

CX-JD5

SERVICE MANUAL

Ver. 1.2 2005.05

AEP Model
E Model
Australian Model



- CX-JD5 is the amplifier, DVD player, tape deck and tuner section in JAX-D5.

This system incorporates Dolby* Digital, Dolby Pro Logic (II) adaptive matrix surround decoder, and the DTS** Digital Surround System.

* Manufactured under license from Dolby Laboratories.
“Dolby”, “Pro Logic” and the double-D symbol are trademarks of Dolby Laboratories.

** Manufactured under license from Digital Theater Systems, Inc. “DTS” and “DTS Digital Surround” are registered trademarks of Digital Theater Systems, Inc.

US and foreign patents licensed from Dolby Laboratories.

DVD Section	Model Name Using Similar Mechanism	NEW
	DVD Mechanism Type	CDM74-DVBU23
	Optical Traverse Unit Name	DBU-1
Tape deck Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	CWM43FR16/CWM43FR26

SPECIFICATIONS

Amplifier section

The following measured at AC 120, 127, 220, 240 V, 50/60 Hz

Rated Power Output at Stereo mode

Continuous RMS power output (reference)

Front speaker: 90 + 90 watts
(6 ohms at 1 kHz, 10% THD)

Center speaker: 30 watts (8 ohms at 1 kHz, 10% THD)

Surround speaker: 30 watts
(8 ohms at 1 kHz, 10% THD)

Inputs

MD/VIDEO (AUDIO) IN (phono jacks):
voltage 450/250 mV,
impedance 47 kilohms

MIC (phone jack):
sensitivity 1 mV,
impedance 10 kilohms

Outputs

MD/VIDEO (AUDIO) OUT (phono jacks):
voltage 250 mV,
impedance 1 kilohm

VIDEO OUT (phono jack):

max. output level
1 V_{p-p}, unbalanced, Sync
negative, load impedance
75 ohms

S-VIDEO OUT (4-pin/mini-DIN jack):

Y: 1 V_{p-p}, unbalanced,
Sync negative,
C: 0.286 V_{p-p}, load
impedance 75 ohms

COMPONENT VIDEO OUT:

Y: 1 V_{p-p}, 75 ohms
Pb, Pr: 0.7 V_{p-p}, 75 ohms

PHONES (stereo mini jack):

accepts headphones of
8 ohms or more

Front speaker: Use only the supplied
speaker SX-JD5

Surround speaker: Use only the supplied
speaker SX-JD5R

Center speaker: Use only the supplied
speaker SX-JD5C

SUB WOOFER OUT: voltage 1 V,
impedance 1 kilohm

Disc player section

System Compact disc and digital
audio and video system

Laser Semiconductor laser
(DVD: $\lambda=657$ nm,
CD: $\lambda=793$ nm)
Emission duration:
continuous

Frequency response DVD (PCM 48 kHz):
2 Hz – 22 kHz (± 1 dB)
CD: 2 Hz – 20 kHz (± 1 dB)

Video color system format
NTSC, PAL

Tape deck section

Recording system 4-track 2-channel stereo

Frequency response 40 – 13,000 Hz (± 3 dB),
using Sony TYPE I
cassette

– Continued on next page –

DVD DECK RECEIVER

9-961-039-03

2005E05-1

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Sony Corporation

Personal Audio Group

Published by Sony Engineering Corporation



Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range 87.5 – 108.0 MHz

Antenna FM lead antenna

Antenna terminals 75 ohm unbalanced

Intermediate frequency 10.7 MHz

AM tuner section

Tuning range

Latin American models: 530 – 1,710 kHz
(with the interval set at 10 kHz)

531 – 1,710 kHz
(with the interval set at 9 kHz)

Saudi Arabian model: 531 – 1,602 kHz (with the interval set at 9 kHz)

Other models: 531 – 1,602 kHz (with the interval set at 9 kHz)
530 – 1,710 kHz (with the interval set at 10 kHz)

Antenna AM loop antenna

Antenna terminals External antenna terminal

Intermediate frequency 450 kHz

General

Power requirements

European model: 230 V AC, 50/60 Hz

Australian model: 230 – 240 V AC, 50/60 Hz

Saudi Arabian model: 120 – 127 V, 220 V or

230 – 240V AC,
50/60 Hz
Adjustable with voltage selector

Other models: 120 V, 220 V or 230 –

240 V AC, 50/60 Hz
Adjustable with voltage selector

Power consumption 255 watts

0.4 watts (in Power Saving Mode, European Model Only)

Dimensions (w/h/d) Approx. 280 × 330 × 405 mm

Mass Approx. 11.75 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.

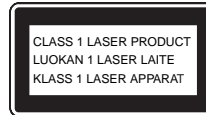
Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

The following caution label is located inside the unit.



This appliance is classified as a CLASS 1 LASER product.

This label is located on the rear exterior.

The following caution label is located inside the apparatus.



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.




SAFETY-RELATED COMPONENT WARNING!!



COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle 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.

Playable discs

You can play back the following discs on this system. Other discs cannot be played back.

List of playable discs


Format of discs	Disc logo	Contents
DVD VIDEOS		Audio + Video
VIDEO CDs		Audio + Video
Audio CDs		Audio
CD-R/CD-RW (audio data)		Audio

Format of discs	Disc logo	Contents
CD-R/CD-RW (MP3 files)		Audio
CD-R/CD-RW (JPEG files)		Video

The "DVD VIDEO" logo is a trademark.

Region code of DVDs you can play on this system

Your system has a region code printed on the back of the unit and will only play DVDs labeled with identical region code.

DVDs labeled  will also be played on this system.

If you try to play any other DVD, the message "Playback prohibited by area limitations." will appear on the TV screen. Depending on the DVD, no region code indication may be labeled even though playing the DVD is prohibited by area restrictions.



Discs that this system cannot play

- CD-ROMs (except for extension ".MP3," ".JPG," or ".JPEG")
- CD-Rs/CD-RWs other than those recorded in the following formats:
 - music CD format
 - video CD format
 - MP3/JPEG format that conforms to ISO9660*¹ Level 1/Level 2, Joliet or Multi Session*²
- Data part of CD-Extras
- Super Audio CDs
- Progressive JPEG format files cannot be played on this system.

- DVD-RWs in VR mode (DVD-RWs created in VR (Video Recording) mode allow the contents to be programmed or edited.)
- DVD-ROMs
- DVD Audio discs
- A DVD with a different region code.
- Audio tracks in MP3PRO format.
- A disc that has a non-standard shape (e.g., card, heart).
- A disc with paper or stickers on it.
- A disc that has the adhesive, cellophane tape, or a sticker still left on it.

*¹ ISO9660 Format

The most common international standard for the logical format of files and folders on a CD-ROM. There are several specification levels. In Level 1, file names must be in the 8.3 format (no more than eight characters in the name, no more than three characters in the extension ".MP3" or ".JPG") and in capital letters. Folder names can be no longer than eight characters. There can be no more than eight nested folder levels. Level 2 specifications allow file names and folder names up to 31 characters long. Each folder can have up to 8 trees.

For Joliet in the expansion format (file and folder names can have up to 64 characters) make sure of the contents of the writing software, etc.

*² Multi Session

This is a recording method that enables adding of data using the Track-At-Once method. Conventional CDs begin at a CD control area called the Lead-in and end at an area called Lead-out. A Multi Session CD is a CD having multiple sessions, with each segment from Lead-in to Lead-out regarded as a single session.

CD-Extra: This format records audio (audio CD data) on the tracks in session 1 and data on the tracks in session 2.

Notes on discs

- This system can play CD-R/CD-RW discs edited by the user. However, note that playback of some discs may not be possible depending on the recording device used for recording or the disc condition.
- Discs recorded on CD-R/CD-RW drives may not be played back because of scratches, dirt, recording condition or the driver's characteristics.
- CD-R and CD-RW discs that have not been correctly finalized (processing to allow play by a normal CD player) cannot be played.
- CD-R and CD-RW discs recorded in multi-session that have not ended by "closing the session" are not supported.
- The system may be unable to play MP3/JPEG format files that do not have the extender ".MP3", ".JPG", or ".JPEG".
- Attempting to play non-MP3/JPEG format files that have the extender ".MP3", ".JPG", or ".JPEG" may result in noise or malfunction. Playback is possible up to 8 levels.
- With formats other than ISO9660 level 1 and 2, folder names or file names may not be displayed correctly.
- The following discs take a longer time to start playback.
 - a disc recorded with complicated tree structure.
 - a disc recorded in Multi Session.
 - a disc to which data can be added (non-finalized disc).
- Some CD-Rs, CD-RWs, DVD-Rs or DVD-RWs (in video mode) (DVD-RWs created in video mode have the same format as a DVD VIDEO) cannot be played on this system depending upon the recording quality or physical condition of the disc, or the characteristics of the recording device. Furthermore, the disc will not play if it has not been correctly finalized. For more information, see the operating instructions for the recording device.
- A disc recorded in packet write format cannot be played.

Note on playback operations of DVDs and VIDEO CDs

Some playback operations of DVDs and VIDEO CDs may be intentionally set by software producers. Since this system plays DVDs and VIDEO CDs according to the disc contents the software producers designed, some playback features may not be available. Also, refer to the instructions supplied with the DVDs or VIDEO CDs.

Copyrights

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

Music discs encoded with copyright protection technologies

This product is designed to playback discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

Cautions when playing a disc that is recorded in Multi Session

- This system can play Multi Session CDs when an MP3 audio track is contained in the first session. Any subsequent MP3 audio tracks recorded in later sessions can also be played back.
- This system can play Multi Session CDs when a JPEG image file is contained in the first session. Any subsequent JPEG image files recorded in later sessions can also be played back.
- If audio tracks and images in music CD format or video CD format are recorded in the first session, only the first session will be played back.

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SECTION 1 SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the "S curve check" in "CD section adjustment" and check that the S curve waveforms is output three times.

DVD TRAY LOCK MODE

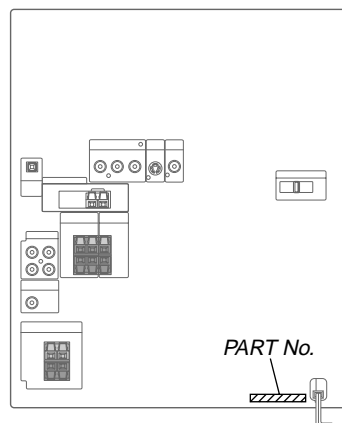
- This mode let you lock the disc trays. When this mode is activated, the disc tray will not open when **▲ OPEN/CLOSE** button or **DISC CHANGE** button is pressed. The message "LOCKED" will be displayed in the will be displayed on the fluorescent indicator tube.

Procedure:

- Press **POWER** button to turn the set ON.
- Select DVD function.
- Press **■** button and **▲ OPEN/CLOSE** button simultaneously and hold down until "LOCKED" or "UNLOCKED" displayed on the fluorescent indicator tube (around 5 seconds).

• MODEL IDENTIFICATION

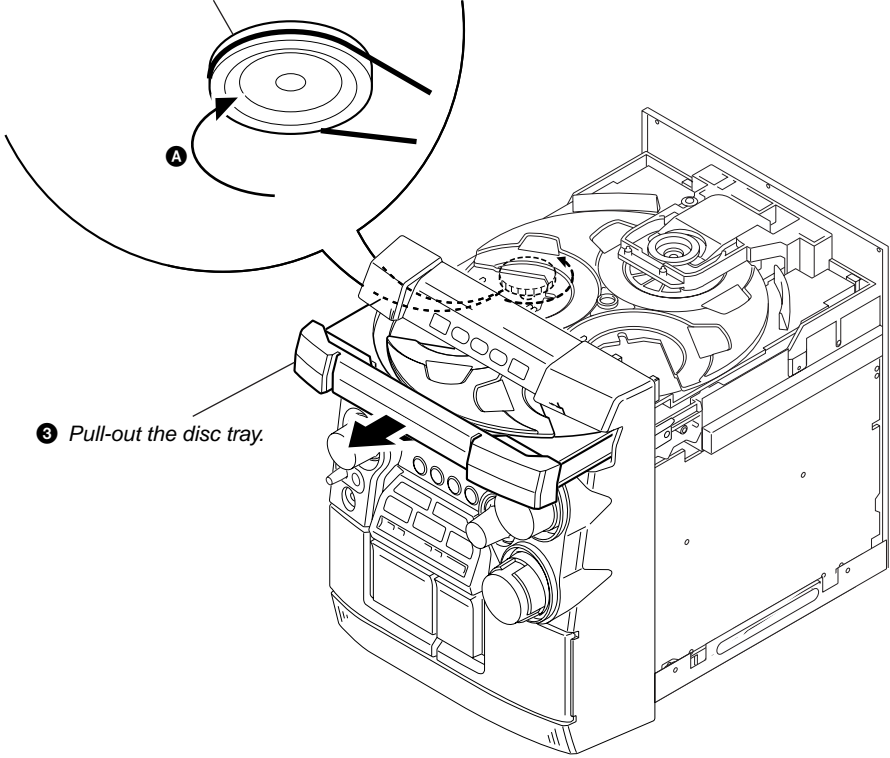
– Rear Cover –



MODEL	PART No.
Singapore and Malaysia models	4-247-797-0□
E model	4-247-797-1□
Thai model	4-247-797-5□
AEP and CIS models	4-247-797-7□
Chilean and Peruvian models	4-247-797-8□
Australian model	4-247-797-9□
Saudi Arabia model	4-247-798-4□

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF.

- ① Remove the steel cabinet case.
- ② Turn the loading gear in the direction of arrow A.



• LOCATION OF CONTROLS

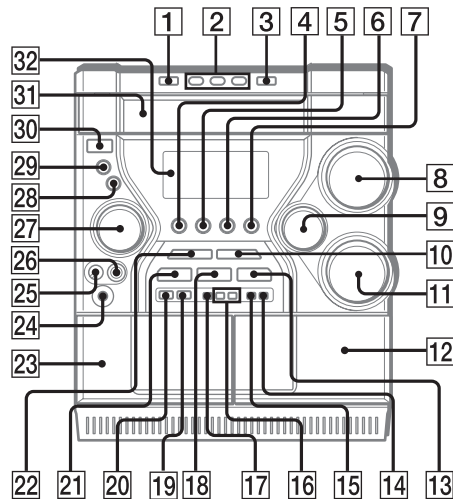
Main unit

ALPHABETICAL ORDER

- ALBUM +/- 16
- BASS 11
- CD SYNC 15
- Deck A 23
- Deck B 12
- DIR (TAPE B) ◀▶ 22
- DISC DIRECT PLAY 1/2/3 2
- DISC SKIP/EX-CHANGE 1
- Disc tray 31
- DISPLAY 17
- Display window 32
- DVD 7
- ENTER 28
- i-Bass 19
- MD (VIDEO) 6
- MIC jack 26
- MIC LEVEL 25
- MODE 29
- MULTI JOG 27
- OPEN/CLOSE ▲ 3
- PHONES jack 24
- REC PAUSE/START 14
- SOUND FIELD 20
- TAPE A/B 4
- TREBLE/MIDDLE 9
- TUNER/BAND 5
- TUNING - ◀◀/◀ 21
- TUNING + ▶▶/▶ 13
- VOLUME control 8

BUTTON DESCRIPTIONS

- I/⏻ (power) 30
- ⏸ (pause) 18
- ▲ (OPEN/CLOSE) 3
- (stop) 10
- ▶▶/▶▶| (fast forward/
TUNING +) 13
- ◀◀ DIRECTION 22
- ◀◀/◀◀ (rewind/TUNING -)
21



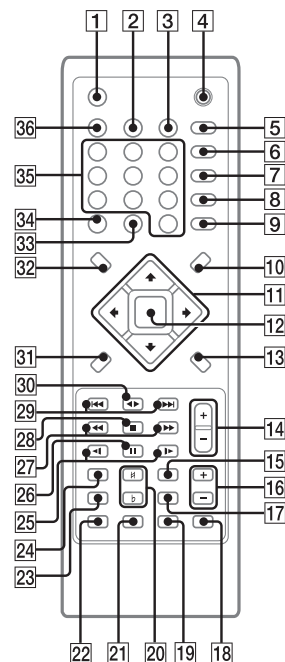
Remote control

ALPHABETICAL ORDER

- ALBUM +/- 16
- AMP MENU 15
- CLEAR 9
- CLOCK/TIMER SELECT 3
- CLOCK/TIMER SET 2
- DISPLAY 1
- D.SKIP 18
- DVD DISPLAY 13
- DVD MENU 10
- DVD SETUP 17
- DVD TOP MENU 32
- ECHO 23
- ENTER 12
- FM MODE 19
- FUNCTION*1 34
- KARAOKE 24
- KEY CONTROL #/b 20
- i-Bass 6
- Number buttons 35
- PLAY MODE 7
- PRESET -/PREV ◀◀ 29
- PRESET +/NEXT ▶▶ 29
- REPEAT 8
- ↶ RETURN 31
- SELECT ◀▶ 30
- SLOW -/+ 25
- SHIFT*2 22
- SLEEP 36
- SOUND FIELD 5
- TUNER/BAND 33
- TUNER MEMORY 21
- TUNING -/+ 27
- VOL +/- 14

BUTTON DESCRIPTIONS


- I/⏻ 4
 - (stop) 28
 - ◀◀ (SELECT) 30
 - ⏸ (pause) 26
 - ↑/↓/←/→ 11
 - ◀◀ (TUNING -) 27
 - ▶▶ (TUNING +) 27
 - ◀◀ (PRESET -/PREV) 29
 - ▶▶ (PRESET +/NEXT) 29
 - ◀ (SLOW -) 25
 - ▶ (SLOW +) 25
 - # (KEY CONTROL) 20
 - b (KEY CONTROL) 20
- *1 Switches the active function among CD, TAPE, TUNER, MD (VIDEO) and DVD.
- *2 Press and hold SHIFT and press ↓, → or ← to do the following:
 S HIFT +↓ = SUBTITLE
 S HIFT +→ = ANGLE
 S HIFT +← = AUDIO
 e.g.) Press and hold SHIFT, and press ↓ to activate the subtitle menu.



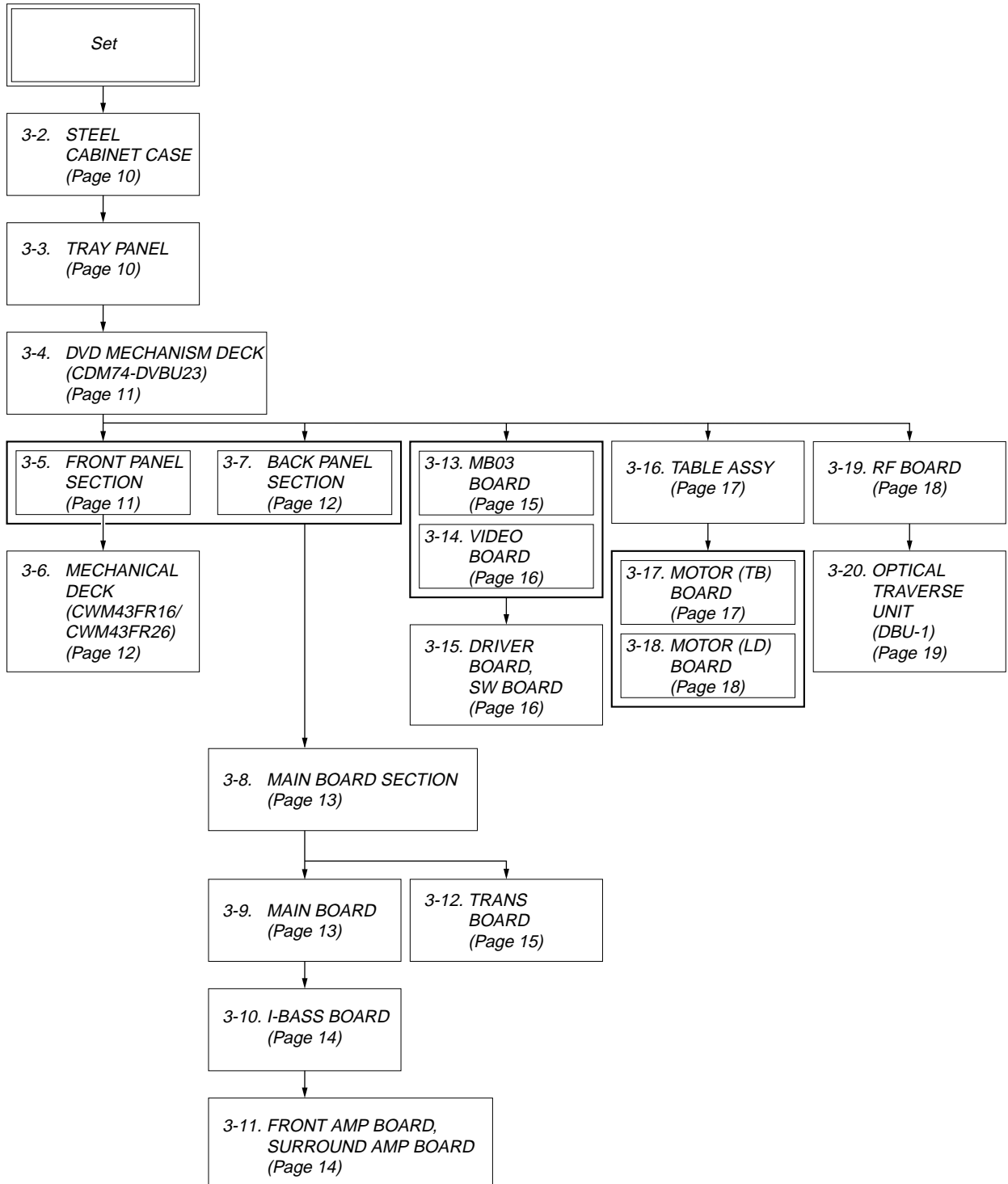
SECTION 3 DISASSEMBLY

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

3-1. DISASSEMBLY FLOW

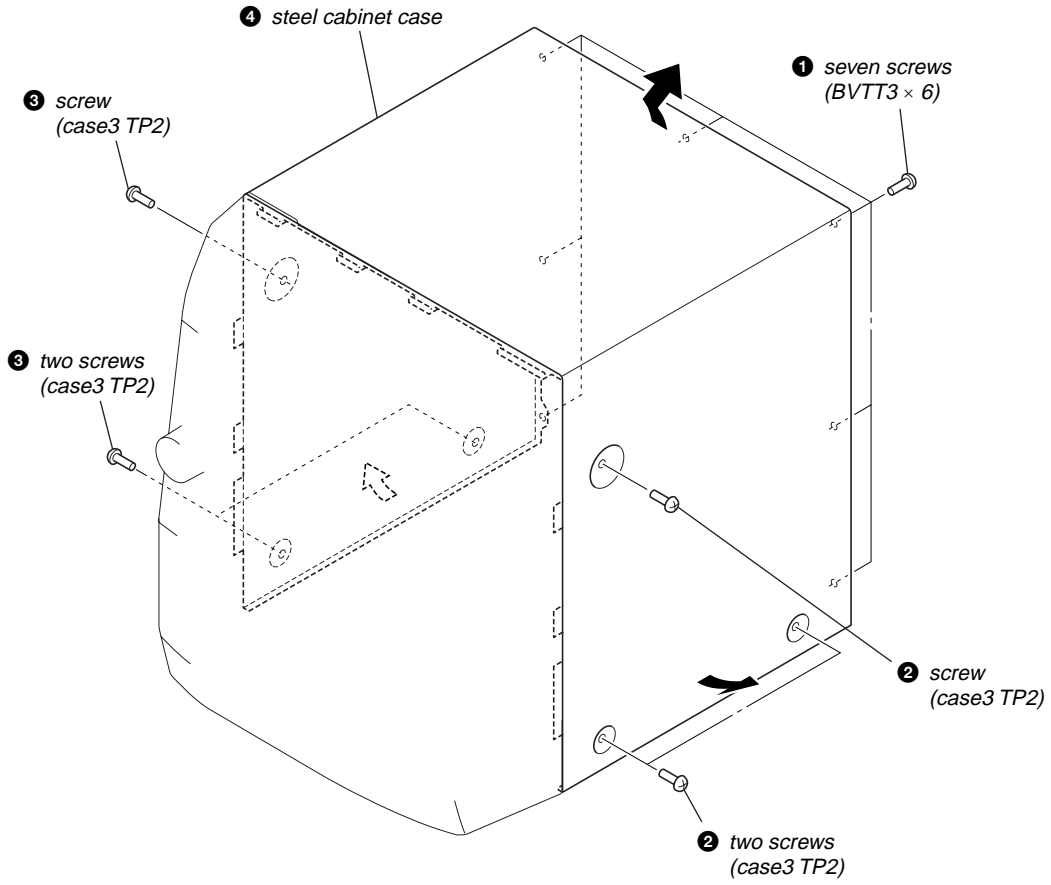
Note 1: The process described in  can be performed in any order.

Note 2: Without completing the process described in , the next process can not be performed.

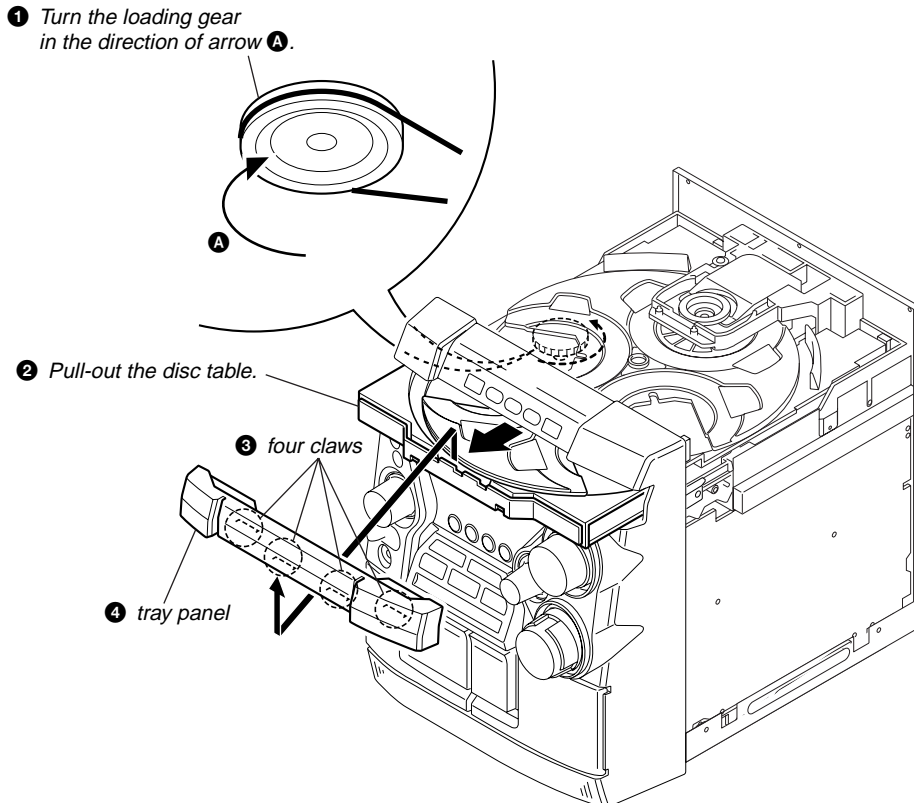


Note: Follow the disassembly procedure in the numerical order given.

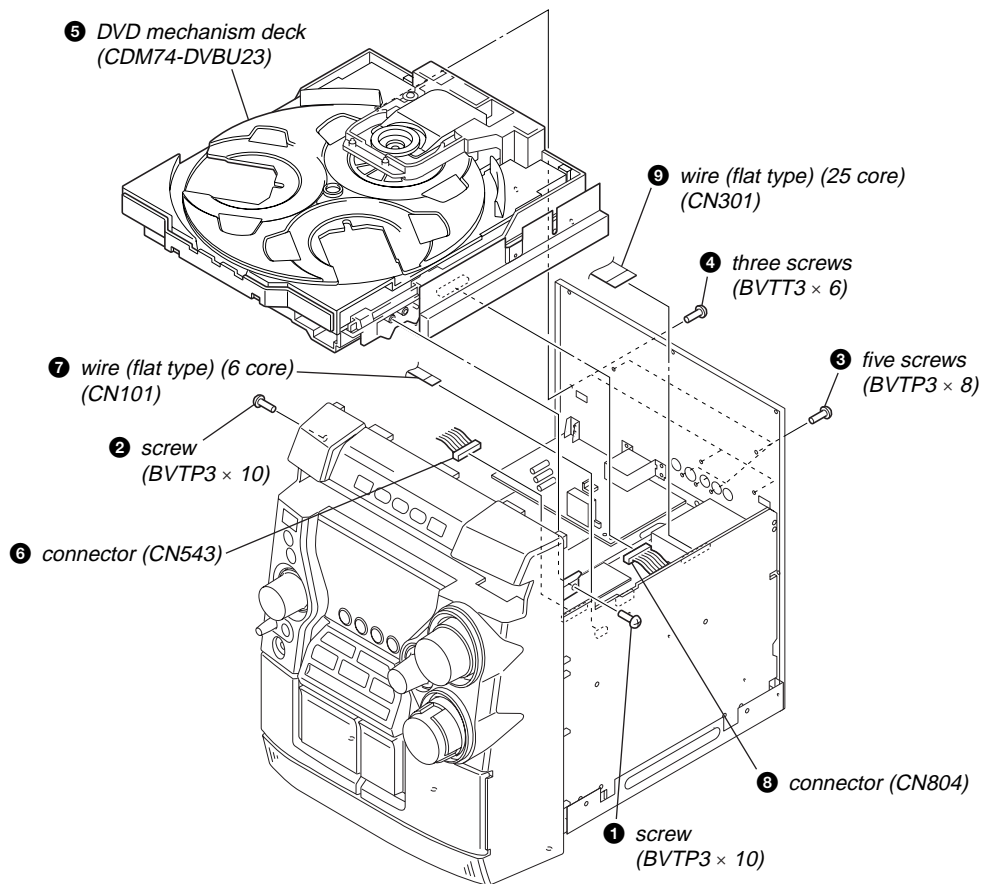
3-2. STEEL CABINET CASE



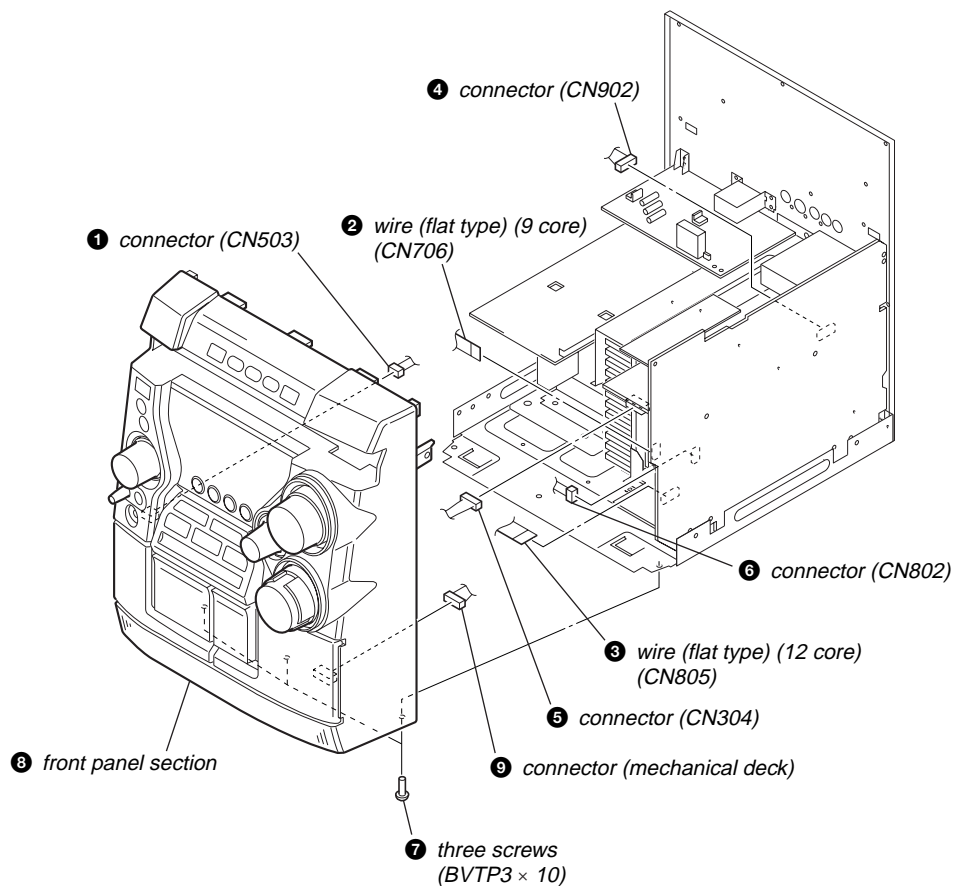
3-3. TRAY PANEL



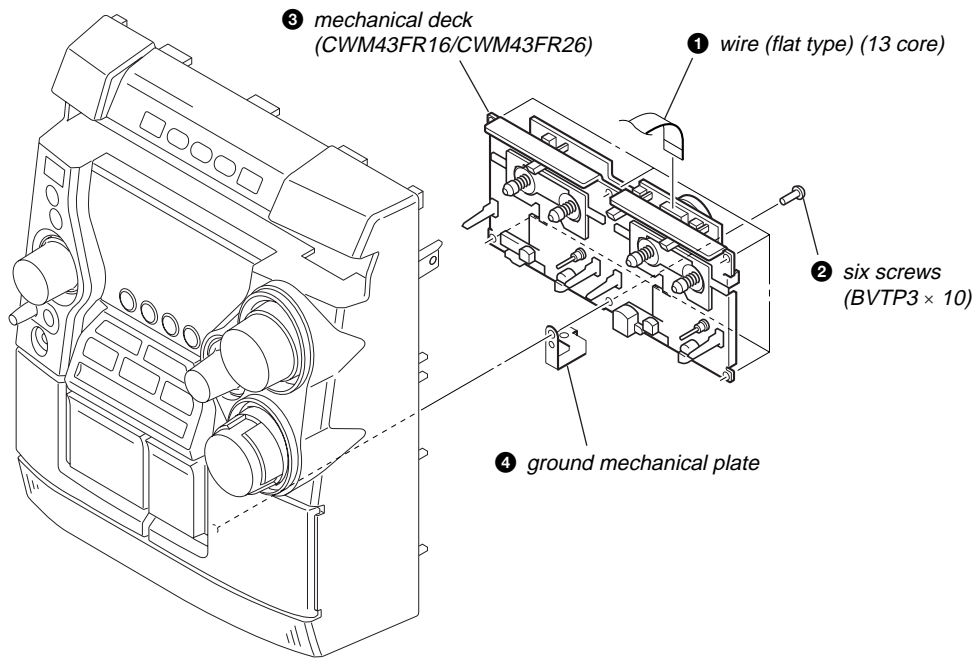
3-4. DVD MECHANISM DECK (CDM74-DVBU23)



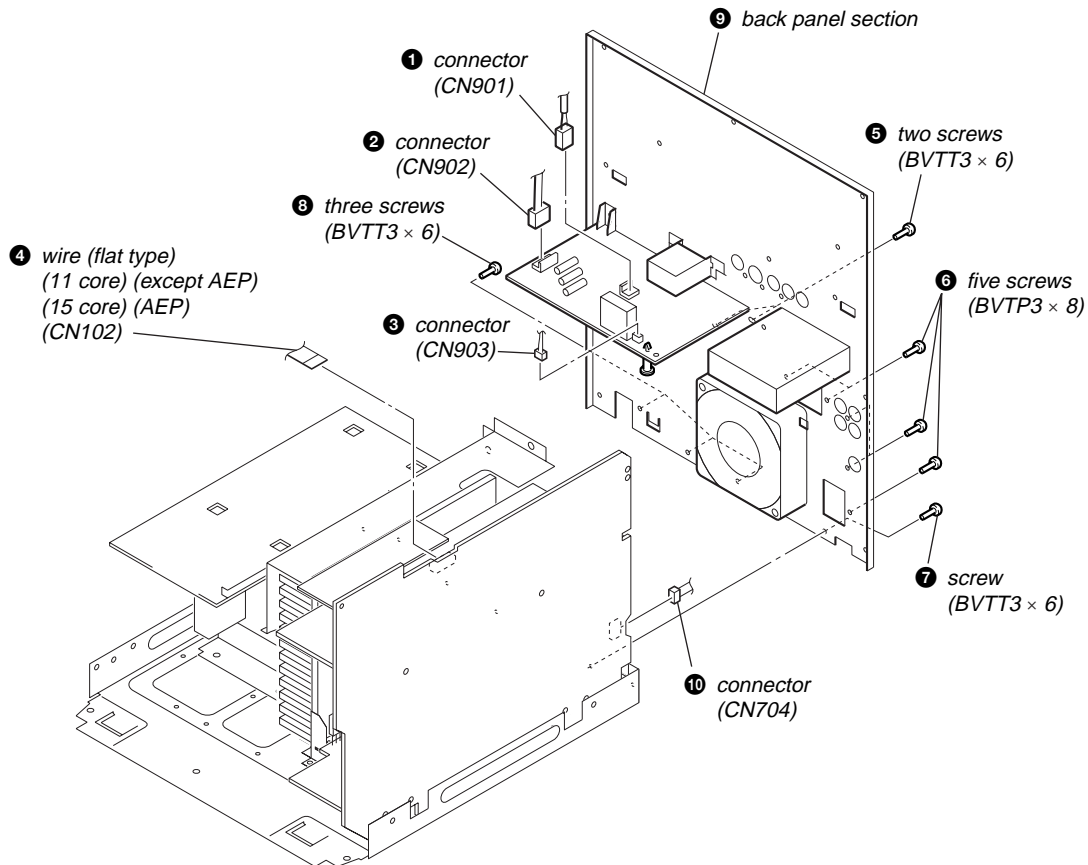
3-5. FRONT PANEL SECTION



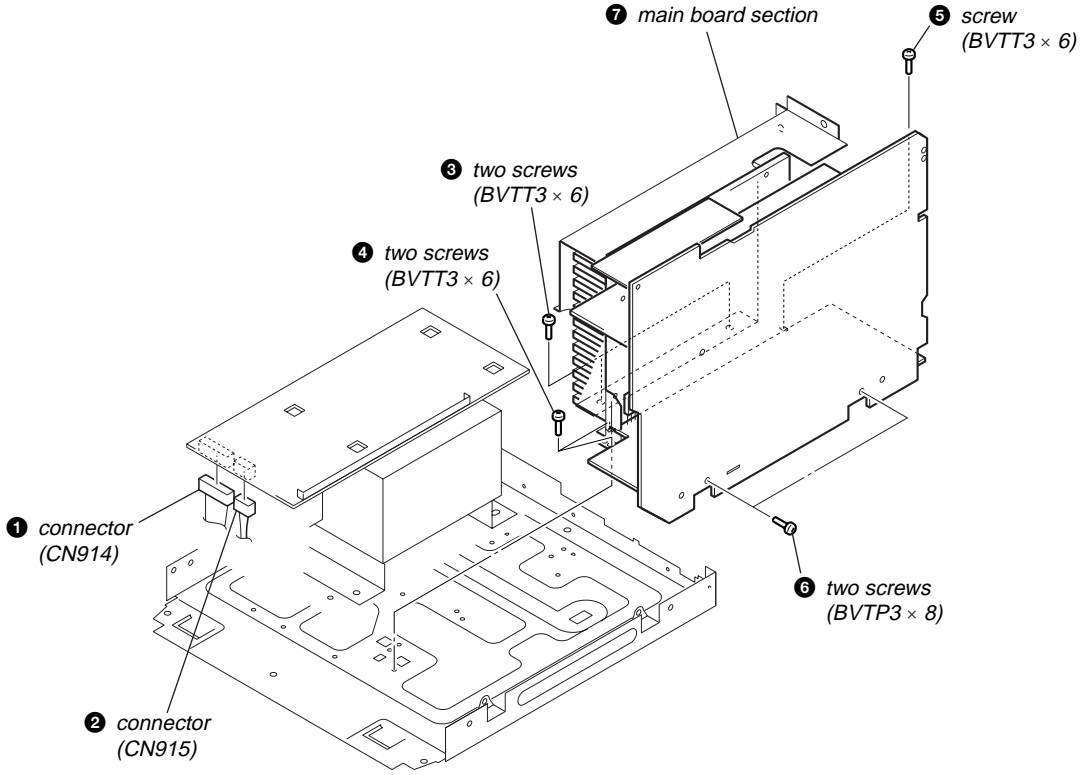
3-6. MECHANICAL DECK (CWM43FR16/CWM43FR26)



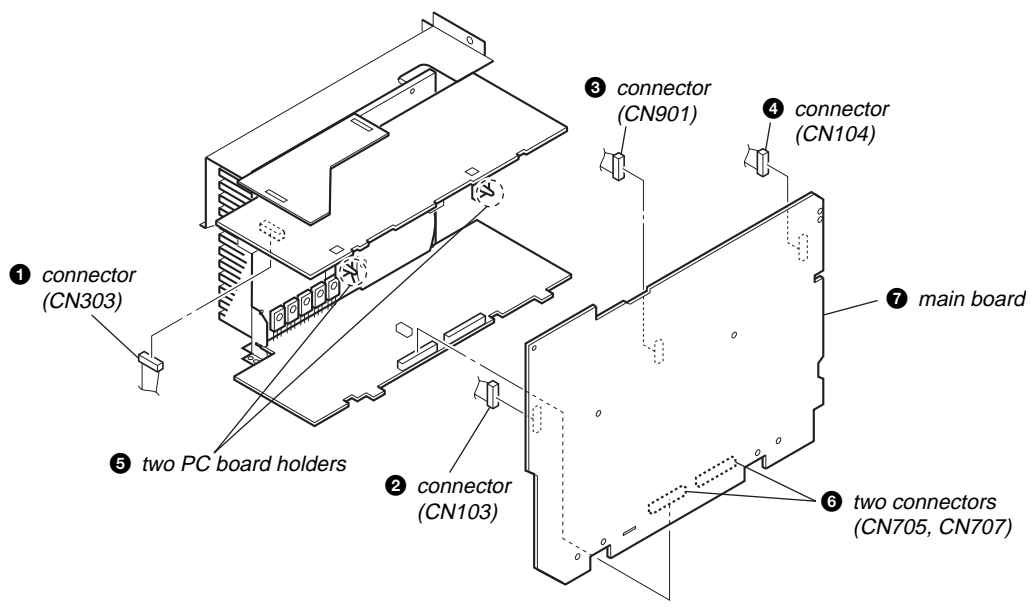
3-7. BACK PANEL SECTION



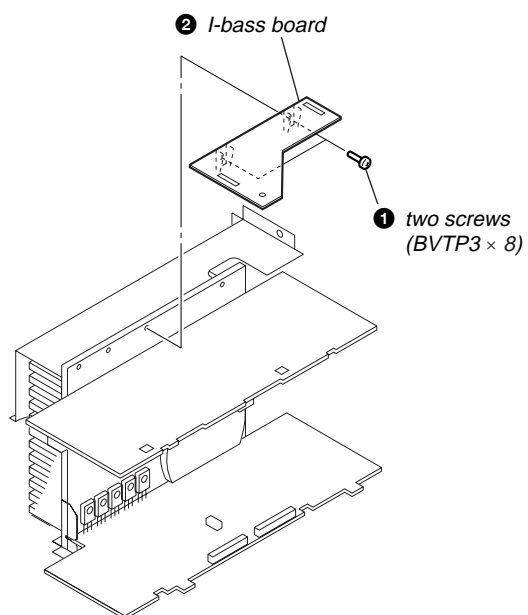
3-8. MAIN BOARD SECTION



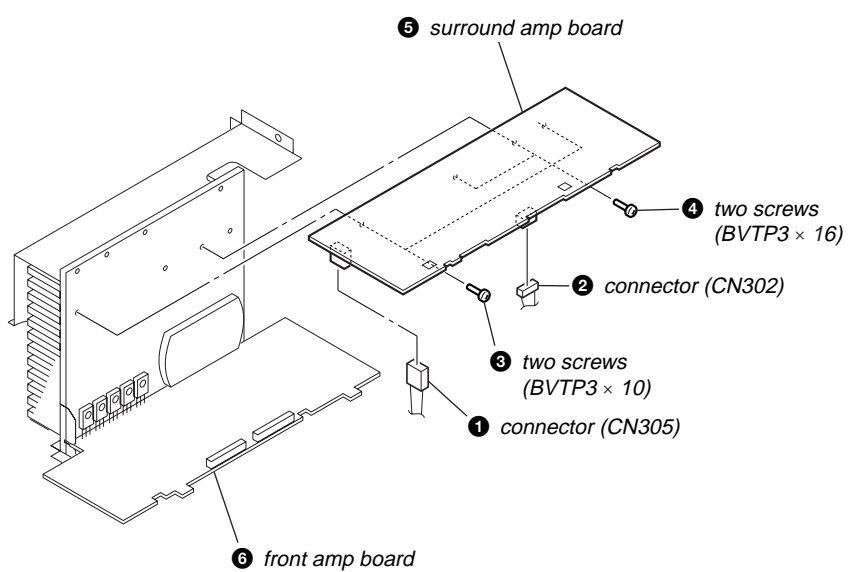
3-9. MAIN BOARD



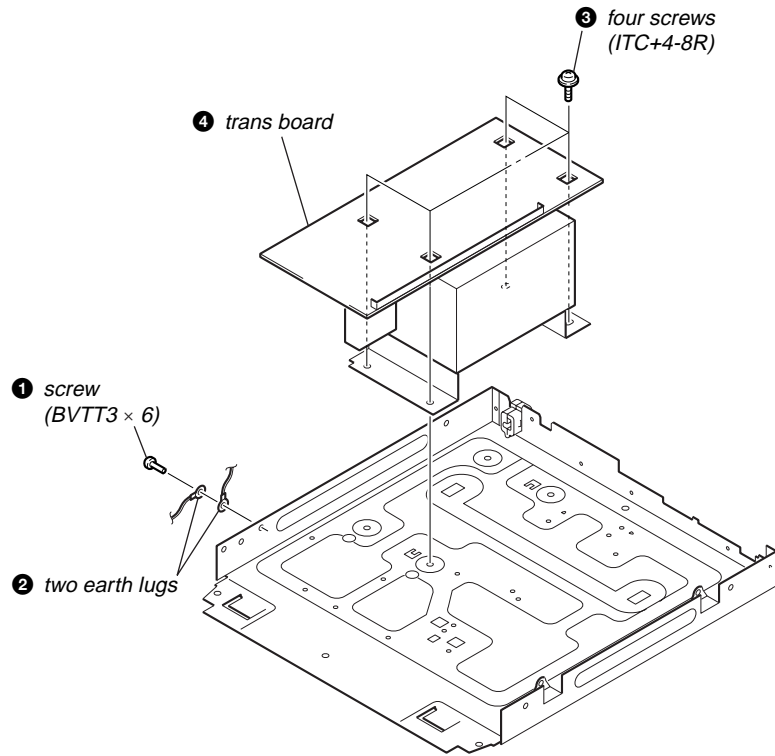
3-10. I-BASS BOARD



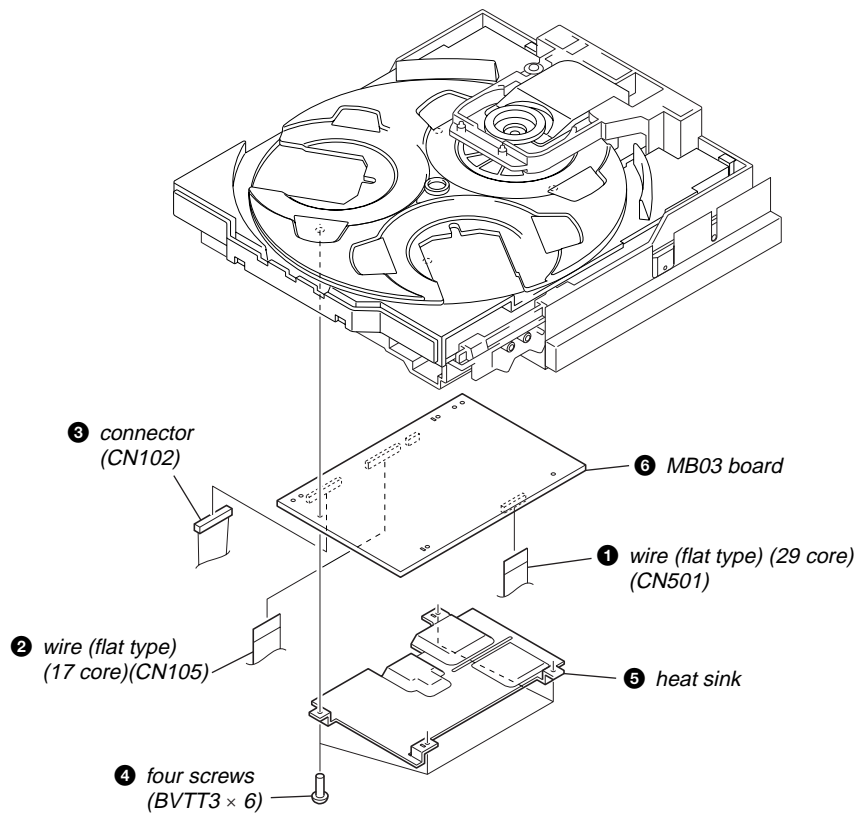
3-11. FRONT AMP BOARD, SURROUND AMP BOARD



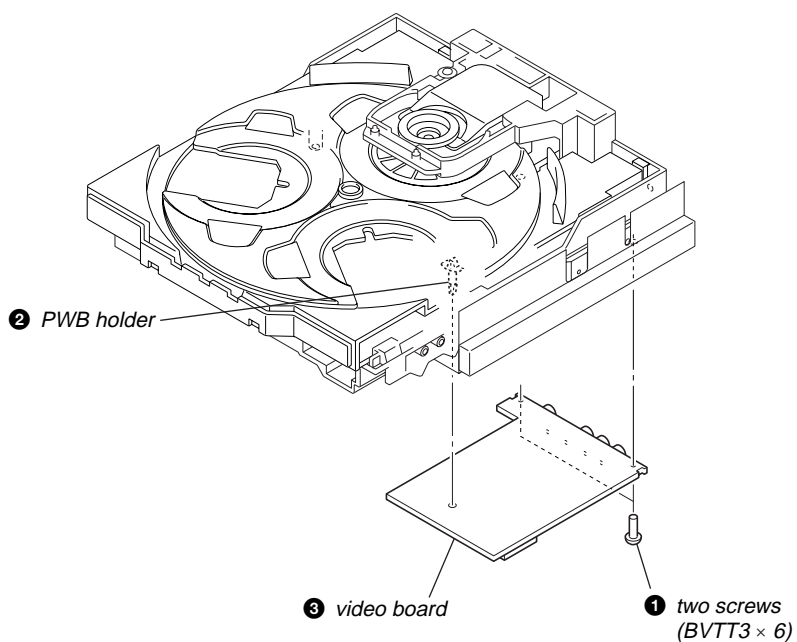
3-12. TRANS BOARD



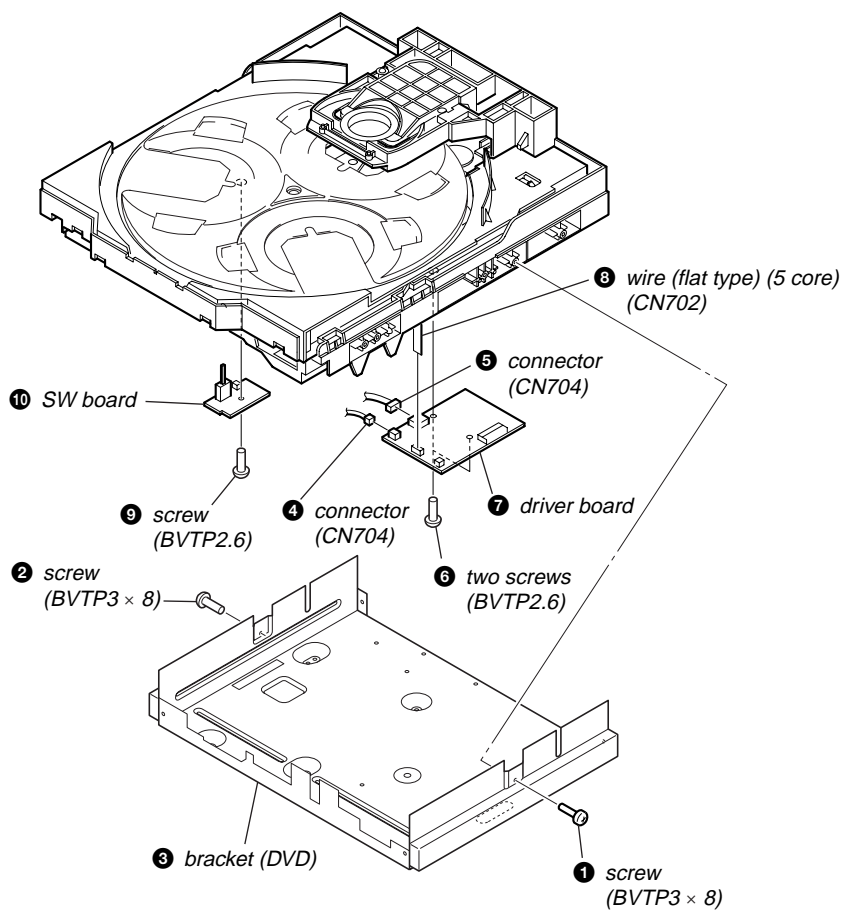
3-13. MB03 BOARD



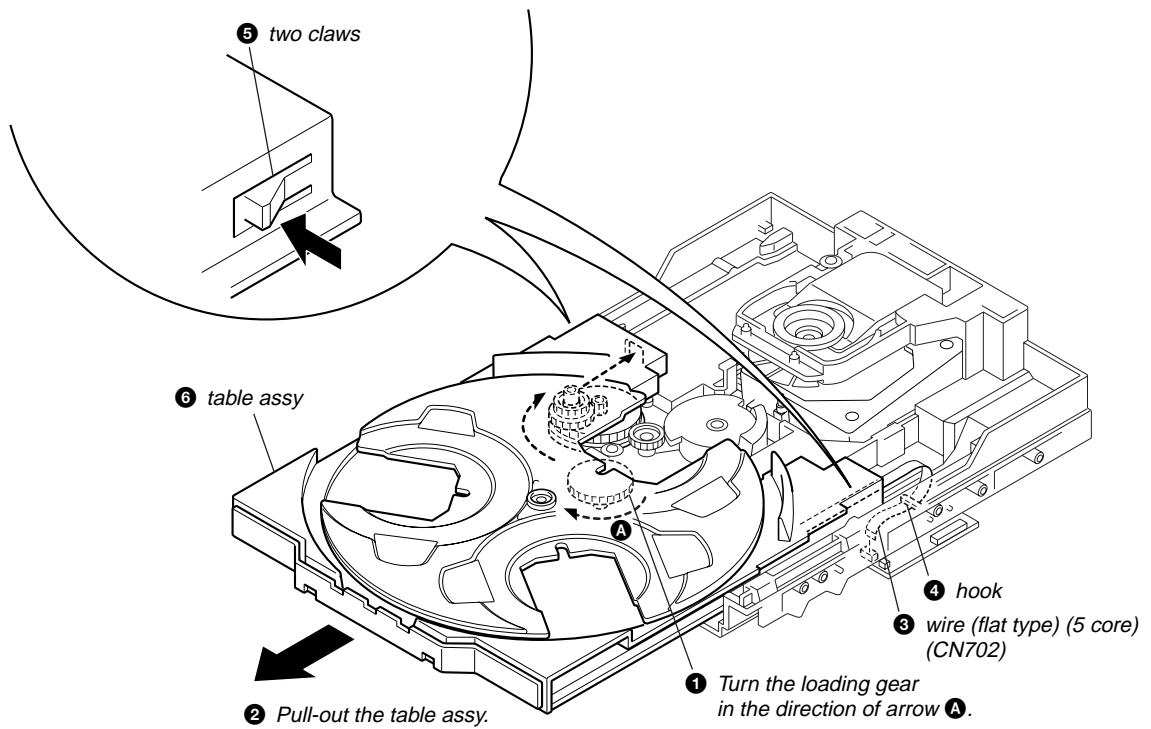
3-14. VIDEO BOARD



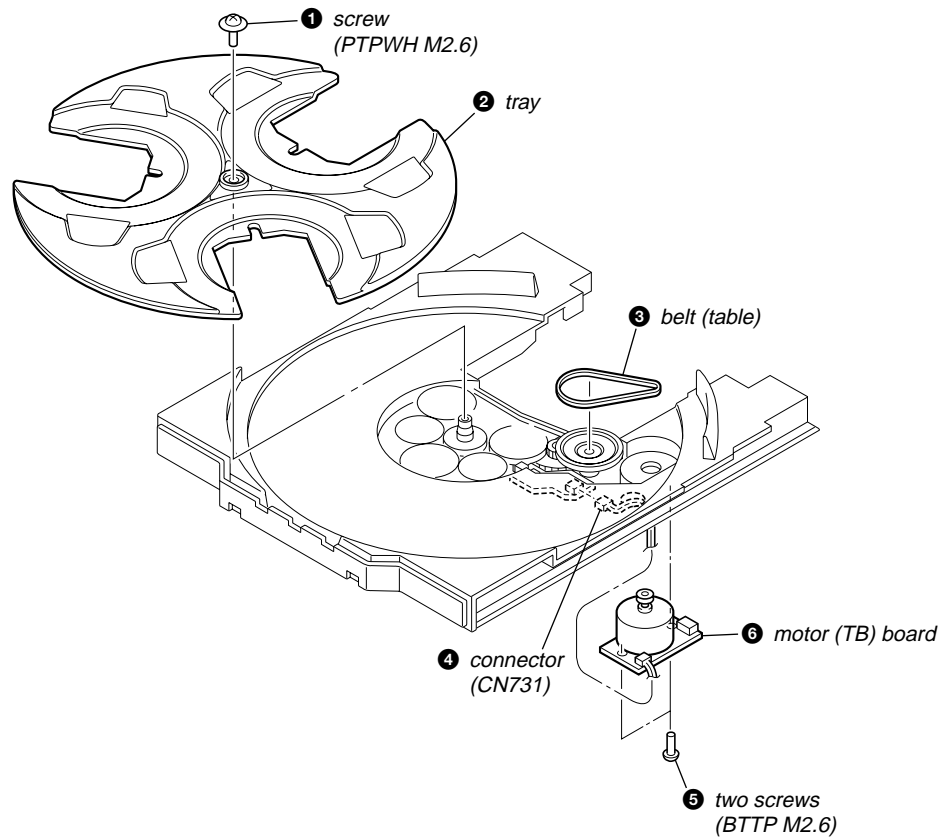
3-15. DRIVER BOARD, SW BOARD



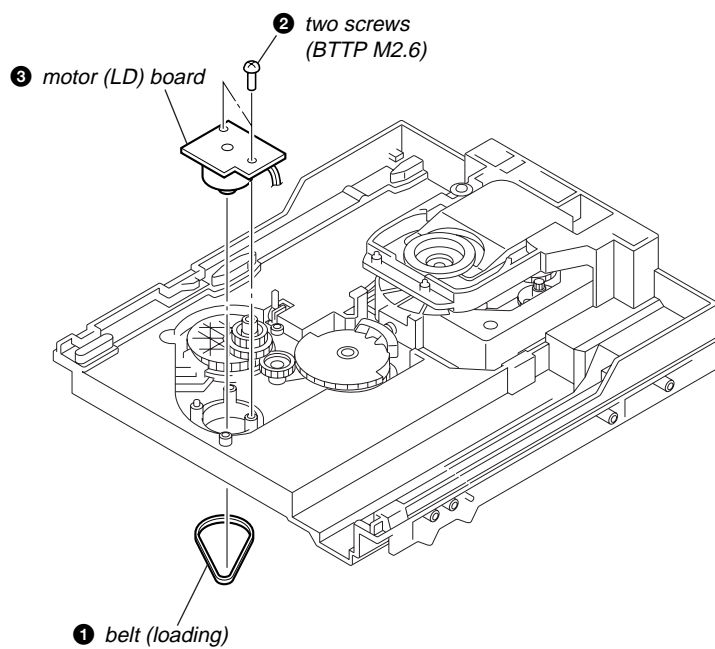
3-16. TABLE ASSY



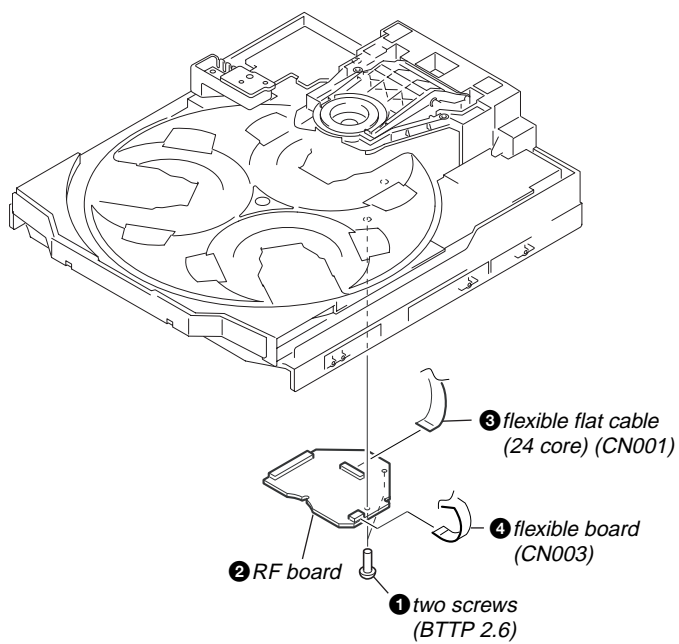
3-17. MOTOR (TB) BOARD



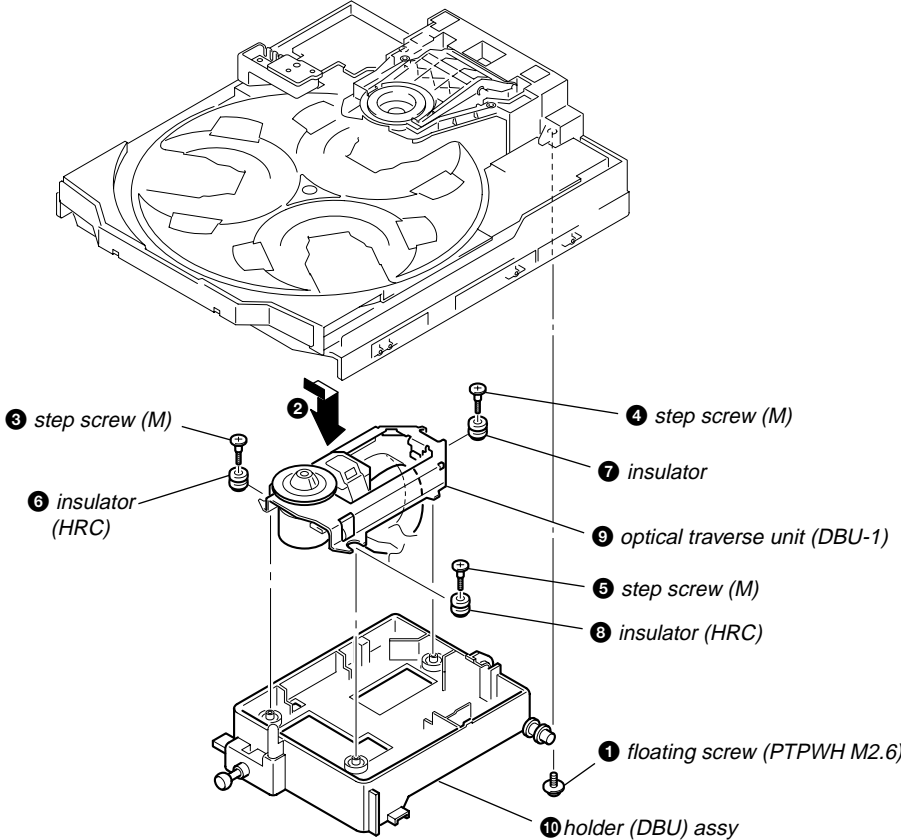
3-18. MOTOR (LD) BOARD



3-19. RF BOARD



3-20. OPTICAL TRAVERSE UNIT (DBU-1)



SECTION 4 TEST MODE

[MC TEST MODE]

- This mode is used to check operations of the respective sections of Amplifier, Tuner, and Tape.

