

# STR-KG800

## SERVICE MANUAL

Ver. 1.0 2008.02

AEP Model  
UK Model



- STR-KG800 is the receiver section in HT-DDWG800.

This receiver incorporates Dolby\* Digital and Pro Logic Surround and the DTS\*\* Digital Surround System.

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### SPECIFICATIONS

#### Amplifier section

Power Output <sup>1)</sup>	Inputs	Sensitivity: 800 mV/ 50 kohms
Models of area code CEL, CEK	Digital (Coaxial)	Impedance: 75 ohms
Stereo mode (rated) (6 ohms, 1 kHz, THD 1%)	Outputs (Analog)	Voltage: 800 mV/ 10 kohms
90 W + 90 W	AUDIO OUT	Voltage: 2 V/1 kohm
Surround mode (reference) (6 ohms, 1 kHz, THD 10%)	SUB WOOFER	Reproduction frequency range: 28 – 20,000 Hz
RMS output <sup>2)</sup>	Tone	Gain levels ±6 dB, 1 dB step
FRONT:135 W per channel	FM tuner section	
CENTER:135 W	Tuning range	87.5 - 108.0 MHz
SURROUND:135 W per channel	Antenna	FM wire antenna

<sup>1)</sup> Measured under the following conditions:

Area code	Power requirements
CEL, CEK	230 V AC, 50 Hz

<sup>2)</sup> Reference power output for front, center and surround speakers. Depending on the sound field settings and the source, there may be no sound output.

Inputs	Analogue	Sensitivity: 800 mV/ 50 kohms
	Digital (Coaxial)	Impedance: 75 ohms
Outputs (Analog)	AUDIO OUT	Voltage: 800 mV/ 10 kohms
	SUB WOOFER	Voltage: 2 V/1 kohm
Reproduction frequency range: 28 – 20,000 Hz	Tone	Gain levels ±6 dB, 1 dB step
	FM tuner section	
Tuning range		87.5 - 108.0 MHz
Antenna		FM wire antenna
Antenna terminals		75 ohms, unbalanced
Intermediate frequency		10.7 MHz

#### AM tuner section

Tuning range	531 – 1,602 kHz
Models of area code CEL, CEK	With 9-kHz tuning scale:
Antenna	Loop antenna
Intermediate frequency	450 kHz

#### Video section

Inputs/Outputs	
Video:	1 Vp-p, 75 ohms
COMPONENT VIDEO:	
Y:	1 Vp-p, 75 ohms
PB/CB:	0.7 Vp-p, 75 ohms
PR/CR:	0.7 Vp-p, 75 ohms
80 MHz HD Pass Through	

– Continued on next page –

## MULTI CHANNEL AV RECEIVER

**General**

Power requirements

<b>Area code</b>	<b>Power requirements</b>
CEL, CEK	230 V AC, 50/60 Hz

Power output (DIGITAL MEDIA PORT)

DC OUT: 5 V, 0.7 A MAX

Power consumption

<b>Area code</b>	<b>Power consumption</b>
CEL, CEK	200 W

Power consumption (during standby mode)

0.3 W (When "CONTROL FOR HDMI" in VIDEO menu is set to "CTRL OFF")

Dimensions (width/height/depth) (Approx.)

430 × 157.5 × 318 mm  
including projecting parts and controls

Mass (Approx.) 7.8 kg

Design and specifications are subject to change without notice.

**Notes on chip component replacement**

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

**SAFETY-RELATED COMPONENT WARNING!**

**COMPONENTS IDENTIFIED BY MARK ▲ OR DOTTED LINE WITH MARK ▲ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION.**  
**REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.**

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## SECTION 1 SERVICING NOTES

### UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.

(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)



#### LF : LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.

Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.

Soldering irons using a temperature regulator should be set to about 350 °C.

Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!

- Strong viscosity

Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.

- Usable with ordinary solder

It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

### NOTE OF REPLACING THE IC1131 ON THE DIGITAL AB BOARD

IC1131 on the DIGITAL AB board cannot exchange with single. When IC1131 on the DIGITAL AB board is damaged, exchange the entire mounted board.

### NOTE OF REPLACING THE IC3511 AND IC3513 ON THE HDMI BOARD

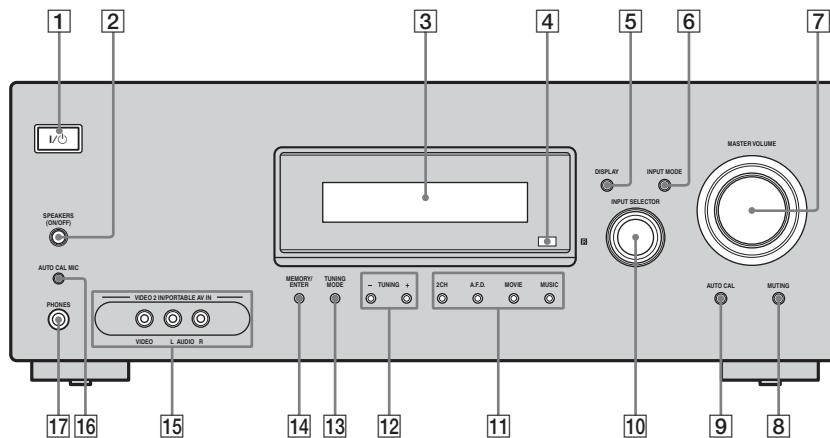
IC3511 and IC3513 on the HDMI board cannot exchange with single. When IC3511 and IC3513 on the HDMI board are damaged, exchange the entire mounted board.

## SECTION 2 GENERAL

This section is extracted  
from instruction manual.

### Receiver

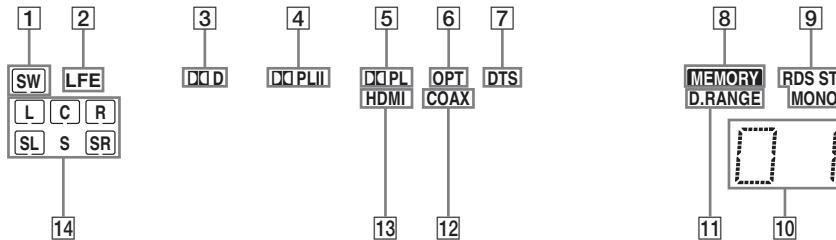
#### Front panel



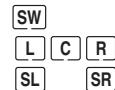
Name	Function
<b>1</b> I/O (on/standby)	Press to turn the receiver on or off.
<b>2</b> SPEAKERS (ON/OFF)	Press to turn the speaker system on or off.
<b>3</b> Display	The current status of the selected component or a list of selectable items appears here.
<b>4</b> Remote sensor	Receives signals from remote commander.
<b>5</b> DISPLAY	Press to select information displayed on the display.
<b>6</b> INPUT MODE	Press to select the input mode when the same components are connected to both digital and analog jacks.
<b>7</b> MASTER VOLUME	Turn to adjust the volume level of all speakers at the same time.
<b>8</b> MUTING	Press to turn off the sound temporarily. Press MUTING again to restore the sound.
<b>9</b> AUTO CAL	Press to activate the Auto Calibration function.

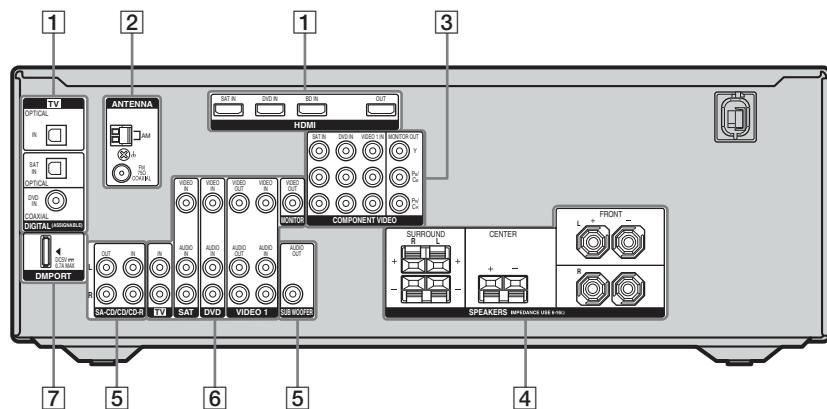
Name	Function
<b>10</b> INPUT SELECTOR	Turn to select the input source to playback.
<b>11</b> 2CH	Press to select a sound field.
A.F.D.	
MOVIE	
MUSIC	
<b>12</b> TUNING +/-	Press to scan a station.
<b>13</b> TUNING MODE	Press to select the tuning mode.
<b>14</b> MEMORY/ENTER	Press to store a station or enter the selection when selecting the settings.
<b>15</b> VIDEO 2 IN/PORTABLE AV IN jacks	Connects to a portable audio/video component such as a camcorder or video game.
<b>16</b> AUTO CAL MIC jack	Connects to the supplied optimizer microphone for the Auto Calibration function.
<b>17</b> PHONES jack	Connects to headphones.

### About the indicators on the display



Name	Function	Name	Function												
<b>[1] SW</b>	Lights up when the audio signal is output from the SUB WOOFER jack.	<b>[9] Tuner indicators</b>	Lights up when using the receiver to tune in radio stations, etc. <b>Note</b> “RDS” appears for models of area code CEL, CEK only.												
<b>[2] LFE</b>	Lights up when the disc being played back contains an LFE (Low Frequency Effect) channel and the LFE channel signal is actually being reproduced.	<b>[10] Preset station indicators</b>	Lights up when using the receiver to tune in preset radio stations.												
<b>[3] DD D</b>	Lights up when the receiver is decoding Dolby Digital signals. <b>Note</b> When playing a Dolby Digital format disc, be sure that you have made digital connections and that INPUT MODE is set to “AUTO”.	<b>[11] D.RANGE</b>	Lights up when dynamic range compression is activated.												
<b>[4] DD PLII</b>	Lights up when the Pro Logic II Movie/Music decoder is activated.	<b>[12] COAX</b>	Lights up when INPUT MODE is set to “AUTO” and the source signal is a digital signal being input through the COAXIAL jack.												
<b>[5] DD PL</b>	Lights up when the receiver applies Pro Logic processing to 2 channel signals in order to output the center and surround channel signals.	<b>[13] HDMI</b>	Lights up when the receiver recognizes a component connected via an HDMI IN jack.												
<b>[6] OPT</b>	Lights up when INPUT MODE is set to “AUTO” and the source signal is a digital signal being input through the OPTICAL jack.	<b>[14] Playback channel indicators</b>	The letters (L, C, R, etc.) indicate the channels being played back. The boxes around the letters vary to show how the receiver downmixes the source sound.  <table border="0"> <tr> <td><b>L</b></td> <td>Front Left</td> </tr> <tr> <td><b>R</b></td> <td>Front Right</td> </tr> <tr> <td><b>C</b></td> <td>Center (monaural)</td> </tr> <tr> <td><b>SL</b></td> <td>Surround Left</td> </tr> <tr> <td><b>SR</b></td> <td>Surround Right</td> </tr> <tr> <td><b>S</b></td> <td>Surround (monaural or the surround components obtained by Pro Logic processing)</td> </tr> </table> <b>Example:</b> Recording format (Front/Surround): 3/2.1 Sound Field: A.F.D. AUTO	<b>L</b>	Front Left	<b>R</b>	Front Right	<b>C</b>	Center (monaural)	<b>SL</b>	Surround Left	<b>SR</b>	Surround Right	<b>S</b>	Surround (monaural or the surround components obtained by Pro Logic processing)
<b>L</b>	Front Left														
<b>R</b>	Front Right														
<b>C</b>	Center (monaural)														
<b>SL</b>	Surround Left														
<b>SR</b>	Surround Right														
<b>S</b>	Surround (monaural or the surround components obtained by Pro Logic processing)														
<b>[7] DTS</b>	Lights up when the receiver is decoding DTS signals. <b>Note</b> When playing a DTS format disc, be sure that you have made digital connections and that INPUT MODE is set to “AUTO”.														
<b>[8] MEMORY</b>	Lights up when a memory function, such as Preset Memory, etc., is activated.														



**Rear panel****[1] DIGITAL INPUT/OUTPUT section**

	OPTICAL IN jacks	Connects to a DVD player, etc. The COAXIAL jack provides a better sound quality.
	COAXIAL IN jack	
	HDMI IN/OUT* jacks	Connects to a DVD player, Blu-ray disc player, etc. The image is output to a TV or a projector while the sound can be output from a TV or/and speakers connected to this receiver.

**[4] SPEAKERS section**

Connects to the supplied speakers.

**[2] ANTENNA section**

	FM ANTENNA jack	Connects to the supplied FM wire antenna.
	AM ANTENNA terminals	Connects to the supplied AM loop antenna.

**[3] COMPONENT VIDEO INPUT/OUTPUT section**

	Green (Y) IN/OUT* jacks	Connects to a DVD player, TV, satellite tuner, etc. You can enjoy high quality image.
	Blue (Pb/Cb) IN/OUT* jacks	
	Red (Pr/Cr) IN/OUT* jacks	

**[5] AUDIO INPUT/OUTPUT section**

	White (L) AUDIO IN/OUT jacks	Connects to a Super Audio CD player, etc..
	Red (R) AUDIO OUT jack	Connects to the supplied subwoofer.

**[6] VIDEO/AUDIO INPUT/OUTPUT section**

	White (L) AUDIO IN/OUT jacks	Connects to a VCR, DVD player, etc..
	VIDEO IN/OUT* jacks	

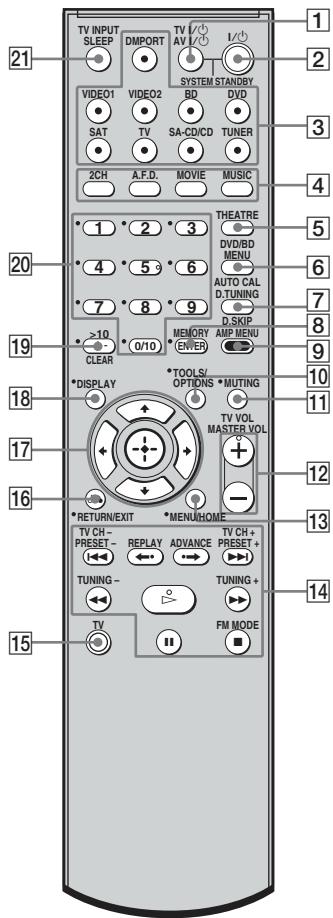
**[7] DMPORT**

	DMPORT jack	Connects to a DIGITAL MEDIA PORT adapter.
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\* You can watch the selected input image when you connect the HDMI OUT or MONITOR OUT jack to a TV.

## Remote commander

You can use the supplied RM-AAU023 Remote Commander to operate the receiver and to control the Sony audio/video components that the remote is assigned to operate. For details, see "Changing button assignments".



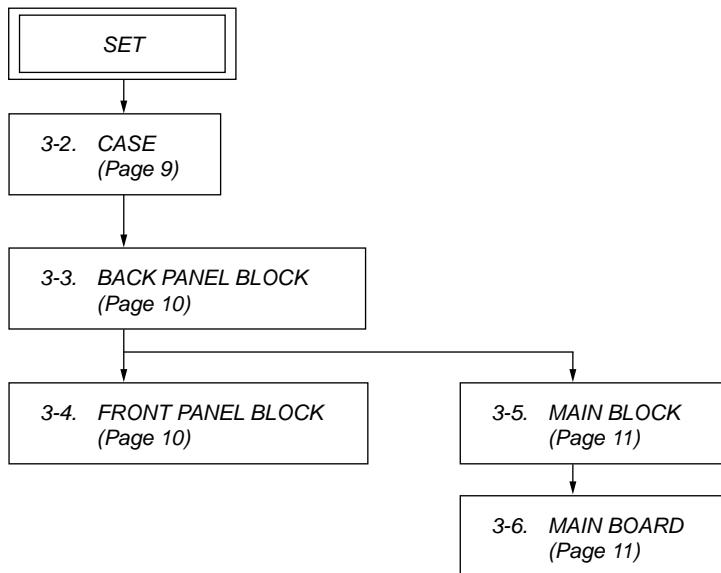
Name	Function	Name	Function
<b>[1] TV I/O (on/standby)</b>	Press TV I/O and TV ([15]) at the same time to turn the TV on or off.	<b>[6] DVD/BD MENU</b>	Press to display the menu of the DVD or Blu-ray disc on the TV screen. Then, use <b>▲</b> , <b>▼</b> , <b>◀</b> , <b>▶</b> and <b>⊕</b> ([17]) to perform menu operations.
<b>[2] AV I/O (on/standby)</b>	Press to turn on or off the Sony audio/video components that the remote is assigned to operate. If you press I/O ([2]) at the same time, it will turn off the receiver and other Sony components (SYSTEM STANDBY). <b>Note</b> The function of the AV I/O switch changes automatically each time you press the input buttons ([3]).	<b>AUTO CAL</b>	Press to activate the Auto Calibration function.
<b>[3] I/O (on/standby)</b>	Press to turn the receiver on or off. To turn off all Sony components, press I/O and AV I/O ([1]) at the same time (SYSTEM STANDBY).	<b>[7] D.TUNING</b>	Press to enter direct tuning mode.
<b>[4] Input buttons</b>	Press one of the buttons to select the component you want to use. When you press any of the input buttons, the receiver turns on. The buttons are factory assigned to control Sony components.	<b>[8] D.SKIP</b>	Press to skip a disc when using a multi-disc changer.
<b>[5] 2CH</b>	Press to select a sound field.	<b>[9] ENTER</b>	Press to enter the value after selecting a channel, disc or track using the numeric buttons of the TV, VCR or satellite tuner.
<b>A.F.D.</b>		<b>MEMORY</b>	Press to store a station.
<b>MOVIE</b>		<b>[10] AMP MENU</b>	Press to display the menu of the receiver. Then, use <b>▲</b> , <b>▼</b> , <b>◀</b> , <b>▶</b> and <b>⊕</b> ([17]) to perform menu operations.
<b>MUSIC</b>		<b>[11] TOOLS/ OPTIONS</b>	Press to display and select the options of the DVD player or Blu-ray disc player. Press TOOLS/OPTIONS and TV ([15]) at the same time to display the options applicable to the Sony TV.
<b>[5] THEATRE</b>	Press to enjoy optimal image suited for movies and to output the sound from the speakers connected to this receiver automatically. <b>Note</b> This button will only function if your TV is compatible with Theater Mode. Refer to the operating instructions supplied with the TV for details.	<b>[11] MUTING</b>	Press to turn off the sound temporarily. Press MUTING again to restore the sound. Press MUTING and TV ([15]) at the same time to activate the TV's muting function.
		<b>[12] TV VOL +a)/-</b>	Press TV VOL +/– and TV ([15]) at the same time to adjust the volume level of the TV.
		<b>MASTER VOL +a)/-</b>	Press to adjust the volume level of all speakers at the same time.

Name	Function	Name	Function	Name	Function
<b>[13] MENU/HOME</b>	Press to display the menu of the VCR, DVD player, satellite tuner or Blu-ray disc player on the TV screen. Press MENU/HOME and TV ([15]) at the same time to display the TV's menu. Then, use <b>↑, ↓, ←, →</b> and <b>⊕</b> ([17]) to perform menu operations.	<b>[15] TV</b>	Press TV and the button with orange printing at the same time to enable TV operation.	<b>[20] Numeric buttons (number 5<sup>a</sup>)</b>	Press to – preset/tune to preset stations. – select track numbers of the CD player, DVD player or Blu-ray disc player. Press 0/10 to select track number 10. – select channel numbers of the VCR or satellite tuner. Press the numeric buttons and TV ([15]) at the same time to select the TV channels.
<b>[14] ▶◀/▶▶<sup>b)</sup></b>	Press to skip a track of the CD player, DVD player or Blu-ray disc player.	<b>[16] RETURN/ EXIT ⌂</b>	Press to – return to the previous menu. – exit the menu while the menu or on-screen guide of the VCR, DVD player, satellite tuner or Blu-ray disc player is displayed on the TV screen. Press RETURN/EXIT ⌂ and TV ([15]) at the same time to return to the previous menu or exit the TV's menu while the menu is displayed on the TV screen.	<b>[21] TV INPUT</b>	Press TV INPUT and TV ([15]) at the same time to select the input signal (TV input or video input).
<b>REPLAY ←/- ADVANCE →</b>	Press to replay the previous scene or fast forward the current scene of the VCR, DVD player or Blu-ray disc player.	<b>[17] ⊕, ↑/↓/←/→</b>	After pressing AMP MENU ([9]), DVD/BD MENU ([6]), or MENU/HOME ([13]), press <b>↑, ↓, ←, →</b> to select the settings. Then, press <b>⊕</b> to enter the selection if you have pressed DVD/BD MENU or MENU/HOME previously. Press <b>⊕</b> also to enter the selection of the receiver, VCR, satellite tuner, CD player, DVD player or Blu-ray disc player.	<b>SLEEP</b>	Press to activate the Sleep Timer function and the duration which the receiver turns off automatically.
<b>◀▶/▶▶<sup>b)</sup></b>	Press to – search tracks in the forward/reverse direction of the DVD player. – start fast forward/rewind of the VCR, CD player or Blu-ray disc player.	<b>[18] DISPLAY</b>	Press to select information displayed on the TV screen of the VCR, satellite tuner, CD player, DVD player or Blu-ray disc player. Press DISPLAY and TV ([15]) at the same time to display TV's information on the TV screen.	<sup>a)</sup> The number 5, TV VOL +/MASTER VOL + and ▷ buttons have tactile dots. Use the tactile dots as references when operating the receiver. <sup>b)</sup> This button is also available for DIGITAL MEDIA PORT adapter operation. For details on the function of the button, see the operating instructions supplied with the DIGITAL MEDIA PORT adapter.	
<b>▷ a)b)</b>	Press to start playback of the VCR, CD player, DVD player, or Blu-ray disc player.	<b>[19] -/-</b>	Press to select the channel entry mode, either one or two digit of the VCR. Press -/- and TV ([15]) at the same time to select the channel entry mode, either one or two digits of the TV.	<b>Notes</b> <ul style="list-style-type: none"><li>• Some functions explained in this section may not work depending on the model.</li><li>• The above explanation is intended to serve as an example only. Therefore, depending on the component, the above operation may not be possible or may operate differently than described.</li></ul>	
<b>II<sup>b)</sup></b>	Press to pause playback or recording of the VCR, CD player, DVD player or Blu-ray disc player. (Also starts recording with components in recording standby.)	<b>&gt;10</b>	Press to select the track numbers over 10 of the CD player.		
<b>■<sup>b)</sup></b>	Press to stop playback of the VCR, CD player, DVD player or Blu-ray disc player.	<b>CLEAR</b>	Press to clear a mistake when you press the incorrect numeric button.		
<b>TV CH +/-</b>	Press TV CH +/- and TV ([15]) at the same time to select preset TV channels.				
<b>PRESET +/-</b>	Press to select – preset stations. – preset channels of the VCR or satellite tuner.				
<b>TUNING +/-</b>	Press to scan a station.				
<b>FM MODE</b>	Press to select the FM monaural or stereo reception.				

## SECTION 3 DISASSEMBLY

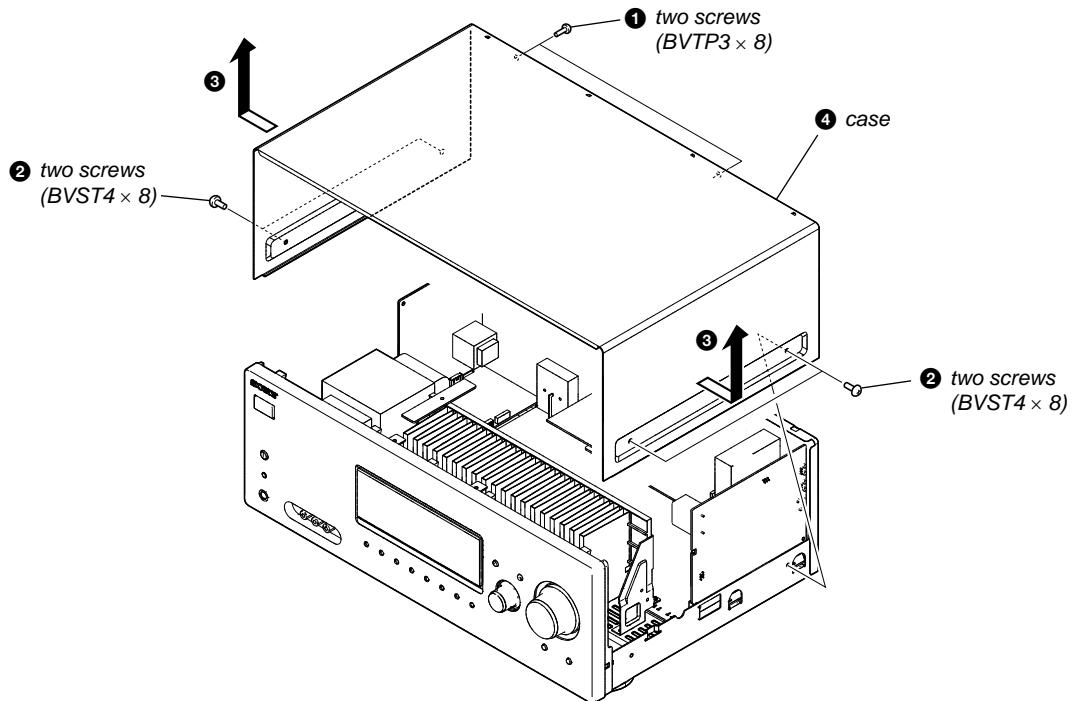
- This set can be disassembled in the order shown below.

