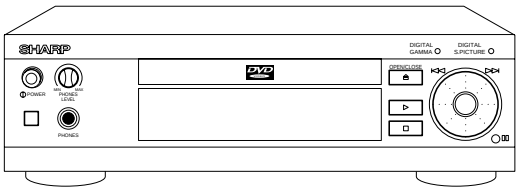
SHARP SERVICE MANUAL

S59F9DV-600S/

DVD VIDEO PLAYER



MODELS DV-600S DV-600H

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified be used.

CONTENTS

SERVICE MANUAL DVD VIDEO PLAYER MODELS DV-600S/600H

1. IMPORTANT SAFEGUARDS AND PRECAUTIONS

CAUTION

BEFORE OPERATING YOUR NEW DVD PLAYER, PLEASE CAREFULLY READ THIS OPERATION MANUAL AND THEN SAVE IT FOR FUTURE REFERENCE AS IT WILL BE USEFUL IF YOU HAVE ANY PROBLEMS OPERATING YOUR DVD PLAYER IN THE FUTURE.

Note:
This unit can be used only where the power supply is AC 110V-240V, 50/60Hz. It cannot be used elsewhere.

CAUTION:

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

AS THE LASER BEAM USED IN THIS DVD PLAYER IS HARMFUL TO THE EYES, DO NOT ATTEMPT TO DISASSEMBLE THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

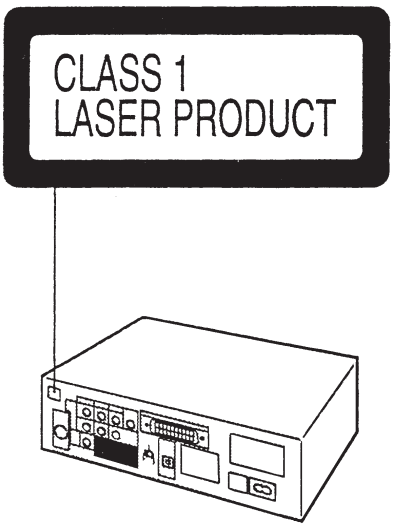
WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

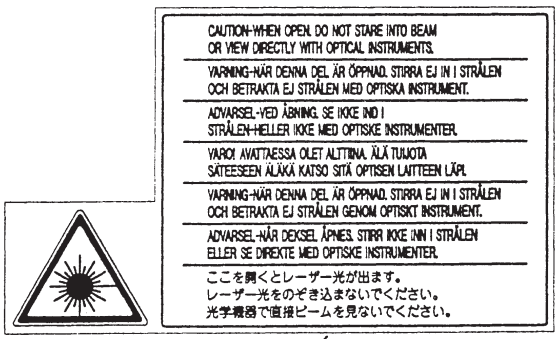
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

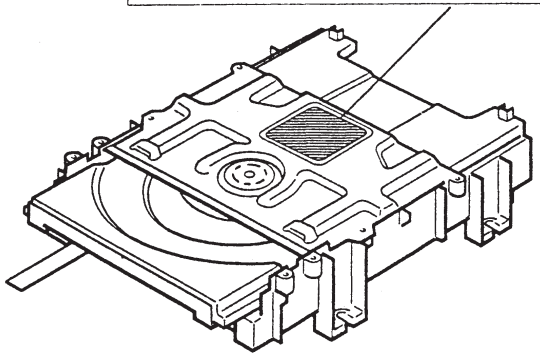
Laser Diode Properties
Material: AlGaInP
Wave length: 650 nm
Emission Duration: Continuous
Laser output: Max. 0.7 mW

- This DVD player is classified as a CLASS 1 LASER product.
- The CLASS 1 LASER PRODUCT label is located on the rear cover.
- This product contains a low power laser device. To ensure continued safety do not remove any cover or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.



(Back of product)





2. FEATURES

- Plays DVD, video CD and CD (Digital Audio) discs
- Built-in Dolby Digital (AC-3) decoder supporting Dolby Pro Logic*1 decoding and Virtual Surround
- MPEG 2-channel (STEREO) decoder (From AUDIO L/R)
- MPEG MULTI digital out capability (5.1ch)
- New Digital Gamma correction and New Digital Super Picture functions
- RGB OUT (LINE1 OUT)/S-VIDEO OUT
- DTS*2 digital output capability

*1 Manufactured under license from Dolby Laboratories, "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.
*2 "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc.

3. SPECIFICATIONS

Signal System:	NTSC*1/PAL (*1: A played back NTSC is a modified PAL signal.)
Video output:	Output connector: Pin-jack/21-pin Euro-SCART Output level: 1 Vp-p (75Ω)
S video output:	Y output level: 1 Vp-p (75Ω) C output level: 0.30 Vp-p (75Ω) Output connector: S connector
Audio output:	Output connector: Pin-jack/21-pin Euro-SCART Output level: 2 Vrms (1 kHz, 0 dB)
Digital audio I/F:	Optical digital output: Optical connector
Audio output:	Coaxial digital output: Pin-jack
Headphone output:	Output connector: Standard jack
Video signal horizontal resolution:	500 lines (DVD)
S/N ratio:	60 dB (DVD)
Audio signal frequency characteristics:	For DVD linear PCM playback: 4 Hz to 22 kHz (48 kHz sampling) 4 Hz to 44 kHz (96 kHz sampling) CD playback: 4Hz to 20 kHz (EIAJ) (MPEG 1/2 Audio)
S/N ratio:	CD: 105 dB, 1 kHz (EIAJ)
Dynamic range:	DVD linear PCM: 94 dB (EIAJ) CD: 94 dB (EIAJ)
Total harmonic distortion ratio:	CD: 0.006% or less (EIAJ)
Operating temperature:	5°C to 40°C
Storage temperature:	–20°C to 55°C
Power supply :	220 V to 240 V AC, 50/60 Hz
Power consumption:	16 W (0 W when switched off)
Dimensions:	270 mm × 338 mm × 80 mm (W × D × H) (Including attachments)
Weight:	2.5 kg

Specifications are subject to change without notice.
Weight and dimensions are approximate.

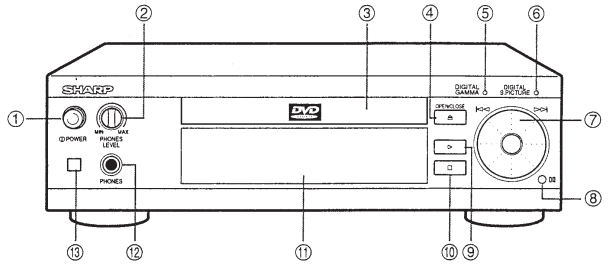
Digital Output
· The digital output format (optical or coaxial) used in this DVD player is linear PCM audio sampling at 44.1 kHz or 48 kHz. Linear PCM sound for DVD video discs sampled at 96 kHz cannot be output digitally. Check the disc jacket for information on the audio sampling used.

3-1. ACCESSORIES

Accessories: Video/audio cord x 1, AC power cord x 1, UM3 battery x 2,
Remote Control Unit x 1

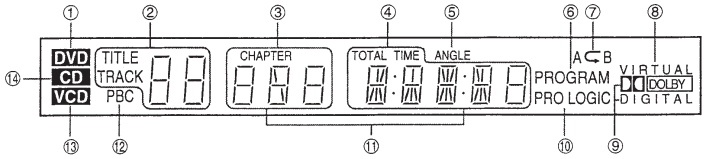
4. PART NAMES

Front



① POWER ON/OFF (⏻) button
If the DVD player is stopped and not used in any way for 5 minutes, the stop display disappears and "----" appears on the Front Panel display.
② PHONES LEVEL knob
③ DISC tray
④ OPEN/CLOSE (⏏) button for tray
⑤ DIGITAL GAMMA indicator
⑥ DIGITAL S.PICTURE indicator
⑦ CHAPTER DIRECT SKIP shuttle dial (Reverse/Forward) (⏮/⏭)
⑧ STILL/PAUSE (⏸) button
⑨ PLAY (▷) button
⑩ STOP (□) button
⑪ Front panel display (see below)
⑫ PHONES jack
⑬ Remote Control receptor

Front Panel Display



The figure above shows the front panel with all the displays on.

① Lights when a DVD is loaded
② Shows the title number [DVD only]/Shows the track number [Video CD and Audio CD]
③ Shows the chapter number [DVD only]
④ Shows the total time elapsed since the disc started playing.
⑤ Lights when it is possible to switch the angle. [DVD only]
⑥ PROGRAM indicator
Lights during PROGRAM play.
⑦ Lights during repeat play
⊂ : Repeat A⊂ B: A-B repeat
⑧ Virtual Surround indicator
⑨ Dolby Digital (AC-3) indicator
⑩ PRO LOGIC indicator
⑪ Operating mode indicator (Messages)
<Display examples>

NO DISC	PLAY	PAUSE
OPEN	FWD	CLOSE
LOAD	REV	SLOW
STOP	STILL	

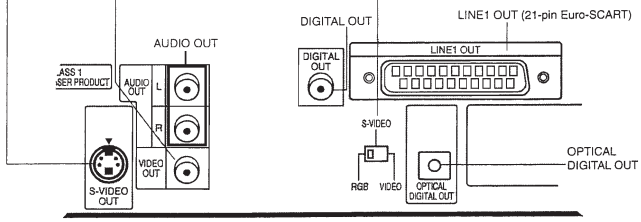
⑫ Lights during video CD with playback control only
⑬ Lights when a video CD is loaded
⑭ Lights when an audio CD is loaded

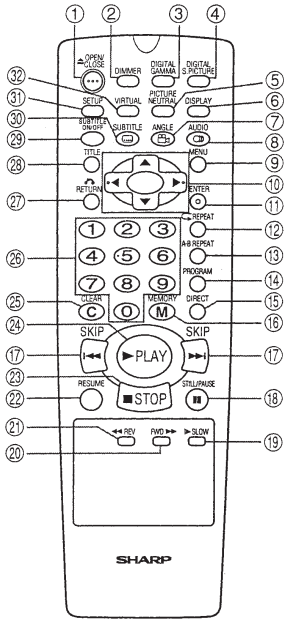
Rear

S-VIDEO OUT
• S-VIDEO signal is always output regardless of the position of the output mode changeover switch for LINE1 OUT (21-pin Euro-SCART).

VIDEO OUT
• VIDEO signal is always output regardless of the position of the output mode changeover switch for LINE1 OUT (21-pin Euro-SCART).

VIDEO output mode changeover switch for LINE1 OUT (21-pin Euro-SCART)
• VIDEO: Position for output of Video signal
• RGB: Position for output of Video signal by RGB signal
• S-VIDEO: Position for output of S-Video out signal
Change the position according to the types (VIDEO/RGB/S-VIDEO) of input terminals of the equipment with which the 21-pin Euro SCART is to be connected.





① OPEN/CLOSE (⏏) button
*② DIMMER button (see "DIMMER button" below)
③ DIGITAL GAMMA button
④ DIGITAL S.PICTURE button
⑤ PICTURE NEUTRAL button
⑥ DISPLAY (OSD) button
⑦ ANGLE (🎦) button
⑧ AUDIO (🔊) button
⑨ MENU button
⑩ ▲/▼, ◀/▶ buttons
⑪ ENTER button
⑫ REPEAT (⊂) button
⑬ A-B REPEAT button
⑭ PROGRAM button
⑮ DIRECT button
⑯ MEMORY (M) button
⑰ SKIP button (⏮/⏭) (Reverse/Forward)
⑱ STILL/PAUSE (⏸) button
⑲ SLOW button (⏯)
⑳ FWD (▶▶) button
㉑ REV (◀◀) button
㉒ RESUME button
㉓ STOP (■) button
㉔ PLAY (▶) button
㉕ CLEAR (C) button
㉖ Number buttons
㉗ RETURN (↩) button
㉘ TITLE button
㉙ SUBTITLE ON/OFF button
㉚ SUBTITLE (🖴) button
㉛ SETUP button
㉜ VIRTUAL button

*DIMMER feature
Use this button to set the front panel display brightness to Bright or Dark.

5. MAINTENANCE CHECK ITEMS AND EXECUTION TIME

MECHANICAL PARTS REGUIRING PERIODICAL INSPECTION

Use the following table as a guide to maintain the mechanical parts in good operating condition.