Procedure:

- * To enter MC Test Mode

1. Press **[M]** button, **[ENTER]** button and **[DISC 3]** button simultaneously, the message "TEST MODE" will be displayed on the fluorescent indicator tube.

- * Check of Amplifier

1. When **[BASS]** knob is turned clockwise, GEQ increases to its maximum and a message "GEQ MAX" appears on the fluorescent indicator tube.
2. When **[BASS]** knob is turned counter clockwise, GEQ decreases to its minimum and a message "GEQ MIN" appears on the fluorescent indicator tube.
3. When **[SOUND FIELD]** button is pressed, GEQ is set to flat and a message "GEQ FLAT" appears on the fluorescent indicator tube.
4. When the **[VOLUME]** knob is turned clockwise even slightly, the sound volume increases to its maximum and a message "VOL MAX" appears for two seconds, then the display returns to the original display.
5. When the **[VOLUME]** knob is turned counter-clockwise even slightly, the sound volume decreases to its minimum and a message "VOL 0" appears for two seconds, then the display returns to the original display.

- * VACS ON/OFF Change Over

1. Press **[i-Bass]** button. The message "VACS OFF" or "VACS ON" appears.

- * Tape function

1. When a tape is inserted in Deck B and recording is started, the function is changed to VIDEO automatically.
2. After recording is stopped by pressing **[M]** button, press **[-◀◀]** button will change the function to TAPE B and rewind Tape B until the recording start position and playback of Tape B is started. If the **[REC PAUSE/ START]** button is pressed for a pause and pressed again to resume recording during recording time, when tape deck B is rewind, tape deck B will be rewind until the position where the pause is applied.

- * AMS Test Mode

1. Select the function "TAPE A" or "TAPE B".
2. Insert a test tape AMS-110A or AMS-120 to selected tape deck.
3. Press the **[CD STNC]** button to enter the AMS test mode.
4. After the test tape is rewind to the beginning of the tape, the AMS+ is checked, and the mechanism is shut off after detecting the AMS signal twice.
5. Then the AMS- is checked and the mechanism is shut off after detecting the AMS signal twice.
6. When the check is complete, a message of either OK or NG appears.

- * To release MC Test mode.

1. To release this mode, press **[POWER]** button.
2. The cold reset is enforced at the same time.

[AMP TEST MODE]

- This mode is used in order to set up each section of amplifier.

Procedure:

1. Press **[M]** button, **[ENTER]** button and **[DISC2]** button simultaneously, the message "AMP TEST" will be displayed on the fluorescent indicator tube.
2. Press **[ENTER]** button and **[DISC1]** button simultaneously, VACS display/amplifier regulation display is switched.
3. Press **[SOUND FIELD]** button, SURROUND ON/OFF is switched.
4. Press **[i-Bass]** button, i-Bass ON/OFF is switched.
5. Turn the **[BASS]** knob, BASS (i-Bass) volume adjustment is performed.
6. Press **[ENTER]** button, i-Bass f₀ adjustment is performed.
7. To release this mode, pull out the AC cord. Then insert the AC code, and press **[POWER]** button to turn the set ON. The cold reset is enforced at the same time.

[PANEL TEST MODE]

- This mode is used check operation of the front panel.

Procedure:

1. Press **[M]** button, **[ENTER]** button and **[DISC2]** button simultaneously, all LED and segments in fluorescent indicator tube are lighted up.
2. Press **[ENTER]** button and **[DISC2]** button simultaneously, the key check mode is activated. In the key check mode, the fluorescent indicator tube displays "KEY 0 0 0". While pressing the key, the number corresponding to each key is displayed. Example: When **[ENTER]** button is pressed "KEY 0 2 0"
3. Press **[ENTER]** button and **[DISC2]** button simultaneously again, the key control mode is activated. In the key control mode, the fluorescent indicator tube displays "KEYCONT 0".
4. Press **[ENTER]** button and **[DISC2]** button simultaneously again, "VOLUME FLR" will be displayed. When the **[VOLUME]** knob is turned clockwise, the message "VOLUME UP" appears for two seconds, then the message "VOLUME FLR" is displayed again. When the **[VOLUME]** knob is turned counter-clockwise, the message "VOLUME DOW" appears for two seconds, then the message "VOLUME FLR" is displayed again.
5. Press **[ENTER]** button and **[DISC2]** button simultaneously again, release from this mode.

[VERSION DISPLAY]

- This mode is used check the model, destination, software version.

Procedure:

1. Press **[M]** button, **[ENTER]** button and **[DISC3]** button simultaneously, the model and destination are displayed.
2. Each time **[ENTER]** button and **[DISC2]** button is pressed simultaneously, the display changes from MC version, GC version and DVD version in this order, and release from this mode.
3. When **[ENTER]** button and **[DISC2]** button is pressed simultaneously while the version numbers are being displayed except model and destination, the date of the software creation appear. When **[ENTER]** button and **[DISC2]** button is pressed simultaneously again, the display returns to the software version display.

[COLD RESET]

- The cold reset clears all data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press **[M]** button, **[ENTER]** button, and **[DISC1]** button simultaneously.
2. The fluorescent indicator tube becomes blank for a while, and the set is reset.

[HOT RESET]

- The hot reset clears data except BUCKUP stored in the RAM.

Procedure:

1. Press **[II]** button, **[ENTER]** button, and **[DISC1]** button simultaneously.
2. The fluorescent indicator tube becomes blank for a while, and the set is reset.

[TUNER STEP CHANGE]

- The step interval of AM channels can be toggled between 9 kHz and 10 kHz.

Procedure:

1. Press **[POWER]** button to turn the set ON.
2. Press **[TUNER/BAND]** button to select the "AM".
3. Press **[POWER]** button to turn the set OFF.
4. Press **[ENTER]** button and **[POWER]** button simultaneously. The system will turn ON automatically. The message "AM 9k STEP" or AM 10k STEP" appears and thus the channel step is changed.

[DVD REPEAT 5 LIMIT OFF MODE]

- The number of repeat for DVD playback is 5 times when the repeat mode is "REPEAT ALL". This mode enables DVD to repeat playback for limitless times.

Procedure:

1. Press **[POWER]** button to turn the set ON.
2. Select DVD function.
3. Press **[II]** button, **[ENTER]** button, and **[DVD]** button simultaneously to enter the DVD repeat 5 limit off mode.
4. To release this mode, operate the cold reset. (Refer to the "MC COLD RESET")

[DVD SHIP MODE (LOCK)]

- This mode moves the optical pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press **[POWER]** button to turn the set ON.
2. Select DVD function.
3. Press **[DVD]** button and **[POWER]** button simultaneously. The set will power off automatically.
4. After the "SEE YOU" blinking display finish, a message "LOCK" is displayed on the fluorescent indicator tube and the DVD ship mode is set.

[DVD POWER MANAGE]

- This mode let you switch on or off power supply to the BU during TUNER function.
- When DVD POWER is set to OFF, the power supply to the BU is cut off during TUNER function. It will increase the time taken to access DVD when function change from TUNER to DVD but it will improve tuner reception.
- When DVD POWER is set to ON, the power supply to the BU is not cut off during TUNER function. It will reduce the time taken to access DVD when function change from TUNER to DVD but it will decrease tuner reception performance.

Procedure:

1. Press **[POWER]** button to turn the set ON.
2. Select DVD function.
3. Press **[POWER]** button to turn the set OFF.
4. Press **[■]** button, **[POWER]** button simultaneously. The set will power on automatically.
5. The message "DVD POWER" will be displayed on the fluorescent indicator tube.

[DVD COLOR SYSTEM CHANGE OVER]

- The color system can be changed over NTSC or PAL.

Procedure:

1. Press **[POWER]** button to turn the set ON.
2. Select DVD function.
3. Press **[POWER]** button to turn the set OFF.
4. Press **[II]** button, **[POWER]** button simultaneously. The set will power on automatically.
5. The message "COLOR PAL" or "COLOR NTSC" will be displayed on the fluorescent indicator tube. The color system is changed over.

[DVD TRAY LOCK MODE]

- This mode let you lock the disc trays. When this mode is activated, the disc tray will not open when **[▲ OPEN/CLOSE]** button or **[DISC CHANGE]** button is pressed. The message "LOCKED" will be displayed in the will be displayed on the fluorescent indicator tube.

Procedure:

1. Press **[POWER]** button, to turn the set ON.
2. Select DVD function.
3. Press **[■]** button and **[▲ OPEN/CLOSE]** button, simultaneously and hold down until "LOCKED" or "UNLOCKED" displayed on the fluorescent indicator tube (around 5 seconds).

[MD/VIDEO SWITCHING]

- This mode let you switch from MD to VIDEO and vice-versa.

Procedure:

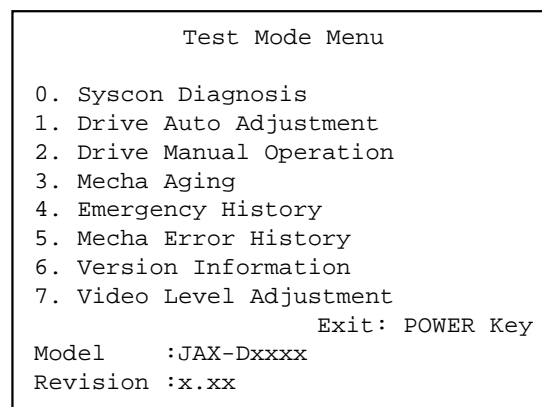
1. Press **[POWER]** button, to turn the set ON.
2. Select MD function.
3. Press **[VIDEO/AUX]** and **[POWER]** button simultaneously. The function will change to VIDEO. Press the same buttons again to change from VIDEO to MD.

[DVD TEST MODE GENERAL DESCRIPTION]

The Test Mode allows you to make diagnosis and adjustment easily using the remote commander and monitor TV. The instructions, diagnostic results, etc. are given on the on-screen display (OSD).

[STARTING DVD TEST MODE]

1. Press the **[POWER]** button to turn the power on.
2. Select the function "DVD".
3. Press the **[POWER]** button to turn the power off.
4. Press two buttons of **[■]** and **[▲ OPEN/CLOSE]** for more than 1 second simultaneously, and **[VOLUME]** knob is turned clockwise.
5. It displays "SERVICE IN" on the fluorescent indicator tube, and displays the Test Mode Menu on the monitor screen as follows. (At the bottom of the menu screen, the model name and revision number are displayed)



6. To execute each function, select the desired menu and press its number on the remote commander (RM-Z20013).
7. To release from test mode, press the **[POWER]** button and turn the power off.

[OPERATING DVD TEST MODE]

0. SYSCON DIAGNOSIS

The same contents as board detail check by serial interface can be checked from the remote commander operation.

On the Test Mode Menu screen, press [10/0] key on the remote commander, and the following Check Menu will be displayed.

```

### Syscon Diagnosis ###

                Check Menu

0. Quit
1. All
2. Version
3. EEPROM
4. GPIO
5. SD Bus
6. Video
    
```

0-0. Quit

Quit the Syscon Diagnosis and return to the Test Mode Menu.

0-1. All (All items continuous check)

This menu checks all diagnostic items continuously. Normally, all items are checked successively one after another automatically unless an error is found, but at a certain item that requires judgment through a visual check to the result, the following screen is displayed for the key entry.

• Example display

```

### Syscon Diagnosis ###

                Diag All Check
                No.2 Version

                2-2. Version
ROM Reversion = 1.06

Press NEXT Key to Continue
Press PREV Key to Repeat
    
```

For the ROM Check, the check sum calculated by the Syscon is output, and therefore you must compare it with the specified value for confirmation.

Following the message, press the [NEXT >>>] button to go to the next item, or press the [PREV <<<] button to repeat the same operation again.

To quit the diagnosis and return to Check Menu screen, press the [RETURN] key on the remote commander to display Check Menu.

• Error occurred

If an error occurred, the diagnosis is suspended and error is displayed. Press the [RETURN] key on the remote commander to quit the diagnosis, or press the [PREV <<<] button to repeat the same check where an error occurred, or press the [NEXT >>>] button to continue the check from the item next to faulty item.

General Description of Checking Method

Selecting 2 and subsequent items calls the submenu screen of each item. And selecting 2 and subsequent items executes respective menus and outputs the results.

For the contents of each submenu, see “Check Items List” as below.

Check Items List:

- 0-2. Version
 - 0-2-1. All
 - 0-2-2. Revision
 - 0-2-3. ROM Check Sum
 - 0-2-4. Model Type
 - 0-2-5. Region
- 0-3. EEPROM Check
 - 0-3-1. Sampling Check
 - 0-3-2. Detail Check
- 0-4. GP I/O Check
- 0-5. SD Bus Check
- 0-6. Video Check
- 0-7. Audio Check

0-2. Version

0-2-2. Revision

The revision number of ROM IC204 that the program for the DVD system processor (IC207) is stored. (4 digits hexadecimal number)

0-2-3. ROM Check Sum

The revision number of ROM IC204 that the program for the DVD system processor (IC207) is stored.

0-2-4. Model Type

Model name is displayed. (JAX-D5)

0-2-5. Region

Model destination code is displayed. (2 digits number)

0-3. EEPROM Check

0-3-1. Sampling Check

EEPROM check at every 64 words.

It compares read data with write data of each address. When there are discrepancies between two data, it displays error.

0-3-2. Detail Check

EEPROM check at every 1 word.

It compares read data with write data of each address. When there are discrepancies between two data, it displays error.

0-4. GP I/O Check

Pull up/down setting check of the DVD system processor (IC207) pin 150, 151 and 154 (for clock setting port).

0-5. SD Bus Check

SD bus data check between DVD decoder (IC701) and MPEG DECODER (IC207).

0-6. Video Check

Output the color bars for video level adjustment.

1. DRIVE AUTO ADJUSTMENT

On the Test Mode Menu screen, press the **[1]** key on the remote commander, and the Adjustment Menu will be displayed.

```

## Drive Auto Adjustment ##
      Adjustment Menu

0. ALL
1. DVD-SL
2. CD
3. DVD-DL

Exit: RETURN

```

Normally, **[10/0]** is selected to adjust DVD (single layer), CD and DVD (dual layer) in this order. But, individual items can be adjusted for the case where adjustment is suspended due to an error. In this mode, the adjustment can be made easily through the operation following the message displayed on the screen.

The disc used for adjustment must be the one specified for adjustment.

1-0. ALL

Press the **[10/0]** key on the remote commander, and the servo set data in EEPROM will be initialized. Then, 1. DVD-SL disc, 2. CD disc and 3. DVD-DL disc are adjusted in this order.

Each time one disc was adjusted, it is ejected. Replace it with the specified disc following the message. You can finish the adjustment by pressing the **[RETURN]** button on the remote commander.

Note: During adjustment of each disc, the measurement for disc type judgment is made. As automatic adjustment does not judge the disc type unlike conventional models, take care not to insert wrong type discs. Also, do not give a shock during adjustment.

1-1. DVD-SL (single layer)

Press the **[1]** key on the remote commander and insert a DVD single layer disc following the message. Then the adjustment will be made through the steps, then adjusted values will be written to the EEPROM.

DVD Single Layer Disc Adjustment Steps:

1. Sled reset
2. Disc check memory SL
3. Wait 300 msec
4. Set disc type SL
5. LD on
6. Spindle start
7. Wait 1 sec
8. Focus servo on 0
9. Auto track offset adjust
10. CLVA on
11. Wait 500 msec
12. Tracking on
13. Wait 1 sec
14. Sled on
15. Check CLV on
16. Auto focus offset adjust
17. Auto focus gain adjust
18. Auto focus offset adjust
19. EQ boost adjust
20. Auto track gain adjust
21. All servo stop
22. EEP copy loop filter offset

1-2. CD

Press the **[2]** key on the remote commander and insert a CD disc following the message. Then the adjustment will be made through the steps, then adjusted values will be written to the EEPROM.

CD Adjustment Steps

1. Sled rest
2. Disc check memory CD
3. Wait 500 msec
4. Set disc type CD
5. LD on
6. Spindle start
7. Wait 500 msec
8. Focus servo on 0
9. Auto track offset adjust
10. CLVA on
11. Wait 500 msec
12. Tracking on
13. (TC display start)
14. Wait 1 sec
15. Sled ON
16. Check CLV on
17. Auto focus offset adjust
18. Auto focus gain adjust
19. Auto focus offset adjust
20. EQ boost adjust
21. Auto track gain adjust
22. All servo stop

1-3. DVD-DL (dual layer)

Press the [3] key on the remote commander and insert a DVD dual layer disc following the message. Then the adjustment will be made through the steps, then adjusted values will be written to the EEPROM.

DVD Dual Layer Disc Adjustment Steps:

1. Sled reset
2. Disc check memory DL
3. Wait 500 msec
4. Set disc type DL
5. LD on
6. Spindle start
7. Wait 1 sec

Layer 1 Adjust

8. Focus servo on 0
9. Auto track offset adjust
10. CLVA on
11. Wait 500 msec
12. Tracking on
13. Wait 500 msec
14. Sled on
15. Check CLV lock
16. Auto focus adjust
17. Auto focus gain adjust
18. Auto focus offset adjust
19. EQ boost adjust
20. Auto Track Gain Adjust

Layer 0 Adjust

21. Focus jump (L1 → L0)
22. Auto track offset adjust L0
23. CLVA on
24. Wait 500 msec
25. Tracking on
26. Wait 500 msec
27. Sled on
28. Check CLV lock
29. Auto Focus Adjust
30. Auto focus gain adjust
33. Auto focus offset adjust
34. EQ boost adjust
35. Auto track gain adjust
37. All servo stop

2. DRIVE MANUAL OPERATION

Note: This mode is used for design, and not used in service fundamentally.

On the Test Mode Menu screen, press the [2] key on the remote commander, and the Operation Menu will be displayed. For the manual operation, each servo on/off control and adjustment can be executed manually.

```

## Drive Manual Operation ##
      Operation Menu
1. Disc Type
2. Servo Control
3. Track/Layer Jump
4. Non EEPROM Write Adjust
5. EEPROM Write Adjust
6. Memory Check
7. Disc Check Memory
8. Error Rate Display
9. SACD Water Mark

                                Exit: RETURN
    
```

In using the manual operation menu, take care of the following points. These commands do not provide protection, thus requiring correct operation. The sector address or time code field is displayed when a disc is loaded.

Note:

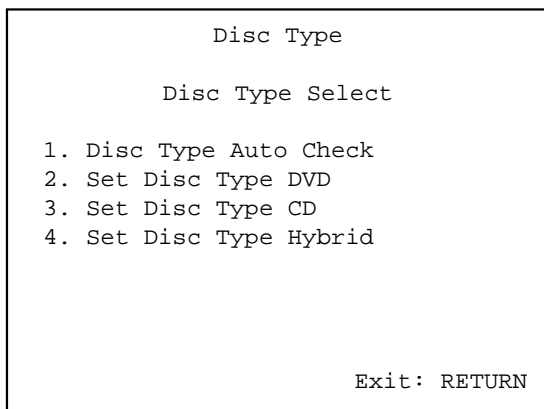
1. Set correctly the disc type to be used on the Disc Type screen.
2. In case of an alarm, exit the manual operation menu immediately to stop the servo operation, and press the [POWER] button to turn the power off.

Basic operation:

(controllable from front panel or remote commander)

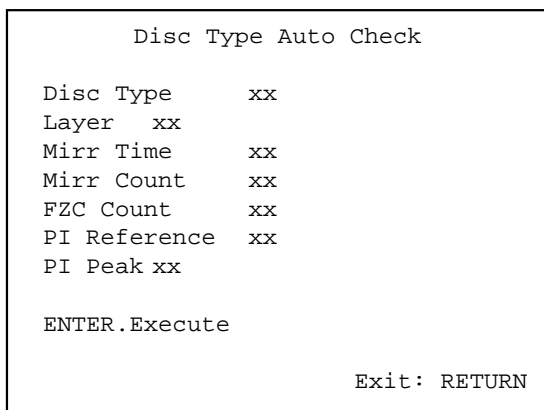
- [POWER] : Power OFF (release the Test Mode)
- [▲ OPEN/CLOSE] : Stop and eject/Loading
- [RETURN] : Return to Operation Menu or Test Mode Menu
- [PREV ◀◀] , [NEXT ▶▶] : Transition between sub modes of menu
- [1 to 9] , [10/0] : Selection of menu items
- Cursor [↓] / [↑] : Increase/Decrease in manually adjusted value

2-1. Disc Type



2-1-1. Disc Type Auto Check

- 1) Press the **[1]** key on the remote commander to display the Disc Type Auto Check screen.
- 2) Insert a disc and press the **[ENTER]** key on the remote commander.
- 3) It judges the type of inserted disc automatically and displays the disc type and so on as below.



- Disc Type : CD or DVD
- Layer : SINGLE or DUAL
- Mirr Time : Mirror time of between disc surface and record surface when disc type judgment. (hexadecimal number)
- Mirr Count : The number of times which mirror counts between disc surface and record surface when disc type judging.
- FZC Count : The number of times which focus zero cross points of each layer when lens down.
- PI Reference : The average of PI reference voltage. (hexadecimal number)
- PI Peak : PI peak level voltage. It performs only when disc type judgment is successful. (hexadecimal number)

2-1-2. Disc Type DVD

It sets up so that it may judge as a disc type of specification of the disc with which the set was inserted.

- [1]**: DVD single layer disc (12 cm)
- [2]**: DVD dual layer disc (0 layer, 12 cm)
- [3]**: DVD dual layer disc (1 layer, 12 cm)
- [4]**: DVD-RW disc (12 cm)
- [5]**: DVD single layer disc (8 cm)
- [6]**: DVD dual layer disc (0 layer, 8 cm)
- [7]**: DVD dual layer disc (1 layer, 8 cm)
- [8]**: DVD-RW disc (8 cm)

2-1-3. Disc Type CD

It sets up so that it may judge as a disc type of specification of the disc with which the set was inserted.

- [1]**: CD disc (normal speed, 12 cm)
- [2]**: CD disc (double speed, 12 cm)
- [3]**: CD disc (normal speed, 8 cm)
- [4]**: CD disc (double speed, 8 cm)
- [5]**: CD-RW disc (normal speed, 12 cm)
- [6]**: CD-RW disc (double speed, 12 cm)
- [7]**: CD-RW disc (normal speed, 8 cm)
- [8]**: CD-RW disc (double speed, 8 cm)

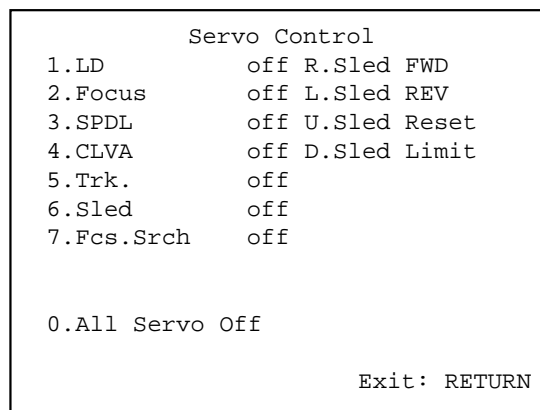
2-1-4. Disc Type Hybrid

It sets up so that it may judge as a disc type of specification of the disc with which the set was inserted.

- [1]**: SACD Hybrid disc (SACD layer, 12 cm)
- [2]**: SACD Hybrid disc (CD layer, normal speed, 12 cm)
- [3]**: SACD Hybrid disc (CD layer, double speed, 12 cm)
- [4]**: SACD Hybrid disc (SACD layer, 8 cm)
- [5]**: SACD Hybrid disc (CD layer, normal speed, 8 cm)
- [6]**: SACD Hybrid disc (CD layer, double speed, 8 cm)

2-2. Servo Control

Note: Be sure to perform the disc type setup before performing this item.



On this screen, the servo on/off control necessary for replay is executed. Normally, turn on each servo from 1 sequentially and when CLVA is turned on, the usual trace mode becomes active. In the trace mode, DVD sector address or CD time code is displayed. This is not displayed where the spindle is not locked. The spindle could run overriding the control if the spindle system is faulty or RF is not present. In such a case, do not operate CLVA.

- [1]** LD : Turn on/off the laser.
- [2]** Focus : Search the focus and turn on the focus.
- [3]** SPDL : Turn on/off the spindle.
- [4]** CLVA : Turn on/off normal servo of spindle servo.
- [5]** Trk. : Turn on/off the tracking servo.
- [6]** Sled : Turn on/off the sled servo.
- [7]** FCS. Srch : Turn on/off the focus search.
- [10/0]** : All servo off.
- [R]** Sled FWD (right cursor) : Move the sled forward.
- [L]** Sled REV (left cursor) : Move the sled reverse.
- [U]** Sled FWD (up cursor) : Reset the sled.
- [D]** Sled REV (down cursor) : Limit in the sled.

2-3. Track/Layer Jump

```

Track/Layer Jump
1. 1Tj      FWD
2. 1Tj      REV
3.500Tj Fine FWD
4.500Tj Fine REV
5.10kTj Dirc FWD
6.10kTj Dirc REV
7.20kTj Dirc FWD
8.20kTj Dirc REV

0. All Servo Off

Exit: RETURN
    
```

On this screen, track jump, etc. can be performed. Only for the DVD dual layer disc, the focus jump and layer jump are displayed in the right field

- [1] 1Tj FWD : 1 track jump forward.
- [2] 1Tj REV : 1 track jump reverse.
- [3] 500Tj FWD : 500 track jump (fine search)forward.
- [4] 500Tj REV : 500 track jump (fine search) reverse.
- [5] 10kTj FWD : 10k track jump (direct search) forward.
- [6] 10kTj REV : 10k track jump (direct search) reverse.
- [7] 20kTj FWD : 20k track jump (direct search) forward.
- [8] 20kTj REV : 20k track jump (direct search) reverse.
- [10/0] : All servo off.

2-4. Non EEPROM Write Adjust

```

Non EEPROM Write Adjust
1. Focus Offset
2. Focus Gain
3. Trk. Offset Coarse
4. Trk. Offset Fine
5. Trk. Gain
6. EQ Boost

0.All Servo Off

Exit: RETURN
    
```

On this screen, each item can be adjusted automatically. Select the desired number [1] to [10/0] from the remote commander, and current setting for the selected item will be displayed, then increase or decrease numeric value with the [↑] key or [↓] key. If CLV has been applied, the jitter is displayed for reference for the adjustment.

- [1] Focus Offset : Adjusts focus offset.
- [2] Focus Gain : Adjusts focus gain.
- [3] TRK. Offset Coarse : Adjusts tracking offset of the RF amp (IC001) side.
- [4] TRK. Offset Fine : Adjusts tracking offset of the DSP (IC401) side.
- [5] TRK. Gain : Adjusts track gain.
- [6] EQ Boost : Adjusts amount of boost of equalizer.
- [10/0] : All servo off.

2-5. EEPROM Write Adjust

```

EEPROM Write Adjust
1. Focus Offset
2. Focus Gain
3. Trk. Offset Coarse
4. _____
5. Trk. Gain
6. EQ Boost

0.All Servo Off

Exit: RETURN
    
```

On this screen, each item can be adjusted automatically. Select the desired number [1] to [10/0] from the remote commander, and selected item is adjusted automatically. Thus value is stored in the EEPROM.

- [1] Focus Offset : Adjusts focus offset.
- [2] Focus Gain : Adjusts focus gain.
- [3] TRK. Offset Coarse : Adjusts tracking offset of the RF amp (IC001) side.
- [5] TRK. Gain : Adjusts track gain.
- [6] EQ Boost : Adjusts amount of boost of equalizer.
- [10/0] : All servo off.

2-6. Memory Check

Display images are shown as follows, and all two screens are able to switch by the [↑] key (UP) or [↓] key (DW).

```

EEPROM Data 1/2  CD  SL  L0  L1
Focus Gain      xx  xx  xx  xx
Trk. Gain       xx  xx  xx  xx
Focus Offset    xx  xx  xx  xx
Trk. Offset     xx  xx  xx  xx
EQ. Boost       xx  xx  xx  xx
PI Level        xx  xx  --  --
Fcs. Balance    --  xx  --  --
Jitter          xx  xx  xx  xx
Mirror Time     xx  xx  xx  --
FE Level        --  xx  --  --
Traverse Lvl.   --  xx  --  --
Next:DW Default:CLR Exit:RET
    
```

```

EEPROM Data 2/2  CDRW DVDRW
Focus Gain       xx  xx
Trk. Gain        xx  xx
Focus Offset     xx  xx
Trk. Offset      xx  xx
EQ. Boost        xx  xx

Next:UP Default:CLR Exit:RET
    
```

On this screen, current servo adjusted data stored in the EEPROM are displayed. The adjusted data are initialized by pressing the [CLEAR] key, but be careful that they are not recoverable after initialization.

Before clearing the adjusted data, make a note of the set data.

2-7. Disc Check Memory

```

Disc Check Memory

1. SL Disc check
2. SL Disc check
3. SL Disc check

Exit: RETURN
    
```

On this screen, measure the mirror time of chucked disc, and write to the EEPROM.

2-8. Error Rate Display

```

Error Rate Display
      UC   CR  Address
PI1 Err Now xx xxxx xxxxxxxx
      Max xx xxxx xxxxxxxx
      Avg xx xxxx
PI2 Err Now xx xxxx xxxxxxxx
      Max xx xxxx xxxxxxxx
      Avg xx xxxx
PO  Err Now xx xxxx xxxxxxxx
      Max xx xxxx xxxxxxxx
      Avg xx xxxx

Exit: RETURN
    
```

On this screen, measure and display the error rate.

UC : Incorrect value
 CR : Correct value
 Add: Address

2-9. SACD Water Mark Check

```

SACD Water Mark Check

PSP AMP
PSN

Start: ENTER      Exit: RETURN
    
```

On this screen, measure the PSP AMP value and PSN value of SACD water mark.

3. MECHA AGING

On the Test Mode Menu screen, selecting **[3]** executes the aging of the mechanism deck.

```

### Aging Test MENU ###
** Pls use over 40 min.CD **
      Operation Menu

1. Open/Close Test

Exit: RETURN
    
```

- 1) Set over-40-min. CDs in Disc 1 to 3.
- 2) On the Aging Test MENU screen, press the **[1]** key on the remote commander to display the Open/Close Test screen.
- 3) Insert discs and press the **[ENTER]** key on the remote commander.
- 4) Is starts the aging.
 During aging, the disc number, operating status and repeat cycle are displayed. Aging can be aborted at any time by pressing the **[RETURN]** key. After the operation is stopped, press the **[RETURN]** key to return to the Aging Test MENU.

4. EMERGENCY HISTORY

On the Test Mode Menu screen, selecting [4] displays the information such as servo emergency history. The history information from last 1 up to 10 can be scrolled with the [↑] key or [↓] key. Also, specific information can be displayed by directly entering that number with ten keys.

```

### EMG. History ###

Laser Hours      CD  xxxhxhxxm
                  DVD xxxhxhxxm

a.   bb xx xx xx  xx xx xx xx
     xx xx xx xx  xx xx xx xx

a.   bb xx xx xx  xx xx xx xx
     xx xx xx xx  xx xx xx xx

Select:1-9      Scroll:UP/DOWN
(1.Latest EMG.) Exit: RETURN
    
```

xxxxhxxm : The laser on total hours. Data below minutes are omitted.
a. : Error number.
bb : Error code.
xx : Not used.

• Clearing History Information

Clearing laser hours:

Press the [DVD DISPLAY] and [CLEAR] keys in this order. Then both CD and DVD data are cleared.

Clearing emergency history:

Press the [DVD TOP MENU] and [CLEAR] keys in this order.

Initializing EEPROM data:

Press [DVD MENU] and [CLEAR] keys in this order. The data have been initialized when "EEPROM Initialize Finished" message is displayed, press the [RETURN] key to return to the EMG. History screen.

• Code list of Emergency History

- 10: Communication to RF AMP (IC001) failed.
- 11: Each servo for focus, tracking, and spindle is unlocked.
- 12: Check sum error of EEPROM (IC204).
- 14: Communication to servo DSP (IC509) failed, or servo DSP (IC509) is faulty.
- 15: Communication to DVD decoder (IC701) failed, or DVD decoder (IC701) is faulty.
- 16: Communication to DSD decoder (IC801) failed, or DSD decoder (IC801) is faulty.
- 20: Initialization of sled servo failed. It is not placed in the initial position.
- 23: Sled servo operation error.
- 24: Made a request to move the sled servo to wrong position.
- 30: Tracking balance adjustment error.
- 31: Tracking gain adjustment error.
- 33: Focus bias adjustment error.
- 34: Focus gain adjustment error.
- 35: Equalizer adjustment error.
- 40: Focus servo does not operate.
- 41: With a DVD dual layer disc, focus jump failed.
- 50: CLV (spindle) servo does not operate.
- 51: Spindle does not stop.
- 60: Made a request to seek nonexistent address.
- 61: Seek error of retry more than regulated times.
- 70: Control data could not be read.
- 80: Disc reading failed.

5. MECHA ERROR HISTORY

On the Test Mode Menu screen, selecting [5] displays the information of mechanism deck error history. The history information from last 1 up to 8 can be scrolled with the [↑] key or [↓] key.

```

### Mecha Error History ###

1. aa bb cc dd ee xx xx xx
2. aa bb cc dd ee xx xx xx
3. aa bb cc dd ee xx xx xx
4. aa bb cc dd ee xx xx xx
5. aa bb cc dd ee xx xx xx
6. aa bb cc dd ee xx xx xx
7. aa bb cc dd ee xx xx xx
8. aa bb cc dd ee xx xx xx

Scroll:UP/DOWN
(1.Latest Err.) Exit: RETURN
    
```

- aa : Initialization is completed or not.
FF : Complete.
other number : Not complete.
- bb : Operating status of mechanism deck at an error occurred. (lod sq jcp)
00 : Initializing.
10 to 15 : Open operating.
16 to 19 : Kicking cause open failed.
1A to 1F : Open operating.
20 to 27 : Complete the open operation.
28 : No disc and complete the open operation.
29 to 2F : Complete the open operation.
30 to 3F : Close requesting.
40 to 4F : Open requesting.
50 to 5F : Close operating.
60 to 6F : Complete the chucking operation.
80 to 8F : Complete the release operation. (BU is home position)
90 to 9F : BU down operating.
A0 to AF : Opening/closing the shutter. Or stationary state in open/close the shutter is enablement.
B0 to BF : BU up requesting.
C0 to CF : BU down requesting.
D0 to DF : BU upping.
E0 to EF : No disc checking in disc loading.
- cc : Operating status of table at an error occurred. (tbl sq jcp)
13 : The rotation stop position determination error of a table.
11 to 12 : The loading position determination error of a table.
- dd : Operating status of mechanism deck at an error occurred. (lod op jcp)
00 : Complete the operation.
10 to 1F : Open operating.
20 to 2F : Close operating.
30 to 3F : Release operating.
60 to 6F : Chucking operating.
70 to 7F : Kicking operating.
80 to 8F : Returning the BU to home position. (after kicking)
- ee : The status of table operation. ("n" is unfixed) (tbl op cp)
1n : Rotating in the direction of a forward.
2n : Rotating in the direction of a reverse.

6. VERSION INFORMATION

On the Test Mode Menu screen, selecting **[6]** displays the ROM version and region code.

The parenthesized hexadecimal number in version field is checksum value of ROM.

```
## Version Information ##

IF con.   Ver.x. xxx

SYScon.   Ver.x. xx (xxxx)
          Model    JAX-Dxx
          Region   xx
          Config   xxxxxxxx

Front End Ver.x.xx

                               Exit: RETURN
```

IF con. : The version of system controller (IC101).

SYScon. : The version of DVD system processor (IC207).

Front End: The version of mechanism controller (IC901).

7. VIDEO LEVEL ADJUSTMENT

On the Test Mode Menu screen, selecting **[7]** displays color bars for video level adjustment. During display of color bars, OSD disappears but the menu screen will be restored if pressing the **[RETURN]** key.

SECTION 5 ELECTRICAL ADJUSTMENTS

Note:

1. VIDEO board is basically designed to operate without adjustment.
Therefore, check each item in order given.
2. Use DVD reference disc unless otherwise indicated.
[DVD reference disc]
TDV-520CSO (DVD-SL): PART No. J-2501-236-A
LUV-P01 (CD): PART No. 4-999-032-01
TDV-540C (DVD-DL): PART No. J-2501-235-A
Note: Do not use exiting test disc for DVD.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

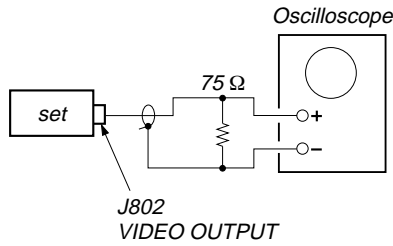
AUTO SERVO ADJUSTMENT

After parts related to the servo circuit (RF amplifier (IC001), DSP (IC401), motor driver (IC501), EEPROM (IC302) so on) are replaced, re-adjusting the servo circuit is necessary. Select "ALL" at "1. DRIVE AUTO ADJUSTMENT" (Refer to page 23 in TEST MODE) and adjust DVD-SL (single layer), CD and DVD-DL (dual layer).

Video Level Check (VIDEO BOARD)

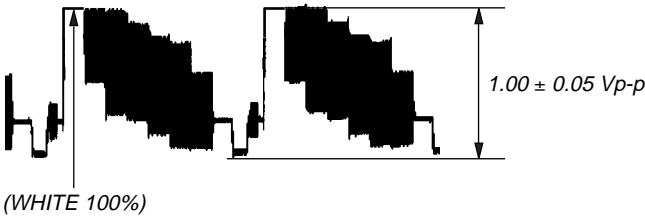
Purpose

This adjustment is made to satisfy the NTSC standard, and if not adjusted correctly, the brightness will be too large or small.



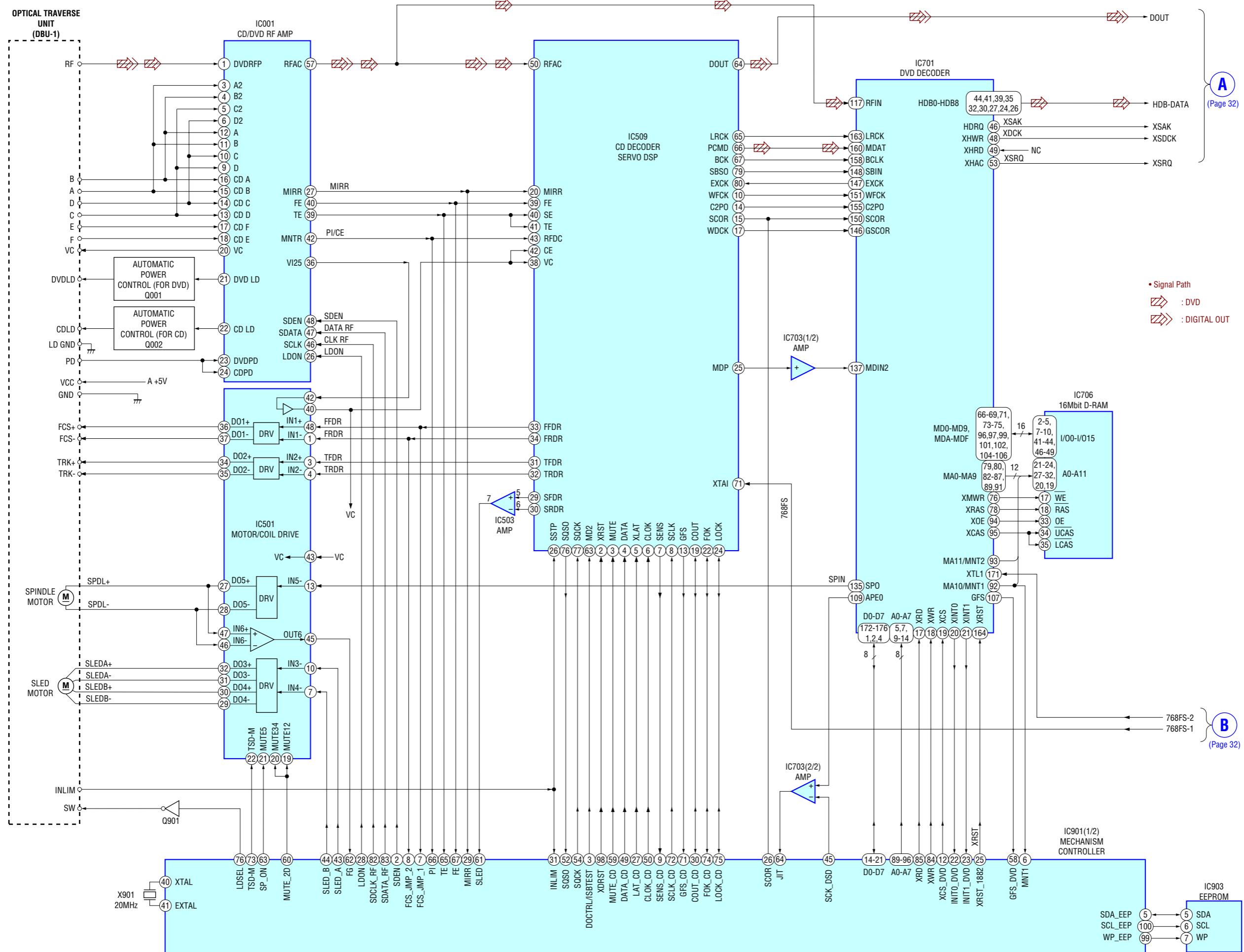
Procedure:

1. Connect oscilloscope to VIDEO output.
2. Load a DVD reference disc playback.
3. Check the video signal level is 1.00 ± 0.05 Vp-p.

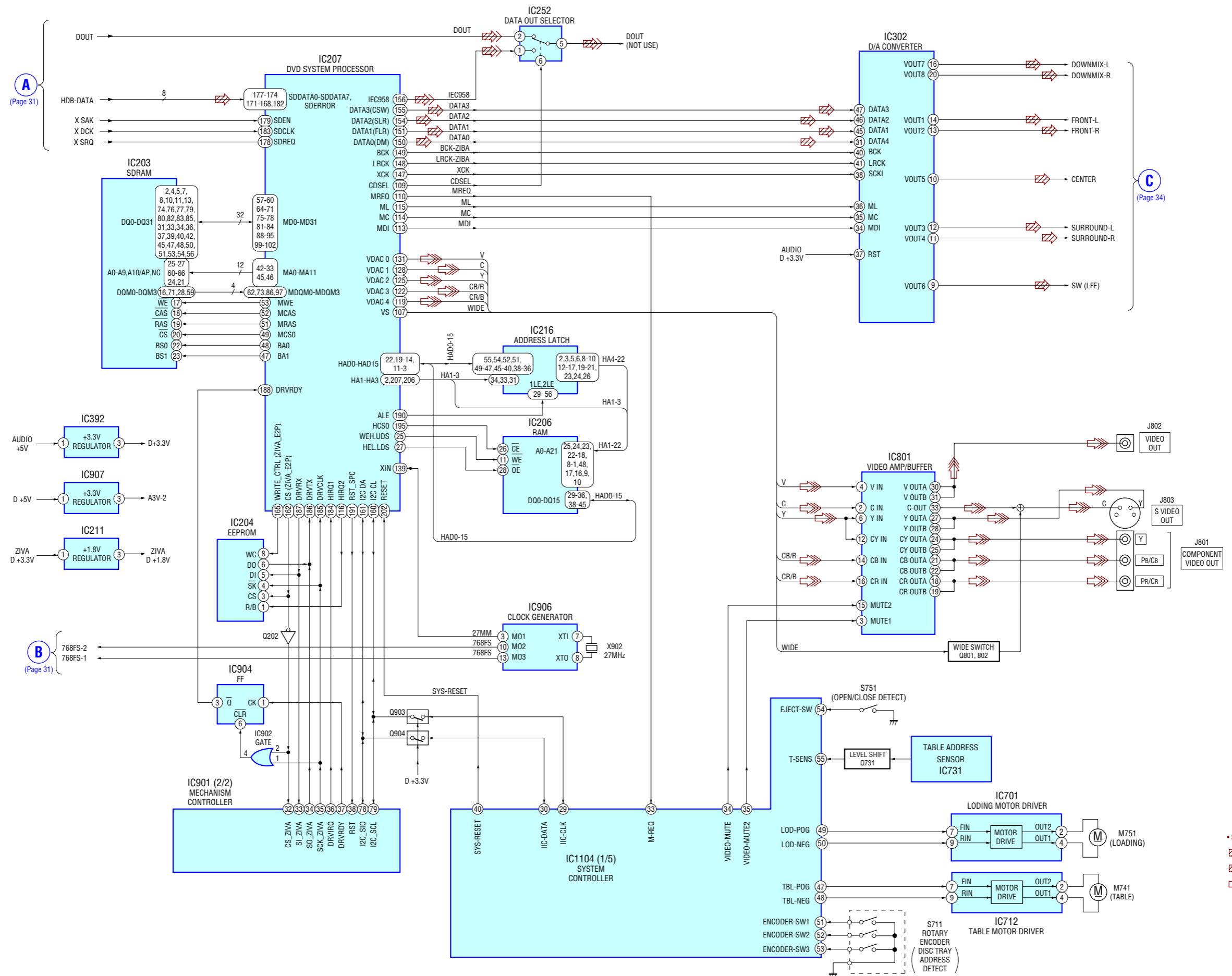


SECTION 6 DIAGRAMS

6-1. BLOCK DIAGRAM – DVD DSP (1/2) Section –



6-2. BLOCK DIAGRAM – DVD DSP (2/2) Section –



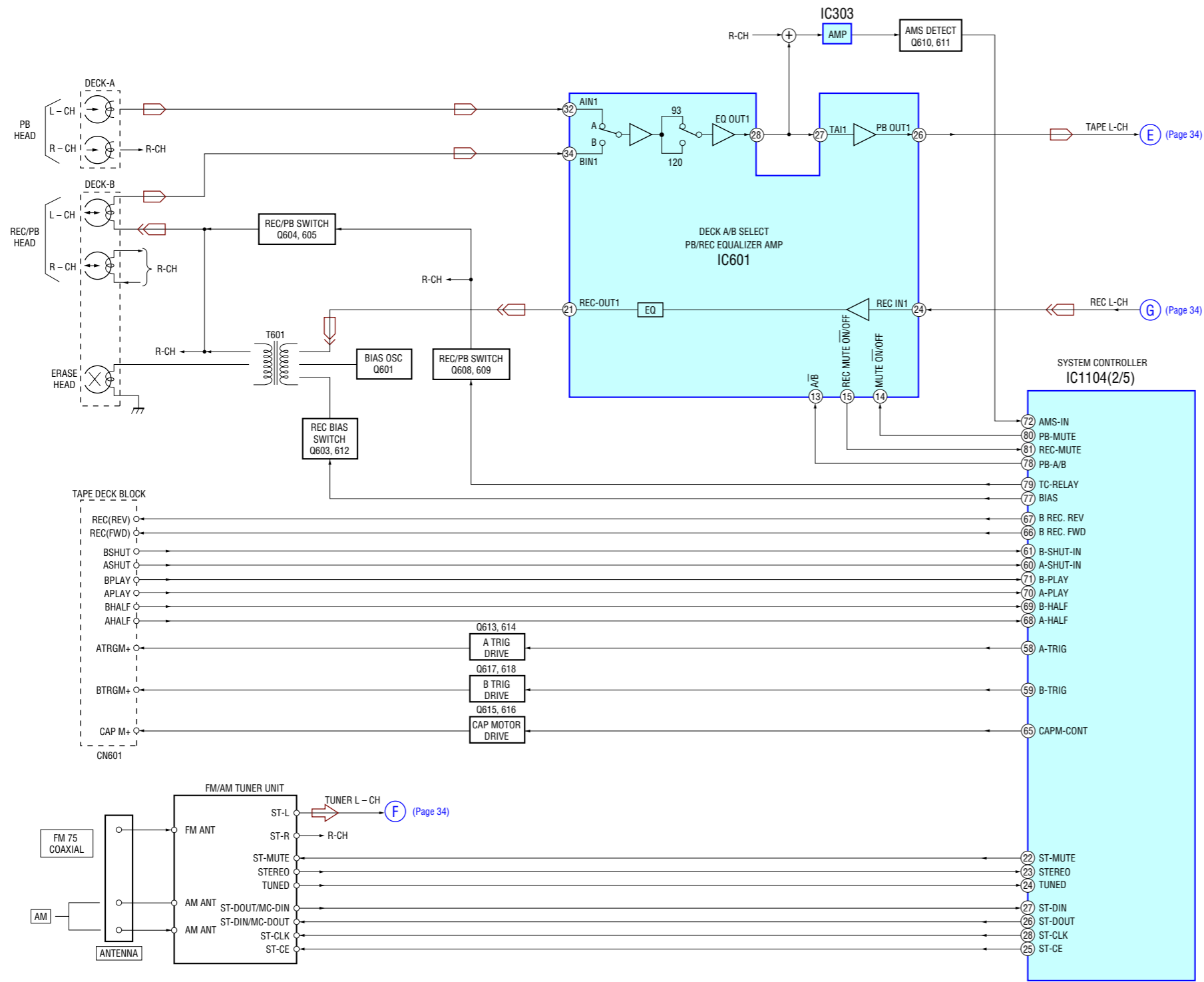
A
(Page 31)

C
(Page 34)

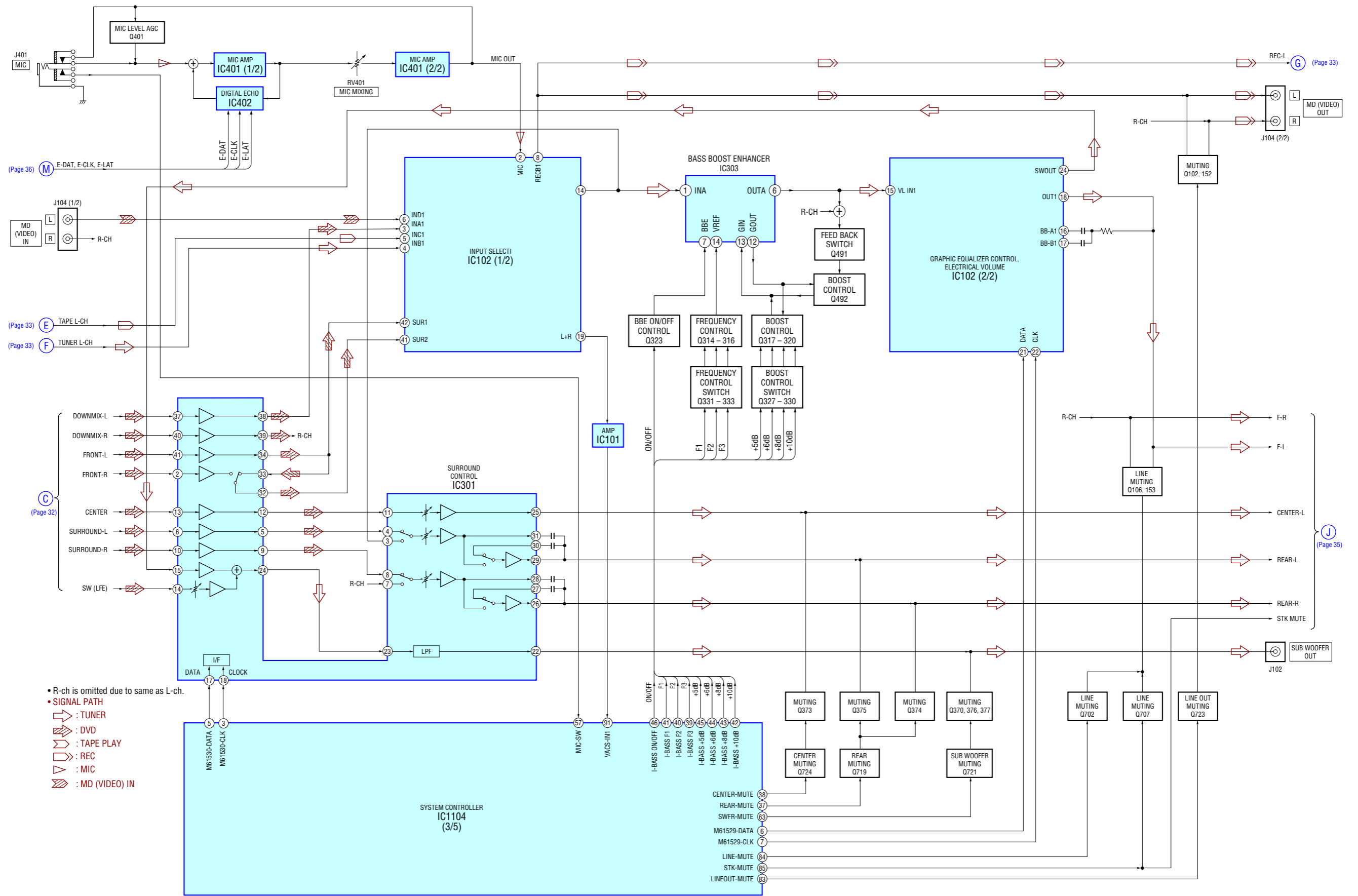
B
(Page 31)

• Signal Path
 [Red dashed line] : DVD
 [Blue dashed line] : DIGITAL OUT
 [Red arrow] : VIDEO

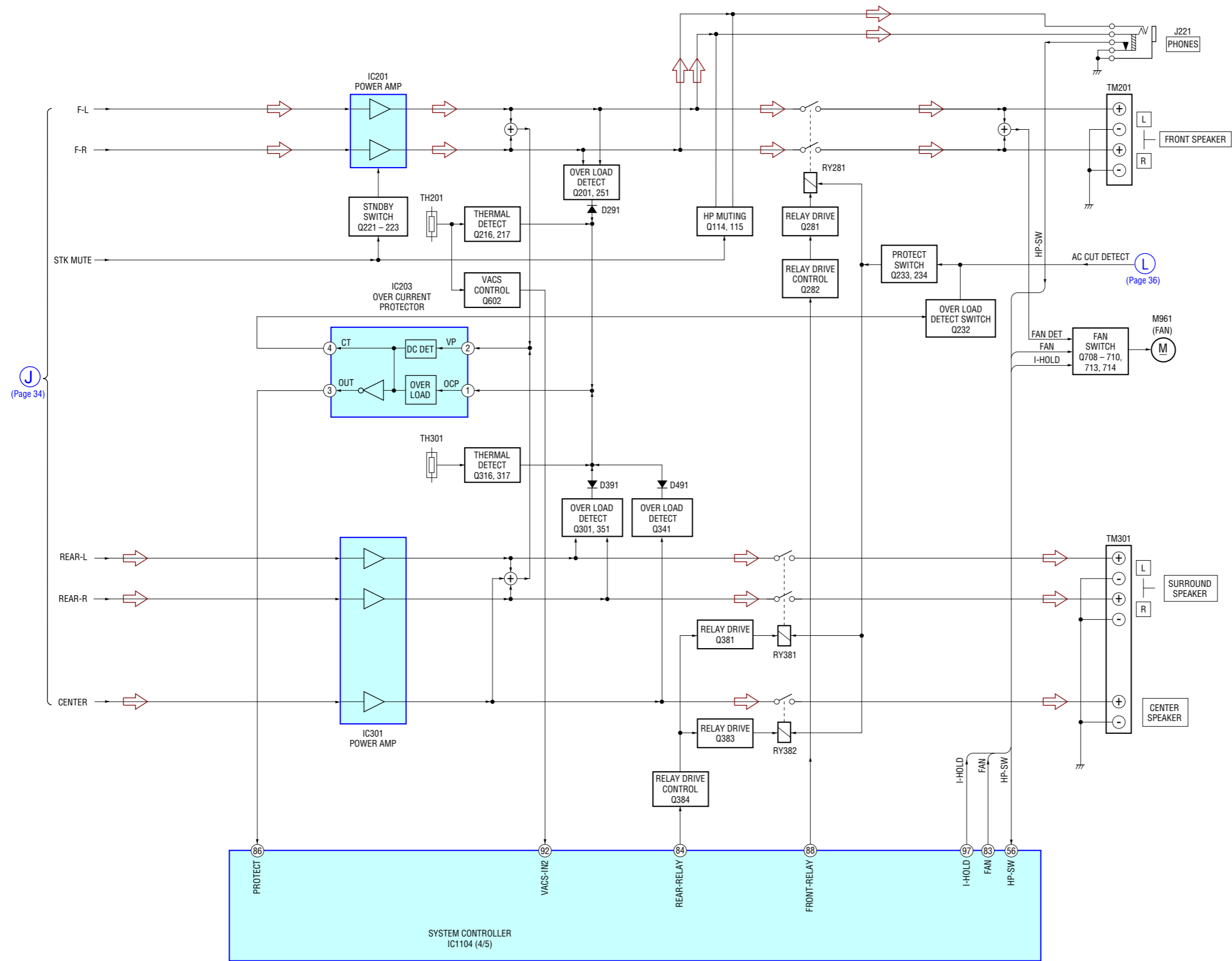
6-3. BLOCK DIAGRAM – TUNER/TAPE DECK Section –



6-4. BLOCK DIAGRAM – MAIN Section –

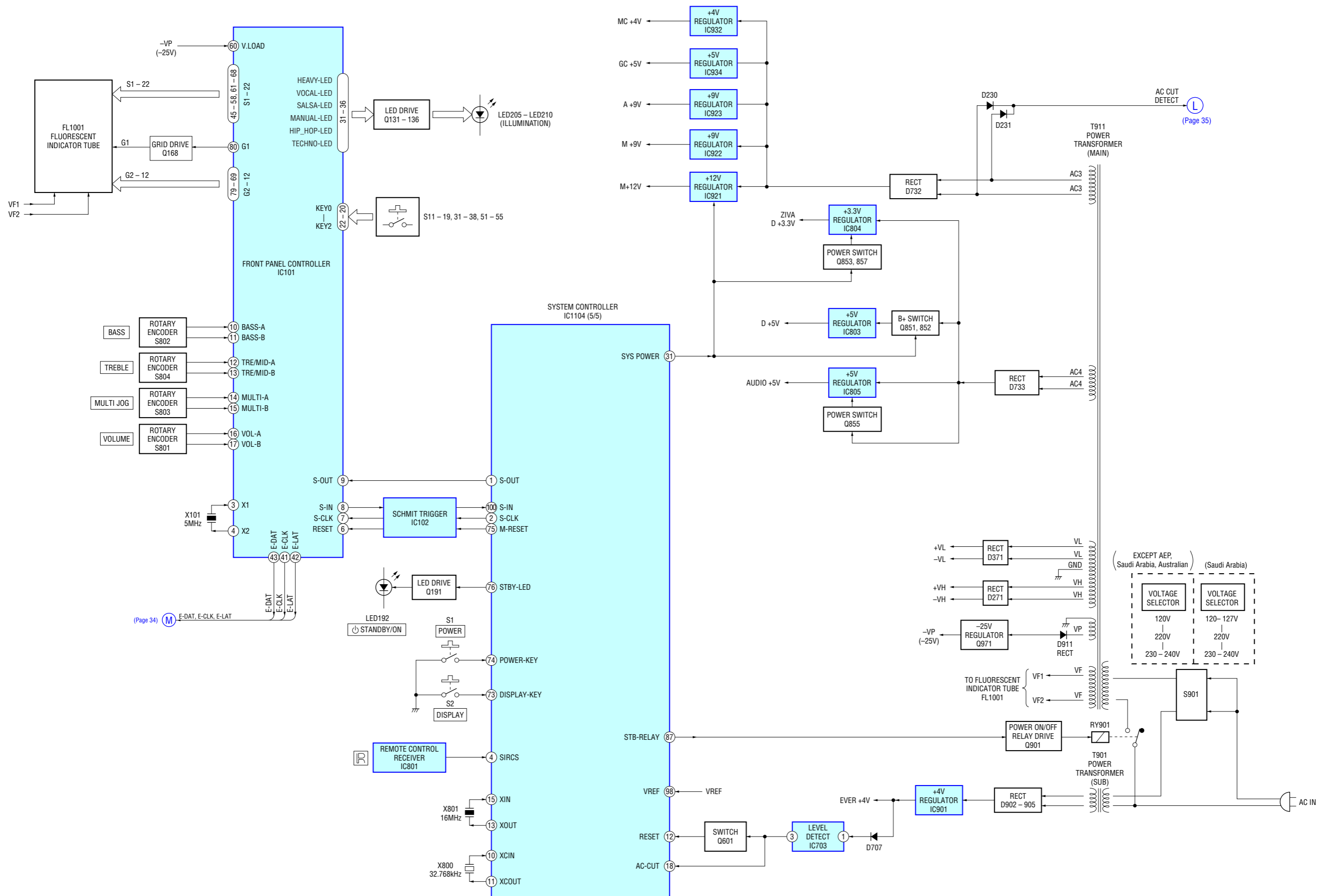


6-5. BLOCK DIAGRAM – AMP Section –



• R-ch is omitted due to same as L-ch.
 • SIGNAL PATH
 ⇨ : TUNER (FM/AM)

6-6. BLOCK DIAGRAM – DISPLAY/POWER SUPPLY Section –



6-7. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

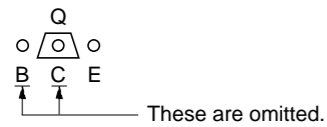
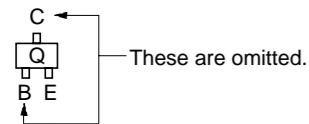
Note on Printed Wiring Board:

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : 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 the pattern face are indicated. (Conductor Side)
 Parts face side: Parts on the parts face side seen from the parts face are indicated. (Component Side)

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

• Indication of transistor.



