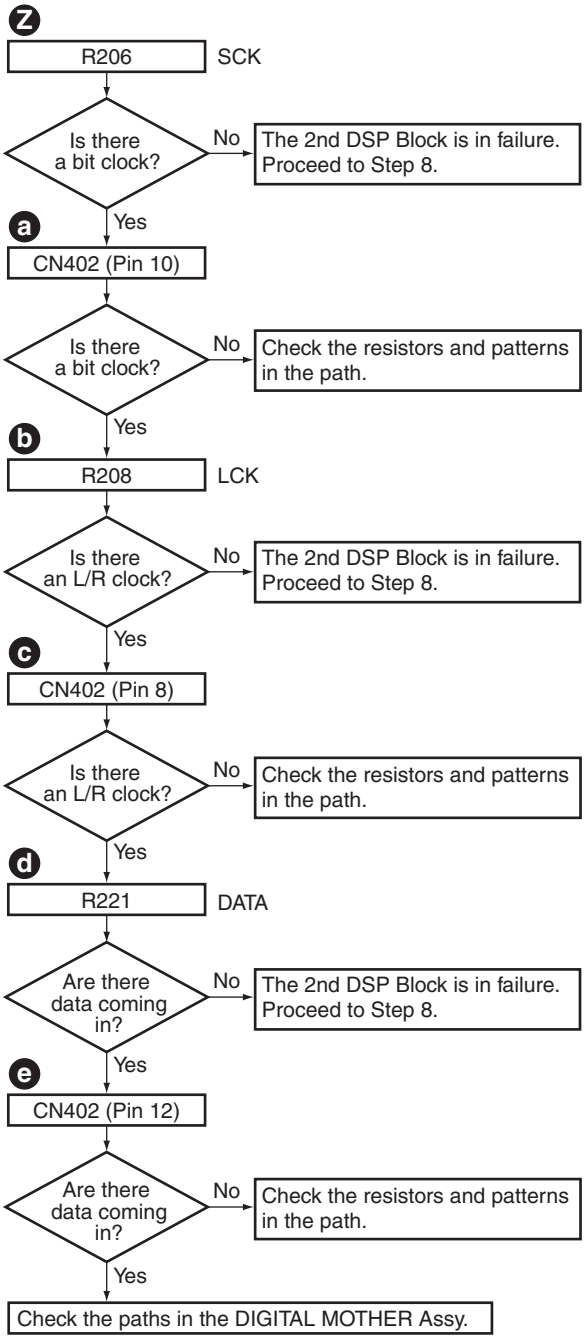
Step 4: Audio Clock



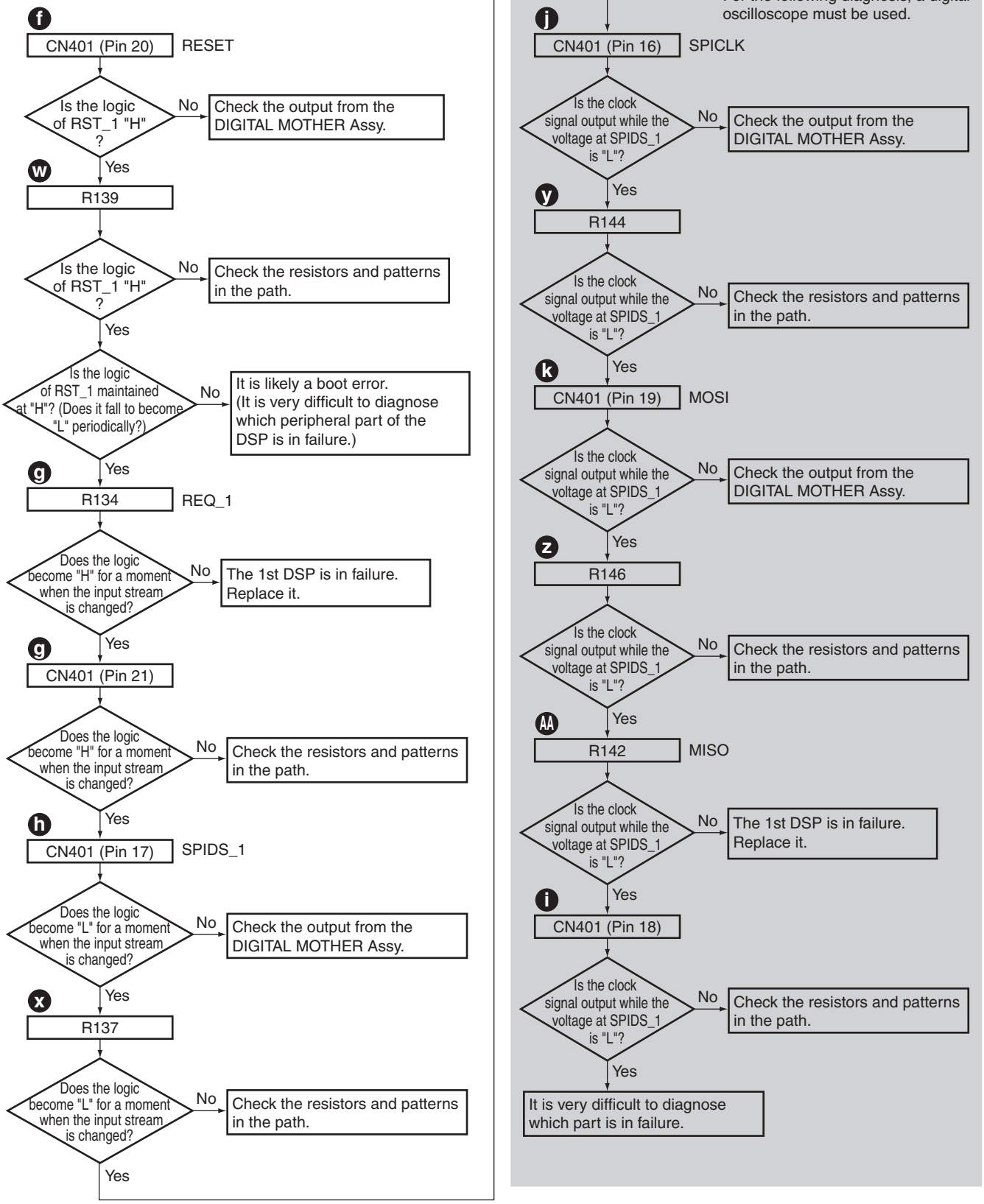
Step 5


W
R121
SCK
Is there a bit clock?
No
The 1st DSP Block is in failure. Proceed to Step 7.
Yes
u
IC201 (Pins 63, 76)
Is there a bit clock?
No
Check the resistors and patterns in the path.
Yes
X
R122
LCK
Is there an L/R clock?
No
The 1st DSP Block is in failure. Proceed to Step 7.
Yes
v
IC201 (Pins 61, 78)
Is there an L/R clock?
No
Check the resistors and patterns in the path.
Yes
Y
R123
DATA
Are there data coming in?
No
The 1st DSP Block is in failure. Proceed to Step 7.
Yes
Y
IC201 (Pin 1)
Are there data coming in?
No
Check the resistors and patterns in the path.
Yes
To Step 6

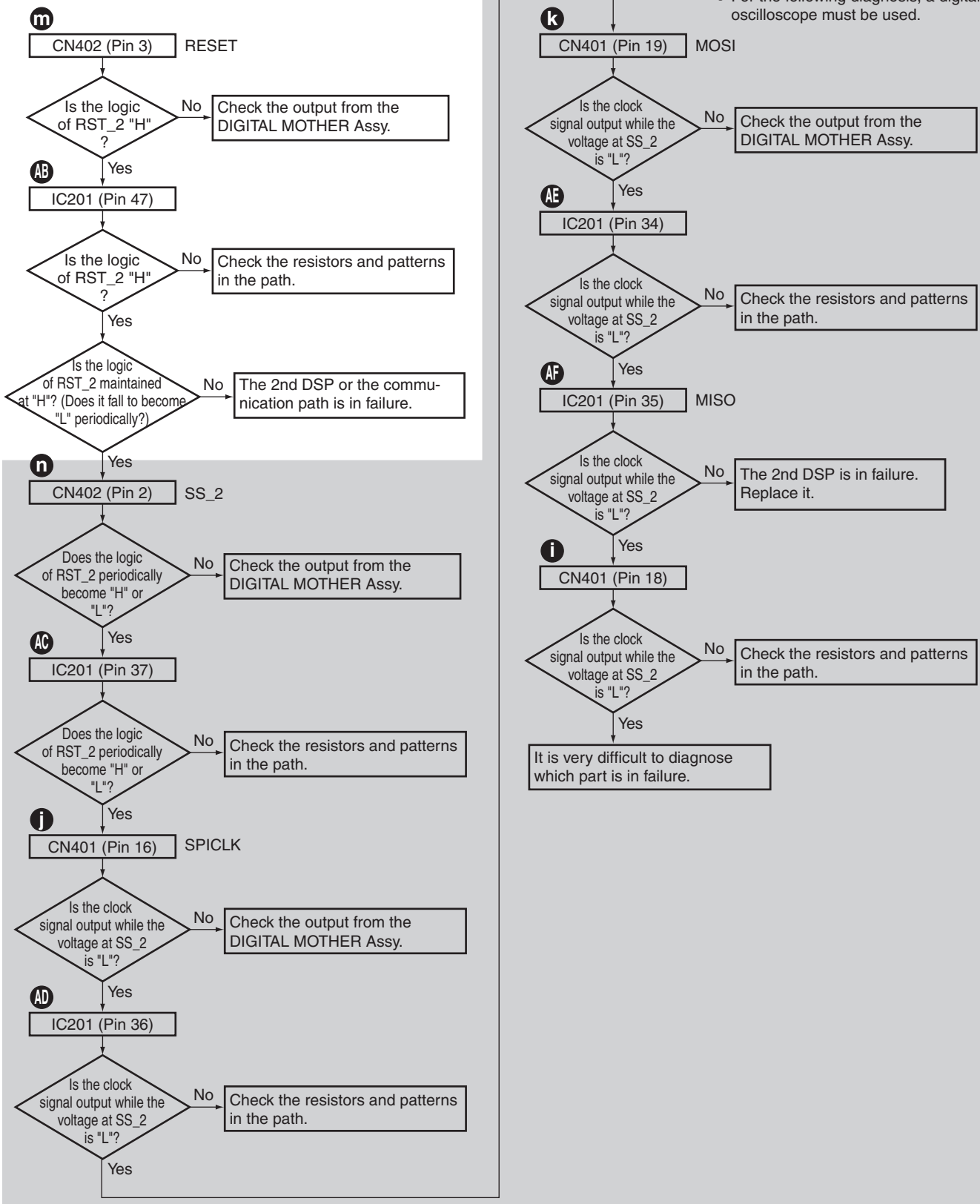
Step 6


Z
R206
SCK
Is there a bit clock?
No
The 2nd DSP Block is in failure. Proceed to Step 8.
Yes
a
CN402 (Pin 10)
Is there a bit clock?
No
Check the resistors and patterns in the path.
Yes
b
R208
LCK
Is there an L/R clock?
No
The 2nd DSP Block is in failure. Proceed to Step 8.
Yes
c
CN402 (Pin 8)
Is there an L/R clock?
No
Check the resistors and patterns in the path.
Yes
d
R221
DATA
Are there data coming in?
No
The 2nd DSP Block is in failure. Proceed to Step 8.
Yes
e
CN402 (Pin 12)
Are there data coming in?
No
Check the resistors and patterns in the path.
Yes
Check the paths in the DIGITAL MOTHER Assy.

Step 7: 1st DSP

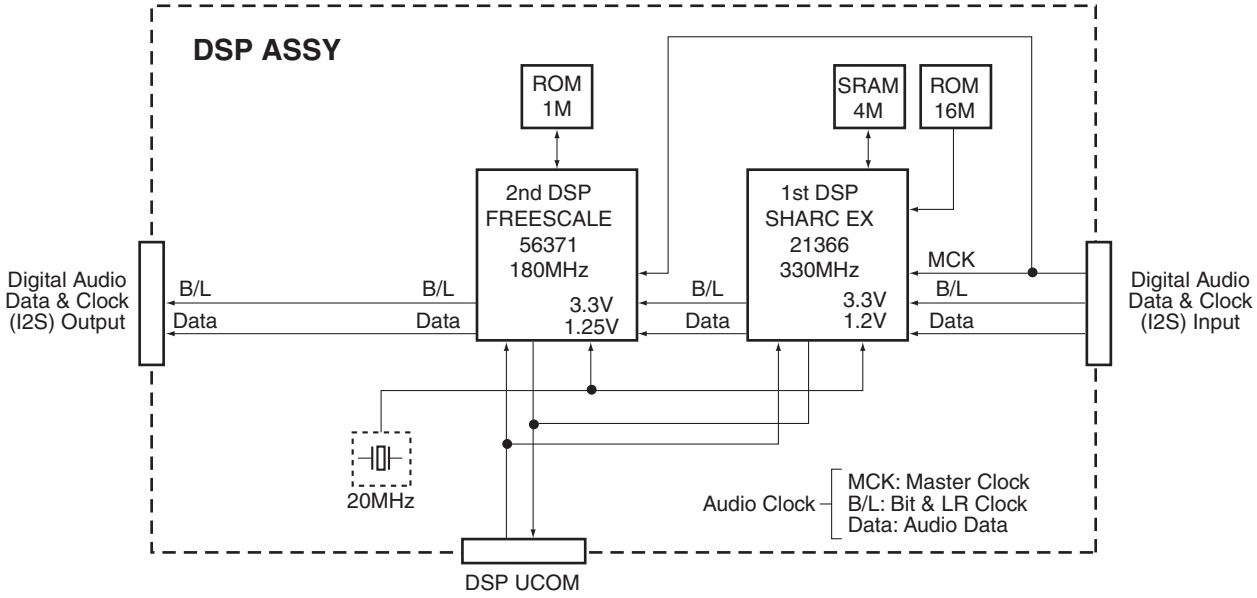


Step 8: 2nd DSP

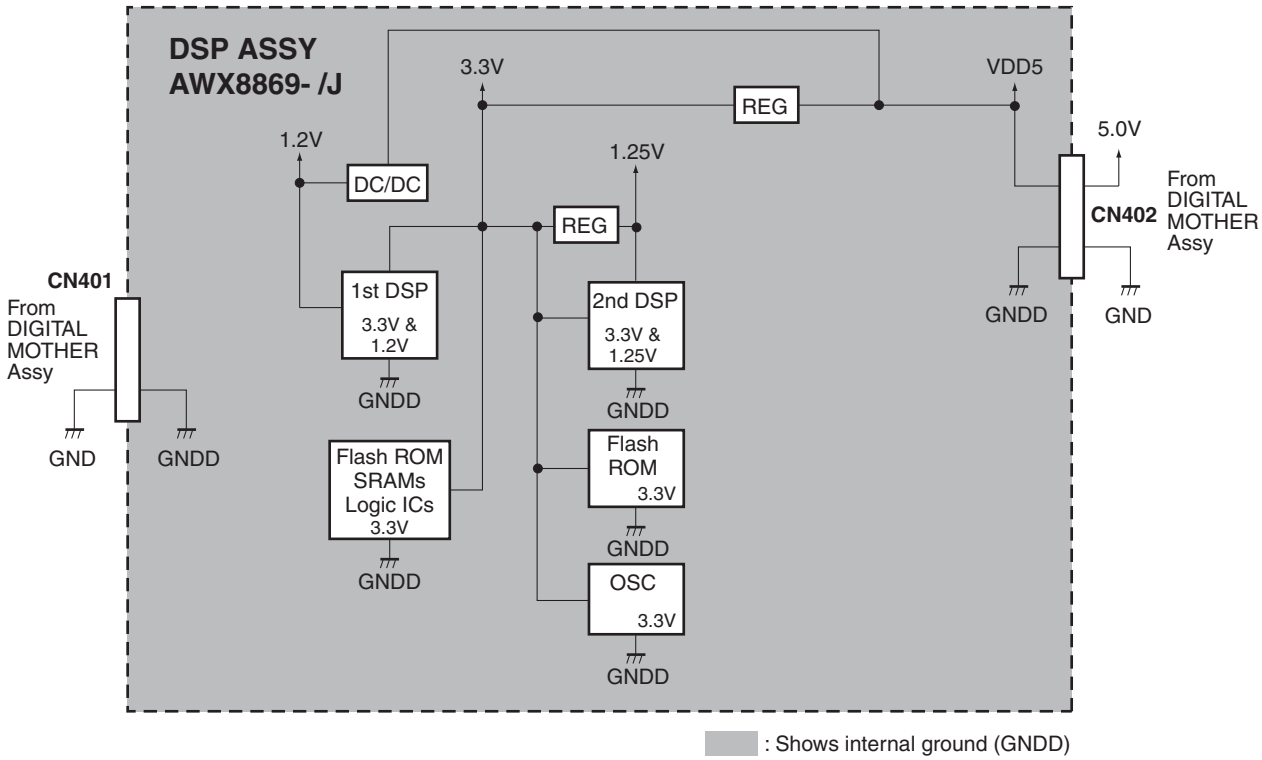


■ DSP Block Diagram

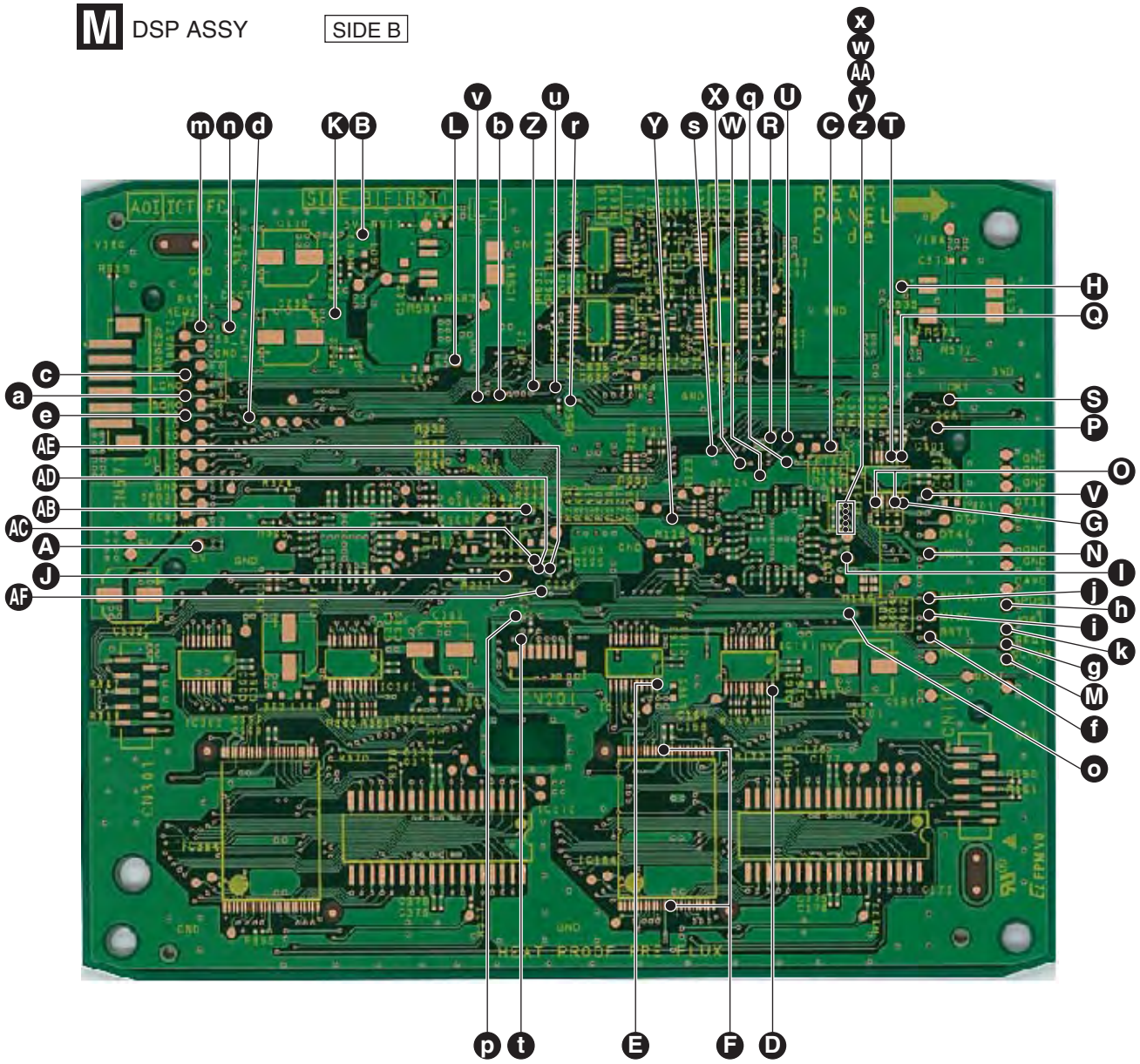
• CORE Block



• Power Block and GND Map



■ DSP Assy Check Points



5.1.2 DIAGNOSIS OF THE HDMI BLOCK AND RELATED SYSTEMS

■ HDMI Simple Diagnosis

Please refer to the one point trouble shooting first before checking the flow chart on the next page.

HDMI

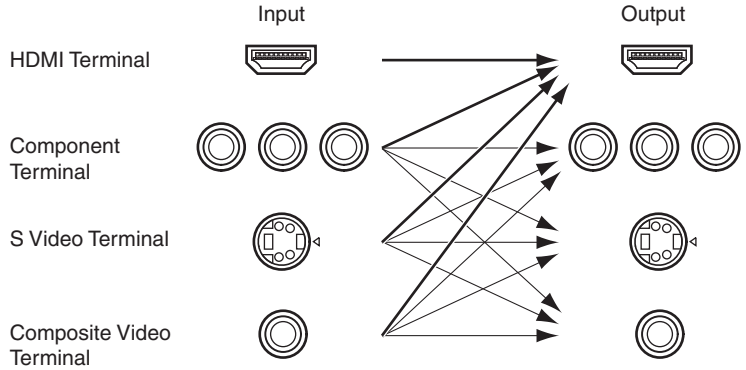
Symptom	Remedy
The HDMI indicator blinks continuously.	Check all the points below.
No picture or sound.	• This receiver is HDCP-compatible. Check that the components you are connecting are also HDCP-compatible. If they are not, please connect them using the component, S-video or composite video jacks. • Depending on the connected source component, it's possible that it will not work with this receiver (even if it is HDCP-compatible). • If the problem still persists when connecting your HDMI component directly to your monitor, please consult the component or monitor manual or contact the manufacturer for support.
No picture.	• Depending in the output settings of the source component, it may be outputting a video format that can't be displayed. Change the output settings of the source, or connect using the component, S-video or composite jacks.
No sound, or sound suddenly ceases.	• Check that the HDMI setting is set to **AMP/THROUGH**. • If the component is a DVI device, use a separate connection for the audio. • Check the audio output settings of the source component.

Note:

- An HDMI connection can only be made with DVI-equipped components compatible with both DVI and High Bandwidth Digital Content Protection (HDCP). If you choose to connect to a DVI connector, you will need a separate adaptor (DVI → HDMI) to do so. A DVI connection, however, does not support audio signals. Consult your local audio dealer for more information.
- This unit has been designed to be compliant with HDMI (High Definition Multimedia Interface) Version 1.3a. Depending on the component you have connected, using a DVI connection may result in unreliable signal transfers. Also, when using a component with HDMI version 1.39, it is not possible to output copy-controlled DVD-Audio CPPM sources from the HDMI connection.

Digital Video Converting System

The following chart is for video converting. As you can see HDMI input signal is output to HDMI output terminal only. Other analog inputs can be converted to HDMI output signal.

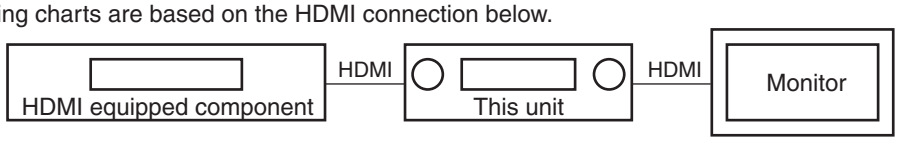


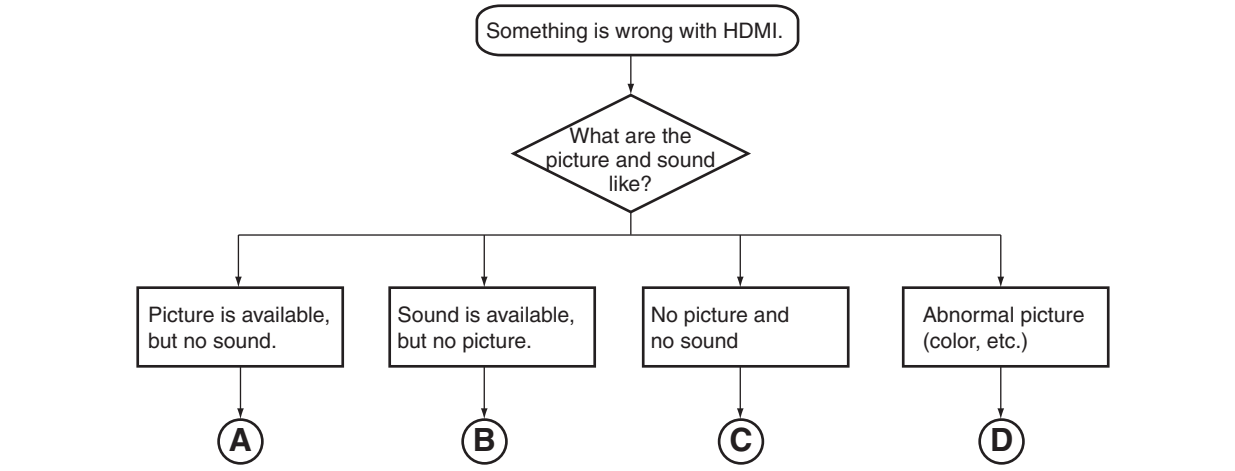
HDMI Audio routing line

Input		Output	HDMI Setting
HDMI	→	HDMI	THROUGH
		Pre out	AMP
		SP Out	
other	→	HDMI	THROUGH
		Pre out	AMP
		SP Out	

■ Status confirmation

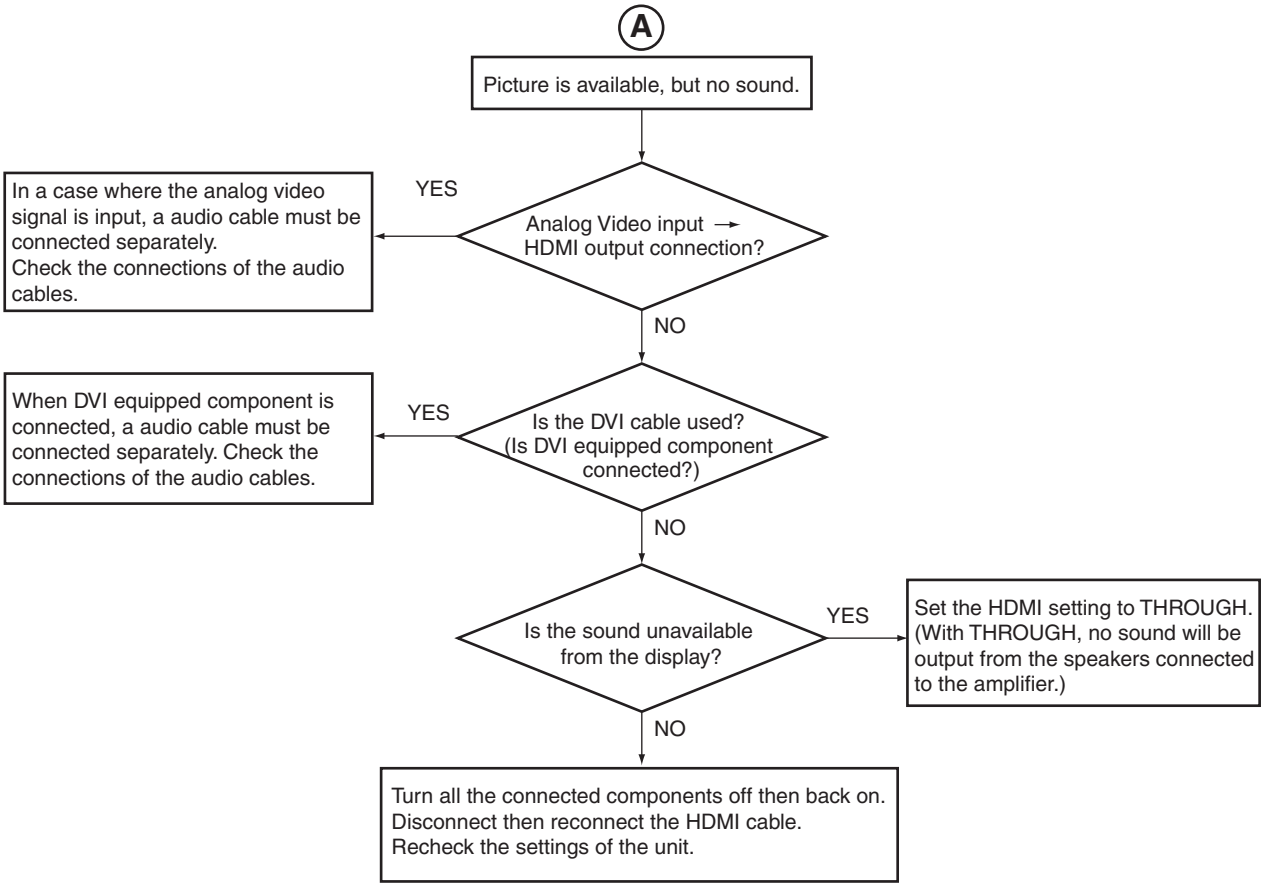
The following charts are based on the HDMI connection below.



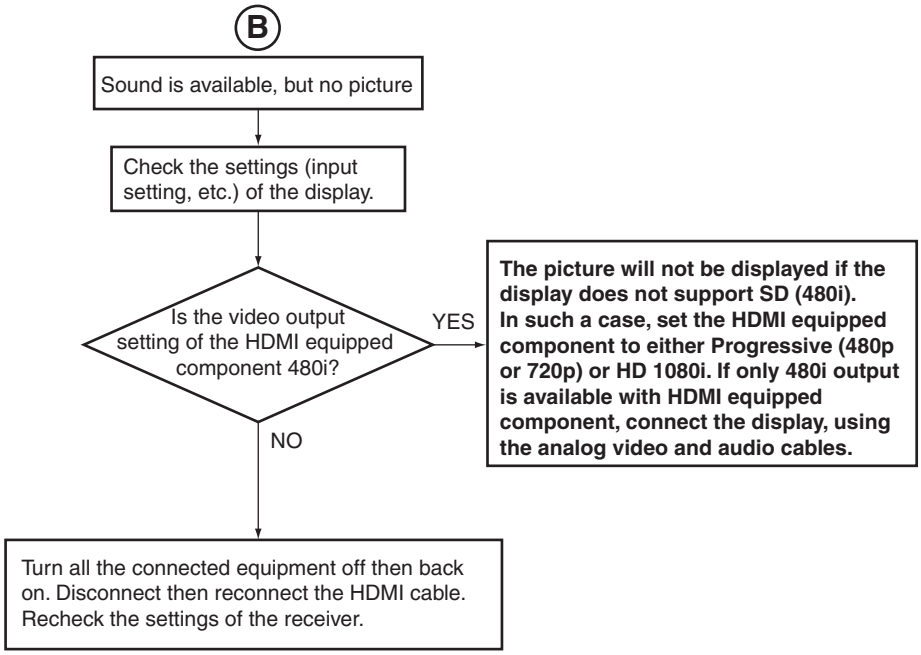


- In either case, check the connection cables, input selection, and initial settings of the unit first.
- "Analog video" hereinafter means composite, S, or component video.
- "Audio cable" hereinafter means either analog or digital audio connection cables.
- "display" hereinafter means HDMI-compatible monitor or plasma display.

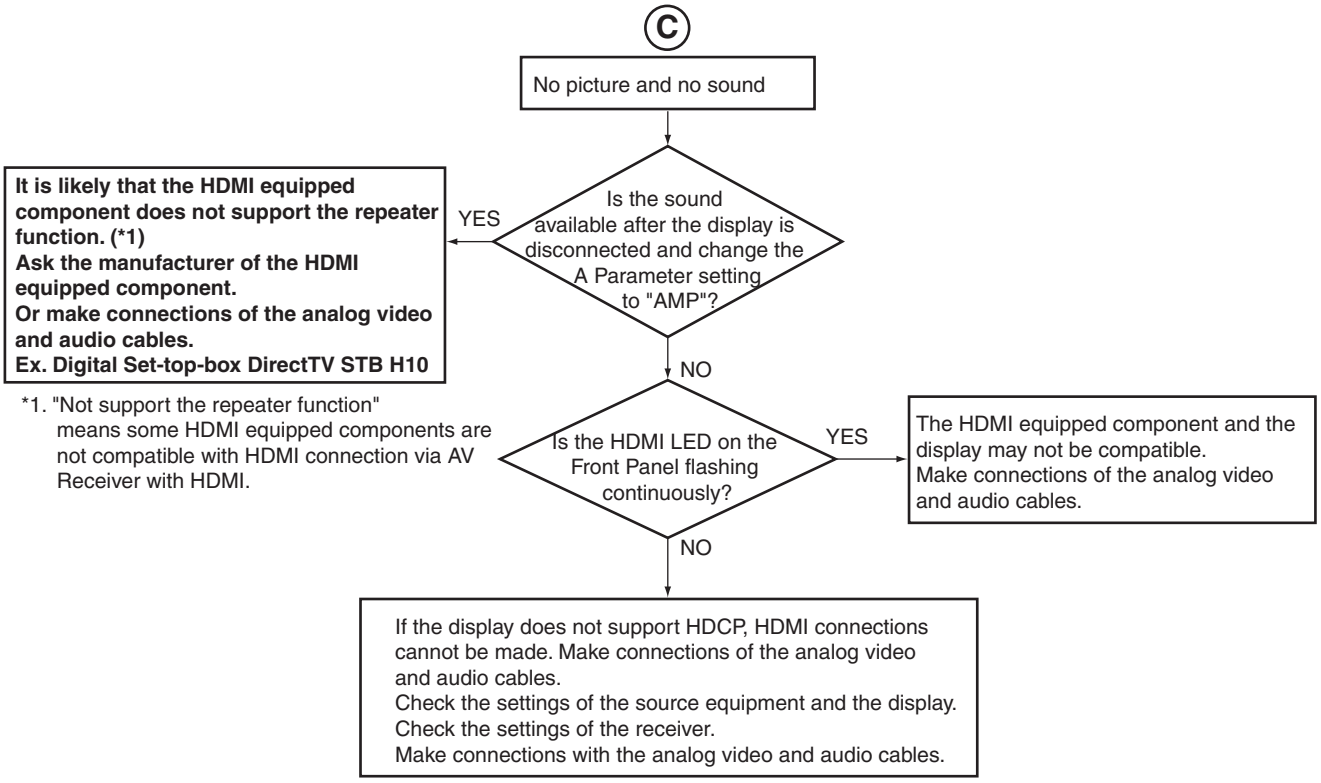
■ In a case where picture is available, but no sound



■ In a case where the sound is available, but no picture

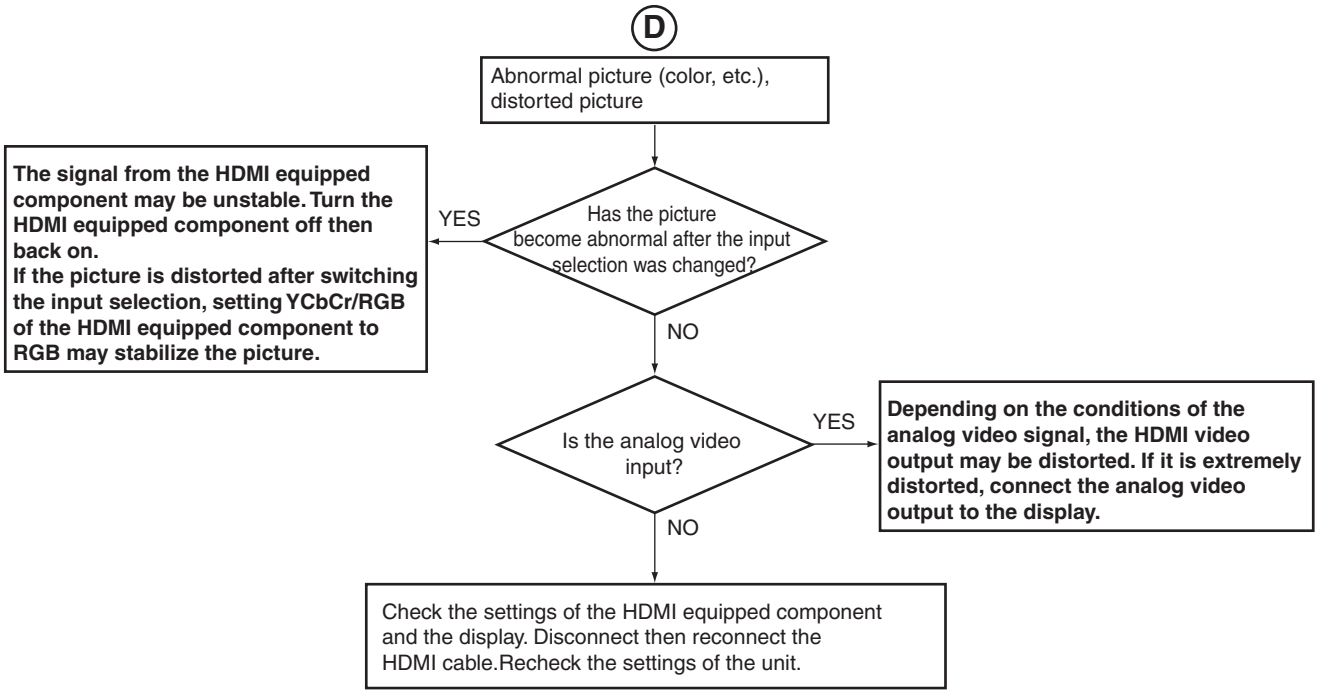


■ In a case of no picture and no sound

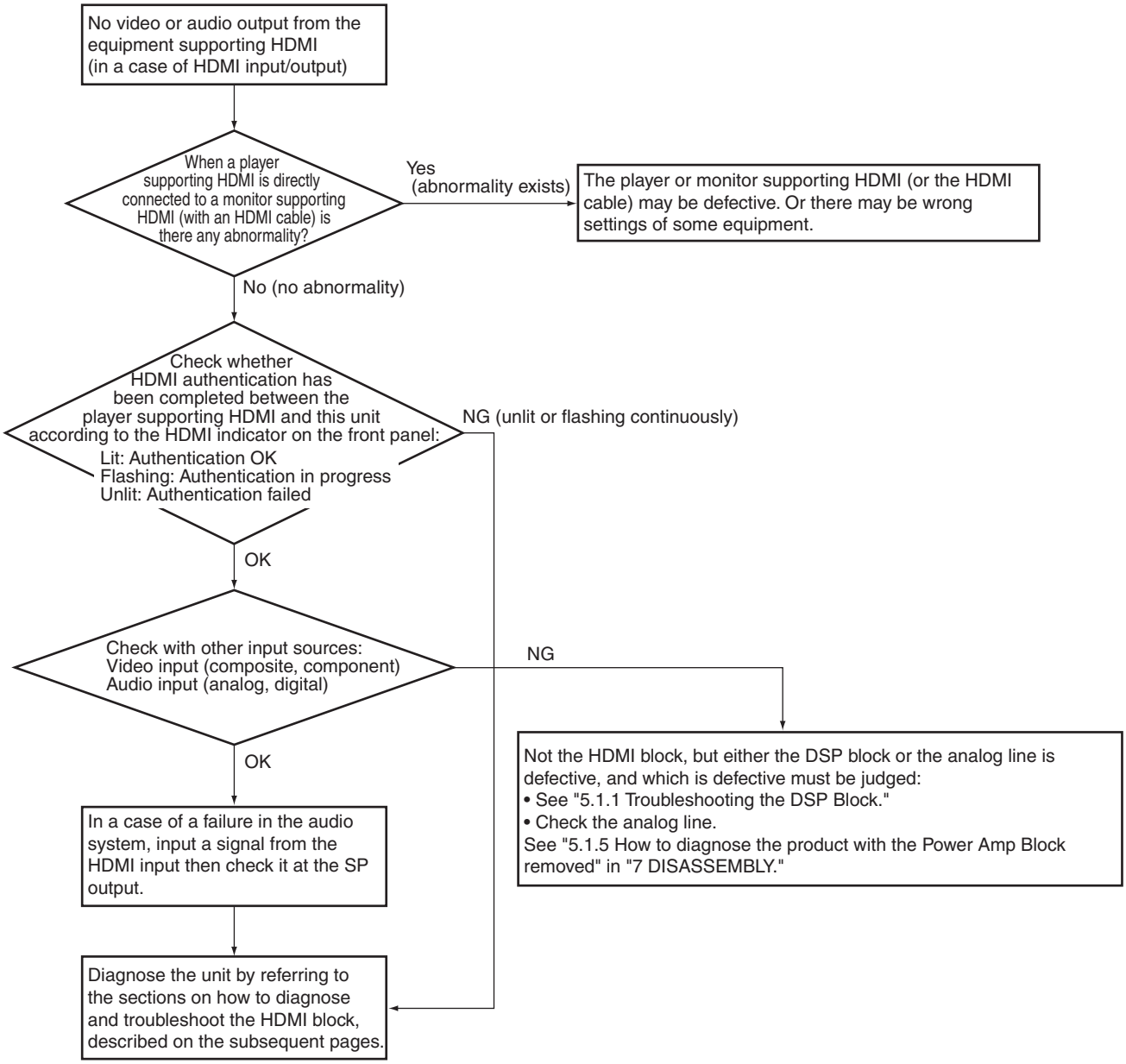


*1. "Not support the repeater function" means some HDMI equipped components are not compatible with HDMI connection via AV Receiver with HDMI.

■ In a case of abnormal picture



■ Flowchart of troubleshooting the HDMI block



■ Preparations for diagnosis

Note : Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

Jig cable

- 30P board to board extension jig cable (GGD1492) x2
- 7-pin FFC (VDA1681)
- 22-pin FFC (GGD1387)

[Procedures]

① Remove the bonnet.

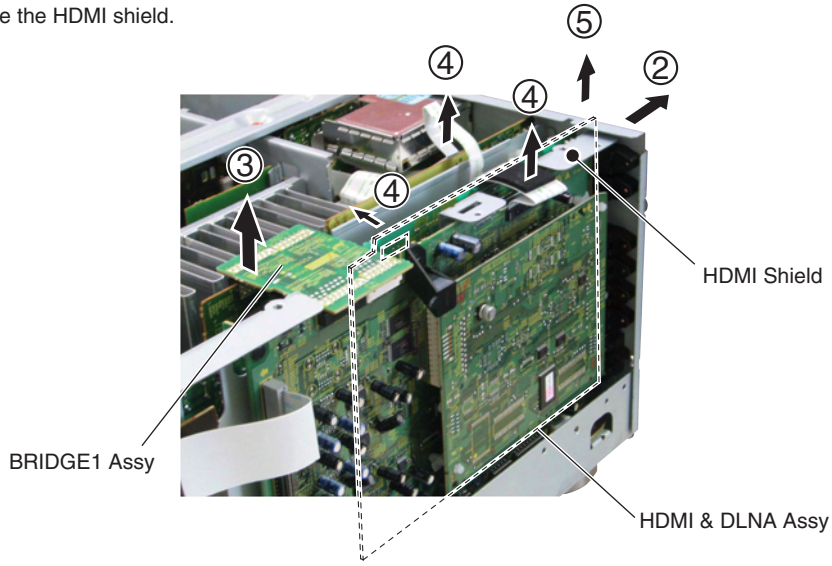
② Remove the rear panel (Refer to P.84)

③ Remove the BRIDGE1 Assy.

④ Disconnect the two flexible cables and connector.

⑤ Remove the HDMI & DLNA Assy.

⑥ Remove the HDMI shield.



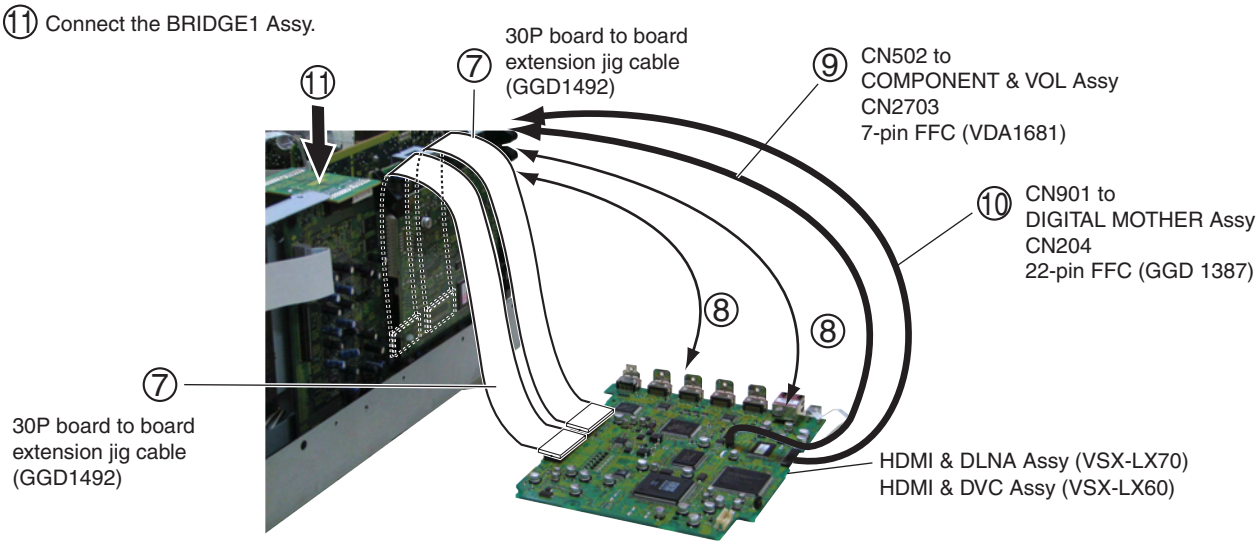
⑦ Connect the two extension jig cables.

⑧ Connect a cable between the HDMI connector and the chassis.

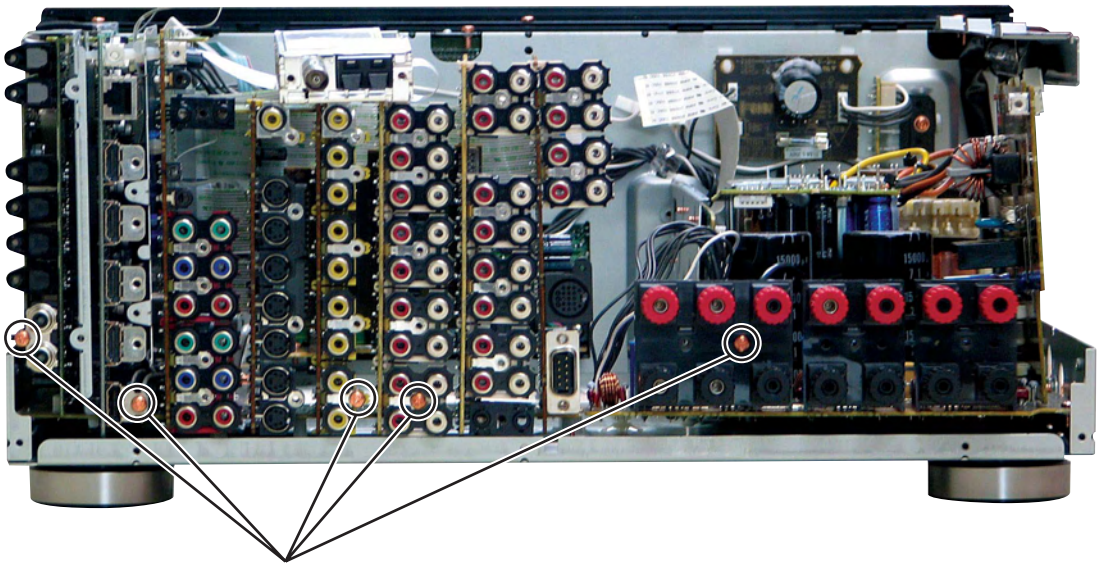
⑨ Connect a cable between CN502 and COMPONENT & VOL Assy (CN2703).

⑩ Connect a cable between CN901 and DIGITAL MOTHER Assy (CN204).

⑪ Connect the BRIDGE1 Assy.



Note : As mentioned below, detach the rear panel, re-fasten the screws at the corresponding points, and connect the chassis to the ground.



Points to be connected to the chassis

■ HDMI Troubleshooting

• The parts marked like **V+5** in the following chart are located in "HDMI & DLNA Assy Check Points".

Common section

Step 1: Connections

CN1001, CN1002 — **A1** **A2**

Is soldering of the connectors OK?
- No → Solder the connectors correctly.
- Yes

Step 2-1: Power supply, CLK

CN1001(Pin 4) — UNReg INPUT — **V+5IN**

Is the voltage 11 V?
- No → Check the INTERFACE Assy.
- Yes

R1031 — 1.8 V — **V+1R8H**

Is the voltage 1.8 V?
- No → Check the soldering of IC1001 and the peripheries of IC1001. If soldering has not been done correctly, replace IC1001.
- Yes

R1008 — 3.3 V — **V+3R3_1**

Is the voltage 3.3 V?
- No → Check the soldering of IC1001 and the peripheries of IC1001. If soldering has not been done correctly, replace IC1001.
- Yes

R1009 — 3.3 V — **V+3R3_2**

Is the voltage 3.3 V?
- No → Check the soldering of IC1001 and the peripheries of IC1001. If soldering has not been done correctly, replace IC1001.
- Yes

R1073 — 5 V — **V+5DH**

Is the voltage 5 V?
- No → Check the soldering of IC1071 and the peripheries of IC1071. If soldering has not been done correctly, replace IC1071.
- Yes

R1072 — 5 V — **V+5AH**

Is the voltage 5 V?
- No → Check the soldering of IC1071 and the peripheries of IC1071. If soldering has not been done correctly, replace IC1071.
- Yes

CN1001(Pin 1) — UNReg INPUT — **V+12UN**

Is the voltage 11 V?
- No → Check the INTERFACE Assy.
- Yes

IC1051(Pin 3) — 5 V — **V+5HD**

Is the voltage 5 V?
- No → Check the soldering of IC1051 and the peripheries of IC1051. If soldering has not been done correctly, replace IC1051.
- Yes

X501 — X'TAL (microcomputer) — **B1**

Is oscillation of 15.7 MHz output?
- No → Check the soldering of X501 or IC501. If soldering has not been done correctly, replace X501 or IC501.
- Yes

Step 2-2: Reset

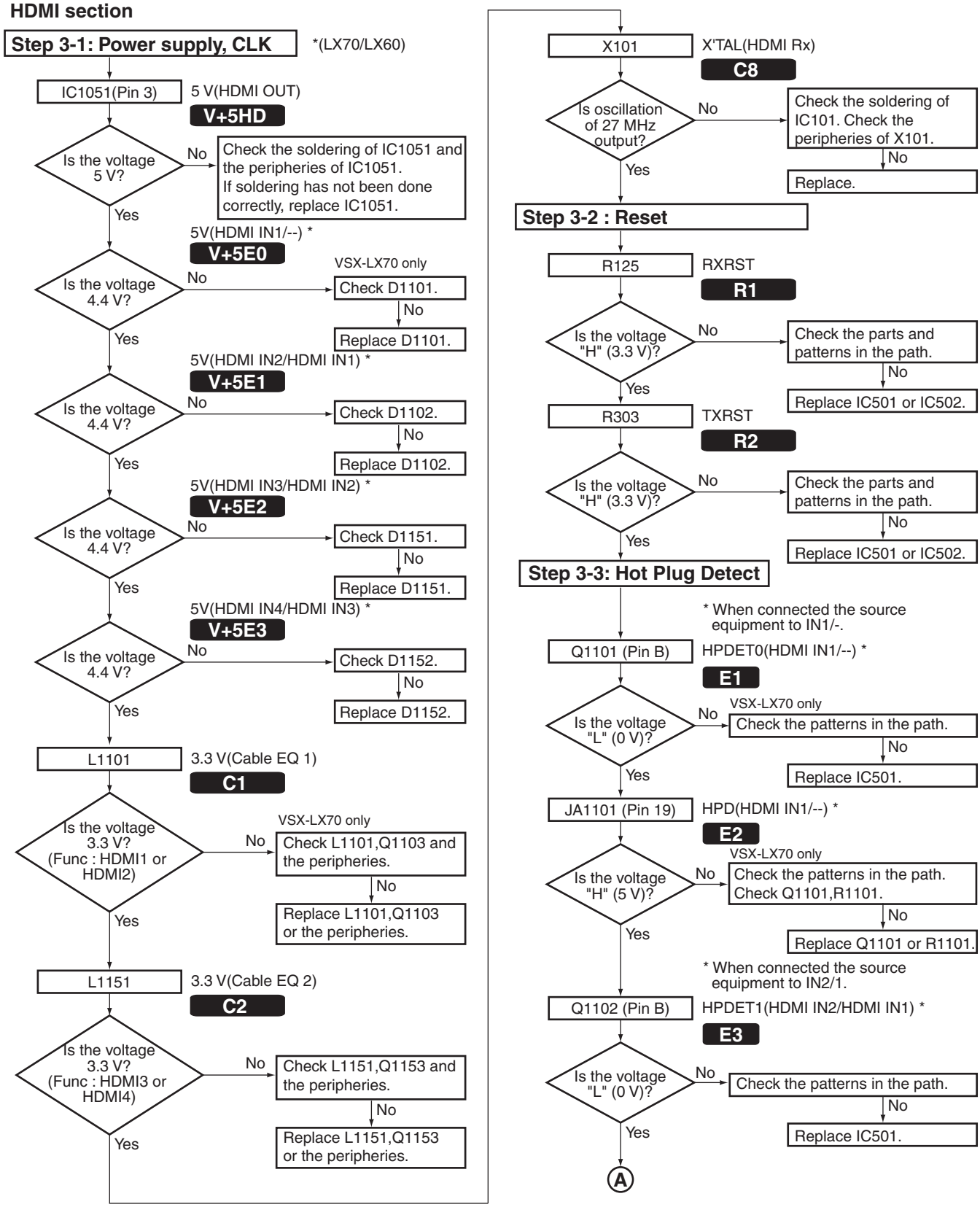
CN1001(Pin 23) — HDRST — **B2**

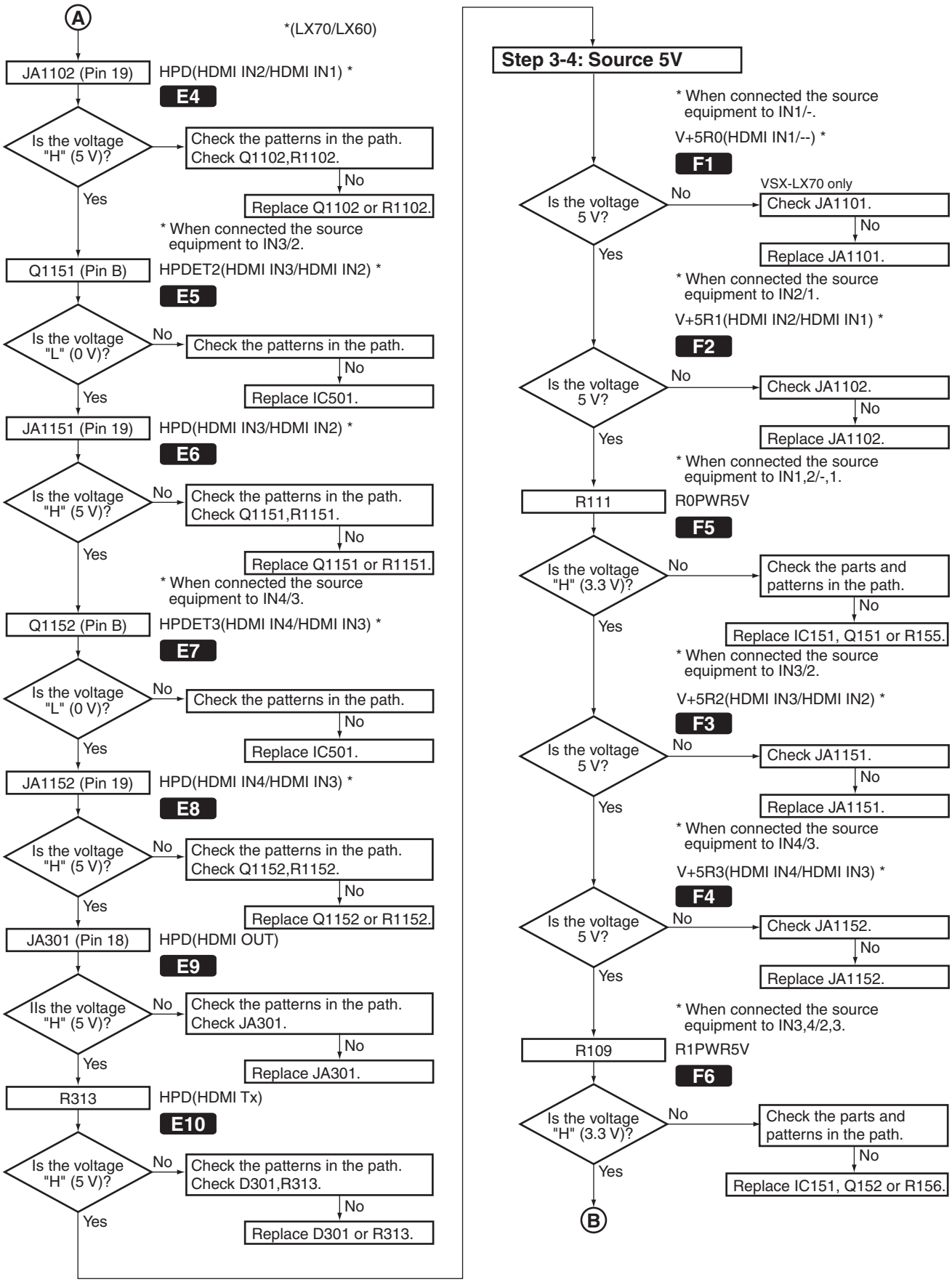
Is the voltage "H" (3.3 V)?
- No → Check the parts and patterns in the path.
  - No → Check the INTERFACE Assy or DIGITAL MOTHER Assy.
- Yes

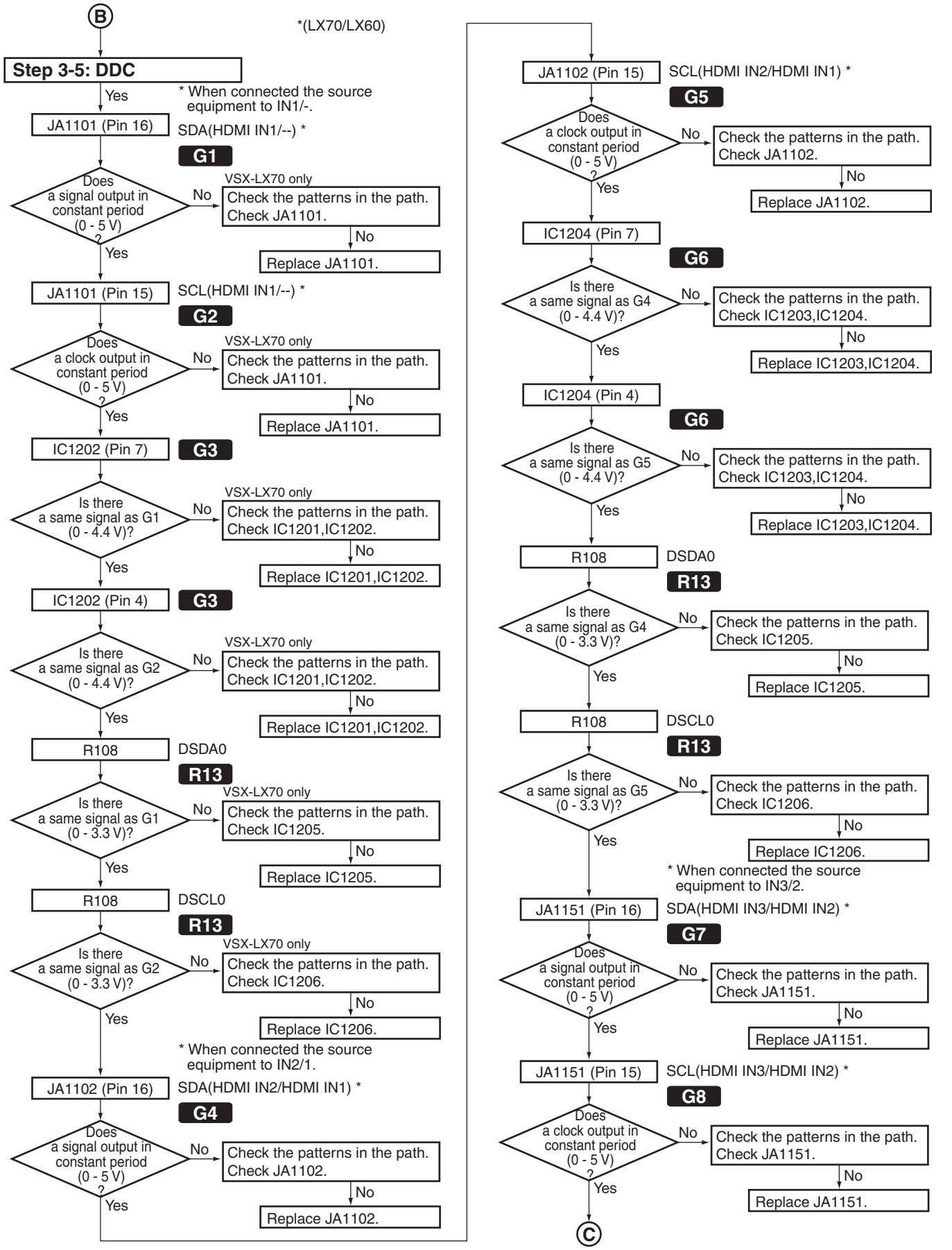
HDMI (HDMI input) diagnosis : To Step 3-1 → Scaler diagnosis : To Step 5-1

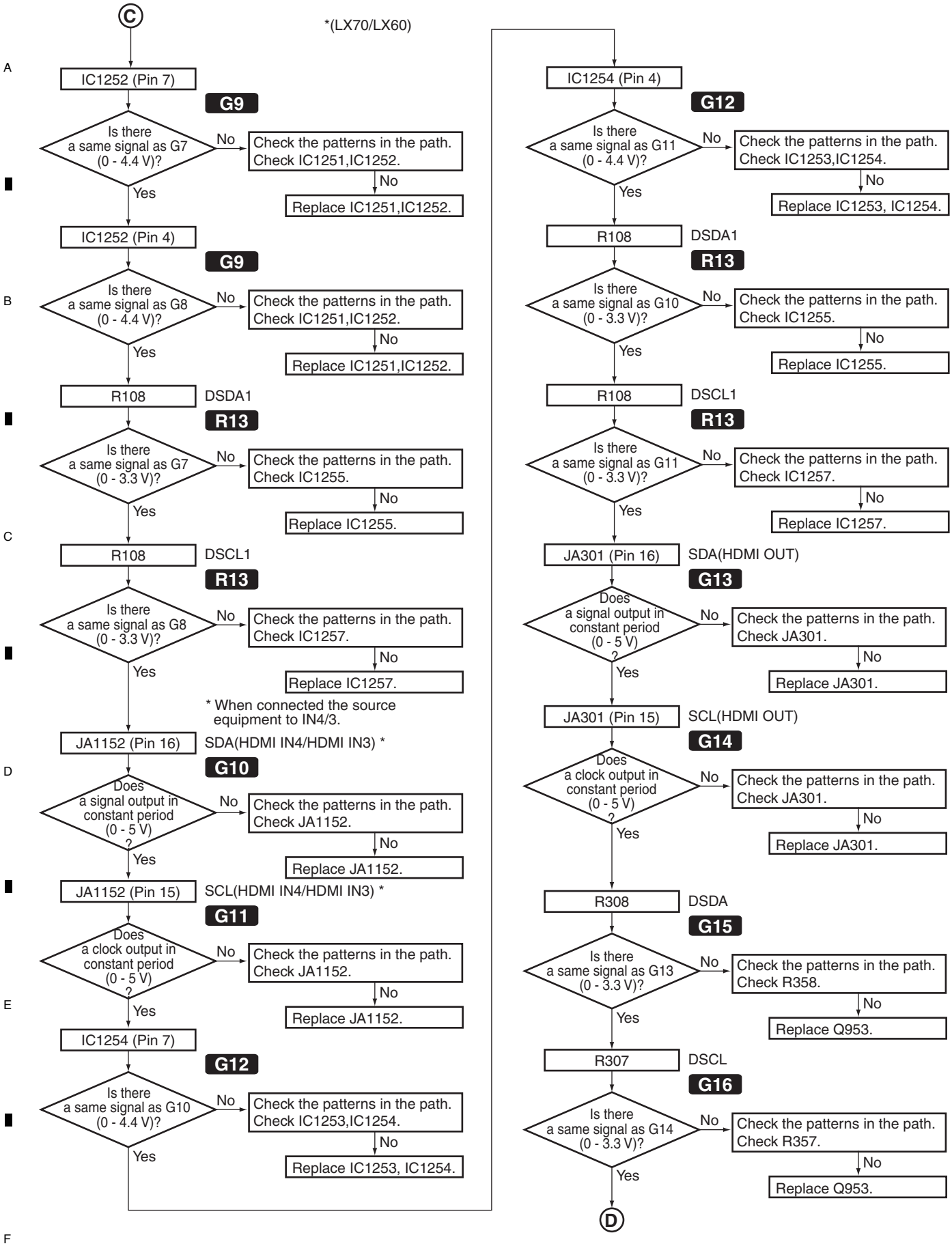
Video converter (Analog input) diagnosis : To Step 4-1 → Scaler diagnosis : To Step 5-1

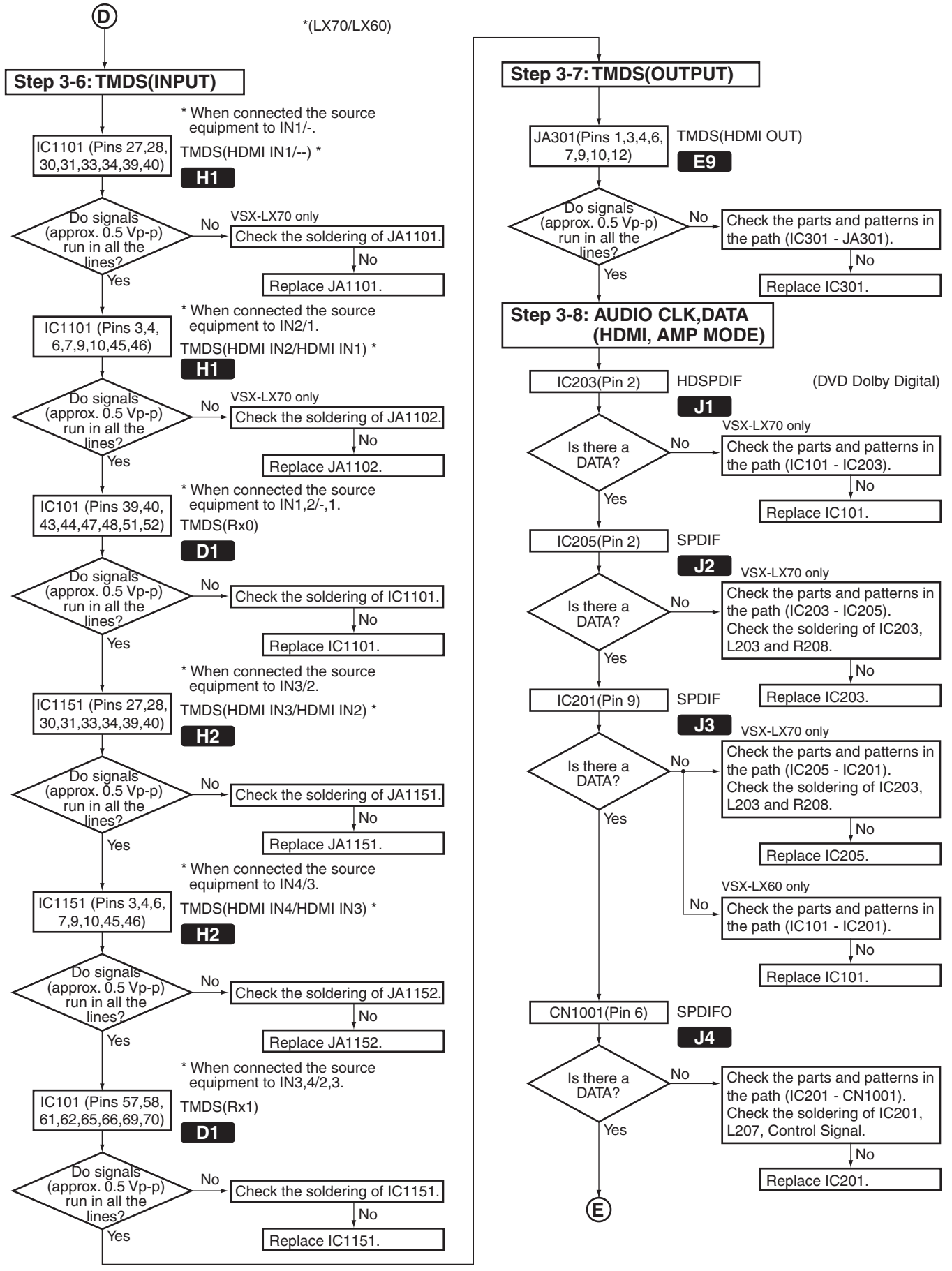
HDMI section

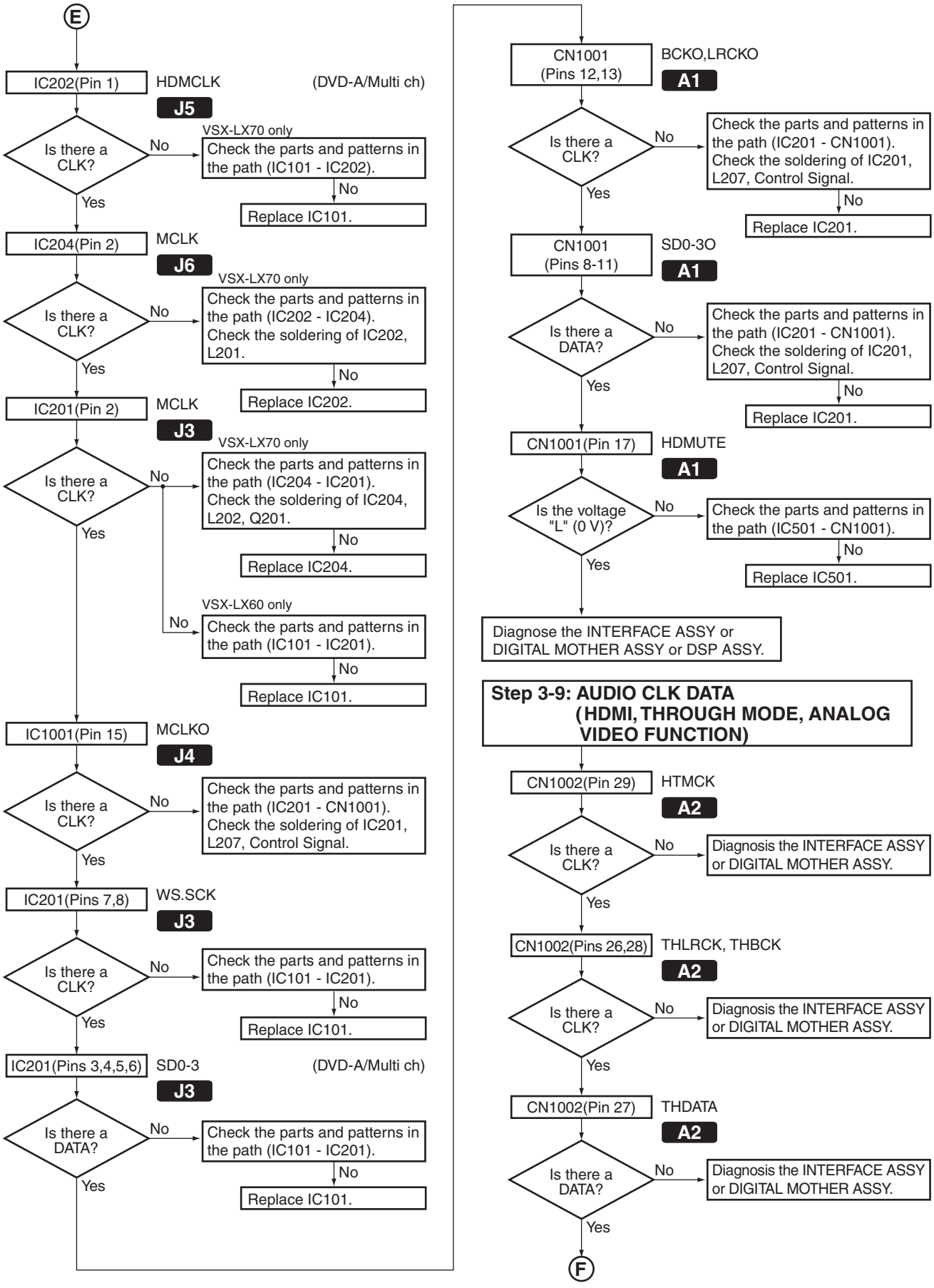


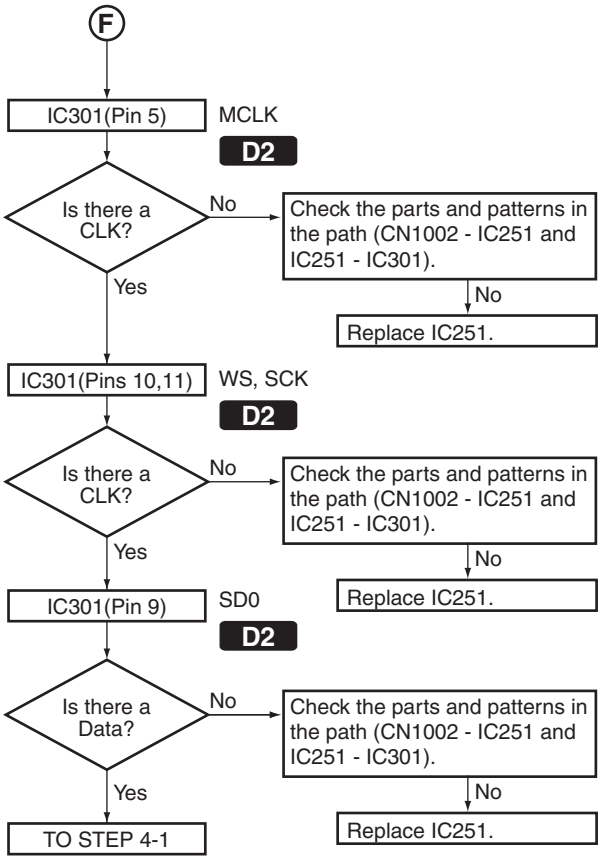

A
*(LX70/LX60)
JA1102 (Pin 19)
HPD(HDMI IN2/HDMI IN1) *
E4
Is the voltage "H" (5 V)?
Check the patterns in the path. Check Q1102,R1102.
No
Replace Q1102 or R1102.
Yes
* When connected the source equipment to IN3/2.
Q1151 (Pin B)
HPDET2(HDMI IN3/HDMI IN2) *
E5
Is the voltage "L" (0 V)?
No
Check the patterns in the path.
No
Replace IC501.
Yes
JA1151 (Pin 19)
HPD(HDMI IN3/HDMI IN2) *
E6
Is the voltage "H" (5 V)?
No
Check the patterns in the path. Check Q1151,R1151.
No
Replace Q1151 or R1151.
Yes
* When connected the source equipment to IN4/3.
Q1152 (Pin B)
HPDET3(HDMI IN4/HDMI IN3) *
E7
Is the voltage "L" (0 V)?
No
Check the patterns in the path.
No
Replace IC501.
Yes
JA1152 (Pin 19)
HPD(HDMI IN4/HDMI IN3) *
E8
Is the voltage "H" (5 V)?
No
Check the patterns in the path. Check Q1152,R1152.
No
Replace Q1152 or R1152.
Yes
JA301 (Pin 18)
HPD(HDMI OUT)
E9
IIs the voltage "H" (5 V)?
No
Check the patterns in the path. Check JA301.
No
Replace JA301.
Yes
R313
HPD(HDMI Tx)
E10
Is the voltage "H" (5 V)?
No
Check the patterns in the path. Check D301,R313.
No
Replace D301 or R313.
Yes
Step 3-4: Source 5V
* When connected the source equipment to IN1/-.
V+5R0(HDMI IN1/--) *
F1
Is the voltage 5 V?
No
VSX-LX70 only
Check JA1101.
No
Replace JA1101.
Yes
* When connected the source equipment to IN2/1.
V+5R1(HDMI IN2/HDMI IN1) *
F2
Is the voltage 5 V?
No
Check JA1102.
No
Replace JA1102.
Yes
* When connected the source equipment to IN1,2/-,1.
R111
R0PWR5V
F5
Is the voltage "H" (3.3 V)?
No
Check the parts and patterns in the path.
No
Replace IC151, Q151 or R155.
Yes
* When connected the source equipment to IN3/2.
V+5R2(HDMI IN3/HDMI IN2) *
F3
Is the voltage 5 V?
No
Check JA1151.
No
Replace JA1151.
Yes
* When connected the source equipment to IN4/3.
V+5R3(HDMI IN4/HDMI IN3) *
F4
Is the voltage 5 V?
No
Check JA1152.
No
Replace JA1152.
Yes
* When connected the source equipment to IN3,4/2,3.
R109
R1PWR5V
F6
Is the voltage "H" (3.3 V)?
No
Check the parts and patterns in the path.
No
Replace IC151, Q152 or R156.
Yes
B


B
*(LX70/LX60)
Step 3-5: DDC
Yes
* When connected the source equipment to IN1/-.
JA1101 (Pin 16)
SDA(HDMI IN1/--) *
G1
Does a signal output in constant period (0 - 5 V) ?
No
VSX-LX70 only
Check the patterns in the path. Check JA1101.
No
Replace JA1101.
Yes
JA1101 (Pin 15)
SCL(HDMI IN1/--) *
G2
Does a clock output in constant period (0 - 5 V) ?
No
VSX-LX70 only
Check the patterns in the path. Check JA1101.
No
Replace JA1101.
Yes
IC1202 (Pin 7)
G3
Is there a same signal as G1 (0 - 4.4 V)?
No
VSX-LX70 only
Check the patterns in the path. Check IC1201,IC1202.
No
Replace IC1201,IC1202.
Yes
IC1202 (Pin 4)
G3
Is there a same signal as G2 (0 - 4.4 V)?
No
VSX-LX70 only
Check the patterns in the path. Check IC1201,IC1202.
No
Replace IC1201,IC1202.
Yes
R108
DSDA0
R13
Is there a same signal as G1 (0 - 3.3 V)?
No
VSX-LX70 only
Check the patterns in the path. Check IC1205.
No
Replace IC1205.
Yes
R108
DSCL0
R13
Is there a same signal as G2 (0 - 3.3 V)?
No
VSX-LX70 only
Check the patterns in the path. Check IC1206.
No
Replace IC1206.
Yes
* When connected the source equipment to IN2/1.
JA1102 (Pin 16)
SDA(HDMI IN2/HDMI IN1) *
G4
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check JA1102.
No
Replace JA1102.
Yes
JA1102 (Pin 15)
SCL(HDMI IN2/HDMI IN1) *
G5
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check JA1102.
No
Replace JA1102.
Yes
IC1204 (Pin 7)
G6
Is there a same signal as G4 (0 - 4.4 V)?
No
Check the patterns in the path. Check IC1203,IC1204.
No
Replace IC1203,IC1204.
Yes
IC1204 (Pin 4)
G6
Is there a same signal as G5 (0 - 4.4 V)?
No
Check the patterns in the path. Check IC1203,IC1204.
No
Replace IC1203,IC1204.
Yes
R108
DSDA0
R13
Is there a same signal as G4 (0 - 3.3 V)?
No
Check the patterns in the path. Check IC1205.
No
Replace IC1205.
Yes
R108
DSCL0
R13
Is there a same signal as G5 (0 - 3.3 V)?
No
Check the patterns in the path. Check IC1206.
No
Replace IC1206.
Yes
* When connected the source equipment to IN3/2.
JA1151 (Pin 16)
SDA(HDMI IN3/HDMI IN2) *
G7
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check JA1151.
No
Replace JA1151.
Yes
JA1151 (Pin 15)
SCL(HDMI IN3/HDMI IN2) *
G8
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check JA1151.
No
Replace JA1151.
Yes
C

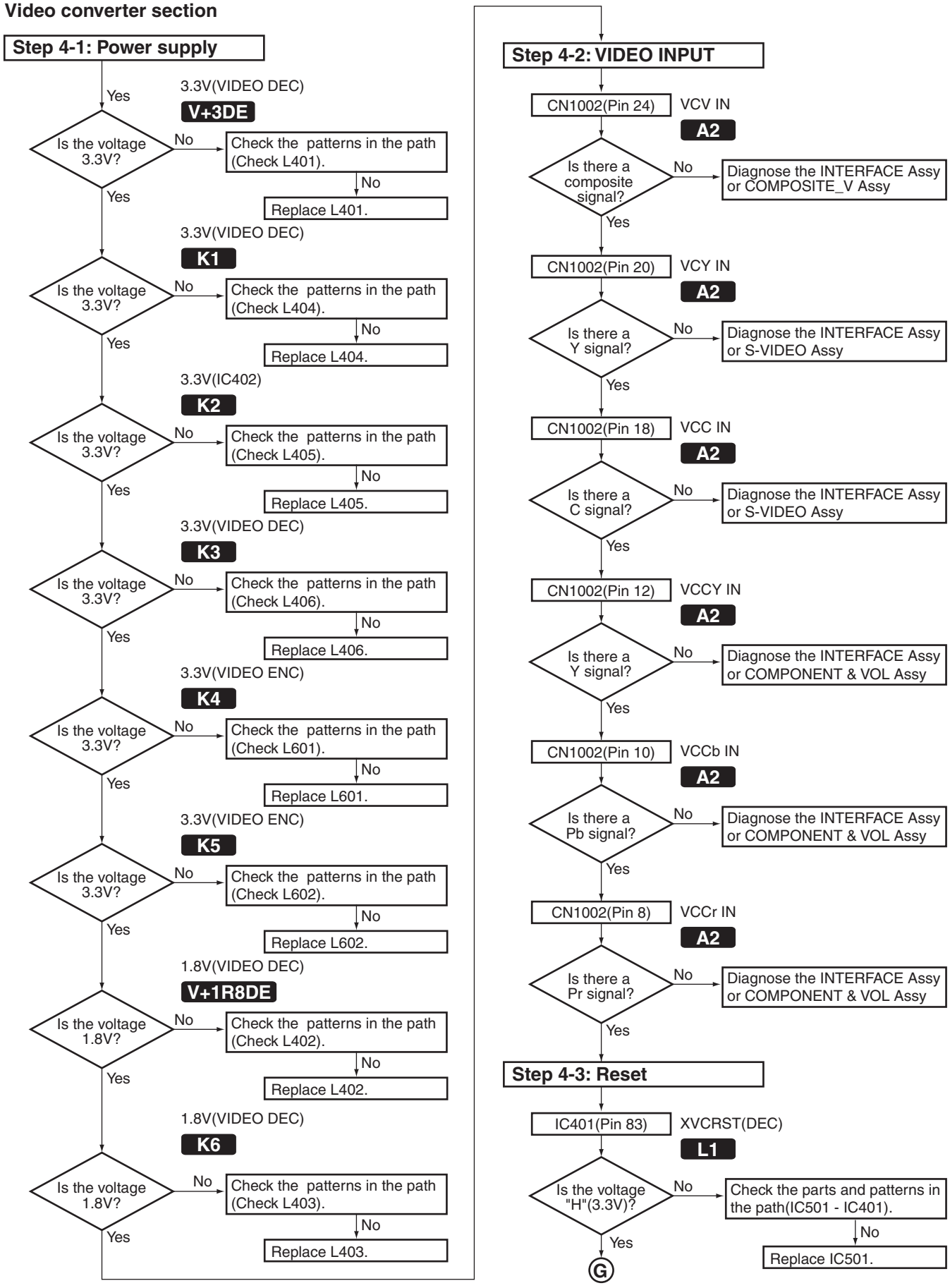

C
*(LX70/LX60)
IC1252 (Pin 7)
G9
Is there a same signal as G7 (0 - 4.4 V)?
No
Check the patterns in the path. Check IC1251,IC1252.
No
Replace IC1251,IC1252.
Yes
IC1252 (Pin 4)
G9
Is there a same signal as G8 (0 - 4.4 V)?
No
Check the patterns in the path. Check IC1251,IC1252.
No
Replace IC1251,IC1252.
Yes
R108
DSDA1
R13
Is there a same signal as G7 (0 - 3.3 V)?
No
Check the patterns in the path. Check IC1255.
No
Replace IC1255.
Yes
R108
DSCL1
R13
Is there a same signal as G8 (0 - 3.3 V)?
No
Check the patterns in the path. Check IC1257.
No
Replace IC1257.
Yes
* When connected the source equipment to IN4/3.
JA1152 (Pin 16)
SDA(HDMI IN4/HDMI IN3) *
G10
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check JA1152.
No
Replace JA1152.
Yes
JA1152 (Pin 15)
SCL(HDMI IN4/HDMI IN3) *
G11
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check JA1152.
No
Replace JA1152.
Yes
IC1254 (Pin 7)
G12
Is there a same signal as G10 (0 - 4.4 V)?
No
Check the patterns in the path. Check IC1253,IC1254.
No
Replace IC1253, IC1254.
Yes
IC1254 (Pin 4)
G12
Is there a same signal as G11 (0 - 4.4 V)?
No
Check the patterns in the path. Check IC1253,IC1254.
No
Replace IC1253, IC1254.
Yes
R108
DSDA1
R13
Is there a same signal as G10 (0 - 3.3 V)?
No
Check the patterns in the path. Check IC1255.
No
Replace IC1255.
Yes
R108
DSCL1
R13
Is there a same signal as G11 (0 - 3.3 V)?
No
Check the patterns in the path. Check IC1257.
No
Replace IC1257.
Yes
JA301 (Pin 16)
SDA(HDMI OUT)
G13
Does a signal output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check JA301.
No
Replace JA301.
Yes
JA301 (Pin 15)
SCL(HDMI OUT)
G14
Does a clock output in constant period (0 - 5 V) ?
No
Check the patterns in the path. Check JA301.
No
Replace JA301.
Yes
R308
DSDA
G15
Is there a same signal as G13 (0 - 3.3 V)?
No
Check the patterns in the path. Check R358.
No
Replace Q953.
Yes
R307
DSCL
G16
Is there a same signal as G14 (0 - 3.3 V)?
No
Check the patterns in the path. Check R357.
No
Replace Q953.
Yes
D

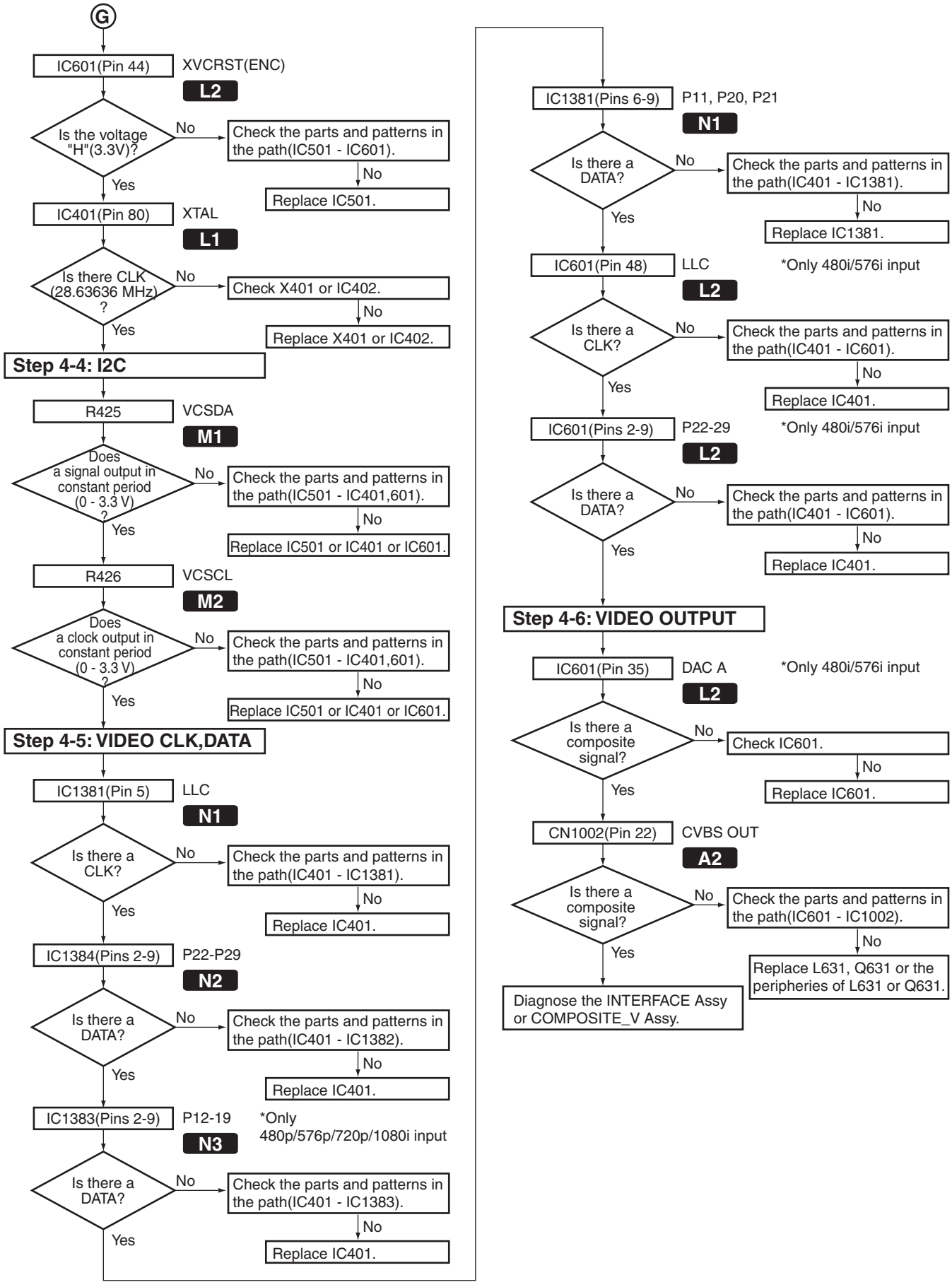

D
*(LX70/LX60)
Step 3-6: TMDS(INPUT)
* When connected the source equipment to IN1/-.
IC1101 (Pins 27,28, 30,31,33,34,39,40)
TMDS(HDMI IN1/--) *
H1
Do signals (approx. 0.5 Vp-p) run in all the lines?
No
VSX-LX70 only
Check the soldering of JA1101.
No
Replace JA1101.
Yes
* When connected the source equipment to IN2/1.
IC1101 (Pins 3,4, 6,7,9,10,45,46)
TMDS(HDMI IN2/HDMI IN1) *
H1
Do signals (approx. 0.5 Vp-p) run in all the lines?
No
VSX-LX70 only
Check the soldering of JA1102.
No
Replace JA1102.
Yes
* When connected the source equipment to IN1,2/-,1.
IC101 (Pins 39,40, 43,44,47,48,51,52)
TMDS(Rx0)
D1
Do signals (approx. 0.5 Vp-p) run in all the lines?
No
Check the soldering of IC1101.
No
Replace IC1101.
Yes
* When connected the source equipment to IN3/2.
IC1151 (Pins 27,28, 30,31,33,34,39,40)
TMDS(HDMI IN3/HDMI IN2) *
H2
Do signals (approx. 0.5 Vp-p) run in all the lines?
No
Check the soldering of JA1151.
No
Replace JA1151.
Yes
* When connected the source equipment to IN4/3.
IC1151 (Pins 3,4,6, 7,9,10,45,46)
TMDS(HDMI IN4/HDMI IN3) *
H2
Do signals (approx. 0.5 Vp-p) run in all the lines?
No
Check the soldering of JA1152.
No
Replace JA1152.
Yes
* When connected the source equipment to IN3,4/2,3.
IC101 (Pins 57,58, 61,62,65,66,69,70)
TMDS(Rx1)
D1
Do signals (approx. 0.5 Vp-p) run in all the lines?
No
Check the soldering of IC1151.
No
Replace IC1151.
Yes
Step 3-7: TMDS(OUTPUT)
JA301(Pins 1,3,4,6, 7,9,10,12)
TMDS(HDMI OUT)
E9
Do signals (approx. 0.5 Vp-p) run in all the lines?
No
Check the parts and patterns in the path (IC301 - JA301).
No
Replace IC301.
Yes
Step 3-8: AUDIO CLK,DATA (HDMI, AMP MODE)
IC203(Pin 2)
HDSPDIF
(DVD Dolby Digital)
J1
Is there a DATA?
No
VSX-LX70 only
Check the parts and patterns in the path (IC101 - IC203).
No
Replace IC101.
Yes
IC205(Pin 2)
SPDIF
J2
Is there a DATA?
No
VSX-LX70 only
Check the parts and patterns in the path (IC203 - IC205). Check the soldering of IC203, L203 and R208.
No
Replace IC203.
Yes
IC201(Pin 9)
SPDIF
J3
Is there a DATA?
No
VSX-LX70 only
Check the parts and patterns in the path (IC205 - IC201). Check the soldering of IC203, L203 and R208.
No
Replace IC205.
Yes
No
VSX-LX60 only
Check the parts and patterns in the path (IC101 - IC201).
No
Replace IC101.
CN1001(Pin 6)
SPDIFO
J4
Is there a DATA?
No
Check the parts and patterns in the path (IC201 - CN1001). Check the soldering of IC201, L207, Control Signal.
No
Replace IC201.
Yes
E

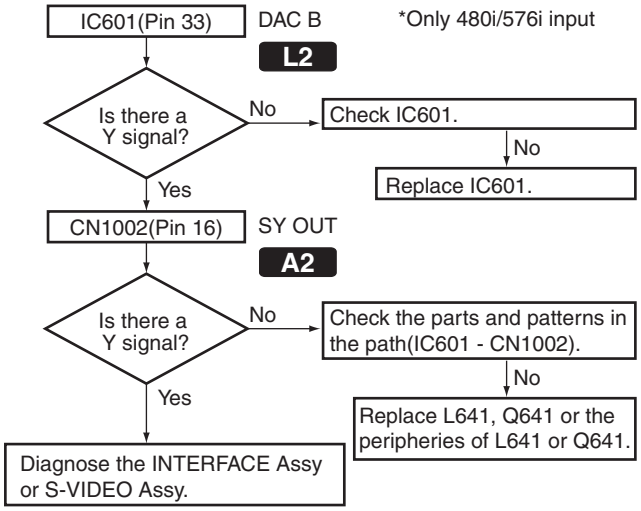

E
IC202(Pin 1)
HDMCLK
(DVD-A/Multi ch)
J5
Is there a CLK?
No
VSX-LX70 only
Check the parts and patterns in the path (IC101 - IC202).
No
Replace IC101.
Yes
IC204(Pin 2)
MCLK
J6
Is there a CLK?
No
VSX-LX70 only
Check the parts and patterns in the path (IC202 - IC204). Check the soldering of IC202, L201.
No
Replace IC202.
Yes
IC201(Pin 2)
MCLK
J3
Is there a CLK?
No
VSX-LX70 only
Check the parts and patterns in the path (IC204 - IC201). Check the soldering of IC204, L202, Q201.
No
Replace IC204.
Yes
No
VSX-LX60 only
Check the parts and patterns in the path (IC101 - IC201).
No
Replace IC101.
IC1001(Pin 15)
MCLKO
J4
Is there a CLK?
No
Check the parts and patterns in the path (IC201 - CN1001). Check the soldering of IC201, L207, Control Signal.
Yes
IC201(Pins 7,8)
WS.SCK
J3
Is there a CLK?
No
Check the parts and patterns in the path (IC101 - IC201).
No
Replace IC101.
Yes
IC201(Pins 3,4,5,6)
SD0-3
(DVD-A/Multi ch)
J3
Is there a DATA?
No
Check the parts and patterns in the path (IC101 - IC201).
No
Replace IC101.
Yes
CN1001 (Pins 12,13)
BCKO,LRCKO
A1
Is there a CLK?
No
Check the parts and patterns in the path (IC201 - CN1001). Check the soldering of IC201, L207, Control Signal.
No
Replace IC201.
Yes
CN1001 (Pins 8-11)
SD0-3O
A1
Is there a DATA?
No
Check the parts and patterns in the path (IC201 - CN1001). Check the soldering of IC201, L207, Control Signal.
No
Replace IC201.
Yes
CN1001(Pin 17)
HDMUTE
A1
Is the voltage "L" (0 V)?
No
Check the parts and patterns in the path (IC501 - CN1001).
No
Replace IC501.
Yes
Diagnose the INTERFACE ASSY or DIGITAL MOTHER ASSY or DSP ASSY.
Step 3-9: AUDIO CLK DATA (HDMI, THROUGH MODE, ANALOG VIDEO FUNCTION)
CN1002(Pin 29)
HTMCK
A2
Is there a CLK?
No
Diagnosis the INTERFACE ASSY or DIGITAL MOTHER ASSY.
Yes
CN1002(Pins 26,28)
THLRCK, THBCK
A2
Is there a CLK?
No
Diagnosis the INTERFACE ASSY or DIGITAL MOTHER ASSY.
Yes
CN1002(Pin 27)
THDATA
A2
Is there a DATA?
No
Diagnosis the INTERFACE ASSY or DIGITAL MOTHER ASSY.
Yes
F

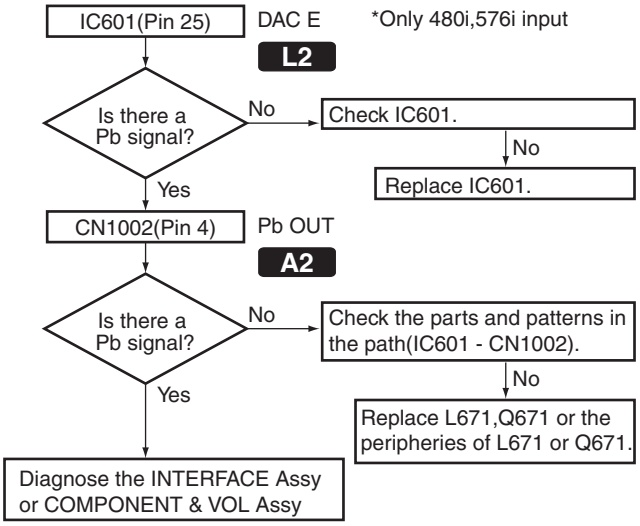

F
IC301(Pin 5)
MCLK
D2
Is there a CLK?
No
Check the parts and patterns in the path (CN1002 - IC251 and IC251 - IC301).
No
Replace IC251.
Yes
IC301(Pins 10,11)
WS, SCK
D2
Is there a CLK?
No
Check the parts and patterns in the path (CN1002 - IC251 and IC251 - IC301).
No
Replace IC251.
Yes
IC301(Pin 9)
SD0
D2
Is there a Data?
No
Check the parts and patterns in the path (CN1002 - IC251 and IC251 - IC301).
No
Replace IC251.
Yes
TO STEP 4-1

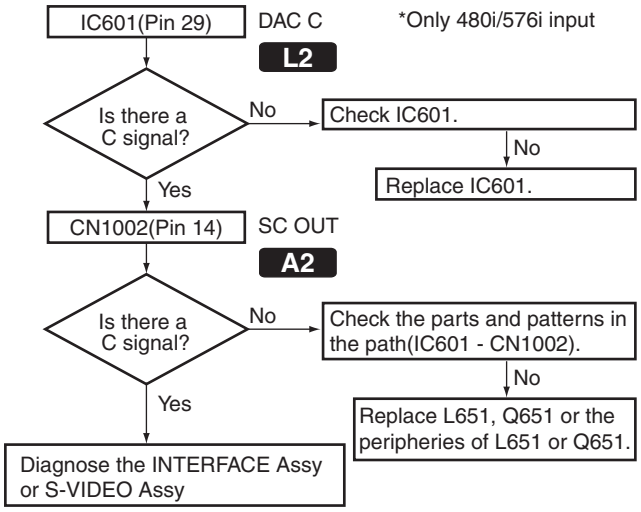
Video converter section

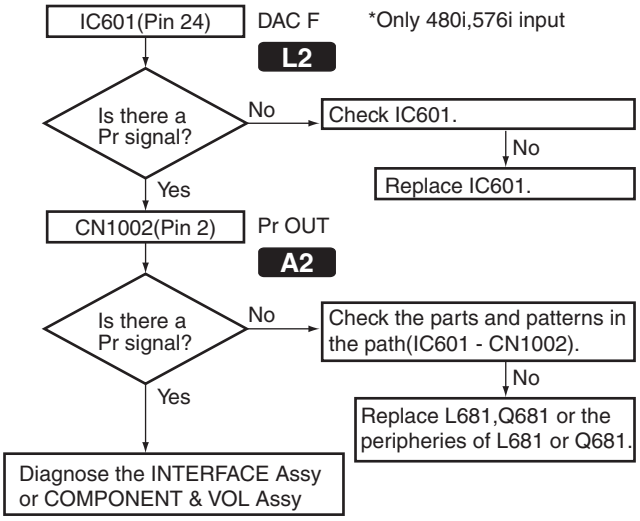


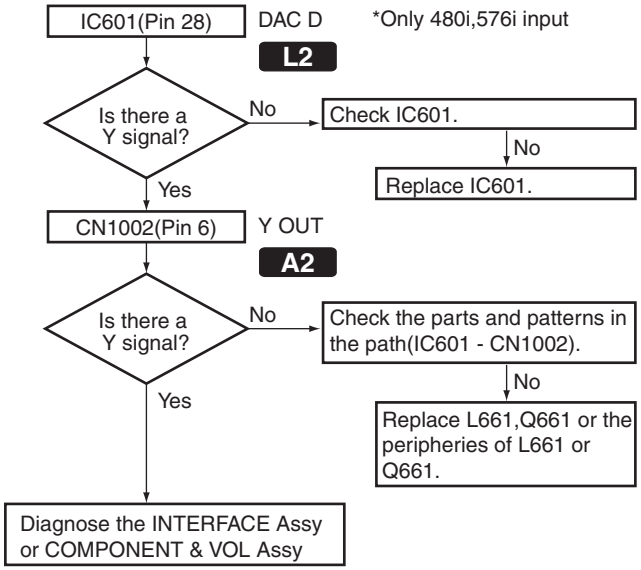

G
IC601(Pin 44)
XVCRST(ENC)
L2
Is the voltage "H"(3.3V)?
No
Check the parts and patterns in the path(IC501 - IC601).
No
Replace IC501.
Yes
IC401(Pin 80)
XTAL
L1
Is there CLK (28.63636 MHz) ?
No
Check X401 or IC402.
No
Replace X401 or IC402.
Yes
Step 4-4: I2C
R425
VCSDA
M1
Does a signal output in constant period (0 - 3.3 V) ?
No
Check the parts and patterns in the path(IC501 - IC401,601).
No
Replace IC501 or IC401 or IC601.
Yes
R426
VCSCL
M2
Does a clock output in constant period (0 - 3.3 V) ?
No
Check the parts and patterns in the path(IC501 - IC401,601).
No
Replace IC501 or IC401 or IC601.
Yes
Step 4-5: VIDEO CLK,DATA
IC1381(Pin 5)
LLC
N1
Is there a CLK?
No
Check the parts and patterns in the path(IC401 - IC1381).
No
Replace IC401.
Yes
IC1384(Pins 2-9)
P22-P29
N2
Is there a DATA?
No
Check the parts and patterns in the path(IC401 - IC1382).
No
Replace IC401.
Yes
IC1383(Pins 2-9)
P12-19
*Only 480p/576p/720p/1080i input
N3
Is there a DATA?
No
Check the parts and patterns in the path(IC401 - IC1383).
No
Replace IC401.
Yes
IC1381(Pins 6-9)
P11, P20, P21
N1
Is there a DATA?
No
Check the parts and patterns in the path(IC401 - IC1381).
No
Replace IC1381.
Yes
IC601(Pin 48)
LLC
*Only 480i/576i input
L2
Is there a CLK?
No
Check the parts and patterns in the path(IC401 - IC601).
No
Replace IC401.
Yes
IC601(Pins 2-9)
P22-29
*Only 480i/576i input
L2
Is there a DATA?
No
Check the parts and patterns in the path(IC401 - IC601).
No
Replace IC401.
Yes
Step 4-6: VIDEO OUTPUT
IC601(Pin 35)
DAC A
*Only 480i/576i input
L2
Is there a composite signal?
No
Check IC601.
No
Replace IC601.
Yes
CN1002(Pin 22)
CVBS OUT
A2
Is there a composite signal?
No
Check the parts and patterns in the path(IC601 - IC1002).
No
Replace L631, Q631 or the peripheries of L631 or Q631.
Yes
Diagnose the INTERFACE Assy or COMPOSITE_V Assy.


IC601(Pin 33)
DAC B
*Only 480i/576i input
L2
Is there a Y signal?
No
Check IC601.
No
Replace IC601.
Yes
CN1002(Pin 16)
SY OUT
A2
Is there a Y signal?
No
Check the parts and patterns in the path(IC601 - CN1002).
No
Replace L641, Q641 or the peripheries of L641 or Q641.
Yes
Diagnose the INTERFACE Assy or S-VIDEO Assy.

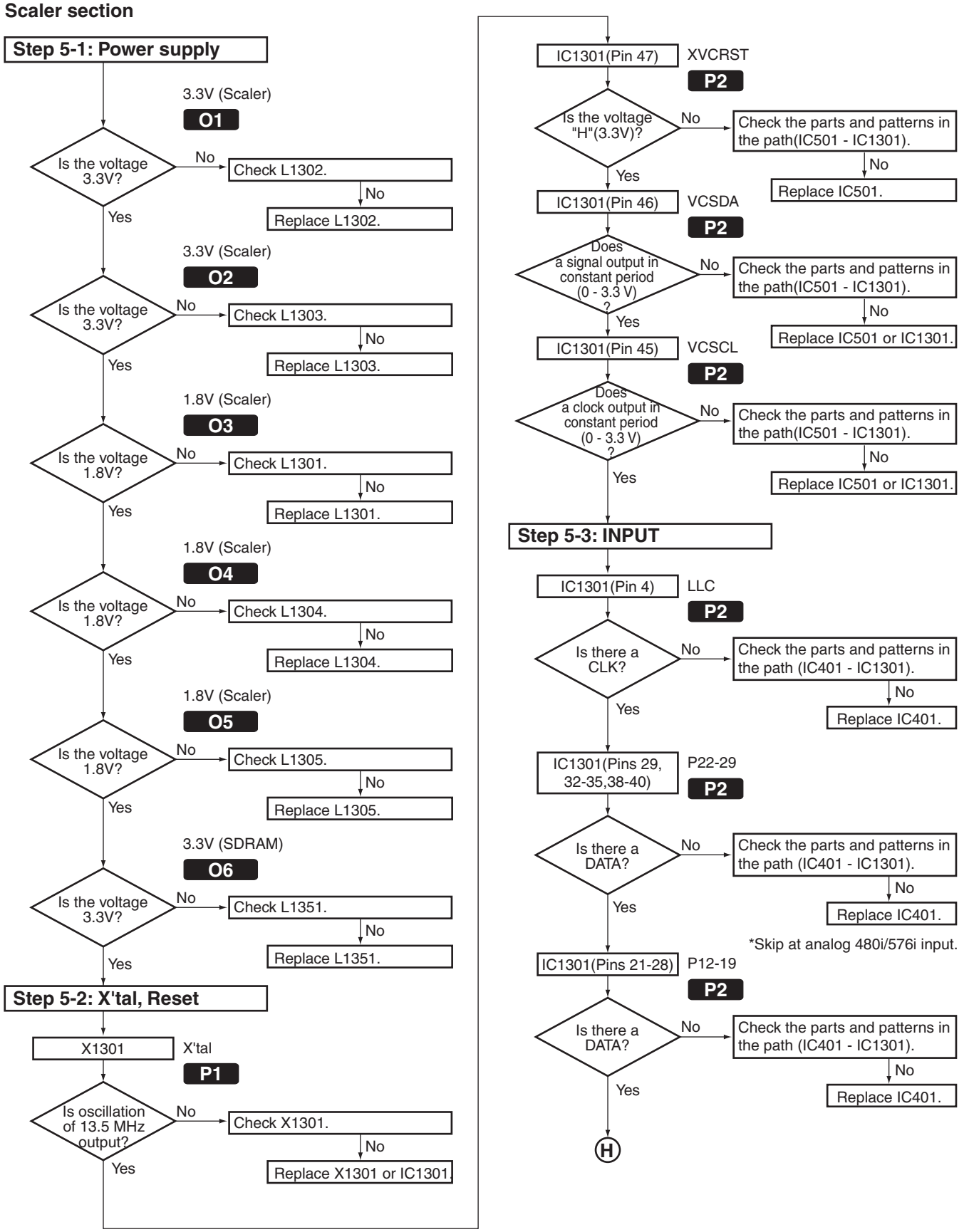

IC601(Pin 25)
DAC E
*Only 480i,576i input
L2
Is there a Pb signal?
No
Check IC601.
No
Replace IC601.
Yes
CN1002(Pin 4)
Pb OUT
A2
Is there a Pb signal?
No
Check the parts and patterns in the path(IC601 - CN1002).
No
Replace L671,Q671 or the peripheries of L671 or Q671.
Yes
Diagnose the INTERFACE Assy or COMPONENT & VOL Assy

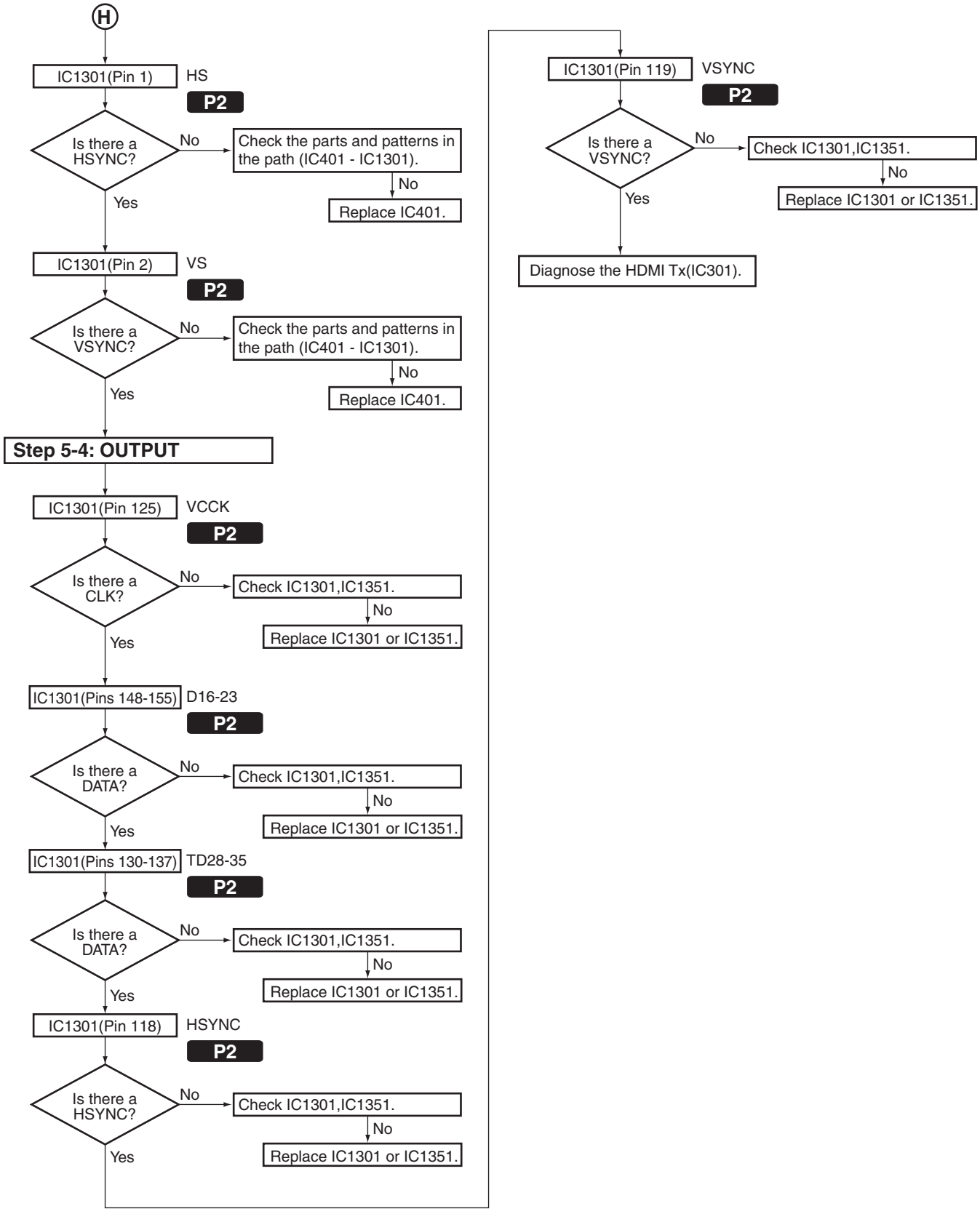

IC601(Pin 29)
DAC C
*Only 480i/576i input
L2
Is there a C signal?
No
Check IC601.
No
Replace IC601.
Yes
CN1002(Pin 14)
SC OUT
A2
Is there a C signal?
No
Check the parts and patterns in the path(IC601 - CN1002).
No
Replace L651, Q651 or the peripheries of L651 or Q651.
Yes
Diagnose the INTERFACE Assy or S-VIDEO Assy


IC601(Pin 24)
DAC F
*Only 480i,576i input
L2
Is there a Pr signal?
No
Check IC601.
No
Replace IC601.
Yes
CN1002(Pin 2)
Pr OUT
A2
Is there a Pr signal?
No
Check the parts and patterns in the path(IC601 - CN1002).
No
Replace L681,Q681 or the peripheries of L681 or Q681.
Yes
Diagnose the INTERFACE Assy or COMPONENT & VOL Assy


IC601(Pin 28)
DAC D
*Only 480i,576i input
L2
Is there a Y signal?
No
Check IC601.
No
Replace IC601.
Yes
CN1002(Pin 6)
Y OUT
A2
Is there a Y signal?
No
Check the parts and patterns in the path(IC601 - CN1002).
No
Replace L661,Q661 or the peripheries of L661 or Q661.
Yes
Diagnose the INTERFACE Assy or COMPONENT & VOL Assy

Scaler section



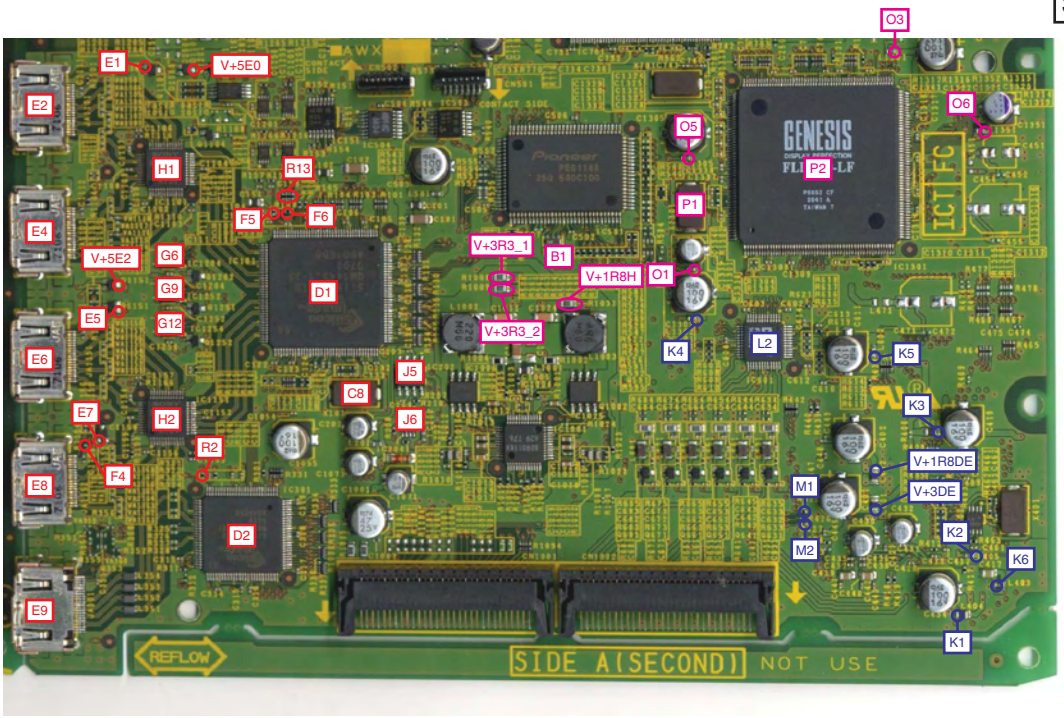

H
IC1301(Pin 1)
HS
P2
Is there a HSYNC?
No
Check the parts and patterns in the path (IC401 - IC1301).
No
Replace IC401.
Yes
IC1301(Pin 2)
VS
P2
Is there a VSYNC?
No
Check the parts and patterns in the path (IC401 - IC1301).
No
Replace IC401.
Yes
Step 5-4: OUTPUT
IC1301(Pin 125)
VCCK
P2
Is there a CLK?
No
Check IC1301,IC1351.
No
Replace IC1301 or IC1351.
Yes
IC1301(Pins 148-155)
D16-23
P2
Is there a DATA?
No
Check IC1301,IC1351.
No
Replace IC1301 or IC1351.
Yes
IC1301(Pins 130-137)
TD28-35
P2
Is there a DATA?
No
Check IC1301,IC1351.
No
Replace IC1301 or IC1351.
Yes
IC1301(Pin 118)
HSYNC
P2
Is there a HSYNC?
No
Check IC1301,IC1351.
No
Replace IC1301 or IC1351.
Yes
IC1301(Pin 119)
VSYNC
P2
Is there a VSYNC?
No
Check IC1301,IC1351.
No
Replace IC1301 or IC1351.
Yes
Diagnose the HDMI Tx(IC301).

■ HDMI & DLNA Assy Check Points

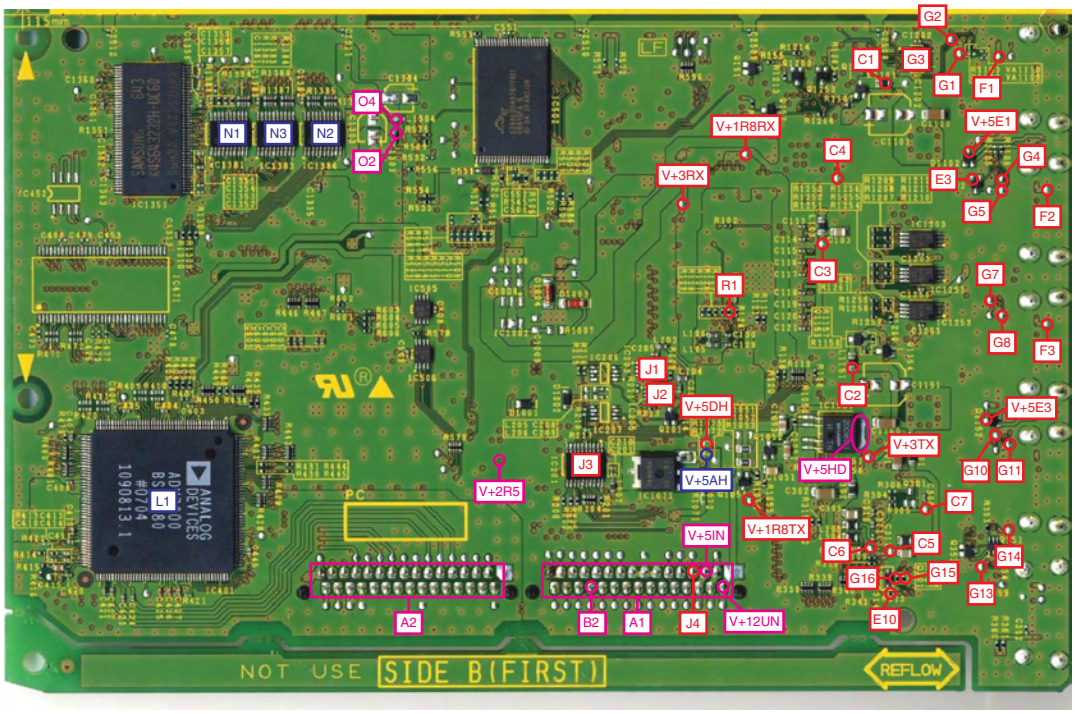
AJ HDMI & DLNA ASSY

Commonness HDMI Video Converter

SIDE A

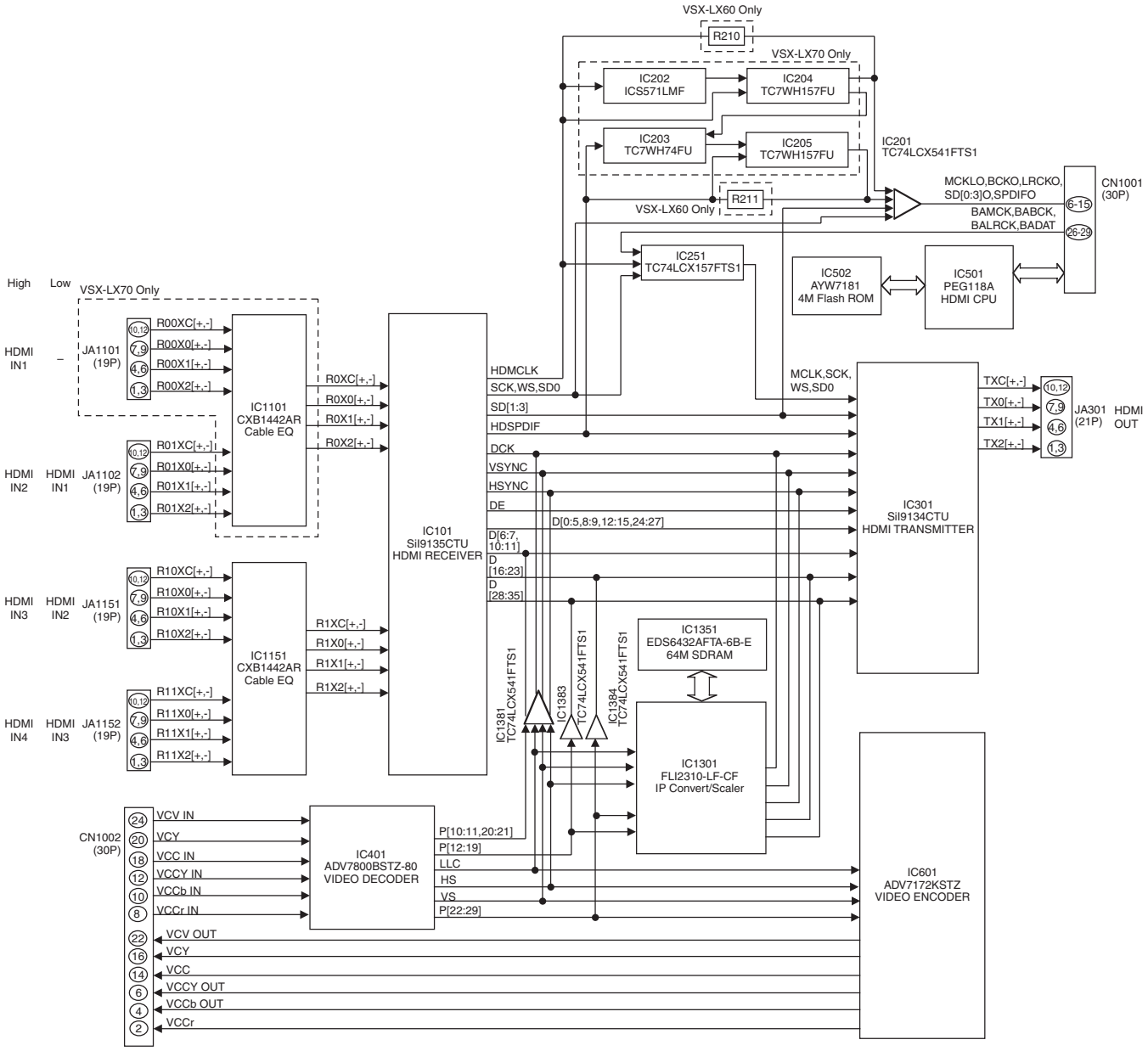


SIDE B



Note : The above photograph is VSX-LX70. HDMI/DVC block of VSX-LX60 is the same layout.

■ HDMI & DVC Block Diagram



Note : The above Block Diagram is VSX-LX60. HDMI/DVC block of VSX-LX70 is the same layout.

5.1.3 DIAGNOSIS OF THE NETWORK BLOCK

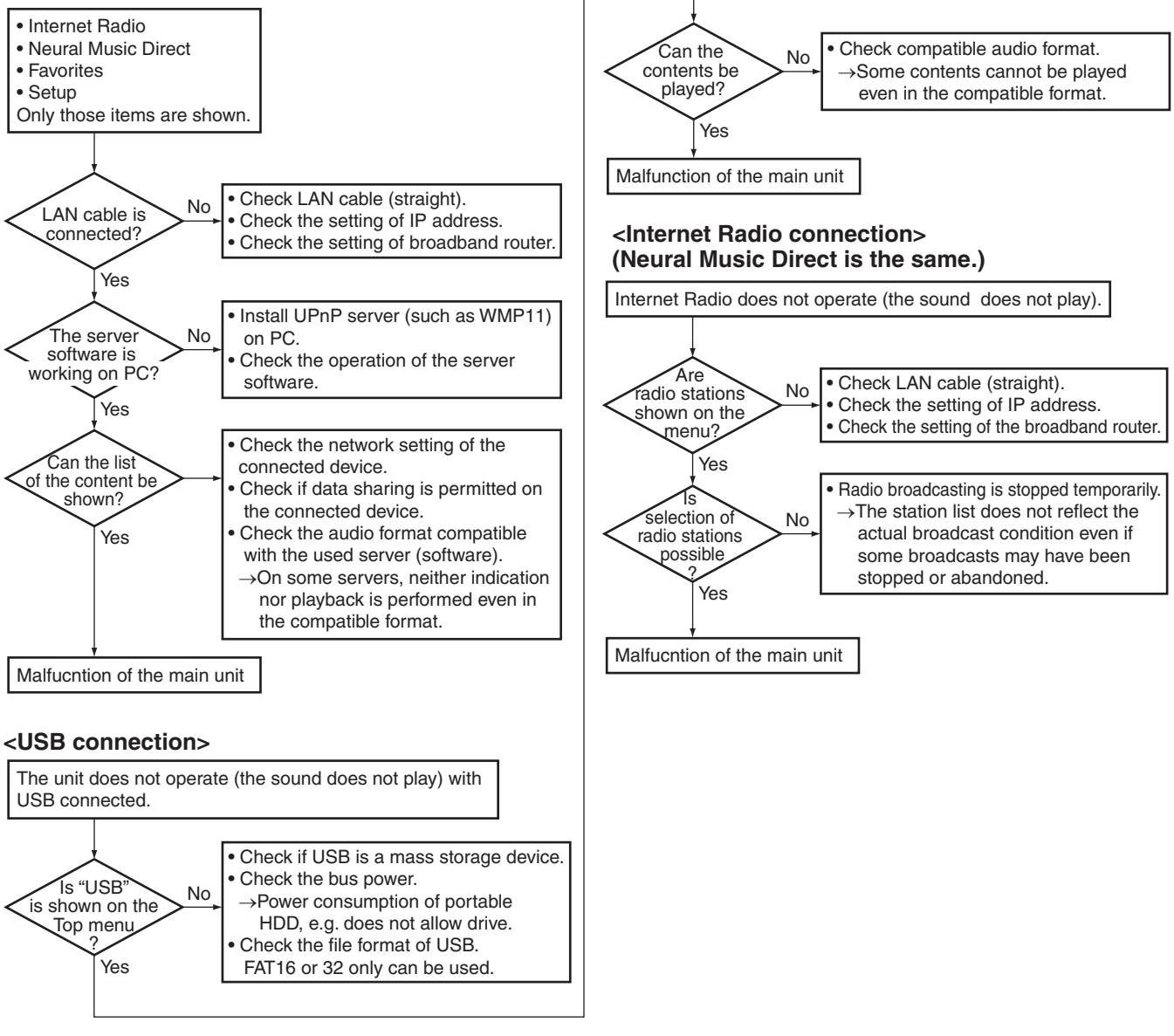
1.Constitution of network function

CD --- ..... -- HDMI4 ---- HOME MEDIA GALLERY

- USB
- Internet Radio
- Neural Music Direct → Internet radio run by Neural
- Servier1
- Servier2
- Servier3
- Favorites
- Setup
  - Information
    - Firmware Version → Indicates the version of the firmware.
    - MAC Address → Indicates MAC Address.
    - IP Address → Indicates IP Address.
    - Gateway IP → Indicates Gateway IP.
    - Proxy Server → Indicates if Proxy Server is valid or invalid.
    - Subnet Mask → Indicates Subnet Mask.
  - Network Setup

2.Flow chart for isolation of network malfunction

<Network connection>

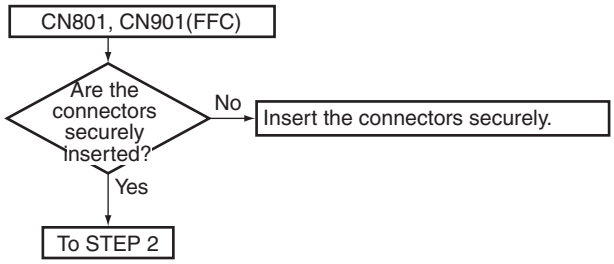


<Internet Radio connection>
(Neural Music Direct is the same.)