### 3-1. DISASSEMBLY FLOW

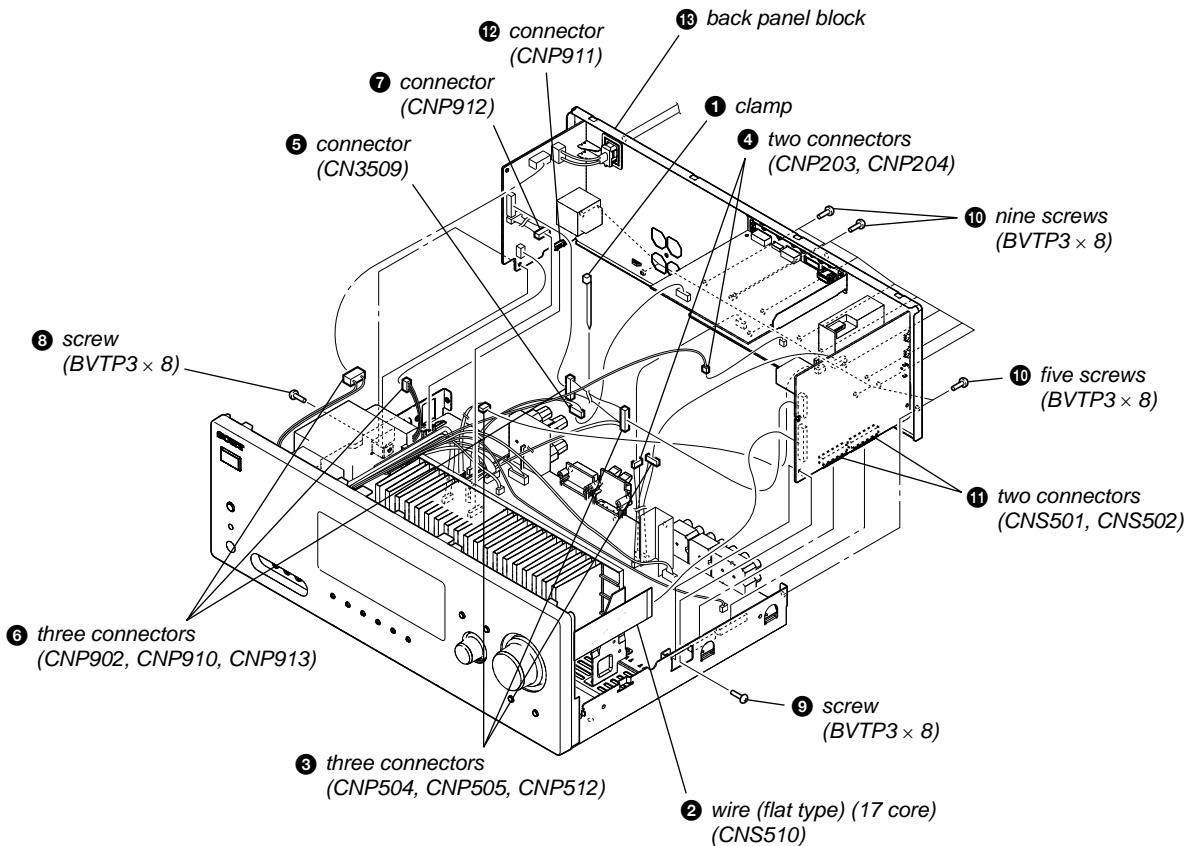


**Note:** Follow the disassembly procedure in the numerical order given.

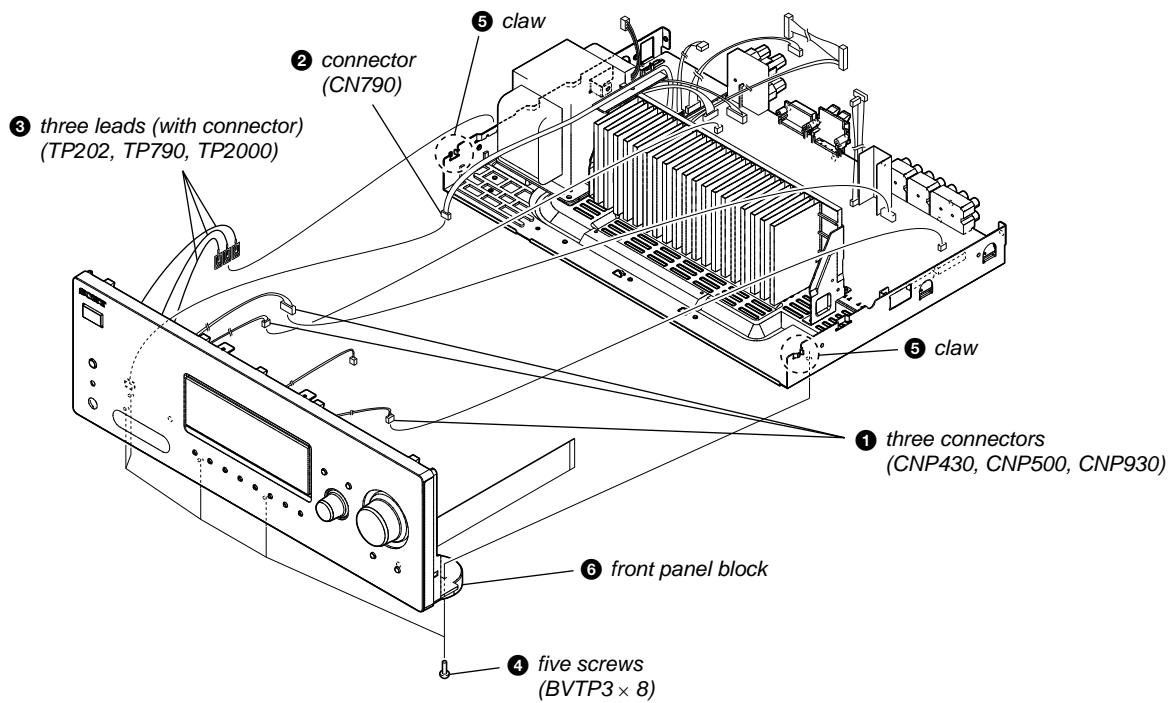
### 3-2. CASE



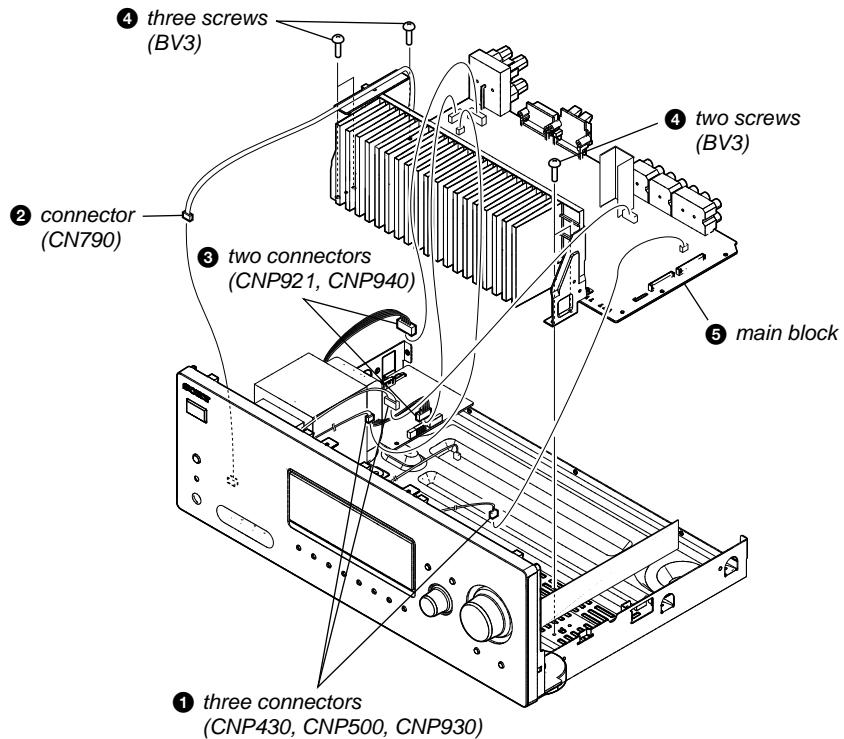
## 3-3. BACK PANEL BLOCK



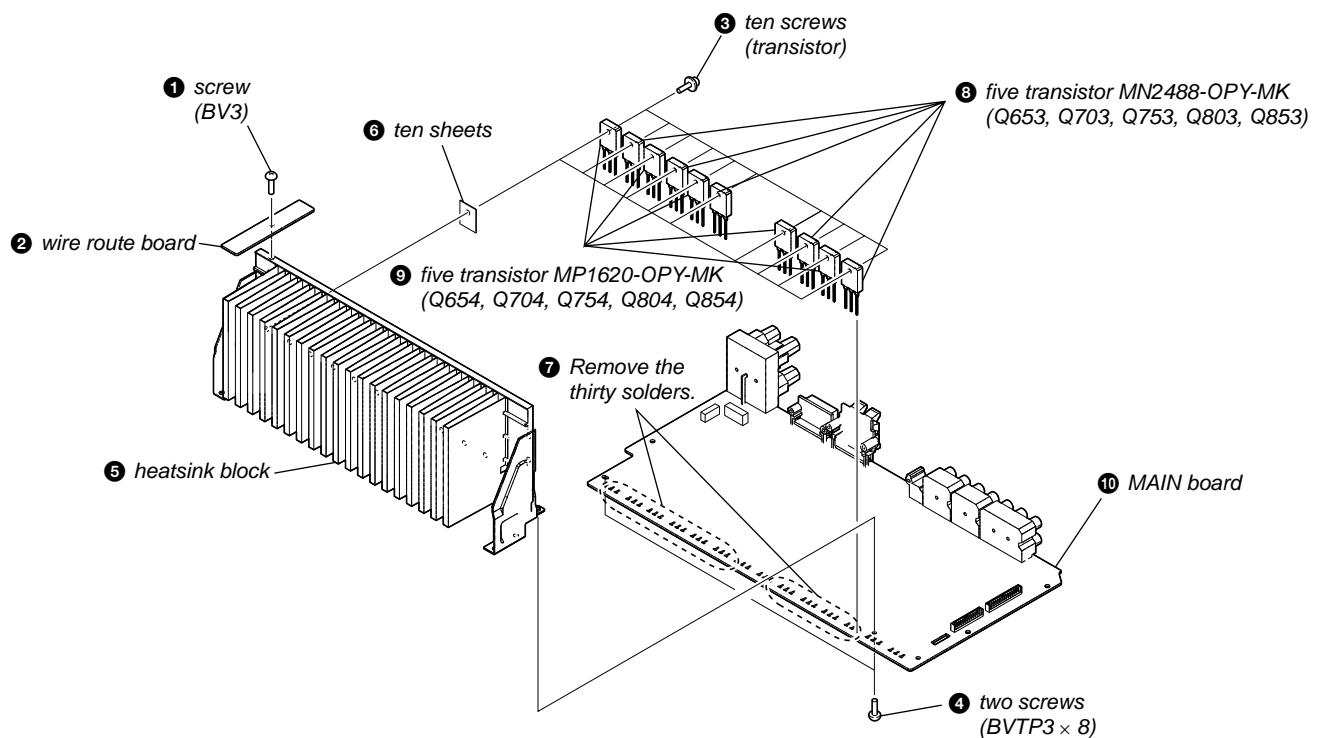
## 3-4. FRONT PANEL BLOCK



### 3-5. MAIN BLOCK



### 3-6. MAIN BOARD



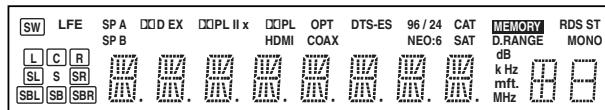
## SECTION 4 TEST MODE

### FL CHECK MODE

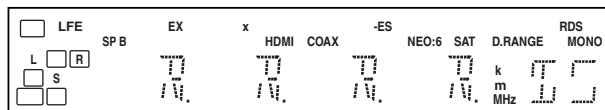
All fluorescent segments are tested. When this test is activated, all segments turn on at the same time, then each segment turns on one after another.

#### Procedure:

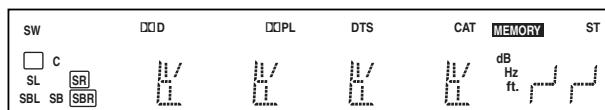
1. When pressing the [TUNING MODE] and [DISPLAY] buttons, press the [*I/Off*] button to turn on the main power.
2. All segments turn on.



3. Turn the [INPUT SELECTOR] dial.
4. Test pattern 1 turn on.



5. Turn the [INPUT SELECTOR] dial once again.
6. Test pattern 2 turn on.



7. Turn the [INPUT SELECTOR] dial once again. All segments turn off.
8. Every turning of the [INPUT SELECTOR] dial turns on each segment one after another on the same order.

### S.F. CLEAR MODE

The preset sound filed is cleared when this mode is activated. Use this mode before returning the product to clients upon completion of repair.

#### Procedure:

1. While pressing the [2CH] button, press the [*I/Off*] button to turn on the main power.
2. The message "S.F CLR." appears and initialization is performed.

### VERSION CHECK MODE

When this mode is used the model, the destination and the software version number are displayed.

#### Procedure:

1. While pressing the [SPEAKERS (ON/OFF)] and [DISPLAY] buttons, press the [*I/Off*] button to turn on the main power.
2. The model, the destination and the software version number appear.

### KEY CHECK MODE

This mode is used to check the key.

#### Procedure:

1. While pressing the [SPEAKERS (ON/OFF)] and [2CH] buttons, press the [*I/Off*] button to turn on the main power.
2. The message "REST 13" appears.
3. Every pressing of any button other than the [*I/Off*] button counts down the buttons. The buttons which are already counted once are not counted again.
4. When all buttons are pressed, the message "REST 00" appears.

### SWAP ALL MODE

When this mode is used, output the audio signal of front L/R channel to all channel.

#### Procedure:

1. While pressing the [MEMORY/ENTER] and [DISPLAY] buttons, press the [*I/Off*] button to turn on the main power.
2. The message "DSP TEST" appears.
3. Press the [AMP MENU] button on the remote commander, and the message "9\_DSPTST" appears.
4. Press the [*→*] button on the remote commander to enter the DSP test mode menu.
5. Press the [*↓*] button on the remote commander twice to enter the swap mode, and the message "SWP.AUTO" appears.
6. Press the [*→*] button on the remote commander twice to select "SWP.*ALL*".

### SHIPMENT MODE

All preset contents are cleared when this mode is activated. Use this mode before returning the product to clients upon completion of repair.

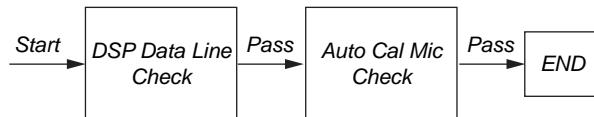
#### Procedure:

1. While pressing the [SPEAKERS (ON/OFF)] and [MUSIC] buttons, press the [*I/Off*] button to turn on the main power.
2. The message "CLEARING" appears.

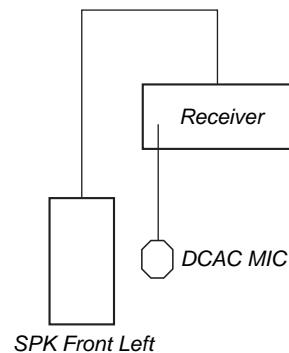
### DCAC FACTORY TEST MODE

DCAC Factory Test mode have two stages:

1. DCAC DSP Data Line Checking
2. DCAC board Checking



### Factory Test System Setup



1. When power off : While pressing the [MEMORY/ENTER] and [MOVIE] buttons, press the [*I/Off*] button to turn on the main power. "DCAC FTM" appears.

Afterward, press the [TUNING MODE] to start DCAC factory test mode.

**1. DCAC DSP Data Line Checking**

After press the [TUNING MODE] button, DCAC Factory test mode will start, below display will show:

“DCAC x” x = 1, 2, 3, 4

If there is error happen, below display will show:

“ERR SD0x” x = 1 → D1501 or R1530 problem

x = 2 → D1502 problem

x = 3 → D1503 problem

x = 4 → D1504 problem

**2. DCAC board Checking**

Connect front left speaker of the receiver and AUTO CAL microphone. Turn [MASTER VOLUME] jog, there will be test tone sound output from front left speaker, and the display will change accordingly.

“AD - xxx” xxx = 0 to 255 (depends on loudness of test tone)

**RE-BOX CLASSIFICATION TEST MODE****Procedure:**

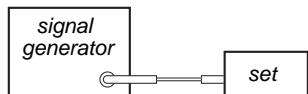
1. While pressing the [MEMORY/ENTER] and [INPUT MODE] buttons, press the [ $\text{I}/\text{O}$ ] button to turn on the main power.
2. The message “R.BOX $\square\square$ XX” appears.  
XX: times set powered on

**VACS CONTROL TEST MODE**

The VACS feature of the amplifier is turned off purposely.

**Procedure:**

1. While pressing the [MEMORY/ENTER] and [2CH] buttons, press the [ $\text{I}/\text{O}$ ] button to turn on the main power.
2. The message “VACS OFF” appears.

**SECTION 5  
ELECTRICAL CHECK****FM AUTO STOP CHECK****Procedure:**

1. Turn on the set.
2. Input the following signal from signal generator to FM antenna input directly.

Carrier frequency: A = 87.5 MHz, B = 98 MHz, C = 108 MHz

Deviation : 75 kHz

Modulation : 1 kHz

ANT input : 1 kHz

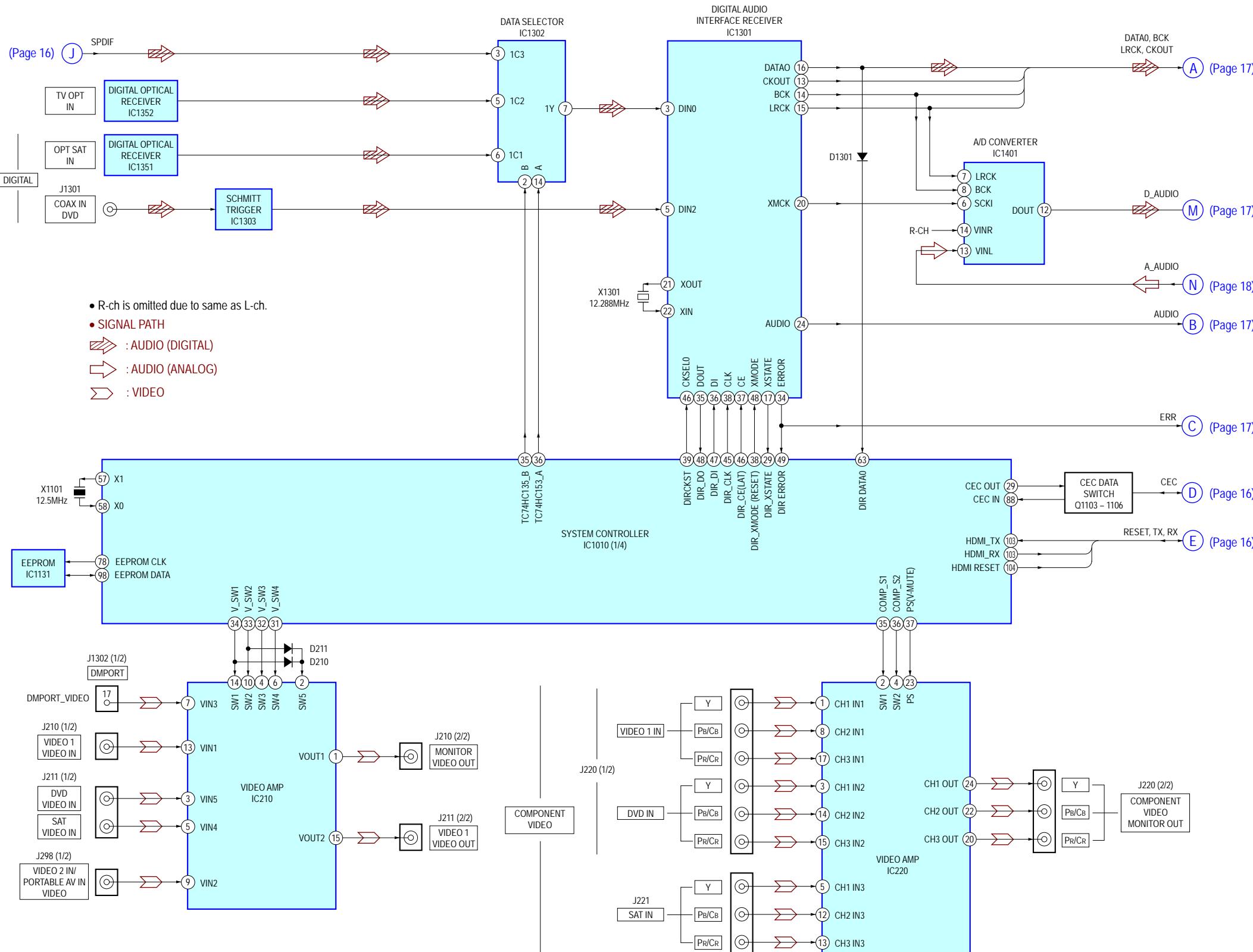
**Note:** Use 75 ohm coaxial cable to connect signal generator and the set.  
You cannot use video cable for checking.  
Use signal generator whose output impedance is 75 ohm.

3. Set to FM tuner function and scan the input FM signal with automatic scanning.
4. Confirm that input frequency of A, B and C are detected and automatic scanning stops.

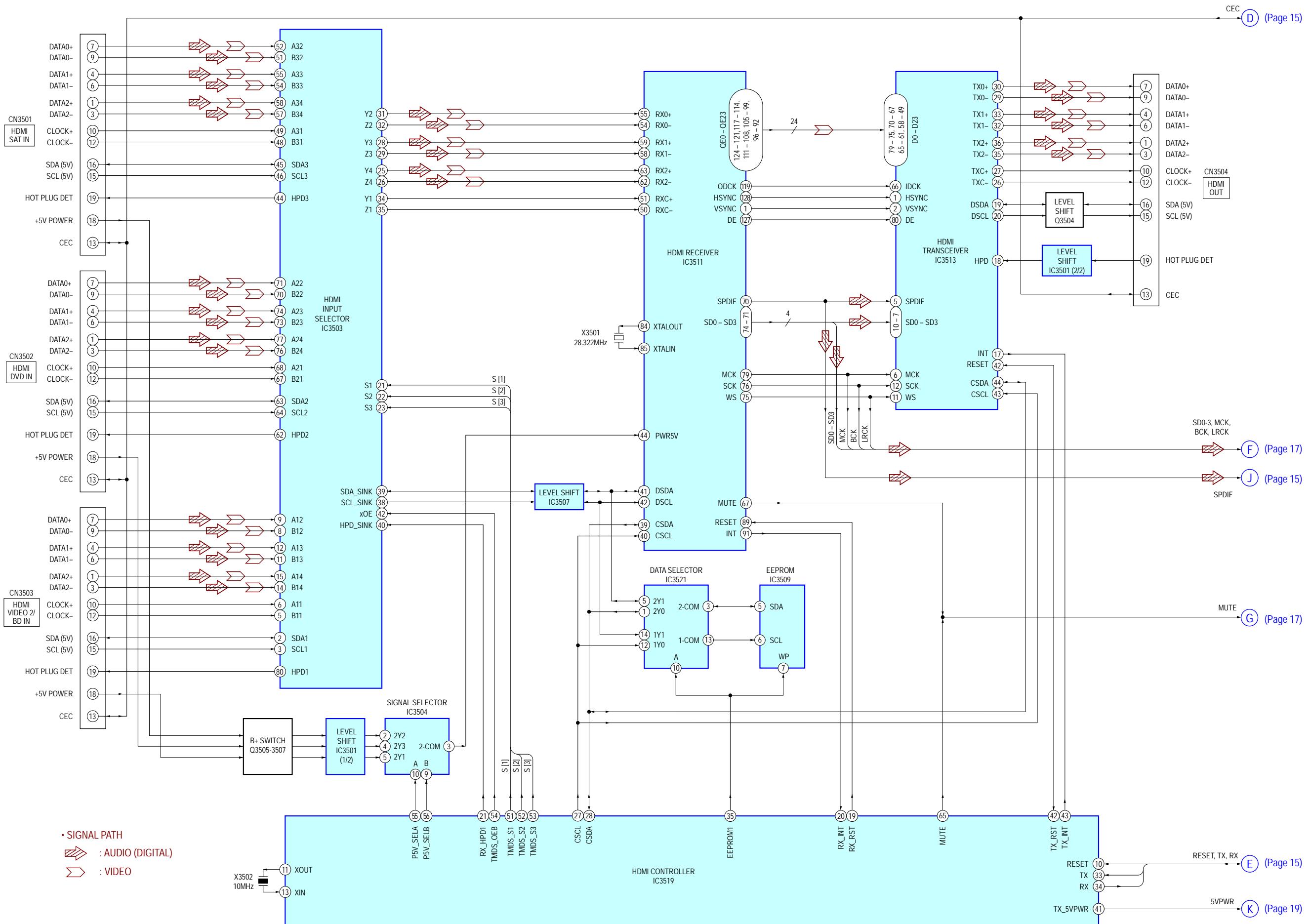
When the station signal is received in good condition, automatic scanning stops.

## SECTION 6 DIAGRAMS

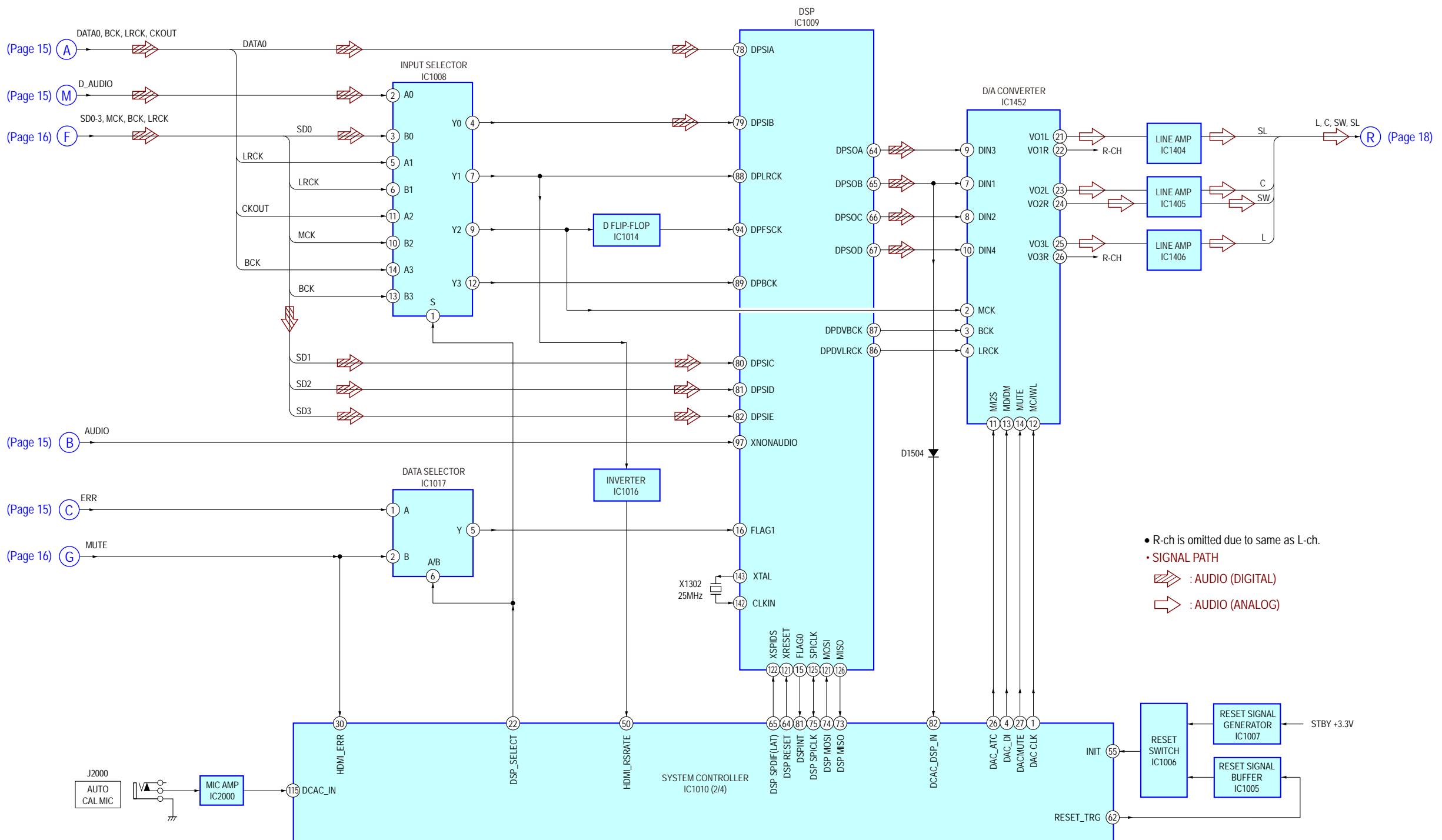
### 6-1. BLOCK DIAGRAM - MAIN Section -



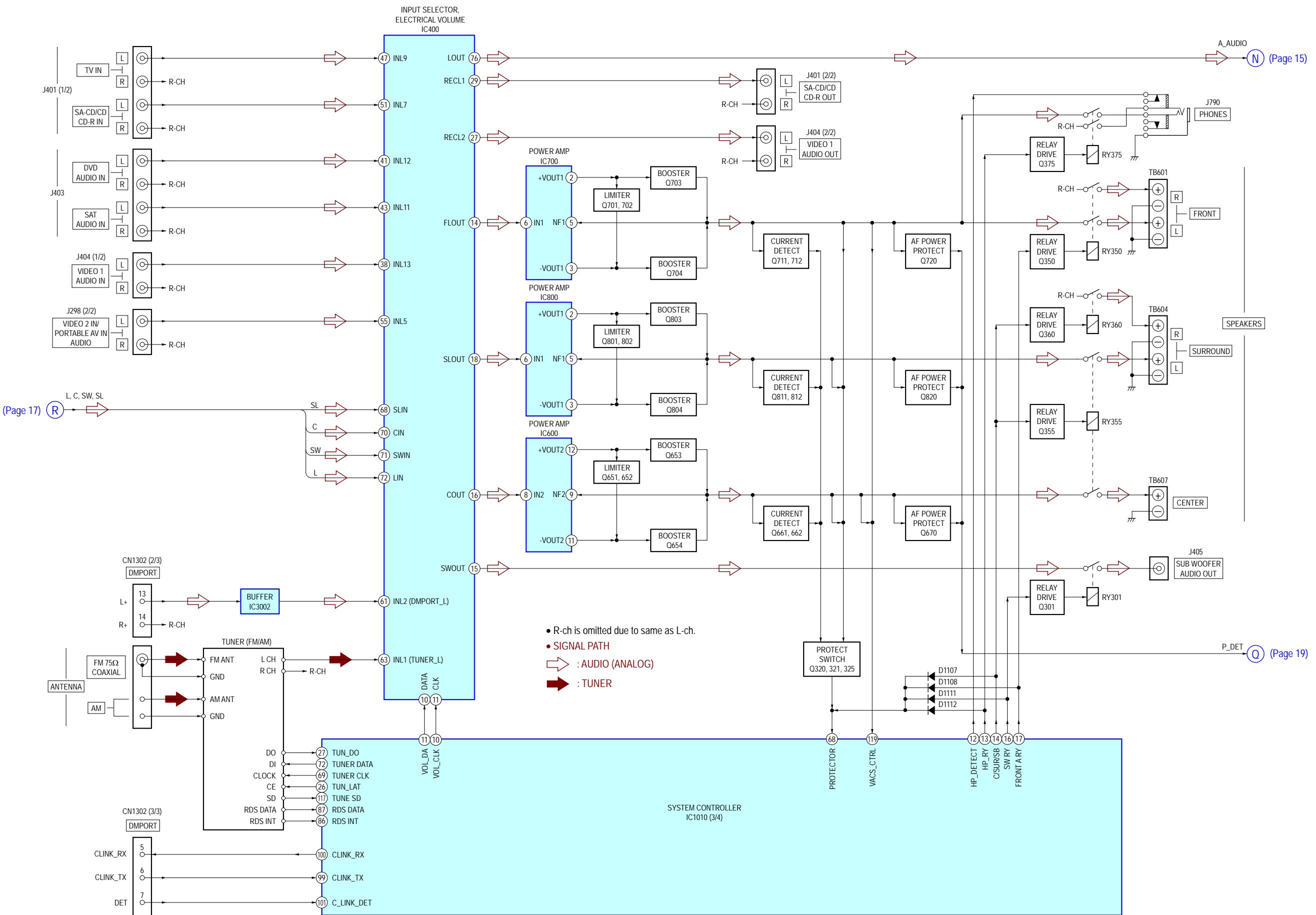
## 6-2. BLOCK DIAGRAM - HDMI Section -



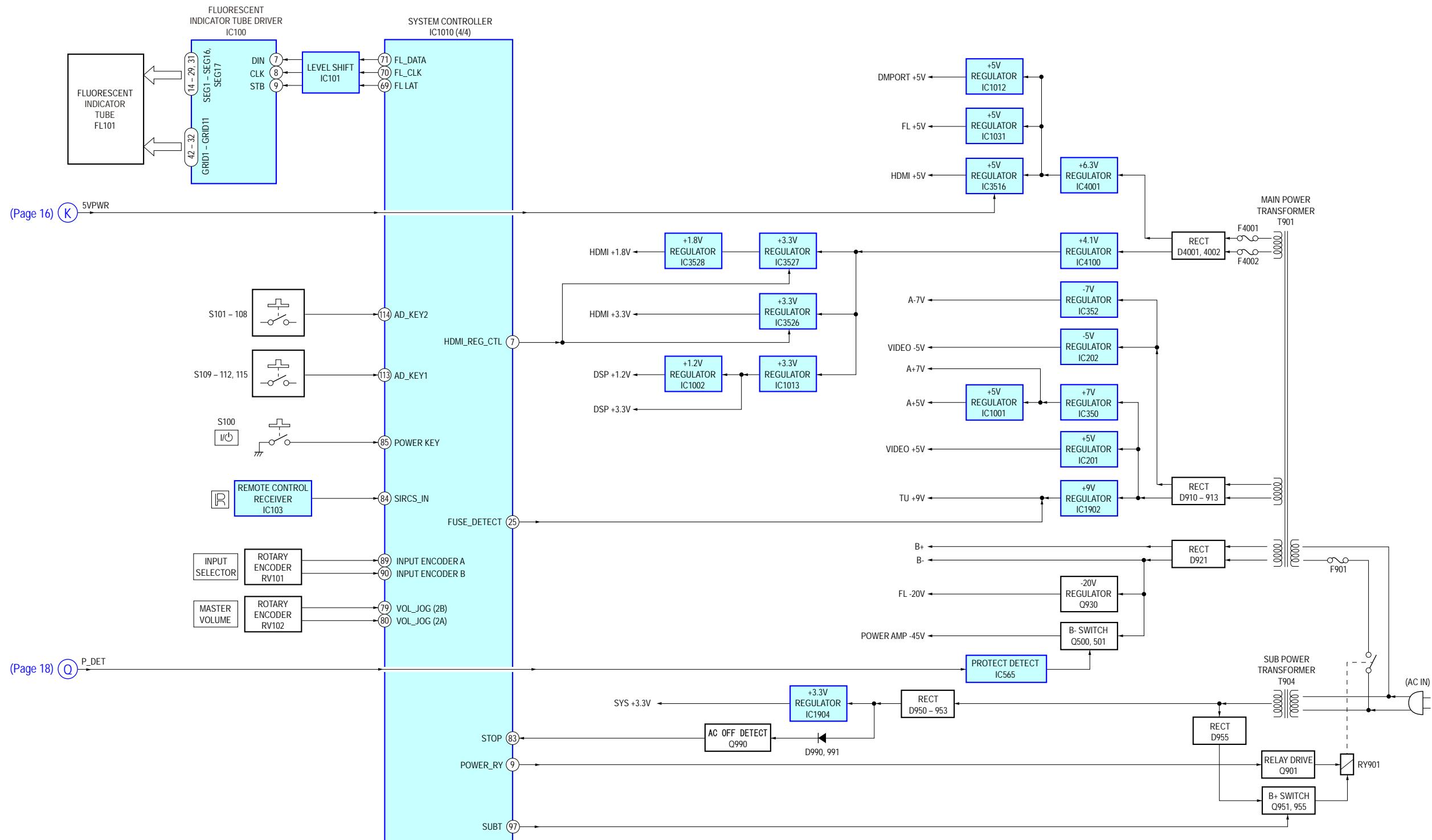
## 6-3. BLOCK DIAGRAM - DSP Section -



## 6-4. BLOCK DIAGRAM - AUDIO Section -



## 6-5. BLOCK DIAGRAM - POWER SUPPLY Section -



**THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.**  
**(In addition to this, the necessary note is printed in each block.)**

**For Printed Wiring Boards.****Note:**

- : Parts extracted from the component side.
- : Parts extracted from the conductor side.
- : Internal component.
- : Pattern from the side which enables seeing.  
(The other layers' patterns are not indicated.)

**Caution:**

Pattern face side: Parts on the pattern face side seen from  
(Conductor Side) the pattern face are indicated.

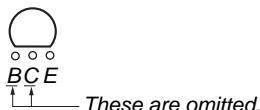
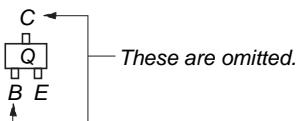
Pattern face side: Parts on the parts face side seen from  
(Component Side) the parts face are indicated.

**Caution:**

Parts face side: Parts on the parts face side seen from  
(SIDE A) the pattern face are indicated.

Pattern face side: Parts on the pattern face side seen from  
(SIDE B) the parts face are indicated.

- Indication of transistor.