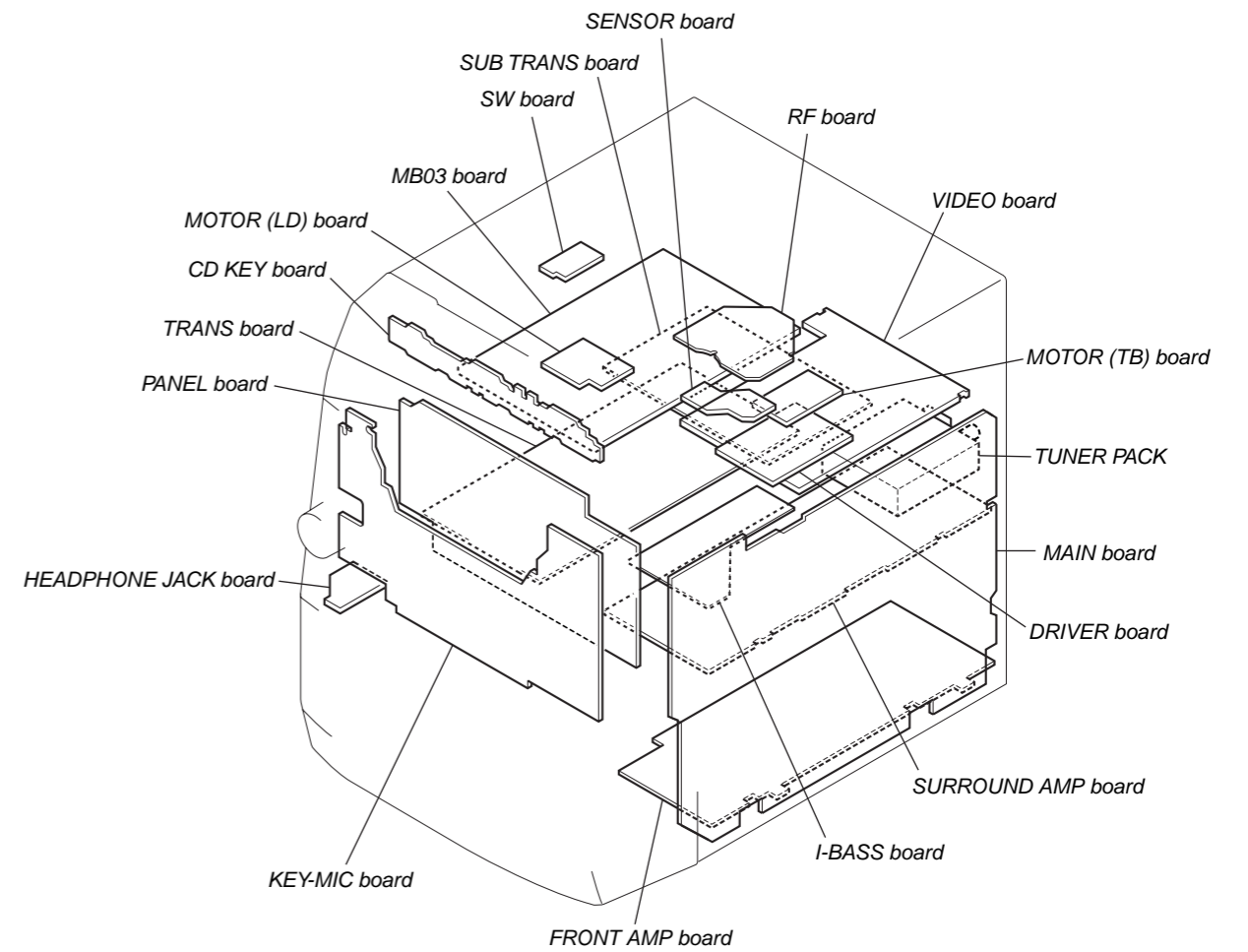
Note on Schematic Diagram:

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

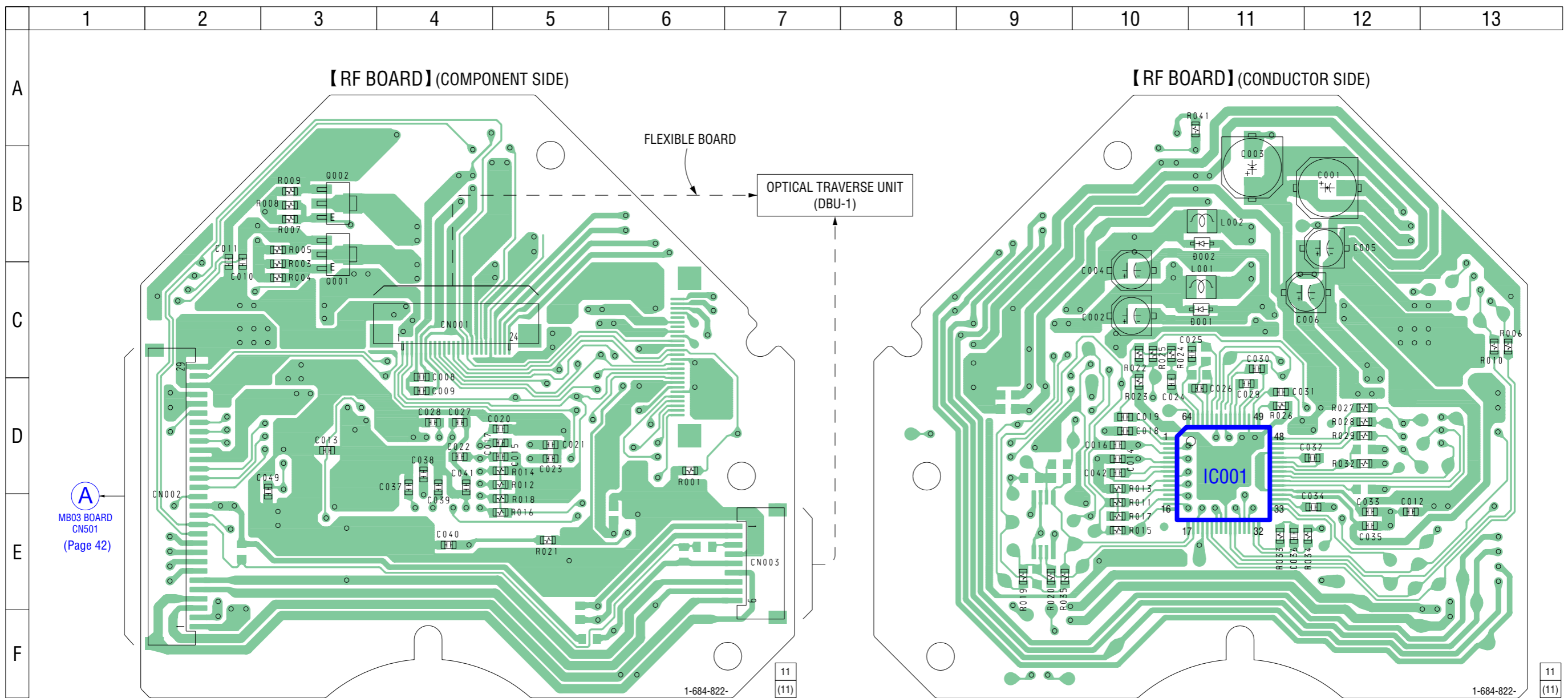
Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

- : B+ Line.
- - - : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
 - RF, MB, VIDEO Section -
 - no mark : DVD
 - Other Sections -
 - no mark : FM
 - * : Impossible to measure
 - () : DVD PLAY
 - << >> : TAPE PLAY
 - [] : REC
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 - ⇨ : TUNER
 - ⇨ : TAPE PLAY
 - ⇨ : REC
 - ⇨ : DVD
 - ⇨ : DIGITAL OUT
 - ⇨ : MD (VIDEO) IN
 - ⇨ : MIC INPUT
 - ⇨ : VIDEO
- Abbreviation
 - AUS : Australian model
 - E51 : Chilean and Peruvian models
 - EA : Saudi Arabia model
 - MY : Malaysia model
 - SP : Singapore model
 - TH : Thai model

• Circuit Boards Location



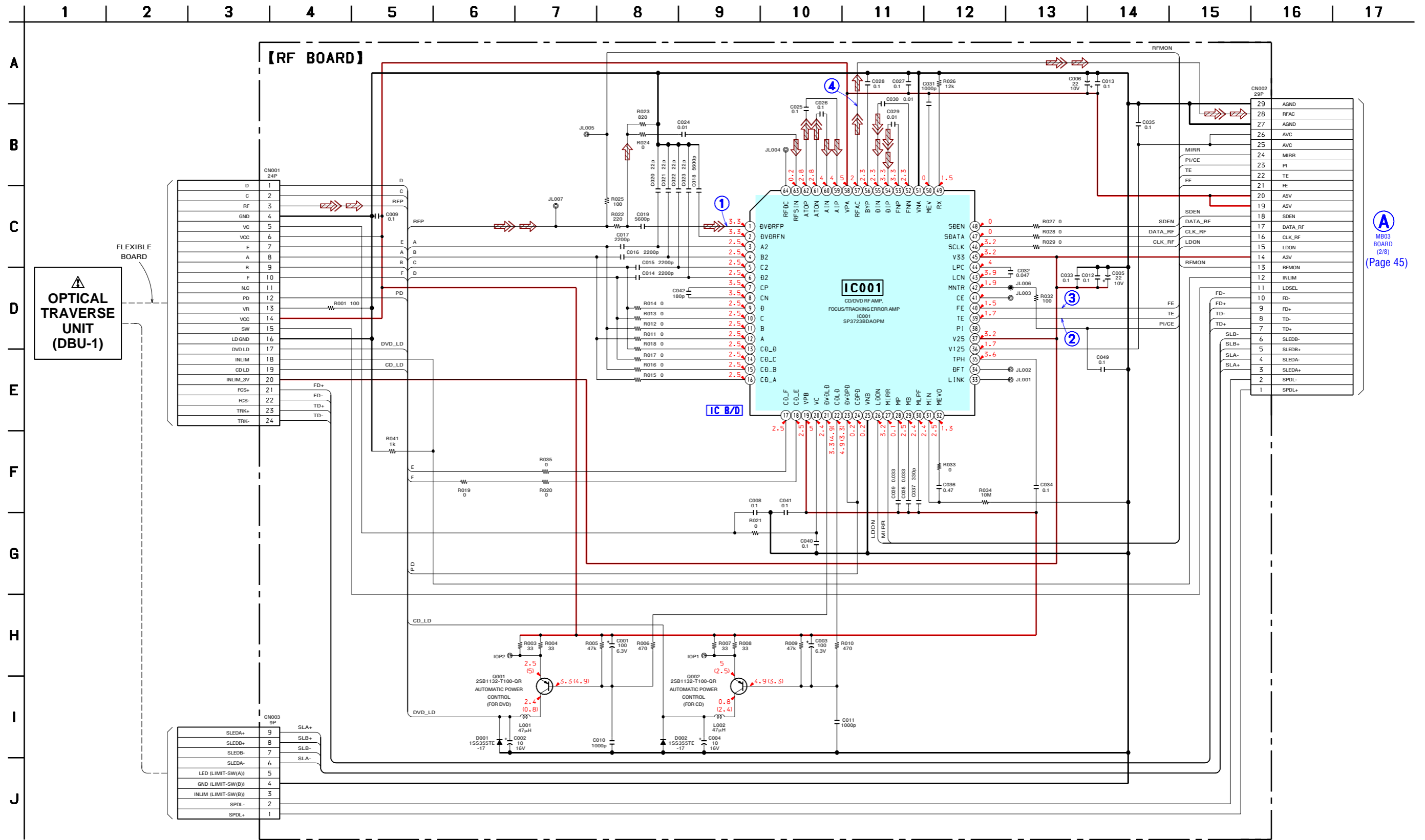
6-8. PRINTED WIRING BOARD – RF Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.



• Semiconductor Location

Ref. No.	Location
D001	C-11
D002	B-11
IC001	D-11
Q001	B-3
Q002	B-3

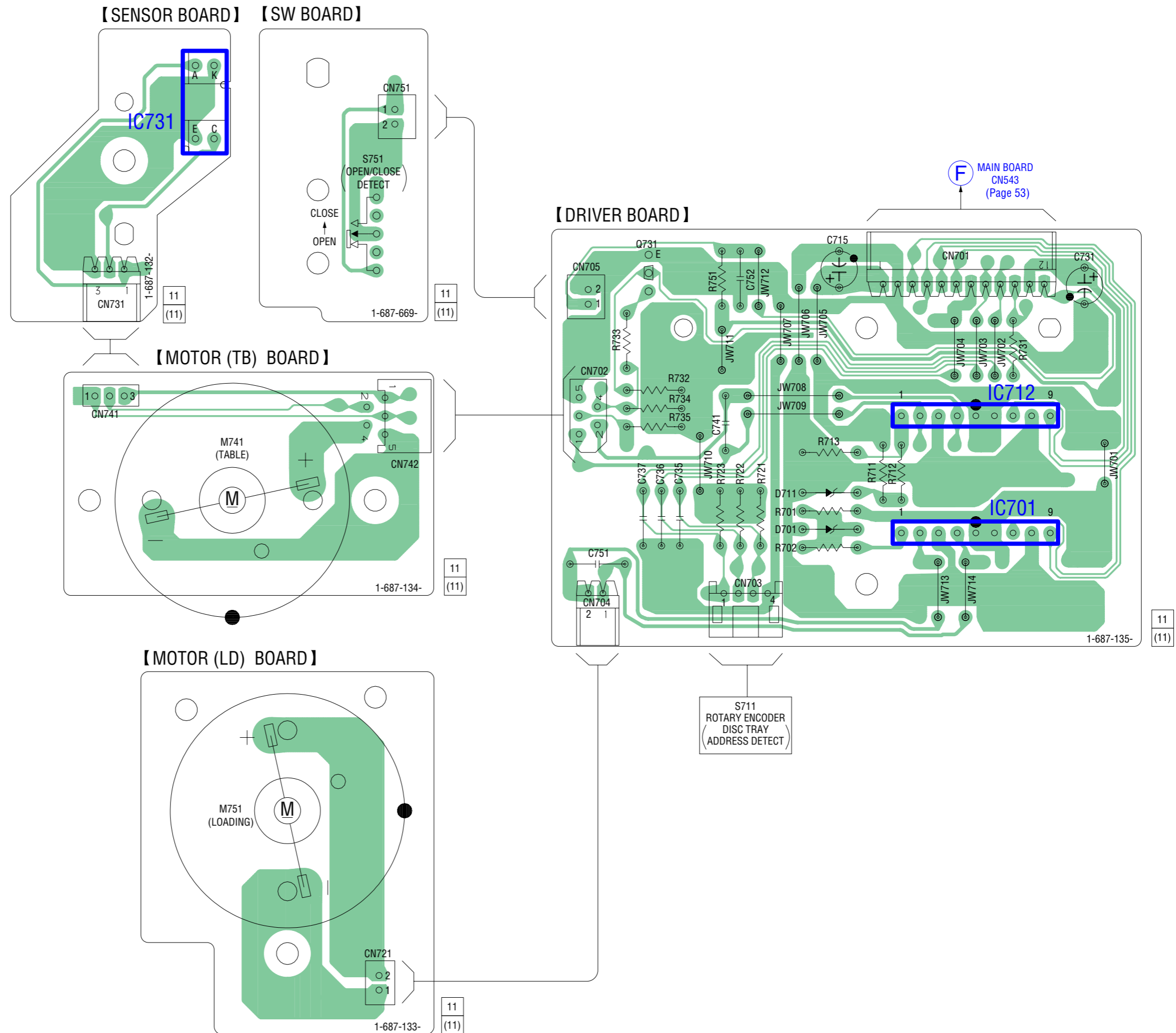
6-9. SCHEMATIC DIAGRAM – RF Section – • See page 52 for Waveforms. • See page 74 for IC Block Diagram.



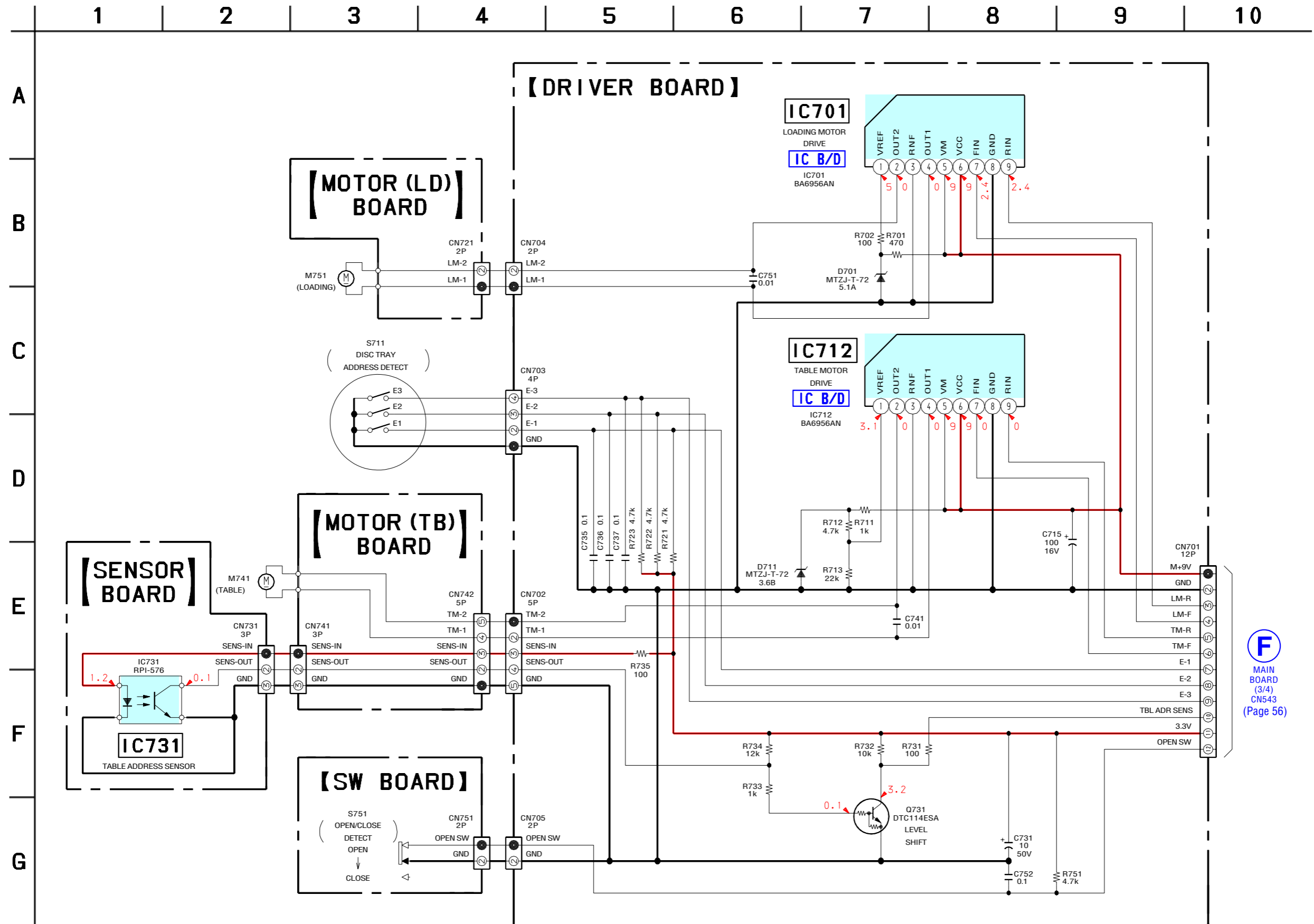
MB03 BOARD (2/8) (Page 45)


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

6-10. PRINTED WIRING BOARDS – CHANGER Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.



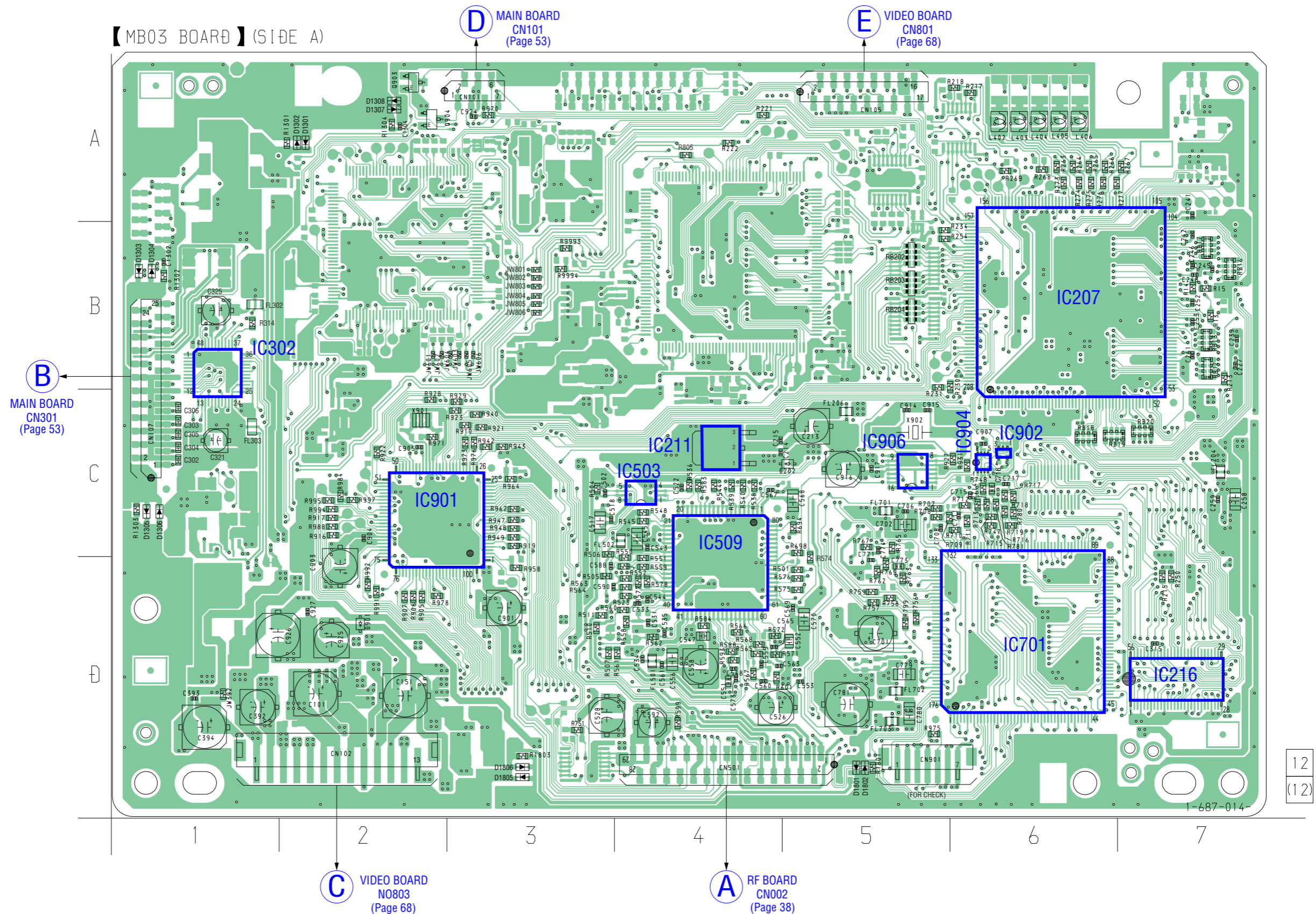
6-11. SCHEMATIC DIAGRAM – CHANGER Section – • See page 74 for IC Block Diagrams.




6-12. PRINTED WIRING BOARD – MB Section (Component Side) – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.

• Semiconductor Location

Ref. No.	Location
D202	C-5
D901	D-2
D1301	A-2
D1302	A-2
D1303	B-1
D1304	B-1
D1305	C-1
D1306	C-1
D1307	A-2
D1308	A-2
D1801	D-5
D1802	D-5
D1805	D-3
D1806	D-3
IC207	B-6
IC211	C-4
IC216	D-7
IC302	B-1
IC503	C-4
IC509	D-4
IC701	D-6
IC901	C-2
IC902	C-6
IC904	C-6
IC906	C-5
Q903	A-2
Q904	A-2



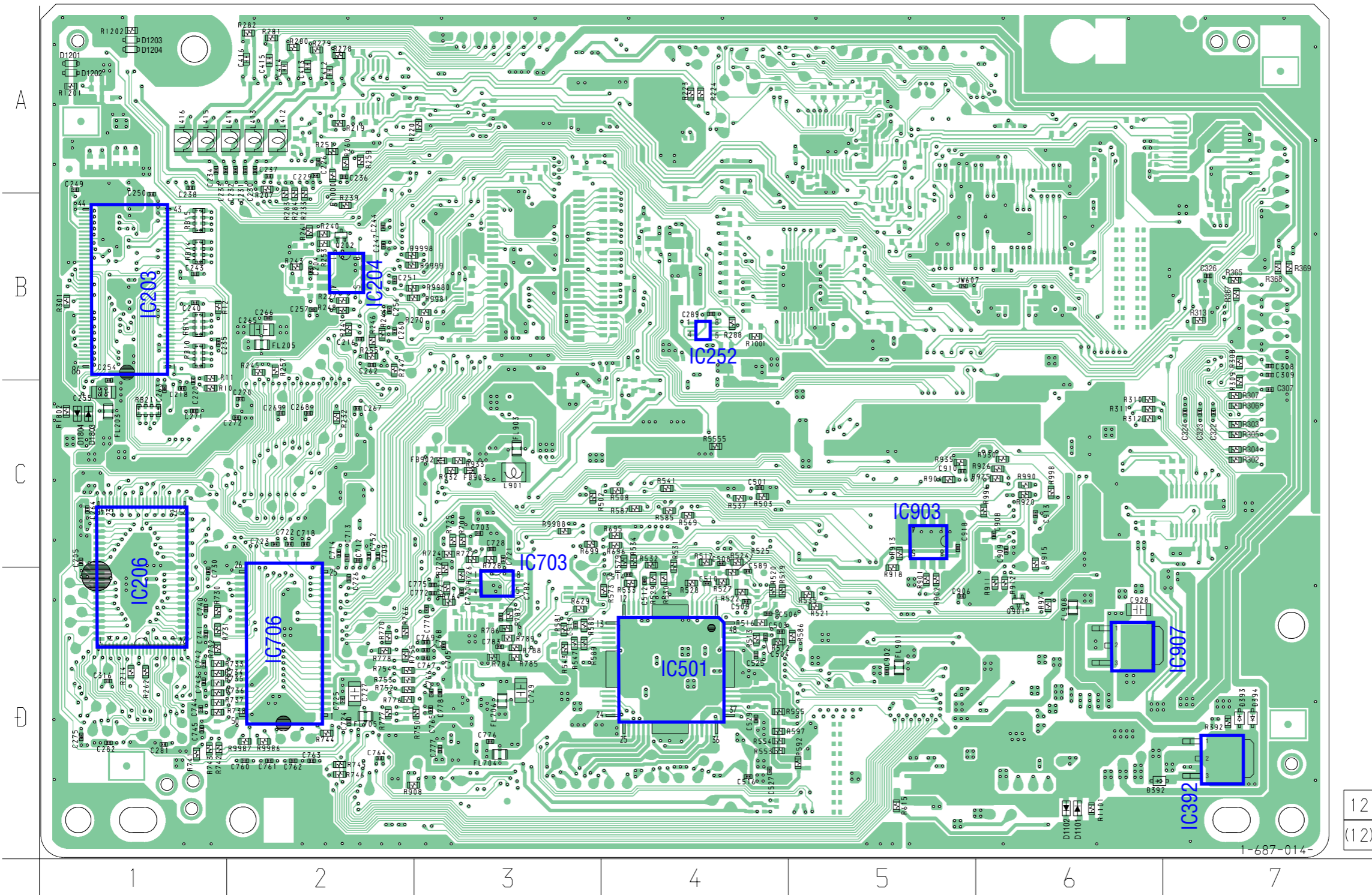
12
(12)

6-13. PRINTED WIRING BOARD – MB Section (Conductor Side) – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.

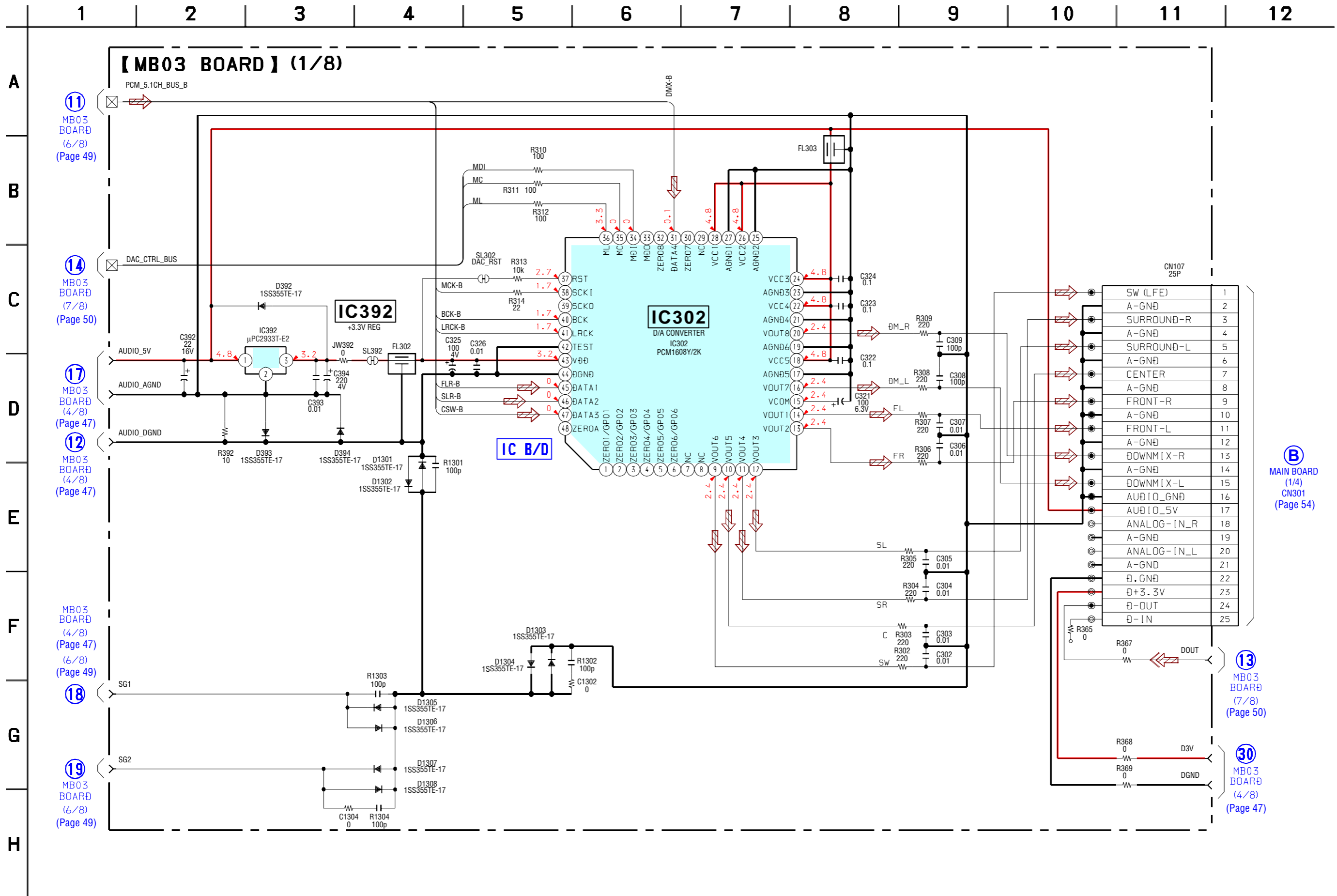
【 MB03 BOARD 】 (SIDE B)

• Semiconductor Location

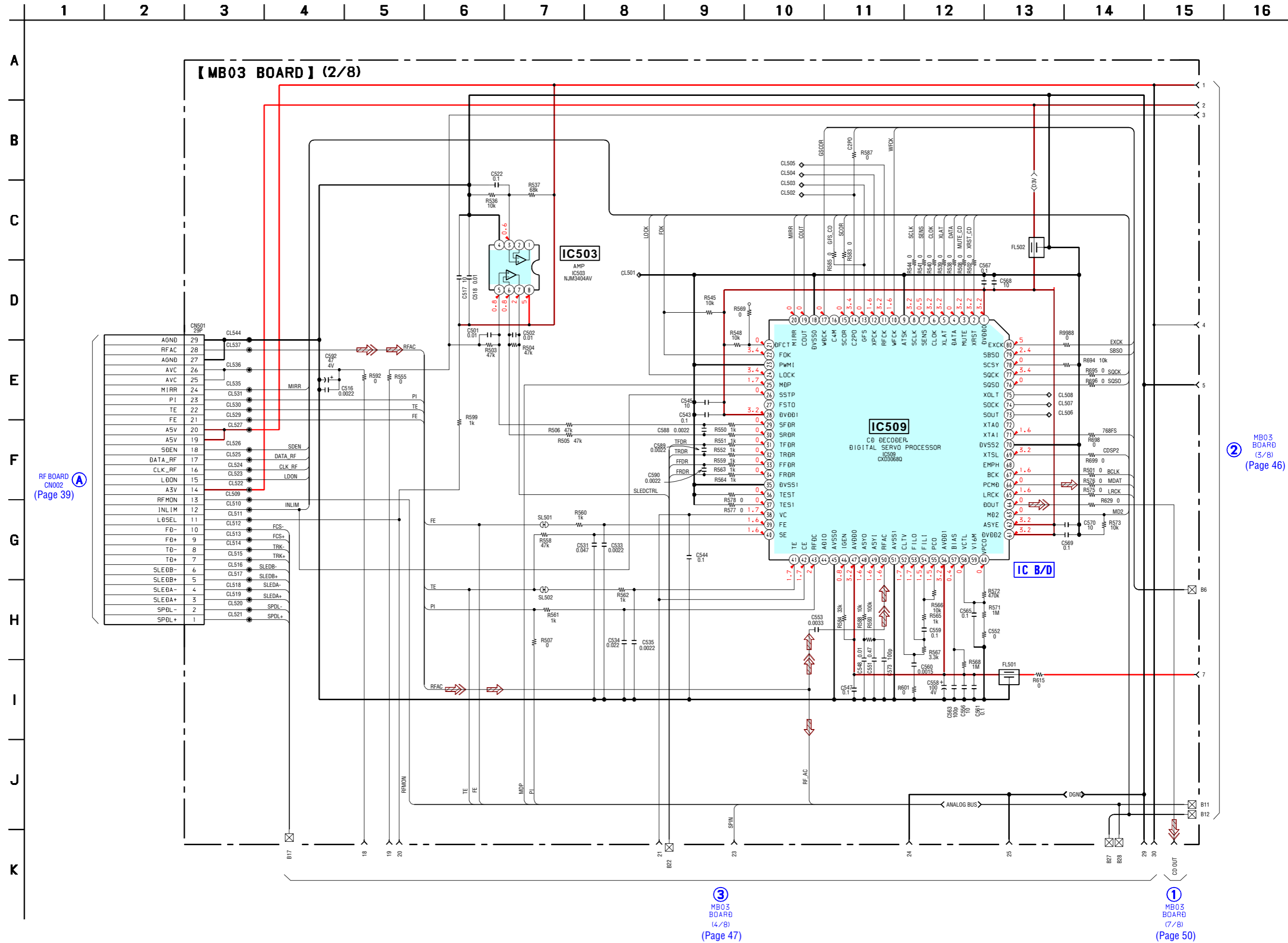
Ref. No.	Location
D392	D-6
D393	D-7
D394	D-7
D1101	D-6
D1102	D-6
D1201	A-1
D1202	A-1
D1203	A-1
D1204	A-1
D1803	C-1
D1804	C-1
IC203	B-1
IC204	B-2
IC206	D-1
IC252	B-4
IC392	D-7
IC501	D-4
IC703	D-3
IC706	D-2
IC903	C-5
IC907	D-6
Q202	B-2
Q901	D-6



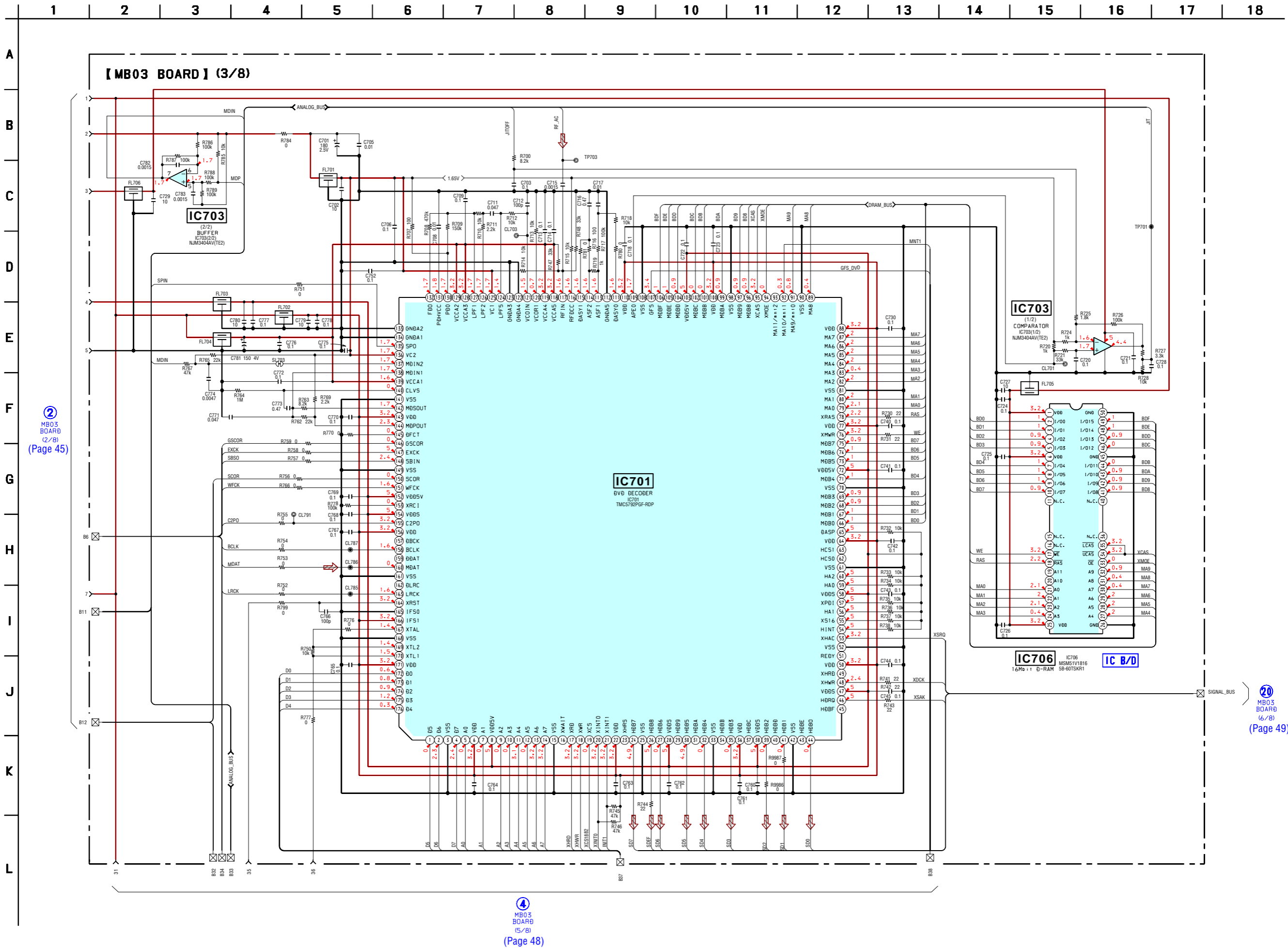
6-14. SCHEMATIC DIAGRAM – MB Section (1/8) – • See page 74 for IC Block Diagram.



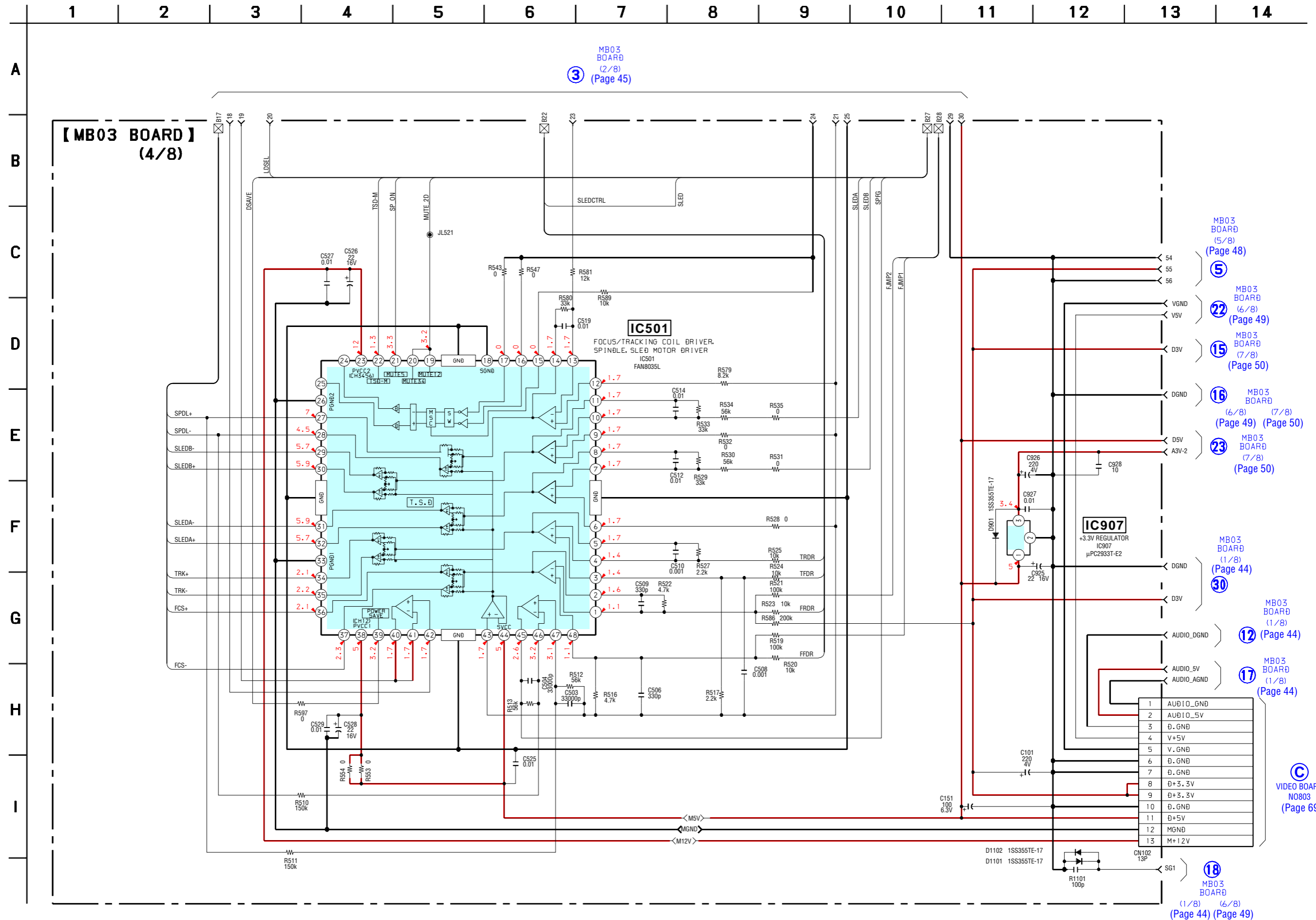
6-15. SCHEMATIC DIAGRAM – MB Section (2/8) – • See page 74 for IC Block Diagram.



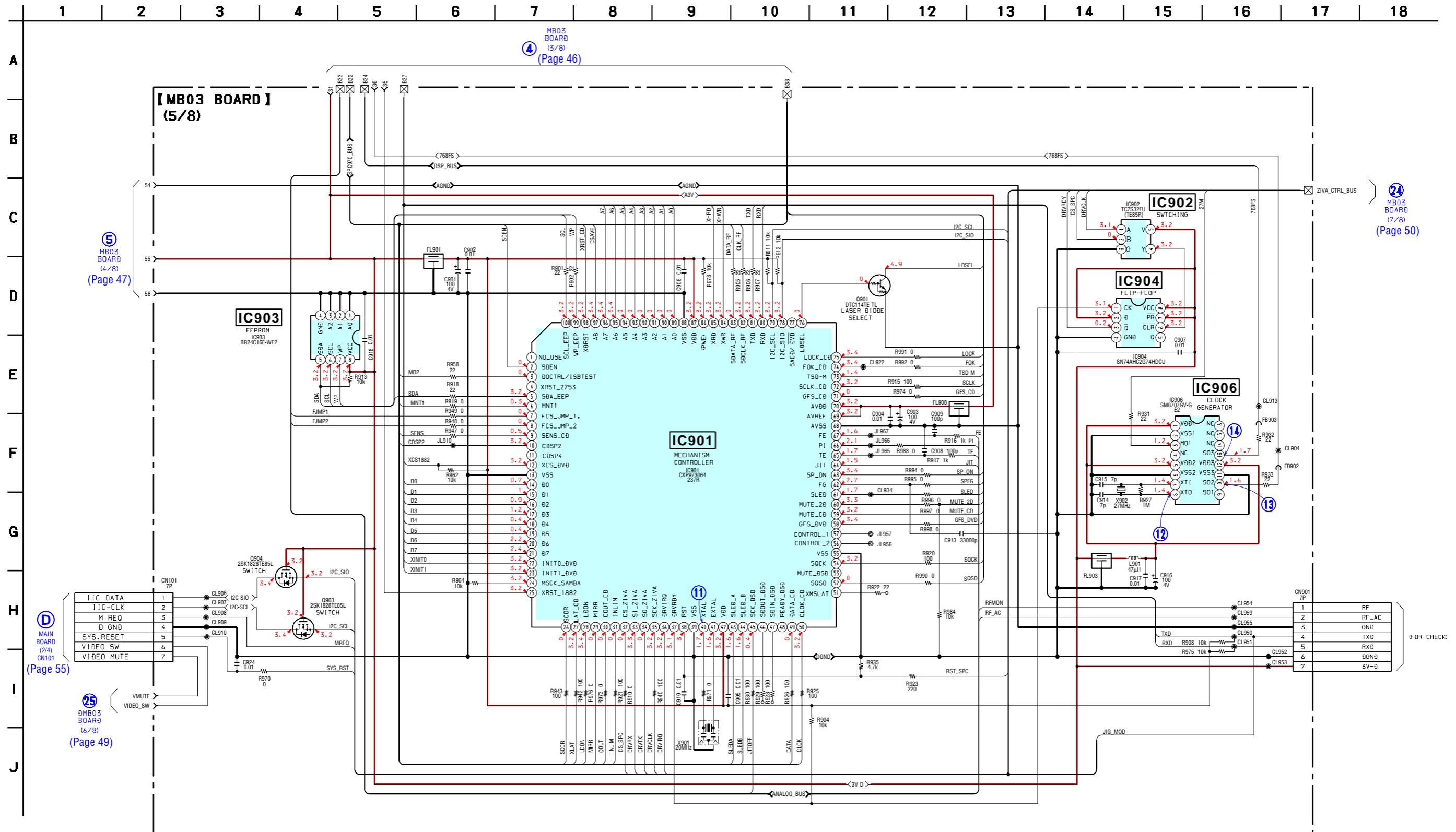
6-16. SCHEMATIC DIAGRAM – MB Section (3/8) – • See page 74 for IC Block Diagram.



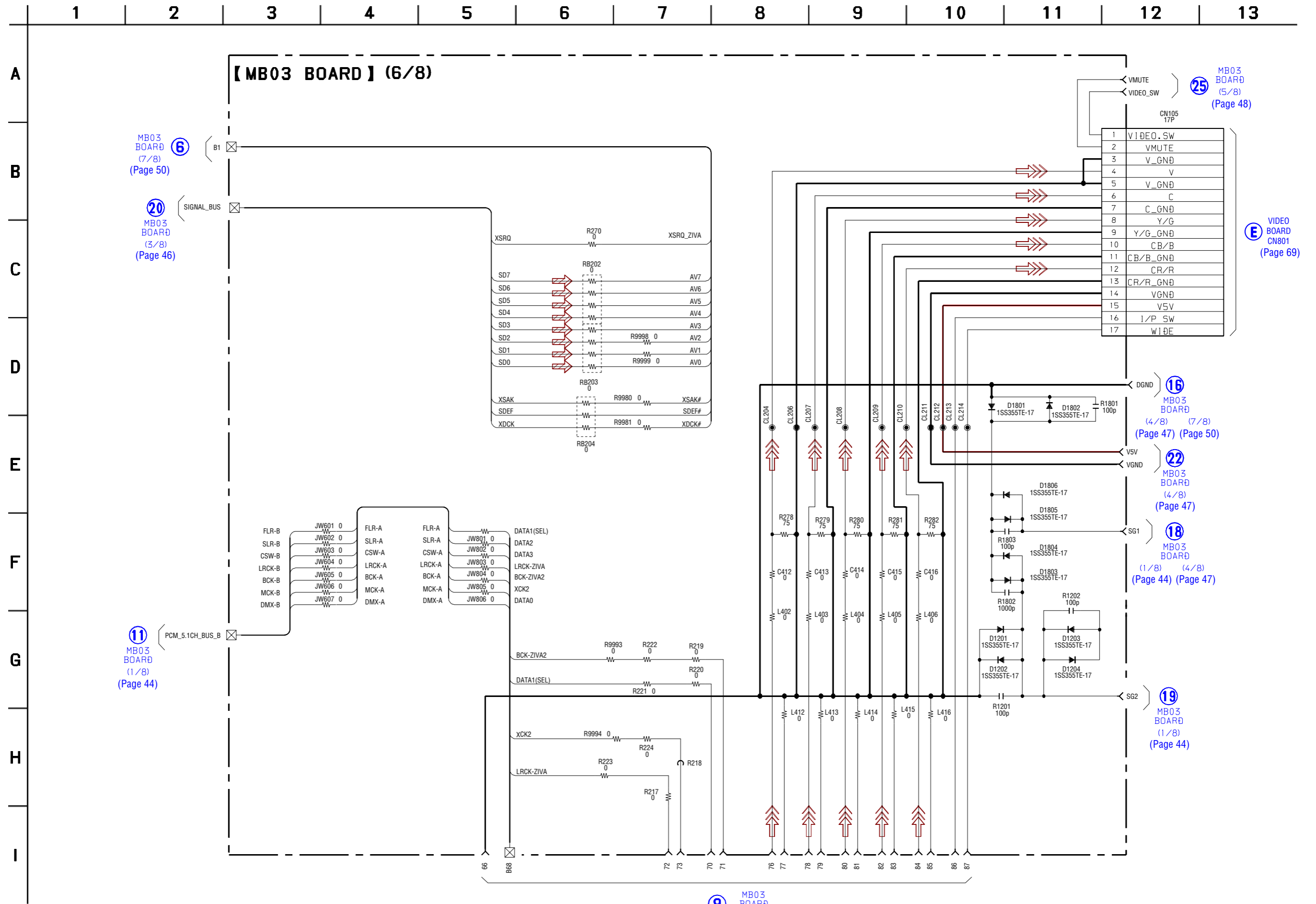
6-17. SCHEMATIC DIAGRAM – MB Section (4/8) –



6-18. SCHEMATIC DIAGRAM – MB Section (5/8) – • See page 52 for Waveforms. • See page 74 for IC Block Diagrams.



6-19. SCHEMATIC DIAGRAM – MB Section (6/8) –



MB03 BOARD (7/8) (Page 50)

MB03 BOARD (3/8) (Page 46)

MB03 BOARD (1/8) (Page 44)

MB03 BOARD (5/8) (Page 48)

VIDEO BOARD CN801 (Page 69)

MB03 BOARD (4/8) (7/8) (Page 47) (Page 50)

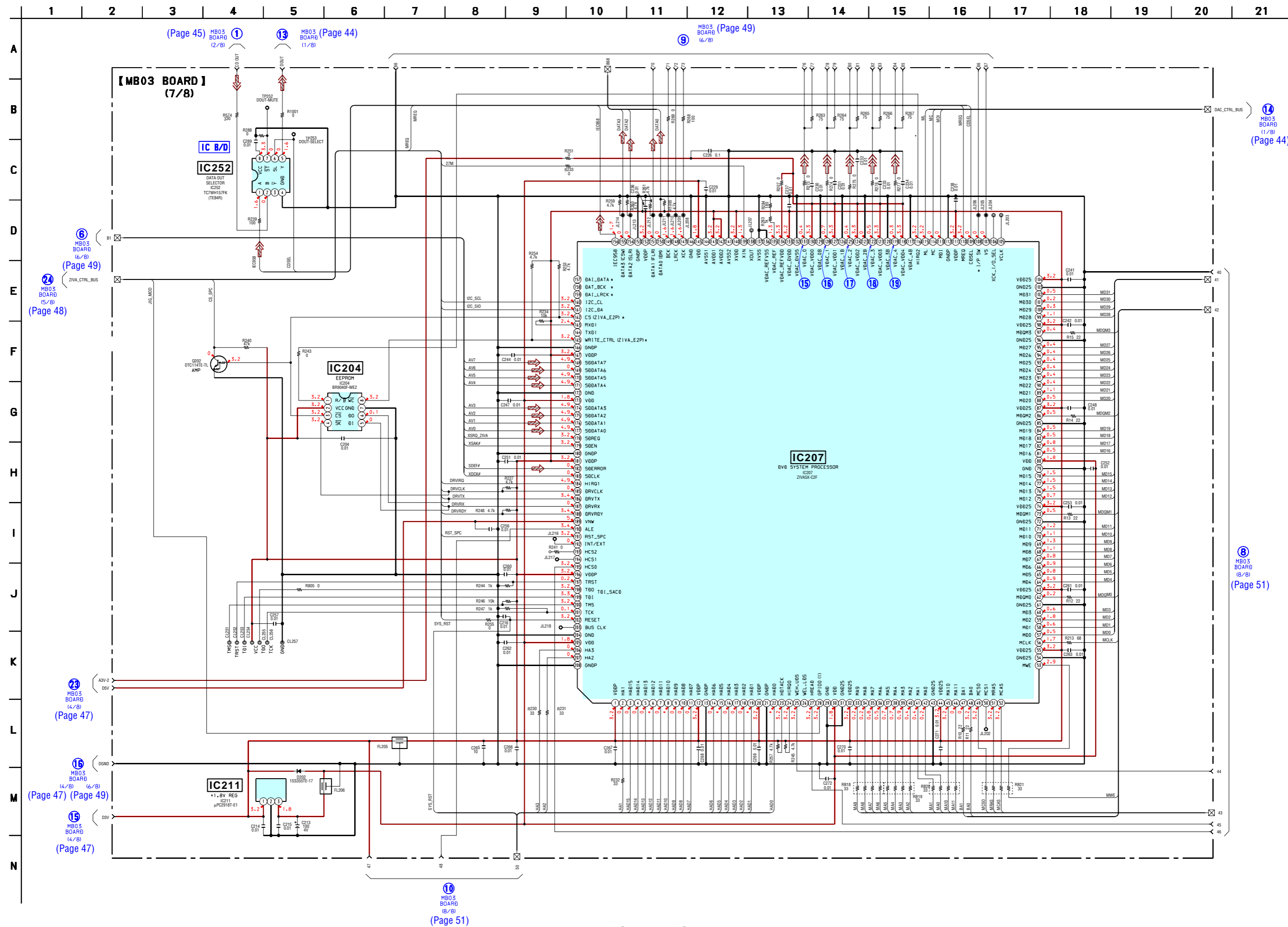
MB03 BOARD (4/8) (Page 47)

MB03 BOARD (1/8) (4/8) (Page 44) (Page 47)

MB03 BOARD (1/8) (Page 44)

MB03 BOARD (7/8) (Page 50)

6-20. SCHEMATIC DIAGRAM – MB Section (7/8) – • See page 52 for Waveforms. • See page 74 for IC Block Diagram.