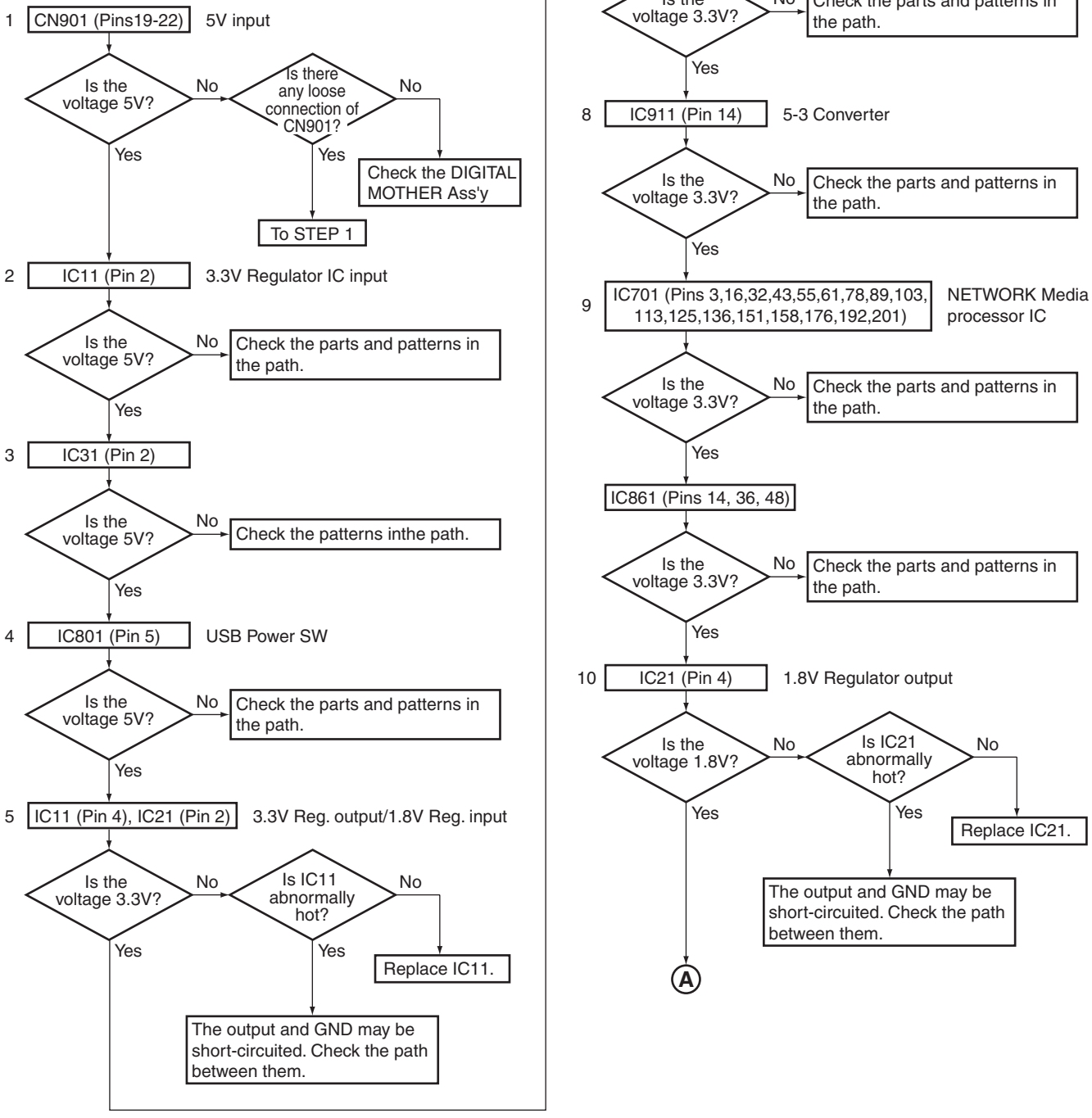
<USB connection>

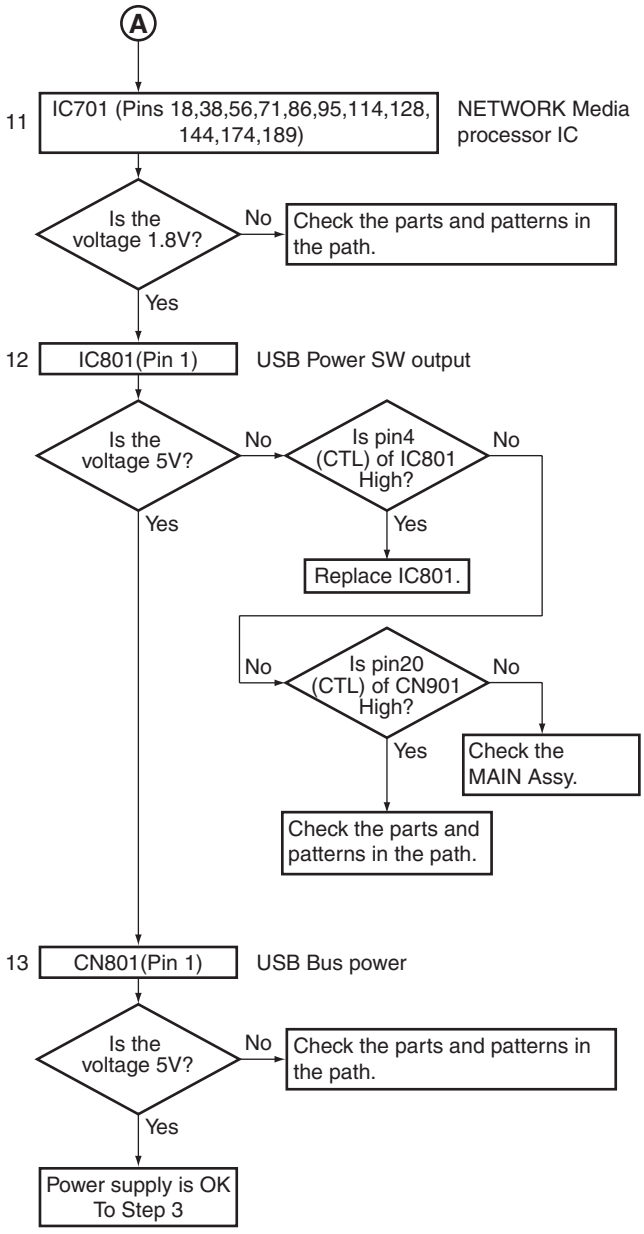
■TROUBLESHOOTING THE NETWORK BLOCK

Step 1:Connectors



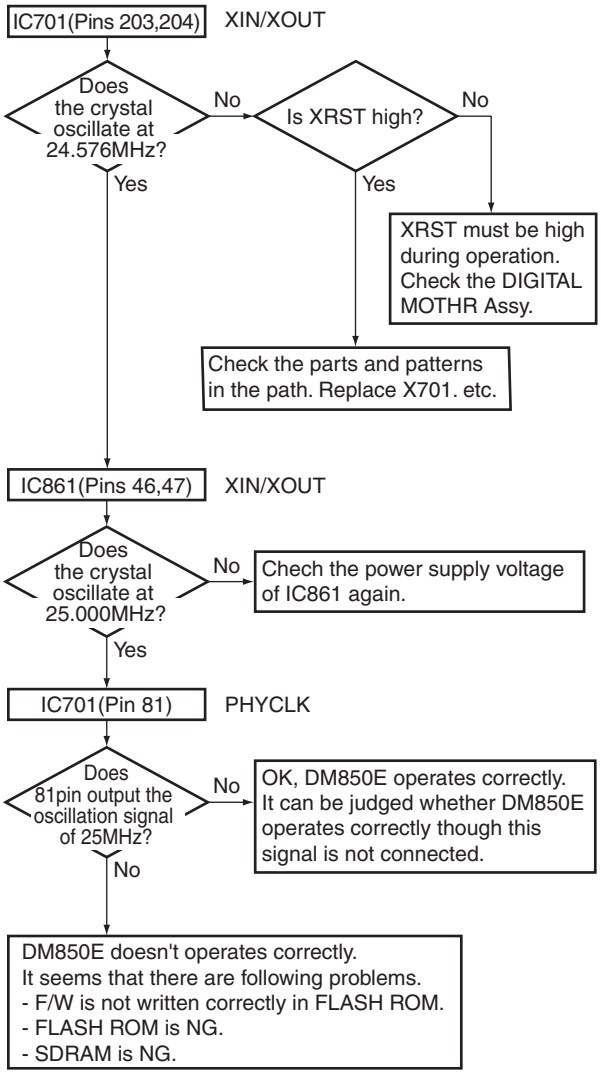
Step 2:Power supply





Step 3:Operation of Network Media processor IC

*Please confirm it with the USB memory that saved the music content.



Step 4 : Communication between DM850E and System CPU

The signal shown by following fig are communication line of DM850E and main CPU(IC101).
Confirm the connection of the signals along these routes.

fig. 1

	CN901	IC911 (5V→3V)		IC701
XRST	Pin 1	Pin 12	Pin 11	Pin 190
SPI CS	Pin 10	Pin 2	Pin 3	Pin 143
SPI CLK	Pin 3	Pin 5	Pin 6	Pin 141
SPI TX	Pin 8	Pin 9	Pin 8	Pin 147

fig. 2

	IC701	IC921 (3V→5V)		CN901
SPI RX	Pin 146	Pin 9	Pin 8	Pin 7
SPI REQ	Pin 100	Pin 5	Pin 6	Pin 9

Step 5 :Communication between DM850E and System CPU

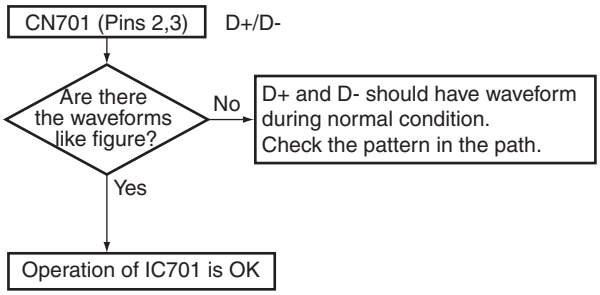
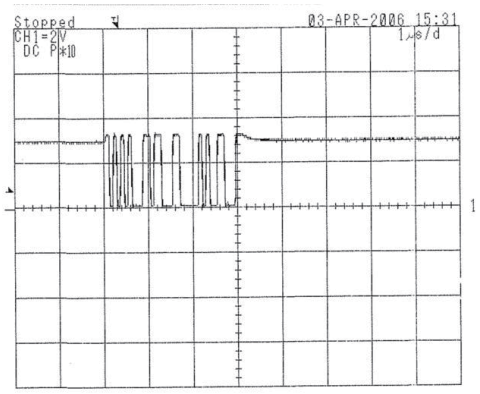
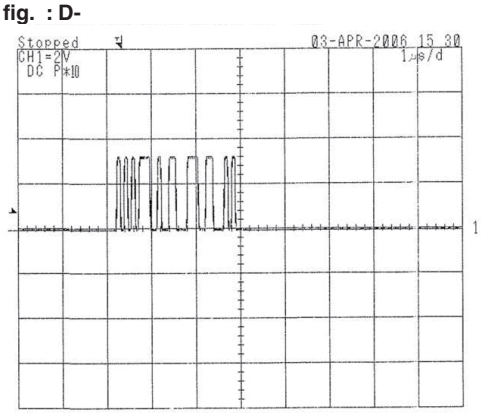


fig. : D+



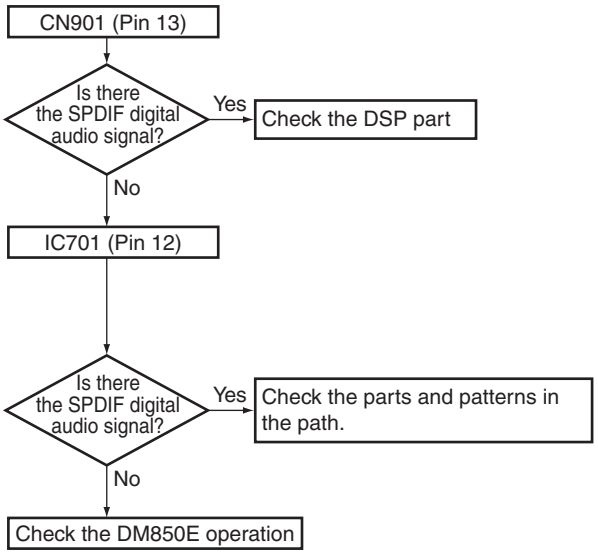
X : 1usec/div, Y : 2V/div

fig. : D-



X : 1usec/div, Y : 2V/div

Step 6 : Audio Output



<Additional information>

- An IC having data (MAC addresses, Favorite and Details etc. that users have changed) on the network (Home Media Gallery) is IC881 (AYW7185).

- How to confirm the network connection

  Set to “Home Media Gallery” entry → Select ”Set up” from home menu → Select ”Network Setup” with ↑↓ Key →
  When “Network Connection Network Found” is displayed, the network can be connected.
  When “Network Connection No Network Found” is displayed, the network cannot be connected.
  → Check the router setting or LAN connection.

5.1.4 USB Assy (VSX-LX60)

■ Description of Error Indications

FL Display	Error Content	Possible causes and actions to be taken
USB ERROR1	Detection of overcurrent to a USB device	Overcurrent (500 mA or more) is consumed at the connected USB device. • Some USB devices, such as a portable HDD, need more current than that this unit supplies. (Use the AC adaptor for the connected USB device.) • The USB power is short-circuited.
USB ERROR2	Detection of a medium not supported	A USB device that this unit does not support (other than the Mass Storage Class) is connected (such as a mouse, printer, or digital camera). • Connect a mass storage class USB device.
USB ERROR3	Communication error with the system microcomputer	Communication between TCC8600-00X-EA-UG (IC701) and PEG378A (IC101) failed. • Defective connection (connectors) inside this unit • See STEP 3 of Troubleshooting.

■ Operations when overcurrent to a USB device is detected

(1) Overcurrent to a USB device is detected at the port for the microcomputer.

(2) The power supply to the USB device is stopped.

(3) Control of 5 V power is disabled at the port for the microcomputer.

(4) Change of indications on the FL display

Flashes for 2 sec.

U S B E R R 1

⇩ Lights up after flashing for 2 sec.

U S B E R R 1

(5) To supply power to the USB module again:

- Turn the power to the unit off then back on.
- Set the function setting to anything other than USB then back to USB.
- Press the USB play key on the remote control unit.

(6) After overcurrent is detected, if the USB play key is pressed while the error indication is displayed, power supply to the USB module is restored. If overcurrent is no longer detected, the indications shown below are displayed (normal indication):

U S B

In this state, flashing of "USB ERROR1" stops, but playback will not start. To start playback, press the USB play key again.

In the above case, if overcurrent is detected again, the above procedures 1 through 4 are repeated.

■ In a case where a medium not supported is connected

(1) Change of indications on the FL displays

Flashes for 2 sec.

U S B E R R 2

⇩ Lights up after flashing for 2 sec.

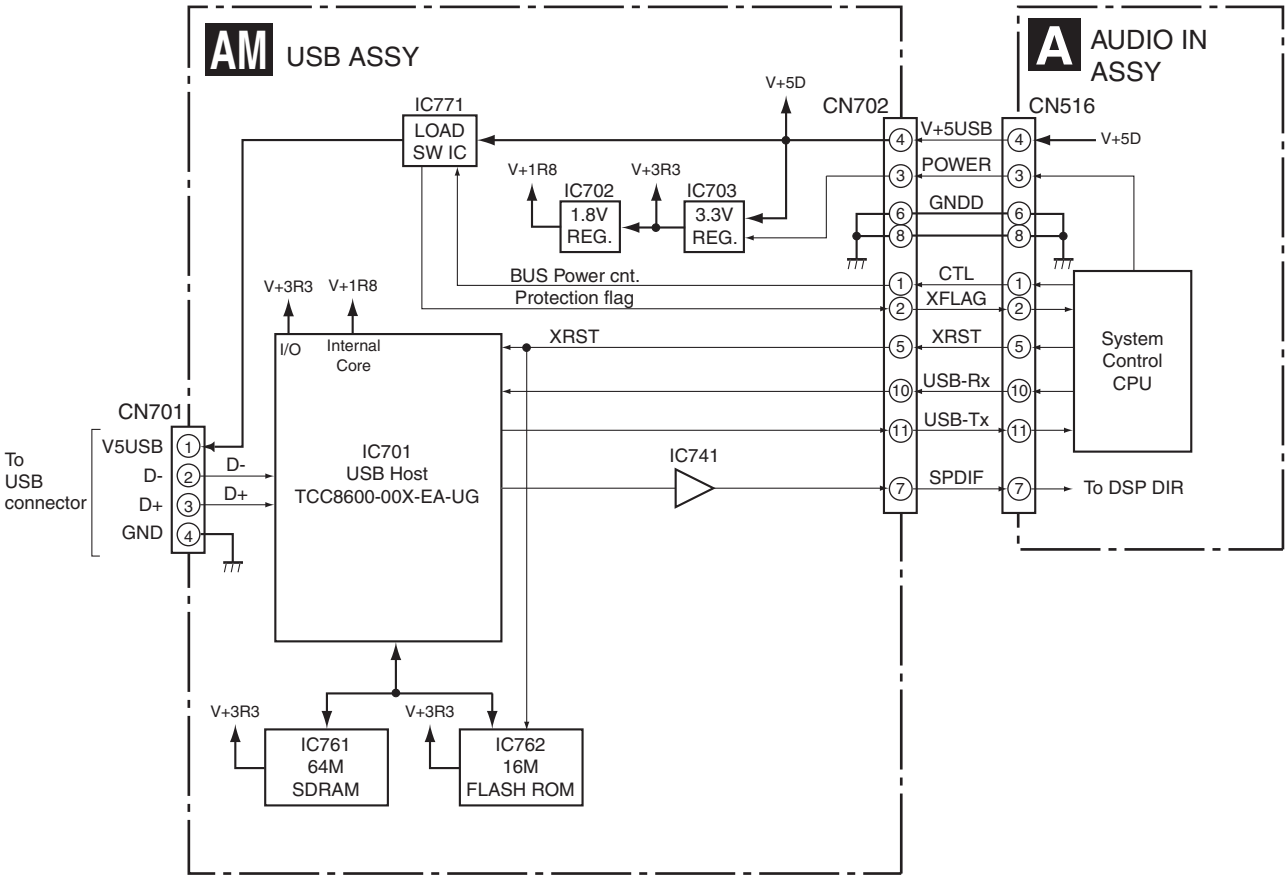
U S B E R R 2

If overcurrent is detected before detection of a non-supported medium, the error indication "USB ERROR1" remains, as the power supply to the USB module is stopped.

On supported media

The formats of supported media that can be played back on this unit are MP3, WMA, and AAC.
Some media in MPEG4 can also be played back. As AAC derives from MPEG4 codec, playback of media in AAC codec of MPEG4 is possible.

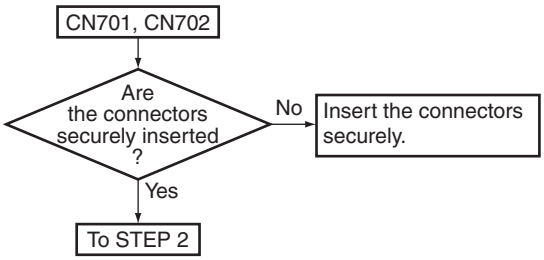
■ Block Diagram of the USB Assy



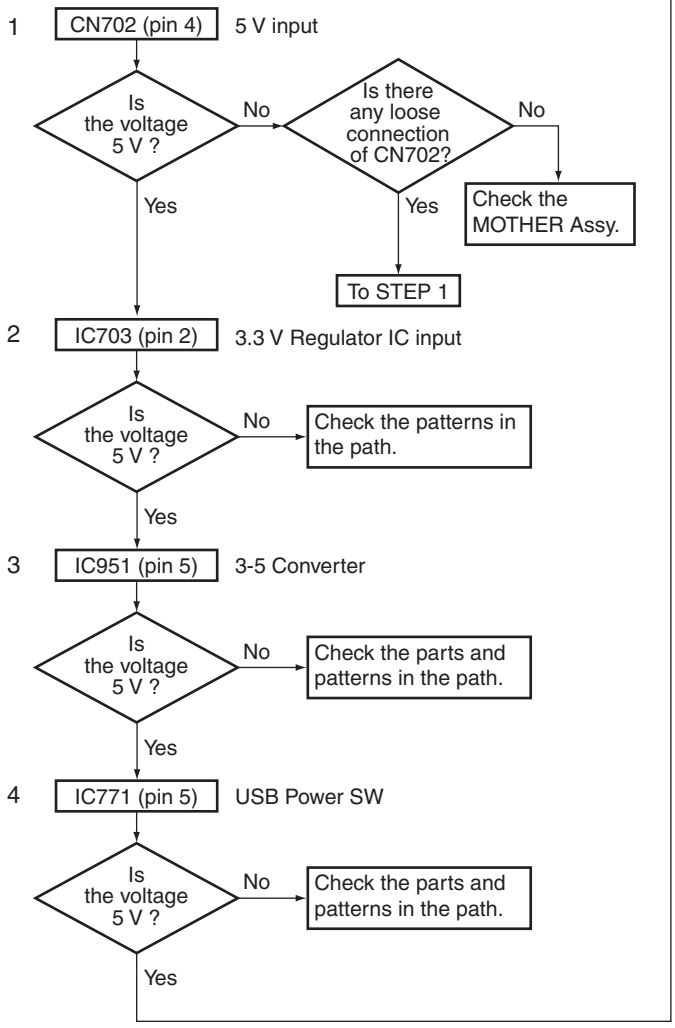
Main parts	Purpose
TCC8600-00X-EA-UG	: USB Host control decoder (MP3/WMA/MPEG-4AAC)
16M FLASH ROM	: Firmware is stored
64M SDRAM	: Temporary storage area of decoding music file
LOAD SWITCH	: Current limitation to USB device power

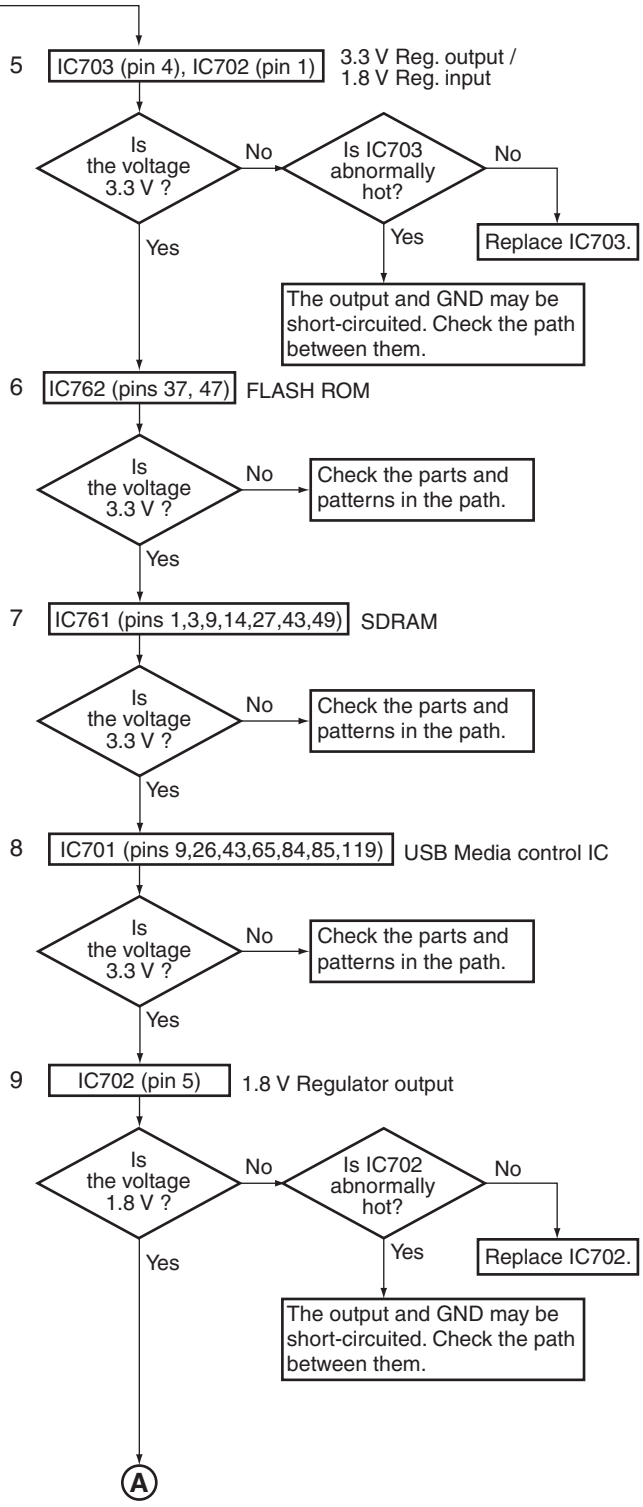
■ USB Troubleshooting

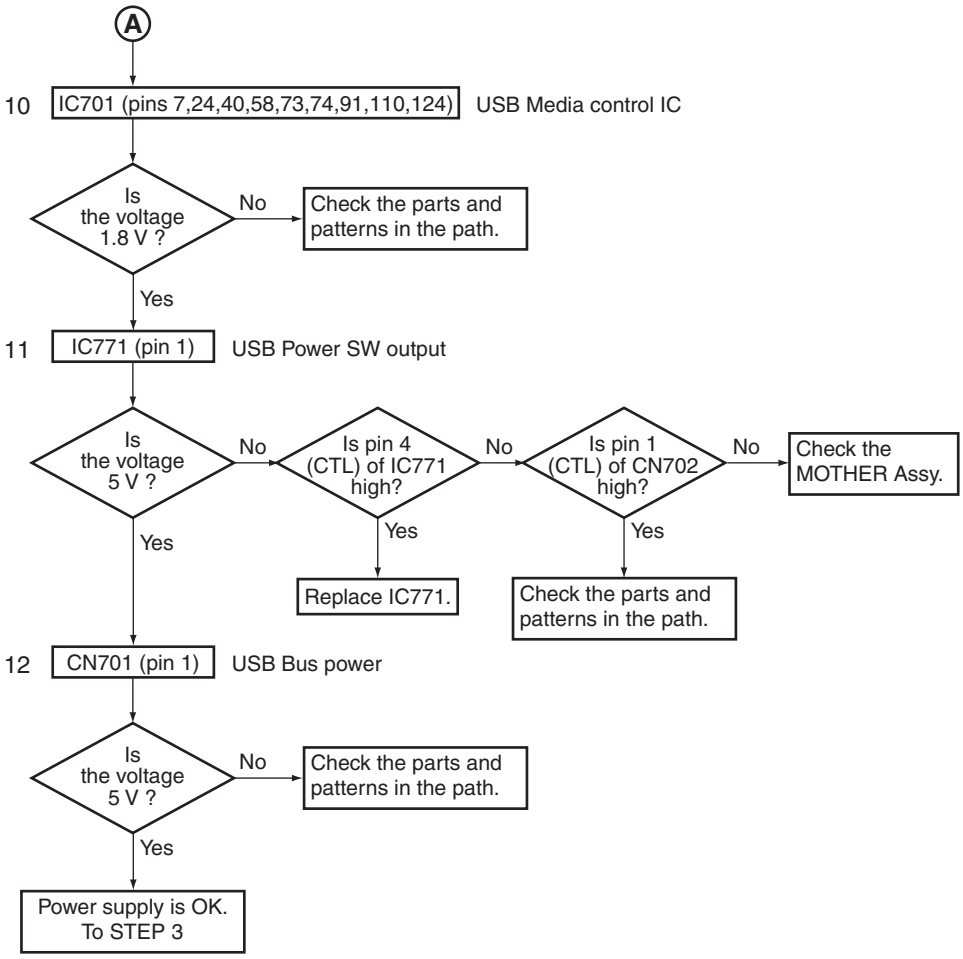
Step 1: Connectors



Step 2: Power supply







Step 3: Operation of USB Media control IC

Note: Please confirm it with the USB memory connected for the content.

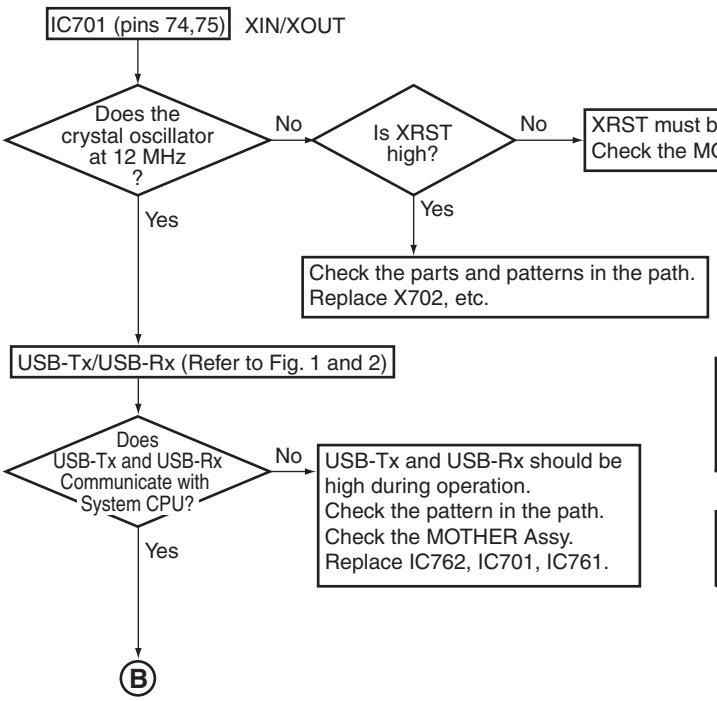


Fig. 1

	IC701		CN702
XRST	pin 77	R951	pin 5
USB-Rx	pin 96	R955	pin 10

Fig. 2

	IC701	IC951 (3 V → 5 V)		CN702
USB-Tx	pin 95	pin 2	pin 4	pin 11

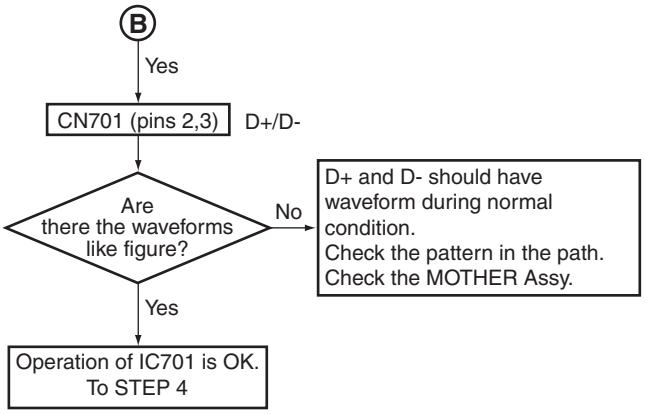
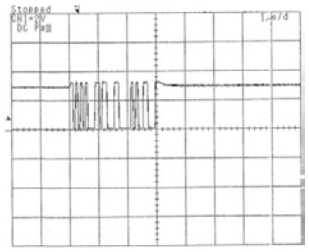
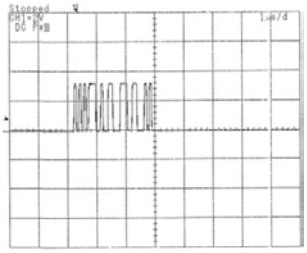


Fig. D+



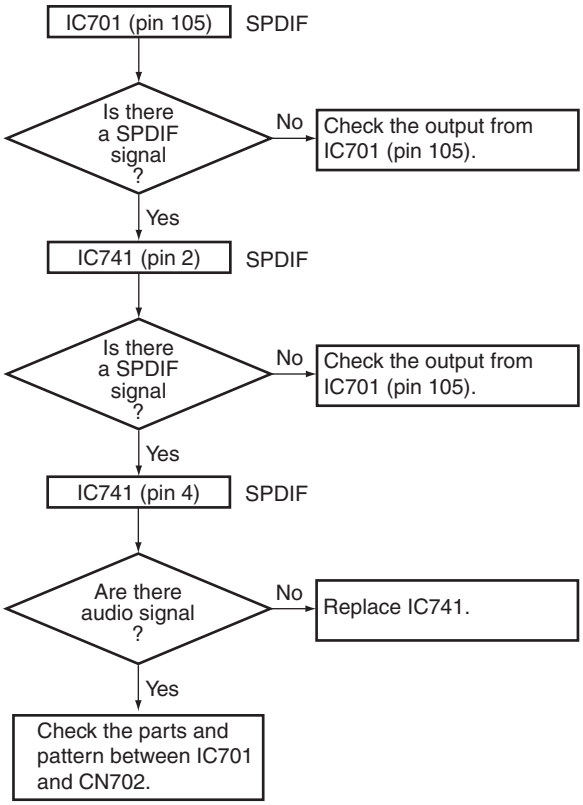
X: 1 μsec/div, Y: 2 V/div

Fig. D-



X: 1 μsec/div, Y: 2 V/div

Step 4: Audio Out check



5.1.5 HOW TO DIAGNOSE THE PRODUCT WITH THE POWER AMP BLOCK REMOVED

The failure in the Power Amp Block is suspected as shown in the table below.

Symptom that is highly suspected to be caused by a failure in the Power Amp Block	Possible cause
① The power cannot be turned on, and the MCACC LED is flashing.	The DC detection circuit is activated in order to prevent extension of the failure. **Note:** See "5.1.6 Failure Diagnosis of the Power Amp Block."
② The unit is shut down after "AMP ERR" is displayed on the FL display. Then the unit goes into the state described in ① above.	
③ "OVER HEAT" is displayed on the FL display.	The posistors (TH5001 and TH5301) in the Power Amp Block are open. **Note:** The resistance of the thermistor at normal temperature is about 330 ohms.
④ The unit is shut down without an error message on the FL display. Then the PHASE CONTROL LED flashes.	Power Amp overloaded, defective overload-detection circuit in the Power Amp Block, etc.

Failure diagnosis with the power on is not possible for some board assys, because the large Power Amp Block lies in the way. However, if the Power Amp Block is removed, the thermistor connected to the Power Amp Block is disconnected, which will activate the protection circuits.

To enable failure diagnosis of those board assys, after the Power Amp Block is removed in the manner described below.

[Procedures]

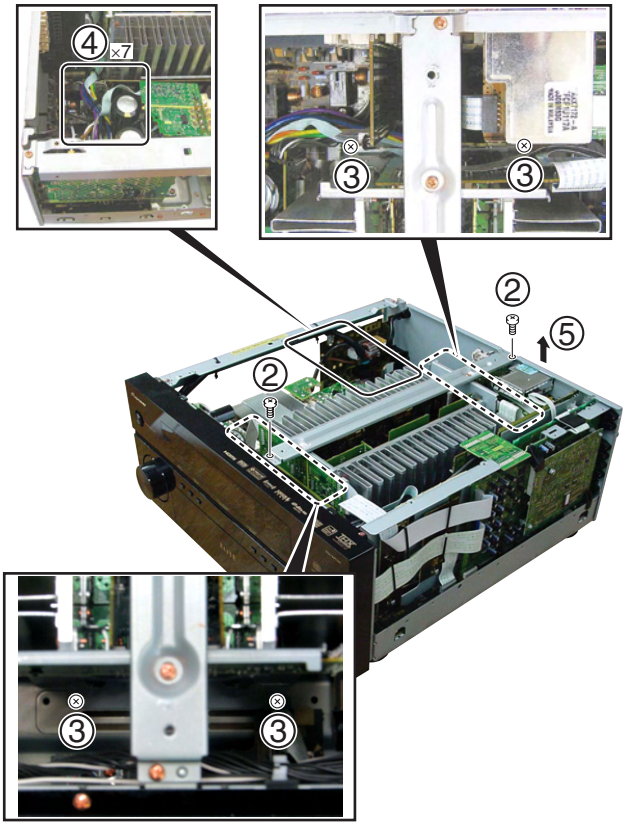
① Remove the bonnet by removing the 22 screws.

② Remove the two screws.

③ Remove the four screws.

④ Disconnect the six connectors and one jumper.

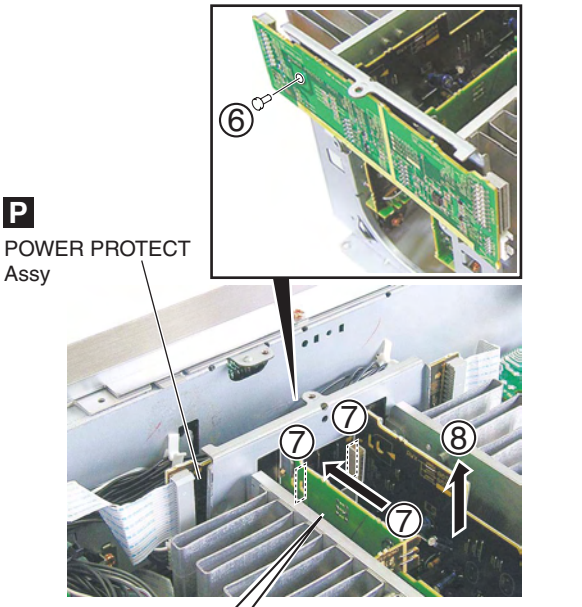
⑤ Disconnect the flexible cable.



⑥ Remove the nylon rivet.

⑦ Remove the POWER PROTECT Assy from the Power Amp Block.

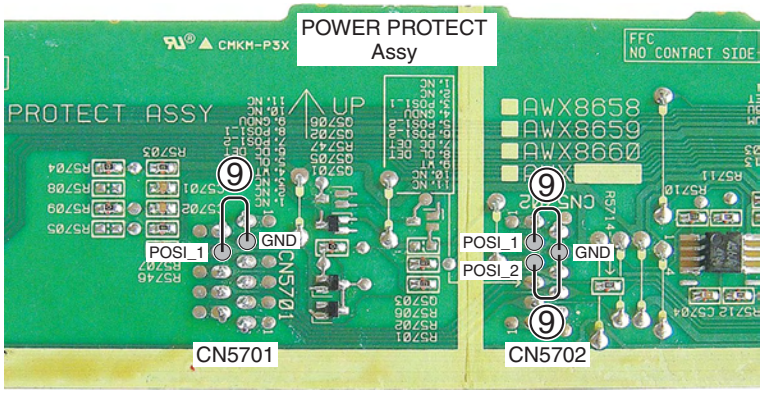
⑧ Remove the Power Amp Block.



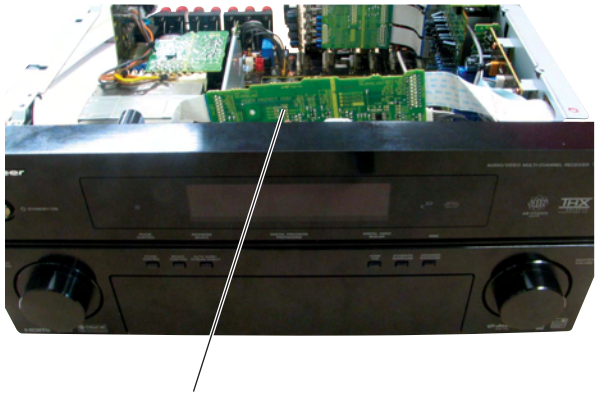
The POWER PROTECT Assy can be easily removed with no load applied to the connectors if you pull out the board by pushing on it at its center from the rear.

Note:
To prevent an electric shock hazard, after removing the Heat Sink Block, discharge the condenser of the ±VL line, by discharging CN4101 or CN4102 on the SP/PS Assy, using a discharging resistor. (It is recommended to make a resistance of 100 ohms or more in the series-parallel connection, using four or more discharging resistors of 100 ohms, 3 W.)

⑨ Short circuit between pin8 (POSI_1) and pin 9 (GND) of CN5701 of the POWER PROTECT Assy, and Pin 3 (POSI_1) and pin 4 (GND), and Pin5 (POSI_2) and pin 4 (GND) of CN5702 .



⑩ Turn the power on. (The power is on without the protection circuits activated.)



Diagnose

⚠ Warning: Before putting the Power Amp Block back

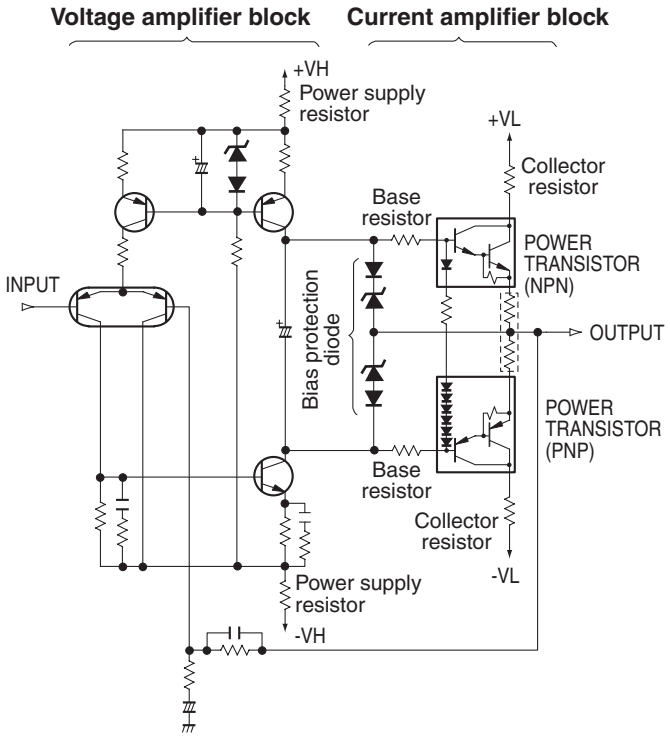
After performing a diagnosis, be sure to remove the solders at short circuit points. Also, be sure to discharge the electric charges of the VH line (charges of the electrolytic condenser) before putting the Power Amp Block back. (See "7. DISASSEMBLY / 1. Before the Power Amp Block is removed.")

Note: If you connect the connectors without discharging, some parts, such as a resistor or Fuse IC on VH line, may be damaged by the inrushing current.

5.1.6 FAILURE DIAGNOSIS OF THE POWER AMP BLOCK

If "AMP ERR" flashes on the FL display immediately after the power is turned on, then the unit is shut down, the power amplifier block is damaged, and DC voltage is output. In this case, either or both of the current and voltage amplifier block(s) is(are) damaged. Herein is described how to diagnose which block is in failure.

Most cases of damage in the power amplifier block are damage on the power transistor caused by excess power consumption, such as short-circuiting of the speaker terminals and use of low-impedance speakers that are not guaranteed. The failure diagnosis is therefore conducted on the current amplifier block first, then on the voltage amplifier block.



Notes:

- During diagnosis of the amplifier block with the power on, if you touch a high-impedance circuit (in particular, both ends of 100-ohm base resistance of the power transistor) with the probe of an oscilloscope or a tester, the circuit may be damaged by oscillation of an oscilloscope or a tester.
- While a failure diagnosis is being conducted with the power on, do NOT touch parts other than the power, input, and output blocks.
- Only the points with CP (check point) marks in the schematic diagram can be diagnosed while the power is on.

1. Damage on the current amplifier block

Check of the power transistor and collector resistance of each channel, using a tester

Tips:

In most cases where the current amplifier block is damaged by an excess power consumption of the power transistor, damage is caused by short-circuiting between the collector and emitter. The collector resistor is open because of large collector current.
In this case, the channel in failure can be identified by checking on which channel the resistance between C and E of the power transistor is 0 Ω (some hundreds of ohms or less) and the resistor of collector resistor is ∞ Ω. As a damage scar appears on the surface of the part when the collector resistor is open, you can also check it by visual inspection.

Note:

Even if the result of the measurement of resistance with the tester shows that the power transistor is not short-circuited, that power transistor may be damaged if the paired push-pull power transistor has been damaged. Therefore, it is recommended to replace both parts when either needs to be replaced.

2. Damage on the voltage amplifier block

Check of the base resistance (100 Ω) and Power supply (±VH) resistor (4.7 Ω) of each channel, using a tester

Tips:

In most cases, the voltage amplifier block is damaged by oscillation generated by a special load connection, a large-amplitude output at higher frequencies out of the audible range, or an influence of damage on the current amplifier block (power transistors). In many cases, the base resistance (100 Ω) is damaged. It is necessary to check each part of the voltage amplifier block, as damage may have been extended to other parts.
In most cases, the resistors are open/damaged, or the transistors or diodes are short-circuited/damaged.

- The resistors must not be open (the resistance must not be higher than the indicated value).
- The terminals of transistors or diodes must not be short-circuited (the resistance must not be extremely low). (If the resistance is low but you are not sure if it is extremely low, compare the value with that of the normal channel.)

If the voltage amplifier block is damaged, Power supply (±VH) resistor (4.7 Ω) may also be damaged.

3. Other damage

Check of the bias protection diodes

Tips:

If the power amplifier is damaged, the bias protection diodes may be deteriorated or open.
For a channel that has been diagnosed to be in failure, the Vf (forward descending voltage) of the four diodes must be checked to confirm that they are not deteriorated or open, using a tester, after repair of the amplifier. If these diodes are deteriorated, its distortion/frequency characteristics may be affected. If these diodes are open, the scale of damage on the power transistors may be extended if any abnormality is generated in the amplifier next time.

■ **Operating temperature of the posistor assembling to the heat sink**

	No.	Part No.	Operating temperature	Purpose	Operation
POS1L	TH5001	PTFM04BH222Q2N34B0	60 °C	FAN control (TEMP1)	FAN activation at more than 60 °C
POS1R	TH5301	PTFM04BH222Q2N34B0	60 °C	FAN control (TEMP1)	FAN activation at more than 60 °C
POS2	TH5002	PTFM04BH222Q2N34B0	100 °C	Detection of abnormal temperature	OVERHEAT perform at more than 100 °C

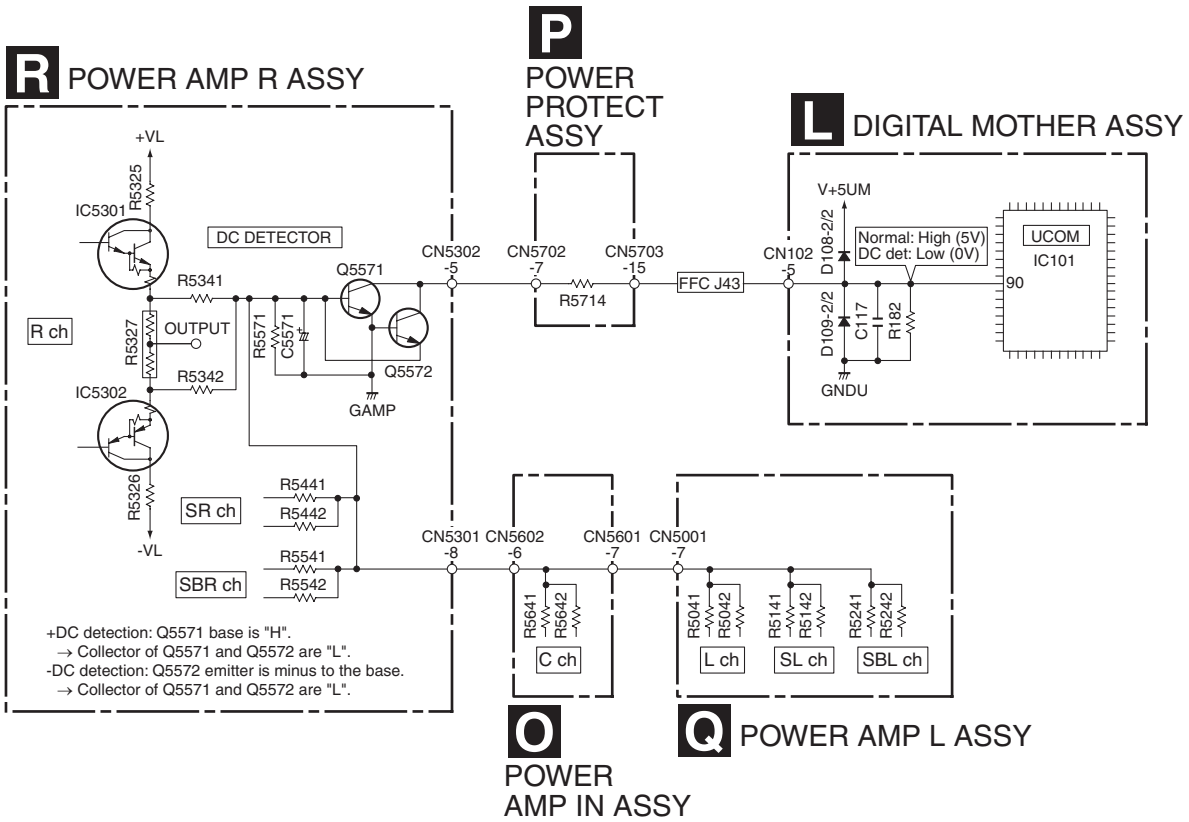
* Operating temperature is body temperature of the posistor (the metal part).

5.2 CIRCUIT DESCRIPTION
5.2.1 PROTECTION CIRCUIT SPECIFICATION

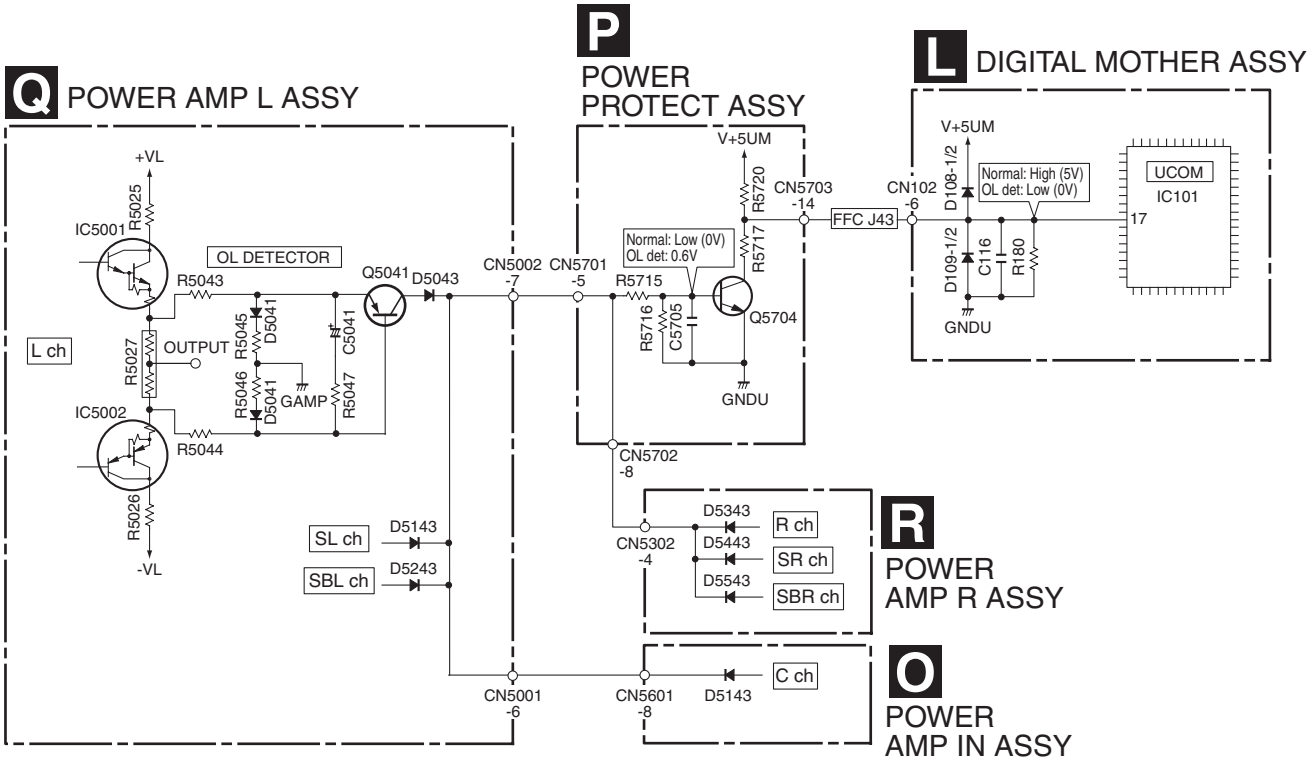
● Protection Circuit Process List

Item	Purpose	Detection Method	Process	Warning Indication	Remarks
DC detection	To detect amplifier damage (defect status) A process to protect speakers (for protection of connected external devices)	Detects when the DC_PROTECT port becomes "L". (Pin 90 of IC101)	Turns muting on and speaker relay off, then turns off the power after 3 seconds. Then flashes MCACC indicator.	Flashing "AMP ERR" for 3 seconds.	Once detected and turned the power off, input a key never again. If the DC_DET port becomes "L" within 3 seconds, the unit returns to normal condition automatically.
AMP overload	To detect overloading (abnormal status) With low-load driving or a short circuit of the speaker terminals (for protection of the amplifier)	Detects when the OL_DET port becomes "L" (checks by interrupt). (Pin 17 of IC101)	Turns muting on and speaker relay off, and immediately turns off the power. Then flashes PHASE CONTROL indicator.	None	
Overheat detection	Self reset type protection feature by temperature-rise of heat sink	Detects when the TEMP2 port becomes "H" . (Pin 24 of IC3301)	Turns muting on and speaker relay off, then turns off the power after 3 seconds.	Flashing "OVERHEAT" for 3 seconds.	If the TEMP2 port becomes "L" within 3 seconds, the unit returns to normal condition automatically.
12V trigger failure detection	To detect the shortcircuit of 12V trigger output (load more than 50mA) (for protection of the amplifier)	Detects when the 12VDET port becomes "H" . (Pin 69 of IC101)	Turns 12V trigger output to off.	Flashing "12V TRG ERR" for 3 seconds.	Continue showing warning. Release the FL indication by switching the INPUT SEL or the turns the power off.

● DC Detection Circuit



● OL (Over Load) Detection Circuit



● FAN CONTROL

1. Condition of FAN Rotation

Condition 1 (AND condition) MAIN u-com (DIGITAL MOTHER Assy IC101)

	TEMP1 (89Pin)	WATT IN (91Pin)
8Ω MODE	H (5V)	0.6V or higher
6Ω MODE	H (5V)	0.4V or higher

2. FAN STOP Detection

Rotate FAN for 10 seconds under Condition 1.

↓

Start FAN STOP detection (after 2 seconds even when FAN DRIVE Port (87Pin) is set Hi)

↓

After cancelling Condition 1, wait for 10 seconds before stopping rotation.

↓

After FAN STOP Port (88Pin) becomes L, turn Mute ON & Speaker Relay OFF.
"FAN STOP" displayed for 3 seconds.

↓ continuation

A power supply is shut off.

↓ return

A program is performed from the power on start up.

6. SERVICE MODE
6.1 SERVICE MODE

The Service mode has three functional blocks (VERSION block, PROTECT block and DOWNLOAD block).

How to enter the Service mode

1. Turn off MULTI-ZONE. Lower MASTER VOLUME to the minimum (---dB) and turn off the power.
2. After the power-off, press and hold down both the "ENTER" key and the "MULTI-ZONE ON/OFF" key for approximately five seconds.

How to exit the Service mode

Turning off the power or pressing the RETURN key returns to the normal mode.

Mode transition methods for each of the VERSION block, PROTECT block and DOWNLOAD block.

*If no key is pressed within 10 seconds, the Service mode returns to the normal mode.

Key operation	FL display
VERSION block 1/4 Display MAIN / EVENT microcomputer. [→] [←]	M1.000 E1.000
PROTECT block 1/8 Display number of times DC is detected. [→] [←]	DC : 000
DOWNLOAD block 1/6 Display MAIN computer DOWNLOAD. [→] [←]	MAIN DL[START]
Return to VERSION block 1/4.	

VERSION block

This block displays version information of various microcomputers and DSP firmware.
*If no key is pressed within 10 seconds, the Service mode returns to the normal mode.

Key operation	FL display	Explanation on displayed versions
Survice mode ON		
VERSION block 1/4 MAIN/EVENT microcomputer	M1.000 E1.000	M * . *** : MAIN microcomputer E * . *** : EVENT microcomputer
[↓] [↑]		
VERSION block 2/4 DISPLAY microcomputer	DISP 1.000	DISP * . *** : DISPLAY microcomputer
[↓] [↑]		
VERSION block 3/4 DSP/HDMI microcomputer	D1.000 H1.000	D * . *** : DSP microcomputer H * . *** : HDMI microcomputer
[↓] [↑]		
VERSION block 4/4 1stDSP/2ndDSP firmware	f1.000 s1.000	f * . *** : 1st DSP firmware s* . *** : 2nd DSP firmware
[↓] [↑]		
To PROTECT block		

PROTECT block

This block displays number of times protection processing is detected.
*If no key is pressed within 10 seconds, the Service mode returns to the normal mode.

Key operation	FL display
PROTECT block 1/8 Display number of times DC is detected. [↓] [↑]	DC : 000
PROTECT block 2/8 Display number of times OVERLOAD is detected. [↓] [↑]	OVER: 010
PROTECT block 3/8 Display number of times COMBINATION is detected. (Detects DC and OVERLOAD simultaneously) [↓] [↑]	CON : 002
PROTECT block 4/8 Displays number of times FAN error is detected. [↓] [↑]	FAN : 002
PROTECT block 5/8 Display number of times abnormal temperature is detected. [↓] [↑]	TEMP: 255
PROTECT block 6/8 Resetting the number of times error is detected [↓] [↑]	RESET ◀ HOLD ▶
PROTECT block 7/8 Display accumulated time & RESET. [↓] [↑]	12345h20m◀HLD▶
PROTECT block 8/8 The Timer of Exception "Set Stream Path" command on CEC. [↓] [↑]	EX.SSP◀1500ms▶
To DOWNLOAD block	

Resetting the number of times error is detected

Key operation	FL display
[←][→]	RESET ◀CLEAR?▶
[ENTER]	RESET [RESET]
↓ To normal mode	

Resetting the accumulated time

Key operation	FL display
[←][→]	12345h20m◀CL ?▶
[ENTER]	0h 0m◀RST▶
↓ To normal mode	

Setting of the Timer of Exception "Set Stream Path" command on CEC.

Key operation	FL display
[←][→]	EX.SSP◀ 600ms▶
↓ To normal mode	

DOWNLOAD block

This block enters the rewriting mode of various microcomputers and DSP firmware.

Key operation	FL display
DOWNLOAD block 1/6 MAIN computer DOWNLOAD [↓] [↑]	MAIN DL[START]
DOWNLOAD block 2/6 EVENT computer DOWNLOAD [↓] [↑]	EVNT DL[START]
DOWNLOAD block 3/6 DSP computer DOWNLOAD [↓] [↑]	DSPM DL[START]
DOWNLOAD block 4/6 HDMI computer DOWNLOAD [↓] [↑]	HDMI DL[START]
DOWNLOAD block 5/6 1stDSP FIRM DOWNLOAD [↓] [↑]	DSP1 DL[START]
DOWNLOAD block 6/6 2ndDSP FIRM DOWNLOAD [↓] [↑]	DSP2 DL[START]
To VERSION block	

■ Error indications when an abnormality in the amplifier system is detected

[Purpose]

An error message is displayed when an abnormality in the amplifier system is detected.

[Error Messages]

FL Display	Status	Duration (sec.)
AMP ERROR	When AMP DC is detected	Flashes 3 times.
AMP OVERHEAT	When a thermal shutdown (abnormal temperature), etc. is detected	Flashes 3 times.
FAN STOP	When stopping of the fan is detected	Flashes 3 times.
12V TRG ERR	When the 12-V trigger circuit is short-circuited	Flashes
DSP NG	When the NG communication with the DSP u-com is detected.	Flashes
HMDI NG	When the NG communication with the HDMI u-com is detected.	Flashes
HDCP ERROR	When the HDCP ERR is detected.	Flashes 5 seconds.
NOT SUPPORT	When the NOT SUPPORT of HDCP is detected.	Flashes 5 seconds.

[Description]

AMP ERROR : After a failure in the amplifier block or high DC output is detected, the shutdown process starts, then the power will be shut off. Then the MCACC LED will flash. The power cannot be turned on again. If you wish to turn on the unit after a shutdown activated by DC detection, enter DC detection cancellation mode, by proceeding with the steps described in "How to enter release mode" below.

AMP OVERHEAT : The temperature of the amplifier is abnormally high.

FAN STOP : The fan does not function.

12V TRG ERR : The 12-V trigger output is short-circuited.

After a failure is detected, the shutdown process starts, then the power will be off. The power can be turned on again in Normal mode.

DSP NG : There is no communication response from the DSP u-com.

HDMI NG : There is no communication response from the HDMI u-com.

HDCP ERR : The monitor is non-HDCP type or the monitor is standby state.

NOT SUPPORT : The output resolution is not correspond to the monitor at analog. →HDMI(scaler exist)

[How to enter release mode]

Press and hold "↓ (DOWN)" and "MULTI-ZONE ON/OFF" keys on the front panel simultaneously for 2 seconds in standby mode.

7. DISASSEMBLY

Note : Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

1. Before the Power Amp Block is removed

Before the Power Amp Block is removed, discharge C4209 and C4210 on the TRANS 2-1 Assy, as indicated below.
If you don't, the IC protectors (IC4261 and IC4262) on the VH TR Assy may be open, and DC voltage may be generated at the power amplifier output, which will result in "AMP ERR."

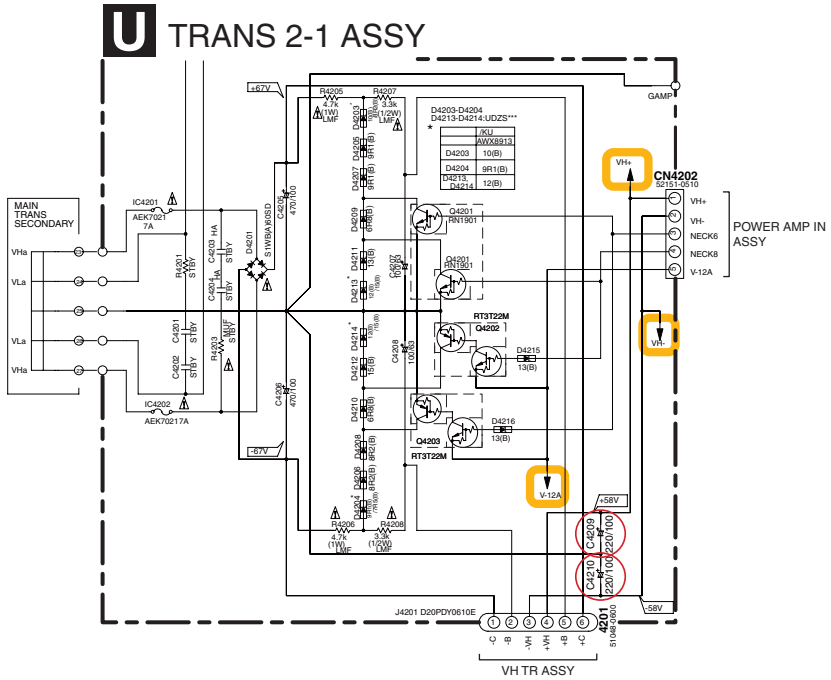
[Procedure]

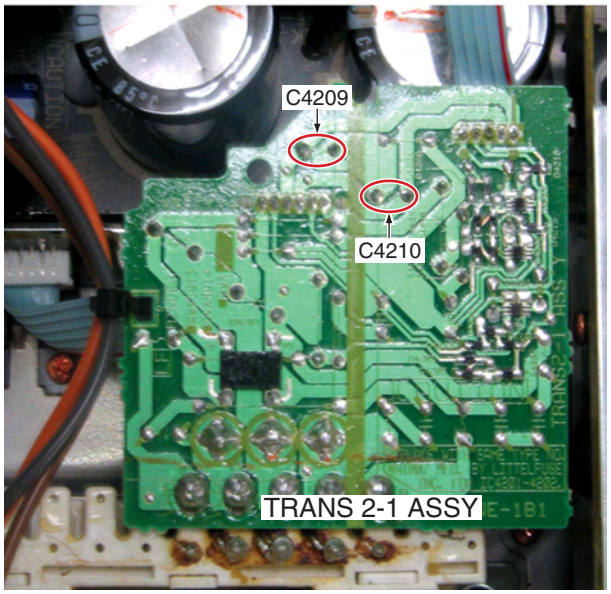
① Unplug the AC code.

② Discharge C4209 and C4210 on the TRANS 2-1 Assy.
Note: For discharging, use a load of 100Ω, 3W or more, to protect the IC protectors. Do NOT discharge instantly by short-circuiting.

③ Check that the voltage between the electrodes of each C4209 and C4210 is 1V or less.

④ Mount the Power Amp Block.

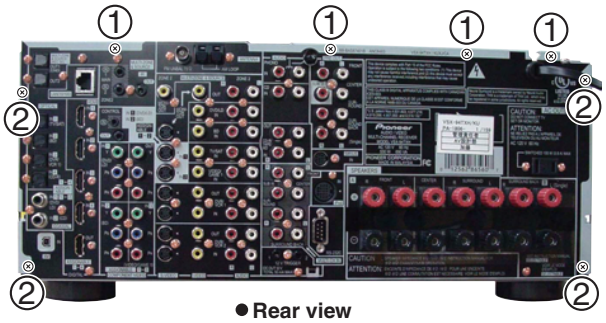




2. Disassembly

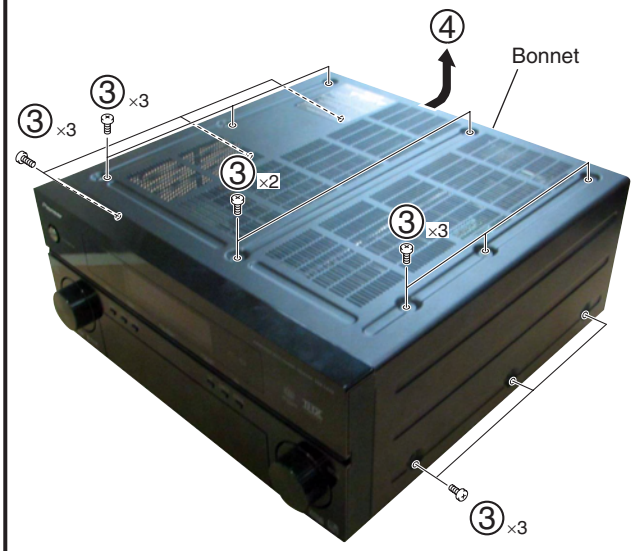
1 Bonnet

① Remove the four screws.
② Remove the four screws.



● Rear view

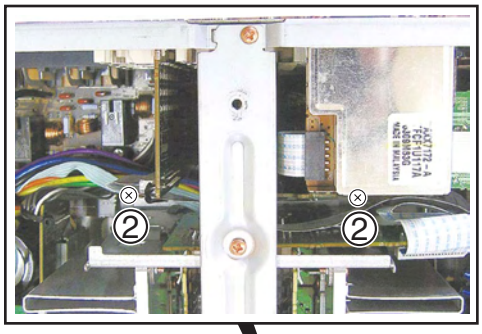
③ Remove the fourteen screws.
④ Remove the bonnet.

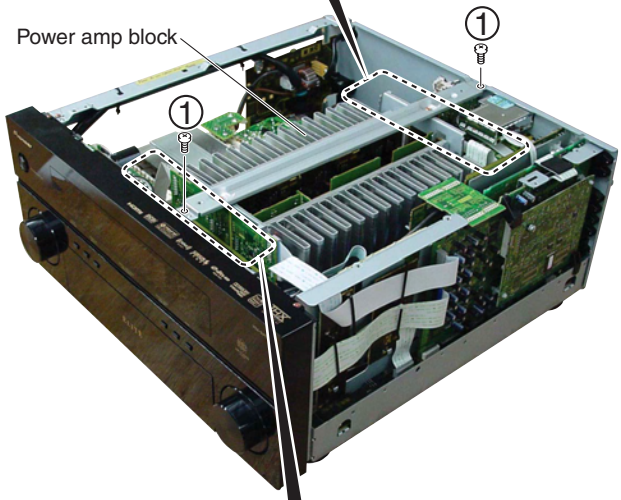


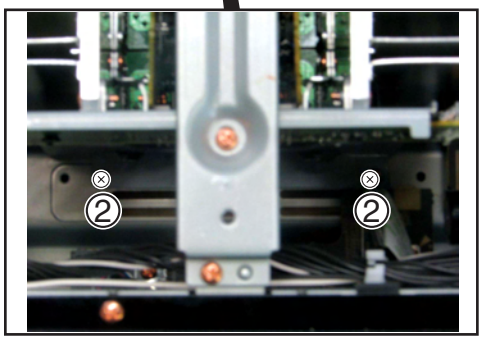
2 Power Amp Block

Before removing the power AMP Block, discharge C4209 and C4210 on TRANS 2-1 Assy.
Refer to "1. Before the Power AMP Block is removed".

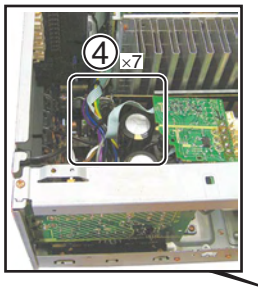
① Remove the two screws.
② Remove the four screws.

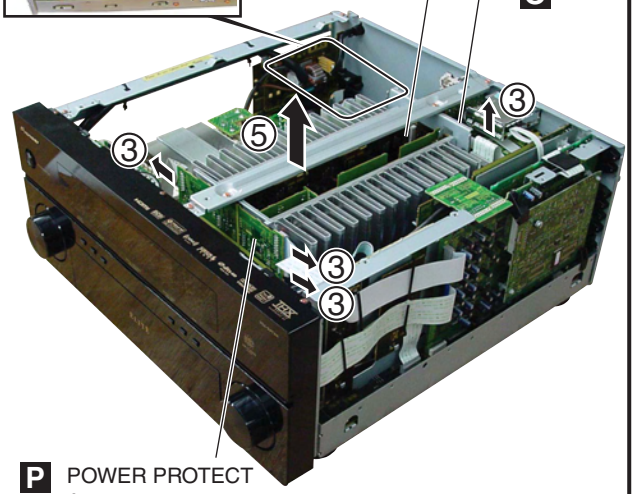


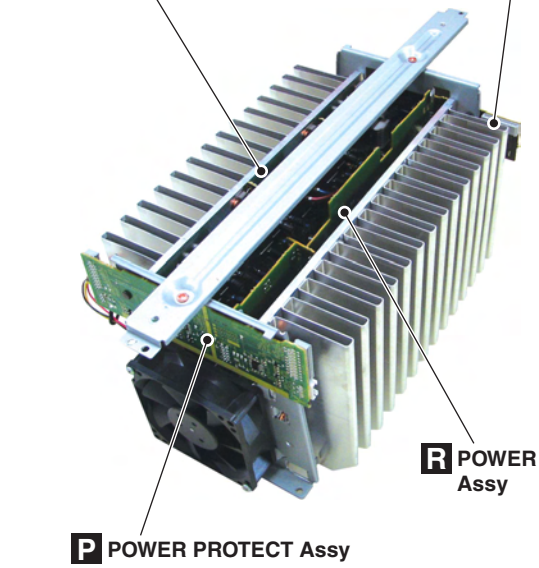




③ Disconnect the three flexible cables and one connector.
④ Disconnect the six connectors and one jumper.
⑤ Remove the power amp block.



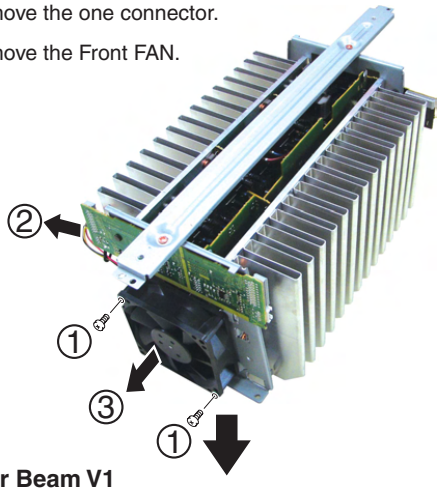




3 Replacing the Power Transistor

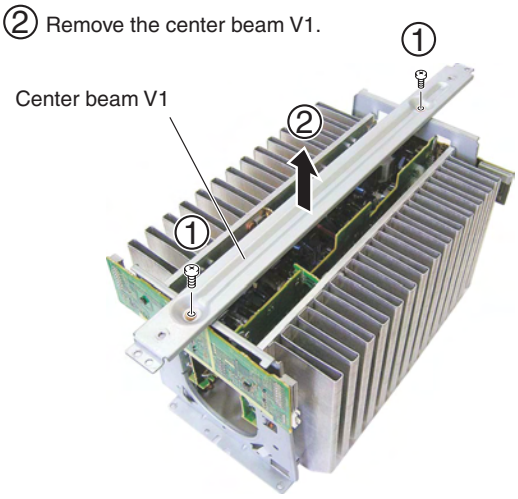
• Front FAN

① Remove the two screws.
② Remove the one connector.
③ Remove the Front FAN.



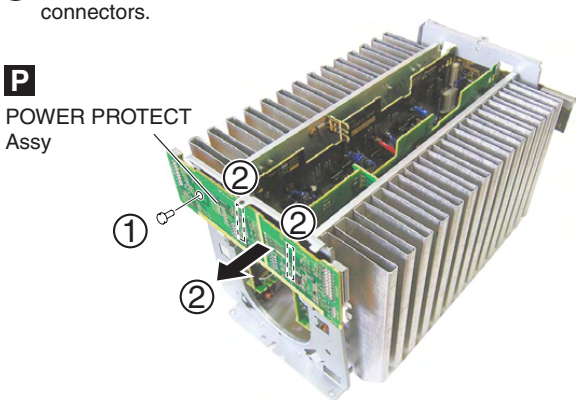
• Center Beam V1

① Remove the two screws.
② Remove the center beam V1.



• POWER PROTECT Assy

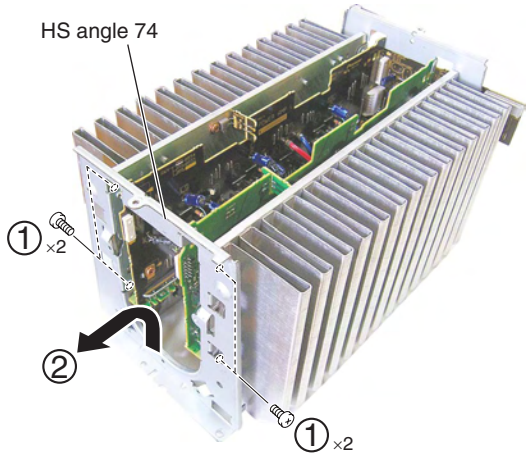
① Remove the one nylon rivet.
② Remove the POWER PROTECT Assy by removing the two connectors.



• **HS Angle 74**

① Remove the four screws.

② Remove the HS angle 74.

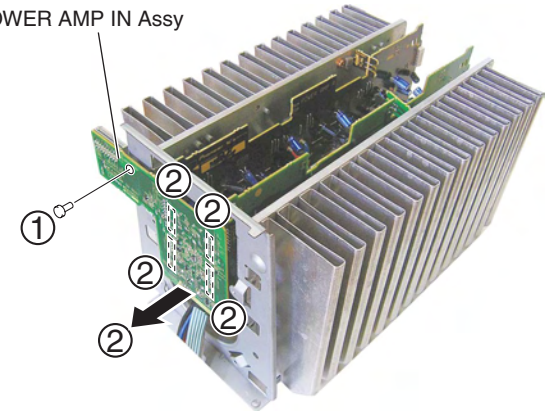


• **POWER AMP IN Assy**

① Remove the one nylon rivet.

② Remove the POWER AMP IN Assy by removing the four connectors.

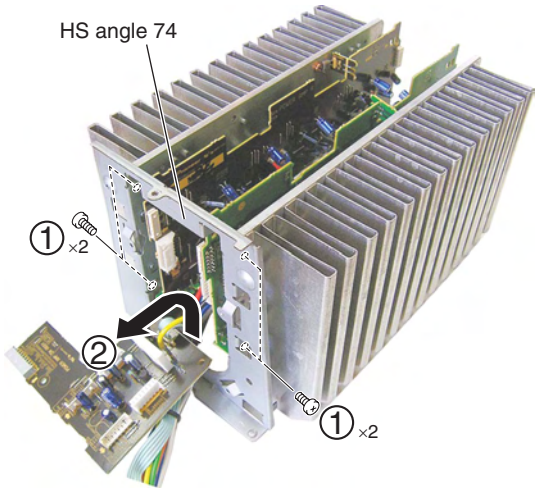
O



• **HS Angle 74**

① Remove the four screws.

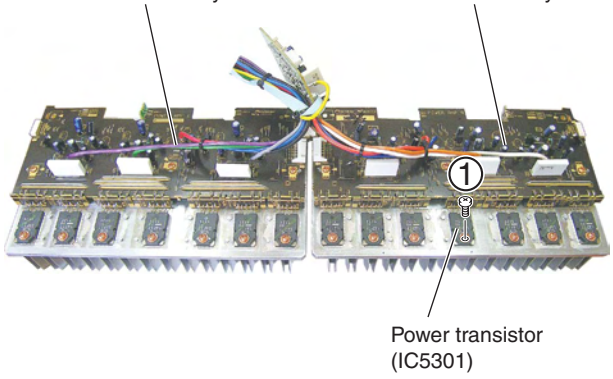
② Remove the HS angle 74.



• **Replacing the Power Transistor**

① Remove the screw.

Q R

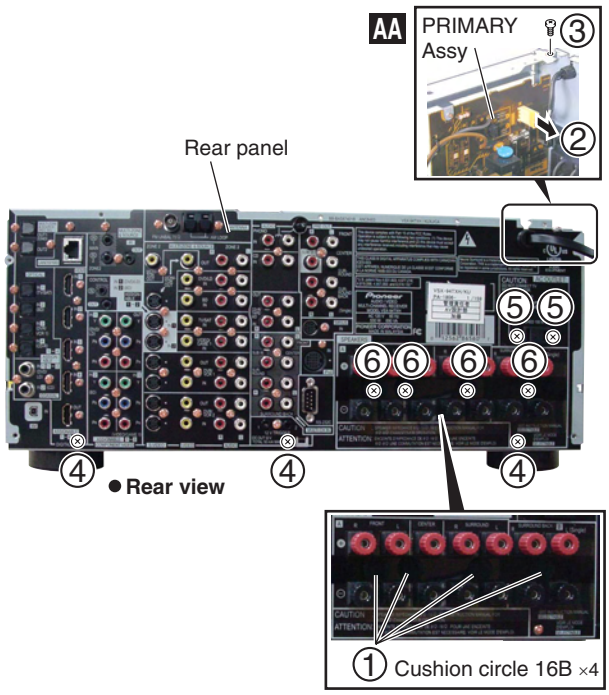


Replace

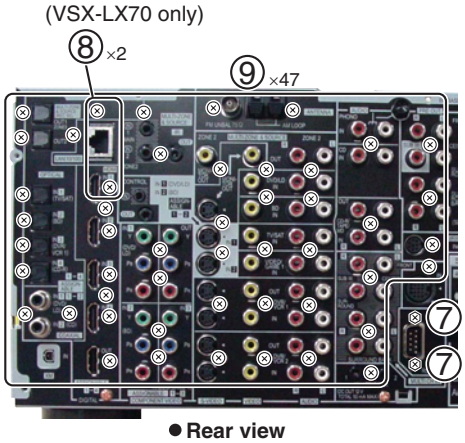
4 Replacing the HDMI & DLNA ASSY

• Rear Panel

① Remove the four cushion circle 16Bs.
② Disconnect the one connector.
③ Remove the screw.
④ Remove the three screws.
⑤ Remove the two screws.
⑥ Remove the four screws.

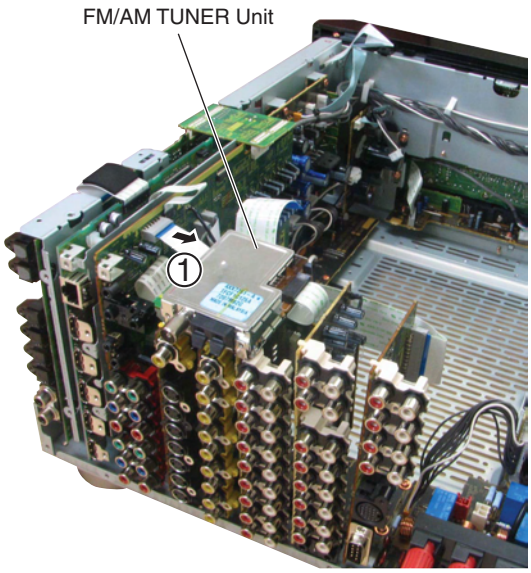


⑦ Remove the two screws.
⑧ Remove the two screws. (VSX-LX70 only)
⑨ Remove the 47 screws.
⑩ Remove the rear panel.



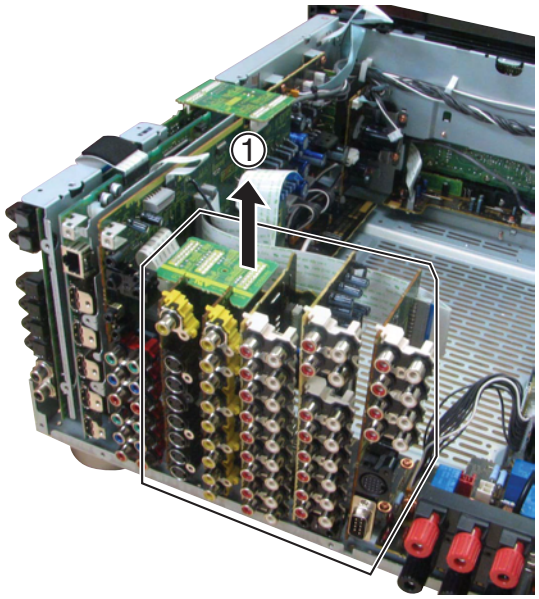
• FM/AM TUNER Unit

① Remove the FM/AM TUNER Unit by removing the one flexible cable.



• PCB Assys

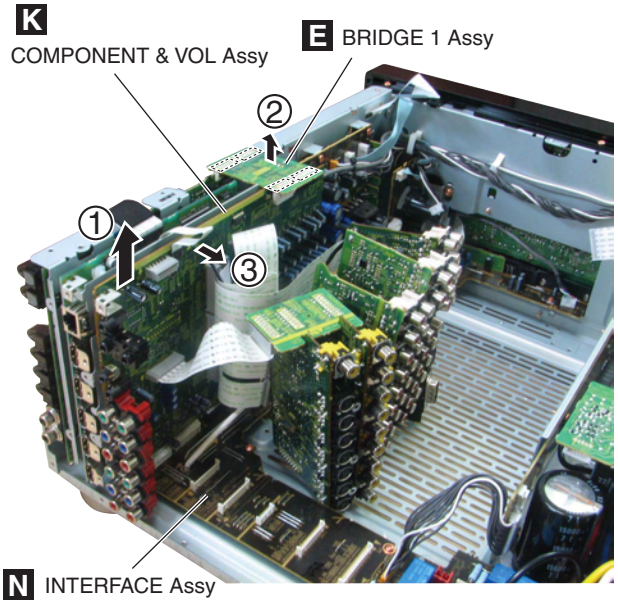
① Remove the PREOUT & CONTROL, AUDIO & MULTI CH IN, V-AUDIO, COMPOSITE V, S VIDEO, BRIDGE 2 and BRIDGE 3 Assys from the INTERFACE Assy.



5 Replacing the INTERFACE ASSY

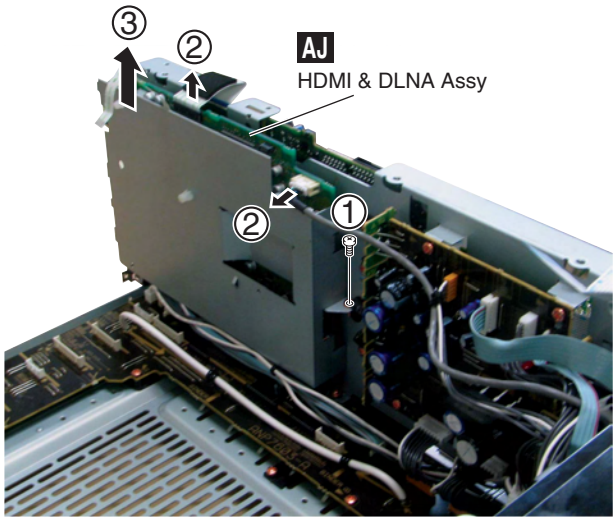
• COMPONENT & VOL Assy

① Remove the COMPONENT & VOL Assy from the INTERFACE Assy.
② Remove the BRIDGE 1 Assy by removing the four connectors.
③ Disconnect the flexible cable.



• HDMI & DLNA Assy

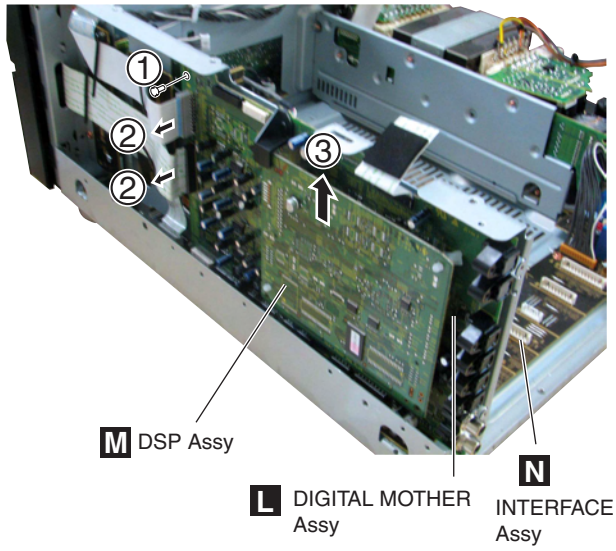
① Remove the screw.
② Disconnect the flexible cables and connector.
③ Remove the HDMI & DLNA Assy from the INTERFACE Assy.



Replace

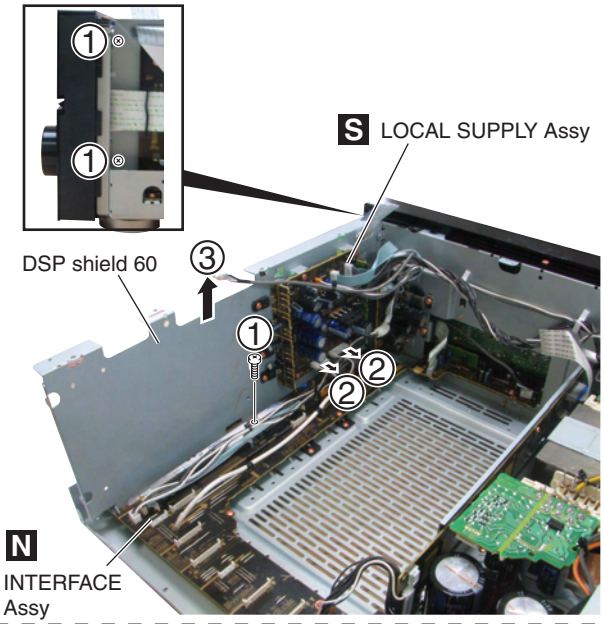
• DIGITAL MOTHER Assy

① Remove the nyron rivet.
② Disconnect the two flexible cables.
③ Remove the DIGITAL MOTHER Assy with DSP Assy from the INTERFACE Assy.



• DSP Shield 60

① Remove the three screws.
② Disconnect the two connectors.
③ Remove the DSP shield 60.



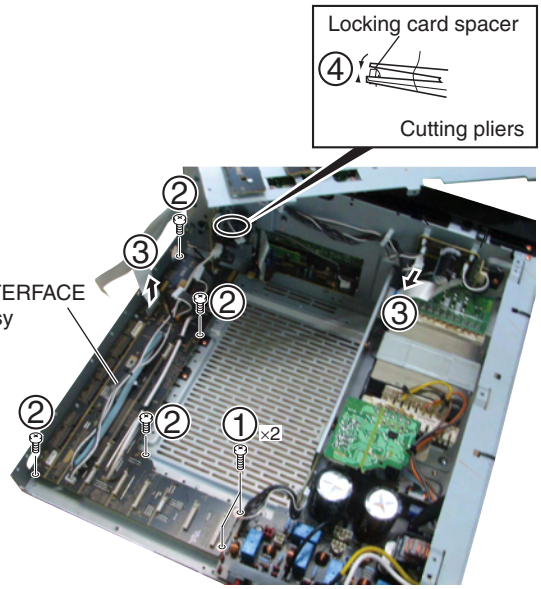
• INTERFACE Assy

① Remove the two screws.

② Remove the four screws.

③ Disconnect the flexible cable and connector.

④ Release the locking card spacer.



④ Remove the INTERFACE Assy.

Replace

8. EACH SETTING AND ADJUSTMENT

8.1 ADJUSTMENT

• There is no information to be shown in this chapter.

8.2 HOW TO UPDATE THE DSP FLASH ROM BY PLAYING BACK A CD

[Purpose]

By referring to this section, rewrite the DSP1 and DSP2 Flash ROM when required. Rewriting is instructed through service information, etc. By playing back a CD-R on which a DSP program is recorded, using a normal CD player, rewriting is possible.

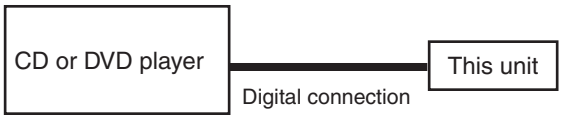
[Tools to be used]

Please use DVD player based on MTK system (DV-270, 370, 373, 575K, 280, 380, 383, etc.) ,Mitsubishi system (DV-59AVi, 868AVi, S969AVi, 668AVi, etc.) or Fujitsu system (DV-343, 444, 545, etc.) DO NOT use DVD player based on ST system (DV-353, 454, 250, 400, 555K, 260, 363, 464, 466, 563, etc.) The factory confirmed that DVD players based on ST system cannot send the correct data to the VSX unit using the update disc.
You can check the base system of our DVD players on the firmware version list at PSN web (Niis)

• Coaxial cable or Optical cable
• Update disc(CD-R disc)
• Headphone

[Connections]

Connect this unit and a player, as shown in the figure below.



[Preparations]

Burn the DSP flash ROM firmware (.wav file) to a CD-R disc using commercially available burning software.
It is necessary to select the writing format to "For music player", not "For PC data".
Note:
Depending on a burning software, data on a CD-R may not be worked for updating the DSP flash ROM.
If the HDMI indicator does not flash when playing back a update disc, the disc is not able to use for updating.
Burn the DSP flash ROM firmware to a CD-R disc, using other burning software.

[Note]

• Do NOT disconnect the AC cords of this unit nor the CD/DVD player while rewriting is in progress.

• The "OK" indication displayed after updating means the checksum on the flash ROM is OK. If the "OK" indication is not displayed, updating has not been completed.

Note that confirmation with audio check or version check is insufficient for checking if updating has been completed.
If you set the unit to STANDBY OFF without confirming of "OK" indication on the FL display, be sure to perform the updating procedures again.

[Procedures]

1. Check the versions of the DSP and microcomputer.
   Check the versions by referring to "Version indication" in "6.1 SERVICE MODE (P.75)".

2. Connect a CD or DVD player.
   (1) Connect the CD or DVD player to be used for updating to any digital input connector of this unit.
   (2) With the INPUT SELECTOR, select the input being used.

3. Check if the digital signal is locked (received).
   (1) Play back a stream for updating with the player.
   (2) Set the receiver to normal setting, "Signal Select" to Auto, then check on the Signal Select indicator whether the input is set to Auto and Digital.

[Procedures]

4. Start up this unit in writing mode.
   (1) Relocate the CD playback starting point to the beginning (time: 0:00) of the track No and pause playback.
   (2) Set the volume of the receiver to - ∞ dB and set the receiver to STANDBY OFF.
   (3) Press the ENTER key and Multi-Zone & Source/REC SEL ON/OFF key simultaneously for 3 seconds.
   (4) Press "↑" key until it enters the predetermined mode.
   When DSP1 is downloaded:
   Display: DSP1 DL [START] → Press the Enter key. → Display: DSP1 DL [GO ON]
   When DSP2 is downloaded:
   Display: DSP2 DL [START] → Press the Enter key. → Display: DSP2 DL [GO ON]

5. Play back the track on CD disc.
   (1) Release Pause mode of the player and play back the track where the DSP program stream signal to be burned is stored.
   (2) After 5-10 seconds, the HDMI indicator starts flashing. Be sure to check that it is flashing.
   (3) Flashing indicates that a correct stream is being received and that updating is in progress.

   Note: Do NOT turn off the unit while the HDMI indicator is flashing. If the unit is turned off, be sure to go back to Step 4. (As the Flash ROM goes into unusual status if the power is off during rewriting, the unit may not start properly.) Even in such a case, you can restore the unit by performing Steps 4 to 7.

6. Wait until rewriting is completed.
   (1) Basically, wait until "OK" is displayed on the FL display. It takes about 2 minutes for updating DSP1 and about 15 seconds for updating DSP2.
   (2) After confirming that "OK" is displayed, stop or pause the player then after 5 seconds set the player to STANDBY OFF.

7. Check the version of the program after updating.
   (1) Check the version by simultaneously pressing and holding the ENTER key and Multi-Zone & Source/REC SEL ON/OFF keys.
   (2) Press "↓" key to check the predetermined version.
   DSP1 version: f…….
   DSP2 version: s…….
   (3) For confirmation, check basic operations.

■ Troubleshooting of DSP FLASH ROM UPDATE

Symptoms	Items to be checked
The HDMI indicator does not start flashing, and 10 seconds or more has elapsed after a updating stream is input.	Is DSP writing mode entered? (Simultaneously press and hold the ENTER and VIDEO Multi-Zone & Source/REC SEL ON/OFF keys.)
	Is DIR locked? → You can check this on the Signal Select indicator if the input is set to Auto and Digital. If DIR is not locked, check the input function and digital connections between the player and this unit.
	Is the stream (Track No., etc.) being played back correct?
	Are compressed audio signals, such as WMA, being input when or after writing mode is entered ? → As soon as the compressed audio signals are input, writing mode is exited. It is recommended that playback be paused at the beginning of the track of a updating stream then writing mode is entered by simultaneous pressing of the keys. Release Pause mode after entering of writing mode is confirmed.
Writing mode is not entered upon simultaneous pressing of the ENTER and Multi-Zone & Source/REC SEL ON/OFF keys.	Is the volume control of the receiver set to -∞ dB? If not, set it to -∞ dB (- - -).
	Reset the receiver then enter writing mode. **Note:** All the user data stored in the receiver are cleared when the receiver is reset.
"OK" is not displayed.	Is the track played back from the beginning to the end? → With the receiver in writing mode, be sure to play back the stream track twice.
	If an error is generated because any scratches on the disc, "OK" is not displayed. → In such a case, play back the same stream stored on another track as backup.

8.3 HOW TO UPDATE THE FLASH ROMS FOR VARIOUS MICROCOMPUTERS

■ HDMI, MAIN, DSP and EVENT microcomputer

[Purpose]

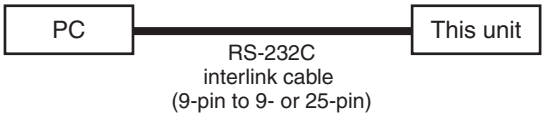
Refer to this section when updating of a Flash ROM is required by the service information, etc.

[Tools to be used]

- PC with a serial port
- RS-232C cable (9-pin to 9- or 25-pin, interlink)
- Firmware ("mot" extension)
- Program for updating (ufu.exe: ver. 1.08)

[Connections] (MAIN microcomputer)
(DSP microcomputer)
(EVENT microcomputer)
(HDMI microcomputer)

Connect as indicated in the figure right:



[Note]

Do NOT disconnect the AC power cords of this unit nor the PC.

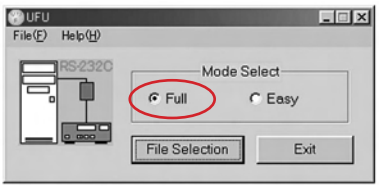
[Procedures]

1. Turn off the power to this unit by setting the main volume level to "---dB" and Multi-Zone to "OFF".
2. Connect the 232C interlink cable and the PC, as indicated in "Connections".
3. Simultaneously press and hold the ENTER and MULTI-ZONE ON/OFF keys for about 5 seconds.
4. Turn the power ON at Service mode.
5. (HDMI microcomputer)
   Press ↓ key and select “HDMI DL [START]” display.
   Press ENTER key and set to “HDMI DL [GO ON]”.

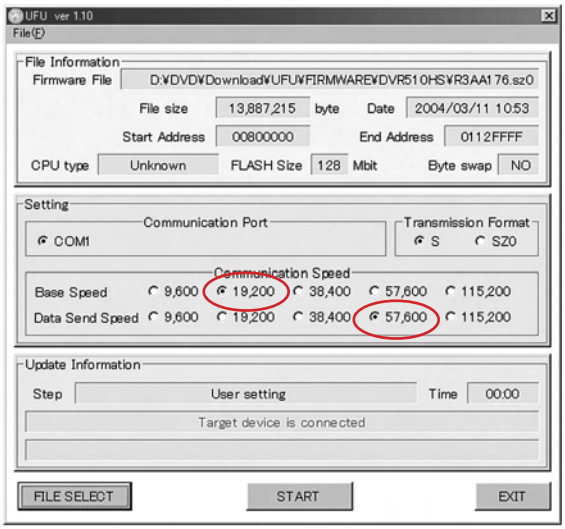
   (MAIN microcomputer)
   Press ↓ key and select “MAIN DL [START]” display.
   Press ENTER key and set to “MAIN DL [GO ON]”.

   (DSP microcomputer)
   Press ↓ key and select “DSPM DL [START]” display.
   Press ENTER key and set to “DSPM DL [GO ON]”.

   (EVENT microcomputer)
   Press ↓ key and select “EVNT DL [START]” display.
   Press ENTER key and set to “EVNT DL [GO ON]”.
6. Double-click on "ufu.exe".
7. Check that "Full" is selected in MODE SELECT.
8. Select the firm ware file with "mot" extension.
9. Select the communication speed.
   - Basic speed: 19200
   - Data transfer speed: 57600
10. Click on "START" button.
11. "Completed" is displayed in the"ufu.exe" window.
12. Disconnect then reconnect the AC power cord of the unit. If the unit is not reset, retry from Step 2.
13. Check the version.
    Following the procedures described in "Version indication" in "6.1 SERVICE MODE (P.75)", check that the version has been changed to a new one.



Check that "Full" is selected in MODE SELECT.



Select the communication speed.
- Basic speed: 19200
- Data transfer speed: 57600

■ USB (VSX-LX60)

[Purpose]

Refer to this section when updating the USB firmware is required by the service information, etc.
It is able to update the USB firmware by using USB flash memory.

[Necessary Tools]

• USB Flash Memory which is saved the firmware file ("player.rom" file).

Note:
In rare cases, it is not able to update the firmware depending on the type of USB flash memory.
In such a case, try to use other model of USB flash memory.

[Procedures]

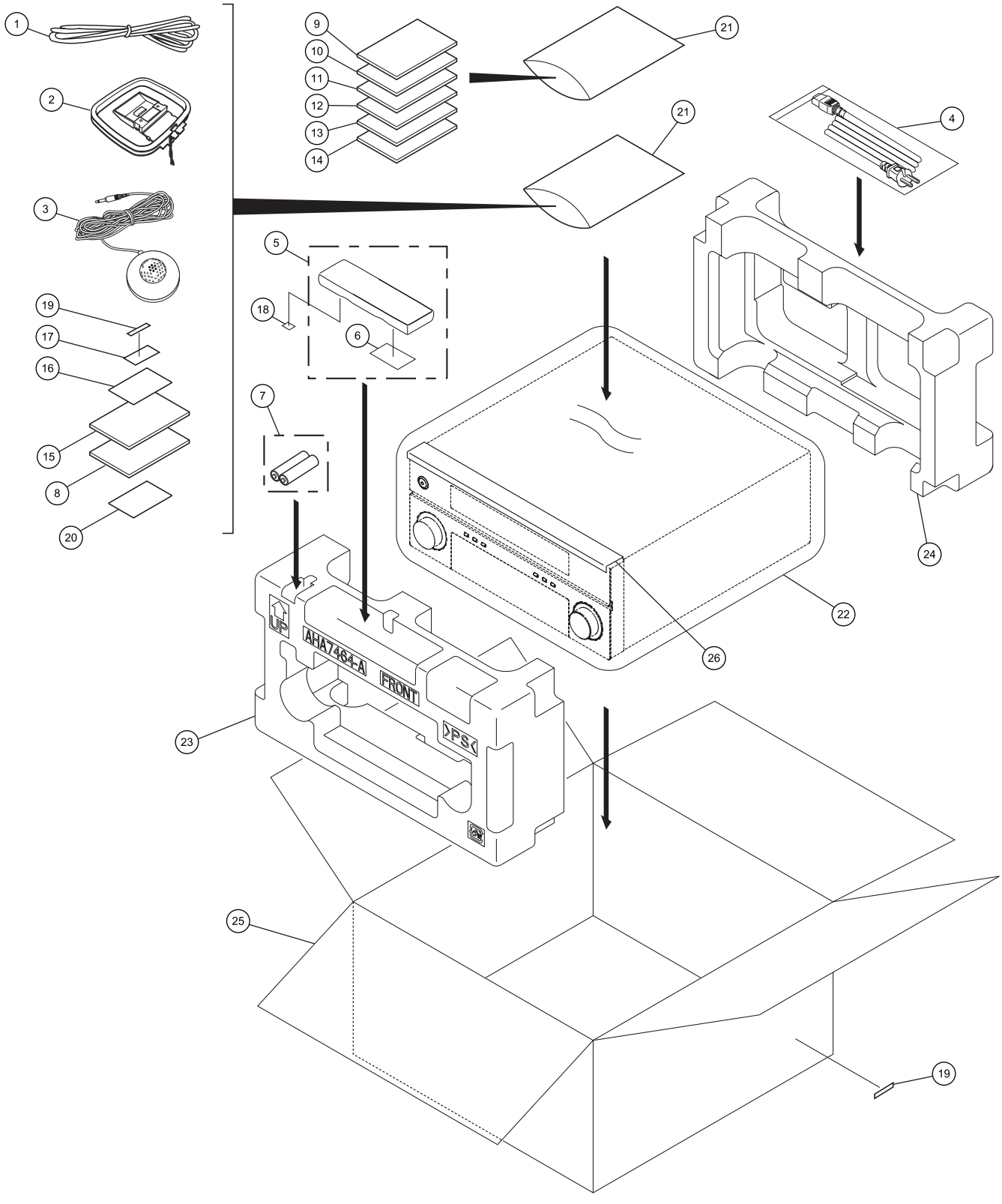
1. Turn on the unit then press and hold "↑" and "POWER" key for about 5sec.
2. "WAITING" is appeared on the FL display.
3. "CORE*.**" is appeared on the FL display. (*.** : F/W version No.)
4. Connect the USB flash memory which is saved the firmware file ("player.rom" file).
5. "UPDT" is displayed on the FL display.
6. Wait until "COMPLETE" is appeared on the FL display.
7. Disconnect the USB flash memory then set the function setting to anything other than USB.
8. Turn off the unit (Standby mode).

Notes:
• Do NOT reconnect the USB flash memory which is saved the "player.rom" file.
• Do NOT change the function setting or turn off the power during step 4 through 6.
If you do, the updating is failed and it is required to replace the USB flash ROM on the USB module.

9. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*
- *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)*

9.1 PACKING



(1) PACKING SECTION PARTS LIST

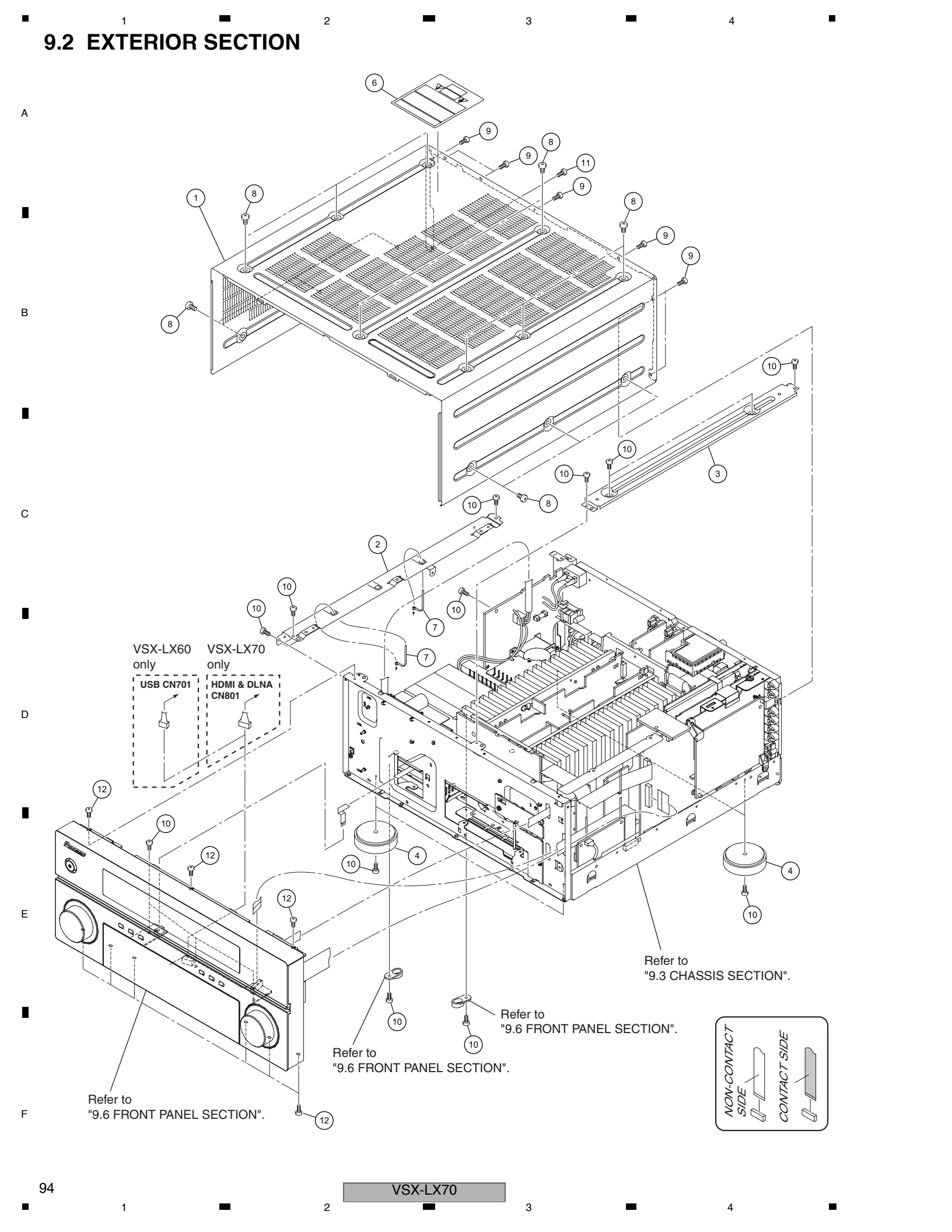
Mark	No.	Description	Part No.
	1	FM Wire Antenna	ADH7030
	2	AM Loop Antenna	ATB7013
	3	Setup Microphone (for Auto MCACC setup)	APM7008
⚠	4	AC Power Cord	ADG7062
	5	Remote Control Unit	See Contrast table (2)
	6	Battery Cover	XZN3140
NSP	7	AA/IEC R6P Dry Cell Batteries	VEM1031
	8	Operating Instructions (English)	ARB7381
	9	Operating Instructions (French)	ARC7749
	10	Operating Instructions (German)	ARC7750
	11	Operating Instructions (Italian)	ARC7751
	12	Operating Instructions (Spanish)	ARC7752
	13	Operating Instructions (Dutch)	ARC7753
	14	Operating Instructions (Russian)	ARC7769
	15	Operating Instructions (7L)	See Contrast table (2)
	16	Caution Sheet (SP, E)	ARM7056
NSP	17	Warranty Card	ARY7065
	18	Label (WEEE)	ARW7322
NSP	19	Label	VRW1629
	20	Disclaimer (6L)	XRM3010
NSP	21	Polyethylene Bag	AHG7117
	22	Packing Sheet	RHC1023
	23	Front Pad LX50	AHA7464
	24	Rear Pad LX50	AHA7465
	25	Packing Case	See Contrast table (2)
NSP	26	Spacer LX60	AHC7043

(2) CONTRAST TABLE

VSX-LX70/HYXJ5 and VSX-LX60/HYXJ5 are constructed the same except for the following:

Mark	No.	Symbol and Description	VSX-LX70/ HYXJ5	VSX-LX60/ HYXJ5
	5	Remote Control Unit	AXD7505	AXD7502
	15	Operating Instructions (7L)	ARE7633	Not used
	25	Packing Case	AHD8550	AHD8549

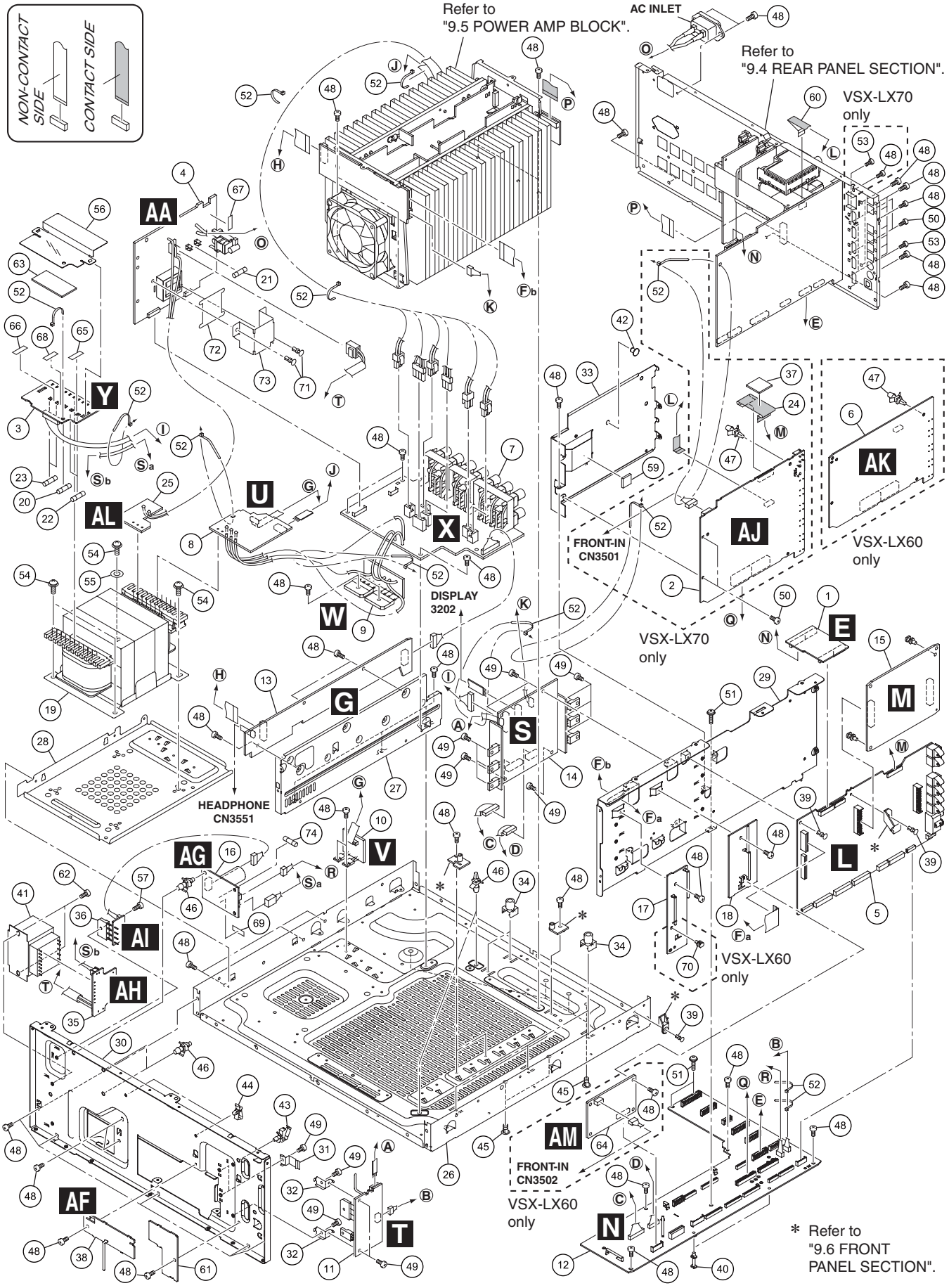
9.2 EXTERIOR SECTION



(1) EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Bonnet 60	AZN8028
	2	Left Beam 45	ANG7401
	3	Center Beam V1	ANG7482
	4	Insulator Assembly	DXA1904
	5	•••••	
	6	Label (LICENSE HD)	ARW7359
	7	Binder (BK-1)	ZCA-BK1
	8	Screw	BCZ40P060FTB
	9	Screw	BBZ30P060FCC
	10	Screw	BBZ30P080FCC
	11	Screw	IBP30P090FCC
	12	Screw	BBT30P080FCC

9.3 CHASSIS SECTION



(1) CHASSIS SECTION PARTS LIST

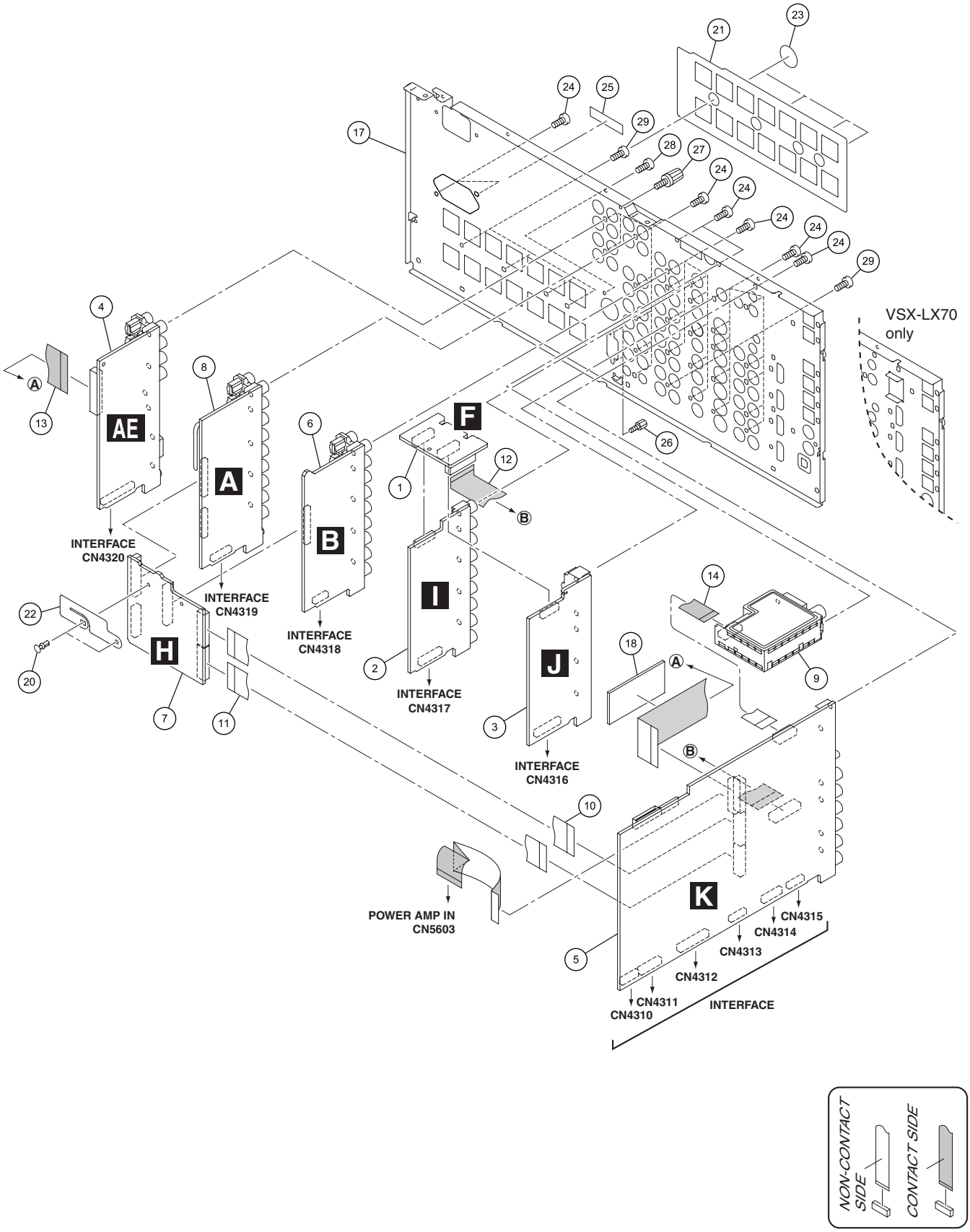
Mark	No.	Description	Part No.
NSP	1	BRIDGE 1 Assy	AWX8934
	2	HDMI & DLNA Assy	See Contrast table (2)
	3	TRANS 2-2 Assy	AWX8891
	4	PRIMARY Assy	AWX8895
	5	DIGITAL MOTHER Assy	See Contrast table (2)
	6	HDMI & DVC Assy	See Contrast table (2)
	7	SP/PS Assy	See Contrast table (2)
	8	TRANS 2-1 Assy	AWX8914
NSP	9	DIODE Assy	AWX8915
	10	VH TR Assy	AWX8916
	11	DC/DC Assy	See Contrast table (2)
	12	INTERFACE Assy	See Contrast table (2)
NSP	13	TRANS SIDE Assy	AWX8921
	14	LOCAL SUPPLY Assy	AWX8924
	15	DSP Assy	AWX8869
NSP	16	HDMI POWER Assy	AWX8933
NSP	17	FFC Guard (Front) Assy	AWX8899
NSP	18	FFC Guard (Side) Assy	See Contrast table (2)
⚠	19	Power Transformer (T1501)	ATS7403
⚠	20	Fuse (FU4 : T4AL/250V)	REK1028
⚠	21	Fuse (FU1 : T5AL/250V)	REK1029
⚠	22	Fuse (FU5, 6 : T800mAL/250V)	REK1021
⚠	23	Fuse (FU7, 8 : T2.5AL/250V)	REK1026
	24	22P Flexible Cable (J52)	See Contrast table (2)
	25	TRANS 1 Assy	• • • • •
NSP	26	Under Base 72	ANA7182
	27	Under Beam V1	ANG7478
NSP	28	Trans. Frame 74	ANG7539
NSP	29	DSP Shield 60	ANG7604
NSP	30	Panel Stay 60	ANG7588
NSP	31	Transistor Holder	ANG7543
NSP	32	DC Assy Holder	ANG7544
	33	HDMI Shield 60	ANK7137
	34	PCB Mold	AMR2534
	35	HDMI TRANS Assy	AWX8939
	36	HDMI DIODE Assy	AWX8940
	37	Shield Cushion	See Contrast table (2)
NSP	38	FR IN BARRIER1 Assy	AWX8948
	39	Nyron Rivet	AEC7408
	40	Card Spacer	AEC7502
⚠	41	Power Transformer (T1502)	ATT7104
NSP	42	PCB Spacer	AEC1084
	43	Locking Wire Saddle	AEC7550
	44	Side Clamp	DEC2007
	45	Card Spacer	DNK2769
	46	Locking Card Spacer	PNW2917
NSP	47	PC Support	VEC1749
	48	Screw	BBZ30P080FCC
	49	Screw	BBZ30P060FCC
	50	Screw	BBZ26P080FCC
	51	Screw 3 x 15	ABA7100
NSP	52	Binder (BK-1)	ZCA-BK1
	53	Screw	PMZ30P060FCC
	54	Screw	ABA7125
	55	Washer	WH40FNI
	56	Trans Barrier 60	AEC7588
	57	Screw	IBZ30P080FCC
	58	• • • • •	
	59	Raditation Sheet	PEB1306
	60	7P Flexible Cable (J55)	ADD7611
NSP	61	FR IN Barrier 2	• • • • •
	62	Screw	IBP30P090FCC
	63	Barrier Cushion	AEB7391
	64	USB Assy	See Contrast table (2)
NSP	65	Fuse Card (800mA, 250V)	AAX2367
NSP	66	Fuse Card (T2.5AL/250V)	AAX7277
NSP	67	Fuse Card (5A, 250V)	AAX7098
NSP	68	Fuse Card (4.0A, 250V)	AAX7099
NSP	69	Fuse Card (T1.6AL/250V)	AAX2377
	70	Card Spacer	See Contrast table (2)
	71	Nylon Rivet	AEC7406
	72	Primary Barrier	AEC7569
	73	Shield Case	AMR7526
⚠	74	Fuse (FU9 : T1.6AL/250V)	REK1024

(2) CONTRAST TABLE

VSX-LX70/HYXJ5 and VSX-LX60/HYXJ5 are constructed the same except for the following:

Mark	No.	Symbol and Description	VSX-LX70/ HYXJ5	VSX-LX60/ HYXJ5
	2	HDMI & DLNA Assy	AWX8974	Not used
	5	DIGITAL MOTHER Assy	AWP7047	AWP7053
	6	HDMI & DVC Assy	Not used	AWX8975
	7	SP/PS Assy	AWX8910	AWX8912
	11	DC/DC Assy	AWX8917	AWX8918
	12	INTERFACE Assy	AWX8949	AWX8941
NSP	18	FFC Guard (Side) Assy	AWX8937	AWX8938
	24	22P Flexible Cable (J52)	ADD7633	Not used
	37	Shield Cushion	AEB7372	Not used
	64	USB Assy	Not used	AWX8944
	70	Card Spacer	Not used	AEC7214

9.4 REAR PANEL SECTION



(1) REAR PANEL SECTION PARTS LIST

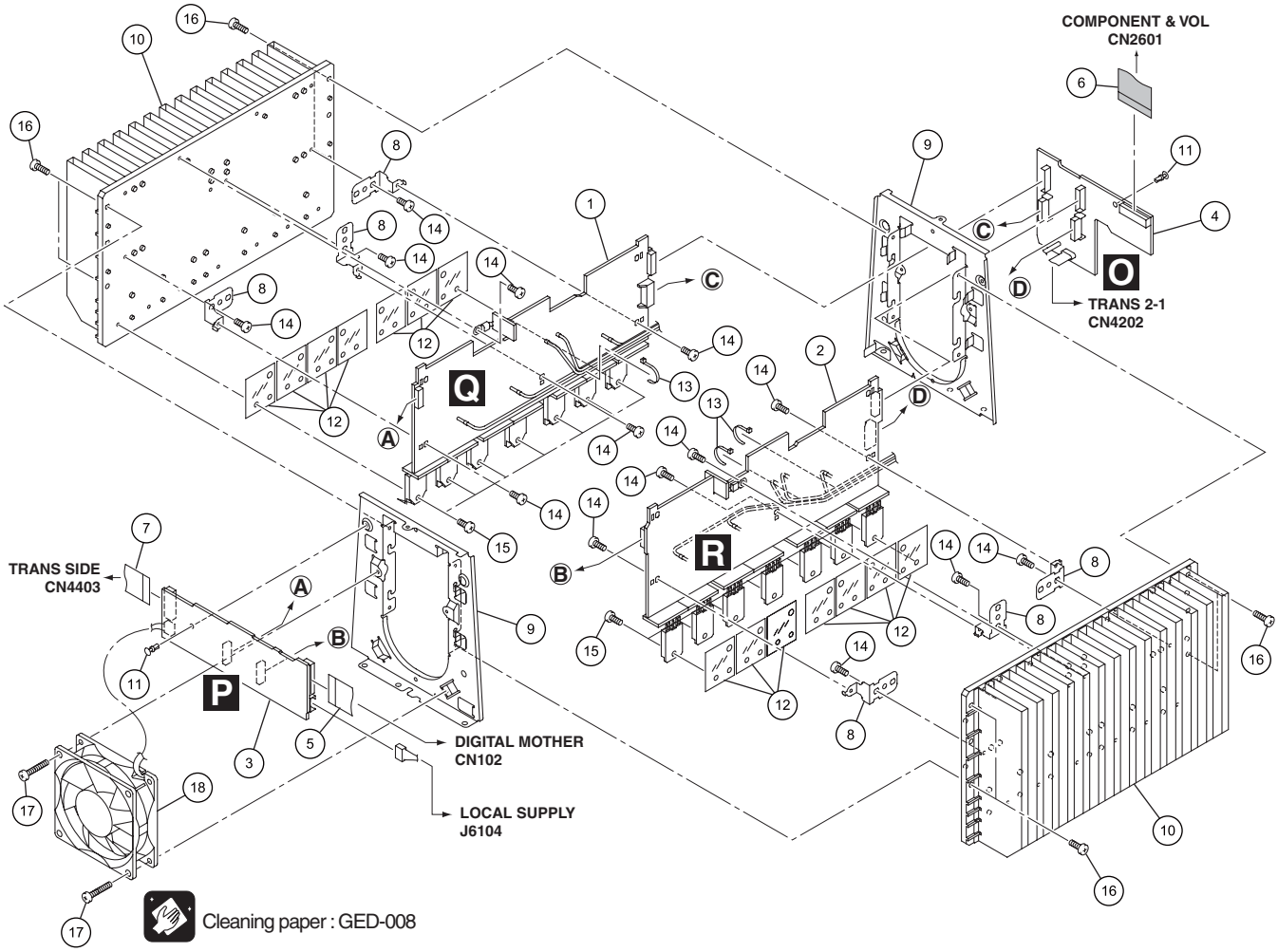
Mark	No.	Description	Part No.
NSP	1	BRIDGE 2 Assy	AWX8935
	2	COMPOSITE V Assy	AWX8972
	3	S VIDEO Assy	AWX8973
	4	PREOUT & CONTROL Assy	AWX8889
	5	COMPONENT & VOL Assy	See Contrast table (2)
	6	V-AUDIO Assy	AWX8931
NSP	7	BRIDGE 3 Assy	AWX8936
	8	AUDIO & MULTI CH IN Assy	AWX8927
	9	FM/AM TUNER Unit	AXX7248
	10	19P Flexible Cable (J45)	ADD7537
	11	15P Flexible Cable (J46)	ADD7613
	12	17P Flexible Cable (J47)	ADD7534
	13	24P Flexible Cable (J48)	ADD7612
	14	11P Flexible Cable (J54)	ADD7536
	15	•••••	
	16	•••••	
	17	Rear Panel	See Contrast table (2)
	18	FFC Cushion	AEB7373
	19	•••••	
	20	Nyron Rivet	AEC7408
	21	SP Sheet 74	AEC7537
NSP	22	Connect Barrier	AEC7541
	23	Cushion Circle 16B	AED7052
	24	Screw	BBZ30P080FCC
NSP	25	Label	VRW1629
	26	Screw 2.85 x 7	ABA7078
	27	Terminal Screw	AKE-031-0
	28	Screw	BBZ26P080FCC
	29	Screw	BBT30P100FCC

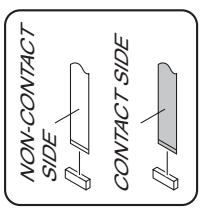
(2) CONTRAST TABLE

VSX-LX70/HYXJ5 and VSX-LX60/HYXJ5 are constructed the same except for the following:

Mark	No.	Symbol and Description	VSX-LX70/ HYXJ5	VSX-LX60/ HYXJ5
	5	COMPONENT & VOL Assy	AWQ7042	AWQ7047
	17	Rear Panel 70HY	ANC8485	Not used
	17	Rear Panel 60HY	Not used	ANC8490

9.5 POWER AMP SECTION

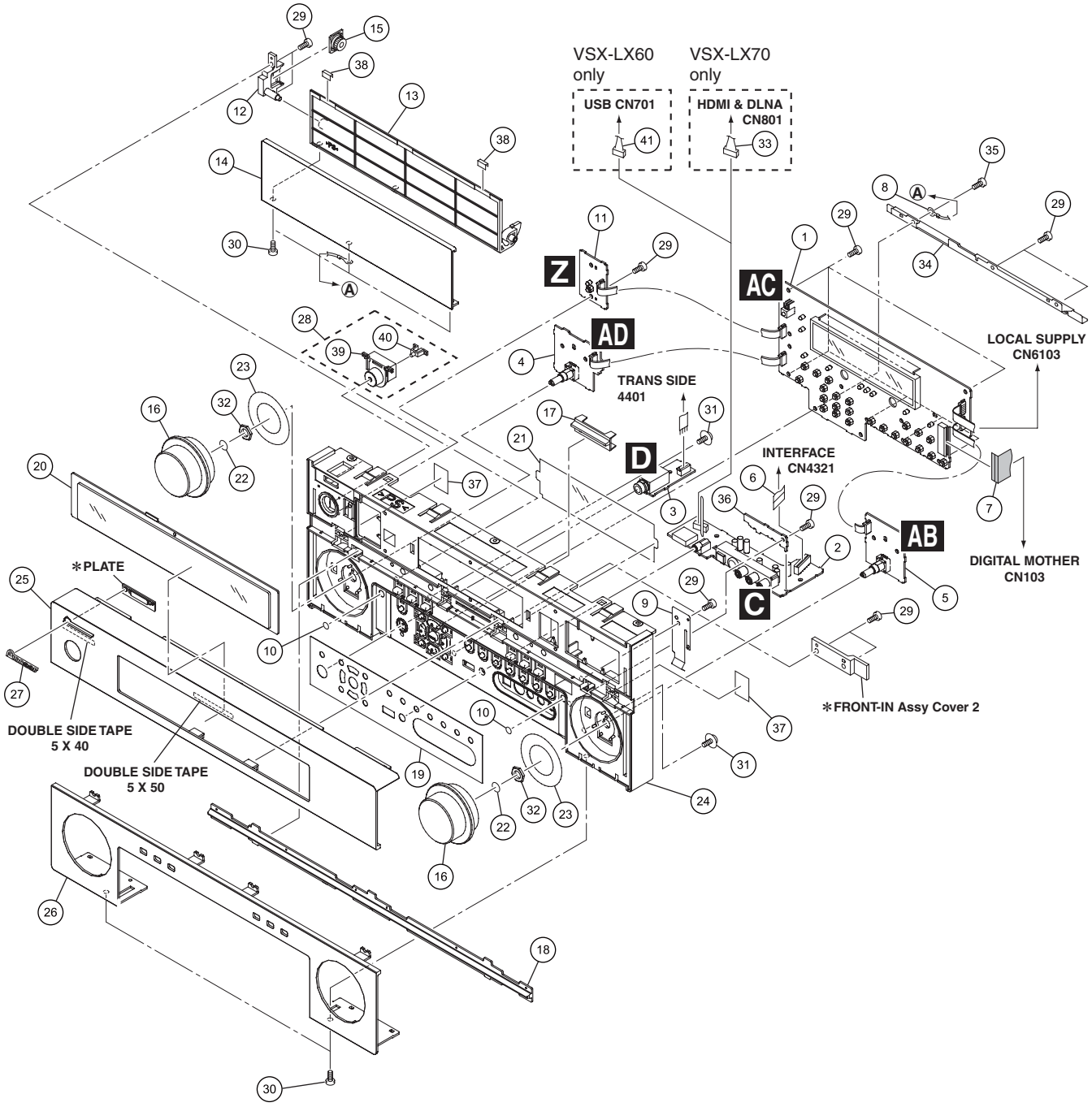


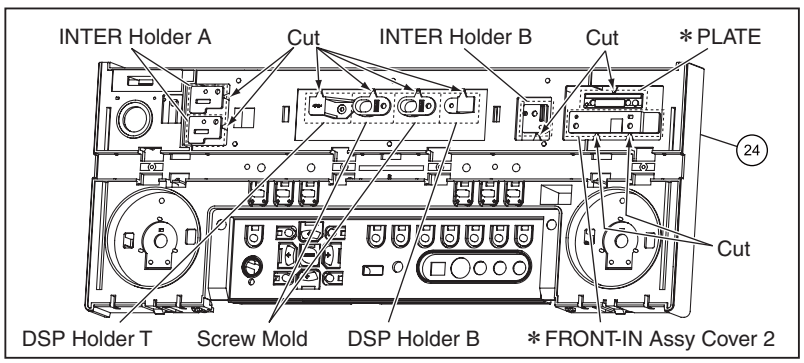


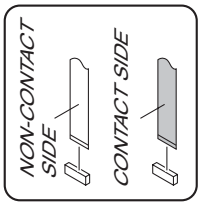
(1) POWER AMP SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	POWER AMP-L Assy	AWX8655
	2	POWER AMP-R Assy	AWX8657
	3	POWER PROTECT Assy	AWX8659
	4	POWER AMP IN Assy	AWX8662
	5	19P Flexible Cable (J43)	ADD7509
	6	19P Flexible Cable (J44)	ADD7535
	7	17P Flexible Cable (J51)	ADD7516
	8	PCB Angle 45	ANG7406
NSP	9	HS Angle 74	ANG7542
NSP	10	Heatsink 74	ANH7181
	11	Nyron Rivet	AEC7408
	12	Mica Sheet	AEC7545
NSP	13	Binder (BK-1)	ZCA-BK1
	14	Screw	BBZ30P080FCC
	15	Screw 3 x 19	ABA7085
	16	Screw	BBT30P100FCC
	17	Screw	BBZ30P300FTC
⚠	18	DC Fan Motor	AXM7029

9.6 FRONT PANEL SECTION







(1) FRONT PANEL SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	DISPLAY Assy	AWX8900
	2	FRONT-IN Assy	See Contrast table (2)
	3	HEADPHONE Assy	AWX8905
	4	INPUT SELECT Assy	AWX8906
	5	VOLUME Assy	AWX8907
	6	15P Flexible Cable (J41)	ADD7610
	7	31P Flexible Cable (J42)	ADD7609
NSP	8	Cord with Plug	ADH7022
	9	Door Spring	ABK7061
	10	Cushion Circle 6B	AED7083
	11	POWER SW Assy	AWX8908
	12	Door Shaft 60	AMR7531
	13	Door Base 60HY	AMR7529
	14	Door Panel 60HY	ANB7471
	15	Damper Assy (240)	AXA7136
	16	VOL. Knob	AAA7052
	17	IB Lens 60	AAK8379
	18	Center Lens 60	AAK8380
	19	Door Sheet 60HY	AAK8405
	20	Window 60HY	AAK8396
	21	Filter 60HY	AAK8413
	22	VOL Ring 60	ABH7249
	23	Knob Spacer 74	AEC7558
	24	Panel Base 60HY	AMB7973
	25	Front Panel TOP	See Contrast table (2)
	26	Front Panel BTM 60HY	ANB7467
	27	Pioneer Badge (AL)	BAM1004
	28	STBY BTN LXHY Assy	AAD7773
	29	Screw	BBZ30P080FNI
	30	Screw	BBZ30P080FTB
	31	Screw	ABA7110
	32	Nut	NK90FTC
	33	5P Shielded Cable	See Contrast table (2)
	34	Panel Beam 60	ANG7590
	35	Screw	BBZ30P100FTC
NSP	36	FRONT-IN Assy Cover1	•••••
	37	Cushion 15 X 20	AED7106
	38	Cushion 11 X 7	AED7092
	39	STBY BTN LXHY	AAD7772
NSP	40	STBY Lens V2	XAK3477
	41	4P Shielded Cable	See Contrast table (2)

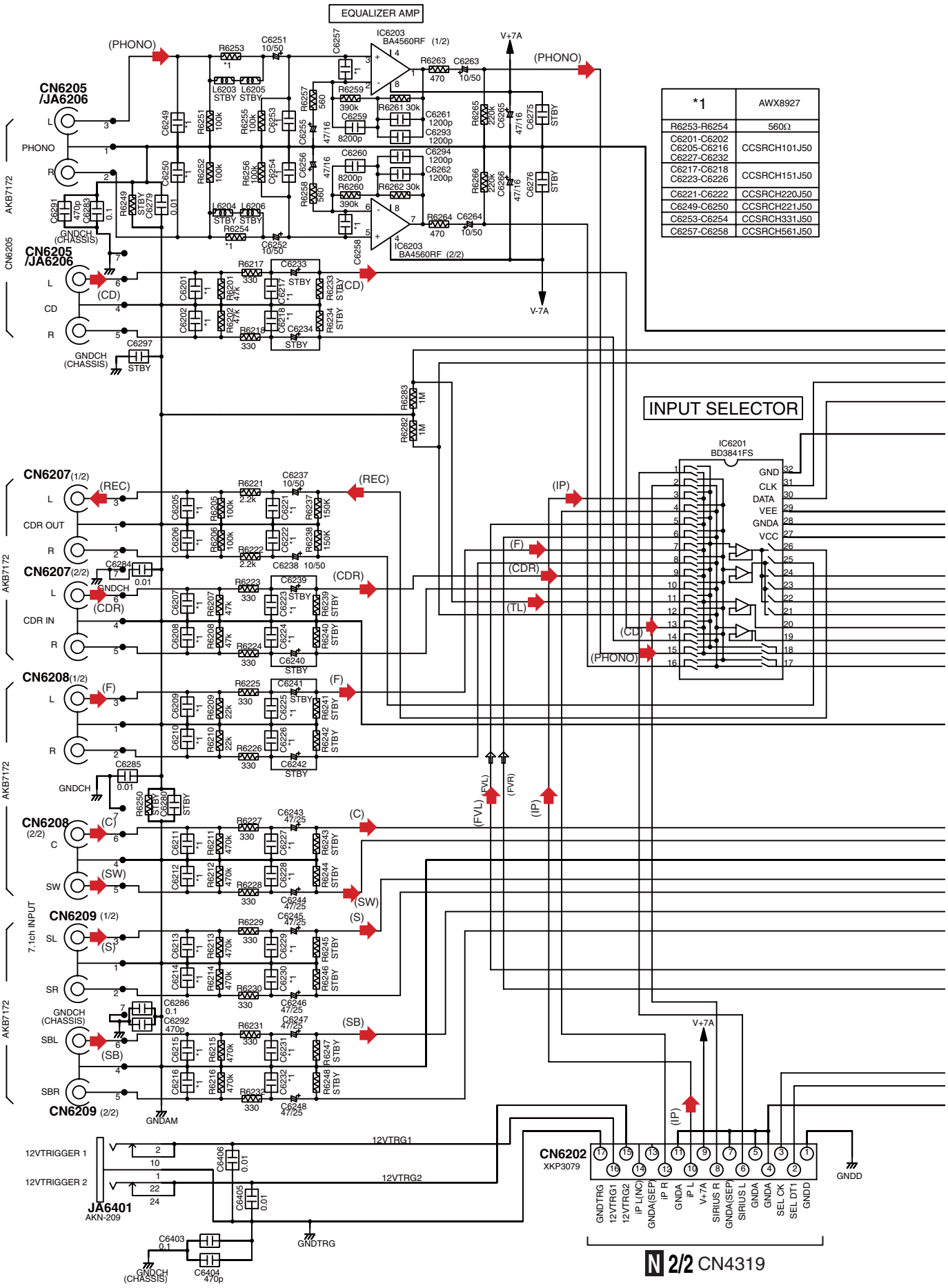
(2) CONTRAST TABLE

VSX-LX70/HYXJ5 and VSX-LX60/HYXJ5 are constructed the same except for the following:

Mark	No.	Symbol and Description	VSX-LX70/ HYXJ5	VSX-LX60/ HYXJ5
	2	FRONT-IN Assy	AWX8902	AWX8904
	25	Front Panel TOP 70HY	ANB7463	Not used
	25	Front Panel TOP 60HY	Not used	ANB7460
	33	5P Shielded Cable	ADX7573	Not used
	41	4P Shielded Cable	Not used	ADX7615

10. SCHEMATIC DIAGRAM

10.1 AUDIO & MULTI CH IN ASSY

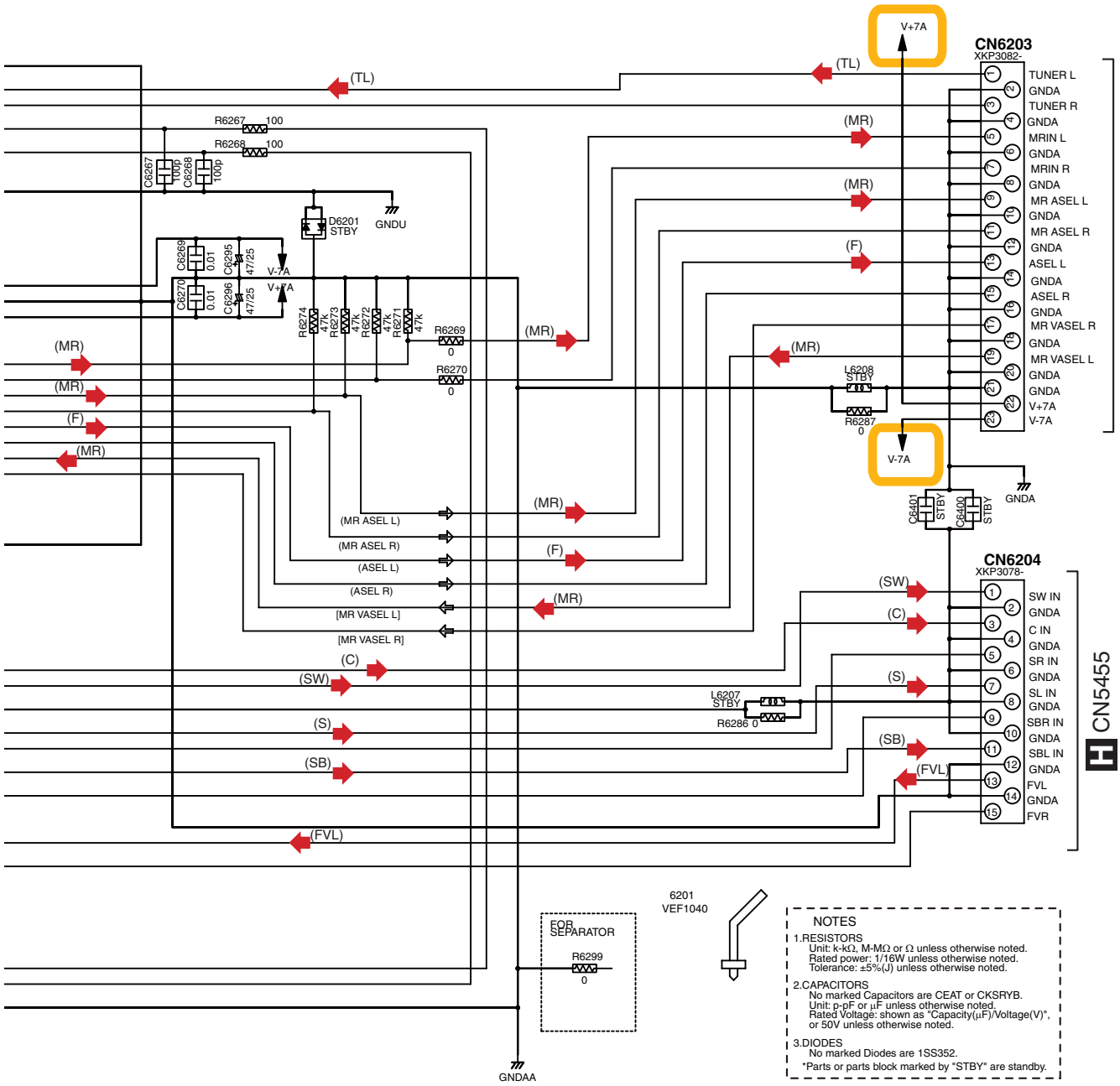


*1	AWX8927
R6253-R6254	560Ω
C6201-C6202 C6205-C6216 C6227-C6232	CCSRCH101J50
C6217-C6218 C6223-C6226	CCSRCH151J50
C6221-C6222	CCSRCH220J50
C6249-C6250	CCSRCH221J50
C6253-C6254	CCSRCH331J50
C6257-C6258	CCSRCH561J50

(F) : AUDIO SIGNAL ROUTE(F)
(C) : AUDIO SIGNAL ROUTE(C)
(S) : AUDIO SIGNAL ROUTE(S)
(SB) : AUDIO SIGNAL ROUTE(SB)
(SW) : AUDIO SIGNAL ROUTE(SW)
(PHONO) : AUDIO SIGNAL ROUTE (PHONO)
(IP) : AUDIO SIGNAL ROUTE(IP)

(CD) : AUDIO SIGNAL ROUTE (CD)
(TL) : AUDIO SIGNAL ROUTE (TL)
(MR) : AUDIO SIGNAL ROUTE (MR)
(REC) : AUDIO SIGNAL ROUTE (REC)
(CDR) : AUDIO SIGNAL ROUTE (CDR)
(FVL) : AUDIO SIGNAL ROUTE (FVL)

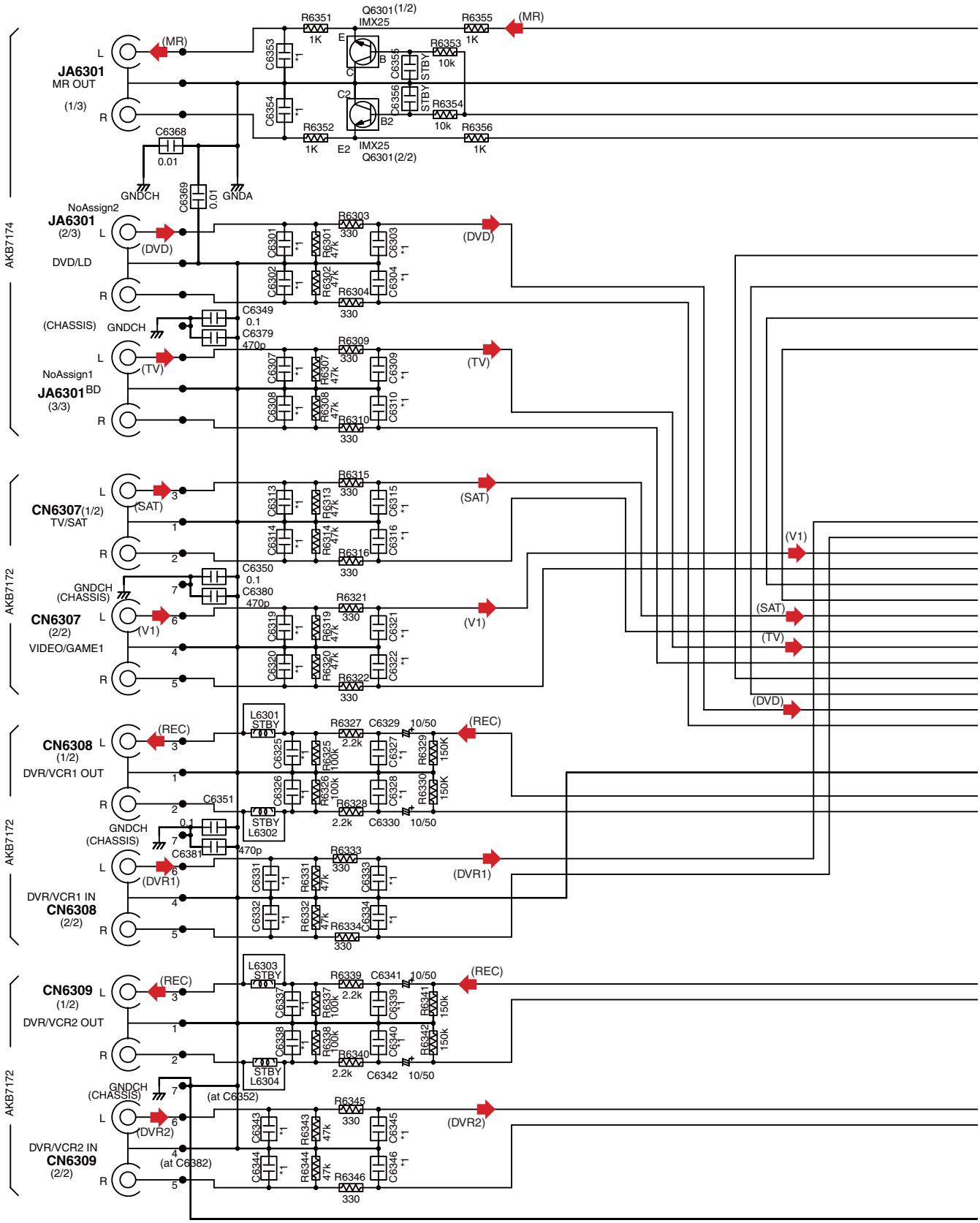
A AUDIO & MULTI CH IN ASSY (AWX8927)



NOTES
1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.
2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB.
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)", or 50V unless otherwise noted.
3.DIODES
No marked Diodes are 1SS352.
*Parts or parts block marked by "STBY" are standby.

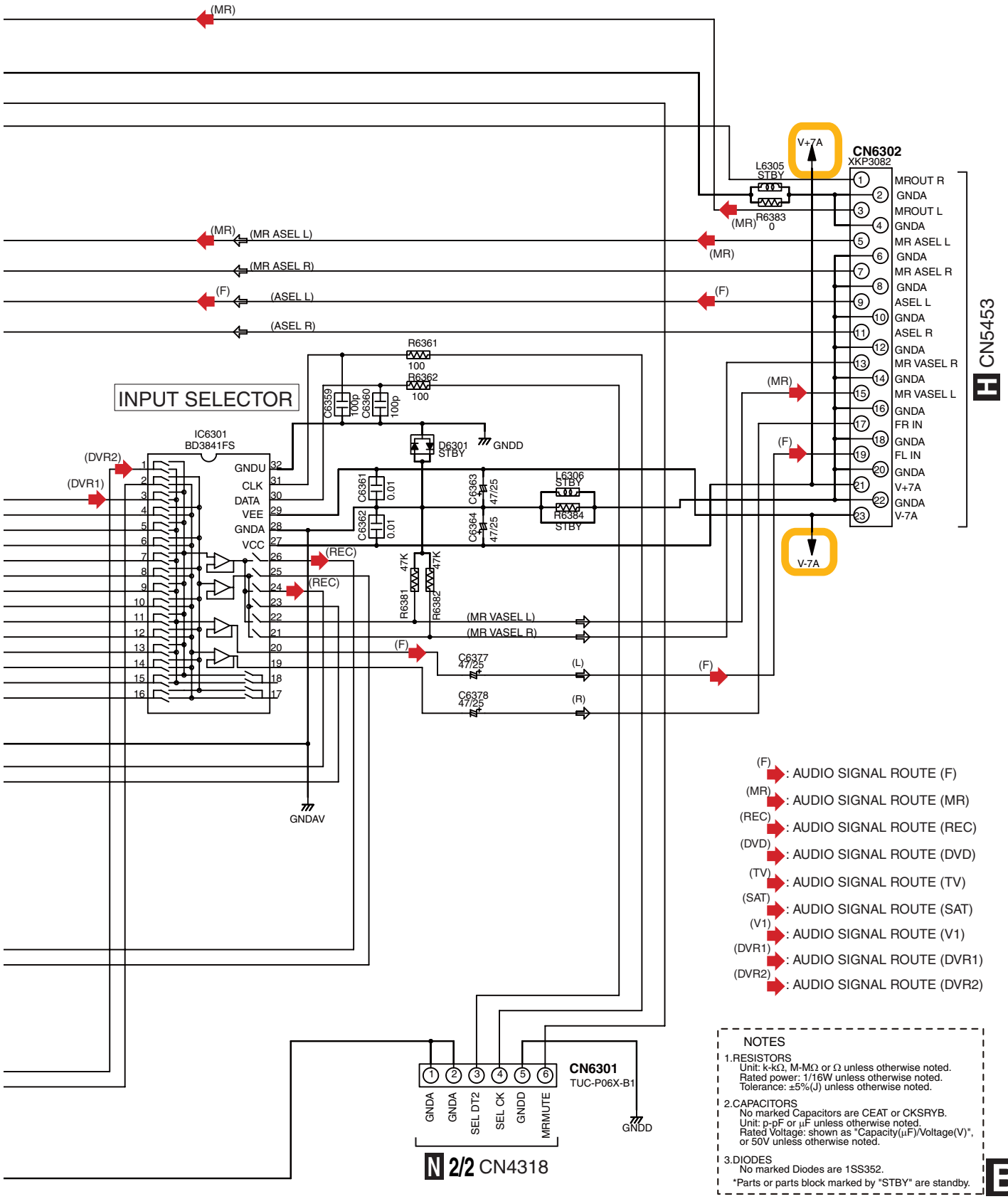
10.2 V-AUDIO ASSY

B V-AUDIO ASSY (AWX8931)



*1

	AWX8931
C6353-C6354	CCSRCH331J50
C6301-C6304 C6307-C6310 C6213-C6316 C6319-C6322 C6325-C6326 C6331-C6334 C6337-C6338 C6343-C6346	CCSRCH101J50
C6327-C6328 C6339-C6340	CCSRCH220J50



(F): AUDIO SIGNAL ROUTE (F)
(MR): AUDIO SIGNAL ROUTE (MR)
(REC): AUDIO SIGNAL ROUTE (REC)
(DVD): AUDIO SIGNAL ROUTE (DVD)
(TV): AUDIO SIGNAL ROUTE (TV)
(SAT): AUDIO SIGNAL ROUTE (SAT)
(V1): AUDIO SIGNAL ROUTE (V1)
(DVR1): AUDIO SIGNAL ROUTE (DVR1)
(DVR2): AUDIO SIGNAL ROUTE (DVR2)

NOTES

1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.

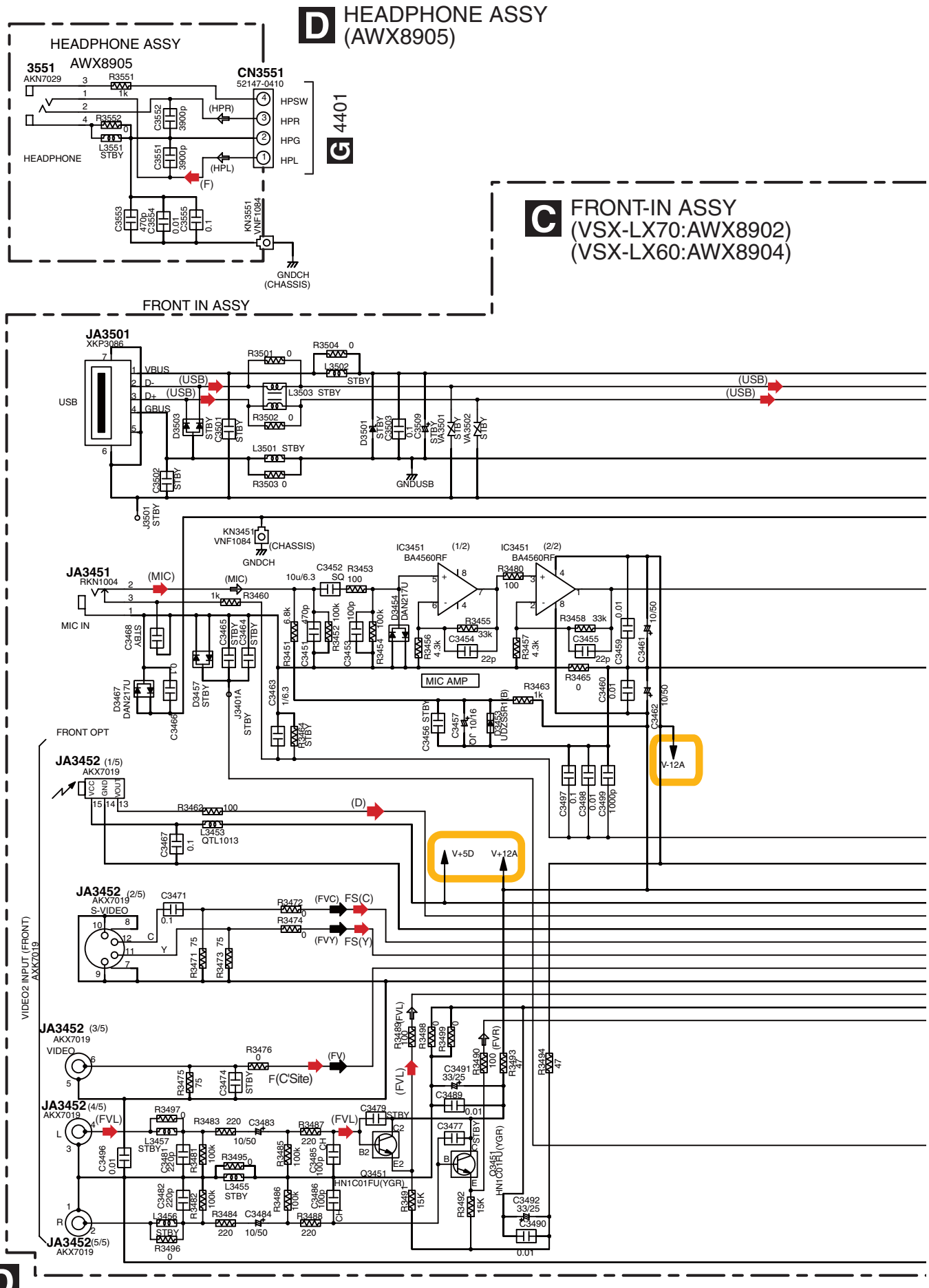
2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB.
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)", or 50V unless otherwise noted.

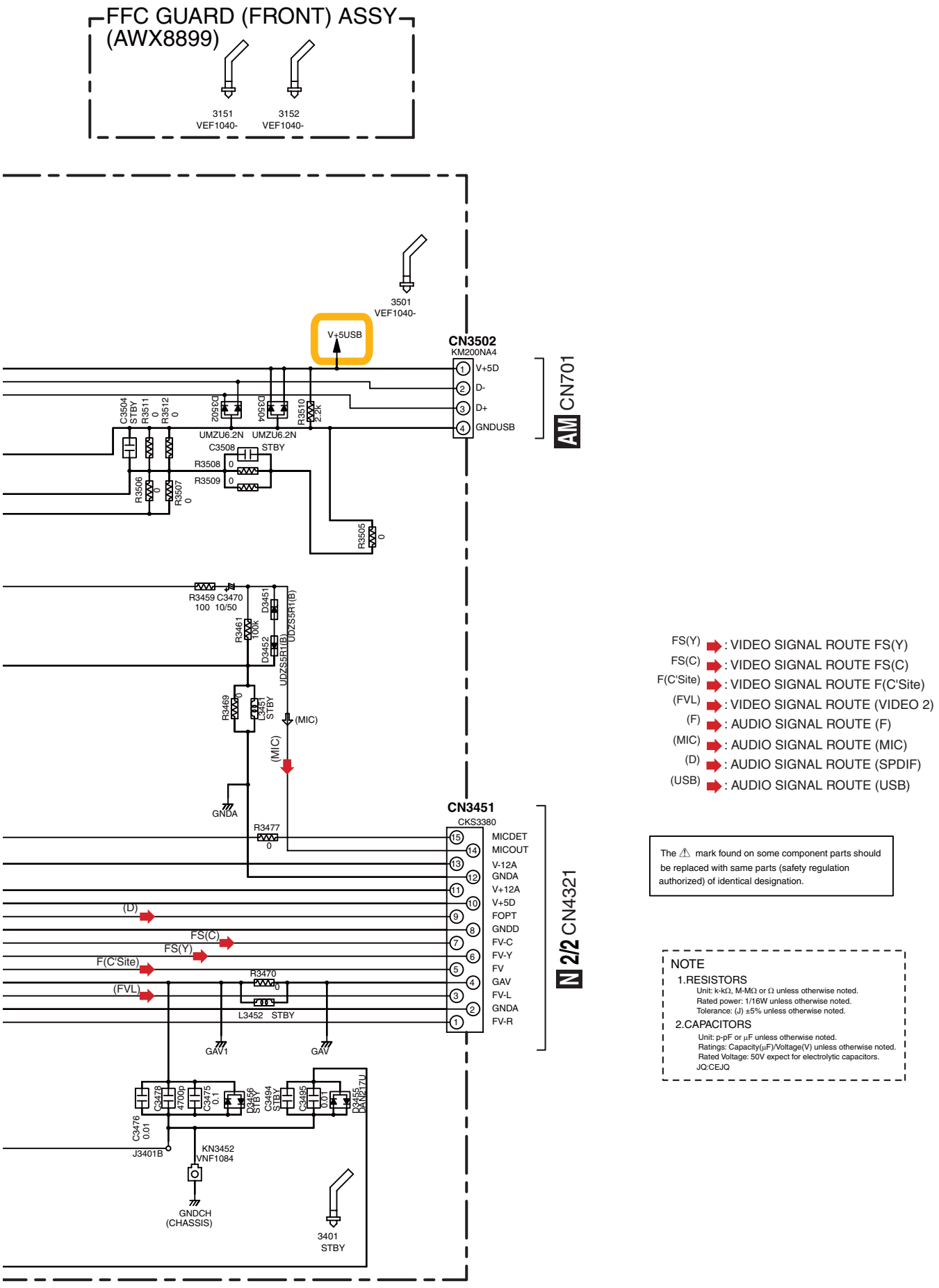
3.DIODES
No marked Diodes are 1SS352.

*Parts or parts block marked by "STBY" are standby.

B

10.3 FRONT-IN and HEADPHONE ASSYS



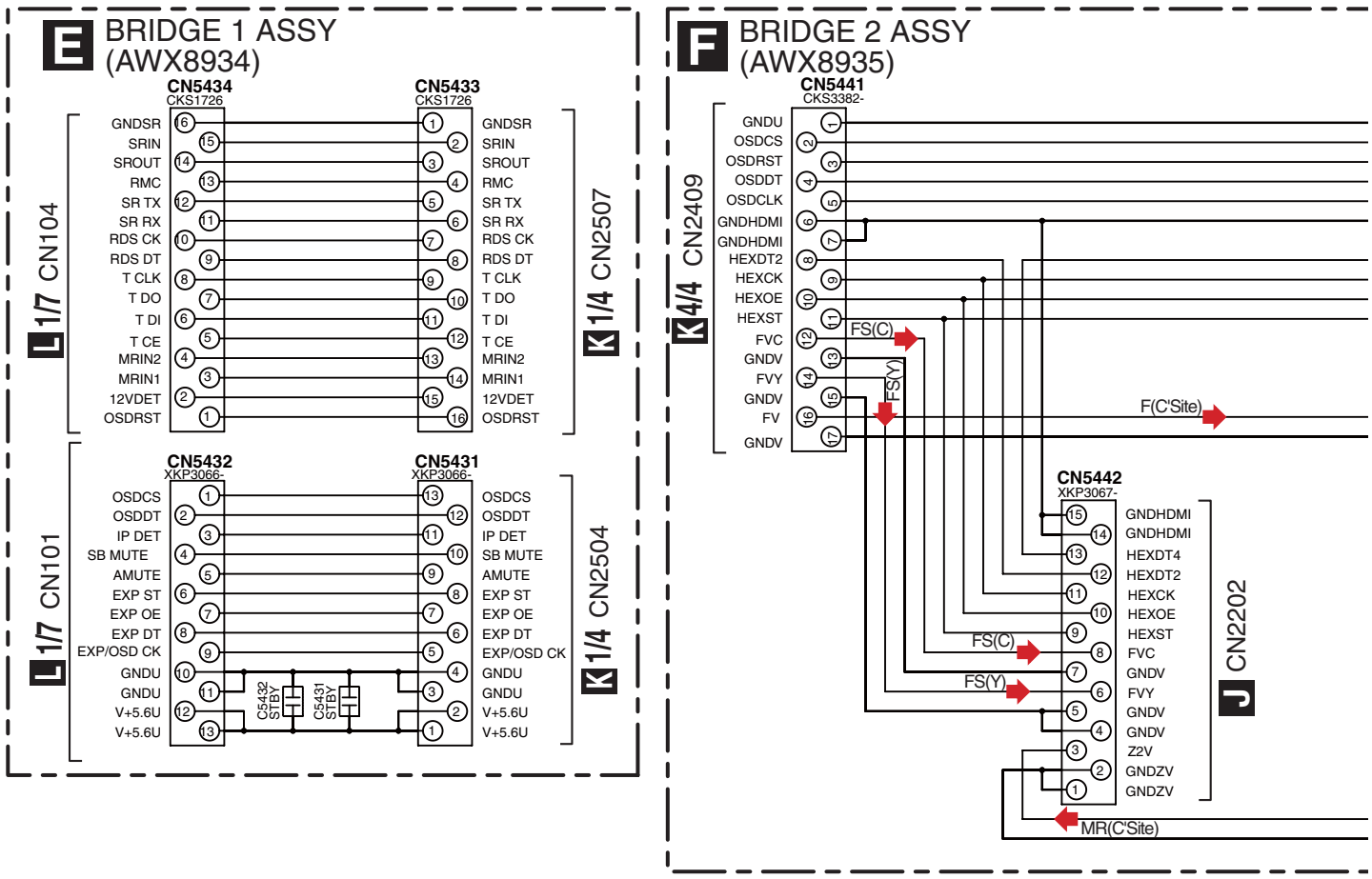


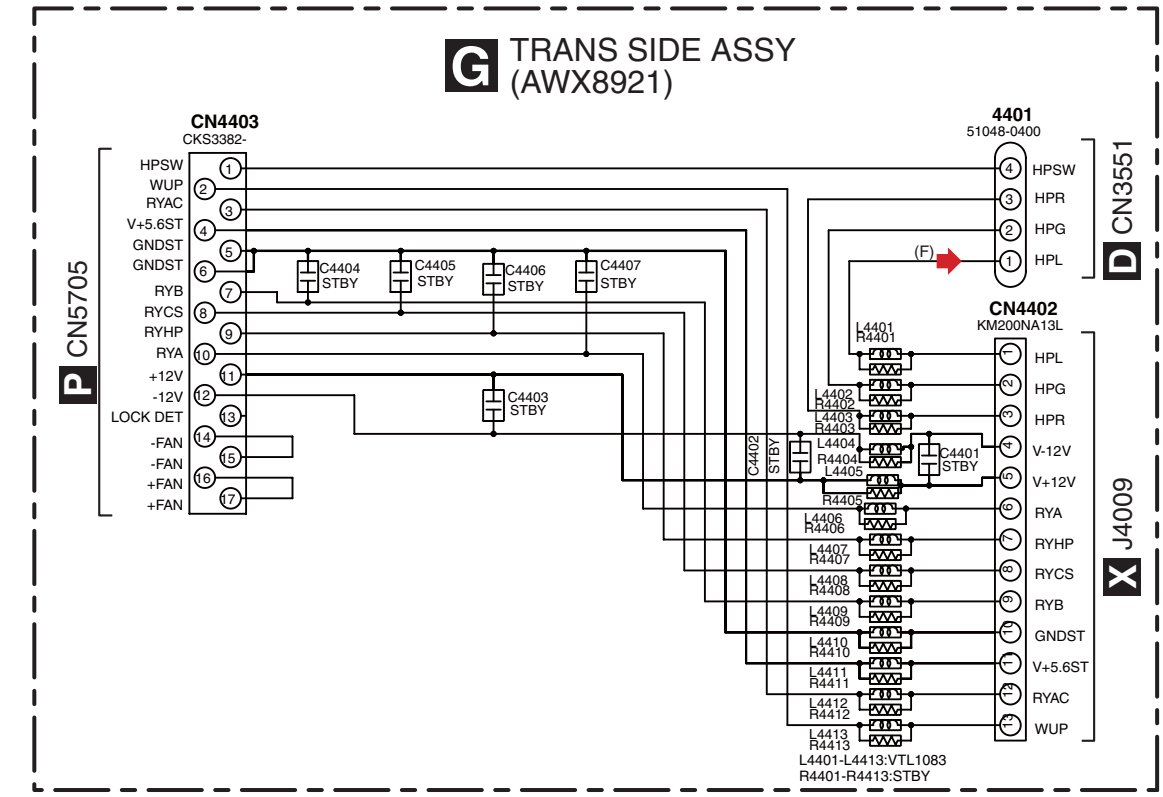
FS(Y) : VIDEO SIGNAL ROUTE FS(Y)
FS(C) : VIDEO SIGNAL ROUTE FS(C)
F(C'Site) : VIDEO SIGNAL ROUTE F(C'Site)
(FVL) : VIDEO SIGNAL ROUTE (VIDEO 2)
(F) : AUDIO SIGNAL ROUTE (F)
(MIC) : AUDIO SIGNAL ROUTE (MIC)
(D) : AUDIO SIGNAL ROUTE (SPDIF)
(USB) : AUDIO SIGNAL ROUTE (USB)

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

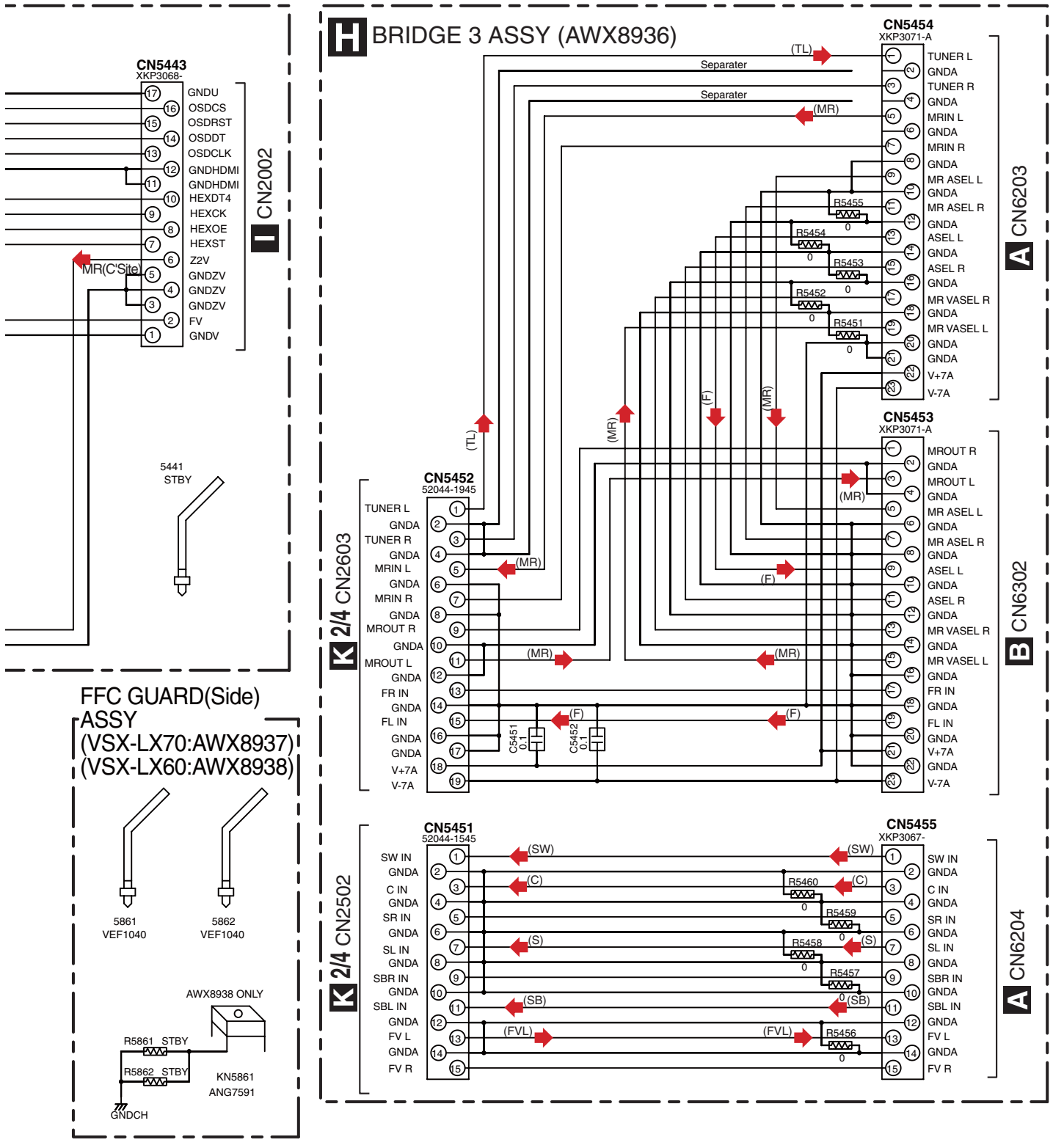
NOTE
1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: (J) ±5% unless otherwise noted.
2.CAPACITORS
Unit: p-pF or μF unless otherwise noted.
Ratings: Capacity(μF)/Voltage(V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capacitors.
JQ:CEJQ

10.4 BRIDGE1, BRIDGE2, TRANS SIDE and BRIDGE3 ASSYS





E F G

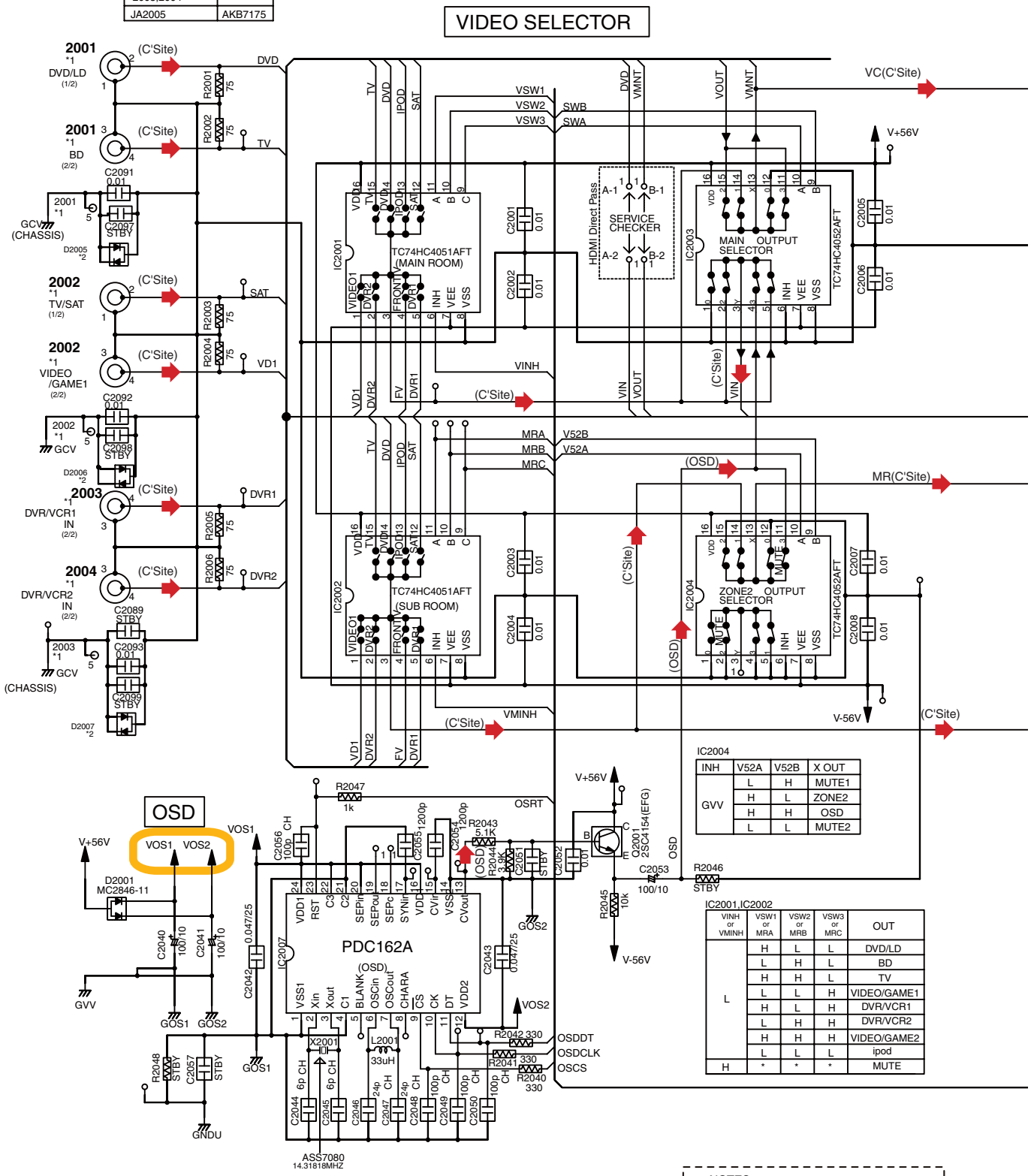


MR(C'Site) : VIDEO SIGNAL ROUTE MR(C'Site)
F(C'Site) : VIDEO SIGNAL ROUTE F(C'Site)
FS(C) : VIDEO SIGNAL ROUTE FS(C)
FS(Y) : VIDEO SIGNAL ROUTE FS(Y)

(F) : AUDIO SIGNAL ROUTE(F)
(C) : AUDIO SIGNAL ROUTE(C)
(S) : AUDIO SIGNAL ROUTE(S)
(SB) : AUDIO SIGNAL ROUTE(SB)
(SW) : AUDIO SIGNAL ROUTE(SW)
(TL) : AUDIO SIGNAL ROUTE(TUNER)
(FVL) : AUDIO SIGNAL ROUTE(VIDEO2)
(MR) : AUDIO SIGNAL ROUTE(MR)

10.5 COMPOSITE V ASSY

*1	AWX8972
2001,2002 2003,2004	AKB7176
JA2005	AKB7175



NOTES

1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.

2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB.
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)", or 50V unless otherwise noted.

3.DIODES
No marked Diodes are 1SS352.

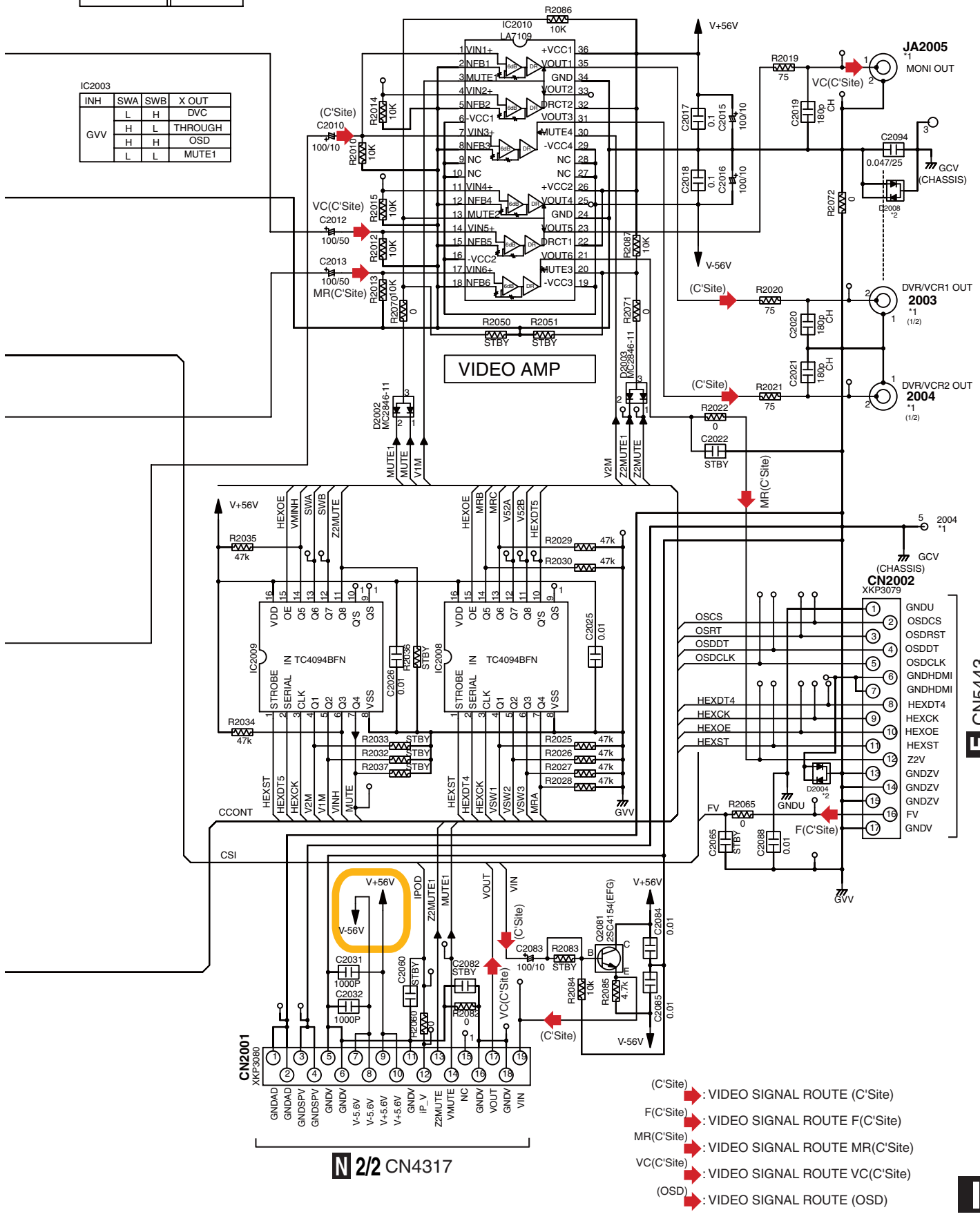
*Parts or parts block marked by "STBY" are standby.

I COMPOSITE V ASSY (AWX8972)

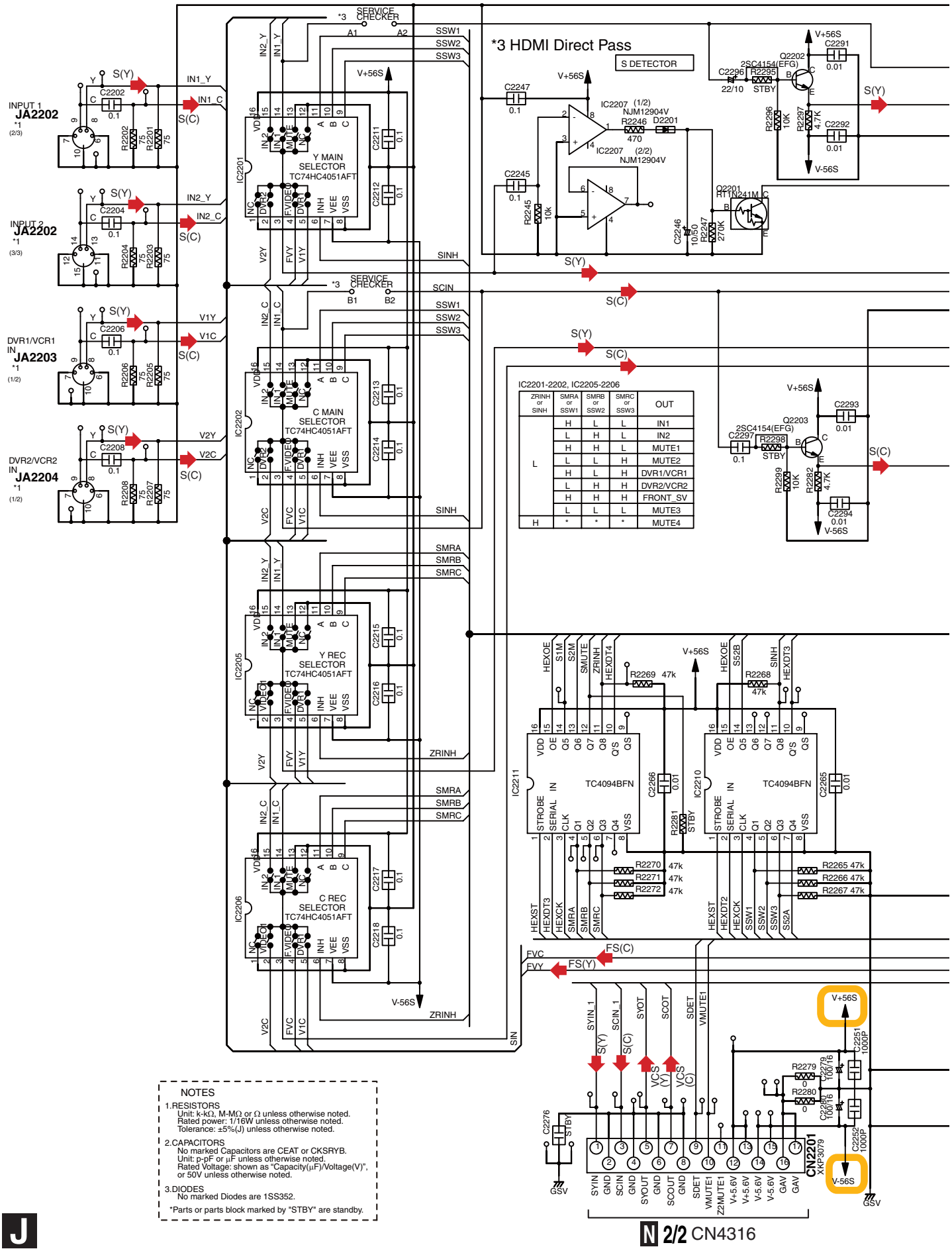
*2	AWX8972
D2004-D2008	DAN217U

IC2003

INH	SWA	SWB	X OUT
GVV	L	H	DVC
	H	L	THROUGH
	H	H	OSD
	L	L	MUTE1



10.6 S-VIDEO ASSY



NOTES

1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.

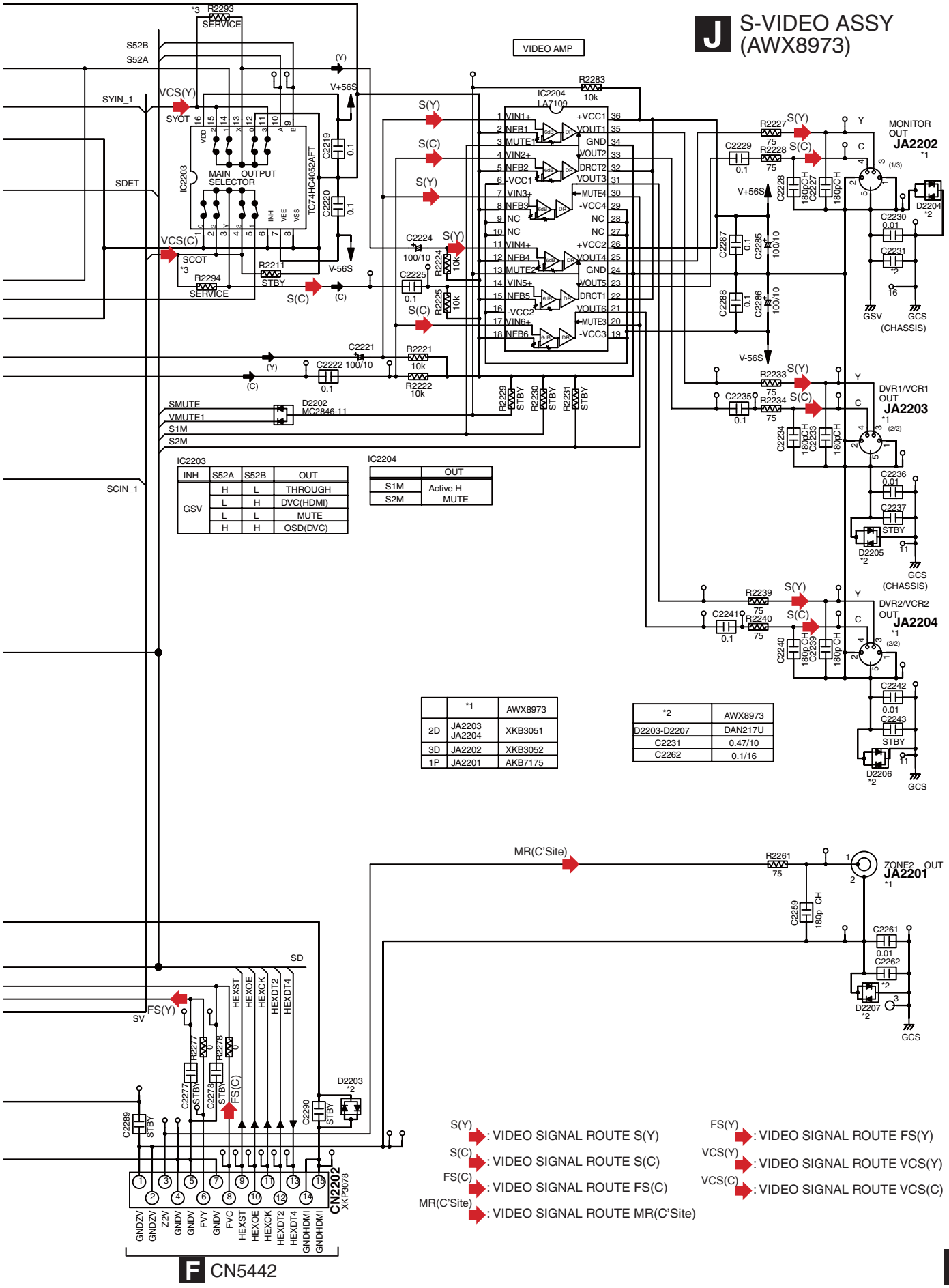
2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB.
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)", or 50V unless otherwise noted.

3.DIODES
No marked Diodes are 1SS352.

*Parts or parts block marked by "STBY" are standby.

N 2/2 CN4316

J S-VIDEO ASSY (AWX8973)



IC2203			
INH	S52A	S52B	OUT
GSV	H	L	THROUGH
	L	H	DVC(HDMI)
	L	L	MUTE
	H	H	OSD(DVC)

IC2204	
	OUT
S1M	Active H
S2M	MUTE

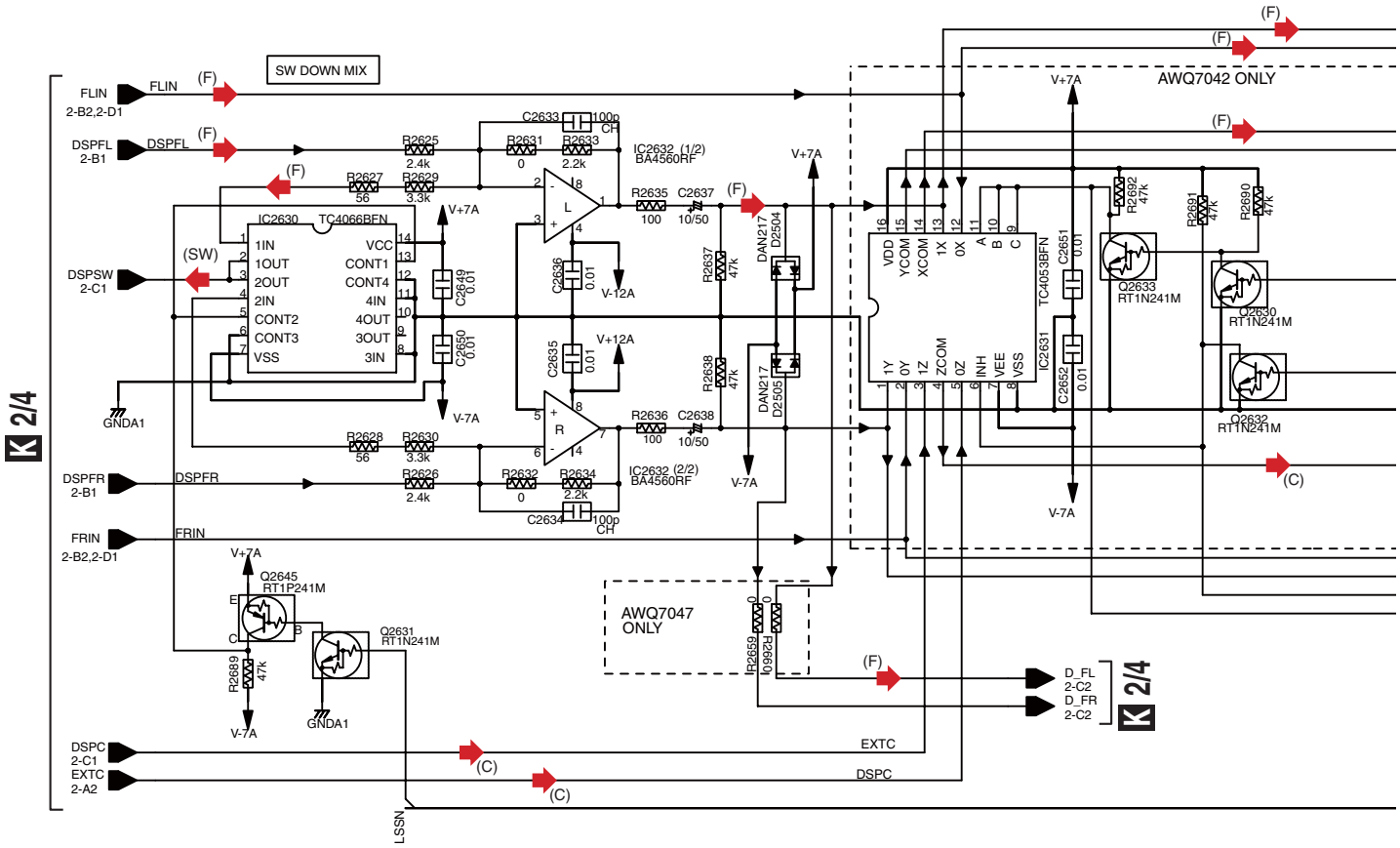
	*1	AWX8973
2D	JA2203 JA2204	XKB3051
3D	JA2202	XKB3052
1P	JA2201	AKB7175

*2	AWX8973
D2203-D2207	DAN217U
C2231	0.47/10
C2262	0.1/16

S(Y) : VIDEO SIGNAL ROUTE S(Y)
S(C) : VIDEO SIGNAL ROUTE S(C)
FS(C) : VIDEO SIGNAL ROUTE FS(C)
MR(C'Site) : VIDEO SIGNAL ROUTE MR(C'Site)
FS(Y) : VIDEO SIGNAL ROUTE FS(Y)
VCS(Y) : VIDEO SIGNAL ROUTE VCS(Y)
VCS(C) : VIDEO SIGNAL ROUTE VCS(C)

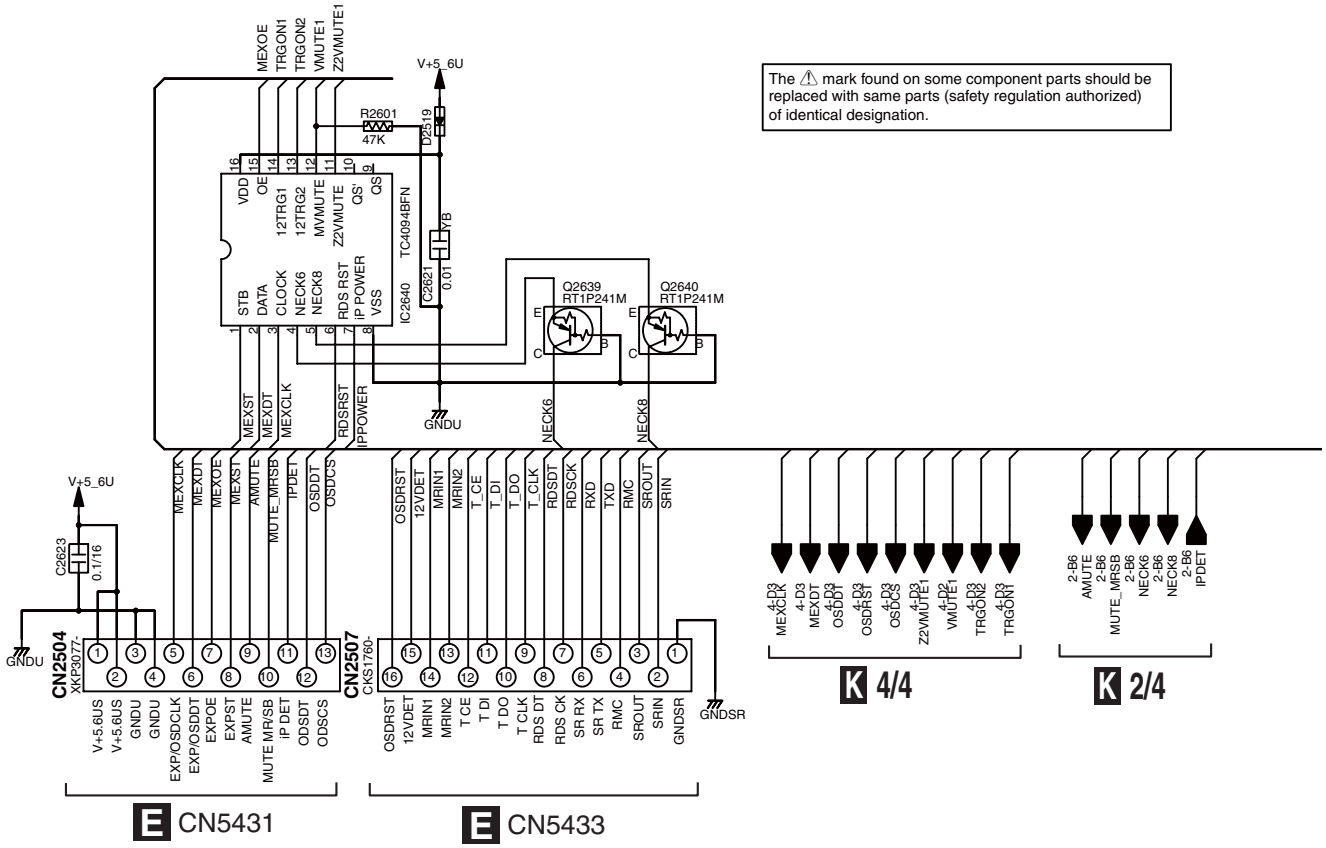
F CN5442

10.7 COMPONENT & VOL ASSY (1/4)



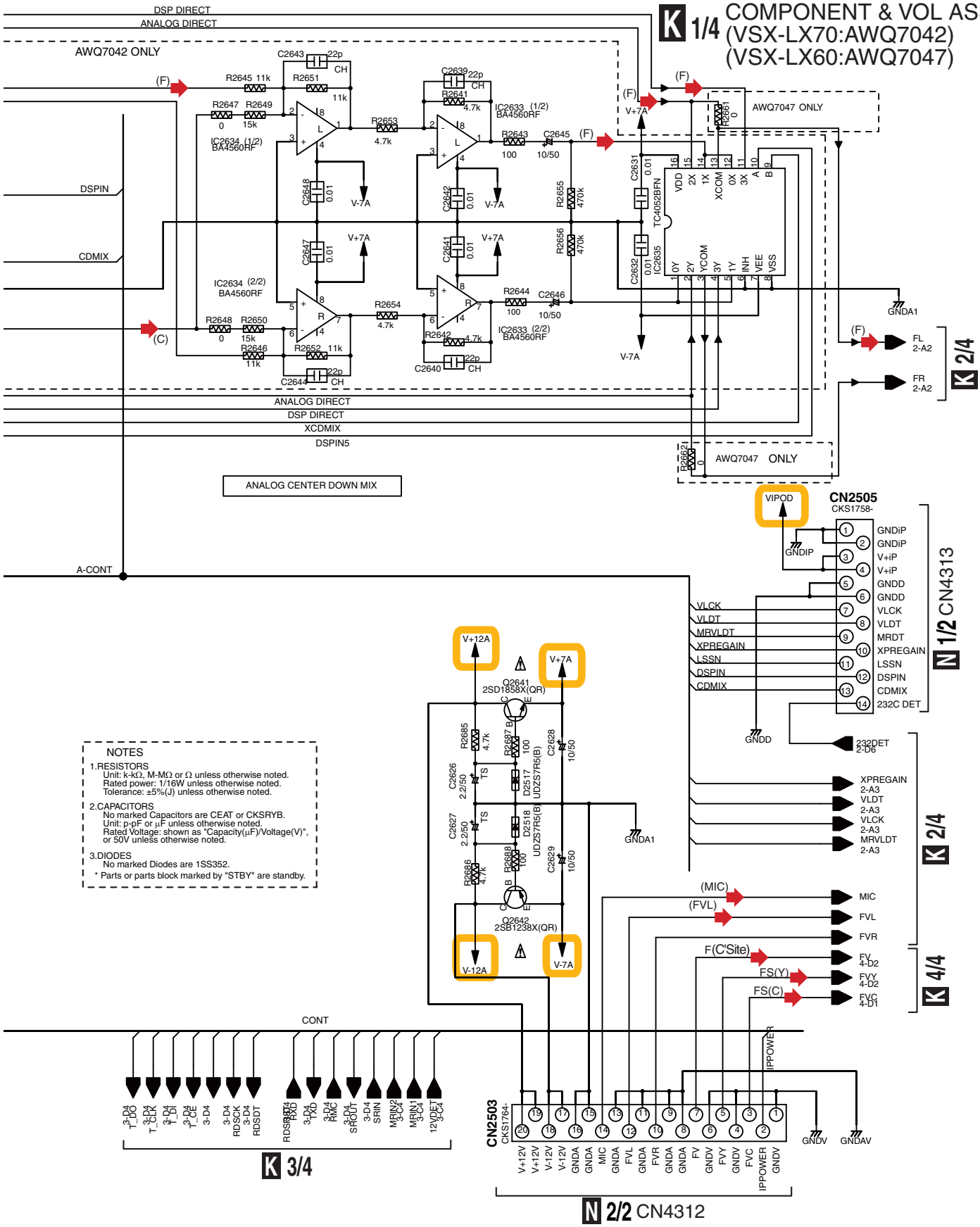
SW DOWN MIX SELECT		
XLSSN	L	H
IC2630[CONT]	H	L
SW DOWNMIX	ON	OFF

CENTER DOWN MIX SELECT								
CDMIX	DSPIN	IC2631				IC2635		SELECT
		A	B	C	INH	A	B	
L	H	H	H	H	H	H	H	DSP Direct
L	L	L	L	L	H	L	H	Analog Direct
H	H	H	H	H	L	H	L	DSP Downmix
H	L	L	L	L	L	L	L	Analog Downmix



The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

K 1/4 COMPONENT & VOL ASSY (VSX-LX70:AWQ7042) (VSX-LX60:AWQ7047)



NOTES

1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.

2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB.
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)", or 50V unless otherwise noted.

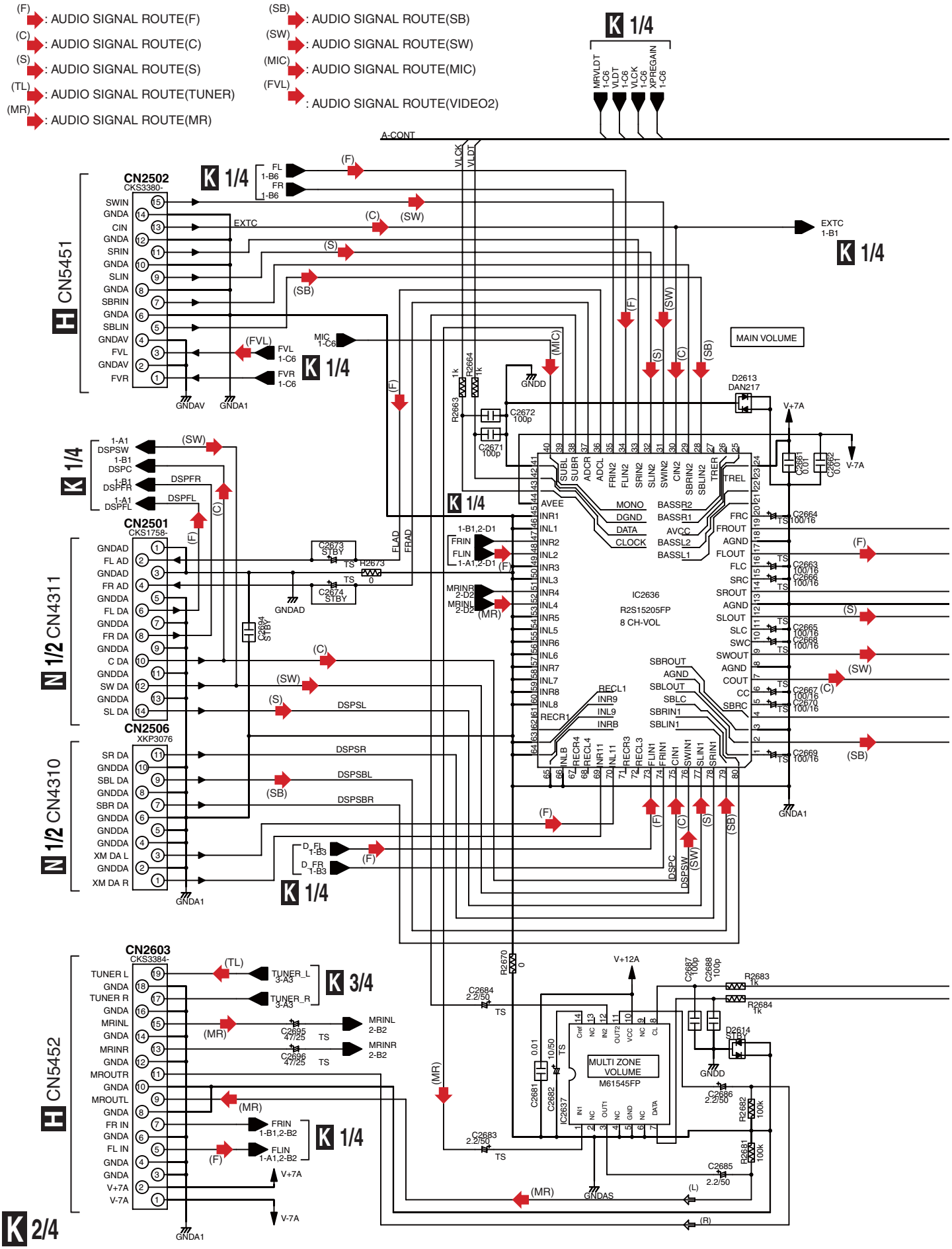
3.DIODES
No marked Diodes are 1SS352.
* Parts or parts block marked by "STBY" are standby.

(F) : AUDIO SIGNAL ROUTE(F)
(C) : AUDIO SIGNAL ROUTE(C)
(SW) : AUDIO SIGNAL ROUTE(SW)
(MIC) : AUDIO SIGNAL ROUTE(MIC)
(FVL) : AUDIO SIGNAL ROUTE(VIDEO2)
F(C'Site) : VIDEO SIGNAL ROUTE F(C'Site)
FS(C) : VIDEO SIGNAL ROUTE FS(C)
FS(Y) : VIDEO SIGNAL ROUTE FS(Y)

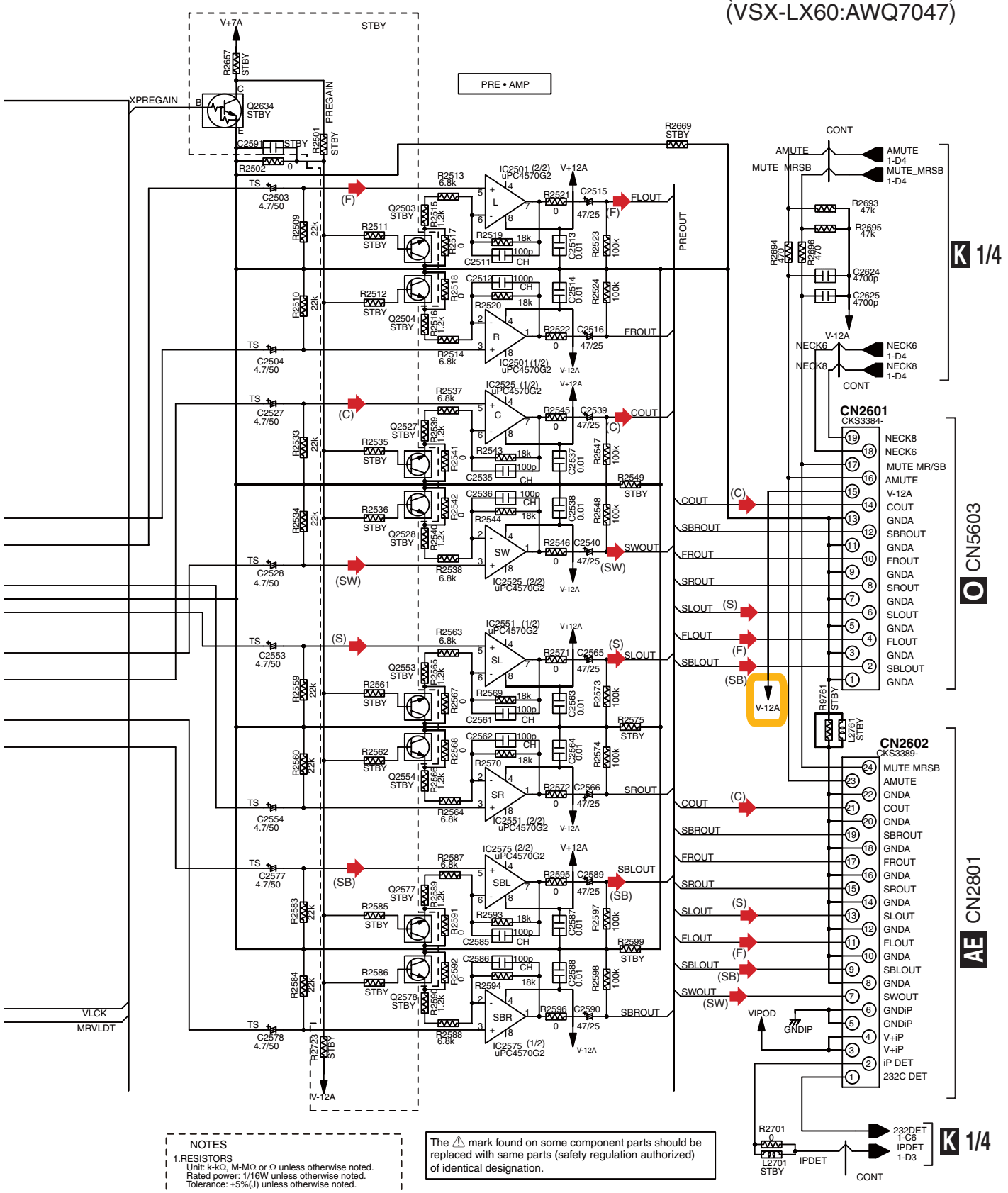
K 1/4

VSX-LX70

10.8 COMPONENT & VOL ASSY (2/4)



K 2/4 COMPONENT & VOL ASSY (VSX-LX70:AWQ7042) (VSX-LX60:AWQ7047)



NOTES

1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.

2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB.
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)", or 50V unless otherwise noted.

3.DIODES
No marked Diodes are 1SS352.

* Parts or parts block marked by "STBY" are standby.

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

K 2/4

10.9 COMPONENT & VOL ASSY (3/4)

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

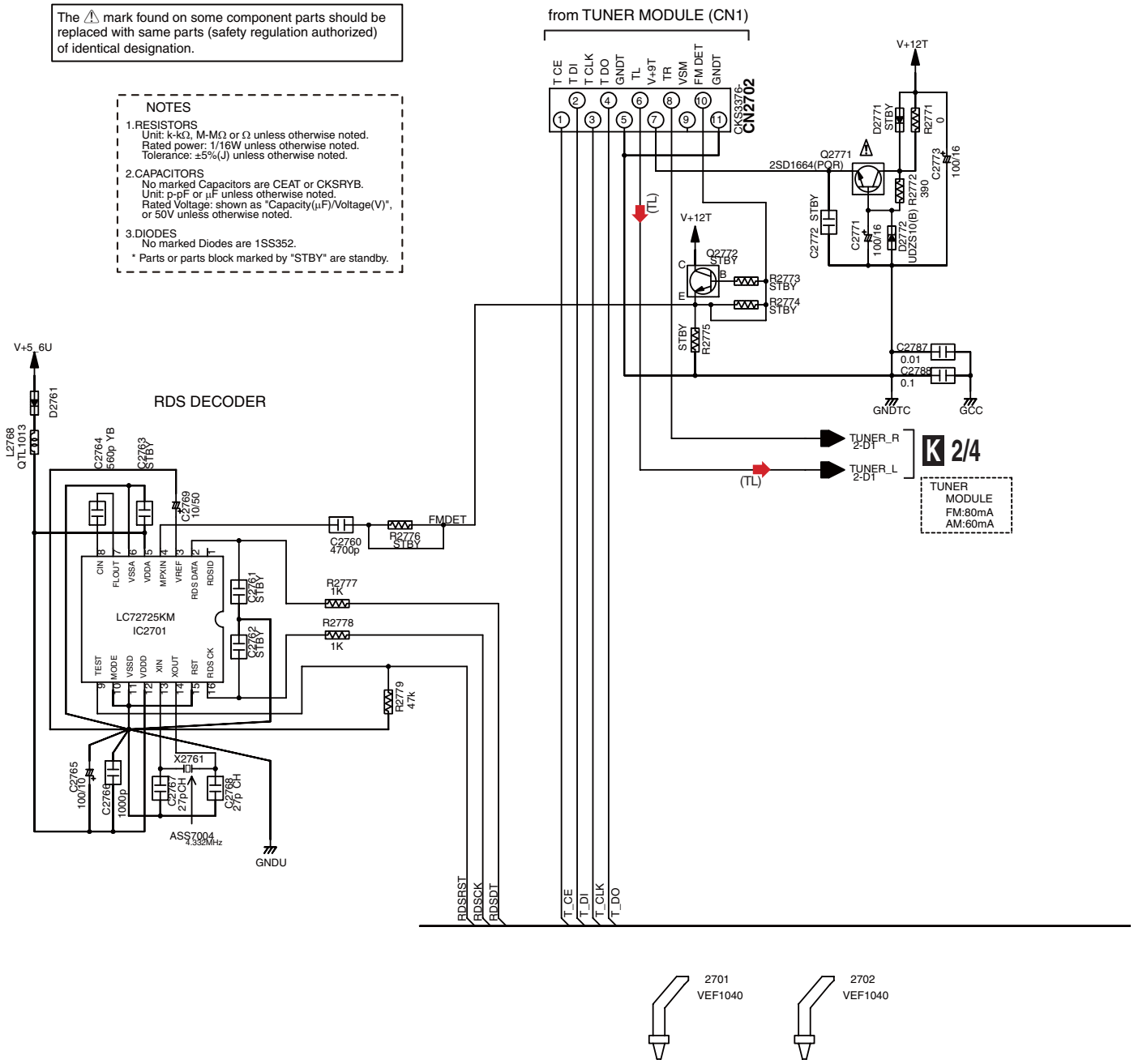
NOTES

1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.

2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB.
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)", or 50V unless otherwise noted.

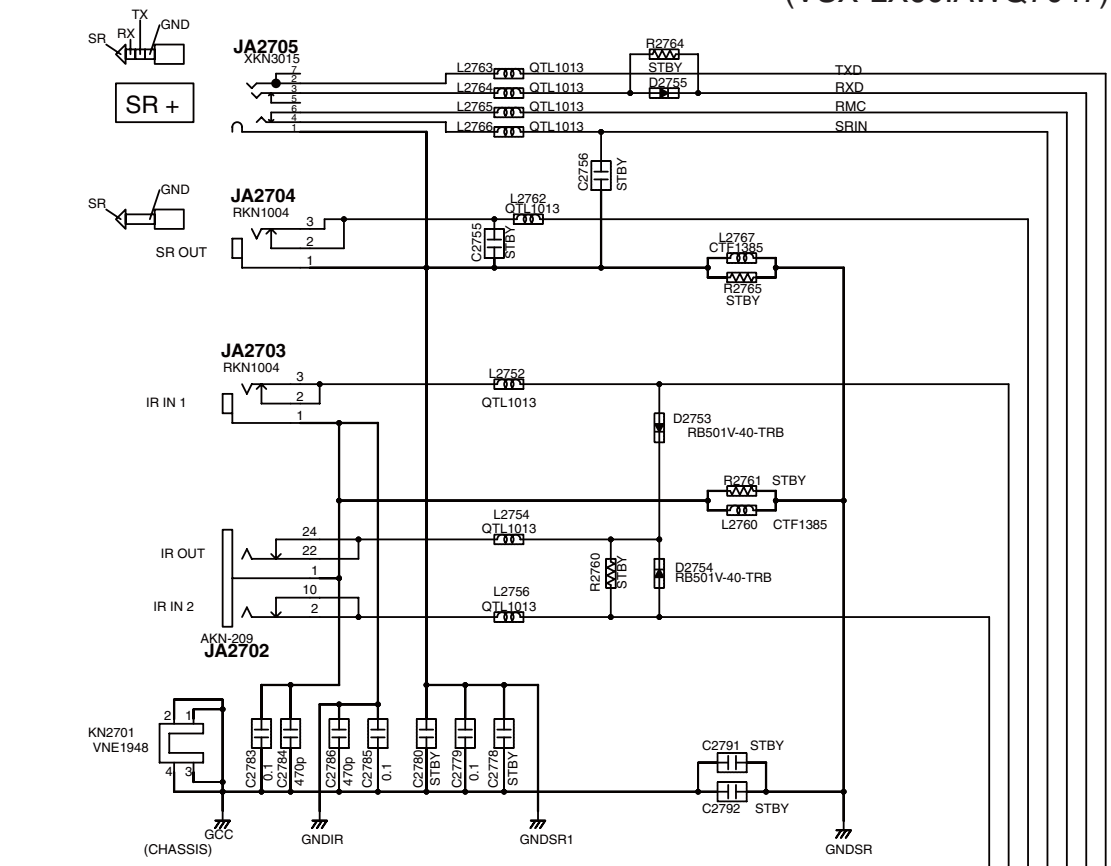
3.DIODES
No marked Diodes are 1SS352.

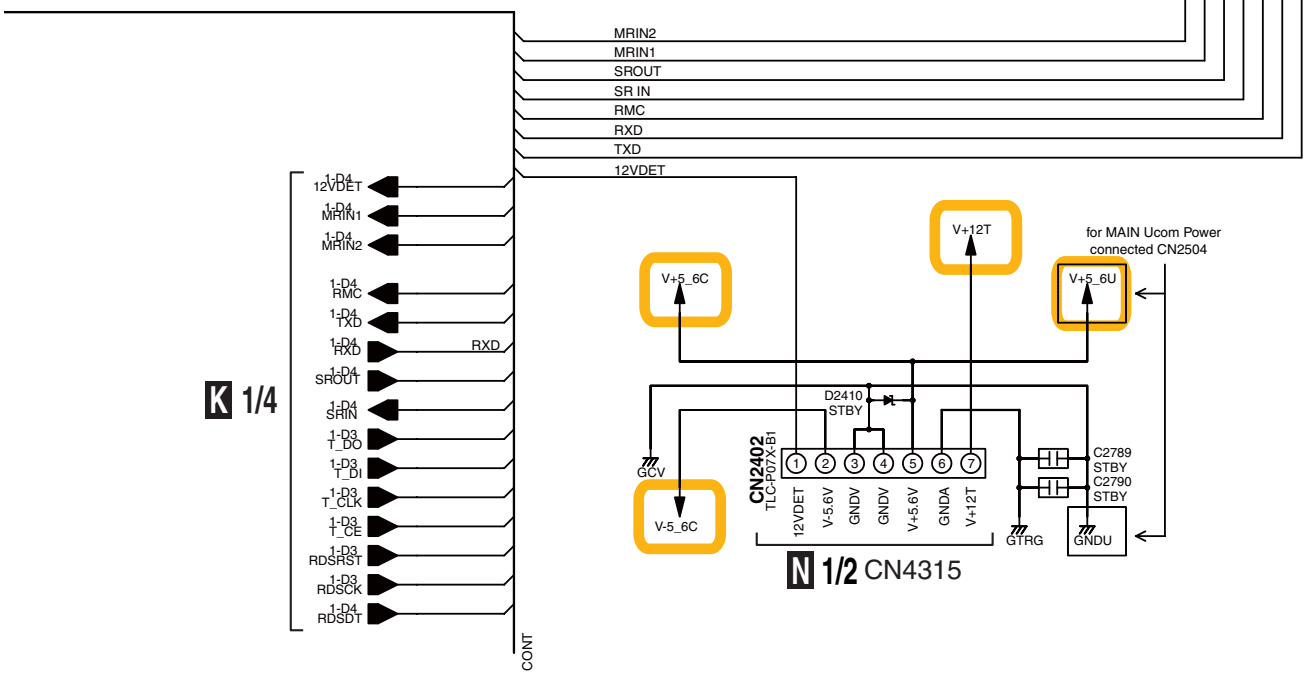
* Parts or parts block marked by "STBY" are standby.



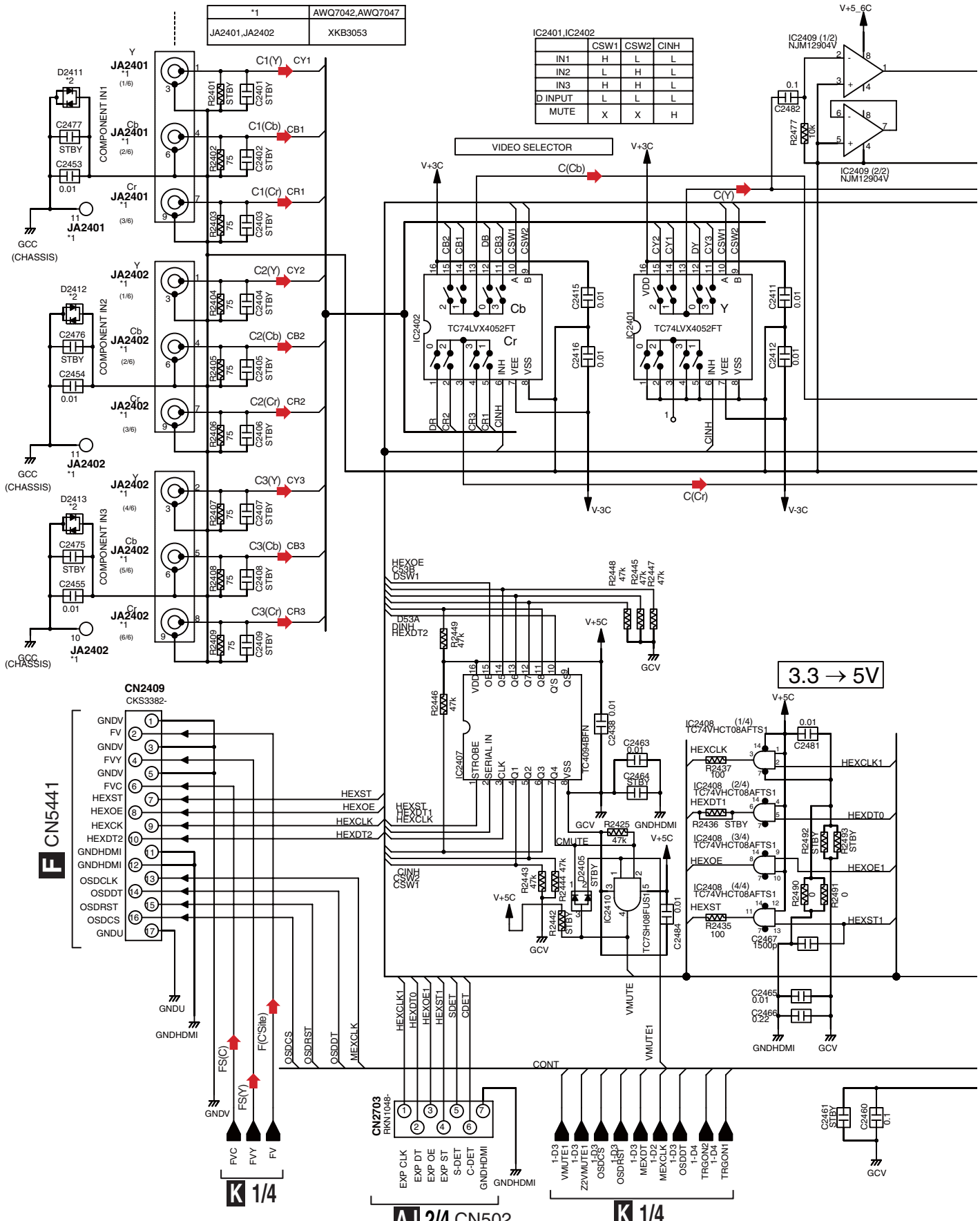
(TL) : AUDIO SIGNAL ROUTE(TUNER)

K 3/4


JA2705
XKN3015
SR +
JA2704
RKN1004
SR OUT
JA2703
RKN1004
IR IN 1
IR OUT
IR IN 2
AKN-209
JA2702
KN2701
VNE1948
L2763 QTL1013
L2764 QTL1013
L2765 QTL1013
L2766 QTL1013
R2764 STBY
D2755
TXD
RXD
RMC
SRIN
C2756 STBY
L2762 QTL1013
C2755 STBY
L2767 CTF1385
R2765 STBY
L2752 QTL1013
D2753 RB501V-40-TRB
R2761 STBY
L2760 CTF1385
L2754 QTL1013
R2760 STBY
D2754 RB501V-40-TRB
L2756 QTL1013
C2783 0.1
C2784 470p
C2786 470p
C2785 0.1
C2780 STBY
C2779 0.1
C2778 STBY
C2791 STBY
C2792 STBY
GCC
(CHASSIS)
GNDIR
GNDSR1
GNDSR


MRIN2
MRIN1
SROUT
SR IN
RMC
RXD
TXD
12VDET
K 1/4
1-D4 12VDET
1-D4 MRIN1
1-D4 MRIN2
1-D4 RMC
1-D4 TXD
1-D4 RXD
RXD
1-D4 SROUT
1-D4 SRIN
1-D3 T_DO
1-D3 T_DI
1-D3 T_CLK
1-D3 T_CE
1-D3 RDSRST
1-D3 RDSCK
1-D4 RDSDT
CONT
V+12T
for MAIN Ucom Power
connected CN2504
V+5_6C
V+5_6U
D2410 STBY
GCV
V-5_6C
CN2402
TLC-P07X-B1
12VDET
V-5.6V
GNDV
GNDV
V+5.6V
GNDA
V+12T
C2789 STBY
C2790 STBY
GTRG
GNDU
N 1/2 CN4315

10.10 COMPONENT & VOL ASSY (4/4)



K 4/4 COMPONENT & VOL ASSY (VSX-LX70:AWQ7042) (VSX-LX60:AWQ7047)

NOTES

1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.

2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB.
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)", or 50V unless otherwise noted.

3.DIODES
No marked Diodes are 1SS352.
* Parts or parts block marked by "STBY" are standby.

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

*2	AWQ7042,AWQ7047
D2411-D2414	DAN217U
C2474	0.47/10

C DET

IC2404

	C53B	CINH
DVC	L	L
CNT/D	H	L
MUTE	X	H

COMPONENT OUT

JA2401 *1 (4/6) Y
JA2401 *1 (5/6) Cb
JA2401 *1 (6/6) Cr

IC2405 NJM2581M

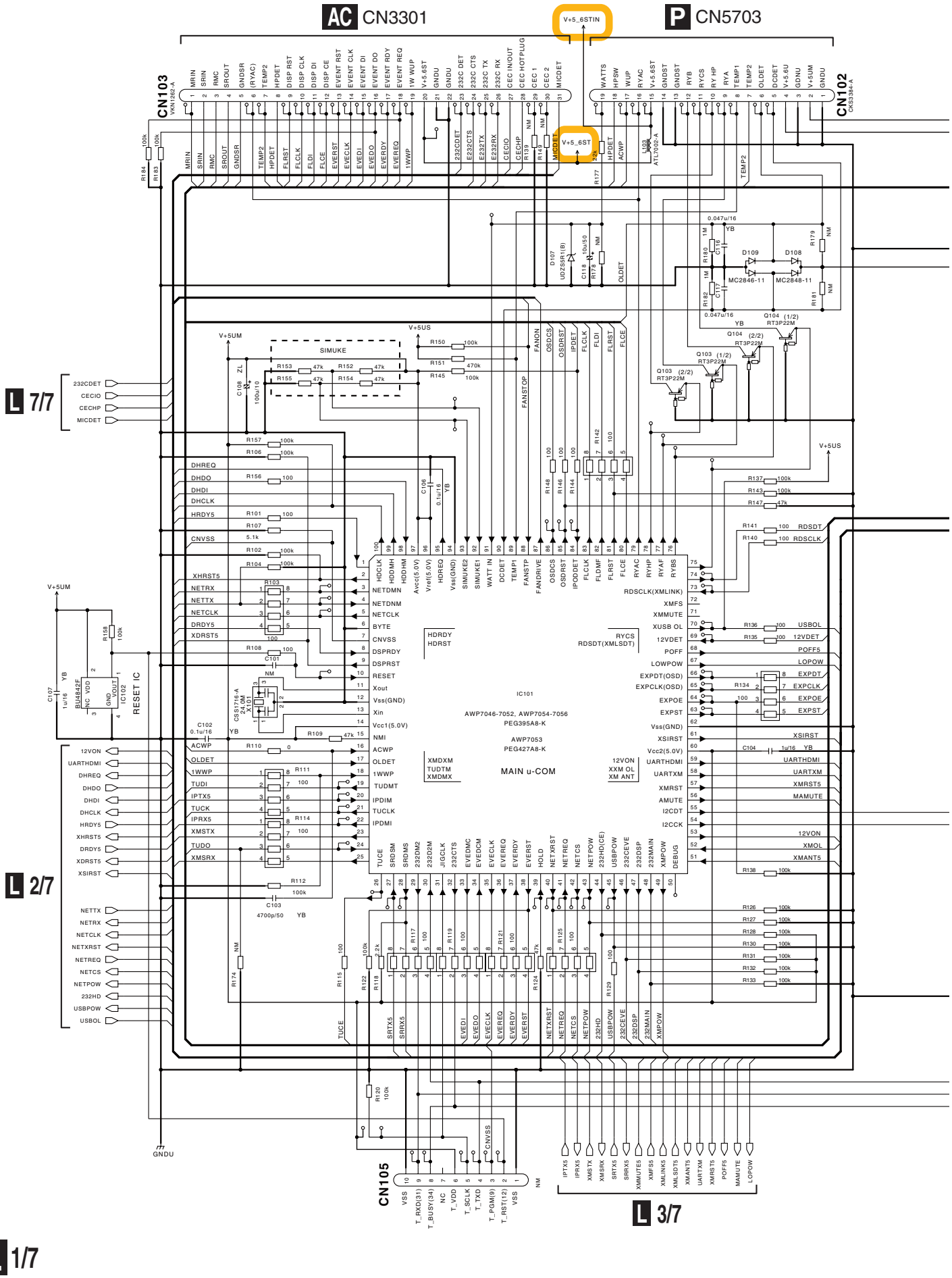
VIDEO AMP

C(Y) : VIDEO SIGNAL ROUTE C1(Y)
C1(Cb) : VIDEO SIGNAL ROUTE C1(Cb)
C1(Cr) : VIDEO SIGNAL ROUTE C1(Cr)
C2(Y) : VIDEO SIGNAL ROUTE C2(Y)
C2(Cb) : VIDEO SIGNAL ROUTE C2(Cb)
C2(Cr) : VIDEO SIGNAL ROUTE C2(Cr)
C3(Y) : VIDEO SIGNAL ROUTE C3(Y)
C3(Cb) : VIDEO SIGNAL ROUTE C3(Cb)
C3(Cr) : VIDEO SIGNAL ROUTE C3(Cr)

F(C'Site) : VIDEO SIGNAL ROUTE F(C'Site)
FS(C) : VIDEO SIGNAL ROUTE FS(C)
FS(Y) : VIDEO SIGNAL ROUTE FS(Y)
C(Y) : VIDEO SIGNAL ROUTE C(Y)
C(Cb) : VIDEO SIGNAL ROUTE C(Cb)
C(Cr) : VIDEO SIGNAL ROUTE C(Cr)
VC(Cr) : VIDEO SIGNAL ROUTE VC(Cr)
VC(Cb) : VIDEO SIGNAL ROUTE VC(Cb)
VC(Y) : VIDEO SIGNAL ROUTE VC(Y)

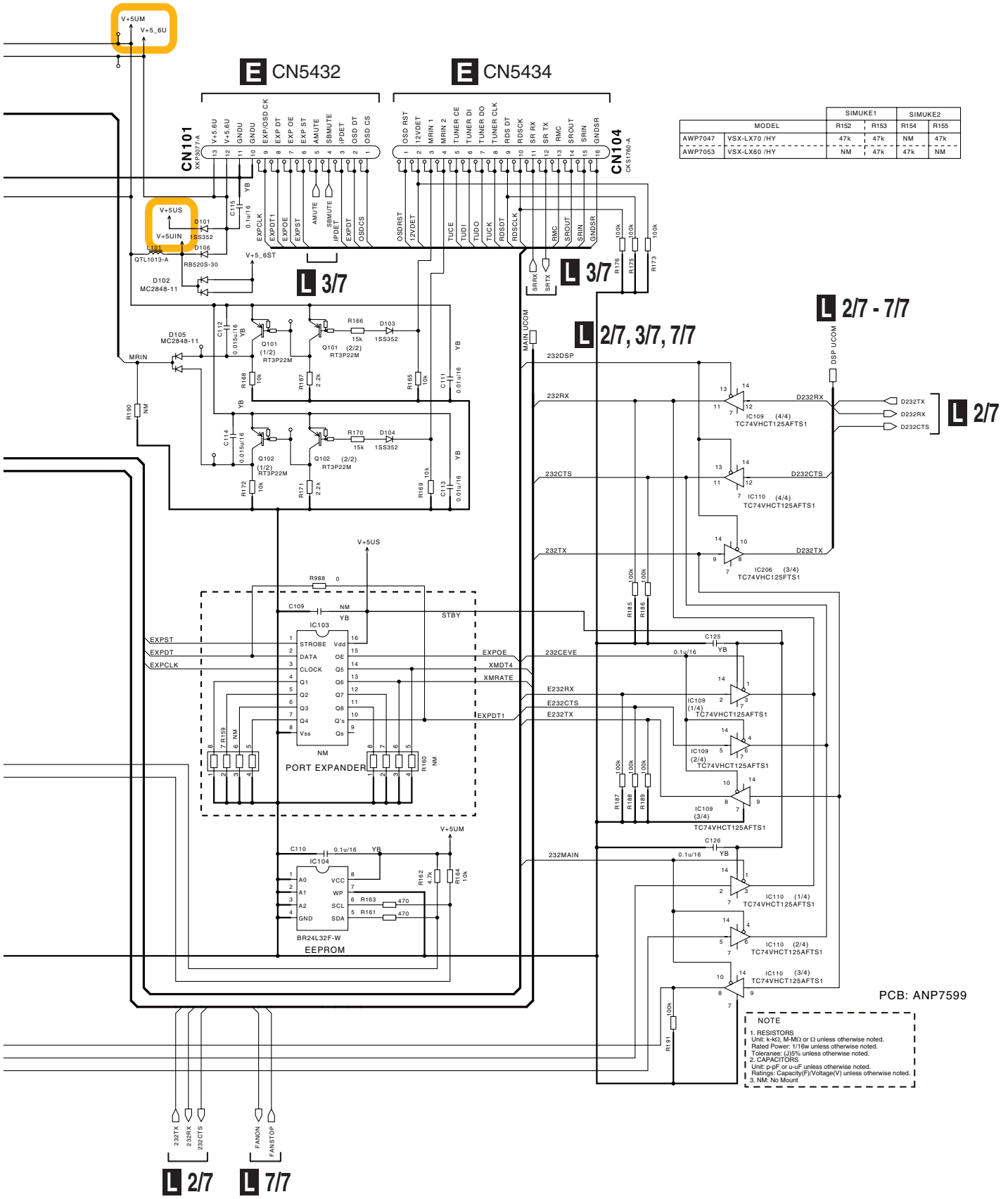
N 1/2 CN4314

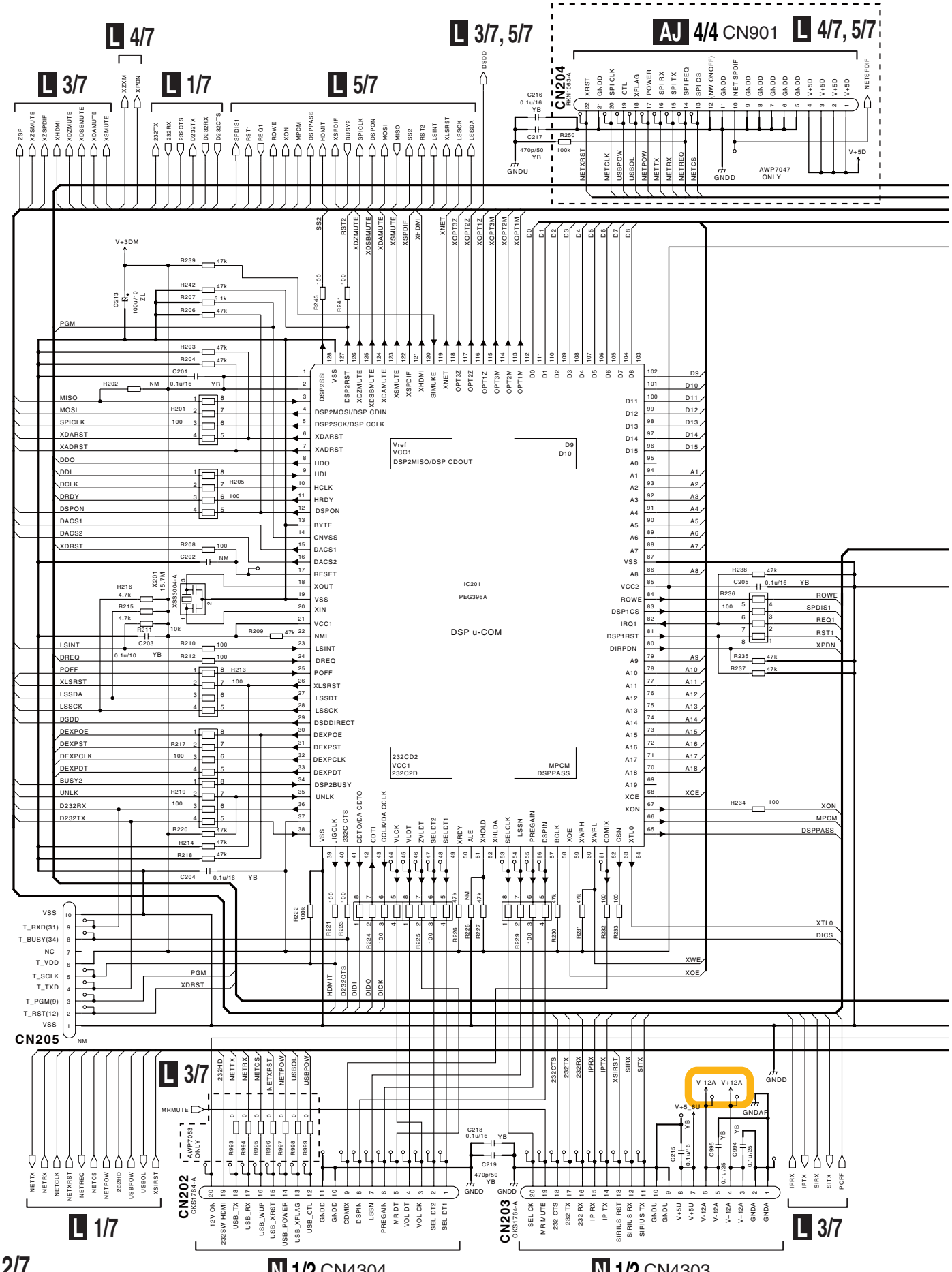
10.11 DIGITAL MOTHER ASSY (1/7)



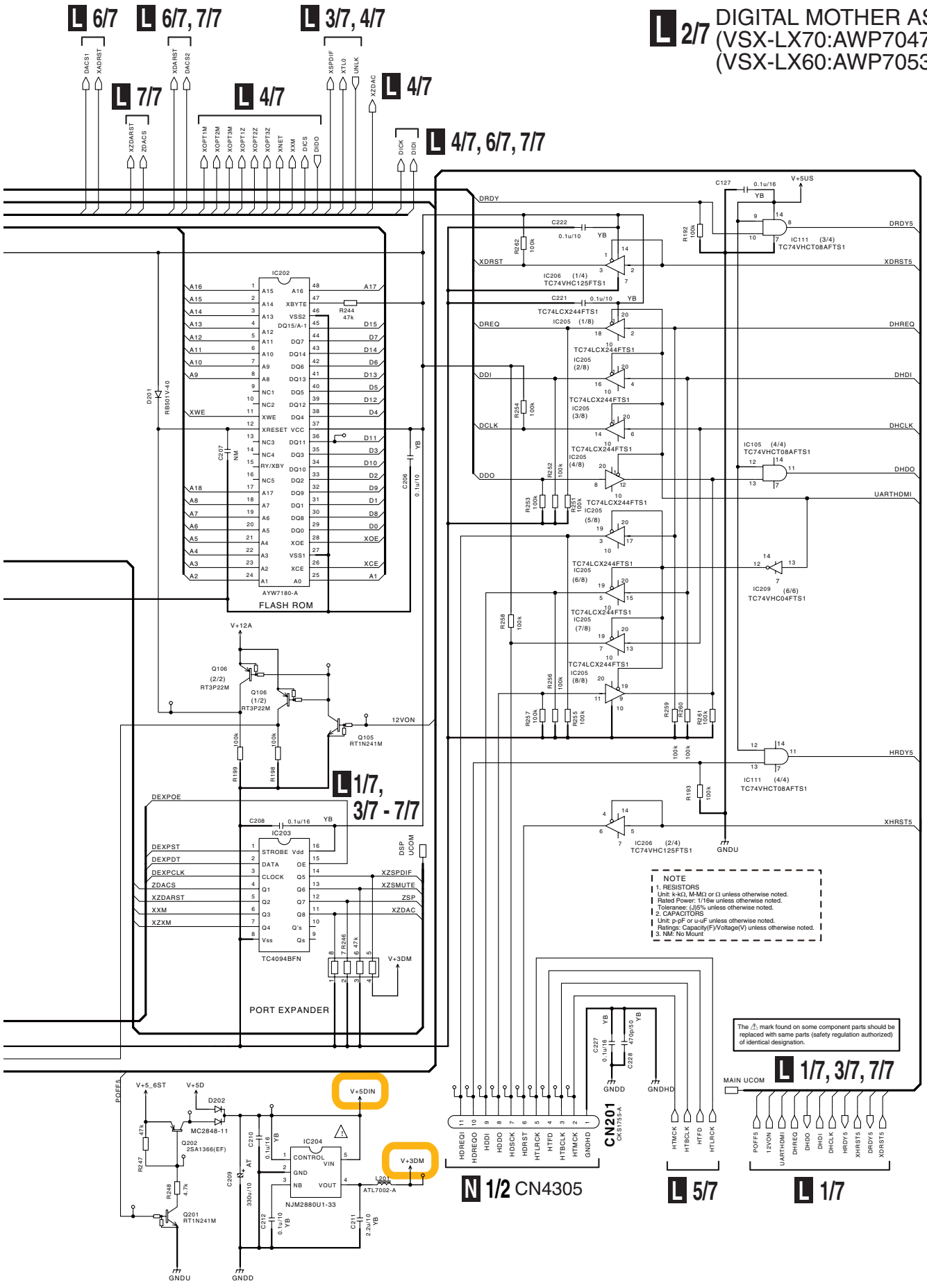
L 1/7 DIGITAL MOTHER ASSY (VSX-LX70:AWP7047) (VSX-LX60:AWP7053)

MODEL		SIMUKE1 R152	SIMUKE1 R153	SIMUKE2 R154	SIMUKE2 R155
AWP7047	VSX-LX70 /HY	47k	47k	NM	47k
AWP7053	VSX-LX60 /HY	NM	47k	47k	NM



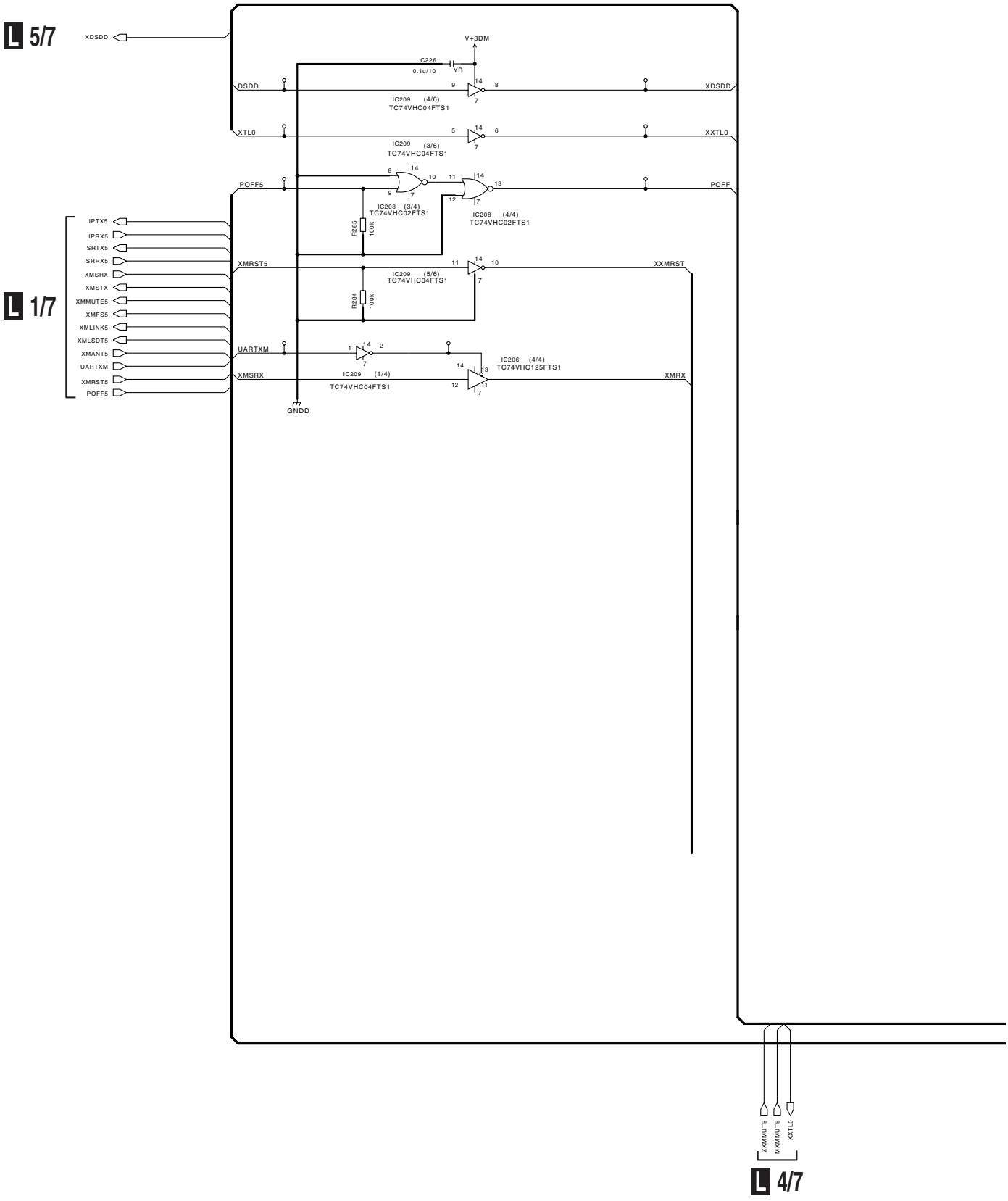

L 4/7
L 3/7, 5/7
AJ 4/4 CN901
L 4/7, 5/7
L 3/7
L 1/7
L 5/7
CN204
IRKN1063-A
AWP7047 ONLY
IC201
PEG396A
DSP u-COM
CN205
CN202
CKS1764-A
CN203
CKS1764-A
AWP7055 ONLY
L 1/7
L 3/7
L 3/7
L 2/7
N 1/2 CN4304
N 1/2 CN4303

L 2/7 DIGITAL MOTHER ASSY (VSX-LX70:AWP7047) (VSX-LX60:AWP7053)

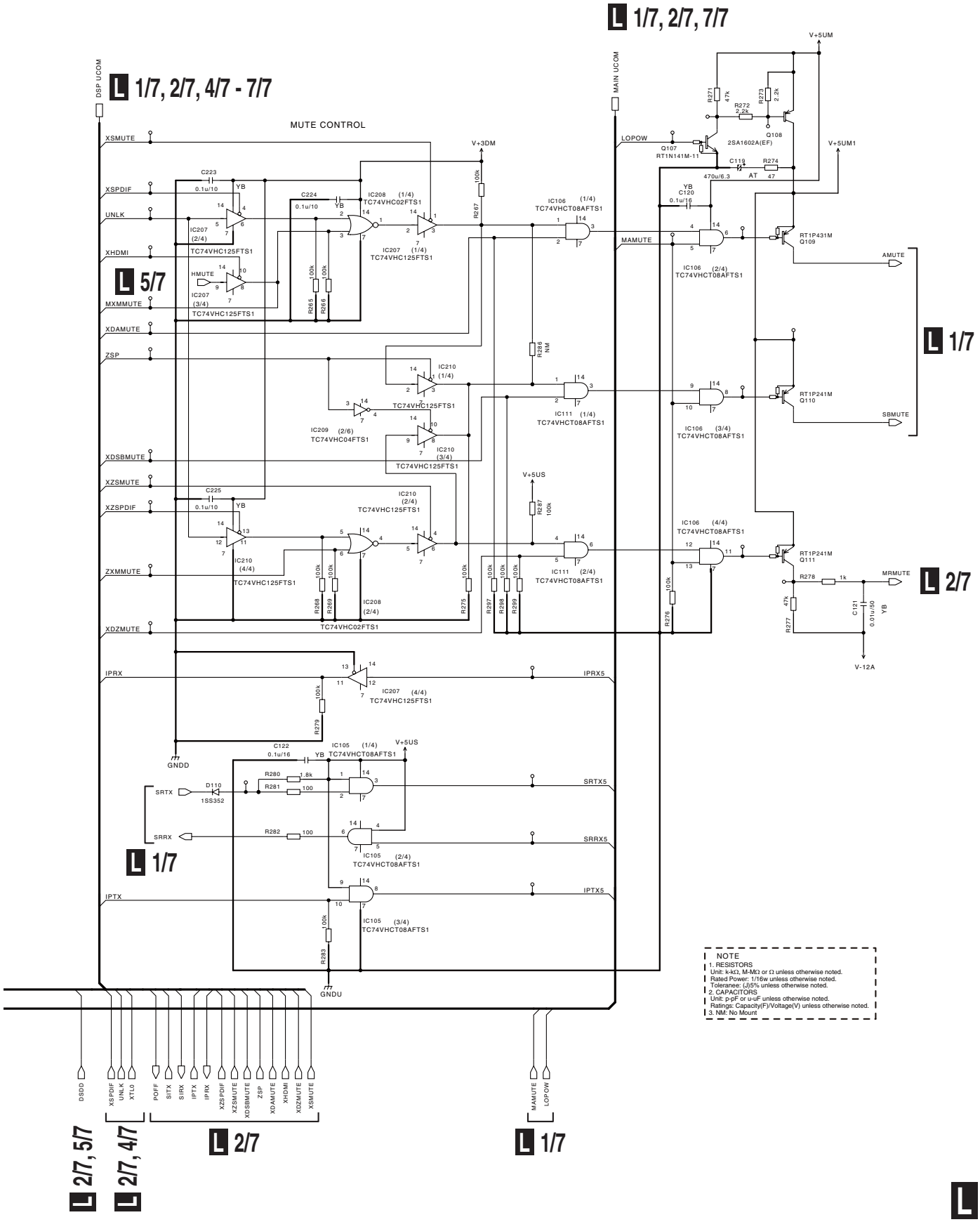


L 2/7

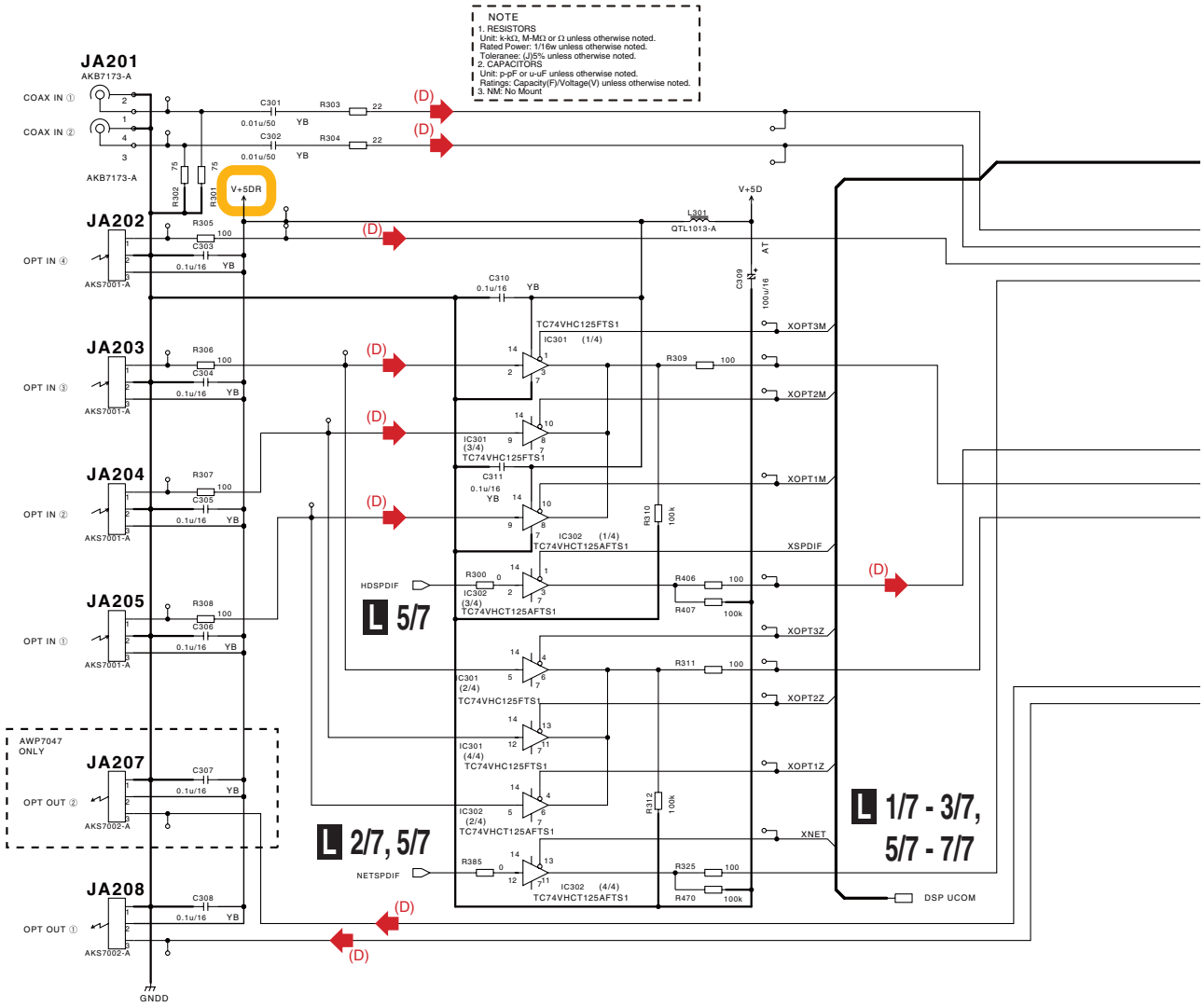
10.13 DIGITAL MOTHER ASSY (3/7)



L 3/7 DIGITAL MOTHER ASSY (VSX-LX70:AWP7047) (VSX-LX60:AWP7053)