Parts \ Maintained	1,000 hrs.	2,000 hrs.
Pickup	◯	◯
Spindle Unit	□	◯
Sled Motor		◯
Loading Motor		◯
Belt	□	◯

Note ◯ : Part Replacement
□ : Cleaning
(For cleaning, use a lint-free cloth danpened with pure isopropyl alcohol.)

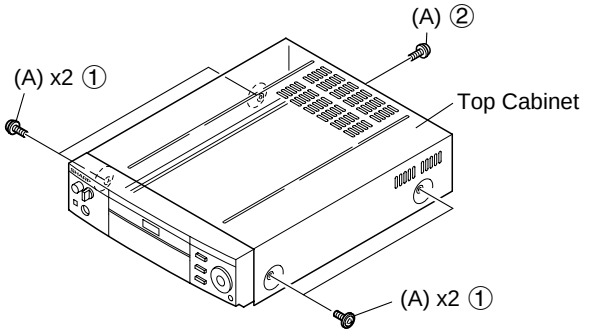
CARES WHEN USING THE PICKUP

1. The laser light having wavelength 650 nm is emitted from the objective lens. BE CAREFUL SO THAT THE LASER LIGHT DOES NOT ENTER DIRECTLY INTO YOUR EYE.
2. The semiconductor laser may be easily damaged by electrostatic charges. When handling the pickup, take care so that the electrostatic charge is not generated.
3. The semiconductor laser may be easily damaged by overcurrent. Use the power supply unit which does not give any spike current when the power is turned on and off.
4. Carefully remove the dust and dirt from the objective lens with the lens blower.
   When handling the objective lens, take due care so that it is not contaminated with fingerprint, etc. If the objective lens is contaminated, impregnate the cleaning paper with a small quantity of solvent (isopropyl alcohol), and gently wipe to clean.
5. The ozone layer depleting components (ODC) are not used in the production process for the product.

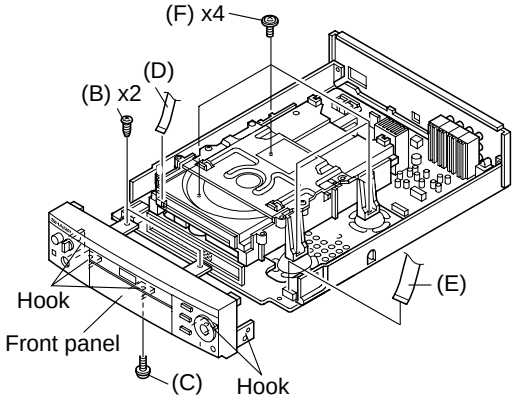
6. DISASSEMBLY AND REPLACEMENT OF MAIN PARTS

6-1. DISASSEMBLY

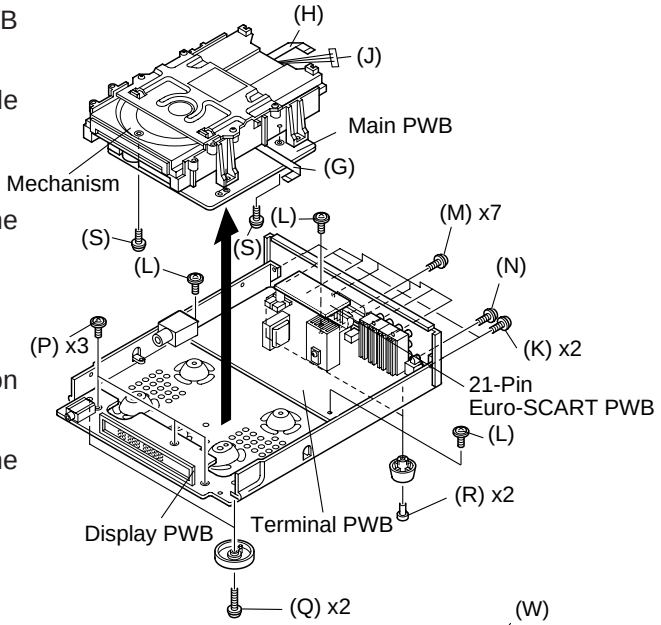
1. Remove five screws (A), and remove the cabinet.
   Note: When assembling it, tighten the screws in order of ①-②. (Because the set may rise a little by tightening the screws.)



2. Remove two screws (B).
3. Remove one screw (C).
4. Release the hooks of the front panel at two places on both sides and at three places on the bottom, and slide the front panel toward you.
5. Disconnect the connectors (D) and (E).
6. Remove four screws (F) which installs the mechanical unit.



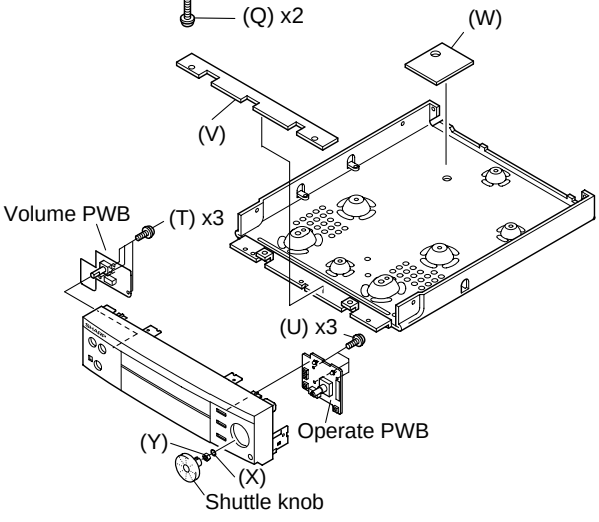
7. Disconnect the lead lines (G) and (H) and (J) from the main PWB under the mechanism.
8. Remove two screws (K) on both sides of the terminal angle frame.
9. Remove three screws (L) which install the terminal PWB.
10. Remove seven screws (M) and one screw (N) which install the terminal block.
11. Remove three screws (P) of the display PWB.
12. Remove two screws (Q) of the decorative leg.
13. Push out the middle pin (R) of the setting leg in the direction opposite to insertion. (Two places)
14. Remove two screws (S) which install the main PWB under the mechanical unit.



15. Remove three screws (T) which install the volume PWB of the front panel.
16. Remove three screws (U) which install the operate PWB.

* The spacer and insulation seat under the indication tube of (V) and (W) are bonded with both-side sticking tape.

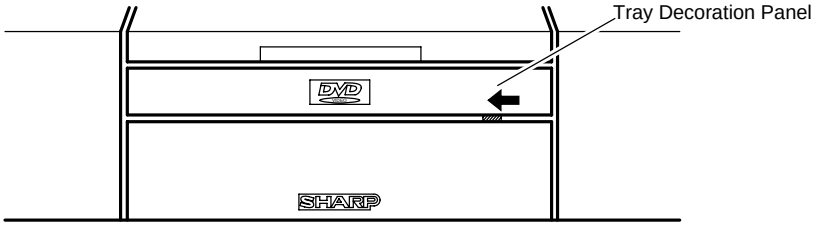
17. Remove one washer (X) and one nut (Y) which install the shuttle knob.



6-2. REPLACEMENT OF MAIN PARTS

<Disassembling and assembling procedure>

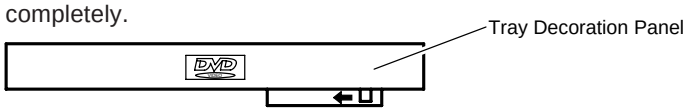
· Removing the tray (emergency ejection)
  Removing the tray lock (set state)



Insert a thin plate into the hatching part, slowly move the it in the arrow direction so that the tray is moved out a little in the arrow direction.

Note: In this state the tray cannot be removed completely.

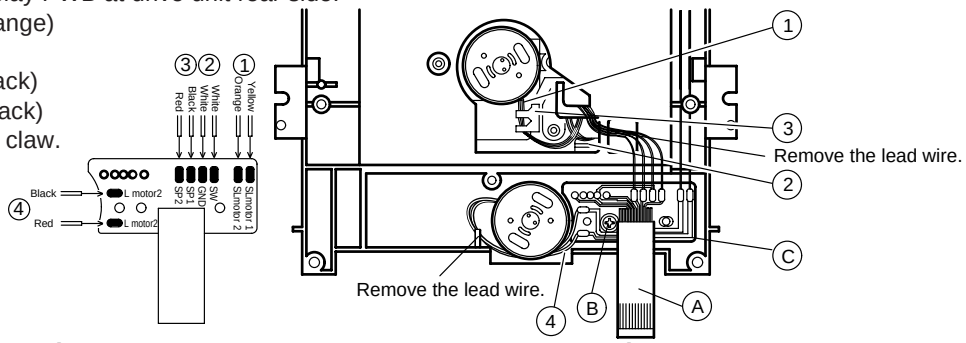
· Drive Unit State



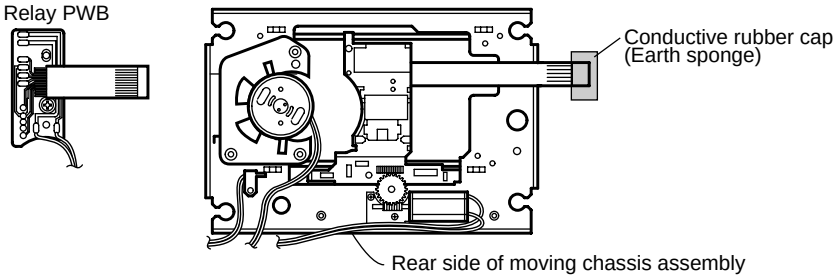
Slowly move in the arrow direction, using the screwdriver having a fine head.

<Disassembling and assembling the mechanism chassis>

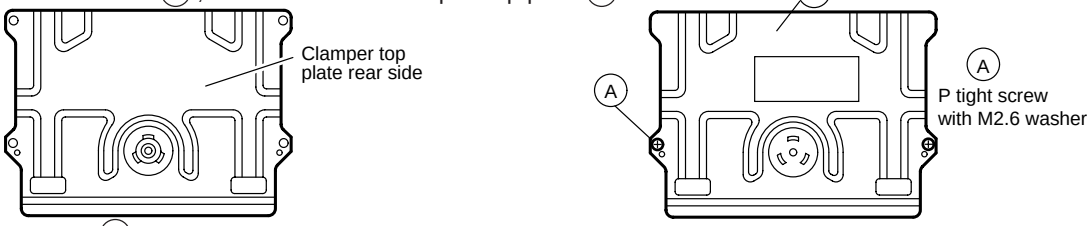
1. Remove the pickup FPC and loading relay FFC Ⓐ from the main PWB.
   Note: Fit the conductive rubber cap to the front end of pickup FPC (short-circuit).
2. Remove the solder joint of loading relay PWB at drive unit rear side.
   ① Sled motor lead wire (Yellow·Orange)
   ② IN SW lead wire 2 (White)
   ③ Spindle motor lead wire (Red·Black)
   ④ Loading motor lead wire (Red·Black)
   ⑤ Remove each lead wire from the claw.



3. Remove the relay PWB mounting screw Ⓑ (M2.6S + 6S S tight), and remove the relay PWB Ⓒ.

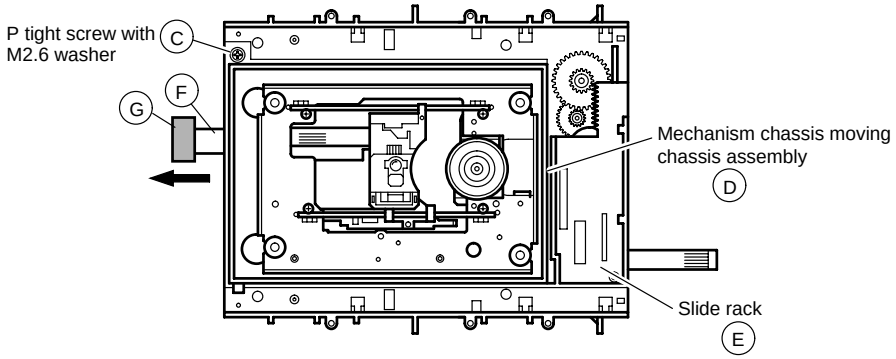


4. Disassembling the mechanism chassis moving chassis assembly
   (1) Remove the four M2.6 screws Ⓐ , and remove the clamped top plate Ⓑ.