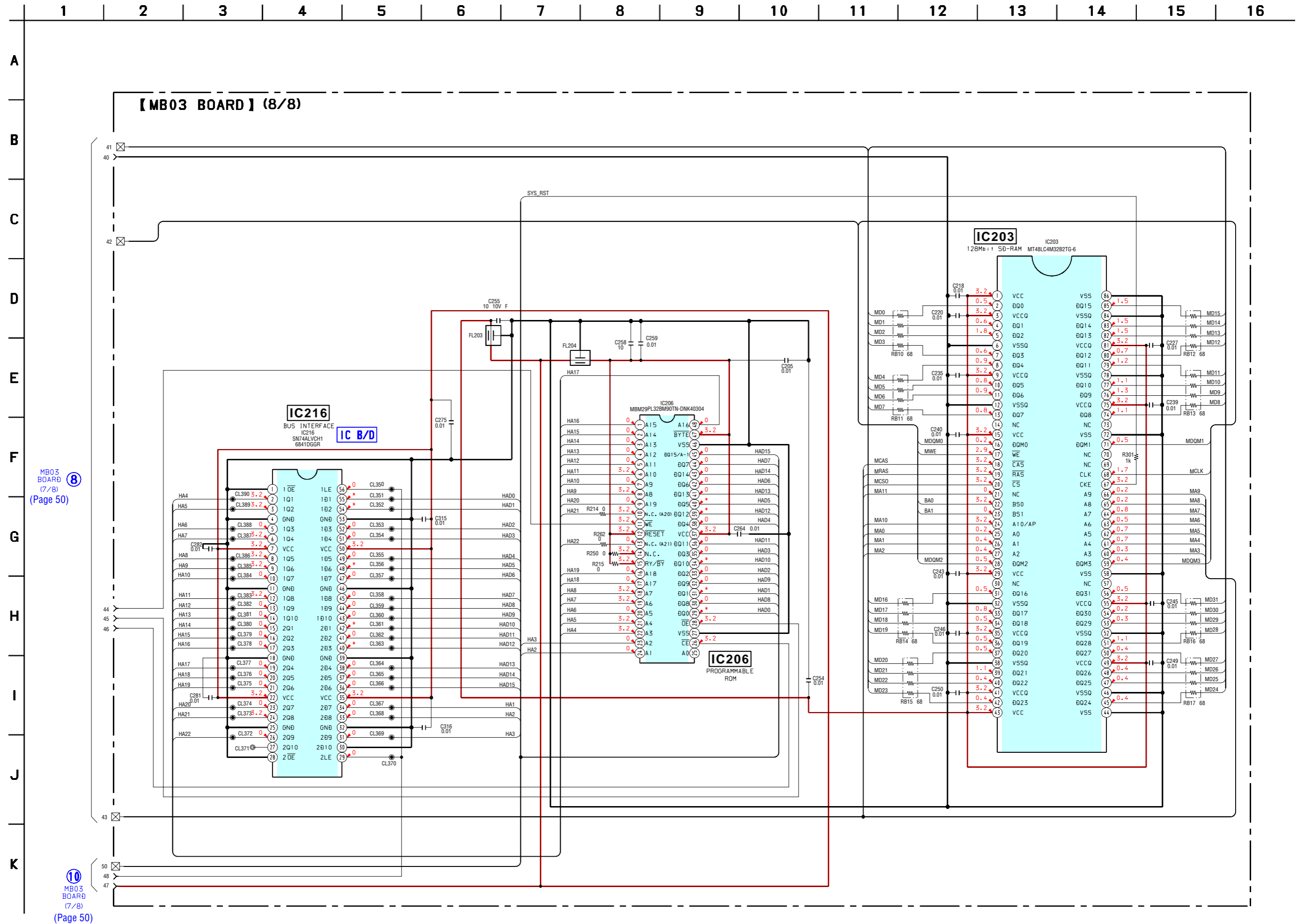


MB03 BOARD (8/8) (Page 51)

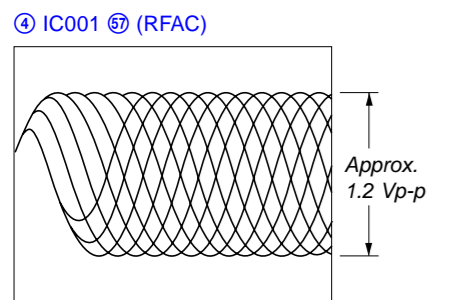
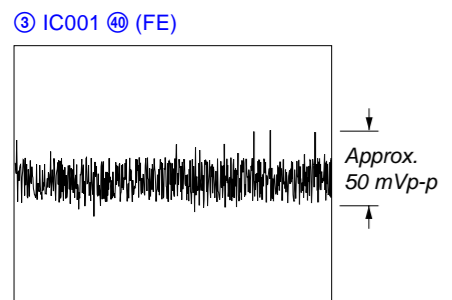
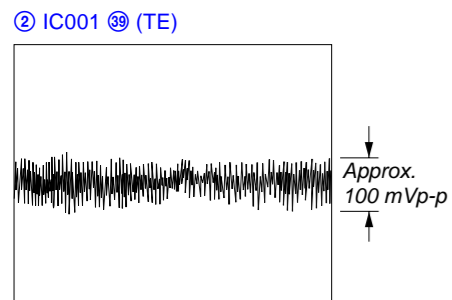
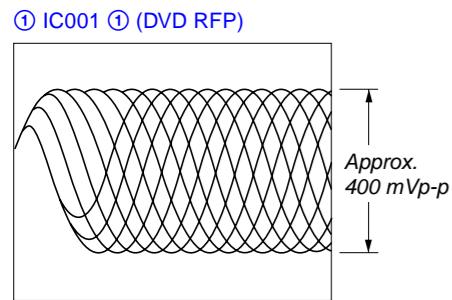
MB03 BOARD (1/8) (Page 44)

MB03 BOARD (8/8) (Page 51)

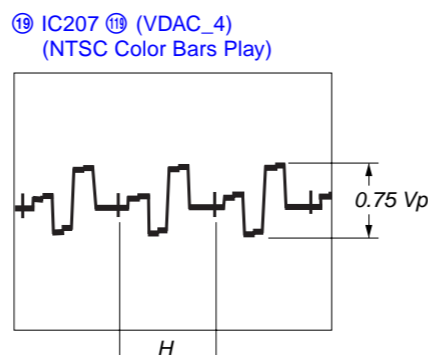
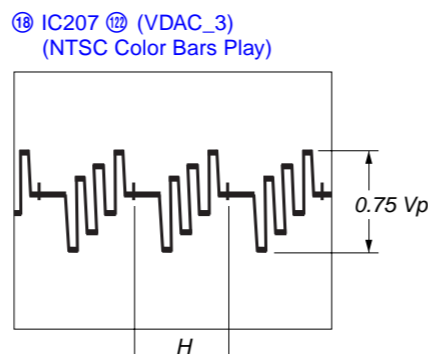
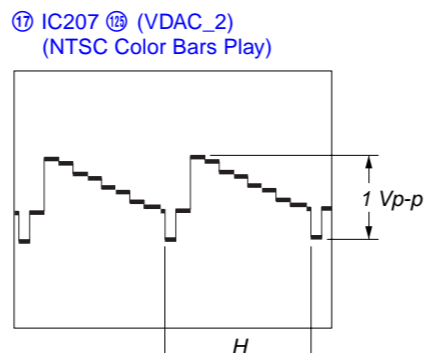
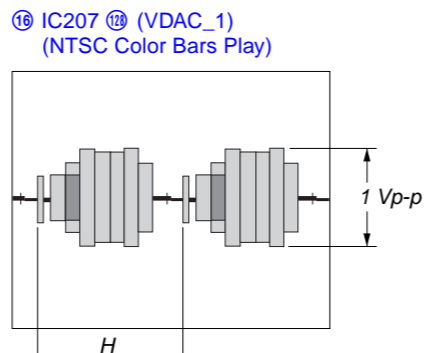
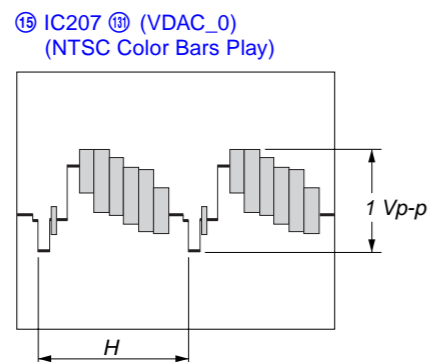
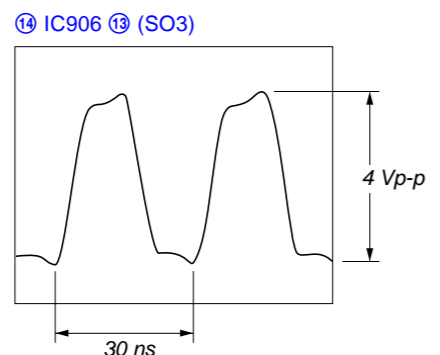
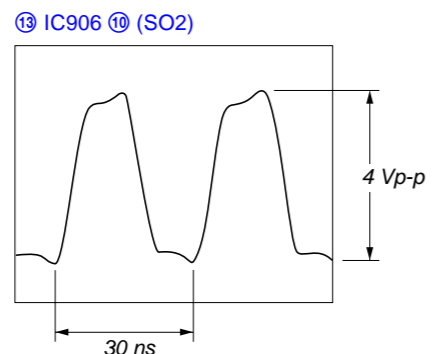
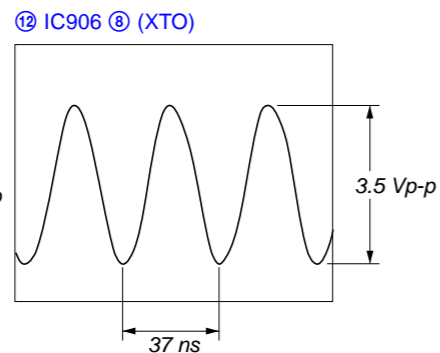
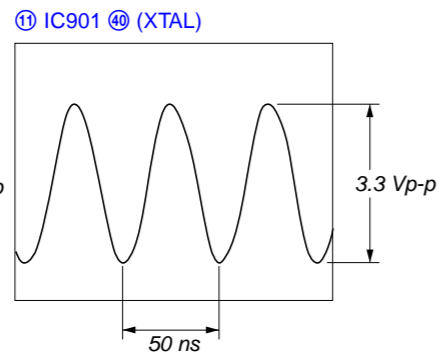
6-21. SCHEMATIC DIAGRAM – MB Section (8/8) – • See page 74 for IC Block Diagram.



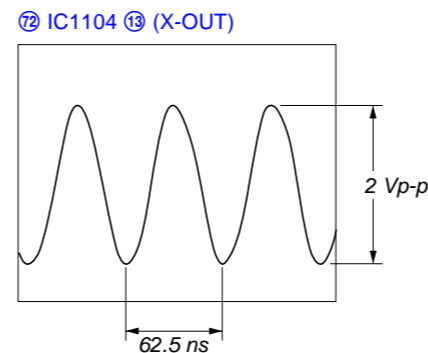
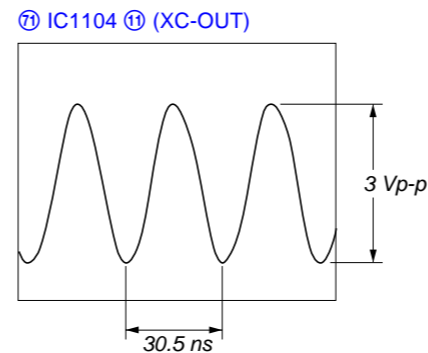
• Waveforms
– RF Board –



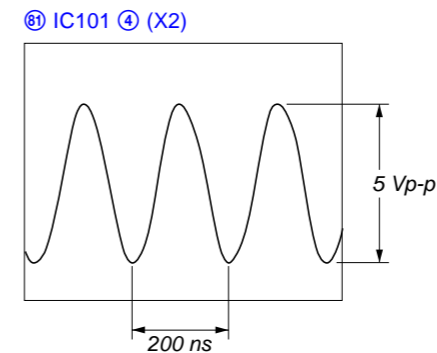
– MB03 Board –



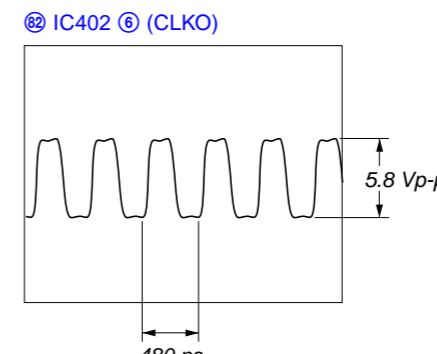
– MAIN Board –



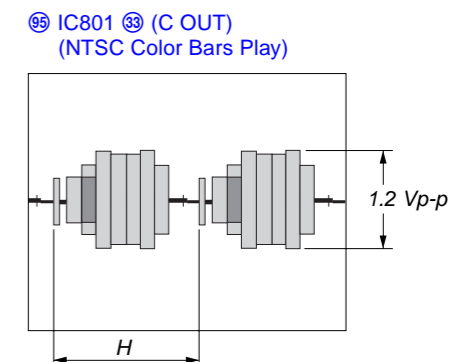
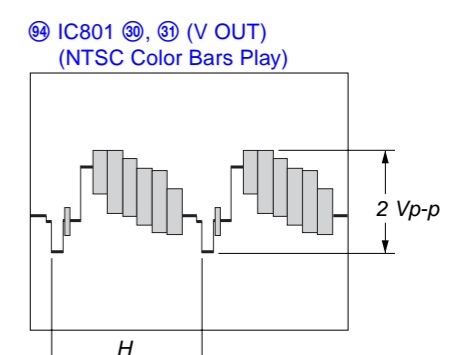
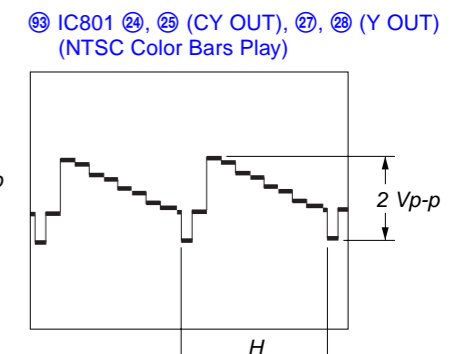
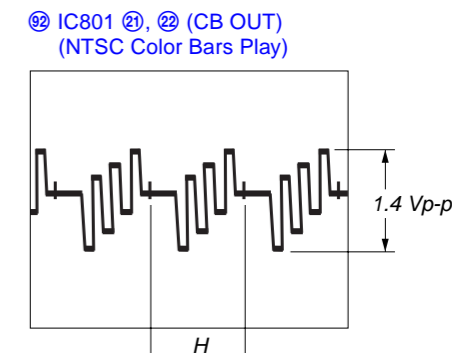
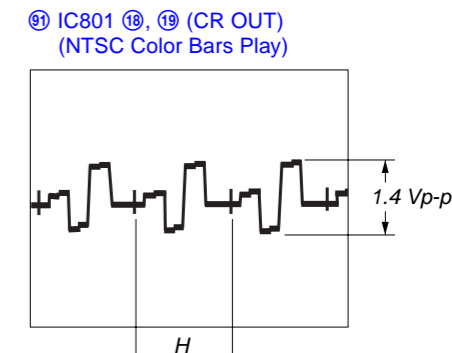
– PANEL Board –



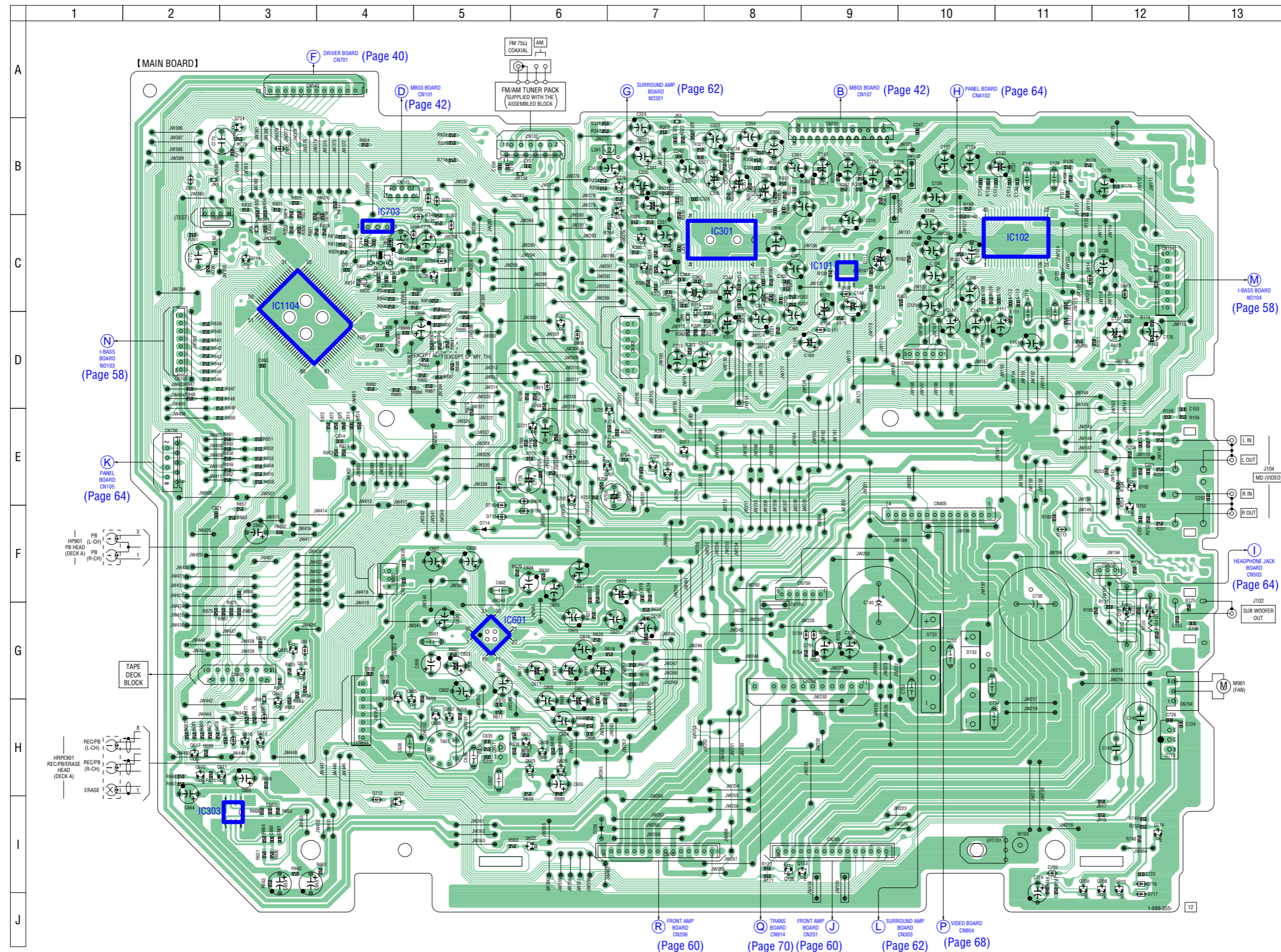
– KEY-MIC Board –



– VIDEO Board –



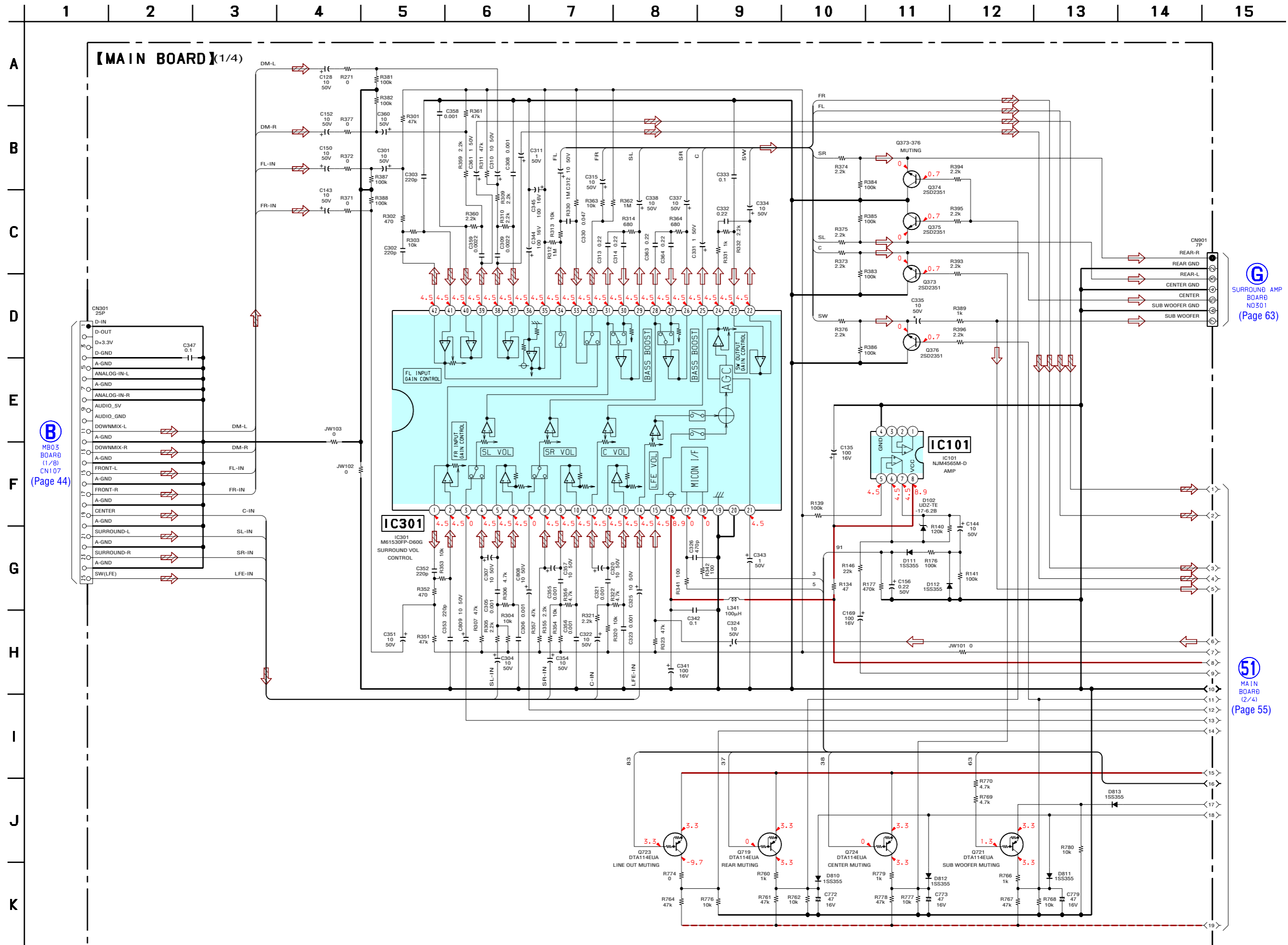
6-22. PRINTED WIRING BOARD – MAIN Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D102	C-9	Q106	I-8
D111	D-9	Q114	G-12
D112	C-9	Q115	G-12
D113	F-11	Q152	F-12
D201	B-5	Q153	I-9
D202	B-5	Q373	B-7
D609	H-3	Q374	C-7
D610	H-3	Q375	C-7
D611	G-3	Q376	B-7
D703	I-11	Q377	E-7
D704	C-5	Q601	H-5
D705	C-5	Q602	I-6
D706	C-5	Q603	H-6
D707	C-5	Q604	H-4
D708	E-5	Q605	H-4
D709	F-6	Q606	H-5
D710	E-5	Q607	H-5
D711	E-5	Q608	H-6
D712	I-4	Q609	H-6
D714	F-5	Q610	H-2
D716	I-12	Q611	H-3
D717	J-12	Q612	H-6
D729	I-6	Q613	H-3
D732	G-10	Q614	H-3
D733	G-10	Q615	G-3
D734	G-9	Q616	G-3
D735	G-9	Q617	H-2
D804	E-6	Q618	H-3
D809	D-6	Q701	E-7
D810	B-2	Q702	E-6
D811	D-6	Q703	D-6
D812	B-3	Q704	E-7
D813	E-6	Q705	E-7
D814	C-11	Q706	C-5
D815	C-12	Q707	I-4
		Q708	I-12
IC101	C-9	Q709	I-11
IC102	C-11	Q710	I-12
IC301	C-8	Q713	H-12
IC303	I-3	Q714	I-12
IC601	G-5	Q719	C-3
IC703	C-4	Q721	E-6
IC1104	D-3	Q723	E-7
		Q724	B-3

6-23. SCHEMATIC DIAGRAM – MAIN Section (1/4) –

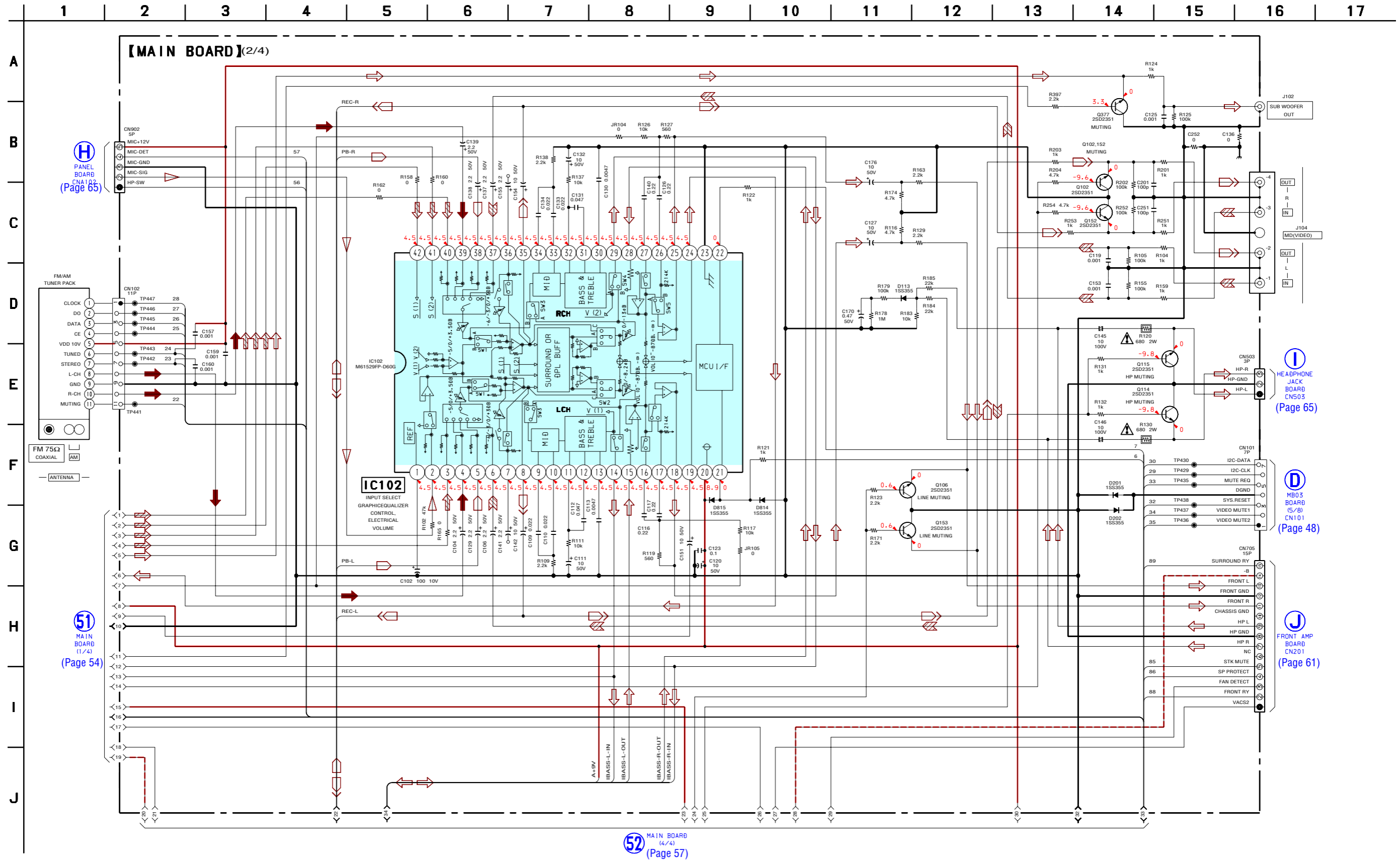


(B) MB03 BOARD (1/8) CN107 (Page 44)

(G) SURROUND AMP BOARD NO.301 (Page 63)

(51) MAIN BOARD (2/4) (Page 55)

6-24. SCHEMATIC DIAGRAM – MAIN Section (2/4) –



H
 PANEL BOARD
 CN102
 (Page 65)

I
 HEADPHONE
 JACK BOARD
 CN503
 (Page 65)

D
 MB03 BOARD
 (S/B)
 CN101
 (Page 48)

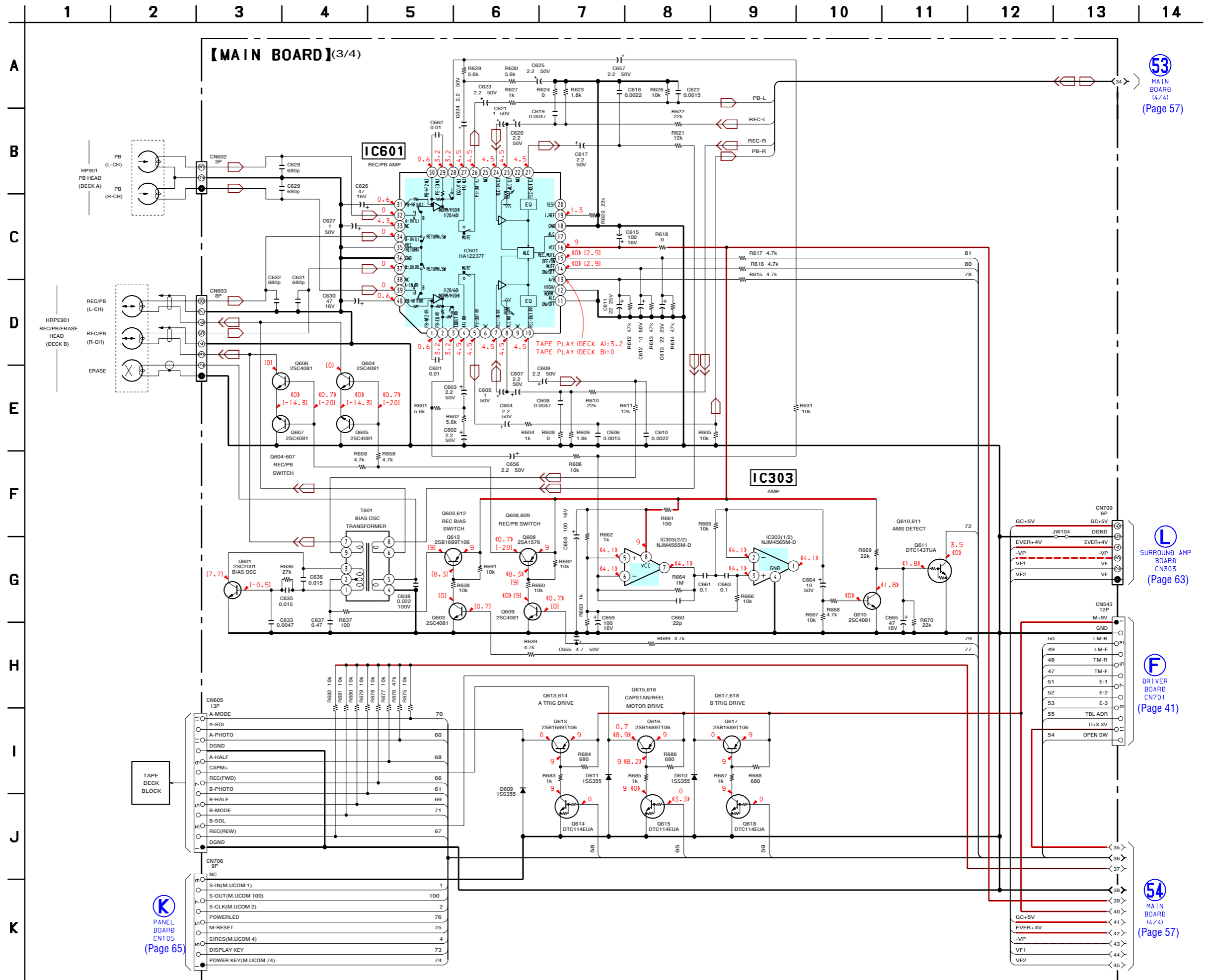
J
 FRONT AMP BOARD
 CN201
 (Page 61)

51
 MAIN BOARD
 (1/4)
 (Page 54)

52 MAIN BOARD
 (4/4)
 (Page 57)

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

6-25. SCHEMATIC DIAGRAM – MAIN Section (3/4) –



53
MAIN BOARD
(4/4)
(Page 57)

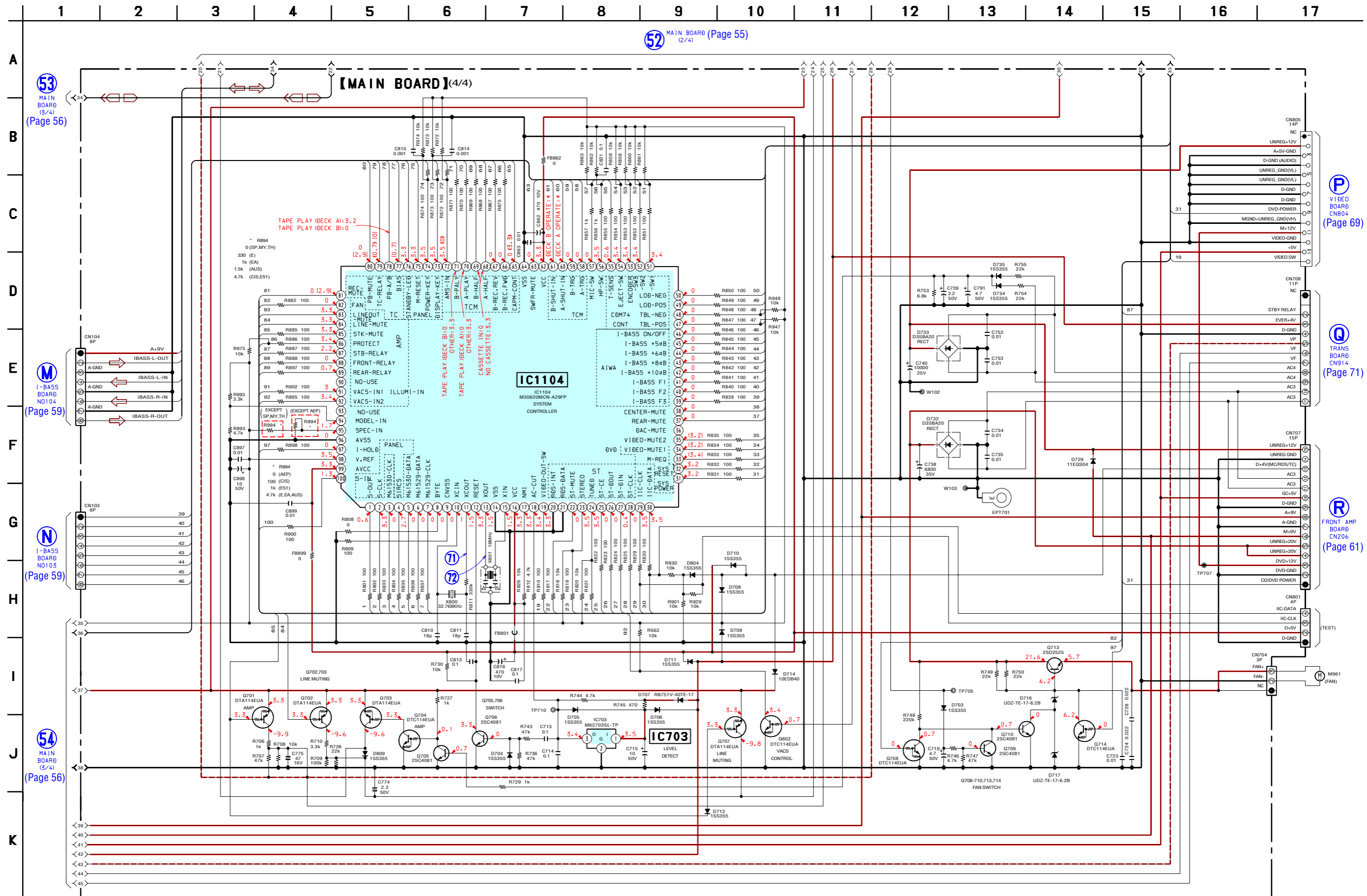
L
SURROUND AMP
BOARD
CN303
(Page 63)

F
DRIVER BOARD
CN701
(Page 41)

54
MAIN BOARD
(4/4)
(Page 57)

K
PANEL BOARD
CN105
(Page 65)

6-26. SCHEMATIC DIAGRAM – MAIN Section (4/4) – • See page 52 for Waveforms.



52 MAIN BOARD (Page 55)
(2/4)

53 MAIN BOARD (3/4)
(Page 56)

M I-BASS BOARD N0104
(Page 59)


N I-BASS BOARD N0103
(Page 59)

54 MAIN BOARD (3/4)
(Page 56)

P VIDEO BOARD CN804
(Page 69)

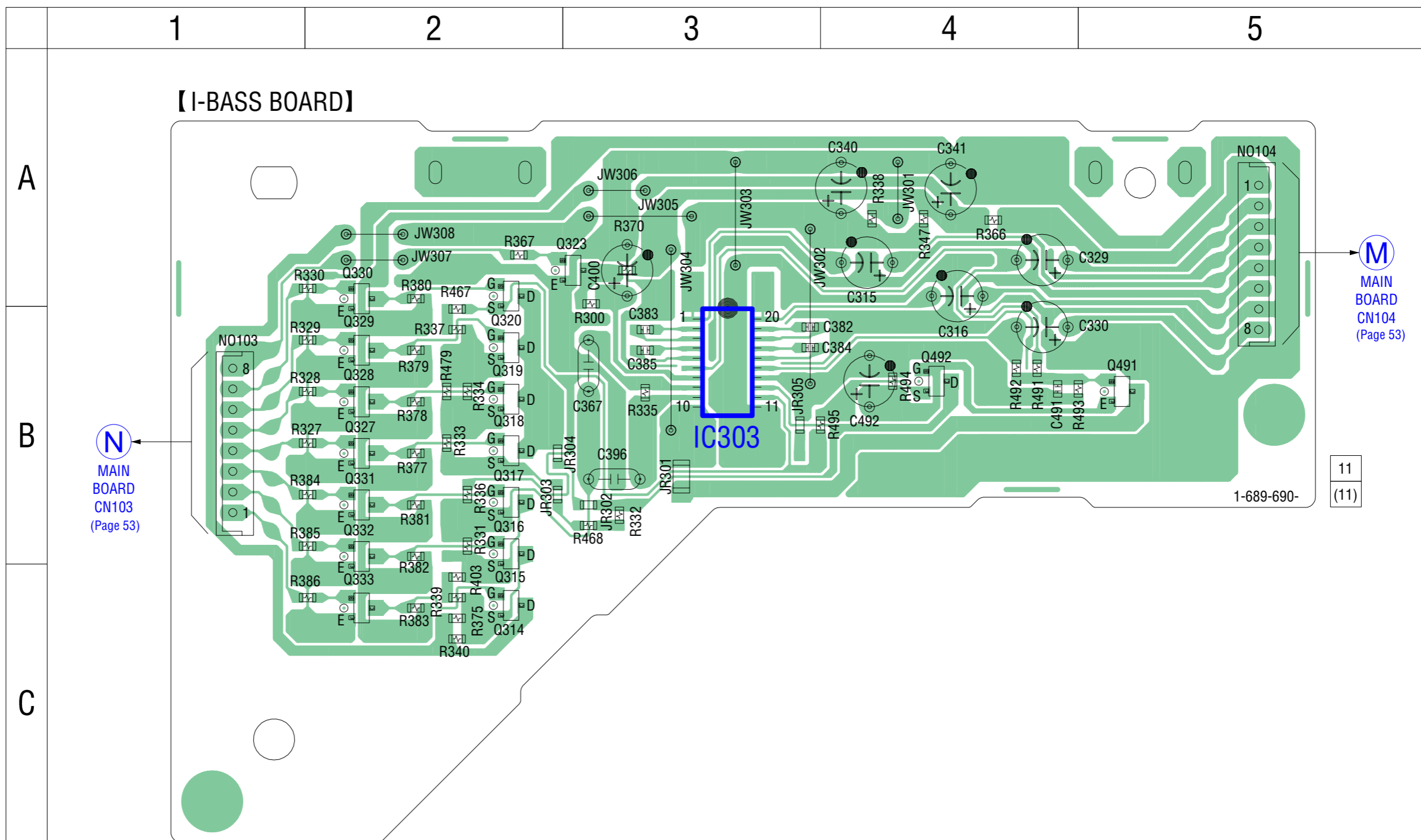
Q TRANS BOARD CN914
(Page 71)

R FRONT AMP BOARD CN206
(Page 61)

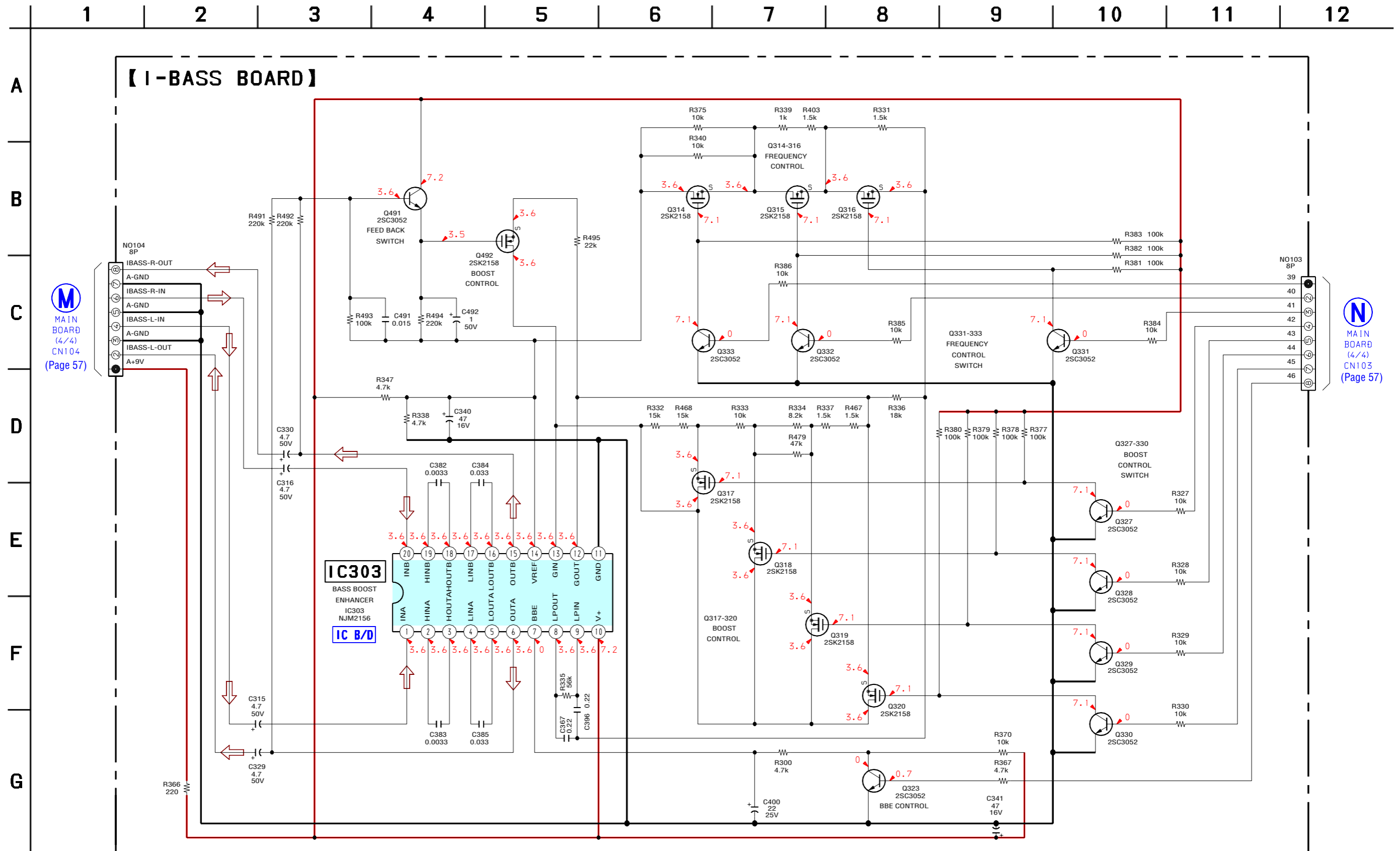
6-27. PRINTED WIRING BOARD – I-BASS Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.

• Semiconductor Location

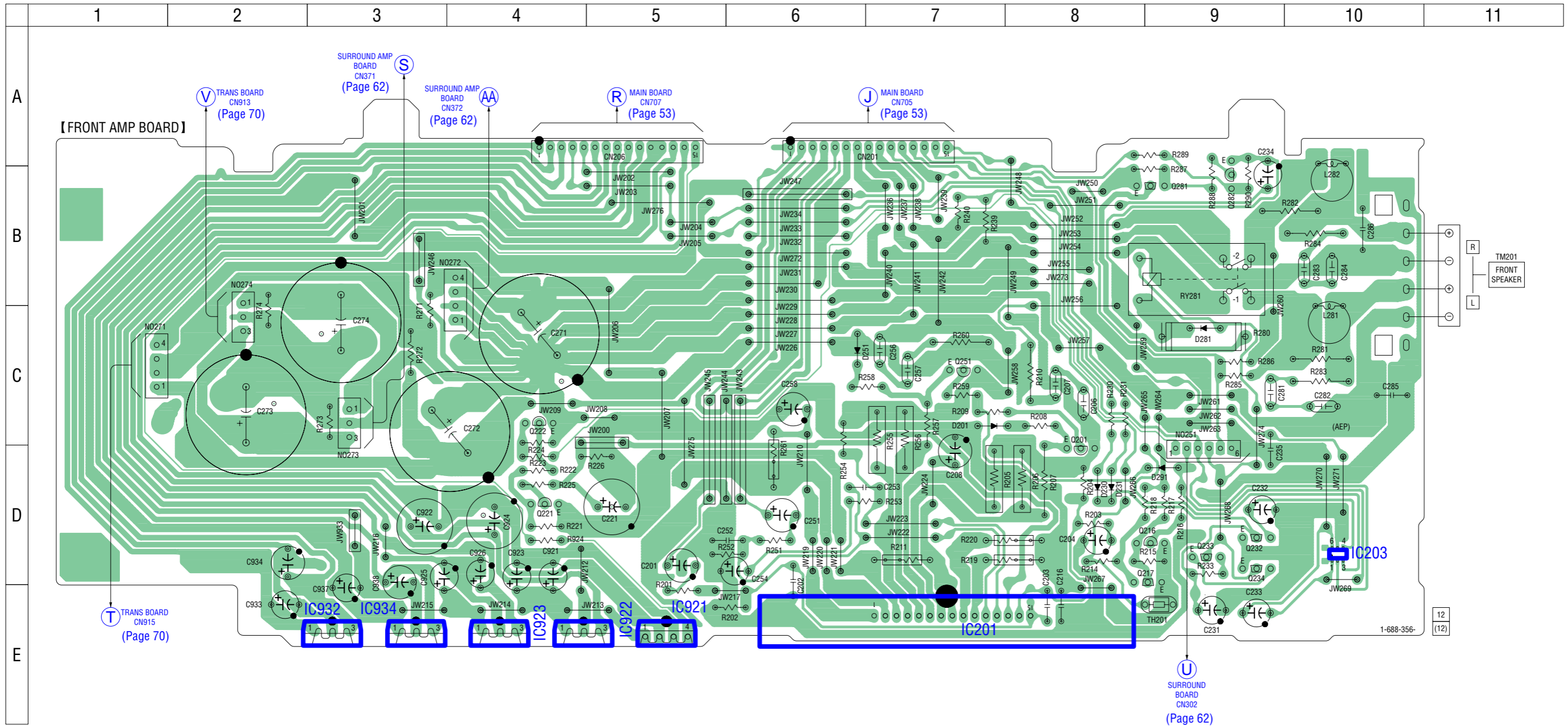
Ref. No.	Location
IC303	B-3
Q314	C-2
Q315	B-2
Q316	B-2
Q317	B-2
Q318	B-2
Q319	B-2
Q320	A-2
Q323	A-3
Q327	B-2
Q328	B-2
Q329	B-2
Q330	A-2
Q331	B-2
Q332	B-2
Q333	C-2
Q491	B-5
Q492	B-4



6-28. SCHEMATIC DIAGRAM – I-BASS Section – • See page 74 for IC Block Diagram.



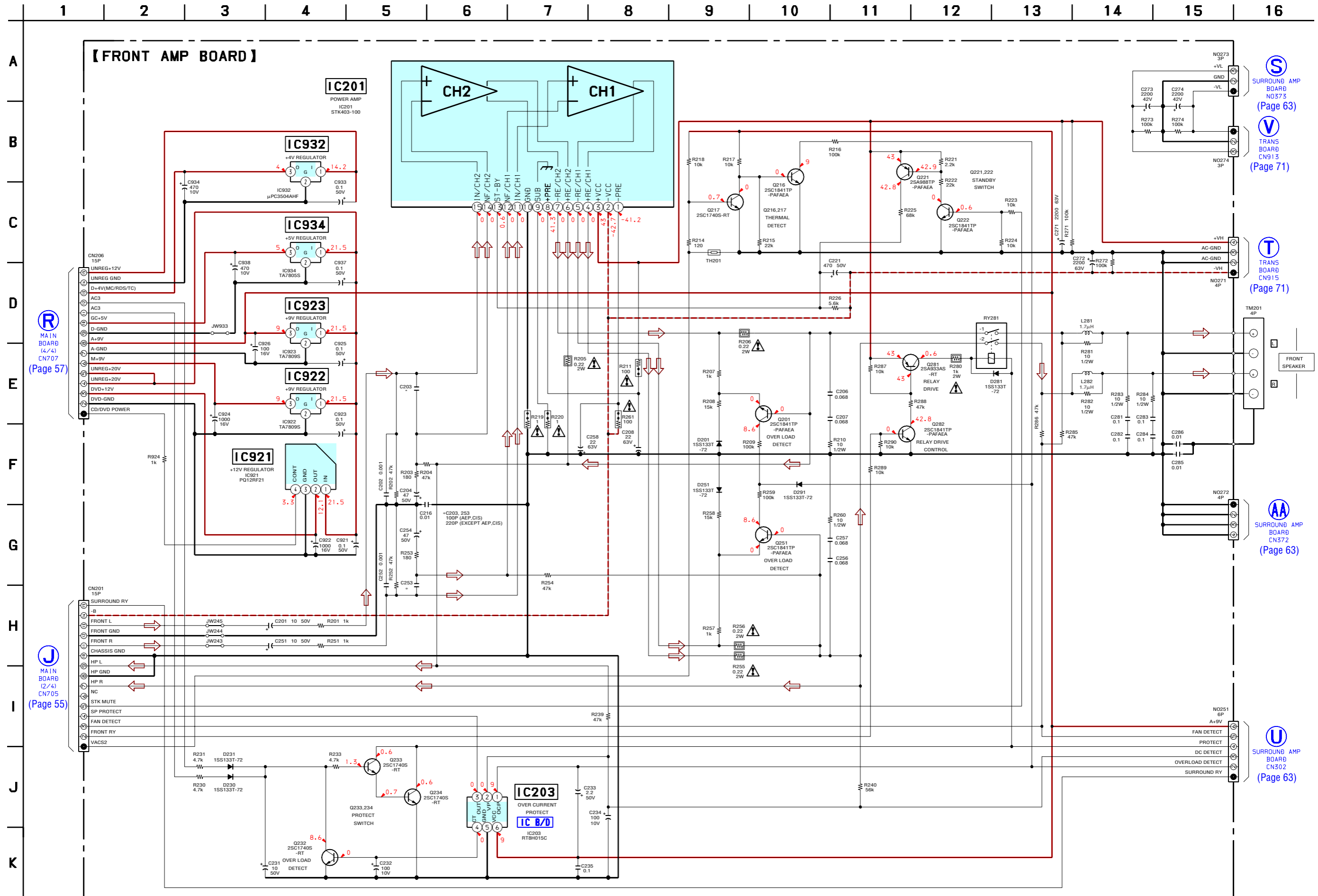
6-29. PRINTED WIRING BOARD – FRONT AMP Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.




• Semiconductor Location

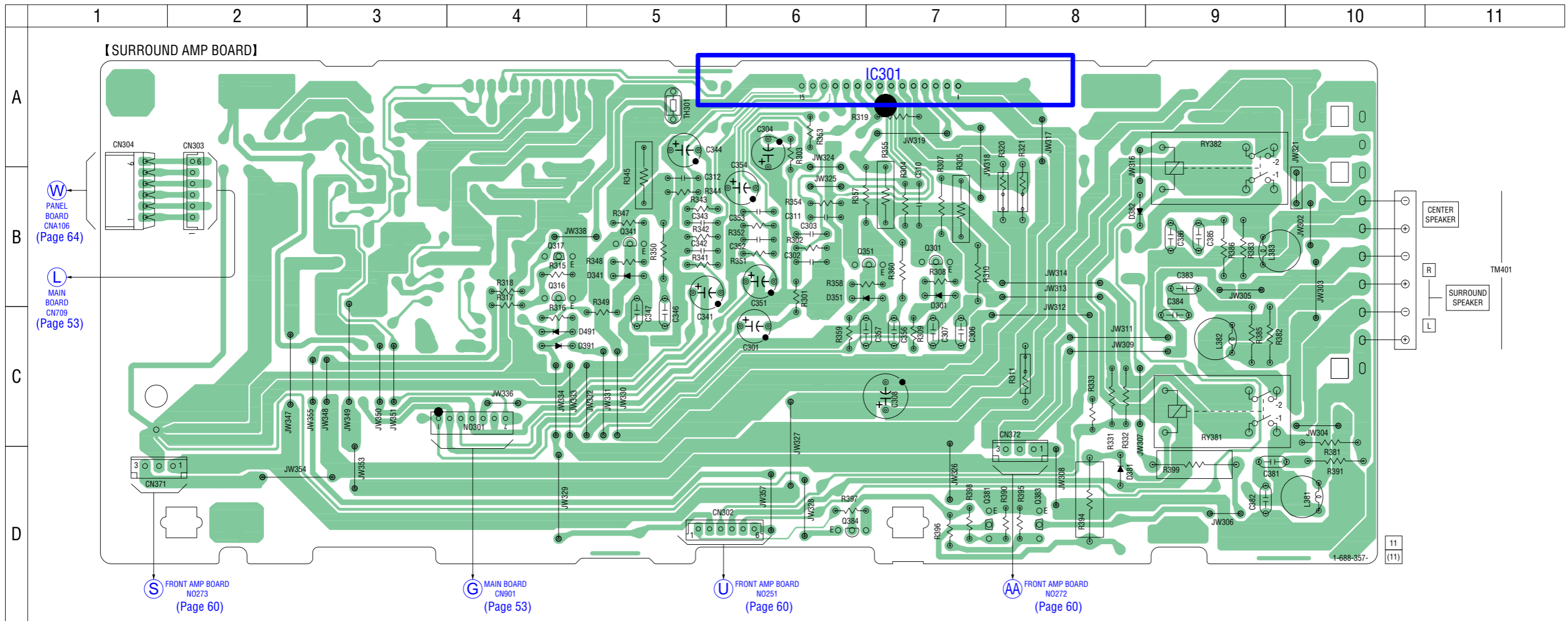
Ref. No.	Location	Ref. No.	Location
D201	C-7	IC934	E-3
D230	D-8		
D231	D-8	Q201	D-8
D251	C-6	Q216	D-9
D281	C-9	Q217	D-9
D291	D-9	Q221	D-4
		Q222	C-4
IC201	E-7	Q232	D-9
IC203	D-10	Q233	D-9
IC921	E-5	Q234	D-9
IC922	E-4	Q251	C-7
IC923	E-4	Q281	B-9
IC932	E-3	Q282	B-9

6-30. SCHEMATIC DIAGRAM – FRONT AMP Section – • See page 74 for IC Block Diagram.



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

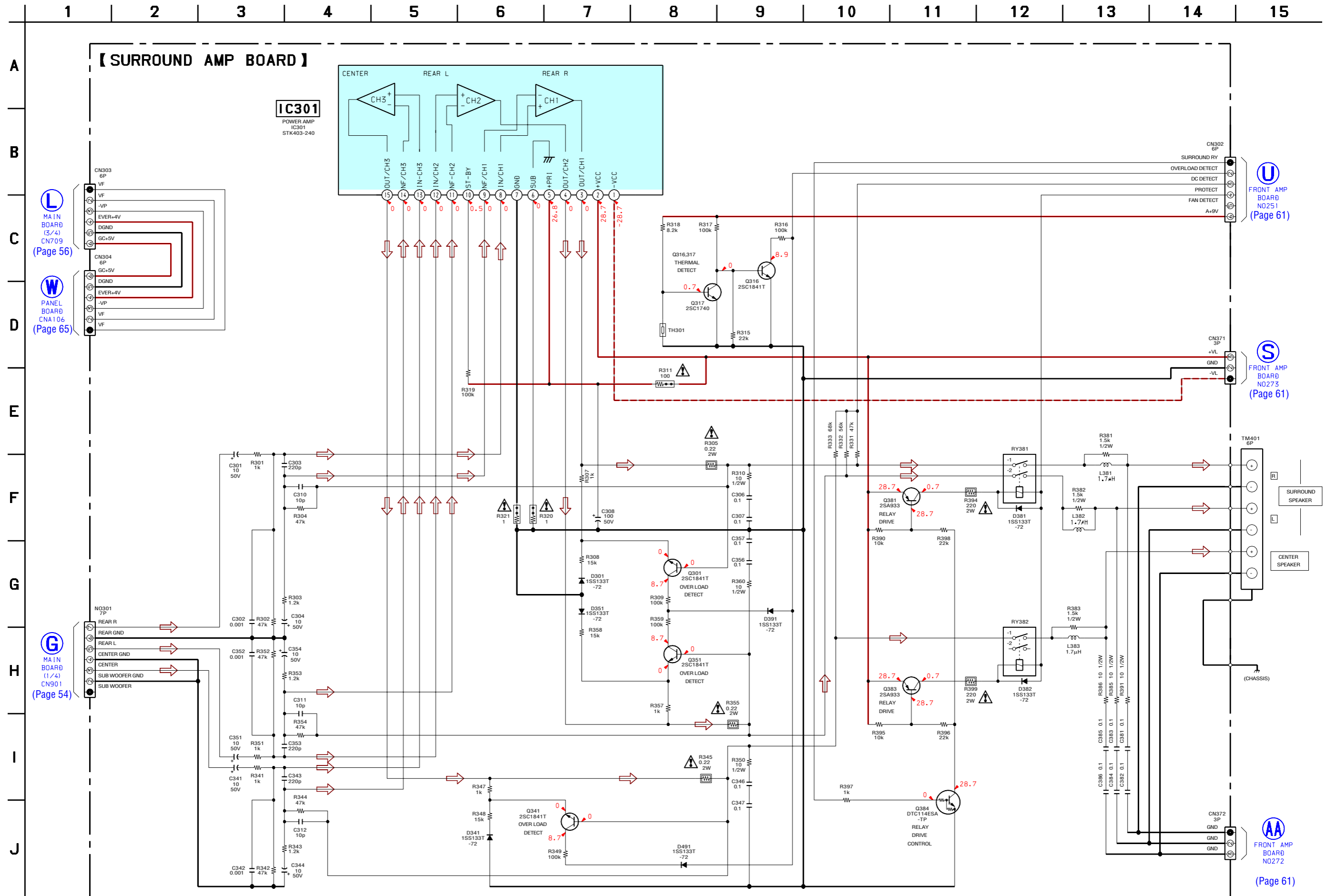
6-31. PRINTED WIRING BOARD – SURROUND AMP Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.