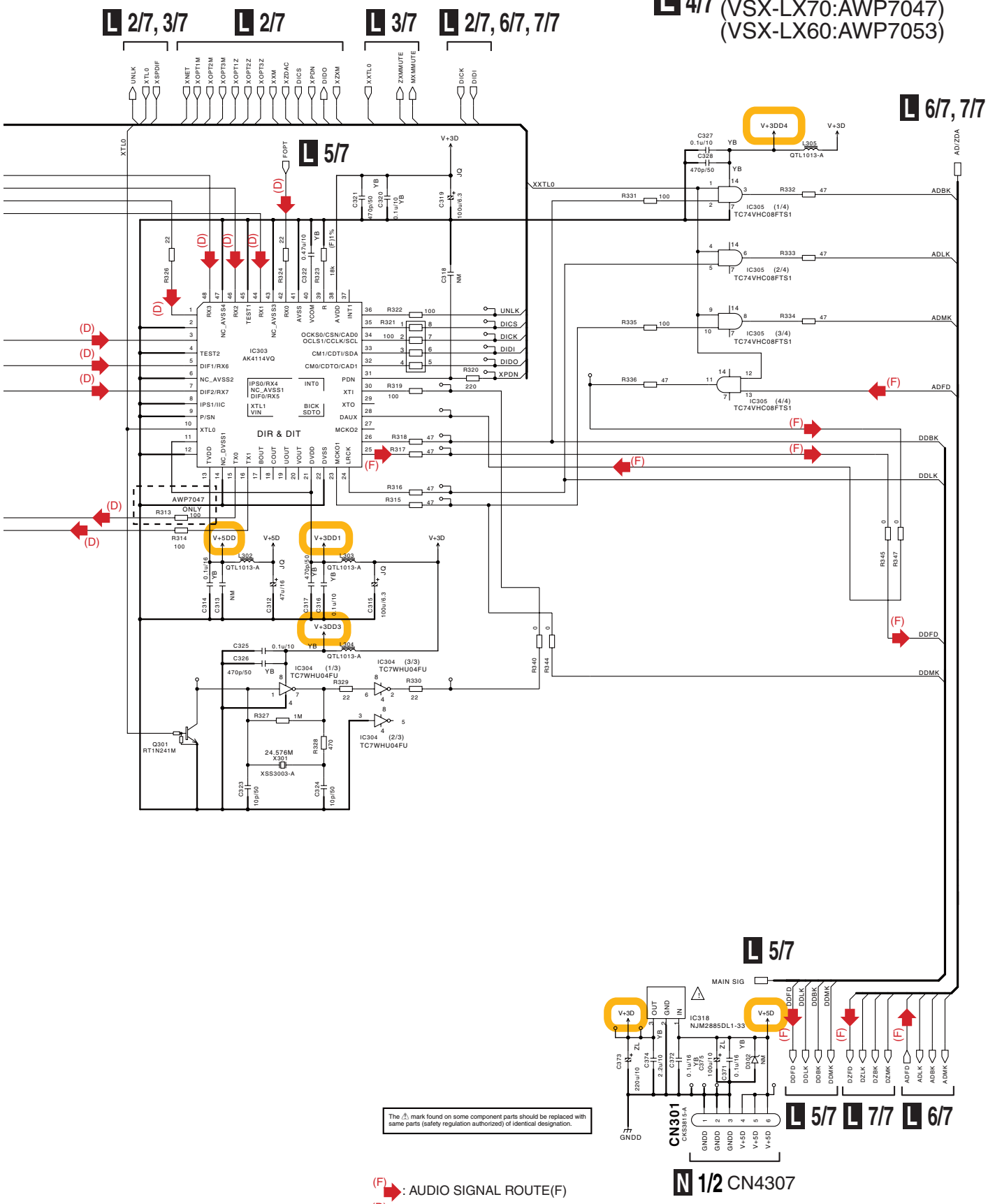


10.14 DIGITAL MOTHER ASSY (4/7)

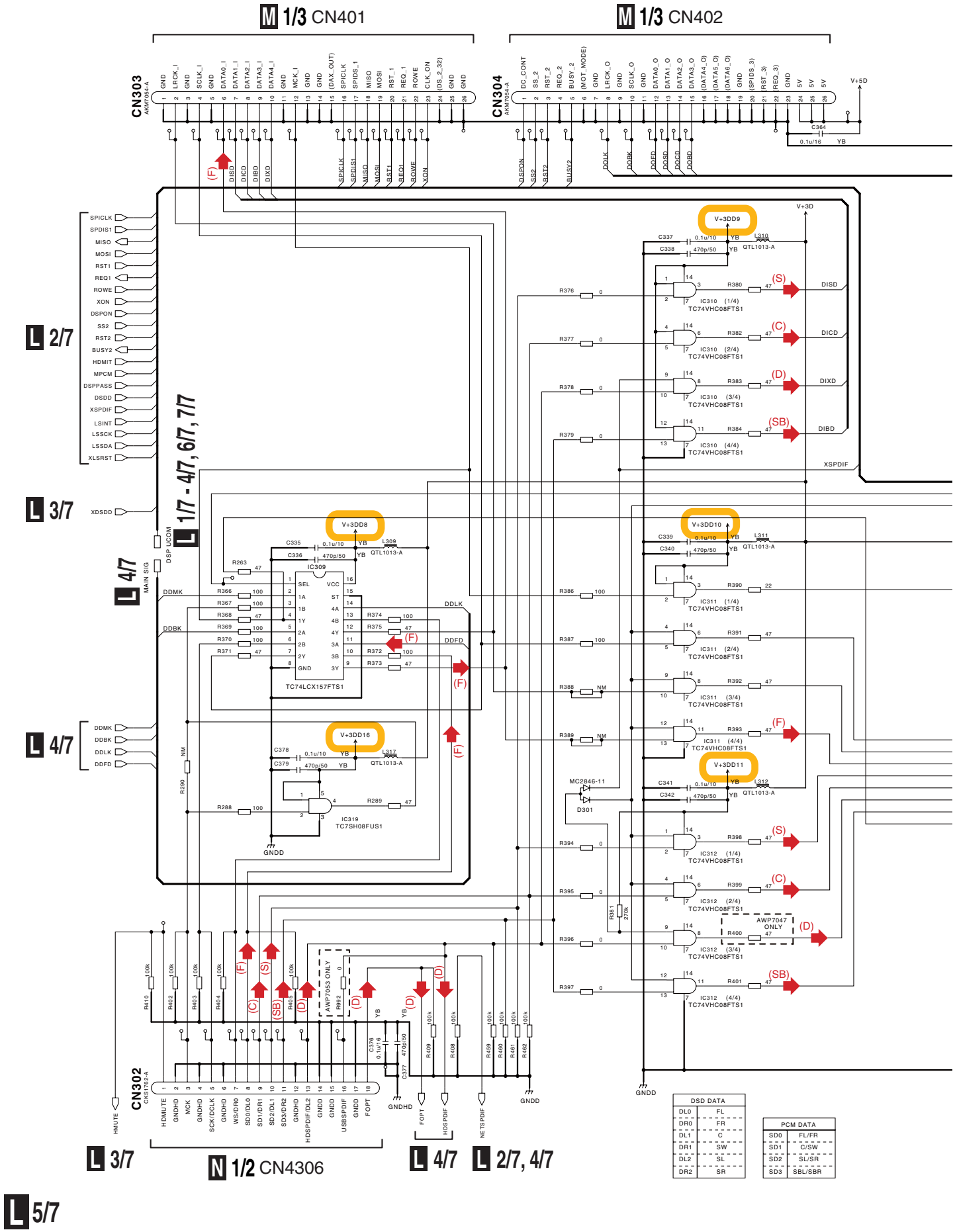


L 4/7

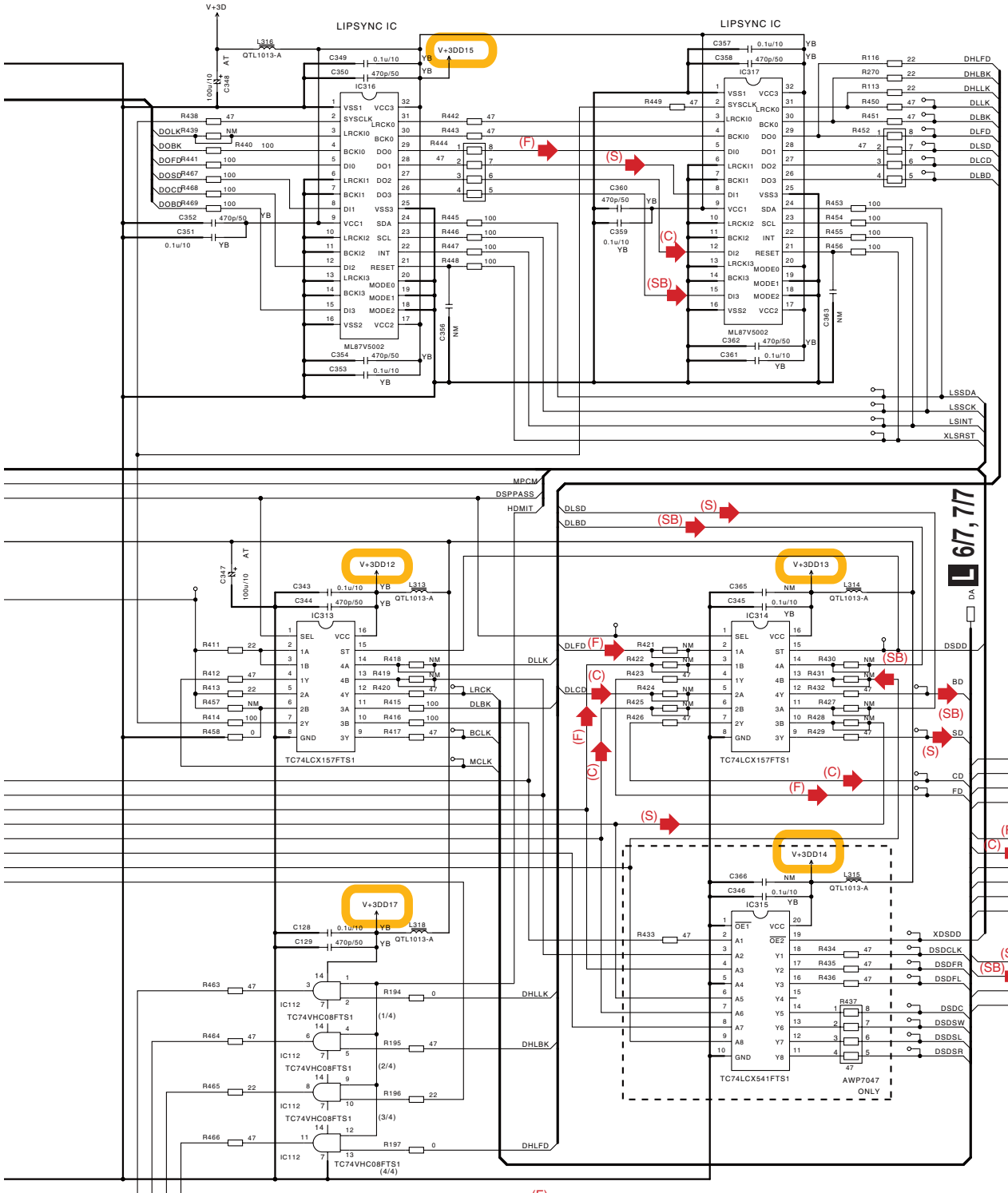
L 4/7 DIGITAL MOTHER ASSY (VSX-LX70:AWP7047) (VSX-LX60:AWP7053)



10.15 DIGITAL MOTHER ASSY (5/7)



L 5/7 DIGITAL MOTHER ASSY (VSX-LX70:AWP7047) (VSX-LX60:AWP7053)

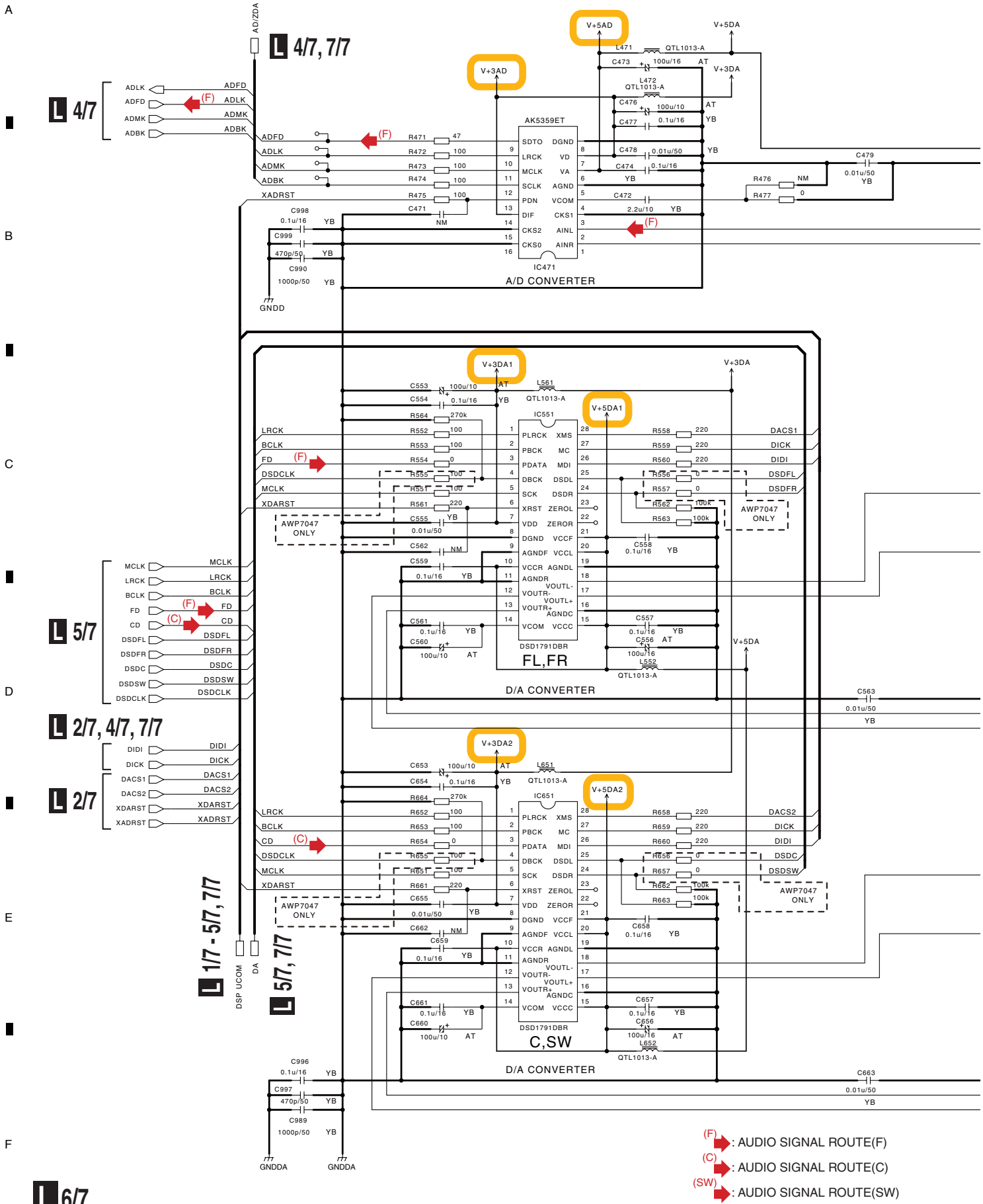


NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Tolerance: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
3. NM: No Mount

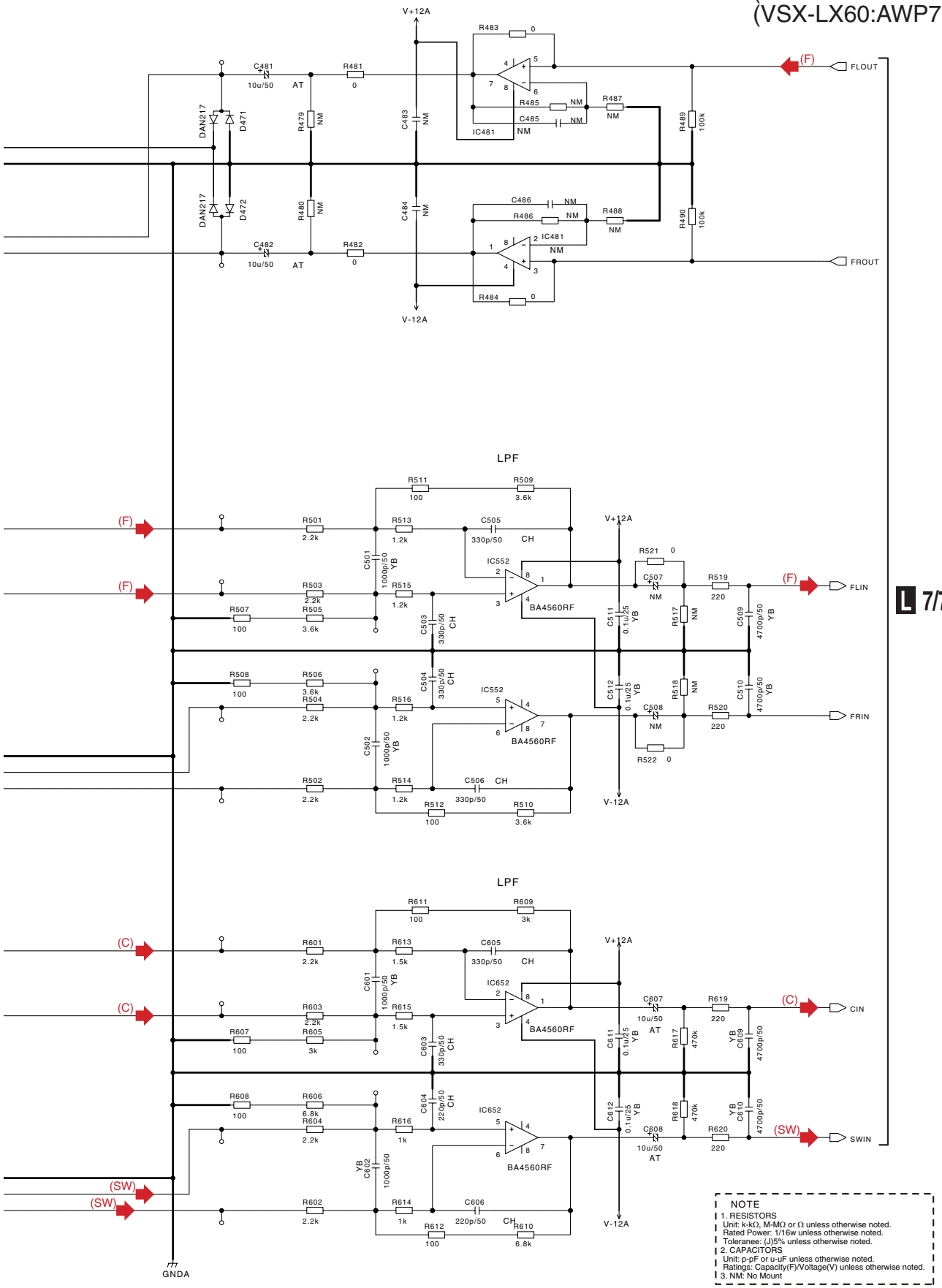
(F): AUDIO SIGNAL ROUTE(F)
(C): AUDIO SIGNAL ROUTE(C)
(S): AUDIO SIGNAL ROUTE(S)
(SB): AUDIO SIGNAL ROUTE(SB)
(D): AUDIO SIGNAL ROUTE(D)

L 2/7
L 6/7, 7/7
L 6/7, 7/7
L 6/7
L 7/7
L 5/7

10.16 DIGITAL MOTHER ASSY (6/7)

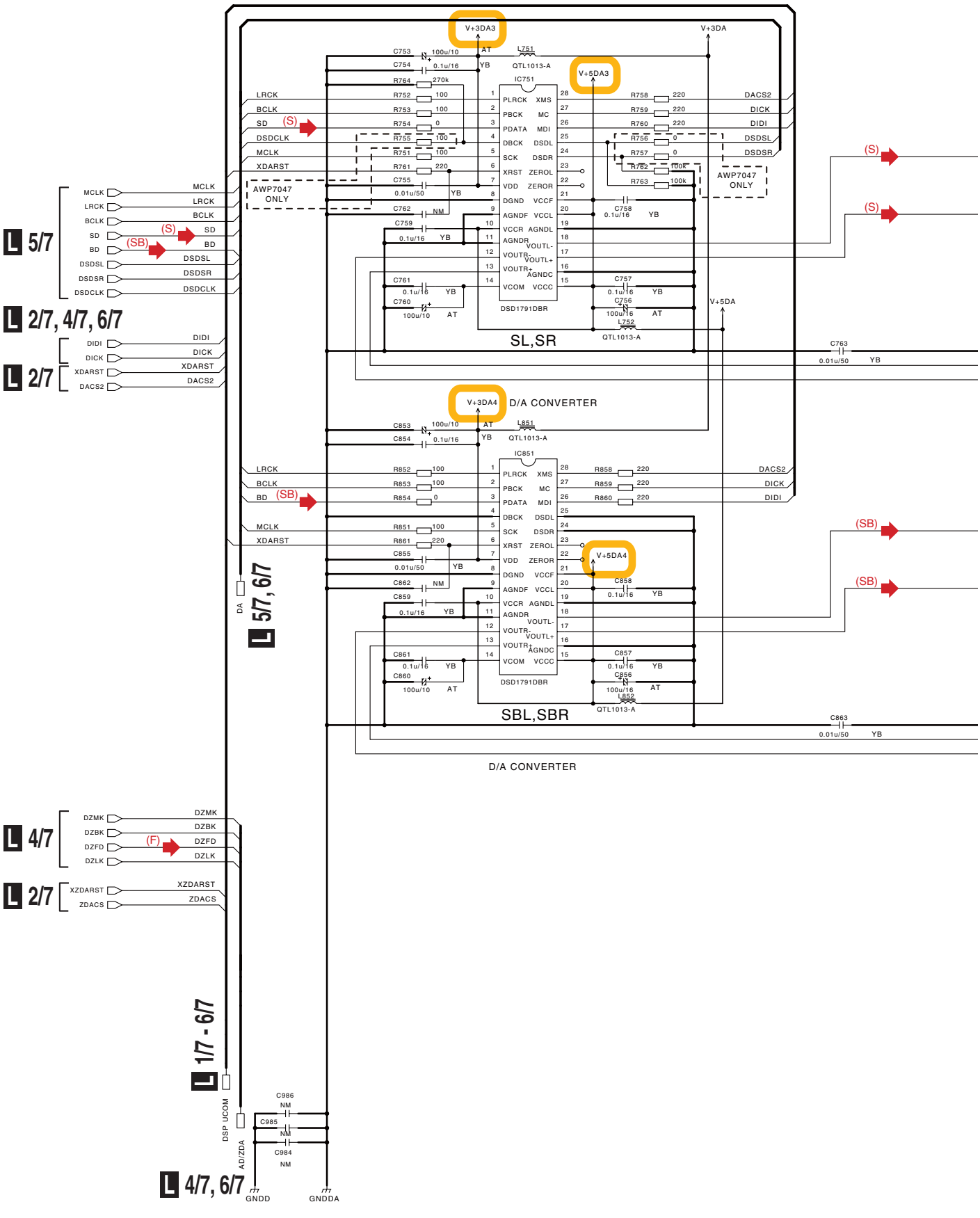


L 6/7 DIGITAL MOTHER ASSY (VSX-LX70:AWP7047) (VSX-LX60:AWP7053)



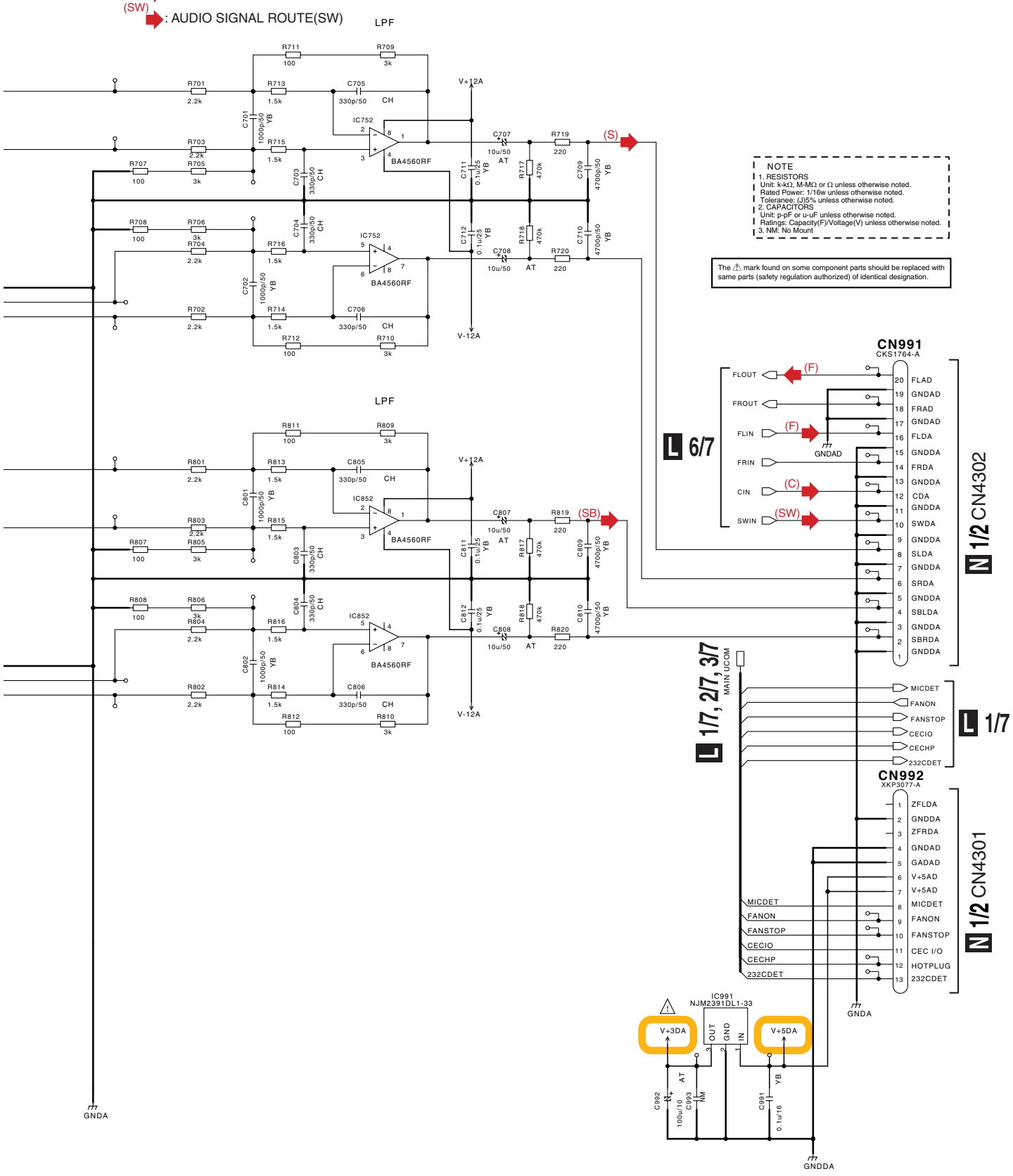
L 7/7

10.17 DIGITAL MOTHER ASSY (7/7)

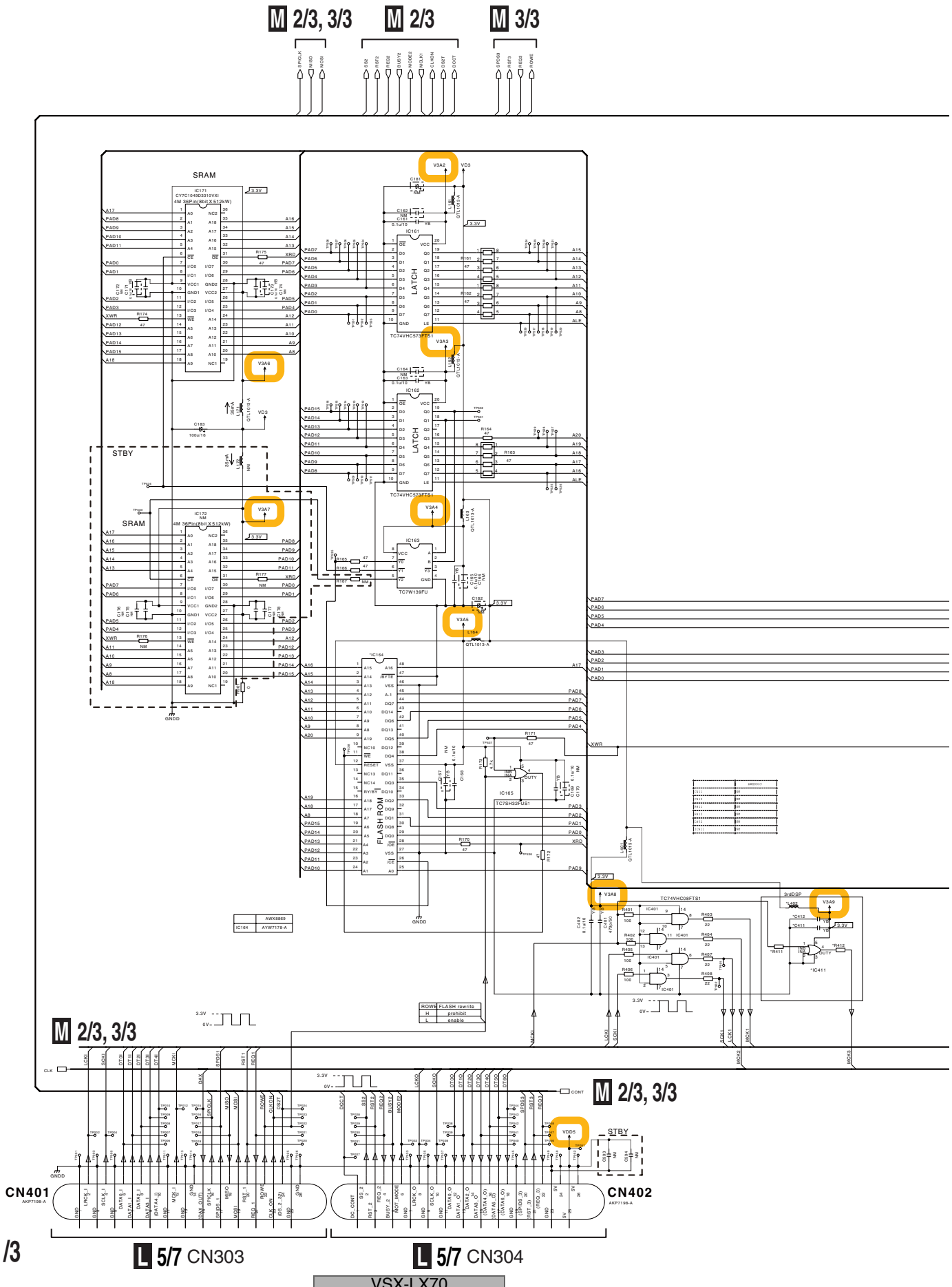


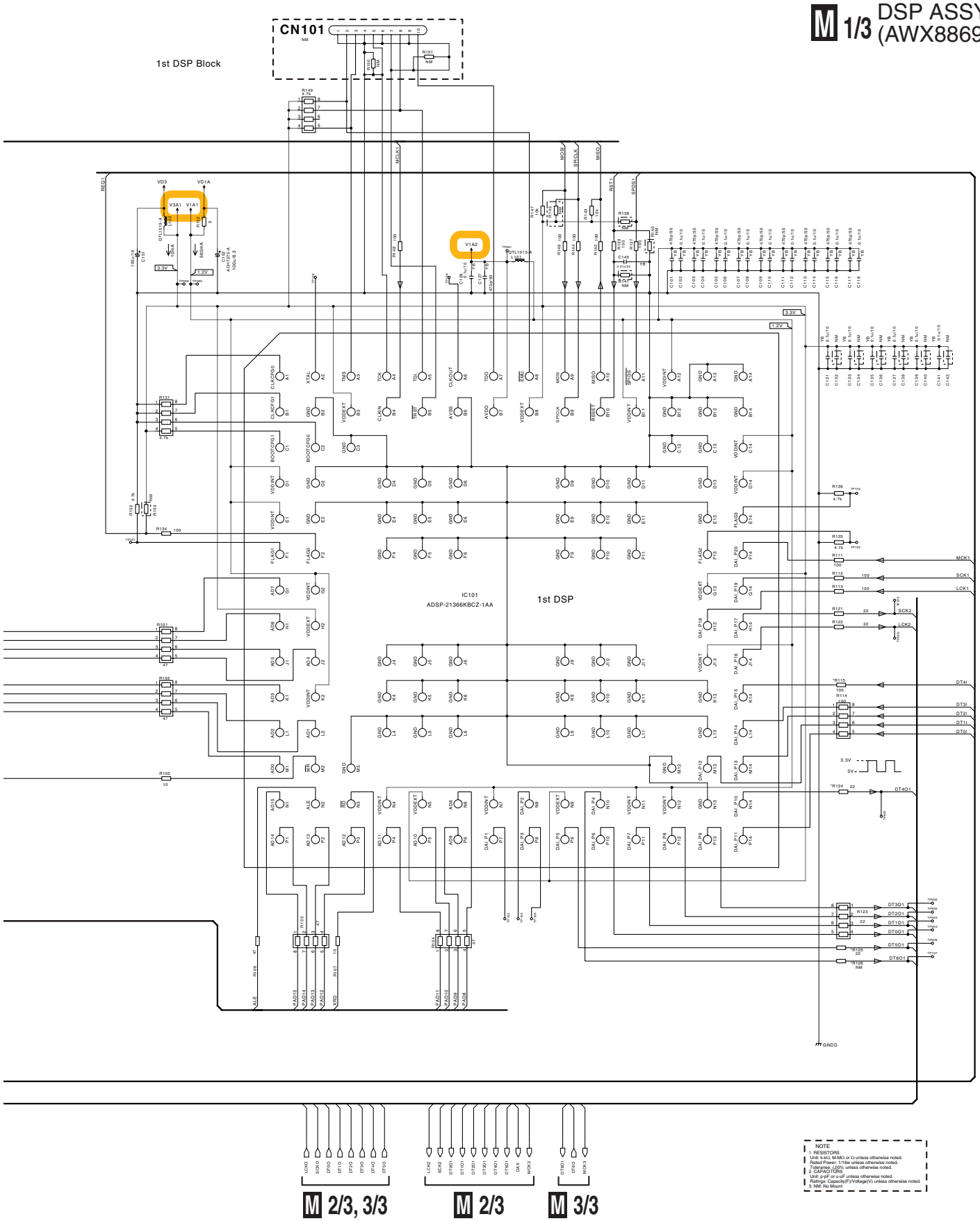
L 7/7 DIGITAL MOTHER ASSY (VSX-LX70:AWP7047) (VSX-LX60:AWP7053)

(F) : AUDIO SIGNAL ROUTE(F)
(S) : AUDIO SIGNAL ROUTE(S)
(SB) : AUDIO SIGNAL ROUTE(SB)
(SW) : AUDIO SIGNAL ROUTE(SW)

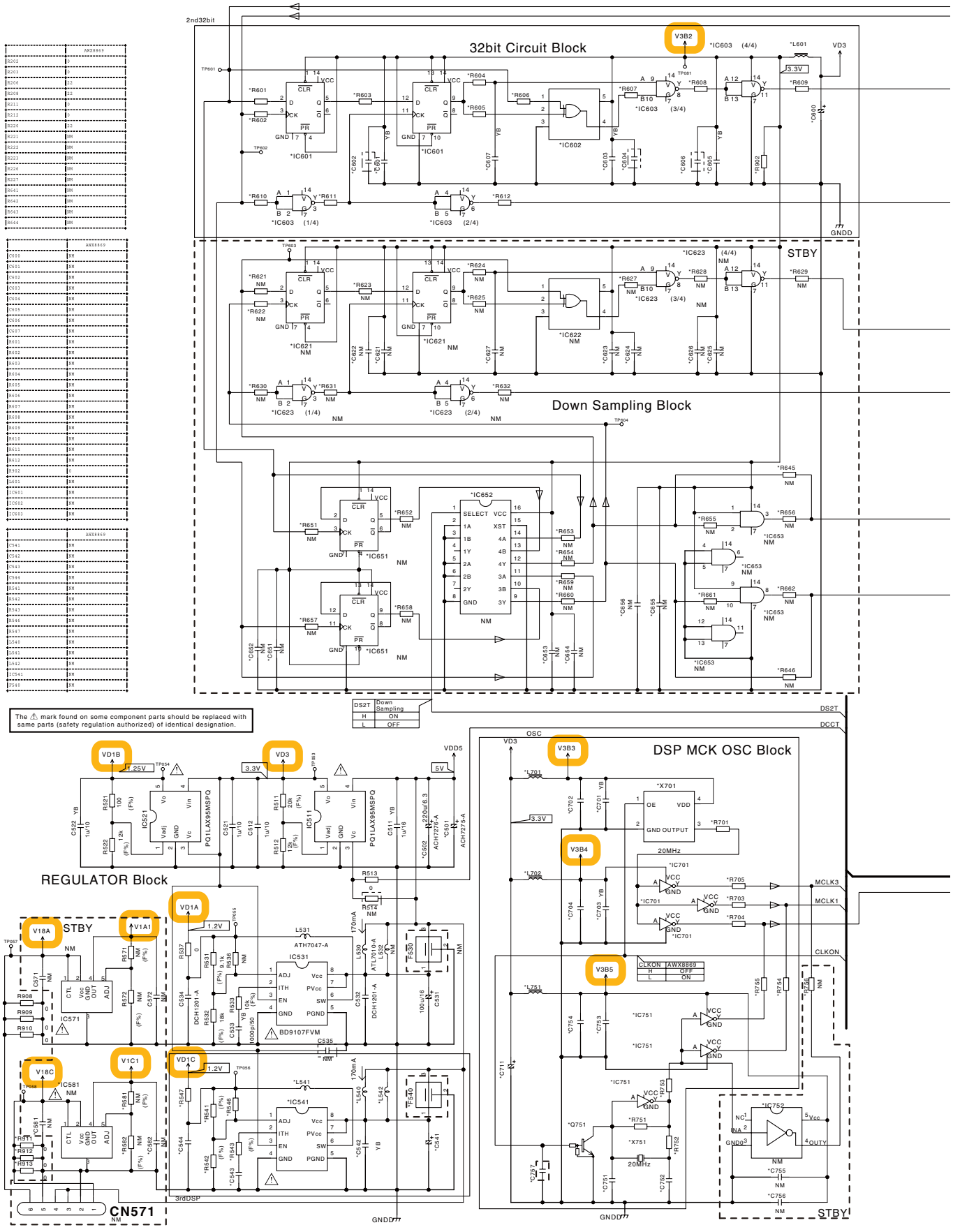


10.18 DSP ASSY (1/3)

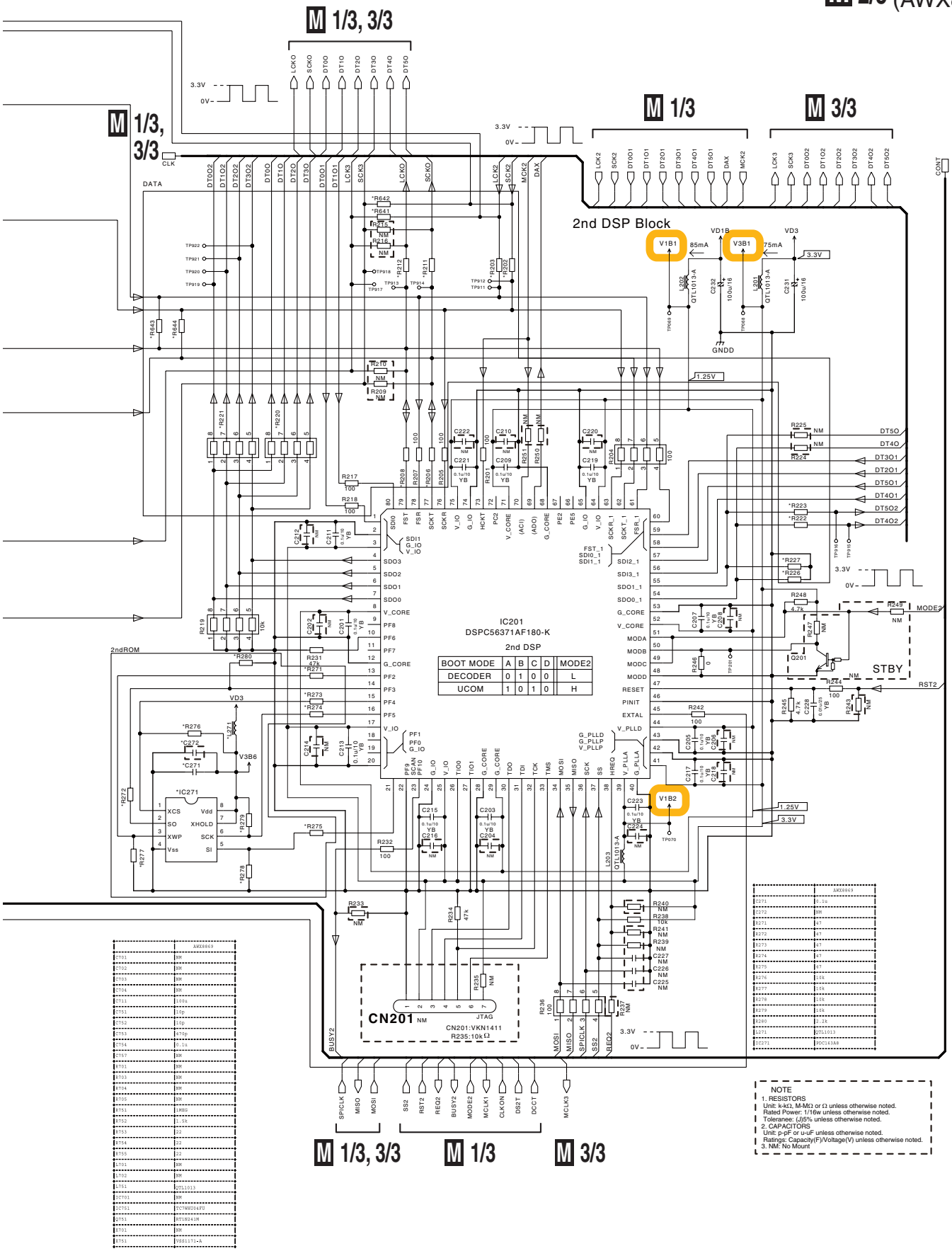



1st DSP Block
CN101
IC101
ADSP-21366KBCZ-1AA
1st DSP
M 2/3, 3/3
M 2/3
M 3/3

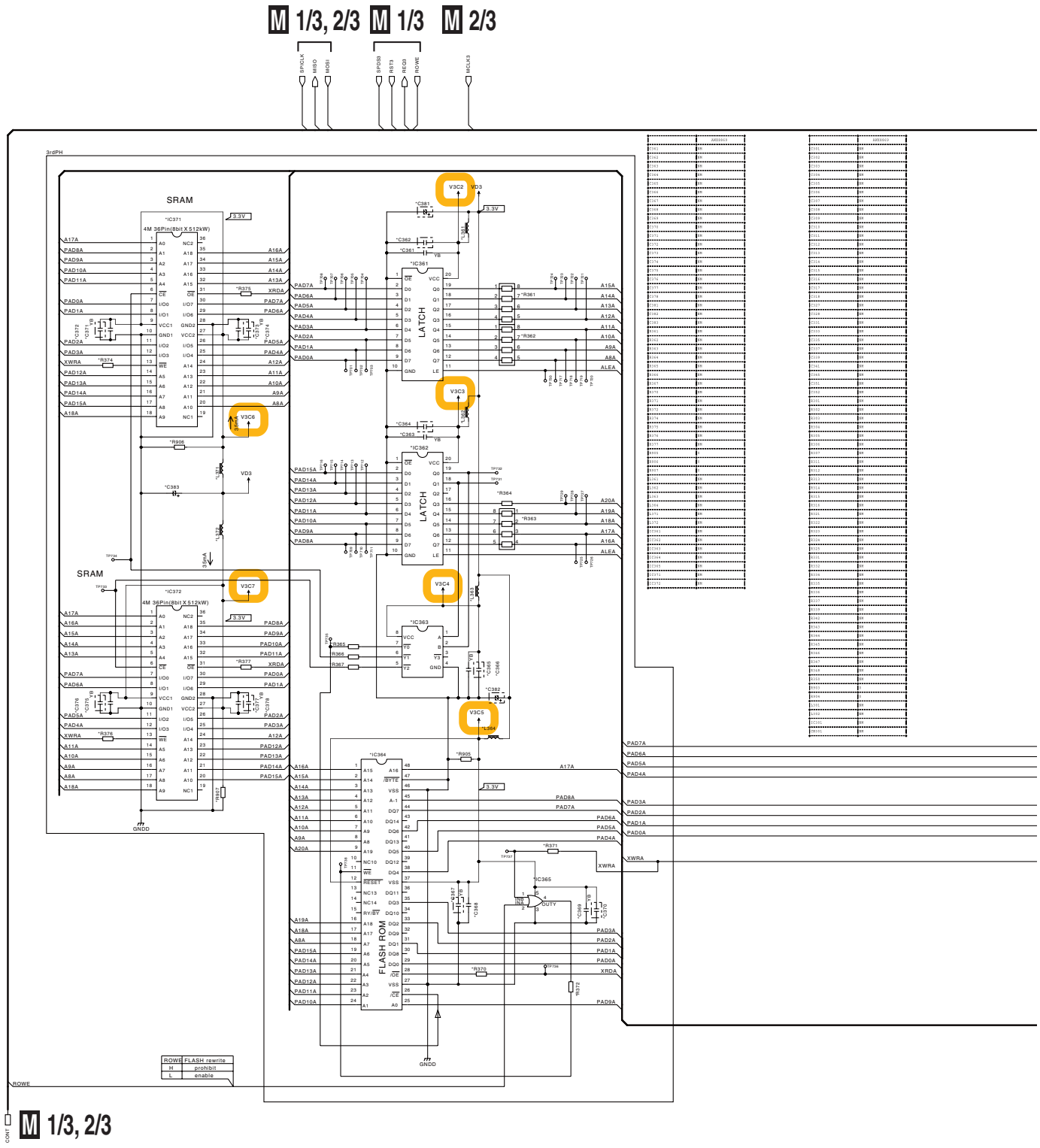
10.19 DSP ASSY (2/3)

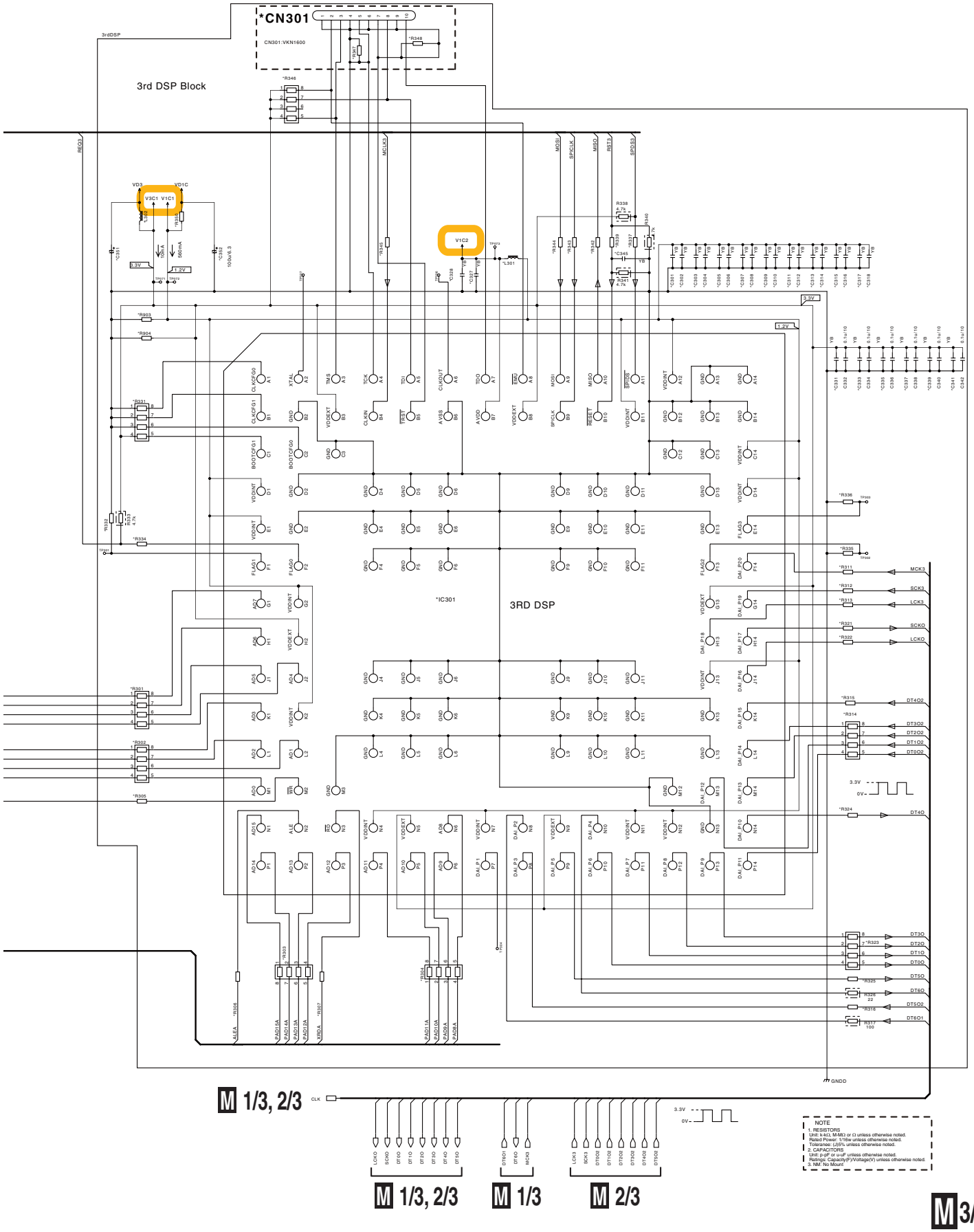


M 2/3 DSP ASSY (AWX8869)



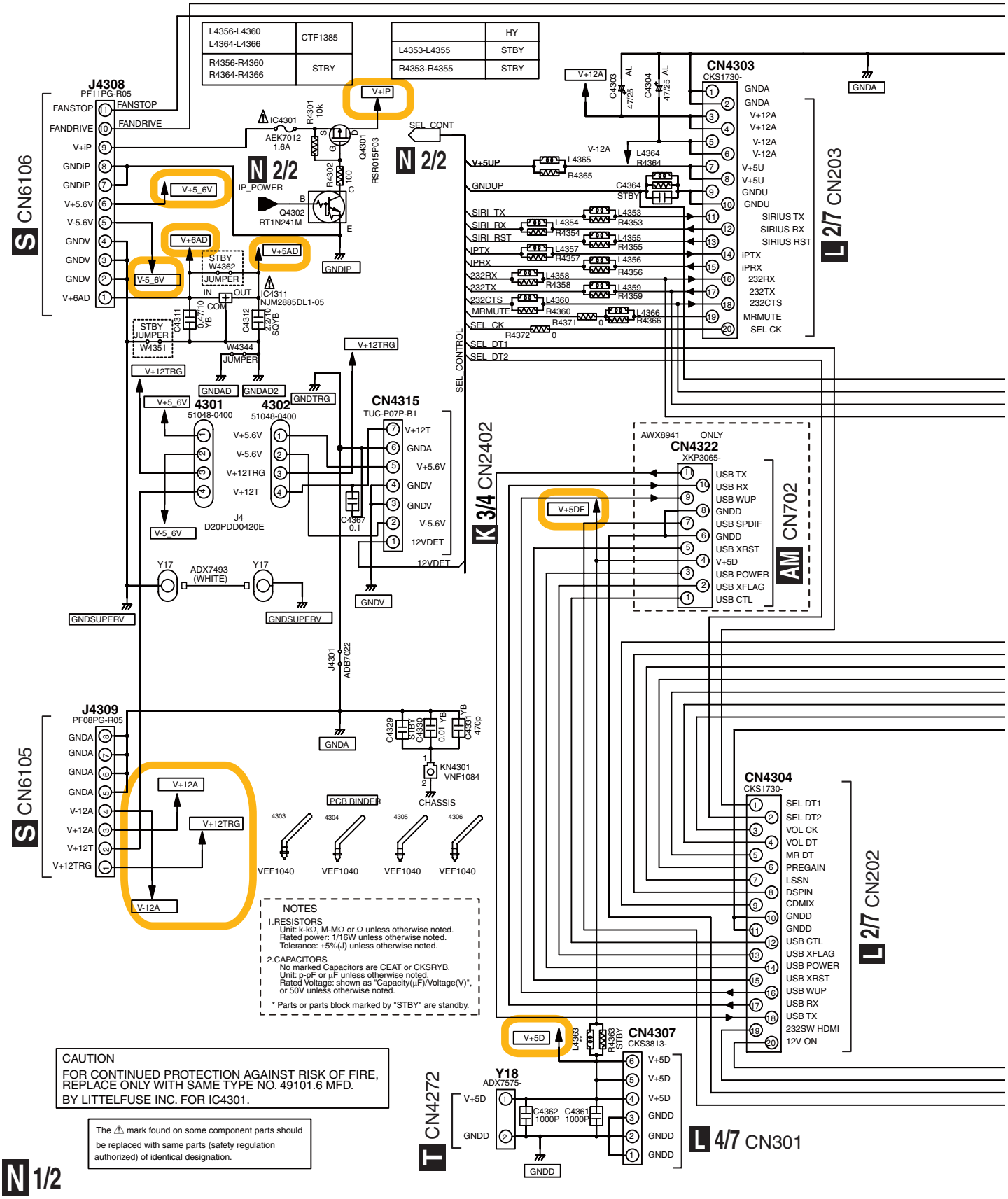
10.20 DSP ASSY (3/3)

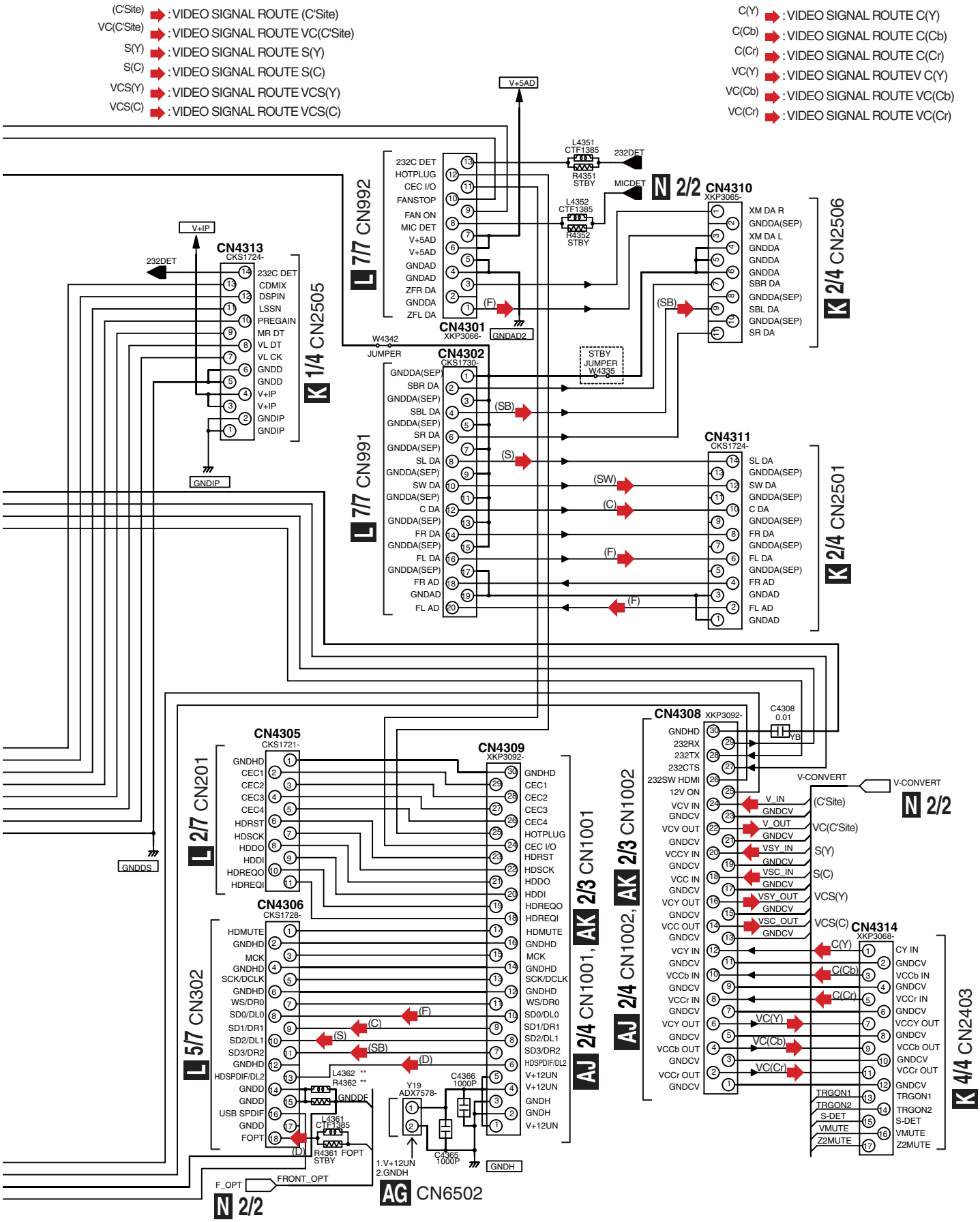



*CN301
CN301:VKN1600
3rdDSP
3rd DSP Block
*IC301
3RD DSP
3.3V
1.2V
GNDD
M 1/3, 2/3
M 1/3
M 2/3
M 3/3
NOTE
1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated Power: 1/16w unless otherwise noted.
Tolerance: (J)5% unless otherwise noted.
2. CAPACITORS
Unit: p-pF or u-uF unless otherwise noted.
Ratings: Capacity(F)/Voltage(V) unless otherwise noted.
3. NM: No Mount

10.21 INTERFACE ASSY (1/2)

N 1/2 INTERFACE ASSY (VSX-LX70:AWX8949) (VSX-LX60:AWX8941)

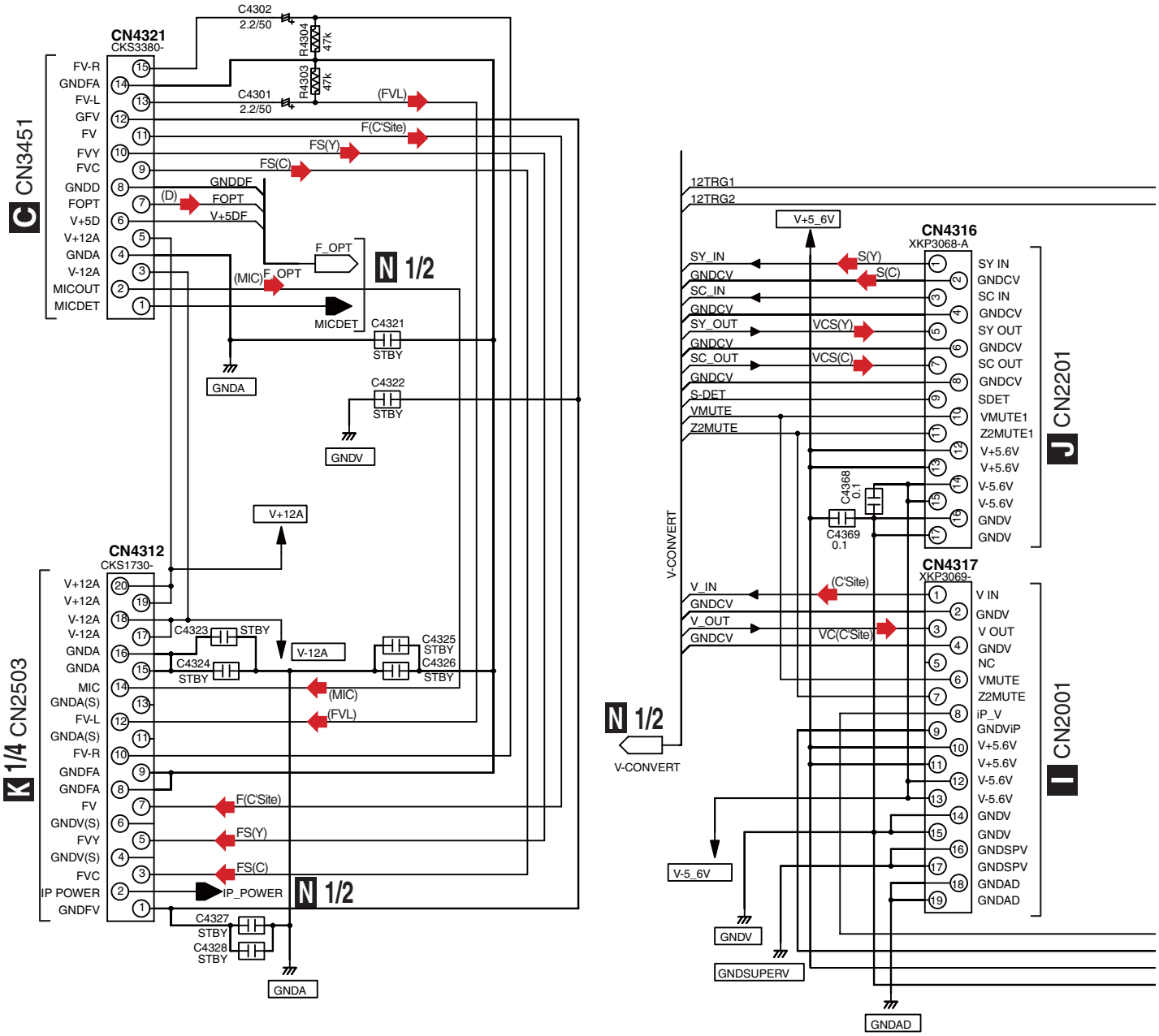


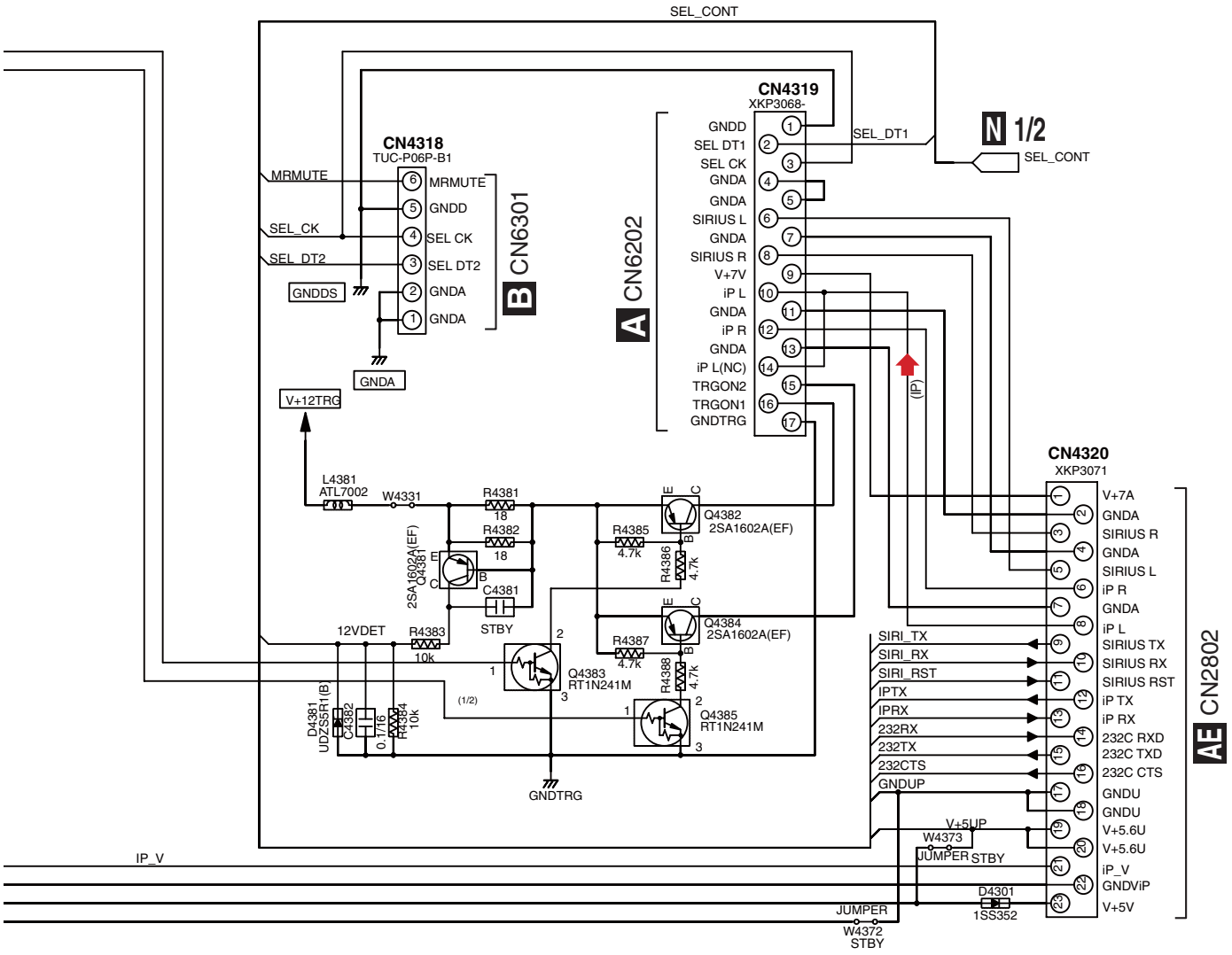


**	AWX8941	AWX8949
L4362	STBY	CTF1385
L4363	VTL1169	CTF1385
R4362	0Ω	STBY

10.22 INTERFACE ASSY (2/2)

N 2/2 INTERFACE ASSY
(VSX-LX70:AWX8949)
(VSX-LX60:AWX8941)



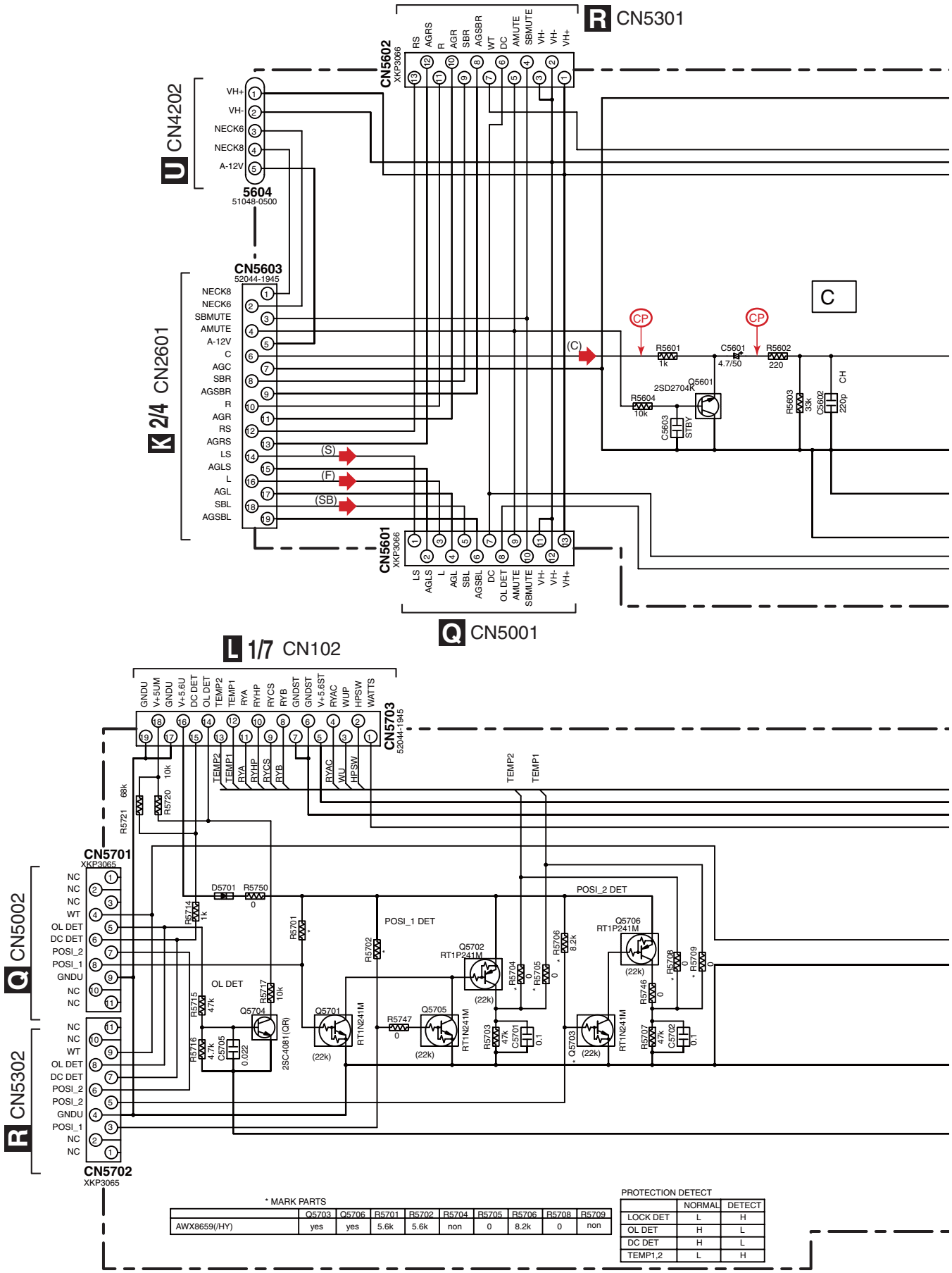


(FVL) : VIDEO SIGNAL ROUTE (VIDEO2)
F(C'Site) : VIDEO SIGNAL ROUTE F(C'Site)
FS(C) : VIDEO SIGNAL ROUTE FS(C)
FS(Y) : VIDEO SIGNAL ROUTE FS(Y)
(C'Site) : VIDEO SIGNAL ROUTE (C'Site)
VC(C'Site) : VIDEO SIGNAL ROUTE VC(C'Site)
S(Y) : VIDEO SIGNAL ROUTE S(Y)
S(C) : VIDEO SIGNAL ROUTE S(C)
VCS(Y) : VIDEO SIGNAL ROUTE VCS(Y)
VCS(C) : VIDEO SIGNAL ROUTE VCS(C)

(IP) : AUDIO SIGNAL ROUTE(IP)
(MIC) : AUDIO SIGNAL ROUTE(MIC)
(D) : AUDIO SIGNAL ROUTE(SPDIF)

N 2/2

10.23 POWER AMP IN and POWER PROTECT ASSYS



* MARK PARTS

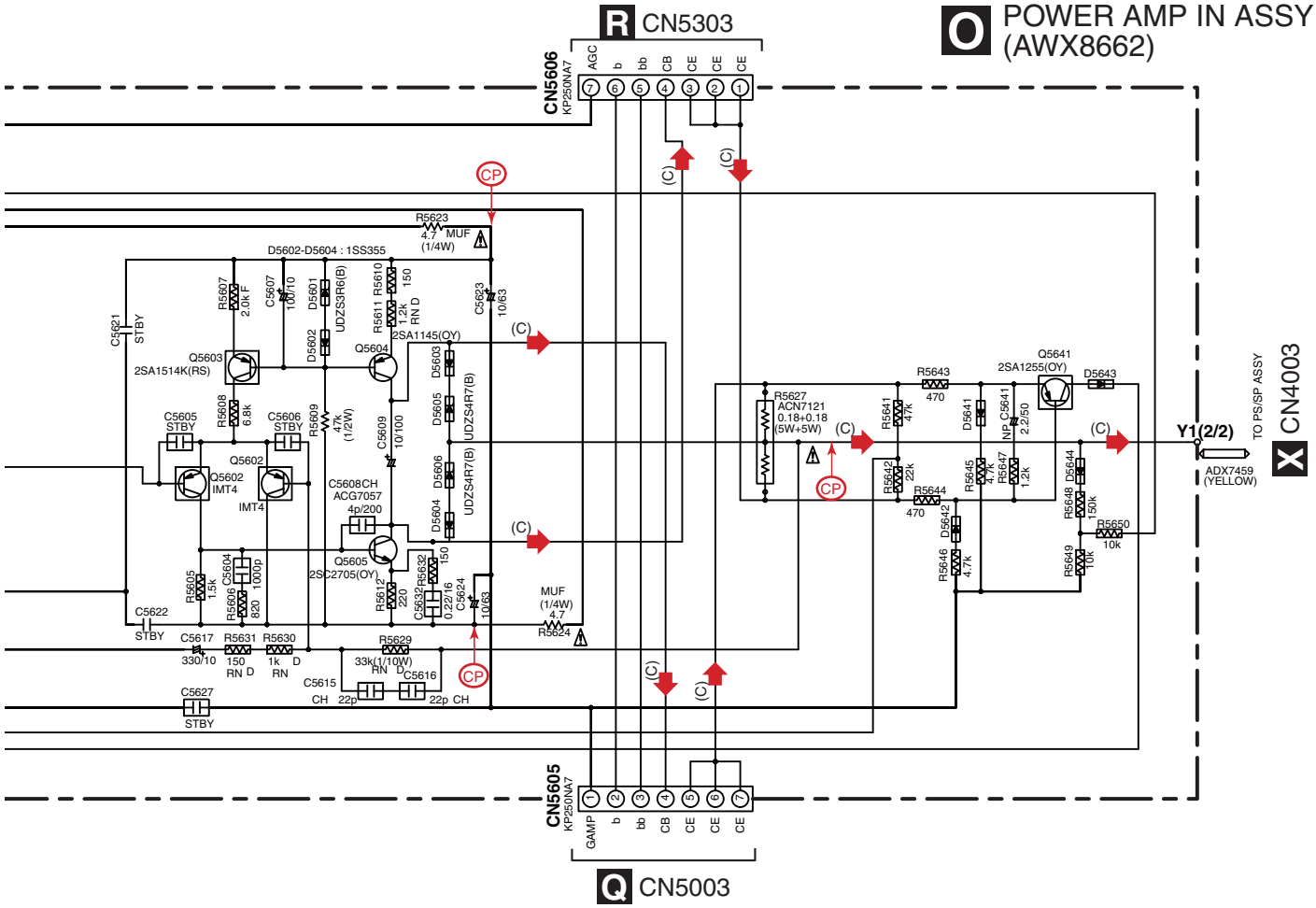
	Q5703	Q5706	R5701	R5702	R5704	R5705	R5706	R5708	R5709
AWX8659(/HY)	yes	yes	5.6k	5.6k	non	0	8.2k	0	non

PROTECTION DETECT

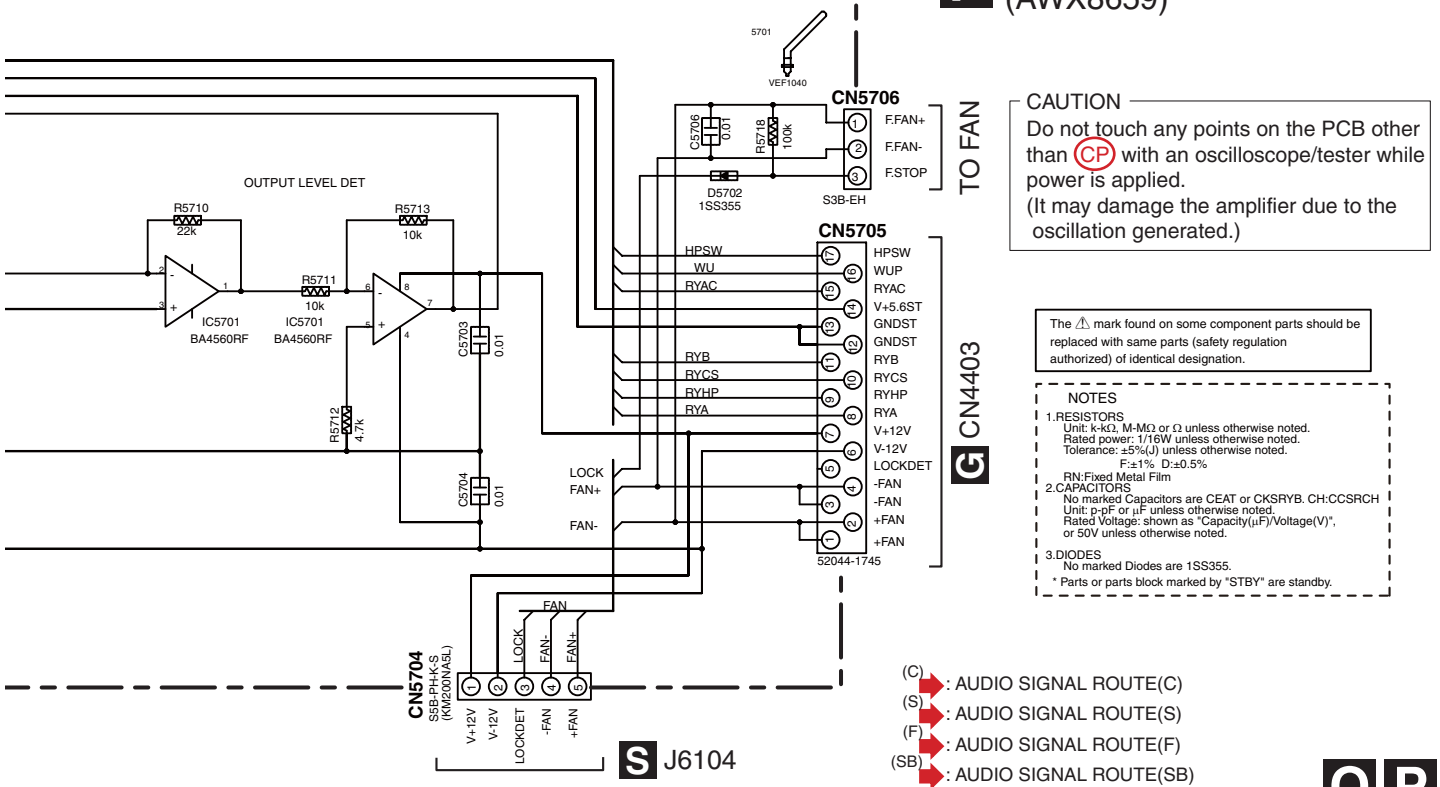
	NORMAL	DETECT
LOCK DET	L	H
OL DET	H	L
DC DET	H	L
TEMP1,2	L	H

O P

O POWER AMP IN ASSY (AWX8662)



P POWER PROTECT ASSY (AWX8659)



CAUTION

Do not touch any points on the PCB other than (CP) with an oscilloscope/tester while power is applied.
(It may damage the amplifier due to the oscillation generated.)

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

NOTES

1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.
F:±1% D:±0.5%
RN:Fixed Metal Film

2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB. CH:CCSRCH
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)", or 50V unless otherwise noted.

3.DIODES
No marked Diodes are 1SS355.

* Parts or parts block marked by "STBY" are standby.

(C): AUDIO SIGNAL ROUTE(C)
(S): AUDIO SIGNAL ROUTE(S)
(F): AUDIO SIGNAL ROUTE(F)
(SB): AUDIO SIGNAL ROUTE(SB)

O P

10.24 POWER AMP L ASSY

CAUTION

Do not touch any points on the PCB other than (CP) with an oscilloscope/tester while power is applied.
(It may damage the amplifier due to the oscillation generated.)

NOTES

1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.
F:±1% D:±0.5%
RN:Fixed Metal Film
2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB. CH:CCSRCH
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)", or 50V unless otherwise noted.
3.DIODES
No marked Diodes are 1SS355.
* Parts or parts block marked by "STBY" are standby.

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

P CN5701 — CN5002 — XKP3076

O CN5601 — CN5001 — XKP3077

O CN5605 — CN5003 KM250NA7L — TO POWER AMP IN ASSY

KN5061, KN5063, CHASSIS, STBY

PTFM04BH222Q2N34B0 (60°C) POSI_1 TH5001
PTFM04BD222Q2N34B0 (100°C) POSI_2 TH5002

D5002-D5004 : 1SS355
D5102-D5104 : 1SS355
D5202-D5204 : 1SS355

L
SL
SBL

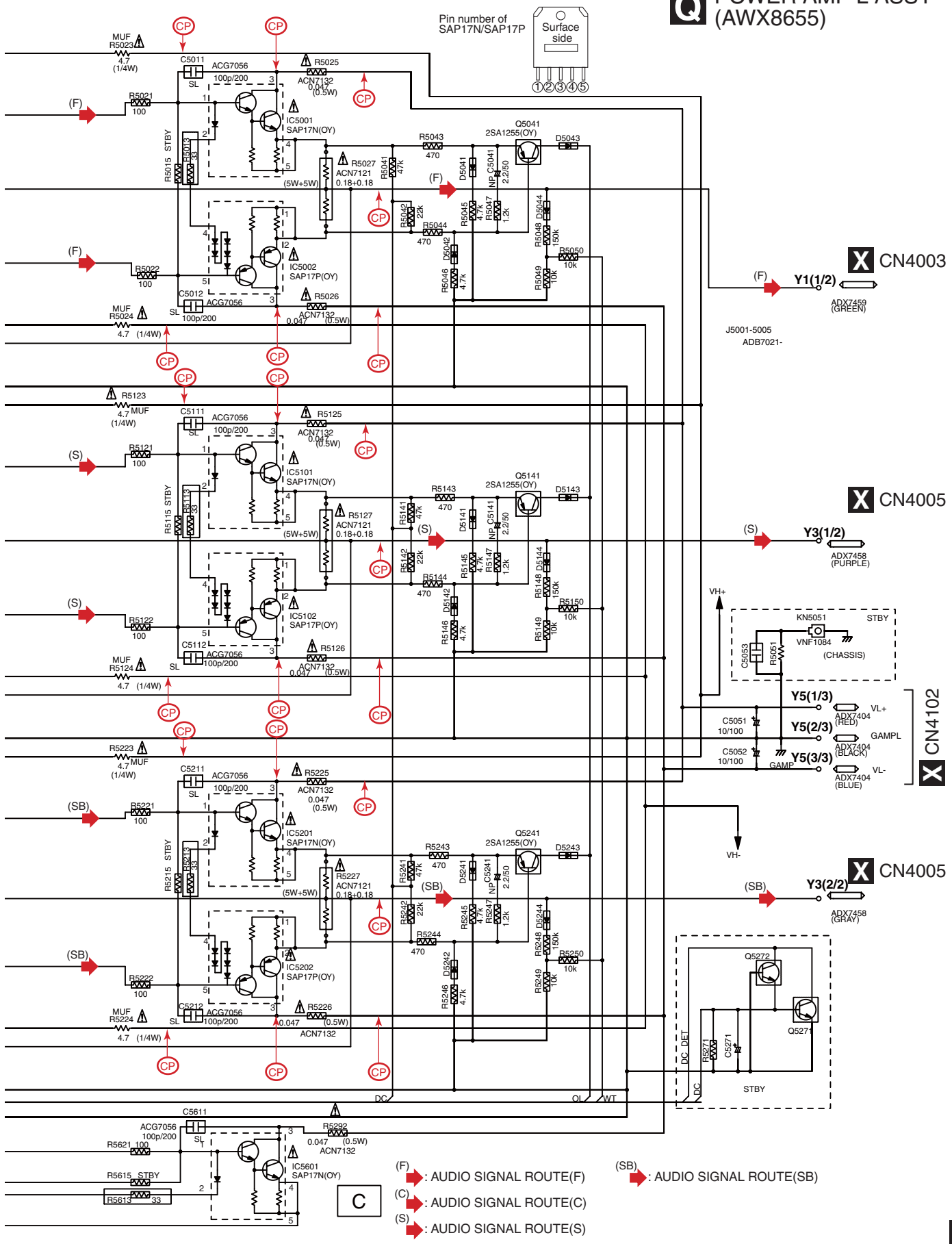
Q5001 2SD2704K
Q5003 2SA1514K(RS)
Q5004 2SA1145(OY)
Q5002 IMT4
Q5005 2SC2705(OY)

Q5101 2SD2704K
Q5103 2SA1514K(RS)
Q5104 2SA1145(OY)
Q5102 IMT4
Q5105 2SC2705(OY)

Q5201 2SD2704K
Q5203 2SA1514K(RS)
Q5204 2SA1145(OY)
Q5202 IMT4
Q5205 2SC2705(OY)

PRT_L

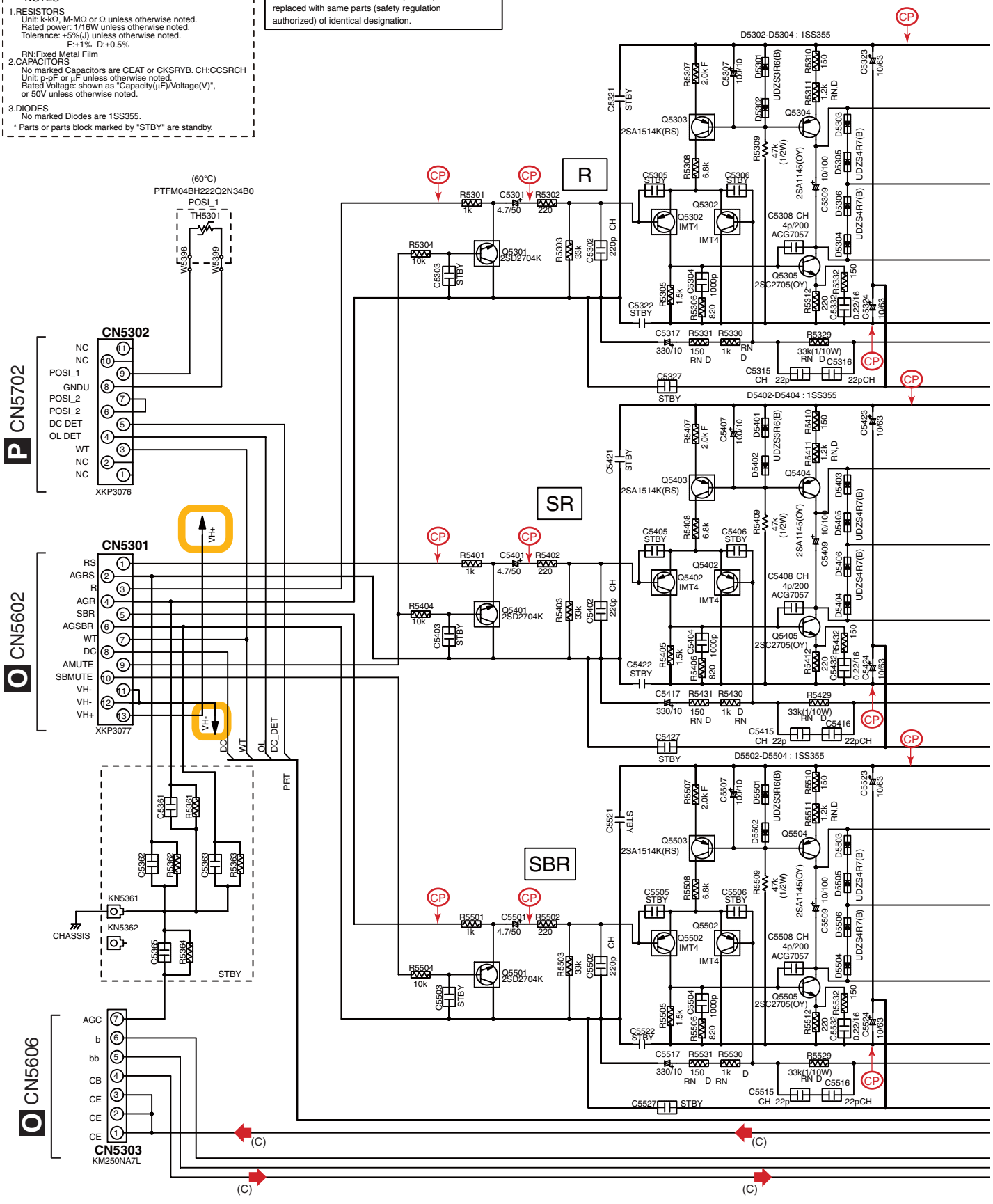
Q POWER AMP L ASSY (AWX8655)



10.25 POWER AMP R ASSY

NOTES
1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.
F:±1% D:±0.5%
RN:Fixed Metal Film
2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB. CH:CCSRCH
Unit: p-pF or µF unless otherwise noted.
Rated Voltage: shown as "Capacity(µF)/Voltage(V)", or 50V unless otherwise noted.
3.DIODES
No marked Diodes are 1SS355.
* Parts or parts block marked by "STBY" are standby.

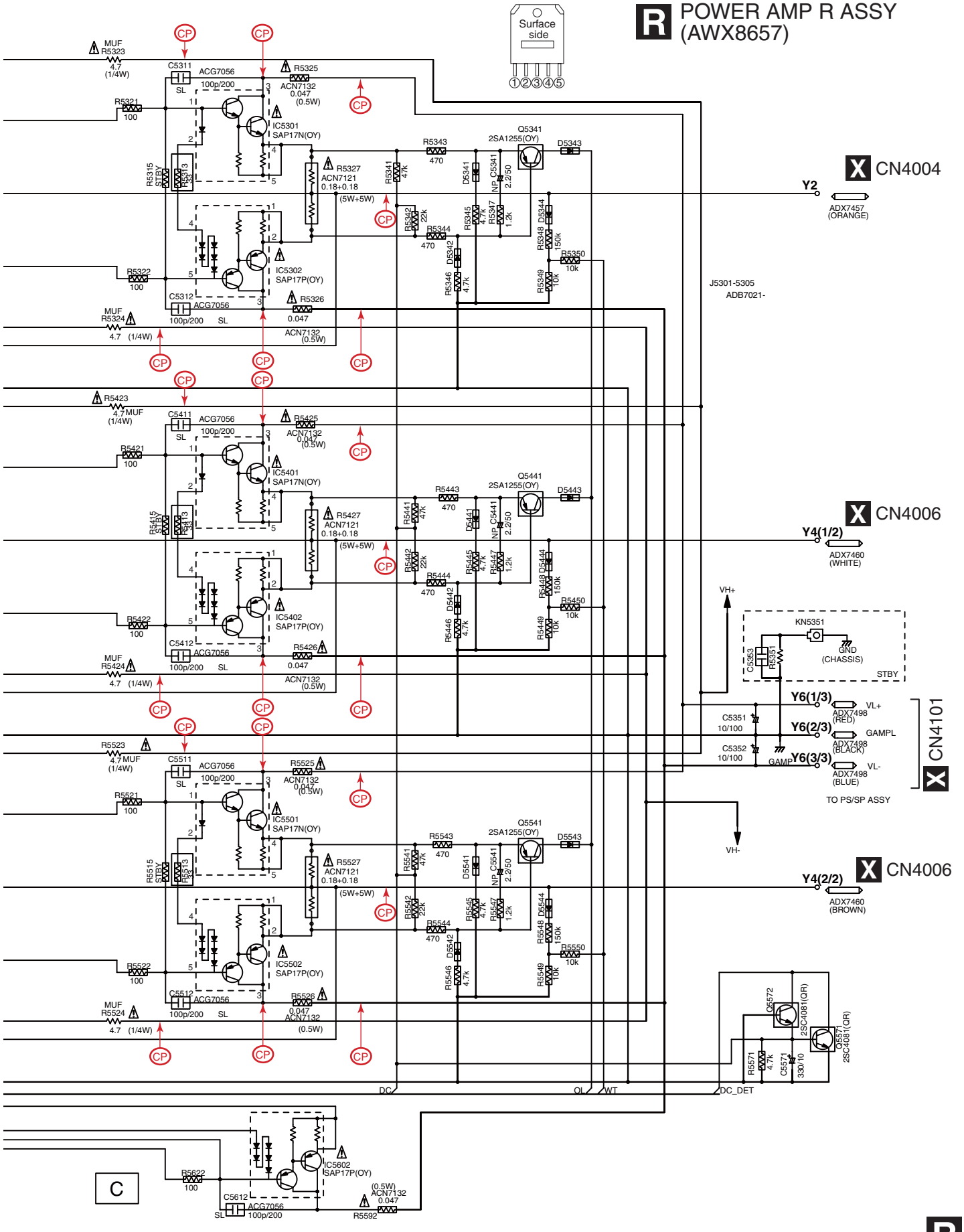
The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.



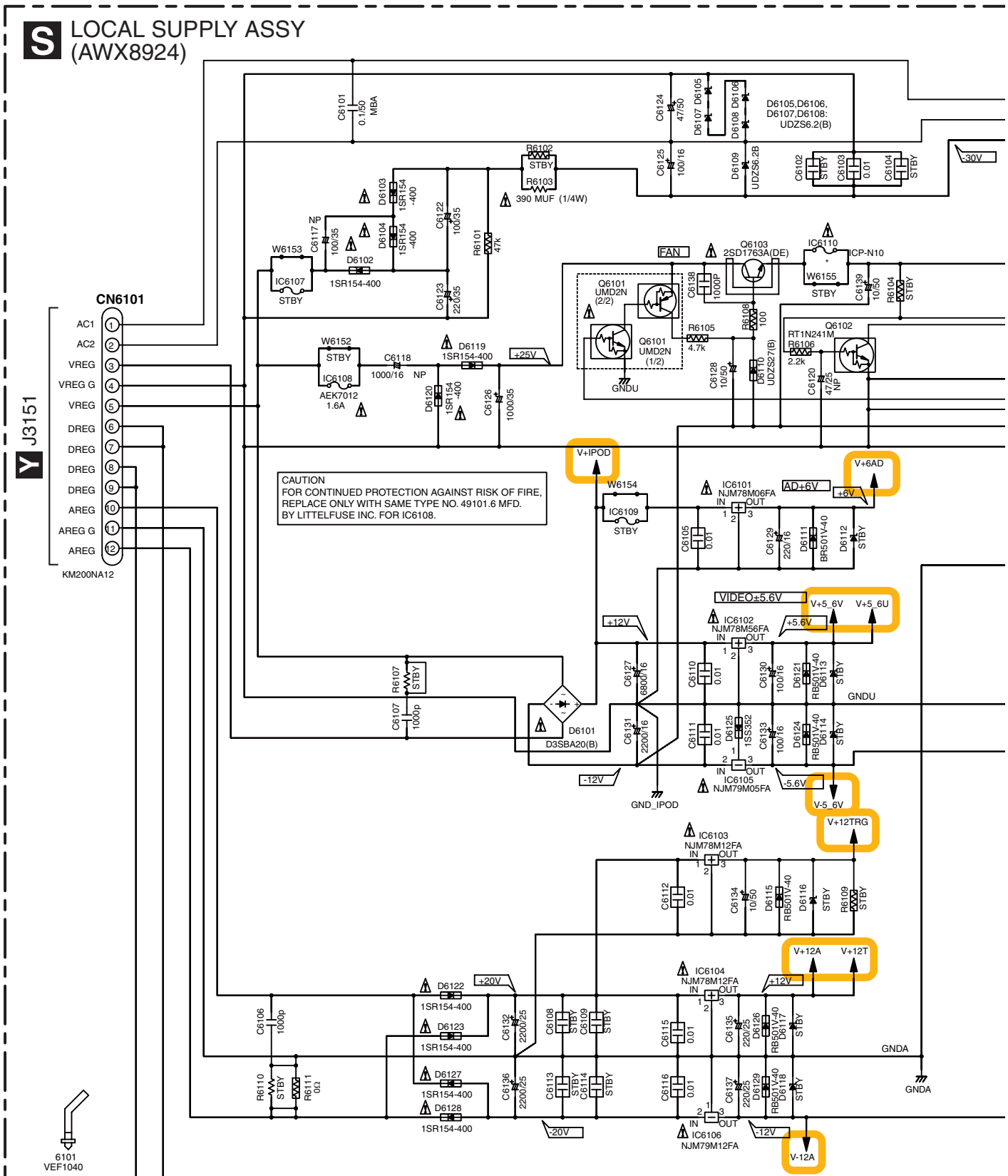
CAUTION
Do not touch any points on the PCB other than (CP) with an oscilloscope/tester while power is applied.
(It may damage the amplifier due to the oscillation generated.)

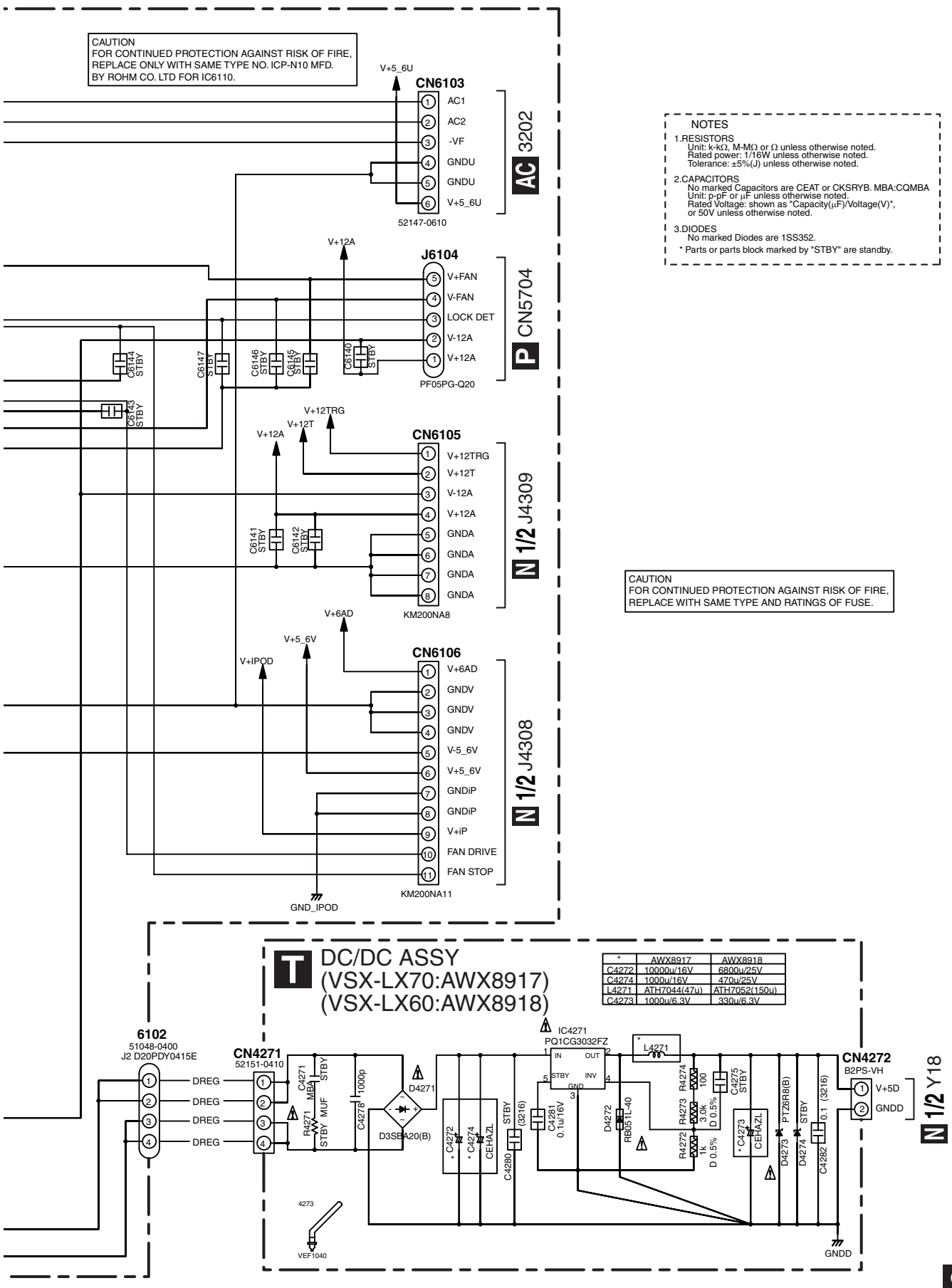
(C): AUDIO SIGNAL ROUTE(C)

R POWER AMP R ASSY (AWX8657)

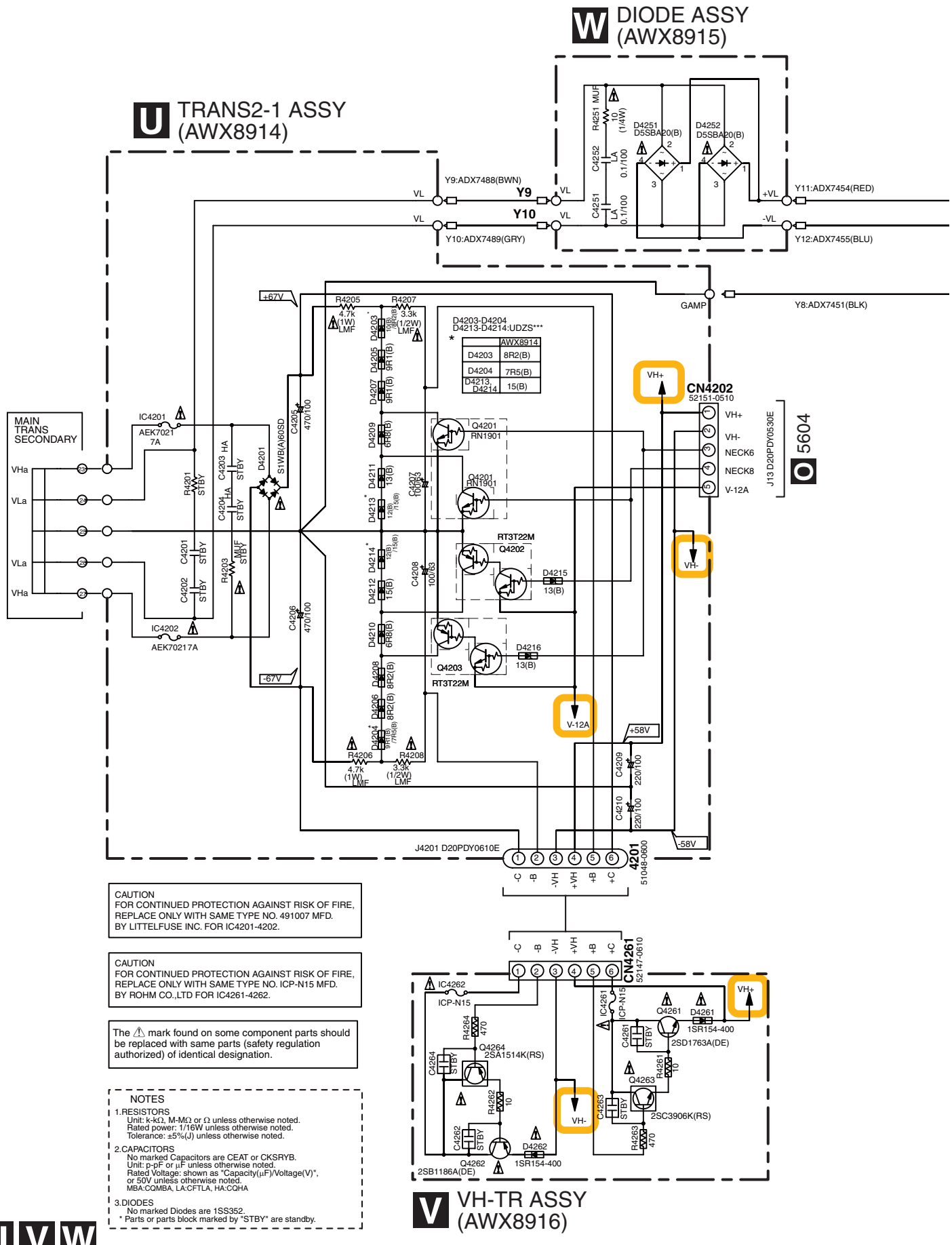


10.26 LOCAL SUPPLY and DC/DC ASSYS




CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE ONLY WITH SAME TYPE NO. ICP-N10 MFD.
BY ROHM CO. LTD FOR IC6110.
CN6103
AC1
AC2
-VF
GNDU
GNDU
V+5_6U
52147-0610
AC 3202
J6104
V+FAN
V-FAN
LOCK DET
V-12A
V+12A
PF05PG-Q20
P CN5704
CN6105
V+12TRG
V+12T
V-12A
V+12A
GNDA
GNDA
GNDA
GNDA
KM200NA8
N 1/2 J4309
CN6106
V+6AD
GNDV
GNDV
GNDV
V-5_6V
V+5_6V
GNDiP
GNDiP
V+iP
FAN DRIVE
FAN STOP
KM200NA11
N 1/2 J4308
GND_IPOD
NOTES
1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.
2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB. MBA:CQMBA
Unit: p-pF or µF unless otherwise noted.
Rated Voltage: shown as "Capacity(µF)/Voltage(V)",
or 50V unless otherwise noted.
3.DIODES
No marked Diodes are 1SS352.
* Parts or parts block marked by "STBY" are standby.
CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE WITH SAME TYPE AND RATINGS OF FUSE.
T DC/DC ASSY
(VSX-LX70:AWX8917)
(VSX-LX60:AWX8918)
AWX8917
AWX8918
C4272 10000u/16V 6800u/25V
C4274 1000u/16V 470u/25V
L4271 ATH7044(47u) ATH7052(150u)
C4273 1000u/6.3V 330u/6.3V
6102
51048-0400
J2 D20PDY0415E
CN4271
52151-0410
DREG
IC4271
PQ1CG3032FZ
L4271
D4271
D3SBA20(B)
CN4272
B2PS-VH
V+5D
GNDD
N 1/2 Y18
VEF1040
GNDD

10.27 TRANS2-1, VH-TR, DIODE and SP/PS ASSYS



CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 491007 MFD. BY LITTELFUSE INC. FOR IC4201-4202.

CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. ICP-N15 MFD. BY ROHM CO.,LTD FOR IC4261-4262.

The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

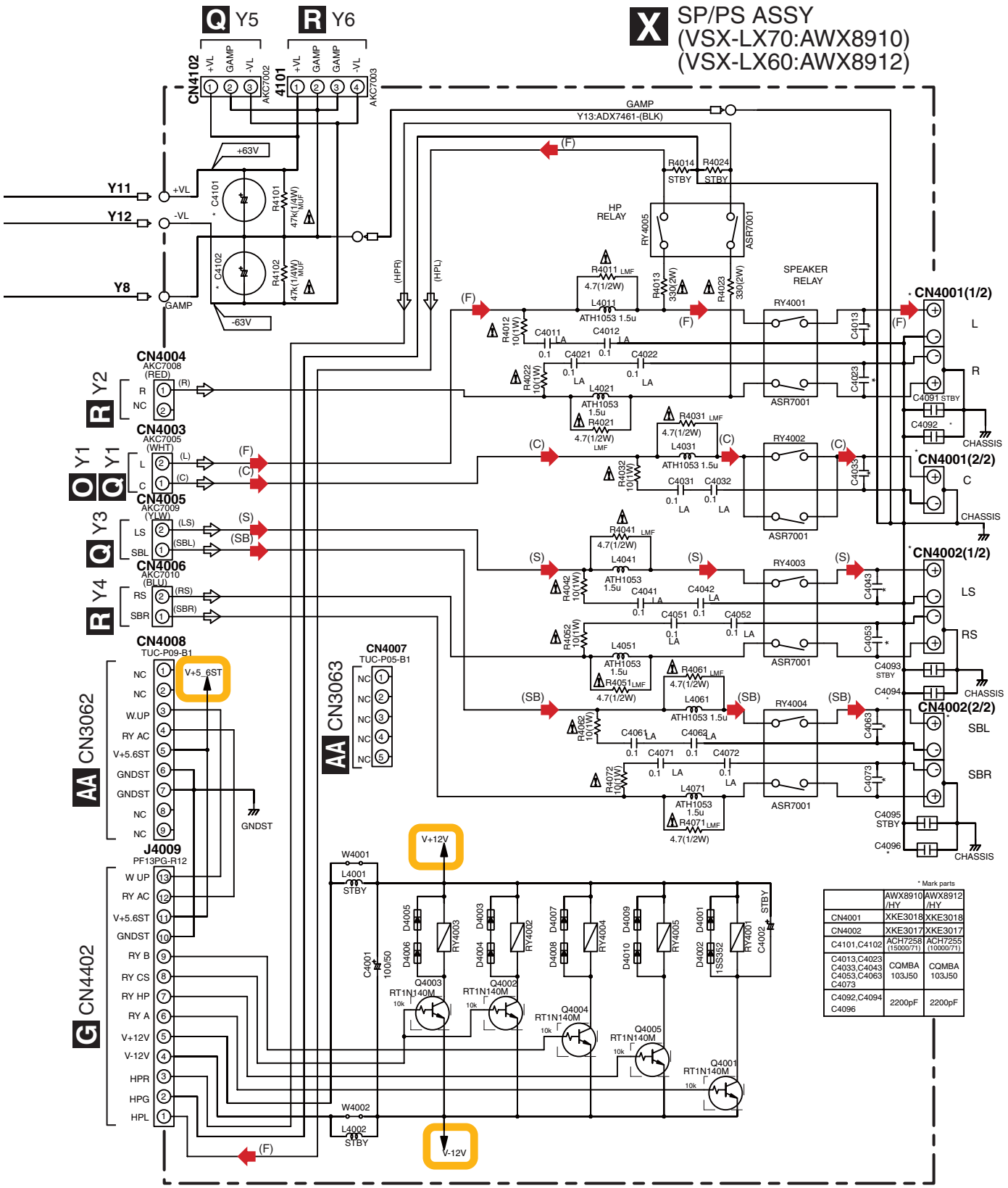
NOTES

1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.

2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB.
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)", or 50V unless otherwise noted.
MBA:CQMBA, LA:CFTLA, HA:CQHA

3.DIODES
No marked Diodes are 1SS352.
* Parts or parts block marked by "STBY" are standby.

X SP/PS ASSY (VSX-LX70:AWX8910) (VSX-LX60:AWX8912)

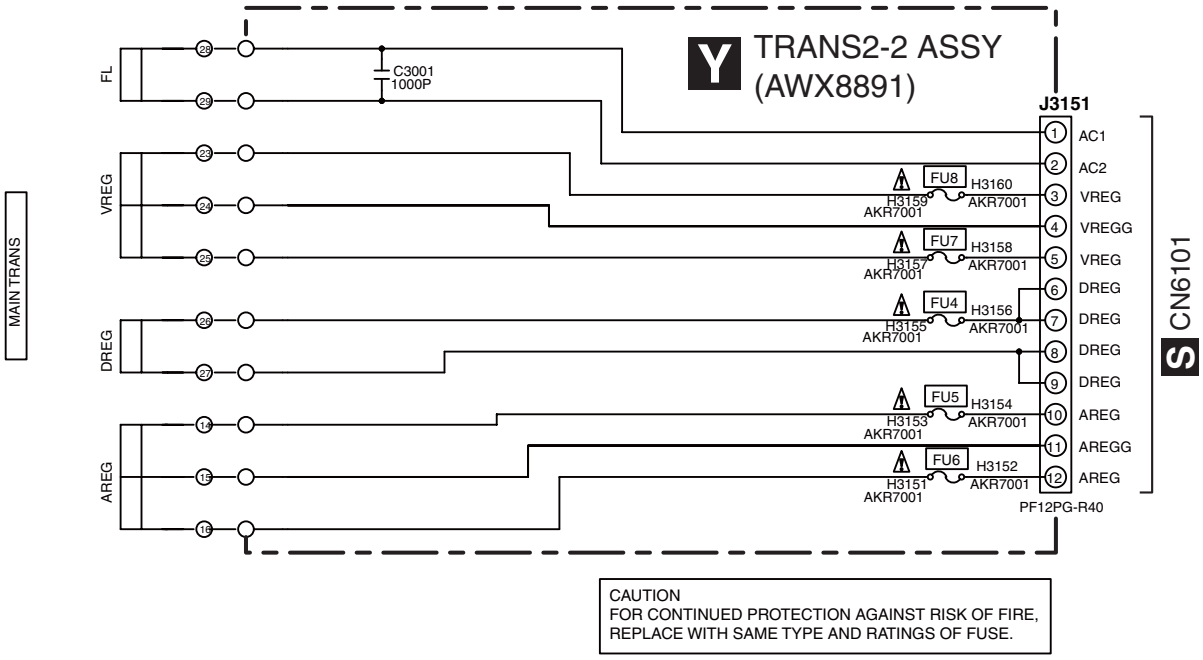


* Mark parts

	AWX8910 /HY	AWX8912 /HY
CN4001	XKE3018	XKE3018
CN4002	XKE3017	XKE3017
C4101,C4102	ACH7258 (15000/71)	ACH7255 (10000/71)
C4013,C4023 C4033,C4043 C4053,C4063 C4073	CQMBA 103J50	CQMBA 103J50
C4092,C4094 C4096	2200pF	2200pF

(F) : AUDIO SIGNAL ROUTE (F)
(C) : AUDIO SIGNAL ROUTE (C)
(S) : AUDIO SIGNAL ROUTE (S)
(SB) : AUDIO SIGNAL ROUTE (SB)

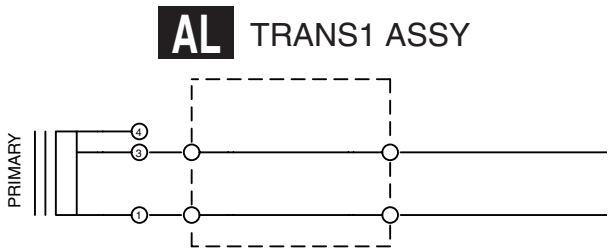
10.28 TRANS2-2,TRANS1 and PRIMARY ASSYS



CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

⚠

	FU1	FU4	FU5,6	FU7,8
HY	T5AL/250V	REK1028 (T4AL/250V)	REK1021 (T800mAL/250V)	REK1026 (T2.5AL/250V)



CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

NOTES

1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.

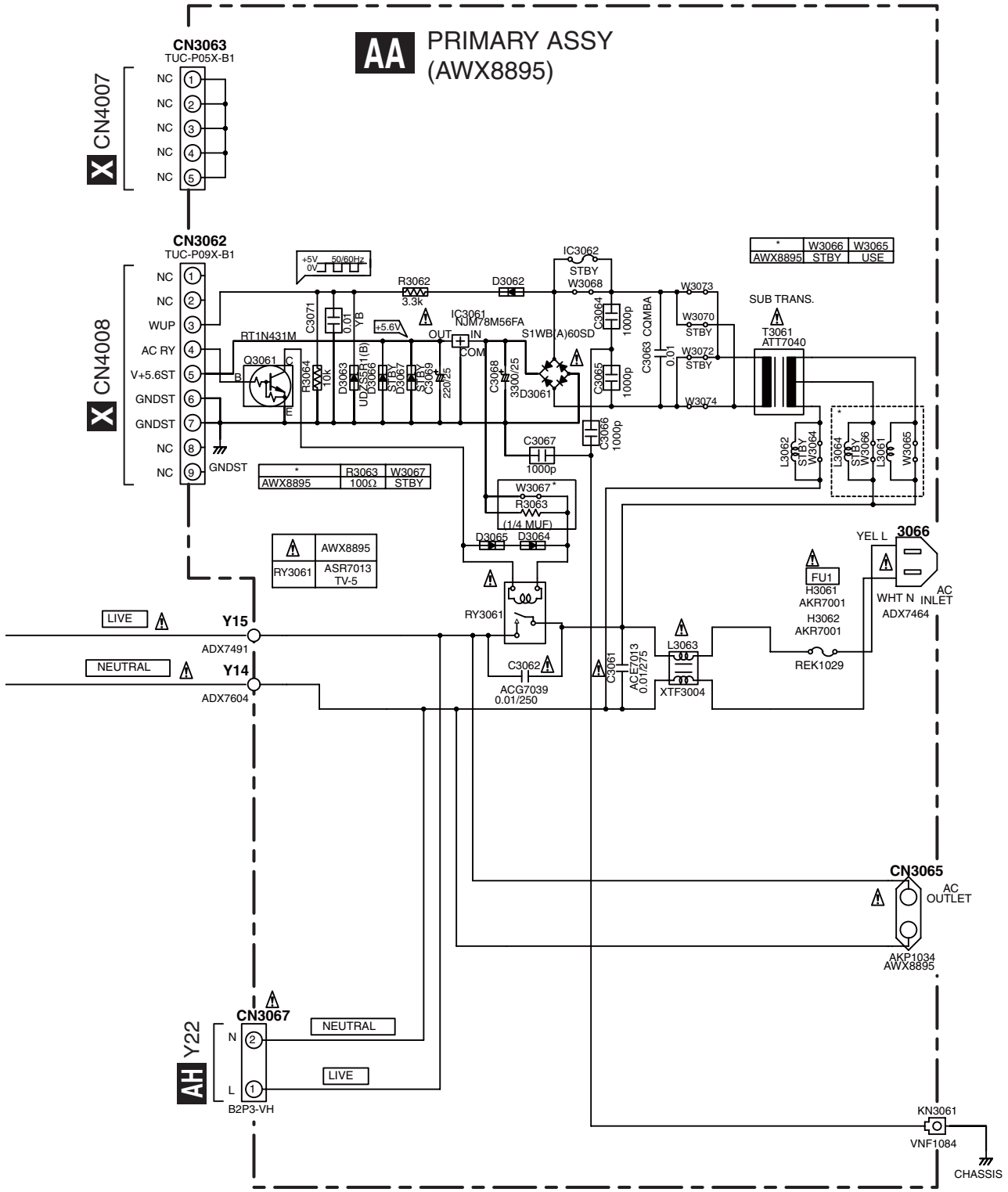
2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB.
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)",
or 50V unless otherwise noted.

3.DIODES
No marked Diodes are 1SS352.

* Parts or parts block marked by "STBY" are standby.

Y AL

AA PRIMARY ASSY (AWX8895)



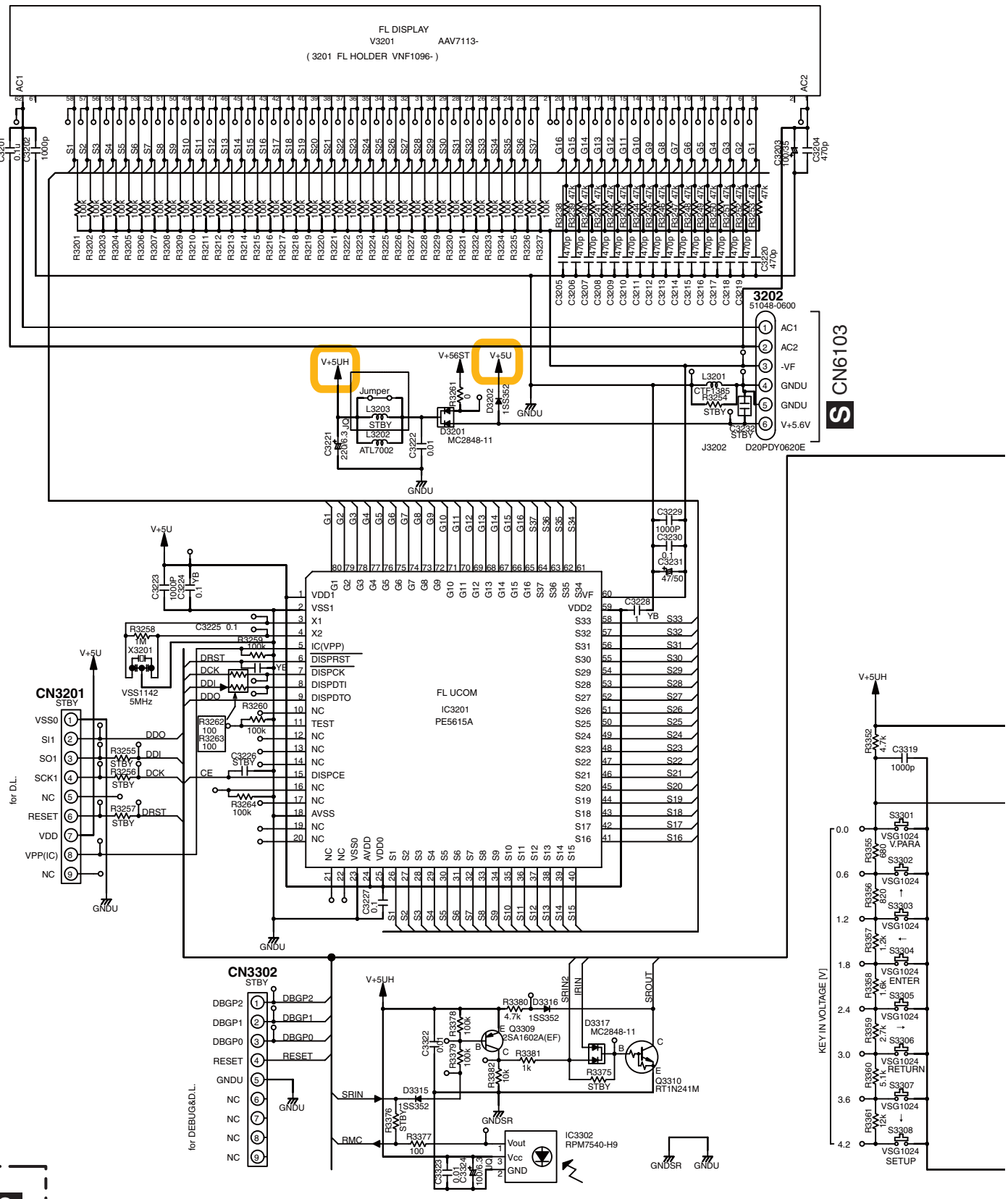
The ⚠ mark found on some component parts should be replaced with same parts (safety regulation authorized) of identical designation.

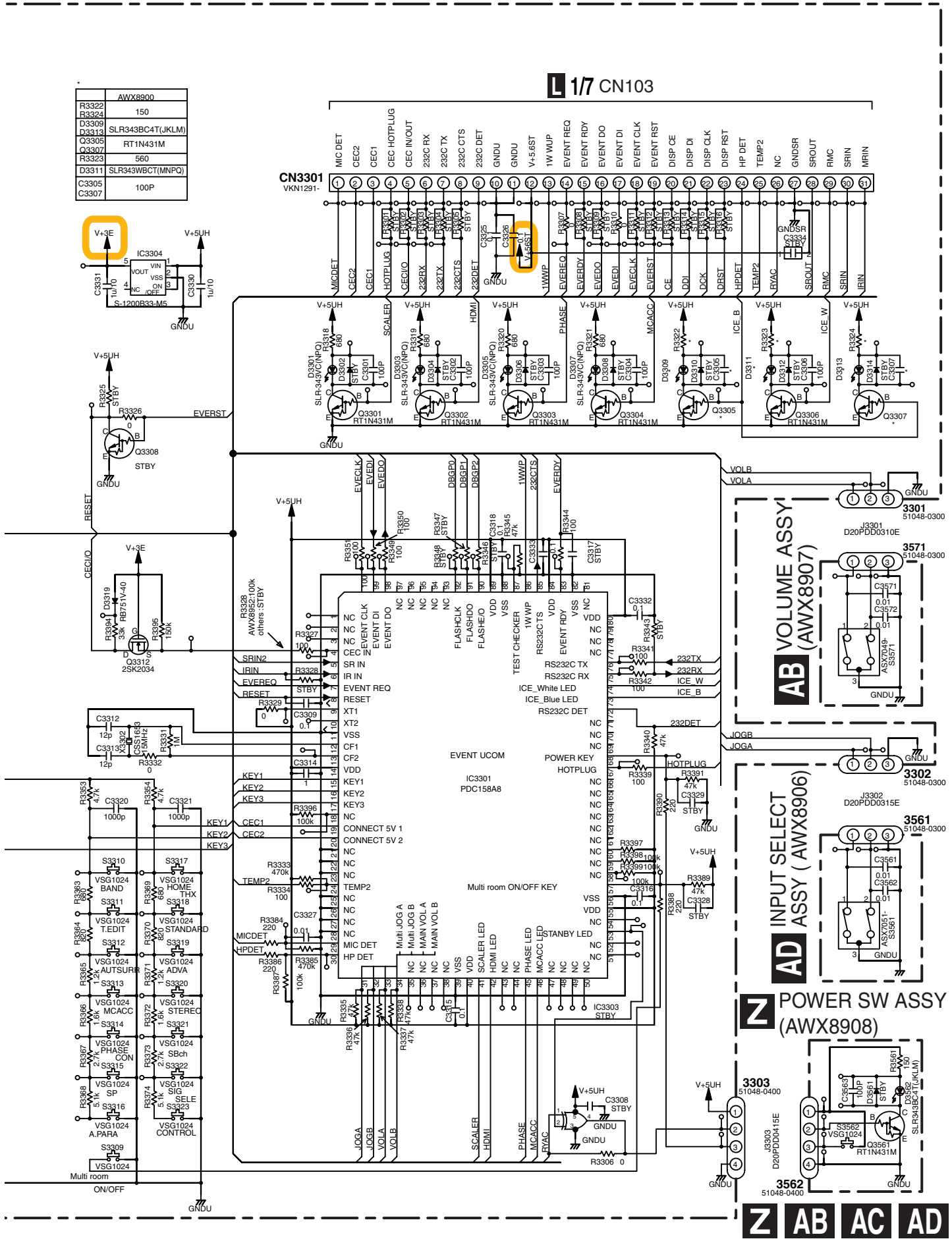
10.29 VOLUME, DISPLAY, POWER SW and INPUT SELECT ASSYS

AC DISPLAY ASSY (AWX8900)

Switches

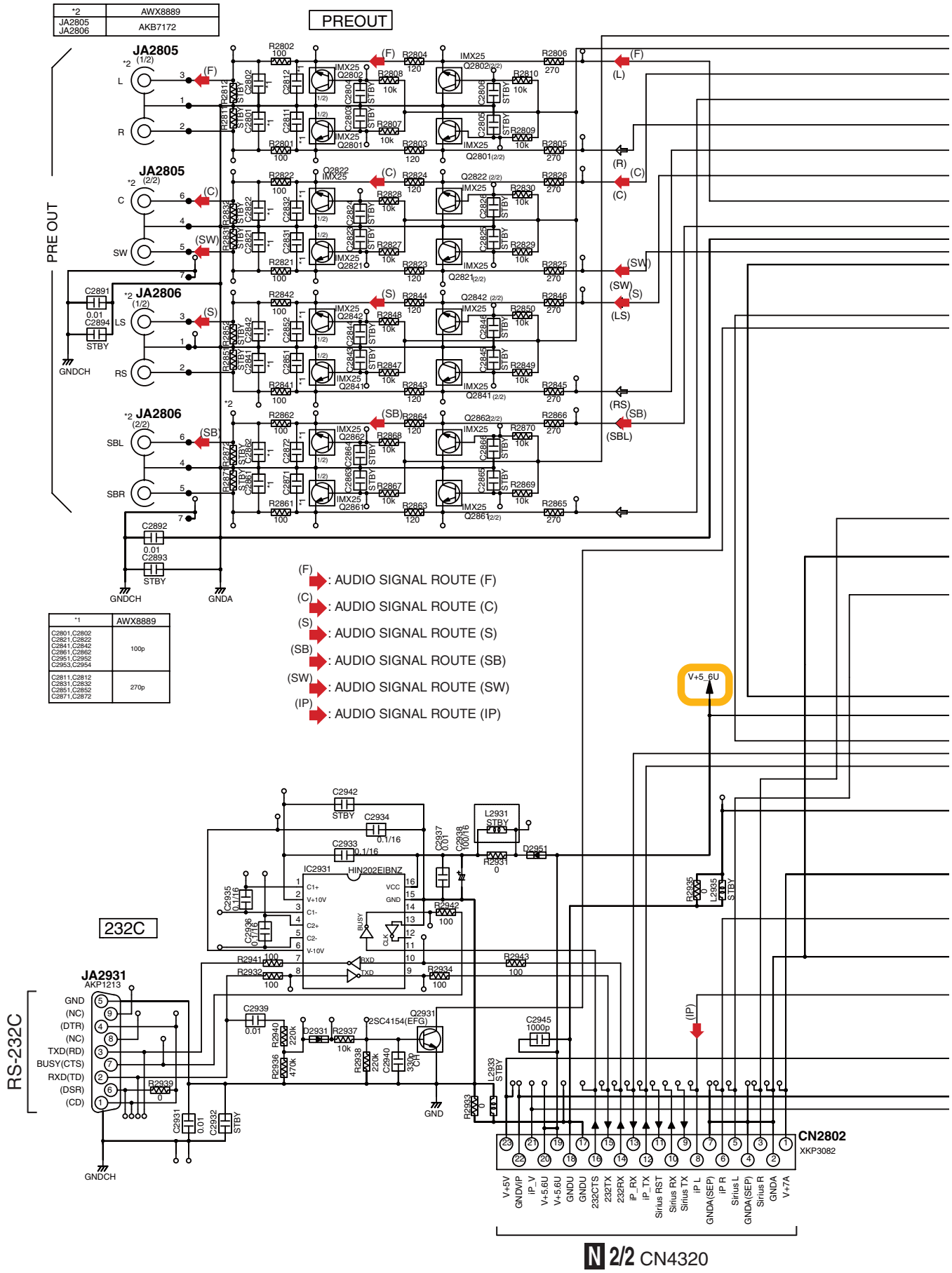
S3301 : V.PARA	S3307 : ⬇	S3313 : MCACC	S3319 : ADVA
S3302 : ⬆	S3308 : SETUP	S3314 : PHASE CON	S3320 : STEREO
S3303 : ⬅	S3309 : MULTI ROOM	S3315 : SP	S3321 : SBch
S3304 : ENTER	S3310 : BAND	S3316 : A.PARA	S3322 : SIG SELE
S3305 : ➡	S3311 : T.EDIT	S3317 : HOME	S3323 : CONTROL
S3306 : RETURN	S3312 : AUTSURR	S3318 : STANDARD	





	AWX8900
R3322 R3324	150
D3309 D3313	SLR343BC4T(JKLM)
Q3305 Q3307	RT1N431M
R3323	560
D3311	SLR343WBCT(MNPQ)
C3305 C3307	100P

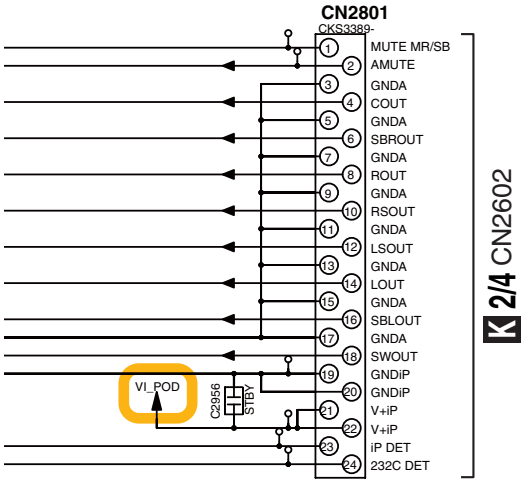
10.30 PREOUT & CONTROL ASSY

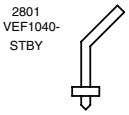


*2	AWX8889
JA2805 JA2806	AKB7172

*1	AWX8889
C2801,C2802 C2821,C2822 C2841,C2842 C2851,C2862 C2951,C2952 C2953,C2954	100p
C2811,C2812 C2831,C2832 C2851,C2852 C2871,C2872	270p

AE PREOUT & CONTROL ASSY (AWX8889)





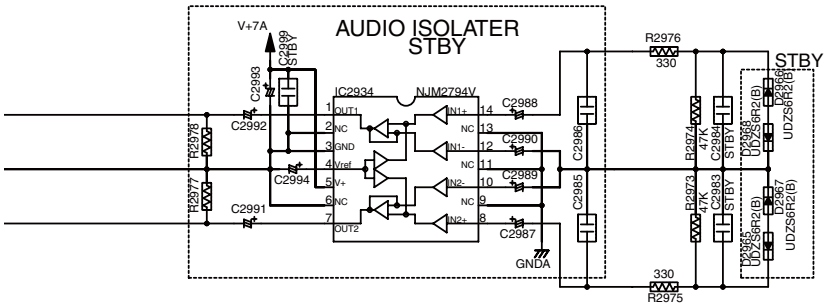
NOTES

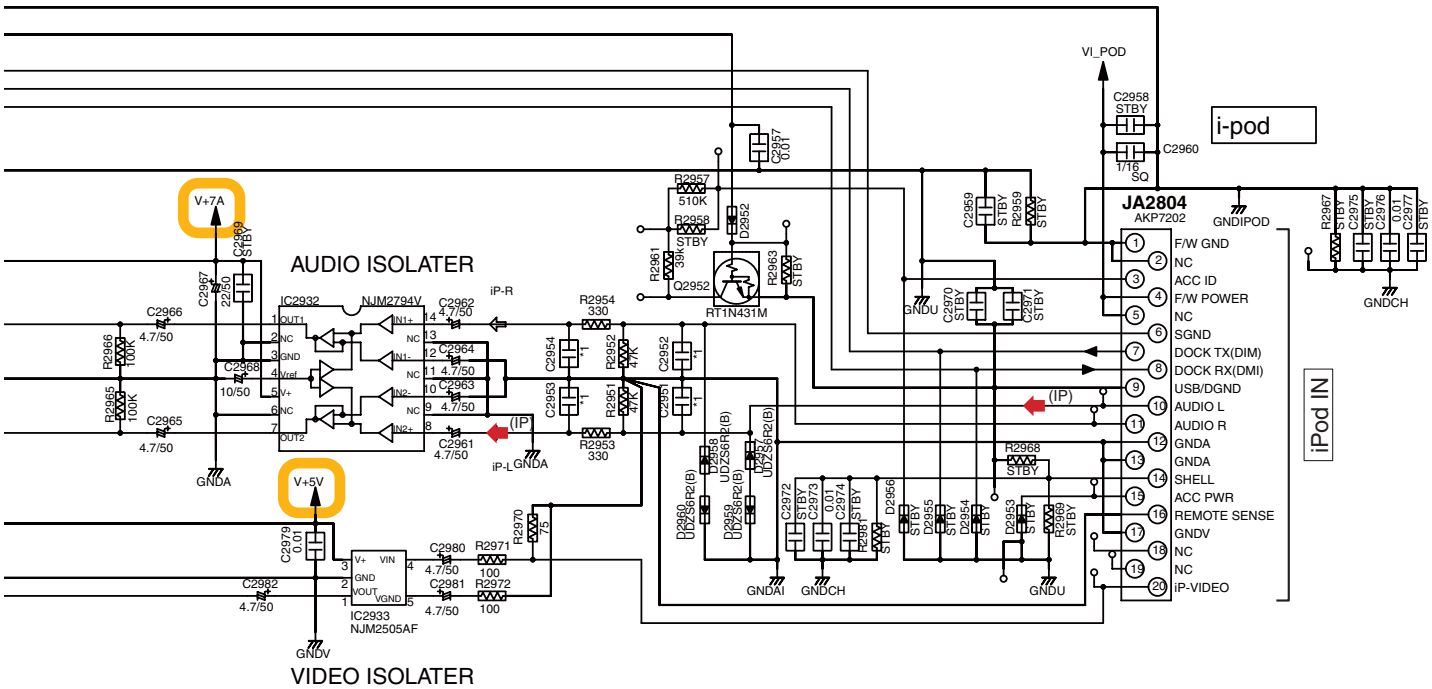
1.RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: ±5%(J) unless otherwise noted.