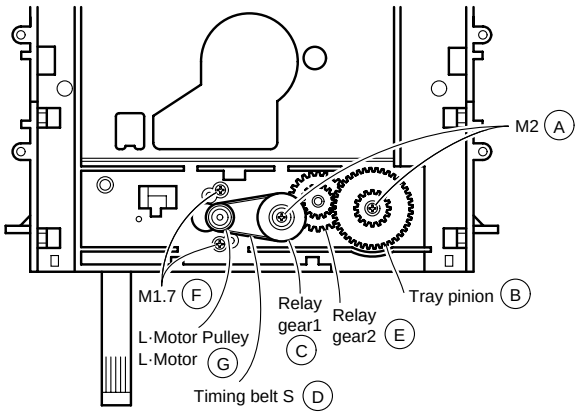


   (2) Remove the M2.6 screw Ⓒ .
   (3) Holding aslant upward the mechanism chassis moving chassis assembly Ⓓ in the arrow direction, remove.

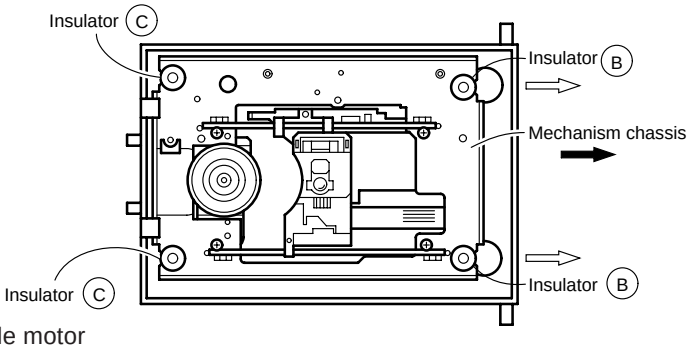
Note: The slide rack Ⓔ must be moved to the left side as shown in diagram.
Take care so that the lead wires, especially the earth sponge Ⓖ at the pickup FPC Ⓕ front end, must not beremoved.



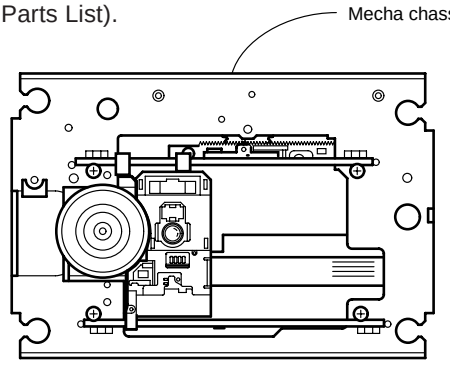
5. Disassembling the loading drive system
   (1) Remove the two M2 screws Ⓐ .
   (2) Remove the tray pinion Ⓑ .
   (3) Remove the relay gear 1 Ⓒ together with the timing belt S Ⓓ .
   (4) Remove relay gear 2 Ⓔ .
   (5) Remove the two M1.7 screws Ⓕ .
   (6) Remove the L motor Ⓖ (with pulley) downward.



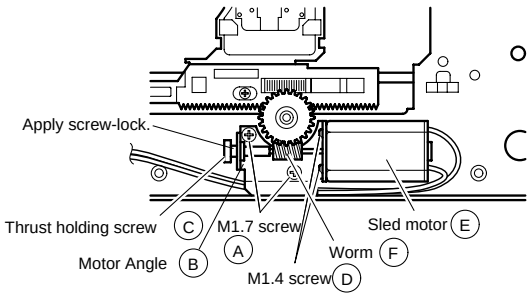
6. Disassembling the mechanism chassis from the moving chassis
   (2) Remove the insulator Ⓑ (2 pcs. at the right side in diagram) parallel in the arrow direction.
   (At this time it is better to insert the fine head of screw driver at the ID side of insulator and to move in the arrow direction, which facilitates removal.)
   (3) Remove the mechanism chassis in the arrow direction, pulling upward aslant.
   At this time take care so that the insulator Ⓒ (left side, 2 pcs.) is not damaged. (Do not put at once the mechanism chassis assembly.)



7. Replacing the pickup and the spindle motor
Since the pickup optical axis and turntable inclination of DVD are adjusted with higher accuracy than of CD/MD, make a replacement as a mechanism service chassis ass'y (refer to Parts List).



8. Replacing the Sled Motor
   (1) At the rear side of chassis remove the two M1.7 screws Ⓐ , and remove the motor angle Ⓑ .
   (2) Remove the thrust holding screw Ⓒ (for easier removing wipe off the thread lock).
   (3) Remove the two motor fitting screws M1.4 Ⓓ , and replace the motor Ⓔ . Motor is replaced in the state while the worm Ⓕ is kept press-fitted to the output shaft.
   Note: When installing the motor, take care so that the worm does not damage the ANG Ⓑ hole.
   (4) Screw in the thrust holding screw Ⓒ , adjust the worm front end clearance to 0 to 0.1 mm, and apply screw lock.



7. EXPLANATION OF MECHANISM

(1) Tray loading mechanism

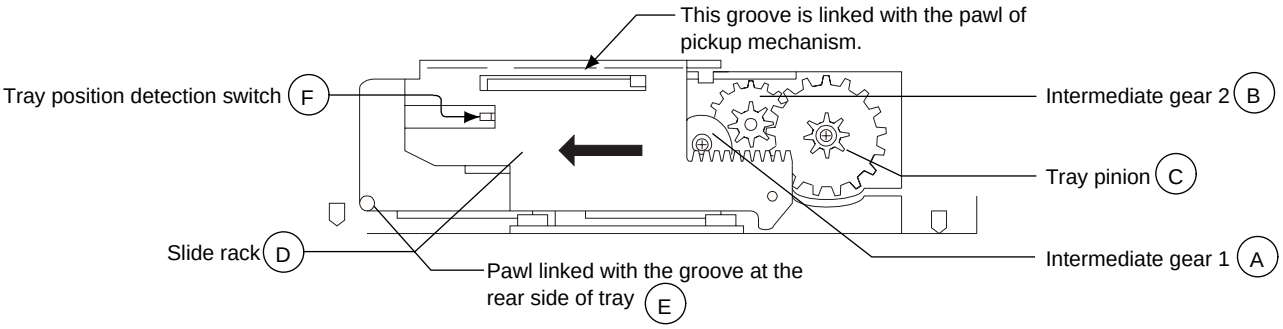
When the tray loading motor rotates counterclockwise, motion is transmitted to the slide rack (D) through the intermediate gear 1 (A), intermediate gear 2 (B) and tray pinion (C), resulting in insignificant motion in the arrow direction.

The slide rack is linked with the operating chassis. It lowers the pickup mechanism.

The protrusion of slide rack (E) is linked with the tray through the groove at the rear side of tray, so that the tray is pushed ahead a little. When the tray is pushed out, the slide rack is disconnected from the tray pinion, and at the same time the gear at the rear side of tray is connected with the tray pinion, and the tray is pushed ahead.

When the tray is pushed out fully, the slide rack moves further in the arrow direction through the groove at the rear side of tray. The tray position detection switch (F) is turned on, and the tray loading motor stops.

When the tray closes the operation is as follows. If the tray OPEN/CLOSE button or tray is pressed and the detection switch is turned off, the tray loading motor rotates clockwise, so that the tray is retracted. When the detection switch is turned on again, the tray loading motor stops.



(2) Pickup feed mechanism

When the sled motor (A) rotates, the rack (C) moves through the sled pinion (B) so that the pickup (D) is moved to the internal or external periphery.

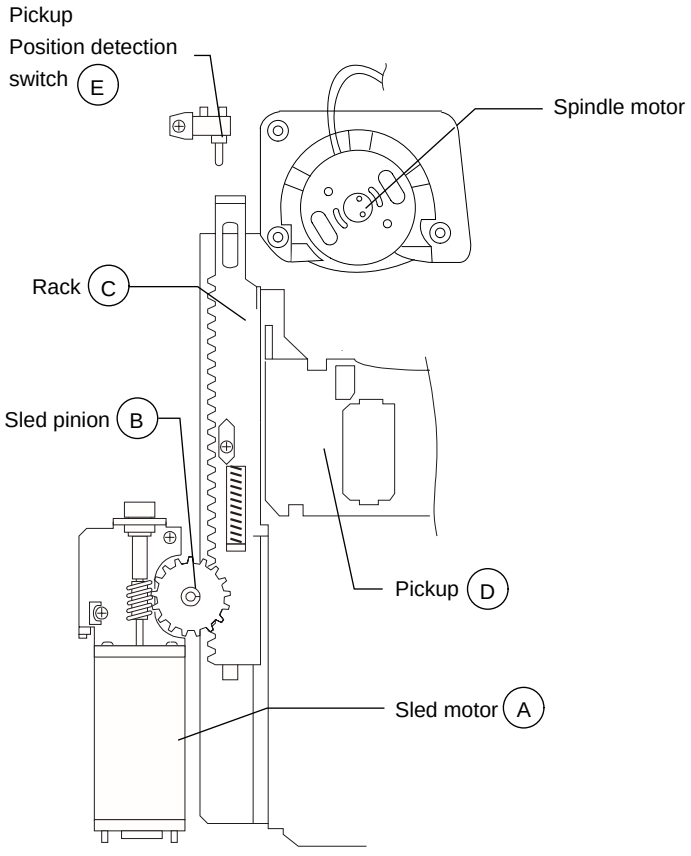
When it is moved to the innermost periphery, the position detection switch (E) is pushed by the rack, so that the position of pickup is initialized.

(3) Disc rotation mechanism

The spindle motor is used to rotate.

IC701 is used to control.

When the spindle motor is replaced, replace the spindle unit.

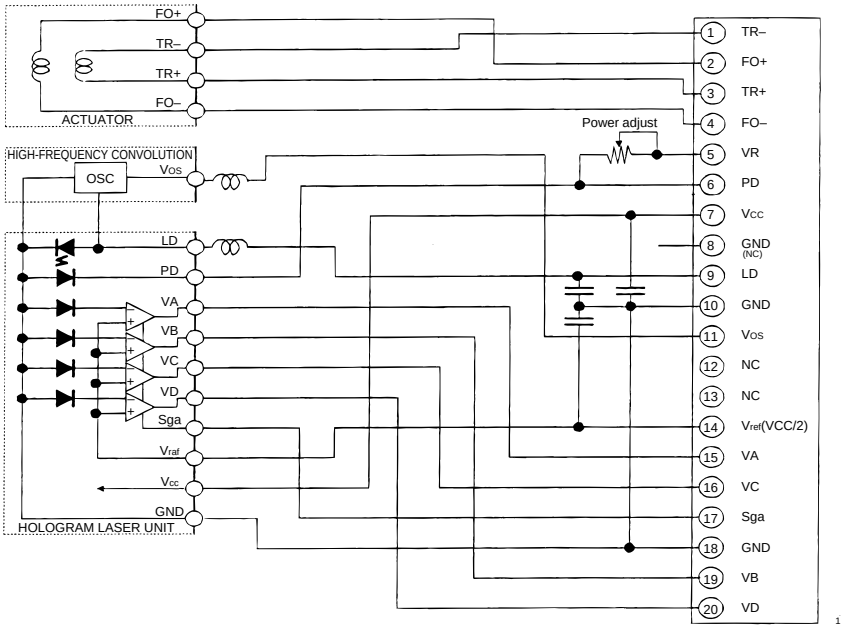


8. OPERATION OF PICKUP

8-1. CIRCUIT CONFIGURATION OF PICKUP

The pickup unit reads signals from the disk, and the flexible cable is connected to the board. The following signals flow through the cable.

8-2. EQUIVALENT CIRCUIT OF PICKUP



8-3. POLARITIES OF SIGNAL

Focus FO+, FO-	When electric current is flowed from FO+ to FO-, the lens comes to near the disk.	
Tracking TR+, TR-	When electric current is flowed from TR+ to TR-, the lens goes toward the outer circumference.	
Gain switching Sga	DVD one Layer DVD two Layer CD	High gain Sga : +5V

8-4. SIGNALS OF PICKUP

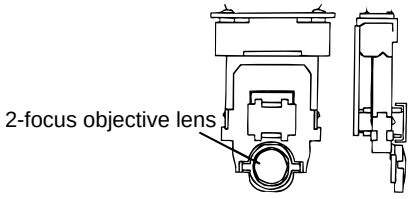
8-4-1. Tracking drive signal (TR+, TR-)

The signal drives the tracking servo mechanism which projects the beam on the track by moving the objective lens (OL) to the outer or inner circumference (at a right angle against the track) of the disk.