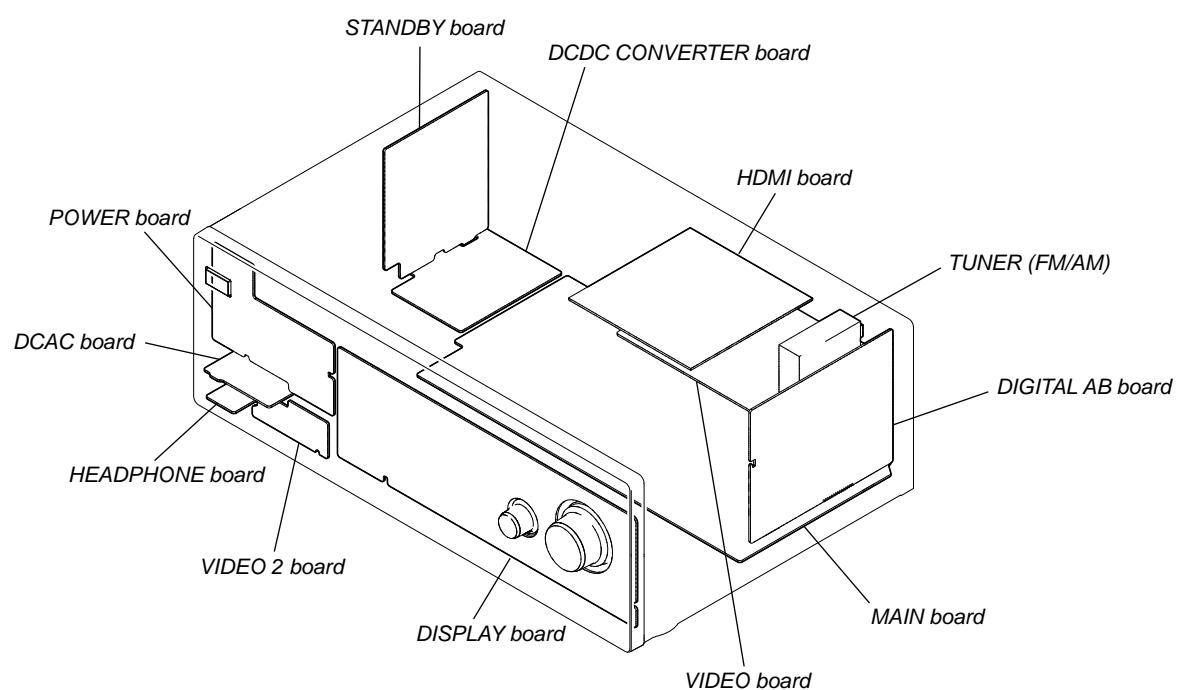
**For Schematic Diagrams.****Note:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. (p:  $\text{pF}$ )  
50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and 1/4 W or less unless otherwise specified.
- : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

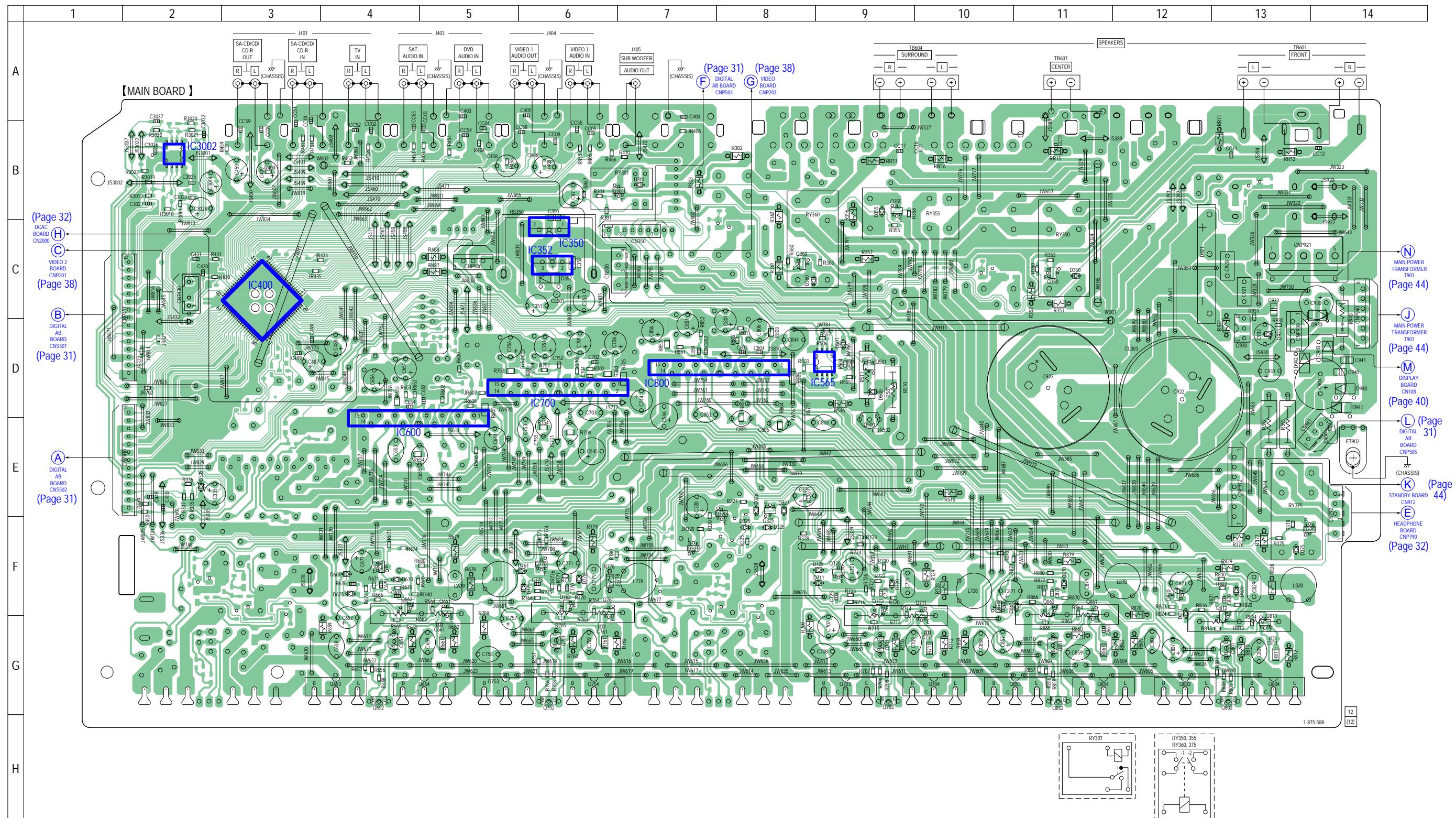
**Note:** The components identified by mark or dotted line with mark are critical for safety.  
Replace only with part number specified.

- : B+ Line.
- : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
no mark : TUNER
- Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ).  
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope.  
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : AUDIO (DIGITAL)
  - : AUDIO (ANALOG)
  - : TUNER
  - : VIDEO

• **Circuit Boards Location**



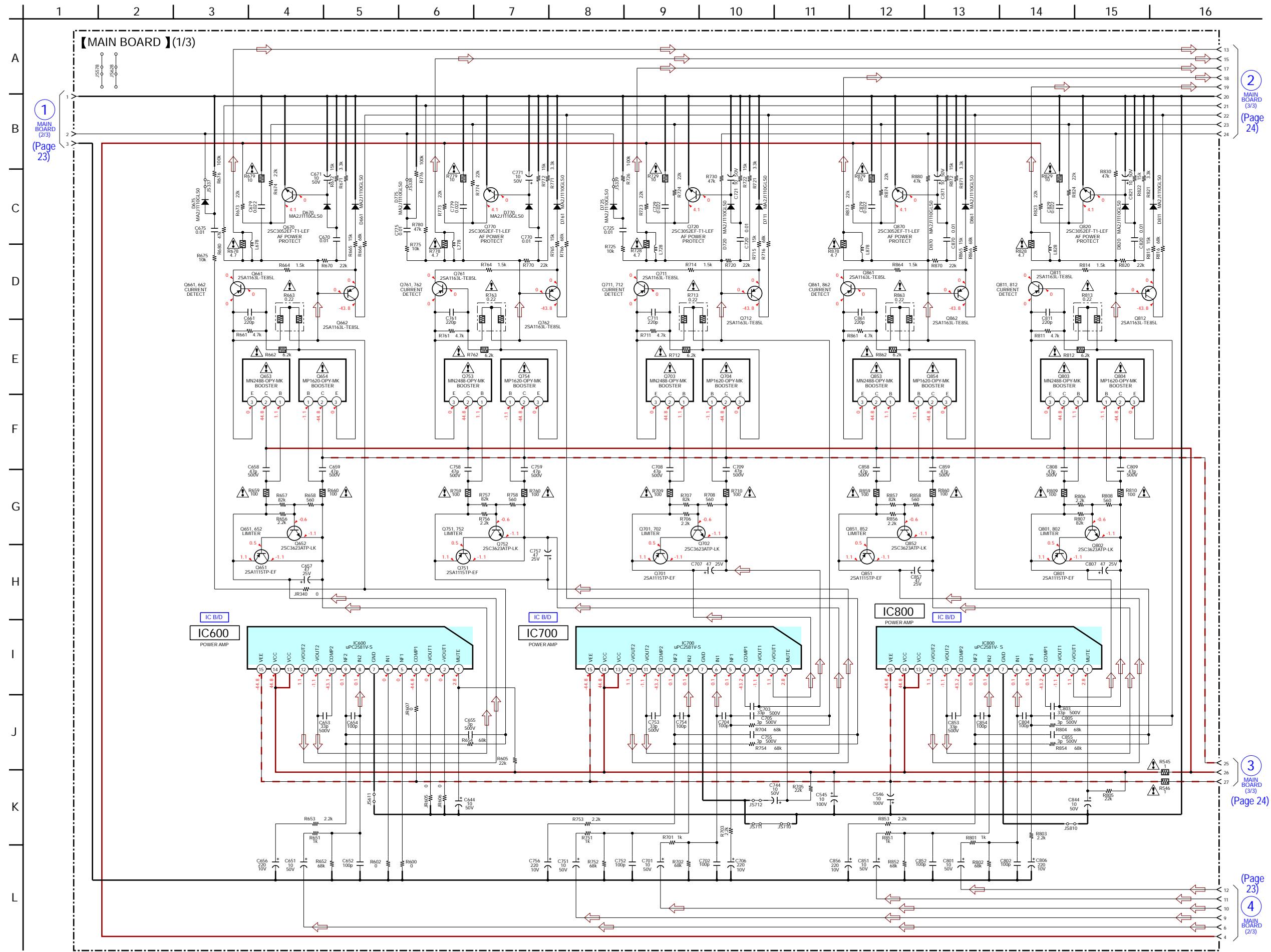
6-6. PRINTED WIRING BOARD - MAIN Board - • See page 20 for Circuit Boards Location. •  : Uses unleaded solder.



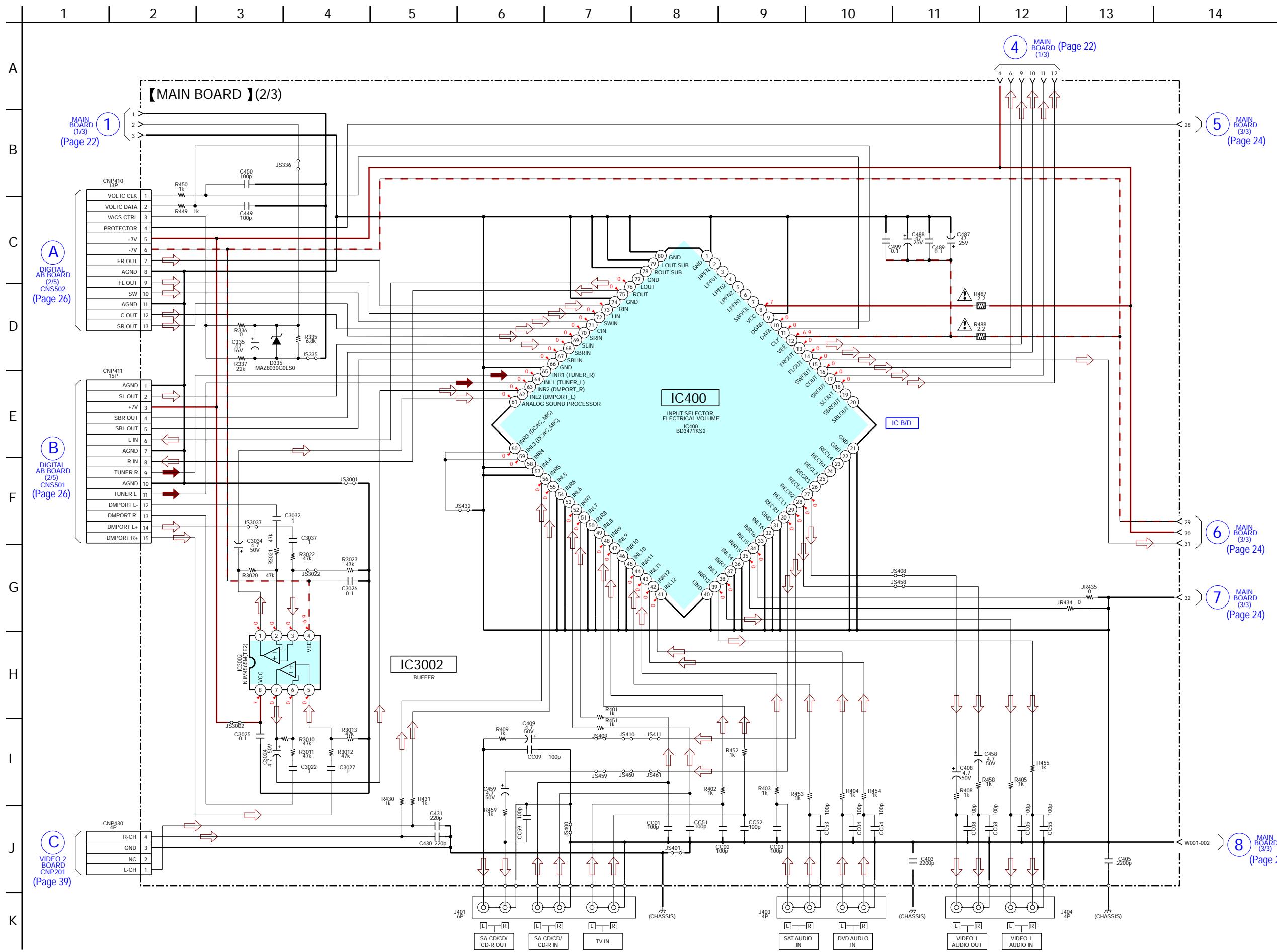
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location				
D301	B-7	D355	B-9	D711	F-9	D861	F-11	D943	D-14	IC800	D-7	Q355	B-9	Q654	G-5	Q711	F-10	Q762	F-6	Q820	F-12	Q930	D-13				
D320	F-8	D360	C-8	D720	F-9	D870	F-11	D725	F-9	D921	C-12	IC3002	B-2	Q360	C-8	Q661	F-5	Q712	F-9	Q770	F-6	Q851	G-11				
D325	F-8	D375	F-13	D761	F-6	D921	C-12	D725	F-9	D930	C-14	IC350	C-6	Q375	F-13	Q662	F-4	Q720	F-9	Q801	G-13	Q852	G-11				
D326	E-8	D500	D-9	D770	F-6	D931	D-13	D761	F-6	D930	C-14	IC352	C-6	Q500	E-9	Q670	F-4	Q751	G-6	Q802	G-13	Q853	G-11				
D327	E-8	D501	D-9	D775	F-6	D940	D-14	D775	F-6	D940	D-14	IC400	C-3	Q501	D-9	Q701	G-9	Q752	G-6	Q803	G-12	Q854	G-11				
D335	E-2	D661	F-4	D811	F-12	D941	D-14	D775	F-6	D941	D-14	IC565	D-9	Q321	F-7	Q651	G-4	Q702	G-9	Q753	G-5	Q804	G-13	Q861	F-11		
D350	C-11	D670	F-4	D820	F-13	D942	D-13	D811	F-12	D942	D-13	IC600	E-4	Q325	E-8	Q652	G-4	Q653	G-4	Q703	G-9	Q754	G-6	Q811	G-13	Q862	F-11
D352	C-6	D675	F-4	D820	F-13	D942	D-13	IC700	D-6	IC700	D-6	Q350	C-11	Q653	G-4	Q704	G-10	Q761	F-6	Q812	G-13	Q870	F-10				

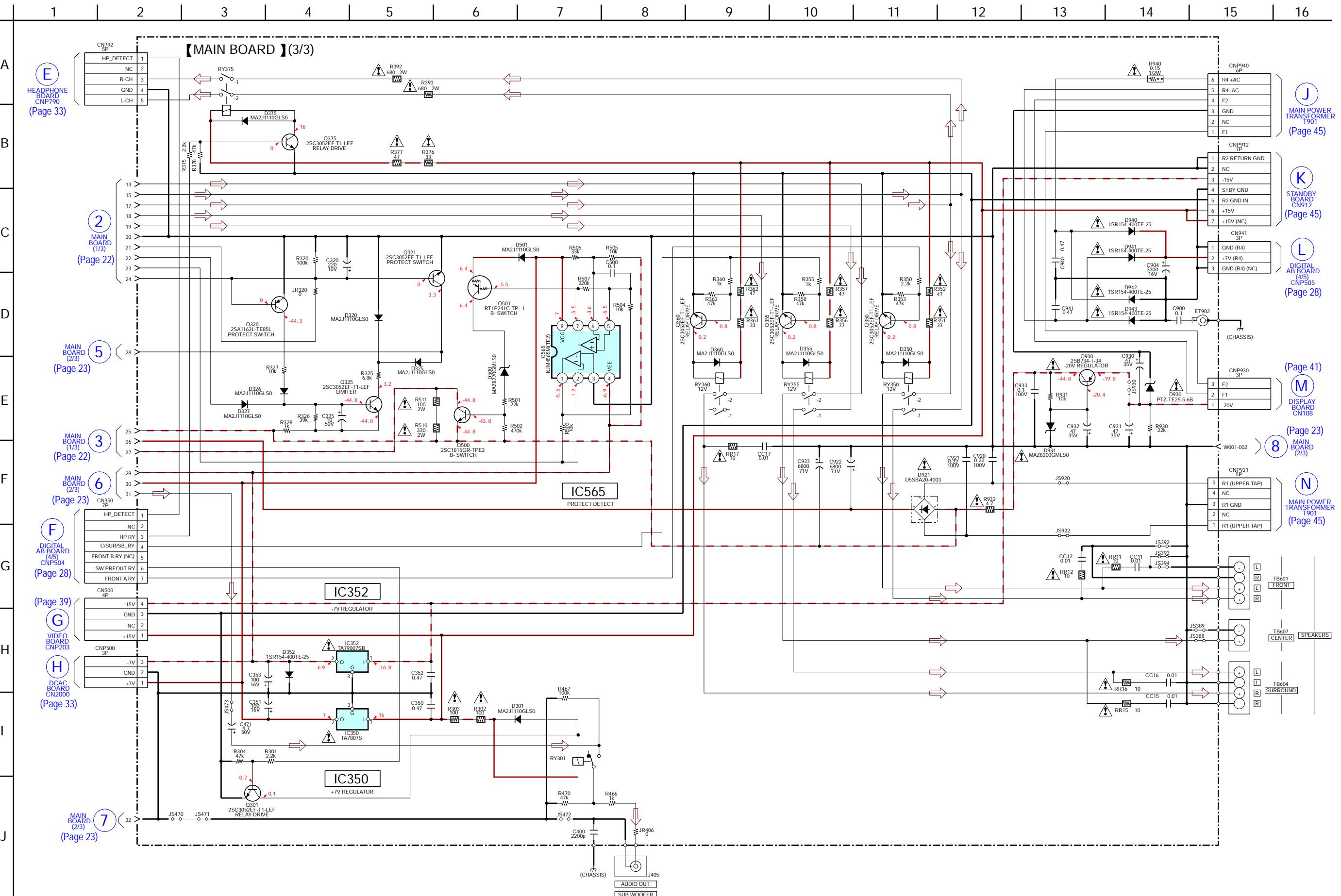
**6-7. SCHEMATIC DIAGRAM - MAIN Board (1/3) - • See page 46 for IC Block Diagrams.**



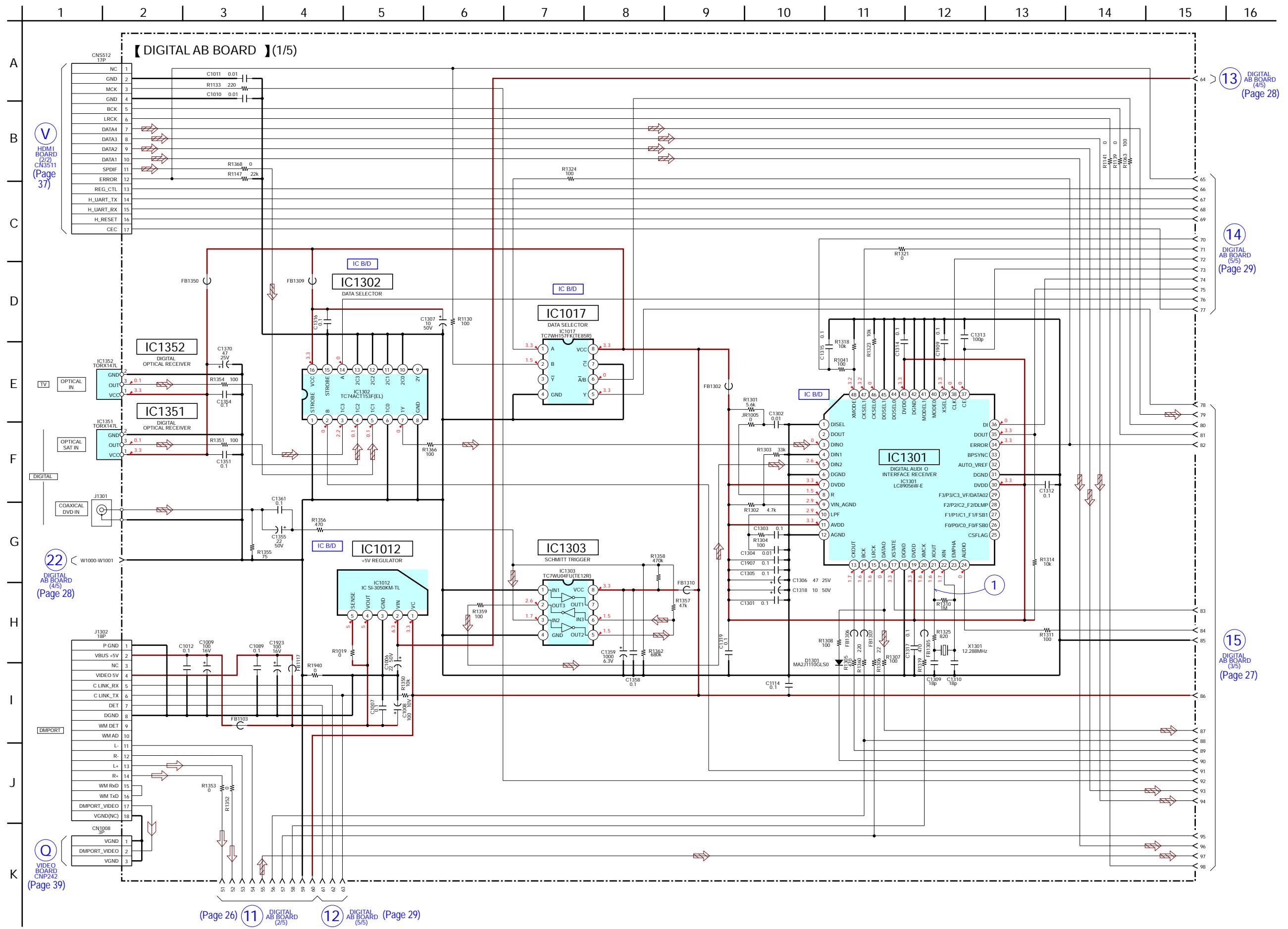
6-8. SCHEMATIC DIAGRAM - MAIN Board (2/3) - • See page 46 for IC Block Diagrams.



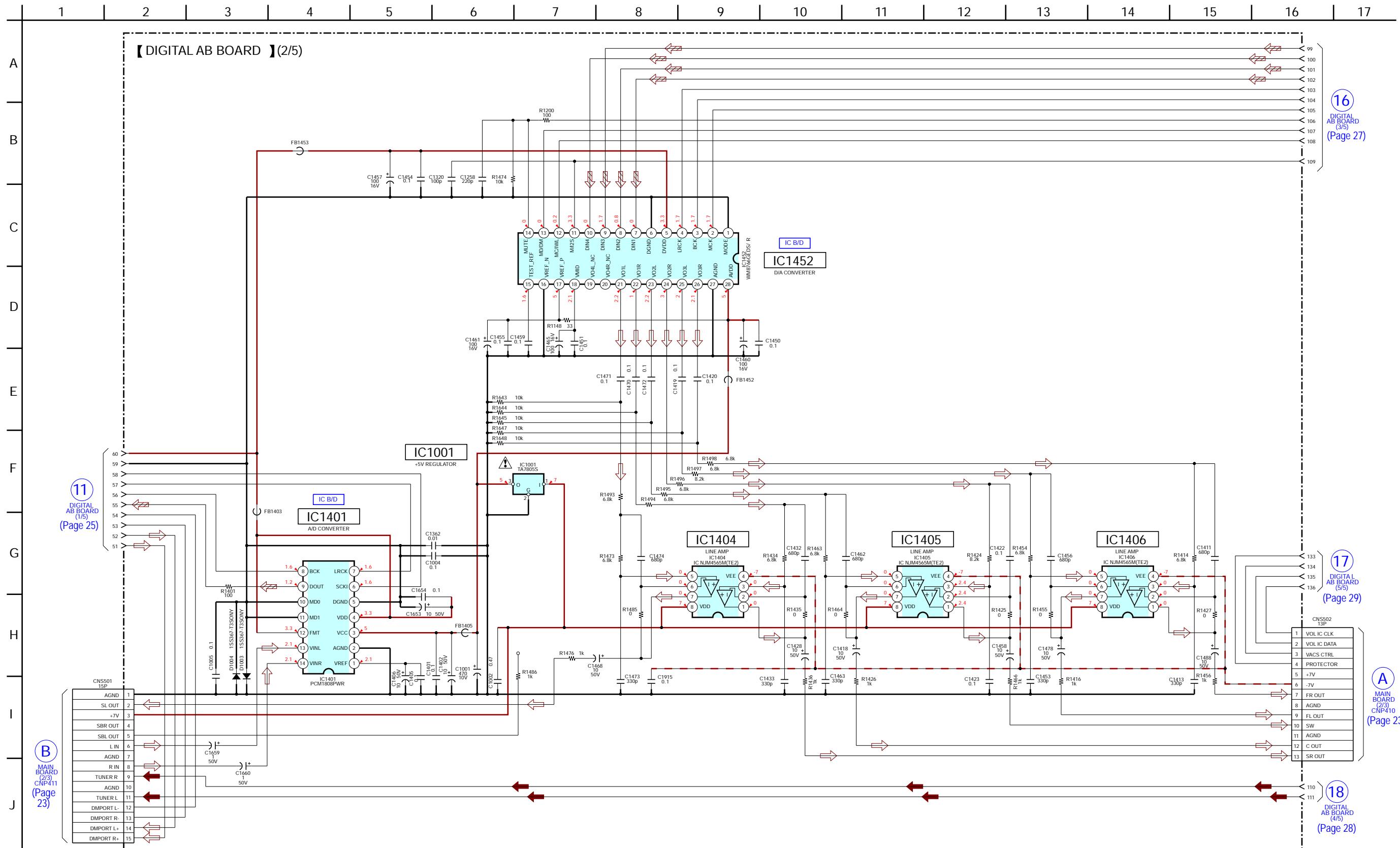
## 6-9. SCHEMATIC DIAGRAM - MAIN Board (3/3) -



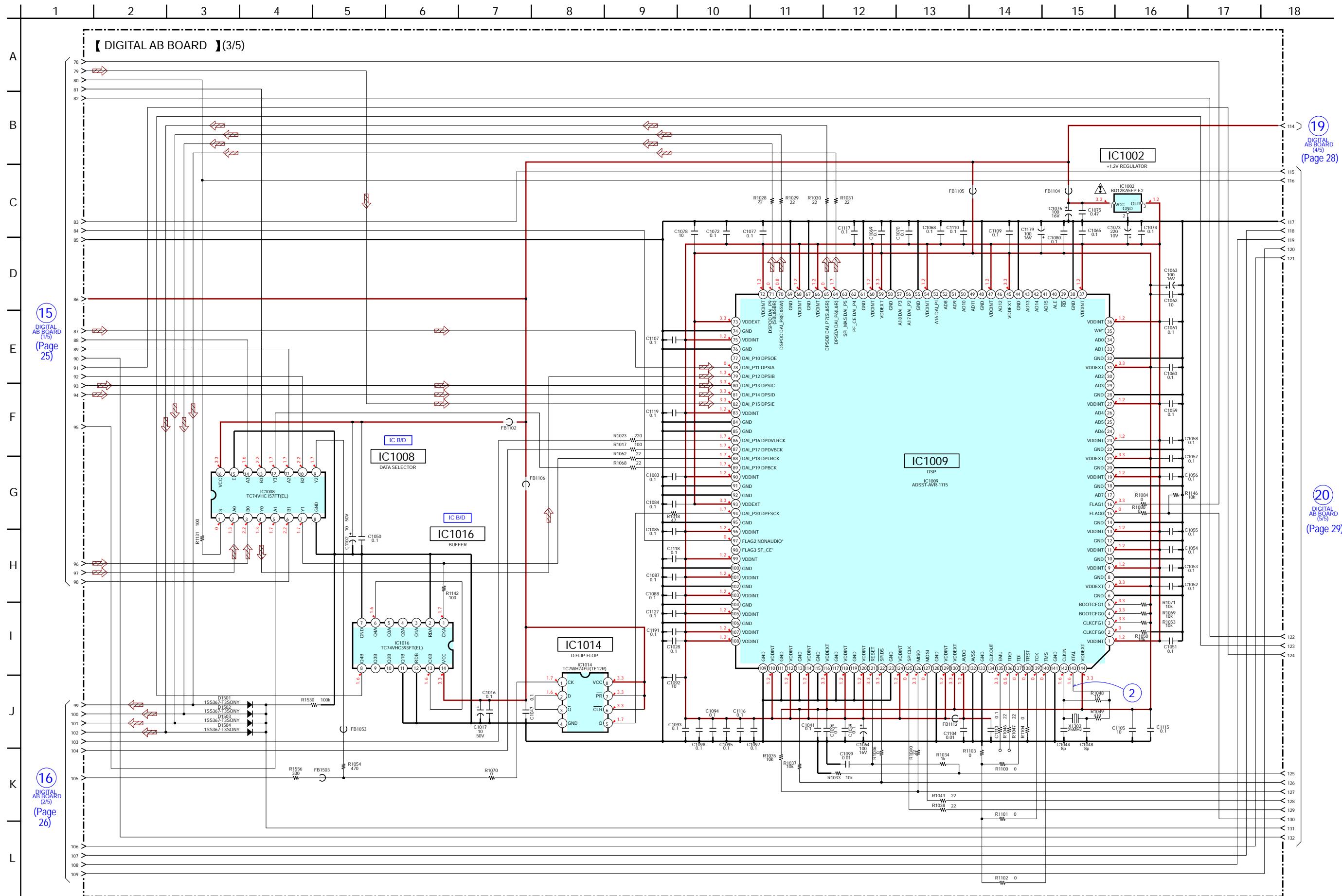
**6-10. SCHEMATIC DIAGRAM - DIGITAL AB Board (1/5) - • See page 33 for Waveforms. • See page 46 for IC Block Diagrams.**



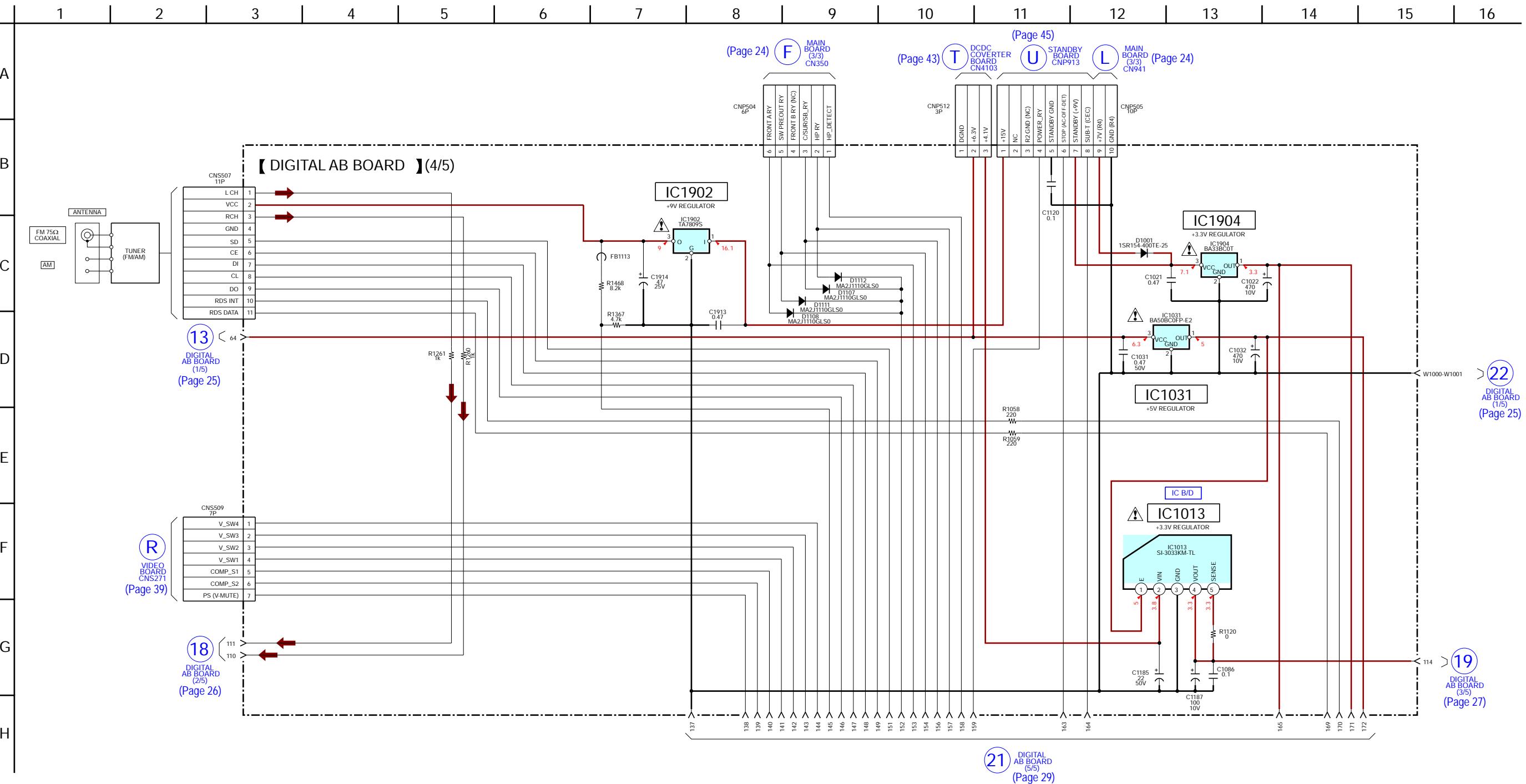
## 6-11. SCHEMATIC DIAGRAM - DIGITAL AB Board (2/5) - • See page 46 for IC Block Diagrams.