2.CAPACITORS
No marked Capacitors are CEAT or CKSRYB.
Unit: p-pF or μF unless otherwise noted.
Rated Voltage: shown as "Capacity(μF)/Voltage(V)", or 50V unless otherwise noted.

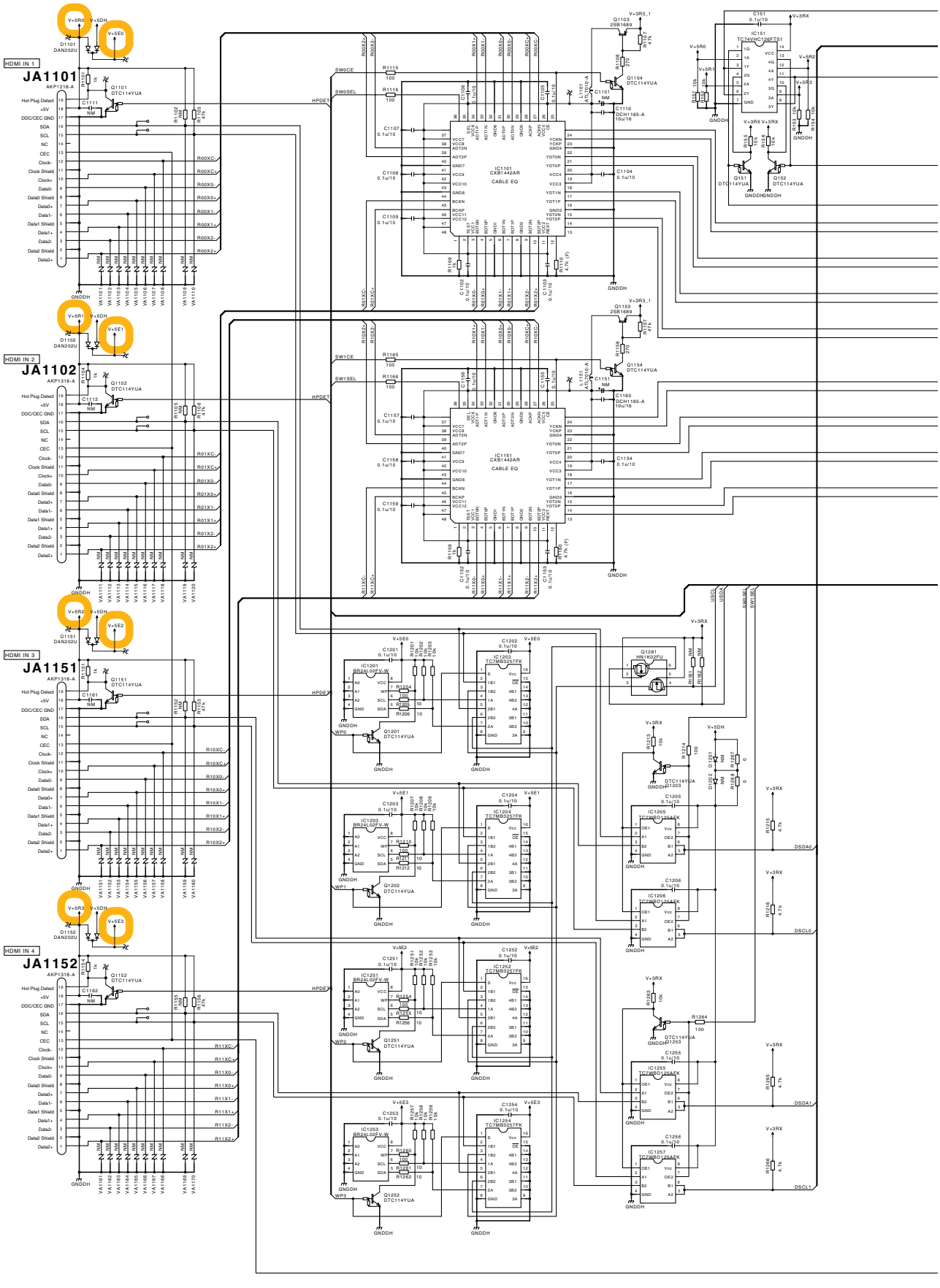
3.DIODES
No marked Diodes are 1SS352.

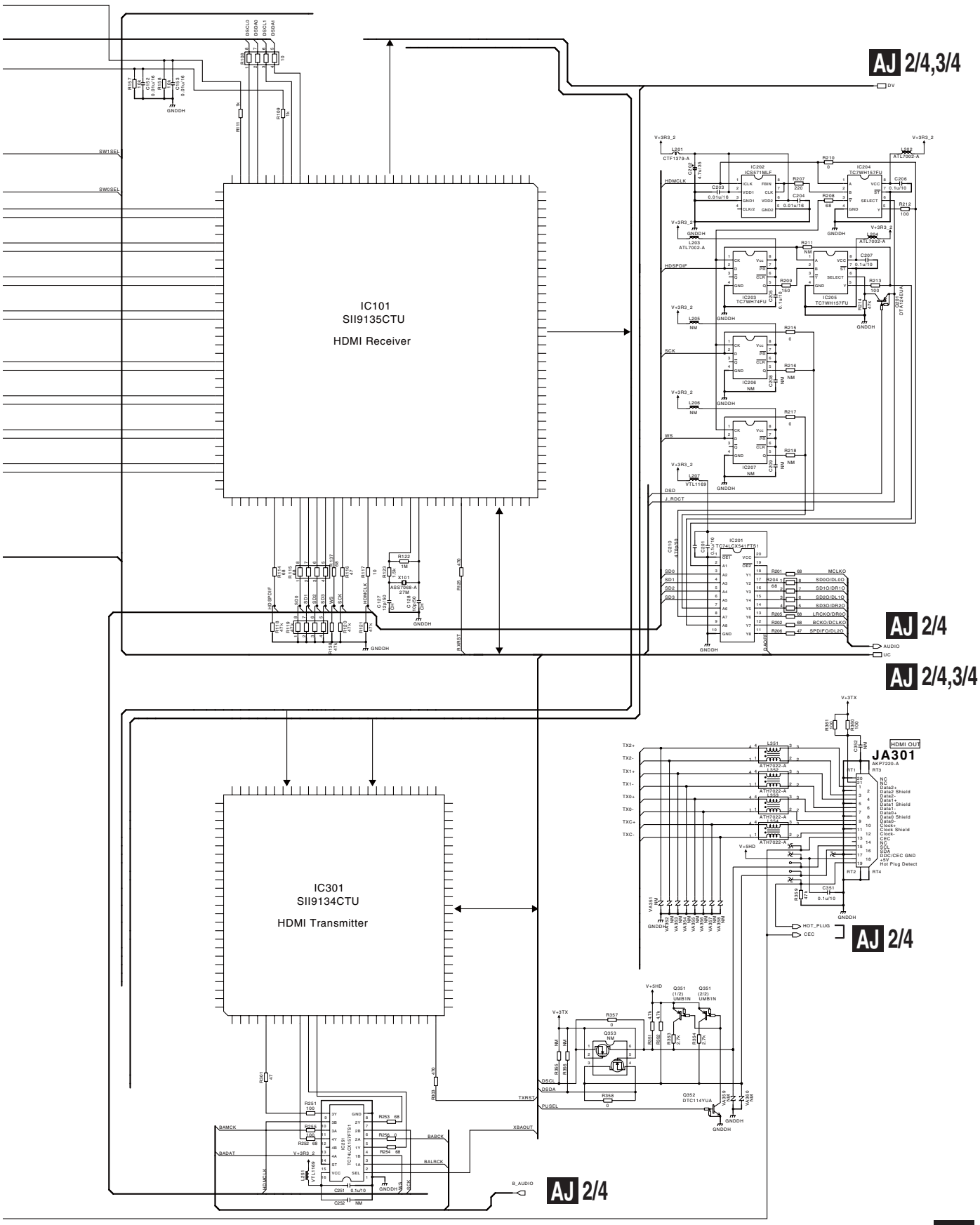
* Parts or parts block marked by "STBY" are standby.



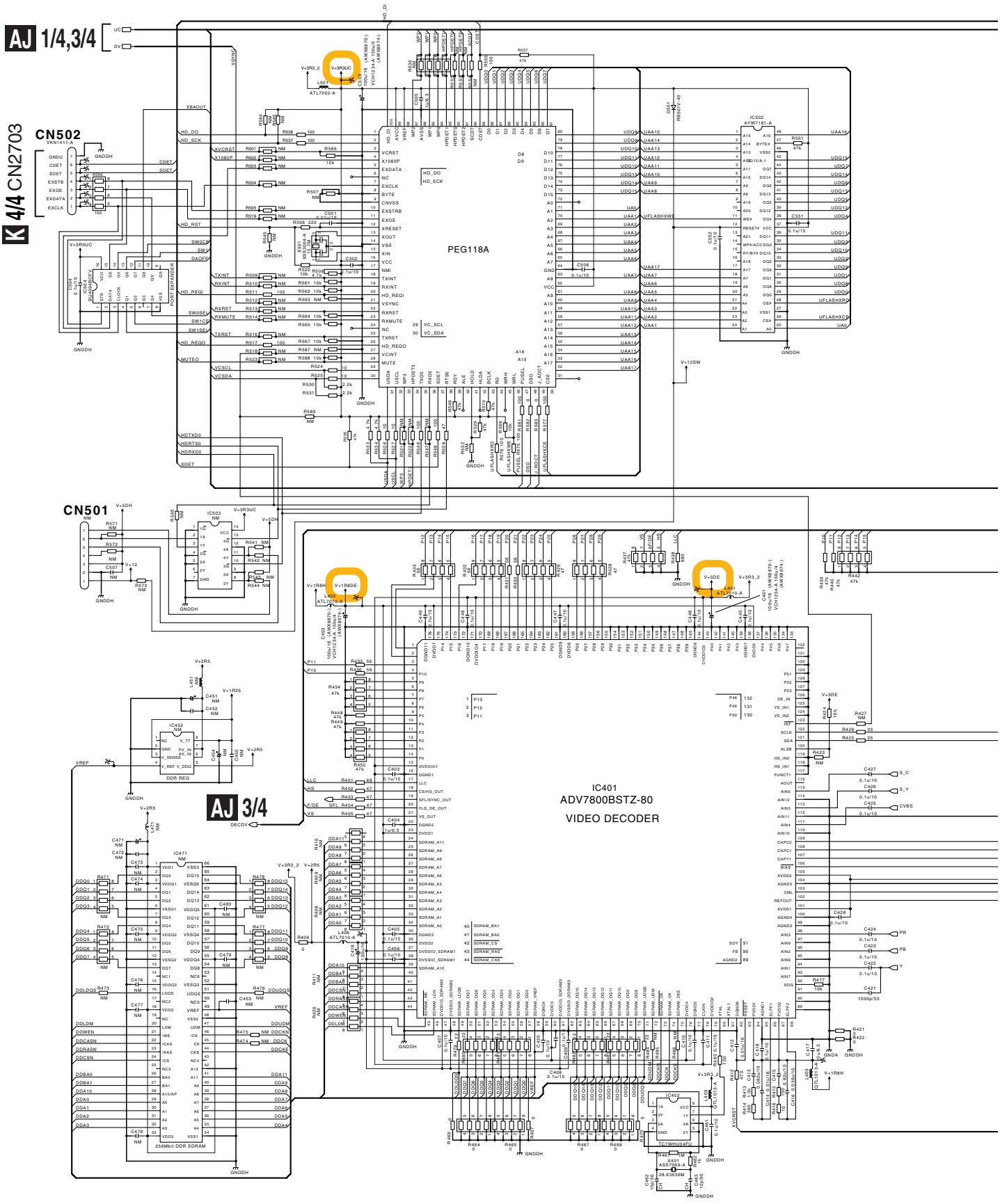


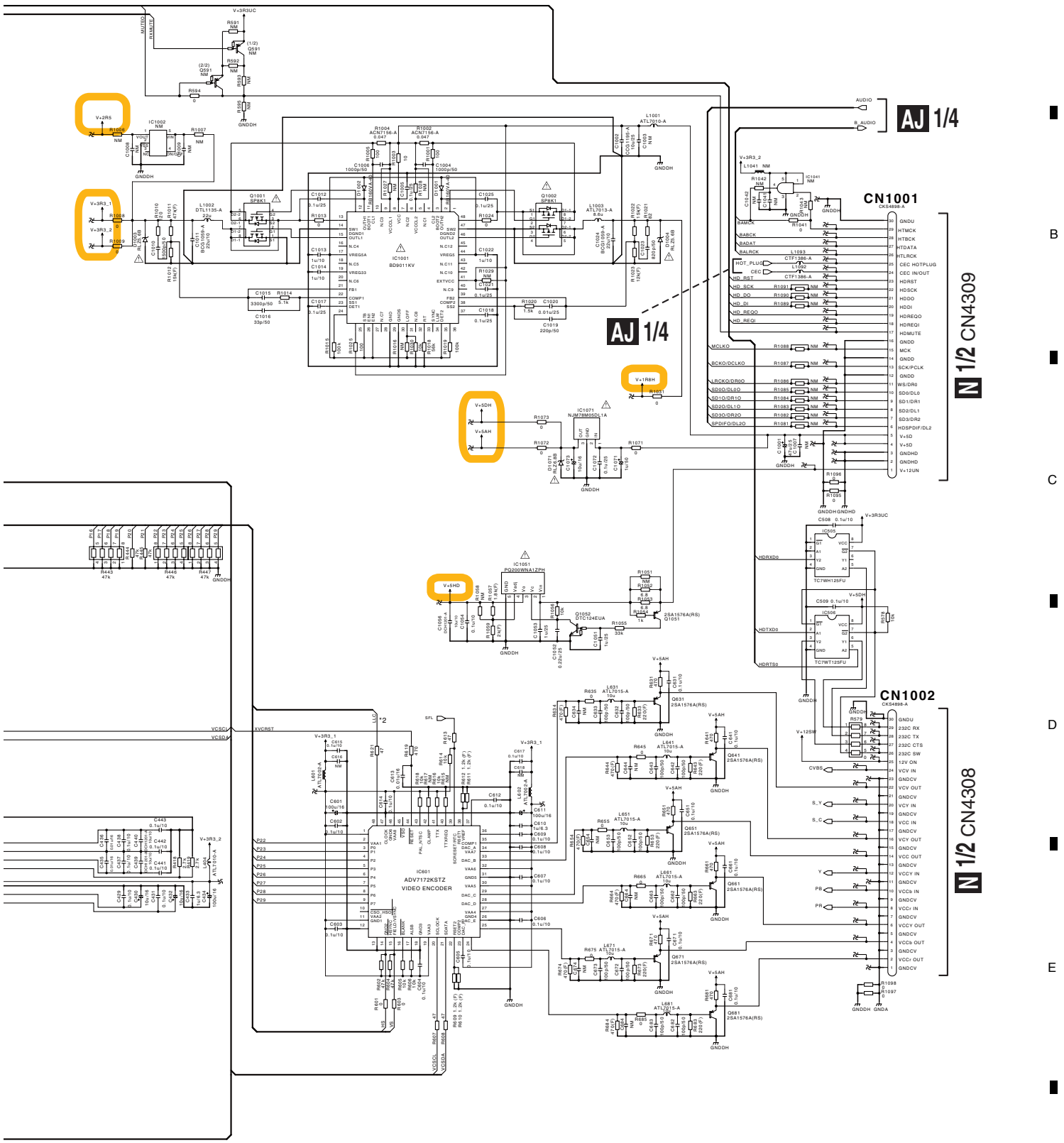
10.31 HDMI & DLNA ASSY (1/4) (VSX-LX70)



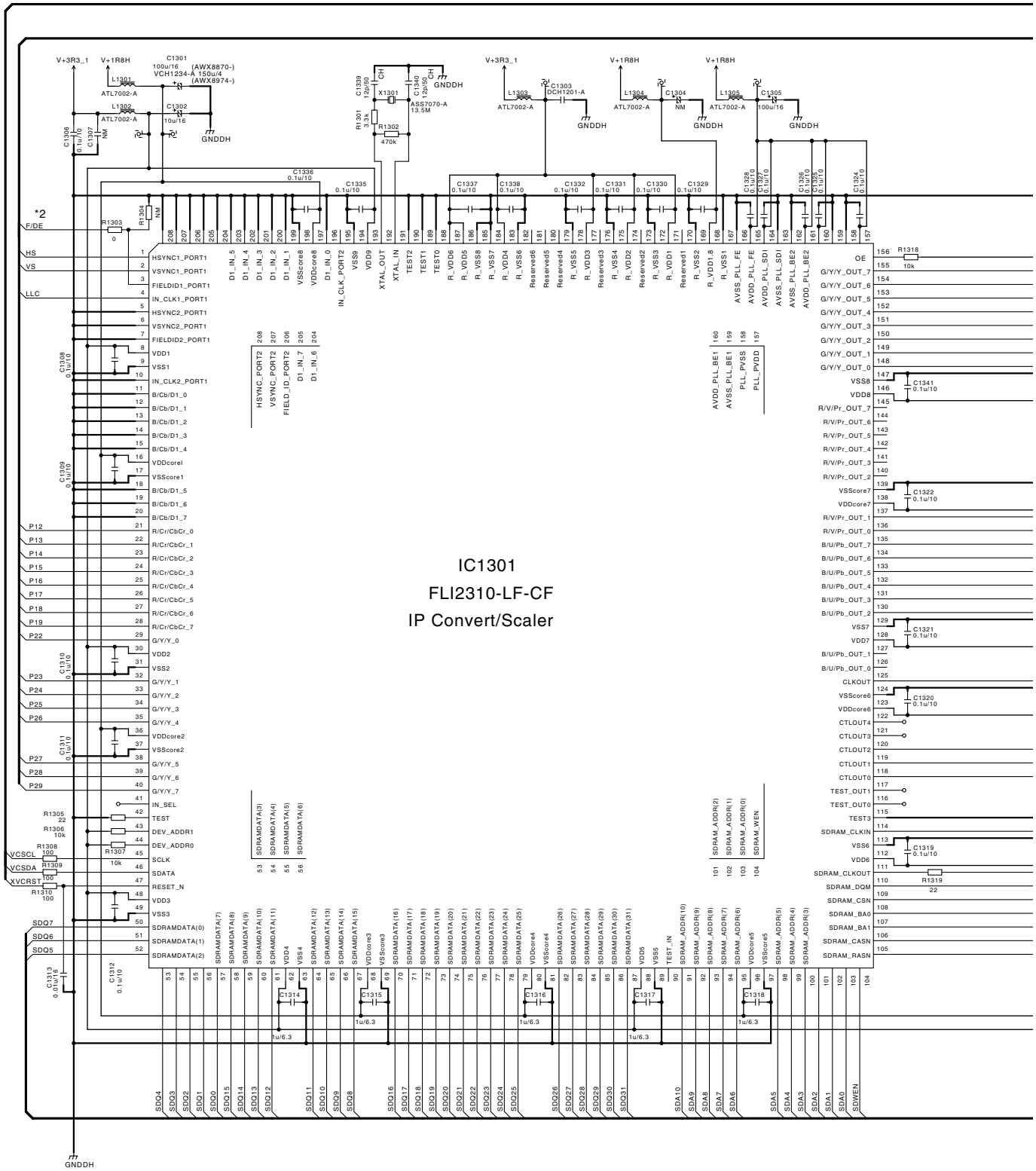

IC101
SII9135CTU
HDMI Receiver
IC301
SII9134CTU
HDMI Transmitter
AJ 2/4,3/4
AJ 2/4
AJ 2/4,3/4
AJ 2/4
AJ 2/4
JA301
HDMI OUT
SW1SEL
SW0SEL
HDMCLK
HDSPDIF
SCK
WS
DSD
J_RDCT
MCLKO
SDO/DL0O
SDO1/DR1O
SDO2/DL1O
SDO3/DR2O
LRCKO/DR0O
BCKO/DCLKO
SPDIFO/DL2O
AUDIO
UC
TXRST
PUSEL
DSCL
DSDA
HOT_PLUG
CEC
BAMCK
BADAT
BALRCK
BABCK
XBAOUT
B_AUDIO
V+3R3_2
V+5HD
V+3TX
GNDDH

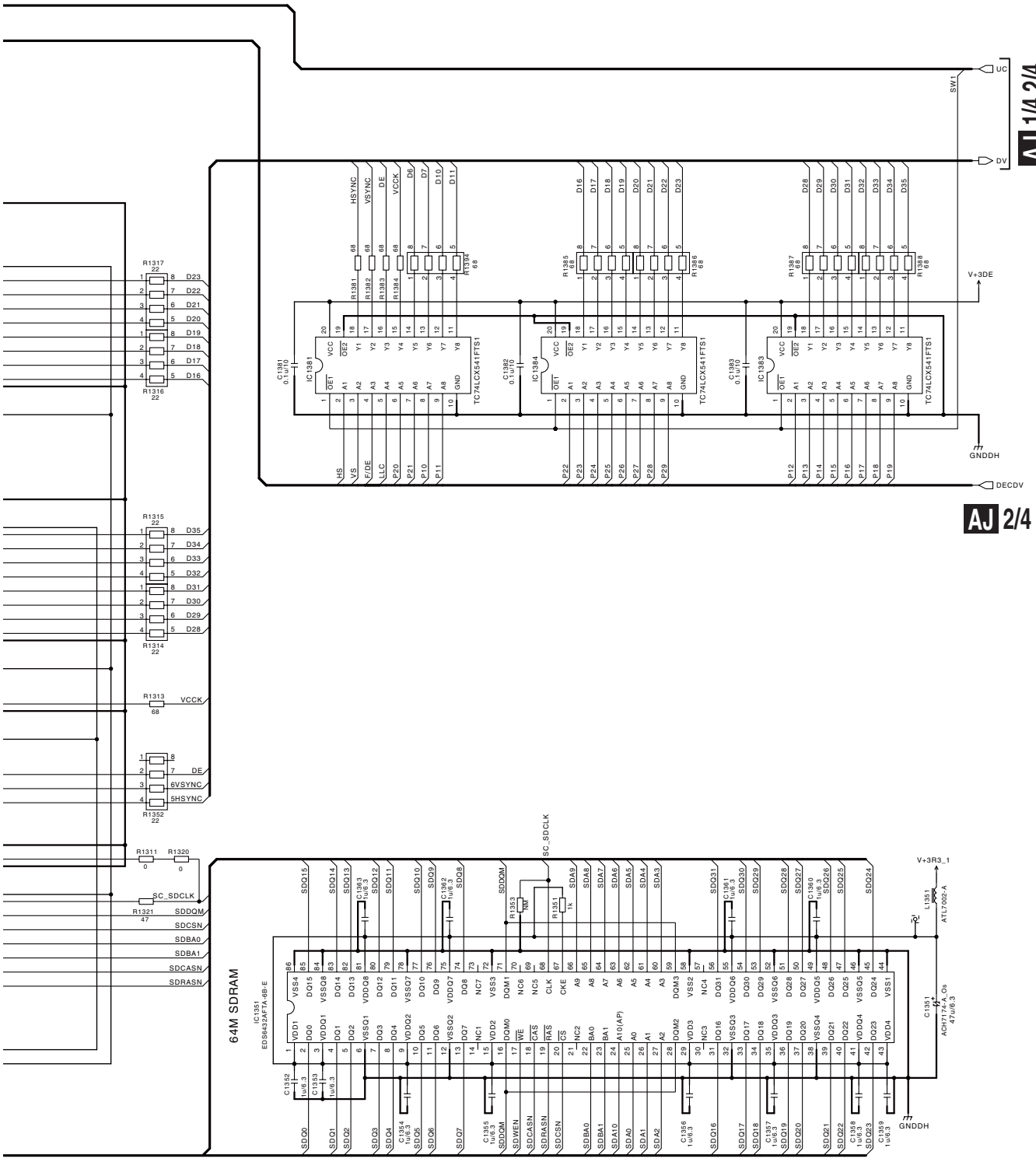
10.32 HDMI & DLNA ASSY (2/4) (VSX-LX70)



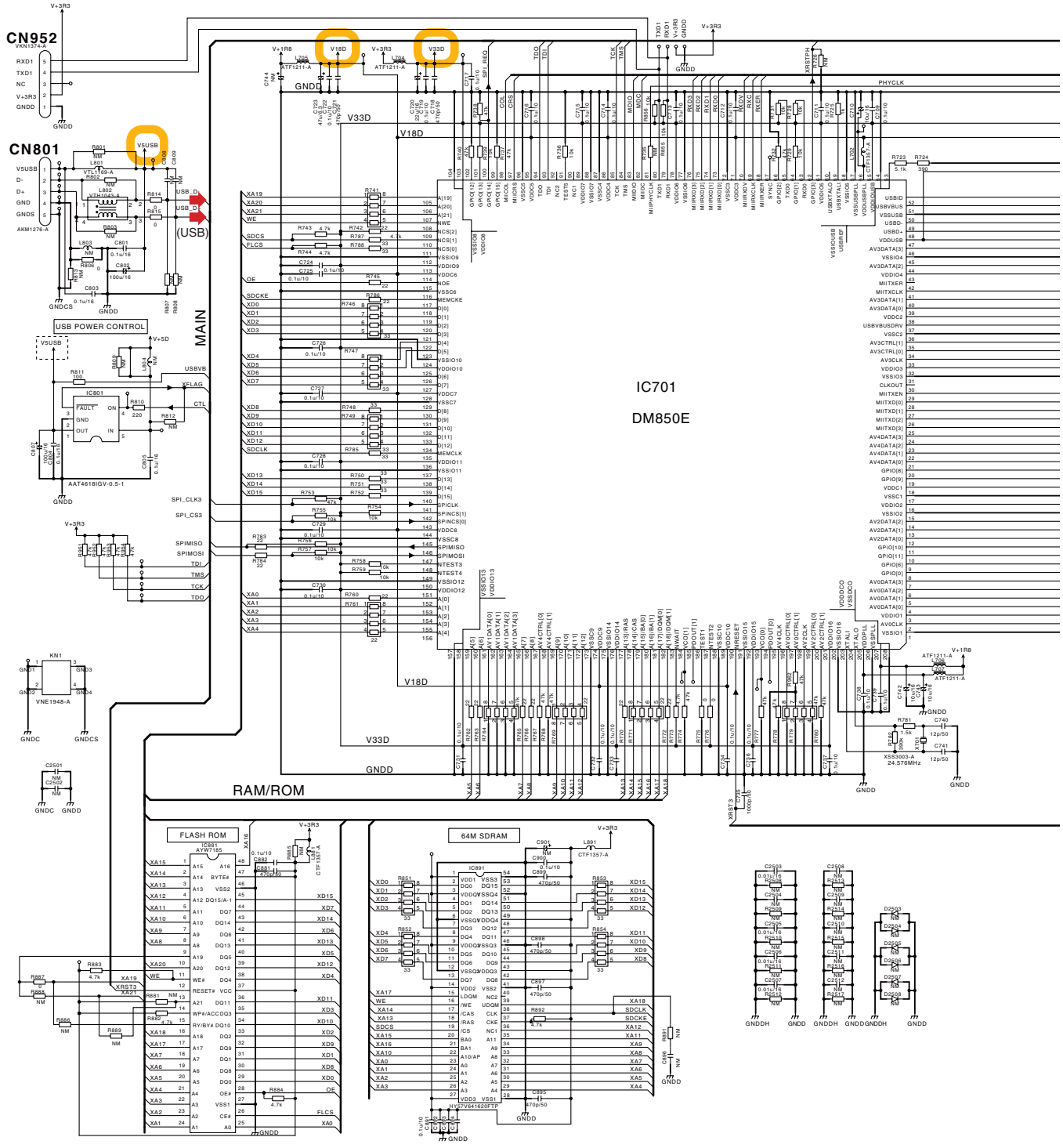

AJ 1/4
AJ 1/4
CN1001
CKS4898-A
N 1/2 CN4309
CN1002
CKS4898-A
N 1/2 CN4308
IC1001
BD9011KV
IC601
ADV7172KSTZ
VIDEO ENCODER
IC1051
PQ209WNA1ZPH
IC1071
NJM78M05DL1A
IC505
TC7WH125FU
IC506
TC7WT125FU
Q1001
SPAK1
Q1002
SPAK1
Q1051
DTC124EUA
Q831
2SA1576A(RS)
Q641
2SA1576A(RS)
Q651
2SA1576A(RS)
Q661
2SA1576A(RS)
Q671
2SA1576A(RS)
Q681
2SA1576A(RS)
AUDIO
B_AUDIO
HDRXD0
HDTXD0
HDRTS0
CVBS
S_Y
S_C
Y
PB
PR
GNDDH
GNDA
V+3R3UC
V+3R3_1
V+3R3_2
V+2R5
V+1R8H
V+5DH
V+5AH
V+5D
V+12SW
V+12UN

10.33 HDMI & DLNA ASSY (3/4) (VSX-LX70)

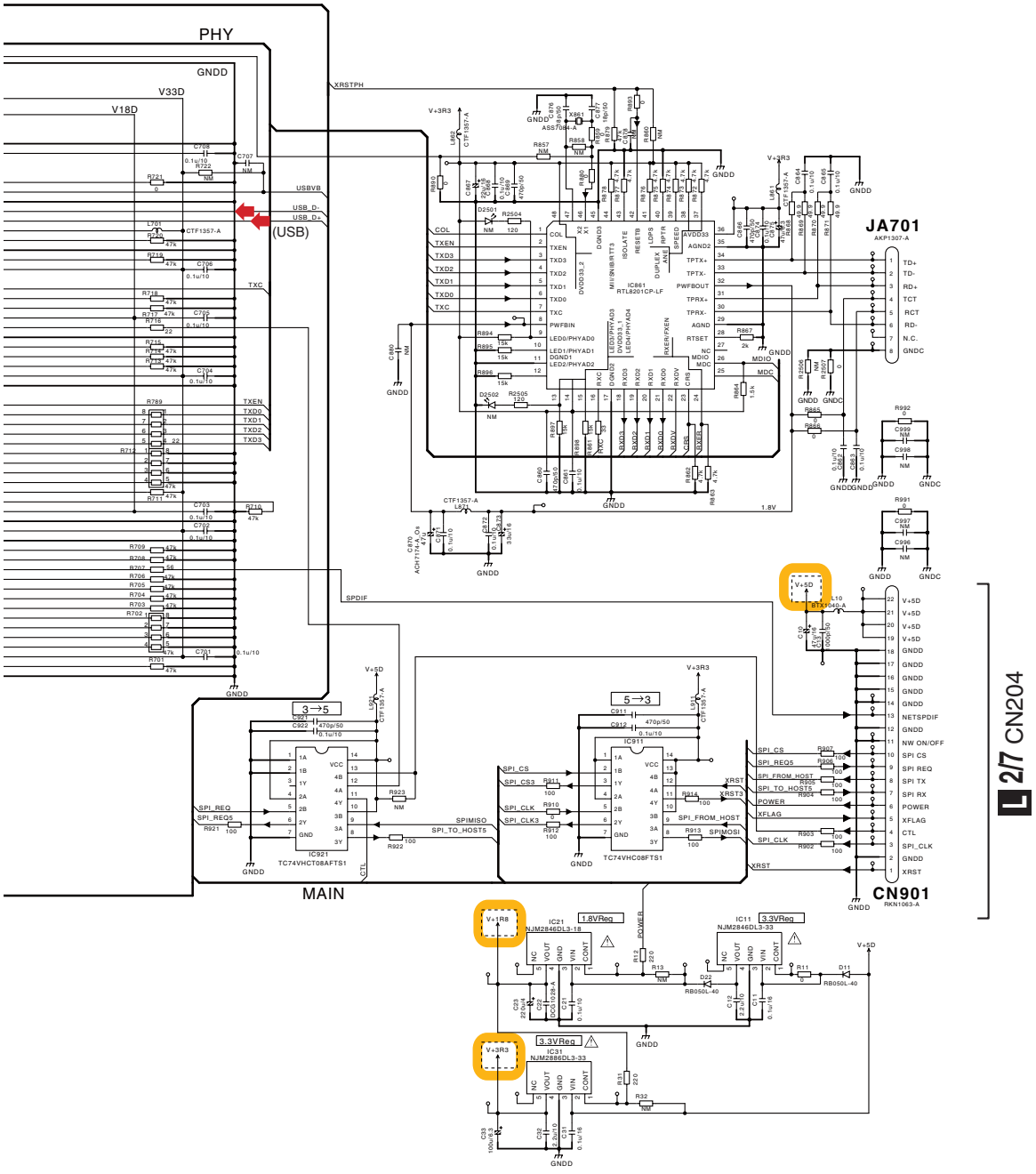



AJ 1/4,2/4
AJ 2/4
64M SDRAM
IC1351
EDS6432AFTA-6B-E
TC74LCX541FTS1
SW1
V+3DE
V+3R3_1
GNDDH
SC_SDCLK
SDDQM
SDCSN
SDBA0
SDBA1
SDCASN
SDRASN
VCCK
DE
6VSYNC
5HSYNC
HSYNC
VSYNC
DE
VCCK
D6
D7
D10
D11
D16
D17
D18
D19
D20
D21
D22
D23
D28
D29
D30
D31
D32
D33
D34
D35
D23
D22
D21
D20
D19
D18
D17
D16
D35
D34
D33
D32
D31
D30
D29
D28
HS
VS
F/DE
LLC
P20
P21
P10
P11
P22
P23
P24
P25
P26
P27
P28
P29
P12
P13
P14
P15
P16
P17
P18
P19
UC
DV
DECDV

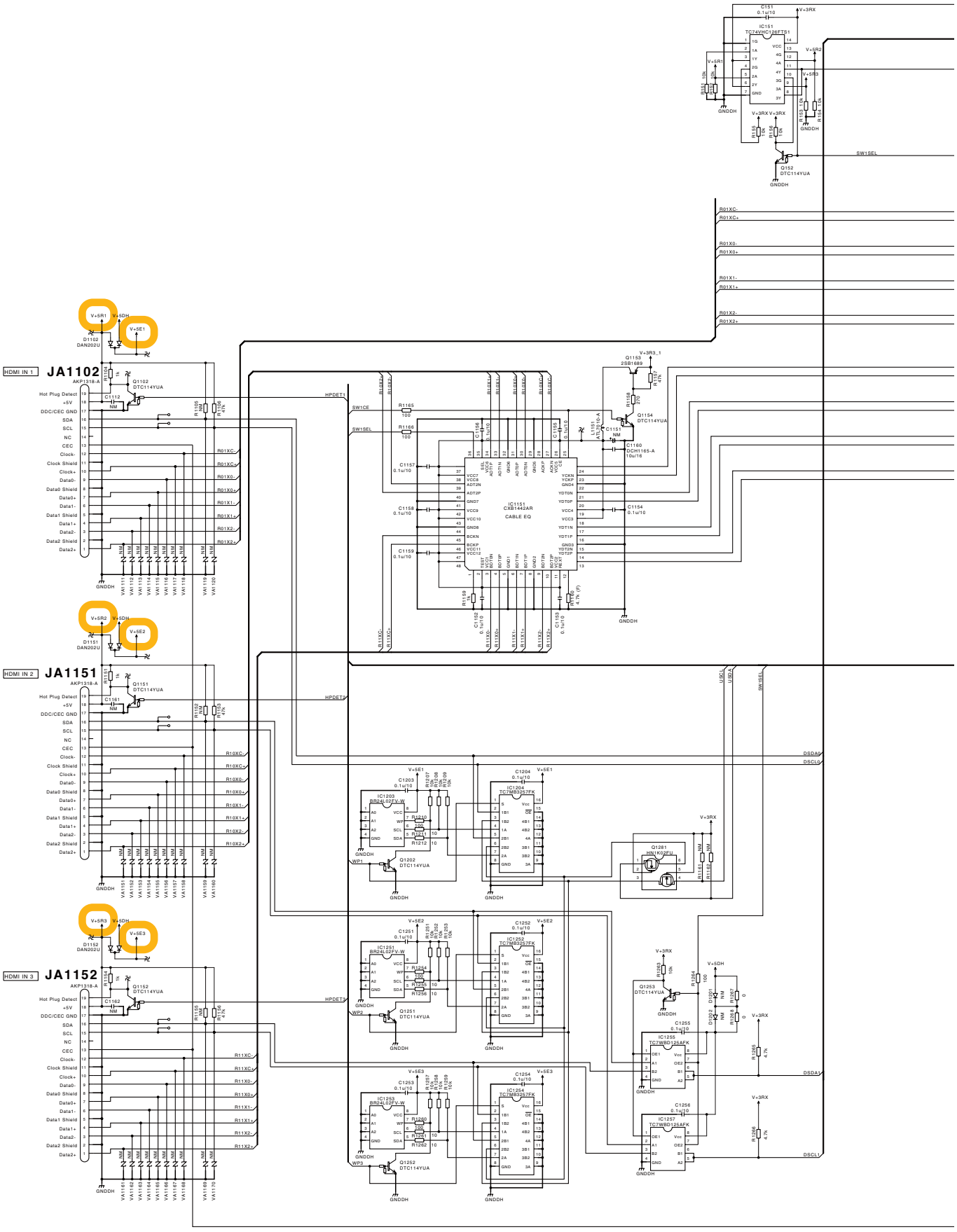
10.34 HDMI & DLNA ASSY (4/4) (VSX-LX70)



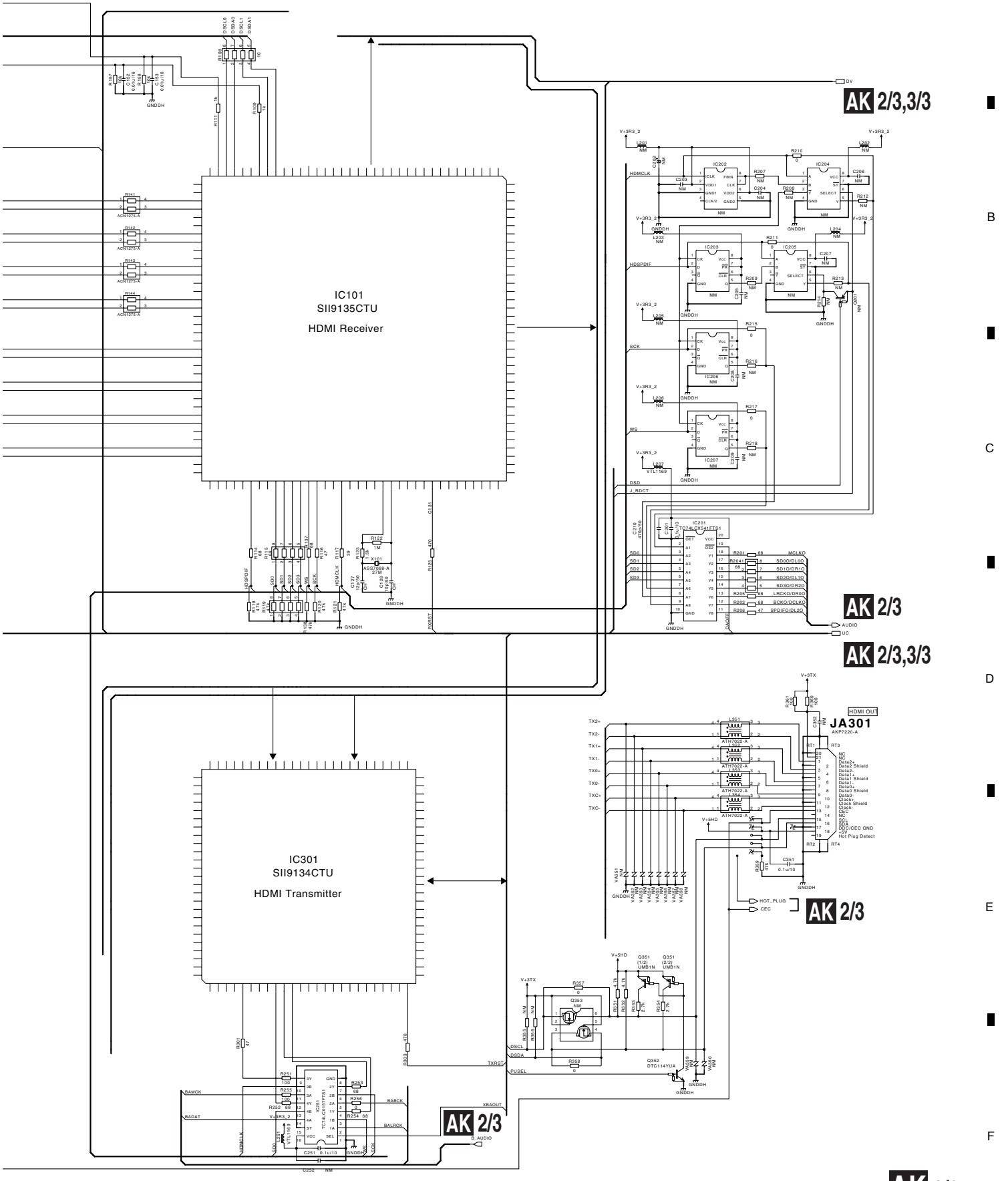
(USB) : AUDIO SIGNAL ROUTE (USB)



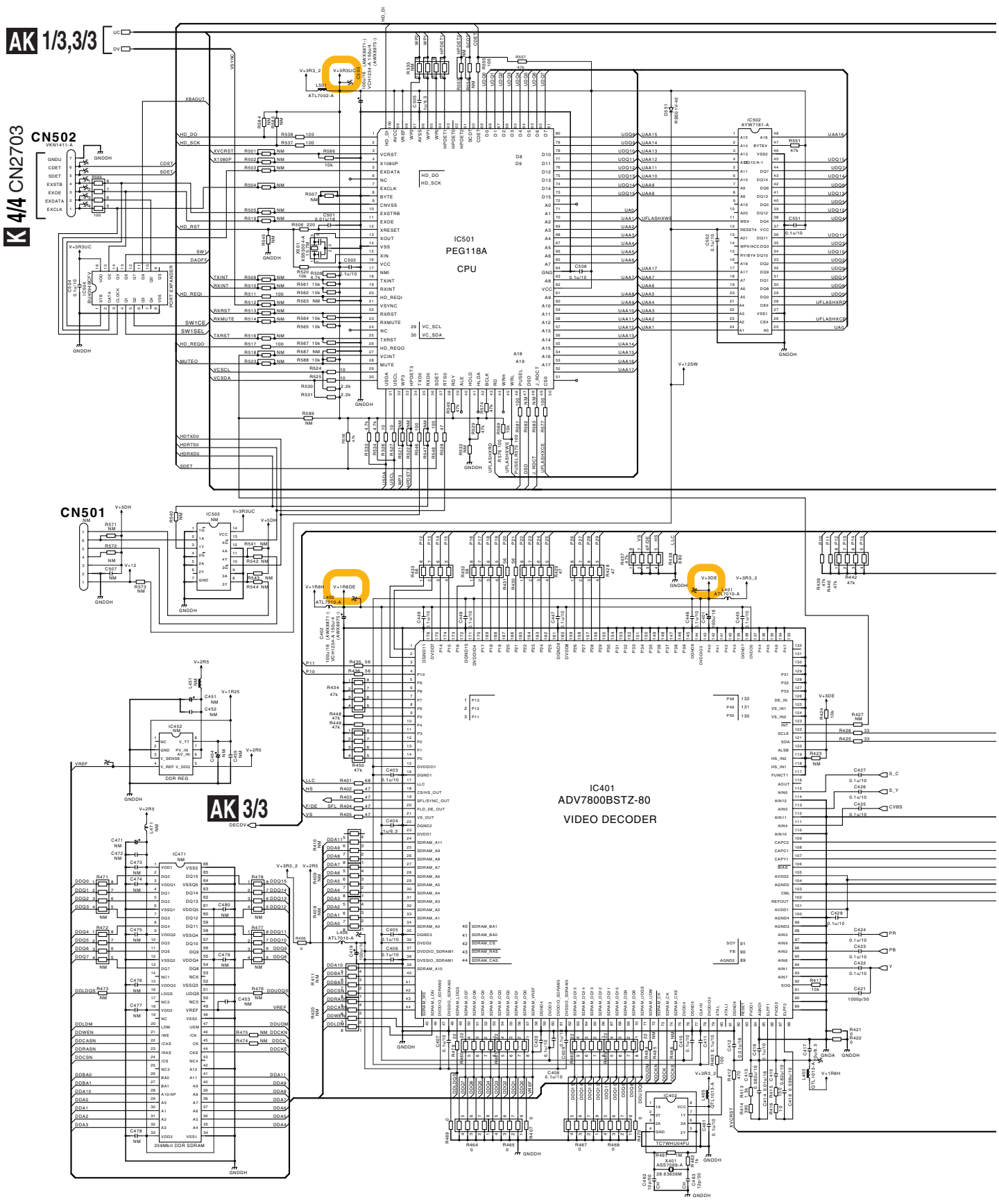
10.35 HDMI & DVC ASSY (1/3) (VSX-LX60)

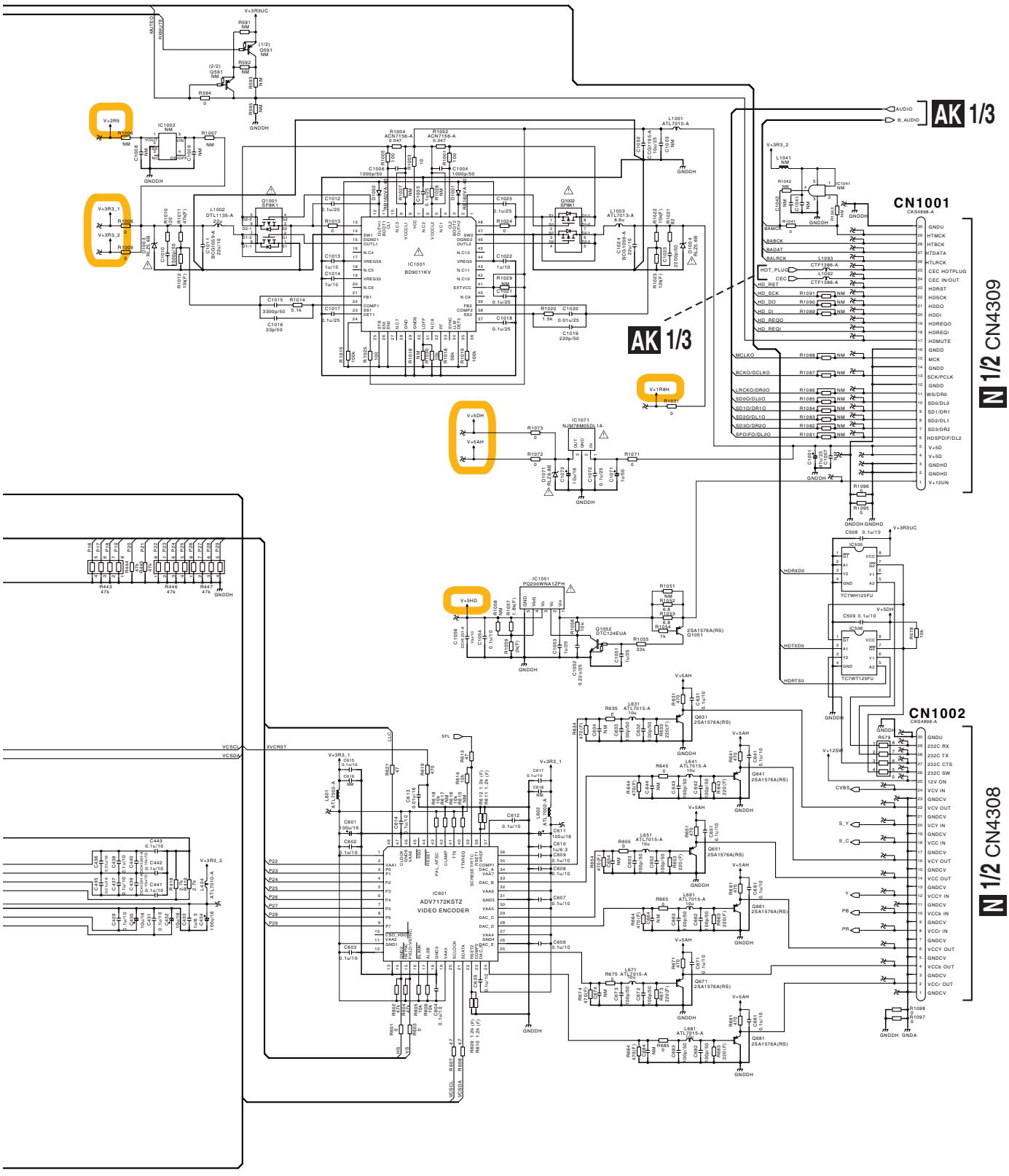


AK 1/3 HDMI & DVC ASSY (AWX8975)

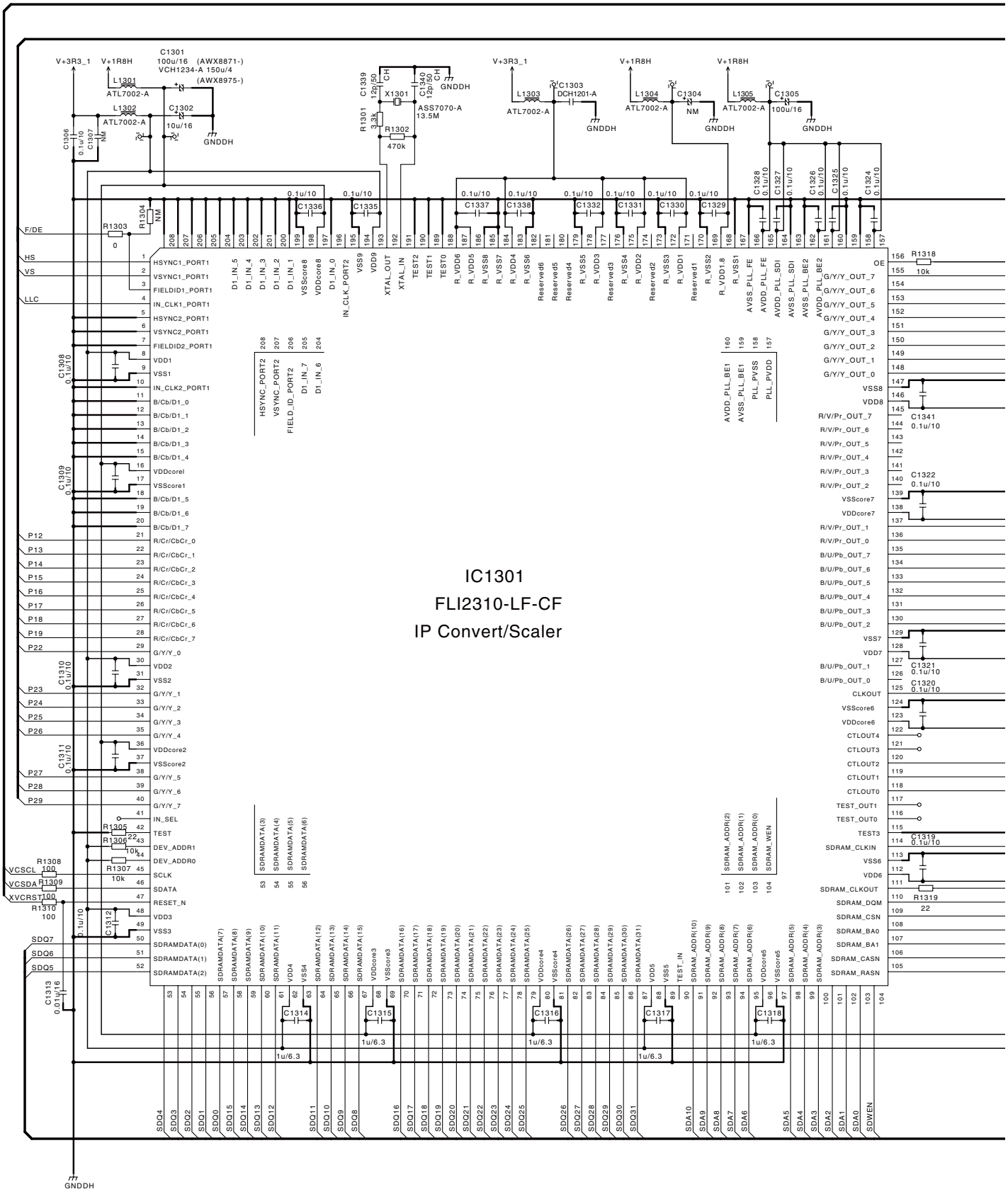


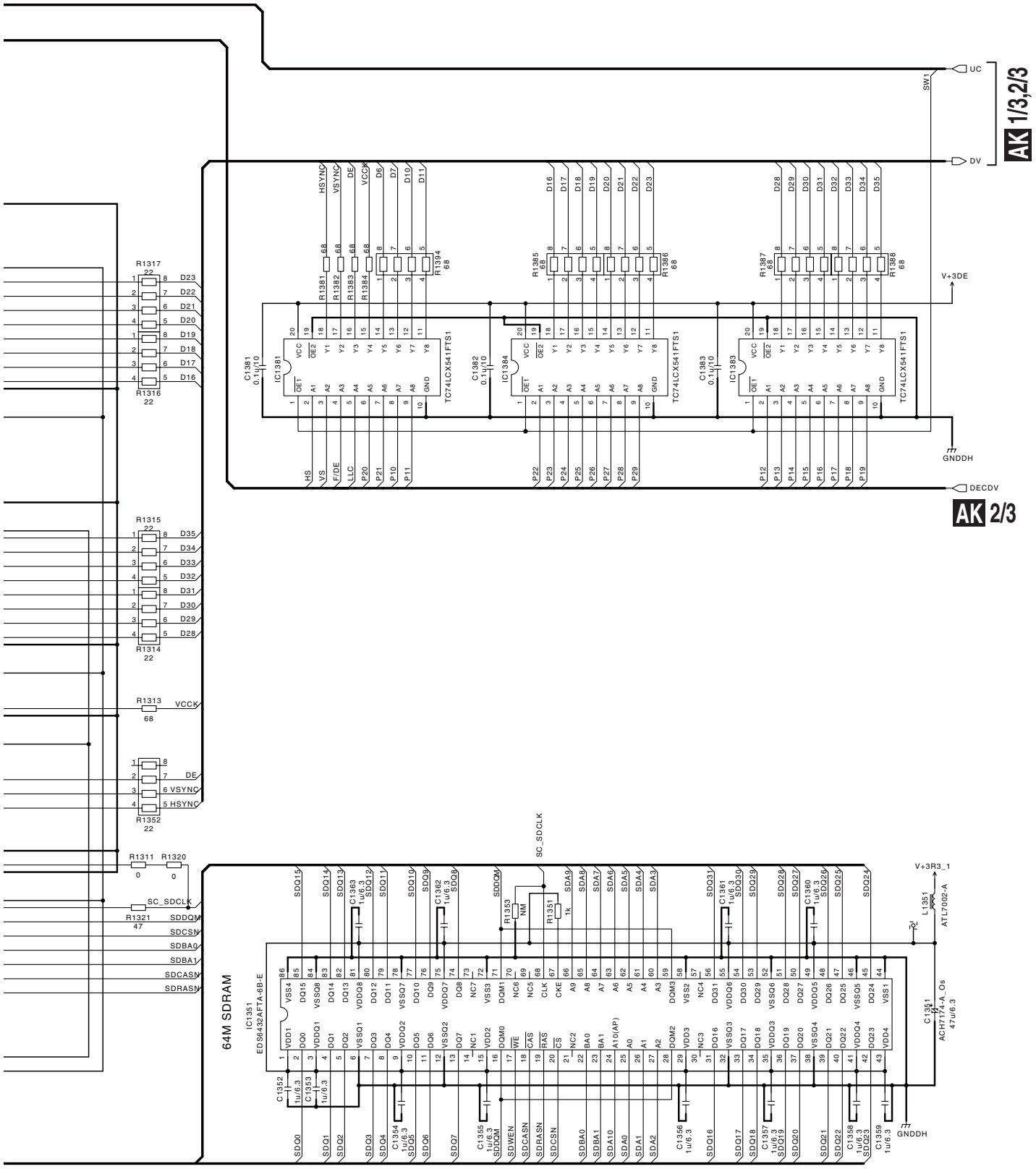
10.36 HDMI & DVC ASSY (2/3) (VSX-LX60)




AK 1/3
AK 1/3
CN1001
CKS4898-A
N 1/2 CN4309
CN1002
CKS4898-A
N 1/2 CN4308
IC1001
BD9011KV
IC601
ADV7172KSTZ
VIDEO ENCODER
IC1071
NJM78M05DL-1A
IC1051
PQ200WNA12PH
IC1002
IC1003
IC1004
IC1005
IC1006
TC7WH125FU
TC7WT125FU
Q1001
Q1000
Q1052
D1C124EUA
Q1051
2SA1576A(RS)
AUDIO
B_AUDIO
V+3R3UC
V+3R3_1
V+3R3_2
V+2R5
V+1R8H
V+5DH
V+5AH
V+5HD
V+12SW
GNDDH
GNDA
HDRXD0
HDTXD0
HDRTS0
VCSCL
VCSDA
XVCRST

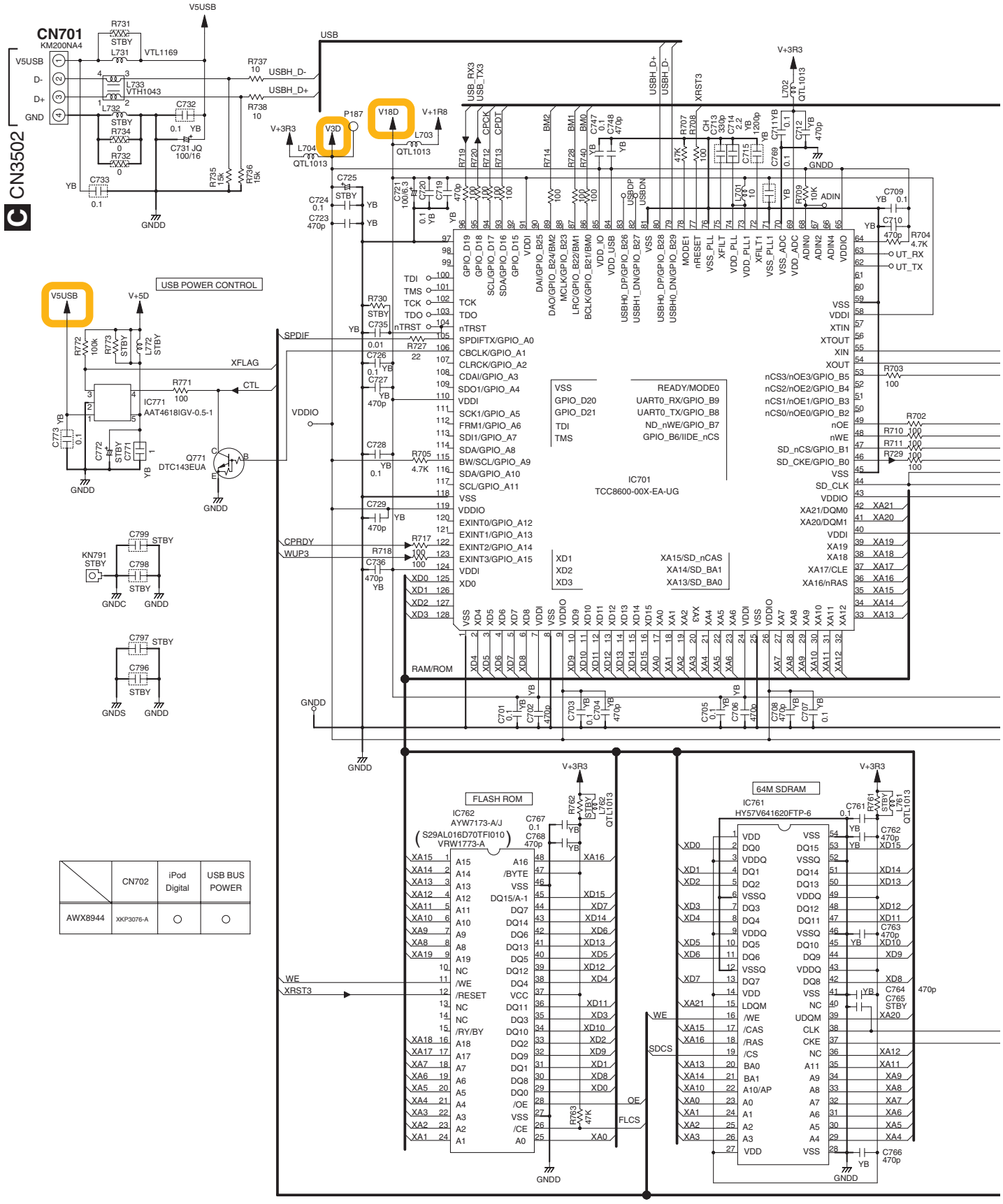
10.37 HDMI & DVC ASSY (3/3) (VSX-LX60)



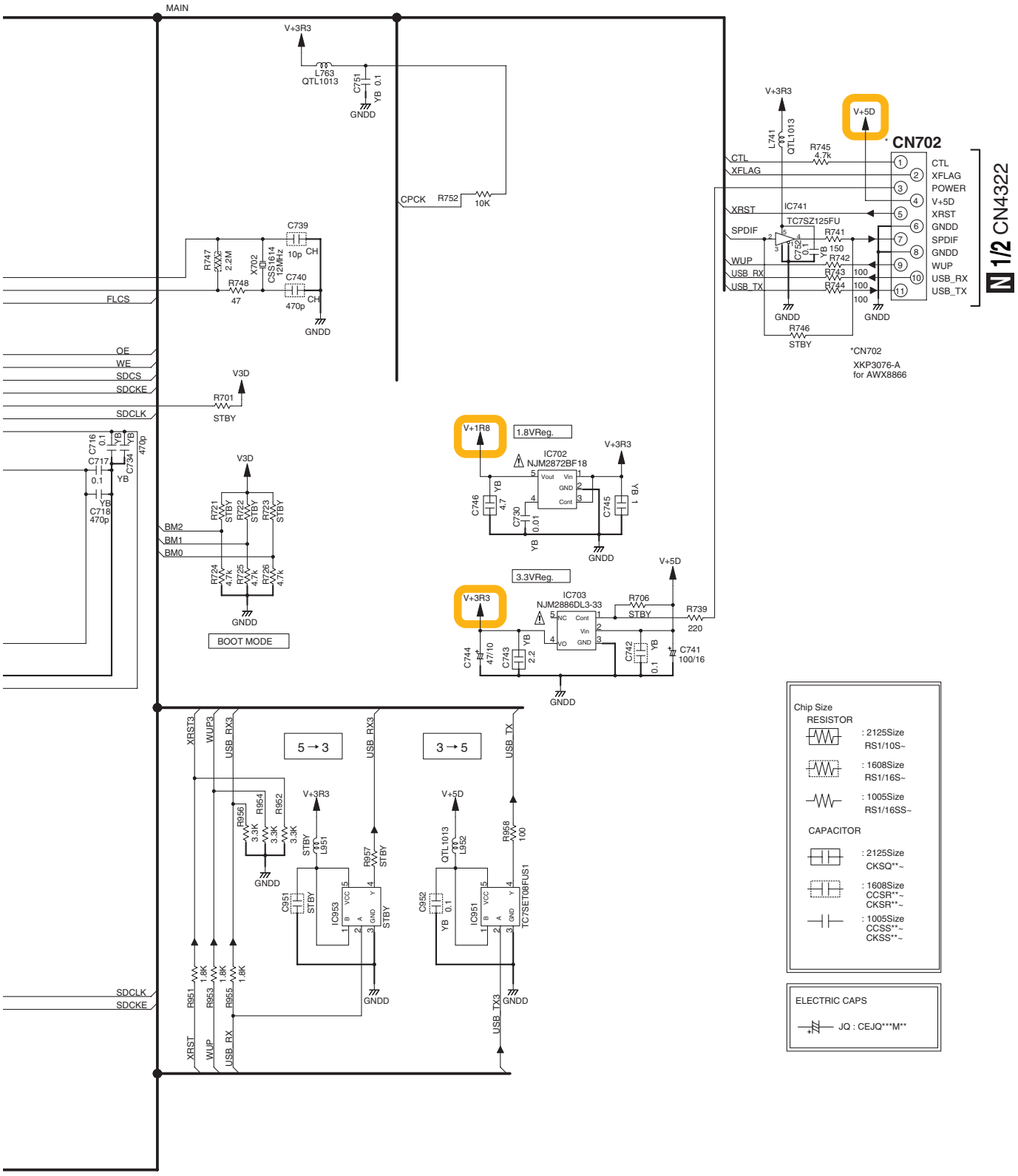

UC
DV
SW1
AK 1/3,2/3
V+3DE
GNDDH
DECDV
AK 2/3
HSYNC
VSYNC
DE
VCCK
D7
D8
D10
D11
D16
D17
D18
D19
D20
D21
D22
D23
D28
D29
D30
D31
D32
D33
D34
D35
R1381 68
R1382 68
R1383 68
R1384 68
R1394 68
R1385 68
R1386 68
R1387 68
R1388 68
IC1381
IC1384
IC1383
TC74LCX541FTS1
C1381 0.1u/10
C1382 0.1u/10
C1383 0.1u/10
HS
VS
FDE
LLC
P20
P21
P10
P11
P22
P23
P24
P25
P26
P27
P28
P29
P12
P13
P14
P15
P16
P17
P18
P19
R1317 22
R1316 22
R1315 22
R1314 22
R1313 68
R1352 22
R1311 0
R1320 0
R1321 47
SC_SDCLK
SDDQM
SDCSN
SDBA0
SDBA1
SDCASN
SDRASN
64M SDRAM
IC1351
EDS6432AFTA-6B-E
R1353 NM
R1351 1k
C1361 1u/6.3
C1360 1u/6.3
C1362 1u/6.3
C1363 1u/6.3
C1352 1u/6.3
C1353 1u/6.3
C1354 1u/6.3
C1355 1u/6.3
C1356 1u/6.3
C1357 1u/6.3
C1358 1u/6.3
C1359 1u/6.3
V+3R3_1
L1351
ATL7002-A
C1350
ACH7174-A Os
47u/6.3
GNDDH

10.38 USB ASSY (VSX-LX60)

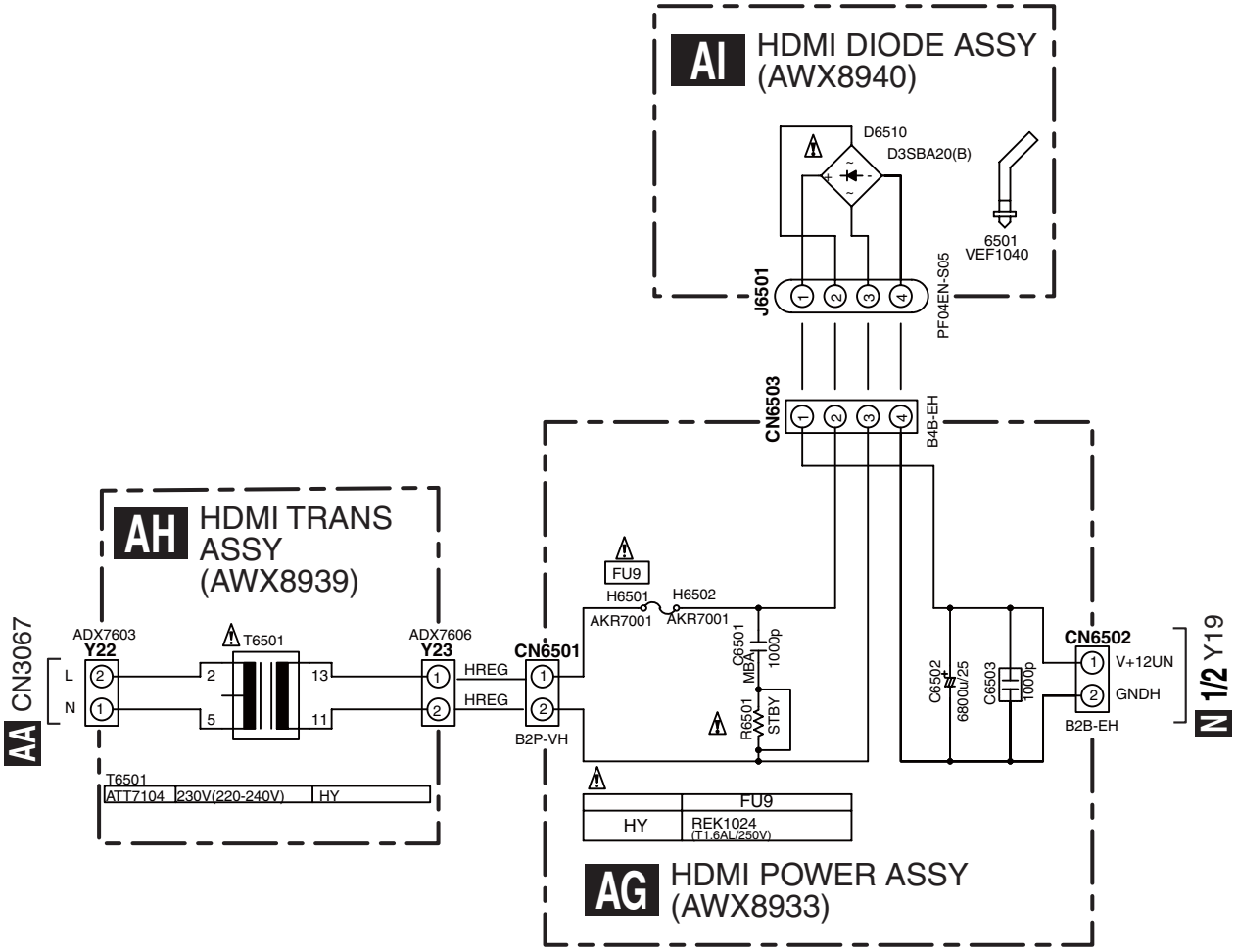
AM USB ASSY (AWX8944)



	CN702	iPod Digital	USB BUS POWER
AWX8944	XKP3076-A	○	○


MAIN
V+3R3
L763
QTL1013
C751
YB 0.1
GNDD
CPCK
R752
10K
C739
10p CH
R747
2.2M
X702
CSS1414
12MHz
C740
470p CH
R748
47
FLCS
OE
WE
SDCS
SDCKE
SDCLK
V3D
R701
STBY
C716
C717
C718
C734
470p
R721
R722
R723
BM2
BM1
BM0
R724
R725
R726
4.7k
BOOT MODE
V+1R8
1.8VReg.
IC702
NJM2872BF18
C746
4.7
C730
0.01
C745
1
3.3VReg.
IC703
NJM2886DL3-33
R706
R739
220
C744
47/10
C743
2.2
C742
C741
100/16
V+5D
CN702
CTL
XFLAG
POWER
V+5D
XRST
GNDD
SPDIF
WUP
USB_RX
USB_TX
L741
R745
4.7k
IC741
TC7SZ125FU
C738
R741
150
R742
R743
R744
100
R746
*CN702
XKP3076-A
for AWX8866
1/2 CN4322
XRST3
WUP3
USB_RX3
5→3
3→5
USB_TX
R956
R954
R952
3.3K
STBY
L951
R957
C951
IC953
C952
QTL1013
L952
R958
100
IC951
TC7SET08FUS1
USB_TX3
R951
R953
R955
1.8K
Chip Size
RESISTOR
: 2125Size
RS1/10S~
: 1608Size
RS1/16S~
: 1005Size
RS1/16SS~
CAPACITOR
: 2125Size
CKSQ**~
: 1608Size
CCSR**~
CKSR**~
: 1005Size
CCSS**~
CKSS**~
ELECTRIC CAPS
JQ : CEJQ***M**

10.39 HDMI POWER, HDMI TRANS and HDMI DIODE ASSYS



AG AH AI

AG AH AI

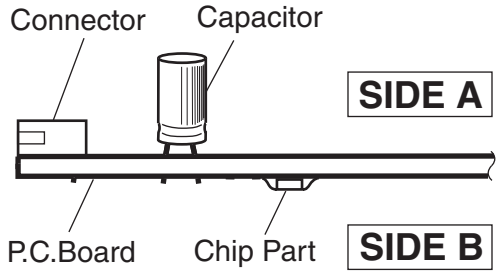
11. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3-terminal regulator

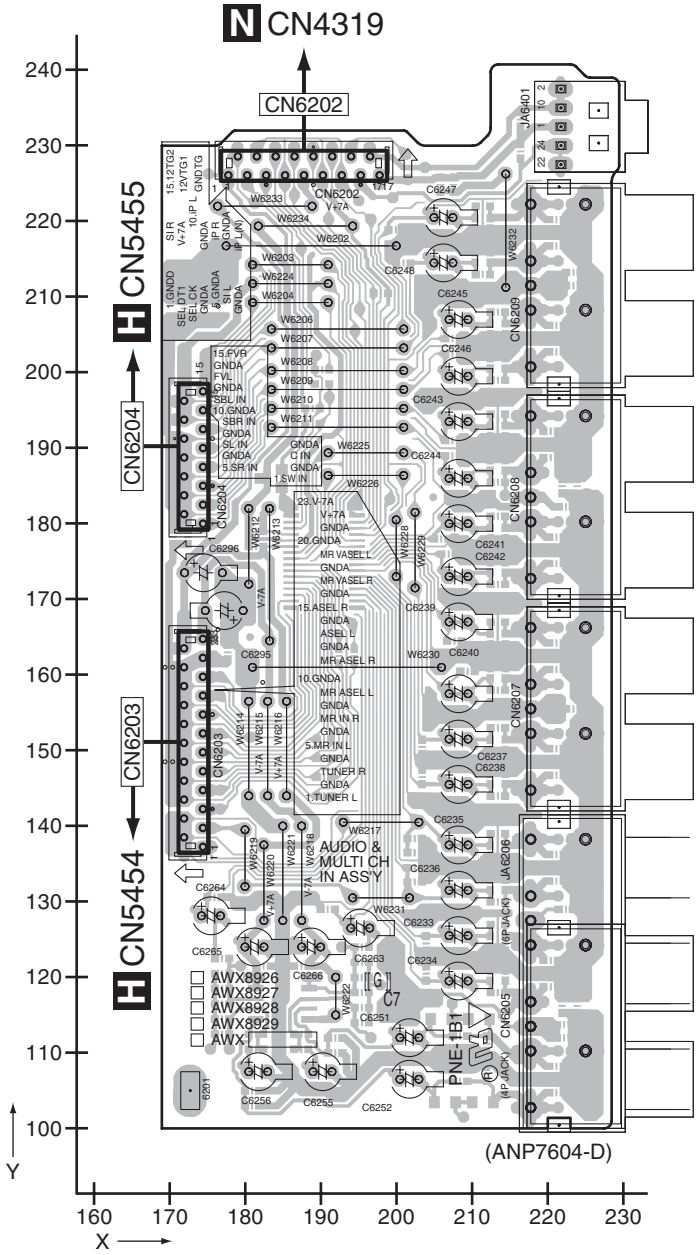
3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



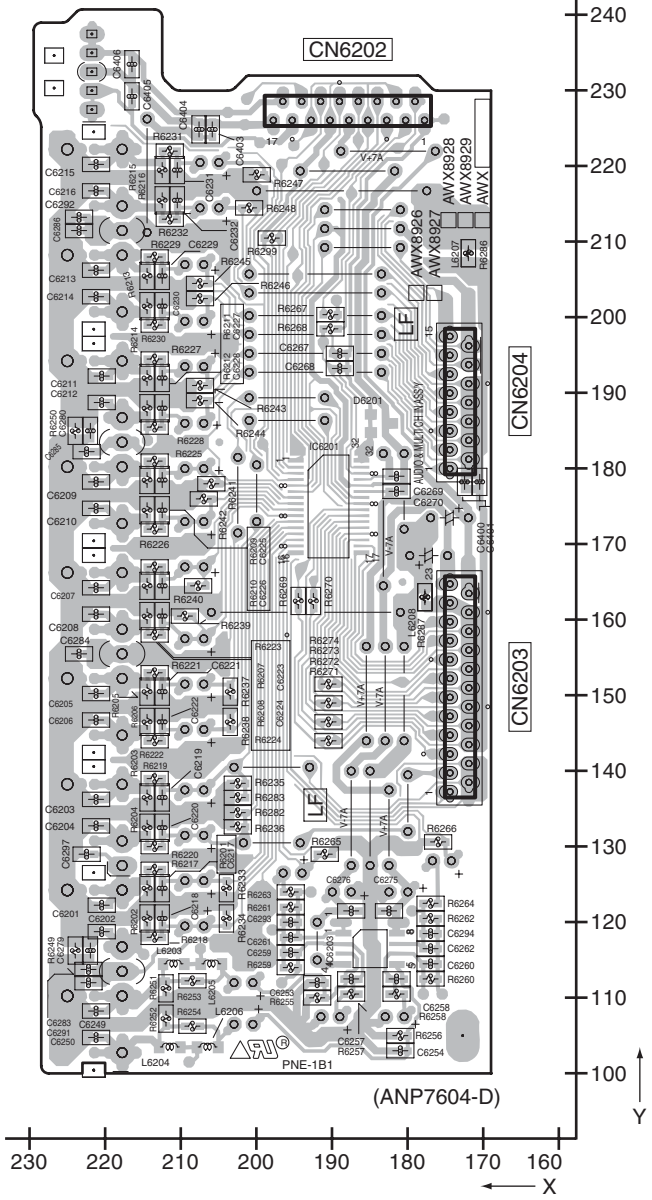
11.1 AUDIO & MULTI CH IN ASSY

SIDE A **SIDE B**

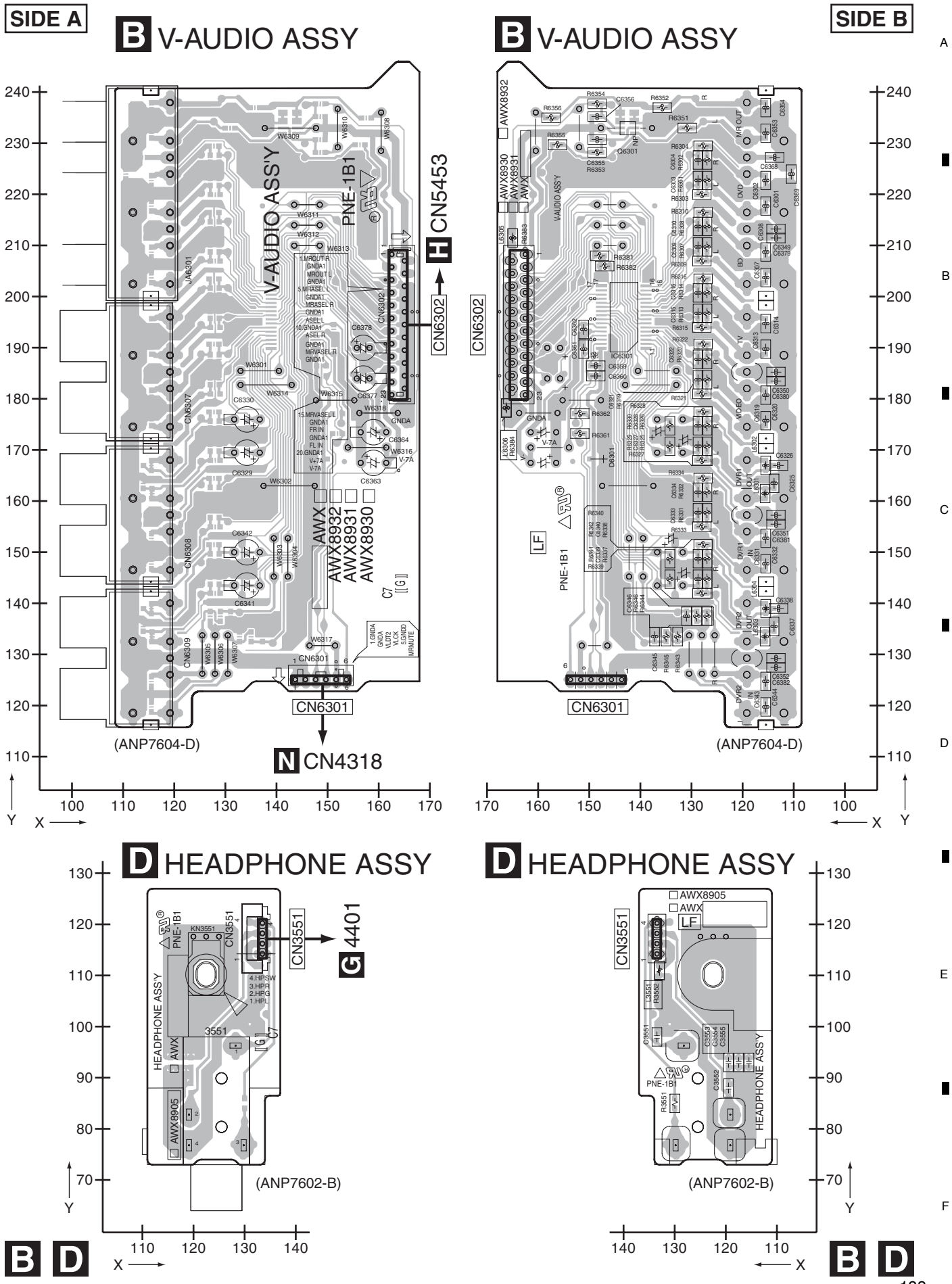
A AUDIO & MULTI CH IN ASSY



A AUDIO & MULTI CH IN ASSY

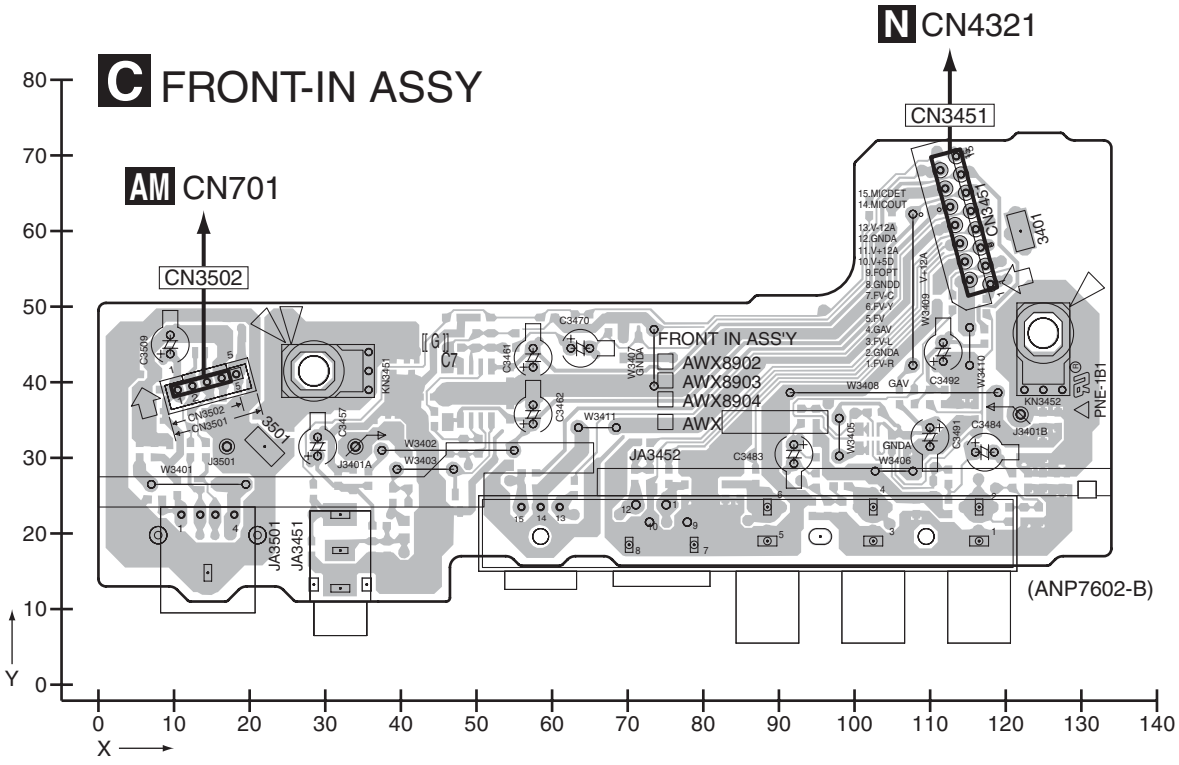


11.2 V-AUDIO and HEADPHONE ASSYS

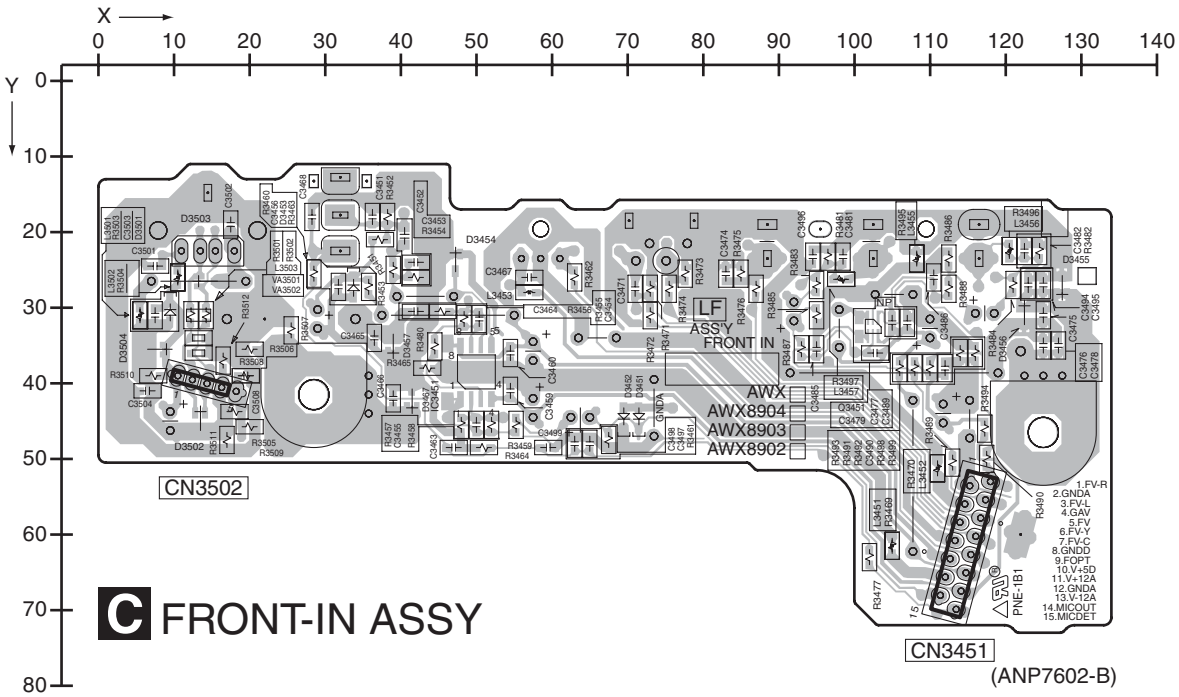


11.3 FRONT-IN ASSY

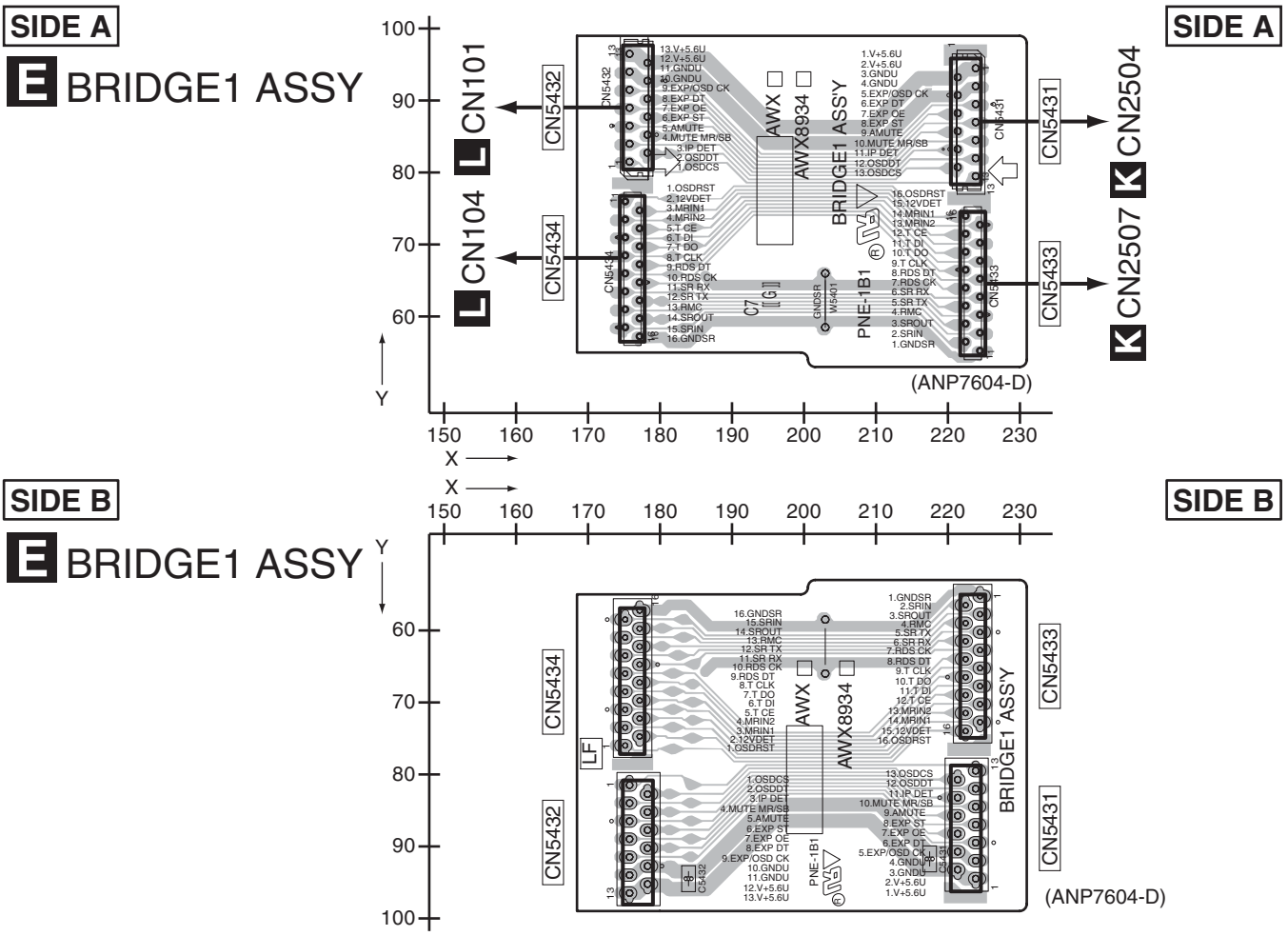
SIDE A

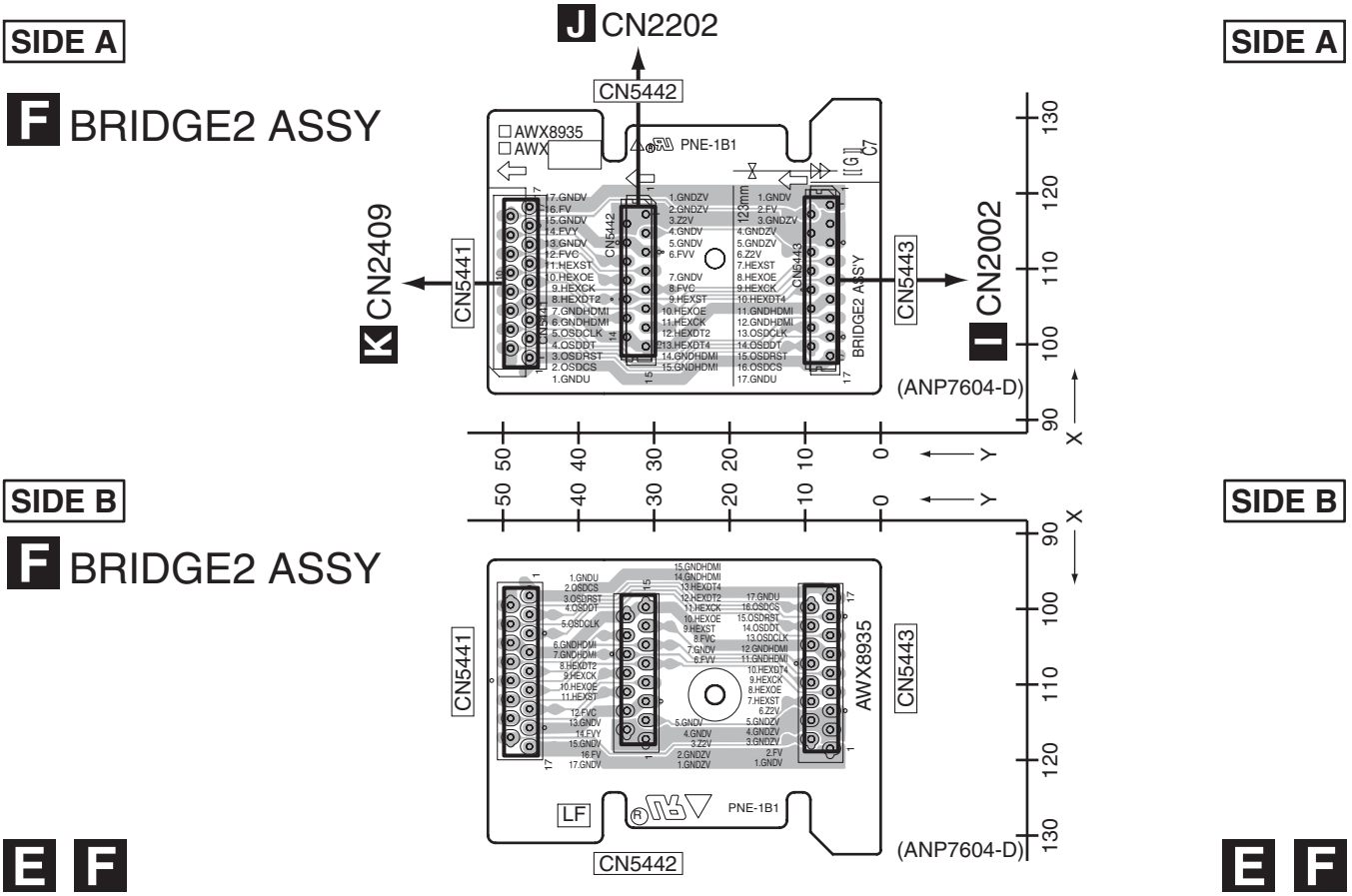


SIDE B



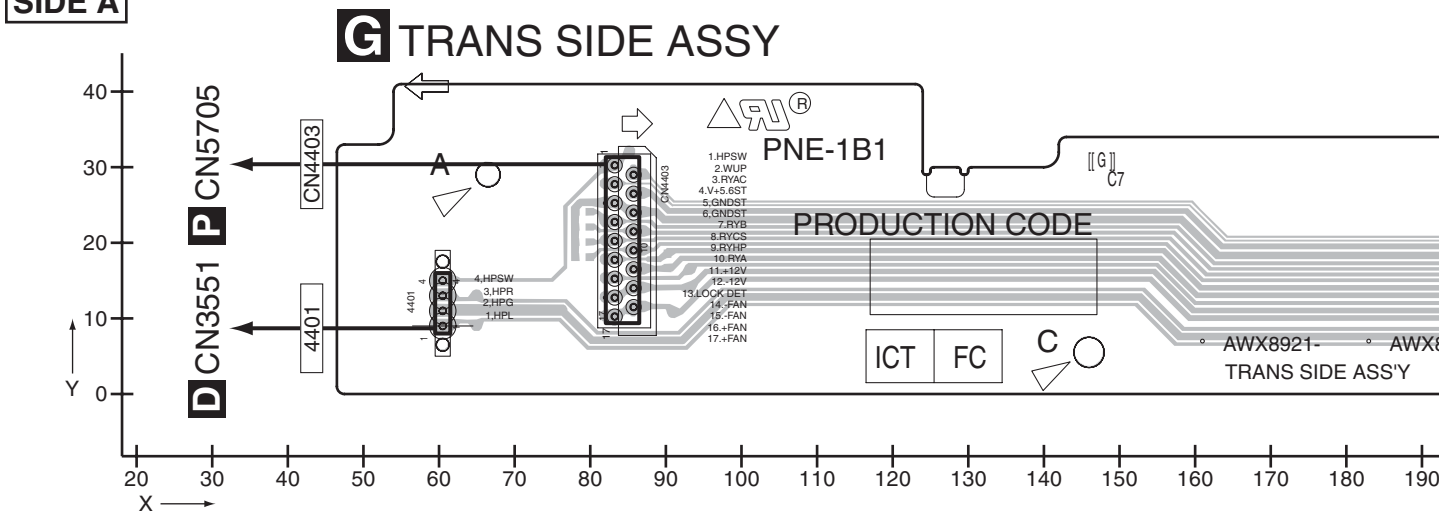
11.4 BRIDGE1 and BRIDGE2 ASSYS



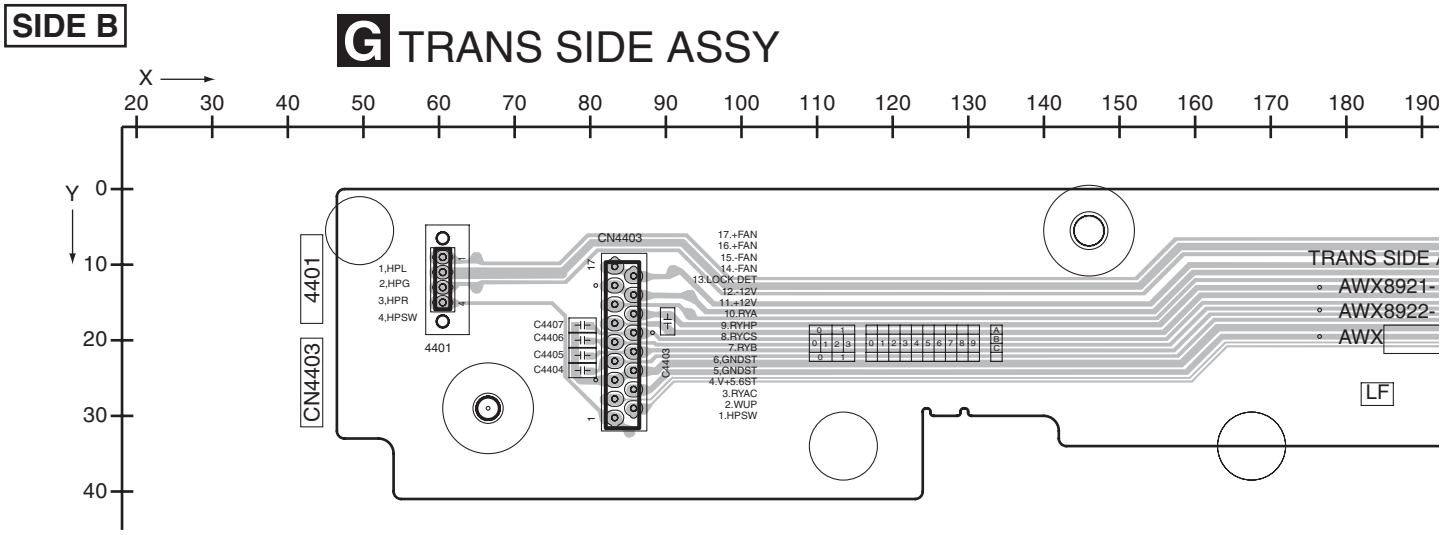


11.5 TRANS SIDE and BRIDGE3 ASSYS

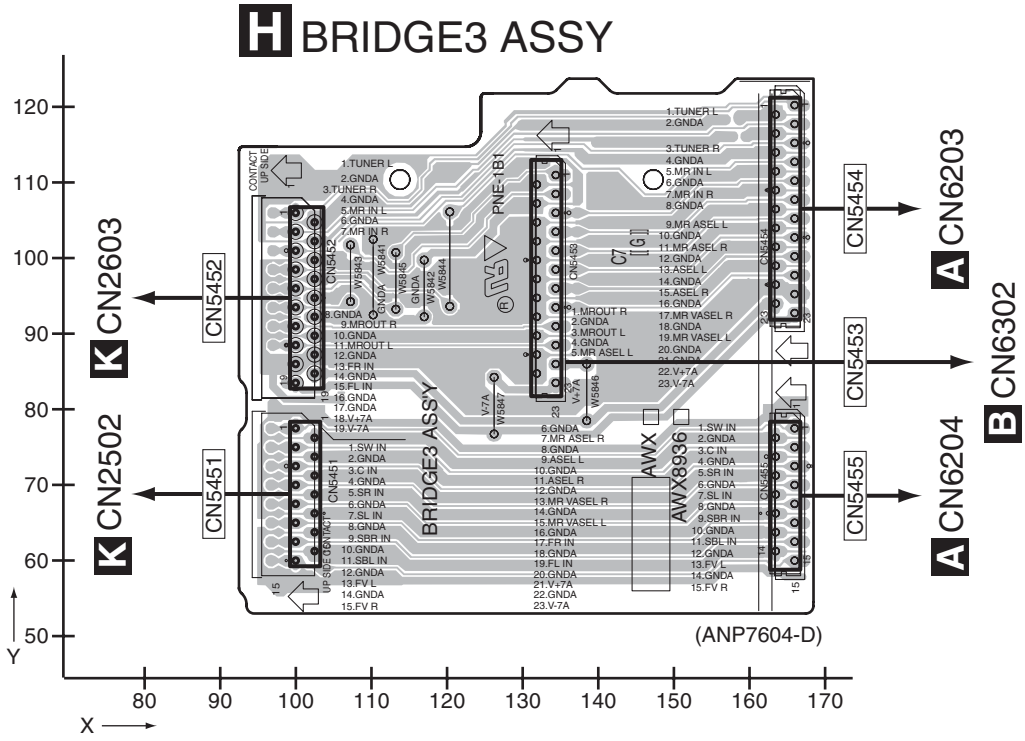
SIDE A



SIDE B

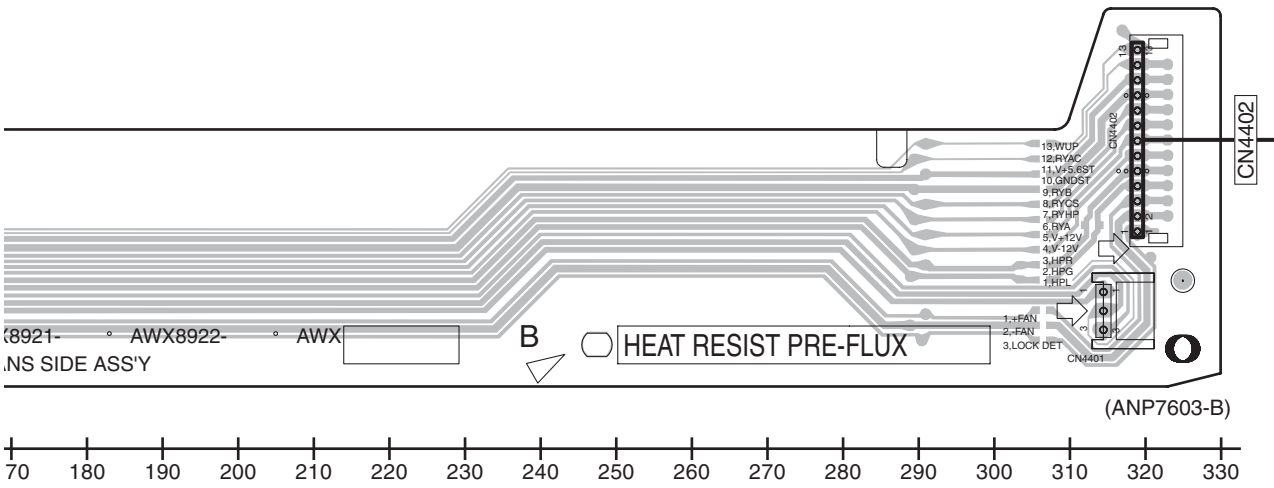


SIDE A

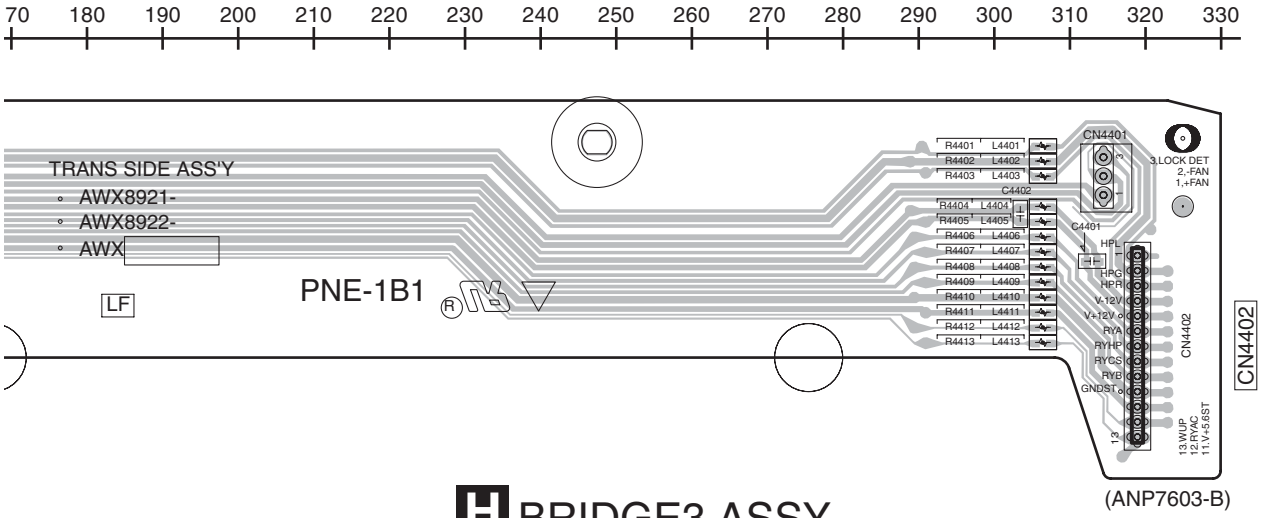


G H

SIDE A

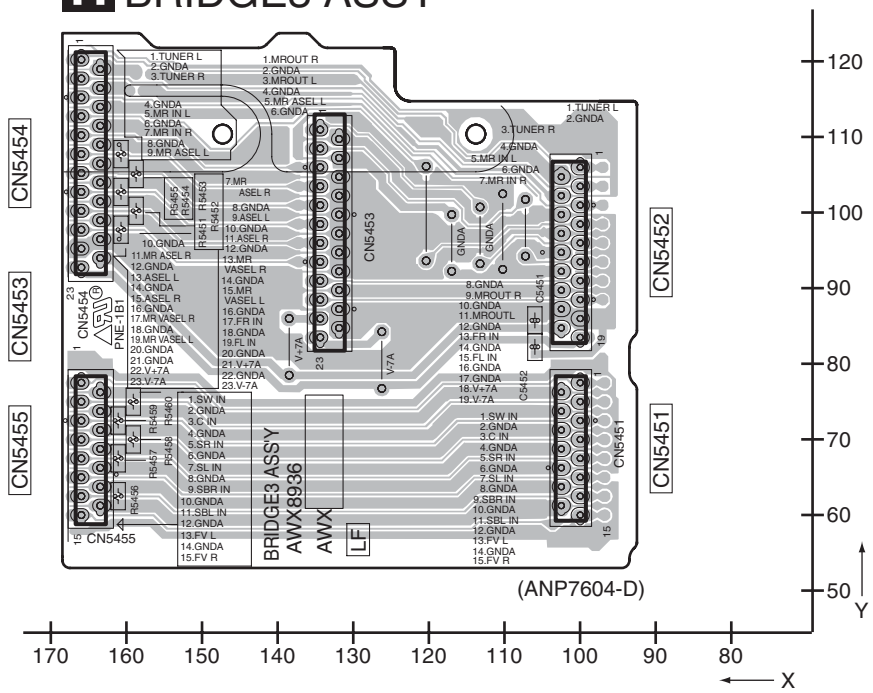


SIDE B



H BRIDGE3 ASSY

SIDE B



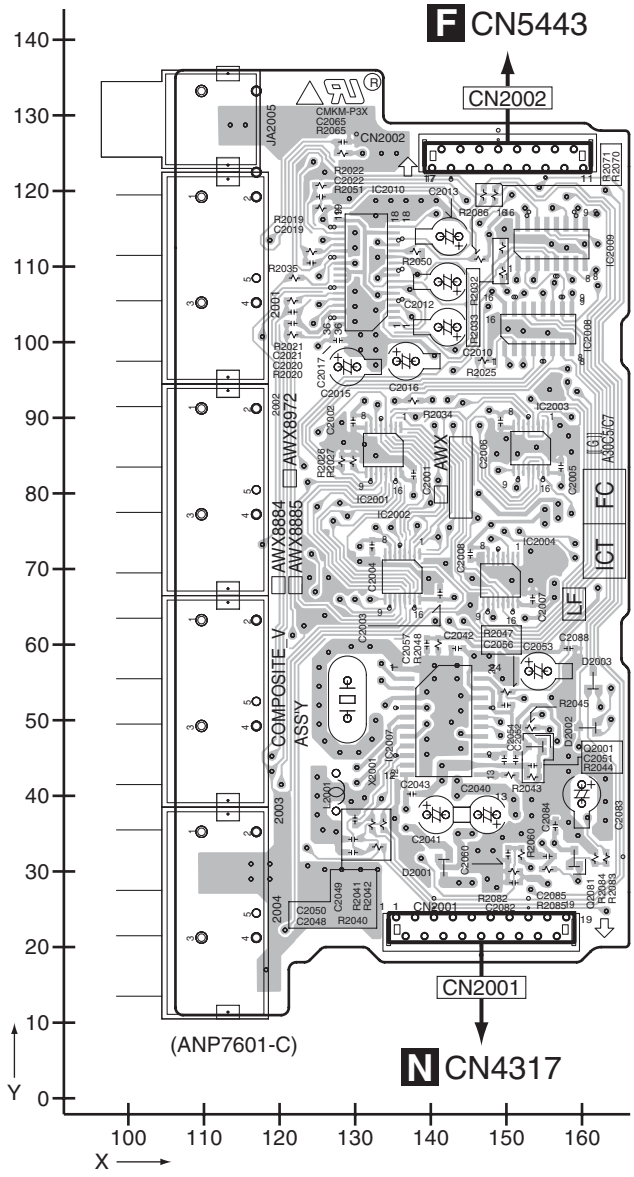
G H

11.6 COMPOSITE V ASSY

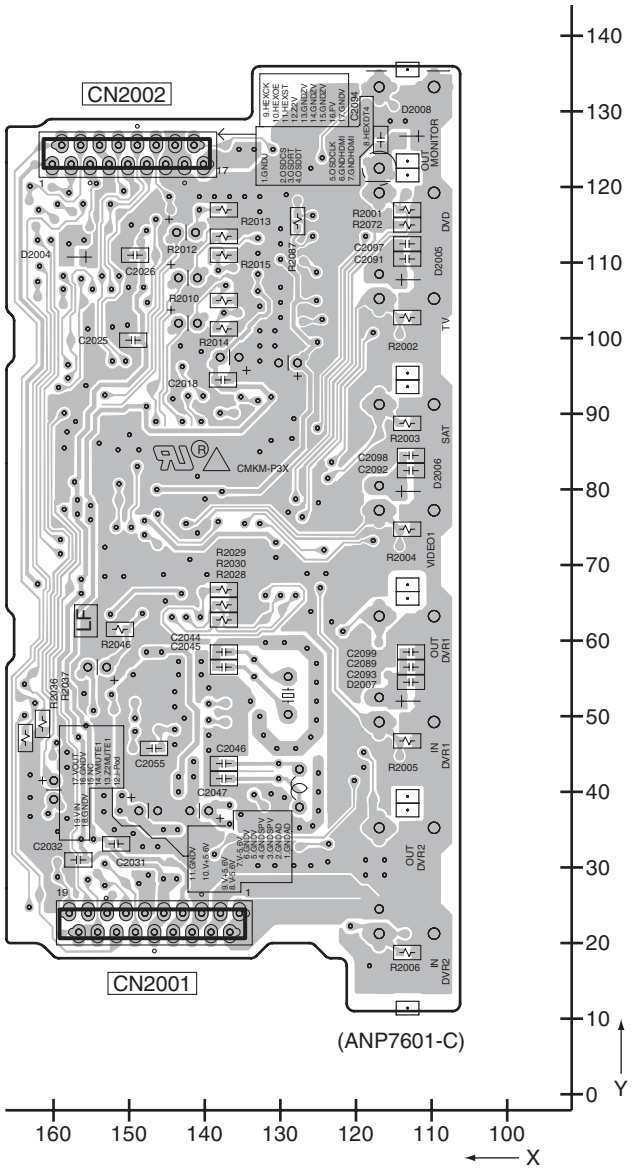
SIDE A

SIDE B

I COMPOSITE V ASSY



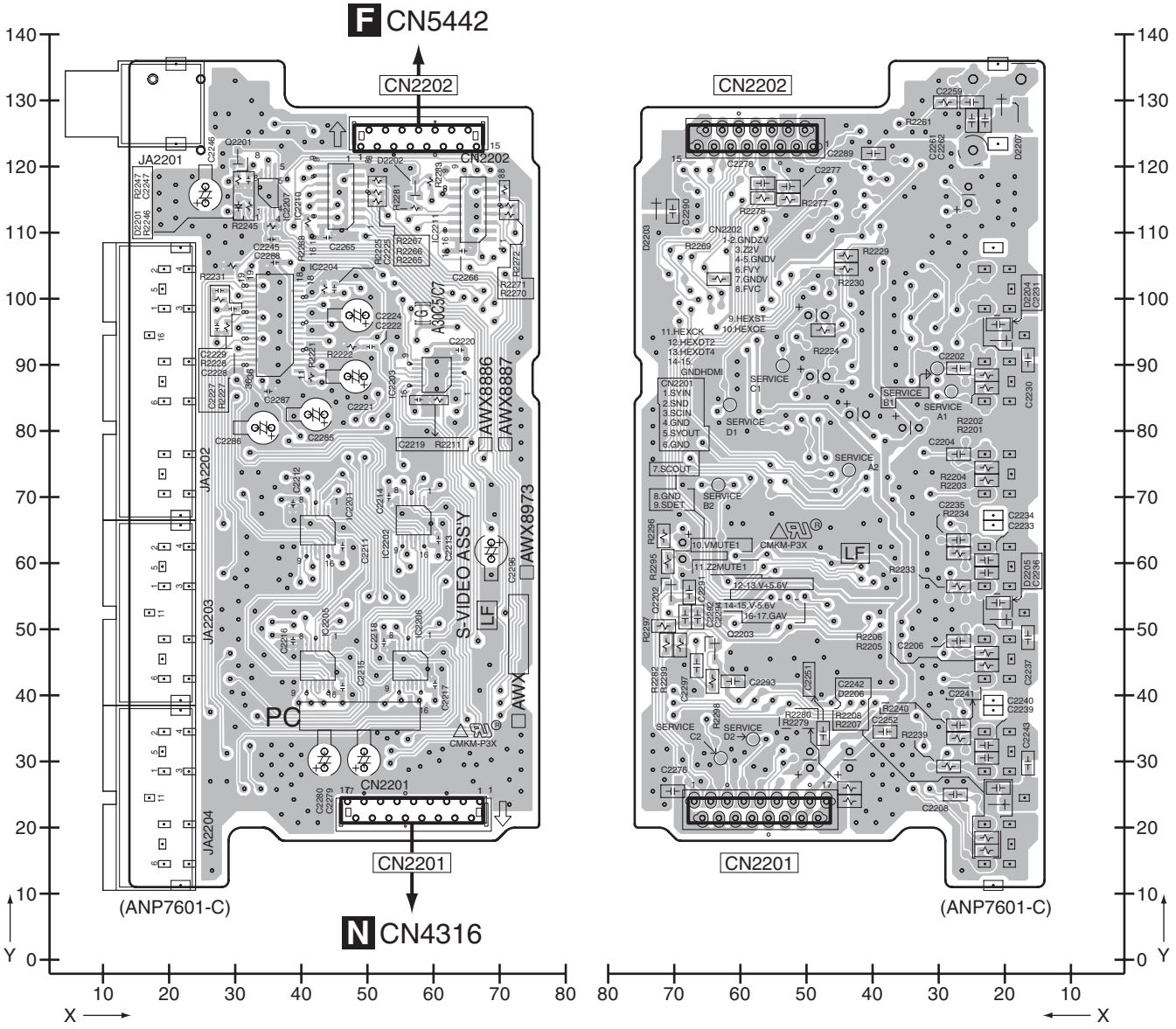
I COMPOSITE V ASSY



11.7 S-VIDEO ASSY

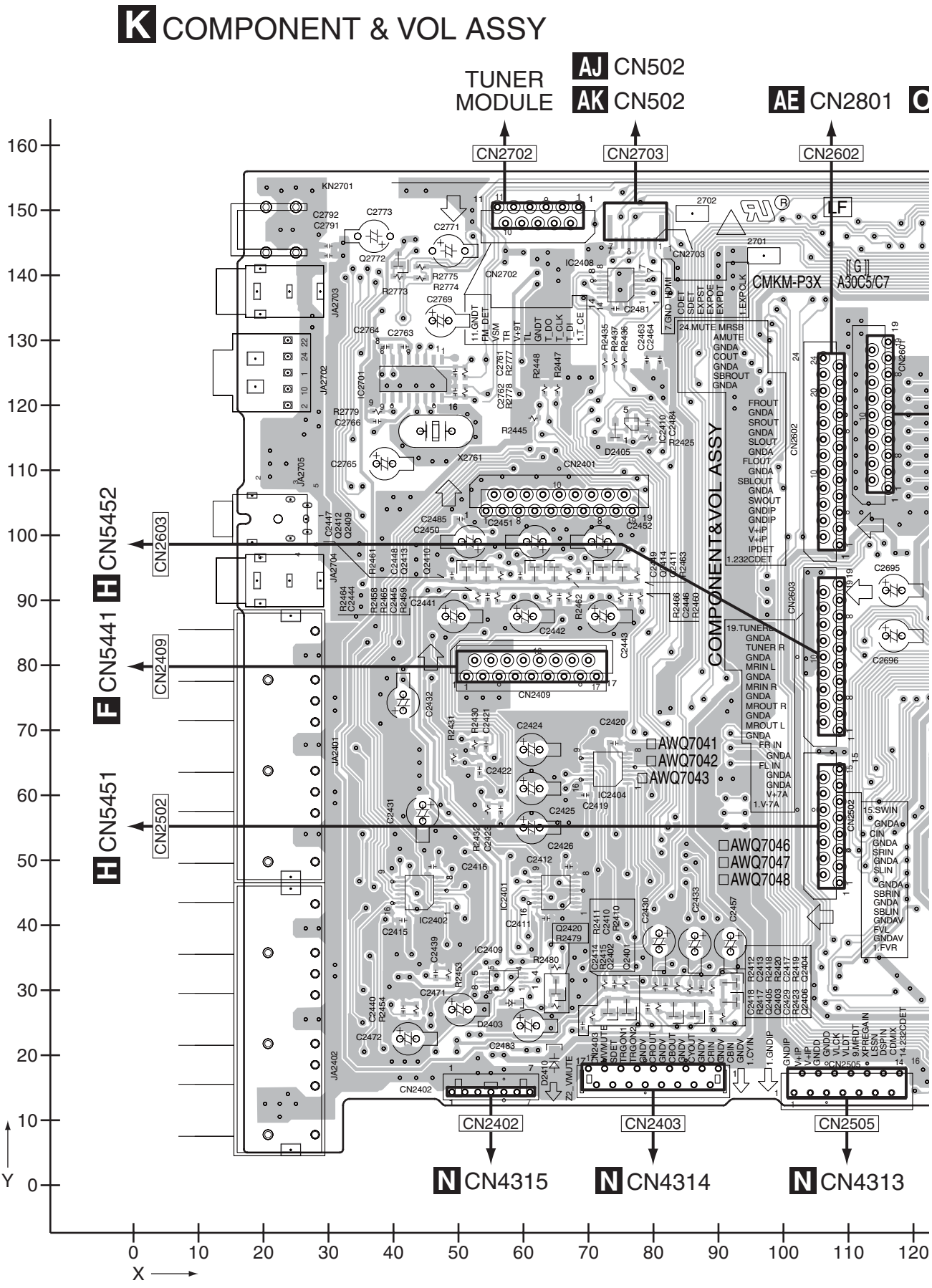
SIDE A **SIDE B**

J S-VIDEO ASSY **J** S-VIDEO ASSY

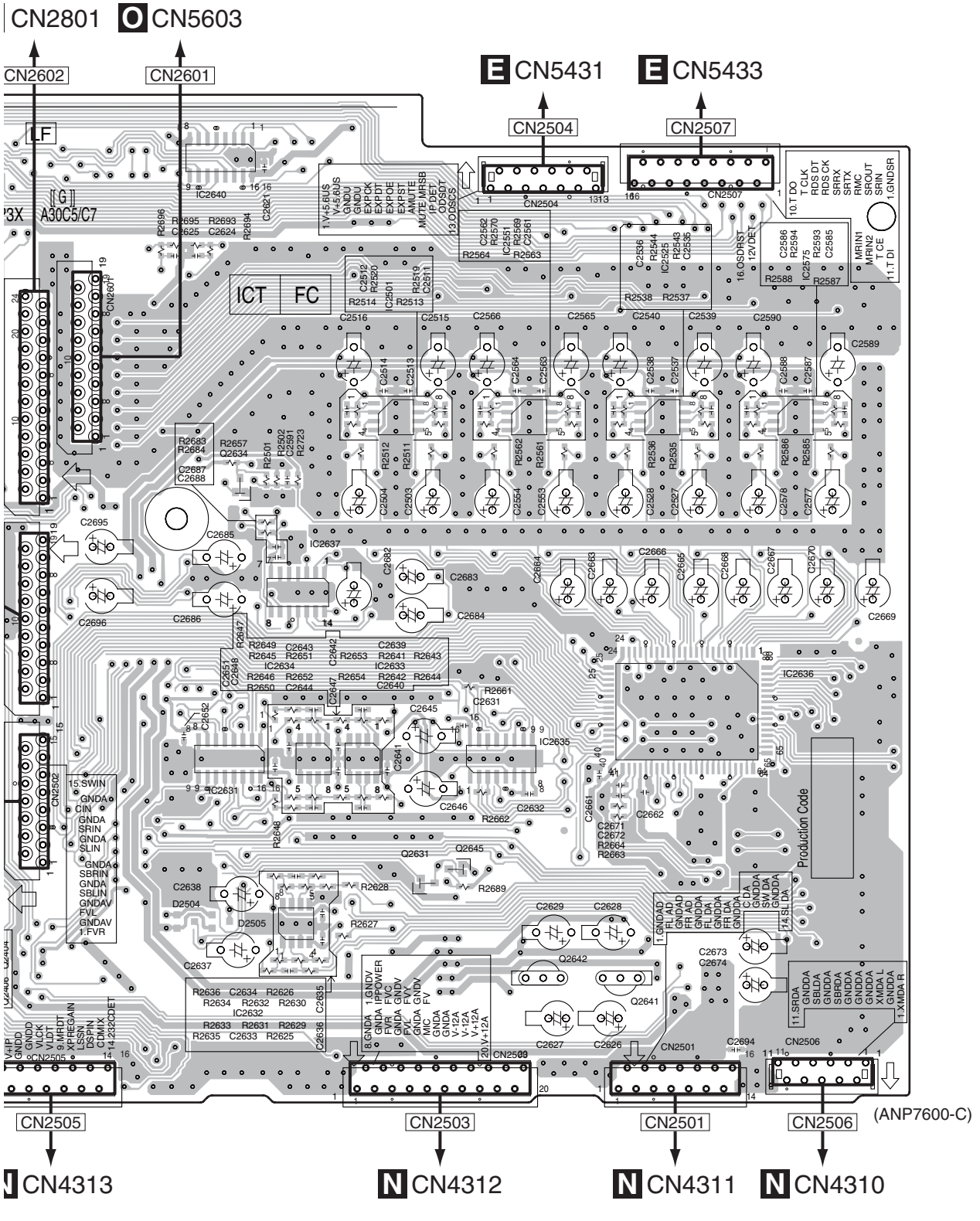


11.8 COMPONENT & VOL ASSY

SIDE A

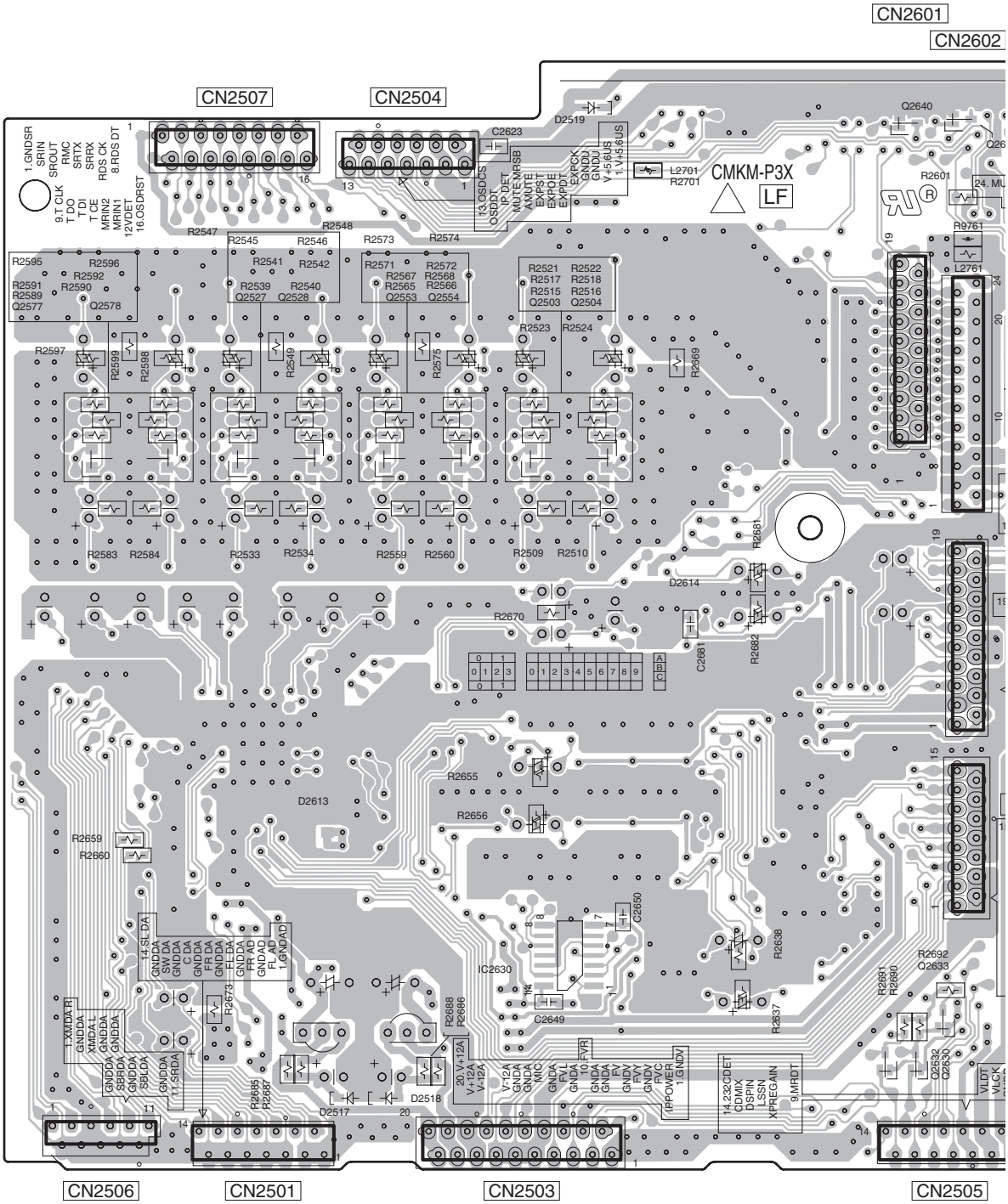


SIDE A


CN2801
O CN5603
CN2602
CN2601
E CN5431
E CN5433
CN2504
CN2507
LF
[G]
A30C5/C7
ICT
FC
IC2640
IC2637
IC2636
IC2635
IC2634
IC2633
IC2632
IC2631
Production Code
CN2505
CN2503
CN2501
CN2506
(ANP7600-C)
J CN4313
N CN4312
N CN4311
N CN4310
110 120 130 140 150 160 170 180 190 200 210 220 230 240