8-4-2. Focus drive signal (FO+, FO-)

The signal drives the focus servo mechanism which aligns the focus on the pit of the disk by elevating OL (vertically against the disk surface.)

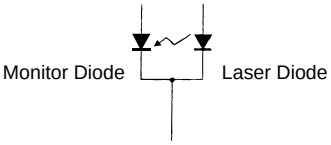
The VR terminal is connected to GND.



Actuator assembly

8-4-3. Monitor Diode (PD)

Since the laser diode largely varies output of the laser light even if the flowing current is slightly varied, the projection light is detected with the monitor diode to control the laser light to be equally output.
Since the current varies on the monitor diode according to the intensity of the received light of the laser diode, the drive current of the laser diode is reduced if the current of the monitor diode increases. On the contrary, the drive current of the laser diode is increased if the current of the monitor diode decreases.
As the projection light of the laser diode becomes stronger, the current of the monitor diode increases to increase the current which flows into the monitor diode output (PD). This is input to the pin 44 of IC303 and is compared with the reference voltage to control the drive current of the laser diode.
The circuit is called ALPC (Automatic Laser Power Control).



Basic Structure of Laser Diode

8-4-4. Laser diode drive current control (LD)

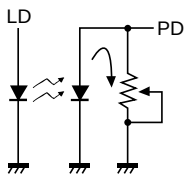
Power supply to drive the laser diode

8-4-5. High-frequency convolution module power supply (VOSC)

The high-frequency convolution imposes the high-frequency signal on the DC current to impose the high frequency on the drive current of the laser. Thus, the interference of outgoing light and reflected light is prevented.

8-4-6. HF Signal (VA, VB, VC, VD)

Signals recorded in the disk

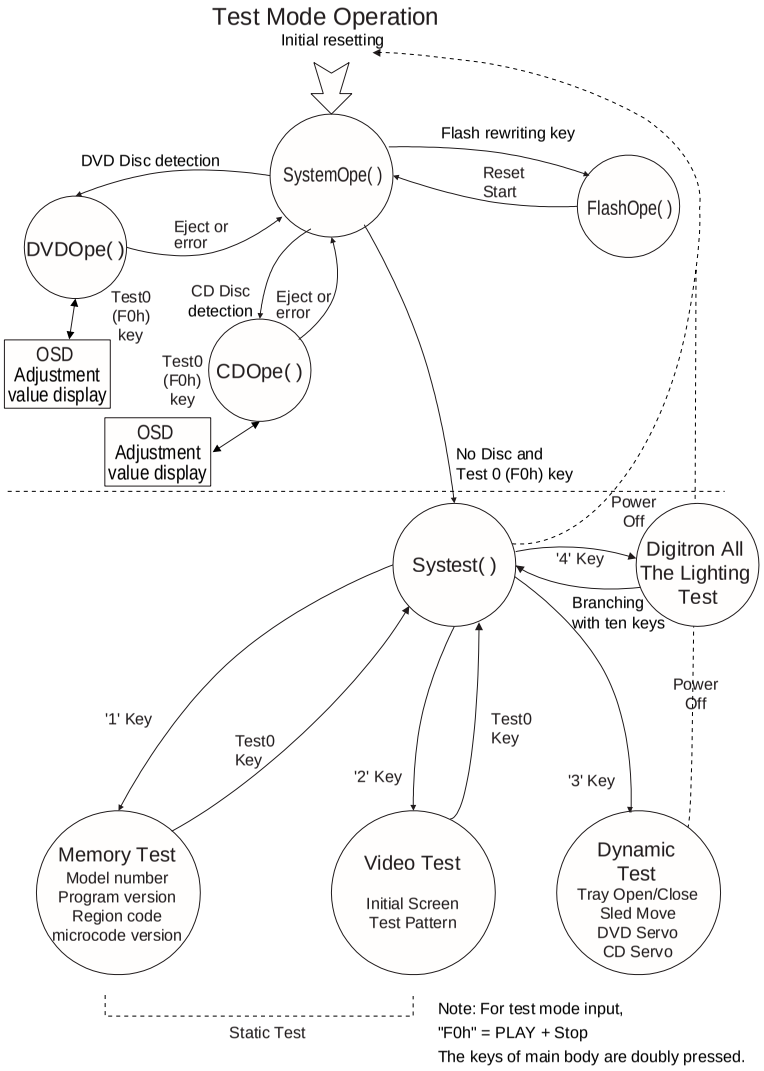


When the quantity of laser light increases, the current shown in figure increases and the PD terminal voltage rises.
IC303 is used to control. The LD terminal voltage lowers, and the quantity of light reduces. (IC303 is actuated by voltage input.)

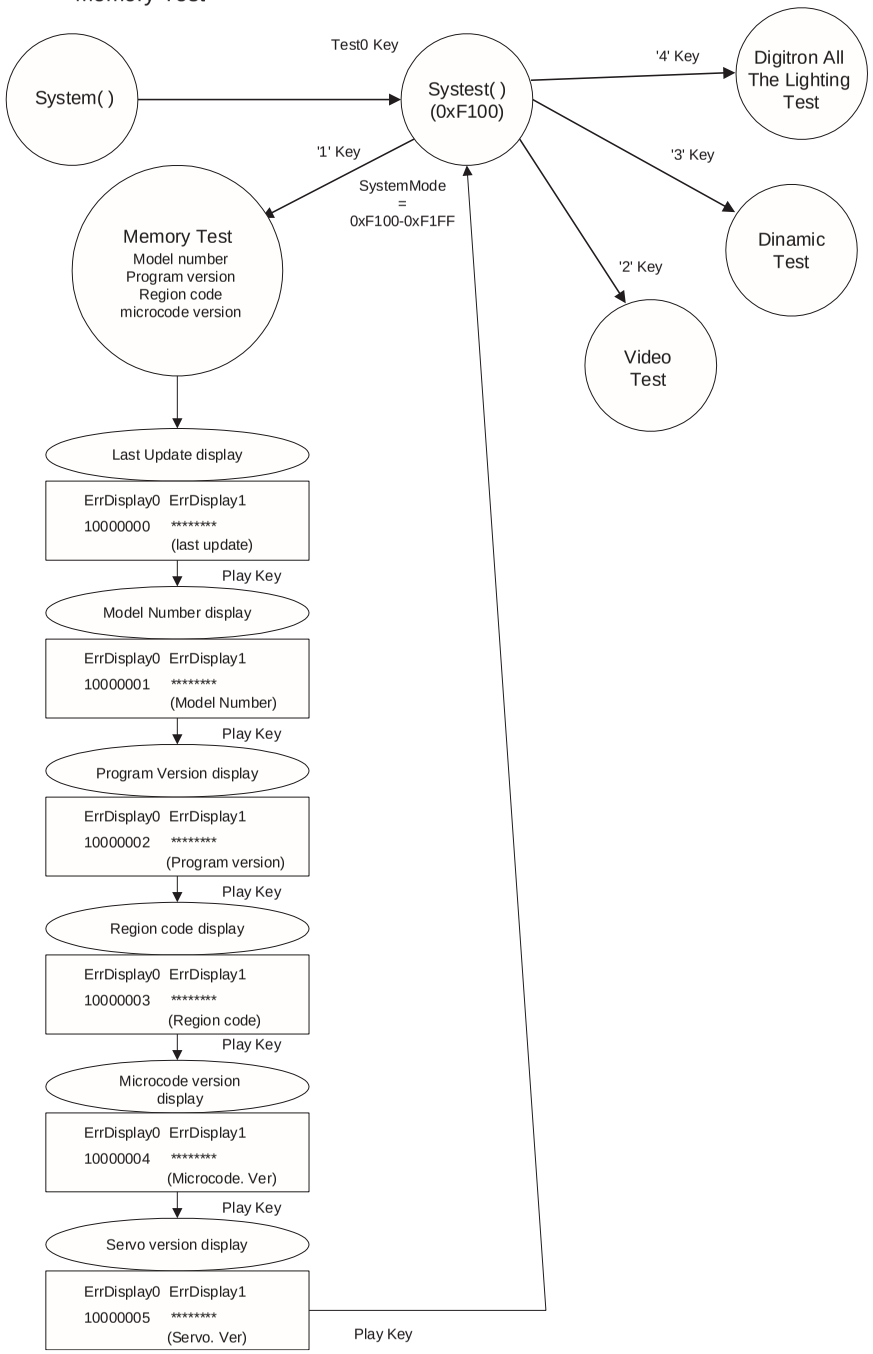
9. TEST MODE

Memory Test Mode	Program version indicaiton.
Video Test Mode	Ordinary test pattern indication, and copy guard signal added test pattern indication are given.
Mecha Test Mode	Servo system initialization, tray opening and closing, laser, servo, continuous playback, jump test are performed.
Servo adjustment value read mode	Servo version indication, VC/FE/TE/RF AVRG, TRVSC, RF LEVEL, FO BIAS, FO GAIN, TR GAIN indication are given.

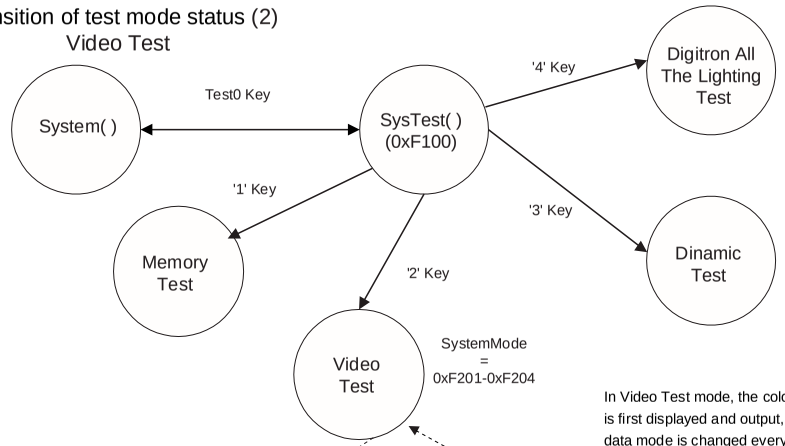
9-1. EXPLANATION OF OPERATION AT THE SYSTEM START

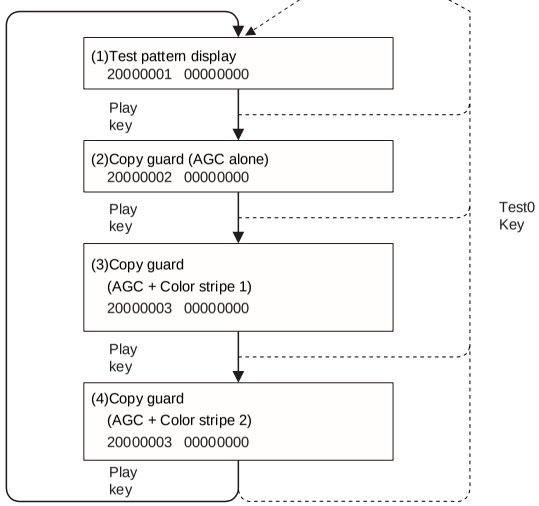


Transition of test mode status (1)