• Semiconductor Location

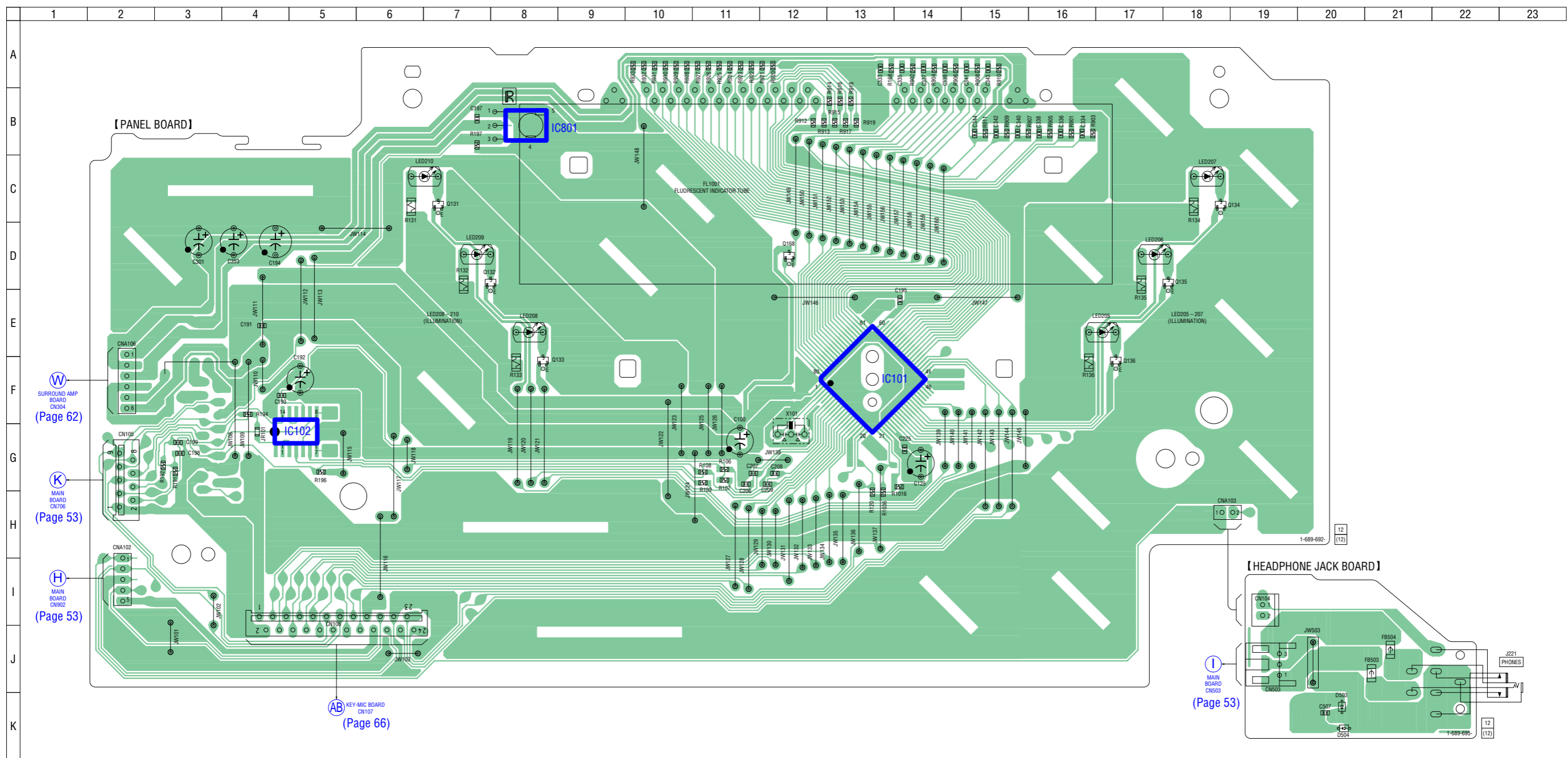
Ref. No.	Location
D301	B-7
D341	B-5
D351	B-7
D381	B-8
D382	B-8
D391	C-4
D491	C-4
IC301	A-7
Q301	B-7
Q316	B-4
Q317	B-4
Q341	B-5
Q351	B-7
Q381	D-7
Q383	D-8
Q384	D-6

6-32. SCHEMATIC DIAGRAM – SURROUND AMP Section –



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

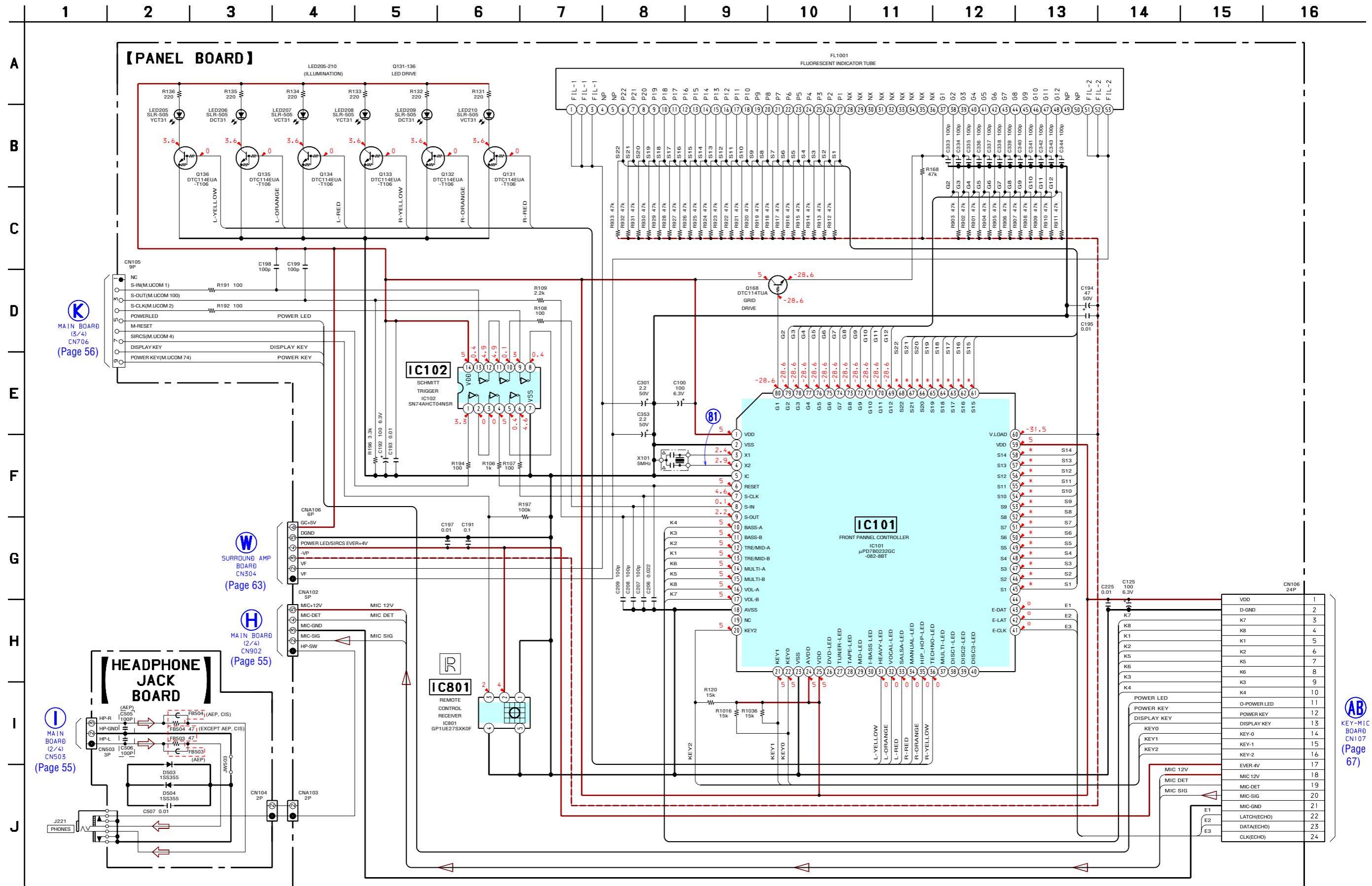
6-33. PRINTED WIRING BOARDS – PANEL Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D503	K-20	LED209	D-7
D504	K-20	LED210	C-7
IC101	F-13	Q131	C-7
IC102	G-5	Q132	D-7
IC801	B-8	Q133	F-8
		Q134	C-18
LED205	E-17	Q135	D-18
LED206	D-17	Q136	F-17
LED207	C-18	Q168	D-12
LED208	E-8		

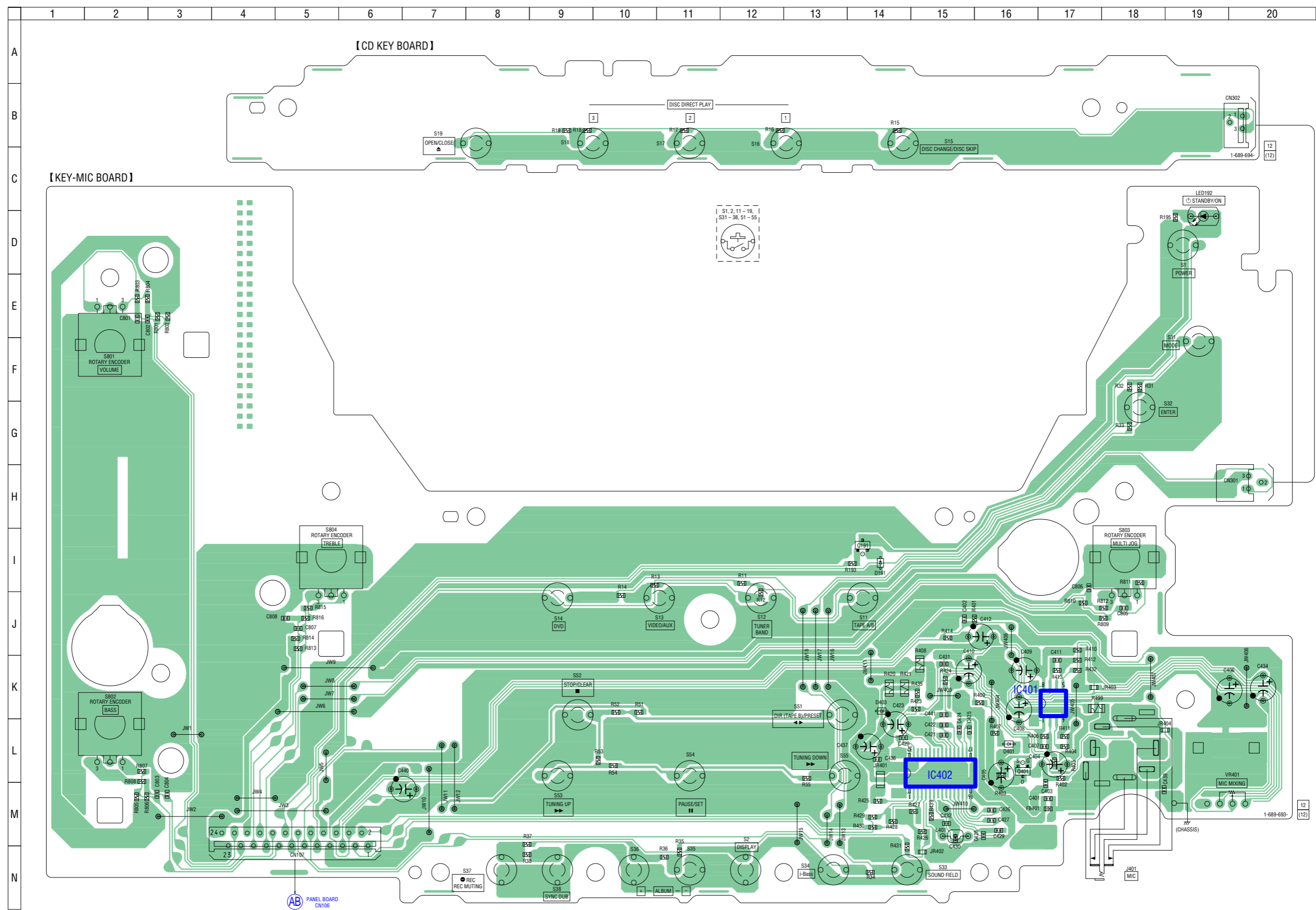
6-34. SCHEMATIC DIAGRAM – PANEL Section – • See page 52 for Waveform.



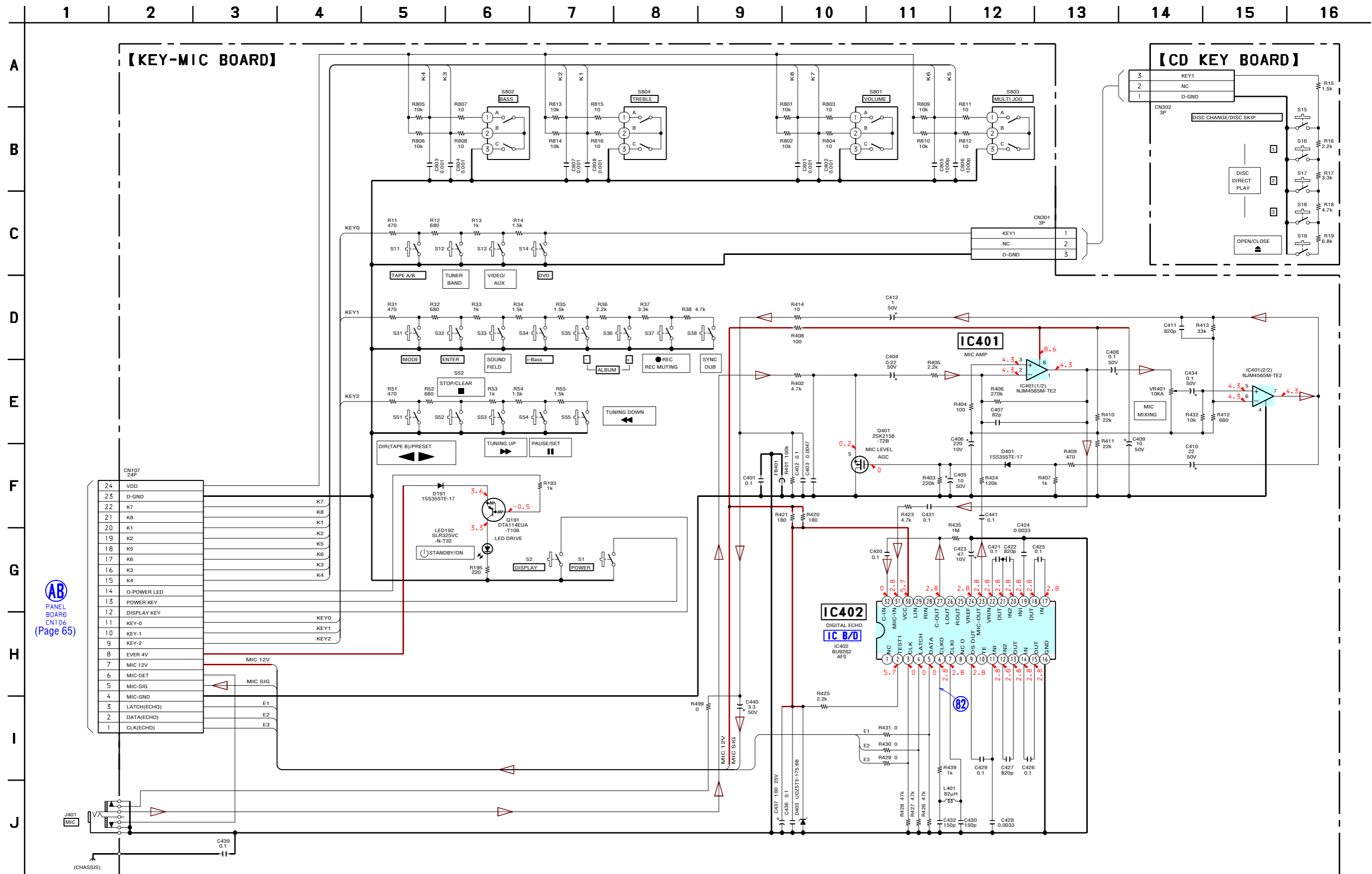
6-35. PRINTED WIRING BOARDS – KEY Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.


• Semiconductor Location

Ref. No.	Location
D191	I-14
D401	L-16
D403	K-14
IC401	K-17
IC402	L-15
LED192	D-19
Q191	I-14
Q401	L-16



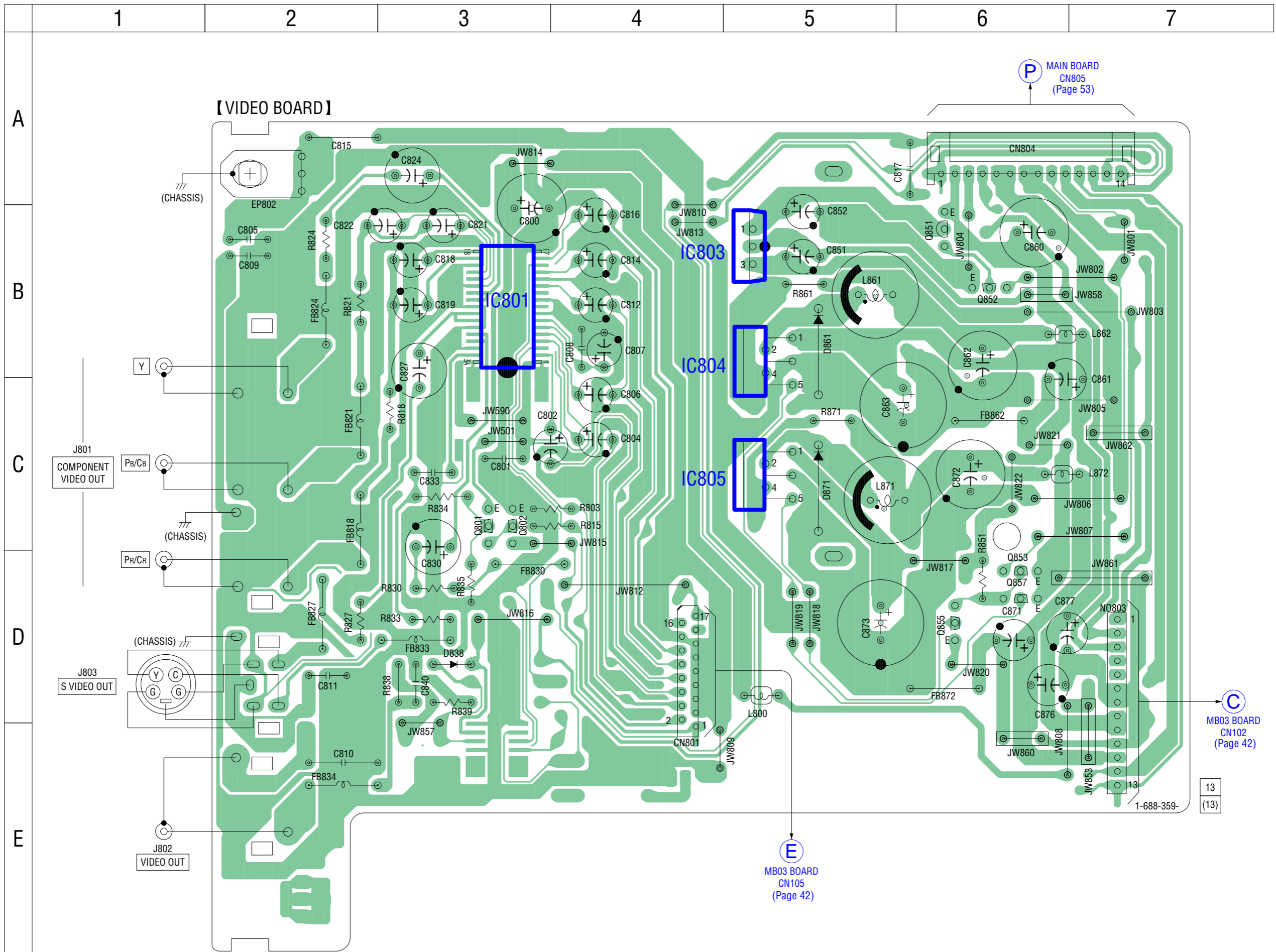
6-36. SCHEMATIC DIAGRAM – KEY Section – • See page 52 for Waveform. • See page 74 for IC Block Diagram.



6-37. PRINTED WIRING BOARD – VIDEO Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.

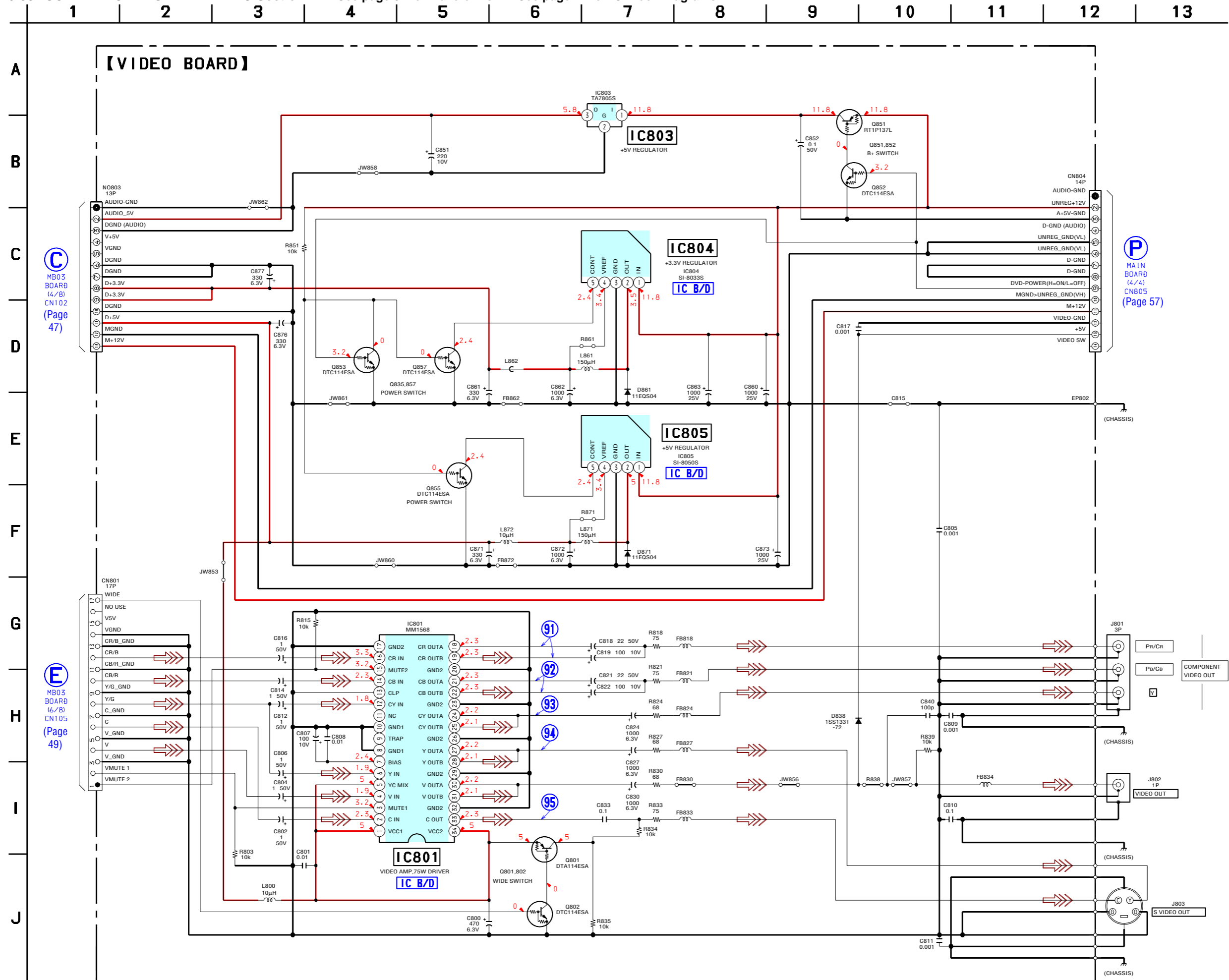
• Semiconductor Location

Ref. No.	Location
D838	D-3
D861	B-5
D871	C-5
IC801	B-3
IC803	B-5
IC804	B-5
IC805	C-5
Q801	C-3
Q802	C-3
Q851	B-6
Q852	B-6
Q853	D-6
Q855	D-5
Q857	D-6



13
(13)


6-38. SCHEMATIC DIAGRAM – VIDEO Section – • See page 52 for Waveforms. • See page 74 for IC Block Diagrams.

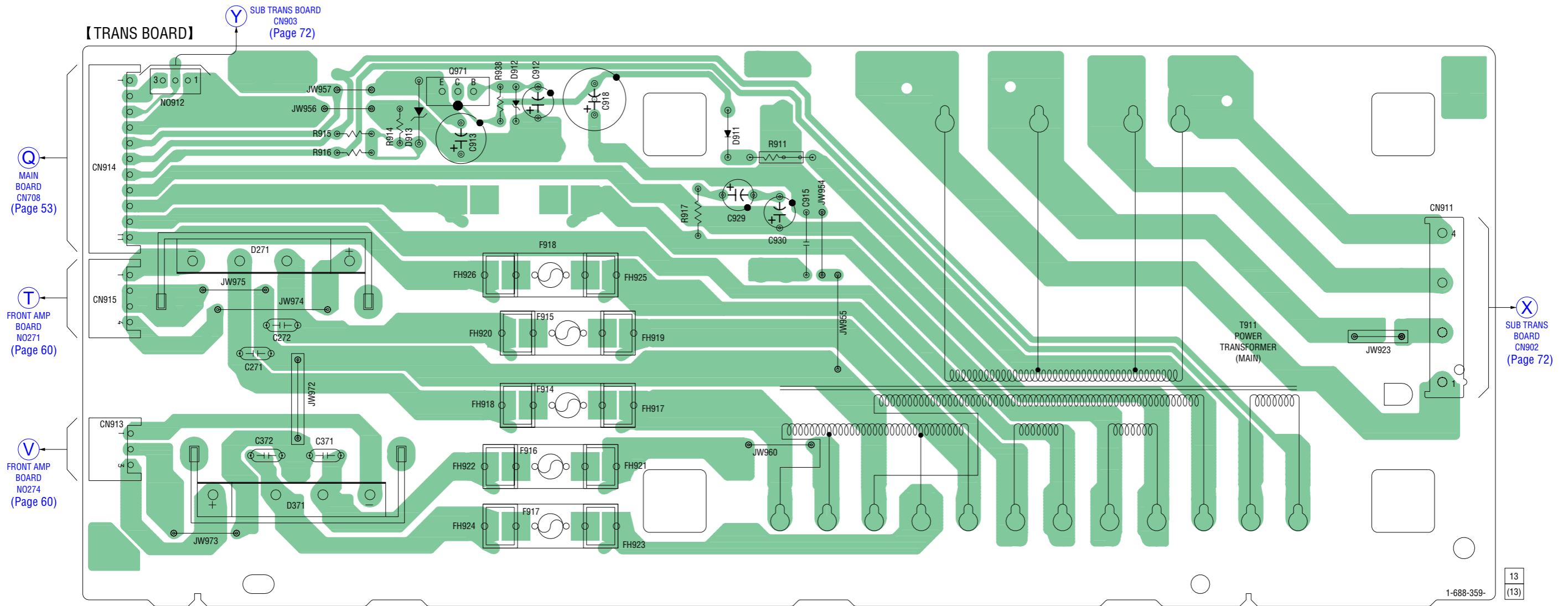


(C) MB03 BOARD (4/8) CN102 (Page 47)

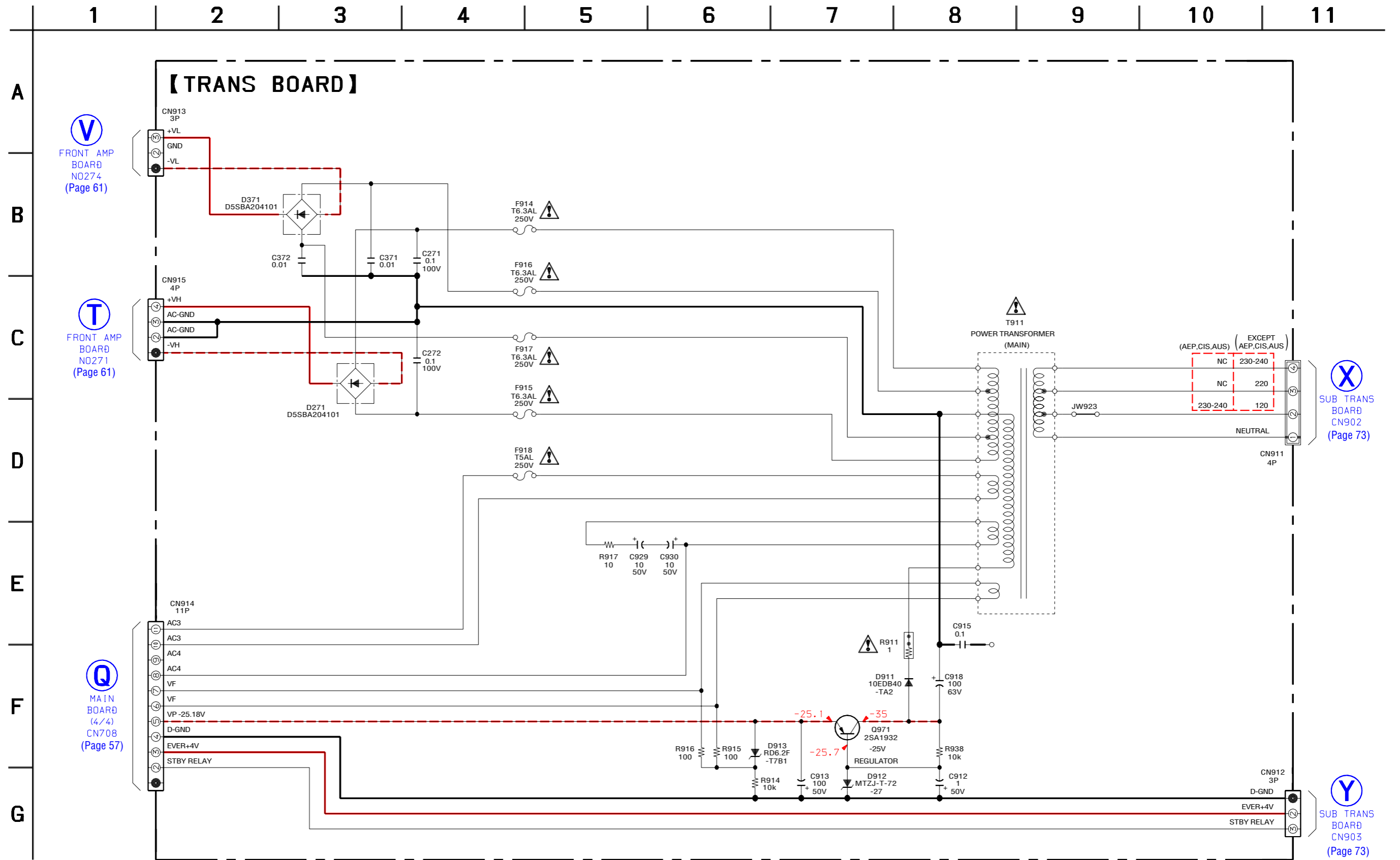
(E) MB03 BOARD (6/8) CN105 (Page 49)

(P) MAIN BOARD (4/4) CN805 (Page 57)

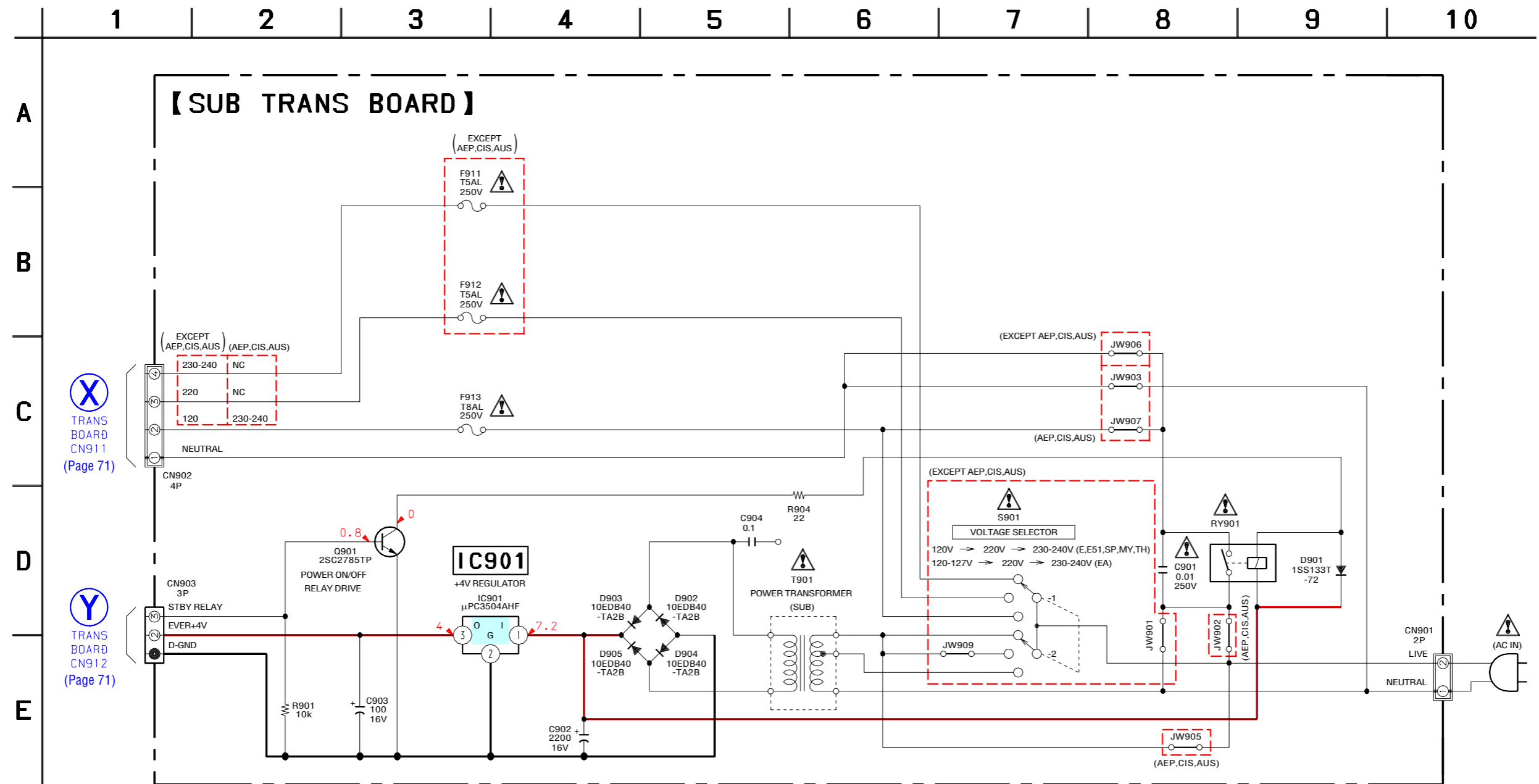
6-39. PRINTED WIRING BOARD – TRANS Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.



6-40. SCHEMATIC DIAGRAM – TRANS Section –



6-42. SCHEMATIC DIAGRAM – SUB TRANS Section –



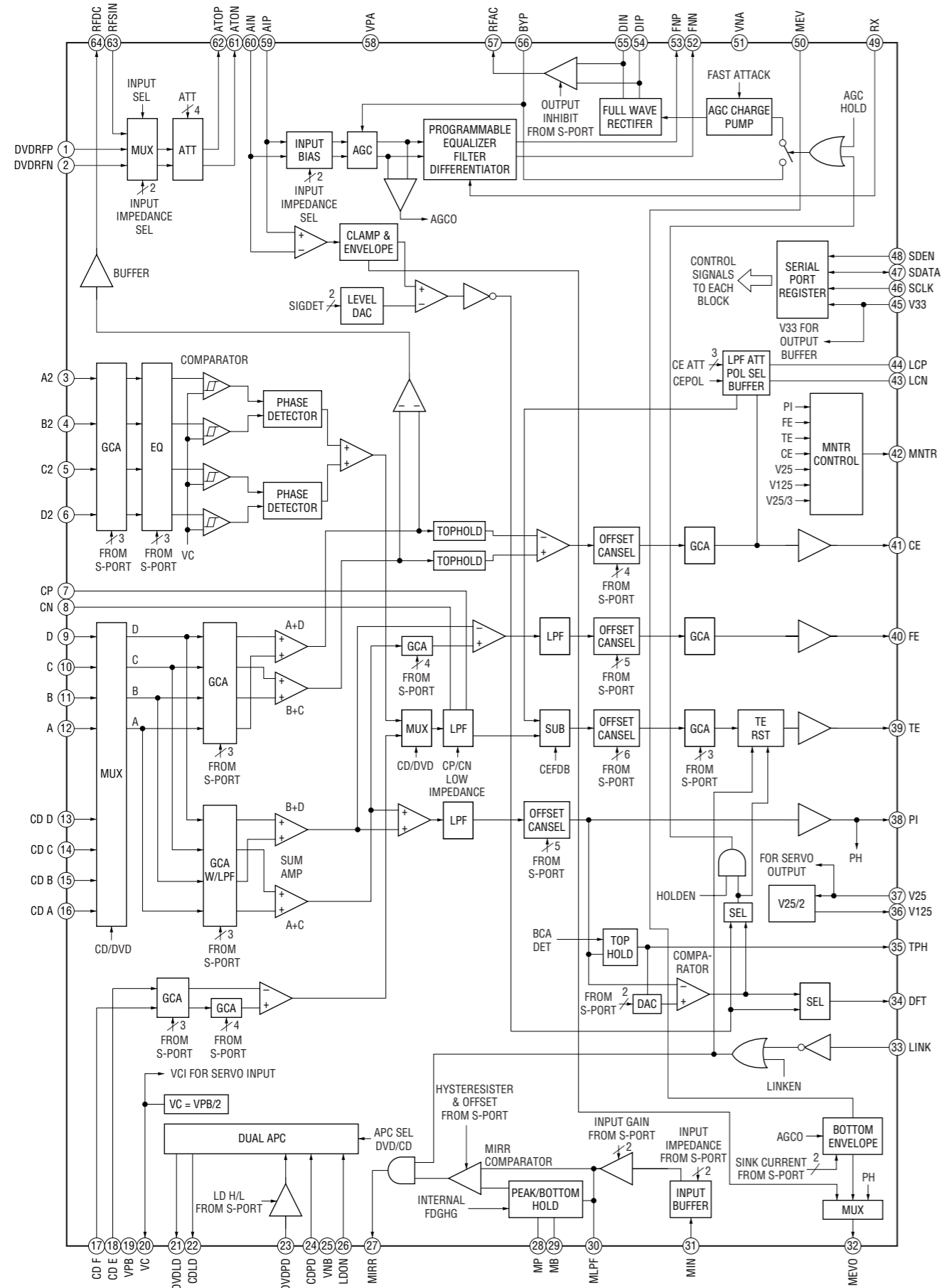
X
TRANS BOARD
CN911
(Page 71)

Y
TRANS BOARD
CN912
(Page 71)

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

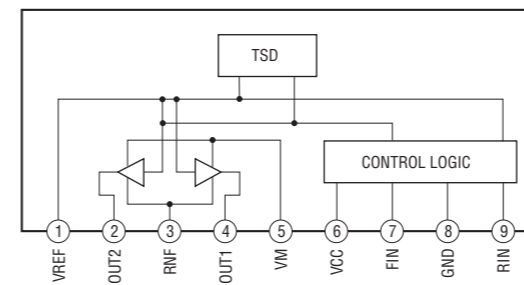
• IC Block Diagrams
– RF Board –

IC001 SP3723BDAOPM



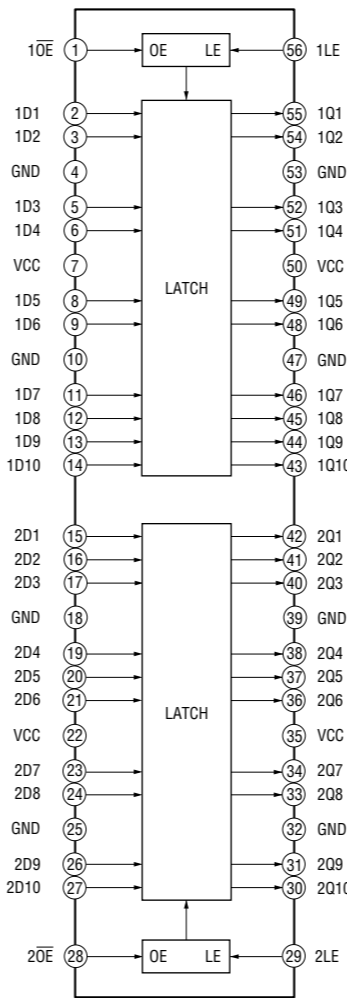
– DRIVER Board –

IC701, 712 BA6956AN

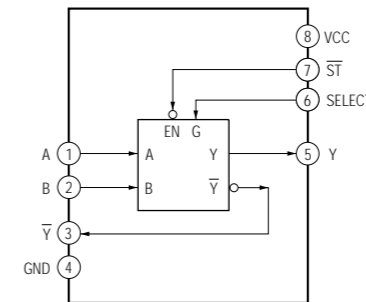


– BD Board –

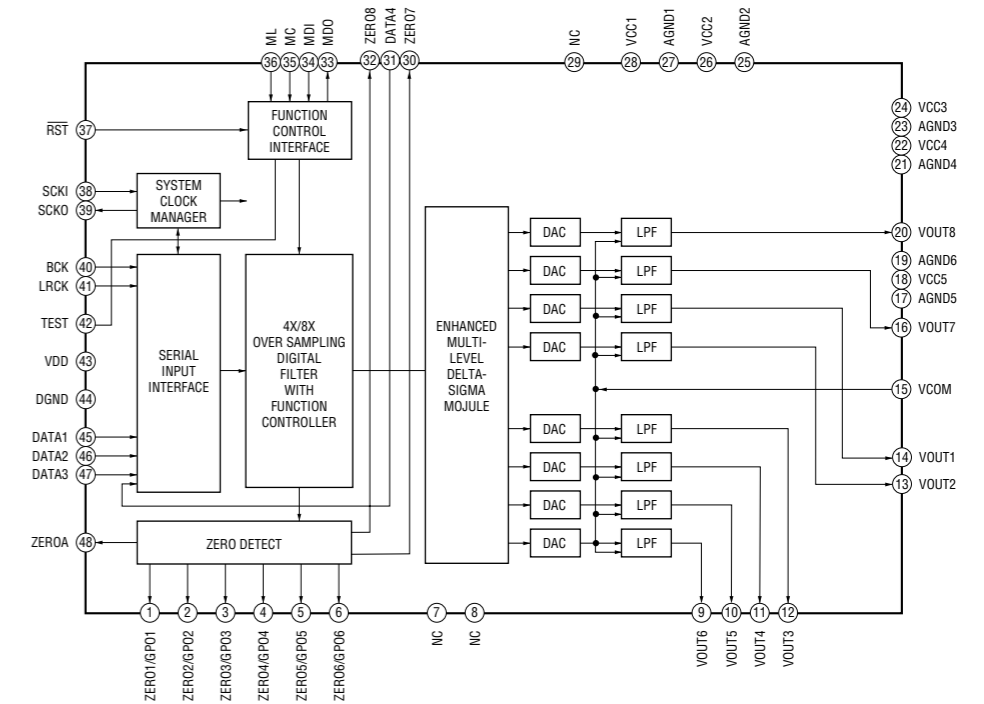
IC216 SN74ALVCH1684DGGR



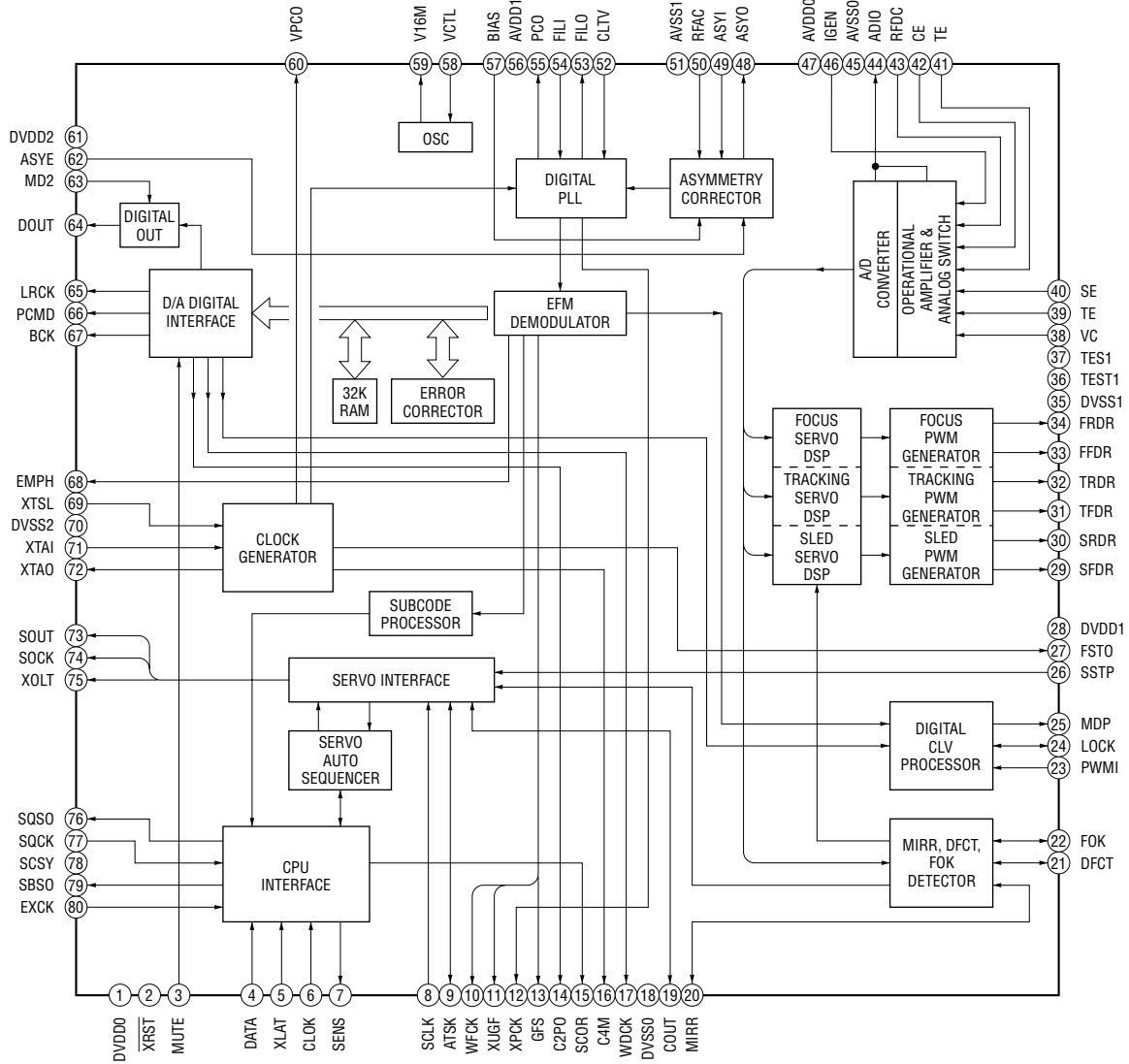
IC252 TC7WH157FK (TE85R)



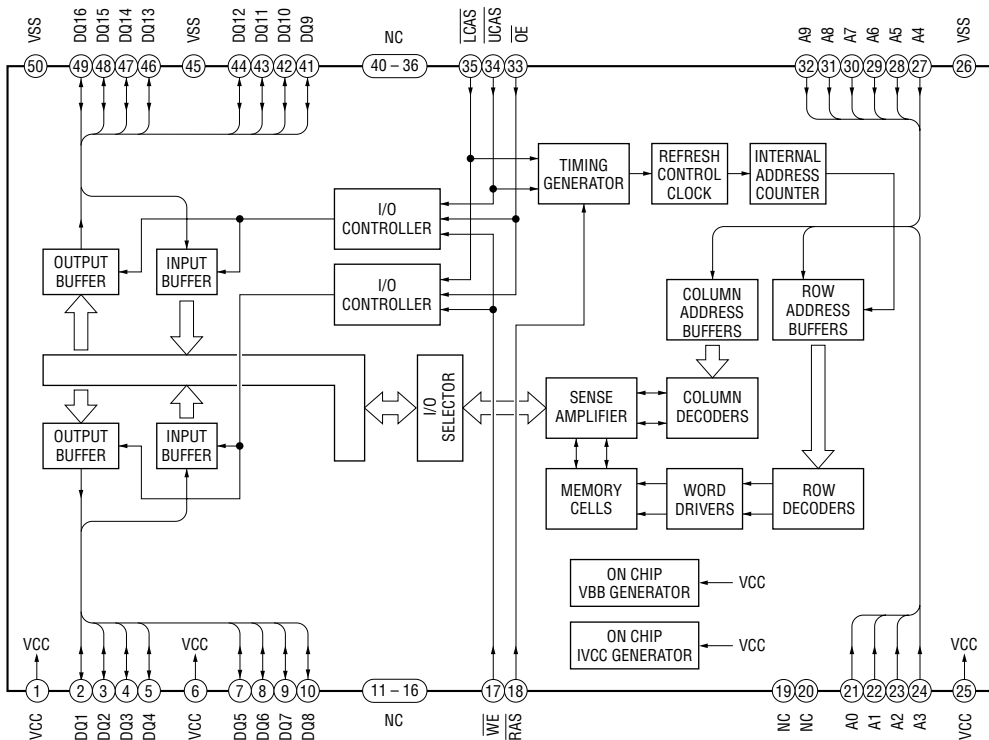
IC302 PCM1609KPTR



IC509 CXD3068Q



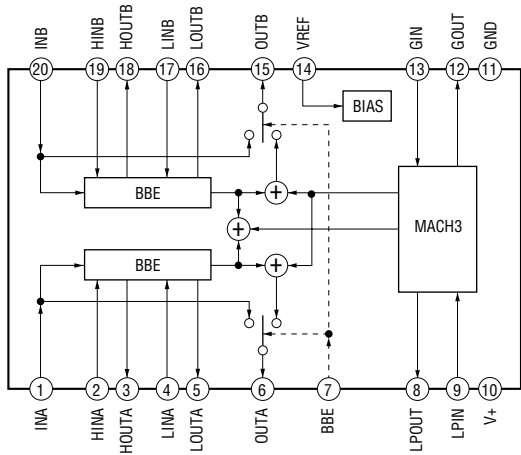
IC706 MSM51V18165F-60TSKR1



CX-JD5

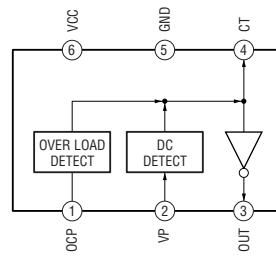
- I-BASS Board -

IC303 NJM2156M (TE2)



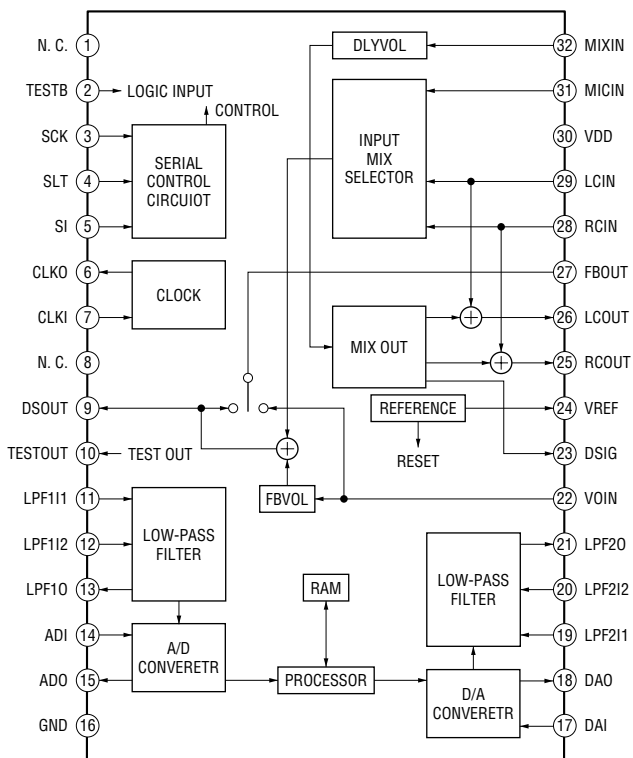
- FRONT AMP Board -

IC203 RT8H015C-T112-1



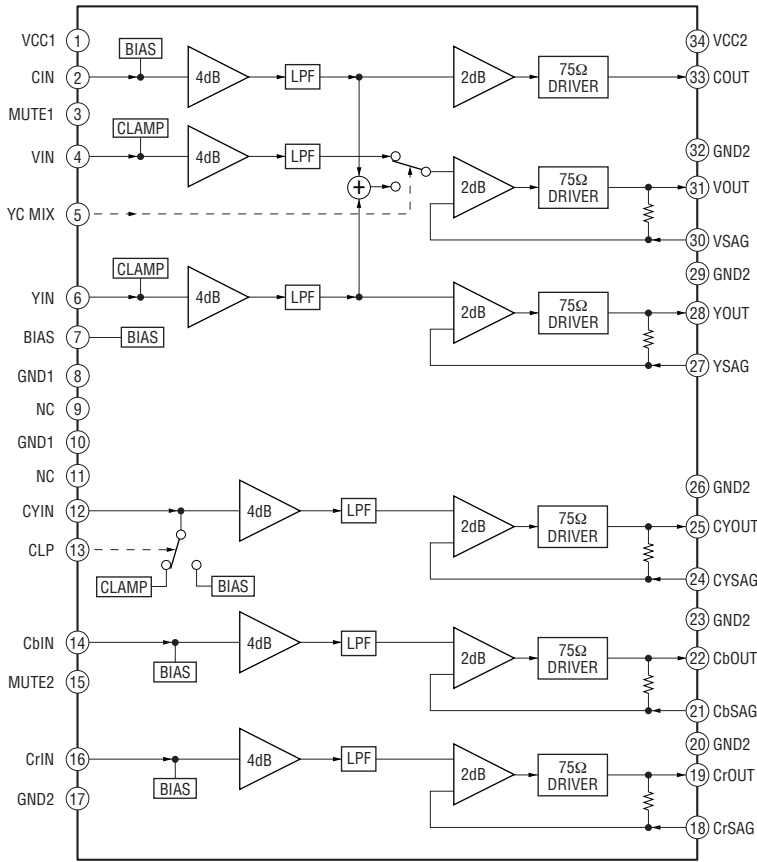
- KEY-MIC Board -

IC402 BU9262AFS

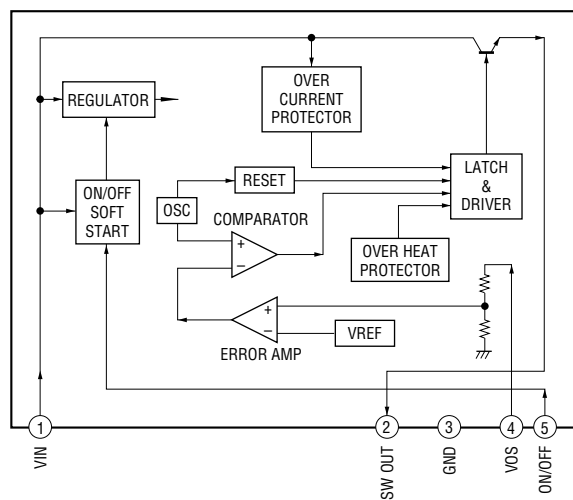


- VIDEO Board -

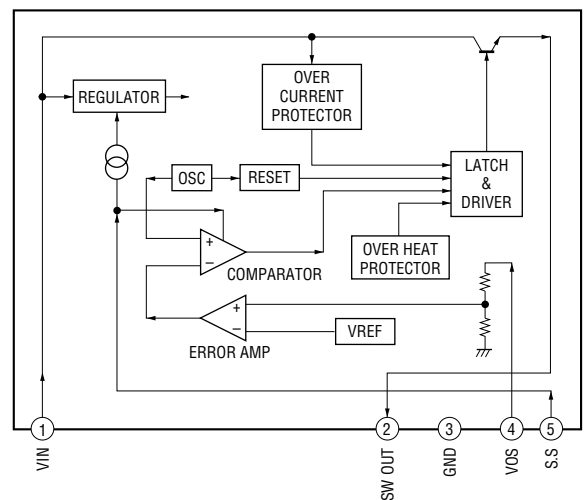
IC801 MM1568



IC804 SI-8033S



IC805 SI-8050S-LF1101



6-43. IC PIN FUNCTION DESCRIPTION

• MB03 BOARD IC207 ZIVA5X-CIF (DVD SYSTEM PROCESSOR)

Pin No.	Pin Name	I/O	Description
1	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
2	HA1	I/O	Address bus
3 to 11	HD15 to HD7	I/O	Data bus (address signal multiplexed)
12	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
13	GNDP	—	Ground terminal (I/O signal)
14 to 19	HD6 to HD1	I/O	Data bus (address signal multiplexed)
20	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
21	GNDP	—	Ground terminal (I/O signal)
22	HD0	I/O	Data bus (address signal multiplexed)
23	HDTACK	I/O	Acknowledge signal input/output for host data transfer (not used)
24	HIRQ0	I	Interrupt signal input for Medusa (not used)
25	WEH.UDS	I/O	Host upper data strobe signal output (not used)
26	WEL.LDS	I/O	Host lower data strobe signal output (not used)
27	HREAD	I/O	Read/write strobe signal output
28	GPIO0	I/O	Jig detection port (pull-up)
29	GND	—	Ground terminal (inside core)
30	VDD	—	Power supply terminal (+1.8V) (inside core)
31	GND25	—	Ground terminal (SDRAM I/O signal)
32	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
33 to 42	MA9 to MA0	O	SDRAM address bus
43	GND25	—	Ground terminal (SDRAM I/O signal)
44	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
45, 46	MA10,MA11	O	SDRAM address bus
47	BA1	O	SDRAM bank select 1 signal output
48	BA0	O	SDRAM bank select 0 signal output
49	MCS0	O	SDRAM chip select 0 signal output
50	MCS1	O	Not used
51	MRAS	O	SDRAM row address strobe signal output
52	MCAS	O	SDRAM column address strobe signal output
53	MWE	O	SDRAM write enable signal output (“H” : read, “L” : write)
54	GND25	—	Ground terminal (SDRAM I/O signal)
55	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
56	MCLK	O	SDRAM Clock output
57 to 60	MD0 to MD3	I/O	SDRAM data
61	GND25	—	Ground terminal (SDRAM I/O signal)
62	MDQM0	O	Byte read /write mask signal 0 output
63	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
64 to 71	MD6 to MD11	I/O	SDRAM data
72	GND25	—	Ground terminal (SDRAM I/O signal)
73	MDQM1	O	Byte read /write mask signal 1 output
74	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
75 to 78	MD12 to MD15	I/O	SDRAM data
79	GND	—	Ground terminal (inside core)
80	VDD	—	Power supply terminal (+1.8V) (inside core)
81 to 84	MD16 to MD19	I/O	SDRAM data
85	GND25	—	Ground terminal (SDRAM I/O signal)

Pin No.	Pin Name	I/O	Description
86	MDQM2	O	Byte read /write mask signal 2 output
87	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
88 to 95	MD20 to MD27	I/O	SDRAM data
96	GND25	—	Ground terminal (SDRAM I/O signal)
97	MDQM3	O	Byte read /write mask signal 3 output
98	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
99 to 102	MD28 to MD31	I/O	SDRAM data
103	GND25	—	Ground terminal (SDRAM I/O signal)
104	VDD25	—	Power supply terminal (+3.3V) (SDRAM I/O signal)
105	VCLK	I/O	System clock (not used)
106	XCK_I/O_SEL	I/O	5.1ch/downmix switch signal output
107	VS	O	S1 signal output
108	I/P SW	O	Progressive/interlace switch signal output
109	CDSEL	O	CD-DA selection signal output
110	MREQ	O	Audio muting request signal output
111	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
112	GNDP	—	Ground terminal (I/O signal)
113	MDI	O	Serial data output to the D/A converter
114	MC	O	Serial data clock output to the D/A converter
115	ML	O	Latch enable signal output to the D/A converter
116	HIRQ2_	I	Busy signal input from the EEPROM
117	VDAC_4B	—	Video DAC bias bit 4 (connected to the ground)
118	VDAC_VDD4	—	Power supply terminal (+3.3V) (Video DAC 4)
119	VDAC_4	O	VDAC output 4
120	VDAC_3B	—	Video DAC bias bit 3 (connected to the ground)
121	VDAC_VDD3	—	Power supply terminal (+3.3V) (Video DAC 3)
122	VDAC_3	O	VDAC output 3
123	VDAC_2B	—	Video DAC bias bit 2 (connected to the ground)
124	VDAC_VDD2	—	Power supply terminal (+3.3V) (Video DAC 2)
125	VDAC_2	O	VDAC output 2
126	VDAC_1B	—	Video DAC bias bit 1 (connected to the ground)
127	VDAC_VDD1	—	Power supply terminal (+3.3V) (Video DAC 1)
128	VDAC_1	O	VDAC output 1
129	VDAC_0B	—	Video DAC bias bit 0 (connected to the ground)
130	VDAC_VDD0	—	Power supply terminal (+3.3V) (Video DAC 0)
131	VDAC_0	O	VDAC output 0
132	VDAC_DVSS	—	Ground terminal (Video DAC digital system)
133	VDAC_DVDD	—	Power supply terminal (+3.3V) (Video DAC digital system)
134	VDAC_REFVDD	—	Power supply terminal (Video DAC reference)
135	VDAC_REF	I	Reference voltage input terminal(for Video DAC)
136	VDAC_REFVSS	—	Ground terminal (Video DAC reference)
137	XVSS	—	Ground terminal (crystal oscillator)
138	XOUT	O	Crystal oscillation signal output
139	XIN	I	Crystal oscillation signal input
140	XVDD	—	Power supply terminal (crystal oscillator)
141	AVSS2	—	Ground terminal (analog PLL)
142	AVDD2	—	Power supply terminal (+3.3V) (analog PLL)

Pin No.	Pin Name	I/O	Description
143	AVDD1	—	Power supply terminal (+3.3V) (analog PLL)
144	AVSS1	—	Ground terminal (analog PLL)
145	VDD	—	Power supply terminal (+1.8V) (inside core)
146	GND	—	Ground terminal (inside core)
147	XCK	O	Audio system clock output
148	LRCK	O	LRCK signal output for audio
149	BCK	O	BCK signal output for audio
150	DATA0(DM)	O	Audio data(Down Mix signal) output
151	DATA1(FLR)	O	Audio data(Front L/R signal) output
152	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
153	GNDP	—	Ground terminal (I/O signal)
154	DATA2(SLR)	O	Audio data(Rear L/R signal) output
155	DATA3(CSW)	O	Audio data(Center/Subwoofer signal) output
156	IEC958	O	S/PDIF signal (not used)
157	DAI_DATA	I	Data input from ADC (not used)
158	DAI_BCK	I	BCK signal input from ADC (not used)
159	DAI_LRCK	I	LRCK signal input from ADC (not used)
160	I2C_CL	I/O	I2C clock bus
161	I2C_DA	I/O	I2C data bus
162	CS(ZIVA_E2P)	O	Chip select signal output to the EEPROM
163	RXD1	I	Serial data input for check jig
164	TXD1	O	Serial data output for check jig
165	WRITE_CTRL (ZIVA_E2P)	O	Write control signal output to the EEPROM
166	GNDP	—	Ground terminal (I/O signal)
167	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
168	SDDATA7	I	SDBus data7 input
169	SDDATA6	I	SDBus data6 input
170	SDDATA5	I	SDBus data5 input
171	SDDATA4	I	SDBus data4 input
172	GND	—	Ground terminal (inside core)
173	VDD	—	Power supply terminal (+1.8V) (inside core)
174	SDDATA3	I	SDBus data3 input
175	SDDATA2	I	SDBus data2 input
176	SDDATA1	I	SDBus data1 input
177	SDDATA0	I	SDBus data0 input
178	SDREQ	O	SDBus data request signal output
179	SDEN	I	SDBus data enable signal input
180	GNDP	—	Ground terminal (I/O signal)
181	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
182	SDERROR	I	SDBus data error signal input
183	SDCLK	I	SDBus data clock input
184	HIRQ1	I	Interrupt signal input from the mechanism controller
185	DRVCLK	I	Serial data clock input from the mechanism controller
186	DRVTX	I	Serial data input from the mechanism controller and the EEPROM
187	DRVRX	I	Serial data output to the mechanism controller and the EEPROM
188	DRVRDY	O	Ready signal input from the mechanism controller

Pin No.	Pin Name	I/O	Description
189	VNW	—	Power supply for 5V tolerance voltage input
190	ALE	O	Latch enable signal output for address data demux
191	RST_SPC	O	Reset signal output to the mechanism controller
192	INT/EXT	O	Input selection signal output for SDBus or ADC (not used)
193	HCS2	O	Chip select signal output for Medusa (not used)
194	HCS1	I/O	Not used
195	HCS0	O	Chip select signal output to the external ROM
196	VDDP	—	Power supply terminal (+3.3V) (I/O signal)
197	TRST	I	Reset signal input
198	TDO	O	Data output
199	TDI	I	Data input
200	TMS	I	TMS signal input
201	TCK	I	TCK signal input
202	RESET	I	ZIVA reset input
203	BUS CLK	I/O	Not used
204	GND	—	Ground terminal (inside core)
205	VDD	—	Power supply terminal (+1.8V) (inside core)
206	HA3	I/O	Address bus 3
207	HA2	I/O	Address bus 2
208	GNDP	—	Ground terminal (I/O signal)

• MB03 BOARD IC701 TMC57929PGF-RDP (DVD DECODER)