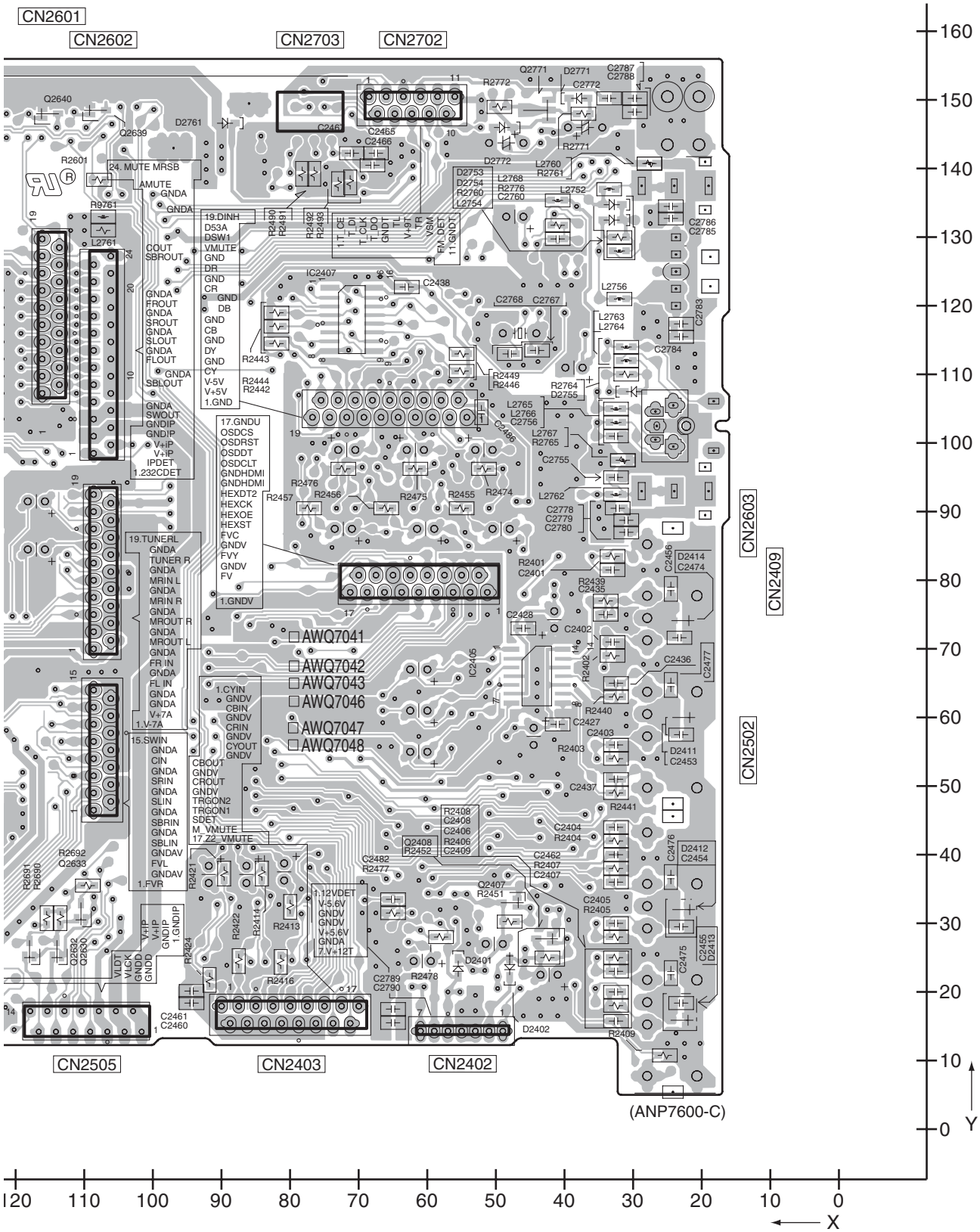
SIDE B

K COMPONENT & VOL ASSY



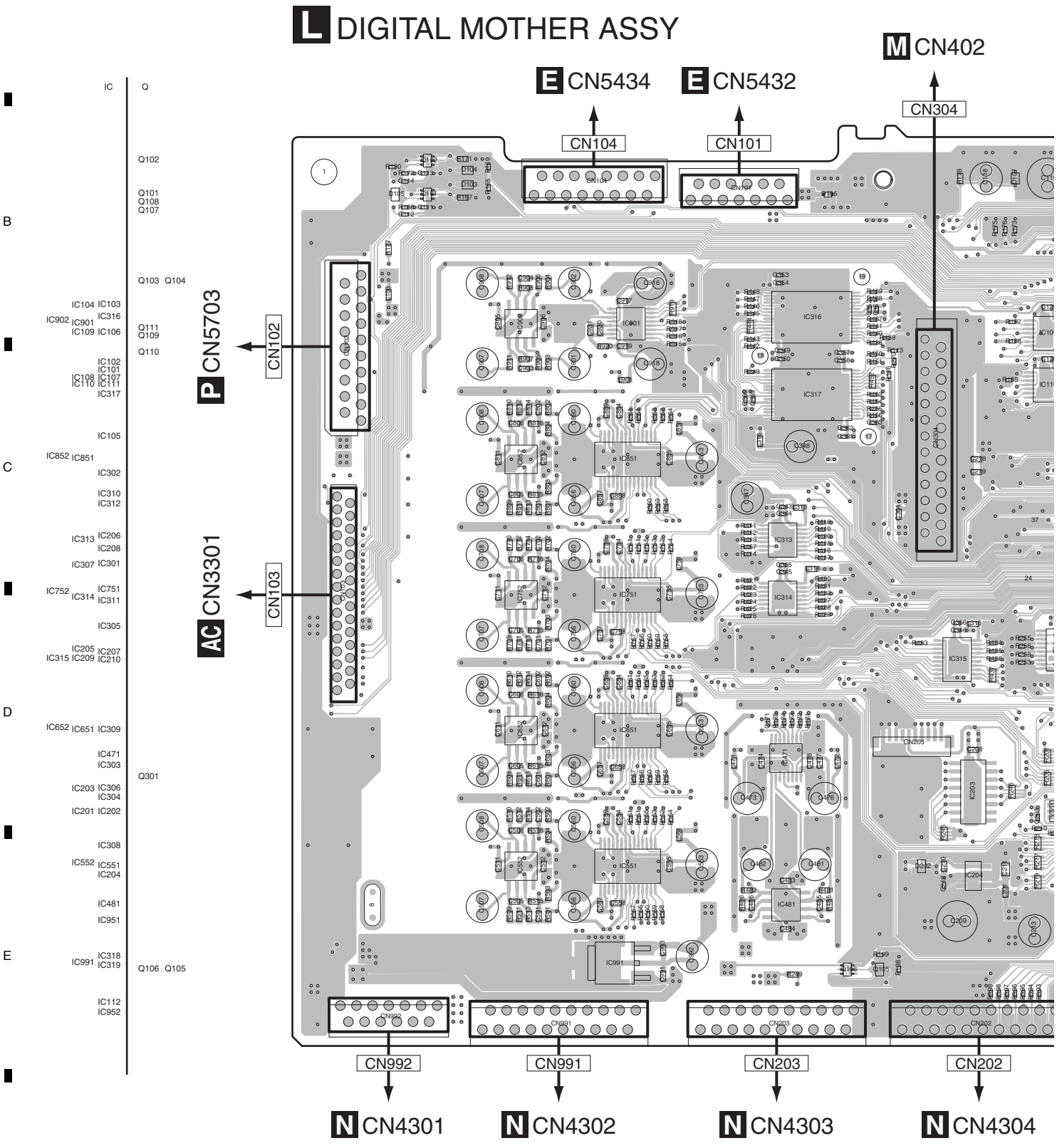
240 230 220 210 200 190 180 170 160 150 140 130 120 110

SIDE B


CN2601
CN2602
CN2703
CN2702
CN2603
CN2409
CN2502
CN2505
CN2403
CN2402
AWQ7041
AWQ7042
AWQ7043
AWQ7046
AWQ7047
AWQ7048
(ANP7600-C)
X
Y

11.9 DIGITAL MOTHER ASSY

SIDE A



SIDE A

A

B

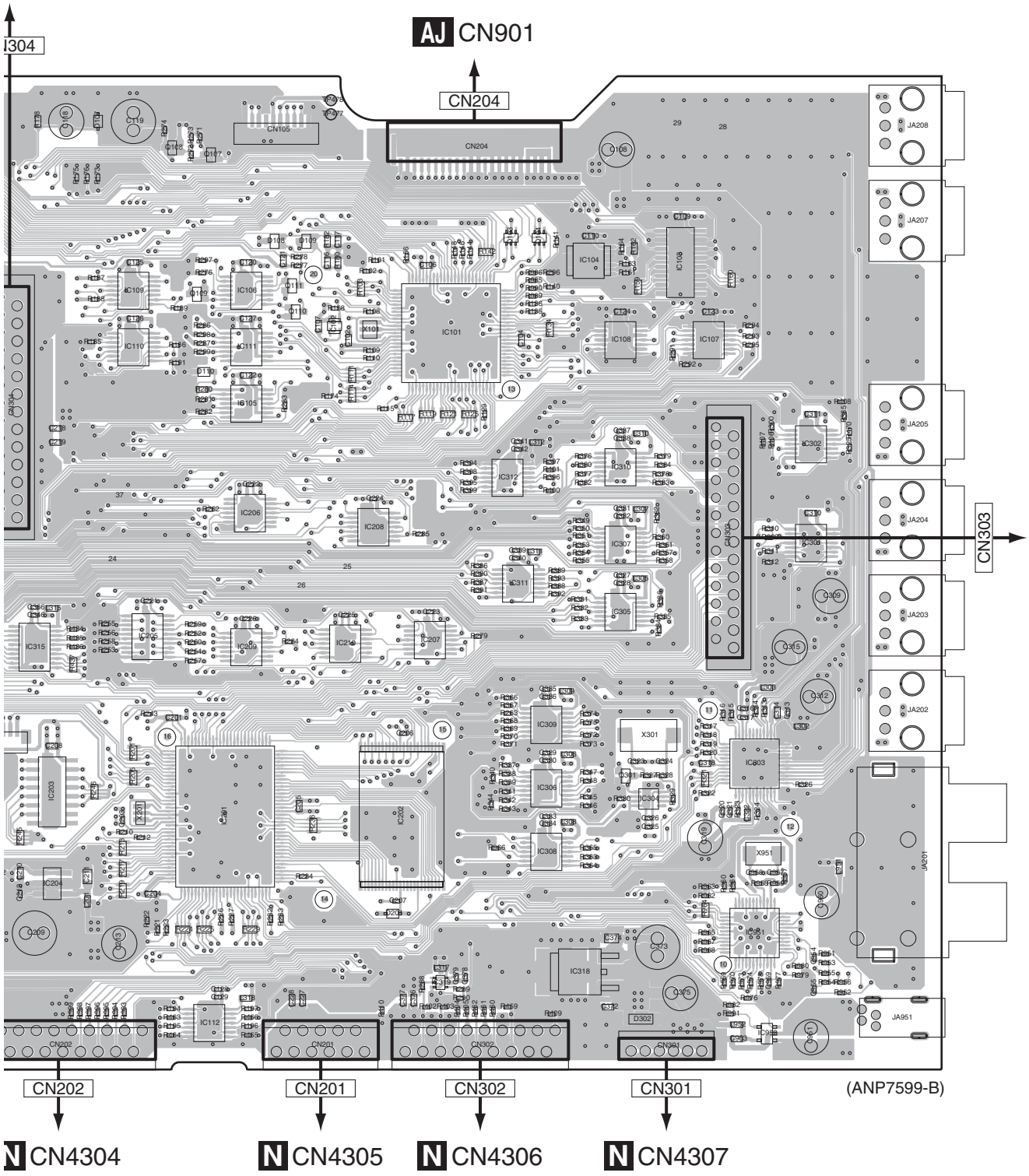
C

D

E

F

N402

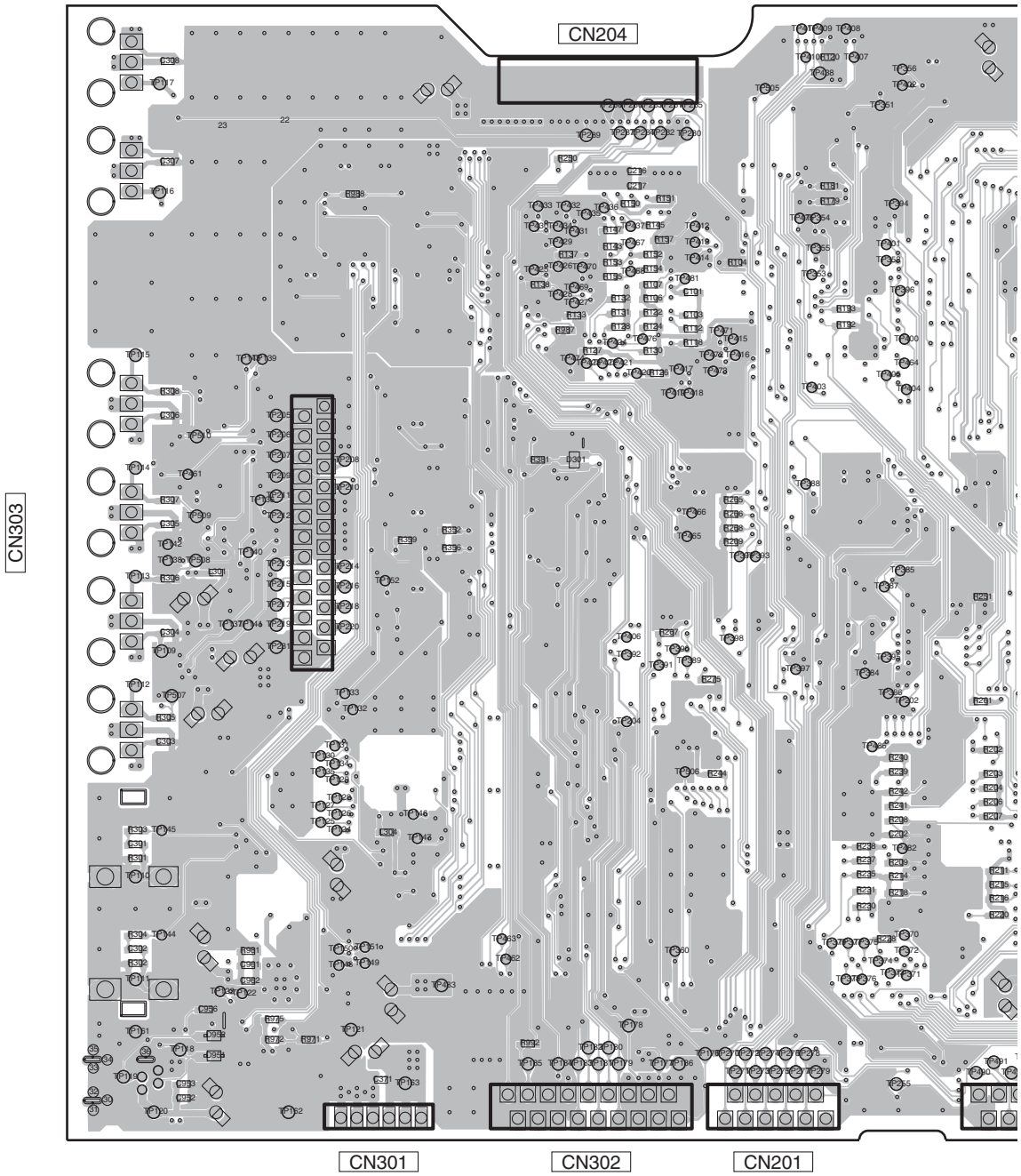


SIDE B

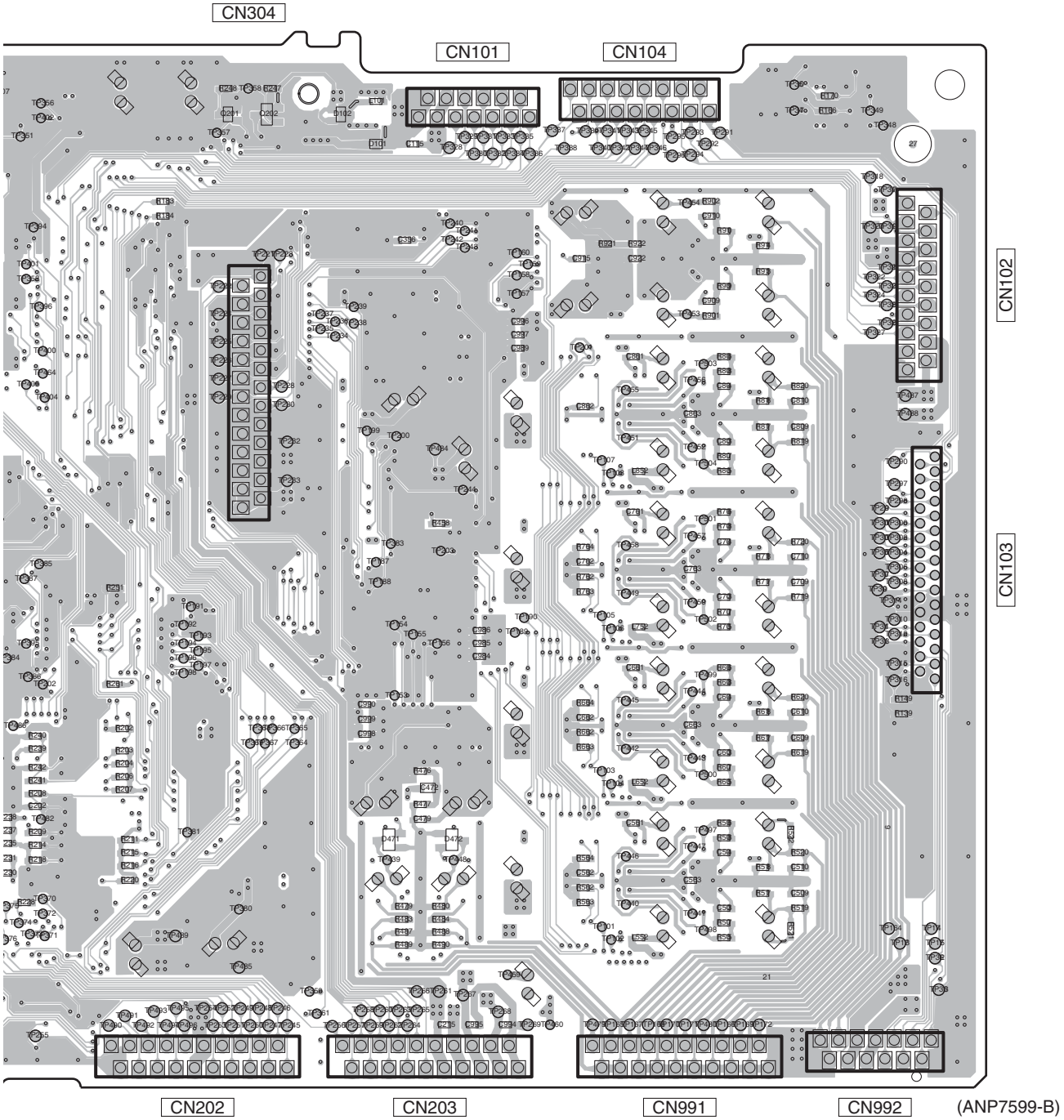
L DIGITAL MOTHER ASSY

IC Q

Q201 Q202



SIDE B



(ANP7599-B)

11.10 DSP ASSY

SIDE A

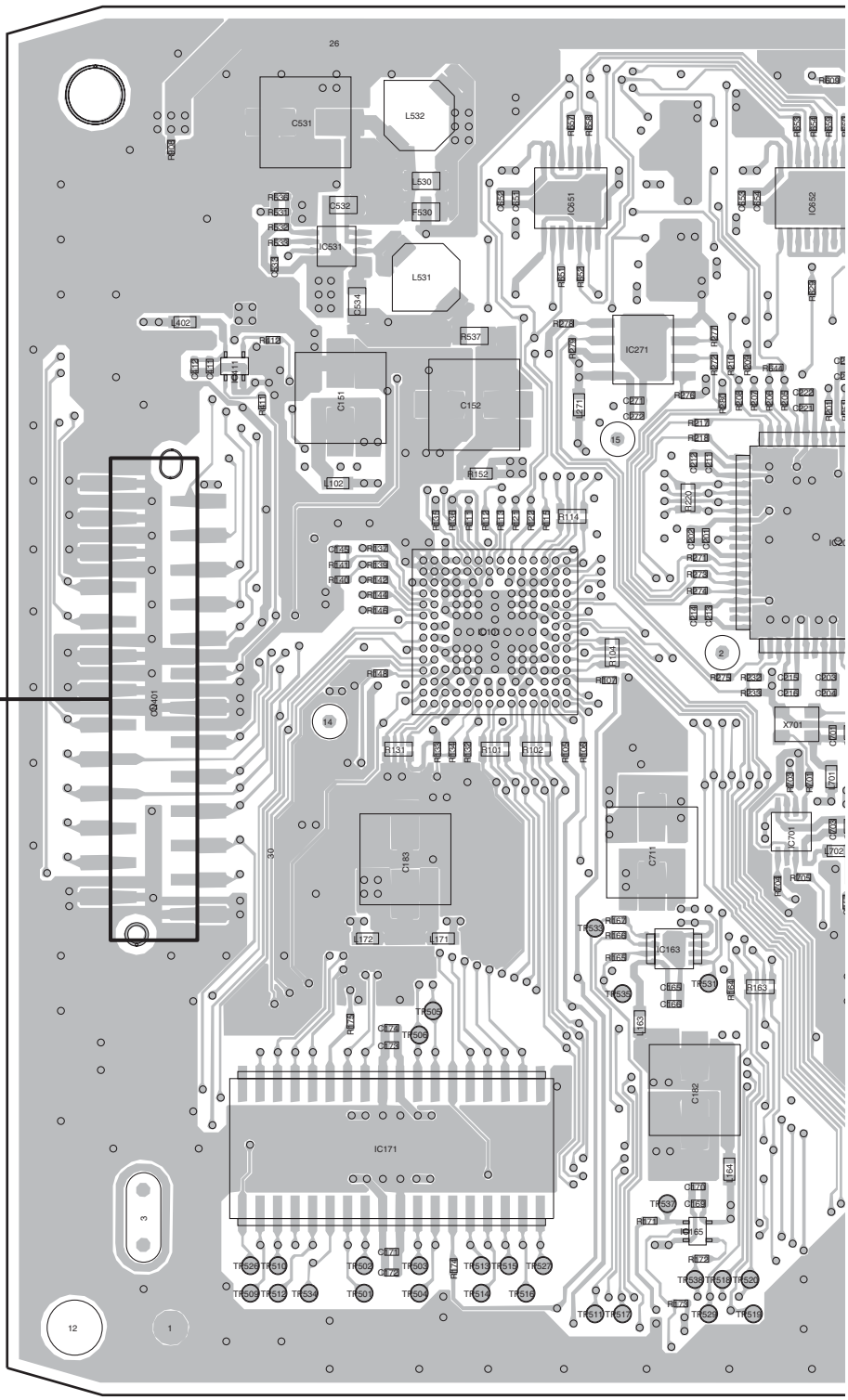
M DSP ASSY

IC Q

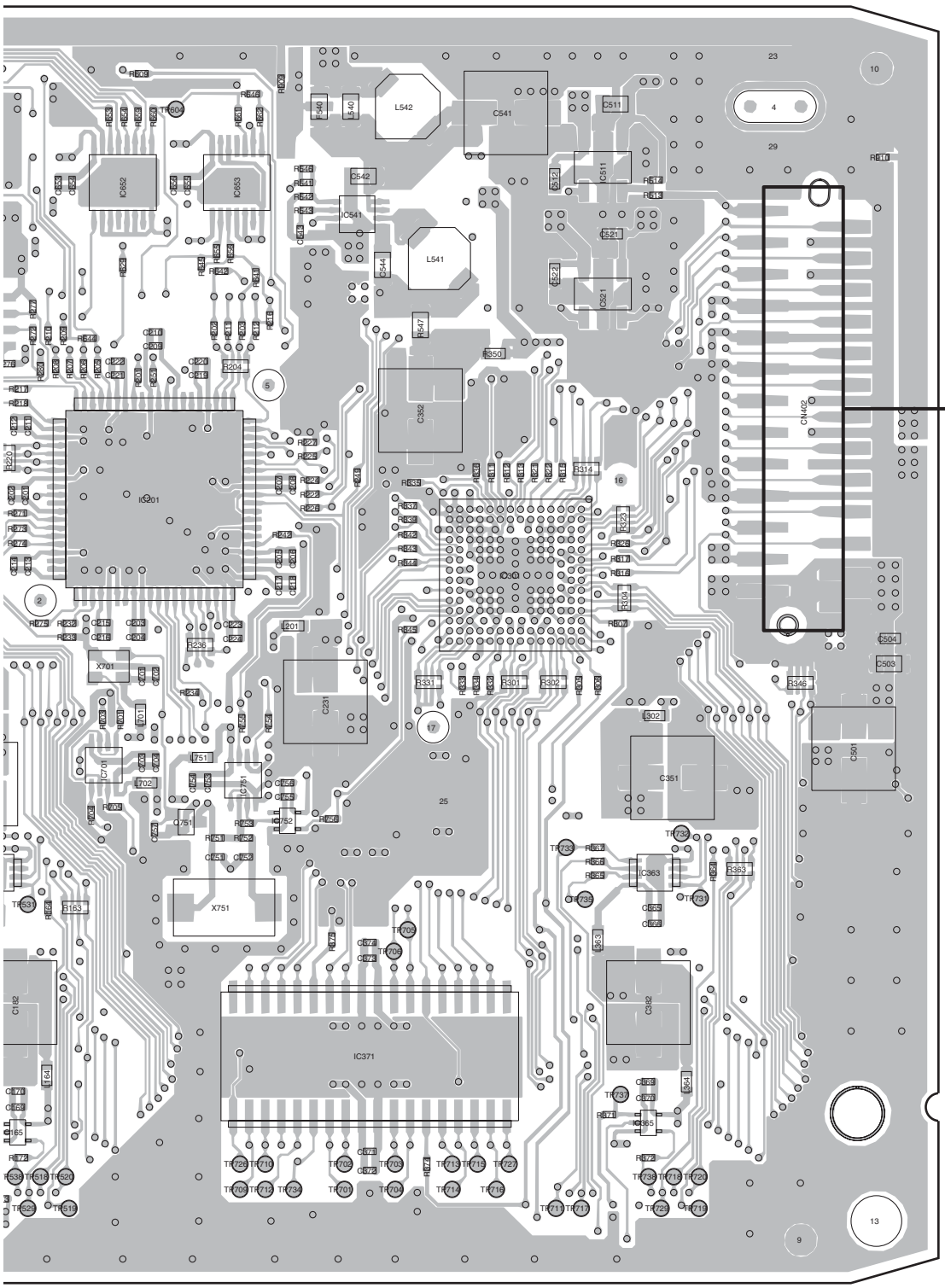
IC511
IC651 IC652 IC653
IC541
IC531
IC521
IC271
IC411
IC201
IC301
IC101
IC701
IC751
IC752 Q751
IC163 IC363
IC171 IC371
IC365
IC165

L CN303

CN401



SIDE A



(ANP7611-A)

SIDE B

M DSP ASSY

IC

IC603 IC601
IC602
IC581

IC571

IC621
IC623 IC622

IC401

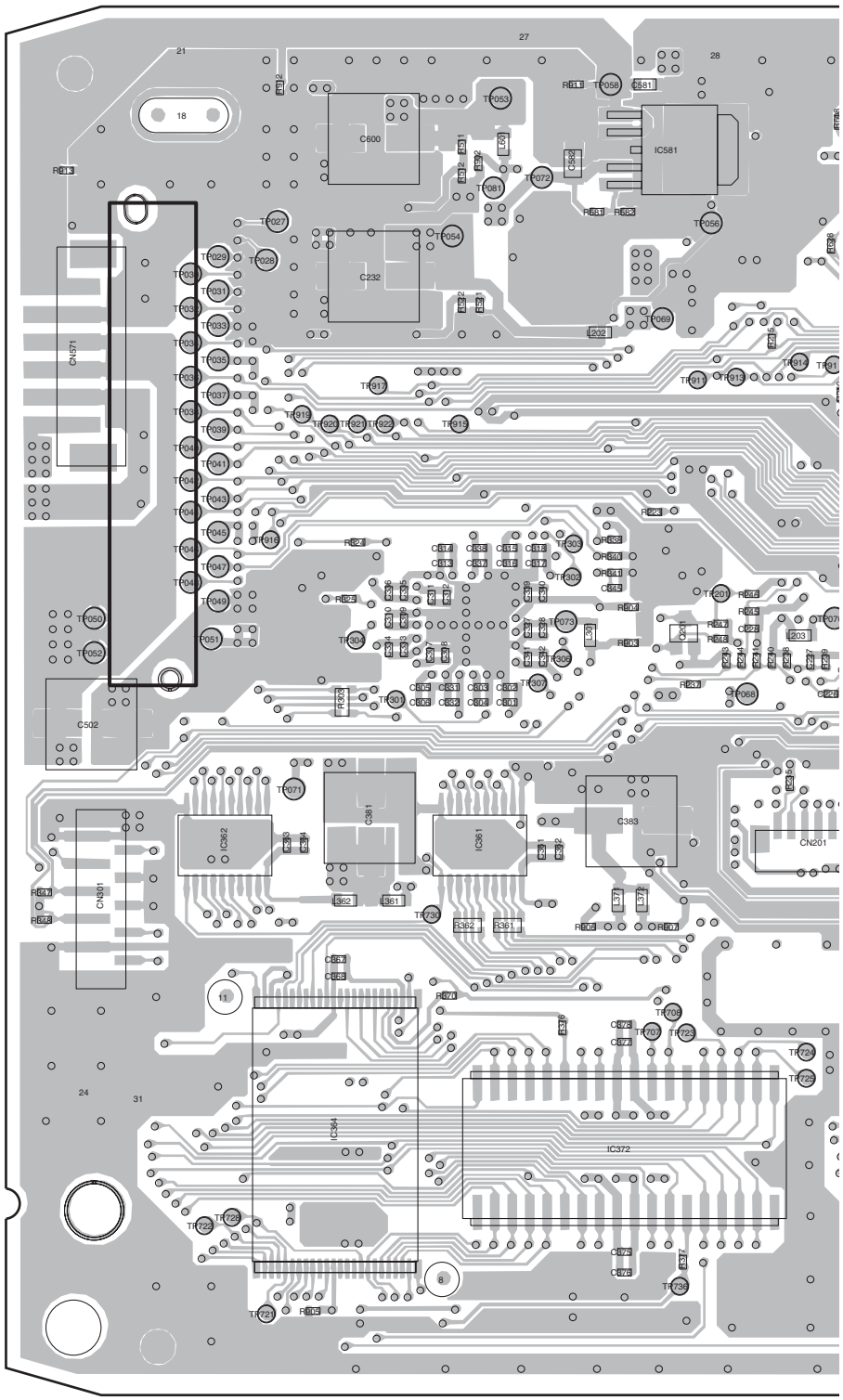
IC362 IC361 IC162
IC161

IC364 IC164
IC372 IC172

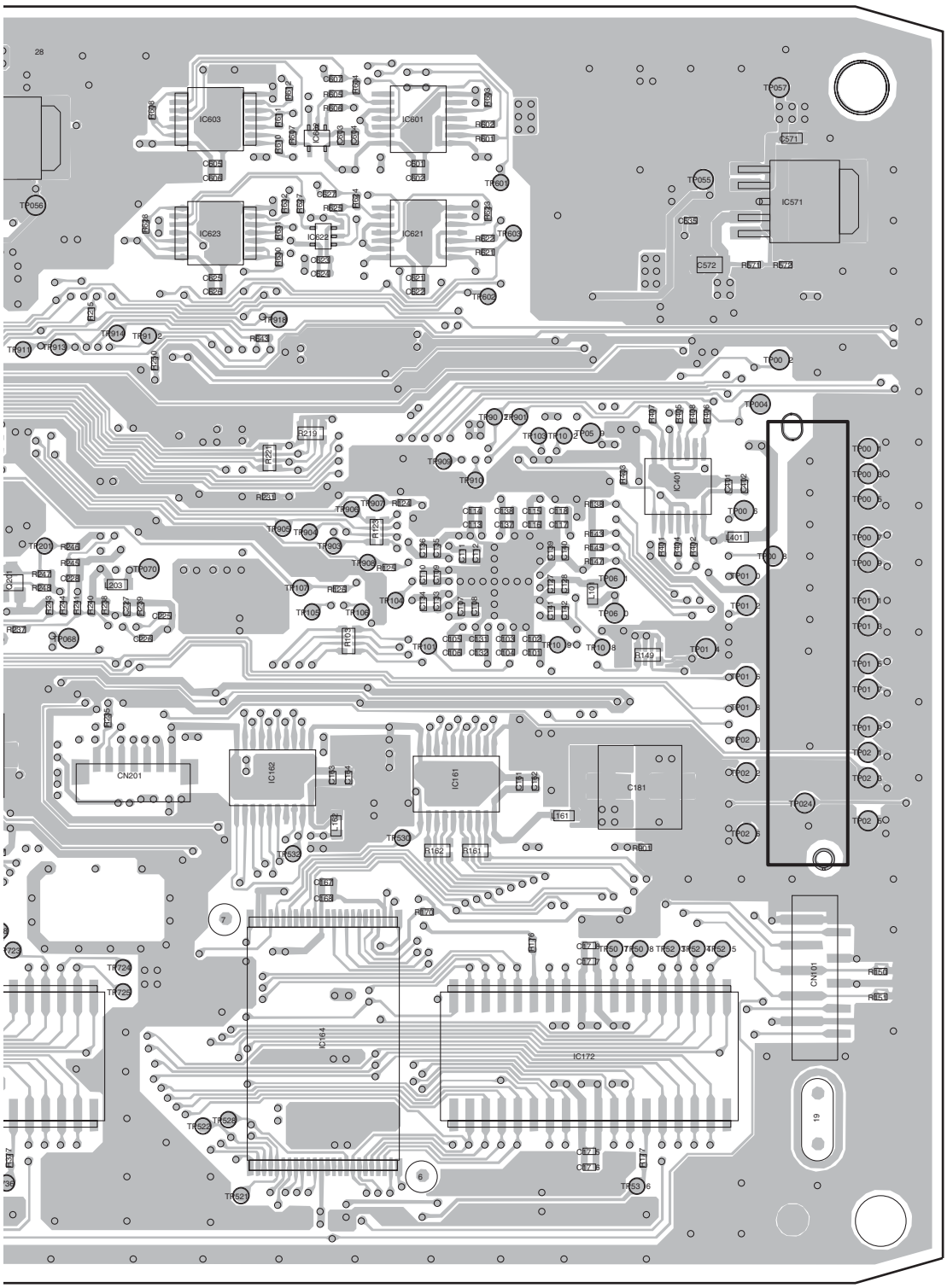
Q

Q201

CN402

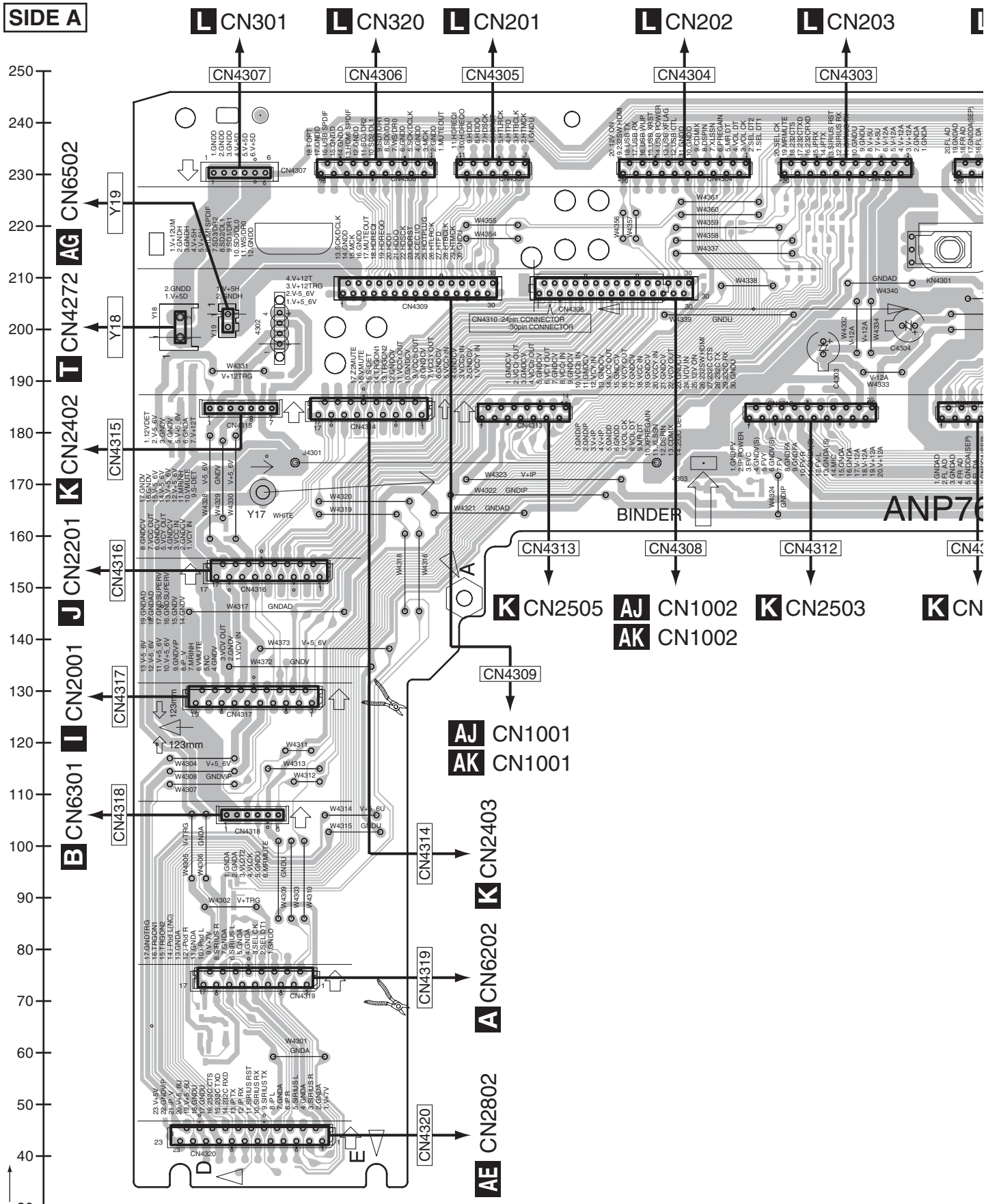


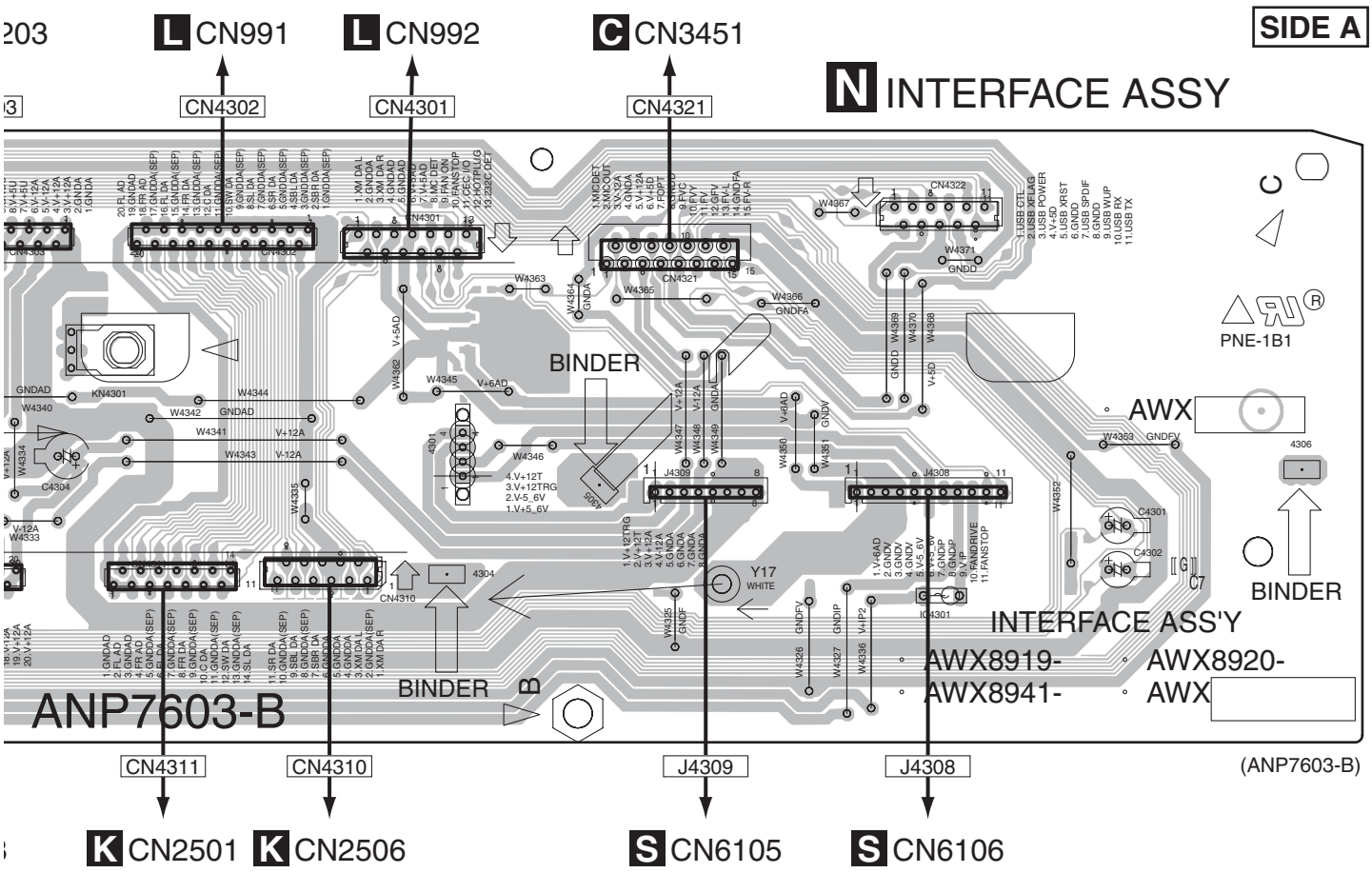
SIDE B



(ANP7611-A)

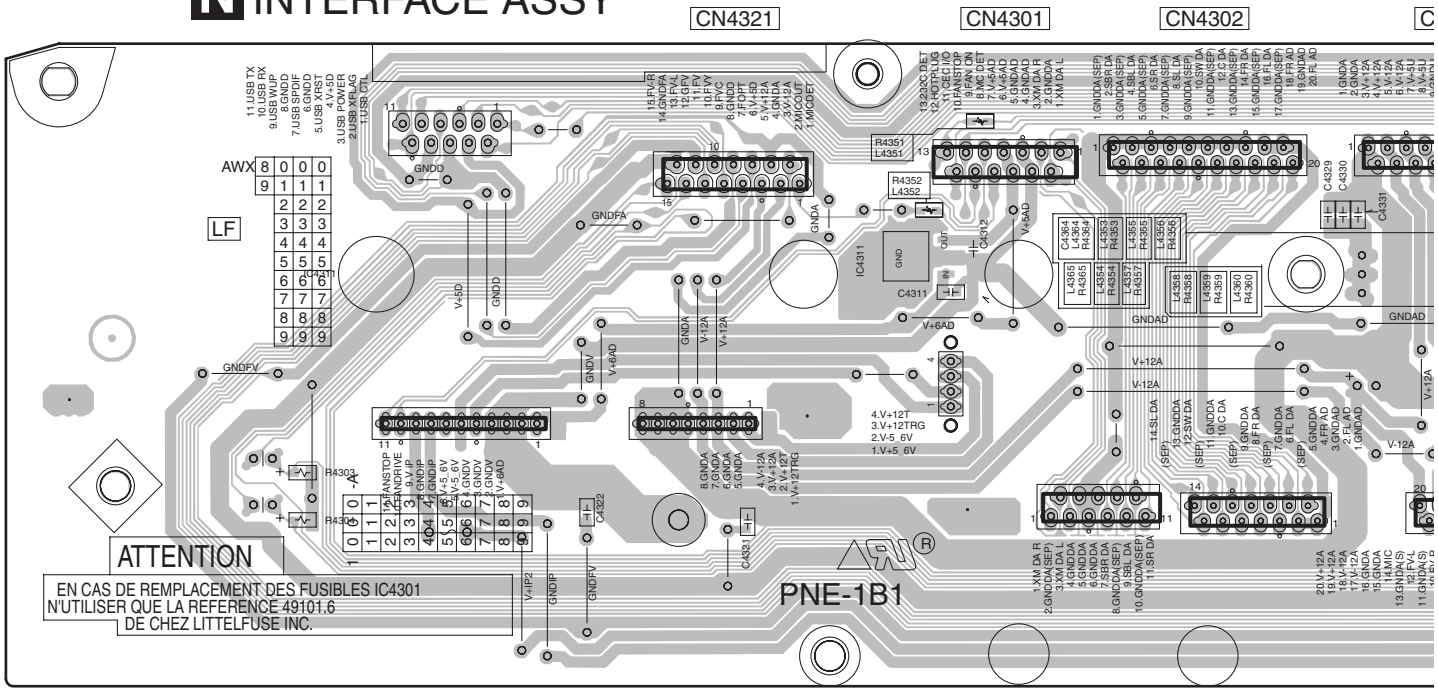
11.11 INTERFACE ASSY

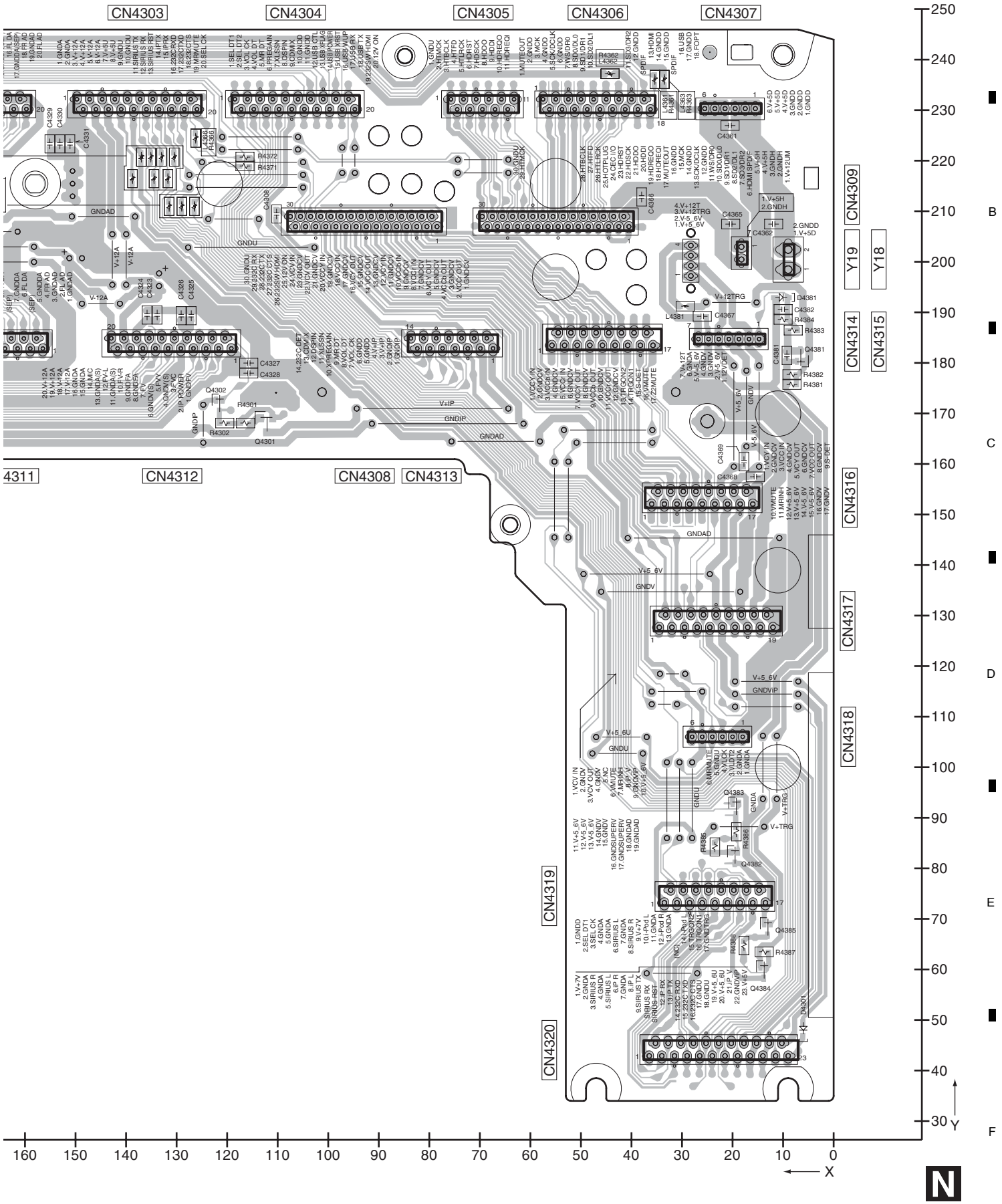



203
L CN991
L CN992
C CN3451
SIDE A
N INTERFACE ASSY
CN4302
CN4301
CN4321
BINDER
PNE-1B1
AWX
INTERFACE ASS'Y
AWX8919-
AWX8941-
AWX8920-
AWX
ANP7603-B
(ANP7603-B)
CN4311
CN4310
J4309
J4308
K CN2501
K CN2506
S CN6105
S CN6106

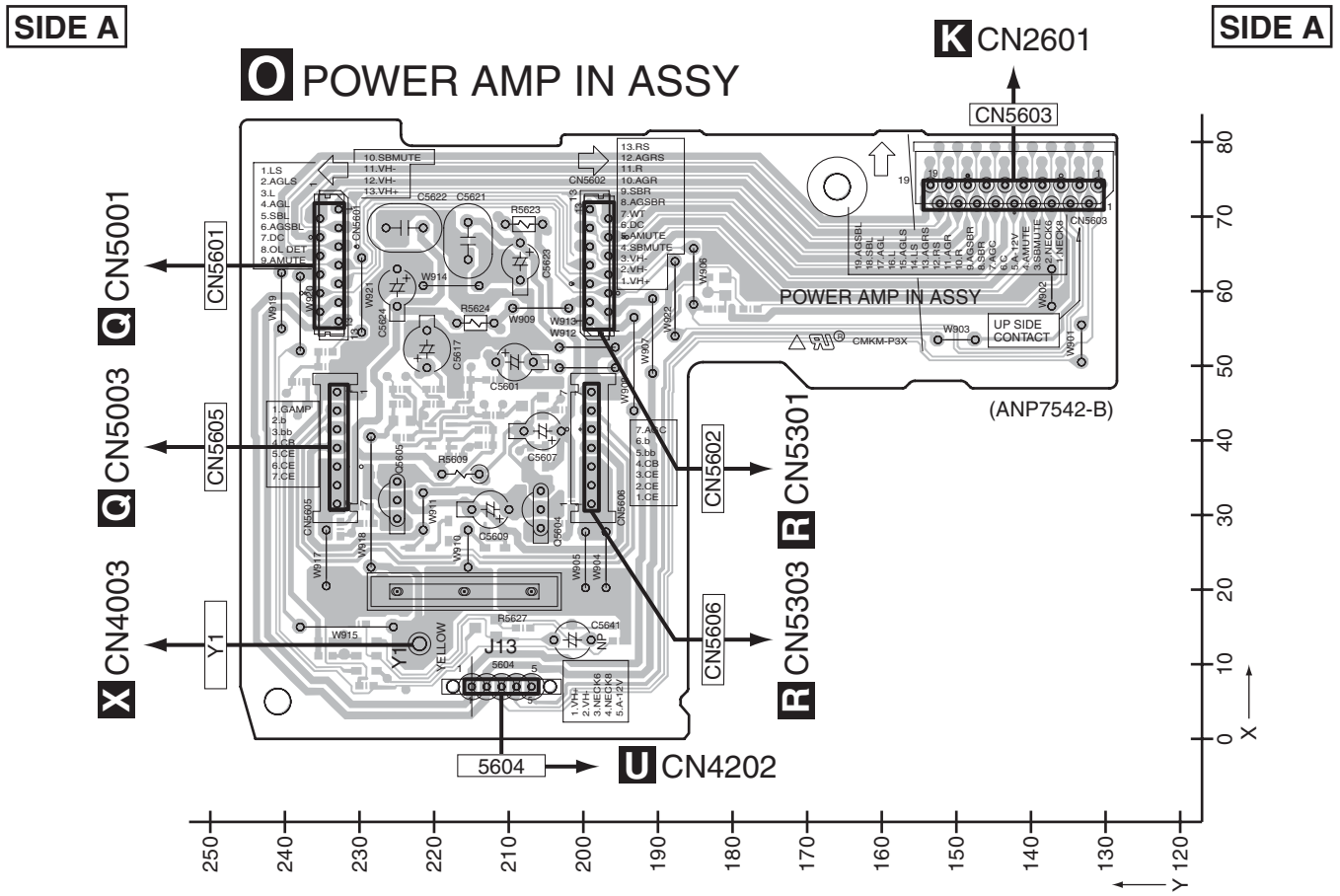
SIDE B

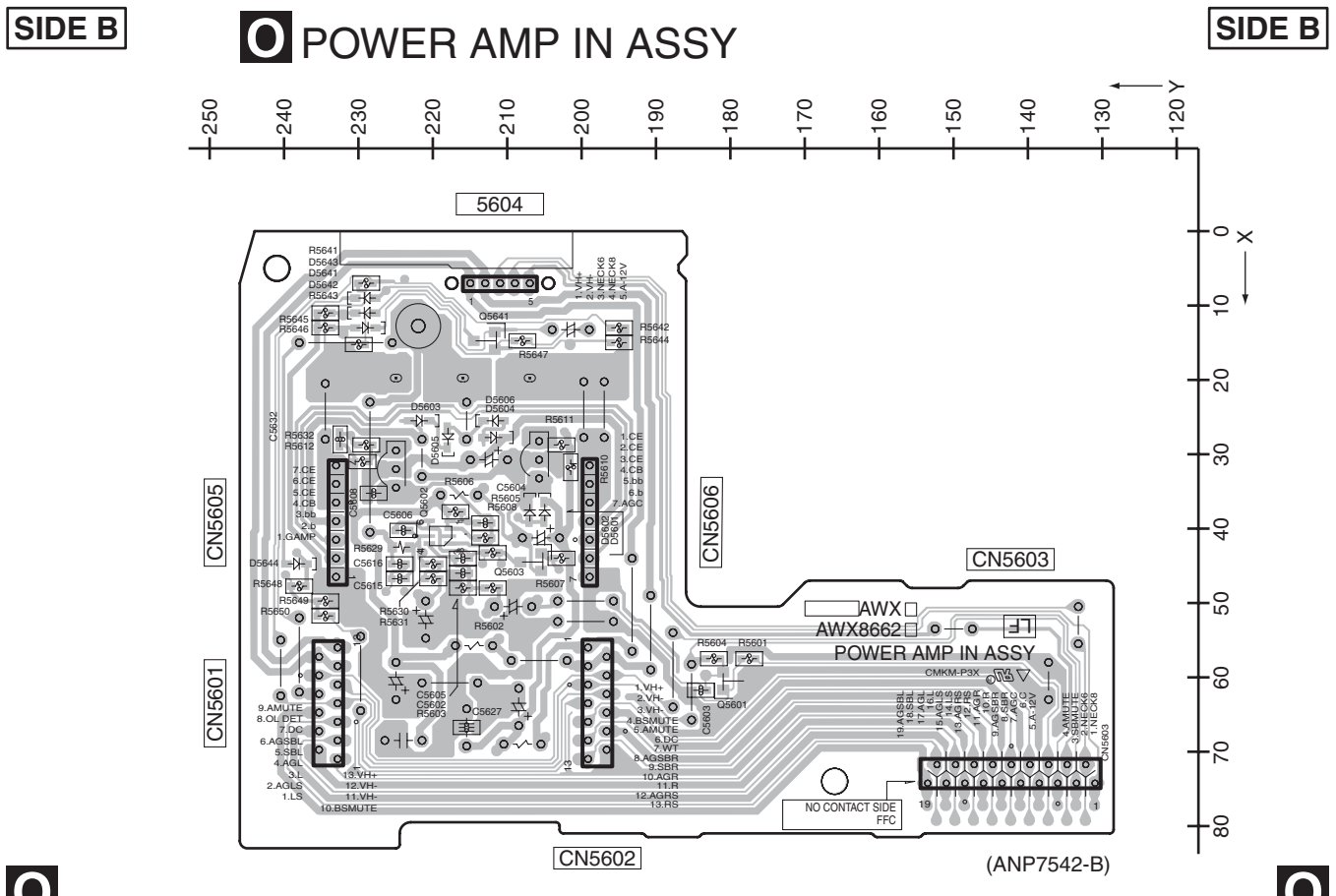
N INTERFACE ASSY




CN4303
CN4304
CN4305
CN4306
CN4307
CN4309
CN4314
CN4315
CN4316
CN4317
CN4318
CN4319
CN4320
CN4312
CN4308
CN4313
Y19
Y18
SIDE B

11.12 POWER AMP IN ASSY

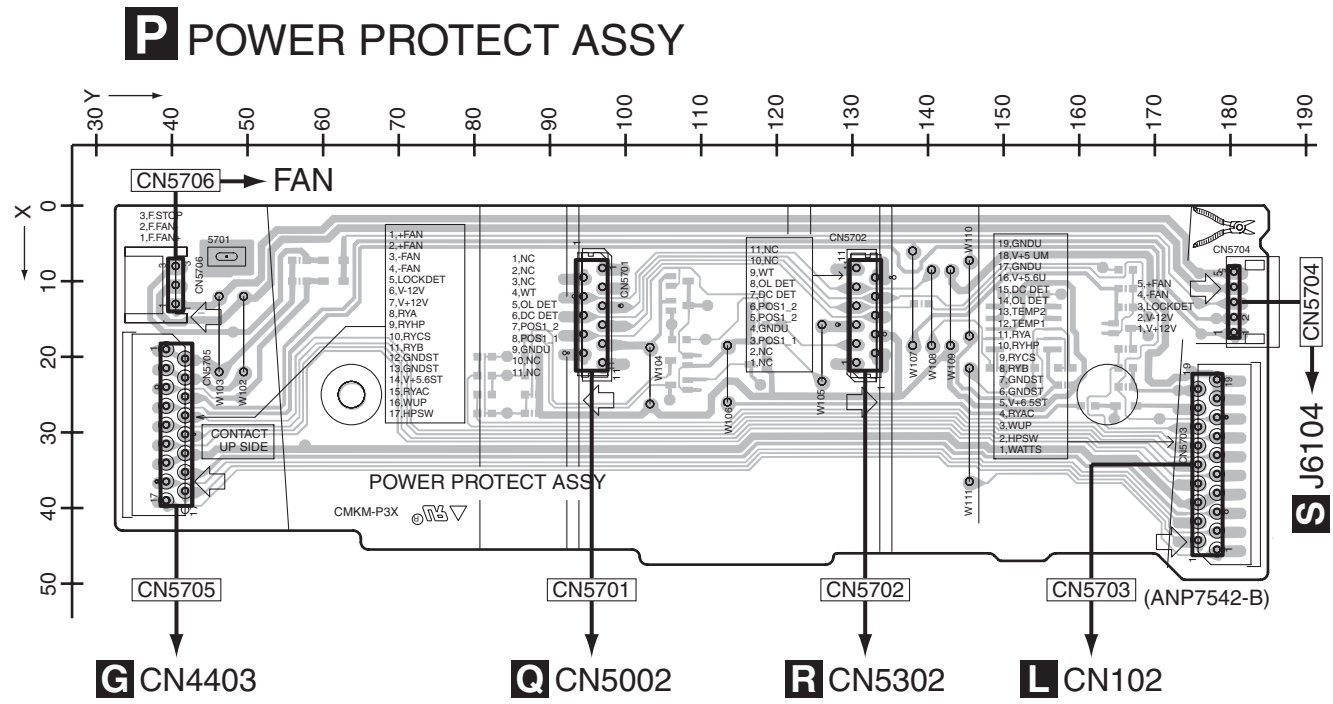




11.13 POWER PROTECT ASSY

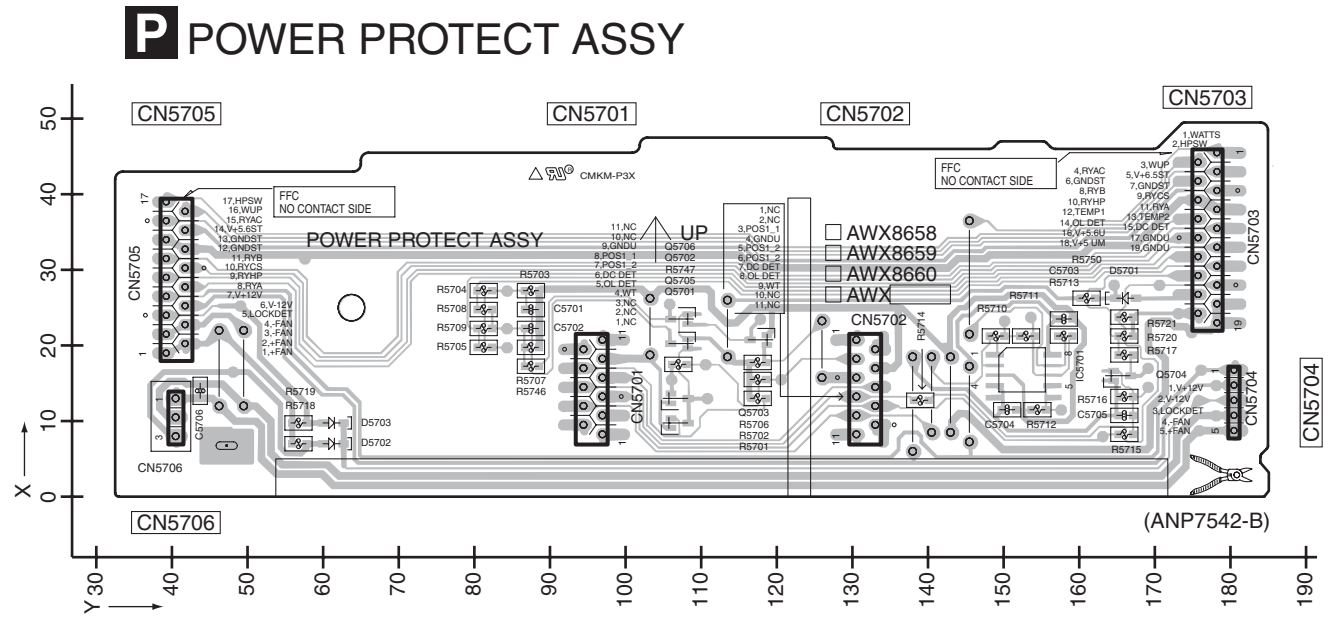
SIDE A

SIDE A

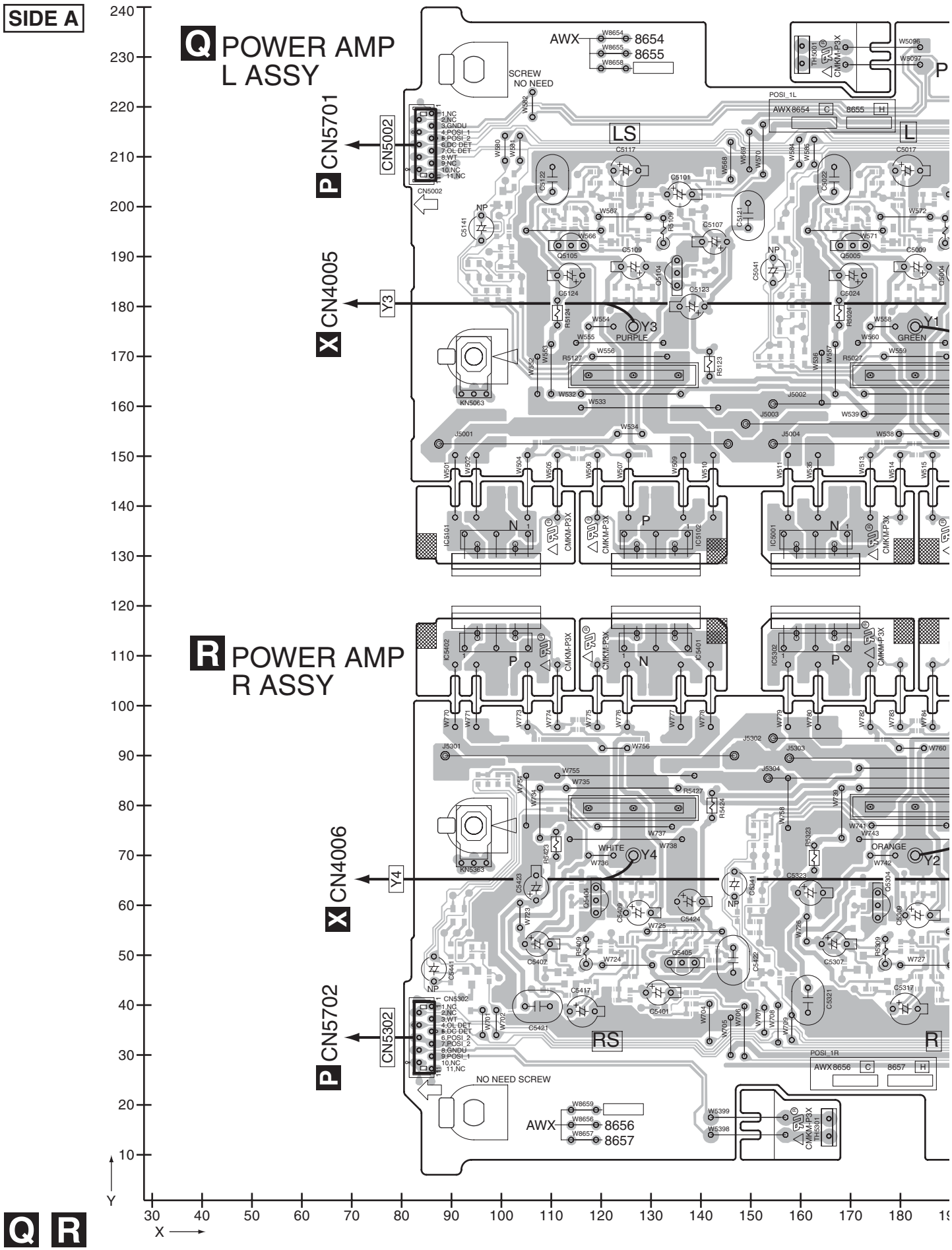


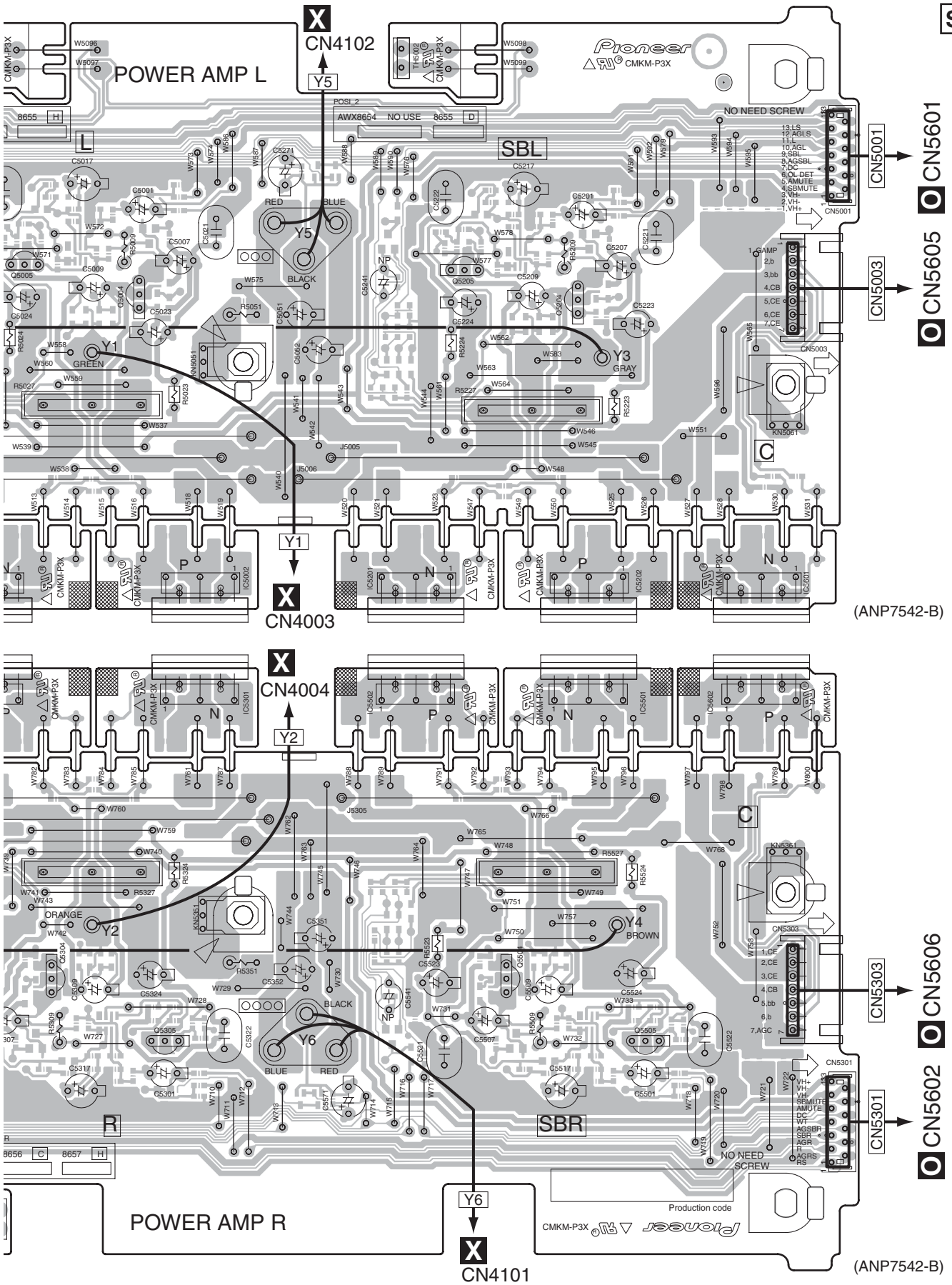
SIDE B

SIDE B

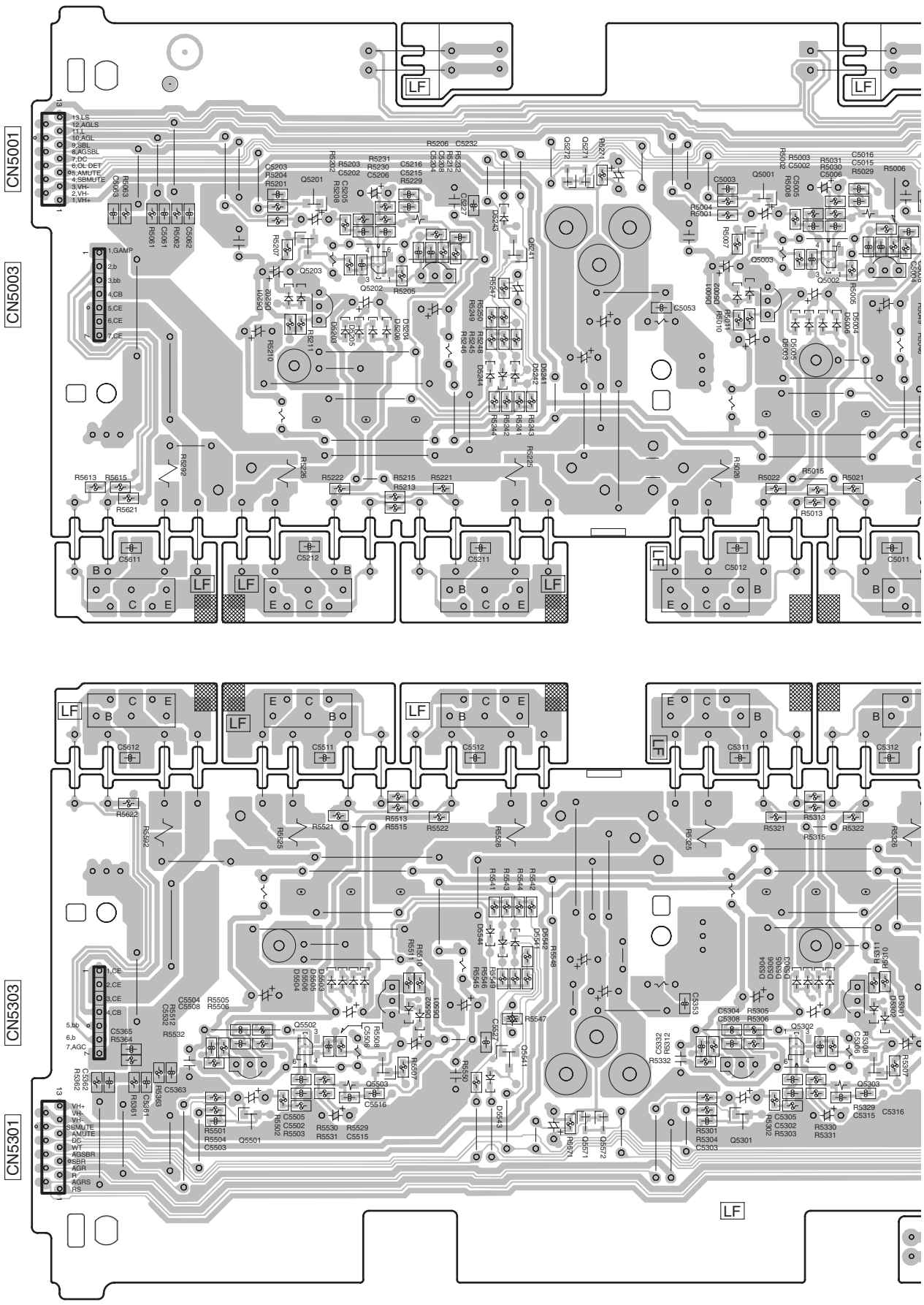


11.14 POWER AMP L and POWER AMP R ASSYS



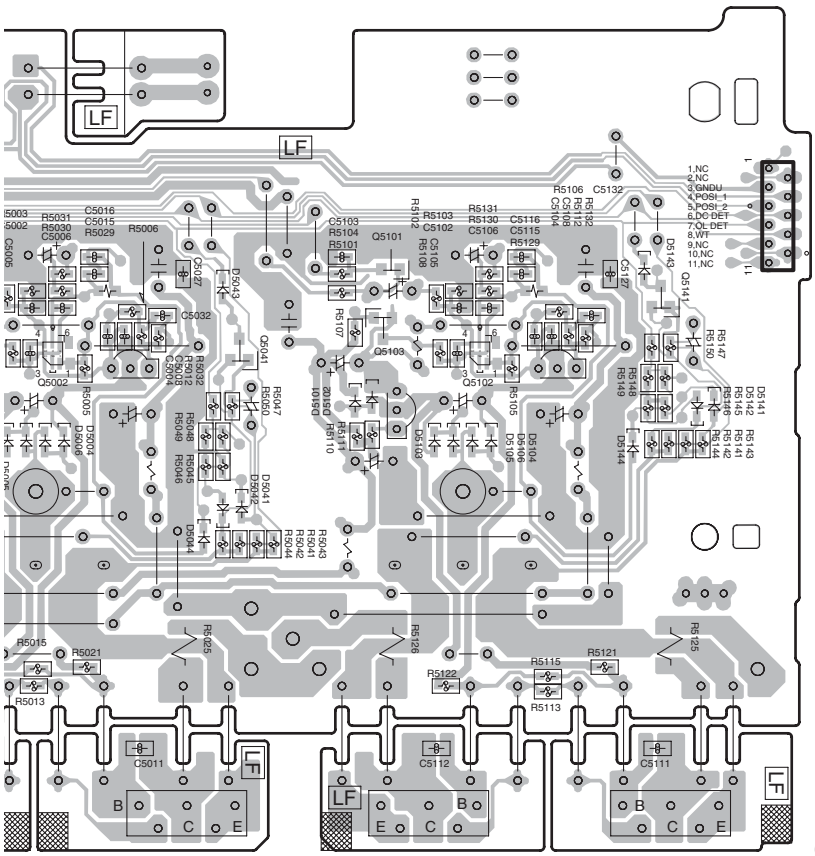

POWER AMP L
POWER AMP R
CN4102
CN4003
CN4004
CN4101
CN5001
CN5003
CN5303
CN5301
CN5601
CN5605
CN5606
CN5602
SBL
SBR
Y1
Y2
Y3
Y4
Y5
Y6
GREEN
ORANGE
GRAY
BROWN
RED
BLUE
BLACK
(ANP7542-B)
(ANP7542-B)
NO NEED SCREW
NO NEED SCREW
Production code
CMKM-P3X

SIDE B


CN5001
CN5003
CN5303
CN5301
LF
330 320 310 300 290 280 270 260 250 240 230 220 210 200 190 180 170

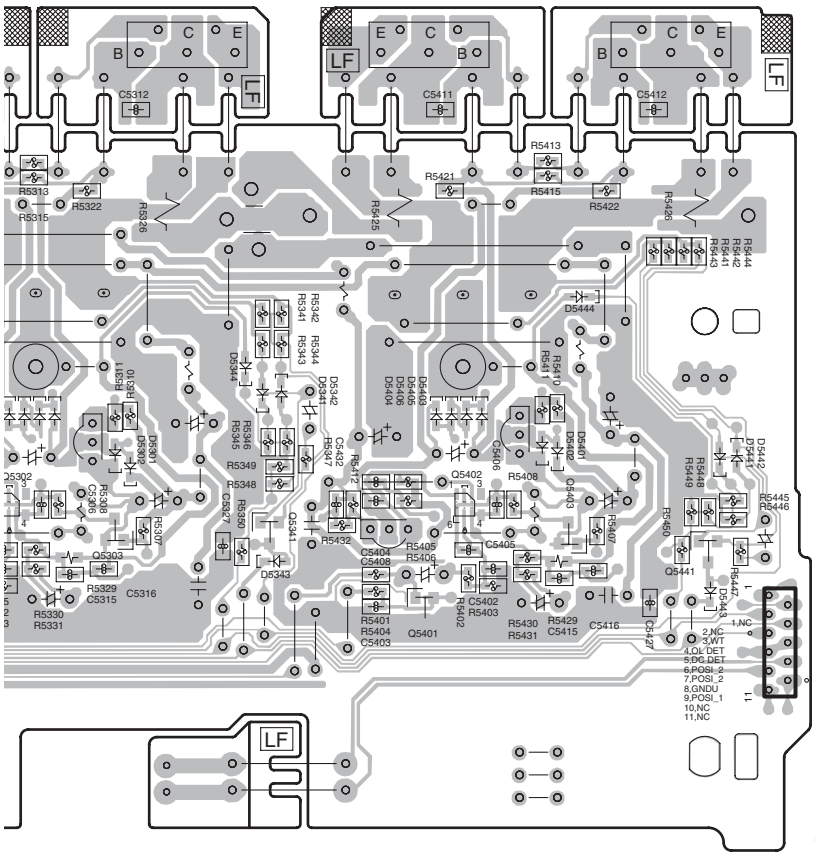
SIDE B

Q POWER AMP L ASSY



(ANP7542-B)

R POWER AMP R ASSY



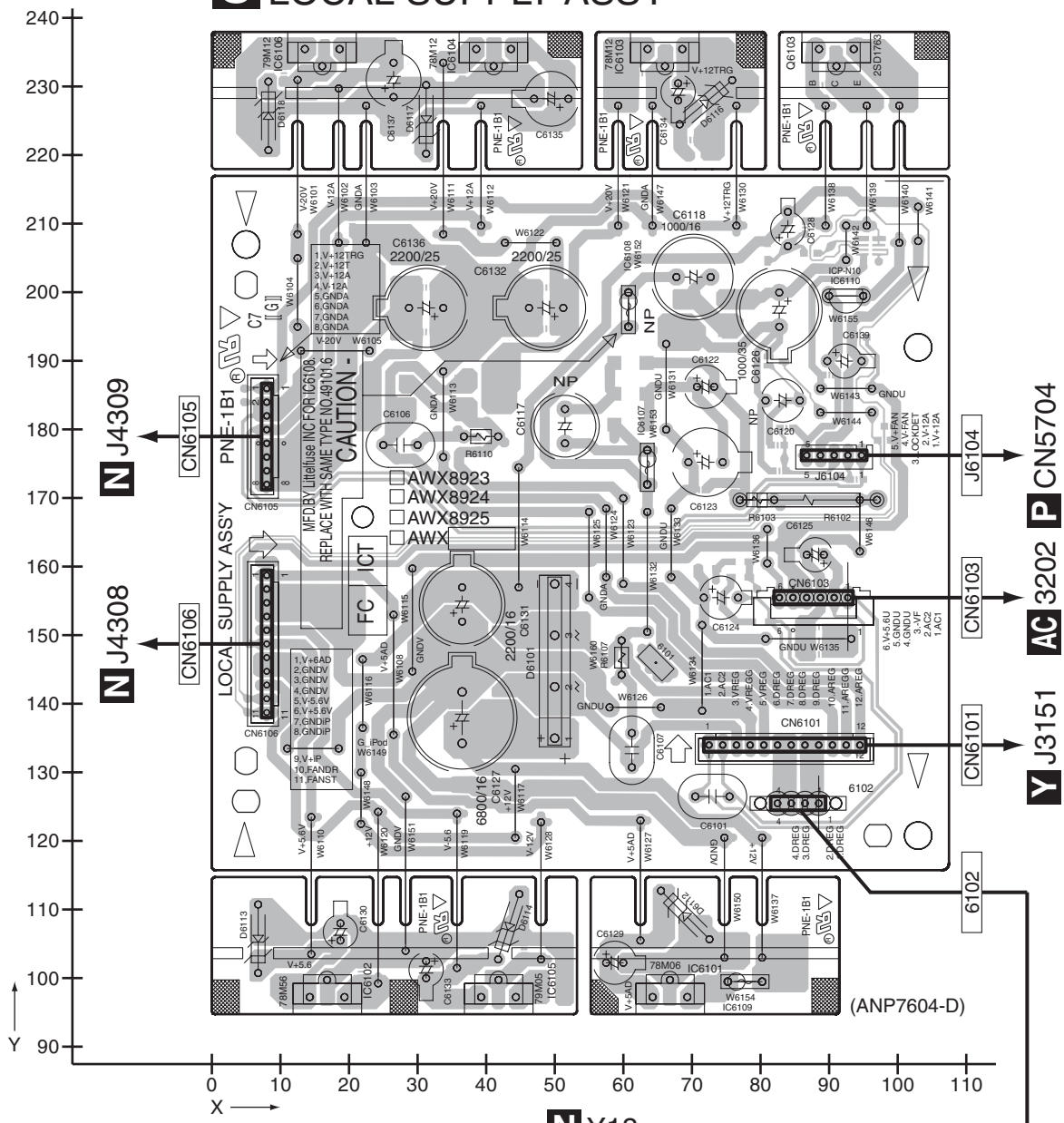
(ANP7542-B)

11.15 LOCAL SUPPLY and DC/DC ASSYS

SIDE A

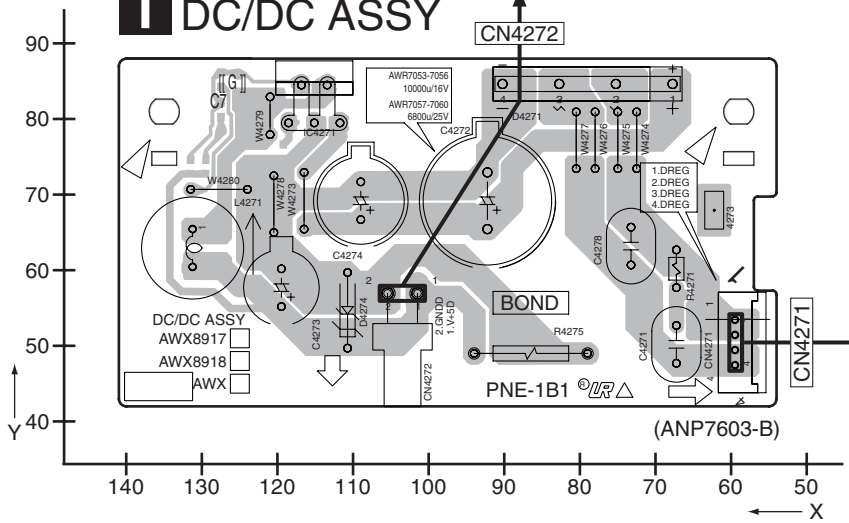
SIDE A

S LOCAL SUPPLY ASSY



N Y18

T DC/DC ASSY

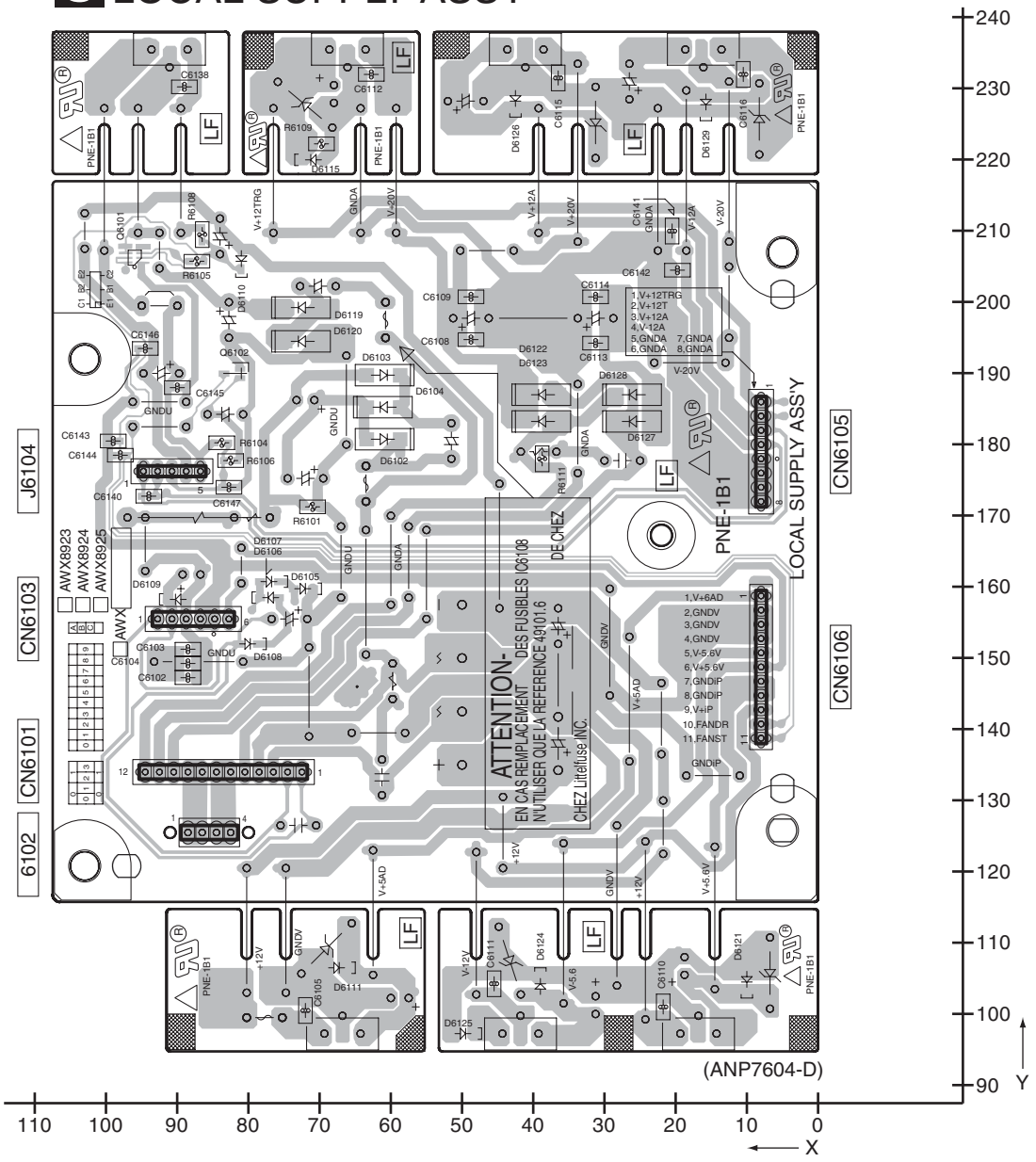


S T

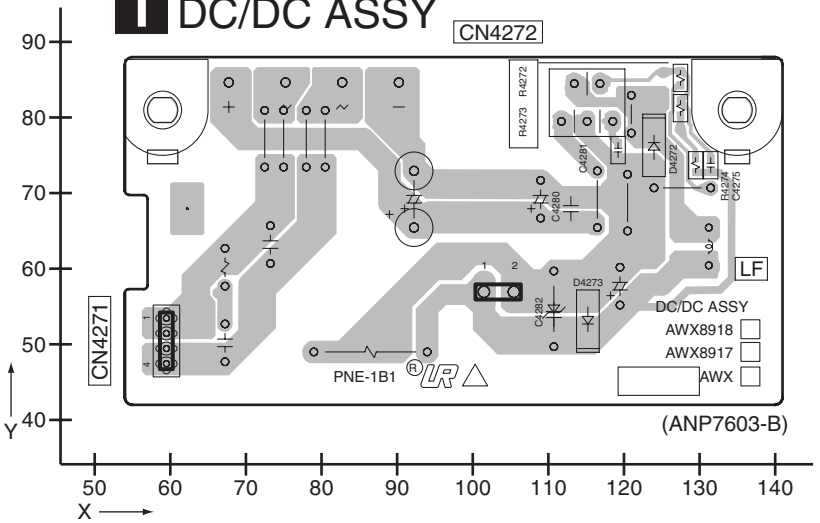
S T

SIDE B

S LOCAL SUPPLY ASSY

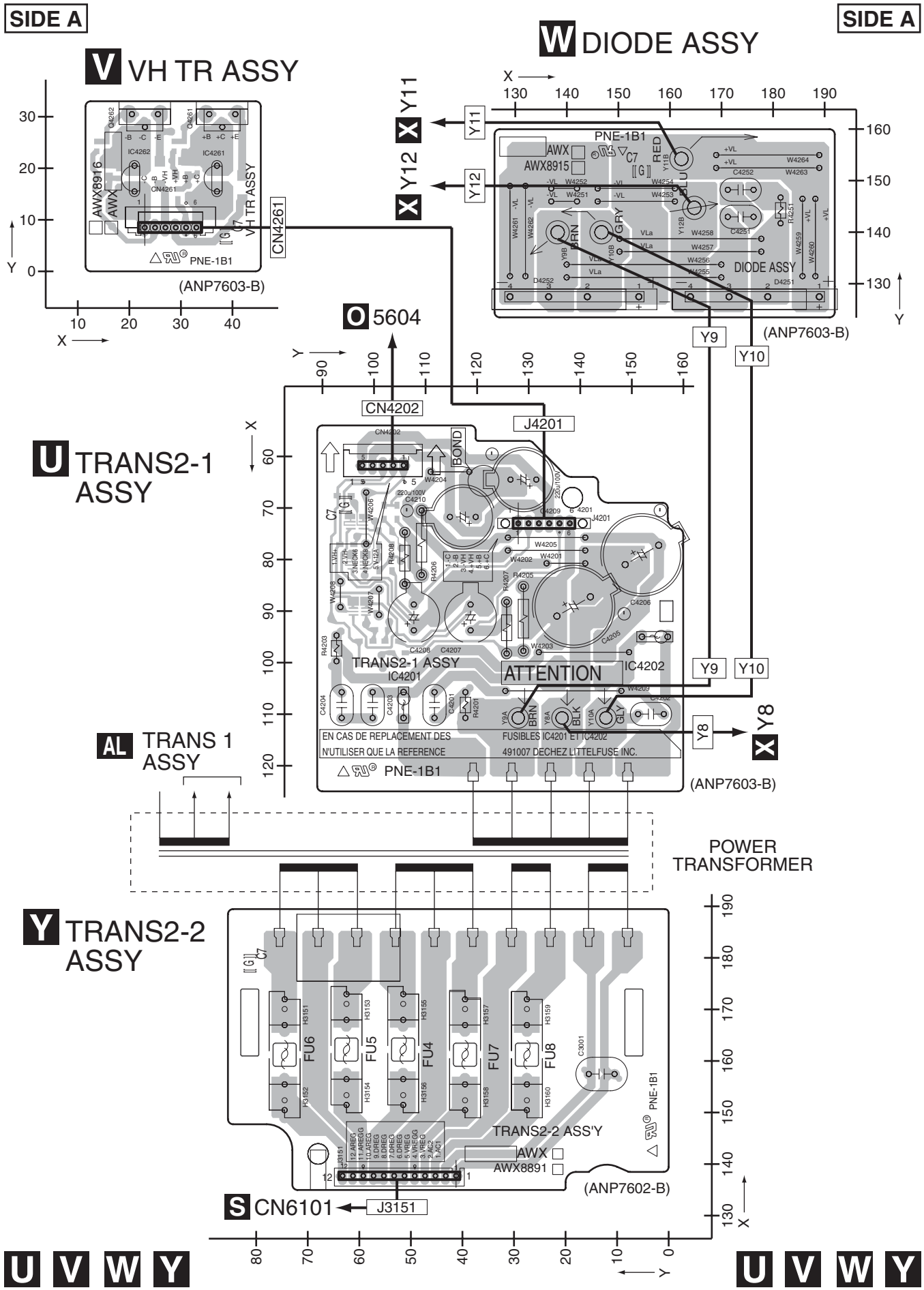


T DC/DC ASSY



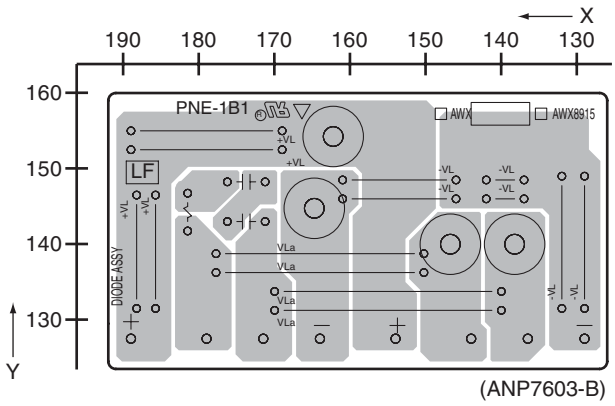
S T

11.16 TRANS2-1, VH-TR, DIODE and TRANS2-2 ASSYS



SIDE B

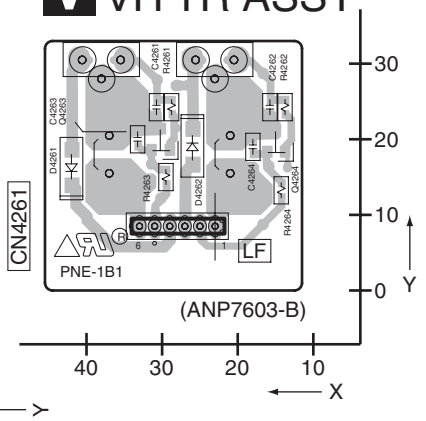
W DIODE ASSY



(ANP7603-B)

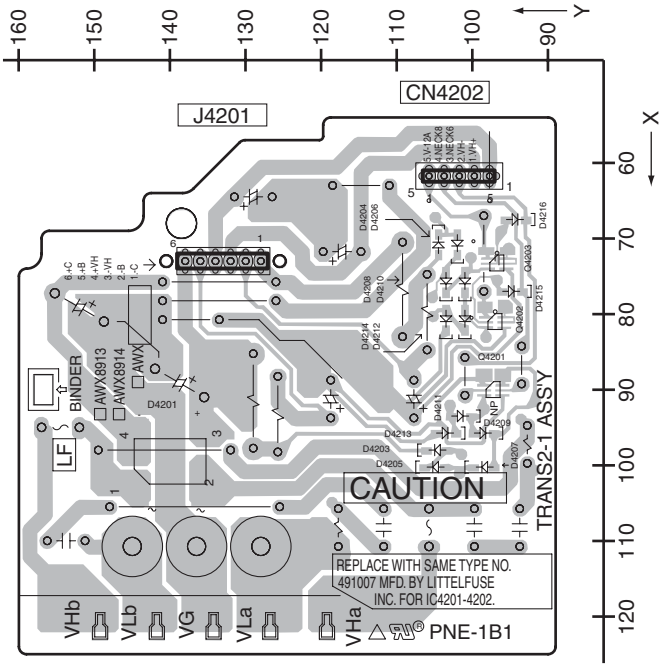
SIDE B

V VH TR ASSY



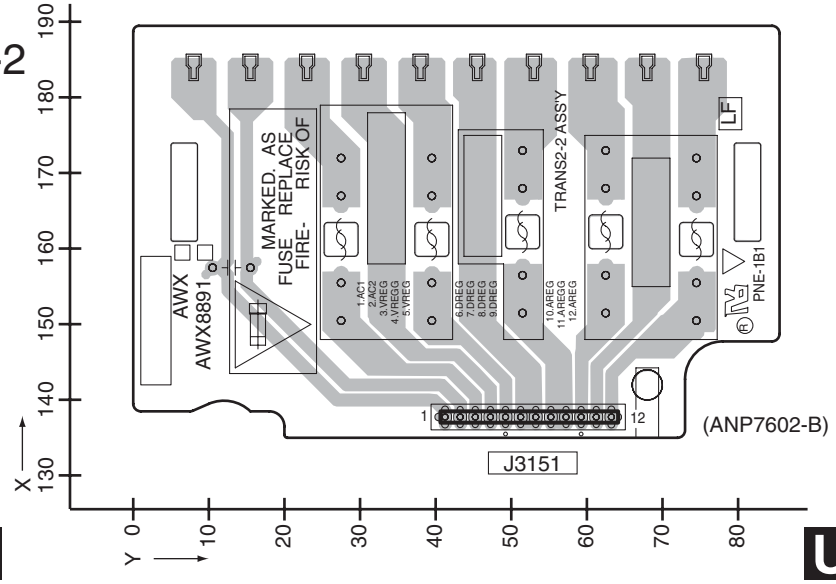
(ANP7603-B)

U TRANS2-1 ASSY



(ANP7603-B)

Y TRANS2-2 ASSY



(ANP7602-B)

U V W Y

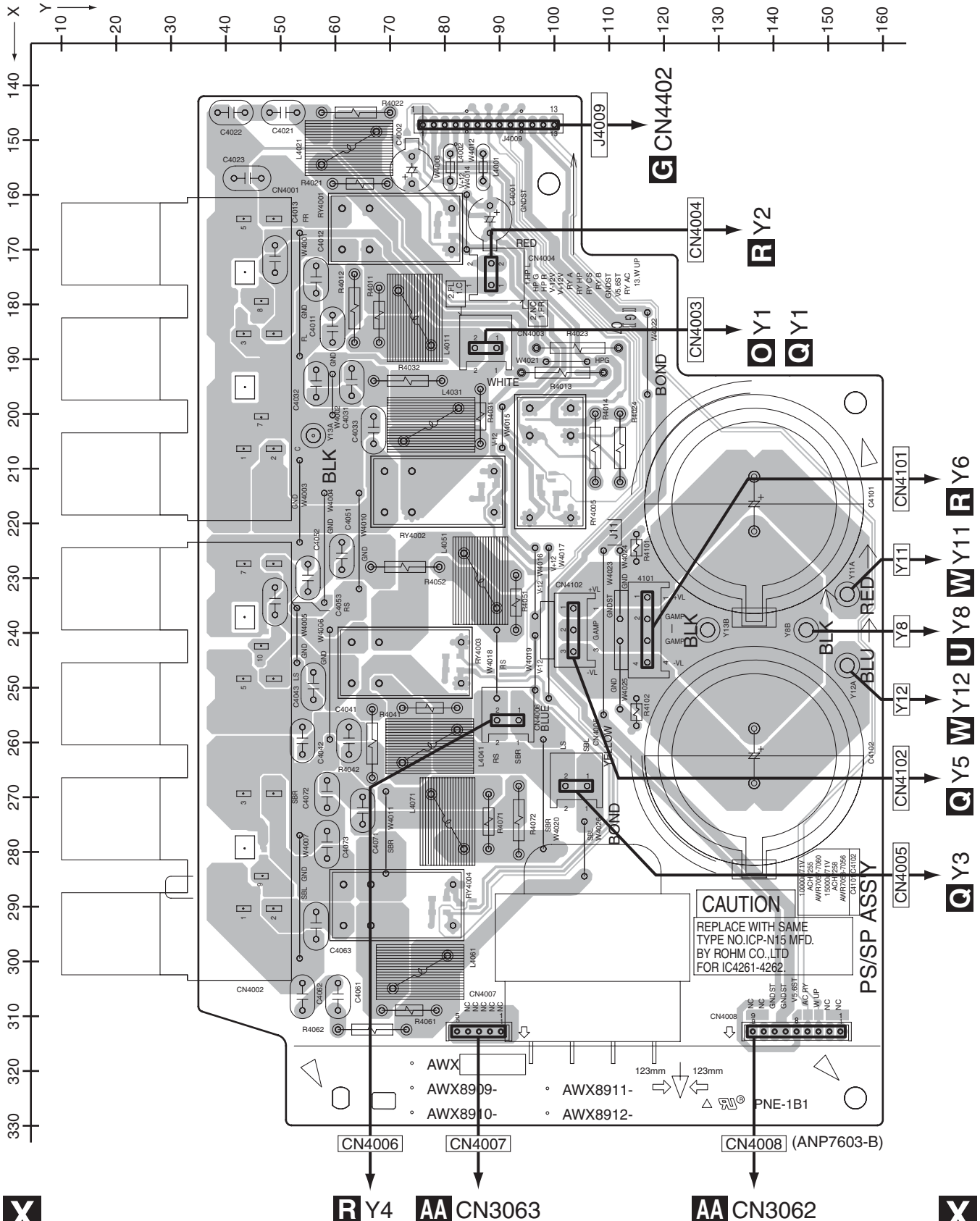
U V W Y

11.17 SP/PS ASSY

SIDE A

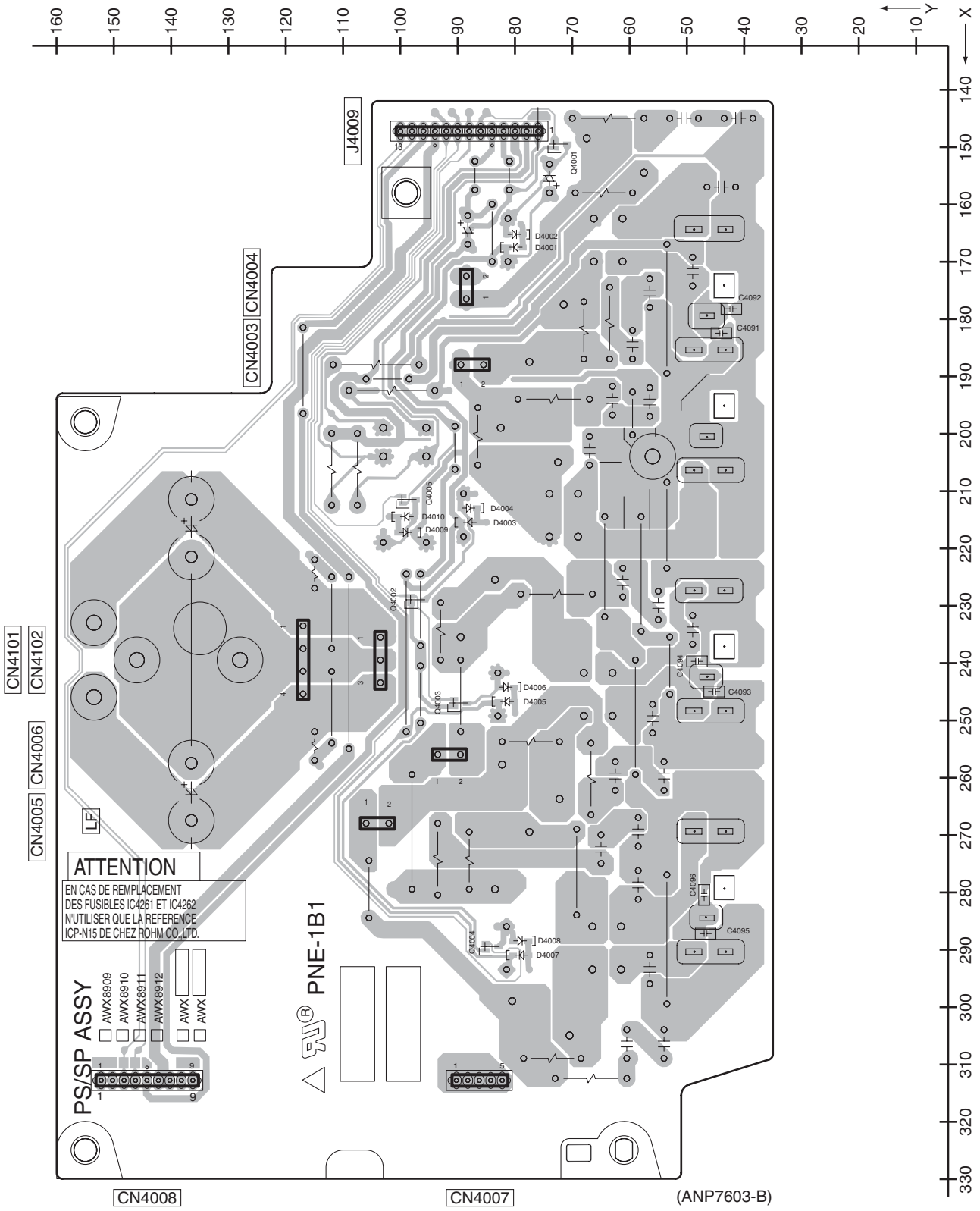
SIDE A

X SP/PS ASSY

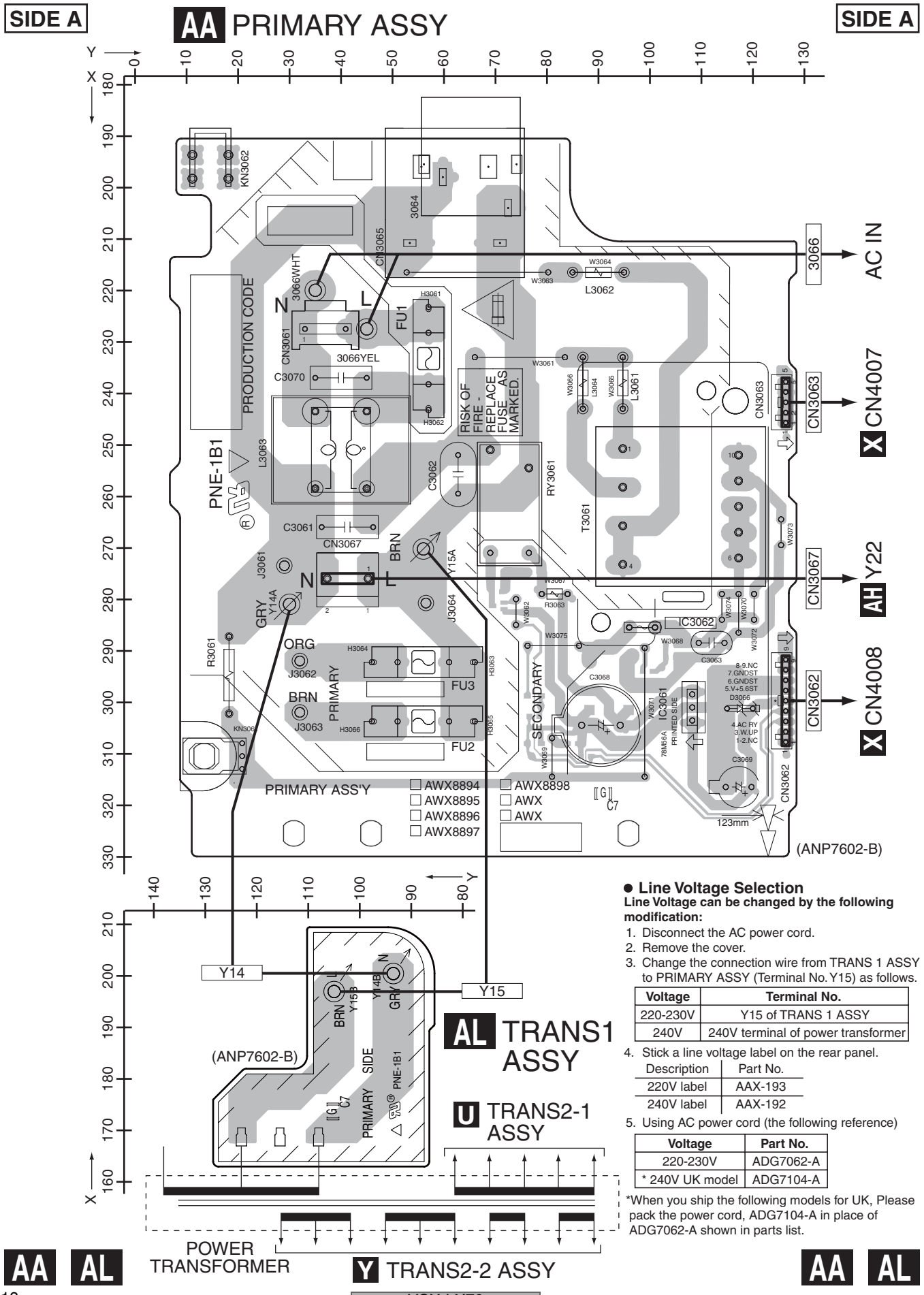


SIDE B

X SP/PS ASSY



11.18 TRANS1 and PRIMARY ASSYS



● Line Voltage Selection

Line Voltage can be changed by the following modification:

1. Disconnect the AC power cord.
2. Remove the cover.
3. Change the connection wire from TRANS 1 ASSY to PRIMARY ASSY (Terminal No. Y15) as follows.

Voltage	Terminal No.
220-230V	Y15 of TRANS 1 ASSY
240V	240V terminal of power transformer

4. Stick a line voltage label on the rear panel.

Description	Part No.
220V label	AAX-193
240V label	AAX-192

5. Using AC power cord (the following reference)

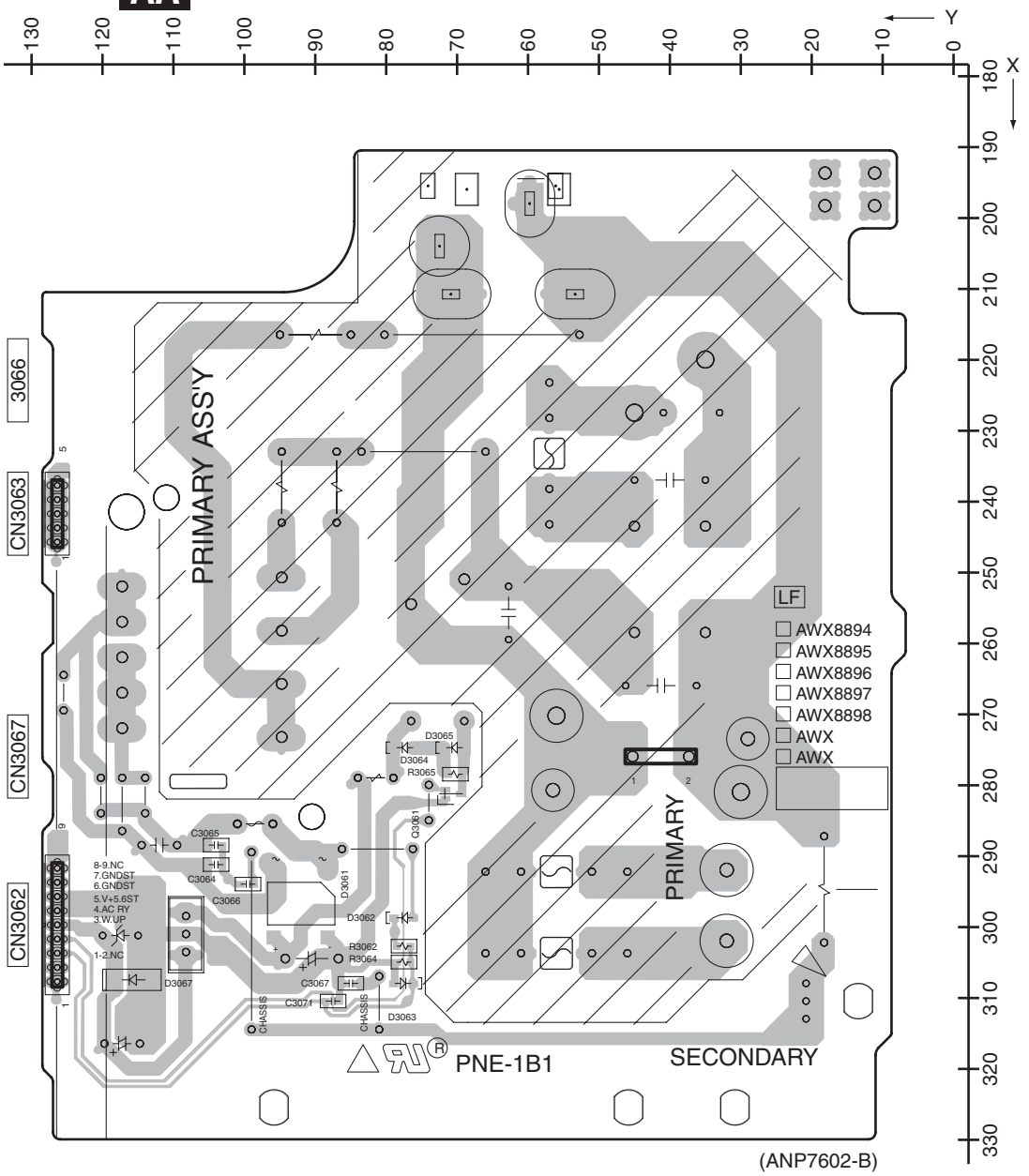
Voltage	Part No.
220-230V	ADG7062-A
* 240V UK model	ADG7104-A

*When you ship the following models for UK, Please pack the power cord, ADG7104-A in place of ADG7062-A shown in parts list.