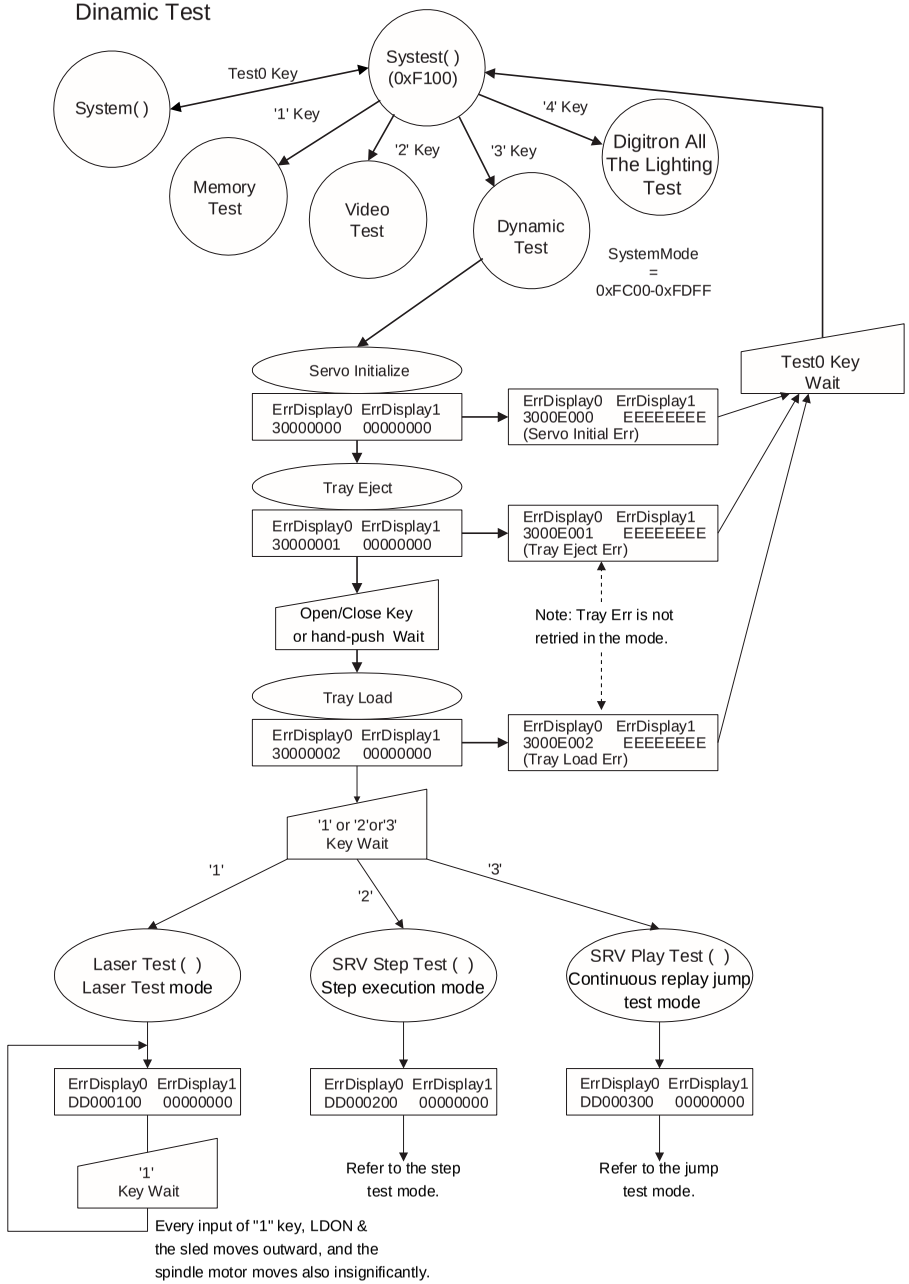
Transition of test mode status (2)
Video Test



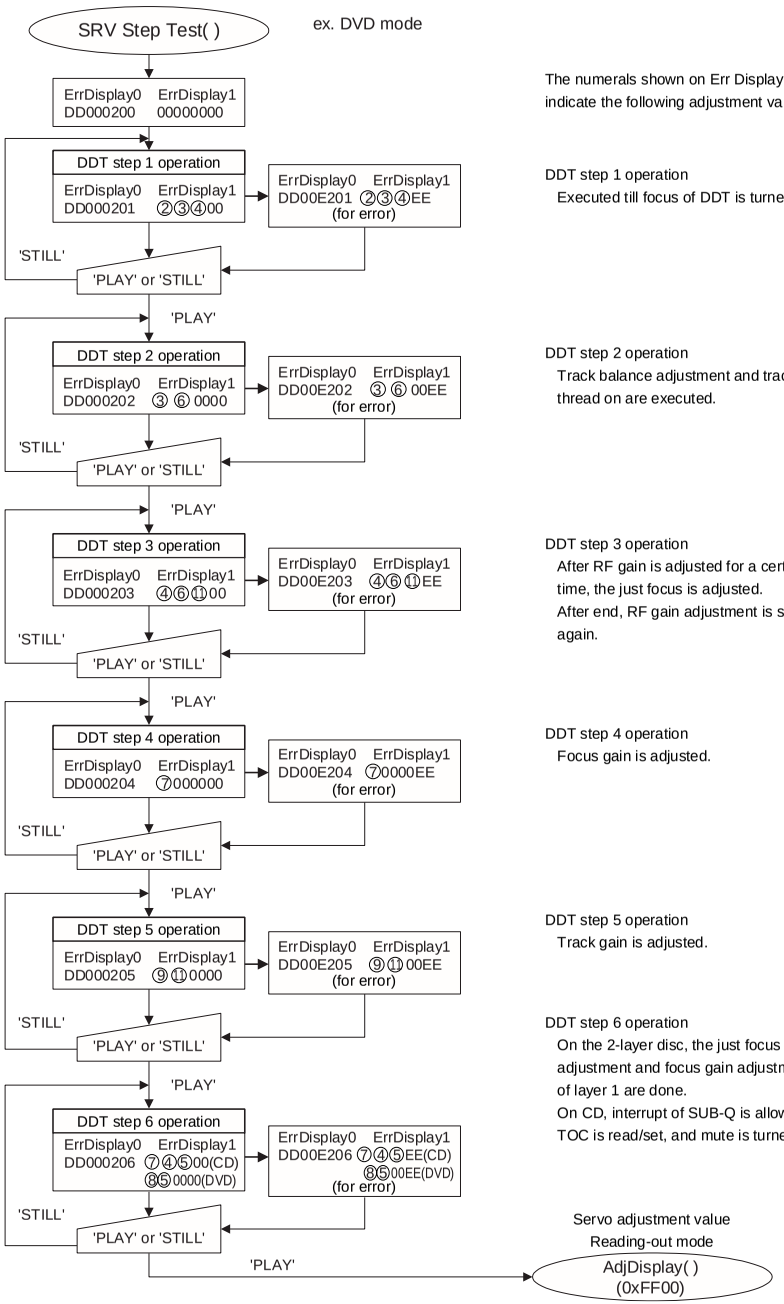


In Video Test mode, the color bar test pattern is first displayed and output, and the display data mode is changed every entry of PLAY key as shown in the right. Here, it returns to Sys Test ( ) if any Test 0 (F0h) key is input in the test display.

Transition of test mode status (3)
Dinamic Test



SRV Step Test( )
Step Test Mode



The numerals shown on Err Display 1 indicate the following adjustment values.

DDT step 1 operation
Executed till focus of DDT is turned on.

DDT step 2 operation
Track balance adjustment and track thread on are executed.

DDT step 3 operation
After RF gain is adjusted for a certain time, the just focus is adjusted.
After end, RF gain adjustment is started again.

DDT step 4 operation
Focus gain is adjusted.

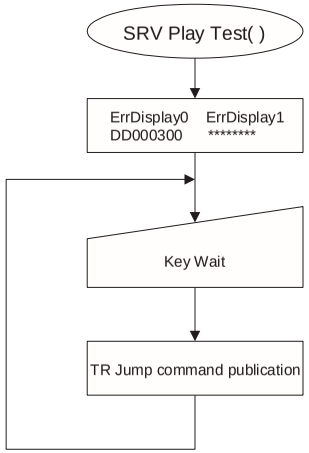
DDT step 5 operation
Track gain is adjusted.

DDT step 6 operation
On the 2-layer disc, the just focus adjustment and focus gain adjustment of layer 1 are done.
On CD, interrupt of SUB-Q is allowed, TOC is read/set, and mute is turned off.

Servo adjustment value
Reading-out mode

②..... Focus Offset
③..... Track Offset
④..... 0-Layer Focus Balance
⑤..... 1-Layer Focus Balance
In case of CD, focus balance after correction.
⑥..... Track Balance
⑦..... 0-Layer Focus Gain
⑧..... 1-Layer Focus Gain
⑨..... Track Gain
⑪..... RF Gain

SRVPlayTest( )
Continuous replay & jump mode



In the continuous replay mode, the current sector address is displayed on ErrDisplay 1.

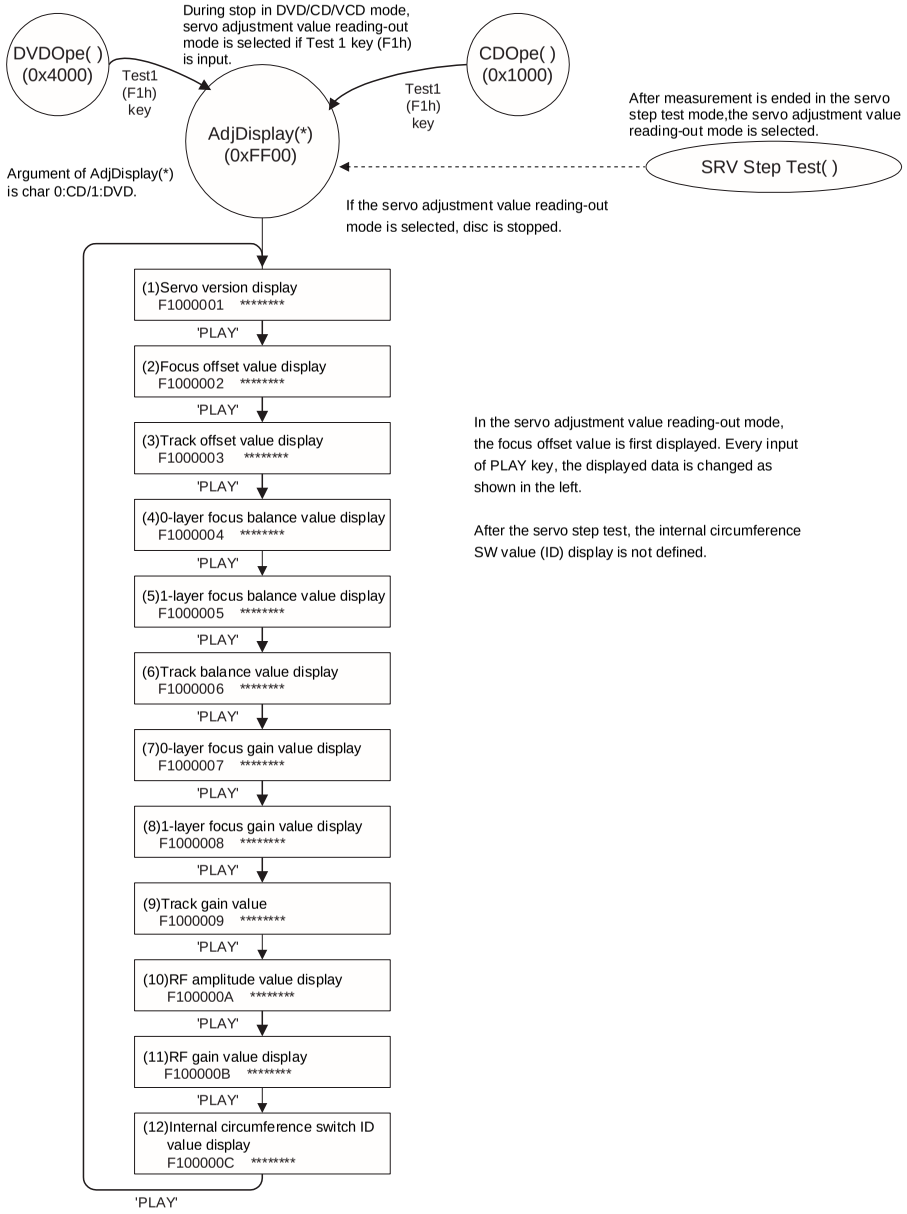
In SRV Play Test ( ), key is input and number of TR jumps is specified as follows.

Key Name	(Code)	Jump Number of TRs	Key Name	(Code)	Jump Number of TRs
[1]	01h	-1	[3]	02h	+1
[4]	04h	-102	[6]	06h	+102
[7]	07h	-510	[9]	09h	+510
[Clear]	1Fh	-511	[Memory]	1Ch	+511
[2]	02h	-765	[Repeat]	35h	+765
[5]	05h	-766	[A-B]	36h	+766
[8]	08h	-7000	[Program]	1Eh	+7000
[Skip(-)]	2Dh	-15000	[Skip(+)]	2Eh	+15000

[Next replay] = Layer Jump

* Here, key allocation may be changed.
* Layer jump operation is not guaranteed except during 2-layer DVD test.