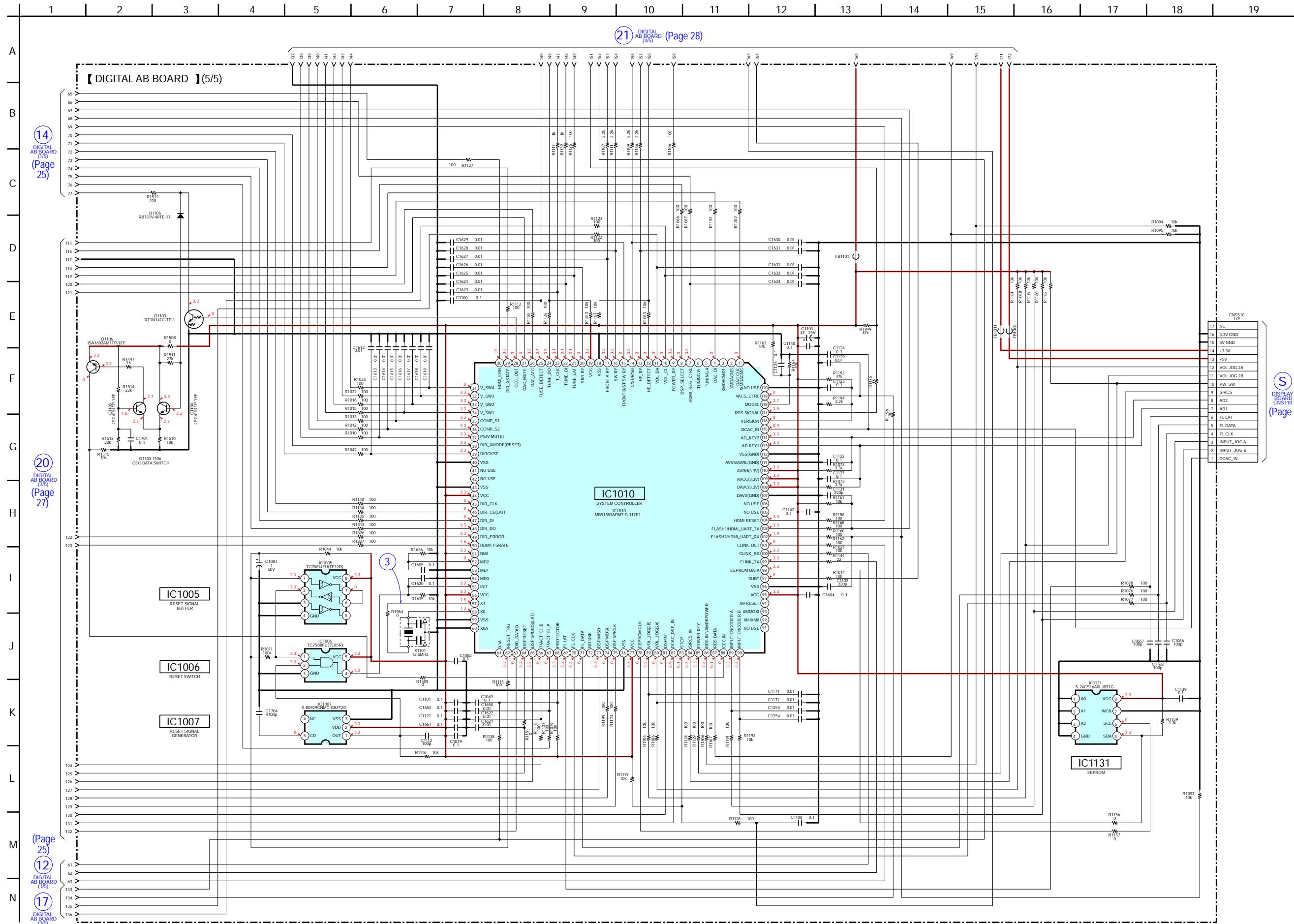
**6-12. SCHEMATIC DIAGRAM - DIGITAL AB Board (3/5) - • See page 33 for Waveforms. • See page 46 for IC Block Diagrams. • See page 53 for IC Pin Function Description.**



## 6-13. SCHEMATIC DIAGRAM - DIGITAL AB Board (4/5) - • See page 46 for IC Block Diagrams.



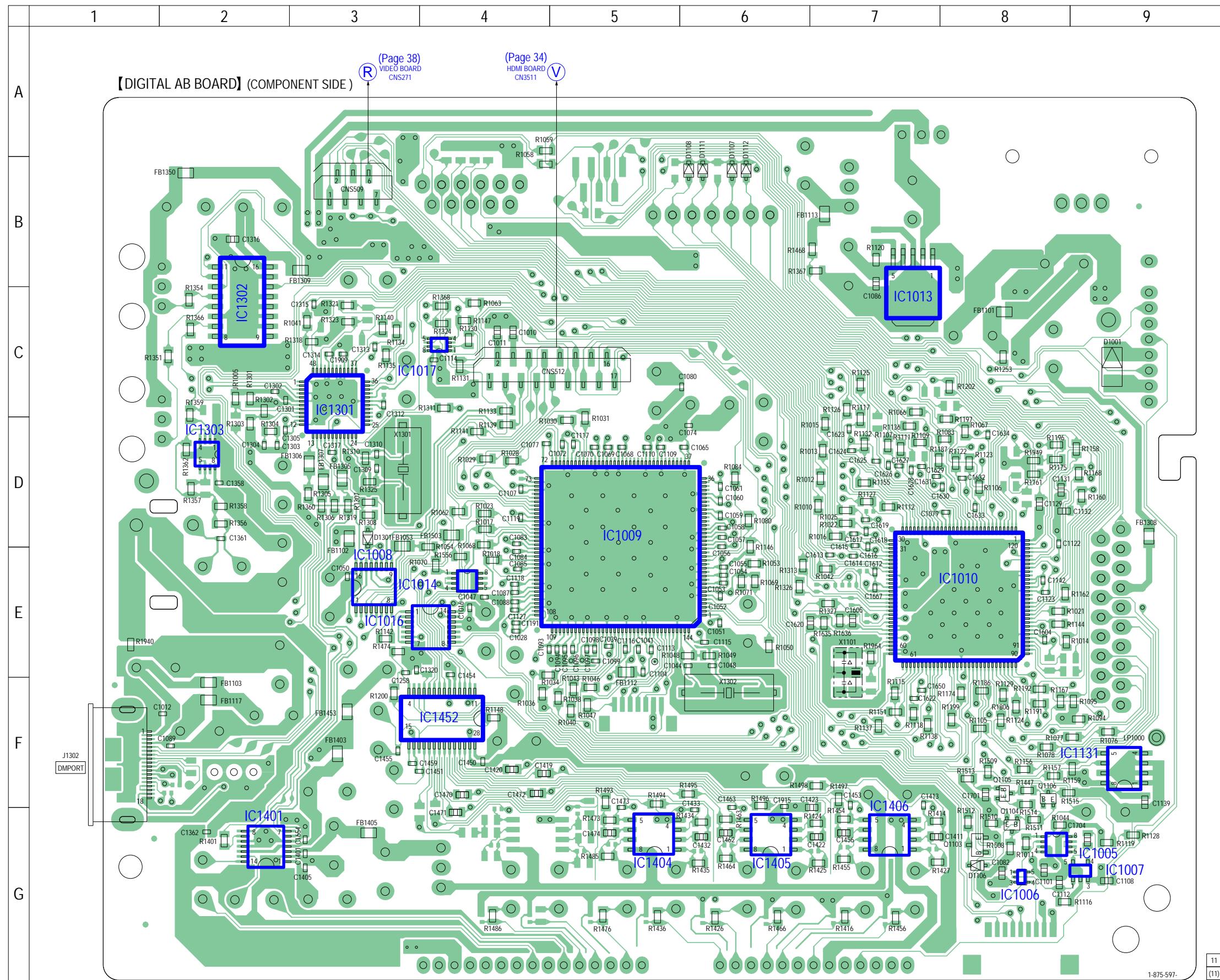
**6-14. SCHEMATIC DIAGRAM - DIGITAL AB Board (5/5) - • See page 33 for Waveforms. • See page 53 for IC Pin Function Description.**



**6-15. PRINTED WIRING BOARD - DIGITAL AB Board (Component Side) - • See page 20 for Circuit Boards Location. • LF : Uses unleaded solder.**

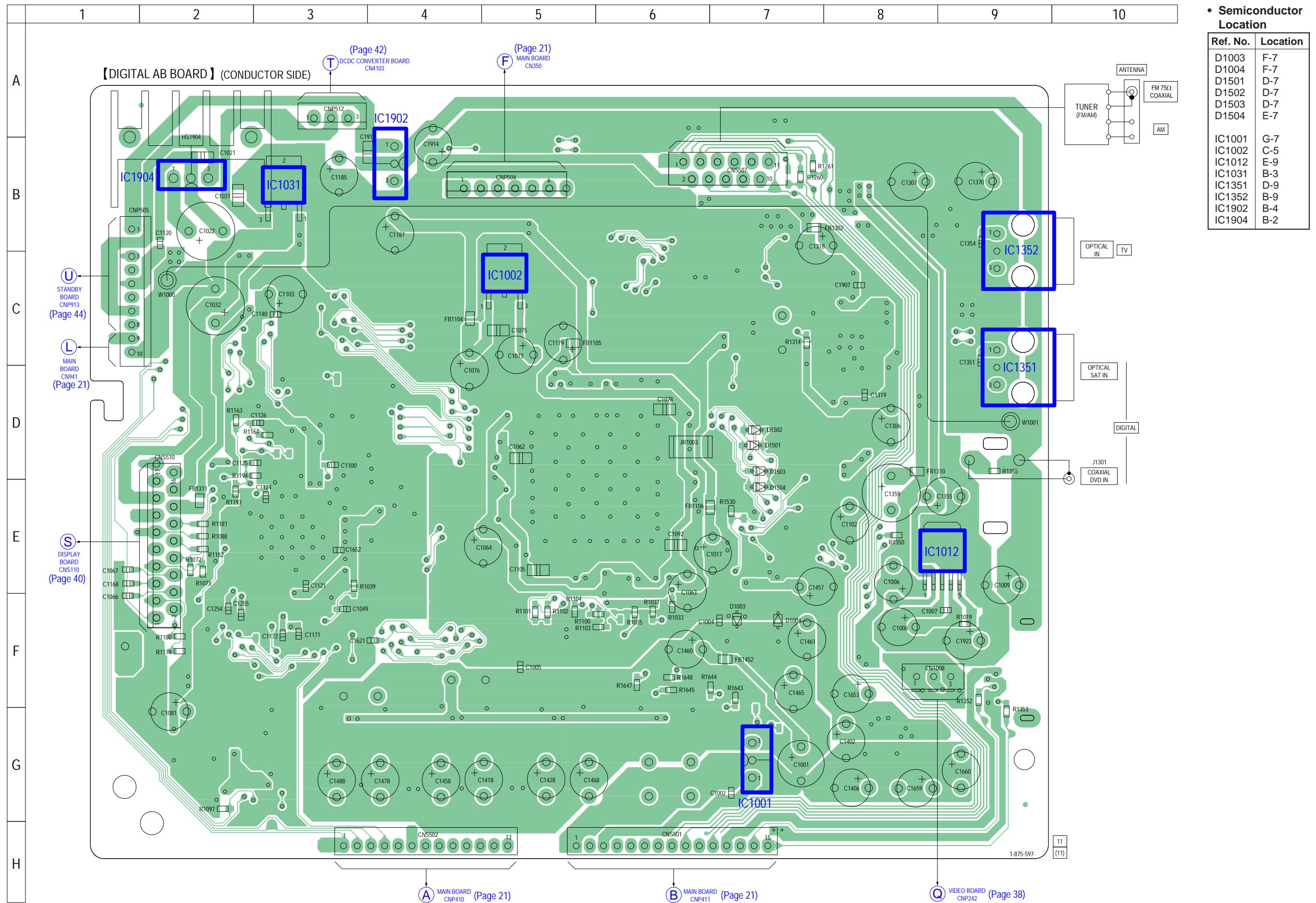
• Semiconductor Location

Ref. No.	Location
D1001	C-9
D1106	G-8
D1107	B-6
D1108	B-6
D1111	B-6
D1112	B-6
D1301	D-3
IC1005	G-8
IC1006	G-8
IC1007	G-9
IC1008	E-3
IC1009	D-5
IC1010	E-8
IC1013	C-7
IC1014	E-4
IC1016	E-4
IC1017	C-4
IC1131	F-9
IC1301	C-3
IC1302	C-2
IC1303	D-2
IC1401	G-2
IC1404	G-5
IC1405	G-6
IC1406	G-7
IC1452	F-4
Q1103	G-8
Q1104	G-8
Q1105	F-8
Q1106	F-8

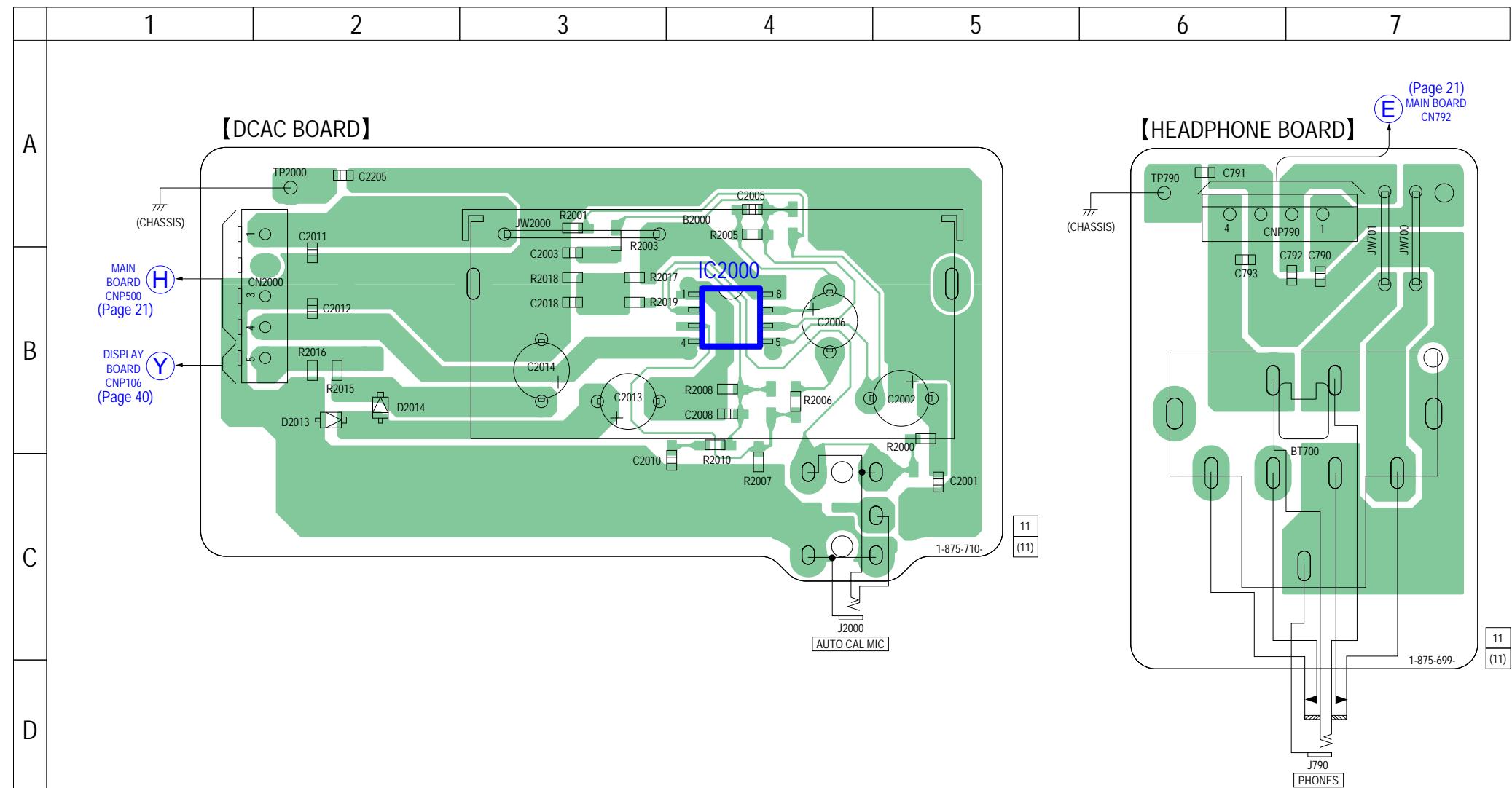


Note: IC1131 cannot exchange with single. When IC1131 is damaged, exchange the entire mounted board.

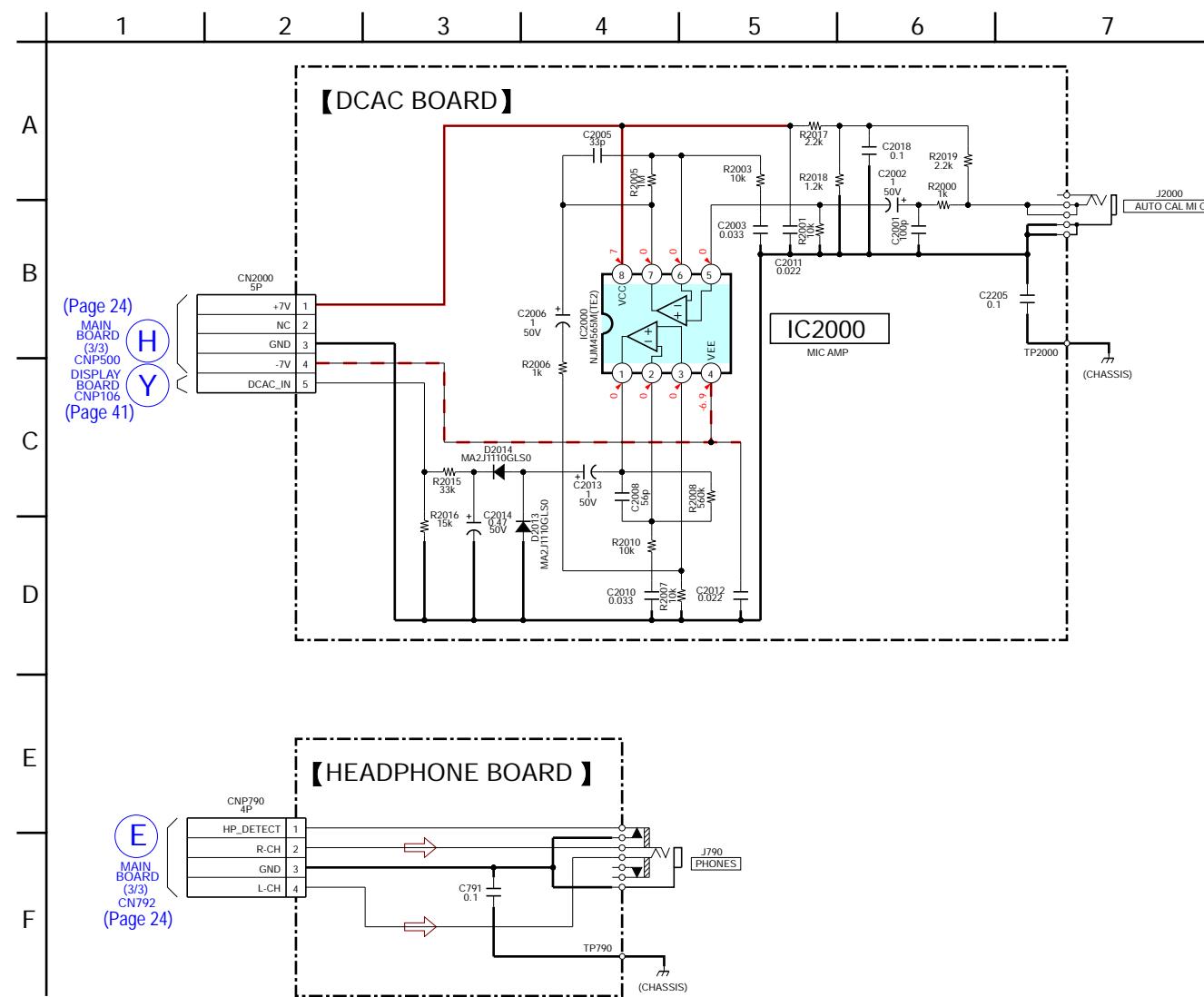
**6-16. PRINTED WIRING BOARD - DIGITAL AB Board (Conductor Side) - • See page 20 for Circuit Boards Location. • LF : Uses unleaded solder.**



**6-17. PRINTED WIRING BOARDS - MIC/HEADPHONE Section - • See page 20 for Circuit Boards Location. •  : Uses unleaded solder.**

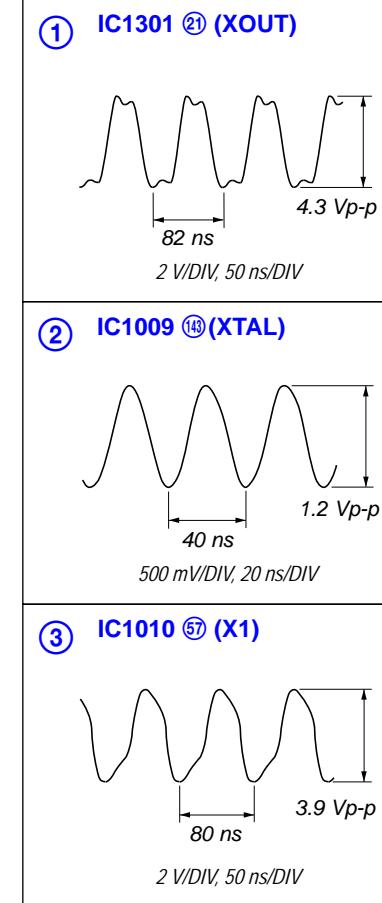


## 6-18. SCHEMATIC DIAGRAM - MIC/HEADPHONE Section -

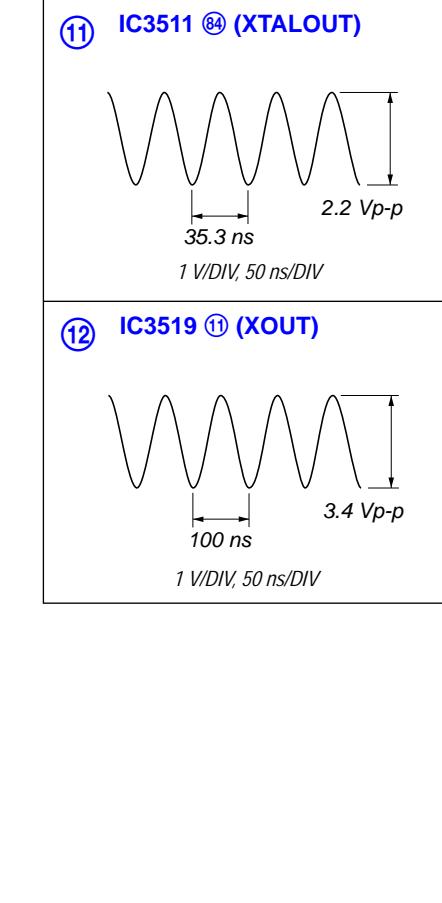


## • Waveforms

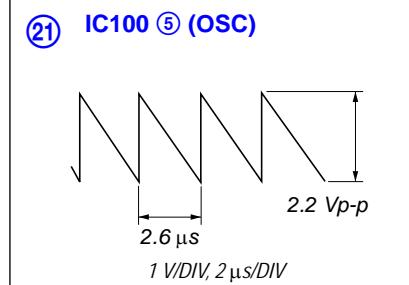
## - DIGITAL AB Board -

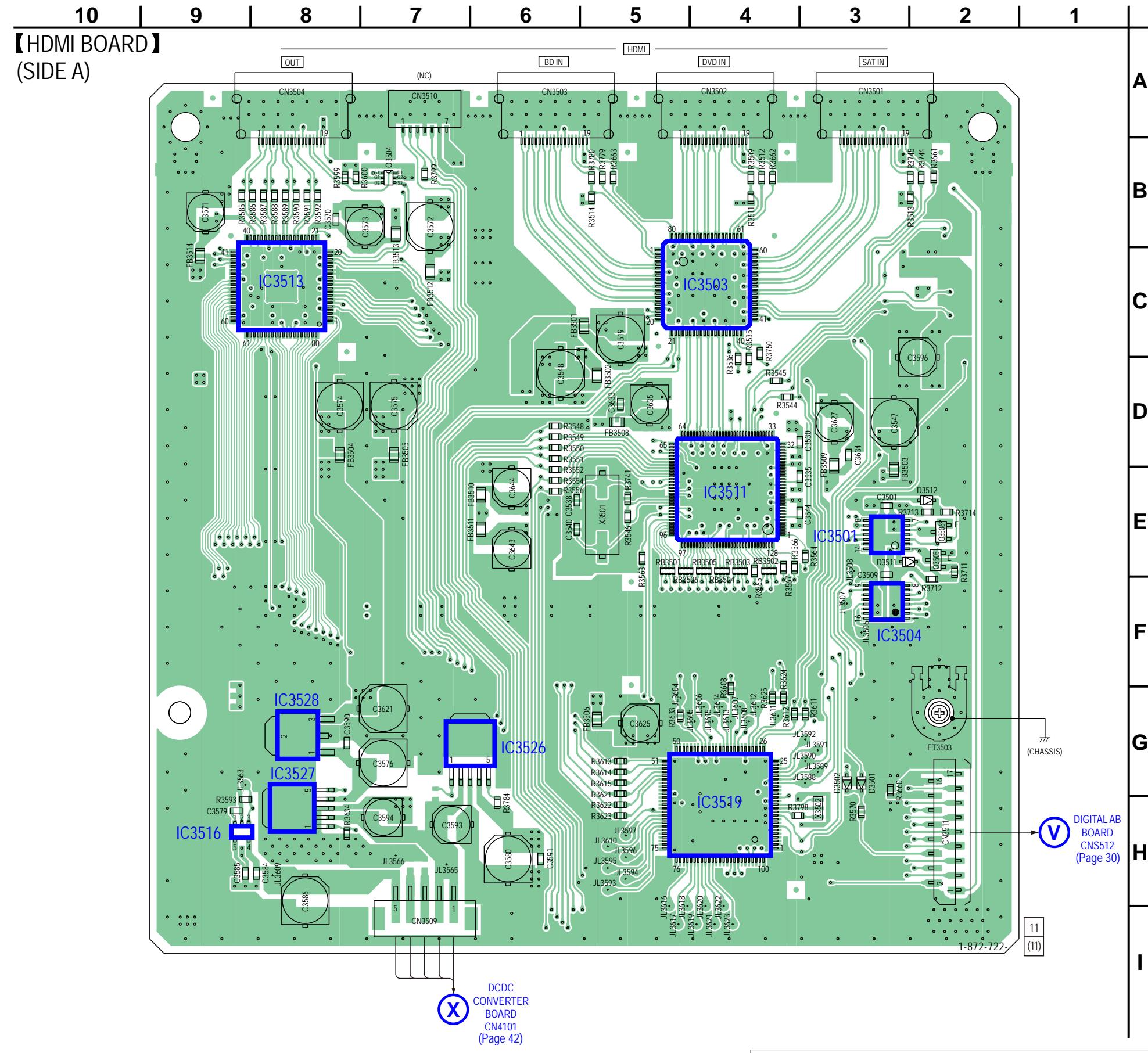


## - HDMI Board -

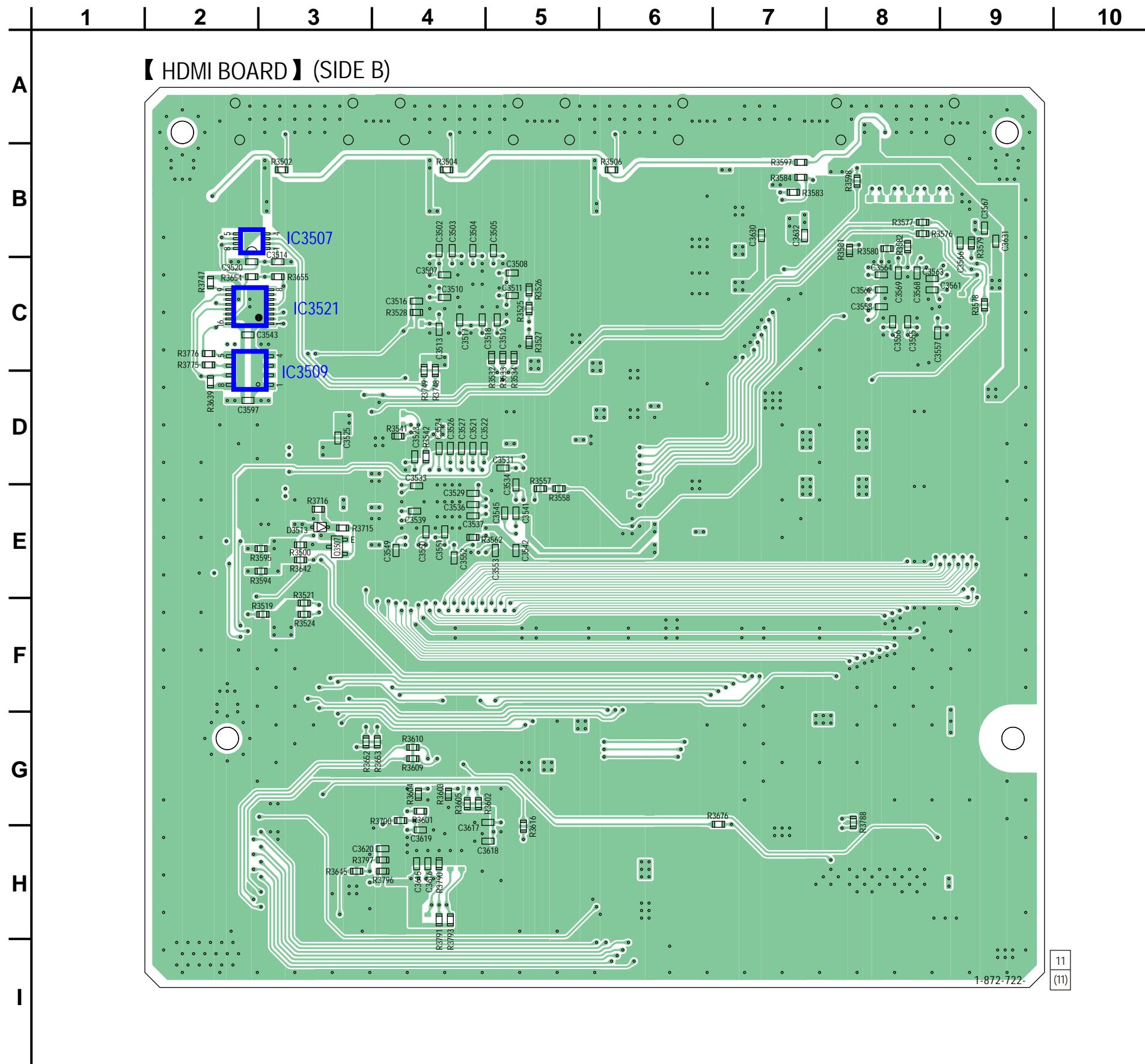


## - DISPLAY Board -

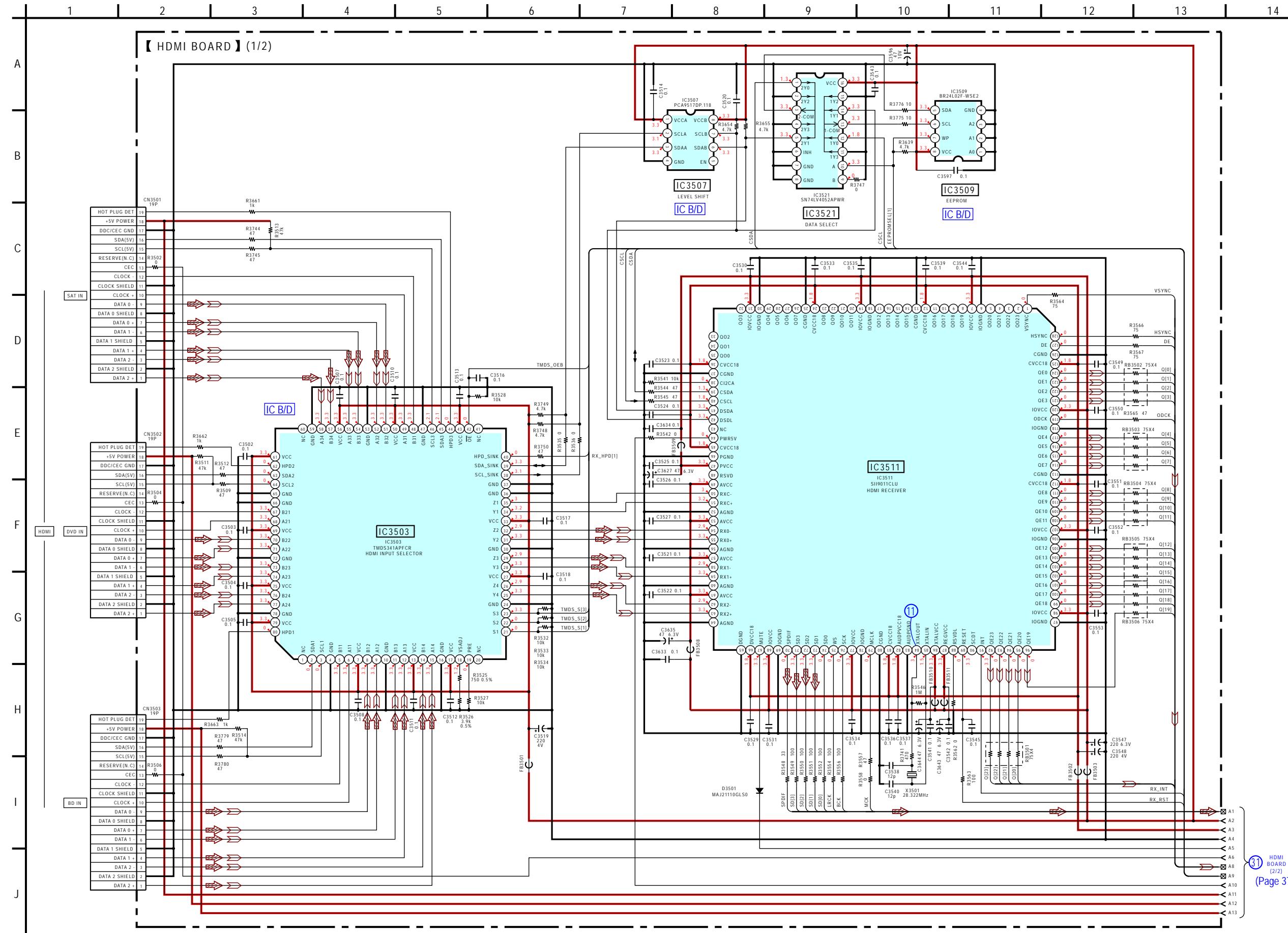


6-19. PRINTED WIRING BOARD - HDMI Board (Side A) - • See page 20 for Circuit Boards Location. •  : Uses unleaded solder.