Pin No.	Pin Name	I/O	Description
1, 2	D5, D6	I/O	Two-way data bus with CXP973064-226R
3	VSS	—	Ground
4	D7	I/O	Two-way data bus with CXP973064-226R
5	A0	I	Address signal input from CXP973064-226R
6	VDD	—	Power supply (+3.3V)
7	A1	I	Address signal input from CXP973064-226R
8	VDD5V	—	Power supply (+5V)
9 to 14	A2 to A7	I	Address signal input from CXP973064-226R
15	VSS	—	Ground
16	XWAIT	O	Not used
17	XRD	I	Read strobe signal input from CXP973064-226R
18	XWR	I	Write strobe signal input from CXP973064-226R
19	XCS	I	Chip select signal input from CXP973064-226R
20, 21	XINT0, XINT1	O	Interrupt signal output to CXP973064-226R
22	VDD	—	Power supply (+3.3V)
23	XHRS	I	Not used
24	HDB7	O	Stream data signal output to ZIVA5X-C1F
25	VSS	—	Ground
26	HDB8	O	Error flag signal output to ZIVA5X-C1F
27	HDB6	O	Stream data signal output to ZIVA5X-C1F
28	VDDS	—	Power supply (+5V)
29	HDB9	O	Not used
30	HDB5	O	Stream data signal output to ZIVA5X-C1F
31	HDBA	O	Not used
32	HDB4	O	Stream data signal output to ZIVA5X-C1F
33	VSS	—	Ground
34	HDBB	O	Not used
35	HDB3	O	Stream data signal output to ZIVA5X-C1F
36	VDD	—	Power supply (+3.3V)
37	HDBC	O	Not used
38	VDDS	—	Power supply (+5V)
39	HDB2	O	Stream data signal output to ZIVA5X-C1F
40	HDBD	O	Not used
41	HDB1	O	Stream data signal output to ZIVA5X-C1F
42	VSS	—	Ground
43	HDBE	O	Not used
44	HDB0	O	Stream data signal output to ZIVA5X-C1F
45	HDBF	O	Not used
46	XSAK	O	Serial data effect flag signal output to ZIVA5X-C1F
47	VDDS	—	Power supply terminal (+5V) (digital system)
48	XDCK	O	Serial data transfer clock signal output to ZIVA5X-C1F
49	XSHD	O	Header flag signal (Not used)
50	VDD	—	Power supply (+3.3V)
51	REDY	O	Not used
52	VSS	—	Ground

Pin No.	Pin Name	I/O	Description
53	XHAC	I	DVD mode: Serial data request signal input from ZIVA5X-C1F
54	HINT	O	Not used (Pull up)
55	XS16	O	Not used (Pull up)
56	HA1	I	Not used (Pull up)
57	XPDI	I/O	Not used (Pull up)
58	VDDS	—	Power supply (+5V)
59, 60	HA0, HA2	I	Not used (Pull up)
61	VSS	—	Ground (open)
62, 63	HCS0, HCS1	I	Not used
64	VDD	—	Power supply (+3.3V)
65	DASP	I/O	Not used
66 to 69	MDB0 to MDB3	I/O	Two-way data bus with the D-RAM
70	VSS	—	Ground
71	MDB4	I/O	Two-way data bus with the D-RAM
72	VDD5V	—	Power supply (+5V)
73 to 75	MDB5 to MDB7	I/O	Two-way data bus with the D-RAM
76	XMWR	O	Write enable signal output to the D-RAM
77	VDD	—	Power supply (+3.3V)
78	XRAS	O	Row address strobe signal output to the D-RAM
79, 80	MA0, MA1	O	Address signal output to the D-RAM
81	VSS	—	Ground
82 to 87	MA2 to MA7	O	Address signal output to the D-RAM
88	VDD	—	Power supply (+3.3V)
89	MA8	O	Address signal output to the D-RAM
90	VSS	—	Ground
91	MA9/MNT0	O	Address signal output to the D-RAM
92	MNT1/MNT1	O	EEPROM ready signal output to CXP973064
93	MNT2/MNT2	O	Address signal output to the D-RAM
94	XMOE	O	Output enable signal output to the D-RAM
95	XCAS	O	Column address strobe signal output to the D-RAM
96, 97	MDB8, MDB9	I/O	Two-way data bus with the D-RAM
98	VSS	—	Ground
99	MDBA	I/O	Two-way data bus with the D-RAM
100	VDD	—	Power supply (+3.3V)
101, 102	MDBB, MDBC	I/O	Two-way data bus with the D-RAM
103	VDD5V	—	Power supply (+5V)
104 to 106	MDBD to MDBF	I/O	Two-way data bus with the D-RAM
107	GFS	O	Guard frame sync signal output to CXP973064-226R
108	VSS	—	Ground
109	APEO	O	Absolute phase error signal output
110	VDD	—	Power supply (+3.3V)
111	DASYO	O	RF binary signal output
112	GND A5	—	Ground
113, 114	ASF1, AFS2	—	Filter connected terminal for selection the constant asymmetry compensation
115	DASYI	I	Analog signal input after integrated from the RF binary signal
116	RFDC	I	Input terminal for adjusting DC cut high-pass filter for RF signal

Pin No.	Pin Name	I/O	Description
117	RFIN	I	RF signal input from the CD/DVD RF amplifier
118, 119	VCCA5, VCCA4	—	Power supply (+3.3V)
120	VCOR1	—	VCO oscillating range setting resistor connected
121	VCOIN	I	VCO input
122, 123	GND4, GND3	—	Ground
124	LPF5	O	Signal output from the operation amplifier from PLL loop filter
125	VC1	I	Middle point voltage (+1.65V) input
126, 127	LPF2, LPF1	I	Inverted signal input to the operation amplifier from PLL loop filter
128, 129	VCCA3, VCCA2	—	Power supply (+3.3V)
130	PDO	O	Signal output from the charge pump for phase comparator
131	PDHVCC	I	Middle point voltage input terminal for RF PLL
132	FDO	O	Signal output from the charge pump for frequency comparator
133, 134	GND2, GND1	—	Ground
135	SPO	O	Spindle motor control signal output to FAN8035L
136	VC2	I	Middle point voltage (+1.65V) input
137	MDIN2	I	Spindle motor servo drive signal input
138	MDIN1	I	MDP input
139	VCCA1	—	Power supply (+3.3V)
140	CLVS	O	Control signal output for selection the spindle control filter constant at CLVS
141	VSS	—	Ground
142	MDSOUT	O	Frequency error output terminal of internal CLV circuit
143	VDD	—	Power supply (+3.3V)
144	MDPOUT	O	Phase error output of internal CLV circuit
145	DEFECT	I	Defect signal input (Not used)
146	GSCOR	I	Guard subcode sync (S0+S1) detection signal input from CXD3068Q
147	EXCK	O	Subcode serial data reading clock signal output to CXD3068Q
148	SBIN	I	Subcode serial data input from CXD3068Q
149	VSS	—	Ground
150	SCOR	I	Subcode sync (S0+S1) detection signal input from CXD3068Q
151	WFCK	I	Write frame clock signal input from CXD3068Q
152	VDD5V	—	Power supply (+5V)
153	XRCI	I	Not used (Pull down)
154	VDDS	—	Power supply (+5V)
155	C2PO	I	C2 pointer signal input from CXD3068Q
156	VDD	—	Power supply (+3.3V)
157	DBCK	O	Bit clock signal (2.8224 MHz) output (Not used)
158	BCLK	I	Bit clock signal (2.8224 MHz) input from CXD3068Q
159	DDAT	O	PCM data (Not used)
160	MDAT	I	Serial data input from CXD3068Q
161	VSS	—	Ground
162	DLRC	O	L/R sampling clock signal (Not used)
163	LRCK	I	L/R sampling clock signal (44.1 kHz) input from CXD3068Q
164	XRST	I	Reset signal input from CXP973064-226R "L": reset
165	IFS0	I	Not used (connected to ground)
166	IFS1	I	Not used (connected to VDD)
167	XTAL	I	33.8688 MHz clock signal input from SM8707GV

Pin No.	Pin Name	I/O	Description
168	VSS	—	Ground
169	XTA2	O	System clock output (33.8688 MHz)
170	XTA1	I	System clock input (33.8688 MHz)
171	VDD	—	Power supply (+3.3V)
172 to 176	D0 to D4	I/O	Two-way data bus with the CXP973064-226R

• MB03 BOARD IC901 CXP973064-232R (MECHANISM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	NO_USE	O	Not used
2	SDEN	O	Serial data enable signal output to SP3723BDAOPM
3	DOCTRL	O	Digital out on/off control signal output to CXD3068Q
4	XRST_2753	O	Not used
5	SDA_EEP	I/O	Data bus with the EEPROM
6	MNT1	I	EEPROM ready signal input from TMC57929PGF-RDP
7	FCS_JMP_1	O	Focus jump 1 signal output to the FAN8035L
8	FCS_JMP_2	O	Focus jump 2 signal output to the FAN8035L
9	SENS_CD	I	Internal status (SENSE) signal input from CXD3068Q
10	CDSP2	O	Not used
11	CDSP4	O	Not used
12	XCS_DVD	O	Chip select signal output to TMC57929PGF-RDP
13	VSS	—	Ground
14 to 21	D0 to D7	I/O	Two-way data bus with TMC57929PGF-RDP
22	INIT0_DVD	I	Interrupt signal input from TMC57929PGF-RDP
23	INIT1_DVD	I	Interrupt signal input from TMC57929PGF-RDP
24	MSCK_SAMBA	O	Not used
25	XRST_1882	O	Reset signal output to TMC57929PGF-RDP
26	SCOR	I	Subcode sync (S0+S1) detection signal input from CXD3068Q
27	LAT_CD	O	Serial data latch pulse signal output to CXD3068Q
28	LD ON	O	Laser diode on/off control signal output to SP3723BDAOPM
29	MIRR	I	Mirror signal input from SP3723BDAOPM
30	COUT_CD	I	Numbers of track counted signal input from SP3723BDAOPM
31	INLIM	I	Detection signal input from limit in switch The optical pick-up is inner position when “H”
32	CS_ZIVA	O	Chip select signal output to ZIVA5X-C1F
33	SI_ZIVA	I	Serial data input from ZIVA5X-C1F
34	SO_ZIVA	O	Serial data output to ZIVA5X-C1F
35	SCK_ZIVA	O	Serial data transfer clock signal output to ZIVA5X-C1F
36	DRVIRQ	O	Interrupt request signal output to ZIVA5X-C1F
37	DRVRDY	O	Ready signal output to ZIVA5X-C1F
38	RST	I	System reset signal input from ZIVA5X-C1F
39	VSS	—	Ground
40	XTAL	I	System clock input terminal (20 MHz)
41	EXTAL	O	System clock output terminal (20 MHz)
42	VDD	—	Power supply (+3.3V)
43, 44	SLED_A, SLED_B	O	Sled motor drive signal output to FAN8035L
45	SCK_DSD	O	Clock output to TMC57929PGF-RDP
46	SDOUT_DSD	O	Serial data output Not used
47	SDIN_DSD	I	Serial data input Not used
48	READY_DSD	I	Ready signal input Not used
49	DATA_CD	O	Serial data output to CXD3068Q
50	CLOK_CD	O	Serial data transfer clock signal output to CXD3068Q
51	XMSLAT	O	Serial data latch pulse signal Not used
52	SQSO	I	Subcode Q data input from TMC57929PGF-RDP
53	MUTE_DSD	O	Muting on/off control signal Not used

Pin No.	Pin Name	I/O	Description
54	SQCK	O	Subcode Q data reading clock signal output to TMC57929PGF-RDP
55	VSS	—	Ground
56	CONTROL_2	I	Not used
57	CONTROL_1	I	Not used
58	GFS_DVD	I	Guard frame sync signal input from TMC57929PGF-RDP
59	MUTE_CD	O	Muting on/off control signal output to CXD3068Q
60	MUTE_2D	O	Muting on/off control signal output to FAN8035L
61	SLED	I	Sled motor servo drive PWM signal input from CXD3068Q
62	FG	I	Spindle motor control signal input from SP3723BDAOPM
63	SP_ON	O	Muting on/off control signal output to FAN 8035L
64	JIT	I	Jitter signal input
65	TE	I	Tracking error signal input from SP3723BDAOPM
66	PI	I	Pull in signal input from SP3723BDAOPM
67	FE	I	Focus error signal input from SP3723BDAOPM
68	AVSS	—	Ground
69	AVREF	I	Reference voltage input (for A/D converter)
70	AVDD	—	Power supply (+3.3V) (for A/D converter)
71	GFS_CD	I	Guard frame sync signal input from CXD3068Q
72	SCLK_CD	O	SENSE serial data reading clock signal output to CXD3068Q
73	TSD-M	O	Thermal shut down signal output to FAN8035L
74	FOK_CD	I	Focus OK signal input from CXD3068Q
75	LOCK_CD	I	GFS is sampled by 460 Hz “H” input when GFS is “H”
76	LDSEL	O	Laser diode selection signal output
77	SACD/DVD	O	SACD/DVD selection signal output
78	I2C_SIO	I/O	Communication data bus input/output
79	I2C-SCL	I/O	Communication data reading clock signal input/output
80	RXD	I	Serial data input from the RS-232C (for check)
81	TXD	O	Serial data output to the RS-232C (for check)
82	SDCLK_RF	O	Serial data transfer clock signal output to SP3723BDAOPM
83	SDATA_RF	I/O	Two-way data bus with SP3723BDAOPM
84	XWR	O	Write strobe signal output to TMC57929PGF-RDP
85	XRD	O	Read strobe signal output to TMC57929PGF-RDP
86	(PWE)	—	Not used
87	VDD	—	Power supply (+3.3V)
88	VSS	—	Ground
89 to 96	A0 to A7	O	Address signal output to TMC57929PGF-RDP
97	A8	O	Motor/coil driver power save control signal Not used
98	XDRST	O	Reset signal output
99	WP_EEP	O	Write protect signal output to the EEPROM
100	CLK_EEP	O	Clock signal output to the EEPROM

• MAIN BOARD IC1104 M30620MCN-A29FP (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	S-OUT	O	Serial data output to the front panel controller
2	S-CLK	O	Serial data transfer clock signal output to the front panel controller
3	61530-CLK	O	Serial data transfer clock signal output to the M62530FP-D60G
4	SIRCS	I	Remote control signal input from the remote control receiver
5	61530-DAT	O	Serial data output to the M62530FP-D60G
6	61529-DAT	O	Serial data output to the M62529FP-D60G
7	61529-CLK	O	Serial data transfer clock signal output to the M62529FP-D60G
8	BYTE	I	External data bus line byte selection signal input terminal “L”: 16 bit, “H”: 8 bit (fixed at “L”)
9	CNVSS	—	Not used
10	XCIN	I	Sub system clock input terminal (32.768 kHz)
11	XCOU	O	Sub system clock output terminal (32.768 kHz)
12	RESET	I	System reset signal input from the reset switch “L”: reset For several hundreds msec. after the power supply rises, “L” is input, then it change to “H”
13	XOUT	O	Main system clock output terminal (16MHz)
14	VSS	—	Ground terminal
15	XIN	I	Main system clock input terminal (16MHz)
16	VCC	—	Power supply terminal (+3.3V)
17	NMI	I	Non-maskable interrupt input Fixed at “H” in this set
18	AC-CUT	I	AC off detection signal input from the level detect “L”: AC cut checked
19	VIDEO-OUT-SW	O	Video out select signal output terminal “H”: DVD mode, “L”: other mode Not used
20	RDS-INT	I	Serial data reading clock signal input terminal Not used
21	RDS-DATA	I	Serial data input terminal Not used
22	ST-MUTE	O	Tuner muting control signal output to the FM/AM tuner unit “L”: muting on
23	STEREO	I	FM stereo detection signal input from the FM/AM tuner unit “L”: stereo
24	TUNED	I	Tuning detection signal input from the FM/AM tuner unit “L”: tuned
25	ST-CE	O	PLL serial chip enable signal output to the FM/AM tuner unit
26	ST-DOUT	O	PLL serial data output to the FM/AM tuner unit
27	ST-DIN	I	PLL serial data input from the FM/AM tuner unit
28	ST-CLK	O	PLL serial data transfer clock signal output to the FM/AM tuner unit
29	IIC-CLK	I/O	IIC data reading clock signal input or transfer clock signal output
30	IIC-DAT	I/O	IIC two-way data bus
31	SYS-POWER	O	CD/DVD power on/off control signal output terminal “H”: CD on
32	SYS-RESET	O	System reset signal output to the ZIVA5X-CIF
33	M-REQ	I	DAC muting request signal input from the ZIVA5X-CIF
34, 35	VIDEO-MUTE1, VIDEO-MUTE2	O	Video muting on/off control signal output terminal “L”: muting on
36	DAC-MUTE	O	Muting on/off control signal output “L”: muting (front speaker)
37	SURROUND-MUTE	O	Muting on/off control signal output “L”: muting (surround speaker)
38	CENTER-MUTE	O	Muting on/off control signal output “L”: muting (center speaker)
39 to 41	I-BASS F3 to I-BASS F1	O	I-BASS f0 control signal output terminal
42	I-BASS +10dB	O	I-BASS +10db control signal output terminal
43	I-BASS +8dB	O	I-BASS +8db control signal output terminal
44	I-BASS +6dB	O	I-BASS +6db control signal output terminal
45	I-BASS +5dB	O	I-BASS +5db control signal output terminal

Pin No.	Pin Name	I/O	Description
46	I-BASS ON/OFF	O	I-BASS on/off control signal output terminal
47	TBL-POS	O	Table motor drive signal (clockwise) output terminal
48	TBL-NEG	O	Table motor drive signal (counterclockwise) output terminal
49	LOD-POS	O	Loding motor drive signal output (load-out direction)
50	LOD-NEG	O	Loding motor drive signal output (load-in direction)
51 to 53	ENCODER-SW1 to ENCODER-SW3	I	Rotary encoder pulse input from the CD/DVD mechanism deck section
54	EJECT-SW	I	Detection input from the tray open/close detect switch “L”: when tray is close, “H”: when tray is open
55	T-SENS	I	CD/DVD table address detection signal input terminal
56	HP-SW	I	Connection detection signal input of the headphone jack “L”: no connected, “H”: headphone connected
57	MIC-SW	I	Connection detection signal input of the microphone jack “L”: no connected, “H”: headphone connected
58	A-TRG	O	Deck-A side trigger plunger drive signal output “H”: plunger on
59	B-TRG	O	Deck-B side trigger plunger drive signal output “H”: plunger on
60	A-SHUT-IN	I	Shut off detection signal input from the deck-A side reel pulse detector
61	B-SHUT-IN	I	Shut off detection signal input from the deck-B side reel pulse detector
62	VCC	—	Power supply terminal (+3.3V)
63	SWFR-MUTE	O	Muting on/off control signal output “L”: muting (sub woofer)
64	VSS	—	Ground terminal
65	CAPM-CONT	O	Capstan motor drive signal output “H”: active
66	B-RECFWD	O	Detection input from the deck-B record detect switch (forward direction)
67	B-RECREV	O	Detection input from the deck-B record detect switch (reverse direction)
68	A-HALF	I	Detection input from the deck-A cassette detect switch “L”: cassette in, “H”: no cassette
69	B-HALF	I	Detection input from the deck-B cassette detect switch “L”: cassette in, “H”: no cassette
70	A-PLAY	I	Detection input from the deck-A play detect switch “H”: deck-A play
71	B-PLAY	I	Detection input from the deck-B play detect switch “H”: deck-B play
72	AMS-IN	I	Automatic music sensor detection signal input terminal
73	DISPLAY-KEY	I	Display key input terminal (A/D input)
74	POWER-KEY	I	Power key input terminal (A/D input)
75	M-RESET	O	System reset signal output to the front panel controller
76	STANDBY-LED	O	LED drive signal output of the standby indicator “L”: LED on
77	BIAS	O	Recording bias on/off control signal output “H”: bias on
78	PB-A/B	O	Deck-A/B selection signal output “H”: deck-A, “L”: deck-B
79	TC-RELAY	O	Recording/playback select signal output to the REC/PB switch “L”: recording
80	PB-MUTE	O	Playing muting on/off control signal output terminal “L”: muting on
81	REC-MUTE	O	Recording muting on/off control signal output terminal “L”: muting on
82	FAN-CONTROL	O	Fan motor drive signal output “H”: active
83	LINEOUT-MUTE	O	Muting on/off control signal output “L”: muting (line out (MD/VIDEO))
84	LINE-MUTE	O	line muting on/off control signal output “L”: muting
85	STK-MUTE	O	Power amplifier on/off selection signal output terminal “L”: muting
86	PROTECT	I	Protect on/off signal input terminal “L”: protect
87	STB-RELAY	O	Main power on/off relay drive signal output terminal “H”: power on
88	FRONT-RELAY	O	Front speaker on/off relay drive signal output terminal “H”: front speaker on
89	REAR-RELAY	O	Rear and center speakers on/off relay drive signal output terminal “H”: rear and center speakers on

Pin No.	Pin Name	I/O	Description
90	NO-USE	—	Not used
91, 92	VACS-IN1, VACS-IN2	I	VACS input terminal
93	NO-USE	—	Not used
94	MODEL-IN	I	Model selection signal input terminal
95	DEST-IN	I	Destination setting terminal
96	AVSS	—	Ground terminal
97	I-HOLD	O	Fan on/off control signal output terminal “L”: fan on
98	V.REF	I	Reference voltage (+3.5V) input terminal
99	AVCC	—	Power supply terminal (+3.3V)
100	S-IN	I	Serial data input from the front panel controller

• MICON-KEY BOARD IC101 μ PD780232GC-082-8BT (FRONT PANEL CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	VDD	—	Power supply terminal (+5V)
2	VSS	—	Ground terminal
3	X1	I	System clock input terminal (5MHz)
4	X2	O	System clock output terminal (5MHz)
5	IC	—	Not used
6	RESET	I	System reset signal input from the system controller
7	S-CLK	I	Serial data transfer clock signal input from the system controller
8	S-IN	O	Serial data output to the system controller
9	S-OUT	I	Serial data input from the system controller
10	BASS-A	I	Jog dial pulse input from the rotary encoder (BASS) (A phase input)
11	BASS-B	I	Jog dial pulse input from the rotary encoder (BASS) (B phase input)
12	TRE/MID-A	I	Jog dial pulse input from the rotary encoder (TREBLE/MIDDLE) (A phase input)
13	TRE/MID-B	I	Jog dial pulse input from the rotary encoder (TREBLE/MIDDLE) (B phase input)
14	MULTI-A	I	Jog dial pulse input from the rotary encoder (MULTI JOG) (A phase input)
15	MULTI-B	I	Jog dial pulse input from the rotary encoder (MULTI JOG) (B phase input)
16	VOL-A	I	Jog dial pulse input from the rotary encoder (VOLUME) (A phase input)
17	VOL-B	I	Jog dial pulse input from the rotary encoder (VOLUME) (B phase input)
18	AVSS	—	Ground terminal
19	NC	—	Not used
20 to 22	KEY2 to KEY0	I	Key input terminal (A/D input)
23	VSS	—	Ground terminal
24	AVDD	—	Power supply terminal (+5V)
25	VDD	—	Power supply terminal (+5V)
26	DVD-LED	O	LED drive signal output terminal "L": LED on Not used
27	TUNER-LED	O	LED drive signal output terminal "L": LED on Not used
28	TAPE-LED	O	LED drive signal output terminal "L": LED on Not used
29	MD-LED	O	LED drive signal output terminal "L": LED on Not used
30	I-BASS-LED	O	LED drive signal output terminal "L": LED on Not used
31	HEAVY-LED	O	LED drive signal output terminal "L": LED on
32	VOCAL-LED	O	LED drive signal output terminal "L": LED on
33	SALSA-LED	O	LED drive signal output terminal "L": LED on
34	MANUAL-LED	O	LED drive signal output terminal "L": LED on
35	HIP_HOP-LED	O	LED drive signal output terminal "L": LED on
36	TECHNO-LED	O	LED drive signal output terminal "L": LED on
37	MULTI-LED	O	LED drive signal output terminal "L": LED on Not used
38	DISC1-LED	O	LED drive signal output terminal "L": LED on Not used
39	DISC2-LED	O	LED drive signal output terminal "L": LED on Not used
40	DISC3-LED	O	LED drive signal output terminal "L": LED on Not used
41	E-CLK	—	Not used
42	E-LAT	—	Not used
43	E-DAT	—	Not used
44 to 58	S1 to S14	O	Segment drive signal output to the fluorescent indicator tube
59	VDD	—	Power supply terminal (+5V)
60	V.LOAD	—	Power supply terminal (–25V) (for fluorescent indicator tube drive)
61 to 68	S15 to S22	O	Segment drive signal output to the fluorescent indicator tube
69 to 80	G12 to G1	O	Grid drive signal output to the fluorescent indicator tube

SECTION 7 EXPLODED VIEWS

NOTE:

- XX and -X mean standardized parts, so they may have some difference from the original one.

Color Indication of Appearance Parts

Example:

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

↑ ↑
Parts Color Cabinet's Color

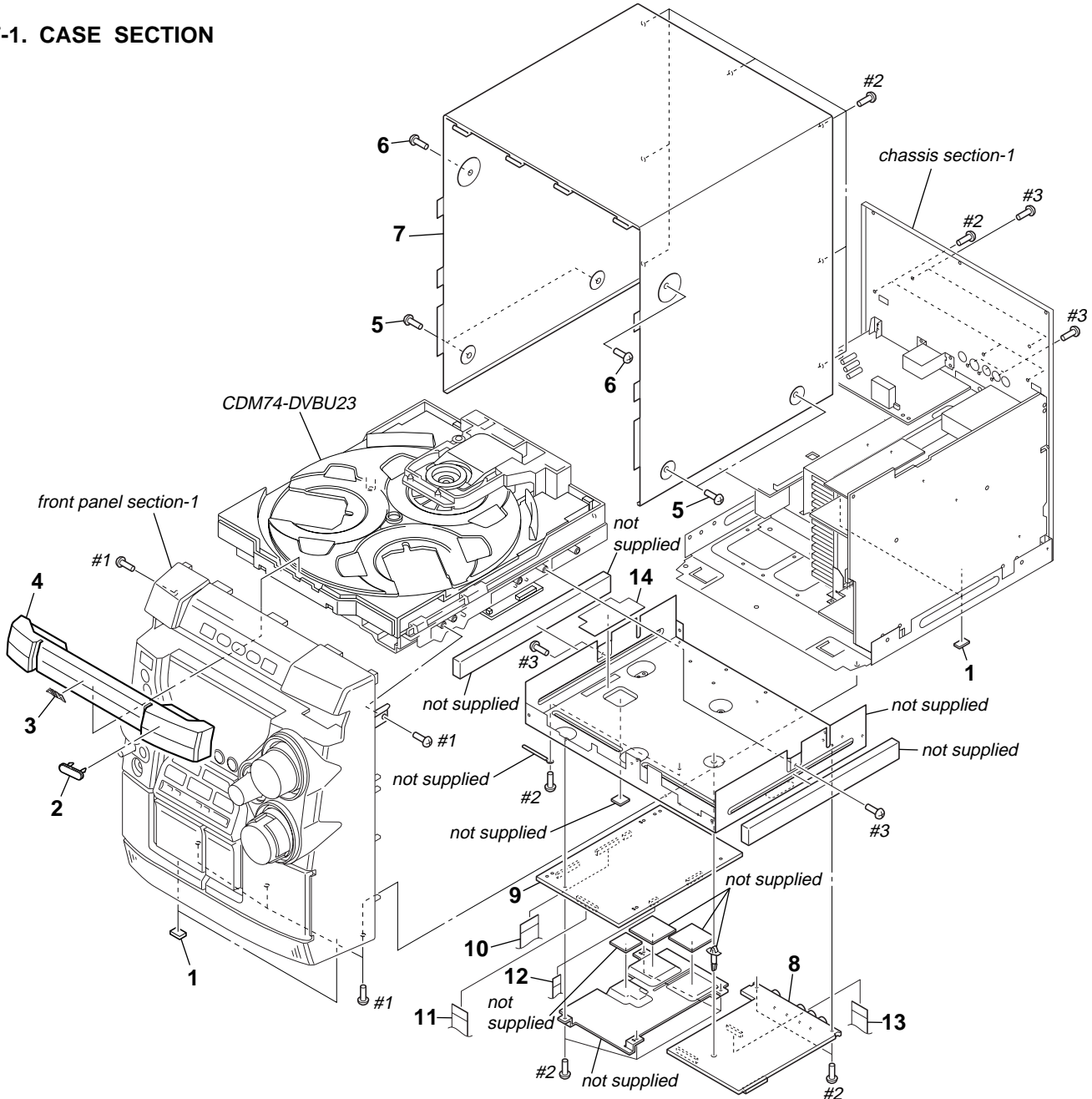
Abbreviation

AUS : Australian model EA : Saudi Arabia model SP : Singapore model
E51 : Chilean and Peruvian models MY : Malaysia model TH : Thai model

- 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.
- Accessories are given in the last of the electrical parts list.

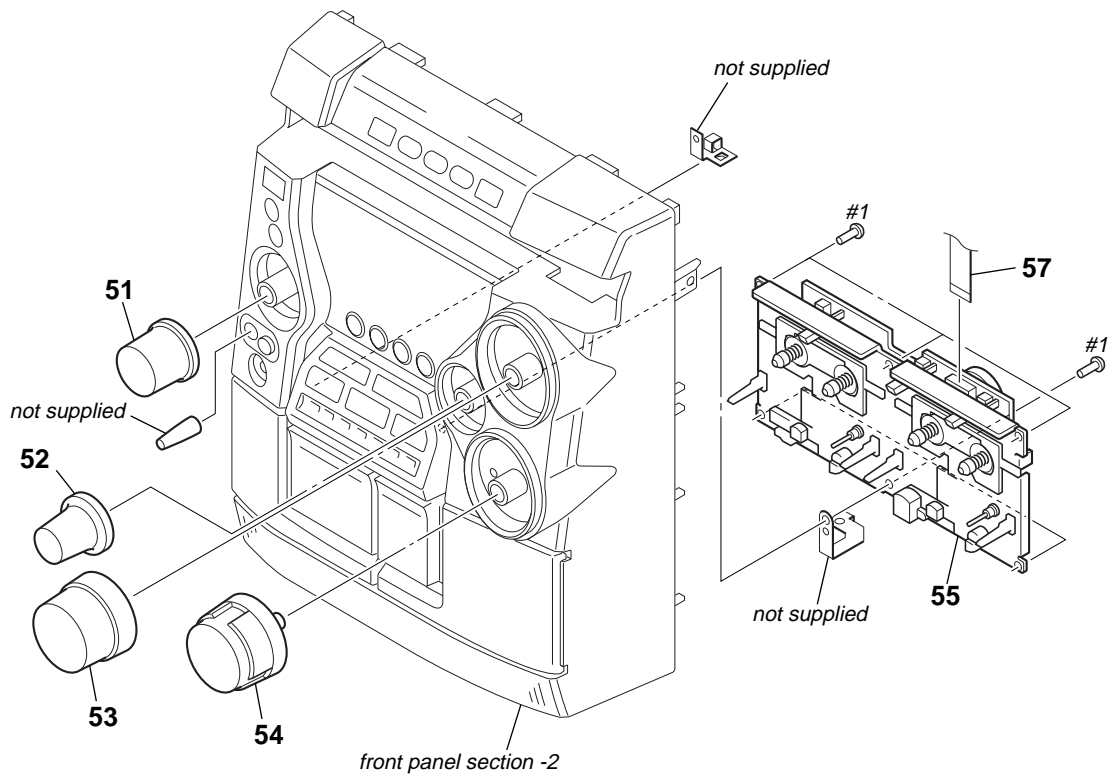
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

7-1. CASE SECTION



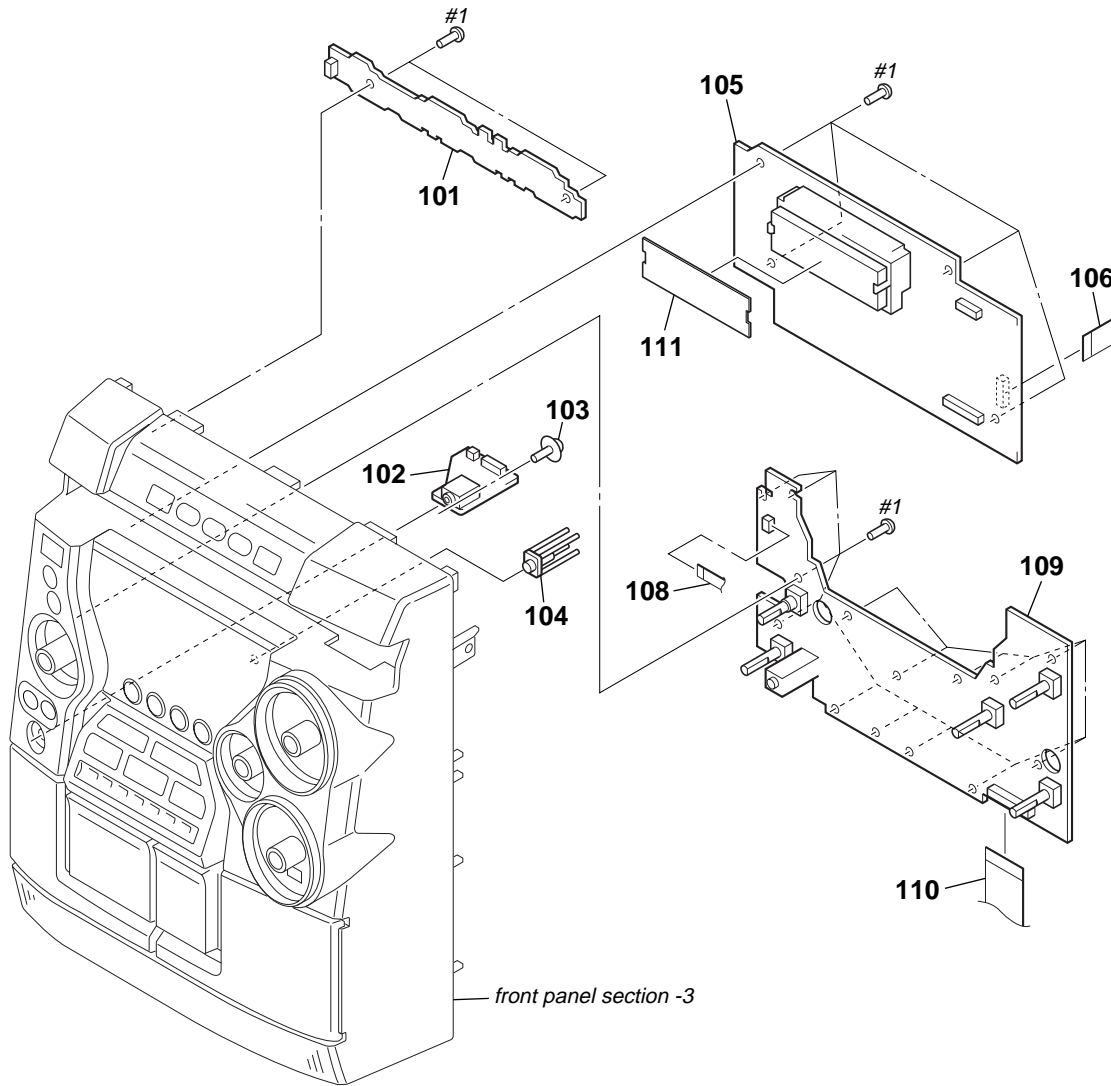
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-225-252-01	CUSHION (FOOT)		9	A-4750-319-A	MB03 BOARD, COMPLETE (TH)	
2	4-246-682-01	EMBLEM (30), MP3		10		WIRE (FLAT TYPE) (29 CORE)	
3	4-245-158-01	EMBLEM		11		WIRE (FLAT TYPE) (13 CORE)	
4	4-245-186-31	PANEL, TRAY		12		WIRE (FLAT TYPE) (7 CORE)	
5	3-363-099-01	SCREW (CASE 3 TP2)		13		WIRE (FLAT TYPE) (17 CORE)	
6	3-363-099-31	SCREW (CASE 3 TP2)		14	4-240-168-01	CUSHION (B)	
7	4-248-760-01	CASE, CABINET STEEL		#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
8	A-4748-816-A	VIDEO BOARD, COMPLETE (TH)		#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
8	A-4749-192-A	VIDEO BOARD, COMPLETE (EXCEPT TH)		#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
9	A-4749-993-A	MB03 BOARD, COMPLETE (EXCEPT TH)					

7-2. FRONT PANEL SECTION-1



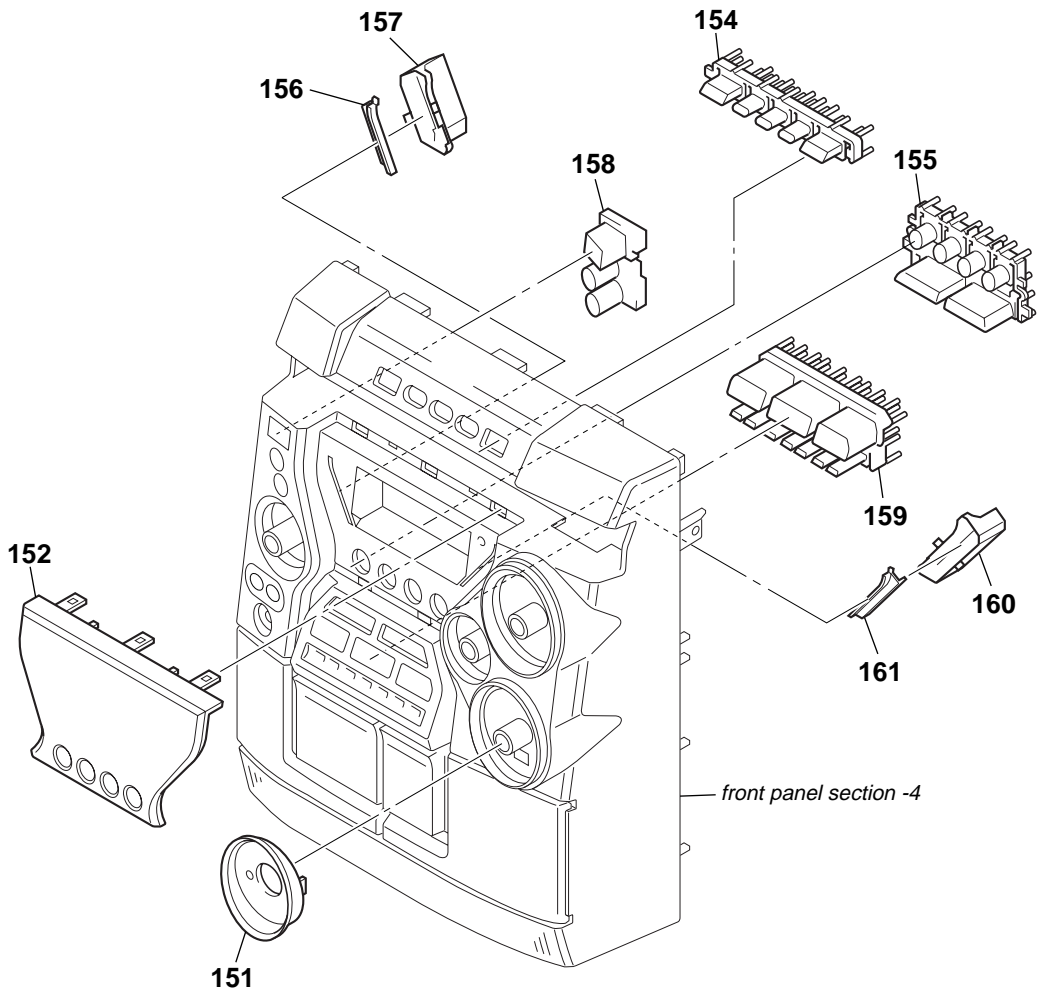
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-245-178-01	PLATING, KNOB ROTARY (JOG)		55	1-796-486-51	DECK, MECHANICAL (CWM43FR26) (TH)	
52	4-245-180-01	PLATING, KNOB ROTARY (TRE)		57		WIRE (FLAT TYPE) (13 CORE)	
53	4-245-182-01	PLATING, KNOB ROTARY (VOL)		#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
54	4-245-176-01	PLATING, KNOB ROTARY (BASS)					
55	1-796-486-41	DECK, MECHANICAL (CWM43FR16)	(EXCEPT TH)				

7-3. FRONT PANEL SECTION-2



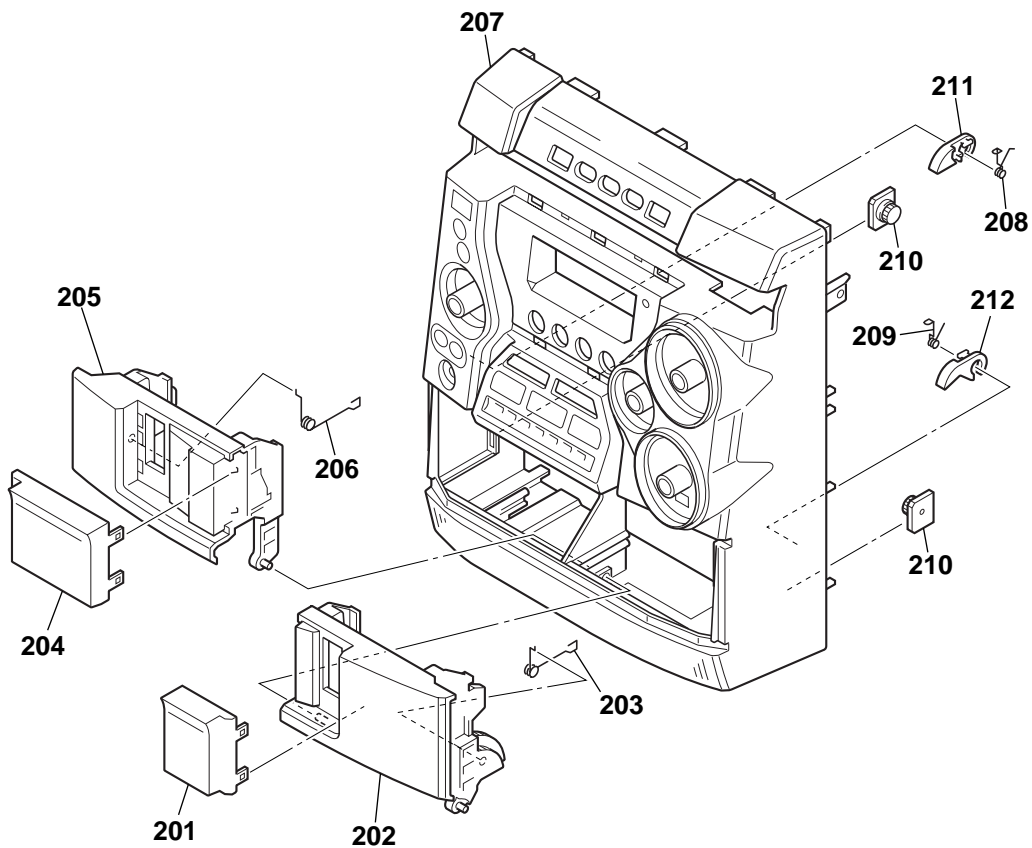
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	1-689-694-11	CD KEY BOARD		108		WIRE (FLAT TYPE) (3 CORE)	
102	1-689-695-11	HEADPHONE JACK BOARD		109	A-4748-819-A	KEY-MIC BOARD, COMPLETE (TH)	
103	3-229-336-01	SCREW, +BVWH TAPPING		109	A-4749-188-A	KEY-MIC BOARD, COMPLETE (EXCEPT TH)	
104	4-245-189-01	REFLECTOR, REMOTE CONTROL		110		WIRE (FLAT TYPE) (24 CORE)	
105	A-4748-808-A	PANEL BOARD, COMPLETE (TH)		111	4-245-194-01	SHEET, FL	
105	A-4749-176-A	PANEL BOARD, COMPLETE (EXCEPT TH)		#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
106		WIRE (FLAT TYPE) (9 CORE)					

7-4. FRONT PANEL SECTION-3



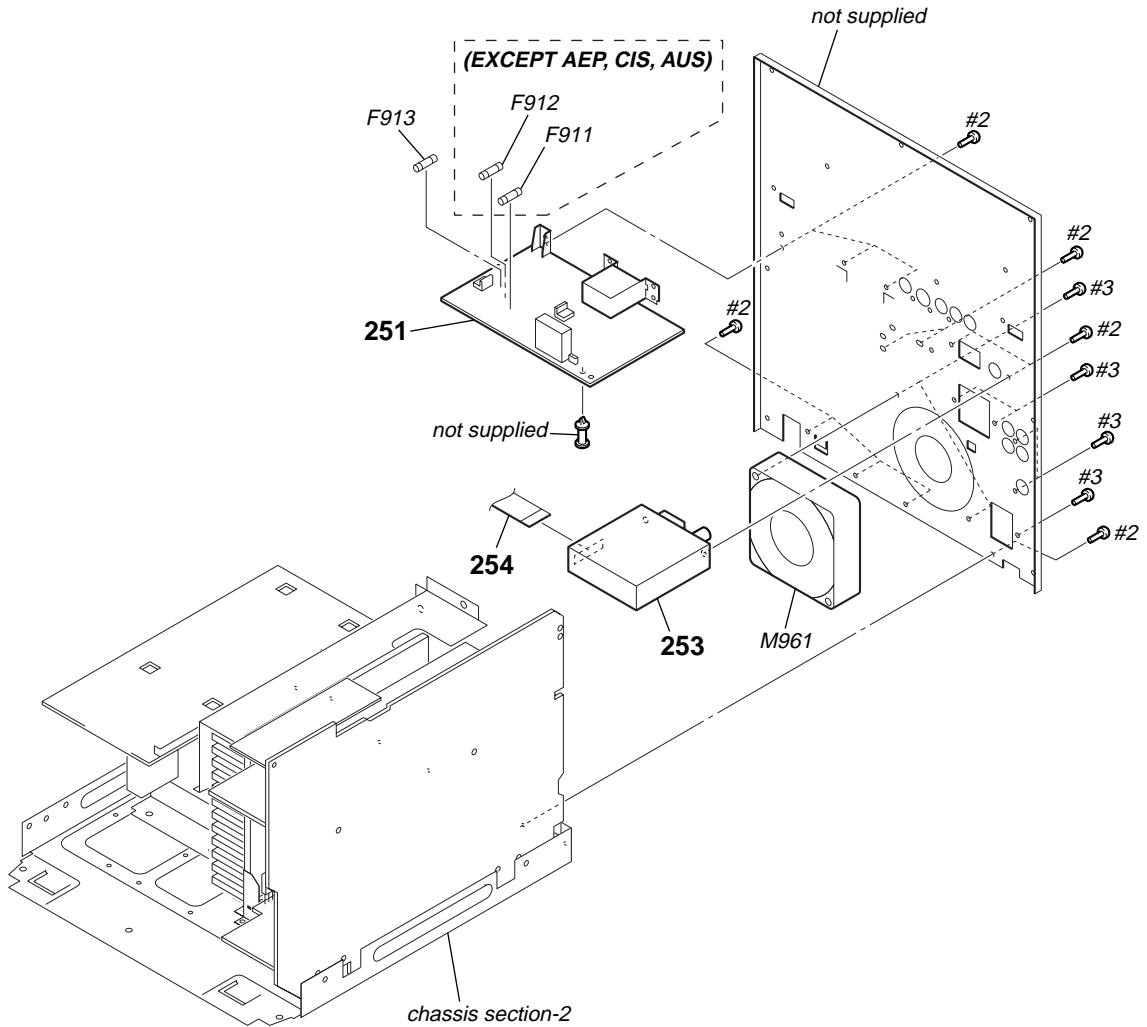
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	4-245-193-01	RING (BASS)		158	X-4955-560-1	KEY ASSY (POWER)	
152	4-248-628-01	WINDOW, DISPLAY		159	4-248-913-02	KEY (OPE DVD) (◀◀. . ▶▶. SOUND FIELD. i-Bass. DISPLAY. -. +. SYNC DUB. ● REC/REC MUTING)	
154	4-245-171-01	KEY (CD) (DISC CHANGE. 1. 2. 3. ▲)		160	4-245-165-01	GUIDE (VOL)	
155	4-245-172-11	KEY (FUN) (TAPE A/B. TUNER BAND. VIDEO/AUX. DVD. ◀▶. ■)		161	4-245-192-01	REFLECTOR (VOL)	
156	4-245-190-01	REFLECTOR (BASS)					
157	4-245-164-01	GUIDE (BASS)					

7-5. FRONT PANEL SECTION-4



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	4-245-198-01	WINDOW (2), CASSETTE		207	4-245-153-61	CABINET, FRONT	
202	4-245-160-11	BOX (2), CASSETTE		208	4-231-836-01	SPRING (HEART CAM-A)	
203	4-245-196-01	SPRING (BOX CASS R), TORSION		209	4-231-841-01	SPRING (HEART CAM-B)	
204	4-245-197-01	WINDOW (1), CASSETTE		210	4-224-104-41	DAMPER	
205	4-245-159-01	BOX (1), CASSETTE		211	4-231-824-01	CAM (A), HEART	
206	4-245-195-01	SPRING (BOX CASS L), TORSION		212	4-231-825-01	CAM (B), HEART	

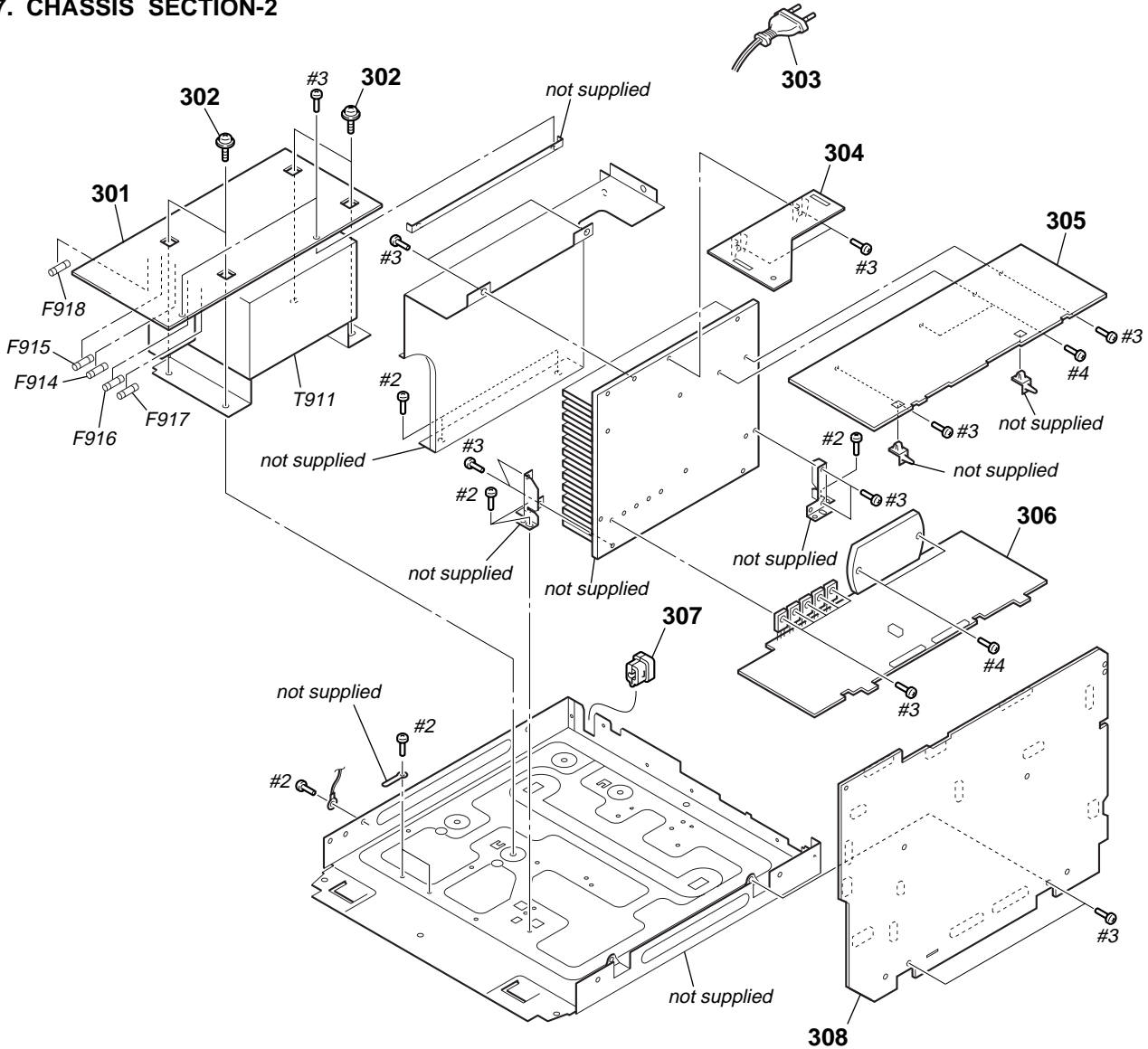
7-6. CHASSIS SECTION-1



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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	A-4748-815-A	SUB TRANS BOARD, COMPLETE (TH)		△F911	1-533-472-12	FUSE, GLASS TUBE (DIA. 5) (T5AL/250V)	(EXCEPT AEP, CIS, AUS)
251	A-4749-191-A	SUB TRANS BOARD, COMPLETE (E, E51, EA, SP, MY)		△F912	1-533-472-12	FUSE, GLASS TUBE (DIA. 5) (T5AL/250V)	(EXCEPT AEP, CIS, AUS)
251	A-4750-590-A	SUB TRANS BOARD, COMPLETE (AEP, CIS)		△F913	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8AL/250V)	
251	A-4750-592-A	SUB TRANS BOARD, COMPLETE (AUS)		M961	1-763-072-11	FAN, DC	
253	1-693-615-21	TUNER (FM/AM) (E, E51, SP, MY, TH)		#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
253	1-693-617-11	TUNER (FM/AM) (AEP, CIS, AUS, EA)		#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
254		WIRE (FLAT TYPE) (11CORE) (EXCEPT AEP)					
254		WIRE (FLAT TYPE) (15CORE) (AEP)					

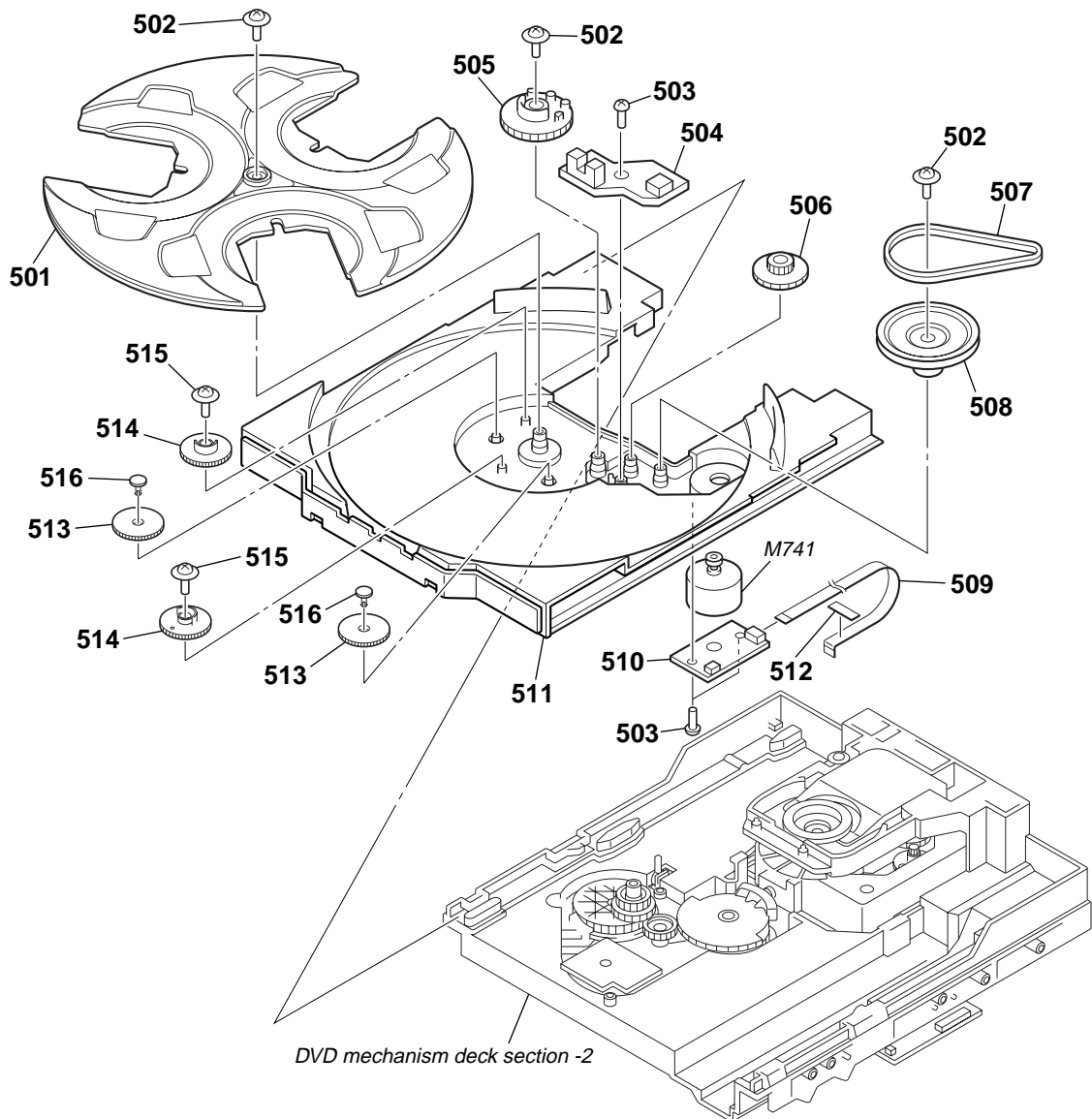
7-7. CHASSIS SECTION-2



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

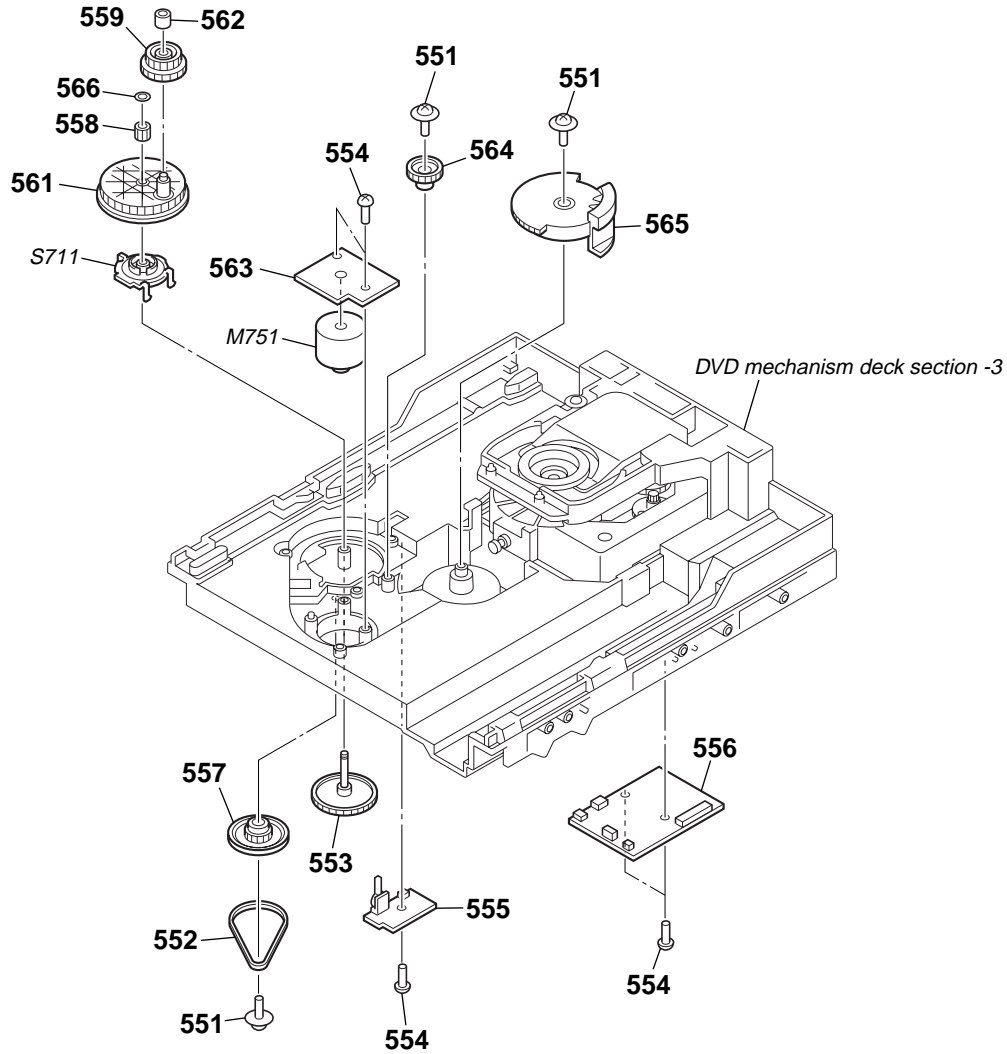
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	A-4748-814-A	TRANS BOARD, COMPLETE (TH)		307	3-703-571-11	BUSHING (S) (4516), CORD (E)	
301	A-4749-190-A	TRANS BOARD, COMPLETE (E, E51, EA, SP, MY)		308	A-4748-801-A	MAIN BOARD, COMPLETE (TH)	
301	A-4750-589-A	TRANS BOARD, COMPLETE (AEP, CIS, AUS)		308	A-4749-175-A	MAIN BOARD, COMPLETE (SP, MY)	
302	4-242-527-01	S-SCREW, ITC+4-8 R		308	A-4749-203-A	MAIN BOARD, COMPLETE (AUS)	
Δ 303	1-696-848-22	CORD, POWER (AUS)		308	A-4749-271-A	MAIN BOARD, COMPLETE (EA)	
Δ 303	1-775-787-21	CORD, POWER (E, E51, EA, SP, MY)		308	A-4749-273-A	MAIN BOARD, COMPLETE (E)	
Δ 303	1-777-071-83	CORD, POWER (AEP, CIS)		308	A-4749-276-A	MAIN BOARD, COMPLETE (E51)	
Δ 303	1-824-818-11	CORD, POWER (WITH CONNECTOR) (TH)		308	A-4749-306-A	MAIN BOARD, COMPLETE (AEP)	
304	A-4748-800-A	I-BASS BOARD, COMPLETE (TH)		308	A-4751-920-A	MAIN BOARD, COMPLETE (CIS)	
304	A-4749-158-A	I-BASS BOARD, COMPLETE (EXCEPT TH)		Δ F914	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V)	
305	A-4748-811-A	SURROUND AMP BOARD, COMPLETE (TH)		Δ F915	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V)	
305	A-4749-179-A	SURROUND AMP BOARD, COMPLETE (EXCEPT TH)		Δ F916	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V)	
306	A-4748-807-A	FRONT AMP BOARD, COMPLETE (TH)		Δ F917	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V)	
306	A-4749-178-A	FRONT AMP BOARD, COMPLETE (EXCEPT AEP, CIS, TH)		Δ F918	1-533-472-12	FUSE, GLASS TUBE (DIA. 5) (T5AL/250V)	
306	A-4750-345-A	FRONT AMP BOARD, COMPLETE (AEP, CIS)		Δ T911	1-443-042-11	TRANSFORMER, POWER (EXCEPT EA)	
* 307	3-703-244-00	BUSHING (2104), CORD (EXCEPT E)		Δ T911	1-443-043-11	TRANSFORMER, POWER (EA)	
				#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
				#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
				#4	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	