Servo adjustment value reading-out mode



In the servo adjustment value reading-out mode, the focus offset value is first displayed. Every input of PLAY key, the displayed data is changed as shown in the left.

After the servo step test, the internal circumference SW value (ID) display is not defined.

OSD adjustment value display

1. Press "FOh" key during disc replay. (Multiple press of S. PICTURE and STOP)
2. The following screen is displayed on OSD.
3. OSD display is turned off with "FOh" key.

1	2	3	4	5	6	7	8

9	10	11	12	13	14	15	16

17	18	19	20	21

22	23	24	25	26

(1) 1, 2 ..... 0-layer focus gain
(2) 3, 4 ..... 1-layer focus gain
(3) 5, 6 ..... 0-layer focus balance
(4) 7, 8 ..... 1-layer focus balance (In case of CD, 0-Layer focus balance after correction.)
(5) 9, 10 ..... Track offset
(6) 11, 12 ..... Track gain
(7) 13, 14 ..... Track balance
(8) 15, 16 ..... RF gain

Hexadecimal data from (1) to (8).

10. TROUBLESHOOTING

FLOW CHART NO.1

The power cannot be turned on.

Is the fuse normal? — No → Replace the fuse. → No → Refer to the flow chart No.3 power trouble-shooting.

Yes

Is normal state restored when the power cord is once withdrawn and then inserted again after several seconds? — No → Is there leaking or short-circuited primary side component? (Q9007, Q9010, D9016, T9001, D9012-3, C9021-2, etc.)

Yes

Is the AT 5V line voltage normal? — No → (Is there leaking or short-circuited primary side component? (Q9007, Q9010, D9016, T9001, D9012-3, C9021-2, etc.))

Yes

Is the voltage of AT 12V, AT -30V and filament normal? — No → Check each rectifying circuit of secondary circuit.

FLOW CHART NO.2

The power cannot be turned on.

Is P-CON(H) of IC504 pin 116 changed from 'L' level to 'H' level? — No → Replace IC504.

Yes

Is the Q9005 base changed from 'L' level to 'H' level? — No → Check the line from the IC504 pin 116 to the Q9005 base.

Yes

Is the AUDIO 9V SW. circuit turned on? — No → Refer to the flow chart No.9.

FLOW CHART NO.3

The fuse blows out.

Is there leaking or short-circuited primary side component?

Check for short-circuiting of rectifying diode and circuit in each rectifying circuit of secondary side.

FLOW CHART NO.4

When the output voltage fluctuates.

Does the secondary side photocoupler circuit operate normally? — No → Check the circuit and replace the parts. (D9020,D9014,D9009-11,Q9006,Q9009,etc.)

Yes

Does the primary side photocoupler circuit operate normally? — No → Check the circuit and replace the parts. (D9020,R9030,D9021-3,etc.)

Yes

Replace D9020.

FLOW CHART NO.5

When buzz is heard from the vicinity of power circuit.

Check for short-circuiting of rectifying diode and circuit in each rectifying circuit of secondary side. (D9005-8,D9025,IC9001-3,Q9001,Q9005,etc.)

FLOW CHART NO.6

The fluorescent display tube does not light.

Is 5V voltage supplied to the IC5001 pin 18? — No → Check the AT 5V line.

Yes

Is -30V voltage supplied to the IC5001 pin 16? — No → Check the AT -30V line.

Yes

Is 4.0 MHz oscillation signal confirmed on the IC5001 pins 19 and 20? — No → Check FL5001, IC5001 and their periphery.

Yes

Check the signal lines of FIP DA, FIP CK, FIP CS of IC5001 and IC504. — No → Check or replace IC5001 and IC504.

Yes

Is the filament voltage supplied to both ends of pins 1, 2 and 61, 62 of fluorescent display tube? — No → Check the power circuit and D5001.

Yes

Check the fluorescent display tube and its periphery. — No → Check for damages such as crack on the fluorescent display tube.

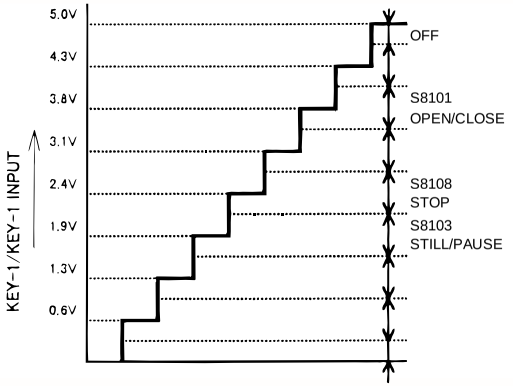
FLOW CHART NO.7

The key operation is disabled.

Is key switch contact and installation state normal? — No → Replace Key switch.

Yes

Is the control voltage input normally into the pins 95 and 96 of IC504?



FLOW CHART NO.8

Shuttle ring doesn't function.

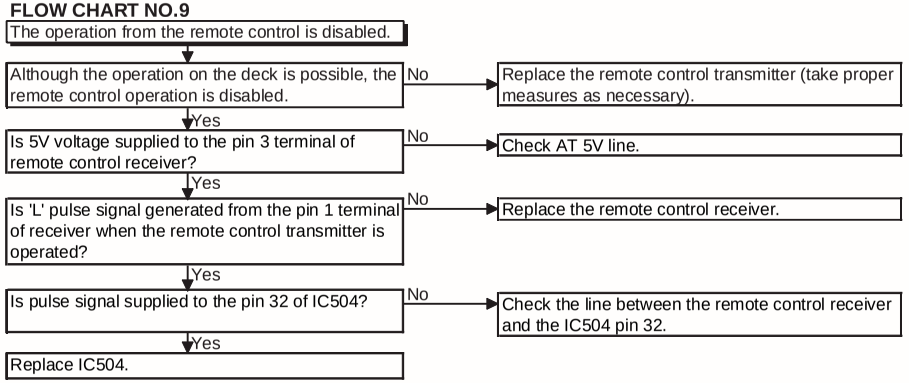
Is there a wrong point in the ring installation condition of shuttle switch and the switch itself? — No → It meets a symptom, it copes, or, part exchange.

Yes

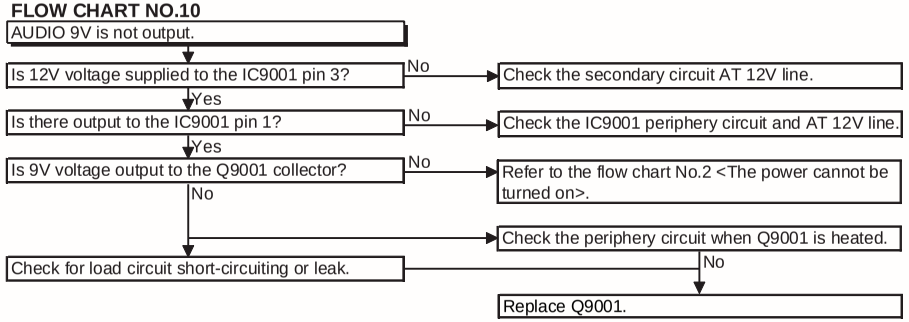
Is the control signal of 63 of IC504, 26 pin being inputted normally? (63pin→J1,26pin→J2)

Shuttle ring rotation direction	Shuttle control signal	Output wave shape
Clockwise direction	J2~GND	OFF / ON
	J1~GND	OFF / ON
Counterclockwise direction	J2~GND	OFF / ON
	J1~GND	OFF / ON

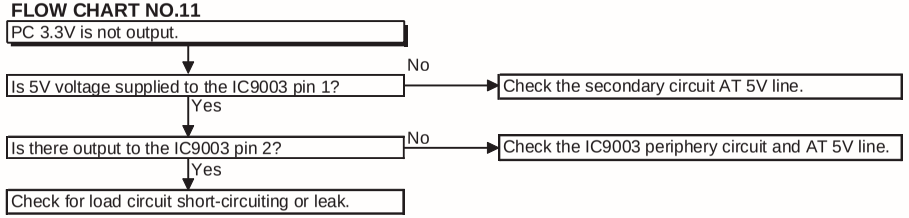
FLOW CHART NO.9



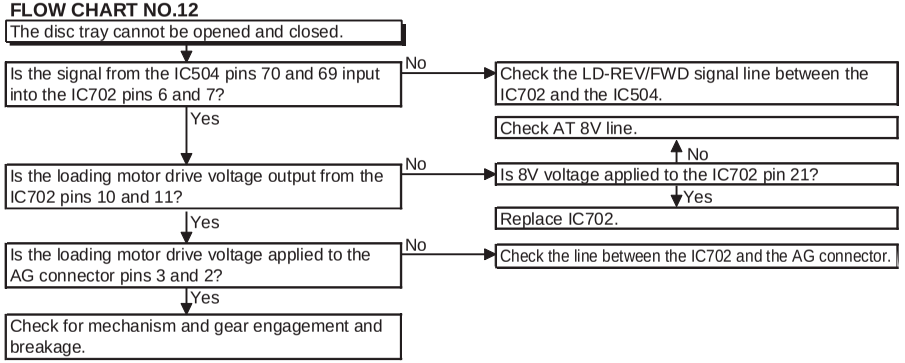
FLOW CHART NO.10



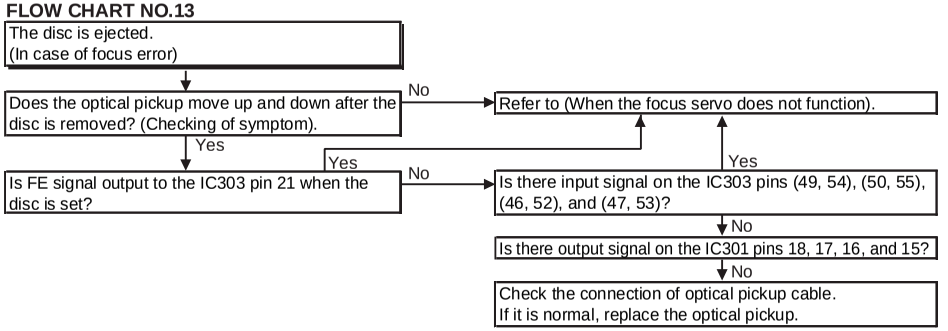
FLOW CHART NO.11



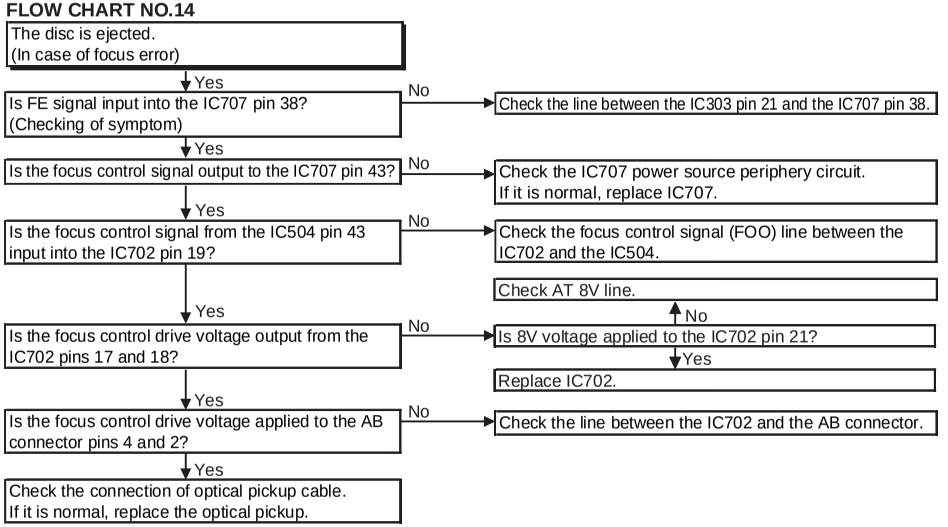
FLOW CHART NO.12



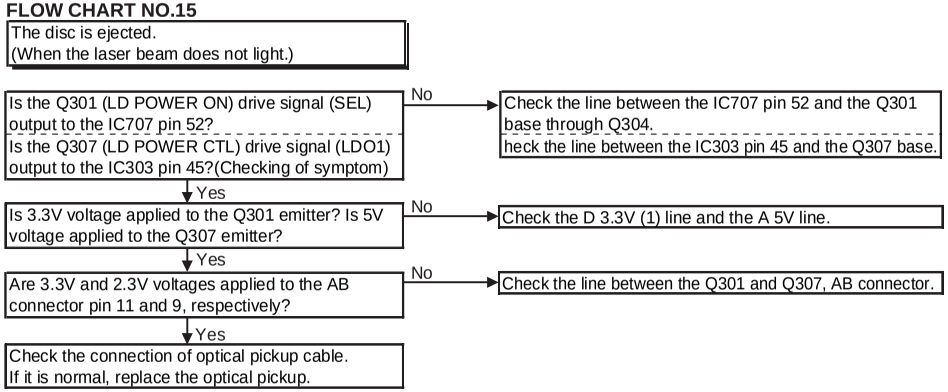
FLOW CHART NO.13



FLOW CHART NO.14



FLOW CHART NO.15



FLOW CHART NO.16

Both video and audio do not operate normally.
↓ Yes
Set the disc on the disc tray.
↓ Yes
Is it possible to hold normally the disc with the chuck? — No → Check the loading switch.
↓ Yes
Is the level of RF signal which is output from the IC303 pin 28 normal? — No → Check for contamination of objective lens of optical pickup.
↓ Yes
Replace the main PWB unit. — No → Replace the optical pickup unit.
↓ Yes
Check the video amplifier unit and the audio amplifier unit. (IC2002-3, IC801)