6-20. PRINTED WIRING BOARD - HDMI Board (Side B) - • See page 20 for Circuit Boards Location. •  : Uses unleaded solder.

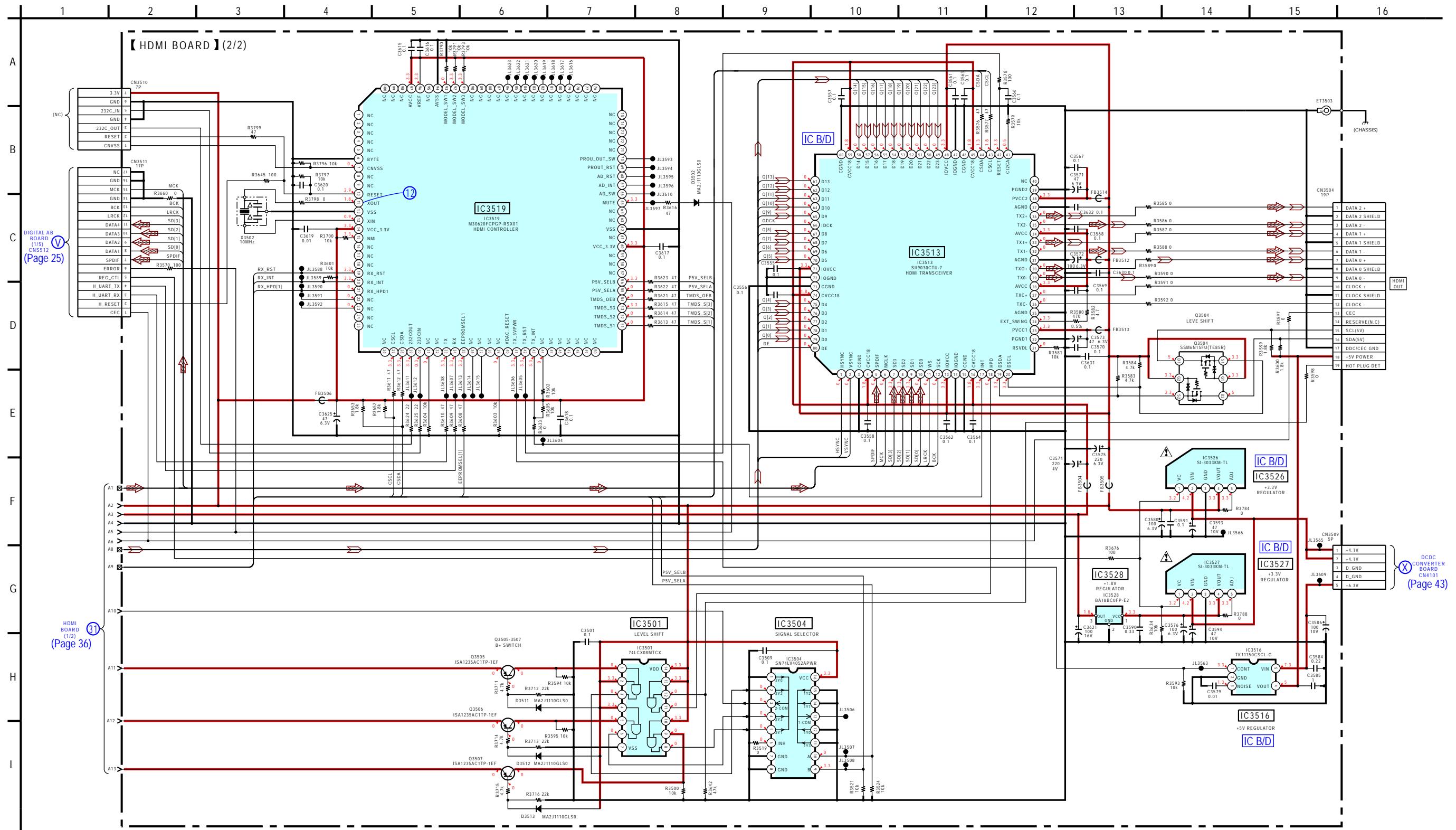


6-21. SCHEMATIC DIAGRAM - HDMI Board (1/2) - • See page 33 for Waveforms. • See page 46 for IC Block Diagrams. • See page 53 for IC Pin Function Description.



Note: IC3511 cannot exchange with single. When IC3511 is damaged, exchange the entire mounted board.

**6-22. SCHEMATIC DIAGRAM - HDMI Board (2/2) - • See page 33 for Waveforms. • See page 46 for IC Block Diagrams. • See page 53 for IC Pin Function Description.**

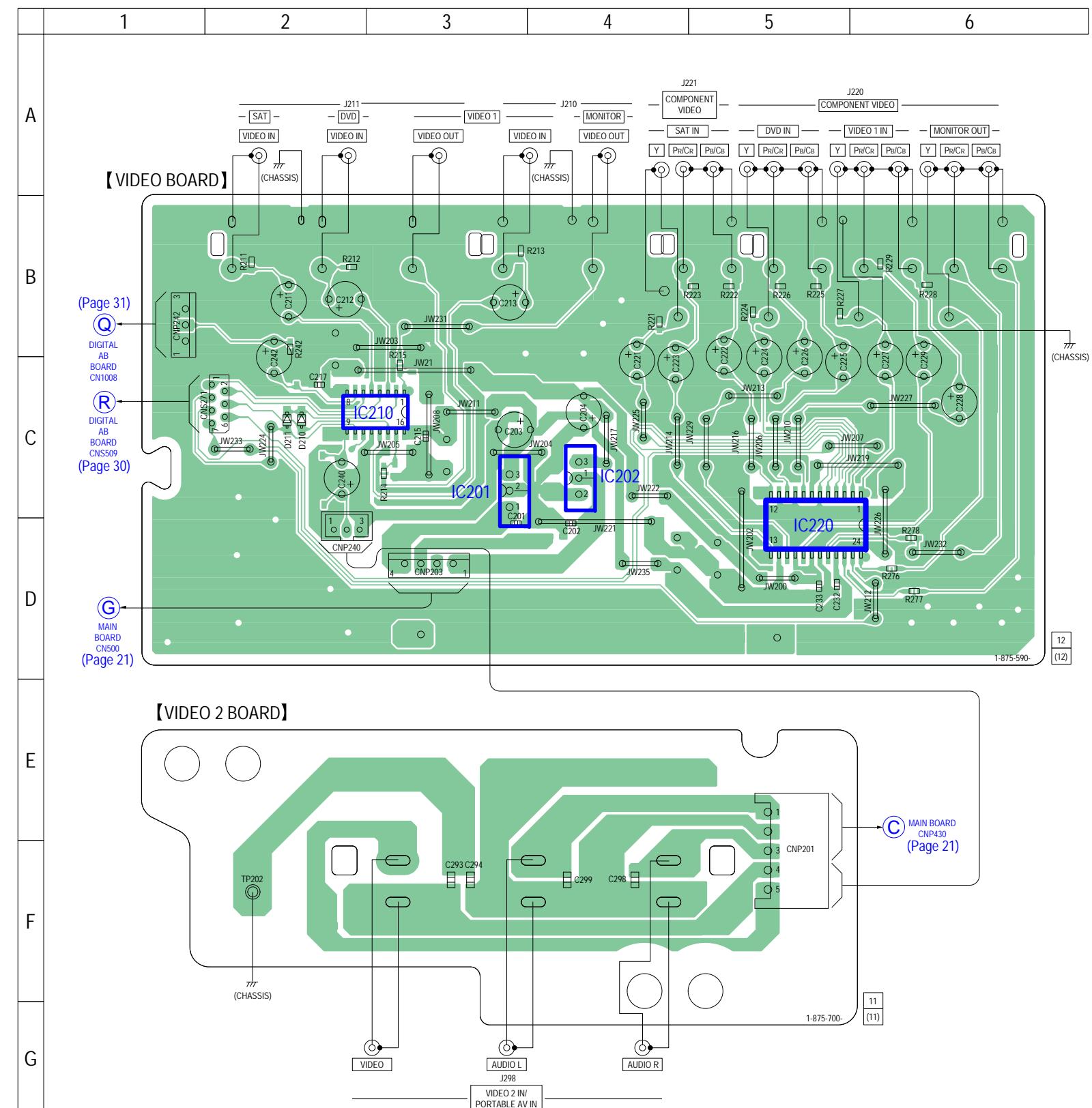


Note: IC3513 cannot exchange with single. When IC3513 is damaged, exchange the entire mounted board.

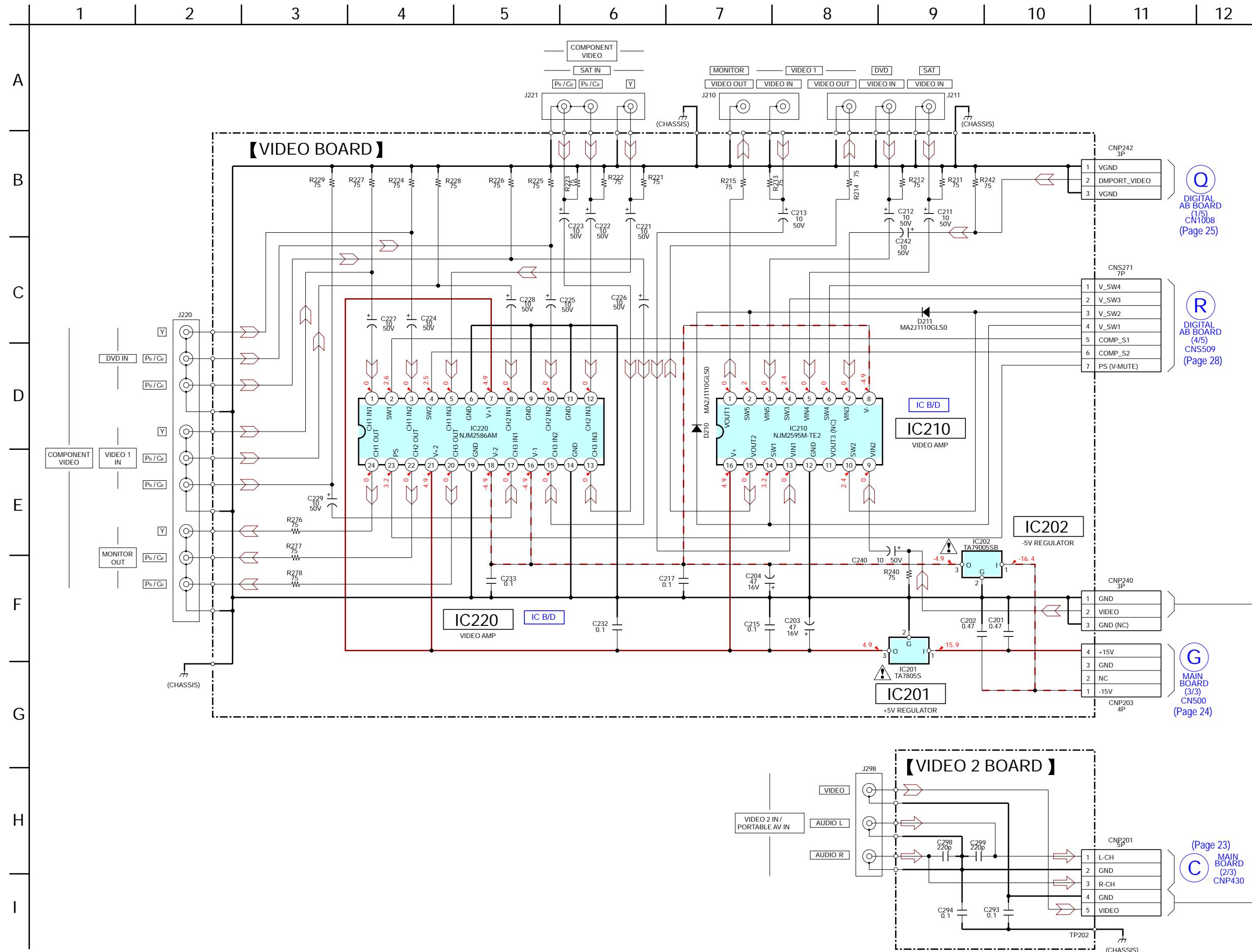
6-23. PRINTED WIRING BOARDS - VIDEO Section - • See page 20 for Circuit Boards Location. •  : Uses unleaded solder.

## • Semiconductor Location

Ref. No.	Location
D210	C-2
D211	C-2
IC201	C-3
IC202	C-4
IC210	C-3
IC220	D-5



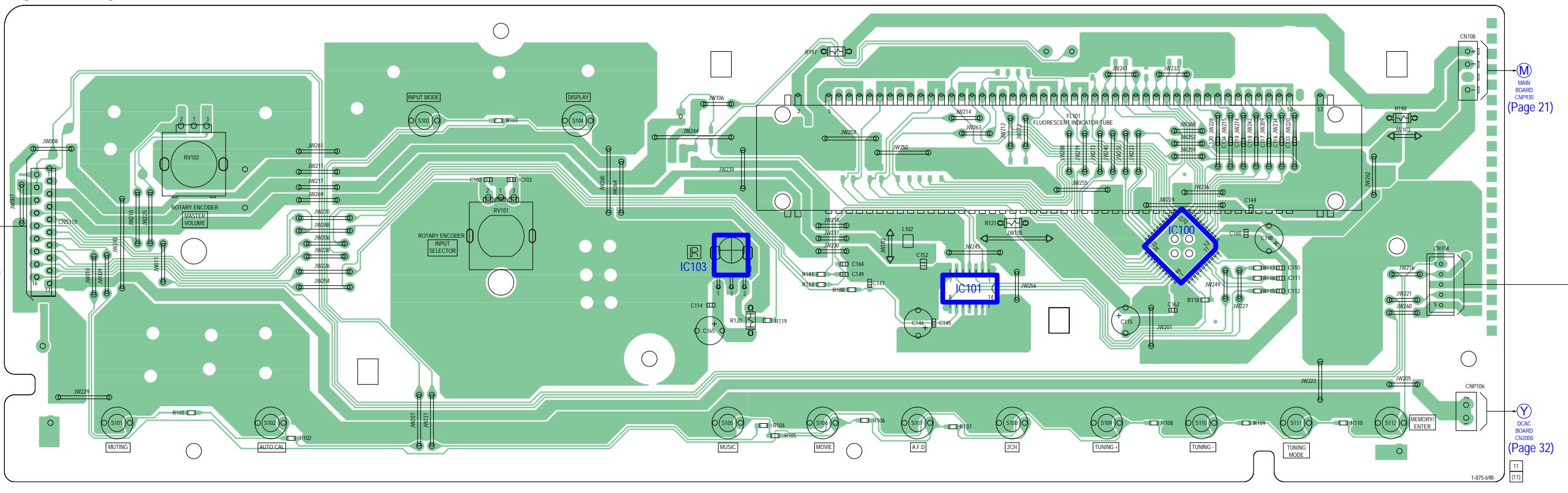
**6-24. SCHEMATIC DIAGRAM - VIDEO Section - • See page 46 for IC Block Diagrams.**



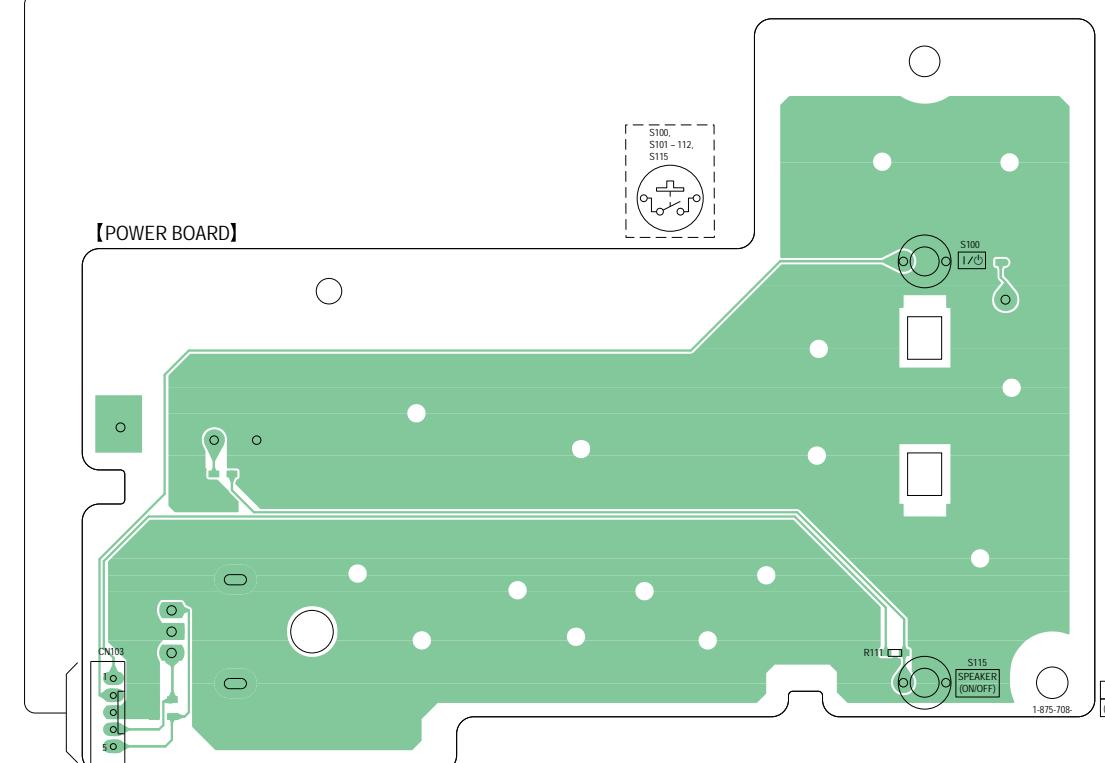
6-25. PRINTED WIRING BOARDS - PANEL Section - • See page 20 for Circuit Boards Location. •  : Uses unleaded solder.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----

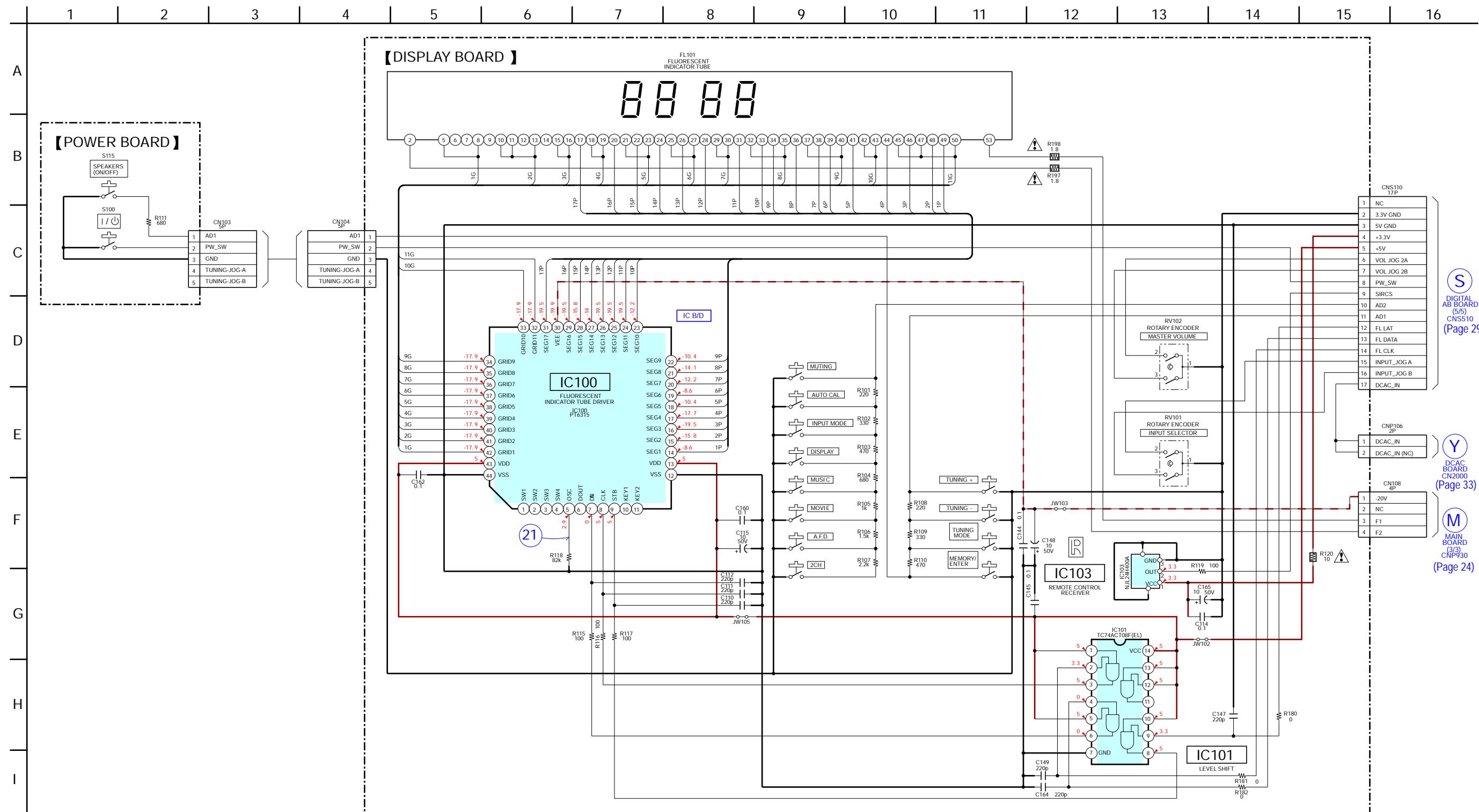
【DISPLAY BOARD】



【POWER BOARD】

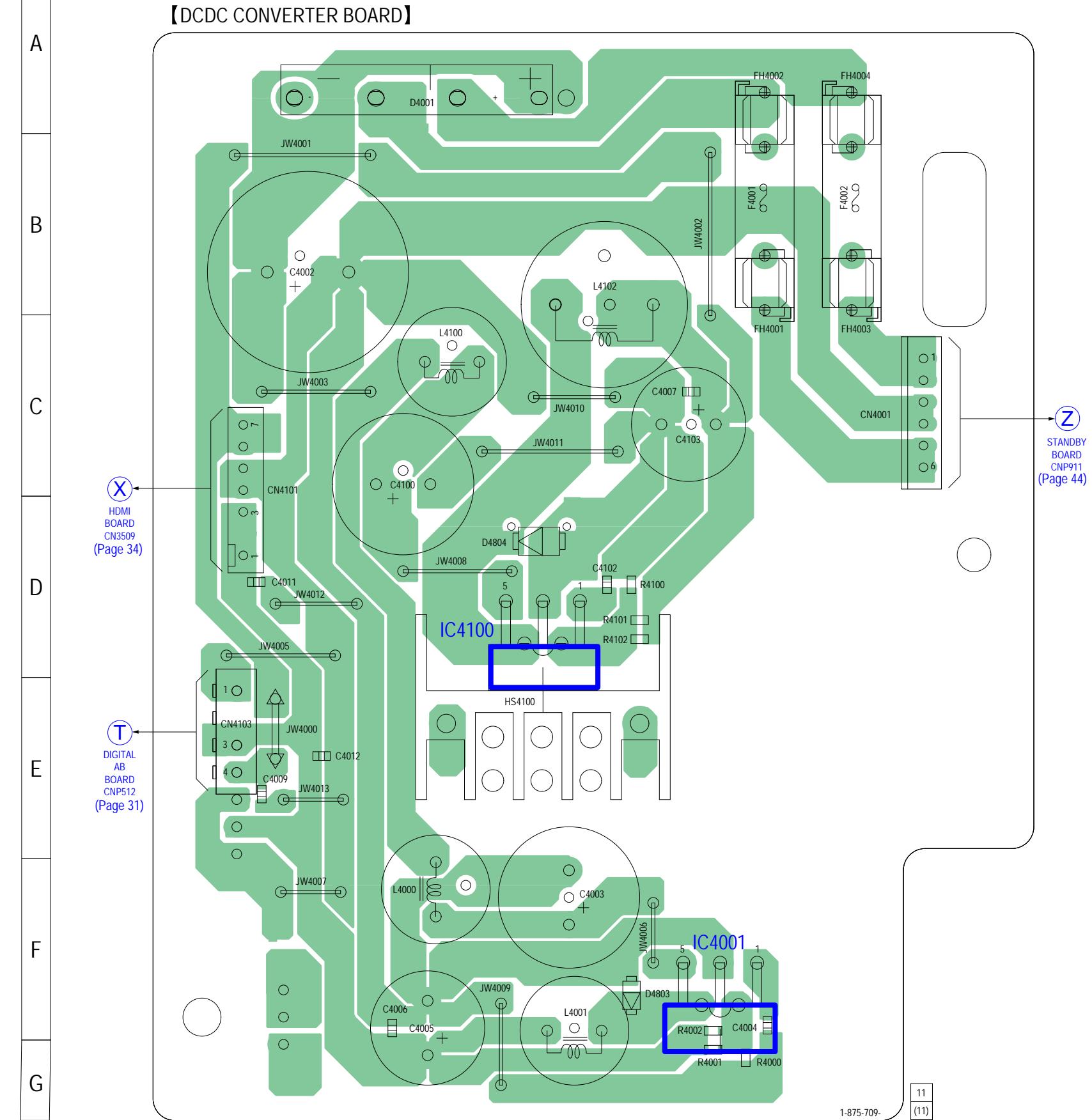


**6-26. SCHEMATIC DIAGRAM - PANEL Section -** • See page 33 for Waveforms. • See page 46 for IC Block Diagrams.

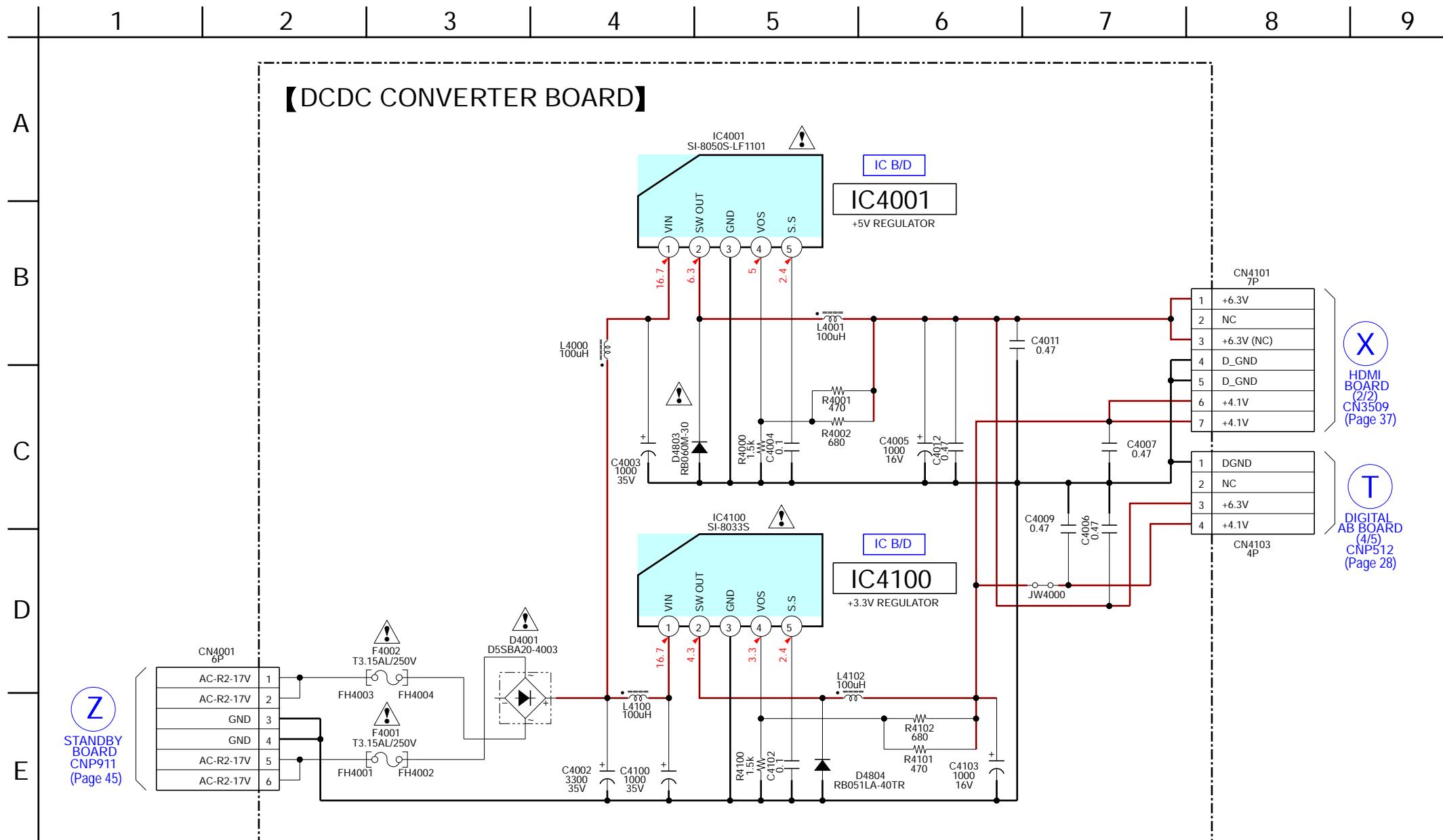


6-27. PRINTED WIRING BOARD - DCDC CONVERTER Board - • See page 20 for Circuit Boards Location. •  : Uses unleaded solder.