7-8. DVD MECHANISM DECK SECTION-1
(CDM74-DVBU23)



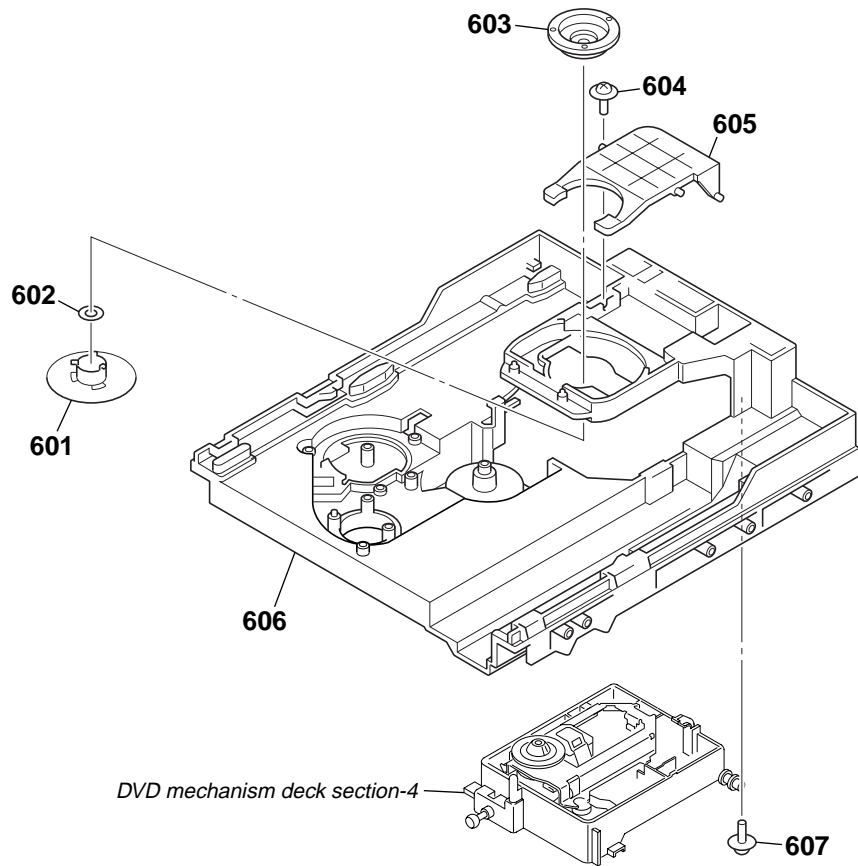
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
501	4-243-816-01	TRAY		510	1-687-134-11	MOTOR (TB) BOARD	
502	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING		511	4-243-815-01	TABLE (LOADING)	
503	4-218-253-21	SCREW (M2.6), +BTTP		512	3-231-598-01	SHEET (BA)	
504	1-687-132-11	SENSOR BOARD		513	4-245-570-01	GEAR (JOINT)	
505	4-243-819-01	GEAR (GENEVA)		514	4-245-571-02	GEAR (STOPPER)	
506	4-243-820-01	GEAR (TABLE)		515	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
507	4-243-823-01	BELT (TABLE)		516	4-245-572-01	BUSHING (GEAR)	
508	4-243-821-01	PULLEY (TABLE)		M741	A-4723-963-A	MOTOR ASSY, TABLE	
509	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)					

7-9. DVD MECHANISM DECK SECTION-2
(CDM74-DVBU23)



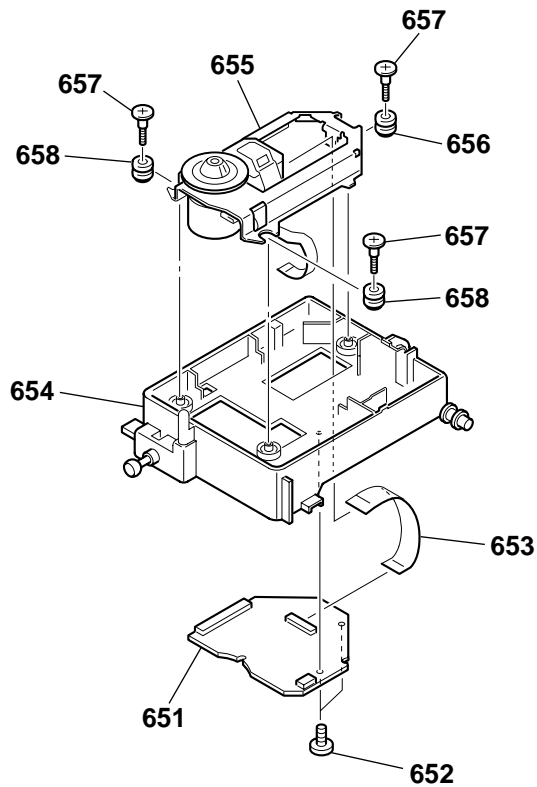
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
551	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING		561	4-244-108-01	GEAR, SWING	
552	4-244-034-01	BELT (LOADING)		562	4-224-608-01	COLLAR, SWING	
553	4-224-613-01	GEAR (SHAFT)		563	1-687-133-11	MOTOR (LD) BOARD	
554	4-218-253-31	SCREW (M2.6), +BTTP		564	4-224-606-01	GEAR (RV)	
555	1-687-669-11	SW BOARD		565	4-243-818-01	GEAR (U/D)	
556	1-687-135-11	DRIVER BOARD		566	3-016-533-01	WASHER (FR), STOPPER	
557	4-225-844-01	GEAR (LOADING A)		M751	A-4737-553-A	MOTOR ASSY, LOADING	
558	4-224-611-01	GEAR (LOADING B)		S711	1-477-680-12	ENCODER, ROTARY	
559	4-224-609-01	GEAR (LOADING C)				(DISC TRAY ADDRESS DETECT)	

7-10. DVD MECHANISM DECK SECTION-3
(CDM74-DVBU23)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
601	X-4954-450-1	PULLEY (240) ASSY		606	4-243-817-11	CHASSIS	
602	3-053-844-01	YOKE		607	4-218-252-51	SCREW (+PTPWH M2.6), FLOATING (EXCEPT TH)	
603	4-233-594-01	PULLEY (B) (DVD), CHUCKING		607	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING (TH)	
604	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING					
605	4-243-822-02	LEVER (LIFTER)					

7-11. DVD MECHANISM DECK SECTION-4
(CDM74-DVBU23)



The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
651	A-4728-690-A	RF BOARD, COMPLETE		\triangle 655	1-477-263-13	OPTICAL TRAVERSE UNIT (DBU-1)	
652	4-218-253-11	SCREW (M2.6), +BTTP		656	3-053-847-31	INSULATOR	
653	1-824-106-12	CABLE, FLEXIBLE FLAT (24 CORE)		657	4-981-923-01	SCREW (M), STEP	
654	X-4955-538-1	HOLDER (DBU) ASSY		658	4-251-328-01	INSULATOR (HRC)	

SECTION 8 ELECTRICAL PARTS LIST

CD KEY	DRIVER
FRONT AMP	

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.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA. . : μ A. . uPA. . : μ PA. .
uPB. . : μ PB. . uPC. . : μ PC. .
uPD. . : μ PD. .
- CAPACITORS • Abbreviation
uF: μ F AUS : Australian model MY : Malaysia model
- COILS E51 : Chilean and Peruvian models SP : Singapore model
uH: μ H EA : Saudi Arabia model TH : Thai model

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

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

Ref. No.	Part No.	Description	Remark		Ref. No.	Part No.	Description	Remark	
	1-689-694-11	CD KEY BOARD *****					< IC >		
		< CONNECTOR >			IC701	8-759-598-69	IC BA6956AN		
					IC712	8-759-598-69	IC BA6956AN		
* CN302	1-695-364-31	PIN, CONNECTOR (PC BOARD) 3P					< TRANSISTOR >		
		< RESISTOR >			Q731	8-729-029-66	TRANSISTOR	DTC114ESA	
R15	1-216-823-11	METAL CHIP	1.5K 5% 1/10W				< RESISTOR >		
R16	1-216-825-11	METAL CHIP	2.2K 5% 1/10W		R701	1-249-413-11	CARBON	470 5% 1/4W	
R17	1-216-827-11	METAL CHIP	3.3K 5% 1/10W		R702	1-247-807-31	CARBON	100 5% 1/4W	
R18	1-216-829-11	METAL CHIP	4.7K 5% 1/10W		R711	1-249-417-11	CARBON	1K 5% 1/4W	
R19	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W		R712	1-249-425-11	CARBON	4.7K 5% 1/4W	
		< SWITCH >			R713	1-249-433-11	CARBON	22K 5% 1/4W	
S15	1-771-410-21	SWITCH, TACTILE (DISC CHANGE/DISC SKIP)			R721	1-249-425-11	CARBON	4.7K 5% 1/4W	
S16	1-771-410-21	SWITCH, TACTILE (DISC DIRECT PLAY 1)			R722	1-249-425-11	CARBON	4.7K 5% 1/4W	
S17	1-771-410-21	SWITCH, TACTILE (DISC DIRECT PLAY 2)			R723	1-249-425-11	CARBON	4.7K 5% 1/4W	
S18	1-771-410-21	SWITCH, TACTILE (DISC DIRECT PLAY 3)			R731	1-247-807-31	CARBON	100 5% 1/4W	
S19	1-771-410-21	SWITCH, TACTILE (OPEN/CLOSE \blacktriangle)			R732	1-249-429-11	CARBON	10K 5% 1/4W	

	1-687-135-11	DRIVER BOARD *****			R733	1-249-417-11	CARBON	1K 5% 1/4W	
		< CAPACITOR >			R734	1-249-430-11	CARBON	12K 5% 1/4W	
C715	1-126-933-11	ELECT	100uF 20% 16V		R735	1-247-807-31	CARBON	100 5% 1/4W	
C731	1-126-964-11	ELECT	10uF 20% 50V		R751	1-249-425-11	CARBON	4.7K 5% 1/4W	
C735	1-164-159-11	CERAMIC	0.1uF 50V		*****				
C736	1-164-159-11	CERAMIC	0.1uF 50V		A-4748-807-A	FRONT AMP BOARD, COMPLETE (TH)			
C737	1-164-159-11	CERAMIC	0.1uF 50V		A-4749-178-A	FRONT AMP BOARD, COMPLETE (EXCEPT AEP, CIS, TH)			
					A-4750-345-A	FRONT AMP BOARD, COMPLETE (AEP, CIS) *****			
							< CAPACITOR >		
C741	1-162-306-11	CERAMIC	0.01uF 20% 16V		C201	1-126-964-11	ELECT	10uF 20% 50V	
C751	1-162-306-11	CERAMIC	0.01uF 20% 16V		C202	1-162-294-31	CERAMIC	0.001uF 10% 50V	
C752	1-164-159-11	CERAMIC	0.1uF 50V		C203	1-162-282-31	CERAMIC	100PF 10% 50V (AEP, CIS)	
		< CONNECTOR >			C203	1-162-286-31	CERAMIC	220PF 10% 50V (EXCEPT AEP, CIS)	
CN701	1-785-338-11	PIN, CONNECTOR (LIGHT ANGLE) 12P			C204	1-126-967-11	ELECT	47uF 20% 50V	
CN702	1-784-766-11	CONNECTOR, FFC 5P			C206	1-136-495-11	FILM	0.068uF 5% 50V	
* CN703	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P			C207	1-136-495-11	FILM	0.068uF 5% 50V	
CN704	1-785-328-11	PIN, CONNECTOR (LIGHT ANGRE) 2P			C208	1-128-551-11	ELECT	22uF 20% 63V	
		< DIODE >			C216	1-162-306-11	CERAMIC	0.01uF 20% 16V	
D701	8-719-947-16	DIODE MTZJ-T-72-5.1A			C221	1-128-555-91	ELECT	470uF 20% 63V	
D711	8-719-983-66	DIODE MTZJ-T-72-3.6B			C231	1-126-964-11	ELECT	10uF 20% 50V	

FRONT AMP

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C232	1-104-658-91	ELECT	100uF 20% 10V			< COIL >	
C233	1-126-961-11	ELECT	2.2uF 20% 50V				
C234	1-104-658-91	ELECT	100uF 20% 10V	L281	1-420-872-52	COIL, AIR-CORE	
C235	1-164-159-11	CERAMIC	0.1uF 50V	L282	1-420-872-52	COIL, AIR-CORE	
C251	1-126-964-11	ELECT	10uF 20% 50V			< TRANSISTOR >	
C252	1-162-294-31	CERAMIC	0.001uF 10% 50V				
C253	1-162-282-31	CERAMIC	100PF 10% 50V	Q201	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
			(AEP, CIS)	Q216	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
C253	1-162-286-31	CERAMIC	220PF 10% 50V	Q217	8-729-119-78	TRANSISTOR	2SC2785-HFE
			(EXCEPT AEP, CIS)	Q221	8-729-140-82	TRANSISTOR	2SA988-PAFAEA
C254	1-126-967-11	ELECT	47uF 20% 50V	Q222	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
C256	1-136-495-11	FILM	0.068uF 5% 50V	Q232	8-729-119-78	TRANSISTOR	2SC2785-HFE
C257	1-136-495-11	FILM	0.068uF 5% 50V	Q233	8-729-119-78	TRANSISTOR	2SC2785-HFE
C258	1-128-551-11	ELECT	22uF 20% 63V	Q234	8-729-119-78	TRANSISTOR	2SC2785-HFE
C271	1-135-928-21	ELECT	2200uF 20% 63V	Q251	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
C272	1-135-928-21	ELECT	2200uF 20% 63V	Q281	8-729-026-39	TRANSISTOR	2SA933AS-QT
C273	1-137-844-11	ELECT	2200uF 20% 42V	Q282	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
C274	1-137-844-11	ELECT	2200uF 20% 42V			< RESISTOR >	
C281	1-136-497-81	FILM	0.1uF 5% 50V	R201	1-249-417-11	CARBON	1K 5% 1/4W
C282	1-136-497-81	FILM	0.1uF 5% 50V	R202	1-249-437-11	CARBON	47K 5% 1/4W
C283	1-136-497-81	FILM	0.1uF 5% 50V	R203	1-249-408-11	CARBON	180 5% 1/4W
C284	1-136-497-81	FILM	0.1uF 5% 50V	R204	1-249-437-11	CARBON	47K 5% 1/4W
C285	1-162-306-11	CERAMIC	0.01uF 20% 16V	△ R205	1-208-602-11	METAL	0.22 10% 2W F
C286	1-162-306-11	CERAMIC	0.01uF 20% 16V	△ R206	1-208-602-11	METAL	0.22 10% 2W F
C921	1-126-956-91	ELECT	0.1uF 20% 50V	R207	1-249-417-11	CARBON	1K 5% 1/4W
C922	1-126-767-11	ELECT	1000uF 20% 16V	R208	1-249-431-11	CARBON	15K 5% 1/4W
C923	1-126-956-91	ELECT	0.1uF 20% 50V	R209	1-249-441-11	CARBON	100K 5% 1/4W
C924	1-126-767-11	ELECT	1000uF 20% 16V	R210	1-260-076-11	CARBON	10 5% 1/2W
C925	1-126-956-91	ELECT	0.1uF 20% 50V	△ R211	1-212-881-11	FUSIBLE	100 5% 1/4W F
C926	1-126-933-11	ELECT	100uF 20% 16V	R214	1-249-406-11	CARBON	120 5% 1/4W
C933	1-126-956-91	ELECT	0.1uF 20% 50V	R215	1-249-433-11	CARBON	22K 5% 1/4W
C934	1-126-925-91	ELECT	470uF 20% 10V	R216	1-249-441-11	CARBON	100K 5% 1/4W
C937	1-126-956-91	ELECT	0.1uF 20% 50V	R217	1-249-429-11	CARBON	10K 5% 1/4W
C938	1-126-925-91	ELECT	470uF 20% 10V	R218	1-249-429-11	CARBON	10K 5% 1/4W
		< CONNECTOR >		R219	1-202-972-61	FUSIBLE	1 5% 1/4W
CN201	1-573-829-11	CONNECTOR, BOARD TO BOARD 15P		△ R220	1-202-972-61	FUSIBLE	1 5% 1/4W F
CN206	1-573-829-11	CONNECTOR, BOARD TO BOARD 15P		R221	1-249-421-11	CARBON	2.2K 5% 1/4W
		< DIODE >		R222	1-249-433-11	CARBON	22K 5% 1/4W
D201	8-719-991-33	DIODE 1SS133T-77		R223	1-249-429-11	CARBON	10K 5% 1/4W
D230	8-719-991-33	DIODE 1SS133T-77		R224	1-249-429-11	CARBON	10K 5% 1/4W
D231	8-719-991-33	DIODE 1SS133T-77		R225	1-249-439-11	CARBON	68K 5% 1/4W
D251	8-719-991-33	DIODE 1SS133T-77		R226	1-249-426-11	CARBON	5.6K 5% 1/4W
D281	8-719-991-33	DIODE 1SS133T-77		R230	1-249-425-11	CARBON	4.7K 5% 1/4W
D291	8-719-991-33	DIODE 1SS133T-77		R231	1-249-425-11	CARBON	4.7K 5% 1/4W
		< IC >		R233	1-249-425-11	CARBON	4.7K 5% 1/4W
IC201	6-704-107-01	IC STK403-100		R239	1-249-437-11	CARBON	47K 5% 1/4W
IC203	6-703-610-01	IC RT8H015C-T112-1		R240	1-249-438-11	CARBON	56K 5% 1/4W
IC921	8-759-518-68	IC PQ12RF21		R251	1-249-417-11	CARBON	1K 5% 1/4W
IC922	8-759-701-59	IC NJM78M09FA		R252	1-249-437-11	CARBON	47K 5% 1/4W
IC923	8-759-701-59	IC NJM78M09FA		R253	1-249-408-11	CARBON	180 5% 1/4W
IC932	6-701-760-01	IC uPC3504AHF		R254	1-249-437-11	CARBON	47K 5% 1/4W
IC934	8-759-231-53	IC TA7805S		△ R255	1-208-602-11	METAL	0.22 10% 2W F
				△ R256	1-208-602-11	METAL	0.22 10% 2W F
				R257	1-249-417-11	CARBON	1K 5% 1/4W
				R258	1-249-431-11	CARBON	15K 5% 1/4W
				R259	1-249-441-11	CARBON	100K 5% 1/4W
				R260	1-260-076-11	CARBON	10 5% 1/2W

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FRONT AMP

HEADPHONE JACK

I-BASS

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
△R261	1-212-881-11	FUSIBLE	100 5% 1/4W F	A-4748-800-A	I-BASS BOARD, COMPLETE (TH)		
R271	1-249-441-11	CARBON	100K 5% 1/4W	A-4749-158-A	I-BASS BOARD, COMPLETE (EXCEPT TH)		
R272	1-249-441-11	CARBON	100K 5% 1/4W	*****			
R273	1-249-441-11	CARBON	100K 5% 1/4W	< CAPACITOR >			
R274	1-249-441-11	CARBON	100K 5% 1/4W	C315	1-126-963-11	ELECT	4.7uF 20% 50V
△R280	1-215-892-11	METAL OXIDE	1K 5% 2W F	C316	1-126-963-11	ELECT	4.7uF 20% 50V
R281	1-260-076-11	CARBON	10 5% 1/2W	C329	1-126-963-11	ELECT	4.7uF 20% 50V
R282	1-260-076-11	CARBON	10 5% 1/2W	C330	1-126-963-11	ELECT	4.7uF 20% 50V
R283	1-260-076-11	CARBON	10 5% 1/2W	C340	1-126-947-11	ELECT	47uF 20% 35V
R284	1-260-076-11	CARBON	10 5% 1/2W	C341	1-126-947-11	ELECT	47uF 20% 35V
R285	1-249-437-11	CARBON	47K 5% 1/4W	C367	1-136-169-00	FILM	0.22uF 5% 50V
R286	1-249-437-11	CARBON	47K 5% 1/4W	C382	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V
R287	1-249-429-11	CARBON	10K 5% 1/4W	C383	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V
R288	1-249-437-11	CARBON	47K 5% 1/4W	C384	1-164-373-11	CERAMIC CHIP	0.033uF 25V
R289	1-249-429-11	CARBON	10K 5% 1/4W	C385	1-164-373-11	CERAMIC CHIP	0.033uF 25V
R290	1-249-429-11	CARBON	10K 5% 1/4W	C396	1-136-169-00	FILM	0.22uF 5% 50V
R924	1-249-417-11	CARBON	1K 5% 1/4W	C400	1-104-662-91	ELECT	22uF 20% 25V
		< RELAY >		C491	1-164-245-11	CERAMIC CHIP	0.015uF 10% 25V
				C492	1-126-960-11	ELECT	1uF 20% 50V
						< IC >	
				IC303	6-704-074-01	IC NJM2156M (TE2)	
						< SHORT >	
				JR301	1-216-296-11	SHORT CHIP	0
				JR302	1-216-864-11	SHORT CHIP	0
				JR303	1-216-864-11	SHORT CHIP	0
				JR304	1-216-864-11	SHORT CHIP	0
				JR305	1-216-864-11	SHORT CHIP	0
						< TRANSISTOR >	
				Q314	8-729-045-62	FET	2SK2158-T2B
				Q315	8-729-045-62	FET	2SK2158-T2B
				Q316	8-729-045-62	FET	2SK2158-T2B
				Q317	8-729-045-62	FET	2SK2158-T2B
				Q318	8-729-045-62	FET	2SK2158-T2B
				Q319	8-729-045-62	FET	2SK2158-T2B
				Q320	8-729-045-62	FET	2SK2158-T2B
				Q323	8-729-120-28	TRANSISTOR	2SC1623-L5L6
				Q327	8-729-120-28	TRANSISTOR	2SC1623-L5L6
				Q328	8-729-120-28	TRANSISTOR	2SC1623-L5L6
				Q329	8-729-120-28	TRANSISTOR	2SC1623-L5L6
				Q330	8-729-120-28	TRANSISTOR	2SC1623-L5L6
				Q331	8-729-120-28	TRANSISTOR	2SC1623-L5L6
				Q332	8-729-120-28	TRANSISTOR	2SC1623-L5L6
				Q333	8-729-120-28	TRANSISTOR	2SC1623-L5L6
				Q491	8-729-120-28	TRANSISTOR	2SC1623-L5L6
				Q492	8-729-045-62	FET	2SK2158-T2B
						< RESISTOR >	
				R300	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
				R327	1-216-833-11	METAL CHIP	10K 5% 1/10W
				R328	1-216-833-11	METAL CHIP	10K 5% 1/10W
				R329	1-216-833-11	METAL CHIP	10K 5% 1/10W
				R330	1-216-833-11	METAL CHIP	10K 5% 1/10W
				R331	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
				R332	1-216-835-11	METAL CHIP	15K 5% 1/10W

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I-BASS

KEY-MIC

Ref. No.	Part No.	Description	Remark
R333	1-216-833-11	METAL CHIP	10K 5% 1/10W
R334	1-216-832-11	METAL CHIP	8.2K 5% 1/10W
R335	1-216-842-11	METAL CHIP	56K 5% 1/10W
R336	1-216-836-11	METAL CHIP	18K 5% 1/10W
R337	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R338	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R339	1-216-821-11	METAL CHIP	1K 5% 1/10W
R340	1-216-833-11	METAL CHIP	10K 5% 1/10W
R347	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R366	1-216-813-11	METAL CHIP	220 5% 1/10W
R367	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R370	1-216-833-11	METAL CHIP	10K 5% 1/10W
R375	1-216-833-11	METAL CHIP	10K 5% 1/10W
R377	1-216-845-11	METAL CHIP	100K 5% 1/10W
R378	1-216-845-11	METAL CHIP	100K 5% 1/10W
R379	1-216-845-11	METAL CHIP	100K 5% 1/10W
R380	1-216-845-11	METAL CHIP	100K 5% 1/10W
R381	1-216-845-11	METAL CHIP	100K 5% 1/10W
R382	1-216-845-11	METAL CHIP	100K 5% 1/10W
R383	1-216-845-11	METAL CHIP	100K 5% 1/10W
R384	1-216-833-11	METAL CHIP	10K 5% 1/10W
R385	1-216-833-11	METAL CHIP	10K 5% 1/10W
R386	1-216-833-11	METAL CHIP	10K 5% 1/10W
R403	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R467	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R468	1-216-835-11	METAL CHIP	15K 5% 1/10W
R479	1-216-841-11	METAL CHIP	47K 5% 1/10W
R491	1-216-849-11	METAL CHIP	220K 5% 1/10W
R492	1-216-849-11	METAL CHIP	220K 5% 1/10W
R493	1-216-845-11	METAL CHIP	100K 5% 1/10W
R494	1-216-849-11	METAL CHIP	220K 5% 1/10W
R495	1-216-837-11	METAL CHIP	22K 5% 1/10W

A-4748-819-A	KEY-MIC BOARD, COMPLETE (TH)		
A-4749-188-A	KEY-MIC BOARD, COMPLETE (EXCEPT TH)		

< CAPACITOR >			
C401	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C402	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C403	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C404	1-115-868-11	ELECT	0.22uF 20% 50V
C405	1-126-795-11	ELECT	10uF 20% 50V
C406	1-126-923-91	ELECT	220uF 20% 10V
C407	1-162-926-11	CERAMIC CHIP	82PF 5% 50V
C408	1-115-867-11	ELECT	0.1uF 20% 50V
C409	1-126-795-11	ELECT	10uF 20% 50V
C410	1-126-796-11	ELECT	22uF 20% 50V
C411	1-115-414-11	CERAMIC CHIP	820PF 5% 25V
C412	1-115-871-11	ELECT	1uF 20% 50V
C420	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C421	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C422	1-164-473-11	CERAMIC CHIP	820PF 5% 50V
C423	1-126-947-11	ELECT	47uF 20% 35V
C424	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V
C425	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C426	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C427	1-164-473-11	CERAMIC CHIP	820PF 5% 50V

Ref. No.	Part No.	Description	Remark
C428	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V
C429	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C430	1-164-217-11	CERAMIC CHIP	150PF 5% 50V
C431	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C432	1-164-217-11	CERAMIC CHIP	150PF 5% 50V
C434	1-115-867-11	ELECT	0.1uF 20% 50V
C436	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C437	1-104-665-11	ELECT	100uF 20% 25V
C439	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C440	1-126-962-11	ELECT	3.3uF 20% 50V
C441	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C801	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C802	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C803	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C804	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C805	1-162-964-11	CERAMIC CHIP	1000PF 5% 50V
C806	1-162-964-11	CERAMIC CHIP	1000PF 5% 50V
C807	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C808	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
< CONNECTOR >			
* CN107	1-784-746-11	CONNECTOR, FFC 24P	
* CN301	1-695-364-31	PIN, CONNECTOR (PC BOARD) 3P	
< DIODE >			
D191	8-719-988-61	DIODE 1SS355TE-17	
D401	8-719-988-61	DIODE 1SS355TE-17	
D403	8-719-069-55	DIODE UDZSTE-175.6B	
< FERRITE BEAD >			
FB401	1-414-760-21	FERRITE, EMI (SMD) (1608)	
< IC >			
IC401	8-759-710-97	IC NJM4565M-D	
IC402	6-702-896-01	IC BU9262AFS	
< JACK >			
J401	1-817-765-11	JACK (LARGE TYPE) (MIC)	
< SHORT >			
JR401	1-216-296-00	SHORT CHIP	0
JR402	1-216-864-11	SHORT CHIP	0
JR403	1-216-864-11	SHORT CHIP	0
JR404	1-216-864-11	SHORT CHIP	0
< COIL >			
L401	1-469-186-51	INDUCTOR, MICRO	82uH
< LED >			
LED192	8-719-063-93	LED SLR325VC-N-T32 (Ⓞ STANDBY/ON)	
< TRANSISTOR >			
Q191	8-729-028-73	TRANSISTOR	DTA114EUA-T106
Q401	8-729-045-62	FET	2SK2158-T2B

KEY-MIC

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< RESISTOR >				R809	1-216-833-11	METAL CHIP 10K 5%	1/10W
R11	1-216-817-11	METAL CHIP 470 5%	1/10W	R810	1-216-833-11	METAL CHIP 10K 5%	1/10W
R12	1-216-819-11	METAL CHIP 680 5%	1/10W	R811	1-216-797-11	METAL CHIP 10 5%	1/10W
R13	1-216-821-11	METAL CHIP 1K 5%	1/10W	R812	1-216-797-11	METAL CHIP 10 5%	1/10W
R14	1-216-823-11	METAL CHIP 1.5K 5%	1/10W	R813	1-216-833-11	METAL CHIP 10K 5%	1/10W
R31	1-216-817-11	METAL CHIP 470 5%	1/10W	R814	1-216-833-11	METAL CHIP 10K 5%	1/10W
R32	1-216-819-11	METAL CHIP 680 5%	1/10W	R815	1-216-797-11	METAL CHIP 10 5%	1/10W
R33	1-216-821-11	METAL CHIP 1K 5%	1/10W	R816	1-216-797-11	METAL CHIP 10 5%	1/10W
R34	1-216-823-11	METAL CHIP 1.5K 5%	1/10W	< SWITCH >			
R35	1-216-823-11	METAL CHIP 1.5K 5%	1/10W	S1	1-771-410-21	SWITCH, TACTILE (POWER)	
R36	1-216-825-11	METAL CHIP 2.2K 5%	1/10W	S2	1-771-410-21	SWITCH, TACTILE (DISPLAY)	
R37	1-216-827-11	METAL CHIP 3.3K 5%	1/10W	S11	1-771-410-21	SWITCH, TACTILE (TAPE A/B)	
R38	1-216-829-11	METAL CHIP 4.7K 5%	1/10W	S12	1-771-410-21	SWITCH, TACTILE (TUNER, BAND)	
R51	1-216-817-11	METAL CHIP 470 5%	1/10W	S13	1-771-410-21	SWITCH, TACTILE (VIDEO/AUX)	
R52	1-216-819-11	METAL CHIP 680 5%	1/10W	S14	1-771-410-21	SWITCH, TACTILE (DVD)	
R53	1-216-821-11	METAL CHIP 1K 5%	1/10W	S31	1-771-410-21	SWITCH, TACTILE (MODE)	
R54	1-216-823-11	METAL CHIP 1.5K 5%	1/10W	S32	1-771-410-21	SWITCH, TACTILE (ENTER)	
R55	1-216-823-11	METAL CHIP 1.5K 5%	1/10W	S33	1-771-410-21	SWITCH, TACTILE (SOUND FIELD)	
R193	1-216-821-11	METAL CHIP 1K 5%	1/10W	S34	1-771-410-21	SWITCH, TACTILE (i-Bass)	
R195	1-216-813-11	METAL CHIP 220 5%	1/10W	S35	1-771-410-21	SWITCH, TACTILE (ALBUM -)	
R401	1-216-845-11	METAL CHIP 100K 5%	1/10W	S36	1-771-410-21	SWITCH, TACTILE (ALBUM +)	
R402	1-216-829-11	METAL CHIP 4.7K 5%	1/10W	S37	1-771-410-21	SWITCH, TACTILE (● REC, REC MUTING)	
R403	1-216-849-11	METAL CHIP 220K 5%	1/10W	S38	1-771-410-21	SWITCH, TACTILE (SYNC DUB)	
R404	1-216-809-11	METAL CHIP 100 5%	1/10W	S51	1-771-410-21	SWITCH, TACTILE	(DIR (TAPE B)/PRESET ◀▶)
R405	1-216-825-11	METAL CHIP 2.2K 5%	1/10W	S52	1-771-410-21	SWITCH, TACTILE (STOP/CLEAR ■)	
R406	1-216-850-11	METAL CHIP 270K 5%	1/10W	S53	1-771-410-21	SWITCH, TACTILE (TUNING UP ▶▶)	
R407	1-216-821-11	METAL CHIP 1K 5%	1/10W	S54	1-771-410-21	SWITCH, TACTILE (PAUSE/SET ■■)	
R408	1-216-174-00	RES-CHIP 100 5%	1/8W	S55	1-771-410-21	SWITCH, TACTILE (TUNING DOWN ◀◀)	
R409	1-216-817-11	METAL CHIP 470 5%	1/10W	S801	1-786-396-11	SWITCH, ROTARY (ENCODER) (VOLUME)	
R410	1-216-837-11	METAL CHIP 22K 5%	1/10W	S802	1-786-396-11	SWITCH, ROTARY (ENCODER) (BASS)	
R411	1-216-837-11	METAL CHIP 22K 5%	1/10W	S803	1-786-418-11	SWITCH, ROTARY (ENCODER) (MULTI JOG)	
R412	1-216-819-11	METAL CHIP 680 5%	1/10W	S804	1-477-824-11	ENCODER, ROTARY (TREBLE)	
R413	1-216-839-11	METAL CHIP 33K 5%	1/10W	< VARIABLE RESISTOR >			
R414	1-216-797-11	METAL CHIP 10 5%	1/10W	VR401	1-227-502-11	RES, VAR, CARBON 10K	(MIC MIXING)
R420	1-216-180-00	RES-CHIP 180 5%	1/8W	*****			
R421	1-216-180-00	RES-CHIP 180 5%	1/8W	A-4748-801-A	MAIN BOARD, COMPLETE (TH)		
R423	1-216-829-11	METAL CHIP 4.7K 5%	1/10W	A-4749-175-A	MAIN BOARD, COMPLETE (SP, MY)		
R424	1-216-846-11	METAL CHIP 120K 5%	1/10W	A-4749-203-A	MAIN BOARD, COMPLETE (AUS)		
R425	1-216-825-11	METAL CHIP 2.2K 5%	1/10W	A-4749-271-A	MAIN BOARD, COMPLETE (EA)		
R426	1-216-841-11	METAL CHIP 47K 5%	1/10W	A-4749-273-A	MAIN BOARD, COMPLETE (E)		
R427	1-216-841-11	METAL CHIP 47K 5%	1/10W	A-4749-276-A	MAIN BOARD, COMPLETE (E51)		
R428	1-216-841-11	METAL CHIP 47K 5%	1/10W	A-4750-306-A	MAIN BOARD, COMPLETE (AEP)		
R429	1-216-864-11	SHORT CHIP 0		A-4751-920-A	MAIN BOARD, COMPLETE (CIS)		
R430	1-216-864-11	SHORT CHIP 0		*****			
R431	1-216-864-11	SHORT CHIP 0		< CAPACITOR >			
R432	1-216-833-11	METAL CHIP 10K 5%	1/10W	C102	1-126-382-11	ELECT 100uF 20%	16V
R435	1-216-857-11	METAL CHIP 1M 5%	1/10W	C104	1-126-961-11	ELECT 2.2uF 20%	50V
R439	1-216-821-11	METAL CHIP 1K 5%	1/10W	C106	1-115-872-11	ELECT 2.2uF 20%	50V
R499	1-216-296-11	SHORT CHIP 0		C109	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V
R801	1-216-833-11	METAL CHIP 10K 5%	1/10W	C110	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V
R802	1-216-833-11	METAL CHIP 10K 5%	1/10W	C111	1-126-795-11	ELECT 10uF 20%	50V
R803	1-216-797-11	METAL CHIP 10 5%	1/10W	C112	1-165-176-11	CERAMIC CHIP 0.047uF 10%	16V
R804	1-216-797-11	METAL CHIP 10 5%	1/10W	C113	1-162-968-11	CERAMIC CHIP 0.0047uF 10%	50V
R805	1-216-833-11	METAL CHIP 10K 5%	1/10W				
R806	1-216-833-11	METAL CHIP 10K 5%	1/10W				
R807	1-216-797-11	METAL CHIP 10 5%	1/10W				
R808	1-216-797-11	METAL CHIP 10 5%	1/10W				

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C626	1-126-947-11	ELECT	47uF 20% 35V	C899	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
C627	1-126-960-11	ELECT	1uF 20% 50V			< CONNECTOR >	
C628	1-162-963-11	CERAMIC CHIP	680PF 10% 50V	CN101	1-779-275-11	CONNECTOR, FFC (LIF (NON-ZIF)) 7P	
C629	1-162-963-11	CERAMIC CHIP	680PF 10% 50V	CN102	1-568-830-11	CONNECTOR, FFC 11P	
C630	1-126-947-11	ELECT	47uF 20% 35V	* CN103	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
C631	1-162-963-11	CERAMIC CHIP	680PF 10% 50V	* CN104	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
C632	1-162-963-11	CERAMIC CHIP	680PF 10% 50V	CN301	1-779-293-11	CONNECTOR, FFC (LIF (NON-ZIF)) 25P	
C633	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V	CN543	1-785-324-11	PIN, CONNECTOR (STRAIGHT) 12P	
C635	1-164-245-11	CERAMIC CHIP	0.015uF 10% 25V	* CN602	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
C636	1-136-155-00	FILM	0.015uF 5% 50V	* CN603	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
C637	1-137-194-81	FILM	0.47uF 5% 50V	CN605	1-784-774-11	CONNECTOR, FFC 13P	
C638	1-106-375-12	MYLAR	0.022uF 5% 200V	* CN704	1-564-518-11	PLUG, CONNECTOR 3P	
C655	1-126-963-11	ELECT	4.7uF 20% 50V	CN705	1-573-847-11	CONNECTOR, BOARD TO BOARD 15P	
C656	1-126-961-11	ELECT	2.2uF 20% 50V	CN706	1-568-828-11	CONNECTOR, FFC 9P	
C657	1-126-961-11	ELECT	2.2uF 20% 50V	CN707	1-573-847-11	CONNECTOR, BOARD TO BOARD 15P	
C658	1-126-933-11	ELECT	100uF 20% 16V	* CN801	1-568-450-11	HOUSING, CONNECTOR (PC BOARD) 4P	
C659	1-126-933-11	ELECT	100uF 20% 16V	* CN901	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
C660	1-162-919-11	CERAMIC CHIP	22PF 5% 50V	CN902	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P	
C661	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V			< DIODE >	
C662	1-136-153-00	FILM	0.01uF 5% 50V	D102	8-719-069-56	DIODE UDZSTE-176.2B	
C663	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	D111	8-719-988-61	DIODE 1SS355TE-17	
C664	1-126-964-11	ELECT	10uF 20% 50V	D112	8-719-988-61	DIODE 1SS355TE-17	
C665	1-126-947-11	ELECT	47uF 20% 35V	D113	8-719-988-61	DIODE 1SS355TE-17	
C713	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	D201	8-719-988-61	DIODE 1SS355TE-17	
C714	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	D202	8-719-988-61	DIODE 1SS355TE-17	
C715	1-126-964-11	ELECT	10uF 20% 50V	D609	8-719-988-61	DIODE 1SS355TE-17	
C719	1-126-963-11	ELECT	4.7uF 20% 50V	D610	8-719-988-61	DIODE 1SS355TE-17	
C723	1-162-974-11	CERAMIC CHIP	0.01uF 50V	D611	8-719-988-61	DIODE 1SS355TE-17	
C724	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V	D703	8-719-988-61	DIODE 1SS355TE-17	
C726	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V	D704	8-719-988-61	DIODE 1SS355TE-17	
C734	1-136-153-00	FILM	0.01uF 5% 50V	D705	8-719-988-61	DIODE 1SS355TE-17	
C735	1-136-153-00	FILM	0.01uF 5% 50V	D706	8-719-988-61	DIODE 1SS355TE-17	
C738	1-119-939-51	ELECT	6800uF 20% 35V	D707	8-719-060-48	DIODE RB751V-40TE	
C739	1-126-961-11	ELECT	2.2uF 20% 50V	D708	8-719-988-61	DIODE 1SS355TE-17	
C740	1-111-235-61	ELECT	10000uF 20% 25V	D709	8-719-988-61	DIODE 1SS355TE-17	
C752	1-136-153-00	FILM	0.01uF 5% 50V	D710	8-719-988-61	DIODE 1SS355TE-17	
C753	1-136-153-00	FILM	0.01uF 5% 50V	D711	8-719-988-61	DIODE 1SS355TE-17	
C772	1-107-696-91	ELECT	47uF 20% 16V	D712	8-719-988-61	DIODE 1SS355TE-17	
C773	1-107-696-91	ELECT	47uF 20% 16V	D714	6-500-522-21	DIODE 10EDB40-TB3	
C774	1-109-953-11	ELECT	2.2uF 20% 50V	D716	8-719-069-56	DIODE UDZSTE-176.2B	
C775	1-107-696-91	ELECT	47uF 20% 16V	D717	8-719-069-56	DIODE UDZSTE-176.2B	
C779	1-107-696-91	ELECT	47uF 20% 16V	D729	8-719-085-36	DIODE 11EQS04-TB5	
C791	1-126-963-11	ELECT	4.7uF 20% 50V	D732	8-719-028-23	DIODE D3SBA20-4101	
C808	1-126-964-11	ELECT	10uF 20% 50V	D733	8-719-028-23	DIODE D3SBA20-4101	
C809	1-126-964-11	ELECT	10uF 20% 50V	D734	8-719-988-61	DIODE 1SS355TE-17	
C810	1-162-918-11	CERAMIC CHIP	18PF 5% 50V	D735	8-719-988-61	DIODE 1SS355TE-17	
C811	1-162-918-11	CERAMIC CHIP	18PF 5% 50V	D804	8-719-988-61	DIODE 1SS355TE-17	
C813	1-164-156-11	CERAMIC CHIP	0.1uF 25V	D809	8-719-988-61	DIODE 1SS355TE-17	
C814	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	D810	8-719-988-61	DIODE 1SS355TE-17	
C815	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	D811	8-719-988-61	DIODE 1SS355TE-17	
C816	1-126-925-91	ELECT	470uF 20% 10V	D812	8-719-988-61	DIODE 1SS355TE-17	
C817	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	D813	8-719-988-61	DIODE 1SS355TE-17	
C821	1-164-156-11	CERAMIC CHIP	0.1uF 25V	D814	8-719-988-61	DIODE 1SS355TE-17	
C862	1-126-925-91	ELECT	470uF 20% 10V	D815	8-719-988-61	DIODE 1SS355TE-17	
C863	1-162-974-11	CERAMIC CHIP	0.01uF 50V				
C897	1-162-974-11	CERAMIC CHIP	0.01uF 50V				
C898	1-126-964-11	ELECT	10uF 20% 50V				

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< GROUND TERMINAL >					
EPT701	1-537-771-21	TERMINAL BOARD, GROUND		Q603	8-729-905-35	TRANSISTOR	2SC4081-R
		< FERRITE BEAD/SHORT >		Q604	8-729-905-35	TRANSISTOR	2SC4081-R
FB801	1-500-445-21	FERRITE, EMI (SMD) (2012)		Q605	8-729-905-35	TRANSISTOR	2SC4081-R
FB862	1-216-864-11	SHORT CHIP	0	Q606	8-729-905-35	TRANSISTOR	2SC4081-R
FB899	1-216-864-11	SHORT CHIP	0	Q607	8-729-905-35	TRANSISTOR	2SC4081-R
		< IC >		Q608	8-729-026-53	TRANSISTOR	2SA1576A-T106-QR
IC101	8-759-710-97	IC NJM4565M-D		Q609	8-729-905-35	TRANSISTOR	2SC4081-R
IC102	6-703-650-11	IC M61529FP-D60G		Q610	8-729-905-35	TRANSISTOR	2SC4081-R
IC301	6-703-651-11	IC M61530FP-D60G		Q611	8-729-029-10	TRANSISTOR	DTC143TUA-T106
IC303	8-759-710-97	IC NJM4565M-D		Q612	6-550-044-01	TRANSISTOR	2SB1689-T106
IC601	6-702-130-01	IC HA12237F		Q613	6-550-044-01	TRANSISTOR	2SB1689-T106
IC703	8-759-532-64	IC M62703SL-TP		Q614	8-729-907-00	TRANSISTOR	DTC114EU
IC1104	6-802-993-01	IC M30620MCN-A29FP		Q615	8-729-907-00	TRANSISTOR	DTC114EU
		< JACK >		Q616	6-550-044-01	TRANSISTOR	2SB1689-T106
J102	1-774-785-11	JACK, PIN 1P (SUB WOOFER OUT)		Q617	6-550-044-01	TRANSISTOR	2SB1689-T106
J104	1-816-918-11	JACK, PIN 4P (MD (VIDEO) IN/OUT)		Q618	8-729-907-00	TRANSISTOR	DTC114EU
		< SHORT >		Q701	8-729-028-73	TRANSISTOR	DTA114EUA-T106
JR1	1-216-864-11	SHORT CHIP	0	Q702	8-729-028-73	TRANSISTOR	DTA114EUA-T106
JR2	1-216-864-11	SHORT CHIP	0	Q703	8-729-028-73	TRANSISTOR	DTA114EUA-T106
JR3	1-216-864-11	SHORT CHIP	0	Q704	8-729-907-00	TRANSISTOR	DTC114EU
JR4	1-216-864-11	SHORT CHIP	0	Q705	8-729-905-35	TRANSISTOR	2SC4081-R
JR5	1-216-864-11	SHORT CHIP	0	Q706	8-729-905-35	TRANSISTOR	2SC4081-R
JR6	1-216-864-11	SHORT CHIP	0	Q707	8-729-028-73	TRANSISTOR	DTA114EUA-T106
JR8	1-216-864-11	SHORT CHIP	0	Q708	8-729-907-00	TRANSISTOR	DTC114EU
JR9	1-216-864-11	SHORT CHIP	0	Q709	8-729-905-35	TRANSISTOR	2SC4081-R
JR16	1-216-864-11	SHORT CHIP	0	Q710	8-729-905-35	TRANSISTOR	2SC4081-R
JR17	1-216-864-11	SHORT CHIP	0	Q713	8-729-026-68	TRANSISTOR	2SD2525 (TP)
JR104	1-216-864-11	SHORT CHIP	0	Q714	8-729-907-00	TRANSISTOR	DTC114EU
JR105	1-216-864-11	SHORT CHIP	0	Q719	8-729-028-73	TRANSISTOR	DTA114EUA-T106
JR159	1-216-864-11	SHORT CHIP	0	Q721	8-729-028-73	TRANSISTOR	DTA114EUA-T106
JW101	1-216-864-11	SHORT CHIP	0	Q723	8-729-028-73	TRANSISTOR	DTA114EUA-T106
JW102	1-216-864-11	SHORT CHIP	0	Q724	8-729-028-73	TRANSISTOR	DTA114EUA-T106
JW103	1-216-864-11	SHORT CHIP	0			< RESISTOR >	
		< COIL >		R102	1-216-841-11	METAL CHIP	47K 5% 1/10W
L341	1-412-064-11	INDUCTOR (SMALL TYPE) 100uH		R104	1-216-821-11	METAL CHIP	1K 5% 1/10W
		< TRANSISTOR >		R105	1-216-845-11	METAL CHIP	100K 5% 1/10W
Q102	8-729-021-15	TRANSISTOR	2SD2351T106W	R109	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
Q106	8-729-021-15	TRANSISTOR	2SD2351T106W	R111	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q114	8-729-021-15	TRANSISTOR	2SD2351T106W	R116	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
Q115	8-729-021-15	TRANSISTOR	2SD2351T106W	R117	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q152	8-729-021-15	TRANSISTOR	2SD2351T106W	R119	1-216-818-11	METAL CHIP	560 5% 1/10W
Q153	8-729-021-15	TRANSISTOR	2SD2351T106W	△R120	1-215-891-11	METAL OXIDE	680 5% 2W F
Q373	8-729-021-15	TRANSISTOR	2SD2351T106W	R121	1-216-821-11	METAL CHIP	1K 5% 1/10W
Q374	8-729-021-15	TRANSISTOR	2SD2351T106W	R122	1-216-821-11	METAL CHIP	1K 5% 1/10W
Q375	8-729-021-15	TRANSISTOR	2SD2351T106W	R123	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
Q376	8-729-021-15	TRANSISTOR	2SD2351T106W	R124	1-216-821-11	METAL CHIP	1K 5% 1/10W
Q377	8-729-021-15	TRANSISTOR	2SD2351T106W	R125	1-216-845-11	METAL CHIP	100K 5% 1/10W
Q601	8-729-142-46	TRANSISTOR	2SC2001-LK	R126	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q602	8-729-907-00	TRANSISTOR	DTC114EU	R127	1-216-818-11	METAL CHIP	560 5% 1/10W
				R129	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
				△R130	1-215-891-11	METAL OXIDE	680 5% 2W F
				R131	1-216-821-11	METAL CHIP	1K 5% 1/10W
				R132	1-216-821-11	METAL CHIP	1K 5% 1/10W
				R134	1-216-805-11	METAL CHIP	47 5% 1/10W
				R137	1-216-833-11	METAL CHIP	10K 5% 1/10W
				R138	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
				R139	1-216-845-11	METAL CHIP	100K 5% 1/10W

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

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R658	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R768	1-216-833-11	METAL CHIP	10K 5% 1/10W
R659	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R769	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R660	1-216-833-11	METAL CHIP	10K 5% 1/10W	R770	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R661	1-216-809-11	METAL CHIP	100 5% 1/10W	R774	1-216-864-11	SHORT CHIP	0
R662	1-216-821-11	METAL CHIP	1K 5% 1/10W	R776	1-216-833-11	METAL CHIP	10K 5% 1/10W
R663	1-216-821-11	METAL CHIP	1K 5% 1/10W	R777	1-216-833-11	METAL CHIP	10K 5% 1/10W
R664	1-216-857-11	METAL CHIP	1M 5% 1/10W	R778	1-216-841-11	METAL CHIP	47K 5% 1/10W
R665	1-216-833-11	METAL CHIP	10K 5% 1/10W	R779	1-216-821-11	METAL CHIP	1K 5% 1/10W
R666	1-216-833-11	METAL CHIP	10K 5% 1/10W	R780	1-216-833-11	METAL CHIP	10K 5% 1/10W
R667	1-216-833-11	METAL CHIP	10K 5% 1/10W	R801	1-216-809-11	METAL CHIP	100 5% 1/10W
R668	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R802	1-216-809-11	METAL CHIP	100 5% 1/10W
R669	1-216-837-11	METAL CHIP	22K 5% 1/10W	R803	1-216-809-11	METAL CHIP	100 5% 1/10W
R670	1-216-837-11	METAL CHIP	22K 5% 1/10W	R804	1-216-809-11	METAL CHIP	100 5% 1/10W
R675	1-216-833-11	METAL CHIP	10K 5% 1/10W	R805	1-216-809-11	METAL CHIP	100 5% 1/10W
R676	1-216-841-11	METAL CHIP	47K 5% 1/10W	R806	1-216-809-11	METAL CHIP	100 5% 1/10W
R677	1-216-833-11	METAL CHIP	10K 5% 1/10W	R807	1-216-809-11	METAL CHIP	100 5% 1/10W
R678	1-216-833-11	METAL CHIP	10K 5% 1/10W	R808	1-216-864-11	SHORT CHIP	0
R679	1-216-833-11	METAL CHIP	10K 5% 1/10W	R809	1-216-809-11	METAL CHIP	100 5% 1/10W
R680	1-216-833-11	METAL CHIP	10K 5% 1/10W	R810	1-216-809-11	METAL CHIP	100 5% 1/10W
R681	1-216-833-11	METAL CHIP	10K 5% 1/10W	R811	1-216-851-11	METAL CHIP	330K 5% 1/10W
R682	1-216-833-11	METAL CHIP	10K 5% 1/10W	R812	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R683	1-216-821-11	METAL CHIP	1K 5% 1/10W	R817	1-216-809-11	METAL CHIP	100 5% 1/10W
R684	1-216-819-11	METAL CHIP	680 5% 1/10W	R818	1-216-833-11	METAL CHIP	10K 5% 1/10W
R685	1-216-821-11	METAL CHIP	1K 5% 1/10W	R819	1-216-809-11	METAL CHIP	100 5% 1/10W
R686	1-216-819-11	METAL CHIP	680 5% 1/10W	R820	1-216-833-11	METAL CHIP	10K 5% 1/10W
R687	1-216-821-11	METAL CHIP	1K 5% 1/10W	R821	1-216-809-11	METAL CHIP	100 5% 1/10W
R688	1-216-819-11	METAL CHIP	680 5% 1/10W	R822	1-216-809-11	METAL CHIP	100 5% 1/10W
R689	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R823	1-216-809-11	METAL CHIP	100 5% 1/10W
R691	1-216-833-11	METAL CHIP	10K 5% 1/10W	R824	1-216-809-11	METAL CHIP	100 5% 1/10W
R692	1-216-833-11	METAL CHIP	10K 5% 1/10W	R825	1-216-809-11	METAL CHIP	100 5% 1/10W
R706	1-216-821-11	METAL CHIP	1K 5% 1/10W	R826	1-216-833-11	METAL CHIP	10K 5% 1/10W
R707	1-216-841-11	METAL CHIP	47K 5% 1/10W	R829	1-216-809-11	METAL CHIP	100 5% 1/10W
R708	1-216-833-11	METAL CHIP	10K 5% 1/10W	R830	1-216-809-11	METAL CHIP	100 5% 1/10W
R709	1-216-845-11	METAL CHIP	100K 5% 1/10W	R831	1-216-809-11	METAL CHIP	100 5% 1/10W
R710	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R832	1-216-809-11	METAL CHIP	100 5% 1/10W
R726	1-216-837-11	METAL CHIP	22K 5% 1/10W	R833	1-216-809-11	METAL CHIP	100 5% 1/10W
R727	1-216-821-11	METAL CHIP	1K 5% 1/10W	R834	1-216-809-11	METAL CHIP	100 5% 1/10W
R729	1-216-821-11	METAL CHIP	1K 5% 1/10W	R835	1-216-809-11	METAL CHIP	100 5% 1/10W
R730	1-216-833-11	METAL CHIP	10K 5% 1/10W	R839	1-216-809-11	METAL CHIP	100 5% 1/10W
R736	1-216-841-11	METAL CHIP	47K 5% 1/10W	R840	1-216-809-11	METAL CHIP	100 5% 1/10W
R743	1-216-841-11	METAL CHIP	47K 5% 1/10W	R841	1-216-809-11	METAL CHIP	100 5% 1/10W
R744	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R842	1-216-809-11	METAL CHIP	100 5% 1/10W
R745	1-216-817-11	METAL CHIP	470 5% 1/10W	R843	1-216-809-11	METAL CHIP	100 5% 1/10W
R746	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R844	1-216-809-11	METAL CHIP	100 5% 1/10W
R747	1-216-841-11	METAL CHIP	47K 5% 1/10W	R845	1-216-809-11	METAL CHIP	100 5% 1/10W
R748	1-216-849-11	METAL CHIP	220K 5% 1/10W	R846	1-216-809-11	METAL CHIP	100 5% 1/10W
R749	1-216-837-11	METAL CHIP	22K 5% 1/10W	R847	1-216-809-11	METAL CHIP	100 5% 1/10W
R750	1-216-837-11	METAL CHIP	22K 5% 1/10W	R848	1-216-809-11	METAL CHIP	100 5% 1/10W
R753	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W	R849	1-216-809-11	METAL CHIP	100 5% 1/10W
R754	1-216-837-11	METAL CHIP	22K 5% 1/10W	R850	1-216-809-11	METAL CHIP	100 5% 1/10W
R755	1-216-837-11	METAL CHIP	22K 5% 1/10W	R851	1-216-809-11	METAL CHIP	100 5% 1/10W
R760	1-216-821-11	METAL CHIP	1K 5% 1/10W	R852	1-216-809-11	METAL CHIP	100 5% 1/10W
R761	1-216-841-11	METAL CHIP	47K 5% 1/10W	R853	1-216-809-11	METAL CHIP	100 5% 1/10W
R762	1-216-833-11	METAL CHIP	10K 5% 1/10W	R854	1-216-809-11	METAL CHIP	100 5% 1/10W
R764	1-216-841-11	METAL CHIP	47K 5% 1/10W	R855	1-216-809-11	METAL CHIP	100 5% 1/10W
R766	1-216-821-11	METAL CHIP	1K 5% 1/10W	R856	1-216-821-11	METAL CHIP	1K 5% 1/10W
R767	1-216-841-11	METAL CHIP	47K 5% 1/10W	R857	1-216-821-11	METAL CHIP	1K 5% 1/10W
				R858	1-216-833-11	METAL CHIP	10K 5% 1/10W

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R859	1-216-833-11	METAL CHIP	10K 5% 1/10W	X801	1-781-107-21	VIBRATOR, CERAMIC (16MHz)	
R860	1-216-833-11	METAL CHIP	10K 5% 1/10W	*****			
R861	1-216-833-11	METAL CHIP	10K 5% 1/10W	A-4749-993-A	MB03 BOARD, COMPLETE (EXCEPT TH)		
R862	1-216-833-11	METAL CHIP	10K 5% 1/10W	A-4750-319-A	MB03 BOARD, COMPLETE (TH)		
R863	1-216-833-11	METAL CHIP	10K 5% 1/10W	*****			
R867	1-216-809-11	METAL CHIP	100 5% 1/10W	< CAPACITOR/SHORT >			
R868	1-216-809-11	METAL CHIP	100 5% 1/10W	C101	1-126-246-11	ELECT CHIP	220uF 20% 4V
R869	1-216-809-11	METAL CHIP	100 5% 1/10W	C151	1-126-206-11	ELECT CHIP	100uF 20% 6.3V
R870	1-216-809-11	METAL CHIP	100 5% 1/10W	C204	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R871	1-216-809-11	METAL CHIP	100 5% 1/10W	C205	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R872	1-216-809-11	METAL CHIP	100 5% 1/10W	C213	1-126-209-11	ELECT CHIP	100uF 20% 4V
R873	1-216-809-11	METAL CHIP	100 5% 1/10W	C214	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R874	1-216-809-11	METAL CHIP	100 5% 1/10W	C215	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R875	1-216-809-11	METAL CHIP	100 5% 1/10W	C216	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R882	1-216-809-11	METAL CHIP	100 5% 1/10W	C218	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R885	1-216-809-11	METAL CHIP	100 5% 1/10W	C220	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R886	1-216-809-11	METAL CHIP	100 5% 1/10W	C226	1-107-820-11	CERAMIC CHIP	0.1uF 16V
R887	1-216-809-11	METAL CHIP	100 5% 1/10W	C227	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R888	1-216-809-11	METAL CHIP	100 5% 1/10W	C229	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R893	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	C229	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R894	1-216-815-11	METAL CHIP	330 5% 1/10W	C230	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R894	1-216-821-11	METAL CHIP	1K 5% 1/10W	C231	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R894	1-216-823-11	METAL CHIP	1.5K 5% 1/10W	C232	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R894	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	C233	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R894	1-216-864-11	SHORT CHIP	0 (SP, MY, TH)	C234	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R895	1-216-809-11	METAL CHIP	100 5% 1/10W	C235	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R897	1-216-809-11	METAL CHIP	100 5% 1/10W	C236	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R898	1-216-809-11	METAL CHIP	100 5% 1/10W	C237	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R900	1-216-809-11	METAL CHIP	100 5% 1/10W	C238	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R901	1-216-833-11	METAL CHIP	10K 5% 1/10W	C239	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R902	1-216-809-11	METAL CHIP	100 5% 1/10W	C240	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R929	1-216-833-11	METAL CHIP	10K 5% 1/10W	C241	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R930	1-216-833-11	METAL CHIP	10K 5% 1/10W	C242	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R947	1-216-833-11	METAL CHIP	10K 5% 1/10W	C243	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R948	1-216-833-11	METAL CHIP	10K 5% 1/10W	C244	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R972	1-216-833-11	METAL CHIP	10K 5% 1/10W	C245	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R973	1-216-833-11	METAL CHIP	10K 5% 1/10W	C246	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R974	1-216-833-11	METAL CHIP	10K 5% 1/10W	C247	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R975	1-216-833-11	METAL CHIP	10K 5% 1/10W	C248	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R993	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	C249	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R994	1-216-811-11	METAL CHIP	150 5% 1/10W	C250	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R994	1-216-821-11	METAL CHIP	1K 5% 1/10W	C251	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R994	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	C252	1-164-947-11	CERAMIC CHIP	0.01uF 50V
R994	1-216-864-11	SHORT CHIP	0 (AEP)	C253	1-164-947-11	CERAMIC CHIP	0.01uF 50V
< TRANSFORMER >				C254	1-164-947-11	CERAMIC CHIP	0.01uF 50V
T601	1-437-220-11	TRANSFORMER, BIAS OSCILLATION		C255	1-117-370-11	CERAMIC CHIP	10uF 10V
< VIBRATOR >				C256	1-164-947-11	CERAMIC CHIP	0.01uF 50V
X800	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)		C257	1-164-947-11	CERAMIC CHIP	0.01uF 50V
				C258	1-117-370-11	CERAMIC CHIP	10uF 10V
				C259	1-164-947-11	CERAMIC CHIP	0.01uF 50V
				C260	1-164-947-11	CERAMIC CHIP	0.01uF 50V
				C261	1-164-947-11	CERAMIC CHIP	0.01uF 50V
				C262	1-164-947-11	CERAMIC CHIP	0.01uF 50V
				C263	1-164-947-11	CERAMIC CHIP	0.01uF 50V
				C264	1-164-947-11	CERAMIC CHIP	0.01uF 50V
				C265	1-117-370-11	CERAMIC CHIP	10uF 10V
				C266	1-164-947-11	CERAMIC CHIP	0.01uF 50V