FLOW CHART NO.17

Both video and audio do not operate normally.(2)
Set the disc on the disc tray.
<Video system>
Are the video signals output to the pins of main unit connector CN801?
CN801 25Pin CVBS
CN801 27Pin C
CN801 29Pin Y
— No → Check the main unit. (IC201, Q202-7 periphery circuit)
↓ Yes
Are the video signals shown above input into the pins of IC2006?
IC2006 4Pin CVBS
IC2006 15Pin C
IC2006 14Pin Y
— No → Check the lines between the pins of main unit connector CN801 and the pins of IC2006.
CN801 25Pin → IC2006 4Pin CVBS
CN801 27Pin → IC2006 15Pin C
CN801 29Pin → IC2006 14Pin Y
↓ Yes
Is the video signal output to each pin of IC2006?
IC2006 5Pin CVBS
IC2006 12Pin S-Y
IC2006 2Pin S-C
— No → Make sure that the level of IC2006 pin 6 is "L" level.
↓ Yes
Check or replace IC2006.
Check the V-MUTE line.
↑ No
↓ Yes
Are the video signals output to the specific output terminals?
Is the composite video signal output to the VIDEO OUT terminal(J2001)? — No → Check the peripheral circuit of Cb/V DRIVE circuit IC2003 from the pin 5 of IC2006.
Is the luminance signal output to the S-OUT terminal (J2002)? — No → Check the peripheral circuit of S-YC DRIVE circuit IC2002 from the pin 12 of IC2006.
Is the chroma signal output to the S-OUT terminal (J2002)? — No → Check the peripheral circuit of S-YC DRIVE circuit IC2002 from the pin 2 of IC2006.

FLOW CHART NO.18

Both video and audio do not operate normally.(3)
Set the disc and play.
<Audio system>
Are the audio signals output to the pins of main unit connector CN801?
CN801 1Pin FRONT-L
CN801 3Pin FRONT-R
↓ Yes
Are the audio signals output to the specific output terminals?
Are the audio signals output to the FRONT-L/R OUT terminal (J2001)? — No → Check the peripheral circuit of AUDIO AMP. circuit IC6001 from the pin 1,3 of CN801.
↓ No
Check the main unit.(IC801 circuit)

FLOW CHART NO.19

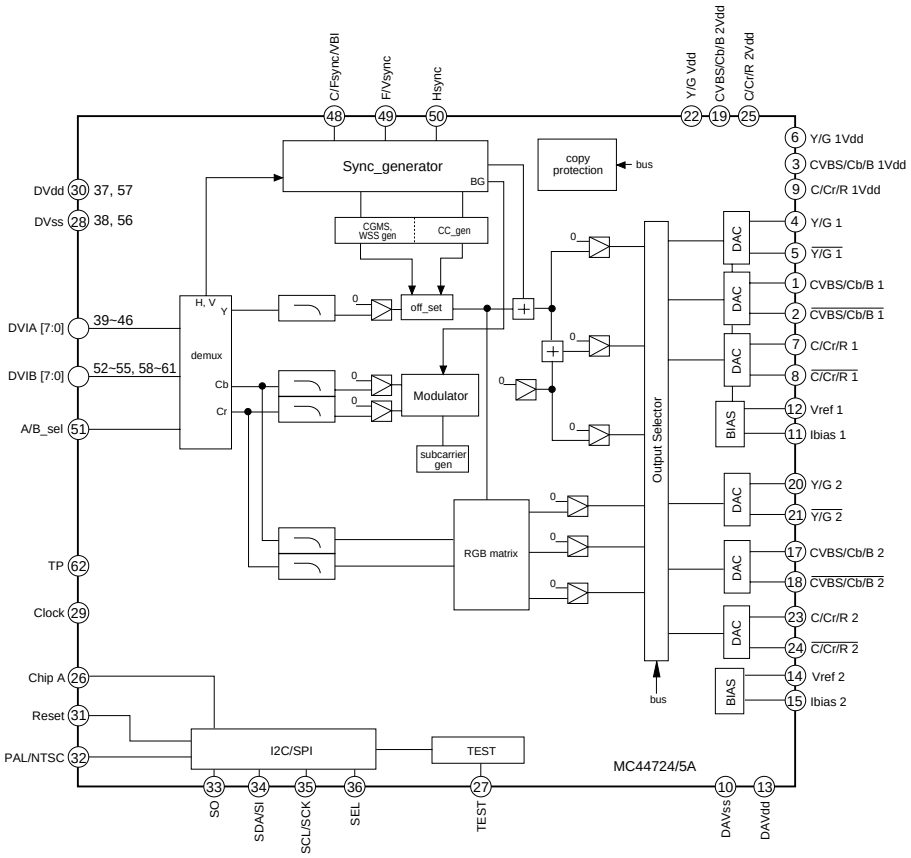
The signal is not output to 21PIN SCART. (The line output is OK.)
<Video system>
Are the video signals output to the pins of main unit connector CN801?
CN803 11Pin B-OUT, CN803 13Pin G-OUT
CN803 15Pin R-OUT
— No → Check the main unit.
(Make sure that the IC201, Q208-13, and IC2005 peripheral circuit and control signal V-MUTE, RGB CTL lines are on "L" level.)
↓ Yes
Is specific signal input into the following terminals?
Is the B-OUT signal input into the pin 5 of CN2303? — No → Check the line between the pin 11 of CN803 and the pin 5 of CN2303.
Is the G-OUT signal input into the pin 3 of CN2303? — Check the line between the pin 13 of CN803 and the pin 3 of CN2303.
Is the R-OUT signal input into the pin 1 of CN2303? — Check the line between the pin 15 of CN803 and the pin 1 of CN2303.
Is the 21P-Y signal input into the pin 7 of CN2303? — Check the line between the pin 12 of IC2006 and the pin 7 of CN2303.
Is the 21P-C signal input into the pin 9 of CN2303? — Check the line between the pin 2 of IC2006 and the pin 9 of CN2303.
Is the 21P-CVBS signal input into the pin 11 of CN2303? — Check the line between the pin 5 of IC2006 and the pin 11 of CN2303.
↓ Yes
When "RGB" is selected with the signal selection switch (SW2301)
(1) Is the B-OUTPUT signal output to the pin 7 of 21PIN SCART terminal (SC2201)? — No → Check the peripheral circuit of B/G DRIVE circuit IC2303, Q2306 from the pin 5 of CN2303.
(2) Is the G-OUTPUT signal output to the pin 11 of 21PIN SCART terminal (SC2201)? — No → Check the peripheral circuit of B/G DRIVE circuit IC2303, Q2304 from the pin 3 of CN2303.
(3) Is the R-OUTPUT signal output to the pin 15 of 21PIN SCART terminal (SC2201)? — No → Check the periphery of Q2305, Q2307, and Q2308.
↑ Yes
(4) Is the VIDEO-OUTPUT signal output to the pin 19 of 21PIN SCART terminal (SC2201)? — No → Is the R-OUT signal output to the pin 5 of SCART R/V DRIVE circuit IC2304?
↑ Yes
Is the R-OUTPUT signal output to the pin 6 of IC2302?
Is the CVBS signal output to the pin 5 of IC2302?
↓ Yes
Are the pins 7 and 12 of IC2302 on "L" level? — No → Is the VIDEO OUT signal output to the pin 4 of SCART R/V DRIVE circuit IC2304?
↓ No
Check the periphery of SCART R/V DRIVE circuit IC2304.
↓ Yes
When "S-VIDEO" is selected with the signal selection switch (SW2301)
(1) Is the C-OUTPUT signal output to the pin 15 of 21PIN SCART terminal (SC2201)? — No → Is the C-OUTPUT signal output to the pin 6 of IC2302?
(2) Is the Y-OUTPUT signal output to the pin 19 of 21PIN SCART terminal (SC2201)? — No → Is the 21P-Y signal output to the pin 5 of IC2302?
↓ Yes
Are the pins 7 and 12 of IC2302 on "H" level? — No → Is the Y-OUT signal output to the pin 4 of SCART R/V DRIVE circuit IC2304?
↓ No
Check the periphery of SCART R/V DRIVE circuit IC2304.
↓ Yes
Is the VIDEO-OUTPUT signal output to the pin 19 of 21PIN SCART terminal (SC2201) when "VIDEO" is selected with the signal selection switch (SW2301)? — No → Is the 21P VIDEO-OUTPUT signal output to the pin 5 of IC2302?
↓ Yes
Are the pins 7 and 12 of IC2302 on "L level? — No → Is the VIDEO OUT signal output to the pin 4 of SCART R/V DRIVE circuit IC2304?
↓ No
Check the periphery of SCART R/V DRIVE circuit IC2304.
Check the periphery of Q2301, Q2302, and Q2303.
↑ No
Is the C-OUT signal output toQ2301,Q2303 of emitter?
↑ No