	1	2	3	4	5	6
--	---	---	---	---	---	---



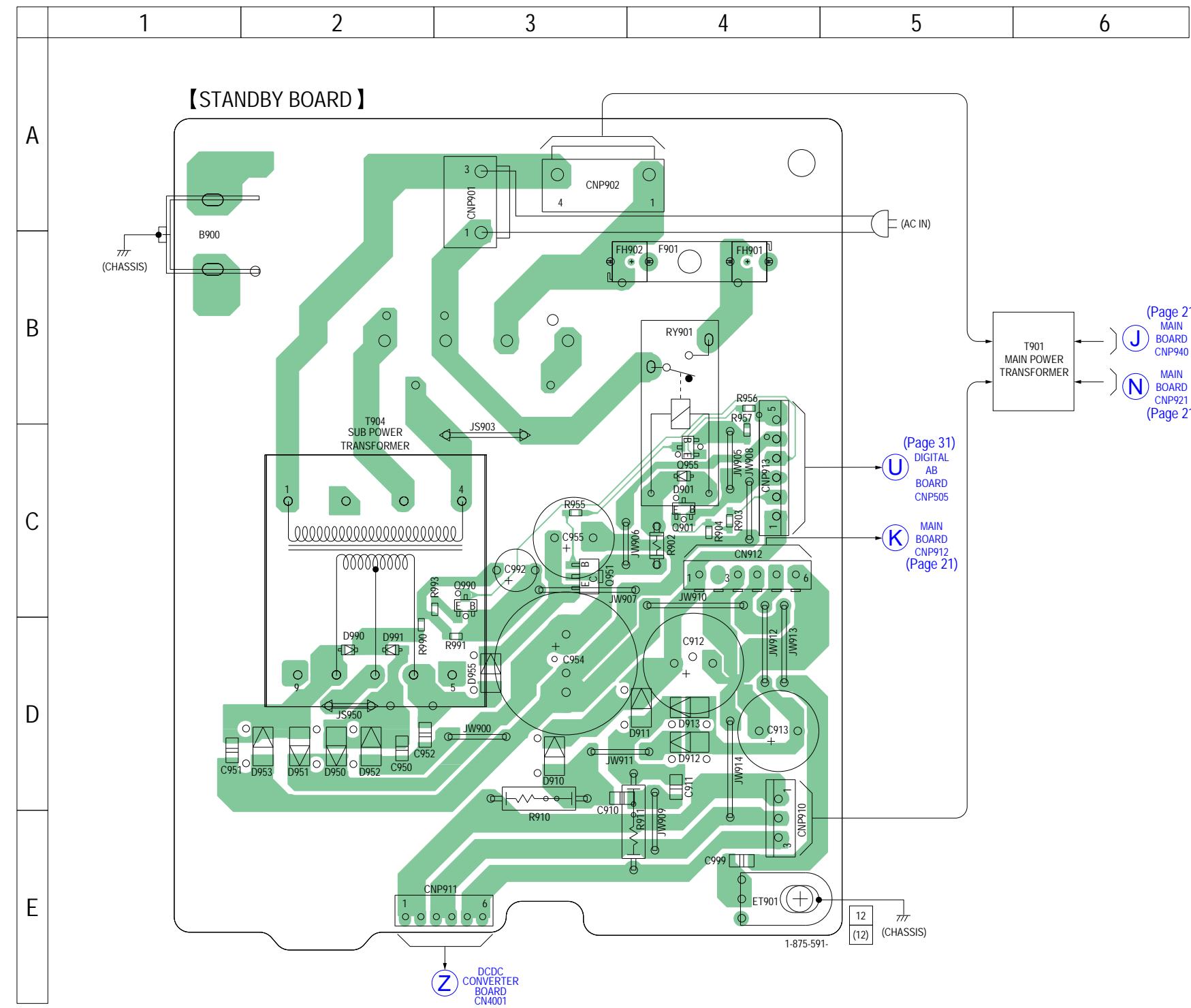
**6-28. SCHEMATIC DIAGRAM - DCDC CONVERTER Board - • See page 46 for IC Block Diagrams.**



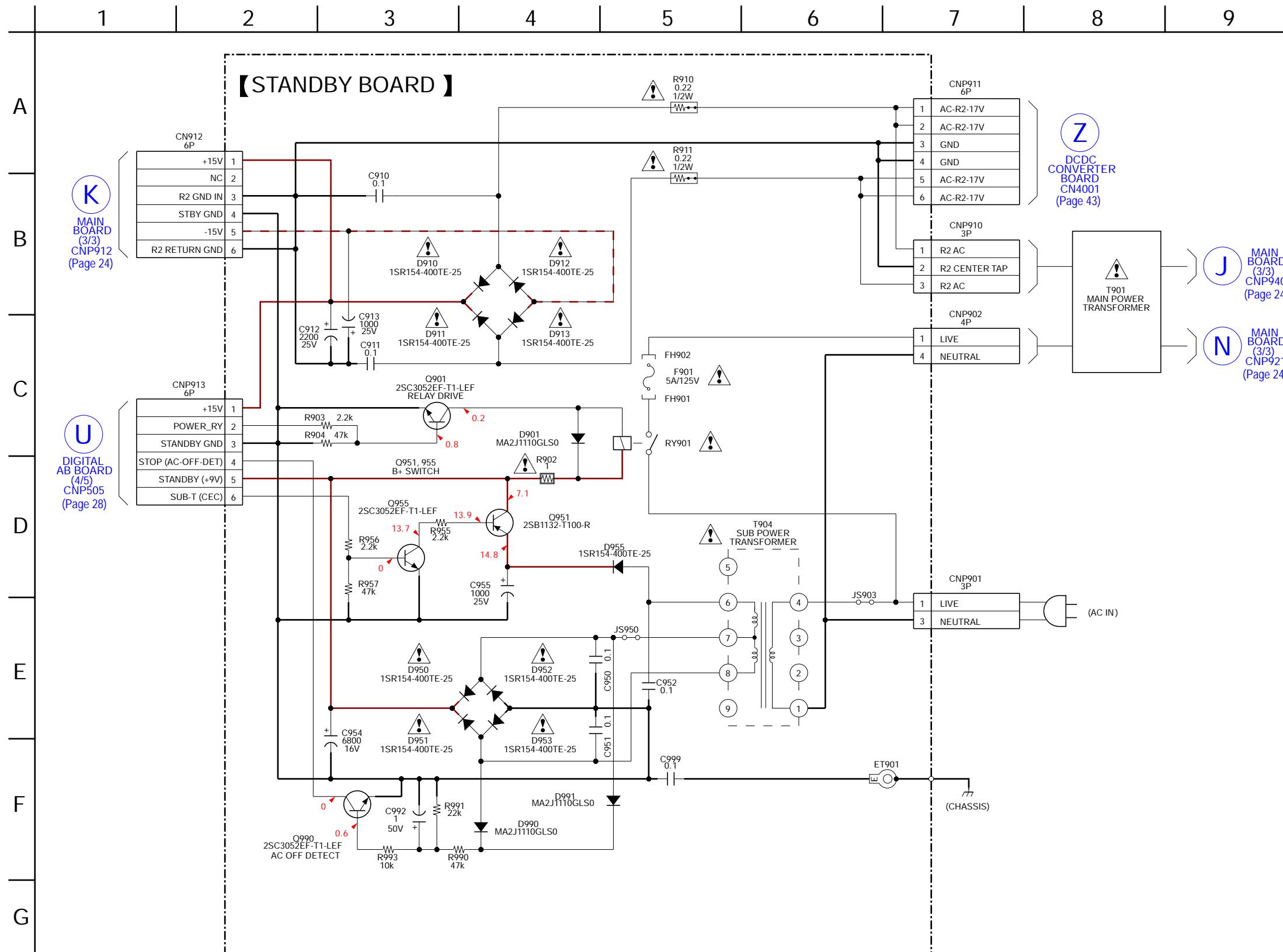
6-29. PRINTED WIRING BOARD - STANDBY Board - • See page 20 for Circuit Boards Location. •  : Uses unleaded solder.

## • Semiconductor Location

Ref. No.	Location
D901	C-4
D910	D-3
D911	D-4
D912	D-4
D913	D-4
D950	D-2
D951	D-2
D952	D-2
D953	D-2
D955	D-3
D990	D-2
D991	D-2
Q901	C-4
Q951	C-3
Q955	C-4
Q990	C-3



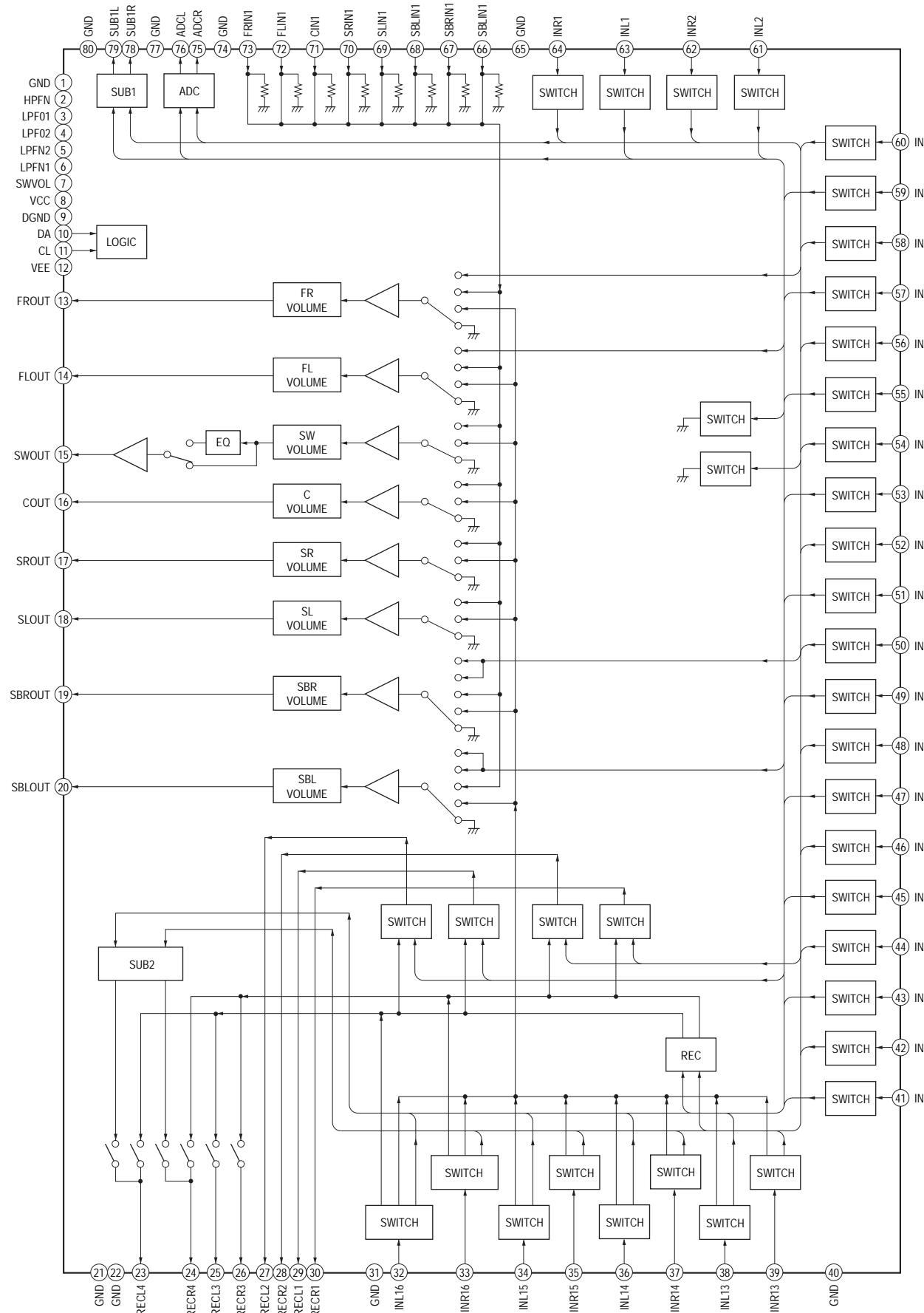
## 6-30. SCHEMATIC DIAGRAM - STANDBY Board -



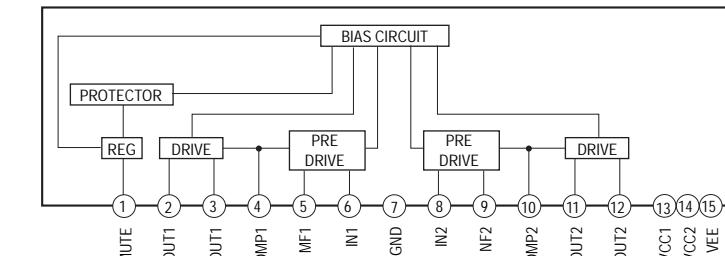
• IC Block Diagrams

- MAIN Board -

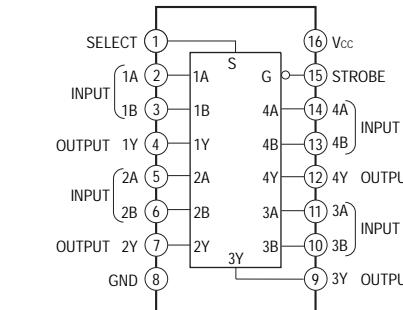
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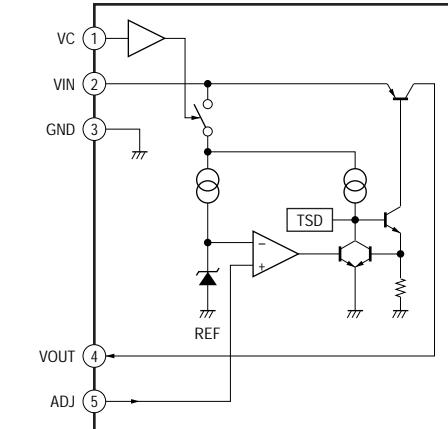
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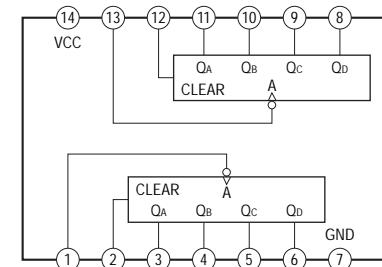
- DIGITAL AB Board -  
**IC1008 TC74VHC157FT (EL)**



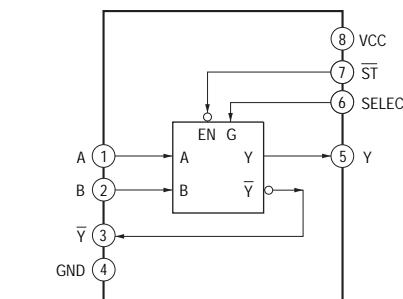
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IC1013 SI-3033KM-TL**



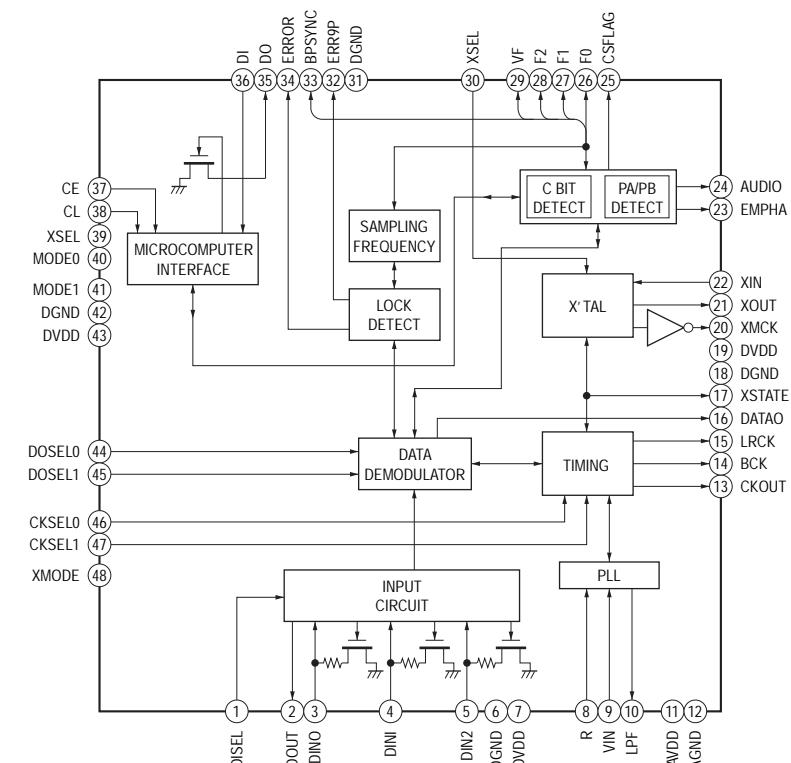
**IC1016 TC74VHC393FT (EL)**

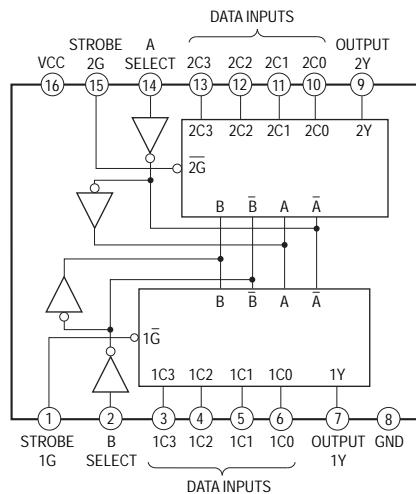
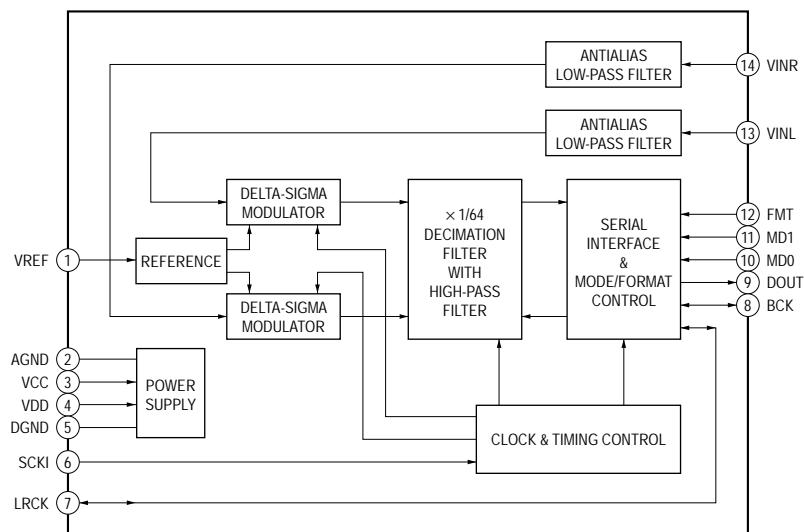
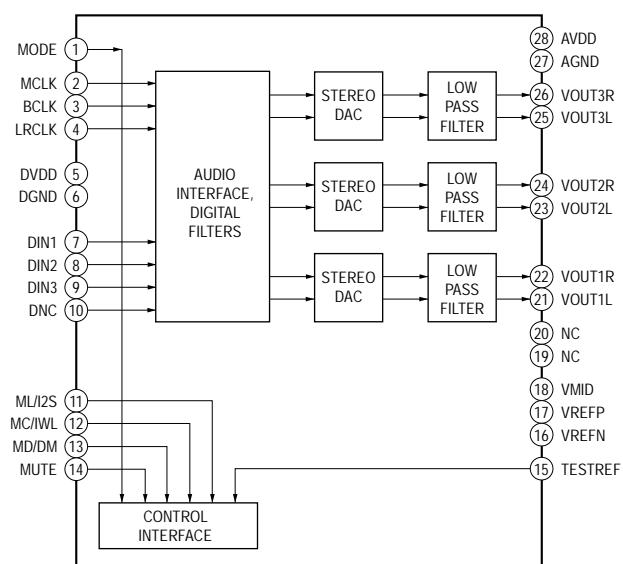


**IC1017 TC7WH157FK (TE85R)**



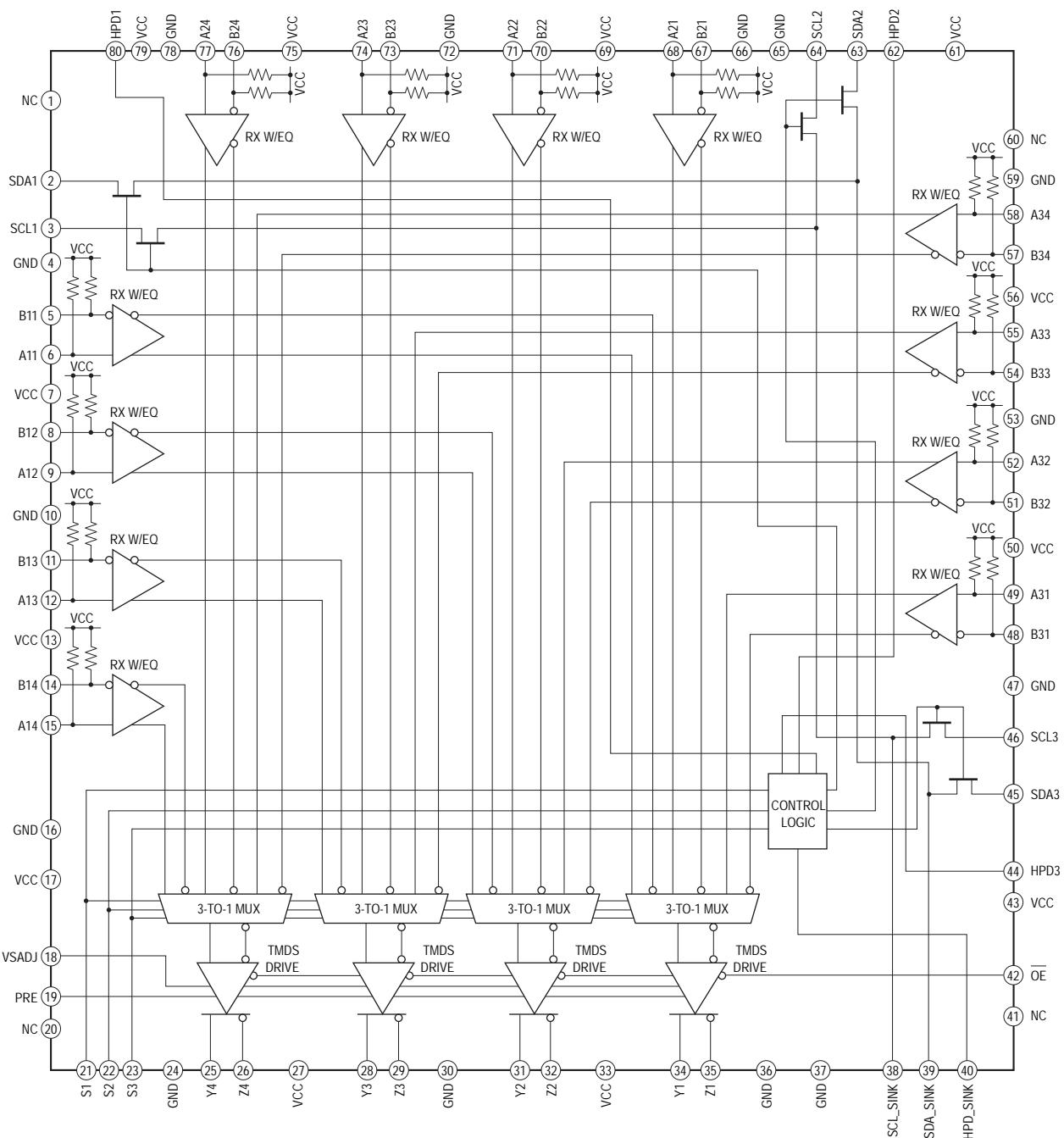
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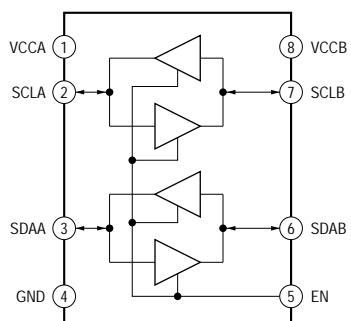
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# STR-KG800

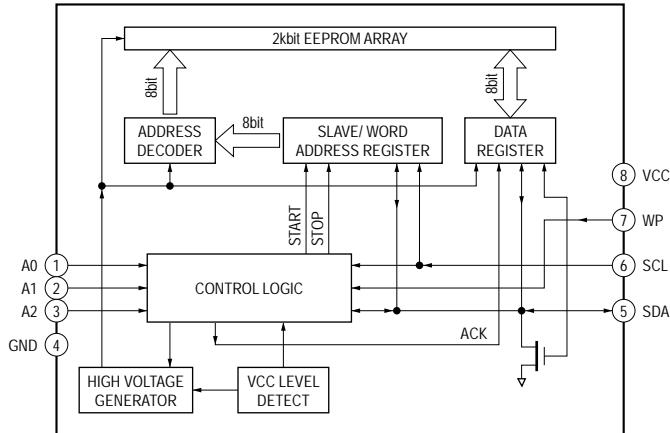
- HDMI Board -  
IC3503 TMDS341APFCR



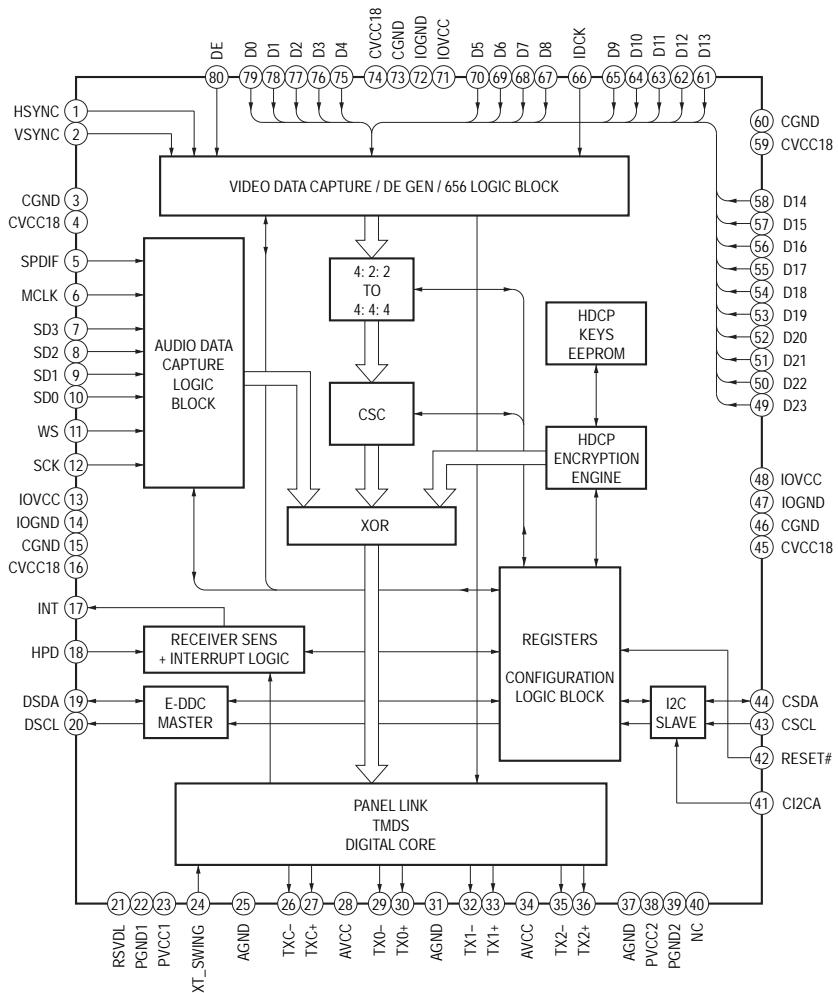
IC3507 PCA9517DP.118



## IC3509 BR24L02F-WE2

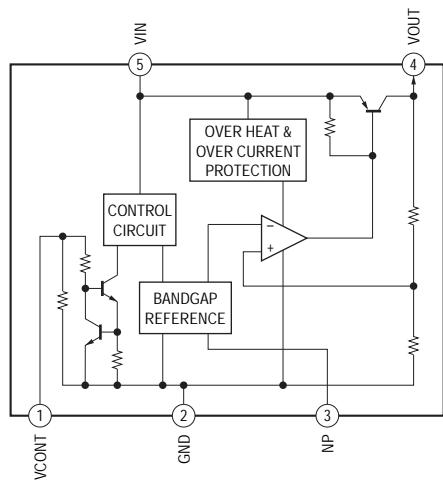


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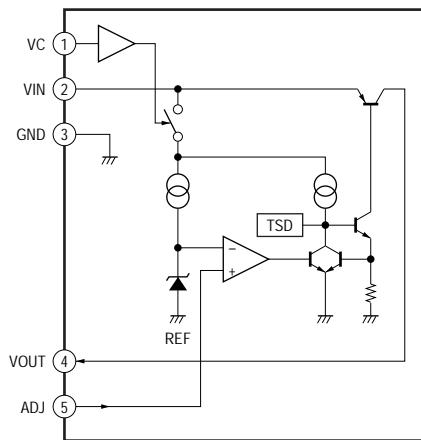