SIDE B

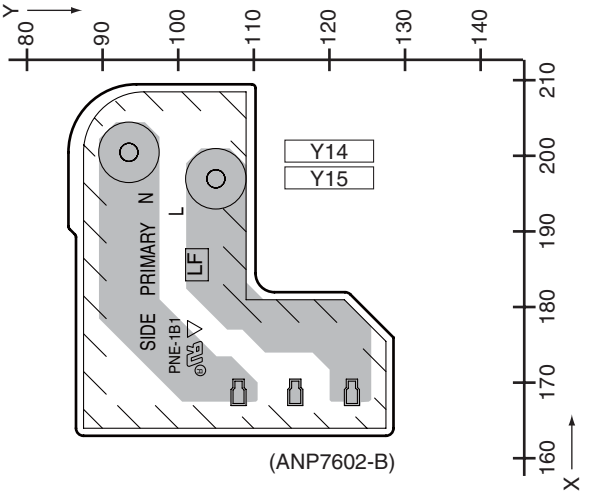
AA PRIMARY ASSY

SIDE B



(ANP7602-B)

AL TRANS1 ASSY



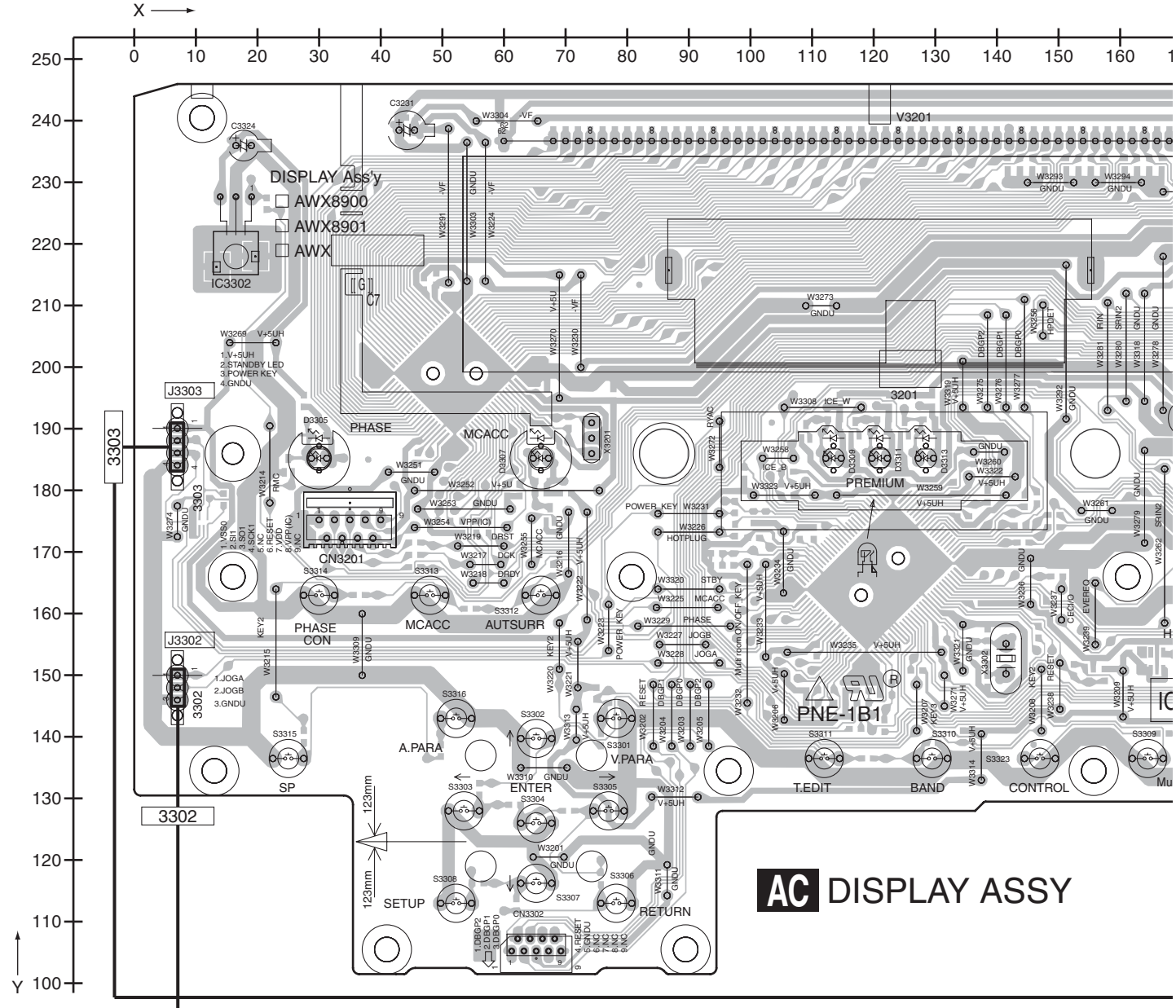
(ANP7602-B)

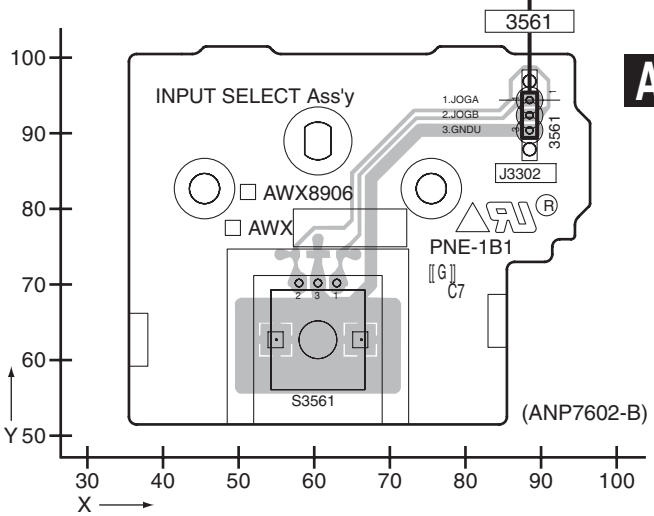
AA AL

AA AL

11.19 POWER SW, VOLUME, DISPLAY and INPUT SELECT ASSYS

SIDE A

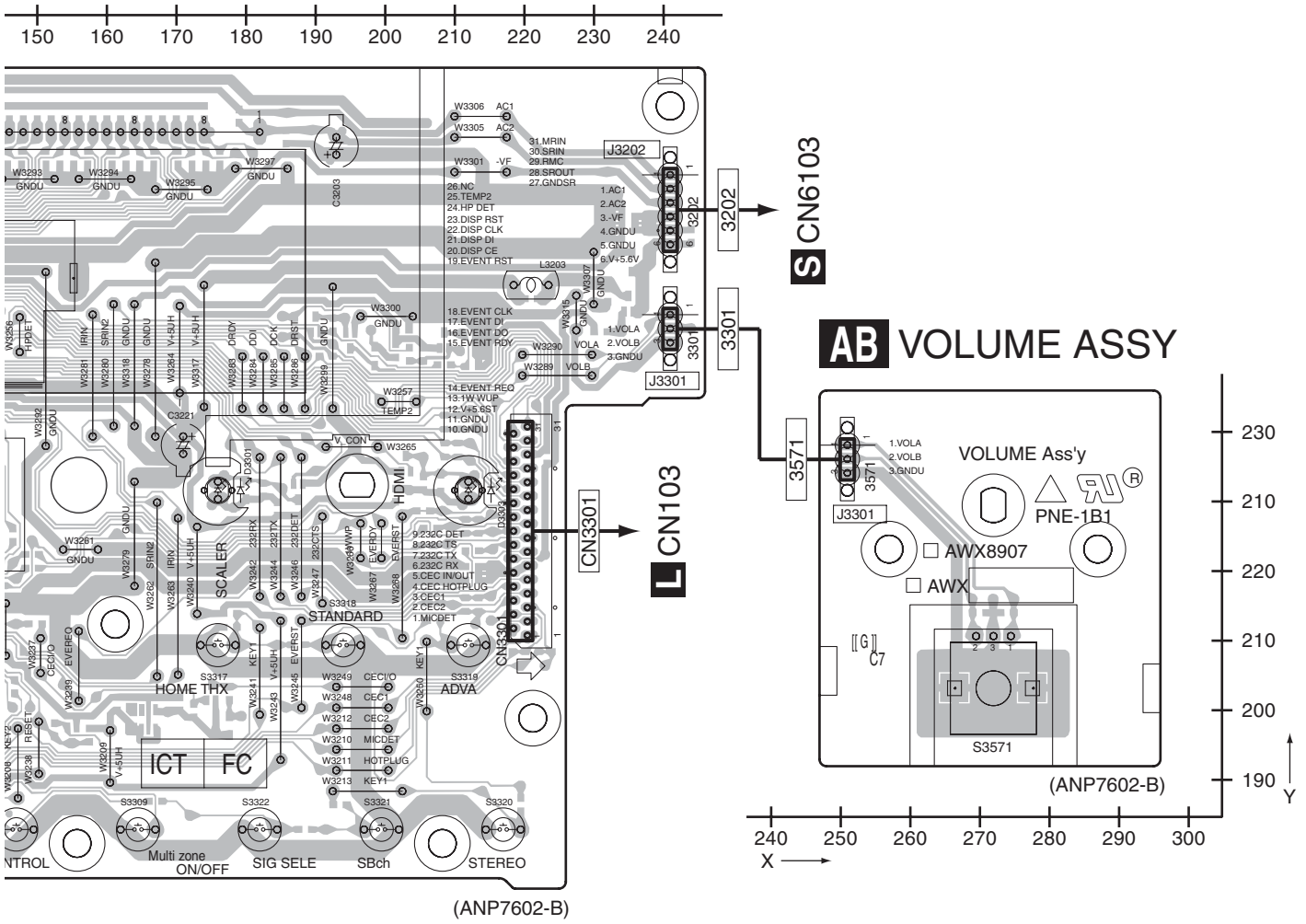




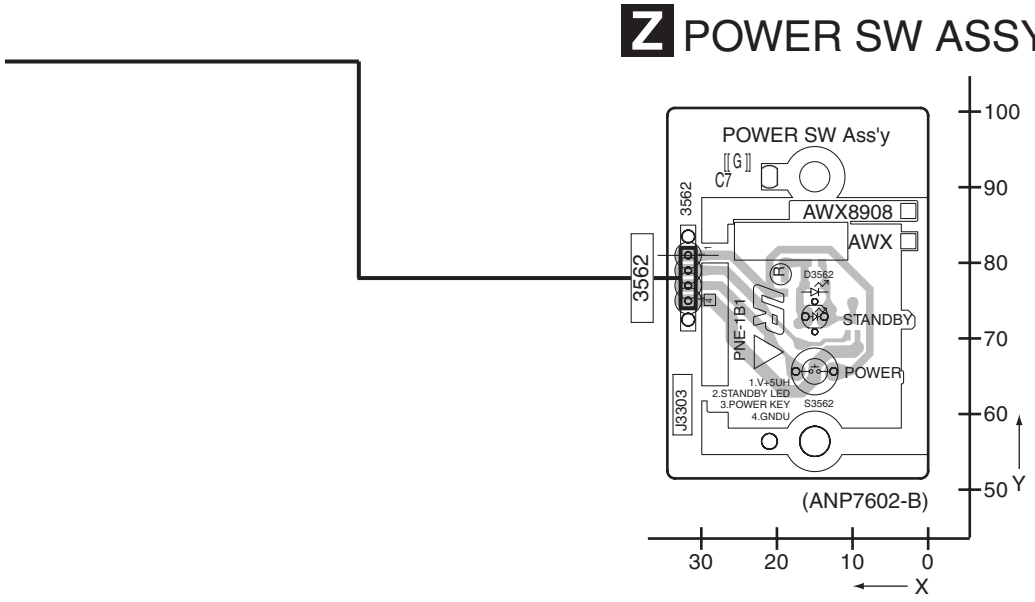
AD INPUT SELECT ASSY

AC **AD**

SIDE A



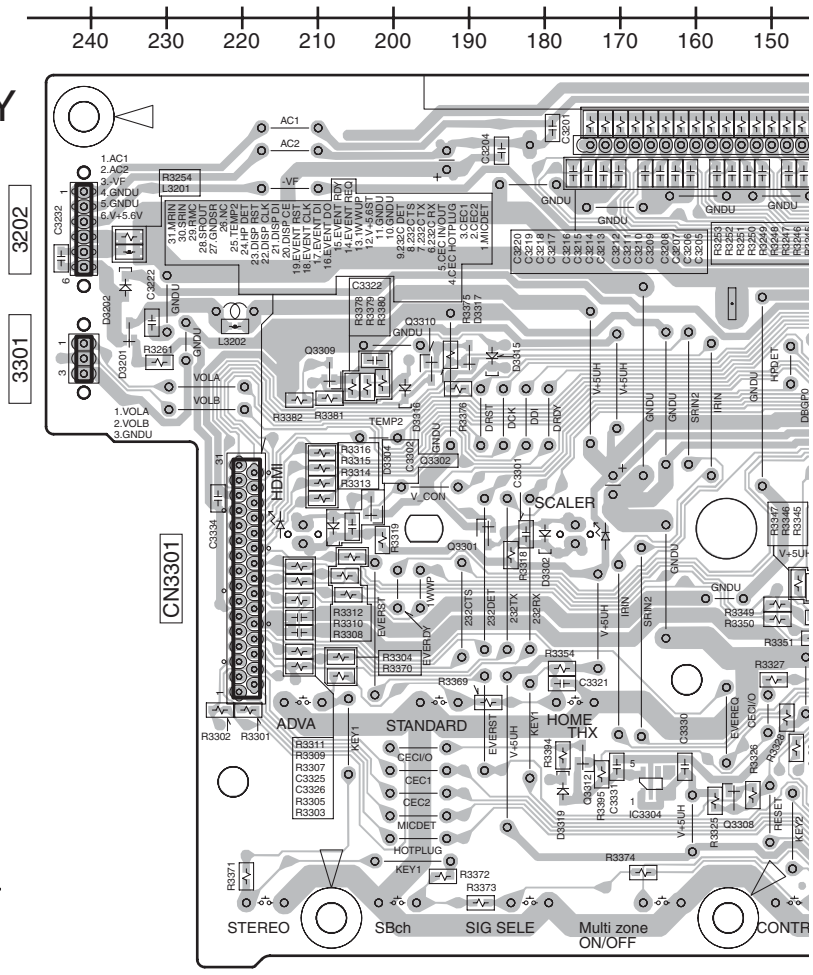
SY



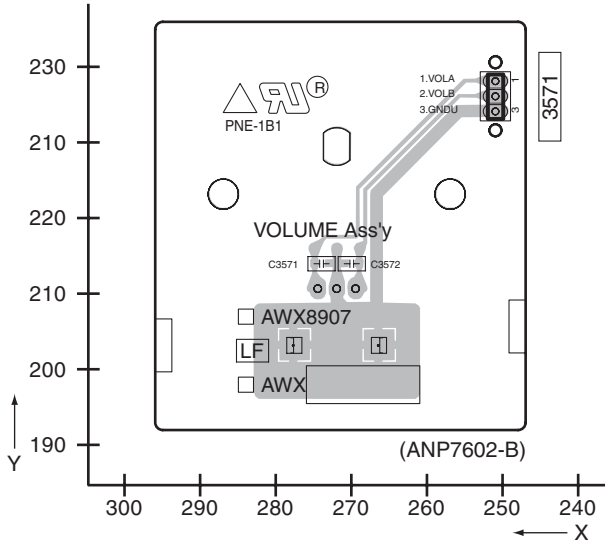
Z AB AC

SIDE B

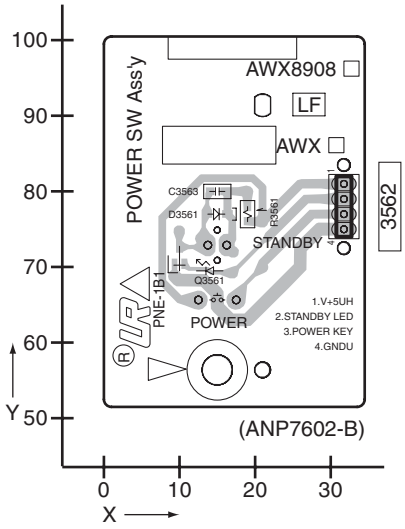
AC DISPLAY ASSY



AB VOLUME ASSY

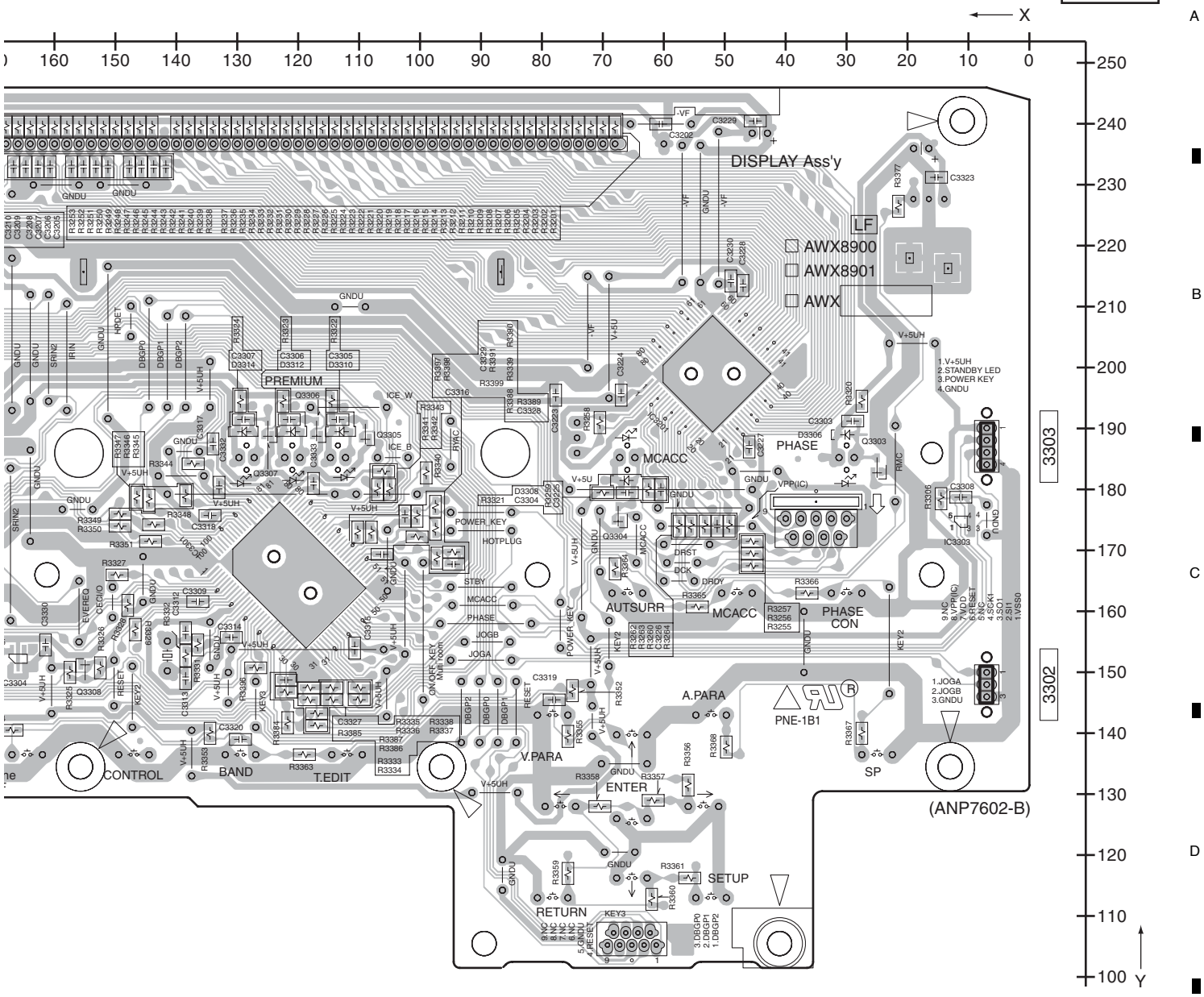


Z POWER SW ASSY

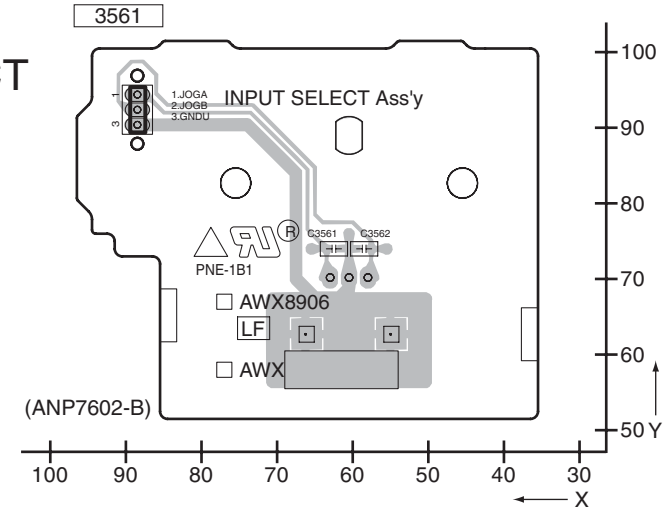


Z AB AC

SIDE B



AD INPUT SELECT ASSY

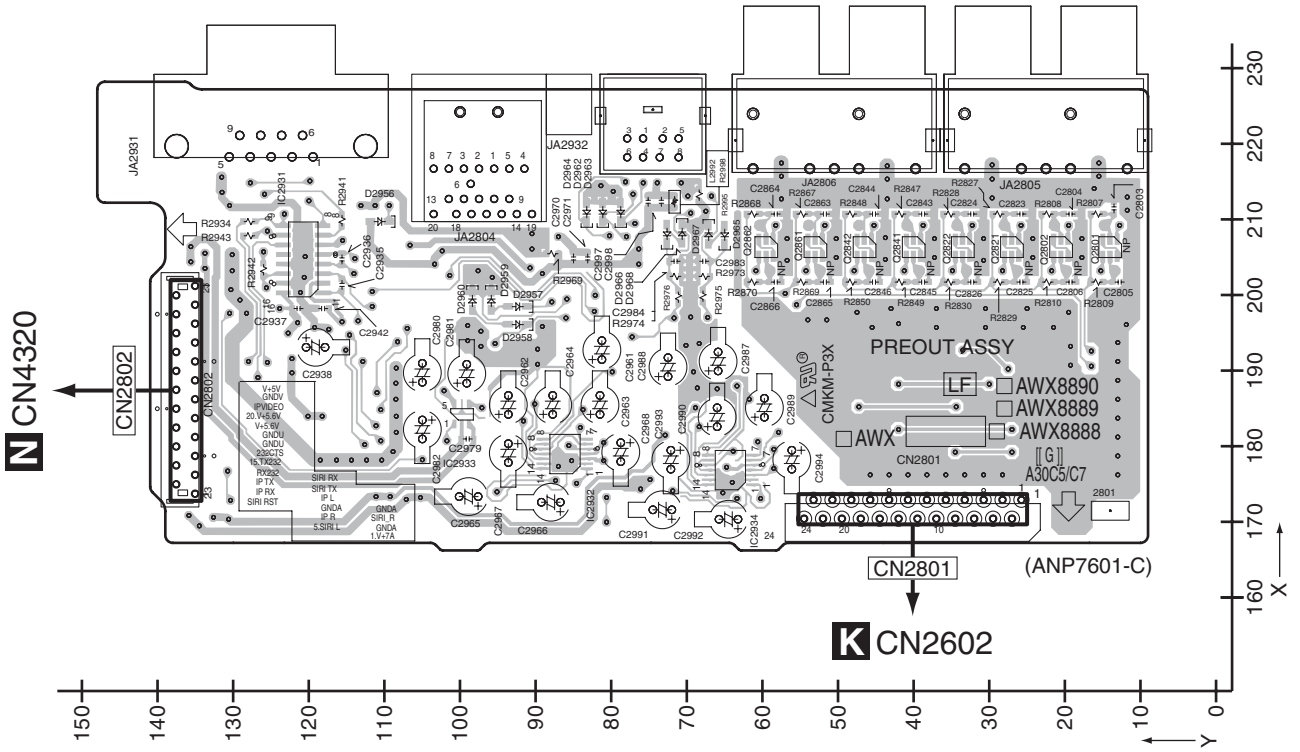


11.20 PREOUT & CONTROL ASSY

SIDE A

SIDE A

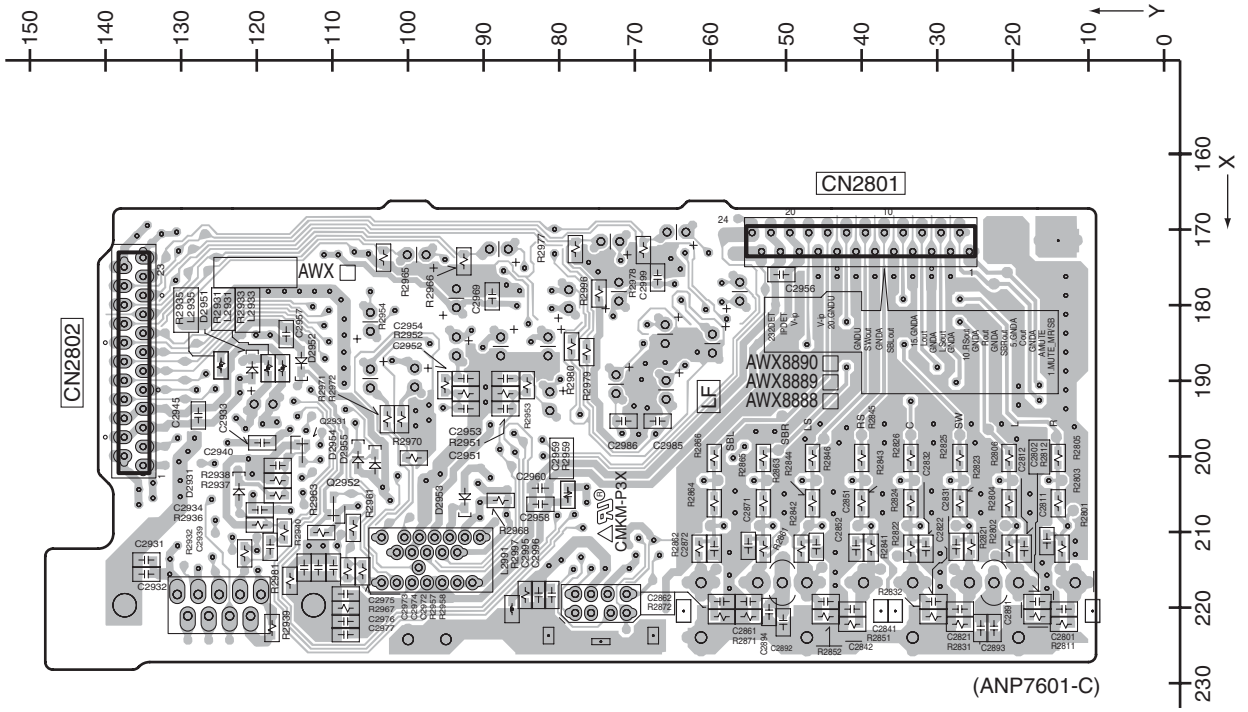
AE PREOUT & CONTROL ASSY



SIDE B

SIDE B

AE PREOUT & CONTROL ASSY



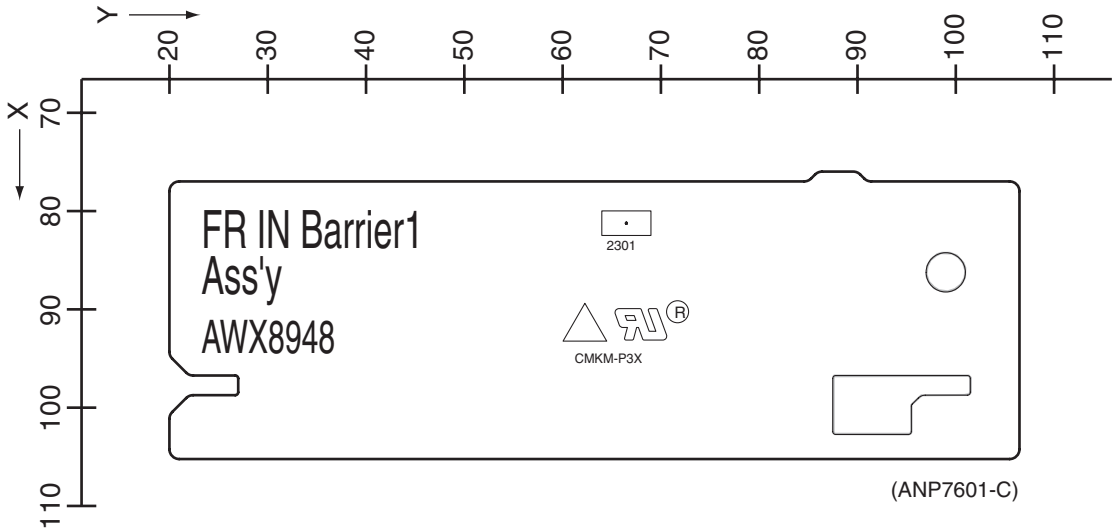
AE

AE

11.21 FR BARRIER 1 ASSY

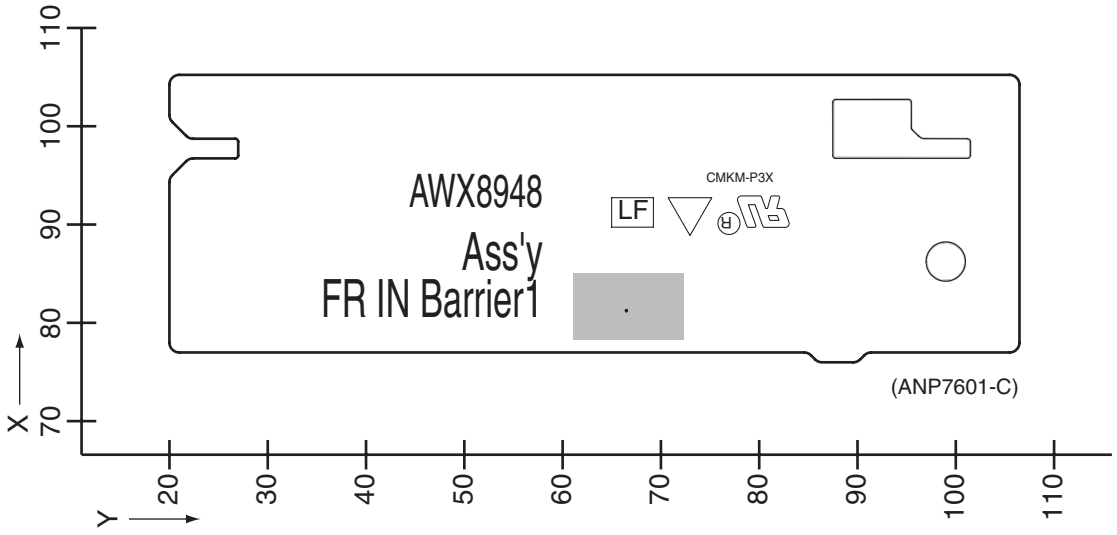
SIDE A **SIDE A**

AF FR IN BARRIER 1 ASSY



SIDE B **SIDE B**

AF FR IN BARRIER 1 ASSY



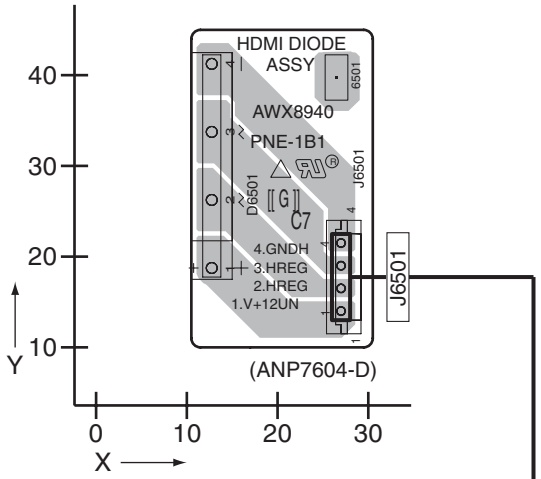
AF **AF**

11.22 HDMI POWER, HDMI TRANS and HDMI DIODE ASSYS

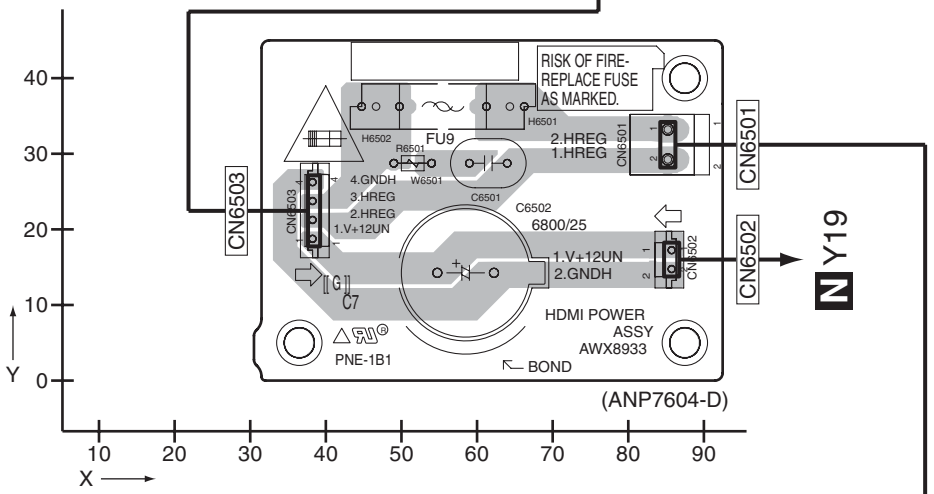
SIDE A

SIDE A

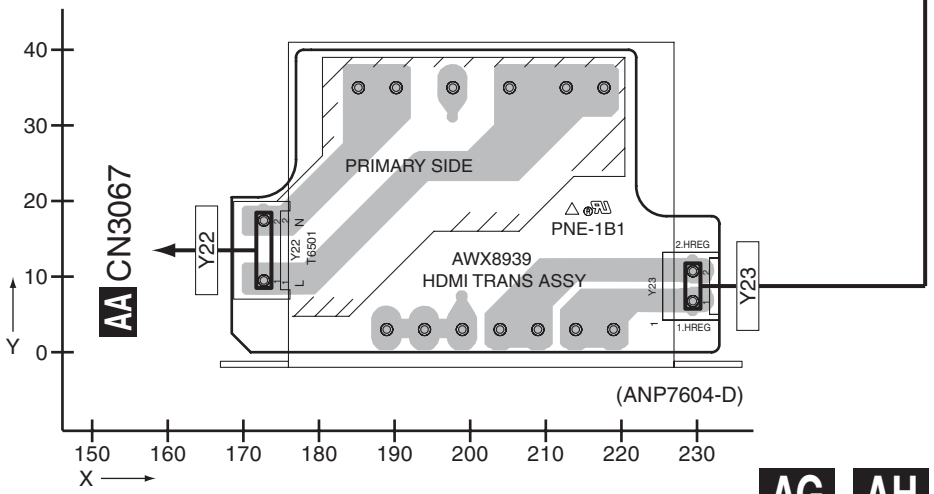
AI HDMI DIODE ASSY



AG HDMI POWER ASSY



AH HDMI TRANS ASSY



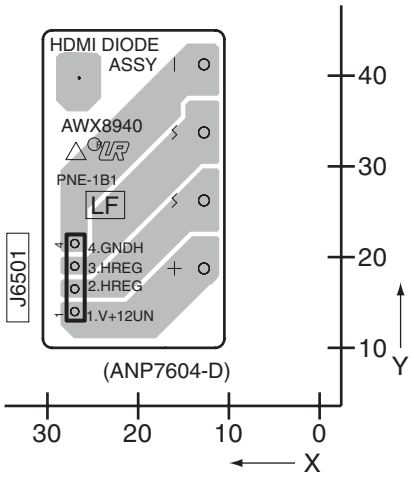
AG AH AI

AG AH AI

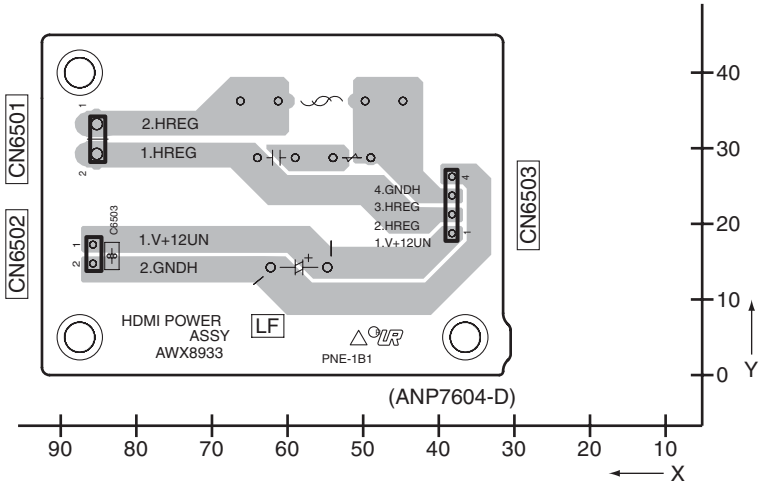
SIDE B

SIDE B

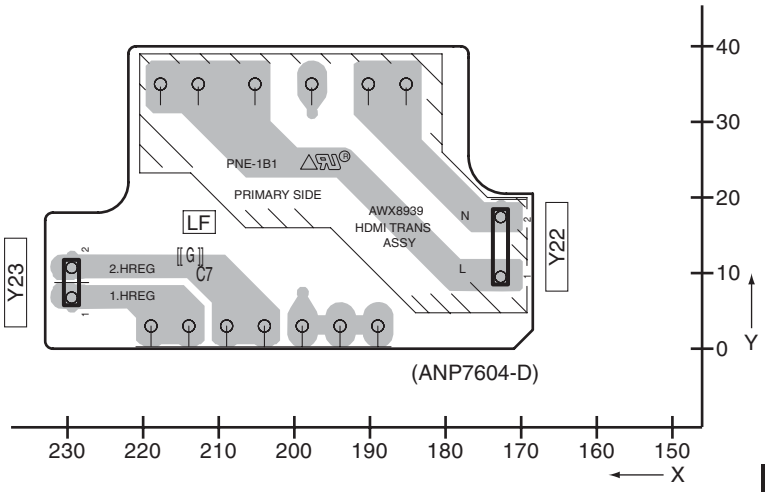
AI HDMI DIODE ASSY



AG HDMI POWER ASSY



AH HDMI TRANS ASSY



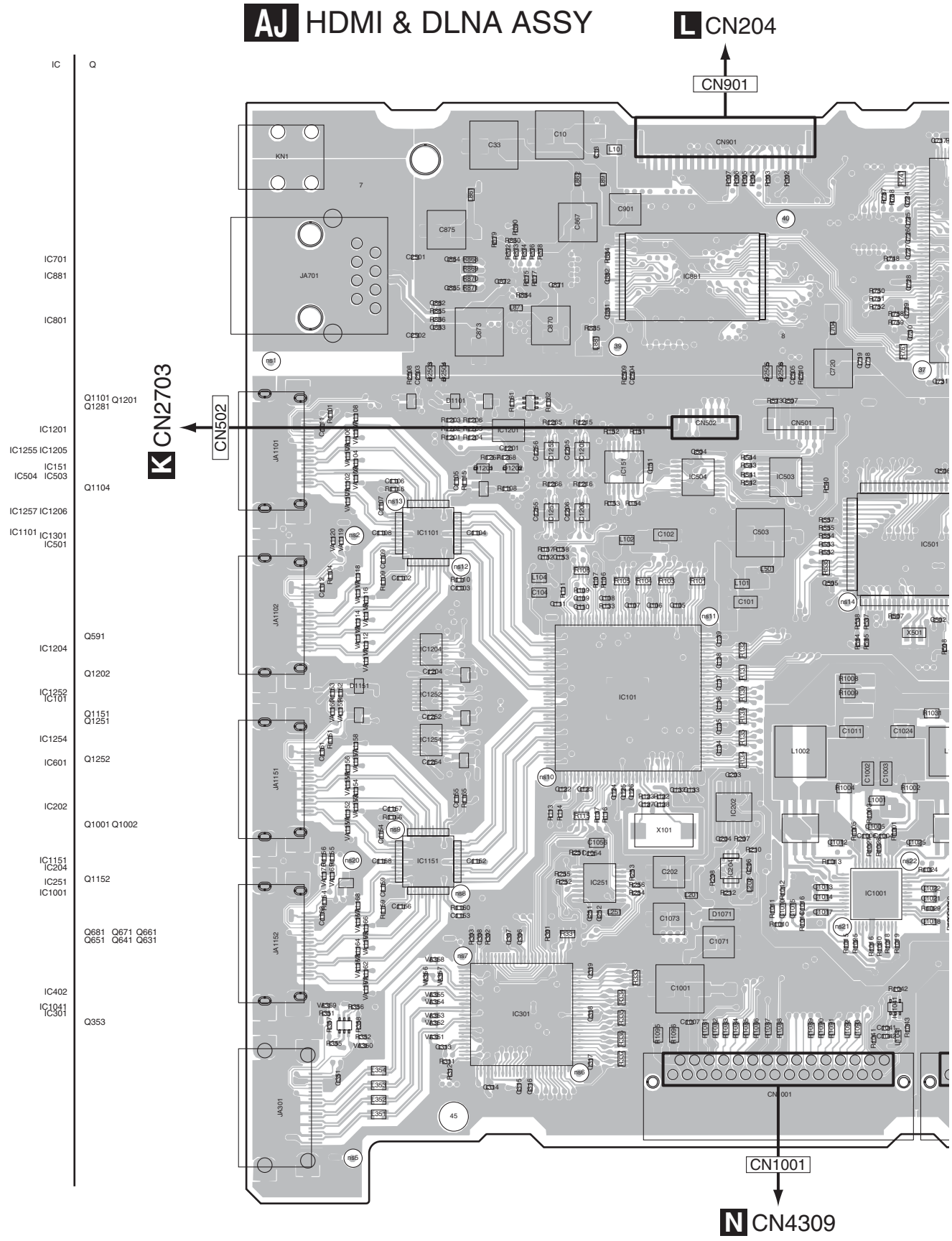
AG AH AI

AG AH AI

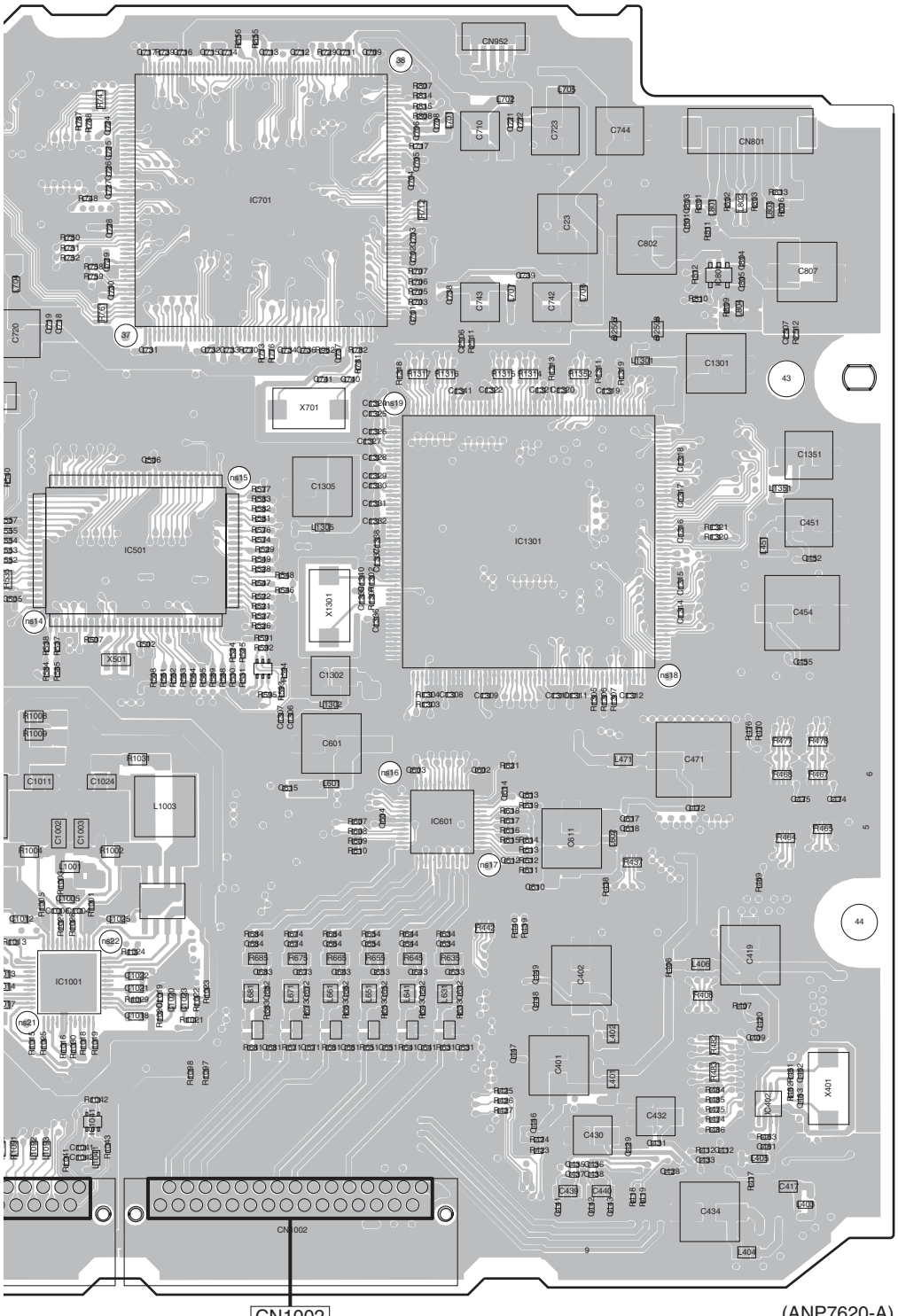
5 6 7 8

11.23 HDMI & DLNA ASSY (VSX-LX70)

SIDE A



SIDE A



CN1002

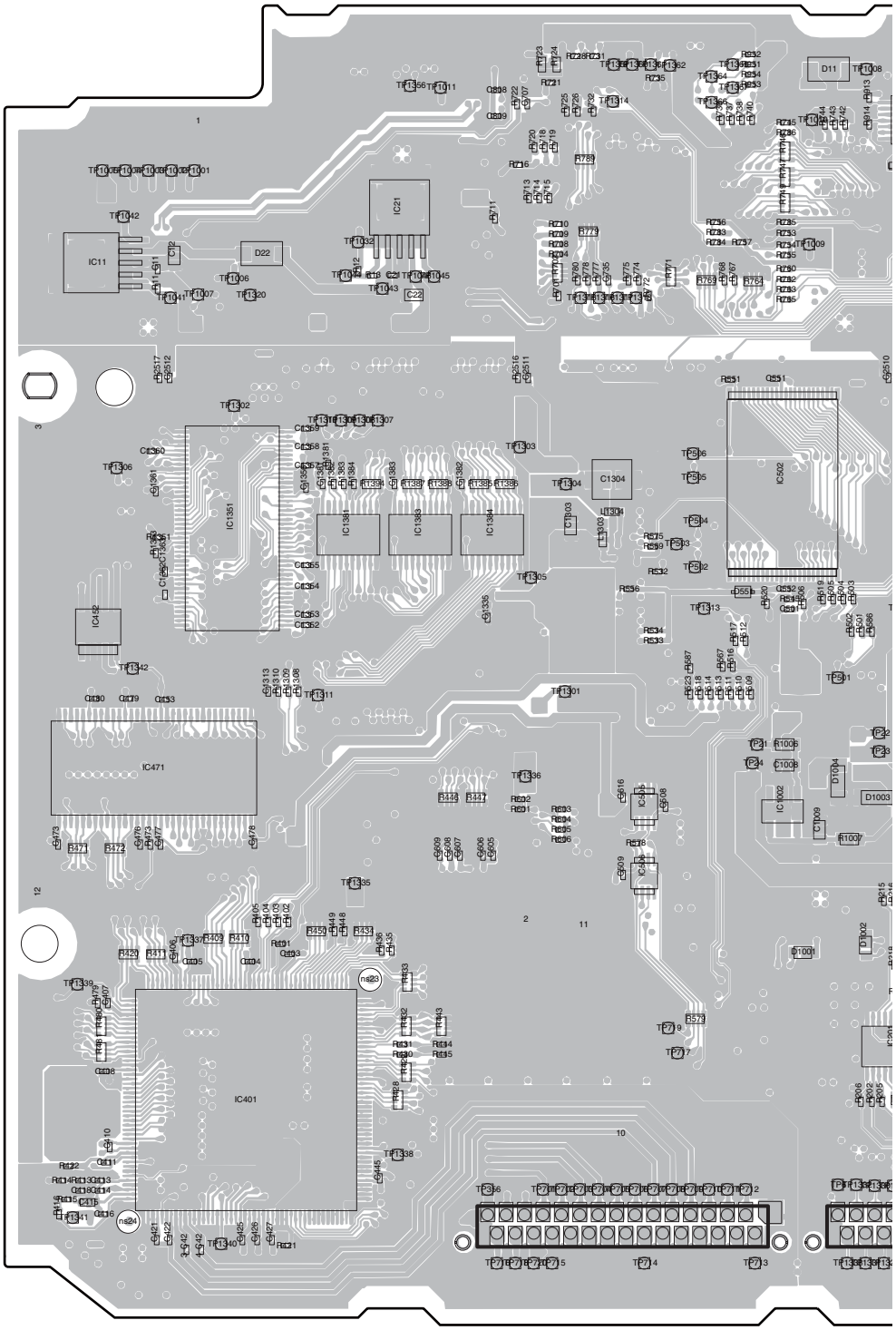
(ANP7620-A)

9 **N** CN4308

SIDE B

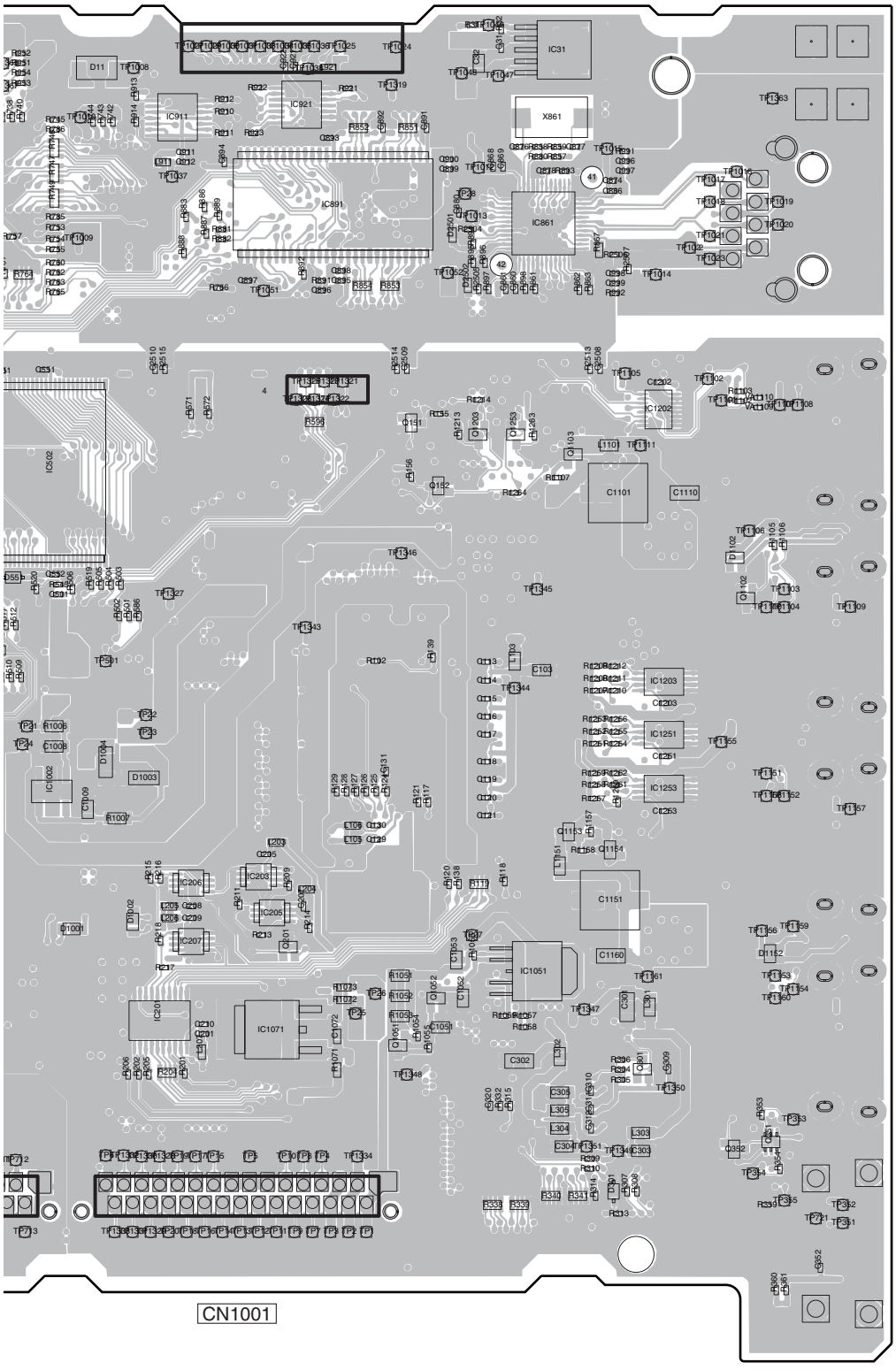
AJ HDMI & DLNA ASSY

IC	Q
IC31	
IC921	
IC911	
IC21	
IC891	
IC861	
IC11	
IC1202	
	Q151 Q1203 Q1253
	Q1103
IC502	
	Q152
IC1351	
IC1383 IC1384	
IC1381	
	Q1102
IC452	
IC1203	
IC1251	
IC471	
IC505 IC1002	
IC1253	
	Q1153
IC506	Q1154
IC203	
IC206	
IC205	
IC207	Q201
IC1051	
	Q1052
IC201	
IC1071	Q1051
	Q301
IC401	
	Q351
	Q352



SIDE B

CN901



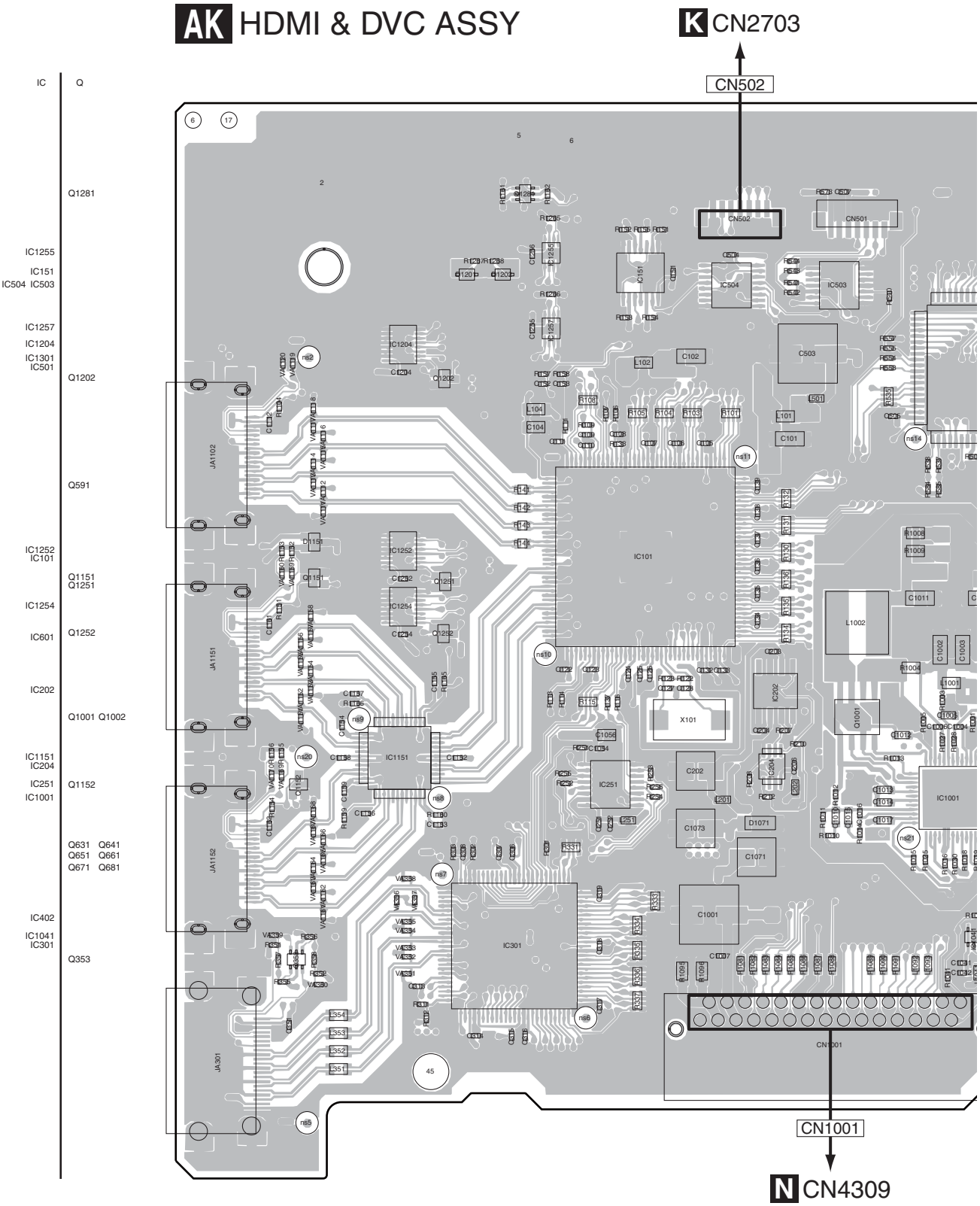
CN1001

CN502

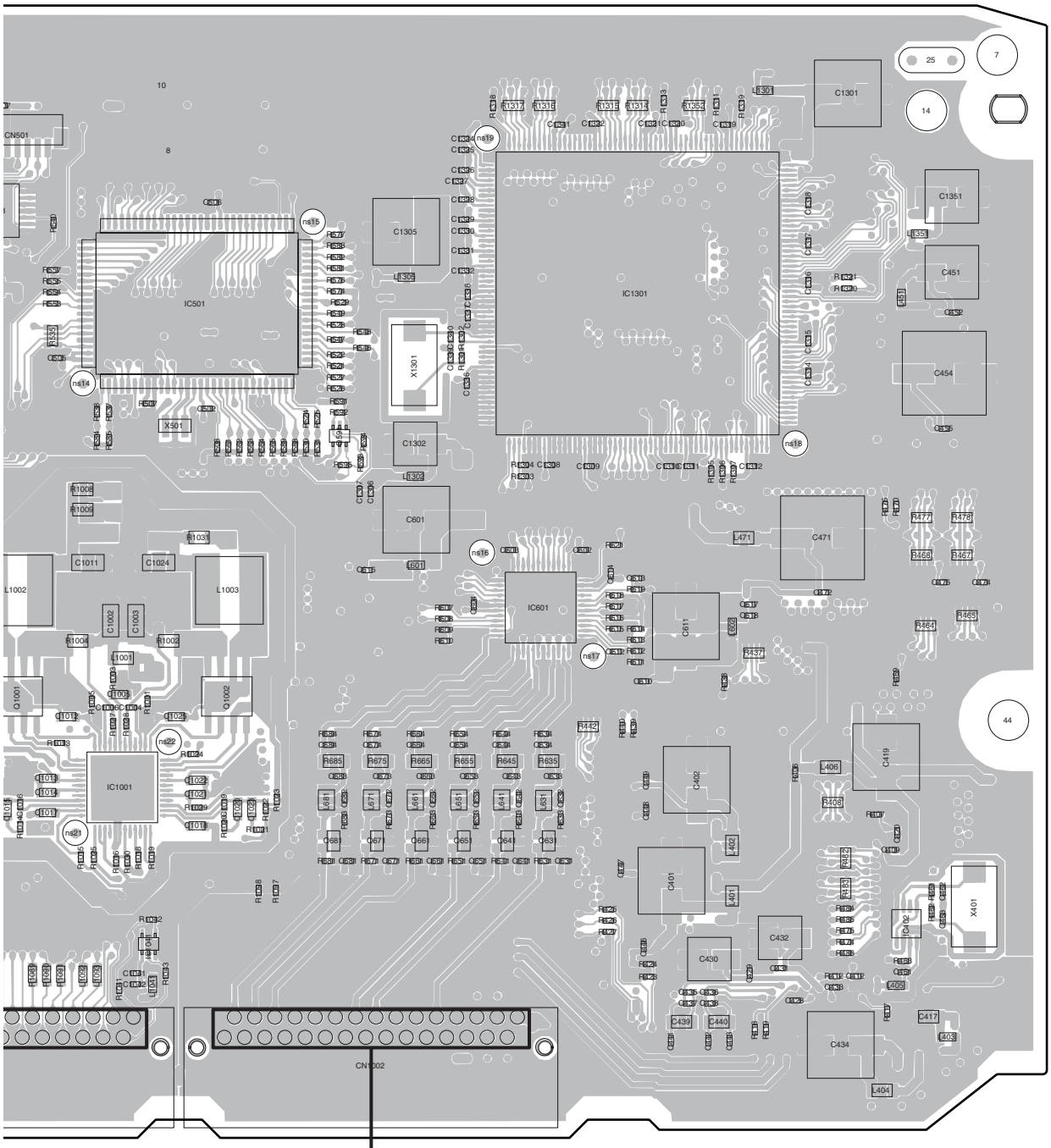
(ANP7620-A)

11.24 HDMI & DVC ASSY (VSX-LX60)

SIDE A



SIDE A



CN1002

(ANP7621-A)

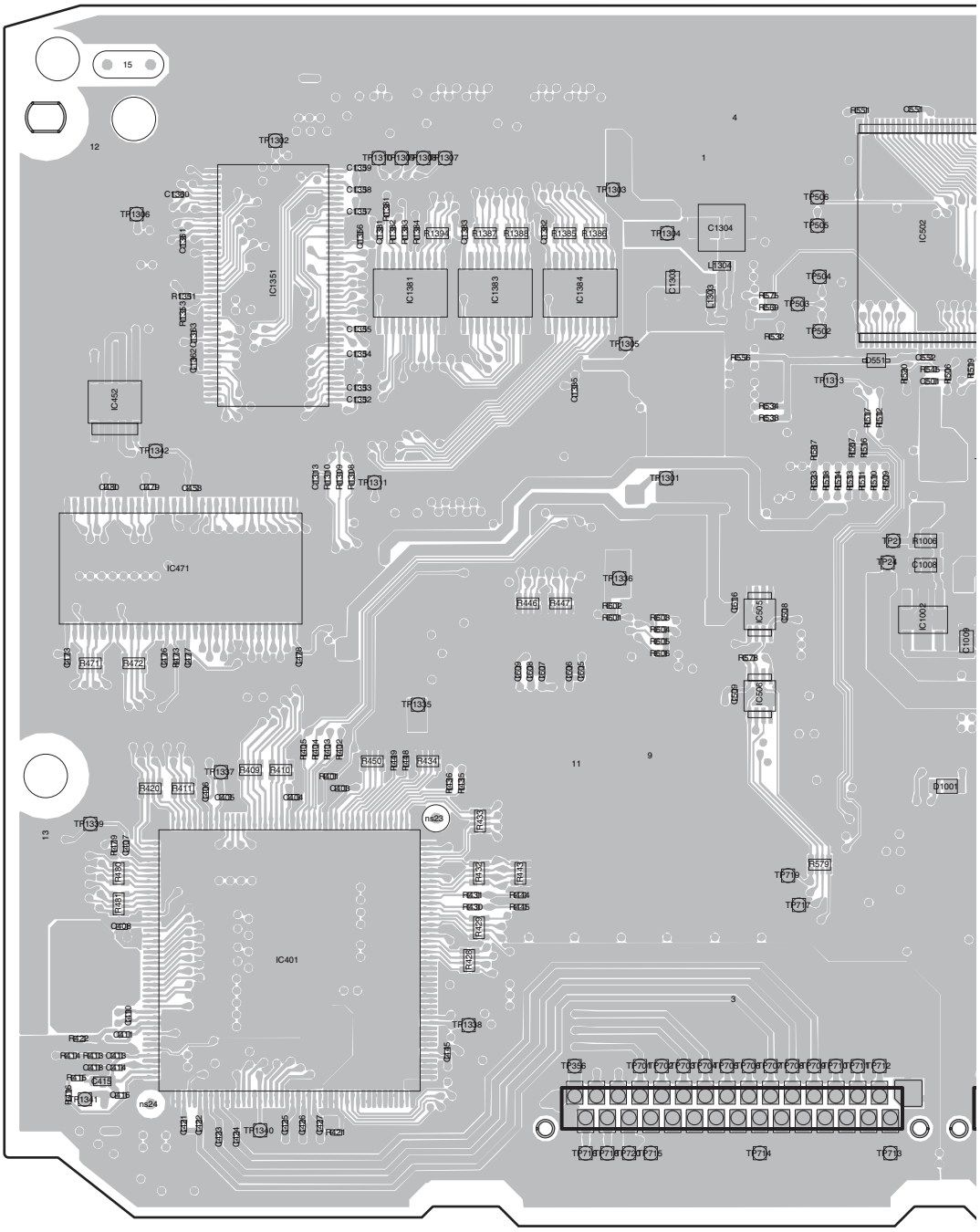
4309

N CN4308

SIDE B

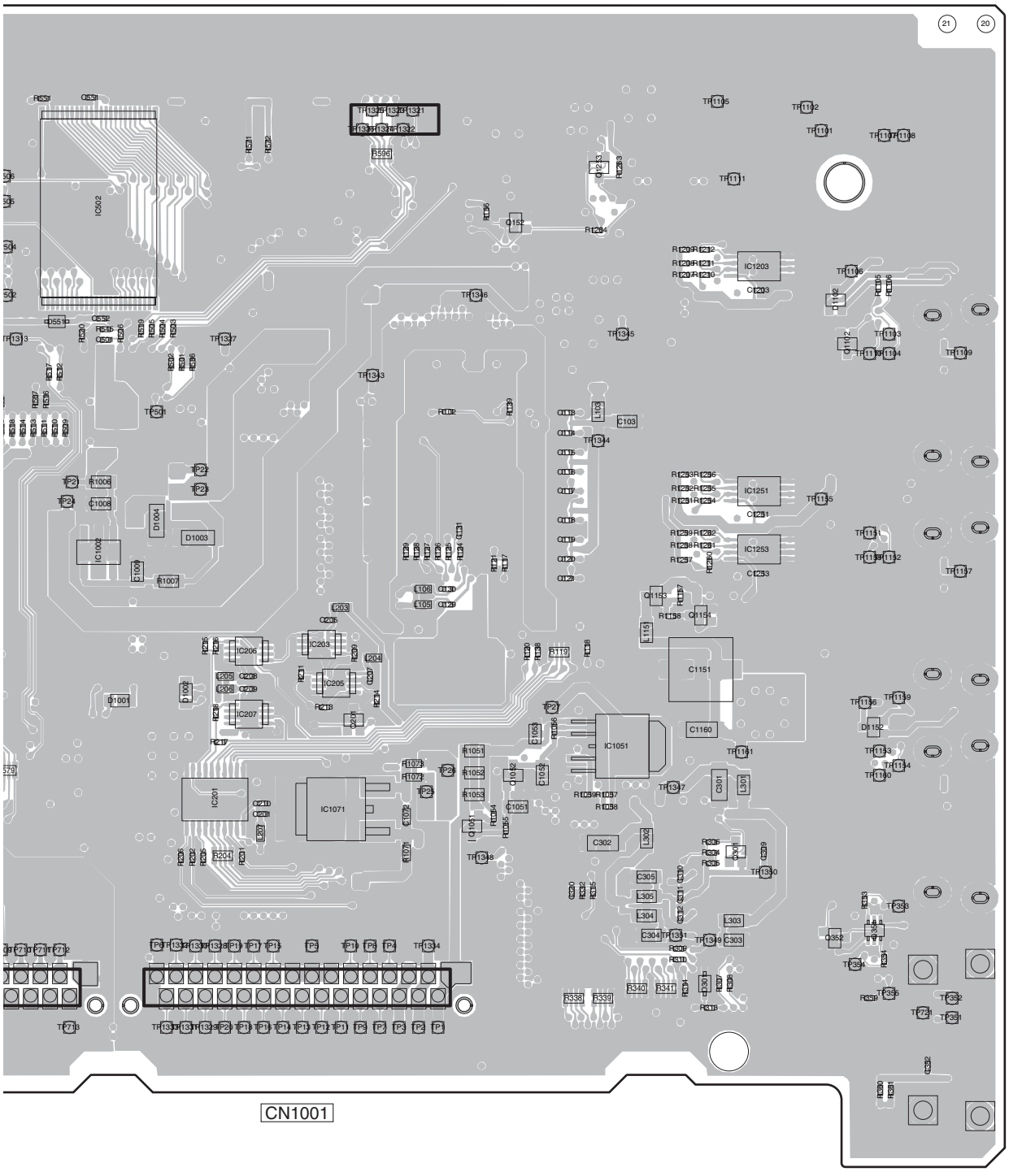
AK HDMI & DVC ASSY

IC	Q
	Q1253
IC502	Q152
IC1351 IC1381 IC1383 IC1384 IC1203	
	Q1102
IC452	
IC1251 IC471	
IC505 IC1253 IC1002	
	Q1153
IC506	Q1154
IC203 IC206	
IC205	
IC207	Q201
IC1051	
	Q1052
IC201 IC1071	
	Q1051
IC401	Q301
	Q351 Q352



SIDE B

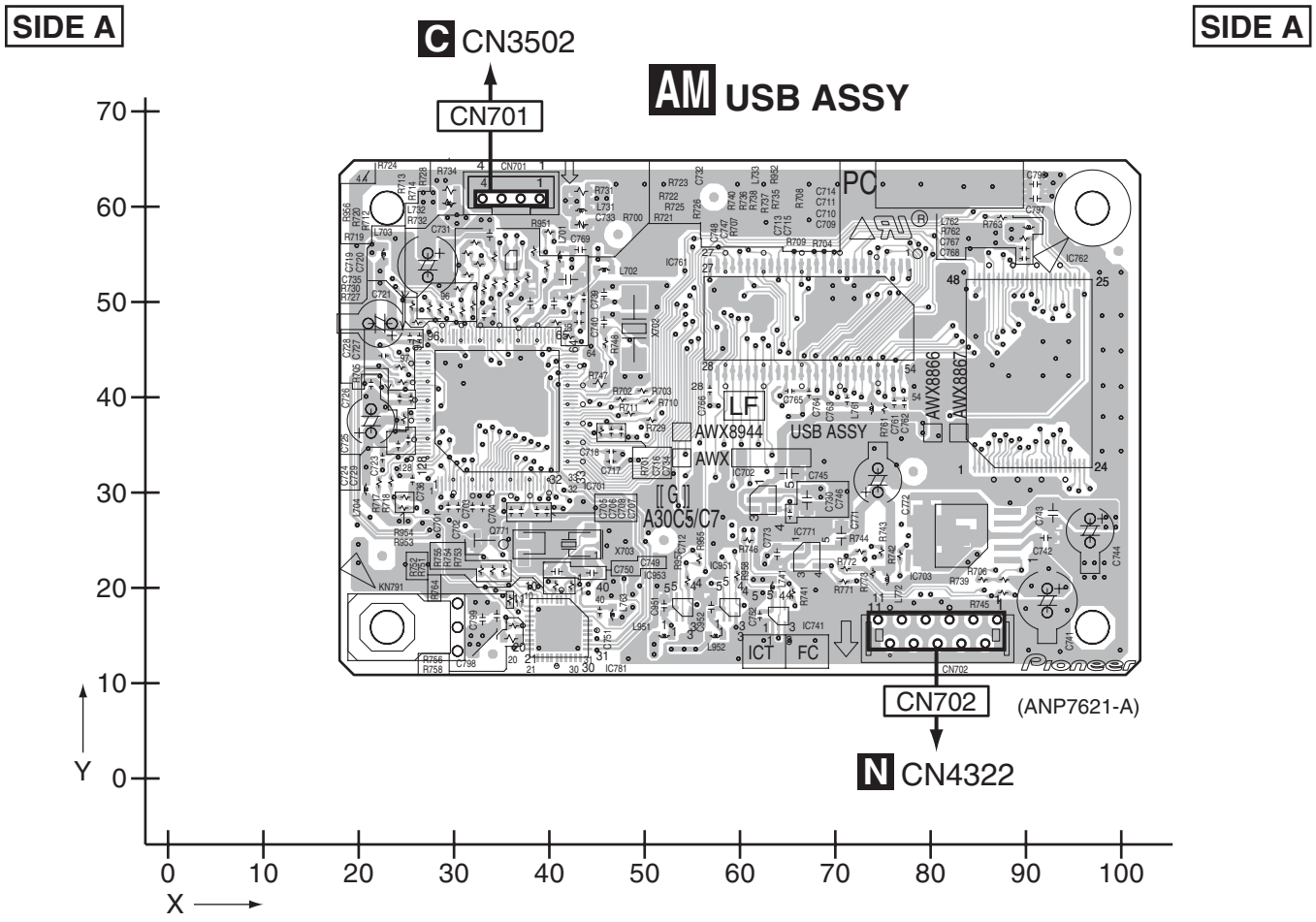
CN502

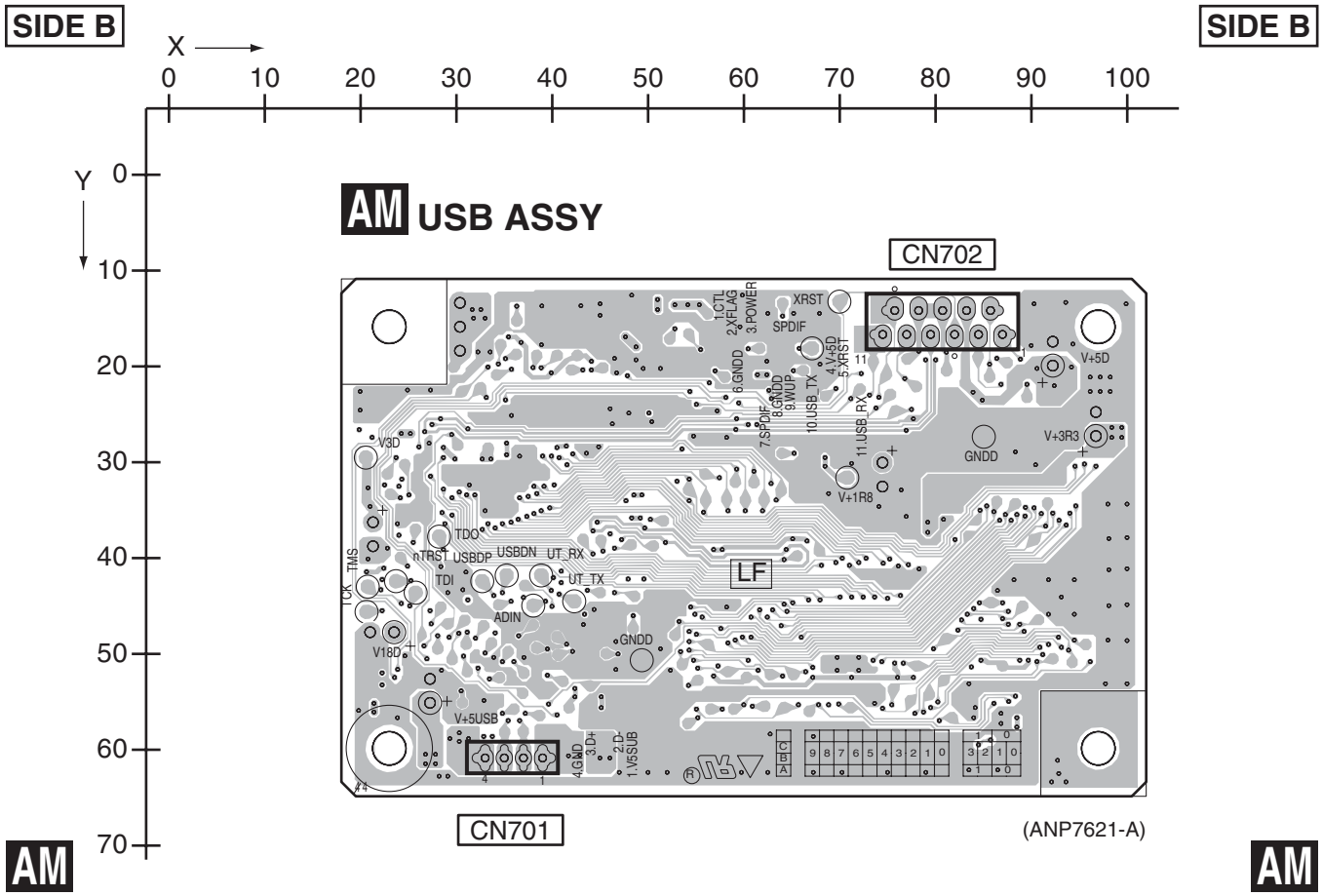


CN1001

(ANP7621-A)

11.25 USB ASSY (VSX-LX60)





12. PCB PARTS LIST

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*

● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

● *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56 x 10^1 → 561 ····· RD1/4PU 5 6 1 J
47k Ω → 47 x 10^3 → 473 ····· RD1/4PU 4 7 3 J
0.5 Ω → R50 ····· RN2H R 5 0 K
1 Ω → 1R0 ····· RS1P 1 R 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562 x 10^1 → 5621 ····· RN1/4PC 5 6 2 1 F

● *Meaning of the figures and others in the parentheses in the parts list.*

Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

IC 301 (A, 91, 111) IC NJM2068V

LIST OF ASSEMBLIES

Mark	Symbol and Description	VSX-LX70/ HYXJ5	VSX-LX60/ HYXJ5
NSP	1..POWER AMP ASSY	AWH7012	AWH7012
	2..POWER AMP-L ASSY	AWX8655	AWX8655
	2..POWER AMP-R ASSY	AWX8657	AWX8657
	2..POWER PROTECT ASSY	AWX8659	AWX8659
	2..POWER AMP IN ASSY	AWX8662	AWX8662
NSP	1..COMPLEX ASSY	AWM8082	AWM8087
	2..TRANS 2-2 ASSY	AWX8891	AWX8891
	2..PRIMARY ASSY	AWX8895	AWX8895
NSP	2..FFC GUARD (FRONT) ASSY	AWX8899	AWX8899
	2..DISPLAY ASSY	AWX8900	AWX8900
	2..FRONT-IN ASSY	AWX8902	AWX8904
	2..HEADPHONE ASSY	AWX8905	AWX8905
	2..INPUT SELECT ASSY	AWX8906	AWX8906
	2..VOLUME ASSY	AWX8907	AWX8907
	2..POWER SW ASSY	AWX8908	AWX8908
	1..DIGITAL MOTHER ASSY	AWP7047	AWP7053
NSP	1..VIDEO ASSY	AWQ7056	AWQ7056
	2..COMPOSITE V ASSY	AWX8972	AWX8972
	2..S VIDEO ASSY	AWX8973	AWX8973
	2..PREOUT & CONTROL ASSY	AWX8889	AWX8889
NSP	2..FR IN BARRIER1 ASSY	AWX8948	AWX8948
	1..COMPONENT & VOL ASSY	AWQ7042	AWQ7047
NSP	1..SECONDARY ASSY	AWR7054	AWR7058
	2..SP/PS ASSY	AWX8910	AWX8912
	2..TRANS 2-1 ASSY	AWX8914	AWX8914
NSP	2..DIODE ASSY	AWX8915	AWX8915
	2..VH TR ASSY	AWX8916	AWX8916
	2..DC/DC ASSY	AWX8917	AWX8918
	2..INTERFACE ASSY	AWX8949	AWX8941
NSP	2..TRANS SIDE ASSY	AWX8921	AWX8921
NSP	1..AUDIO ASSY	AWR7062	AWR7065
	2..LOCAL SUPPLY ASSY	AWX8924	AWX8924
	2..AUDIO & MULTI CH IN ASSY	AWX8927	AWX8927
	2..V-AUDIO ASSY	AWX8931	AWX8931
NSP	2..HDMI POWER ASSY	AWX8933	AWX8933
NSP	2..BRIDGE 1 ASSY	AWX8934	AWX8934
NSP	2..BRIDGE 2 ASSY	AWX8935	AWX8935
NSP	2..BRIDGE 3 ASSY	AWX8936	AWX8936
NSP	2..FFC GUARD (SIDE) ASSY	AWX8937	AWX8938
	2..HDMI TRANS ASSY	AWX8939	AWX8939

Mark	Symbol and Description	VSX-LX70/ HYXJ5	VSX-LX60/ HYXJ5
	2..HDMI DIODE ASSY	AWX8940	AWX8940
	1..DSP ASSY	AWX8869	AWX8869
	1..HDMI & DLNA ASSY	AWX8974	Not used
	1..HDMI & DVC ASSY	Not used	AWX8975
	1..USB ASSY	Not used	AWX8944
	1..FM/AM TUNER MODULE	AXX7248	AXX7248

CONTRAST OF PCB ASSEMBLIES

C FRONT-IN ASSY

AWX8902 and AWX8904 are constructed the same except for the following:

Mark	Symbol and Description	AWX8902	AWX8904
	CN3502 4P Plug	Not used	KM200NA4
	CN3501 5P Plug	KM200NA5	Not used

K COMPONENT & VOL ASSY

AWQ7042 and AWQ7047 are constructed the same except for the following:

Mark	Symbol and Description	AWQ7042	AWQ7047
	IC2631	TC4053BFN	Not used
	IC2635	TC4052BFN	Not used
	IC2633, IC2634	BA4560RF	Not used
	Q2630, Q2632, Q2633	RT1N241M	Not used
	C2631, C2632, C2641, C2642	CKSRYB103K50	Not used
	C2647, C2648, C2651, C2652	CKSRYB103K50	Not used
	C2639, C2640, C2643, C2644	CCSRCH220J50	Not used
	C2645, C2646	CEAT100M50	Not used
	R2641, R2642, R2653, R2654	RS1/16S472J	Not used
	R2643, R2644	RS1/16S101J	Not used
	R2645, R2646, R2651, R2652	RS1/16S113J	Not used
	R2647, R2648	RS1/16S0R0J	Not used
	R2649, R2650	RS1/16S153J	Not used
	R2655, R2656	RS1/16S474J	Not used
	R2659-R2662	Not used	RS1/16S0R0J
	R2690-R2692	RS1/16S473J	Not used

L DIGITAL MOTHER ASSY

AWP7047 and AWP7053 are constructed the same except for the following:

Mark	Symbol and Description	AWP7047	AWP7053
	IC101	PEG395A8	PEG427A8
	IC315	TC74LCX541FTS1-TBB	Not used
	L315	QTL1013	Not used
	C307	CKSRYB104K16	Not used
	C346	CKSSYB104K10	Not used
	R152, R155	RS1/16S473J	Not used
	R154	Not used	RS1/16S473J
	R250	RS1/16S104J	Not used
	R313, R555, R655, R755	RS1/16SS101J	Not used
	R400, R433-R436	RS1/16SS470J	Not used
	R556, R557, R656, R657, R756, R757	RS1/16SS0R0J	Not used
	R992	Not used	RS1/16S0R0J
	R993-R999	Not used	RS1/16SS0R0J
	R437	RAB4CQ470J	Not used
	CN204 (22P FFC Connector)	RKN1063	Not used
	JA207 (Optical Link Out)	AKS7002	Not used

N INTERFACE ASSY

AWX8949 and AWX8941 are constructed the same except for the following:

Mark	Symbol and Description	AWX8949	AWX8941
	L4362	CTF1385	Not used
	L4363	CTF1385	VTL1169
	R4362	Not used	RS1/16S0R0J
	CN4322 11P Plug	Not used	XKP3065

T DC/DC ASSY

AWX8917 and AWX8918 are constructed the same except for the following:

Mark	Symbol and Description	AWX8917	AWX8918
	C4272	CEAT103M16	CEAT682M25
	C4273	CEHAZL102M6R3	CEHAZL331M6R3
	C4274	CEHAZL102M16	CEHAZL471M25
	L4271	ATH7044	ATH7052

X SP/PS ASSY

AWX8910 and AWX8912 are constructed the same except for the following:

Mark	Symbol and Description	AWX8910	AWX8912
	C4101, C4102	ACH7258	ACH7255

FFC GUARD (SIDE) ASSY

AWX8937 and AWX8938 are constructed the same except for the following:

Mark	Symbol and Description	AWX8937	AWX8938
	KN5861 Screw Plate	Not used	ANG7591

PCB PARTS LIST FOR VSX-LX70 UNLESS OTHER WISE NOTED

Mark	No.	Description	Part No.
POWER AMP ASSY (AWH7012)			
MISCELLANEOUS			
J	13	JUMPER WIRE	D20PDY0525E
Y	3	LEAD WITH HOUSING	ADX7458
Y	1	LEAD WITH HOUSING	ADX7459
Y	2	LEAD WITH HOUSING	ADX7457
Y	4	LEAD WITH HOUSING	ADX7460
⚠	11	P.C.BOARD	ANP7542
Y	5	LEAD WITH HOUSING	ADX7404
Y	6	LEAD WITH HOUSING	ADX7498
COMPLEX ASSY (AWM8082)			
MISCELLANEOUS			
J	3301	3P JUMPER WIRE	D20PDD0310E
J	3302	3P JUMPER WIRE	D20PDD0315E
J	3303	4PJUMPER WIRE	D20PDD0415E
⚠ Y	14	AWG18 BOARD IN	ADX7604
⚠ Y	15	AWG18 BOARD IN	ADX7491
SECONDARY ASSY (AWR7054)			
MISCELLANEOUS			
Y	10	AWG14 BOARD IN	ADX7489
Y	9	AWG14 BOARD IN	ADX7488
Y	8	AWG14 BOARD IN	ADX7451
Y	11	AWG14 BOARD IN	ADX7454
Y	12	AWG14 BOARD IN	ADX7455
FFC GUARD (FRONT) ASSY (AWX8899)			
MISCELLANEOUS			
	3152(A,322,161)	PCB BINDER	VEF1040
	3151(A,302,132)	PCB BINDER	VEF1040
FFC GUARD (SIDE) ASSY (AWX8937)			
MISCELLANEOUS			
	5862(A,175,32)	PCB BINDER	VEF1040
	5861(A,170,77)	PCB BINDER	VEF1040
A AUDIO & MULTI CH IN ASSY			
MISCELLANEOUS			
IC	6201(B,71,191)	AUDIO IC	BD3841FS
IC	6203(B,130,185)	OP-AMP IC	BA4560RF
JA	6401(A,14,230)	JACK	AKN-209
CN	6202(A,20,178)	17P SOCKET	XKP3079
CN	6203(A,109,174)	23P SOCKET	XKP3082
CN	6204(A,66,174)	15P SOCKET	XKP3078
CN	6205(A,133,230)	PIN JACK(4P)	AKB7172
CN	6207(A,91,230)	PIN JACK(4P)	AKB7172
CN	6208(A,63,230)	PIN JACK(4P)	AKB7172
CN	6209(A,35,230)	PIN JACK(4P)	AKB7172
	6201(A,141,173)	PCB BINDER	VEF1040
RESISTORS			
R	6201(B,122,215)		RS1/16S473J
R	6202(B,126,215)		RS1/16S473J
R	6205(B,96,215)		RS1/16S104J
R	6206(B,100,215)		RS1/16S104J
R	6207(B,82,215)		RS1/16S473J
R	6208(B,86,215)		RS1/16S473J
R	6209(B,68,215)		RS1/16S223J
R	6210(B,72,215)		RS1/16S223J
R	6211(B,54,215)		RS1/16S474J
R	6212(B,58,215)		RS1/16S474J
R	6213(B,41,215)		RS1/16S474J
R	6214(B,45,215)		RS1/16S474J
R	6215(B,27,213)		RS1/16S474J
R	6216(B,31,213)		RS1/16S474J
R	6217(B,119,214)		RS1/16S331J
R	6218(B,128,214)		RS1/16S331J
R	6221(B,93,214)		RS1/16S222J
R	6222(B,102,214)		RS1/16S222J
R	6223(B,79,214)		RS1/16S331J
R	6224(B,88,214)		RS1/16S331J
R	6225(B,65,214)		RS1/16S331J
R	6226(B,74,214)		RS1/16S331J
R	6227(B,52,214)		RS1/16S331J
R	6228(B,61,214)		RS1/16S331J
R	6229(B,38,214)		RS1/16S331J
R	6230(B,47,214)		RS1/16S331J
R	6231(B,24,212)		RS1/16S331J
R	6232(B,33,212)		RS1/16S331J
R	6237(B,96,204)		RS1/16S154J
R	6238(B,100,204)		RS1/16S154J
R	6251(B,135,212)		RS1/16S104J
R	6252(B,139,212)		RS1/16S104J
R	6253(B,134,209)		RS1/16S561J
R	6254(B,140,209)		RS1/16S561J
R	6255(B,136,192)		RS1/16S104J
R	6256(B,141,181)		RS1/16S104J
R	6257(B,136,188)		RS1/16S561J
R	6258(B,136,182)		RS1/16S561J
R	6259(B,132,196)		RS1/16S394J
R	6260(B,134,177)		RS1/16S394J
R	6261(B,124,196)		RS1/16S303J
R	6262(B,126,177)		RS1/16S303J
R	6263(B,122,196)		RS1/16S471J
R	6264(B,124,177)		RS1/16S471J
R	6265(B,117,191)		RS1/16S224J
R	6266(B,115,176)		RS1/16S224J
R	6267(B,46,190)		RS1/16S101J
R	6268(B,48,190)		RS1/16S101J
R	6269(B,84,195)		RS1/16S0R0J
R	6270(B,84,193)		RS1/16S0R0J
R	6271(B,102,191)		RS1/16S473J
R	6272(B,100,191)		RS1/16S473J
R	6273(B,97,191)		RS1/16S473J
R	6274(B,95,191)		RS1/16S473J
R	6282(B,112,203)		RS1/16S105J
R	6283(B,110,203)		RS1/16S105J
R	6286(B,38,172)		RS1/16S0R0J
R	6287(B,83,178)		RS1/16S0R0J
R	6299(B,36,198)		RS1/16S0R0J
CAPACITORS			
C	6201(B,124,221)		CCSRCH101J50

Mark	No.	Description	Part No.
C	6202(B,127,221)		CCSRCH101J50
C	6205(B,96,221)		CCSRCH101J50
C	6206(B,99,221)		CCSRCH101J50
C	6207(B,82,221)		CCSRCH101J50
C	6208(B,85,221)		CCSRCH101J50
C	6209(B,68,221)		CCSRCH101J50
C	6210(B,71,221)		CCSRCH101J50
C	6211(B,54,221)		CCSRCH101J50
C	6212(B,57,221)		CCSRCH101J50
C	6213(B,40,221)		CCSRCH101J50
C	6214(B,43,221)		CCSRCH101J50
C	6215(B,26,221)		CCSRCH101J50
C	6216(B,29,221)		CCSRCH101J50
C	6217(B,122,213)		CCSRCH151J50
C	6218(B,126,213)		CCSRCH151J50
C	6221(B,96,213)		CCSRCH220J50
C	6222(B,100,213)		CCSRCH220J50
C	6223(B,82,213)		CCSRCH151J50
C	6224(B,86,213)		CCSRCH151J50
C	6225(B,68,213)		CCSRCH151J50
C	6226(B,72,213)		CCSRCH151J50
C	6227(B,54,213)		CCSRCH101J50
C	6228(B,58,213)		CCSRCH101J50
C	6229(B,41,213)		CCSRCH101J50
C	6230(B,45,213)		CCSRCH101J50
C	6231(B,27,211)		CCSRCH101J50
C	6232(B,31,211)		CCSRCH101J50
C	6237(A,95,207)		CEAT100M50
C	6238(A,101,207)		CEAT100M50
C	6243(A,53,207)	ELECT. CAPACITOR	CEAT470M25
C	6244(A,60,207)	ELECT. CAPACITOR	CEAT470M25
C	6245(A,39,207)	ELECT. CAPACITOR	CEAT470M25
C	6246(A,47,207)	ELECT. CAPACITOR	CEAT470M25
C	6247(A,26,205)	ELECT. CAPACITOR	CEAT470M25
C	6248(A,32,205)	ELECT. CAPACITOR	CEAT470M25
C	6249(B,138,221)		CCSRCH221J50
C	6250(B,141,221)		CCSRCH221J50
C	6251(A,134,201)		CEAT100M50
C	6252(A,140,201)		CEAT100M50
C	6253(B,134,192)		CCSRCH331J50
C	6254(B,143,181)		CCSRCH331J50
C	6255(A,139,189)		CEAT470M16
C	6256(A,139,181)		CEAT470M16
C	6257(B,134,188)		CCSRCH561J50
C	6258(B,134,182)		CCSRCH561J50
C	6259(B,130,196)		CKSRYB822K50
C	6260(B,132,177)		CKSRYB822K50
C	6261(B,128,196)		CKSRYB122K50
C	6262(B,130,177)		CKSRYB122K50
C	6263(A,120,194)		CEAT100M50
C	6264(A,118,174)		CEAT100M50
C	6265(A,122,180)		CEAT470M16
C	6266(A,122,188)		CEAT470M16
C	6267(B,51,189)		CCSRCH101J50
C	6268(B,53,189)		CCSRCH101J50
C	6269(B,67,182)		CKSRYB103K50
C	6270(B,69,182)		CKSRYB103K50
C	6279(B,130,222)		CKSRYB103K50
C	6283(B,132,222)		CKSRYB104K16
C	6284(B,91,224)		CKSRYB103K50
C	6285(B,64,223)		CKSRYB103K50
C	6286(B,35,224)		CKSRYB104K16
C	6291(B,134,222)		CKSRYB471K50
C	6292(B,33,224)		CKSRYB471K50
C	6293(B,126,196)		CKSRYB122K50
C	6294(B,128,177)		CKSRYB122K50
C	6295(A,78,180)		CEAT470M25
C	6296(A,73,172)		CEAT470M25
C	6403(B,21,206)		CKSRYB104K50
C	6404(B,21,208)		CKSRYB471K50
C	6405(B,17,217)		CKSRYB103K50
C	6406(B,13,217)		CKSRYB103K50

B V-AUDIO ASSY

MISCELLANEOUS

IC	6301(B,50,143)	AUDIO IC	BD3841FS
Q	6301(B,13,143)	TRANSISTOR	IMX25
JA	6301(A,26,107)	PIN JACK(6P)	AKB7174
CN	6301(A,121,144)	CONNECTOR(06P)	TUC-P06X-B1
CN	6302(A,38,163)	23P SOCKET	XKP3082
CN	6307(A,61,107)	PIN JACK(4P)	AKB7172
CN	6308(A,89,107)	PIN JACK(4P)	AKB7172
CN	6309(A,117,107)	PIN JACK(4P)	AKB7172

RESISTORS

R	6301(B,23,127)	RS1/16S473J
R	6302(B,19,127)	RS1/16S473J
R	6303(B,26,128)	RS1/16S331J
R	6304(B,17,128)	RS1/16S331J
R	6307(B,36,127)	RS1/16S473J
R	6308(B,32,127)	RS1/16S473J
R	6309(B,39,128)	RS1/16S331J
R	6310(B,30,128)	RS1/16S331J
R	6313(B,49,127)	RS1/16S473J
R	6314(B,45,127)	RS1/16S473J
R	6315(B,52,128)	RS1/16S331J
R	6316(B,43,128)	RS1/16S331J
R	6319(B,62,127)	RS1/16S473J
R	6320(B,58,127)	RS1/16S473J
R	6321(B,65,128)	RS1/16S331J
R	6322(B,55,128)	RS1/16S331J
R	6325(B,75,127)	RS1/16S104J
R	6326(B,71,127)	RS1/16S104J
R	6327(B,78,128)	RS1/16S222J
R	6328(B,69,128)	RS1/16S222J
R	6329(B,75,134)	RS1/16S154J
R	6330(B,71,134)	RS1/16S154J
R	6331(B,88,127)	RS1/16S473J
R	6332(B,84,127)	RS1/16S473J
R	6333(B,91,128)	RS1/16S331J
R	6334(B,82,128)	RS1/16S331J
R	6337(B,101,127)	RS1/16S104J
R	6338(B,97,127)	RS1/16S104J
R	6339(B,104,128)	RS1/16S222J
R	6340(B,95,128)	RS1/16S222J
R	6341(B,101,134)	RS1/16S154J
R	6342(B,97,134)	RS1/16S154J
R	6343(B,113,133)	RS1/16S473J
R	6344(B,109,127)	RS1/16S473J

Mark	No.	Description	Part No.
R	6345(B,113,135)		RS1/16S331J
R	6346(B,109,129)		RS1/16S331J
R	6351(B,13,131)		RS1/16S102J
R	6352(B,9,136)		RS1/16S102J
R	6353(B,18,149)		RS1/16S103J
R	6354(B,8,149)		RS1/16S103J
R	6355(B,16,156)		RS1/16S102J
R	6356(B,11,158)		RS1/16S102J
R	6361(B,73,152)		RS1/16S101J
R	6362(B,69,152)		RS1/16S101J
R	6381(B,38,148)		RS1/16S473J
R	6382(B,40,147)		RS1/16S473J
R	6383(B,35,165)		RS1/16S0R0J

CAPACITORS

C	6301(B,28,116)		CCSRCH101J50
C	6302(B,23,116)		CCSRCH101J50
C	6303(B,23,129)		CCSRCH101J50
C	6304(B,19,129)		CCSRCH101J50
C	6307(B,42,116)		CCSRCH101J50
C	6308(B,37,116)		CCSRCH101J50
C	6309(B,36,129)		CCSRCH101J50
C	6310(B,32,129)		CCSRCH101J50
C	6313(B,56,116)		CCSRCH101J50
C	6314(B,51,116)		CCSRCH101J50
C	6315(B,49,129)		CCSRCH101J50
C	6316(B,45,129)		CCSRCH101J50
C	6319(B,70,116)		CCSRCH101J50
C	6320(B,65,116)		CCSRCH101J50
C	6321(B,62,129)		CCSRCH101J50
C	6322(B,58,129)		CCSRCH101J50
C	6325(B,83,114)		CCSRCH101J50
C	6326(B,79,113)		CCSRCH101J50
C	6327(B,75,129)		CCSRCH220J50
C	6328(B,71,129)		CCSRCH220J50
C	6329(A,77,137)		CEAT100M50
C	6330(A,70,137)		CEAT100M50
C	6331(B,98,116)		CCSRCH101J50
C	6332(B,93,116)		CCSRCH101J50
C	6333(B,88,129)		CCSRCH101J50
C	6334(B,84,129)		CCSRCH101J50
C	6337(B,111,114)		CCSRCH101J50
C	6338(B,107,113)		CCSRCH101J50
C	6339(B,101,129)		CCSRCH220J50
C	6340(B,97,129)		CCSRCH220J50
C	6341(A,103,137)		CEAT100M50
C	6342(A,96,137)		CEAT100M50
C	6343(B,126,116)		CCSRCH101J50
C	6344(B,121,116)		CCSRCH101J50
C	6345(B,113,137)		CCSRCH101J50
C	6346(B,109,131)		CCSRCH101J50
C	6349(B,33,114)		CKSRYB104K16
C	6350(B,61,114)		CKSRYB104K16
C	6351(B,89,114)		CKSRYB104K16
C	6353(B,14,116)		CCSRCH331J50
C	6354(B,9,116)		CCSRCH331J50
C	6359(B,60,149)		CCSRCH101J50
C	6360(B,62,149)		CCSRCH101J50
C	6361(B,56,151)		CKSRYB103K50
C	6362(B,52,151)		CKSRYB103K50
C	6363(A,79,157)		CEAT470M25
C	6364(A,73,162)		CEAT470M25
C	6368(B,19,114)		CKSRYB103K50
C	6369(B,22,111)		CKSRYB103K50
C	6377(A,62,156)	ELECT. CAPACITOR	CEAT470M25
C	6378(A,56,156)	ELECT. CAPACITOR	CEAT470M25
C	6379(B,35,114)		CKSRYB471K50
C	6380(B,63,114)		CKSRYB471K50
C	6381(B,91,114)		CKSRYB471K50

C FRONT-IN ASSY

MISCELLANEOUS

IC	3451(B,50,39)	OP-AMP IC	BA4560RF
Q	3451(B,103,33)	CHIP TRANSISTOR	HN1C01FU
D	3451(B,72,45)	DIODE	UDZS5R1(B)
D	3452(B,70,45)	DIODE	UDZS5R1(B)
D	3453(B,34,27)	DIODE	UDZS5R1(B)
D	3454(B,47,24)	DIODE	DAN217U
D	3455(B,128,27)	DIODE	DAN217U
D	3467(B,42,42)	DIODE	DAN217U
D	3502(B,14,45)	ZENER DIODE	UMZU6.2N
D	3504(B,8,36)	ZENER DIODE	UMZU6.2N
L	3453(B,57,28)	CHIP SOLID INDUCTOR	QTL1013
L	3465	INDUCTOR	CTF1385
JA	3451(A,32,11)	JACK	RKN1004
JA	3452(A,117,15)	FRONT AV INPUT	AKX7019
JA	3501(A,14,10)	USB CONNECTOR	XKP3086
KN	3451(A,36,39)	WRAPPING TERMINAL	VNF1084
KN	3452(A,123,39)	WRAPPING TERMINAL	VNF1084
CN	3451(A,118,53)	CONNECTOR	CKS3380
CN	3501(A,11,39)	PLUG(5P)	KM200NA5
	3501(A,22,32)	PCB BINDER	VEF1040

RESISTORS

R	3451(B,37,21)		RS1/16S682J
R	3452(B,38,18)		RS1/16S104J
R	3453(B,39,25)		RS1/16S101J
R	3454(B,42,26)		RS1/16S104J
R	3455(B,48,32)		RS1/16S333J
R	3456(B,46,31)		RS1/16S432J
R	3457(B,48,46)		RS1/16S432J
R	3458(B,52,46)		RS1/16S333J
R	3459(B,55,46)		RS1/16S101J
R	3460(B,29,26)		RS1/16S102J
R	3461(B,68,48)		RS1/16S104J
R	3462(B,63,26)		RS1/16S101J
R	3463(B,36,27)		RS1/16S102J
R	3469(B,105,62)		RS1/16S0R0J
R	3470(B,111,51)		RS1/16S0R0J
R	3471(B,73,28)		RS1/16S750J
R	3472(B,73,31)		RS1/16S0R0J
R	3473(B,78,26)		RS1/16S750J
R	3474(B,76,28)		RS1/16S0R0J
R	3475(B,85,26)		RS1/16S750J
R	3476(B,87,28)		RS1/16S0R0J
R	3477(B,102,63)		RS1/16S0R0J
R	3480(B,45,35)		RS1/16S101J
R	3481(B,97,23)		RS1/16S104J

Mark	No.	Description	Part No.
R	3482(B,125,23)		RS1/16S104J
R	3483(B,95,27)		RS1/16S221J
R	3484(B,121,27)		RS1/16S221J
R	3485(B,95,31)		RS1/16S104J
R	3486(B,113,24)		RS1/16S104J
R	3487(B,93,36)		RS1/16S221J
R	3488(B,113,28)		RS1/16S221J
R	3489(B,113,51)		RS1/16S101J
R	3490(B,118,50)		RS1/16S101J
R	3491(B,108,38)		RS1/16S153J
R	3492(B,110,38)		RS1/16S153J
R	3493(B,106,38)		RS1/16S470J
R	3494(B,117,46)		RS1/16S470J
R	3495(B,108,24)		RS1/16S0R0J
R	3496(B,121,23)		RS1/16S0R0J
R	3497(B,98,26)		RS1/16S0R0J
R	3498(B,114,36)		RS1/16S0R0J
R	3499(B,116,36)		RS1/16S0R0J
R	3501(B,12,31)		RS1/16S0R0J
R	3502(B,14,31)		RS1/16S0R0J
R	3503(B,6,31)		RS1/16S0R0J
R	3504(B,11,26)		RS1/16S0R0J
R	3505(B,18,44)		RS1/16S0R0J
R	3506(B,20,36)		RS1/16S0R0J
R	3507(B,26,33)		RS1/16S0R0J
R	3508(B,20,39)		RS1/16S0R0J
R	3509(B,20,46)		RS1/16S0R0J
R	3510(B,7,39)		RS1/16S222J
R	3511(B,17,48)		RS1/16S0R0J
R	3512(B,17,37)		RS1/16S0R0J

CAPACITORS

C	3451(B,36,18)		CKSRYB471K50
C	3452(B,41,21)		CKSQYB106K6R3
C	3453(B,42,24)		CCSRCH101J50
C	3454(B,50,32)		CCSRCH220J50
C	3455(B,50,46)		CCSRCH220J50
C	3457(A,29,30)		CEJQ100M16
C	3459(B,55,41)		CKSRYB103K50
C	3460(B,55,36)		CKSRYB103K50
C	3461(A,58,42)		CEAT100M50
C	3462(A,58,35)		CEAT100M50
C	3463(B,47,49)		CKSRYB105K6R3
C	3466(B,39,42)		CKSRYB104K16
C	3467(B,57,26)		CKSRYB104K16
C	3470(A,63,45)		CEAT100M50
C	3471(B,71,28)		CKSRYB104K16
C	3475(B,125,31)		CKSRYB104K16
C	3476(B,125,35)		CKSRYB103K50
C	3478(B,127,35)		CKSRYB472K50
C	3481(B,99,23)		CCSRCH221J50
C	3482(B,123,23)		CCSRCH221J50
C	3483(A,92,32)		CEAT100M50
C	3484(A,116,31)		CEAT100M50
C	3485(B,95,36)		CCSRCH101J50
C	3486(B,111,26)		CCSRCH101J50
C	3489(B,107,32)		CKSRYB103K50
C	3490(B,112,38)		CKSRYB103K50
C	3491(A,110,34)	ELECT. CAPACITOR	CEAT330M25
C	3492(A,112,43)	ELECT. CAPACITOR	CEAT330M25
C	3495(B,125,27)		CKSRYB103K50
C	3496(B,95,23)		CKSRYB103K50
C	3497(B,65,48)		CKSRYB104K16
C	3498(B,63,48)		CKSRYB103K50
C	3499(B,60,49)		CKSRYB102K50
C	3503(B,8,31)		CKSRYB104K16

D HEADPHONE ASSY

MISCELLANEOUS

KN	3551(A,125,118)	WRAPPING TERMINAL	VNF1084
CN	3551(A,134,114)	4P JUMPER CONNECTOR	52147-0410
	3551(A,125,73)	PHONE JACK	AKN7029

RESISTORS

R	3551(B,130,85)		RS1/16S102J
R	3552(B,133,111)		RS1/16S0R0J

CAPACITORS

C	3551(B,134,98)		CKSRYB392K50
C	3552(B,120,88)		CKSRYB392K50
C	3553(B,120,93)		CKSRYB471K50
C	3554(B,118,93)		CKSRYB103K50
C	3555(B,116,93)		CKSRYB104K16

E BRIDGE 1 ASSY

MISCELLANEOUS

CN	5431(A,152,224)	13P PLUG	XKP3066
CN	5432(A,165,176)	13P PLUG	XKP3066
CN	5433(A,191,225)	CONNECTOR	CKS1726
CN	5434(A,170,175)	CONNECTOR	CKS1726

F BRIDGE 2 ASSY

MISCELLANEOUS

CN	5441(A,200,98)	CONNECTOR	CKS3382
CN	5442(A,215,117)	15P PLUG	XKP3067
CN	5443(A,239,119)	17P PLUG	XKP3068

G TRANS SIDE ASSY

MISCELLANEOUS

L	4401(B,307,6)	INDUCTOR	CTF1385
L	4402(B,307,8)	INDUCTOR	CTF1385
L	4403(B,307,10)	INDUCTOR	CTF1385
L	4404(B,307,14)	INDUCTOR	CTF1385
L	4405(B,307,16)	INDUCTOR	CTF1385
L	4406(B,307,18)	INDUCTOR	CTF1385
L	4407(B,307,20)	INDUCTOR	CTF1385
L	4408(B,307,22)	INDUCTOR	CTF1385
L	4409(B,307,24)	INDUCTOR	CTF1385
L	4410(B,307,26)	INDUCTOR	CTF1385
L	4411(B,307,28)	INDUCTOR	CTF1385
L	4412(B,307,30)	INDUCTOR	CTF1385
L	4413(B,307,32)	INDUCTOR	CTF1385
J	5	JUMPER WIRE	D20PDY0410E
CN	4402(A,319,21)	L-PLUG(13P)	KM200NA13L
CN	4403(A,83,30)	CONNECTOR	CKS3382

Mark	No.	Description	Part No.
	4401(A,61,9)	4P CABLE HOLDER	51048-0400

H BRIDGE 3 ASSY

MISCELLANEOUS

CN	5451(A,169,100)	15P CONNECTOR	52044-1545
CN	5452(A,140,100)	19P CONNECTOR	52044-1945
CN	5453(A,135,134)	23P PLUG	XKP3071
CN	5454(A,126,166)	23P PLUG	XKP3071
CN	5455(A,169,166)	15P PLUG	XKP3067

RESISTORS

R	5451(B,148,161)	RS1/16S0R0J
R	5452(B,146,159)	RS1/16S0R0J
R	5453(B,143,161)	RS1/16S0R0J
R	5454(B,141,159)	RS1/16S0R0J
R	5455(B,138,161)	RS1/16S0R0J
R	5456(B,184,161)	RS1/16S0R0J
R	5457(B,179,161)	RS1/16S0R0J
R	5458(B,176,159)	RS1/16S0R0J
R	5459(B,174,161)	RS1/16S0R0J
R	5460(B,171,159)	RS1/16S0R0J

CAPACITORS

C	5451(B,160,106)	CKSRYB104K16
C	5452(B,164,106)	CKSRYB104K16

I COMPOSITE V ASSY

MISCELLANEOUS

IC	2001(A,134,86)	LOGIC IC	TC74HC4051AFT
IC	2002(A,136,69)	LOGIC IC	TC74HC4051AFT
IC	2003(A,153,86)	LOGIC IC	TC74HC4052AFT
IC	2004(A,149,69)	LOGIC IC	TC74HC4052AFT
IC	2007(A,142,50)	CHARACTER GENERATOR	PDC162A
IC	2008(A,154,102)	LOGIC IC	TC4094BFN
IC	2009(A,156,113)	LOGIC IC	TC4094BFN
IC	2010(A,132,109)	VIDEO AMP IC	LA7109
Q	2001(A,154,47)	TRANSISTOR	2SC4154
Q	2081(A,159,32)	TRANSISTOR	2SC4154
D	2001(A,142,31)	DIODE	MC2846-11
D	2002(A,161,49)	DIODE	MC2846-11
D	2003(A,162,55)	DIODE	MC2846-11
D	2004(B,157,111)	DIODE	DAN217U
D	2005(B,113,108)	DIODE	DAN217U
D	2006(B,113,80)	DIODE	DAN217U
D	2007(B,113,52)	DIODE	DAN217U
D	2008(B,113,127)	DIODE	DAN217U
L	2001(A,128,43)	AXIAL INDUCTOR	LAU330J
JA	2005(A,104,130)	PIN JACK(1P)	AKB7175
X	2001(A,129,55)	CRYSTAL RESONATOR	ASS7080
CN	2001(A,135,24)	19P SOCKET	XKP3080
CN	2002(A,160,123)	17P SOCKET	XKP3079
	2001(A,104,109)	PIN JACK(2P)	AKB7176
	2002(A,104,81)	PIN JACK(2P)	AKB7176
	2004(A,104,25)	PIN JACK(2P)	AKB7176
	2003(A,104,53)	PIN JACK(2P)	AKB7176

RESISTORS

R	2001(B,113,117)	RS1/16S750J
R	2002(B,113,103)	RS1/16S750J
R	2003(B,113,89)	RS1/16S750J
R	2004(B,113,75)	RS1/16S750J
R	2005(B,113,47)	RS1/16S750J
R	2006(B,113,19)	RS1/16S750J
R	2010(B,138,105)	RS1/16S103J
R	2012(B,138,114)	RS1/16S103J
R	2013(B,138,117)	RS1/16S103J
R	2014(B,138,101)	RS1/16S103J
R	2015(B,138,111)	RS1/16S103J
R	2019(A,124,112)	RS1/16S750J
R	2020(A,122,101)	RS1/16S750J
R	2021(A,122,106)	RS1/16S750J
R	2022(A,126,121)	RS1/16S0R0J
R	2025(A,147,98)	RS1/16S473J
R	2026(A,128,84)	RS1/16S473J
R	2027(A,130,84)	RS1/16S473J
R	2028(B,138,63)	RS1/16S473J
R	2029(B,138,67)	RS1/16S473J
R	2030(B,138,65)	RS1/16S473J
R	2034(A,138,92)	RS1/16S473J
R	2035(A,122,109)	RS1/16S473J
R	2040(A,133,33)	RS1/16S331J
R	2041(A,132,36)	RS1/16S331J
R	2042(A,134,36)	RS1/16S331J
R	2043(A,151,43)	RS1/16S512J
R	2044(A,154,43)	RS1/16S392J
R	2045(A,153,49)	RS1/16S103J
R	2047(A,150,54)	RS1/16S102J
R	2060(A,152,32)	RS1/16S0R0J
R	2065(A,128,125)	RS1/16S0R0J
R	2070(A,149,120)	RS1/16S0R0J
R	2071(A,147,120)	RS1/16S0R0J
R	2072(B,113,115)	RS1/16S0R0J
R	2082(A,151,30)	RS1/16S0R0J
R	2084(A,162,32)	RS1/16S103J
R	2085(A,156,30)	RS1/16S472J
R	2086(A,147,111)	RS1/16S103J
R	2087(B,128,116)	RS1/16S103J

CAPACITORS

C	2001(A,138,83)	CKSRYB103K50
C	2002(A,130,90)	CKSRYB103K50
C	2003(A,141,67)	CKSRYB103K50
C	2004(A,132,73)	CKSRYB103K50
C	2005(A,157,84)	CKSRYB103K50
C	2006(A,149,90)	CKSRYB103K50
C	2007(A,154,66)	CKSRYB103K50
C	2008(A,145,72)	CKSRYB103K50
C	2010(A,144,102)	CEAT101M10
C	2012(A,144,108)	CEAT101M10
C	2013(A,144,114)	CEAT101M10
C	2015(A,128,97)	CEAT101M10
C	2016(A,136,98)	CEAT101M10
C	2017(A,128,100)	CKSRYB104K16
C	2018(B,138,95)	CKSRYB104K16
C	2019(A,124,111)	CCSRCH181J50
C	2020(A,122,103)	CCSRCH181J50
C	2021(A,122,104)	CCSRCH181J50
C	2025(B,150,100)	CKSRYB103K50

Mark	No.	Description	Part No.
C	2026(B,149,111)		CKSRYB103K50
C	2031(B,152,33)		CKSRYB102K50
C	2032(B,157,31)		CKSRYB102K50
C	2040(A,149,38)		CEAT101M10
C	2041(A,140,38)		CEAT101M10
C	2042(A,144,60)		CKSRYB473K25
C	2043(A,138,40)		CKSRYB473K25
C	2044(B,138,59)		CCSRCH6R0D50
C	2045(B,138,57)		CCSRCH6R0D50
C	2046(B,138,44)		CCSRCH240J50
C	2047(B,138,42)		CCSRCH240J50
C	2048(A,130,33)		CCSRCH101J50
C	2049(A,130,37)		CCSRCH101J50
C	2050(A,130,34)		CCSRCH101J50
C	2052(A,151,45)		CKSRYB103K50
C	2053(A,153,57)		CEAT101M10
C	2054(A,150,45)		CKSRYB122K50
C	2055(B,147,46)		CKSRYB122K50
C	2056(A,150,52)		CCSRCH101J50
C	2083(A,160,42)		CEAT101M10
C	2084(A,157,36)		CKSRYB103K50
C	2085(A,156,32)		CKSRYB103K50
C	2088(A,158,60)		CKSRYB103K50
C	2091(B,113,111)		CKSRYB103K50
C	2092(B,113,83)		CKSRYB103K50
C	2093(B,113,55)		CKSRYB103K50
C	2094(B,117,126)		CKSRYB473K25

J S VIDEO ASSY

MISCELLANEOUS

IC	2201(A,43,65)	LOGIC IC	TC74HC4051AFT
IC	2202(A,57,67)	LOGIC IC	TC74HC4051AFT
IC	2203(A,61,89)	LOGIC IC	TC74HC4052AFT
IC	2204(A,36,96)	VIDEO AMP IC	LA7109
IC	2205(A,43,45)	LOGIC IC	TC74HC4051AFT
IC	2206(A,57,45)	LOGIC IC	TC74HC4051AFT
IC	2207(A,35,116)	IC	NJM12904V
IC	2210(A,46,116)	LOGIC IC	TC4094BFN
IC	2211(A,66,114)	LOGIC IC	TC4094BFN
Q	2201(A,30,122)	TRANSISTOR	RT1N241M
Q	2202(B,71,56)	TRANSISTOR	2SC4154
Q	2203(B,64,47)	TRANSISTOR	2SC4154
D	2201(A,31,114)	DIODE	1SS352
D	2202(A,57,117)	DIODE	MC2846-11
D	2203(B,73,113)	DIODE	DAN217U
D	2204(B,21,94)	DIODE	DAN217U
D	2205(B,21,52)	DIODE	DAN217U
D	2206(B,21,24)	DIODE	DAN217U
D	2207(B,21,129)	DIODE	DAN217U
JA	2201(A,12,130)	PIN JACK(1P)	AKB7175
JA	2202(A,12,88)	SOCKET	XKB3052
JA	2203(A,12,53)	SOCKET	XKB3051
JA	2204(A,12,25)	SOCKET	XKB3051
CN	2201(A,67,24)	17P SOCKET	XKP3079
CN	2202(A,49,123)	15P SOCKET	XKP3078

RESISTORS

R	2201(B,23,87)		RS1/16S750J
R	2202(B,23,88)		RS1/16S750J
R	2203(B,23,73)		RS1/16S750J
R	2204(B,23,74)		RS1/16S750J
R	2205(B,23,45)		RS1/16S750J
R	2206(B,23,46)		RS1/16S750J
R	2207(B,23,17)		RS1/16S750J
R	2208(B,23,18)		RS1/16S750J
R	2221(A,42,88)		RS1/16S103J
R	2222(A,48,93)		RS1/16S103J
R	2224(B,48,95)		RS1/16S103J
R	2225(A,44,102)		RS1/16S103J
R	2227(A,29,96)		RS1/16S750J
R	2228(A,28,100)		RS1/16S750J
R	2233(B,27,57)		RS1/16S750J
R	2234(B,27,62)		RS1/16S750J
R	2239(B,29,29)		RS1/16S750J
R	2240(B,27,34)		RS1/16S750J
R	2245(A,36,111)		RS1/16S103J
R	2246(A,32,114)		RS1/16S471J
R	2247(A,31,118)		RS1/16S274J
R	2261(B,29,130)		RS1/16S750J
R	2265(A,52,115)		RS1/16S473J
R	2266(A,52,116)		RS1/16S473J
R	2267(A,52,118)		RS1/16S473J
R	2268(A,41,112)		RS1/16S473J
R	2269(B,63,103)		RS1/16S473J
R	2270(A,72,113)		RS1/16S473J
R	2271(A,72,114)		RS1/16S473J
R	2272(A,71,117)		RS1/16S473J
R	2277(B,53,115)		RS1/16S0R0J
R	2278(B,57,115)		RS1/16S0R0J
R	2279(B,44,24)		RS1/16S0R0J
R	2280(B,44,26)		RS1/16S0R0J
R	2282(B,71,48)		RS1/16S472J
R	2283(A,60,118)		RS1/16S103J
R	2296(B,72,64)		RS1/16S103J
R	2297(B,72,51)		RS1/16S472J
R	2299(B,69,48)		RS1/16S103J

CAPACITORS

C	2202(B,27,90)		CKSRYB104K16
C	2204(B,27,77)		CKSRYB104K16
C	2206(B,27,48)		CKSRYB104K16
C	2208(B,28,25)		CKSRYB104K16
C	2211(A,46,63)		CKSRYB104K16
C	2212(A,39,69)		CKSRYB104K16
C	2213(A,61,64)		CKSRYB104K16
C	2214(A,53,70)		CKSRYB104K16
C	2215(A,46,41)		CKSRYB104K16
C	2216(A,39,48)		CKSRYB104K16
C	2217(A,60,42)		CKSRYB104K16
C	2218(A,53,48)		CKSRYB104K16
C	2219(A,58,85)		CKSRYB103K50
C	2220(A,64,92)		CKSRYB103K50
C	2221(A,50,88)		CEAT101M10
C	2222(A,51,93)		CKSRYB104K16
C	2224(A,50,98)		CEAT101M10
C	2225(A,45,102)		CKSRYB104K16
C	2227(A,27,96)		CCSRCH181J50
C	2228(A,30,99)		CCSRCH181J50

Mark	No.	Description	Part No.
	C	2229(A,28,101)	CKSRYB104K16
	C	2230(B,17,91)	CKSRYB103K50
	C	2231(B,21,96)	CKSRYB474K10
	C	2233(B,23,59)	CCSRCH181J50
	C	2234(B,23,60)	CCSRCH181J50
	C	2235(B,27,64)	CKSRYB104K16
	C	2236(B,21,54)	CKSRYB103K50
	C	2239(B,23,31)	CCSRCH181J50
	C	2240(B,23,32)	CCSRCH181J50
	C	2241(B,27,36)	CKSRYB104K16
	C	2242(B,21,26)	CKSRYB103K50
	C	2245(A,36,109)	CKSRYB104K16
	C	2246(A,26,115)	CEAT100M50
	C	2247(A,32,118)	CKSRYB103K50
	C	2251(B,48,34)	CKSRYB102K50
	C	2252(B,38,35)	CKSRYB102K50
	C	2259(B,25,130)	CCSRCH181J50
	C	2261(B,25,127)	CKSRYB103K50
	C	2262(B,23,127)	CKSRYB104K16
	C	2265(A,44,109)	CKSRYB103K50
	C	2266(A,65,107)	CKSRYB103K50
	C	2279(A,50,29)	CEAT101M16
	C	2280(A,44,29)	CEAT101M16
	C	2285(A,44,83)	CEAT101M10
	C	2286(A,36,81)	CEAT101M10
	C	2287(A,35,86)	CKSRYB104K16
	C	2288(A,36,106)	CKSRYB104K16
	C	2291(B,68,56)	CKSRYB103K50
	C	2292(B,68,52)	CKSRYB103K50
	C	2293(B,61,42)	CKSRYB103K50
	C	2294(B,67,52)	CKSRYB103K50
	C	2296(A,69,63)	CEAL220M10
	C	2297(B,67,45)	CKSRYB104K16

K COMPONENT & VOL ASSY

MISCELLANEOUS

	IC	2401(A,65,45) MULTIPLEXER(4CH*2)	TC74LVX4052FT
	IC	2402(A,44,45) MULTIPLEXER(4CH*2)	TC74LVX4052FT
	IC	2404(A,73,64) MULTIPLEXER(2CH*3)	TC74LVX4053FT
	IC	2405(B,44,66) VIDEO IC	NJM2581M
	IC	2407(B,71,118) LOGIC IC	TC4094BFN
	IC	2408(A,75,139) IC	TC74VHCT08AFTS1
	IC	2409(A,57,32) IC	NJM12904V
	IC	2410(A,77,117) IC	TC7SH08FUS1
	IC	2501(A,159,110) OP-AMP IC	UPC4570G2
	IC	2525(A,197,110) OP-AMP IC	UPC4570G2
	IC	2551(A,178,110) OP-AMP IC	UPC4570G2
	IC	2575(A,216,110) OP-AMP IC	UPC4570G2
	IC	2630(B,159,40) IC	TC4066BFN
	IC	2631(A,135,61) IC	TC4053BFN
	IC	2632(A,145,38) OP-AMP IC	BA4560RF
	IC	2633(A,154,61) OP-AMP IC	BA4560RF
	IC	2634(A,147,61) OP-AMP IC	BA4560RF
	IC	2635(A,174,61) IC	TC4052BFN
	IC	2636(A,201,68) 8CH E-VOL	R2S15205FP
	IC	2637(A,145,85) 2CH E-VOL	M61545FP
	IC	2640(A,134,147) LOGIC IC	TC4094BFN
	IC	2701(A,43,124) RDS DECORDER IC	LC72725KM
	Q	2401(A,76,28) TRANSISTOR(SC-70)	2SA1602A
	Q	2402(A,73,28) TRANSISTOR(SC-70)	2SA1602A
	Q	2403(A,86,27) TRANSISTOR(SC-70)	2SA1602A
	Q	2404(A,92,31) TRANSISTOR(SC-70)	2SA1602A
	Q	2405(A,83,27) TRANSISTOR(SC-70)	2SA1602A
	Q	2406(A,92,28) TRANSISTOR(SC-70)	2SA1602A
⚠	Q	2407(B,48,33) TRANSISTOR	2SC4154
⚠	Q	2408(B,43,28) TRANSISTOR(SC-70)	2SA1602A
	Q	2420(A,65,31) TRANSISTOR	RT1N241M
	Q	2630(B,114,26) TRANSISTOR	RT1N241M
	Q	2631(A,164,44) TRANSISTOR	RT1N241M
	Q	2632(B,118,26) TRANSISTOR	RT1N241M
	Q	2633(B,111,32) TRANSISTOR	RT1N241M
	Q	2639(B,108,149) DIGITAL TR(SC-70)	RT1P241M
	Q	2640(B,115,148) DIGITAL TR(SC-70)	RT1P241M
⚠	Q	2641(A,194,30) TRANSISTOR	2SD1858X
⚠	Q	2642(A,178,30) TRANSISTOR	2SB1238X
	Q	2645(A,168,46) DIGITAL TR(SC-70)	RT1P241M
	Q	2771(B,44,149) TRANSISTOR	2SD1664
	D	2401(B,56,24) DIODE	1SS352
	D	2402(B,48,24) DIODE	1SS352
	D	2403(A,58,28) DIODE	1SS352
	D	2411(B,23,60) DIODE	DAN217U
	D	2412(B,23,32) DIODE	DAN217U
	D	2413(B,23,16) DIODE	DAN217U
	D	2414(B,23,74) DIODE	DAN217U
	D	2504(A,129,38) DIODE	DAN217
	D	2505(A,134,38) DIODE	DAN217
	D	2517(B,188,22) DIODE	UDZS7R5(B)
	D	2518(B,183,22) DIODE	UDZS7R5(B)
	D	2519(B,156,150) DIODE	1SS352
	D	2613(B,192,56) DIODE	DAN217
	D	2753(B,33,135) CHIP DIODE	RB501V-40
	D	2754(B,33,133) CHIP DIODE	RB501V-40
	D	2755(B,30,108) DIODE	1SS352
	D	2761(B,89,147) DIODE	1SS352
	D	2772(B,49,146) DIODE	UDZS10(B)
	L	2752(B,34,137) CHIP SOLID INDUCTOR	QTL1013
	L	2754(B,32,128) CHIP SOLID INDUCTOR	QTL1013
	L	2756(B,32,121) CHIP SOLID INDUCTOR	QTL1013
	L	2760(B,28,141) INDUCTOR	CTF1385
	L	2762(B,33,93) CHIP SOLID INDUCTOR	QTL1013
	L	2763(B,31,114) CHIP SOLID INDUCTOR	QTL1013
	L	2764(B,31,112) CHIP SOLID INDUCTOR	QTL1013
	L	2765(B,33,105) CHIP SOLID INDUCTOR	QTL1013
	L	2766(B,33,103) CHIP SOLID INDUCTOR	QTL1013
	L	2767(B,32,98) INDUCTOR	CTF1385
	L	2768(B,41,135) CHIP SOLID INDUCTOR	QTL1013
	JA	2401(A,15,68) 6P RCA PINJACK	XKB3053
	JA	2402(A,15,26) 6P RCA PINJACK	XKB3053
	JA	2702(A,15,125) JACK	AKN-209
	JA	2703(A,17,138) JACK	RKN1004
	JA	2704(A,17,93) JACK	RKN1004
	JA	2705(A,15,103) MINI JACK(4P) /W SW	XKN3015
	KN	2701(A,15,147) SCREW PLATE	VNE1948
	X	2761(A,49,116) CRYSTAL RESONATOR	ASS7004
	CN	2402(A,49,14) CONNECTOR(07P)	TUC-P07X-B1
	CN	2403(A,90,18) 17P SOCKET	XKP3079
	CN	2409(A,51,78) CONNECTOR	CKS3382
	CN	2501(A,191,14) PLUG	CKS1758

Mark	No.	Description	Part No.
	CN2502(A,109,47)	CONNECTOR	CKS3380
	CN2503(A,153,14)	PLUG	CKS1764
	CN2504(A,173,143)	13P SOCKET	XKP3077
	CN2505(A,102,14)	PLUG	CKS1758
	CN2506(A,226,18)	11P SOCKET	XKP3076
	CN2507(A,212,146)	PLUG	CKS1760
	CN2601(A,116,107)	CONNECTOR	CKS3384
	CN2602(A,109,99)	CONNECTOR	CKS3389
	CN2603(A,109,70)	CONNECTOR	CKS3384
	CN2702(A,69,151)	CONNECTOR	CKS3376
	CN2703(A,77,148)	07P CONNECTOR	RKN1048
	2702(A,86,150)	PCB BINDER	VEF1040
	2701(A,97,143)	PCB BINDER	VEF1040

RESISTORS

	R 2401(B,33,84)		RS1/16S750J
	R 2402(B,33,69)		RS1/16S750J
	R 2403(B,33,54)		RS1/16S750J
	R 2404(B,33,42)		RS1/16S750J
	R 2405(B,33,28)		RS1/16S750J
	R 2406(B,33,18)		RS1/16S750J
	R 2407(B,33,38)		RS1/16S750J
	R 2408(B,33,25)		RS1/16S750J
	R 2409(B,25,11)		RS1/16S750J
	R 2410(A,76,31)		RS1/16S102J
	R 2411(A,73,31)		RS1/16S184J
	R 2412(A,80,31)		RS1/16S184J
	R 2413(B,80,32)		RS1/16S0R0J
	R 2414(B,84,37)		RS1/16S0R0J
	R 2415(A,71,26)		RS1/16S114J
	R 2416(B,81,24)		RS1/16S0R0J
	R 2417(A,81,27)		RS1/16S114J
	R 2418(A,84,31)		RS1/16S102J
	R 2419(A,89,30)		RS1/16S102J
	R 2420(A,86,30)		RS1/16S184J
	R 2421(B,90,37)		RS1/16S0R0J
	R 2422(B,88,25)		RS1/16S0R0J
	R 2423(A,91,26)		RS1/16S114J
	R 2424(B,92,22)		RS1/16S0R0J
	R 2425(A,79,115)		RS1/16S473J
	R 2435(A,73,127)		RS1/16S101J
	R 2437(A,74,127)		RS1/16S101J
	R 2439(B,34,77)		RS1/16S750J
	R 2440(B,33,63)		RS1/16S750J
	R 2441(B,33,49)		RS1/16S750J
	R 2443(B,82,119)		RS1/16S473J
	R 2444(B,82,117)		RS1/16S473J
	R 2445(A,62,118)		RS1/16S473J
	R 2446(B,55,111)		RS1/16S473J
	R 2447(A,65,123)		RS1/16S473J
	R 2448(A,63,123)		RS1/16S473J
	R 2449(B,55,113)		RS1/16S473J
	R 2451(B,48,30)		RS1/16S153J
	R 2452(B,43,25)		RS1/16S153J
	R 2453(A,49,33)		RS1/16S333J
	R 2454(A,44,27)		RS1/16S333J
	R 2477(B,65,32)		RS1/16S103J
	R 2478(B,58,28)		RS1/16S471J
	R 2479(A,65,28)		RS1/16S274J
	R 2480(A,65,34)		RS1/16S0R0J

Mark	No.	Description	Part No.
	R 2490(B,78,139)		RS1/16S0R0J
	R 2491(B,77,139)		RS1/16S0R0J
	R 2502(A,142,101)		RS1/16S0R0J
	R 2509(B,161,98)		RS1/16S223J
	R 2510(B,157,98)		RS1/16S223J
	R 2513(A,165,109)		RS1/16S682J
	R 2514(A,153,109)		RS1/16S682J
	R 2515(B,163,108)		RS1/16S122J
	R 2516(B,155,108)		RS1/16S122J
	R 2517(B,162,110)		RS1/16S0R0J
	R 2518(B,156,110)		RS1/16S0R0J
	R 2519(A,165,111)		RS1/16S183J
	R 2520(A,154,111)		RS1/16S183J
	R 2521(B,164,112)		RS1/16S0R0J
	R 2522(B,155,112)		RS1/16S0R0J
	R 2523(B,164,118)		RS1/16S104J
	R 2524(B,154,118)		RS1/16S104J
	R 2533(B,199,98)		RS1/16S223J
	R 2534(B,195,98)		RS1/16S223J
	R 2537(A,203,109)		RS1/16S682J
	R 2538(A,191,109)		RS1/16S682J
	R 2539(B,201,108)		RS1/16S122J
	R 2540(B,193,108)		RS1/16S122J
	R 2541(B,200,110)		RS1/16S0R0J
	R 2542(B,194,110)		RS1/16S0R0J
	R 2543(A,203,111)		RS1/16S183J
	R 2544(A,192,111)		RS1/16S183J
	R 2545(B,202,112)		RS1/16S0R0J
	R 2546(B,193,112)		RS1/16S0R0J
	R 2547(B,202,118)		RS1/16S104J
	R 2548(B,192,118)		RS1/16S104J
	R 2559(B,180,98)		RS1/16S223J
	R 2560(B,176,98)		RS1/16S223J
	R 2563(A,184,109)		RS1/16S682J
	R 2564(A,172,109)		RS1/16S682J
	R 2565(B,182,108)		RS1/16S122J
	R 2566(B,174,108)		RS1/16S122J
	R 2567(B,181,110)		RS1/16S0R0J
	R 2568(B,175,110)		RS1/16S0R0J
	R 2569(A,184,111)		RS1/16S183J
	R 2570(A,173,111)		RS1/16S183J
	R 2571(B,183,112)		RS1/16S0R0J
	R 2572(B,174,112)		RS1/16S0R0J
	R 2573(B,183,118)		RS1/16S104J
	R 2574(B,173,118)		RS1/16S104J
	R 2583(B,218,98)		RS1/16S223J
	R 2584(B,214,98)		RS1/16S223J
	R 2587(A,222,109)		RS1/16S682J
	R 2588(A,210,109)		RS1/16S682J
	R 2589(B,220,108)		RS1/16S122J
	R 2590(B,212,108)		RS1/16S122J
	R 2591(B,219,110)		RS1/16S0R0J
	R 2592(B,213,110)		RS1/16S0R0J
	R 2593(A,222,111)		RS1/16S183J
	R 2594(A,211,111)		RS1/16S183J
	R 2595(B,221,112)		RS1/16S0R0J
	R 2596(B,212,112)		RS1/16S0R0J
	R 2597(B,221,118)		RS1/16S104J
	R 2598(B,211,118)		RS1/16S104J
	R 2601(B,108,138)		RS1/16S473J

Mark	No.	Description	Part No.
	R 2625(A,147,31)		RS1/16S242J
	R 2626(A,148,45)		RS1/16S242J
A	R 2627(A,152,36)		RS1/16S101J
	R 2628(A,153,43)		RS1/16S101J
	R 2629(A,148,33)		RS1/16S272J
	R 2630(A,149,43)		RS1/16S272J
	R 2631(A,145,33)		RS1/16S0R0J
	R 2632(A,146,43)		RS1/16S0R0J
	R 2633(A,142,33)		RS1/16S222J
	R 2634(A,143,43)		RS1/16S222J
	R 2635(A,141,31)		RS1/16S101J
	R 2636(A,142,45)		RS1/16S101J
	R 2637(B,137,35)		RS1/16S473J
B	R 2638(B,137,40)		RS1/16S473J
	R 2641(A,154,67)		RS1/16S472J
	R 2642(A,154,56)		RS1/16S472J
	R 2643(A,157,67)		RS1/16S101J
	R 2644(A,157,56)		RS1/16S101J
	R 2645(A,144,67)		RS1/16S113J
	R 2646(A,144,56)		RS1/16S113J
	R 2647(A,142,68)		RS1/16S0R0J
	R 2648(A,142,55)		RS1/16S0R0J
	R 2649(A,144,68)		RS1/16S153J
	R 2650(A,144,54)		RS1/16S153J
C	R 2651(A,147,67)		RS1/16S113J
	R 2652(A,147,56)		RS1/16S113J
	R 2653(A,151,67)		RS1/16S472J
	R 2654(A,151,56)		RS1/16S472J
	R 2655(B,163,64)		RS1/16S474J
	R 2656(B,163,58)		RS1/16S474J
	R 2663(A,191,53)		RS1/16S102J
	R 2664(A,191,55)		RS1/16S102J
	R 2670(B,161,85)		RS1/16S0R0J
	R 2673(B,205,33)		RS1/16S0R0J
	R 2681(B,135,89)		RS1/16S104J
D			
	R 2682(B,135,85)		RS1/16S104J
	R 2683(A,141,95)		RS1/16S102J
	R 2684(A,141,94)		RS1/16S102J
	R 2685(B,196,25)		RS1/16S472J
	R 2686(B,176,25)		RS1/16S472J
	R 2687(B,194,25)		RS1/16S101J
	R 2688(B,178,25)		RS1/16S101J
	R 2689(A,169,43)		RS1/16S473J
	R 2690(B,114,31)		RS1/16S473J
	R 2691(B,116,31)		RS1/16S473J
E			
	R 2692(B,110,36)		RS1/16S473J
	R 2693(A,131,135)		RS1/16S473J
	R 2694(A,133,134)		RS1/16S471J
	R 2695(A,128,135)		RS1/16S473J
	R 2696(A,126,134)		RS1/16S471J
	R 2701(B,149,142)		RS1/16S0R0J
	R 2771(B,37,148)		RS1/16S0R0J
	R 2772(B,50,149)		RS1/16S391J
	R 2777(A,51,125)		RS1/16S102J
	R 2778(A,51,122)		RS1/16S102J
	R 2779(A,38,119)		RS1/16S473J
F			