MB03

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark				
C267	1-164-947-11	CERAMIC CHIP	0.01uF	50V	C543	1-107-820-11	CERAMIC CHIP	0.1uF	16V		
C268	1-164-947-11	CERAMIC CHIP	0.01uF	50V	C544	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C269	1-164-947-11	CERAMIC CHIP	0.01uF	50V							
C270	1-164-947-11	CERAMIC CHIP	0.01uF	50V	C545	1-117-370-11	CERAMIC CHIP	10uF		10V	
C271	1-164-947-11	CERAMIC CHIP	0.01uF	50V	C547	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V	
					C548	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C272	1-164-947-11	CERAMIC CHIP	0.01uF	50V	C551	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V	
C275	1-164-947-11	CERAMIC CHIP	0.01uF	50V	C552	1-216-295-00	SHORT CHIP	0			
C281	1-164-947-11	CERAMIC CHIP	0.01uF	50V							
C282	1-164-947-11	CERAMIC CHIP	0.01uF	50V	C553	1-164-940-11	CERAMIC CHIP	0.0033uF	10%	16V	
C289	1-164-947-11	CERAMIC CHIP	0.01uF	50V	C556	1-117-370-11	CERAMIC CHIP	10uF		10V	
					C558	1-126-209-11	ELECT CHIP	100uF	20%	4V	
C302	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C559	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C303	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C560	1-164-938-11	CERAMIC CHIP	0.0015uF	10%	50V
C304	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V						
C305	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C561	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C306	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C563	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
					C565	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C307	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C567	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C308	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	C568	1-117-370-11	CERAMIC CHIP	10uF		10V
C309	1-164-874-11	CERAMIC CHIP	100PF	5%	50V						
C315	1-164-947-11	CERAMIC CHIP	0.01uF		50V	C569	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C316	1-164-947-11	CERAMIC CHIP	0.01uF		50V	C570	1-117-370-11	CERAMIC CHIP	10uF		10V
					C573	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	
C321	1-126-206-11	ELECT CHIP	100uF	20%	6.3V	C588	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C322	1-107-820-11	CERAMIC CHIP	0.1uF		16V	C589	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C323	1-107-820-11	CERAMIC CHIP	0.1uF		16V						
C324	1-107-820-11	CERAMIC CHIP	0.1uF		16V	C590	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C325	1-126-209-11	ELECT CHIP	100uF	20%	4V	C592	1-126-208-21	ELECT CHIP	47uF	20%	4V
						C701	1-100-391-21	ELECT CHIP	180uF	20%	2.5V
C326	1-164-947-11	CERAMIC CHIP	0.01uF		50V	C702	1-117-370-11	CERAMIC CHIP	10uF		10V
C392	1-126-395-11	ELECT CHIP	22uF	20%	16V	C703	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C393	1-164-947-11	CERAMIC CHIP	0.01uF		50V						
C394	1-126-246-11	ELECT CHIP	220uF	20%	4V	C705	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C412	1-216-864-11	SHORT CHIP	0			C706	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
						C708	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C413	1-216-864-11	SHORT CHIP	0			C709	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C414	1-216-864-11	SHORT CHIP	0			C711	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C415	1-216-864-11	SHORT CHIP	0								
C416	1-216-864-11	SHORT CHIP	0			C712	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C501	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C713	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
						C714	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C502	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C715	1-164-938-11	CERAMIC CHIP	0.0015uF	10%	50V
C503	1-127-772-11	CERAMIC CHIP	33000PF	10%	10V	C716	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C504	1-127-772-11	CERAMIC CHIP	33000PF	10%	10V						
C506	1-164-934-11	CERAMIC CHIP	330PF	10%	50V	C717	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C508	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V	C718	1-107-820-11	CERAMIC CHIP	0.1uF		16V
						C720	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C509	1-164-934-11	CERAMIC CHIP	330PF	10%	50V	C721	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C510	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V	C722	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C512	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V						
C514	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C723	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C516	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V	C724	1-107-820-11	CERAMIC CHIP	0.1uF		16V
						C725	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C517	1-117-370-11	CERAMIC CHIP	10uF		10V	C726	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C518	1-164-947-11	CERAMIC CHIP	0.01uF		50V	C727	1-117-370-11	CERAMIC CHIP	10uF		10V
C519	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V						
C522	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C728	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C525	1-164-947-11	CERAMIC CHIP	0.01uF		50V	C729	1-117-370-11	CERAMIC CHIP	10uF		10V
						C730	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C526	1-126-395-11	ELECT CHIP	22uF	20%	16V	C740	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C527	1-164-947-11	CERAMIC CHIP	0.01uF		50V	C741	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C528	1-126-395-11	ELECT CHIP	22uF	20%	16V						
C529	1-164-947-11	CERAMIC CHIP	0.01uF		50V	C742	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C531	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V	C743	1-107-820-11	CERAMIC CHIP	0.1uF		16V
						C744	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C533	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V	C745	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C534	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V	C752	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C535	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V						

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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC252	8-759-680-48	IC TC7WH157FK (TE85R)		R15	1-216-801-11	METAL CHIP	22 5% 1/10W
IC302	6-702-007-01	IC PCM1608Y/2K		R207	1-216-864-11	SHORT CHIP	0
IC392	8-759-583-47	IC uPC2933T-E2		R213	1-216-807-11	METAL CHIP	68 5% 1/10W
IC501	6-702-157-01	IC FAN8035L		R214	1-216-864-11	SHORT CHIP	0
IC503	8-759-058-43	IC NJM3404AV		R215	1-216-864-11	SHORT CHIP	0
IC509	8-752-408-73	IC CXD3068Q		R217	1-216-864-11	SHORT CHIP	0
IC701	6-703-552-01	IC TMC57929PGF-RDP		R218	1-469-122-21	FERRITE, EMI (SMD) (1608)	
IC703	8-759-058-43	IC NJM3404AV		R219	1-216-864-11	SHORT CHIP	0
IC706	8-759-564-30	IC MSM51V18165B-60TSKR1		R220	1-216-864-11	SHORT CHIP	0
IC901	8-753-217-25	IC CXP973064-237R		R221	1-216-864-11	SHORT CHIP	0
IC902	8-759-058-64	IC TC7S32FU (TE85R)		R222	1-216-864-11	SHORT CHIP	0
IC903	6-704-004-01	IC BR24C16F-WE2		R223	1-216-864-11	SHORT CHIP	0
IC904	6-704-753-01	IC SN74AHC2G74HDCU		R224	1-216-864-11	SHORT CHIP	0
IC906	6-700-407-01	IC SM8707GV-G-E2		R227	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
IC907	8-759-583-47	IC uPC2933T-E2		R230	1-216-803-11	METAL CHIP	33 5% 1/10W
		< SHORT >		R231	1-216-803-11	METAL CHIP	33 5% 1/10W
				R232	1-216-803-11	METAL CHIP	33 5% 1/10W
JW392	1-216-864-11	SHORT CHIP	0	R233	1-216-864-11	SHORT CHIP	0
JW601	1-218-990-11	SHORT CHIP	0	R234	1-216-833-11	METAL CHIP	10K 5% 1/10W
JW602	1-218-990-11	SHORT CHIP	0	R239	1-216-809-11	METAL CHIP	100 5% 1/10W
JW603	1-218-990-11	SHORT CHIP	0	R240	1-216-841-11	METAL CHIP	47K 5% 1/10W
JW604	1-218-990-11	SHORT CHIP	0	R241	1-216-864-11	SHORT CHIP	0
JW605	1-218-990-11	SHORT CHIP	0	R243	1-216-864-11	SHORT CHIP	0
JW606	1-218-990-11	SHORT CHIP	0	R244	1-216-821-11	METAL CHIP	1K 5% 1/10W
JW607	1-218-990-11	SHORT CHIP	0	R245	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
JW801	1-218-990-11	SHORT CHIP	0	R246	1-216-833-11	METAL CHIP	10K 5% 1/10W
JW802	1-218-990-11	SHORT CHIP	0	R247	1-216-821-11	METAL CHIP	1K 5% 1/10W
JW803	1-218-990-11	SHORT CHIP	0	R248	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
JW804	1-218-990-11	SHORT CHIP	0	R250	1-216-864-11	SHORT CHIP	0
JW805	1-218-990-11	SHORT CHIP	0	R251	1-216-864-11	SHORT CHIP	0
JW806	1-218-990-11	SHORT CHIP	0	R253	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
		< COIL/SHORT >		R254	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
L402	1-216-296-11	SHORT CHIP	0	R255	1-216-864-11	SHORT CHIP	0
L403	1-216-296-11	SHORT CHIP	0	R257	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
L404	1-216-296-11	SHORT CHIP	0	R259	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
L405	1-216-296-11	SHORT CHIP	0	R260	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
L406	1-216-296-11	SHORT CHIP	0	R261	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
L412	1-216-296-11	SHORT CHIP	0	R262	1-216-864-11	SHORT CHIP	0
L413	1-216-296-11	SHORT CHIP	0	R263	1-218-285-11	METAL CHIP	75 5% 1/10W
L414	1-216-296-11	SHORT CHIP	0	R264	1-218-285-11	METAL CHIP	75 5% 1/10W
L415	1-216-296-11	SHORT CHIP	0	R265	1-218-285-11	METAL CHIP	75 5% 1/10W
L416	1-216-296-11	SHORT CHIP	0	R266	1-218-285-11	METAL CHIP	75 5% 1/10W
L901	1-412-031-11	INDUCTOR	47uH	R267	1-218-285-11	METAL CHIP	75 5% 1/10W
		< TRANSISTOR >		R268	1-216-809-11	METAL CHIP	100 5% 1/10W
Q202	8-729-929-26	TRANSISTOR	DTC114TE	R269	1-216-864-11	SHORT CHIP	0
Q901	8-729-929-26	TRANSISTOR	DTC114TE	R270	1-216-864-11	SHORT CHIP	0
Q903	8-729-025-28	FET	2SK1828	R273	1-216-864-11	SHORT CHIP	0
Q904	8-729-025-28	FET	2SK1828	R274	1-216-864-11	SHORT CHIP	0
		< RESISTOR/FERRITE BEAD/CAPACITOR >		R275	1-216-864-11	SHORT CHIP	0
R10	1-216-801-11	METAL CHIP	22 5% 1/10W	R276	1-216-864-11	SHORT CHIP	0
R11	1-216-801-11	METAL CHIP	22 5% 1/10W	R277	1-216-864-11	SHORT CHIP	0
R12	1-216-801-11	METAL CHIP	22 5% 1/10W	R278	1-218-285-11	METAL CHIP	75 5% 1/10W
R13	1-216-801-11	METAL CHIP	22 5% 1/10W	R279	1-218-285-11	METAL CHIP	75 5% 1/10W
R14	1-216-801-11	METAL CHIP	22 5% 1/10W	R280	1-218-285-11	METAL CHIP	75 5% 1/10W
				R281	1-218-285-11	METAL CHIP	75 5% 1/10W
				R282	1-218-285-11	METAL CHIP	75 5% 1/10W
				R283	1-218-847-11	METAL CHIP	1K 0.5% 1/10W
				R284	1-218-829-11	METAL CHIP	180 0.5% 1/10W

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Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R288	1-216-864-11	SHORT CHIP	0			R544	1-216-864-11	SHORT CHIP	0		
R301	1-216-821-11	METAL CHIP	1K	5%	1/10W	R545	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R547	1-216-864-11	SHORT CHIP	0		
R302	1-216-813-11	METAL CHIP	220	5%	1/10W	R548	1-216-833-11	METAL CHIP	10K	5%	1/10W
R303	1-216-813-11	METAL CHIP	220	5%	1/10W	R550	1-216-821-11	METAL CHIP	1K	5%	1/10W
R304	1-216-813-11	METAL CHIP	220	5%	1/10W						
R305	1-216-813-11	METAL CHIP	220	5%	1/10W	R551	1-216-821-11	METAL CHIP	1K	5%	1/10W
R306	1-216-813-11	METAL CHIP	220	5%	1/10W	R552	1-216-821-11	METAL CHIP	1K	5%	1/10W
						R553	1-216-864-11	SHORT CHIP	0		
R307	1-216-813-11	METAL CHIP	220	5%	1/10W	R554	1-216-864-11	SHORT CHIP	0		
R308	1-216-813-11	METAL CHIP	220	5%	1/10W	R555	1-216-864-11	SHORT CHIP	0		
R309	1-216-813-11	METAL CHIP	220	5%	1/10W						
R310	1-216-809-11	METAL CHIP	100	5%	1/10W	R558	1-216-841-11	METAL CHIP	47K	5%	1/10W
R311	1-216-809-11	METAL CHIP	100	5%	1/10W	R559	1-216-821-11	METAL CHIP	1K	5%	1/10W
						R560	1-216-821-11	METAL CHIP	1K	5%	1/10W
R312	1-216-809-11	METAL CHIP	100	5%	1/10W	R561	1-216-821-11	METAL CHIP	1K	5%	1/10W
R313	1-216-833-11	METAL CHIP	10K	5%	1/10W	R562	1-216-821-11	METAL CHIP	1K	5%	1/10W
R314	1-216-801-11	METAL CHIP	22	5%	1/10W						
R365	1-216-864-11	SHORT CHIP	0			R563	1-216-821-11	METAL CHIP	1K	5%	1/10W
R367	1-216-864-11	SHORT CHIP	0			R564	1-216-821-11	METAL CHIP	1K	5%	1/10W
						R565	1-216-821-11	METAL CHIP	1K	5%	1/10W
R368	1-216-864-11	SHORT CHIP	0			R566	1-216-833-11	METAL CHIP	10K	5%	1/10W
R369	1-216-864-11	SHORT CHIP	0			R567	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R392	1-216-797-11	METAL CHIP	10	5%	1/10W						
R501	1-216-864-11	SHORT CHIP	0			R568	1-216-857-11	METAL CHIP	1M	5%	1/10W
R502	1-216-864-11	SHORT CHIP	0			R569	1-216-864-11	SHORT CHIP	0		
						R571	1-216-857-11	METAL CHIP	1M	5%	1/10W
R503	1-216-841-11	METAL CHIP	47K	5%	1/10W	R572	1-216-853-11	METAL CHIP	470K	5%	1/10W
R504	1-216-841-11	METAL CHIP	47K	5%	1/10W	R573	1-216-833-11	METAL CHIP	10K	5%	1/10W
R505	1-216-841-11	METAL CHIP	47K	5%	1/10W						
R506	1-216-841-11	METAL CHIP	47K	5%	1/10W	R574	1-216-815-11	METAL CHIP	330	5%	1/10W
R507	1-216-864-11	SHORT CHIP	0			R575	1-216-864-11	SHORT CHIP	0		
						R576	1-216-864-11	SHORT CHIP	0		
R508	1-216-864-11	SHORT CHIP	0			R577	1-216-864-11	SHORT CHIP	0		
R510	1-216-847-11	METAL CHIP	150K	5%	1/10W	R578	1-216-864-11	SHORT CHIP	0		
R511	1-216-847-11	METAL CHIP	150K	5%	1/10W						
R512	1-216-842-11	METAL CHIP	56K	5%	1/10W	R579	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R513	1-216-842-11	METAL CHIP	56K	5%	1/10W	R580	1-216-839-11	METAL CHIP	33K	5%	1/10W
						R581	1-216-834-11	METAL CHIP	12K	5%	1/10W
R516	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R583	1-216-864-11	SHORT CHIP	0		
R517	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R584	1-216-839-11	METAL CHIP	33K	5%	1/10W
R519	1-216-845-11	METAL CHIP	100K	5%	1/10W						
R520	1-216-833-11	METAL CHIP	10K	5%	1/10W	R585	1-216-864-11	SHORT CHIP	0		
R521	1-216-845-11	METAL CHIP	100K	5%	1/10W	R586	1-218-747-11	METAL CHIP	200K	0.5%	1/10W
						R587	1-216-864-11	SHORT CHIP	0		
R522	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R588	1-216-833-11	METAL CHIP	10K	5%	1/10W
R523	1-216-833-11	METAL CHIP	10K	5%	1/10W	R589	1-216-833-11	METAL CHIP	10K	5%	1/10W
R524	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R525	1-216-833-11	METAL CHIP	10K	5%	1/10W	R592	1-216-864-11	SHORT CHIP	0		
R527	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R593	1-216-845-11	METAL CHIP	100K	5%	1/10W
						R597	1-216-864-11	SHORT CHIP	0		
R528	1-216-864-11	SHORT CHIP	0			R599	1-216-821-11	METAL CHIP	1K	5%	1/10W
R529	1-216-839-11	METAL CHIP	33K	5%	1/10W	R601	1-216-864-11	SHORT CHIP	0		
R530	1-216-842-11	METAL CHIP	56K	5%	1/10W						
R531	1-216-864-11	SHORT CHIP	0			R615	1-216-864-11	SHORT CHIP	0		
R532	1-216-864-11	SHORT CHIP	0			R629	1-216-864-11	SHORT CHIP	0		
						R694	1-216-833-11	METAL CHIP	10K	5%	1/10W
R533	1-216-839-11	METAL CHIP	33K	5%	1/10W	R695	1-216-864-11	SHORT CHIP	0		
R534	1-216-842-11	METAL CHIP	56K	5%	1/10W	R696	1-216-864-11	SHORT CHIP	0		
R535	1-216-864-11	SHORT CHIP	0								
R536	1-216-833-11	METAL CHIP	10K	5%	1/10W	R698	1-216-864-11	SHORT CHIP	0		
R537	1-216-843-11	METAL CHIP	68K	5%	1/10W	R699	1-216-864-11	SHORT CHIP	0		
						R700	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R538	1-216-864-11	SHORT CHIP	0			R707	1-216-809-11	METAL CHIP	100	5%	1/10W
R539	1-216-864-11	SHORT CHIP	0			R708	1-216-853-11	METAL CHIP	470K	5%	1/10W
R540	1-216-864-11	SHORT CHIP	0								
R541	1-216-864-11	SHORT CHIP	0			R709	1-216-847-11	METAL CHIP	150K	5%	1/10W
R543	1-216-864-11	SHORT CHIP	0			R710	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R711	1-216-825-11	METAL CHIP	2.2K	5%	1/10W

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Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R712	1-216-833-11	METAL CHIP	10K	5%	1/10W	R786	1-216-845-11	METAL CHIP	100K	5%	1/10W
R713	1-216-833-11	METAL CHIP	10K	5%	1/10W	R787	1-216-845-11	METAL CHIP	100K	5%	1/10W
R714	1-216-833-11	METAL CHIP	10K	5%	1/10W	R788	1-216-845-11	METAL CHIP	100K	5%	1/10W
R715	1-216-833-11	METAL CHIP	10K	5%	1/10W	R789	1-216-845-11	METAL CHIP	100K	5%	1/10W
R716	1-216-809-11	METAL CHIP	100	5%	1/10W	R799	1-216-864-11	SHORT CHIP	0		
R717	1-216-845-11	METAL CHIP	100K	5%	1/10W	R805	1-216-864-11	SHORT CHIP	0		
R718	1-216-833-11	METAL CHIP	10K	5%	1/10W	R901	1-216-801-11	METAL CHIP	22	5%	1/10W
R719	1-216-821-11	METAL CHIP	1K	5%	1/10W	R902	1-216-801-11	METAL CHIP	22	5%	1/10W
R720	1-216-821-11	METAL CHIP	1K	5%	1/10W	R904	1-216-833-11	METAL CHIP	10K	5%	1/10W
R721	1-216-839-11	METAL CHIP	33K	5%	1/10W	R905	1-216-801-11	METAL CHIP	22	5%	1/10W
R724	1-216-821-11	METAL CHIP	1K	5%	1/10W	R906	1-216-801-11	METAL CHIP	22	5%	1/10W
R725	1-216-824-11	METAL CHIP	1.8K	5%	1/10W	R907	1-216-801-11	METAL CHIP	22	5%	1/10W
R726	1-216-845-11	METAL CHIP	100K	5%	1/10W	R908	1-216-833-11	METAL CHIP	10K	5%	1/10W
R727	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R910	1-216-864-11	SHORT CHIP	0		
R728	1-216-833-11	METAL CHIP	10K	5%	1/10W	R911	1-216-833-11	METAL CHIP	10K	5%	1/10W
R730	1-216-801-11	METAL CHIP	22	5%	1/10W	R912	1-216-833-11	METAL CHIP	10K	5%	1/10W
R731	1-216-801-11	METAL CHIP	22	5%	1/10W	R913	1-216-833-11	METAL CHIP	10K	5%	1/10W
R732	1-216-833-11	METAL CHIP	10K	5%	1/10W	R915	1-216-809-11	METAL CHIP	100	5%	1/10W
R733	1-216-833-11	METAL CHIP	10K	5%	1/10W	R916	1-216-821-11	METAL CHIP	1K	5%	1/10W
R734	1-216-833-11	METAL CHIP	10K	5%	1/10W	R917	1-216-821-11	METAL CHIP	1K	5%	1/10W
R735	1-216-833-11	METAL CHIP	10K	5%	1/10W	R918	1-216-801-11	METAL CHIP	22	5%	1/10W
R736	1-216-833-11	METAL CHIP	10K	5%	1/10W	R919	1-216-864-11	SHORT CHIP	0		
R737	1-216-833-11	METAL CHIP	10K	5%	1/10W	R920	1-216-809-11	METAL CHIP	100	5%	1/10W
R738	1-216-833-11	METAL CHIP	10K	5%	1/10W	R921	1-216-809-11	METAL CHIP	100	5%	1/10W
R741	1-216-801-11	METAL CHIP	22	5%	1/10W	R922	1-216-801-11	METAL CHIP	22	5%	1/10W
R742	1-216-801-11	METAL CHIP	22	5%	1/10W	R923	1-216-813-11	METAL CHIP	220	5%	1/10W
R743	1-216-801-11	METAL CHIP	22	5%	1/10W	R925	1-216-809-11	METAL CHIP	100	5%	1/10W
R744	1-216-801-11	METAL CHIP	22	5%	1/10W	R926	1-216-809-11	METAL CHIP	100	5%	1/10W
R745	1-216-841-11	METAL CHIP	47K	5%	1/10W	R927	1-216-857-11	METAL CHIP	1M	5%	1/10W
R746	1-216-841-11	METAL CHIP	47K	5%	1/10W	R928	1-216-809-11	METAL CHIP	100	5%	1/10W
R747	1-216-839-11	METAL CHIP	33K	5%	1/10W	R929	1-216-809-11	METAL CHIP	100	5%	1/10W
R748	1-216-839-11	METAL CHIP	33K	5%	1/10W	R930	1-216-809-11	METAL CHIP	100	5%	1/10W
R750	1-216-833-11	METAL CHIP	10K	5%	1/10W	R931	1-216-801-11	METAL CHIP	22	5%	1/10W
R751	1-216-864-11	SHORT CHIP	0			R932	1-216-801-11	METAL CHIP	22	5%	1/10W
R752	1-216-864-11	SHORT CHIP	0			R933	1-216-801-11	METAL CHIP	22	5%	1/10W
R753	1-216-864-11	SHORT CHIP	0			R935	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R754	1-216-864-11	SHORT CHIP	0			R940	1-216-809-11	METAL CHIP	100	5%	1/10W
R755	1-216-864-11	SHORT CHIP	0			R942	1-216-809-11	METAL CHIP	100	5%	1/10W
R756	1-216-864-11	SHORT CHIP	0			R943	1-216-809-11	METAL CHIP	100	5%	1/10W
R757	1-216-864-11	SHORT CHIP	0			R947	1-216-864-11	SHORT CHIP	0		
R758	1-216-864-11	SHORT CHIP	0			R948	1-216-864-11	SHORT CHIP	0		
R759	1-216-864-11	SHORT CHIP	0			R949	1-216-864-11	SHORT CHIP	0		
R762	1-216-837-11	METAL CHIP	22K	5%	1/10W	R958	1-216-801-11	METAL CHIP	22	5%	1/10W
R763	1-216-832-11	METAL CHIP	8.2K	5%	1/10W	R962	1-216-833-11	METAL CHIP	10K	5%	1/10W
R764	1-216-857-11	METAL CHIP	1M	5%	1/10W	R964	1-216-833-11	METAL CHIP	10K	5%	1/10W
R765	1-216-837-11	METAL CHIP	22K	5%	1/10W	R970	1-216-864-11	SHORT CHIP	0		
R766	1-216-864-11	SHORT CHIP	0			R971	1-216-864-11	SHORT CHIP	0		
R767	1-216-841-11	METAL CHIP	47K	5%	1/10W	R973	1-216-864-11	SHORT CHIP	0		
R769	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R974	1-216-864-11	SHORT CHIP	0		
R770	1-216-864-11	SHORT CHIP	0			R975	1-216-833-11	METAL CHIP	10K	5%	1/10W
R776	1-216-864-11	SHORT CHIP	0			R976	1-216-864-11	SHORT CHIP	0		
R777	1-216-864-11	SHORT CHIP	0			R978	1-216-833-11	METAL CHIP	10K	5%	1/10W
R778	1-216-845-11	METAL CHIP	100K	5%	1/10W	R984	1-216-833-11	METAL CHIP	10K	5%	1/10W
R780	1-216-864-11	SHORT CHIP	0			R988	1-216-864-11	SHORT CHIP	0		
R781	1-216-864-11	SHORT CHIP	0			R990	1-216-864-11	SHORT CHIP	0		
R784	1-216-864-11	SHORT CHIP	0			R991	1-216-864-11	SHORT CHIP	0		
R785	1-216-833-11	METAL CHIP	10K	5%	1/10W	R992	1-216-864-11	SHORT CHIP	0		
						R994	1-216-864-11	SHORT CHIP	0		

MB03 **MOTOR (LD)** **MOTOR (TB)** **PANEL**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R995	1-216-864-11	SHORT CHIP	0				
R996	1-216-864-11	SHORT CHIP	0				
R997	1-216-864-11	SHORT CHIP	0				
R998	1-216-864-11	SHORT CHIP	0				
R1000	1-216-829-11	METAL CHIP	4.7K				5% 1/10W
R1001	1-216-864-11	SHORT CHIP	0				
R1101	1-162-927-11	CERAMIC CHIP	100PF				5% 50V
R1201	1-162-927-11	CERAMIC CHIP	100PF				5% 50V
R1202	1-162-927-11	CERAMIC CHIP	100PF				5% 50V
R1301	1-162-927-11	CERAMIC CHIP	100PF				5% 50V
R1302	1-162-927-11	CERAMIC CHIP	100PF				5% 50V
R1303	1-162-927-11	CERAMIC CHIP	100PF				5% 50V
R1304	1-162-927-11	CERAMIC CHIP	100PF				5% 50V
R1801	1-162-927-11	CERAMIC CHIP	100PF				5% 50V
R1802	1-162-964-11	CERAMIC CHIP	0.001uF				10% 50V
R1803	1-162-927-11	CERAMIC CHIP	100PF				5% 50V
R5555	1-216-864-11	SHORT CHIP	0				
R9980	1-216-864-11	SHORT CHIP	0				
R9981	1-216-864-11	SHORT CHIP	0				
R9986	1-216-864-11	SHORT CHIP	0				
R9987	1-216-864-11	SHORT CHIP	0				
R9988	1-216-864-11	SHORT CHIP	0				
R9993	1-216-864-11	SHORT CHIP	0				
R9994	1-216-864-11	SHORT CHIP	0				
R9998	1-216-864-11	SHORT CHIP	0				
R9999	1-216-864-11	SHORT CHIP	0				
< COMPOSITION CIRCUIT BLOCK >							
RB10	1-233-388-11	RES, NETWORK	68				
RB11	1-233-388-11	RES, NETWORK	68				
RB12	1-233-388-11	RES, NETWORK	68				
RB13	1-233-388-11	RES, NETWORK	68				
RB14	1-233-388-11	RES, NETWORK	68				
RB15	1-233-388-11	RES, NETWORK	68				
RB16	1-233-388-11	RES, NETWORK	68				
RB17	1-233-388-11	RES, NETWORK	68				
RB18	1-234-524-21	RES, CHIP NETWORK					33
RB19	1-234-524-21	RES, CHIP NETWORK					33
RB20	1-234-524-21	RES, CHIP NETWORK					33
RB21	1-234-524-21	RES, CHIP NETWORK					33
RB202	1-234-523-21	RES, CHIP NETWORK					0
RB203	1-234-523-21	RES, CHIP NETWORK					0
RB204	1-234-523-21	RES, CHIP NETWORK					0
< VIBRATOR >							
X901	1-781-945-21	VIBRATOR, CERAMIC (20MHz)					
X902	1-795-630-11	VIBRATOR, CRYSTAL (27MHz)					

	1-687-133-11	MOTOR (LD) BOARD					

	1-687-134-11	MOTOR (TB) BOARD					

< CONNECTOR >							
CN742	1-784-727-11	CONNECTOR, FFC 5P					

				A-4748-808-A		PANEL BOARD, COMPLETE (TH)	
				A-4749-176-A		PANEL BOARD, COMPLETE (EXCEPT TH)	

< CAPACITOR >							
C100	1-126-382-11	ELECT	100uF				20% 16V
C125	1-126-382-11	ELECT	100uF				20% 16V
C191	1-164-156-11	CERAMIC CHIP	0.1uF				25V
C192	1-126-382-11	ELECT	100uF				20% 16V
C193	1-162-974-11	CERAMIC CHIP	0.01uF				50V
C194	1-119-943-11	ELECT	47uF				20% 50V
C195	1-162-974-11	CERAMIC CHIP	0.01uF				50V
C197	1-162-974-11	CERAMIC CHIP	0.01uF				50V
C198	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C199	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C206	1-164-227-11	CERAMIC CHIP	0.022uF				10% 25V
C207	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C208	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C209	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C225	1-162-974-11	CERAMIC CHIP	0.01uF				50V
C301	1-115-872-11	ELECT	2.2uF				20% 50V
C333	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C334	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C335	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C336	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C337	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C338	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C339	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C340	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C341	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C342	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C343	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C344	1-162-953-11	CERAMIC CHIP	100PF				5% 50V
C353	1-115-872-11	ELECT	2.2uF				20% 50V
< CONNECTOR >							
CN105	1-784-731-11	CONNECTOR, FFC 9P					
* CN106	1-784-746-11	CONNECTOR, FFC 24P					
< FLUORESCENT INDICATOR TUBE >							
FL1001	1-518-929-11	INDICATOR TUBE, FLUORESCENT					
< IC >							
IC101	6-802-994-01	IC uPD780232GC-082-8BT					
IC102	8-759-584-98	IC SN74AHCT04NSR					
IC801	6-600-256-01	IC GP1UE27SXK0F					
< SHORT >							
JR101	1-216-864-11	SHORT CHIP	0				
< LED >							
LED205	6-500-642-01	LED SLR-505YCT31 (ILLUMINATION)					
LED206	6-500-644-01	LED SLR-505DCT31 (ILLUMINATION)					
LED207	6-500-643-01	LED SLR-505VCT31 (ILLUMINATION)					
LED208	6-500-642-01	LED SLR-505YCT31 (ILLUMINATION)					
LED209	6-500-644-01	LED SLR-505DCT31 (ILLUMINATION)					

PANEL

RF

Ref. No.	Part No.	Description	Remark
LED210	6-500-643-01	LED SLR-505VCT31 (ILLUMINATION)	
< TRANSISTOR >			
Q131	8-729-907-00	TRANSISTOR DTC114EU	
Q132	8-729-907-00	TRANSISTOR DTC114EU	
Q133	8-729-907-00	TRANSISTOR DTC114EU	
Q134	8-729-907-00	TRANSISTOR DTC114EU	
Q135	8-729-907-00	TRANSISTOR DTC114EU	
Q136	8-729-907-00	TRANSISTOR DTC114EU	
Q168	8-729-028-97	TRANSISTOR DTC114TUA-T106	
< RESISTOR >			
R106	1-216-821-11	METAL CHIP 1K	5% 1/10W
R107	1-216-809-11	METAL CHIP 100	5% 1/10W
R108	1-216-809-11	METAL CHIP 100	5% 1/10W
R109	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R120	1-216-835-11	METAL CHIP 15K	5% 1/10W
R131	1-216-182-00	RES-CHIP 220	5% 1/8W
R132	1-216-182-00	RES-CHIP 220	5% 1/8W
R133	1-216-182-00	RES-CHIP 220	5% 1/8W
R134	1-216-182-00	RES-CHIP 220	5% 1/8W
R135	1-216-182-00	RES-CHIP 220	5% 1/8W
R136	1-216-182-00	RES-CHIP 220	5% 1/8W
R168	1-216-841-11	METAL CHIP 47K	5% 1/10W
R191	1-216-809-11	METAL CHIP 100	5% 1/10W
R192	1-216-809-11	METAL CHIP 100	5% 1/10W
R194	1-216-809-11	METAL CHIP 100	5% 1/10W
R196	1-216-827-11	METAL CHIP 3.3K	5% 1/10W
R197	1-216-845-11	METAL CHIP 100K	5% 1/10W
R901	1-216-841-11	METAL CHIP 47K	5% 1/10W
R902	1-216-841-11	METAL CHIP 47K	5% 1/10W
R903	1-216-841-11	METAL CHIP 47K	5% 1/10W
R904	1-216-841-11	METAL CHIP 47K	5% 1/10W
R905	1-216-841-11	METAL CHIP 47K	5% 1/10W
R906	1-216-841-11	METAL CHIP 47K	5% 1/10W
R907	1-216-841-11	METAL CHIP 47K	5% 1/10W
R908	1-216-841-11	METAL CHIP 47K	5% 1/10W
R909	1-216-841-11	METAL CHIP 47K	5% 1/10W
R910	1-216-841-11	METAL CHIP 47K	5% 1/10W
R911	1-216-841-11	METAL CHIP 47K	5% 1/10W
R912	1-216-841-11	METAL CHIP 47K	5% 1/10W
R913	1-216-841-11	METAL CHIP 47K	5% 1/10W
R914	1-216-841-11	METAL CHIP 47K	5% 1/10W
R915	1-216-841-11	METAL CHIP 47K	5% 1/10W
R916	1-216-841-11	METAL CHIP 47K	5% 1/10W
R917	1-216-841-11	METAL CHIP 47K	5% 1/10W
R918	1-216-841-11	METAL CHIP 47K	5% 1/10W
R919	1-216-841-11	METAL CHIP 47K	5% 1/10W
R920	1-216-841-11	METAL CHIP 47K	5% 1/10W
R921	1-216-841-11	METAL CHIP 47K	5% 1/10W
R922	1-216-841-11	METAL CHIP 47K	5% 1/10W
R923	1-216-841-11	METAL CHIP 47K	5% 1/10W
R924	1-216-841-11	METAL CHIP 47K	5% 1/10W
R925	1-216-841-11	METAL CHIP 47K	5% 1/10W
R926	1-216-841-11	METAL CHIP 47K	5% 1/10W
R927	1-216-841-11	METAL CHIP 47K	5% 1/10W
R928	1-216-841-11	METAL CHIP 47K	5% 1/10W

Ref. No.	Part No.	Description	Remark
R929	1-216-841-11	METAL CHIP 47K	5% 1/10W
R930	1-216-841-11	METAL CHIP 47K	5% 1/10W
R931	1-216-841-11	METAL CHIP 47K	5% 1/10W
R932	1-216-841-11	METAL CHIP 47K	5% 1/10W
R933	1-216-841-11	METAL CHIP 47K	5% 1/10W
R1016	1-216-835-11	METAL CHIP 15K	5% 1/10W
R1036	1-216-835-11	METAL CHIP 15K	5% 1/10W
< VIBRATOR >			
X101	1-579-233-11	VIBRATOR, CERAMIC (5MHz)	

A-4728-690-A	RF BOARD, COMPLETE		

< CAPACITOR >			
C001	1-126-206-11	ELECT CHIP 100uF	20% 6.3V
C002	1-124-779-00	ELECT CHIP 10uF	20% 16V
C003	1-126-206-11	ELECT CHIP 100uF	20% 6.3V
C004	1-124-779-00	ELECT CHIP 10uF	20% 16V
C005	1-128-993-21	ELECT CHIP 22uF	20% 10V
C006	1-128-993-21	ELECT CHIP 22uF	20% 10V
C008	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C009	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C010	1-115-416-11	CERAMIC CHIP 0.001uF	5% 25V
C011	1-115-416-11	CERAMIC CHIP 0.001uF	5% 25V
C012	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C013	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C014	1-162-966-11	CERAMIC CHIP 0.0022uF	10% 50V
C015	1-162-966-11	CERAMIC CHIP 0.0022uF	10% 50V
C016	1-162-966-11	CERAMIC CHIP 0.0022uF	10% 50V
C017	1-162-966-11	CERAMIC CHIP 0.0022uF	10% 50V
C018	1-164-172-11	CERAMIC CHIP 0.0056uF	10% 25V
C019	1-164-172-11	CERAMIC CHIP 0.0056uF	10% 25V
C020	1-162-919-11	CERAMIC CHIP 22PF	5% 50V
C021	1-162-919-11	CERAMIC CHIP 22PF	5% 50V
C022	1-162-919-11	CERAMIC CHIP 22PF	5% 50V
C023	1-162-919-11	CERAMIC CHIP 22PF	5% 50V
C024	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C025	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C026	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C027	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C028	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C029	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C030	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C031	1-115-416-11	CERAMIC CHIP 0.001uF	5% 25V
C032	1-165-176-11	CERAMIC CHIP 0.047uF	10% 16V
C033	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C034	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C035	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C036	1-125-891-11	CERAMIC CHIP 0.47uF	10% 10V
C037	1-162-959-11	CERAMIC CHIP 330PF	5% 50V
C038	1-164-677-11	CERAMIC CHIP 0.033uF	10% 16V
C039	1-164-677-11	CERAMIC CHIP 0.033uF	10% 16V
C040	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C041	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C042	1-164-218-11	CERAMIC CHIP 180PF	5% 50V
C049	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V

RF

SENSOR

SUB TRANS

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
CN001	1-815-031-11	CONNECTOR, FFC/FPC (ZIF) 24P	
CN002	1-784-836-21	CONNECTOR, FFC (LIF (NON-ZIF)) 29P	
CN003	1-784-861-21	CONNECTOR, FFC (LIF (NON-ZIF)) 9P	
		< DIODE >	
D001	8-719-988-61	DIODE 1SS355TE-17	
D002	8-719-988-61	DIODE 1SS355TE-17	
		< IC >	
IC001	6-703-551-01	IC SP3723BDAOPM	
		< COIL >	
L001	1-412-031-11	INDUCTOR 47uH	
L002	1-412-031-11	INDUCTOR 47uH	
		< TRANSISTOR >	
Q001	8-729-903-46	TRANSISTOR 2SB1132-P	
Q002	8-729-903-46	TRANSISTOR 2SB1132-P	
		< RESISTOR >	
R001	1-218-668-11	METAL CHIP 100 0.5% 1/10W	
R003	1-216-803-11	METAL CHIP 33 5% 1/10W	
R004	1-216-803-11	METAL CHIP 33 5% 1/10W	
R005	1-216-841-11	METAL CHIP 47K 5% 1/10W	
R006	1-216-817-11	METAL CHIP 470 5% 1/10W	
R007	1-216-803-11	METAL CHIP 33 5% 1/10W	
R008	1-216-803-11	METAL CHIP 33 5% 1/10W	
R009	1-216-841-11	METAL CHIP 47K 5% 1/10W	
R010	1-216-817-11	METAL CHIP 470 5% 1/10W	
R011	1-216-864-11	SHORT CHIP 0	
R012	1-216-864-11	SHORT CHIP 0	
R013	1-216-864-11	SHORT CHIP 0	
R014	1-216-864-11	SHORT CHIP 0	
R015	1-216-864-11	SHORT CHIP 0	
R016	1-216-864-11	SHORT CHIP 0	
R017	1-216-864-11	SHORT CHIP 0	
R018	1-216-864-11	SHORT CHIP 0	
R019	1-216-864-11	SHORT CHIP 0	
R020	1-216-864-11	SHORT CHIP 0	
R021	1-216-864-11	SHORT CHIP 0	
R022	1-216-813-11	METAL CHIP 220 5% 1/10W	
R023	1-216-820-11	METAL CHIP 820 5% 1/10W	
R024	1-216-864-11	SHORT CHIP 0	
R025	1-216-809-11	METAL CHIP 100 5% 1/10W	
R026	1-218-718-11	METAL CHIP 12K 0.5% 1/10W	
R027	1-216-864-11	SHORT CHIP 0	
R028	1-216-864-11	SHORT CHIP 0	
R029	1-216-864-11	SHORT CHIP 0	
R032	1-216-809-11	METAL CHIP 100 5% 1/10W	
R033	1-216-864-11	SHORT CHIP 0	
R034	1-219-570-11	METAL CHIP 10M 5% 1/10W	
R035	1-216-864-11	SHORT CHIP 0	
R041	1-216-821-11	METAL CHIP 1K 5% 1/10W	

Ref. No.	Part No.	Description	Remark
	1-687-132-11	SENSOR BOARD *****	
		< CONNECTOR >	
CN731	1-785-329-21	PIN, CONNECTOR (LIGHT ANGLE) 3P	
		< IC >	
IC731	6-600-022-01	IC RPI-576	

	A-4748-815-A	SUB TRANS BOARD, COMPLETE (TH)	
	A-4749-191-A	SUB TRANS BOARD, COMPLETE (E, E51, EA, SP, MY)	
	A-4750-590-A	SUB TRANS BOARD, COMPLETE (AEP, CIS)	
	A-4750-592-A	SUB TRANS BOARD, COMPLETE (AUS) *****	
	1-533-217-41	HOLDER, FUSE	
		< CAPACITOR >	
△C901	1-113-925-11	CERAMIC 0.01uF 20% 250V	
C902	1-126-768-11	ELECT 2200uF 20% 16V	
C903	1-126-933-11	ELECT 100uF 20% 16V	
C904	1-164-159-11	CERAMIC 0.1uF 50V	
		< CONNECTOR >	
CN901	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P	
CN902	1-568-106-11	PIN, CONNECTOR (3.96mm PITCH) 4P	
CN903	1-506-468-11	PIN, CONNECTOR 3P	
		< DIODE >	
D901	8-719-991-33	DIODE 1SS133T-77	
D902	6-500-522-11	DIODE 10EDB40-TA2B5	
D903	6-500-522-11	DIODE 10EDB40-TA2B5	
D904	6-500-522-11	DIODE 10EDB40-TA2B5	
D905	6-500-522-11	DIODE 10EDB40-TA2B5	
		< IC >	
IC901	6-701-760-01	IC uPC3504AHF	
		< TRANSISTOR >	
Q901	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		< RESISTOR >	
R901	1-249-429-11	CARBON 10K 5% 1/4W	
R904	1-249-397-11	CARBON 22 5% 1/4W	
		< RELAY >	
△RY901	1-755-467-11	RELAY (POWER)	
		< SWITCH >	
△S901	1-786-055-21	SELECTOR, VOLTAGE (VOLTAGE SELECT)	
		< TRANSFORMER >	
△T901	1-437-676-11	TRANSFORMER, POWER (AEP, CIS)	
△T901	1-437-677-11	TRANSFORMER, POWER (EXCEPT AEP, CIS)	

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

SURROUND AMP

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
A-4748-811-A		SURROUND AMP BOARD, COMPLETE (TH)				< TRANSISTOR >	
A-4749-179-A		SURROUND AMP BOARD, COMPLETE (EXCEPT TH)					

< CAPACITOR >							
C301	1-126-964-11	ELECT	10uF 20% 50V	Q301	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
C302	1-162-294-31	CERAMIC	0.001uF 10% 50V	Q316	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
C303	1-162-286-31	CERAMIC	220PF 10% 50V	Q317	8-729-119-78	TRANSISTOR	2SC2785-HFE
C304	1-126-964-11	ELECT	10uF 20% 50V	Q341	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
C306	1-136-165-00	FILM	0.1uF 5% 50V	Q351	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
C307	1-136-165-00	FILM	0.1uF 5% 50V				
C308	1-126-968-11	ELECT	100uF 20% 50V			< RESISTOR >	
C310	1-162-199-31	CERAMIC	10PF 5% 50V	R301	1-249-417-11	CARBON	1K 5% 1/4W
C311	1-162-199-31	CERAMIC	10PF 5% 50V	R302	1-249-437-11	CARBON	47K 5% 1/4W
C312	1-162-199-31	CERAMIC	10PF 5% 50V	R303	1-249-418-11	CARBON	1.2K 5% 1/4W
C341	1-126-964-11	ELECT	10uF 20% 50V	R304	1-249-437-11	CARBON	47K 5% 1/4W
C342	1-162-294-31	CERAMIC	0.001uF 10% 50V	△R305	1-208-602-11	METAL	0.22 10% 2W F
C343	1-162-286-31	CERAMIC	220PF 10% 50V	R307	1-249-417-11	CARBON	1K 5% 1/4W
C344	1-126-964-11	ELECT	10uF 20% 50V	R308	1-249-431-11	CARBON	15K 5% 1/4W
C346	1-136-165-00	FILM	0.1uF 5% 50V	R309	1-249-441-11	CARBON	100K 5% 1/4W
C347	1-136-165-00	FILM	0.1uF 5% 50V	R310	1-260-076-11	CARBON	10 5% 1/2W
C351	1-126-964-11	ELECT	10uF 20% 50V	△R311	1-212-881-11	FUSIBLE	100 5% 1/4W F
C352	1-162-294-31	CERAMIC	0.001uF 10% 50V	R315	1-249-433-11	CARBON	22K 5% 1/4W
C353	1-162-286-31	CERAMIC	220PF 10% 50V	R316	1-249-441-11	CARBON	100K 5% 1/4W
C354	1-126-964-11	ELECT	10uF 20% 50V	R317	1-249-441-11	CARBON	100K 5% 1/4W
C356	1-136-165-00	FILM	0.1uF 5% 50V	R318	1-249-428-11	CARBON	8.2K 5% 1/4W
C357	1-136-165-00	FILM	0.1uF 5% 50V	R319	1-249-441-11	CARBON	100K 5% 1/4W
C381	1-136-165-00	FILM	0.1uF 5% 50V	△R320	1-202-972-61	FUSIBLE	1 5% 1/4W F
C382	1-136-165-00	FILM	0.1uF 5% 50V	△R321	1-202-972-61	FUSIBLE	1 5% 1/4W F
C383	1-136-165-00	FILM	0.1uF 5% 50V	R331	1-249-437-11	CARBON	47K 5% 1/4W
C384	1-136-165-00	FILM	0.1uF 5% 50V	R332	1-249-438-11	CARBON	56K 5% 1/4W
C385	1-136-165-00	FILM	0.1uF 5% 50V	R333	1-249-439-11	CARBON	68K 5% 1/4W
C386	1-136-165-00	FILM	0.1uF 5% 50V	R341	1-249-417-11	CARBON	1K 5% 1/4W
< CONNECTOR >				R342	1-249-437-11	CARBON	47K 5% 1/4W
CN302	1-785-318-11	PIN, CONNECTOR (STRAIGHT) 6P		R343	1-249-418-11	CARBON	1.2K 5% 1/4W
CN303	1-785-318-11	PIN, CONNECTOR (STRAIGHT) 6P		R344	1-249-437-11	CARBON	47K 5% 1/4W
CN304	1-785-332-11	PIN, CONNECTOR (LIGHT ANGLE) 6P		△R345	1-208-602-11	METAL	0.22 10% 2W F
CN371	1-564-506-11	PLUG, CONNECTOR 3P		R347	1-249-417-11	CARBON	1K 5% 1/4W
CN372	1-564-506-11	PLUG, CONNECTOR 3P		R348	1-249-431-11	CARBON	15K 5% 1/4W
< DIODE >				R349	1-249-441-11	CARBON	100K 5% 1/4W
D301	8-719-991-33	DIODE 1SS133T-77		R350	1-260-076-11	CARBON	10 5% 1/2W
D341	8-719-991-33	DIODE 1SS133T-77		R351	1-249-417-11	CARBON	1K 5% 1/4W
D351	8-719-991-33	DIODE 1SS133T-77		R352	1-249-437-11	CARBON	47K 5% 1/4W
D381	8-719-991-33	DIODE 1SS133T-77		R353	1-249-418-11	CARBON	1.2K 5% 1/4W
D382	8-719-991-33	DIODE 1SS133T-77		R354	1-249-437-11	CARBON	47K 5% 1/4W
D391	8-719-991-33	DIODE 1SS133T-77		△R355	1-208-602-11	METAL	0.22 10% 2W F
D491	8-719-991-33	DIODE 1SS133T-77		R357	1-249-417-11	CARBON	1K 5% 1/4W
< IC >				R358	1-249-431-11	CARBON	15K 5% 1/4W
IC301	6-600-173-01	IC STK403-240		R359	1-249-441-11	CARBON	100K 5% 1/4W
< COIL >				R360	1-260-076-11	CARBON	10 5% 1/2W
L381	1-420-872-52	COIL, AIR-CORE		R381	1-260-330-11	CARBON	1.5K 5% 1/2W
L382	1-420-872-52	COIL, AIR-CORE		R382	1-260-330-11	CARBON	1.5K 5% 1/2W
L383	1-420-872-52	COIL, AIR-CORE		R383	1-260-330-11	CARBON	1.5K 5% 1/2W
				R385	1-260-076-11	CARBON	10 5% 1/2W
				R386	1-260-076-11	CARBON	10 5% 1/2W
				R390	1-249-429-11	CARBON	10K 5% 1/4W
				R391	1-260-076-11	CARBON	10 5% 1/2W

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SURROUND AMP

SW

TRANS

VIDEO

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
△ R394	1-215-888-00	METAL OXIDE	220 5% 2W F			< TRANSISTOR >	
R395	1-249-429-11	CARBON	10K 5% 1/4W				
R396	1-249-433-11	CARBON	22K 5% 1/4W				
R397	1-249-417-11	CARBON	1K 5% 1/4W	Q971	8-729-048-52	TRANSISTOR 2SA1932 (TP)	
R398	1-249-433-11	CARBON	22K 5% 1/4W			< RESISTOR >	
△ R399	1-215-888-00	METAL OXIDE	220 5% 2W F	△ R911	1-202-972-61	FUSIBLE 1 5% 1/4W F	
		< RELAY >		R914	1-249-429-11	CARBON 10K 5% 1/4W	
				R915	1-247-807-31	CARBON 100 5% 1/4W	
RY381	1-515-920-11	RELAY		R916	1-247-807-31	CARBON 100 5% 1/4W	
RY382	1-515-920-11	RELAY		R917	1-249-393-11	CARBON 10 5% 1/4W	
		< THERMISTOR >		R938	1-249-429-11	CARBON 10K 5% 1/4W	
TH301	1-807-796-11	THERMISTOR		*****			
		< TERMINAL >		A-4748-816-A	VIDEO BOARD, COMPLETE (TH)		
				A-4749-192-A	VIDEO BOARD, COMPLETE (EXCEPT TH)		

TM401	1-694-674-22	TERMINAL BOARD (6P) (CENTER/SURROUND SPEAKER)		7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT (B)		
*****						< CAPACITOR >	
	1-687-669-11	SW BOARD		C800	1-104-655-91	ELECT 470uF 20% 6.3V	
		*****		C801	1-162-306-11	CERAMIC 0.01uF 20% 16V	
		< SWITCH >		C802	1-126-960-11	ELECT 1uF 20% 50V	
S751	1-786-514-11	SWITCH, LEVER (SLIDE) (OPEN/CLOSE DETECT)		C804	1-126-960-11	ELECT 1uF 20% 50V	
*****				C805	1-162-294-31	CERAMIC 0.001uF 10% 50V	
	A-4748-814-A	TRANS BOARD, COMPLETE (TH)		C806	1-126-960-11	ELECT 1uF 20% 50V	
	A-4749-190-A	TRANS BOARD, COMPLETE (E, E51, EA, SP, MY)		C807	1-104-658-91	ELECT 100uF 20% 10V	
	A-4750-589-A	TRANS BOARD, COMPLETE (AEP, CIS, AUS)		C808	1-162-306-11	CERAMIC 0.01uF 20% 16V	
		*****		C809	1-162-294-31	CERAMIC 0.001uF 10% 50V	
	1-533-217-41	HOLDER, FUSE		C810	1-164-159-11	CERAMIC 0.1uF 50V	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT (B)		C811	1-162-294-31	CERAMIC 0.001uF 10% 50V	
		< CAPACITOR >		C812	1-126-960-11	ELECT 1uF 20% 50V	
C271	1-130-777-00	MYLAR 0.1uF 5% 100V		C814	1-126-960-11	ELECT 1uF 20% 50V	
C272	1-130-777-00	MYLAR 0.1uF 5% 100V		C816	1-126-960-11	ELECT 1uF 20% 50V	
C371	1-136-153-00	FILM 0.01uF 5% 50V		C817	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C372	1-136-153-00	FILM 0.01uF 5% 50V		C818	1-126-965-91	ELECT 22uF 20% 50V	
C912	1-126-960-11	ELECT 1uF 20% 50V		C819	1-104-658-91	ELECT 100uF 20% 10V	
C913	1-126-968-11	ELECT 100uF 20% 50V		C821	1-126-965-91	ELECT 22uF 20% 50V	
C915	1-164-159-11	CERAMIC 0.1uF 50V		C822	1-104-658-91	ELECT 100uF 20% 10V	
C918	1-128-576-11	ELECT 100uF 20% 63V		C824	1-126-916-11	ELECT 1000uF 20% 6.3V	
C929	1-126-964-11	ELECT 10uF 20% 50V		C827	1-126-916-11	ELECT 1000uF 20% 6.3V	
C930	1-126-964-11	ELECT 10uF 20% 50V		C830	1-126-916-11	ELECT 1000uF 20% 6.3V	
		< CONNECTOR >		C833	1-164-159-11	CERAMIC 0.1uF 50V	
* CN913	1-564-518-11	PLUG, CONNECTOR 3P		C840	1-162-282-31	CERAMIC 100PF 10% 50V	
* CN914	1-564-526-11	PLUG, CONNECTOR 11P		C851	1-126-923-91	ELECT 220uF 20% 10V	
* CN915	1-564-519-11	PLUG, CONNECTOR 4P		C852	1-126-956-91	ELECT 0.1uF 20% 50V	
		< DIODE >		C860	1-126-942-61	ELECT 1000uF 20% 25V	
D271	8-719-510-68	DIODE D5SBA204101		C861	1-117-245-91	ELECT 330uF 20% 6.3V	
D371	8-719-510-68	DIODE D5SBA204101		C862	1-128-646-91	ELECT 1000uF 20% 6.3V	
D911	6-500-522-11	DIODE 10EDB40-TA2B5		C863	1-117-317-51	ELECT 1000uF 20% 25V	
D912	8-719-982-15	DIODE MTZJ-27B		C871	1-117-245-91	ELECT 330uF 20% 6.3V	
D913	8-719-160-29	DIODE RD6.2FB2		C872	1-128-646-91	ELECT 1000uF 20% 6.3V	
				C873	1-117-317-51	ELECT 1000uF 20% 25V	
				C876	1-117-245-91	ELECT 330uF 20% 6.3V	
				C877	1-117-245-91	ELECT 330uF 20% 6.3V	
						< CONNECTOR >	
				CN801	1-779-285-11	CONNECTOR, FFC (LIF (NON-ZIF)) 17P	
				* CN804	1-564-730-11	PIN, CONNECTOR (SMALL TYPE) 14P	

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VIDEO

Ref. No.	Part No.	Description	Remark
< DIODE >			
D838	8-719-991-33	DIODE 1SS133T-77	
D861	8-719-210-21	DIODE 11EQS04	
D871	8-719-210-21	DIODE 11EQS04	
< GROUND TERMINAL >			
EP802	1-537-771-21	TERMINAL BOARD, GROUND	
< COIL >			
FB818	1-412-473-21	INDUCTOR (SMALL TYPE)	
FB821	1-412-473-21	INDUCTOR (SMALL TYPE)	
FB824	1-412-473-21	INDUCTOR (SMALL TYPE)	
FB827	1-412-473-21	INDUCTOR (SMALL TYPE)	
FB833	1-412-473-21	INDUCTOR (SMALL TYPE)	
FB834	1-412-473-21	INDUCTOR (SMALL TYPE)	
< IC >			
IC801	6-702-335-01	IC MM1568AJBE	
IC803	8-759-231-53	IC TA7805S	
IC804	8-759-659-28	IC SI-8033S	
IC805	8-759-474-09	IC SI-8050S-LF1101	
< JACK >			
J801	1-817-449-11	JACK, PIN 3P (COMPONENT VIDEO OUT)	
J802	1-774-227-11	JACK, PIN 1P (VIDEO OUT)	
J803	1-537-943-11	TERMINAL, S (S VIDEO OUT)	
< COIL >			
L800	1-410-470-11	MICRO INDUCTOR	10uH
L861	1-456-513-11	COIL, CHOKE	150uH
L862	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH
L871	1-456-513-11	COIL, CHOKE	150uH
L872	1-414-741-11	INDUCTOR, MICRO	10uH
< TRANSISTOR >			
Q801	8-729-029-21	TRANSISTOR DTA114ESA-TP	
Q802	8-729-029-66	TRANSISTOR DTC114ESA	
Q851	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q852	8-729-029-66	TRANSISTOR DTC114ESA	
Q853	8-729-029-66	TRANSISTOR DTC114ESA	
Q855	8-729-029-66	TRANSISTOR DTC114ESA	
Q857	8-729-029-66	TRANSISTOR DTC114ESA	
< RESISTOR >			
R803	1-249-429-11	CARBON 10K	5% 1/4W
R815	1-249-429-11	CARBON 10K	5% 1/4W
R818	1-247-804-11	CARBON 75	5% 1/4W
R821	1-247-804-11	CARBON 75	5% 1/4W
R824	1-249-403-11	CARBON 68	5% 1/4W
R827	1-249-403-11	CARBON 68	5% 1/4W
R830	1-249-403-11	CARBON 68	5% 1/4W
R833	1-247-804-11	CARBON 75	5% 1/4W
R834	1-249-429-11	CARBON 10K	5% 1/4W
R835	1-249-429-11	CARBON 10K	5% 1/4W
R839	1-249-429-11	CARBON 10K	5% 1/4W
R851	1-249-429-11	CARBON 10K	5% 1/4W

Ref. No.	Part No.	Description	Remark
MISCELLANEOUS *****			
10		WIRE (FLAT TYPE) (29 CORE)	
11		WIRE (FLAT TYPE) (13 CORE)	
12		WIRE (FLAT TYPE) (7 CORE)	
13		WIRE (FLAT TYPE) (17 CORE)	
55	1-796-486-41	DECK, MECHANICAL (CWM43FR16)	(EXCEPT TH)
55	1-796-486-51	DECK, MECHANICAL (CWM43FR26) (TH)	
57		WIRE (FLAT TYPE) (13 CORE)	
106		WIRE (FLAT TYPE) (9 CORE)	
108		WIRE (FLAT TYPE) (3 CORE)	
110		WIRE (FLAT TYPE) (24 CORE)	
253	1-693-615-21	TUNER (FM/AM) (E, E51, SP, MY, TH)	
253	1-693-617-11	TUNER (FM/AM) (AEP, CIS, AUS, EA)	
254		WIRE (FLAT TYPE) (11 CORE) (EXCEPT AEP)	
254		WIRE (FLAT TYPE) (15 CORE) (AEP)	
△303	1-696-848-22	CORD, POWER (AUS)	
△303	1-775-787-21	CORD, POWER (E, E51, EA, SP, MY)	
△303	1-777-071-83	CORD, POWER (AEP, CIS)	
△303	1-824-818-11	CORD, POWER (WITH CONNECTOR) (TH)	
509	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)	
653	1-824-106-12	CABLE, FLEXIBLE FLAT (24 CORE)	
△655	1-477-263-11	OPTICAL TRAVERSE UNIT (DBU-1)	
△F911	1-533-472-12	FUSE, GLASS TUBE (DIA. 5) (T5AL/250V)	(EXCEPT AEP, CIS, AUS)
△F912	1-533-472-12	FUSE, GLASS TUBE (DIA. 5) (T5AL/250V)	(EXCEPT AEP, CIS, AUS)
△F913	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8AL/250V)	
△F914	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V)	
△F915	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V)	
△F916	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V)	
△F917	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V)	
△F918	1-533-472-12	FUSE, GLASS TUBE (DIA. 5) (T5AL/250V)	
M741	A-4723-963-A	MOTOR ASSY, TABLE	
M751	A-4737-533-A	MOTOR ASSY, LOADING	
M961	1-763-072-11	FAN, DC	
S711	1-477-680-12	ENCODER, ROTARY	(DISC TRAY ADDRESS DETECT)
△T911	1-443-042-11	TRANSFORMER, POWER (EXCEPT EA)	
△T911	1-443-043-11	TRANSFORMER, POWER (EA)	

ACCESSORIES *****			
△	1-569-008-22	ADAPTOR, CONVERSION 2P (E, E51, SP, MY)	
△	1-569-008-32	ADAPTOR, CONVERSION (EA)	

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MEMO