# STR-KG800

**IC3516 TK11150CSCL-G**

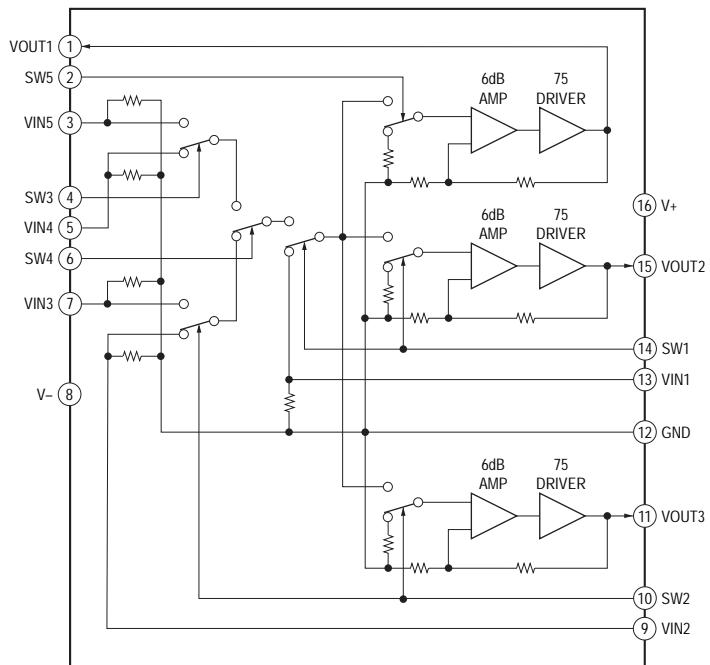


**IC3526, 3527 SI-3033KM-TL**

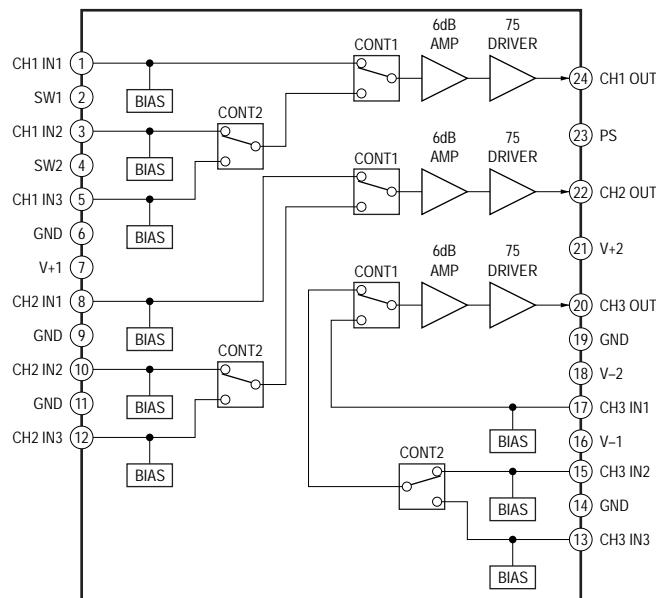
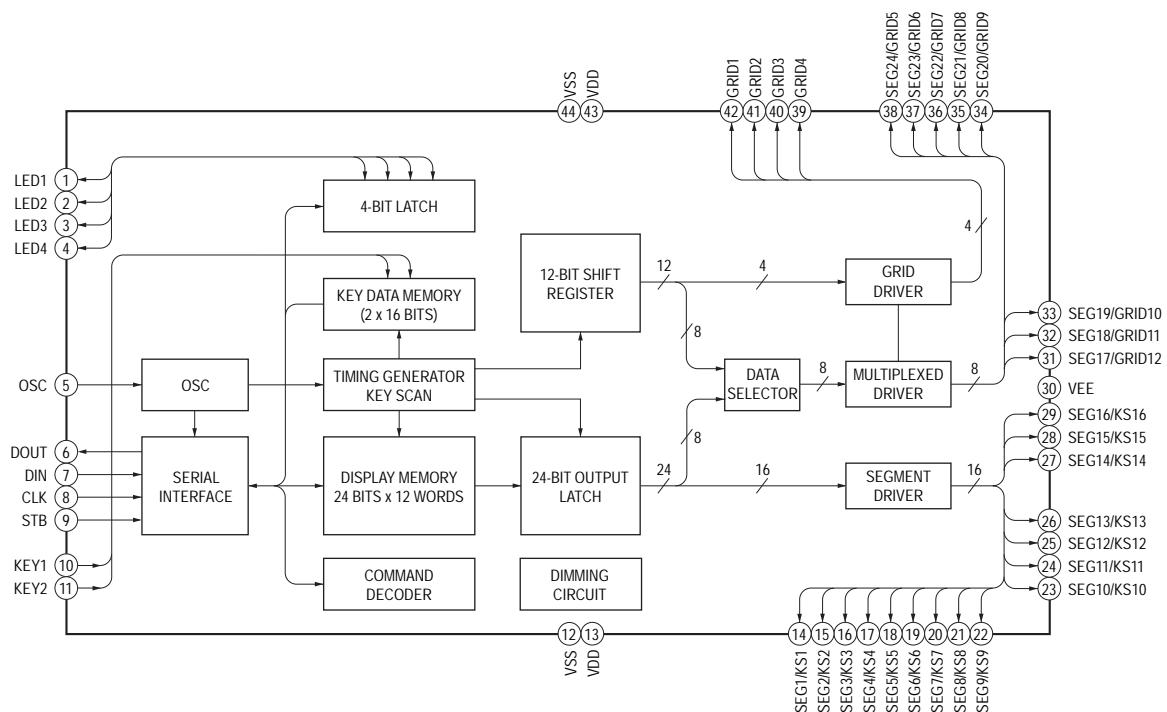


**- VIDEO Board -**

**IC210 NJM2595M-TE2**



## IC220 NJM2586AM

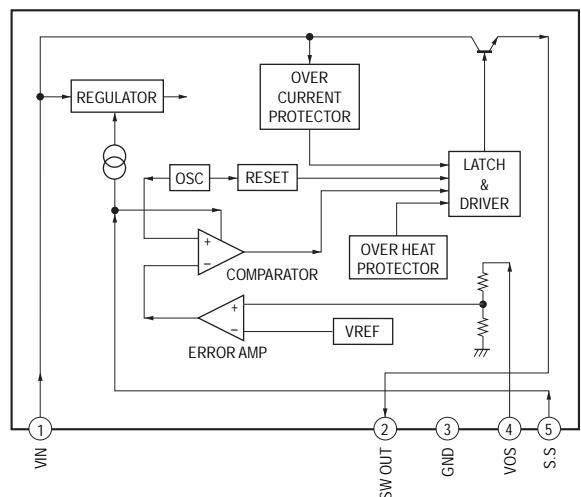
– DISPLAY Board –  
IC100 PT6315

# STR-KG800

- DCDC CONVERTER Board -

IC4001 SI-8050S-LF1101

IC4100 SI-8033S



• IC Pin Function Description

**DIGITAL BOARD IC1009 ADSST-AVR-1115 (DSP)**

Pin No.	Pin Name	I/O	Description
1	VDDINT	-	Power supply terminal (+1.2V)
2, 3	CLKCFG0, CLKCFG1	I	Clock frequency setting terminal
4, 5	BOOTCFG0, BOOTCFG1	I	Boot mode setting terminal for DSP
6	GND	-	Ground terminal
7	VDDEXT	-	Power supply terminal (+3.3V)
8	GND	-	Ground terminal
9	VDDINT	-	Power supply terminal (+1.2V)
10	GND	-	Ground terminal
11	VDDINT	-	Power supply terminal (+1.2V)
12	GND	-	Ground terminal
13	VDDINT	-	Power supply terminal (+1.2V)
14	GND	-	Ground terminal
15	FRAG1	O	Interrupt status output to the system controller
16	FRAG2	I	PLL lock error signal and data error flag input terminal
17	AD7	I/O	Two-way data bus and address signal output with S-RAM Not used
18	GND	-	Ground terminal
19	VDDINT	-	Power supply terminal (+1.2V)
20	GND	-	Ground terminal
21	VDDEXT	-	Power supply terminal (+3.3V)
22	GND	-	Ground terminal
23	VDDINT	-	Power supply terminal (+1.2V)
24 to 26	AD6 to AD4	I/O	Two-way data bus and address signal output with S-RAM Not used
27	VDDINT	-	Power supply terminal (+1.2V)
28	GND	-	Ground terminal
29, 30	AD3, AD2	I/O	Two-way data bus and address signal output with S-RAM Not used
31	VDDEXT	-	Power supply terminal (+3.3V)
32	GND	-	Ground terminal
33, 34	AD1, AD0	I/O	Two-way data bus and address signal output with S-RAM Not used
35	XWR	O	Data write enable signal output to the S-RAM "L": active Not used
36, 37	VDDINT	-	Power supply terminal (+1.2V)
38	GND	-	Ground terminal
39	XRD	O	Read strobe signal output to the S-RAM "L": active Not used
40	ALE	O	Address latch enable signal output terminal Not used
41 to 43	AD15 to AD13	I/O	Two-way data bus and address signal output with S-RAM Not used
44	GND	-	Ground terminal
45	VDDEXT	-	Power supply terminal (+3.3V)
46	AD12	I/O	Two-way data bus and address signal output with S-RAM Not used
47	VDDINT	-	Power supply terminal (+1.2V)
48	GND	-	Ground terminal
49 to 52	AD11 to AD8	I/O	Two-way data bus and address signal output with S-RAM Not used
53	A16	O	Address signal output to S-RAM Not used
54	VDDINT	-	Power supply terminal (+1.2V)
55	GND	-	Ground terminal
56, 57	A17, A18	O	Address signal output to S-RAM Not used
58	GND	-	Ground terminal
59	VDDEXT	-	Power supply terminal (+3.3V)
60	VDDINT	-	Power supply terminal (+1.2V)
61	GND	-	Ground terminal
62	PF_CE	I/O	Chip enable signal input/output terminal Not used
63	SPI_MAS	O	Master/slave selection signal output terminal "L": DSP is master Not used
64	DPSOA	O	PCM audio signal (front L/R) output to the D/A converter
65	DPSOB	O	PCM audio signal (surround L/R) output to the D/A converter
66	VDDINT	-	Power supply terminal (+1.2V)
67	GND	-	Ground terminal
68	VDDINT	-	Power supply terminal (+1.2V)
69	GND	-	Ground terminal
70	DPSOC	O	PCM audio signal (center, sub woofer) output to the D/A converter

Pin No.	Pin Name	I/O	Description
71	DPSOD	O	PCM audio signal (surround back L/R) output to the D/A converter
72	VDDINT	-	Power supply terminal (+1.2V)
73	VDDEXT	-	Power supply terminal (+3.3V)
74	GND	-	Ground terminal
75	VDDINT	-	Power supply terminal (+1.2V)
76	GND	-	Ground terminal
77	DPSOE	O	PCM audio signal output terminal Not used
78	DPSIA	I	PCM audio signal (digital input) input from the digital audio interface receiver
79	DPSIB	I	PCM audio signal (front L/R) input terminal
80	DPSIC	I	PCM audio signal (surround L/R) input terminal
81	DPSID	I	PCM audio signal (center, sub woofer) input terminal
82	DPSIE	I	PCM audio signal (surround back L/R) input terminal
83	VDDINT	-	Power supply terminal (+1.2V)
84, 85	GND	-	Ground terminal
86	DPDVLRCK	O	L/R sampling clock signal output to the D/A converter for PCM audio output
87	DPDVBC	O	Bit clock signal output to the D/A converter for PCM audio output
88	DPLRCK	I	L/R sampling clock signal input terminal for PCM audio input
89	DPBCK	I	Bit clock signal input terminal for PCM audio input
90	VDDINT	-	Power supply terminal (+1.2V)
91, 92	GND	-	Ground terminal
93	VDDEXT	-	Power supply terminal (+3.3V)
94	DPFSCK	I	Master clock signal input terminal
95	GND	-	Ground terminal
96	VDDINT	-	Power supply terminal (+1.2V)
97	XNONAUDIO	I	Digital input signal switch control signal input from the digital audio interface receiver
98	XSF_CE	O	Chip enable signal output terminal Not used
99	VDDINT	-	Power supply terminal (+1.2V)
100	GND	-	Ground terminal
101	VDDINT	-	Power supply terminal (+1.2V)
102	GND	-	Ground terminal
103	VDDINT	-	Power supply terminal (+1.2V)
104	GND	-	Ground terminal
105	VDDINT	-	Power supply terminal (+1.2V)
106	GND	-	Ground terminal
107, 108	VDDINT	-	Power supply terminal (+1.2V)
109	GND	-	Ground terminal
110	VDDINT	-	Power supply terminal (+1.2V)
111	GND	-	Ground terminal
112	VDDINT	-	Power supply terminal (+1.2V)
113	GND	-	Ground terminal
114	VDDINT	-	Power supply terminal (+1.2V)
115	GND	-	Ground terminal
116	VDDEXT	-	Power supply terminal (+3.3V)
117	GND	-	Ground terminal
118	VDDINT	-	Power supply terminal (+1.2V)
119	GND	-	Ground terminal
120	VDDINT	-	Power supply terminal (+1.2V)
121	XRESET	I	System reset signal input from the system controller
122	XSPIDS	I	Serial data latch pulse signal input from the system controller
123	GND	-	Ground terminal
124	VDDINT	-	Power supply terminal (+1.2V)
125	SPICLK	I/O	Serial data transfer clock signal input/output with the system controller
126	MISO	O	Serial data output to the main system controller
127	MOSI	I	Serial data input from the main system controller
128	GND	-	Ground terminal
129	VDDINT	-	Power supply terminal (+1.2V)
130	VDDEXT	-	Power supply terminal (+3.3V)
131	AVDD	-	Power supply terminal (+3.3V)
132	AVSS	-	Ground terminal

Pin No.	Pin Name	I/O	Description
133	GND	-	Ground terminal
134	CLKOUT	-	Not used
135	XEMU	-	Not used
136	TDO	-	Not used
137	TDI	-	Not used
138	CTRST	-	Not used
139	TCK	-	Not used
140	TMS	-	Not used
141	GND	-	Ground terminal
142	CLKIN	I	System clock input terminal (25 MHz)
143	XTAL	O	System clock output terminal (25 MHz)
144	VDDEXT	-	Power supply terminal (+3.3V)

## DIGITAL BOARD IC1010 MB91353APMT-G-117E1 (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	DAC CLK	O	Clock signal output to the D/A converter
2	XMDACMS	O	Serial data latch pulse signal output terminal Not used
3	XMDACMD1	O	Serial data output terminal Not used
4	DAC_D1	O	Serial data output to the D/A converter
5	TUNING A	I	Jog dial pulse input terminal Not used
6	TUNING B	I	Jog dial pulse input terminal Not used
7	HDMI_REG_CTRL	O	Power on/off control signal output terminal for the HDMI section "H": power on
8	DSP_SELECT	O	DSP select signal output to the switching and data selector
9	POWER RY	O	Relay drive signal (for main power) output terminal "H": relay on
10	VOL_CL	O	Clock signal output to the electrical volume
11	VOL_DA	O	Serial data output to the electrical volume
12	HP_DETECT	I	Headphone detection signal input terminal "H": headphone is connected
13	HP_RY	O	Relay drive signal (for headphone) output terminal "H": relay on
14	C/SUR/SB	O	Relay drive signal (for center and surround) output terminal "H": relay on
15	FRONT B RY/ STER_SW	O	Relay drive signal (for front B) output terminal Not used
16	SW RY	O	Relay drive signal (for sub woofer) output terminal "H": relay on
17	FRONT A RY	O	Relay drive signal (for front A) output terminal "H": relay on
18	GND	-	Ground terminal
19	VCC	-	Power supply terminal (+3.3V)
20	SBR RY	O	Relay drive signal (for surround back) output terminal Not used
21	TUNE_LAT	O	Serial data latch pulse signal output to the tuner (FM/AM)
22	TUNE_DI	O	Serial data output to the tuner (FM/AM)
23	T_CLK	O	Serial data transfer clock signal output to the tuner (FM/AM)
24	TUNE_DO	I	PLL data input from the tuner (FM/AM)
25	FUSE_DETECT	I	Fuse detection signal input terminal
26	DAC_ATC	O	Serial data latch pulse signal output to the D/A converter
27	DAC_MUTE	O	Muting signal output to the D/A converter
28	CEC_OUT	O	CEC serial data output to the HDMI OUT connector
29	DIR_XSTATE	I	Source clock selection monitor input from the digital audio interface receiver
30	HDMI_ERR	I	HDMI audio error signal input terminal
31 to 34	V_SW4 to V_SW1	O	Video select signal output to the video amplifier
35, 36	COMP_S1, COMP_S2	O	Component video select signal output to the video amplifier
37	PS(V-MUTE)	O	Muting signal output to the video amplifier
38	DIR_XMODE(RESET)	O	Reset signal output to the digital audio interface receiver "L": reset
39	DIRCKST	O	Clock selection signal output to the digital audio interface receiver
40	GND	-	Ground terminal
41, 42	NO USE	-	Not used
43	GND	-	Ground terminal
44	+3.3V	-	Power supply terminal (+3.3V)
45	DIR CLK	O	Serial data transfer clock signal output to the digital audio interface receiver
46	DIR CE(LAT)	O	Chip enable signal output to the digital audio interface receiver
47	DIR DI	O	Serial data output to the digital audio interface receiver
48	DIR DO	I	Serial data input from the digital audio interface receiver
49	DIR ERROR	I	PLL lock error signal and data error flag input from the digital audio interface receiver
50	HDMI_FSRATE	I	Serial data input terminal
51	NMI	I	Non maskable interrupt signal input terminal Not used
52	MD2	I	CPU operation mode setting signal input terminal "H": flash programming
53	MD1	I	CPU operation mode setting signal input terminal Not used
54	MD0	I	CPU operation mode setting signal input terminal Not used
55	INIT	I	External reset signal input terminal
56	+3.3V	-	Power supply terminal (+3.3V)
57	X1	O	Main system clock output terminal (24 MHz)
58	X0	I	Main system clock input terminal (24 MHz)
59	GND	-	Ground terminal
60	XOA	I	Sub system clock input terminal Not used
61	X1A	O	Sub system clock output terminal Not used
62	RST_TRG	O	Reset signal output terminal
63	DIR_DATA0	I	Serial data input from the digital audio interface receiver

Pin No.	Pin Name	I/O	Description
64	DSP_RESET	O	System reset signal output to the DSP
65	DSP_SPIDS(LAT)	O	Serial data latch pulse signal output to the DSP
66	74ACT153_B	O	Data selection signal output terminal
67	74ACT154_A	O	Data selection signal output terminal
68	PROTECTOR	I	Protector status detect signal input terminal
69	FL LAT	O	Strobe signal output to the fluorescent indicator tube
70	FL_CLK	O	Serial data transfer clock signal output to the fluorescent indicator tube
71	FL_DATA	O	Serial data output to the fluorescent indicator tube
72	NO USE	O	Not used
73	DSP MISO	I	Serial data input from the DSP
74	DSP MOSI	O	Serial data output to the DSP
75	DSP SPICLK	I/O	Serial data transfer clock signal input/output with the DSP
76	GND	-	Ground terminal
77	+3.3V	-	Power supply terminal (+3.3V)
78	EEPROM CLK	O	Serial data transfer clock signal output to the EEPROM
79	VOL_JOG (2B)	I	Jog dial pulse input from the rotary encoder (for MASTER VOLUME) (B phase input)
80	VOL_JOG (2A)	I	Jog dial pulse input from the rotary encoder (for MASTER VOLUME) (A phase input)
81	DSPINT	I	Interrupt status input from the DSP
82	DCAC_DSP_IN	I	Mic signal interrupt input terminal
83	STOP	I	AC off detection signal input terminal "L": AC off
84	SIRCS_IN	I	SIRCS signal input from the remote control receiver
85	POWER KEY	I	Power key input terminal
86	RDSINI	I	RDS serial data transfer clock signal input from the tuner (FM/AM)
87	RDS DATA	I	RDS serial data input from the tuner (FM/AM)
88	CEC IN	I	CEC serial data input from the HDMI OUT connector
89	INPUT ENCODER A	I	Jog dial pulse input from the rotary encoder (for INPUT SELECTOR) (A phase input)
90	INPUT ENCODER B	I	Jog dial pulse input from the rotary encoder (for INPUT SELECTOR) (B phase input)
91	NO USE	O	Not used
92	XM_MIXMO	O	Serial data output terminal Not used
93	XM_MOXMI	I	Serial data input terminal Not used
94	XMRESET	O	Reset signal output terminal Not used
95	+3.3V	-	Power supply terminal (+3.3V)
96	GND	-	Ground terminal
97	SUBT	O	Transformer power on/off control signal output terminal
98	EEPROM DATA	I/O	Two-way data bus with the EEPROM
99	CLINK_TX	I	Receive data input from the DMPORT connector
100	CLINK_RX	O	Transmit data output to the DMPORT connector
101	CLINK_DET	I	Digital media port adapter connection detection signal input terminal
102	FLASH2/ HDMI_UART_RX	O	UART data output to the HDMI controller
103	FLASH1/ HDMI_UART_TX	I	UART data input from the HDMI controller
104	HDMI RESET	O	System reset signal output to the HDMI controller "L": reset
105, 106	NO USE	-	Not used
107	GND	-	Ground terminal (for D/A converter)
108	DAVC	-	Power supply terminal (+3.3V) (for D/A converter)
109	AVCC	-	Analog power supply terminal (+3.3V) (for A/D converter)
110	AVRH	-	Reference voltage input terminal (+3.3V) (for A/D converter)
111	AVSS/AVRL	-	Analog ground terminal (for A/D converter)
112	GND	-	Ground terminal
113, 114	AD KEY1, AD KEY2	I	Front panel key input terminal (A/D input)
115	DCAC_IN	I	Mic signal input terminal
116	VERSION	I	Setting terminal for the destination
117	RDS SIGNAL	I	Tuning detection signal input from the tuner (FM/AM)
118	MODEL	I	Setting terminal for the model
119	VACS_CTRL	I	VACS control signal input terminal
120	NO USE	I	Not used

## HDMI BOARD IC3511 SII9011CLU (HDMI RECEIVER)

Pin No.	Pin Name	I/O	Description
1	VSYNC	O	Vertical synchronize signal output for the HDMI transceiver
2 to 5	QO23 to QO20	-	Not used
6	IOGND	-	Ground terminal
7	IOVCC	-	Power supply terminal (+3.3V)
8 to 11	QO19 to QO16	-	Not used
12	CVCC18	-	Power supply terminal (+1.8V)
13	CGND	-	Ground terminal
14 to 17	QO15 to QO12	-	Not used
18	IOGND	-	Ground terminal
19	IOVCC	-	Power supply terminal (+3.3V)
20 to 23	QO11 to QO8	-	Not used
24	CVCC18	-	Power supply terminal (+1.8V)
25	CGND	-	Ground terminal
26 to 29	QO7 to QO4	-	Not used
30	IOGND	-	Ground terminal
31	IOVCC	-	Power supply terminal (+3.3V)
32 to 35	QO3 to QO0	-	Not used
36	CVCC18	-	Power supply terminal (+1.8V)
37	CGND	-	Ground terminal
38	CI2CA	-	Not used
39	CSDA	I/O	I2C two-way data bus with the HDMI controller and HDMI transceiver
40	CSCL	I	I2C clock signal input from the HDMI controller
41	DSDA	I/O	I2C two-way data bus with the level shift and data selector
42	DSDL	I	I2C clock signal input from the level shift and data selector
43	NC	-	Not used
44	PWR5V	I	Power detect signal input terminal
45	CVCC18	-	Power supply terminal (+1.8V)
46	PGND	-	Ground terminal
47	PVCC	-	Power supply terminal (+3.3V)
48	PSVD	-	Not used
49	AVCC	-	Power supply terminal (+3.3V)
50	RXC-	I	TMDS clock signal input from the HDMI input selector
51	RXC+	I	TMDS clock signal input from the HDMI input selector
52	AGND	-	Ground terminal
53	AVCC	-	Power supply terminal (+3.3V)
54	RX0-	I	TMDS data input from the HDMI input selector
55	RX0+	I	TMDS data input from the HDMI input selector
56	AGND	-	Ground terminal
57	AVCC	-	Power supply terminal (+3.3V)
58	RX1-	I	TMDS data input from the HDMI input selector
59	RX1+	I	TMDS data input from the HDMI input selector
60	AGND	-	Ground terminal
61	AVCC	-	Power supply terminal (+3.3V)
62	RX2-	I	TMDS data input from the HDMI input selector
63	RX2+	I	TMDS data input from the HDMI input selector
64, 65	AGND, DGND	-	Ground terminal
66	DVCC18	-	Power supply terminal (+1.8V)
67	MUTE	O	Audio muting signal output terminal
68	IOVCC	-	Power supply terminal (+3.3V)
69	IOGND	-	Ground terminal
70	SPDIF	O	SPDIF signal output for the digital audio interface receiver and HDMI transceiver
71 to 74	SD3 to SD0	O	Serial data output for the DSP and HDMI transceiver
75	WS	O	Word select signal output for the DSP and HDMI transceiver
76	SCK	O	Serial clock signal output for the DSP and HDMI transceiver
77	IOVCC	-	Power supply terminal (+3.3V)

Pin No.	Pin Name	I/O	Description
78	IOGND	-	Ground terminal
79	MCLK	O	Audio master clock signal output for the DSP and HDMI transceiver
80	CGND	-	Ground terminal
81	CVCC18	-	Power supply terminal (+1.8V)
82	AUDPVCC18	-	Power supply terminal (+1.8V)
83	AUDPGND	-	Ground terminal
84	XTALOUT	O	System clock output terminal (28.322 MHz)
85	XTALIN	I	System clock input terminal (28.322 MHz)
86	ZTALVCC	-	Power supply terminal (+3.3V)
87	REGVCC	-	Power supply terminal (+3.3V)
88	RSVDSL	-	Not used
89	RESET	I	Reset signal input from the HDMI controller "L": reset
90	SCDT	-	Not used
91	INT	O	Interrupt signal output for the HDMI controller
92 to 96	QE23 to QE19	O	Serial data output for the HDMI transceiver
97	IOGND	-	Ground terminal
98	IOVCC	-	Power supply terminal (+3.3V)
99 to 105	QE18 to QE12	O	Serial data output for the HDMI transceiver
106	IOGND	-	Ground terminal
107	IOVCC	-	Power supply terminal (+3.3V)
108 to 111	QE11 to QE8	O	Serial data output for the HDMI transceiver
112	CVCC18	-	Power supply terminal (+1.8V)
113	CGND	-	Ground terminal
114 to 117	QE7 to QE4	O	Serial data output for the HDMI transceiver
118	IOGND	-	Ground terminal
119	ODCK	O	Output data clock signal output for the HDMI transceiver
120	IOVCC	-	Power supply terminal (+3.3V)
121 to 124	QE3 to QE0	O	Serial data output for the HDMI transceiver
125	CVCC18	-	Power supply terminal (+1.8V)
126	CGND	-	Ground terminal
127	DE	O	Data enable signal output for the HDMI transceiver
128	HSYNC	O	Horizontal synchronize signal output for the HDMI transceiver

## HDMI RE BOARD IC3519 M30620FCPGP-RSX01 (HDMI CONTROLLER)

Pin No.	Pin Name	I/O	Description
1 to 5	NC	-	Not used
6	BYTE	-	Not used
7	CNVSS	I	Processor mode switch input terminal (for test)
8, 9	NC	-	Not used
10	RESET	I	System reset signal input from the main system controller "L": reset
11	XOUT	O	System clock output terminal (10 MHz)
12	VSS	-	Ground terminal
13	XIN	I	System clock input terminal (10 MHz)
14	VCC_3.3V	-	Power supply terminal (+3.3V)
15	NMI	-	Not used
16 to 18	NC	-	Not used
19	RX_RST	O	System reset signal output to the HDMI receiver "L": reset
20	RX_INT	I	Interrupt status input from the HDMI receiver
21	RX_HPD1	O	Hot plug connection detect signal output to the HDMI input selector
22 to 26	NC	-	Not used
27	CSCL	O	Serial data transfer clock signal output to the HDMI section
28	CSDA	I/O	Two-way data bus with the HDMI section
29	232COUT	O	Serial data output terminal for the RS-232C
30	232CIN	I	Serial data input terminal for the RS-232C
31, 32	NC	-	Not used
33	TX	I	UART data input from the system controller
34	RX	O	UART data output to the system controller
35	EEPROMSEL1	O	Write enable signal output to the EEPROM
36 to 39	NC	-	Not used
40	VDAC_RESET	-	Not used
41	TX_5VPWR	O	Power on/off control signal output terminal "H": power on
42	TX_RST	I	Interrupt status input from the HDMI transceiver
43	TX_INT	O	System reset signal output to the HDMI transceiver "L": reset
44 to 50	NC	-	Not used
51 to 53	TMDS_S1 to TMDS_S3	O	Source selection signal output to the HDMI input selector
54	TMDS_OEB	O	Output enable signal output to the HDMI input selector
55, 56	P5V_SELA, P5V_SELB	O	HDMI SAT IN, DVD IN, VIDEO 2/BD IN jack detection signal select signal output terminal
57 to 59	NC	-	Not used
60	VCC_3.3V	-	Power supply terminal (+3.3V)
61	NC	-	Not used
62	VSS	-	Ground terminal
63, 64	NC	-	Not used
65	MUTE	O	Audio muting signal output terminal
66	AD_SW	-	Not used
67	AD_INT	-	Not used
68	AD_RST	-	Not used
69	PROUT_RST	-	Not used
70	PROU_OUT_SW	-	Not used
71 to 90	NC	-	Not used
91 to 93	MODEL_SW3 to MODEL_SW1	I	Model setting terminal
94	AVSS	-	Ground terminal
95	NC	-	Not used
96	VREF	I	Reference voltage (+3.3V) input terminal
97	AVCC	-	Power supply terminal (+3.3V)
98 to 100	NC	-	Not used

## SECTION 7 EXPLODED VIEWS

**Note:**

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked “\*” are not stocked since they are seldom required for routine service.  
Some delay should be anticipated when ordering these items.

- The mechanical parts with no reference number in the exploded views are not supplied.

- Color Indication of Appearance Parts Example:

KNOB, BALANCE (WHITE) . . . (RED)

↑  
Parts Color Cabinet's Color

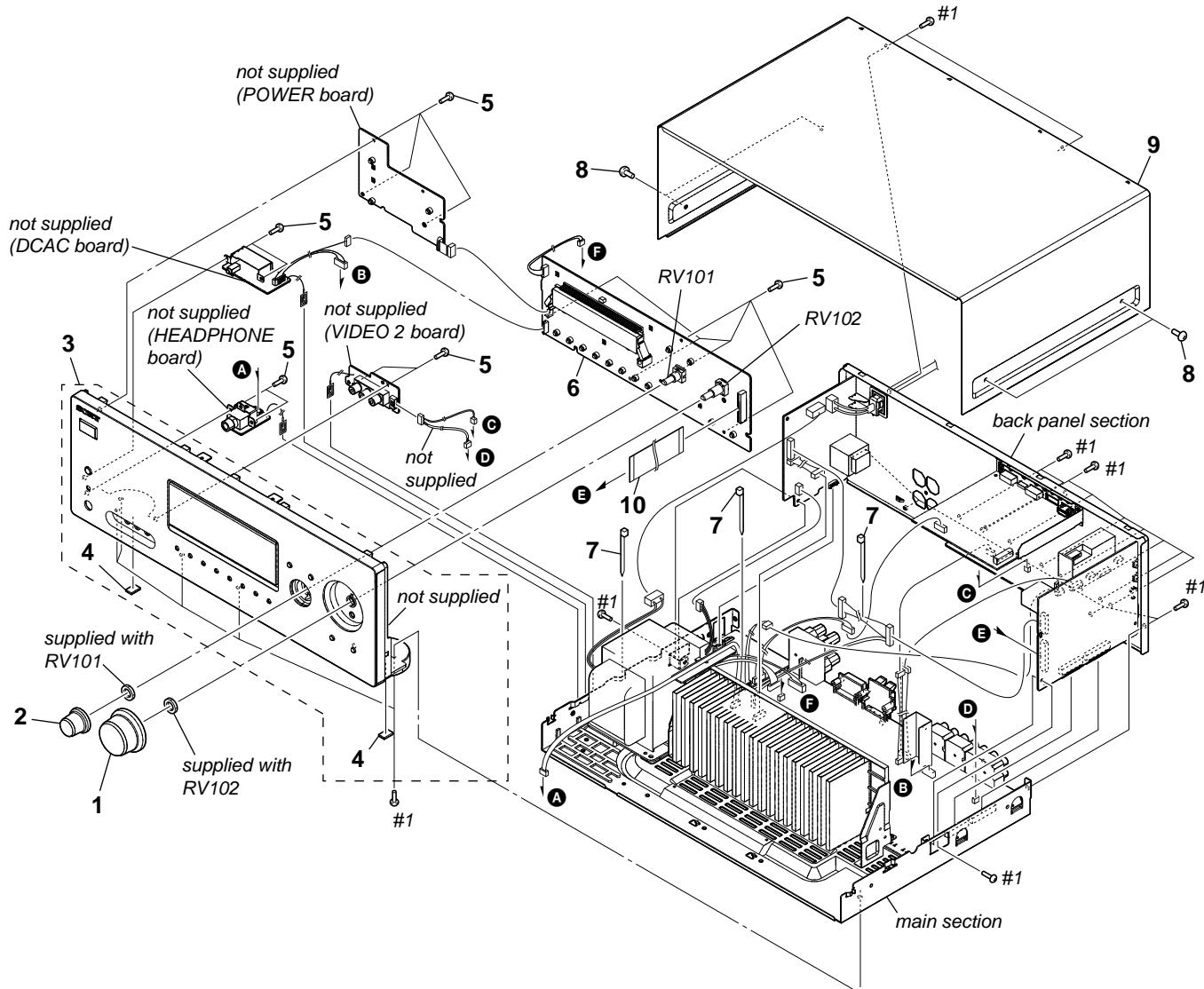
The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.

Replace only with part number specified.

The components identified by mark  $\square$  contain confidential information.