Mark	No.	Description	Part No.
CAPACITORS			
	C 2410(A,74,31)		CKSRYB103K50
	C 2411(A,64,41)		CKSRYB103K50
	C 2412(A,67,49)		CKSRYB103K50
	C 2413(A,82,31)		CKSRYB103K50
	C 2414(A,69,25)		CKSRYB103K50
	C 2415(A,42,41)		CKSRYB103K50
	C 2416(A,46,49)		CKSRYB103K50
	C 2417(A,87,30)		CKSRYB103K50
	C 2418(A,79,27)		CKSRYB103K50
	C 2419(A,70,60)		CKSRYB103K50
	C 2420(A,74,68)		CKSRYB103K50
	C 2424(A,60,67)		CEAT101M10
	C 2425(A,60,61)		CEAT101M10
	C 2426(A,60,55)		CEAT101M10
	C 2427(B,41,59)		CKSRYB104K16
	C 2428(B,46,73)		CKSRYB104K16
	C 2429(A,89,26)		CKSRYB103K50
	C 2430(A,81,39)		CEAT100M50
	C 2431(A,45,59)		CEAT101M10
	C 2432(A,42,73)		CEAT101M10
	C 2433(A,86,38)		CEAT100M50
	C 2438(B,63,123)		CKSRYB103K50
	C 2439(A,47,33)		CKSRYB224K10
	C 2440(A,42,27)		CKSRYB224K10
	C 2453(B,23,58)		CKSRYB103K50
	C 2454(B,23,30)		CKSRYB103K50
	C 2455(B,23,18)		CKSRYB103K50
	C 2456(B,25,79)		CKSRYB103K50
	C 2457(A,92,38)		CEAT100M50
	C 2460(B,94,18)		CKSRYB104K16
	C 2463(A,79,127)		CKSRYB103K50
	C 2465(B,68,142)		CKSRYB103K50
	C 2466(B,68,141)		CKSRYB224K10
	C 2467(B,71,142)		CKSRYB152K50
	C 2471(A,49,27)		CEAT101M16
	C 2472(A,41,23)		CEAT101M16
	C 2474(B,23,72)		CKSRYB474K10
	C 2481(A,74,135)		CKSRYB103K50
	C 2482(B,65,34)		CKSRYB104K16
	C 2483(A,60,25)		CEAT100M50
	C 2484(A,79,117)		CKSRYB103K50
	C 2503(A,164,97)		CEAT4R7M50
	C 2504(A,154,97)		CEAT4R7M50
	C 2511(A,166,111)		CCSRCH101J50
	C 2512(A,152,111)		CCSRCH101J50
	C 2513(A,161,114)		CKSRYB103K50
	C 2514(A,157,114)		CKSRYB103K50
	C 2515(A,165,115)		CEAT470M25
	C 2516(A,153,115)		CEAT470M25
	C 2527(A,202,97)		CEAT4R7M50
	C 2528(A,192,97)		CEAT4R7M50
	C 2535(A,204,111)		CCSRCH101J50
	C 2536(A,190,111)		CCSRCH101J50
	C 2537(A,199,114)		CKSRYB103K50
	C 2538(A,195,114)		CKSRYB103K50
	C 2539(A,203,115)		CEAT470M25
	C 2540(A,191,115)		CEAT470M25
	C 2553(A,183,97)		CEAT4R7M50
	C 2554(A,173,97)		CEAT4R7M50

Mark	No.	Description	Part No.
C	2561(A,185,111)		CCSRCH101J50
C	2562(A,171,111)		CCSRCH101J50
C	2563(A,180,114)		CKSRYB103K50
C	2564(A,176,114)		CKSRYB103K50
C	2565(A,184,115)		CEAT470M25
C	2566(A,172,115)		CEAT470M25
C	2577(A,221,97)		CEAT4R7M50
C	2578(A,211,97)		CEAT4R7M50
C	2585(A,223,111)		CCSRCH101J50
C	2586(A,209,111)		CCSRCH101J50
C	2587(A,218,114)		CKSRYB103K50
C	2588(A,214,114)		CKSRYB103K50
C	2589(A,222,115)		CEAT470M25
C	2590(A,210,115)		CEAT470M25
C	2621(A,140,146)		CKSRYB103K50
C	2623(B,169,145)		CKSRYB104K16
C	2624(A,131,133)		CKSRYB472K50
C	2625(A,128,133)		CKSRYB472K50
C	2626(A,191,24)		CEAT2R2M50
C	2627(A,183,24)		CEAT2R2M50
C	2628(A,193,37)		CEAT100M50
C	2629(A,184,37)		CEAT100M50
C	2631(A,169,66)		CKSRYB103K50
C	2632(A,178,56)		CKSRYB103K50
C	2633(A,144,31)		CCSRCH101J50
C	2634(A,145,45)		CCSRCH101J50
C	2635(A,149,39)		CKSRYB103K50
C	2636(A,149,35)		CKSRYB103K50
C	2637(A,139,34)		CEAT100M50
C	2638(A,140,42)		CEAT100M50
C	2639(A,154,68)		CCSRCH220J50
C	2640(A,154,54)		CCSRCH220J50
C	2641(A,158,60)		CKSRYB103K50
C	2642(A,151,63)		CKSRYB103K50
C	2643(A,147,68)		CCSRCH220J50
C	2644(A,147,54)		CCSRCH220J50
C	2645(A,161,65)		CEAT100M50
C	2646(A,161,57)		CEAT100M50
C	2647(A,151,60)		CKSRYB103K50
C	2648(A,144,63)		CKSRYB103K50
C	2649(B,162,34)		CKSRYB103K50
C	2650(B,152,45)		CKSRYB103K50
C	2651(A,142,60)		CKSRYB103K50
C	2652(A,129,65)		CKSRYB103K50
C	2661(A,188,59)		CKSRYB103K50
C	2662(A,195,57)		CKSRYB103K50
C	2663(A,190,84)		CEAT101M16
C	2664(A,184,84)		CEAT101M16
C	2665(A,203,84)		CEAT101M16
C	2666(A,196,84)		CEAT101M16
C	2667(A,215,84)		CEAT101M16
C	2668(A,209,84)		CEAT101M16
C	2669(A,227,84)		CEAT101M16
C	2670(A,221,84)		CEAT101M16
C	2671(A,191,58)		CCSRCH101J50
C	2672(A,191,56)		CCSRCH101J50
C	2681(B,143,83)		CKSRYB103K50
C	2682(A,153,84)		CEAT100M50
C	2683(A,160,87)		CEAT2R2M50
C	2684(A,160,82)		CEAT2R2M50
C	2685(A,137,90)		CEAT2R2M50
C	2686(A,137,84)		CEAT2R2M50
C	2687(A,142,92)		CCSRCH101J50
C	2688(A,142,90)		CCSRCH101J50
C	2695(A,116,92)	ELECT. CAPACITOR	CEAT470M25
C	2696(A,116,85)	ELECT. CAPACITOR	CEAT470M25
C	2760(B,41,130)		CKSRYB472K50
C	2764(A,39,129)		CCSRCH561J50
C	2765(A,37,111)		CEAT101M10
C	2766(A,38,118)		CCSRCH102J50
C	2767(B,44,114)		CCSRCH270J50
C	2768(B,48,113)		CCSRCH270J50
C	2769(A,46,133)		CEAT100M50
C	2771(A,46,144)		CEAT101M16
C	2773(A,40,146)		CEAT101M16
C	2779(B,31,89)		CKSRYB104K16
C	2783(B,23,117)		CKSRYB104K16
C	2784(B,23,116)		CKSRYB471K50
C	2785(B,25,133)		CKSRYB104K16
C	2786(B,25,135)		CKSRYB471K50
C	2787(B,30,150)		CKSRYB103K50
C	2788(B,30,148)		CKSRYB104K16

L DIGITAL MOTHER ASSY

SEMICONDUCTORS

IC	101	PEG395A8
IC	102	BU4842F
IC	104	BR24L32F-W
IC	105,106,111	TC74VHCT08AFTS1
IC	109,110,302	TC74VHCT125AFTS1
IC	112,305,310-312	TC74VHC08FTS1
IC	201	PEG396A
IC	202	AYW7180
IC	203	TC4094BFN
⚠ IC	204	NJM2880U1-33
IC	205	TC74LCX244FTS1
IC	206,207,210,301	TC74VHC125FTS1
IC	208	TC74VHC02FTS1
IC	209	TC74VHC04FTS1
IC	303	AK4114VQ
IC	304	TC7WHU04FU
IC	309,313,314	TC74LCX157FTS1
IC	315	TC74LCX541FTS1
IC	316,317	ML87V5002
⚠ IC	318	NJM2885DL1-33
IC	319	TC7SH08FUS1
IC	471	AK5359ET
IC	551,651,751,851	DSD1791DBR
IC	552,652,752,852	BA4560RF
⚠ IC	991	NJM2391DL1-33
Q	101-104,106	RT3P22M
Q	105,201,301	RT1N241M
Q	107	RT1N141M-11
Q	108	2SA1602A
Q	109	RT1P431M
Q	110,111	RT1P241M
Q	202	2SA1366
D	101,103,104,110	1SS352

Mark	No.	Description	Part No.
D	102,105,108,202		MC2848-11
D	106		RB520S-30
D	107		UDZS5R1(B)
D	109,301		MC2846-11
D	201		RB501V-40
D	471,472		DAN217

MISCELLANEOUS

L	101	CHIP SOLID INDUCTOR	QTL1013
L	103,201	CHIP SOLID INDUCTOR	ATL7002
L	301-305	CHIP SOLID INDUCTOR	QTL1013
L	309-318	CHIP SOLID INDUCTOR	QTL1013
L	471,472	CHIP SOLID INDUCTOR	QTL1013
L	552,561	CHIP SOLID INDUCTOR	QTL1013
L	651,652	CHIP SOLID INDUCTOR	QTL1013
L	751,752	CHIP SOLID INDUCTOR	QTL1013
L	851,852	CHIP SOLID INDUCTOR	QTL1013
JA	201	PIN JACK(2P)	AKB7173
JA	202-205	OPT. LINK IN	AKS7001
JA	207,208	OPT. LINK OUT	AKS7002
X	101	RESONATOR	CSS1716
X	201	CERAMIC RESONATOR	XSS3004
X	301	CRYSTAL RESONATOR	XSS3003
CN	101,992	13P SOCKET	XKP3077
CN	102	CONNECTOR	CKS3384
CN	103	31P CONNECTOR	VKN1262
CN	104	PLUG	CKS1760
CN	201	CONNECTOR	CKS1755
CN	202,203,991	PLUG	CKS1764
CN	204	22P CONNECTOR	RKN1063
CN	301	CONNECTOR	CKS3815
CN	302	PLUG	CKS1762
CN	303,304	26P PLUG	AKM7054

RESISTORS

R	103,111,114,117		RAB4CQ101J
R	104,106,112,120		RS1/16S104J
R	107,207		RS1/16S512J
R	118,167,171		RS1/16S222J
R	119,121,125,134		RAB4CQ101J
R	122,126-128		RS1/16S104J
R	124,147,152,153		RS1/16S473J
R	130-133,137,138		RS1/16S104J
R	142,201,205,213		RAB4CQ101J
R	143,145,150,157		RS1/16S104J
R	151,617,618,717		RS1/16S474J
R	155,203,204,206		RS1/16S473J
R	162,215,216,248		RS1/16S472J
R	166,170		RS1/16S153J
R	177		RS1/16S223J
R	180,182		RS1/16S105J
R	183,184,192,193		RS1/16S104J
R	208,241,305-308		RS1/16S101J
R	209,214,218,220		RS1/16S473J
R	211		RS1/16S103J
R	217,219,224,225		RAB4CQ101J
R	229,236,321		RAB4CQ101J
R	230,231,235		RS1/16S473J
R	237-239,242,244		RS1/16S473J
R	246		RAB4CQ473J
R	247		RS1/16S473J
R	250,251,261		RS1/16S104J
R	265-269,275,489		RS1/16S104J
R	280		RS1/16S182J
R	301,302		RS1/16S750J
R	303,304		RS1/16S220J
R	323		RS1/16SS1802F
R	381,564,664,764		RS1/16S274J
R	437,444,452		RAB4CQ470J
R	458,477,481-484		RS1/16S0R0J
R	490,562,563,662		RS1/16S104J
R	501-504,601-604		RS1/16S222J
R	505,506,509,510		RS1/16S362J
R	507,508,511,512		RS1/16S101J
R	513-516		RS1/16S122J
R	519,520,619,620		RS1/16S221J
R	521,522,981,988		RS1/16S0R0J
R	605,609,705,706		RS1/16S302J
R	606,610		RS1/16S682J
R	607,608,611,612		RS1/16S101J
R	613,615,713-716		RS1/16S152J
R	614,616		RS1/16S102J
R	663,762,763		RS1/16S104J
R	701-704,801-804		RS1/16S222J
R	707,708,711,712		RS1/16S101J
R	709,710,805,806		RS1/16S302J
R	718,817,818		RS1/16S474J
R	719,720,819,820		RS1/16S221J
R	807,808,811,812		RS1/16S101J
R	809,810		RS1/16S302J
R	813-816		RS1/16S152J
Other Resistors			RS1/16SS###J

CAPACITORS

C	102,106,110,115		CKSRYB104K16
C	103,509,510,609		CKSRYB472K50
C	104,107		CKSRYB105K16
C	108,213,375		CEHAZL101M10
C	111,113		CKSSYB103K16
C	112,114		CKSSYB153K16
C	116,117		CKSRYB473K16
C	118,481,482,607		CEAT100M50
C	119		CEAT471M6R3
C	120,122,125-127		CKSRYB104K16
C	121,301,302,478		CKSRYB103K50
C	128,203,206,212		CKSSYB104K10
C	129,317,321,326		CKSSYB471K50
C	201,204,205,208		CKSRYB104K16
C	209		CEAT331M10
C	210,215,216,218		CKSRYB104K16
C	211,374,472		CKSQYB225K10
C	217,219,228,377		CKSRYB471K50
C	221-226,316,320		CKSSYB104K10
C	227,303-308,310		CKSRYB104K16
C	309,473,556,656		CEAT101M16
C	311,314,364,371		CKSRYB104K16
C	312		CEJQ470M16
C	315,319		CEJQ101M6R3
C	322		CKSRYB474K10

Mark	No.	Description	Part No.
C	323,324		CCSSCH100D50
C	325,327,335,337		CKSSYB104K10
C	328,336,338,340		CKSSYB471K50
C	339,341,343,345		CKSSYB104K10
C	342,344,350,352		CKSSYB471K50
C	346,349,351,353		CKSSYB104K10
C	347,348,476,553		CEAT101M10
C	354,358,360,362		CKSSYB471K50
C	357,359,361,378		CKSSYB104K10
C	372,376,474,477		CKSRYB104K16
C	373		CEHAZL221M10
C	379		CKSSYB471K50
C	479,555,563,655		CKSRYB103K50
C	501,502,601,602		CKSRYB102K50
C	503-506,603,605		CCSRCH331J50
C	511,512,611,612		CKSRYB104K25
C	554,557-559,561		CKSRYB104K16
C	560,653,660,753		CEAT101M10
C	604,606		CCSRCH221J50
C	608,707,708,807		CEAT100M50
C	610,709,710,809		CKSRYB472K50
C	654,657-659,661		CKSRYB104K16
C	663,755,763,855		CKSRYB103K50
C	701,702,801,802		CKSRYB102K50
C	703-706,803-806		CCSRCH331J50
C	711,712,811,812		CKSRYB104K25
C	754,757-759,761		CKSRYB104K16
C	756,856		CEAT101M16
C	760,853,860,992		CEAT101M10
C	808		CEAT100M50
C	810		CKSRYB472K50
C	854,857-859,861		CKSRYB104K16
C	863		CKSRYB103K50
C	989,990		CKSRYB102K50
C	991,996,998		CKSRYB104K16
C	994,995		CKSRYB104K25
C	997,999		CKSRYB471K50

M DSP ASSY

SEMICONDUCTORS

IC	101		ADSP-21366KBCZ-1AA
IC	161,162		TC74VHC573FTS1
IC	163		TC7W139FU
IC	164		AYW7178
IC	165		TC7SH32FUS1
IC	171		CY7C1049D3310VXI
IC	201		DSPC56371AF180
IC	271		PDC163A8
IC	401		TC74VHC08FTS1
⚠ IC	511,521		PQ1LAX95MSPQ
⚠ IC	531		BD9107FVM
IC	751		TC7WHU04FU
Q	751		RT1N241M

MISCELLANEOUS

L	101,102	CHIP SOLID INDUCTOR	QTL1013
L	161-164	CHIP SOLID INDUCTOR	QTL1013
L	171	CHIP SOLID INDUCTOR	QTL1013
L	201-203	CHIP SOLID INDUCTOR	QTL1013
L	271,401	CHIP SOLID INDUCTOR	QTL1013
L	530	CHIP BEADS	ATL7010
L	531	POWER INDUCTOR	ATH7047
L	751	CHIP SOLID INDUCTOR	QTL1013
X	751	CRYSTAL RESONATOR	VSS1171
CN	401,402	26P SOCKET	AKP7198

RESISTORS

R	101-104,161-163		RAB4CQ470J
R	114,204,236		RAB4CQ101J
R	123,220		RAB4CQ220J
R	131,149		RAB4CQ472J
R	152		RS1/16S0R0J
R	219		RAB4CQ103J
R	511		RS1/16SS2002F
R	512,522		RS1/16SS1202F
R	521		RS1/16SS1000F
R	531		RS1/16SS9101F
R	532		RS1/16SS1802F
R	533		RS1/16SS1002F
R	537		RS1/10S0R0J
Other Resistors			RS1/16SS###J

CAPACITORS

C	101,103,105,107		CKSSYB471K50
C	102,104,106,108		CKSSYB104K10
C	109,111,113,115		CKSSYB471K50
C	110,112,114,116		CKSSYB104K10
C	117,127,401,753		CKSSYB471K50
C	118,128,131,133		CKSSYB104K10
C	135,137,139,141		CKSSYB104K10
C	145,228		CKSSYB103K25
C	151,183,231,232		CEVW101M16
C	152		ACH7275
C	161,163,165,168		CKSSYB104K10
C	169,171,173,201		CKSSYB104K10
C	203,205,207,209		CKSSYB104K10
C	211,213,215,217		CKSSYB104K10
C	219,221,223,271		CKSSYB104K10
C	402,754		CKSSYB104K10
C	501,531,711		CEVW101M16
C	511		CKSQYB105K16
C	512,521,522		CKSRYB105K10
C	532,534		DCH1201
C	533		CKSSYB102K50
C	751,752		CCSSCH100D50

N INTERFACE ASSY

MISCELLANEOUS

⚠ IC	4301(A,269,181)	PROTECTOR(1.6A)	AEK7012
⚠ IC	4311(B,210,218)	REGULATOR IC	NJM2885DL1-05
Q	4301(B,112,168)	CHIP TRANSISTOR	RSR015P03
Q	4302(B,122,172)	TRANSISTOR	RT1N241M
Q	4381(B,7,182)	TRANSISTOR(SC-70)	2SA1602A
Q	4382(B,20,82)	TRANSISTOR(SC-70)	2SA1602A
Q	4383(B,19,92)	TRANSISTOR	RT1N241M
Q	4384(B,14,60)	TRANSISTOR(SC-70)	2SA1602A
Q	4385(B,13,68)	TRANSISTOR	RT1N241M

Mark	No.	Description	Part No.
D	4301(B,6,48)	DIODE	1SS352
D	4381(B,10,193)	DIODE	UDZS5R1(B)
L	4351(B,201,236)	INDUCTOR	CTF1385
L	4352(B,208,224)	INDUCTOR	CTF1385
L	4356(B,131,221)	INDUCTOR	CTF1385
L	4357(B,132,217)	INDUCTOR	CTF1385
L	4358(B,132,211)	INDUCTOR	CTF1385
L	4359(B,129,211)	INDUCTOR	CTF1385
L	4360(B,127,211)	INDUCTOR	CTF1385
L	4361(B,35,236)	INDUCTOR	CTF1385
L	4362(B,44,237)	INDUCTOR	CTF1385
L	4363(B,34,236)	INDUCTOR	CTF1385
L	4364(B,137,221)	INDUCTOR	CTF1385
L	4365(B,139,217)	INDUCTOR	CTF1385
L	4366(B,126,225)	INDUCTOR	CTF1385
L	4381(B,29,191)	CHIP SOLID INDUCTOR	ATL7002
J	4	4PJUMPER WIRE	D20PDD0420E
J	4308(A,260,196)	CONNECTOR ASS'Y	PF11PG-R05
J	4309(A,232,196)	CONNECTOR ASS'Y	PF08PG-R05
KN	4301(A,151,218)	WRAPPING TERMINAL	VNF1084
CN	4301(A,191,232)	13P PLUG	XKP3066
CN	4302(A,184,232)	CONNECTOR	CKS1730
CN	4303(A,150,232)	CONNECTOR	CKS1730
CN	4304(A,119,232)	CONNECTOR	CKS1730
CN	4305(A,76,232)	CONNECTOR	CKS1721
CN	4306(A,58,232)	CONNECTOR	CKS1728
CN	4307(A,16,230)	CONNECTOR	CKS3813
CN	4308(A,79,207)	30P SOCKET	XKP3092
CN	4309(A,41,207)	30P SOCKET	XKP3092
CN	4310(A,192,183)	11P PLUG	XKP3065
CN	4311(A,157,183)	PLUG	CKS1724
CN	4312(A,119,183)	CONNECTOR	CKS1730
CN	4313(A,67,183)	PLUG	CKS1724
CN	4314(A,56,184)	17P PLUG	XKP3068
CN	4315(A,15,185)	CONNECTOR(07P)	TUC-P07P-B1
CN	4316(A,36,152)	17P PLUG	XKP3068
CN	4317(A,35,128)	19P PLUG	XKP3069
CN	4318(A,18,106)	CONNECTOR(06P)	TUC-P06P-B1
CN	4319(A,34,73)	17P PLUG	XKP3068
CN	4320(A,37,43)	23P PLUG	XKP3071
CN	4321(A,225,228)	CONNECTOR	CKS3380
	4301(A,205,198)	4P CABLE HOLDER	51048-0400
	4306(A,322,199)	PCB BINDER	VEF1040
	4305(A,224,197)	PCB BINDER	VEF1040
	4304(A,5,5)	PCB BINDER	VEF1040
	4302(A,28,197)	4P CABLE HOLDER	51048-0400
Y	19 (A,18,203)	2P HOUSING WIRE ASSY	ADX7578
Y	17	AWG14 BOARD IN	ADX7493
Y	18 (A,9,199)	2P HOUSING WIRE ASSY	ADX7575
	4303(A,110,174)	PCB BINDER	VEF1040

RESISTORS

R	4301(B,116,168)		RS1/16S103J
R	4302(B,121,168)		RS1/16S101J
R	4303(B,291,189)		RS1/16S473J
R	4304(B,291,183)		RS1/16S473J
R	4371(B,117,219)		RS1/16S0R0J
R	4372(B,117,221)		RS1/16S0R0J
R	4381(B,8,176)		RS1/16S180J
R	4382(B,8,178)		RS1/16S180J
R	4383(B,8,187)		RS1/16S103J
R	4384(B,10,189)		RS1/16S103J
R	4385(B,24,84)		RS1/16S472J
R	4386(B,19,87)		RS1/16S472J
R	4387(B,14,64)		RS1/16S472J
R	4388(B,18,65)		RS1/16S472J

CAPACITORS

C	4301(A,295,191)		CEAT2R2M50
C	4302(A,295,185)		CEAT2R2M50
C	4303(A,134,198)	ELECTR. CAPACITOR	CEAL470M25
C	4304(A,151,201)	ELECTR. CAPACITOR	CEAL470M25
C	4308(B,110,210)		CKSRYB103K50
C	4311(B,205,213)		CKSRYB474K10
C	4312(B,202,219)		CKSQYB225K10
C	4330(B,153,223)		CKSRYB103K50
C	4331(B,151,223)		CKSRYB471K50
C	4361(B,21,227)		CKSRYB102K50
C	4362(B,12,208)		CKSRYB102K50
C	4365(B,20,208)		CKSRYB102K50
C	4366(B,38,213)		CKSRYB102K50
C	4367(B,26,189)		CKSRYB104K16
C	4368(B,16,158)		CKSRYB104K16
C	4369(B,18,161)		CKSRYB104K16
C	4382(B,10,191)		CKSRYB104K16

O POWER AMP IN ASSY

MISCELLANEOUS

Q	5601(B,61,180)	CHIP TRANSISTOR	2SD2704K
Q	5602(B,41,219)	TRANSISTOR	IMT4
Q	5603(B,45,207)	CHIP TRANSISTOR	2SA1514K
Q	5604(A,28,206)	TRANSISTOR	2SA1145
Q	5605(A,30,225)	TRANSISTOR	2SC2705
Q	5641(B,15,213)	CHIP TR	2SA1255
D	5601(B,38,205)	CHIP ZENER DIODE	UDZS3R6(B)
D	5602(B,38,207)	DIODE	1SS355
D	5603(B,26,222)	DIODE	1SS355
D	5604(B,28,212)	DIODE	1SS355
D	5605(B,28,218)	DIODE	UDZS4R7(B)
D	5606(B,26,212)	DIODE	UDZS4R7(B)
D	5641(B,11,229)	DIODE	1SS355
D	5642(B,13,229)	DIODE	1SS355
D	5643(B,9,229)	DIODE	1SS355
D	5644(B,45,238)	DIODE	1SS355
CN	5601(A,71,233)	13P PLUG	XKP3066
CN	5602(A,56,199)	13P PLUG	XKP3066
CN	5603(A,74,131)	19P CONNECTOR	52044-1945
CN	5605(A,47,233)	SOCKET 7-P	KP250NA7
CN	5606(A,32,199)	SOCKET 7-P	KP250NA7
	5604(A,7,215)	5P CABLE HOLDER	51048-0500

RESISTORS

R	5601(B,58,178)		RS1/16S102J
R	5602(B,48,212)		RS1/16S221J
R	5603(B,48,216)		RS1/16S333J
R	5604(B,58,182)		RS1/16S103J
R	5605(B,41,213)		RS1/16S152J

Mark	No.	Description	Part No.
	R 5606(B,38,217)		RS1/16S821J
	R 5607(B,44,203)		RS1/16S2001F
	R 5608(B,43,212)		RS1/16S682J
	R 5609(A,36,214)	CARBON FILM RESISTOR	RD1/2VM473J
	R 5610(B,32,202)		RS1/16S151J
	R 5611(B,29,203)		RN1/16SE1201D
	R 5612(B,31,230)		RS1/16S221J
⚠	R 5623(A,69,206)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠	R 5624(A,56,217)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠	R 5627(A,20,225)	RESISTOR (0.18, 5W)	ACN7121
	R 5629(B,43,224)		RN1/10SE3302D
	R 5630(B,45,220)		RN1/16SE1001D
	R 5631(B,47,220)		RN1/16SE1500D
	R 5632(B,29,229)		RS1/16S151J
	R 5641(B,7,229)		RS1/16S473J
	R 5642(B,13,195)		RS1/16S223J
	R 5643(B,15,230)		RS1/16S471J
	R 5644(B,15,195)		RS1/16S471J
	R 5645(B,11,235)		RS1/16S472J
	R 5646(B,13,235)		RS1/16S472J
	R 5647(B,15,208)		RS1/16S122J
	R 5648(B,48,238)		RS1/16S154J
	R 5649(B,50,235)		RS1/16S103J
	R 5650(B,52,235)		RS1/16S103J

CAPACITORS

	C 5601(A,51,212)		CEAT4R7M50
	C 5602(B,46,216)		CCSRCH221J50
	C 5604(B,39,213)		CKSRYB102K50
	C 5607(A,41,203)		CEAT101M10
	C 5608(B,35,228)	CAPACITOR(CERAMIC)	ACG7057
	C 5609(A,31,210)	ELECT. CAPACITOR	CEAT100M2A
	C 5615(B,47,225)		CCSRCH220J50
	C 5616(B,45,225)		CCSRCH220J50
	C 5617(A,50,221)		CEAT331M10
	C 5623(A,67,209)		CEAT100M63
	C 5624(A,63,225)		CEAT100M63
	C 5632(B,28,233)		CKSRYB224K16
	C 5641(A,13,199)		CEANP2R2M50

P POWER PROTECT ASSY

MISCELLANEOUS

	IC 5701(B,17,153)	OP-AMP IC	BA4560RF
	Q 5701(B,10,107)	TRANSISTOR	RT1N241M
	Q 5702(B,20,107)	DIGITAL TR(SC-70)	RT1P241M
	Q 5703(B,21,118)	TRANSISTOR	RT1N241M
	Q 5704(B,16,166)	TRANSISTOR	2SC4081
	Q 5705(B,13,107)	TRANSISTOR	RT1N241M
	Q 5706(B,24,107)	DIGITAL TR(SC-70)	RT1P241M
	D 5701(B,26,166)	DIODE	1SS355
	D 5702(B,7,61)	DIODE	1SS355
	CN5701(A,8,97)	11P PLUG	XKP3065
	CN5702(A,21,131)	11P PLUG	XKP3065
	CN5703(A,46,178)	19P CONNECTOR	52044-1945
	CN5704(A,17,181)	CONNECTOR	S5B-PH
	CN5705(A,19,39)	17P CONNECTOR	52044-1745
	CN5706(A,13,41)	3PIN CONNECTOR	S3B-EH
	5701(A,7,47)	PCB BINDER	VEF1040

Mark	No.	Description	Part No.

RESISTORS

	R 5701(B,13,118)		RS1/16S562J
	R 5702(B,16,118)		RS1/16S562J
	R 5703(B,27,88)		RS1/16S473J
	R 5705(B,20,81)		RS1/16S0R0J
	R 5706(B,18,118)		RS1/16S822J
	R 5707(B,20,88)		RS1/16S473J
	R 5708(B,25,81)		RS1/16S0R0J
	R 5710(B,21,149)		RS1/16S223J
	R 5711(B,21,153)		RS1/16S103J
	R 5712(B,12,155)		RS1/16S472J
	R 5713(B,21,158)		RS1/16S103J
	R 5714(B,13,139)		RS1/16S102J
	R 5715(B,8,166)		RS1/16S473J
	R 5716(B,13,166)		RS1/16S472J
	R 5717(B,19,166)		RS1/16S103J
	R 5718(B,7,57)		RS1/16S104J
	R 5720(B,21,166)		RS1/16S103J
	R 5721(B,24,166)		RS1/16S683J
	R 5746(B,17,88)		RS1/16S0R0J
	R 5747(B,18,107)		RS1/16S0R0J
	R 5750(B,26,161)		RS1/16S0R0J

CAPACITORS

	C 5701(B,25,88)		CKSRYB104K50
	C 5702(B,22,88)		CKSRYB104K50
	C 5703(B,24,158)		CKSRYB104K50
	C 5704(B,12,151)		CKSRYB104K50
	C 5705(B,11,166)		CKSRYB223K50
	C 5706(B,14,44)		CKSRYB103K50

Q POWER AMP-L ASSY

MISCELLANEOUS

⚠	IC 5001(A,169,134)	DARLINGTON POWER IC	SAP17N(OY)
⚠	IC 5002(A,209,134)	DARLINGTON POWER IC	SAP17P(OY)
⚠	IC 5101(A,105,134)	DARLINGTON POWER IC	SAP17N(OY)
⚠	IC 5102(A,137,134)	DARLINGTON POWER IC	SAP17P(OY)
⚠	IC 5201(A,249,134)	DARLINGTON POWER IC	SAP17N(OY)
⚠	IC 5202(A,281,134)	DARLINGTON POWER IC	SAP17P(OY)
⚠	IC 5601(A,313,134)	DARLINGTON POWER IC	SAP17N(OY)
	Q 5001(B,193,207)	CHIP TRANSISTOR	2SD2704K
	Q 5002(B,181,194)	TRANSISTOR	IMT4
	Q 5003(B,194,198)	CHIP TRANSISTOR	2SA1514K
	Q 5004(A,192,184)	TRANSISTOR	2SA1145
	Q 5005(A,168,192)	TRANSISTOR	2SC2705
	Q 5041(B,156,195)	CHIP TR	2SA1255
	Q 5101(B,136,207)	CHIP TRANSISTOR	2SD2704K
	Q 5102(B,124,194)	TRANSISTOR	IMT4
	Q 5103(B,137,198)	CHIP TRANSISTOR	2SA1514K
	Q 5104(A,135,184)	TRANSISTOR	2SA1145
	Q 5105(A,112,192)	TRANSISTOR	2SC2705
	Q 5141(B,100,202)	CHIP TR	2SA1255
	Q 5201(B,274,206)	CHIP TRANSISTOR	2SD2704K
	Q 5202(B,262,193)	TRANSISTOR	IMT4
	Q 5203(B,275,197)	CHIP TRANSISTOR	2SA1514K
	Q 5204(A,273,183)	TRANSISTOR	2SA1145
	Q 5205(A,250,191)	TRANSISTOR	2SC2705
	Q 5241(B,238,197)	CHIP TR	2SA1255

Mark	No.	Description	Part No.
D	5001(B,197,188)	CHIP ZENER DIODE	UDZS3R6(B)
D	5002(B,195,188)	DIODE	1SS355
D	5003(B,187,183)	DIODE	1SS355
D	5004(B,179,183)	DIODE	1SS355
D	5005(B,184,183)	DIODE	UDZS4R7(B)
D	5006(B,182,183)	DIODE	UDZS4R7(B)
D	5041(B,156,174)	DIODE	1SS355
D	5042(B,158,174)	DIODE	1SS355
D	5043(B,158,203)	DIODE	1SS355
D	5044(B,161,170)	DIODE	1SS355
D	5101(B,141,188)	CHIP ZENER DIODE	UDZS3R6(B)
D	5102(B,139,188)	DIODE	1SS355
D	5103(B,130,183)	DIODE	1SS355
D	5104(B,123,183)	DIODE	1SS355
D	5105(B,128,183)	DIODE	UDZS4R7(B)
D	5106(B,125,183)	DIODE	UDZS4R7(B)
D	5141(B,93,187)	DIODE	1SS355
D	5142(B,96,187)	DIODE	1SS355
D	5143(B,103,205)	DIODE	1SS355
D	5144(B,104,182)	DIODE	1SS355
D	5201(B,279,187)	CHIP ZENER DIODE	UDZS3R6(B)
D	5202(B,276,187)	DIODE	1SS355
D	5203(B,268,181)	DIODE	1SS355
D	5204(B,261,181)	DIODE	1SS355
D	5205(B,266,181)	DIODE	UDZS4R7(B)
D	5206(B,263,181)	DIODE	UDZS4R7(B)
D	5241(B,238,173)	DIODE	1SS355
D	5242(B,240,173)	DIODE	1SS355
D	5243(B,240,202)	DIODE	1SS355
D	5244(B,242,173)	DIODE	1SS355
⚠ TH	5001(A,160,229)	POSISTOR	PTFM04BH222Q2N34B0
⚠ TH	5002(A,240,229)	POSISTOR	PTFM04BD222Q2N34B0
CN	5001(A,320,205)	13P SOCKET	XKP3077
CN	5002(A,86,219)	11P SOCKET	XKP3076
CN	5003(A,313,196)	7-P PLUG	KM250NA7L

RESISTORS

Mark	No.	Description	Part No.
R	5001(B,199,202)		RS1/16S102J
R	5002(B,187,202)		RS1/16S221J
R	5003(B,184,203)		RS1/16S333J
R	5004(B,199,205)		RS1/16S103J
R	5005(B,177,192)		RS1/16S152J
R	5006(B,170,200)		RS1/16S821J
R	5007(B,197,197)		RS1/16S2001F
R	5008(B,186,194)		RS1/16S682J
R	5009(A,189,193)	CARBON FILM RESISTOR	RD1/2VM473J
R	5010(B,197,183)		RS1/16S151J
R	5011(B,195,184)		RN1/16SE1201D
R	5012(B,169,197)		RS1/16S221J
⚠ R	5013(B,183,150)		RS1/16S330J
R	5021(B,176,153)		RS1/16S101J
R	5022(B,190,153)		RS1/16S101J
⚠ R	5023(A,198,166)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠ R	5024(A,168,176)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠ R	5025(B,163,156)	CHIP RESISTOR	ACN7132
⚠ R	5026(B,200,156)	CHIP RESISTOR	ACN7132
⚠ R	5027(A,192,166)	RESISTOR (0.18, 5W)	ACN7121
R	5029(B,174,203)		RN1/10SE3302D
R	5030(B,180,203)		RN1/16SE1001D
R	5031(B,180,205)		RN1/16SE1500D
R	5032(B,167,196)		RS1/16S151J
R	5041(B,154,169)		RS1/16S473J
R	5042(B,156,169)		RS1/16S223J
R	5043(B,152,169)		RS1/16S471J
R	5044(B,158,169)		RS1/16S471J
R	5045(B,158,179)		RS1/16S472J
R	5046(B,161,179)		RS1/16S472J
R	5047(B,157,187)		RS1/16S122J
R	5048(B,158,183)		RS1/16S154J
R	5049(B,161,183)		RS1/16S103J
R	5050(B,160,187)		RS1/16S103J
R	5101(B,143,202)		RS1/16S102J
R	5102(B,130,202)		RS1/16S221J
R	5103(B,127,203)		RS1/16S333J
R	5104(B,143,205)		RS1/16S103J
R	5105(B,120,192)		RS1/16S152J
R	5106(B,114,200)		RS1/16S821J
R	5107(B,141,197)		RS1/16S2001F
R	5108(B,130,194)		RS1/16S682J
R	5109(A,133,193)	CARBON FILM RESISTOR	RD1/2VM473J
R	5110(B,141,183)		RS1/16S151J
R	5111(B,139,184)		RN1/16SE1201D
R	5112(B,113,197)		RS1/16S221J
⚠ R	5113(B,115,150)		RS1/16S330J
R	5121(B,108,153)		RS1/16S101J
R	5122(B,129,150)		RS1/16S101J
⚠ R	5123(A,142,166)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠ R	5124(A,111,176)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠ R	5125(B,99,156)	CHIP RESISTOR	ACN7132
⚠ R	5126(B,136,156)	CHIP RESISTOR	ACN7132
⚠ R	5127(A,136,166)	RESISTOR (0.18, 5W)	ACN7121
R	5129(B,117,203)		RN1/10SE3302D
R	5130(B,123,203)		RN1/16SE1001D
R	5131(B,123,205)		RN1/16SE1500D
R	5132(B,110,196)		RS1/16S151J
R	5141(B,97,182)		RS1/16S473J
R	5142(B,99,182)		RS1/16S223J
R	5143(B,95,182)		RS1/16S471J
R	5144(B,102,182)		RS1/16S471J
R	5145(B,100,187)		RS1/16S472J
R	5146(B,102,187)		RS1/16S472J
R	5147(B,99,195)		RS1/16S122J
R	5148(B,100,191)		RS1/16S154J
R	5149(B,102,191)		RS1/16S103J
R	5150(B,102,195)		RS1/16S103J
R	5201(B,281,201)		RS1/16S102J
R	5202(B,268,201)		RS1/16S221J
R	5203(B,265,202)		RS1/16S333J
R	5204(B,281,204)		RS1/16S103J
R	5205(B,258,191)		RS1/16S152J
R	5206(B,252,199)		RS1/16S821J
R	5207(B,279,196)		RS1/16S2001F
R	5208(B,268,193)		RS1/16S682J
R	5209(A,271,192)	CARBON FILM RESISTOR	RD1/2VM473J
R	5210(B,278,183)		RS1/16S151J
R	5211(B,276,183)		RN1/16SE1201D
R	5212(B,251,196)		RS1/16S221J
⚠ R	5213(B,259,149)		RS1/16S330J
R	5221(B,251,153)		RS1/16S101J

Mark	No.	Description	Part No.
	R 5222(B,269,153)		RS1/16S101J
⚠	R 5223(A,280,164)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠	R 5224(A,250,175)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠	R 5225(B,238,156)	CHIP RESISTOR	ACN7132
⚠	R 5226(B,279,156)	CHIP RESISTOR	ACN7132
⚠	R 5227(A,274,165)	RESISTOR (0.18, 5W)	ACN7121
	R 5229(B,255,202)		RN1/10SE3302D
	R 5230(B,261,202)		RN1/16SE1001D
	R 5231(B,261,204)		RN1/16SE1500D
	R 5232(B,248,195)		RS1/16S151J
	R 5241(B,237,169)		RS1/16S473J
	R 5242(B,239,169)		RS1/16S223J
	R 5243(B,235,169)		RS1/16S471J
	R 5244(B,241,169)		RS1/16S471J
	R 5245(B,240,180)		RS1/16S472J
	R 5246(B,242,180)		RS1/16S472J
	R 5247(B,240,189)		RS1/16S122J
	R 5248(B,237,180)		RS1/16S154J
	R 5249(B,242,184)		RS1/16S103J
	R 5250(B,240,184)		RS1/16S103J
⚠	R 5292(B,300,156)	CHIP RESISTOR	ACN7132
⚠	R 5613(B,314,153)		RS1/16S330J
	R 5621(B,308,151)		RS1/16S101J

CAPACITORS

	C 5001(A,190,203)		CEAT4R7M50
	C 5002(B,184,200)		CCSRCH221J50
	C 5004(B,174,197)		CKSRYB102K50
	C 5007(A,202,193)		CEAT101M10
	C 5008(B,171,197)	CAPACITOR(CERAMIC)	ACG7057
	C 5009(A,186,188)	ELECT. CAPACITOR	CEAT100M2A
	C 5011(B,169,142)	CAPACITOR(CERAMIC)	ACG7056
	C 5012(B,197,142)	CAPACITOR(CERAMIC)	ACG7056
	C 5015(B,175,205)		CCSRCH220J50
	C 5016(B,175,207)		CCSRCH220J50
	C 5017(A,179,207)		CEAT331M10
	C 5023(A,197,180)		CEAT100M63
	C 5024(A,173,186)		CEAT100M63
	C 5032(B,166,199)		CKSRYB224K16
	C 5041(A,155,190)		CEANP2R2M50
	C 5051(A,219,183)	ELECT. CAPACITOR	CEAT100M2A
	C 5052(A,223,177)	ELECT. CAPACITOR	CEAT100M2A
	C 5101(A,133,203)		CEAT4R7M50
	C 5102(B,127,200)		CCSRCH221J50
	C 5104(B,117,197)		CKSRYB102K50
	C 5107(A,145,193)		CEAT101M10
	C 5108(B,115,197)	CAPACITOR(CERAMIC)	ACG7057
	C 5109(A,129,188)	ELECT. CAPACITOR	CEAT100M2A
	C 5111(B,101,142)	CAPACITOR(CERAMIC)	ACG7056
	C 5112(B,130,142)	CAPACITOR(CERAMIC)	ACG7056
	C 5115(B,119,205)		CCSRCH220J50
	C 5116(B,119,207)		CCSRCH220J50
	C 5117(A,123,207)		CEAT331M10
	C 5123(A,141,180)		CEAT100M63
	C 5124(A,116,186)		CEAT100M63
	C 5132(B,110,199)		CKSRYB224K16
	C 5141(A,96,198)		CEANP2R2M50
	C 5201(A,271,202)		CEAT4R7M50
	C 5202(B,265,199)		CCSRCH221J50
	C 5204(B,255,196)		CKSRYB102K50
	C 5207(A,283,192)		CEAT101M10
	C 5208(B,253,196)	CAPACITOR(CERAMIC)	ACG7057
	C 5209(A,267,187)	ELECT. CAPACITOR	CEAT100M2A
	C 5211(B,244,142)	CAPACITOR(CERAMIC)	ACG7056
	C 5212(B,275,142)	CAPACITOR(CERAMIC)	ACG7056
	C 5215(B,257,204)		CCSRCH220J50
	C 5216(B,257,206)		CCSRCH220J50
	C 5217(A,261,206)		CEAT331M10
	C 5223(A,287,181)		CEAT100M63
	C 5224(A,255,185)		CEAT100M63
	C 5232(B,248,198)		CKSRYB224K16
	C 5241(A,237,192)		CEANP2R2M50
	C 5611(B,307,142)	CAPACITOR(CERAMIC)	ACG7056

R POWER AMP-R ASSY

MISCELLANEOUS

⚠	IC 5301(A,197,112)	DARLINGTON POWER IC	SAP17N(OY)
⚠	IC 5302(A,157,112)	DARLINGTON POWER IC	SAP17P(OY)
⚠	IC 5401(A,125,112)	DARLINGTON POWER IC	SAP17N(OY)
⚠	IC 5402(A,93,112)	DARLINGTON POWER IC	SAP17P(OY)
⚠	IC 5501(A,269,112)	DARLINGTON POWER IC	SAP17N(OY)
⚠	IC 5502(A,237,112)	DARLINGTON POWER IC	SAP17P(OY)
⚠	IC 5602(A,301,112)	DARLINGTON POWER IC	SAP17P(OY)
	Q 5301(B,196,38)	CHIP TRANSISTOR	2SD2704K
	Q 5302(B,187,52)	TRANSISTOR	IMT4
	Q 5303(B,173,49)	CHIP TRANSISTOR	2SA1514K
	Q 5304(A,176,63)	TRANSISTOR	2SA1145
	Q 5305(A,199,49)	TRANSISTOR	2SC2705
	Q 5341(B,152,48)	CHIP TR	2SA1255
	Q 5401(B,132,38)	CHIP TRANSISTOR	2SD2704K
	Q 5402(B,126,52)	TRANSISTOR	IMT4
	Q 5403(B,113,48)	CHIP TRANSISTOR	2SA1514K
	Q 5404(A,119,64)	TRANSISTOR	2SA1145
	Q 5405(A,139,49)	TRANSISTOR	2SC2705
	Q 5441(B,94,46)	CHIP TR	2SA1255
	Q 5501(B,285,38)	CHIP TRANSISTOR	2SD2704K
	Q 5502(B,276,52)	TRANSISTOR	IMT4
	Q 5503(B,262,49)	CHIP TRANSISTOR	2SA1514K
	Q 5504(A,260,63)	TRANSISTOR	2SA1145
	Q 5505(A,288,49)	TRANSISTOR	2SC2705
	Q 5541(B,239,49)	CHIP TR	2SA1255
	Q 5571(B,225,38)	TRANSISTOR	2SC4081
	Q 5572(B,222,38)	TRANSISTOR	2SC4081
	D 5301(B,171,57)	CHIP ZENER DIODE	UDZS3R6(B)
	D 5302(B,173,59)	DIODE	1SS355
	D 5303(B,181,64)	DIODE	1SS355
	D 5304(B,187,64)	DIODE	1SS355
	D 5305(B,183,64)	DIODE	UDZS4R7(B)
	D 5306(B,185,64)	DIODE	UDZS4R7(B)
	D 5341(B,153,67)	DIODE	1SS355
	D 5342(B,151,67)	DIODE	1SS355
	D 5343(B,151,44)	DIODE	1SS355
	D 5344(B,155,70)	DIODE	1SS355
	D 5401(B,114,59)	CHIP ZENER DIODE	UDZS3R6(B)
	D 5402(B,116,60)	DIODE	1SS355
	D 5403(B,124,64)	DIODE	1SS355
	D 5404(B,130,64)	DIODE	1SS355
	D 5405(B,126,64)	DIODE	UDZS4R7(B)

Mark	No.	Description	Part No.
	D 5406(B,128,64)	DIODE	UDZS4R7(B)
	D 5441(B,93,58)	DIODE	1SS355
	D 5442(B,90,58)	DIODE	1SS355
	D 5443(B,94,40)	DIODE	1SS355
	D 5444(B,111,79)	DIODE	1SS355
	D 5501(B,255,57)	CHIP ZENER DIODE	UDZS3R6(B)
	D 5502(B,257,59)	DIODE	1SS355
	D 5503(B,265,64)	DIODE	1SS355
	D 5504(B,271,64)	DIODE	1SS355
	D 5505(B,267,64)	DIODE	UDZS4R7(B)
	D 5506(B,269,64)	DIODE	UDZS4R7(B)
	D 5541(B,240,71)	DIODE	1SS355
	D 5542(B,238,71)	DIODE	1SS355
	D 5543(B,242,46)	DIODE	1SS355
	D 5544(B,242,73)	DIODE	1SS355
⚠	TH 5301(A,166,17)	POSISTOR	PTFM04BH222Q2N34B0
	CN 5301(A,320,26)	13P SOCKET	XKP3077
	CN 5302(A,86,40)	11P SOCKET	XKP3076
	CN 5303(A,313,66)	7-P PLUG	KM250NA7L

RESISTORS

Mark	No.	Description	Part No.
	R 5301(B,203,43)		RS1/16S102J
	R 5302(B,191,42)		RS1/16S221J
	R 5303(B,187,41)		RS1/16S333J
	R 5304(B,203,40)		RS1/16S103J
	R 5305(B,194,55)		RS1/16S152J
	R 5306(B,194,52)		RS1/16S821J
	R 5307(B,169,48)		RS1/16S2001F
	R 5308(B,180,52)		RS1/16S682J
	R 5309(A,177,48)	CARBON FILM RESISTOR	RD1/2VM473J
	R 5310(B,171,64)		RS1/16S151J
	R 5311(B,173,63)		RN1/16SE1201D
	R 5312(B,202,52)		RS1/16S221J
⚠	R 5313(B,183,97)		RS1/16S330J
	R 5321(B,190,93)		RS1/16S101J
	R 5322(B,176,93)		RS1/16S101J
⚠	R 5323(A,163,72)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠	R 5324(A,198,83)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠	R 5325(B,203,90)	CHIP RESISTOR	ACN7132
⚠	R 5326(B,166,91)	CHIP RESISTOR	ACN7132
⚠	R 5327(A,174,80)	RESISTOR (0.18, 5W)	ACN7121
	R 5329(B,179,45)		RN1/10SE3302D
	R 5330(B,183,46)		RN1/16SE1001D
	R 5331(B,183,43)		RN1/16SE1500D
	R 5332(B,203,49)		RS1/16S151J
	R 5341(B,153,77)		RS1/16S473J
	R 5342(B,151,77)		RS1/16S223J
	R 5343(B,153,73)		RS1/16S471J
	R 5344(B,151,73)		RS1/16S471J
	R 5345(B,152,60)		RS1/16S472J
	R 5346(B,150,60)		RS1/16S472J
	R 5347(B,147,58)		RS1/16S122J
	R 5348(B,151,55)		RS1/16S154J
	R 5349(B,151,57)		RS1/16S103J
	R 5350(B,156,46)		RS1/16S103J
	R 5401(B,138,43)		RS1/16S102J
	R 5402(B,126,42)		RS1/16S221J
	R 5403(B,123,41)		RS1/16S333J
	R 5404(B,138,40)		RS1/16S103J
	R 5405(B,134,55)		RS1/16S152J
	R 5406(B,134,52)		RS1/16S821J
	R 5407(B,109,48)		RS1/16S2001F
	R 5408(B,120,52)		RS1/16S682J
	R 5409(A,117,48)	CARBON FILM RESISTOR	RD1/2VM473J
	R 5410(B,114,65)		RS1/16S151J
	R 5411(B,116,64)		RN1/16SE1201D
	R 5412(B,141,52)		RS1/16S221J
⚠	R 5413(B,115,97)		RS1/16S330J
	R 5421(B,128,93)		RS1/16S101J
	R 5422(B,108,93)		RS1/16S101J
⚠	R 5423(A,111,75)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠	R 5424(A,142,83)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠	R 5425(B,135,91)	CHIP RESISTOR	ACN7132
⚠	R 5426(B,96,91)	CHIP RESISTOR	ACN7132
⚠	R 5427(A,118,80)	RESISTOR (0.18, 5W)	ACN7121
	R 5429(B,114,44)		RN1/10SE3302D
	R 5430(B,118,45)		RN1/16SE1001D
	R 5431(B,118,43)		RN1/16SE1500D
	R 5432(B,143,49)		RS1/16S151J
	R 5441(B,99,85)		RS1/16S473J
	R 5442(B,97,85)		RS1/16S223J
	R 5443(B,101,85)		RS1/16S471J
	R 5444(B,95,85)		RS1/16S471J
	R 5445(B,91,52)		RS1/16S472J
	R 5446(B,91,50)		RS1/16S472J
	R 5447(B,90,46)		RS1/16S122J
	R 5448(B,94,51)		RS1/16S154J
	R 5449(B,96,51)		RS1/16S103J
	R 5450(B,98,46)		RS1/16S103J
	R 5501(B,292,43)		RS1/16S102J
	R 5502(B,280,42)		RS1/16S221J
	R 5503(B,276,41)		RS1/16S333J
	R 5504(B,292,40)		RS1/16S103J
	R 5505(B,283,55)		RS1/16S152J
	R 5506(B,283,52)		RS1/16S821J
	R 5507(B,258,48)		RS1/16S2001F
	R 5508(B,269,52)		RS1/16S682J
	R 5509(A,266,48)	CARBON FILM RESISTOR	RD1/2VM473J
	R 5510(B,255,63)		RS1/16S151J
	R 5511(B,257,63)		RN1/16SE1201D
	R 5512(B,290,52)		RS1/16S221J
⚠	R 5513(B,259,97)		RS1/16S330J
	R 5521(B,270,94)		RS1/16S101J
	R 5522(B,251,93)		RS1/16S101J
⚠	R 5523(A,247,69)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠	R 5524(A,283,82)	CARBON FILM RESISTOR	RD1/4MUF4R7J
⚠	R 5525(B,277,91)	CHIP RESISTOR	ACN7132
⚠	R 5526(B,238,91)	CHIP RESISTOR	ACN7132
⚠	R 5527(A,258,80)	RESISTOR (0.18, 5W)	ACN7121
	R 5529(B,268,45)		RN1/10SE3302D
	R 5530(B,272,46)		RN1/16SE1001D
	R 5531(B,272,43)		RN1/16SE1500D
	R 5532(B,292,49)		RS1/16S151J
	R 5541(B,241,77)		RS1/16S473J
	R 5542(B,235,77)		RS1/16S223J
	R 5543(B,239,77)		RS1/16S471J
	R 5544(B,237,77)		RS1/16S471J
	R 5545(B,240,64)		RS1/16S472J
	R 5546(B,238,64)		RS1/16S472J

Mark	No.	Description	Part No.
	R 5547(B,238,57)		RS1/16S122J
	R 5548(B,235,68)		RS1/16S154J
	R 5549(B,235,64)		RS1/16S103J
	R 5550(B,245,45)		RS1/16S103J
	R 5571(B,228,38)		RS1/16S472J
⚠	R 5592(B,301,91)	CHIP RESISTOR	ACN7132
	R 5622(B,308,96)		RS1/16S101J

CAPACITORS

	C 5301(A,194,43)		CEAT4R7M50
	C 5302(B,187,43)		CCSRCH221J50
	C 5304(B,198,55)		CKSRYB102K50
	C 5307(A,164,52)		CEAT101M10
	C 5308(B,198,52)	CAPACITOR(CERAMIC)	ACG7057
	C 5309(A,181,58)	ELECT. CAPACITOR	CEAT100M2A
	C 5311(B,197,104)	CAPACITOR(CERAMIC)	ACG7056
	C 5312(B,170,104)	CAPACITOR(CERAMIC)	ACG7056
	C 5315(B,179,43)		CCSRCH220J50
	C 5316(B,174,43)		CCSRCH220J50
	C 5317(A,179,39)		CEAT331M10
	C 5323(A,160,63)		CEAT100M63
	C 5324(A,191,61)		CEAT100M63
	C 5332(B,204,52)		CKSRYB224K16
	C 5341(A,147,62)		CEANP2R2M50
	C 5351(A,228,68)	ELECT. CAPACITOR	CEAT100M2A
	C 5352(A,224,62)	ELECT. CAPACITOR	CEAT100M2A
	C 5401(A,129,43)		CEAT4R7M50
	C 5402(B,123,43)		CCSRCH221J50
	C 5404(B,138,55)		CKSRYB102K50
	C 5407(A,105,52)		CEAT101M10
	C 5408(B,138,52)	CAPACITOR(CERAMIC)	ACG7057
	C 5409(A,125,59)	ELECT. CAPACITOR	CEAT100M2A
	C 5411(B,130,104)	CAPACITOR(CERAMIC)	ACG7056
	C 5412(B,101,104)	CAPACITOR(CERAMIC)	ACG7056
	C 5415(B,114,42)		CCSRCH220J50
	C 5416(B,109,43)		CCSRCH220J50
	C 5417(A,114,39)		CEAT331M10
	C 5423(A,107,61)		CEAT100M63
	C 5424(A,135,61)		CEAT100M63
	C 5432(B,143,52)		CKSRYB224K16
	C 5441(A,87,45)		CEANP2R2M50
	C 5501(A,283,43)		CEAT4R7M50
	C 5502(B,276,43)		CCSRCH221J50
	C 5504(B,287,55)		CKSRYB102K50
	C 5507(A,253,52)		CEAT101M10
	C 5508(B,287,52)	CAPACITOR(CERAMIC)	ACG7057
	C 5509(A,265,58)	ELECT. CAPACITOR	CEAT100M2A
	C 5511(B,272,104)	CAPACITOR(CERAMIC)	ACG7056
	C 5512(B,245,104)	CAPACITOR(CERAMIC)	ACG7056
	C 5515(B,268,43)		CCSRCH220J50
	C 5516(B,263,43)		CCSRCH220J50
	C 5517(A,268,39)		CEAT331M10
	C 5523(A,244,59)		CEAT100M63
	C 5524(A,280,61)		CEAT100M63
	C 5532(B,293,52)		CKSRYB224K16
	C 5541(A,238,54)		CEANP2R2M50
	C 5571(A,231,35)		CEAT331M10
	C 5612(B,307,104)	CAPACITOR(CERAMIC)	ACG7056

Mark	No.	Description	Part No.

S LOCAL SUPPLY ASSY

MISCELLANEOUS

	IC 6101(A,149,69)	IC	NJM78M06FA
⚠	IC 6102(A,149,19)	REGULATOR IC	NJM78M56FA
⚠	IC 6103(A,11,64)	REGULATOR IC	NJM78M12FA
⚠	IC 6104(A,11,39)	REGULATOR IC	NJM78M12FA
⚠	IC 6105(A,149,44)	IC	NJM79M05FA
⚠	IC 6106(A,11,14)	REGULATOR IC	NJM79M12FA
⚠	IC 6108(A,51,61)	PROTECTOR(1.6A)	AEK7012
⚠	IC 6110(A,47,95)	IC PROTECTOR	ICP-N10
	Q 6101(B,40,96)	TRANSISTOR	UMD2N
	Q 6102(B,56,82)	TRANSISTOR	RT1N241M
⚠	Q 6103(A,11,89)	TRANSISTOR	2SD1763A
⚠	D 6101(A,111,50)	DIODE	D3SBA20(B)
⚠	D 6102(B,65,61)	DIODE	1SR154-400
⚠	D 6103(B,56,61)	DIODE	1SR154-400
⚠	D 6104(B,61,61)	DIODE	1SR154-400
	D 6105(B,86,72)	DIODE	UDZS6R2(B)
	D 6106(B,88,77)	DIODE	UDZS6R2(B)
	D 6107(B,85,77)	DIODE	UDZS6R2(B)
	D 6108(B,94,80)	DIODE	UDZS6R2(B)
	D 6109(B,88,90)	DIODE	UDZS6R2(B)
	D 6110(B,40,81)	DIODE	UDZS27(B)
	D 6111(B,140,68)	CHIP DIODE	RB501V-40
	D 6115(B,26,71)	CHIP DIODE	RB501V-40
⚠	D 6119(B,47,73)	DIODE	1SR154-400
⚠	D 6120(B,52,73)	DIODE	1SR154-400
	D 6121(B,141,10)	CHIP DIODE	RB501V-40
⚠	D 6122(B,59,39)	DIODE	1SR154-400
⚠	D 6123(B,63,39)	DIODE	1SR154-400
	D 6124(B,142,39)	CHIP DIODE	RB501V-40
	D 6125(B,149,50)	DIODE	1SS352
	D 6126(B,18,43)	CHIP DIODE	RB501V-40
⚠	D 6127(B,63,26)	DIODE	1SR154-400
⚠	D 6128(B,59,26)	DIODE	1SR154-400
	D 6129(B,18,16)	CHIP DIODE	RB501V-40
	J 2	JUMPER WIRE	D20PDY0415E
	J 6104(A,70,95)	CONNECTOR ASS'Y	PF05PG-Q12
	CN6101(A,112,73)	PLUG(12P)	KM200NA12
	CN6103(A,91,93)	6P JUMPER CONNECTOR	52147-0610
	CN6105(A,60,8)	PLUG(8P)	KM200NA8
	CN6106(A,87,8)	PLUG(11P)	KM200NA11
	6102(A,121,89)	4P CABLE HOLDER	51048-0400
	6101(A,100,65)	PCB BINDER	VEF1040

RESISTORS

	R 6101(B,75,71)		RS1/16S473J
⚠	R 6103(A,76,77)	CARBON FILM RESISTOR	RD1/4MUF391J
	R 6105(B,40,87)		RS1/16S472J
	R 6106(B,68,83)		RS1/16S222J
	R 6108(B,37,87)		RS1/16S101J
	R 6111(B,68,39)		RS1/16S0R0J

CAPACITORS

	C 6101(A,120,76)	FILM CAPACITOR	CQMBA104J50
	C 6103(B,95,89)		CKSRYB103K50
	C 6105(B,146,72)		CKSRYB103K50
	C 6106(A,68,30)	FILM CAPACITOR	CQMBA102J50
	C 6107(A,110,61)	FILM CAPACITOR	CQMBA102J50

Mark	No.	Description	Part No.
	C 6110(B,145,22)		CKSRYB103K50
	C 6111(B,142,46)		CKSRYB103K50
	C 6112(B,14,63)		CKSRYB103K50
A	C 6115(B,15,37)		CKSRYB103K50
	C 6116(B,14,11)		CKSRYB103K50
	C 6117(A,63,52)	ELECT. CAPACITOR	CEANP101M35
	C 6118(A,44,68)	ELECT. CAPACITOR	CEANP102M16
	C 6120(A,62,81)	ELECT. CAPACITOR	CEANP470M25
	C 6122(A,60,71)	ELECT. CAPACITOR	CEAT101M35
	C 6123(A,71,70)		CEAT221M35
	C 6124(A,91,72)		CEAT470M50
	C 6125(A,84,89)		CEAT101M16
	C 6126(A,46,83)	ELECT. CAPACITOR	CEAT102M35
	C 6127(A,112,37)	ELECT. CAPACITOR	CEAT682M16
B	C 6128(A,39,84)		CEAT100M50
	C 6129(A,144,58)		CEAT221M16
	C 6130(A,141,19)		CEAT101M16
	C 6131(A,94,37)	ELECT. CAPACITOR	CEAT222M16
	C 6132(A,48,51)	ELECT. CAPACITOR	CEAT222M25
	C 6133(A,144,31)		CEAT101M16
	C 6134(A,16,68)		CEAT100M50
	C 6135(A,18,52)		CEAT221M25
	C 6136(A,48,34)	ELECT. CAPACITOR	CEAT222M25
	C 6137(A,18,27)		CEAT221M25
	C 6138(B,16,89)		CKSRYB102K50
C			
	C 6139(A,56,90)		CEAT100M50

T DC/DC ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
⚠	IC 4271(A,112,80)	REGULATOR IC	PQ1CG3032FZ
⚠	D 4271(A,68,85)	DIODE	D3SBA20(B)
⚠	D 4272(B,124,76)	DIODE	RB051L-40
⚠	D 4273(B,115,53)	DIODE	PTZ6R8(B)
	L 4271(A,131,65)	INDUCTOR	ATH7044
D			
	CN 4271(A,60,53)	4PJUMPER CONNECTOR	52151-0410
	CN 4272(A,102,57)	CONNECTOR	B2PS-VH
	4273(A,62,68)	PCB BINDER	VEF1040

RESISTORS

	R 4272(B,128,85)		RN1/16SE1001D
	R 4273(B,128,81)		RN1/16SE3001D
	R 4274(B,130,74)		RS1/16S101J

CAPACITORS

E	C 4272(A,92,65)	ELECT. CAPACITOR	CEAT103M16
	C 4273(A,120,55)	ELECT. CAPACITOR	CEHAZL102M6R3
	C 4274(A,62,70)	ELECT. CAPACITOR	CEHAZL102M16
	C 4278(A,73,61)	FILM CAPACITOR	CQMBA102J50
	C 4281(B,119,76)		CKSRYB104K16
	C 4282(B,111,54)		CKSYB104K25

U TRANS 2-1 ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
⚠	IC 4201(A,111,106)	PROTECTOR(7A)	AEK7021
F ⚠	IC 4202(A,95,152)	PROTECTOR(7A)	AEK7021
	Q 4201(B,90,97)	CHIP TRANSISTOR	RN1901
	Q 4202(B,81,97)	TRANSISTOR	RT3T22M
	Q 4203(B,73,97)	TRANSISTOR	RT3T22M
⚠	D 4201(B,100,140)	BRIDGE DIODE	S1WB(A)60SD
	D 4203(B,98,105)	DIODE	UDZS8R2(B)
	D 4204(B,71,105)	DIODE	UDZS7R5(B)
	D 4205(B,100,105)	DIODE	UDZS9R1(B)
	D 4206(B,71,102)	DIODE	UDZS8R2(B)
	D 4207(B,100,99)	DIODE	UDZS9R1(B)
	D 4208(B,76,104)	DIODE	UDZS8R2(B)
	D 4209(B,96,99)	DIODE	UDZS6R8(B)
	D 4210(B,76,101)	DIODE	UDZS6R8(B)
	D 4211(B,94,102)	DIODE	UDZS13(B)
	D 4212(B,81,101)	DIODE	UDZS15(B)
	D 4213(B,96,104)	DIODE	UDZS15(B)
	D 4214(B,81,104)	DIODE	UDZS15(B)
	D 4215(B,77,95)	DIODE	UDZS13(B)
	D 4216(B,68,94)	DIODE	UDZS13(B)
	J 4201	JUMPER WIRE	D20PDY0610E
	4201(A,73,128)	6P CABLE HOLDER	51048-0600

RESISTORS

⚠	R 4205(A,85,129)	METAL OXIDE RESISTOR	RS1LMF472J
⚠	R 4206(A,71,109)	METAL OXIDE RESISTOR	RS1LMF472J
⚠	R 4207(A,88,126)	METAL OXIDE RESISTOR	RS1/2LMF332J
⚠	R 4208(A,75,106)	METAL OXIDE RESISTOR	RS1/2LMF332J

CAPACITORS

	C 4205(A,91,136)	ELECT. CAPACITOR	CEAT471M2A
	C 4206(A,81,149)	ELECT. CAPACITOR	CEAT471M2A
	C 4207(A,94,119)	ELECT. CAPACITOR	CEAT101M63
	C 4208(A,94,108)	ELECT. CAPACITOR	CEAT101M63
	C 4209(A,65,132)	ELECT. CAPACITOR	CEAT221M2A
	C 4210(A,72,120)	ELECT. CAPACITOR	CEAT221M2A

V VH TR ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
⚠	IC 4261(A,37,16)	IC PROTECTOR	ICP-N15
⚠	IC 4262(A,21,16)	IC PROTECTOR	ICP-N15
⚠	Q 4261(A,36,31)	TRANSISTOR	2SD1763A
⚠	Q 4262(A,21,31)	TRANSISTOR	2SB1186A
⚠	Q 4263(B,30,20)	CHIP TRANSISTOR	2SC3906K
⚠	Q 4264(B,15,20)	CHIP TRANSISTOR	2SA1514K
⚠	D 4261(B,42,16)	DIODE	1SR154-400
⚠	D 4262(B,26,19)	DIODE	1SR154-400
	CN 4261(A,23,9)	6P JUMPER CONNECTOR	52147-0610

RESISTORS

	R 4261(B,29,24)		RS1/16S100J
	R 4262(B,14,24)		RS1/16S100J
	R 4263(B,30,15)		RS1/16S471J
	R 4264(B,14,13)		RS1/16S471J

W DIODE ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
⚠	D 4251(A,189,128)	DIODE	D5SBA20(B)
⚠	D 4252(A,154,128)	DIODE	D5SBA20(B)

Mark	No.	Description	Part No.
RESISTORS			
⚠ R	4251(A,182,147)	CARBON FILM RESISTOR	RD1/4MUF100J
CAPACITORS			
C	4251(A,171,143)	FILM CAPACITOR	CFTLA104J2A
C	4252(A,176,148)	FILM CAPACITOR	CFTLA104J2A

X SP/PS ASSY

MISCELLANEOUS			
Q	4001(B,150,72)	TRANSISTOR	RT1N140M
Q	4002(B,229,97)	TRANSISTOR	RT1N140M
Q	4003(B,247,90)	TRANSISTOR	RT1N140M
Q	4004(B,290,84)	TRANSISTOR	RT1N140M
Q	4005(B,212,99)	TRANSISTOR	RT1N140M
D	4001(B,168,80)	DIODE	1SS352
D	4002(B,165,80)	DIODE	1SS352
D	4003(B,216,88)	DIODE	1SS352
D	4004(B,213,88)	DIODE	1SS352
D	4005(B,247,82)	DIODE	1SS352
D	4006(B,244,82)	DIODE	1SS352
D	4007(B,291,79)	DIODE	1SS352
D	4008(B,289,79)	DIODE	1SS352
D	4009(B,217,99)	DIODE	1SS352
D	4010(B,215,99)	DIODE	1SS352
L	4011(A,188,78)	COIL	ATH1053
L	4021(A,149,68)	COIL	ATH1053
L	4031(A,199,83)	COIL	ATH1053
L	4041(A,258,82)	COIL	ATH1053
L	4051(A,236,90)	COIL	ATH1053
L	4061(A,299,81)	COIL	ATH1053
L	4071(A,280,84)	COIL	ATH1053
J	4009(A,147,76)	CONNECTOR ASS'Y	PF13PG-R12
RY	4001(A,163,81)	RELAY	ASR7001
RY	4002(A,211,89)	RELAY	ASR7001
RY	4003(A,242,83)	RELAY	ASR7001
RY	4004(A,286,82)	RELAY	ASR7001
RY	4005(A,219,103)	RELAY	ASR7001
CN	4001(A,185,33)	SP TERMINAL 6-P(V0)	XKE3018
CN	4002(A,248,33)	SP TERMINAL 8-P(V0)	XKE3017
CN	4007(A,313,90)	CONNECTOR(05P)	TUC-P05P-B1
CN	4008(A,313,152)	CONNECTOR(09P)	TUC-P09P-B1
Y	13	AWG14 BOARD IN	ADX7461
RESISTORS			
⚠ R	4011(A,187,68)	METAL OXIDE RESISTOR	RS1/2LMF4R7J
⚠ R	4012(A,175,64)	METAL OXIDE RESISTOR	RS1LMF100J
⚠ R	4013(A,193,94)	METAL OXIDE RESISTOR	RS2LMF331J
⚠ R	4021(A,158,70)	METAL OXIDE RESISTOR	RS1/2LMF4R7J
⚠ R	4022(A,145,58)	METAL OXIDE RESISTOR	RS1LMF100J
⚠ R	4023(A,188,97)	METAL OXIDE RESISTOR	RS2LMF331J
⚠ R	4031(A,196,87)	METAL OXIDE RESISTOR	RS1/2LMF4R7J
⚠ R	4032(A,194,67)	METAL OXIDE RESISTOR	RS1LMF100J
⚠ R	4041(A,254,82)	METAL OXIDE RESISTOR	RS1/2LMF4R7J
⚠ R	4042(A,267,67)	METAL OXIDE RESISTOR	RS1LMF100J
⚠ R	4051(A,240,93)	METAL OXIDE RESISTOR	RS1/2LMF4R7J
⚠ R	4052(A,228,67)	METAL OXIDE RESISTOR	RS1LMF100J
⚠ R	4061(A,309,79)	METAL OXIDE RESISTOR	RS1/2LMF4R7J
⚠ R	4062(A,313,73)	METAL OXIDE RESISTOR	RS1LMF100J
⚠ R	4071(A,280,88)	METAL OXIDE RESISTOR	RS1/2LMF4R7J
⚠ R	4072(A,268,94)	METAL OXIDE RESISTOR	RS1LMF100J
⚠ R	4101(A,222,115)	CARBON FILM RESISTOR	RD1/4MUF473J
⚠ R	4102(A,252,115)	CARBON FILM RESISTOR	RD1/4MUF473J
CAPACITORS			
C	4001(A,162,88)		CEAT101M50
C	4011(A,182,60)		CFTLA104J50
C	4012(A,178,57)		CFTLA104J50
C	4013(A,169,49)	FILM CAPACITOR	CQMBA103J50
C	4021(A,145,48)		CFTLA104J50
C	4022(A,145,39)		CFTLA104J50
C	4023(A,157,42)	FILM CAPACITOR	CQMBA103J50
C	4031(A,197,63)		CFTLA104J50
C	4032(A,192,57)		CFTLA104J50
C	4033(A,201,67)	FILM CAPACITOR	CQMBA103J50
C	4041(A,257,63)		CFTLA104J50
C	4042(A,257,54)		CFTLA104J50
C	4043(A,247,56)	FILM CAPACITOR	CQMBA103J50
C	4051(A,224,61)		CFTLA104J50
C	4052(A,228,55)		CFTLA104J50
C	4053(A,232,49)	FILM CAPACITOR	CQMBA103J50
C	4061(A,304,61)		CFTLA104J50
C	4062(A,304,54)		CFTLA104J50
C	4063(A,296,57)	FILM CAPACITOR	CQMBA103J50
C	4071(A,270,65)		CFTLA104J50
C	4072(A,272,59)		CFTLA104J50
C	4073(A,276,59)	FILM CAPACITOR	CQMBA103J50
C	4092(B,178,42)		CKSRYB222K50
C	4094(B,240,48)		CKSRYB222K50
C	4096(B,281,47)		CKSRYB222K50
C	4101(A,212,137)		ACH7258
C	4102(A,258,137)		ACH7258

Y TRANS 2-2 ASSY

MISCELLANEOUS			
H	3151(A,172,75)	FUSE CLIP	AKR7001
H	3152(A,151,75)	FUSE CLIP	AKR7001
H	3153(A,173,63)	FUSE CLIP	AKR7001
H	3154(A,152,63)	FUSE CLIP	AKR7001
H	3155(A,173,52)	FUSE CLIP	AKR7001
H	3156(A,152,52)	FUSE CLIP	AKR7001
H	3157(A,172,40)	FUSE CLIP	AKR7001
H	3158(A,151,40)	FUSE CLIP	AKR7001
H	3159(A,172,28)	FUSE CLIP	AKR7001
H	3160(A,151,28)	FUSE CLIP	AKR7001
J	3151(A,138,41)	CONNECTOR ASS'Y	PF12PG-R40
CAPACITORS			
C	3001(A,158,11)	FILM CAPACITOR	CQMBA102J50

Z POWER SW ASSY

MISCELLANEOUS			
Q	3561(B,10,72)	DIGITAL TR(SC-70)	RT1N431M
D	3562(A,14,73)	LED(BLUE)	SLR343BC4T(JKLM)
S	3562(A,13,66)	SWITCH	VSG1024
	3562(A,32,81)	4P CABLE HOLDER	51048-0400

Mark	No.	Description	Part No.
		RESISTORS	
	R	3561(B,19,77)	RS1/16S151J
		CAPACITORS	
	C	3563(B,15,80)	CCSRCH101J50

AA PRIMARY ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
⚠	IC	3061(A,299,108) REGULATOR IC	NJM78M56FA
	Q	3061(B,281,71) DIGITAL TR(SC-70)	RT1N431M
⚠	D	3061(B,297,92) BRIDGE DIODE	S1WB(A)60SD
	D	3062(B,299,78) DIODE	1SS352
	D	3063(B,308,78) DIODE	UDZS5R1(B)
	D	3064(B,275,78) DIODE	1SS352
	D	3065(B,275,71) DIODE	1SS352
⚠	L	3063(A,244,35) LINE FILTER	XTF3004
	H	3061(A,223,57) FUSE CLIP	AKR7001
	H	3062(A,243,57) FUSE CLIP	AKR7001
	KN	3061(A,313,21) WRAPPING TERMINAL	VNF1084
⚠	RY	3061(A,271,69) JOE LOWPOWER RELAY	ASR7013
⚠	T	3061(A,273,95) STANDBY TRANSFORMER	ATT7040
	CN	3062(A,308,126) CONNECTOR(9P)	TUC-P09X-B1
	CN	3063(A,246,126) CONNECTOR(05P)	TUC-P05X-B1
⚠	CN	3064 AC SOCKET 1-P	AKP1034
⚠	CN	3067(A,276,45) CONNECTOR	B2P3-VH
⚠		3066 AC INLET ASSY	ADX7464

RESISTORS

	R	3062(B,303,78)	RS1/16S332J
	R	3063(A,279,84) CARBON FILM RESISTOR	RD1/4MUF101J
	R	3064(B,305,78)	RS1/16S103J

CAPACITORS

⚠	C	3061(A,266,36) FILM CAPACITOR	ACE7013
⚠	C	3062(A,252,63)	ACG7039
	C	3063(A,289,115) FILM CAPACITOR	CQMBA103J50
	C	3064(B,291,104)	CKSRYB102K50
	C	3065(B,289,104)	CKSRYB102K50
	C	3066(B,294,100)	CKSRYB102K50
	C	3067(B,308,85)	CKSRYB102K50
	C	3068(A,305,94) ELECT. CAPACITOR	CEAT332M25
	C	3069(A,317,120)	CEAT221M25
	C	3071(B,311,88)	CKSRYB103K50

AB VOLUME ASSY

MISCELLANEOUS

	S	3571(A,272,203) ROTARY ENCODER	ASX7049
		3571(A,251,238) 3P CABLE HOLDER	51048-0300

CAPACITORS

	C	3571(B,274,214)	CKSRYB103K50
	C	3572(B,270,214)	CKSRYB103K50

AC DISPLAY ASSY

MISCELLANEOUS

Mark	No.	Description	Part No.
	IC	3201(B,52,199) DISPLAY U-COM	PE5615A
	IC	3301(B,121,166) MICROCOMPUTER IC	PDC158A8
	IC	3302(A,17,218) REMOTE RECEIVER UNIT	RPM7540-H9
⚠	IC	3304(B,166,152) IC	S-1200B33-M5
	Q	3301(B,188,185) DIGITAL TR(SC-70)	RT1N431M
	Q	3302(B,203,189) DIGITAL TR(SC-70)	RT1N431M
	Q	3303(B,25,184) DIGITAL TR(SC-70)	RT1N431M
	Q	3304(B,68,176) DIGITAL TR(SC-70)	RT1N431M
	Q	3305(B,109,190) DIGITAL TR(SC-70)	RT1N431M
	Q	3306(B,117,190) DIGITAL TR(SC-70)	RT1N431M
	Q	3307(B,125,190) DIGITAL TR(SC-70)	RT1N431M
	Q	3309(B,209,207) TRANSISTOR(SC-70)	2SA1602A
	Q	3310(B,195,207) TRANSISTOR	RT1N241M
	Q	3312(B,175,156) MOS FET	2SK2034
	D	3201(B,235,212) DIODE	MC2848-11
	D	3202(B,236,218) DIODE	1SS352
	D	3301(A,176,187) LED(RED)	SLR-343VC(NPQ)
	D	3303(A,212,187) LED(RED)	SLR-343VC(NPQ)
	D	3305(A,29,185) LED(RED)	SLR-343VC(NPQ)
	D	3307(A,65,185) LED(RED)	SLR-343VC(NPQ)
	D	3309(A,112,185) LED(BLUE)	SLR343BC4T(JKLM)
	D	3311(A,120,185) LED(WHITE)	SLR343WBCT(MNPQ)
	D	3313(A,127,185) LED(BLUE)	SLR343BC4T(JKLM)
	D	3315(B,187,209) DIODE	1SS352
	D	3316(B,199,205) DIODE	1SS352
	D	3317(B,190,209) DIODE	MC2848-11
	D	3319(B,178,151) DIODE	RB751V-40
	L	3201(B,235,223) INDUCTOR	CTF1385
	L	3202(B,221,213) CHIP SOLID INDUCTOR	ATL7002
	J	3202 JUMPER WIRE	D20PDY0620E
	V	3201(A,182,237) FL TUBE DISPLAY	AAV7113
	S	3301(A,76,143) SWITCH	VSG1024
	S	3302(A,63,140) SWITCH	VSG1024
	S	3303(A,51,128) SWITCH	VSG1024
	S	3304(A,63,126) SWITCH	VSG1024
	S	3305(A,75,128) SWITCH	VSG1024
	S	3306(A,76,113) SWITCH	VSG1024
	S	3307(A,63,116) SWITCH	VSG1024
	S	3308(A,50,113) SWITCH	VSG1024
	S	3309(A,162,137) SWITCH	VSG1024
	S	3310(A,127,137) SWITCH	VSG1024
	S	3311(A,110,137) SWITCH	VSG1024
	S	3312(A,64,163) SWITCH	VSG1024
	S	3313(A,46,163) SWITCH	VSG1024
	S	3314(A,28,163) SWITCH	VSG1024
	S	3315(A,23,137) SWITCH	VSG1024
	S	3316(A,50,143) SWITCH	VSG1024
	S	3317(A,174,163) SWITCH	VSG1024
	S	3318(A,192,163) SWITCH	VSG1024
	S	3319(A,210,163) SWITCH	VSG1024
	S	3320(A,215,137) SWITCH	VSG1024
	S	3321(A,197,137) SWITCH	VSG1024
	S	3322(A,180,137) SWITCH	VSG1024
	S	3323(A,145,137) SWITCH	VSG1024
	X	3201(A,74,191) CERAMIC RESONATOR	VSS1142
	X	3302(A,142,150) CRYSTAL OSCILLATOR	CSS1653
	CN	3301(A,220,164) 31P CONNECTOR	VKN1291

Mark	No.	Description	Part No.
	3201(A,121,201)	FL HOLDER(FE)	VNF1096
	3202(A,241,231)	6P CABLE HOLDER	51048-0600
	3301(A,241,211)	3P CABLE HOLDER	51048-0300
	3302(A,7,150)	3P CABLE HOLDER	51048-0300
	3303(A,7,190)	4P CABLE HOLDER	51048-0400

RESISTORS

R	3201(B,68,240)	RS1/16S104J
R	3202(B,70,240)	RS1/16S104J
R	3203(B,72,240)	RS1/16S104J
R	3204(B,74,240)	RS1/16S104J
R	3205(B,76,240)	RS1/16S104J
R	3206(B,78,240)	RS1/16S104J
R	3207(B,80,240)	RS1/16S104J
R	3208(B,82,240)	RS1/16S104J
R	3209(B,84,240)	RS1/16S104J
R	3210(B,86,240)	RS1/16S104J
R	3211(B,88,240)	RS1/16S104J
R	3212(B,90,240)	RS1/16S104J
R	3213(B,92,240)	RS1/16S104J
R	3214(B,94,240)	RS1/16S104J
R	3215(B,96,240)	RS1/16S104J
R	3216(B,98,240)	RS1/16S104J
R	3217(B,100,240)	RS1/16S104J
R	3218(B,102,240)	RS1/16S104J
R	3219(B,104,240)	RS1/16S104J
R	3220(B,106,240)	RS1/16S104J
R	3221(B,108,240)	RS1/16S104J
R	3222(B,110,240)	RS1/16S104J
R	3223(B,112,240)	RS1/16S104J
R	3224(B,114,240)	RS1/16S104J
R	3225(B,116,240)	RS1/16S104J
R	3226(B,118,240)	RS1/16S104J
R	3227(B,120,240)	RS1/16S104J
R	3228(B,122,240)	RS1/16S104J
R	3229(B,124,240)	RS1/16S104J
R	3230(B,126,240)	RS1/16S104J
R	3231(B,128,240)	RS1/16S104J
R	3232(B,130,240)	RS1/16S104J
R	3233(B,132,240)	RS1/16S104J
R	3234(B,134,240)	RS1/16S104J
R	3235(B,136,240)	RS1/16S104J
R	3236(B,138,240)	RS1/16S104J
R	3237(B,140,240)	RS1/16S104J
R	3238(B,144,240)	RS1/16S473J
R	3239(B,146,240)	RS1/16S473J
R	3240(B,148,240)	RS1/16S473J
R	3241(B,150,240)	RS1/16S473J
R	3242(B,152,240)	RS1/16S473J
R	3243(B,154,240)	RS1/16S473J
R	3244(B,156,240)	RS1/16S473J
R	3245(B,158,240)	RS1/16S473J
R	3246(B,160,240)	RS1/16S473J
R	3247(B,162,240)	RS1/16S473J
R	3248(B,164,240)	RS1/16S473J
R	3249(B,166,240)	RS1/16S473J
R	3250(B,168,240)	RS1/16S473J
R	3251(B,170,240)	RS1/16S473J
R	3252(B,172,240)	RS1/16S473J
R	3253(B,174,240)	RS1/16S473J
R	3258(B,71,191)	RS1/16S105J
R	3259(B,63,180)	RS1/16S104J
R	3260(B,53,174)	RS1/16S104J
R	3261(B,231,208)	RS1/16S0R0J
R	3262(B,58,174)	RS1/16S101J
R	3263(B,56,174)	RS1/16S101J
R	3264(B,49,174)	RS1/16S104J
R	3306(B,15,179)	RS1/16S0R0J
R	3307(B,213,177)	RS1/16S0R0J
R	3310(B,207,180)	RS1/16S0R0J
R	3318(B,185,183)	RS1/16S681J
R	3319(B,202,185)	RS1/16S681J
R	3320(B,28,195)	RS1/16S681J
R	3321(B,70,180)	RS1/16S681J
R	3322(B,115,195)	RS1/16S151J
R	3323(B,123,195)	RS1/16S561J
R	3324(B,130,195)	RS1/16S151J
R	3326(B,153,151)	RS1/16S0R0J
R	3327(B,150,166)	RS1/16S101J
R	3329(B,147,157)	RS1/16S0R0J
R	3331(B,137,155)	RS1/16S105J
R	3332(B,139,153)	RS1/16S0R0J
R	3333(B,117,143)	RS1/16S474J
R	3334(B,117,141)	RS1/16S101J
R	3335(B,115,148)	RS1/16S473J
R	3336(B,115,146)	RS1/16S473J
R	3337(B,110,146)	RS1/16S473J
R	3338(B,110,148)	RS1/16S473J
R	3339(B,98,174)	RS1/16S101J
R	3340(B,99,183)	RS1/16S473J
R	3341(B,107,180)	RS1/16S101J
R	3342(B,105,180)	RS1/16S101J
R	3344(B,137,184)	RS1/16S101J
R	3345(B,139,179)	RS1/16S473J
R	3349(B,149,176)	RS1/16S101J
R	3350(B,149,174)	RS1/16S101J
R	3351(B,144,172)	RS1/16S101J
R	3352(B,75,147)	RS1/16S472J
R	3353(B,135,140)	RS1/16S472J
R	3354(B,178,168)	RS1/16S472J
R	3355(B,76,140)	RS1/16S681J
R	3356(B,56,132)	RS1/16S821J
R	3357(B,62,129)	RS1/16S122J
R	3358(B,71,128)	RS1/16S162J
R	3359(B,76,117)	RS1/16S272J
R	3360(B,62,113)	RS1/16S512J
R	3361(B,56,116)	RS1/16S123J
R	3363(B,119,137)	RS1/16S681J
R	3364(B,68,167)	RS1/16S821J
R	3365(B,55,161)	RS1/16S122J
R	3366(B,37,163)	RS1/16S162J
R	3367(B,28,140)	RS1/16S272J
R	3368(B,50,138)	RS1/16S512J
R	3369(B,188,163)	RS1/16S681J
R	3370(B,207,167)	RS1/16S821J
R	3371(B,220,140)	RS1/16S122J
R	3372(B,194,140)	RS1/16S162J
R	3373(B,189,137)	RS1/16S272J
R	3374(B,167,141)	RS1/16S512J

Mark	No.	Description	Part No.
R	3377(B,22,227)		RS1/16S101J
R	3378(B,206,205)		RS1/16S104J
R	3379(B,204,205)		RS1/16S104J
R	3380(B,202,205)		RS1/16S472J
R	3381(B,209,203)		RS1/16S102J
R	3382(B,213,203)		RS1/16S103J
R	3384(B,122,142)		RS1/16S221J
R	3385(B,122,147)		RS1/16S474J
R	3386(B,118,146)		RS1/16S221J
R	3387(B,118,148)		RS1/16S104J
R	3388(B,97,169)		RS1/16S221J
R	3389(B,95,170)		RS1/16S473J
R	3390(B,98,177)		RS1/16S221J
R	3391(B,101,176)		RS1/16S473J
R	3394(B,178,156)		RS1/16S333J
R	3395(B,173,154)		RS1/16S154J
R	3396(B,127,151)		RS1/16S104J
R	3397(B,110,173)		RS1/16S104J
R	3398(B,108,173)		RS1/16S104J
R	3399(B,101,172)		RS1/16S104J

CAPACITORS

C	3201(B,179,239)		CKSRYB104K50
C	3202(B,61,240)		CKSRYB102K50
C	3203(A,193,234)	ELECT. CAPACITOR	CEAT101M35
C	3204(B,186,236)		CKSRYB471K50
C	3205(B,142,233)		CKSRYB471K50
C	3206(B,144,233)		CKSRYB471K50
C	3207(B,146,233)		CKSRYB471K50
C	3208(B,148,233)		CKSRYB471K50
C	3209(B,151,233)		CKSRYB471K50
C	3210(B,153,233)		CKSRYB471K50
C	3211(B,155,233)		CKSRYB471K50
C	3212(B,157,233)		CKSRYB471K50
C	3213(B,161,233)		CKSRYB471K50
C	3214(B,163,233)		CKSRYB471K50
C	3215(B,165,233)		CKSRYB471K50
C	3216(B,167,233)		CKSRYB471K50
C	3217(B,170,233)		CKSRYB471K50
C	3218(B,172,233)		CKSRYB471K50
C	3219(B,174,233)		CKSRYB471K50
C	3220(B,176,233)		CKSRYB471K50
C	3221(A,171,193)		CEJQ221M6R3
C	3222(B,232,213)		CKSRYB103K50
C	3223(B,78,196)		CKSRYB102K50
C	3224(B,67,196)		CKSRYB104K16
C	3225(B,61,180)		CKSRYB104K16
C	3227(B,46,187)		CKSRYB104K16
C	3228(B,47,214)		CKSRYB105K10
C	3230(B,49,214)		CKSRYB104K50
C	3231(A,43,239)		CEAT470M50
C	3301(B,183,185)		CCSRCH101J50
C	3302(B,206,186)		CCSRCH101J50
C	3303(B,29,191)		CCSRCH101J50
C	3304(B,66,180)		CCSRCH101J50
C	3305(B,114,192)		CCSRCH101J50
C	3306(B,122,192)		CCSRCH101J50
C	3307(B,129,192)		CCSRCH101J50
C	3309(B,137,162)		CKSRYB104K16

Mark	No.	Description	Part No.
C	3312(B,139,157)		CCSRCH120J50
C	3313(B,139,149)		CCSRCH120J50
C	3314(B,131,156)		CKSRYB105K10
C	3315(B,111,154)		CKSRYB104K16
C	3316(B,106,169)		CKSRYB104K16
C	3318(B,135,176)		CKSRYB104K16
C	3319(B,78,146)		CKSRYB102K50
C	3320(B,130,139)		CKSRYB102K50
C	3321(B,178,166)		CKSRYB102K50
C	3322(B,203,208)		CKSRYB103K50
C	3323(B,15,231)		CKSRYB103K50
C	3324(A,17,236)		CEJQ101M6R3
C	3325(B,213,174)		CKSRYB104K16
C	3326(B,213,172)		CKSRYB104K16
C	3327(B,122,149)		CKSRYB103K50
C	3329(B,103,176)		CKSRYB102K50
C	3330(B,162,155)		CKSRYB105K10
C	3331(B,171,155)		CKSRYB105K10
C	3332(B,133,180)		CKSRYB104K16
C	3333(B,118,181)		CKSRYB104K16

AD INPUT SELECT ASSY

MISCELLANEOUS

S	3561(A,61,63)	ROTARY ENCODER	ASX7051
	3561(A,89,94)	3P CABLE HOLDER	51048-0300

CAPACITORS

C	3561(B,63,74)		CKSRYB103K50
C	3562(B,59,74)		CKSRYB103K50

AE PREOUT & CONTROL ASSY

MISCELLANEOUS

IC	2931(A,205,121)	RS232 IC	HIN202EIBNZ
IC	2932(A,179,86)	IC	NJM2794V
IC	2933(A,184,100)	IC	NJM2505AF
Q	2801(A,206,14)	TRANSISTOR	IMX25
Q	2802(A,206,21)	TRANSISTOR	IMX25
Q	2821(A,206,27)	TRANSISTOR	IMX25
Q	2822(A,206,34)	TRANSISTOR	IMX25
Q	2841(A,206,40)	TRANSISTOR	IMX25
Q	2842(A,206,47)	TRANSISTOR	IMX25
Q	2861(A,206,53)	TRANSISTOR	IMX25
Q	2862(A,206,60)	TRANSISTOR	IMX25
Q	2931(B,200,114)	TRANSISTOR	2SC4154
Q	2952(B,207,110)	DIGITAL TR(SC-70)	RT1N431M
D	2931(B,205,122)	DIODE	1SS352
D	2951(B,189,121)	DIODE	1SS352
D	2952(B,188,114)	DIODE	1SS352
D	2957(A,199,92)	DIODE	UDZS6R2(B)
D	2958(A,196,92)	DIODE	UDZS6R2(B)
D	2959(A,199,96)	DIODE	UDZS6R2(B)
D	2960(A,199,98)	DIODE	UDZS6R2(B)
JA	2804(A,229,98)	20P SOCKET	AKP7202
JA	2805(A,229,23)	PIN JACK(4P)	AKB7172
JA	2806(A,229,51)	PIN JACK(4P)	AKB7172
JA	2931(A,229,125)	9P D-SUB SOCKET	AKP1213
CN	2801(A,173,26)	CONNECTOR	CKS3389

Mark	No.	Description	Part No.
	CN2802(A,174,135)	23P SOCKET	XKP3082

RESISTORS

R	2801(B,212,14)		RS1/16S101J
R	2802(B,212,21)		RS1/16S101J
R	2803(B,206,14)		RS1/16S121J
R	2804(B,206,21)		RS1/16S121J
R	2805(B,200,14)		RS1/16S271J
R	2806(B,200,21)		RS1/16S271J
R	2807(A,211,16)		RS1/16S103J
R	2808(A,211,22)		RS1/16S103J
R	2809(A,202,16)		RS1/16S103J
R	2810(A,202,22)		RS1/16S103J
R	2821(B,212,26)		RS1/16S101J
R	2822(B,212,34)		RS1/16S101J
R	2823(B,206,27)		RS1/16S121J
R	2824(B,206,34)		RS1/16S121J
R	2825(B,200,27)		RS1/16S271J
R	2826(B,200,34)		RS1/16S271J
R	2827(A,211,29)		RS1/16S103J
R	2828(A,211,35)		RS1/16S103J
R	2829(A,202,29)		RS1/16S103J
R	2830(A,202,35)		RS1/16S103J
R	2841(B,212,39)		RS1/16S101J
R	2842(B,212,48)		RS1/16S101J
R	2843(B,206,40)		RS1/16S121J
R	2844(B,206,47)		RS1/16S121J
R	2845(B,200,40)		RS1/16S271J
R	2846(B,200,47)		RS1/16S271J
R	2847(A,211,42)		RS1/16S103J
R	2848(A,211,48)		RS1/16S103J
R	2849(A,202,42)		RS1/16S103J
R	2850(A,202,48)		RS1/16S103J
R	2861(B,212,53)		RS1/16S101J
R	2862(B,212,62)		RS1/16S101J
R	2863(B,206,53)		RS1/16S121J
R	2864(B,206,60)		RS1/16S121J
R	2865(B,200,53)		RS1/16S271J
R	2866(B,200,60)		RS1/16S271J
R	2867(A,211,55)		RS1/16S103J
R	2868(A,211,61)		RS1/16S103J
R	2869(A,202,55)		RS1/16S103J
R	2870(A,202,61)		RS1/16S103J
R	2931(B,188,119)		RS1/16S0R0J
R	2932(B,213,122)		RS1/16S101J
R	2933(B,188,117)		RS1/16S0R0J
R	2934(A,210,128)		RS1/16S101J
R	2935(B,188,125)		RS1/16S0R0J
R	2936(B,209,120)		RS1/16S474J
R	2937(B,205,117)		RS1/16S103J
R	2938(B,203,117)		RS1/16S224J
R	2939(B,223,118)		RS1/16S0R0J
R	2940(B,210,116)		RS1/16S224J
R	2941(A,210,116)		RS1/16S101J
R	2942(A,203,126)		RS1/16S101J
R	2943(A,208,128)		RS1/16S101J
R	2951(B,192,87)		RS1/16S473J
R	2952(B,192,92)		RS1/16S473J
R	2953(B,191,84)		RS1/16S331J
R	2954(B,191,95)		RS1/16S331J
R	2957(B,215,108)		RS1/16S514J
R	2961(B,210,107)		RS1/16S393J
R	2965(B,174,103)		RS1/16S104J
R	2966(B,174,93)		RS1/16S104J
R	2970(B,200,99)		RS1/16S750J
R	2971(B,195,103)		RS1/16S101J
R	2972(B,195,101)		RS1/16S101J

CAPACITORS

C	2801(B,220,13)		CCSRCH101J50
C	2802(B,219,17)		CCSRCH101J50
C	2811(B,211,16)		CCSRCH271J50
C	2812(B,212,19)		CCSRCH271J50
C	2821(B,220,27)		CCSRCH101J50
C	2822(B,219,31)		CCSRCH101J50
C	2831(B,212,28)		CCSRCH271J50
C	2832(B,212,32)		CCSRCH271J50
C	2841(B,220,41)		CCSRCH101J50
C	2842(B,219,45)		CCSRCH101J50
C	2851(B,212,41)		CCSRCH271J50
C	2852(B,212,46)		CCSRCH271J50
C	2861(B,219,55)		CCSRCH101J50
C	2862(B,219,59)		CCSRCH101J50
C	2871(B,212,55)		CCSRCH271J50
C	2872(B,212,60)		CCSRCH271J50
C	2891(B,223,23)		CKSRYB103K50
C	2892(B,222,50)		CKSRYB103K50
C	2931(B,214,135)		CKSRYB103K50
C	2933(B,198,119)		CKSRYB104K16
C	2934(B,207,120)		CKSRYB104K16
C	2935(A,201,116)		CKSRYB104K16
C	2936(A,205,116)		CKSRYB104K16
C	2937(A,198,121)		CKSRYB103K50
C	2938(A,193,120)		CEAT101M16
C	2939(B,212,118)		CKSRYB103K50
C	2940(B,201,117)		CCSRCH331J50
C	2945(B,195,128)		CKSRYB102K50
C	2951(B,194,87)		CCSRCH101J50
C	2952(B,194,92)		CCSRCH101J50
C	2953(B,190,87)		CCSRCH101J50
C	2954(B,190,92)		CCSRCH101J50
C	2957(B,184,116)		CKSRYB103K50
C	2960(B,204,83)		CKSQYB105K16
C	2961(A,192,81)		CEAT4R7M50
C	2962(A,184,94)		CEAT4R7M50
C	2963(A,184,82)		CEAT4R7M50
C	2964(A,184,88)		CEAT4R7M50
C	2965(A,173,98)		CEAT4R7M50
C	2966(A,173,87)		CEAT4R7M50
C	2967(A,180,94)	ELECT. CAPACITOR	CEAT220M50
C	2968(A,181,79)		CEAT100M50
C	2973(B,215,114)		CKSRYB103K50
C	2976(B,222,108)		CKSRYB103K50
C	2979(A,181,99)		CKSRYB103K50
C	2980(A,189,105)		CEAT4R7M50
C	2981(A,188,99)		CEAT4R7M50
C	2982(A,184,105)		CEAT4R7M50

Mark	No.	Description	Part No.

AF FR IN BARRIER1 ASSY

MISCELLANEOUS

	2301(A,81,67)	PCB BINDER	VEF1040

AG HDMI POWER ASSY

MISCELLANEOUS

H	6501(A,210,66)	FUSE CLIP	AKR7001
H	6502(A,210,45)	FUSE CLIP	AKR7001
CN	6501(A,213,85)	2P CONNECTOR	B2P-VH
CN	6502(A,229,86)	2P TOP POST	B2B-EH
CN	6503(A,227,38)	CONNECTOR	B4B-EH

CAPACITORS

C	6501(A,217,59)	FILM CAPACITOR	CQMBA102J50
C	6502(A,232,55)	ELECT. CAPACITOR	CEAT682M25
C	6503(B,230,83)		CKSRYB102K50

AH HDMI TRANS ASSY

MISCELLANEOUS

	Y 23	(A,239,230)	2P HOUSING WIRE ASSY	ADX7606
⚠	Y 22	(A,237,173)	2P HOUSING WIRE ASSY	ADX7603

AI HDMI DIODE ASSY

MISCELLANEOUS

⚠	D	6501(A,227,13)	DIODE	D3SBA20(B)
	J	6501(A,232,27)	CONNECTOR ASS'Y	PF04EN-S05
		6501(A,206,27)	PCB BINDER	VEF1040

AJ HDMI & DLNA ASSY (VSX-LX70)

SEMICONDUCTORS

⚠	IC	11	NJM2846DL3-33
⚠	IC	21	NJM2846DL3-18
⚠	IC	31	NJM2886DL3-33
	IC	101	SII9135CTU
	IC	151	TC74VHC126FTS1
	IC	201,1381,1383,1384	TC74LCX541FTS1
	IC	202	ICS571MLF
	IC	203	TC7WH74FU
	IC	204,205	TC7WH157FU
	IC	251	TC74LCX157FTS1
	IC	301	SII9134CTU
	IC	401	ADV7800BSTZ-80
	IC	402	TC7WHU04FU
	IC	501	PEG118A
	IC	502	AYW7181
	IC	504	BU4094BCFV
	IC	505	TC7WH125FU
	IC	506	TC7WT125FU
	IC	601	ADV7172KSTZ
	IC	701	DM850E
	IC	801	AAT4618IGV-0.5-1
	IC	861	RTL8201CP-LF
	IC	881	AYW7185
	IC	891	HY57V641620FTP-6
	IC	911	TC74VHC08FTS1
	IC	921	TC74VHCT08AFTS1
⚠	IC	1001	BD9011KV
⚠	IC	1051	PQ200WNA1ZPH
⚠	IC	1071	NJM78M05DL1A
	IC	1101,1151	CXB1442AR
	IC	1201,1203,1251,1253	BR24L02FV-W
	IC	1202,1204,1252,1254	TC7MB3257FK
	IC	1205,1206,1255,1257	TC7WBD125AFK
	IC	1301	FLI2310-LF-CF
	IC	1351	EDS6432AFTA-6B-E
	Q	151,152,352,1101	DTC114YUA
	Q	201	DTA124EUA
	Q	351	UMB1N
	Q	631,641,651,661	2SA1576A
	Q	671,681,1051	2SA1576A
⚠	Q	1001,1002	SP8K1
	Q	1052	DTC124EUA
	Q	1102,1104,1151,1152	DTC114YUA
	Q	1103,1153	2SB1689
	Q	1154,1201-1203	DTC114YUA
	Q	1251-1253	DTC114YUA
	Q	1281	HN1K02FU
	D	11,22	RB050L-40
	D	301	UDZS5R1(B)
	D	551	RB501V-40
	D	1001,1002	RB160VA-40
⚠	D	1003,1004	RLZ5.6B
⚠	D	1071	RLZ6.8B
	D	1101,1102,1151,1150	DAN202U

MISCELLANEOUS

	L 10	CHIP BEEDS FILTER	BTX1040
	L 101-104,301-305	CHIP BEADS	ATL7010
	L 105,106	CHIP SOLID INDUCTOR	QTL1013
	L 201	INDUCTOR	CTF1379
	L 202-204	CHIP SOLID INDUCTOR	ATL7002
	L 207,251	CHIP SOLID INDUCTOR	VTL1169
	L 351-354	COIL	ATH7022
	L 401,402,404,406	CHIP BEADS	ATL7010
	L 403,405	CHIP SOLID INDUCTOR	QTL1013
	L 501,601	CHIP SOLID INDUCTOR	ATL7002
	L 602	CHIP SOLID INDUCTOR	ATL7002
	L 631,641,651,661	INDUCTOR	ATL7015
	L 671,681	INDUCTOR	ATL7015
	L 701,702,861,862	INDUCTOR	CTF1357
	L 704-707	CHIP FERRITE BEADS	ATF1211
	L 801	CHIP FERRITE BEADS	VTL1169
	L 802	COIL	VTH1043
	L 871,881,891,911	INDUCTOR	CTF1357
	L 921	INDUCTOR	CTF1357
	L 1001,1101,1151	CHIP BEADS	ATL7010
	L 1002	INDUCTOR	DTL1135
	L 1003	INDUCTOR	ATL7013
	L 1092,1093	INDUCTOR	CTF1386
	L 1301-1305	CHIP SOLID INDUCTOR	ATL7002
	L 1351	CHIP SOLID INDUCTOR	ATL7002
	JA 301	HDMI CONNECTOR	AKP7220
	JA 701	RJ45C ONNECTOR TRNS	AKP1307
	JA 1101,1102,1151	HDMI CONNECTOR	AKP1318

Mark	No.	Description	Part No.
JA	1152	HDMI CONNECTOR	AKP1318
KN	1	SCREW PLATE	VNE1948
X	101	CRYSTAL RESONATOR	ASS7068
X	401	CRYSTAL RESONATOR	ASS7069
X	501	CERAMIC RESONATOR	XSS3004
X	701	CRYSTAL RESONATOR	XSS3003
X	861	CRYSTAL RESONATOR	ASS7084
X	1301	CRYSTAL RESONATOR	ASS7070
CN	502	7P CONNECTOR	VKN1411
CN	801	CONNECTOR	AKM1276
CN	901	22P CONNECTOR	RKN1063
CN	952	5P CONNECTOR	VKN1374
CN	1001,1002	CONNECTOR	CKS4898
	0	ID LABEL ASSY	AXW7015

RESISTORS

R	101,103-105		RAB4CQ220J
R	108		RAB4CQ100J
R	115,204,1385-1388		RAB4CQ680J
R	119,331,333-341		RAB4CQ473J
R	130-132,134-136		RAB4CQ220J
R	304		RS1/16SS6800F
R	428,429		RAB4CQ470J
R	432,433		RAB4CQ560J
R	434,437,442,443		RAB4CQ473J
R	446,447,450,702		RAB4CQ473J
R	464,465,467,468		RAB4CQ0R0J
R	480-483,741,761		RAB4CQ220J
R	579		RAB4CQ0R0J
R	596		RAB4CQ101J
R	609-612		RS1/16SS1201F
R	633,643,653,663		RS1/16SS2200F
R	634,644,654,664		RS1/16SS4700F
R	635,645,655,665		RS1/10S0R0J
R	673,683		RS1/16SS2200F
R	674,684		RS1/16SS4700F
R	675,685,1008,1009		RS1/10S0R0J
R	712,764,779		RAB4CQ473J
R	723		RS1/16S5101F
R	724		RS1/16S3900F
R	746,747,749		RAB4CQ330J
R	769,771,789		RAB4CQ220J
R	851-854		RAB4CQ330J
R	867		RS1/16S2001F
R	868-871		RS1/16S49R9F
R	1002,1004		ACN7156
R	1011		RS1/16SS4702F
R	1012,1022		RS1/16SS1502F
R	1023		RS1/16SS1202F
R	1031,1095,1096		RS1/10S0R0J
R	1052,1053		RS1/10S6R8J
R	1057		RS1/16SS1801F
R	1059		RS1/16SS2001F
R	1071-1073		RS1/16S0R0J
R	1110,1160		RS1/16SS4701F
R	1314-1317,1352		RAB4CQ220J
R	1394		RAB4CQ680J
Other Resistors			RS1/16SS###J

Mark	No.	Description	Part No.

CAPACITORS

C	10		CEVW470M16
C	11,31,801		CKSSYB104K16
C	12,32		CKSQYB225K10
C	13,421,735,1004		CKSSYB102K50
C	21,106-108,110		CKSSYB104K10
C	22		DCG1028
C	23		CEVW221M4
C	33		CEVW101M6R3
C	101,102,301,302		DCH1165
C	103,104,303-305		CKSQYB106K6R3
C	105,113,121,122		CKSSYB105K6R3
C	109,111,131,152		CKSSYB103K16
C	114-120,123-126		CKSSYB104K10
C	127,320,463,740		CCSSCH120J50
C	128,462		CCSSCH100D50
C	129,130,133,307		CKSSYB105K6R3
C	132,134-139,151		CKSSYB104K10
C	153,203,204,308		CKSSYB103K16
C	201,205-207,251		CKSSYB104K10
C	202		CEVW4R7M35
C	210,718,721,860		CKSSYB471K50
C	306,309,311,313		CKSSYB104K10
C	310,312,314		CKSSYB105K6R3
C	315,316,351,403		CKSSYB104K10
C	317-319,404,433		CKSSYB105K6R3
C	401,402		VCH1234
C	419,434		CEVW101M16
C	405-411,418,420		CKSSYB104K10
C	412,414,435,436		CKSSYB103K16
C	413		CKSSYB823K10
C	415		CKSRYB824K10
C	416		CKSSYB393K10
C	417		CKSQYB106K6R3
C	422-429,431,437		CKSSYB104K10
C	430,432,710,742		CEVW100M16
C	438,441-443		CKSSYB104K10
C	439,440,1056,1303		DCH1201
C	445-449,461,502		CKSSYB104K10
C	501,613,1313,2503		CKSSYB103K16
C	503		VCH1234
C	601,611,802		CEVW101M16
C	504,506,508,509		CKSSYB104K10
C	505,610,1314-1318		CKSSYB105K6R3
C	551,552,602-609		CKSSYB104K10
C	612,614,615,617		CKSSYB104K10
C	631,641,651,661		CKSSYB104K10
C	632,633,642,643		CCSSCH101J50
C	652,653,662,663		CCSSCH101J50
C	671,681,701-706		CKSSYB104K10
C	672,673,682,683		CCSSCH101J50
C	708,709,711-717		CKSSYB104K10
C	719,722,724-734		CKSSYB104K10
C	720,867		CEVW220M16
C	723,875		CEVW470M6R3
C	736-739,861-865		CKSSYB104K10
C	741,1339,1340		CCSSCH120J50
C	743,1073,1302		CEVW100M16
C	803-805		CKSSYB104K16

Mark	No.	Description	Part No.
	C	807,1305	CEVW101M16
	C	866,869,881,895	CKSSYB471K50
	C	868,871,872,874	CKSSYB104K10
	C	870,1351	ACH7174
	C	873	CEVW330M16
	C	876,877	CCSSCH180J50
	C	882,891-894,900	CKSSYB104K10
	C	897-899,911,921	CKSSYB471K50
	C	912,922,1054	CKSSYB104K10
	C	1001	CEVW470M25
	C	1002	CCG1195
	C	1005,1012,1017,1018	CKSRYB104K25
	C	1006	CKSSYB102K50
	C	1010	CKSRYB152K50
	C	1011,1024	BCG1059
	C	1013,1014,1022	CKSRYB105K10
	C	1015	CKSRYB332K50
	C	1016	CCSSCH330J50
	C	1019	CCSSCH221J50
	C	1020	CKSRYB103K25
	C	1021,1025,1072	CKSRYB104K25
	C	1023	CKSRYB222K50
	C	1051,1053	CKSQYB105K25
	C	1052	CKSQYB224K25
	C	1071	CEVW1R0M50
	C	1102-1109,1152-1159	CKSSYB104K10
	C	1110,1160	DCH1165
	C	1201-1206,1251-1256	CKSSYB104K10
	C	1301	VCH1234
	C	1306,1308-1312	CKSSYB104K10
	C	1319-1322,1324-1332	CKSSYB104K10
	C	1335-1338,1341	CKSSYB104K10
	C	1352-1363	CKSSYB105K6R3
	C	1381-1383	CKSSYB104K10
	C	2505-2507	CKSSYB103K16

AK HDMI & DVC ASSY (VSX-LX60)

SEMICONDUCTORS

	IC	101	SII9135CTU
	IC	151	TC74VHC126FTS1
	IC	201,1381,1383,1384	TC74LCX541FTS1
	IC	251	TC74LCX157FTS1
	IC	301	SII9134CTU
	IC	401	ADV7800BSTZ-80
	IC	402	TC7WHU04FU
	IC	501	PEG118A
	IC	502	AYW7181
	IC	504	BU4094BCFV
	IC	505	TC7WH125FU
	IC	506	TC7WT125FU
	IC	601	ADV7172KSTZ
	IC	1001	BD9011KV
	IC	1051	PQ200WNA1ZPH
	IC	1071	NJM78M05DL1A
	IC	1151	CXB1442AR
	IC	1203,1251,1253	BR24L02FV-W
	IC	1204,1252,1254	TC7MB3257FK
	IC	1255,1257	TC7WBD125AFK
	IC	1301	FLI2310-LF-CF
	IC	1351	EDS6432AFTA-6B-E
	Q	152,352,1102,1151	DTC114YUA
	Q	351	UMB1N
	Q	631,641,651,661	2SA1576A
	Q	671,681,1051	2SA1576A
	Q	1001,1002	SP8K1
	Q	1052	DTC124EUA
	Q	1152,1154,1202	DTC114YUA
	Q	1153	2SB1689
	Q	1251-1253	DTC114YUA
	Q	1281	HN1K02FU
	D	301	UDZS5R1(B)
	D	551	RB501V-40
	D	1001,1002	RB160VA-40
⚠	D	1003,1004	RLZ5.6B
⚠	D	1071	RLZ6.8B
	D	1102,1151,1152	DAN202U

MISCELLANEOUS

	L	101-104,301-305 CHIP BEADS	ATL7010
	L	105,106 CHIP SOLID INDUCTOR	QTL1013
	L	207,251 CHIP SOLID INDUCTOR	VTL1169
	L	351-354 COIL	ATH7022
	L	401,402,404,406 CHIP BEADS	ATL7010
	L	403,405 CHIP SOLID INDUCTOR	QTL1013
	L	501,601 CHIP SOLID INDUCTOR	ATL7002
	L	602 CHIP SOLID INDUCTOR	ATL7002
	L	631,641,651,661 INDUCTOR	ATL7015
	L	671,681 INDUCTOR	ATL7015
	L	1001,1151 CHIP BEADS	ATL7010
	L	1002 INDUCTOR	DTL1135
	L	1003 INDUCTOR	ATL7013
	L	1092,1093 INDUCTOR	CTF1386
	L	1301-1305 CHIP SOLID INDUCTOR	ATL7002
	L	1351 CHIP SOLID INDUCTOR	ATL7002
	JA	301 HDMI CONNECTOR	AKP7220
	JA	1102,1151,1152 HDMI CONNECTOR	AKP1318
	X	101 CRYSTAL RESONATOR	ASS7068
	X	401 CRYSTAL RESONATOR	ASS7069
	X	501 CERAMIC RESONATOR	XSS3004
	X	1301 CRYSTAL RESONATOR	ASS7070
	CN	502 7P CONNECTOR	VKN1411
	CN	1001,1002 CONNECTOR	CKS4898

RESISTORS

	R	101,103-105	RAB4CQ220J
	R	108	RAB4CQ100J
	R	115,204,1385-1388	RAB4CQ680J
	R	119,331,333-341	RAB4CQ473J
	R	130-132,134-136	RAB4CQ220J
	R	141-144	ACN1275
	R	304	RS1/16SS6800F
	R	428,429	RAB4CQ470J
	R	432,433	RAB4CQ560J
	R	434,437,442,443	RAB4CQ473J
	R	446,447,450	RAB4CQ473J
	R	464,465,467,468	RAB4CQ0R0J
	R	480-483,1314-1317	RAB4CQ220J
	R	579	RAB4CQ0R0J

Mark	No.	Description	Part No.
R	596		RAB4CQ101J
R	609-612		RS1/16SS1201F
R	633,643,653,663		RS1/16SS2200F
R	634,644,654,664		RS1/16SS4700F
R	635,645,655,665		RS1/10S0R0J
R	673,683		RS1/16SS2200F
R	674,684		RS1/16SS4700F
R	675,685,1008,1009		RS1/10S0R0J
R	1002,1004		ACN7156
R	1011		RS1/16SS4702F
R	1012,1022		RS1/16SS1502F
R	1023		RS1/16SS1202F
R	1031,1095,1096		RS1/10S0R0J
R	1052,1053		RS1/10S6R8J
R	1057		RS1/16SS1801F
R	1059		RS1/16SS2001F
R	1071-1073		RS1/16S0R0J
R	1160		RS1/16SS4701F
R	1352		RAB4CQ220J
R	1394		RAB4CQ680J
	Other Resistors		RS1/16SS###J

CAPACITORS

C	101,102,301,302		DCH1165
C	103,104,303-305		CKSQYB106K6R3
C	105,113,121,122		CKSSYB105K6R3
C	106-108,110		CKSSYB104K10
C	109,111,131,152		CKSSYB103K16
C	114-120,123-126		CKSSYB104K10
C	127,320,463,1339		CCSSCH120J50
C	128,462		CCSSCH100D50
C	129,130,133,307		CKSSYB105K6R3
C	132,134-139,151		CKSSYB104K10
C	153,308,412,414		CKSSYB103K16
C	201,251,306,309		CKSSYB104K10
C	210		CKSSYB471K50
C	310,312,314		CKSSYB105K6R3
C	311,313,315,316		CKSSYB104K10
C	317-319,404,433		CKSSYB105K6R3
C	351,403,405-411		CKSSYB104K10
C	401,419,434		CEVW101M16
C	402		VCH1234
C	413		CKSSYB823K10
C	415		CKSRYB824K10
C	416		CKSSYB393K10
C	417		CKSQYB106K6R3
C	418,420,422-429		CKSSYB104K10
C	421,1004,1006		CKSSYB102K50
C	430,432,1073,1302		CEVW100M16
C	431,437,438		CKSSYB104K10
C	435,436,501,613		CKSSYB103K16
C	439,440,1056,1303		DCH1201
C	441-443,445-449		CKSSYB104K10
C	461,502,504,506		CKSSYB104K10
C	503		VCH1234
C	505,610,1314-1318		CKSSYB105K6R3
C	508,509,551,552		CKSSYB104K10
C	601,611		CEVW101M16
C	602-609,612,614		CKSSYB104K10
C	615,617,631,641		CKSSYB104K10
C	632,633,642,643		CCSSCH101J50
C	651,661,671,681		CKSSYB104K10
C	652,653,662,663		CCSSCH101J50
C	672,673,682,683		CCSSCH101J50
C	1001		CEVW470M25
C	1002		CCG1195
C	1005,1012,1017,1018		CKSRYB104K25
C	1010		CKSRYB152K50
C	1011,1024		BCG1059
C	1013,1014,1022		CKSRYB105K10
C	1015		CKSRYB332K50
C	1016		CCSSCH330J50
C	1019		CCSSCH221J50
C	1020		CKSRYB103K25
C	1021,1025,1072		CKSRYB104K25
C	1023		CKSRYB222K50
C	1051,1053		CKSQYB105K25
C	1052		CKSQYB224K25
C	1054,1152-1159,1203		CKSSYB104K10
C	1071		CEVW1R0M50
C	1160		DCH1165
C	1204,1251-1256,1306		CKSSYB104K10
C	1301		VCH1234
C	1305		CEVW101M16
C	1308-1312,1319-1322		CKSSYB104K10
C	1313		CKSSYB103K16
C	1324-1332,1335-1338		CKSSYB104K10
C	1340		CCSSCH120J50
C	1341,1381-1383		CKSSYB104K10
C	1351		ACH7174
C	1352-1363		CKSSYB105K6R3

AL TRANS 1 ASSY

TRANS 1 ASSY has no service part.

AM USB ASSY (VSX-LX60)

MISCELLANEOUS

	IC	701 (A,35,38)	USB MEDIA CONTROL IC	TCC8600-00X-EA-UG
⚠	IC	702 (A,63,28)	IC	NJM2872BF18
⚠	IC	703 (A,84,25)	IC	NJM2886DL3-33
	IC	741 (A,64,16)	IC	TC7SZ125FU
	IC	761 (A,67,47)	SD-RAM(64M)	HY57V641620FTP-6-K
	IC	762 (A,90,42)	FLASH ROM	AYW7173
	IC	771 (A,67,22)	LOAD SWITCHING	AAT4618IGV-0.5-1
	IC	951 (A,59,17)	L-MOS AND GATE	TC7SET08FUS1
	Q	771 (A,33,24)	DIGITAL TRANSISTOR	DTC143EUA
	L	701 (A,41,54)	INDUCTOR	LCTC100K1608
	L	702 (A,46,53)	CHIP SOLID INDUCTOR	QTL1013
	L	703 (A,23,54)	CHIP SOLID INDUCTOR	QTL1013
	L	704 (A,21,29)	CHIP SOLID INDUCTOR	QTL1013
	L	731 (A,43,59)	CHIP FERRITE BEADS	VTL1169
	L	733 (A,36,54)	COIL	VTH1043
	L	741 (A,63,19)	CHIP SOLID INDUCTOR	QTL1013
	L	761 (A,74,38)	CHIP SOLID INDUCTOR	QTL1013
	L	762 (A,90,57)	CHIP SOLID INDUCTOR	QTL1013
	L	763 (A,47,16)	CHIP SOLID INDUCTOR	QTL1013
	L	952 (A,57,14)	CHIP SOLID INDUCTOR	QTL1013

Mark	No.	Description	Part No.
X	702 (A,49,46)	CRYSTAL OSCILLATOR	CSS1614
CN	701 (A,39,60)	PLUG(4P)	KM200NA4
CN	702 (A,87,16)	11P SOCKET	XKP3076

RESISTORS

R	702 (A,48,39)	RS1/16SS101J
R	703 (A,50,40)	RS1/16SS101J
R	704 (A,42,46)	RS1/16SS472J
R	705 (A,25,37)	RS1/16SS472J
R	707 (A,36,49)	RS1/16SS473J
R	708 (A,40,53)	RS1/16SS101J
R	709 (A,41,47)	RS1/16SS103J
R	710 (A,50,39)	RS1/16SS101J
R	711 (A,48,37)	RS1/16SS101J
R	712 (A,29,48)	RS1/16SS101J
R	713 (A,30,49)	RS1/16SS101J
R	714 (A,31,48)	RS1/16SS101J
R	717 (A,22,30)	RS1/16SS101J
R	718 (A,23,30)	RS1/16SS101J
R	719 (A,26,47)	RS1/16SS101J
R	720 (A,27,49)	RS1/16SS101J
R	724 (A,31,51)	RS1/16SS472J
R	725 (A,33,53)	RS1/16SS472J
R	726 (A,34,54)	RS1/16SS472J
R	727 (A,25,41)	RS1/16SS220J
R	728 (A,32,49)	RS1/16SS101J
R	729 (A,51,37)	RS1/16SS101J
R	732 (A,30,60)	RS1/16S0R0J
R	734 (A,30,61)	RS1/16S0R0J
R	735 (A,38,52)	RS1/16SS153J
R	736 (A,34,51)	RS1/16SS153J
R	737 (A,37,51)	RS1/16SS100J
R	738 (A,35,51)	RS1/16SS100J
R	739 (A,86,20)	RS1/16SS221J
R	740 (A,33,50)	RS1/16SS101J
R	741 (A,66,19)	RS1/16SS151J
R	742 (A,77,23)	RS1/16SS101J
R	743 (A,75,23)	RS1/16SS101J
R	744 (A,73,23)	RS1/16SS101J
R	745 (A,88,19)	RS1/16SS472J
R	747 (A,45,41)	RS1/16S225J
R	748 (A,46,45)	RS1/16SS470J
R	752 (A,41,19)	RS1/16SS103J
R	756 (A,36,15)	RS1/16SS103J
R	763 (A,88,58)	RS1/16SS473J
R	771 (A,71,20)	RS1/16SS101J
R	772 (A,71,21)	RS1/16SS104J
R	951 (A,40,57)	RS1/16SS182J
R	952 (A,38,55)	RS1/16SS332J
R	953 (A,25,28)	RS1/16SS182J
R	954 (A,25,29)	RS1/16SS332J
R	955 (A,56,22)	RS1/16SS182J
R	956 (A,26,49)	RS1/16SS332J
R	958 (A,60,20)	RS1/16SS101J

CAPACITORS

C	701 (A,29,28)	CKSSYB104K10
C	702 (A,30,28)	CKSSYB471K50
C	703 (A,32,28)	CKSSYB104K10
C	704 (A,33,28)	CKSSYB471K50
C	705 (A,36,27)	CKSSYB104K10
C	706 (A,37,27)	CKSSYB471K50
C	707 (A,40,27)	CKSSYB104K10
C	708 (A,39,27)	CKSSYB471K50
C	709 (A,43,47)	CKSSYB104K10
C	710 (A,43,48)	CKSSYB471K50
C	711 (A,42,50)	CKSSYB104K10
C	712 (A,44,50)	CKSSYB471K50
C	713 (A,38,49)	CCSRCH331J50
C	714 (A,42,52)	CKSQYB225K10
C	715 (A,41,49)	CKSRYB122K50
C	716 (A,47,36)	CKSSYB104K10
C	717 (A,47,32)	CKSSYB104K10
C	718 (A,47,33)	CKSSYB471K50
C	719 (A,25,45)	CKSSYB471K50
C	720 (A,26,45)	CKSSYB104K10
C	721 (A,24,47)	CEJQ101M6R3
C	723 (A,23,33)	CKSSYB471K50
C	724 (A,24,34)	CKSSYB104K10
C	726 (A,21,41)	CKSSYB104K10
C	727 (A,26,39)	CKSSYB471K50
C	728 (A,24,39)	CKSSYB104K10
C	729 (A,25,35)	CKSSYB471K50
C	730 (A,65,27)	CKSSYB103K16
C	731 (A,27,54)	CEJQ101M16
C	732 (A,34,56)	CKSRYB104K16
C	733 (A,43,57)	CKSRYB104K16
C	734 (A,48,36)	CKSSYB471K50
C	735 (A,23,44)	CKSSYB103K16
C	736 (A,26,30)	CKSSYB471K50
C	739 (A,46,50)	CCSRCH100D50
C	740 (A,46,47)	CCSRCH471J50
C	741 (A,92,19)	CEJQ101M16
C	742 (A,92,24)	CKSRYB104K16
C	743 (A,93,27)	CKSQYB225K10
C	744 (A,97,26)	CEJQ470M10
C	745 (A,65,31)	CKSQYB105K16
C	746 (A,67,28)	CKSQYB475K6R3
C	747 (A,34,48)	CKSSYB104K10
C	748 (A,33,48)	CKSSYB471K50
C	751 (A,45,17)	CKSSYB104K10
C	752 (A,62,16)	CKSSYB104K10
C	761 (A,76,39)	CKSSYB104K10
C	762 (A,77,39)	CKSSYB471K50
C	763 (A,71,39)	CKSSYB471K50
C	764 (A,67,40)	CKSSYB471K50
C	766 (A,57,40)	CKSSYB471K50
C	767 (A,90,55)	CKSSYB104K10
C	768 (A,90,54)	CKSSYB471K50
C	769 (A,43,55)	CKSRYB104K16
C	771 (A,71,25)	CKSQYB105K16
C	773 (A,64,23)	CKSRYB104K16
C	952 (A,57,17)	CKSRYB104K16

FM/AM TUNER UNIT

FM/AM TUNER UNIT has no service part.