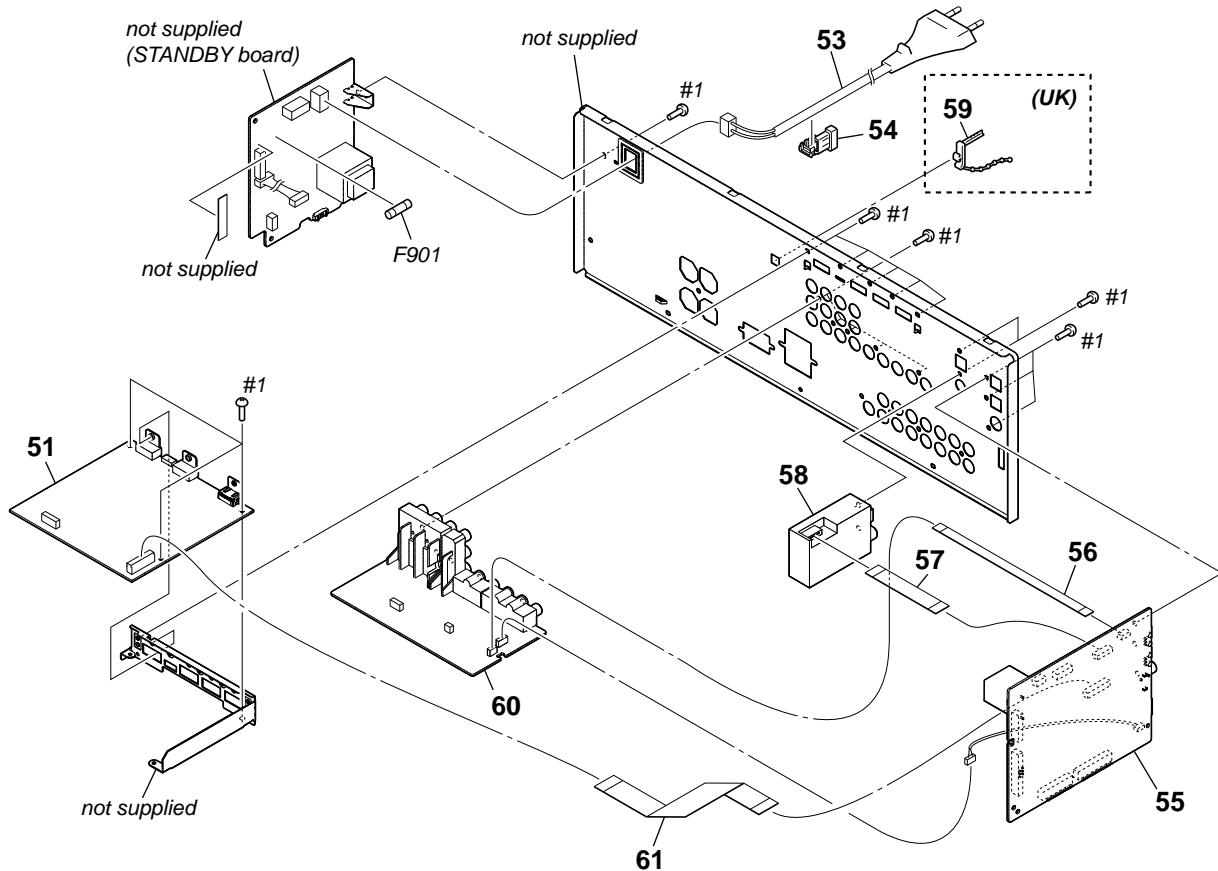
Strictly follow the instructions whenever the components are repaired and/or replaced.

### 7-1. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	2-661-142-01	VOLUME KNOB		8	2-580-630-01	SCREW, +BVST 4X8	
2	X-2190-020-1	KNOB MENU ASSY		9	3-285-693-11	CASE	
3	X-2187-664-1	FRONT PANEL ASSY		10	1-828-994-11	WIRE (FLAT TYPE) (17 CORE)	
4	4-977-358-01	CUSHION		RV101	1-418-817-31	ENCODER, ROTARY (INPUT SELECTOR)	
5	3-087-053-01	+BVTP2.6 (3CR)		RV102	1-418-725-41	ENCODER, ROTARY (12 TYPE) (MASTER VOLUME)	
6	A-1433-583-A	DISPLAY BOARD, COMPLETE		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
7	3-701-748-00	CLAMP					

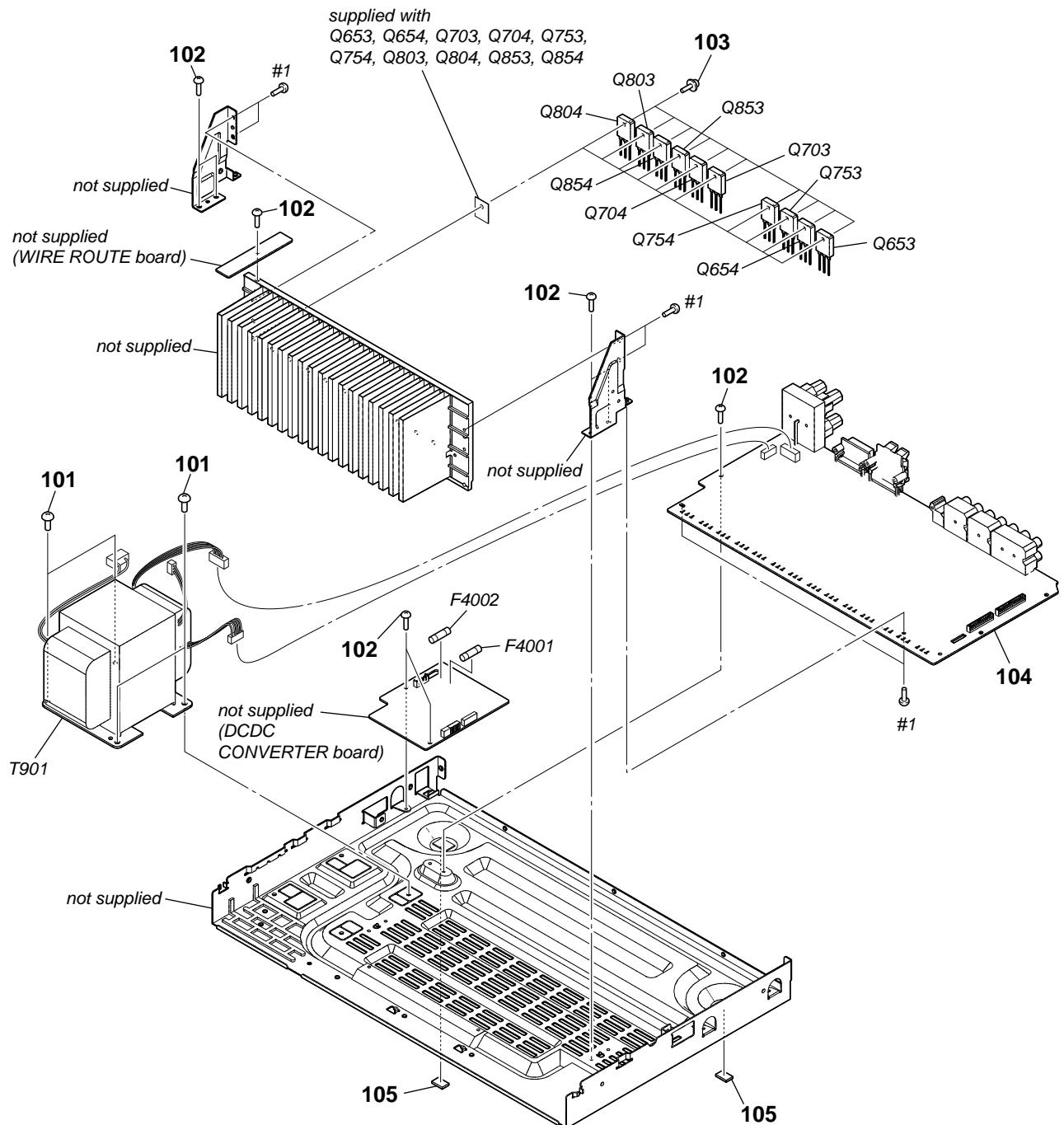
## 7-2. BACK PANEL SECTION



**Note:** If wire (flat type) is replaced, install it after bending it in the same form as that before replacement.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	A-1438-372-A	HDMI BOARD, COMPLETE (for SERVICE)		58	1-693-737-21	TUNER (FM/AM)	
△ 53	1-777-071-83	CORD, POWER		59	4-956-370-12	BAND, PLUG FIXED (UK)	
54	4-966-267-12	BUSHING (FBS001), CORD		60	A-1433-570-A	VIDEO BOARD, COMPLETE	
55	A-1433-592-A	DIGITAL AB BOARD, COMPLETE		61	1-828-350-51	WIRE (FLAT TYPE) (17 CORE)	
56	1-828-299-51	WIRE (FLAT TYPE) (7 CORE)		△ F901	1-532-464-33	FUSE (T2.5AL/250V)	
57	1-828-961-51	WIRE (FLAT TYPE) (11 CORE)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

## 7-3. MAIN SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	4-249-675-01	+BV SUMITITE S 4X6 ROUND		Q704	6-702-391-01	TRANSISITOR MP1620-OPY-MK	
102	3-077-331-21	+BV3 (3-CR)		Q753	6-702-390-01	TRANSISITOR MN2488-OPY-MK	
103	3-905-609-01	SCREW (TRANSISTOR)		Q754	6-702-391-01	TRANSISITOR MP1620-OPY-MK	
104	A-1433-568-A	MAIN BOARD, COMPLETE		Q803	6-702-390-01	TRANSISITOR MN2488-OPY-MK	
105	4-977-358-01	CUSHION		Q804	6-702-391-01	TRANSISITOR MP1620-OPY-MK	
△ F4001	1-532-465-33	FUSE (T3.15AL/250V)		Q853	6-702-390-01	TRANSISITOR MN2488-OPY-MK	
△ F4002	1-532-465-33	FUSE (T3.15AL/250V)		Q854	6-702-391-01	TRANSISITOR MP1620-OPY-MK	
Q653	6-702-390-01	TRANSISITOR MN2488-OPY-MK		△ T901	1-443-525-11	POWER TRANSFORMER	
Q654	6-702-391-01	TRANSISITOR MP1620-OPY-MK		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
Q703	6-702-390-01	TRANSISITOR MN2488-OPY-MK					

## SECTION 8

### ELECTRICAL PARTS LIST

**Note:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
  - -XX and -X mean standardized parts, so they may have some difference from the original one.
  - Items marked “\*” are not stocked since they are seldom required for routine service.
- Some delay should be anticipated when ordering these items.

**CAPACITORS**

uF:  $\mu$ F  
COILS  
uH:  $\mu$ H

**RESISTORS**

All resistors are in ohms.  
METAL: Metal-film resistor.

METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable

**SEMICONDUCTORS**

In each case, u:  $\mu$ , for example:  
uA... :  $\mu$ A..., uPA... ,  $\mu$ PA... ,  
uPB... :  $\mu$ PB..., uPC... ,  $\mu$ PC... ,  
uPD... :  $\mu$ PD... .

When indicating parts by reference number, please include the board name.

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.

Replace only with part number specified.

The components identified by mark  $\square$  contain confidential information.

Strictly follow the instructions whenever the components are repaired and/or replaced.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
DCAC BOARD							
*****							
< CAPACITOR >							
C2001	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	LEAD (WITH CONNECTOR)	
C2002	1-126-160-11	ELECT	1uF	20%	50V	*****	
C2003	1-100-436-91	CERAMIC CHIP	0.033uF	10%	25V	DCDC CONVERTER BOARD	
C2005	1-162-921-11	CERAMIC CHIP	33PF	5%	50V	*****	
C2006	1-126-160-11	ELECT	1uF	20%	50V	SCREW +BVTP 3X8 TYPE2 IT-3	
C2008	1-162-924-11	CERAMIC CHIP	56PF	5%	50V	< CAPACITOR >	
C2010	1-100-436-91	CERAMIC CHIP	0.033uF	10%	25V	C4002	1-128-549-11
C2011	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	C4003	1-128-959-21
C2012	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	C4004	1-100-566-91
C2013	1-126-160-11	ELECT	1uF	20%	50V	C4005	1-128-950-21
C2014	1-124-465-00	ELECT	0.47uF	20%	50V	C4006	1-125-891-11
C2018	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V	C4007	1-125-891-11
C2205	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V	C4009	1-125-891-11
	< DIODE >					C4011	1-125-891-11
D2013	6-501-817-01	DIODE	MA2J1110GLSO			C4012	1-125-891-11
D2014	6-501-817-01	DIODE	MA2J1110GLSO			C4100	1-128-959-21
	< IC >					C4102	1-100-566-91
	< CONNECTOR >					C4103	1-128-950-21
IC2000	8-759-710-97	IC	NJM4565M-D			CN4001	1-778-226-21
	< JACK >						
J2000	1-820-056-21	SMALL TYPE JACK (3.5MM) (AUTO CAL MIC)				< DIODE >	
	< RESISTOR >					△ D4001	8-719-081-52
R2000	1-216-821-11	METAL CHIP	1K	5%	1/10W	△ D4803	6-502-218-01
R2001	1-216-833-11	METAL CHIP	10K	5%	1/10W	D4804	6-501-361-01
R2003	1-216-833-11	METAL CHIP	10K	5%	1/10W		
R2005	1-216-857-11	METAL CHIP	1M	5%	1/10W	< FUSE HOLDER >	
R2006	1-216-821-11	METAL CHIP	1K	5%	1/10W	FH4001	1-533-233-11
R2007	1-216-833-11	METAL CHIP	10K	5%	1/10W	FH4002	1-533-233-11
R2008	1-216-854-11	METAL CHIP	560K	5%	1/10W	FH4003	1-533-233-11
R2010	1-216-833-11	METAL CHIP	10K	5%	1/10W	FH4004	1-533-233-11
R2015	1-216-839-11	METAL CHIP	33K	5%	1/10W		
R2016	1-216-835-11	METAL CHIP	15K	5%	1/10W	△ IC4001	8-759-474-09
R2017	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	△ IC4100	8-759-659-28
R2018	1-216-822-11	METAL CHIP	1.2K	5%	1/10W		
R2019	1-216-825-11	METAL CHIP	2.2K	5%	1/10W		
	< COIL >					L4000	1-456-545-11
						L4001	1-456-545-11
						L4100	1-456-545-11





Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
CNS510	1-784-778-11	CONNECTOR, FFC 17P		IC1301	8-759-825-15	IC LC89056W-E	
CNS512	1-820-116-41	CONNECTOR, FFC/FPC 17P		IC1302	8-759-595-15	IC TC74ACT153F (EL)	
		< DIODE >		IC1303	8-759-096-87	IC TC7WU04FU (TE12R)	
D1001	8-719-053-18	DIODE 1SR154-400TE-25		IC1351	6-600-466-01	IC TORX147L (SONY)	(DIGITAL OPTICAL SAT IN)
D1003	8-719-049-09	DIODE 1SS367-T3SONY		IC1352	6-600-466-01	IC TORX147L (SONY) (TV OPTICAL IN)	
D1004	8-719-049-09	DIODE 1SS367-T3SONY		IC1401	6-710-554-01	IC PCM1808PWR	
D1106	8-719-060-48	DIODE RB751V-40TE-17		IC1404	8-759-710-97	IC NJM4565M-D	
D1107	6-501-817-01	DIODE MA2J1110GLS0		IC1405	8-759-710-97	IC NJM4565M-D	
D1108	6-501-817-01	DIODE MA2J1110GLS0		IC1406	8-759-710-97	IC NJM4565M-D	
D1111	6-501-817-01	DIODE MA2J1110GLS0		IC1452	6-711-875-01	IC WM8766GEDS/R	
D1112	6-501-817-01	DIODE MA2J1110GLS0		△ IC1902	8-759-231-56	IC TA7809S	
D1301	6-501-817-01	DIODE MA2J1110GLS0		△ IC1904	6-705-463-01	IC BA33BC0T	
D1501	8-719-049-09	DIODE 1SS367-T3SONY				< JACK >	
D1502	8-719-049-09	DIODE 1SS367-T3SONY		J1301	1-793-446-21	JACK, PIN 1P (DIGITAL COAXIAL DVD IN)	
D1503	8-719-049-09	DIODE 1SS367-T3SONY		J1302	1-817-615-21	CONNECTOR, SQUARE TYPE (RECE) (DMPORT)	
D1504	8-719-049-09	DIODE 1SS367-T3SONY				< JUMPER RESISTOR >	
		< FERRITE BEAD >					
FB1053	1-469-139-21	FERRITE, EMI (SMD) (2012)		JR1003	1-211-950-11	SHORT CHIP	0
FB1101	1-400-862-11	BEAD, FERRITE		JR1005	1-216-864-11	SHORT CHIP	0
FB1102	1-400-862-11	BEAD, FERRITE				< TRANSISTOR >	
FB1103	1-400-862-11	BEAD, FERRITE		Q1103	8-729-027-43	TRANSISTOR	DTC114EKA-T146
FB1104	1-469-670-21	FERRITE, EMI (SMD) (2012)		Q1104	8-729-620-13	TRANSISTOR	2SC4154TP-1EF
FB1105	1-400-862-11	BEAD, FERRITE		Q1105	8-729-620-13	TRANSISTOR	2SC4154TP-1EF
FB1106	1-400-862-11	BEAD, FERRITE		Q1106	6-551-699-01	TRANSISTOR	ISA1602AM1TP-1EF
FB1112	1-469-670-21	FERRITE, EMI (SMD) (2012)				< RESISTOR >	
FB1113	1-400-862-11	BEAD, FERRITE		R1010	1-216-809-11	METAL CHIP	100
FB1117	1-400-862-11	BEAD, FERRITE		R1011	1-216-845-11	METAL CHIP	100K
FB1302	1-400-862-11	BEAD, FERRITE		R1012	1-216-809-11	METAL CHIP	100
FB1305	1-469-139-21	FERRITE, EMI (SMD) (2012)		R1013	1-216-809-11	METAL CHIP	100
FB1306	1-469-139-21	FERRITE, EMI (SMD) (2012)		R1014	1-216-809-11	METAL CHIP	100
FB1307	1-469-139-21	FERRITE, EMI (SMD) (2012)		R1015	1-216-809-11	METAL CHIP	100
FB1308	1-400-862-11	BEAD, FERRITE		R1016	1-216-809-11	METAL CHIP	100
FB1309	1-400-862-11	BEAD, FERRITE		R1017	1-216-809-11	METAL CHIP	100
FB1310	1-400-862-11	BEAD, FERRITE		R1018	1-216-805-11	METAL CHIP	47
FB1311	1-400-862-11	BEAD, FERRITE		R1019	1-216-864-11	SHORT CHIP	0
FB1350	1-400-862-11	BEAD, FERRITE		R1021	1-216-809-11	METAL CHIP	100
FB1403	1-400-862-11	BEAD, FERRITE		R1022	1-216-809-11	METAL CHIP	100
FB1405	1-400-862-11	BEAD, FERRITE		R1023	1-216-813-11	METAL CHIP	220
FB1452	1-400-862-11	BEAD, FERRITE		R1025	1-216-809-11	METAL CHIP	100
FB1453	1-400-862-11	BEAD, FERRITE		R1028	1-216-801-11	METAL CHIP	22
FB1503	1-469-139-21	FERRITE, EMI (SMD) (2012)		R1029	1-216-801-11	METAL CHIP	22
		< IC >		R1030	1-216-801-11	METAL CHIP	22
△ IC1001	8-759-231-53	IC TA7805S		R1031	1-216-801-11	METAL CHIP	22
△ IC1002	6-710-766-01	IC BD12KA5FP-E2		R1033	1-216-833-11	METAL CHIP	10K
IC1005	8-759-277-63	IC TC7W14FU (TE12R)		R1034	1-216-821-11	METAL CHIP	1K
IC1006	8-759-058-62	IC TC7S08FU (TE85R)		R1035	1-216-833-11	METAL CHIP	10K
IC1007	6-702-913-01	IC S-80929CNMC-G8ZT2G		R1036	1-216-864-11	SHORT CHIP	0
IC1008	8-759-524-10	IC TC74VHC157FT (EL)		R1037	1-216-833-11	METAL CHIP	10K
IC1009	6-709-759-01	IC ADSST-AVR-1115		R1038	1-216-801-11	METAL CHIP	22
IC1010	6-807-917-01	IC MB91353APMT-G-117E1		R1039	1-216-833-11	METAL CHIP	10K
IC1012	6-707-745-01	IC SI-3050KM-TL		R1040	1-216-801-11	METAL CHIP	22
△ IC1013	6-707-744-01	IC SI-3033KM-TL		R1041	1-216-809-11	METAL CHIP	100
IC1014	8-759-447-77	IC TC7WH74FU (TE12R)		R1042	1-216-809-11	METAL CHIP	100
IC1016	8-759-524-48	IC TC74VHC393FT (EL)		R1043	1-216-801-11	METAL CHIP	22
IC1017	8-759-680-48	IC TC7WH157FK (TE85R)		R1044	1-216-833-11	METAL CHIP	10K
△ IC1031	6-705-469-01	IC BA50BC0FP-E2		R1046	1-216-801-11	METAL CHIP	22
	(Not supplied)	IC S-24CS16A0I-J8T1G					5% 1/10W

Note: IC1131 cannot exchange with single. When IC1131 is damaged, exchange the entire mounted board.









# STR-KG800

**HDMI** **HEADPHONE** **MAIN**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R3589	1-216-864-11	SHORT CHIP	0	R3779	1-216-805-11	METAL CHIP	47 5% 1/10W
R3590	1-216-864-11	SHORT CHIP	0	R3780	1-216-805-11	METAL CHIP	47 5% 1/10W
R3591	1-216-864-11	SHORT CHIP	0	R3784	1-216-864-11	SHORT CHIP	0
R3592	1-216-864-11	SHORT CHIP	0	R3788	1-216-864-11	SHORT CHIP	0
R3593	1-216-833-11	METAL CHIP	10K 5% 1/10W	R3790	1-216-833-11	METAL CHIP	10K 5% 1/10W
R3594	1-216-833-11	METAL CHIP	10K 5% 1/10W	R3791	1-216-833-11	METAL CHIP	10K 5% 1/10W
R3595	1-216-833-11	METAL CHIP	10K 5% 1/10W	R3793	1-216-833-11	METAL CHIP	10K 5% 1/10W
R3597	1-216-864-11	SHORT CHIP	0	R3796	1-216-833-11	METAL CHIP	10K 5% 1/10W
R3598	1-216-864-11	SHORT CHIP	0	R3797	1-216-833-11	METAL CHIP	10K 5% 1/10W
R3599	1-216-824-11	METAL CHIP	1.8K 5% 1/10W	R3798	1-216-864-11	SHORT CHIP	0
R3600	1-216-824-11	METAL CHIP	1.8K 5% 1/10W	R3799	1-216-805-11	METAL CHIP	47 5% 1/10W
R3601	1-216-833-11	METAL CHIP	10K 5% 1/10W				< COMPOSITION CIRCUIT BLOCK >
R3602	1-216-833-11	METAL CHIP	10K 5% 1/10W				
R3603	1-216-833-11	METAL CHIP	10K 5% 1/10W				
R3604	1-216-833-11	METAL CHIP	10K 5% 1/10W	* RB3501	1-234-723-11	RES, NETWORK 75 (1005X4)	
R3605	1-216-833-11	METAL CHIP	10K 5% 1/10W	* RB3502	1-234-723-11	RES, NETWORK 75 (1005X4)	
R3608	1-216-805-11	METAL CHIP	47 5% 1/10W	* RB3503	1-234-723-11	RES, NETWORK 75 (1005X4)	
R3609	1-216-805-11	METAL CHIP	47 5% 1/10W	* RB3504	1-234-723-11	RES, NETWORK 75 (1005X4)	
R3610	1-216-805-11	METAL CHIP	47 5% 1/10W	* RB3505	1-234-723-11	RES, NETWORK 75 (1005X4)	
R3611	1-216-805-11	METAL CHIP	47 5% 1/10W	* RB3506	1-234-723-11	RES, NETWORK 75 (1005X4)	
R3612	1-216-805-11	METAL CHIP	47 5% 1/10W				< VIBRATOR >
R3613	1-216-805-11	METAL CHIP	47 5% 1/10W	X3501	1-813-570-21	VIBRATOR, CRYSTAL (28.322MHz)	
R3614	1-216-805-11	METAL CHIP	47 5% 1/10W	X3502	1-795-244-11	VIBRATOR, CERAMIC (10MHz)	
R3615	1-216-805-11	METAL CHIP	47 5% 1/10W				*****
R3616	1-216-805-11	METAL CHIP	47 5% 1/10W				
R3621	1-216-805-11	METAL CHIP	47 5% 1/10W				HEADPHONE BOARD
R3622	1-216-805-11	METAL CHIP	47 5% 1/10W				*****
R3623	1-216-805-11	METAL CHIP	47 5% 1/10W				< CAPACITOR >
R3624	1-216-801-11	METAL CHIP	22 5% 1/10W				
R3625	1-216-801-11	METAL CHIP	22 5% 1/10W	C791	1-100-566-91	CERAMIC CHIP 0.1uF	10% 25V
R3633	1-216-864-11	SHORT CHIP	0				< CONNECTOR >
R3634	1-216-833-11	METAL CHIP	10K 5% 1/10W				
R3639	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	* CNP790	1-564-507-11	PLUG, CONNECTOR 4P	
R3642	1-216-841-11	METAL CHIP	47K 5% 1/10W				< JACK >
R3645	1-216-809-11	METAL CHIP	100 5% 1/10W				
R3652	1-216-824-11	METAL CHIP	1.8K 5% 1/10W	J790	1-815-314-21	JACK (PHONES)	
R3653	1-216-824-11	METAL CHIP	1.8K 5% 1/10W				< LEAD >
R3654	1-216-829-11	METAL CHIP	4.7K 5% 1/10W				
R3655	1-216-829-11	METAL CHIP	4.7K 5% 1/10W				
R3660	1-216-864-11	SHORT CHIP	0	* TP790	1-690-880-31	LEAD (WITH CONNECTOR)	
R3661	1-216-821-11	METAL CHIP	1K 5% 1/10W				*****
R3662	1-216-821-11	METAL CHIP	1K 5% 1/10W				
R3663	1-216-821-11	METAL CHIP	1K 5% 1/10W	A-1433-568-A		MAIN BOARD, COMPLETE	
R3676	1-216-809-11	METAL CHIP	100 5% 1/10W				*****
R3700	1-216-833-11	METAL CHIP	10K 5% 1/10W				
R3711	1-216-829-11	METAL CHIP	4.7K 5% 1/10W				7-685-646-79 SCREW +BVTP 3X8 TYPE2 IT-3
R3712	1-216-837-11	METAL CHIP	22K 5% 1/10W				< CAPACITOR >
R3713	1-216-837-11	METAL CHIP	22K 5% 1/10W				
R3714	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	C320	1-126-923-91	ELECT 220uF	20% 10V
R3715	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	C325	1-126-964-11	ELECT 10uF	20% 50V
R3716	1-216-837-11	METAL CHIP	22K 5% 1/10W	C335	1-126-947-11	ELECT 47uF	20% 35V
R3741	1-216-817-11	METAL CHIP	470 5% 1/10W	C350	1-137-980-91	CERAMIC CHIP 0.47uF	10% 50V
R3744	1-216-805-11	METAL CHIP	47 5% 1/10W	C351	1-126-933-11	ELECT 100uF	20% 16V
R3745	1-216-805-11	METAL CHIP	47 5% 1/10W	C352	1-137-980-91	CERAMIC CHIP 0.47uF	10% 50V
R3747	1-216-864-11	SHORT CHIP	0	C353	1-126-933-11	ELECT 100uF	20% 16V
R3748	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	C400	1-162-966-11	CERAMIC CHIP 0.0022uF	10% 50V
R3749	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	C403	1-162-966-11	CERAMIC CHIP 0.0022uF	10% 50V
R3750	1-216-805-11	METAL CHIP	47 5% 1/10W	C405	1-162-966-11	CERAMIC CHIP 0.0022uF	10% 50V
R3775	1-216-797-11	METAL CHIP	10 5% 1/10W	C408	1-126-963-11	ELECT 4.7uF	20% 50V
R3776	1-216-797-11	METAL CHIP	10 5% 1/10W	C409	1-126-963-11	ELECT 4.7uF	20% 50V
				C430	1-162-960-11	CERAMIC CHIP 220PF	10% 50V











# STR-KG800

**VIDEO**    **VIDEO2**

Ref. No.	Part No.	Description	Remark		Ref. No.	Part No.	Description	Remark					
< JACK >													
J210	1-815-043-11	JACK, PIN 2P (MONITOR VIDEO OUT, VIDEO 1 DVD IN)			△ F4001	1-532-465-33	FUSE (T3.15AL/250V)						
J211	1-794-978-11	JACK, PIN 3P (VIDEO 1 VIDEO OUT, DVD VIDEO IN, SAT VIDEO IN)			△ F4002	1-532-465-33	FUSE (T3.15AL/250V)						
J220	1-816-592-11	JACK, PIN 9P (COMPONENT VIDEO DVD IN/ VIDEO 1 IN/MONITER OUT)			Q653	6-702-390-01	TRANSISITOR MN2488-OPY-MK						
J221	1-821-278-12	JACK 3P (COMPONENT VIDEO SAT IN)			Q654	6-702-391-01	TRANSISITOR MP1620-OPY-MK						
< RESISTOR >													
R211	1-211-990-11	METAL CHIP	75	0.5%	1/10W	Q703	6-702-390-01	TRANSISITOR MN2488-OPY-MK					
R212	1-211-990-11	METAL CHIP	75	0.5%	1/10W	Q704	6-702-391-01	TRANSISITOR MP1620-OPY-MK					
R213	1-211-990-11	METAL CHIP	75	0.5%	1/10W	Q753	6-702-390-01	TRANSISITOR MN2488-OPY-MK					
R214	1-211-990-11	METAL CHIP	75	0.5%	1/10W	Q754	6-702-391-01	TRANSISITOR MP1620-OPY-MK					
R215	1-211-990-11	METAL CHIP	75	0.5%	1/10W	Q803	6-702-390-01	TRANSISITOR MN2488-OPY-MK					
R221	1-211-990-11	METAL CHIP	75	0.5%	1/10W	Q804	6-702-391-01	TRANSISITOR MP1620-OPY-MK					
R222	1-211-990-11	METAL CHIP	75	0.5%	1/10W	Q853	6-702-390-01	TRANSISITOR MN2488-OPY-MK					
R223	1-211-990-11	METAL CHIP	75	0.5%	1/10W	Q854	6-702-391-01	TRANSISITOR MP1620-OPY-MK					
R224	1-211-990-11	METAL CHIP	75	0.5%	1/10W	△ T901	1-443-525-11	POWER TRANSFORMER					
R225	1-211-990-11	METAL CHIP	75	0.5%	1/10W	*****							
R226	1-211-990-11	METAL CHIP	75	0.5%	1/10W	ACCESSORY							
R227	1-211-990-11	METAL CHIP	75	0.5%	1/10W	*****							
R228	1-211-990-11	METAL CHIP	75	0.5%	1/10W	*****							
R229	1-211-990-11	METAL CHIP	75	0.5%	1/10W	*****							
R240	1-211-990-11	METAL CHIP	75	0.5%	1/10W	△	1-770-019-61	ADAPTOR, CONVERSION PLUG (UK)					
*****													
VIDEO 2 BOARD													
*****													
< CAPACITOR >													
C293	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V								
C294	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V								
C298	1-162-960-11	CERAMIC CHIP	220PF	10%	50V								
C299	1-162-960-11	CERAMIC CHIP	220PF	10%	50V								
< CONNECTOR >													
CNP201	1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P											
< JACK >													
J298	1-819-187-11	PIN JACK 3P (VIDEO 2 IN/PORTABLE AV IN VIDEO/AUDIO)											
< LEAD >													
* TP202	1-690-880-31	LEAD (WITH CONNECTOR)											
*****													
MISCELLANEOUS													
*****													
10	1-828-994-11	WIRE (FLAT TYPE) (17 CORE)											
△ 53	1-777-071-83	CORD, POWER											
56	1-828-299-51	WIRE (FLAT TYPE) (7 CORE)											
57	1-828-961-51	WIRE (FLAT TYPE) (11 CORE)											
58	1-693-737-21	TUNER (FM/AM)											
61	1-828-350-51	WIRE (FLAT TYPE) (17 CORE)											
△ F901	1-532-464-33	FUSE (T2.5AL/250V)											

**Note:** If wire (flat type) is replaced, install it after bending it in the same form as that before replacement.

**MEMO**