11. IC FUNCTION LIST

11-1. IC201 MC44724A DIGITAL VIDEO ENCODER

Pin No.	Terminal name	I/O	Operation function
1	CVBS/Cb/B1	O	Analog composite video signal output or Cb or B signal output current drive (positive)
2	$\overline{\text{CVBS/Cb/B1}}$	O	Analog composite video signal output or Cb or B signal output current drive (negative)
3	CVBS/Cb/B1 Vdd		Power Supply for CVBS / Cb/B DAC1 circuit
4	Y/G 1	O	Analog luminance or G signal output current drive (positive)
5	$\overline{\text{Y/G 1}}$	O	Analog luminance or G signal output current drive (negative)
6	Y/G 1Vdd		Power Supply for Y/G DAC1 circuit
7	C/Cr/R 1	O	Analog chrominance signal output or Cr or R signal output current drive (positive)
8	$\overline{\text{C/Cr/R 1}}$	O	Analog chrominance signal output or Cr or R signal output current drive (negative)
9	C/Cr/R 1Vdd		Power Supply for C/Cr/R DAC1 circuit
10	DA Vss		Ground for DAC circuit
11	Ibias 1	O	Reference current for the 1st set of 3 DACs
12	VRef 1		Reference full scale voltage for the 1st set of 3 DACs
13	DA Vdd		Power Supply for DACs
14	VRef 2		Reference full scale voltage for the 2nd set of 3 DACs
15	Ibias 2	O	Reference current for 2nd set of the 3 DACs
16	NC		No connect to pin
17	CVBS/Cb/B2	O	Analog composite video signal output or Cb or B signal output current drive (positive)
18	$\overline{\text{CVBS/Cb/B2}}$	O	Analog composite video signal output or Cb or B signal output current drive (negative)
19	CVBS/Cb/B2 Vdd		Power Supply for CVBS / Cb/B DAC2 circuit
20	Y/G 2	O	Analog luminance or G signal output current drive (positive)
21	$\overline{\text{Y/G 2}}$	O	Analog luminance or G signal output current drive (negative)
22	Y/G Vdd		Power Supply for Y/G DAC2 circuit
23	C/Cr/R 2	O	Analog chrominance signal output or Cr or R signal output current drive (positive)
24	$\overline{\text{C/Cr/R 2}}$	O	Analog chrominance signal output or Cr or R signal output current drive (negative)
25	C/Cr/R 2Vdd		Power Supply for C/Cr/R DAC2 circuit
26	ChipA		I2C chip address select {0 : 40(hex)/41(hex) 1 : 1D(hex)/1E(hex)}
27	TEST	I	TEST pin (Ground)
28	DVss		Ground for Digital circuit
29	CLOCK	I	27MHz clock input
30	DVdd		Power Supply for Digital circuit
31	$\overline{\text{Reset}}$	I	Reset signal, active LOW
32	PAL/NTSC	I	NTSC/PAL select. This pin is sampledonly at Reset.(NTSC : Low PAL : High)
33	SO	z(O)	In SPI mode, serial data output / In I2C mode, grounded.
34	SDA/SI	I/O(I)	Serial data input, Open drain output / If SPI mode, serial data input
35	SCL/SCK	I	Serial clock
36	SEL	I/(I)	Connect to Ground / If SPI mode, this pin is chip select
37	DVdd		Power supply for Digital circuit
38	DVss		Ground for Digital circuit
39-46	DVIA7-0	I/O	8-bit Multiplexd Y/Cr/Cb 4:2:2 data (ITU Rec656/601) input (DVIA) or Multiplexd Y data (ITU-Rec656/601) input in 16-bit input mode
47	Vmute	I	Video mute on Reset (0: normal, 1: mute)
48	C/Fsync/VBI	I/O	Csync/Frame sync input/output
49	F/Vsync	I/O	Frame sync or Vertical sync input/output
50	Hsync	I/O	Horizontal sync input/output
51	A/B sel	I	Switch control for 8-bit x 2 Mutiplexed 4:2:2 data (ITU Rec656/601) input (DVIA) or (DVIB)
52-55	DVIB7-4	I/O	8-bit Multiplexed 4:2:2 data (ITU Rec656-601) input (DVIB), or Multiplexed Cr/Cb data (ITU Rec656/601) input in 16-bit input mode
56	DVss		Ground for Digital circuit
57	DVdd		Power Supply for Digital circuit
58-61	DVIB3-0	I/O	Multiplexed 4:2:2 data (ITU Rec656/601) input (DVIB), or Multiplexed Cr/Cb data (ITU Rec656/601) input in 16-bit input mode
62	TP	I/O	Test data input/output (Grounded)
63,64	NC		No connect to pin (Ground)

• Block Diagram



11-2. IC301 IX1461GE RF PRE AMP.

Pin No.	Terminal name	I/O	Operation function
1	EIN	I	RF signal input. Input of RF signal output of optical pickup.
2	GND1	–	Ground
3	S/DUAL	I	Single layer/dual layer selection signal input.
4	AIN	I	RF signal input. Input of RF signal output of optical pickup.
5	BIN	I	RF signal input. Input of RF signal output of optical pickup.
6	CIN	I	RF signal input. Input of RF signal output of optical pickup.
7	DIN	I	RF signal input. Input of RF signal output of optical pickup.
8	VrefIN	I	Reference voltage input. (2.1V)
9	FIN	I	RF signal input. Input of RF signal output of optical pickup.
10	GAINsel1	I	Amp gain selection input 1.
11	VCC1	–	Power terminal. (5.0V)
12	GAINsel2	I	Amp gain selection input 2.
13	FOUT	O	RF signal output. Input RF signal is current-voltage-converted and output.
14	EOUT	O	RF signal output. Input RF signal is current-voltage-converted and output.
15	DOUT	O	RF signal output. Input RF signal is current-voltage-converted and output.
16	COUT	O	RF signal output. Input RF signal is current-voltage-converted and output.
17	BOUT	O	RF signal output. Input RF signal is current-voltage-converted and output.
18	AOUT	O	RF signal output. Input RF signal is current-voltage-converted and output.
19	VCC2	–	Power terminal. (5.0V)
20	RFPOUT	O	Data read signal output. The same phase as MIXIN.
21	RFNOUT	O	Data read signal output. Reverse phase with respect to MIXIN.
22	MIXIN	I	Data read signal input.
23	MIXOUT	O	Data read signal output.
24	GND2	–	Ground

• Mode selection table

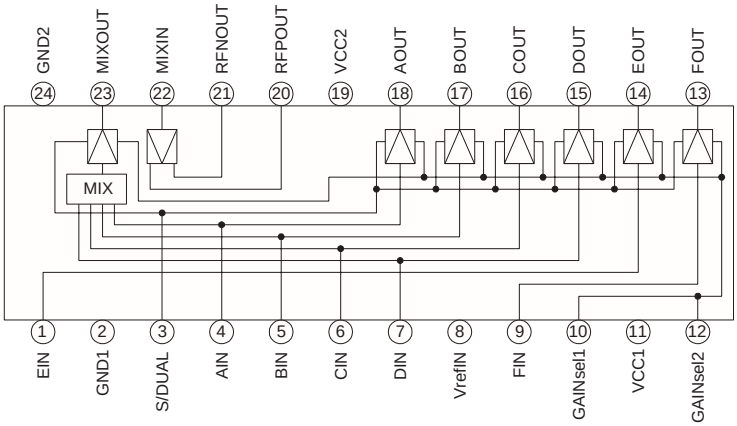
Single layer/dual layer selection

Layer	S/DSEL (Terminal 3)	Amp gain
Single	L, OPEN	0dB
Dual	H	+10dB

Amp. gain selection

GAINsel1 (Terminal 10)	GAINsel2 (Terminal 12)	Amp gain
L	L	+6dB
H, OPEN	L	-2dB
L	H, OPEN	+2dB
H, OPEN	H, OPEN	-6dB

• **Block Diagram**

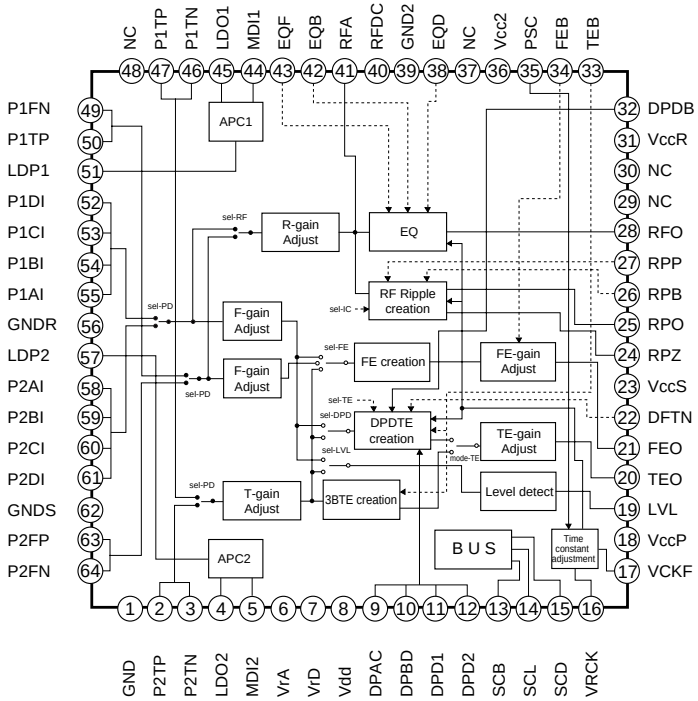


11-3. IC303 IX1517GE RF SIGNAL PROCESSOR

Pin No.	Terminal name	I/O	Operation function	Terminal DC Voltage(TYP.)	Remarks
1	GND	–	GND terminal.	–	
2	P2TP	I	TE+input (CD)	VrA	
3	P2TN	I	TE–input (CD)	VrA	
4	LDO2	O	Drive ouput	–	
5	MDI2	I	Monitor input	–	
6	VrA	O	Analog VREF	2.1[V]	
7	VrD	O	Digital VREF	–	Vdd 1/2
8	Vdd	I	Power terminal		4.2V (3.3V)
9	DPAC	–	DPD AC combination capacity 1	–	
10	DPBD	–	DPD AC combination capacity 2	–	
11	DPD1	–	DPD integral capacity 1	–	
12	DPD2	–	DPD integral capacity 2	–	
13	SCB	I	Control line (Bit clock)	2.2[V]	
14	SCL	I	Control line (Latch signal)	2.2[V]	
15	SCD	I	Control line (Sirial Data)	2.2[V]	
16	VRCK	I	Reference clock input	2.3[V]	When frequency is increased, the filters excepting the servo LPF are shifted to high frequency side.
17	VCKF	–	Capacity for time constant adjustment	–	
18	VccP	–	Power terminal	–	
19	LVL	O	Servo addition output	Vrd x (1/2)	
20	TEO	O	TE output	VrD	
21	FEO	O	FE output	VrD	
22	DFTN	I	DPD difect	–	Low DPD output: Mute
23	VccS	–	Power terminal (servo)	–	
24	RPZ	O	RF ripple center voltage	VrD	
25	RPO	O	RF ripple output	VrD	
26	RPB	O	RF ripple bottom	–	
27	RPP	O	RF ripple peak	–	
28	RFO	O	Equalizing RF output	2.3[V]	
29	NC	–	NC terminal	–	To be connected to GND
30	NC	–	NC terminal	–	To be connected to GND
31	VccR	–	Power terminal (RF)	–	
32	DPDB	I	Pit depth adjustment	VrD	When D PDB is raised, the A/B side delay increases.
33	TEB	I	TE balance	VrD	When TEB is raised, the TP side gain increases and the A+C side delay increases.
34	FEB	I	FE balance	VrD	When FEB is raised, the A+C (FP) side gain increases.
35	PSC	I	VRCK frequency division ON/OFF	–	High: Frequency division OFF
36	Vcc2	–	Power terminal	–	
37	NC	–	NC terminal	VrD	To be connected to VrD, or to GND through C
38	EQD	I	Group delay correction	VrD	When EQD is raised, the group delay increases at the right side.
39	GND2	–	GND terminal.	–	
40	RFDC	–	DC feedback capacity	–	

Pin No.	Terminal name	I/O	Operation function	Terminal DC Voltage(TYP.)	Remarks
41	RFA	O	RF total addition output	2.2[V]	
42	EQB	I	Boost adjustment	VrD	When EQB is raised, the boost increases.
43	EQF	I	Frequency adjustment	VrD	When EQF is raised, shift to the high frequency side occurs.
44	MDI1	I	Monitor input	–	
45	LDO1	O	Drive output	–	
46	P1TN	I	TE–input (DVD)	VrA	
47	P1TP	I	TE+input (DVD)	VrA	
48	NC	–	NC terminal	–	To be connected to GND
49	P1FN	I	FE–input (DVD)	VrA	
50	P1TP	I	FE+input (DVD)	VrA	
51	LDP1	I	APC polarity 1	–	Positive polarity when this terminal is connected to Vcc.
52	P1DI	I	D input (DVD)		
53	P1CI	I	C input (DVD)	VrA	
54	P1BI	I	B input (DVD)	VrA	
55	P1AI	I	A input (DVD)	VrA	
56	GNDR	–	GND terminal (RF)	–	
57	LDP2	I	APC polarity 2	–	Positive polarity when this terminal is connected to Vcc.
58	P2AI	I	A input (CD)	VrA	
59	P2BI	I	B input (CD)	VrA	
60	P2CI	I	C input (CD)	VrA	
61	P2DI	I	D input (CD)	VrA	
62	GNDS	–	GND terminal (Servo)	–	
63	P2FP	I	FE+input (CD)	VrA	
64	P2FN	I	FE–input (CD)	VrA	

• Block Diagram



11-4. IC401 IX1484GE 4M DRAM

Terminal	Terminal name	Function
10~13,16~20,9	A0~A8,A9R	Address input
8	RAS	Row address strobe
23	CAS	Column address strobe
1~5,24~27	DQ1~DQ8	Data input/Data output
22	OE	Output enable
7	WE	Light enable
1, 14	Vcc	Power (5V)
15, 28	Vss	Ground (0V)
6, 21	NC	Not connected

11-5. IC402 IX1474GE DEM/ECC (DVD)

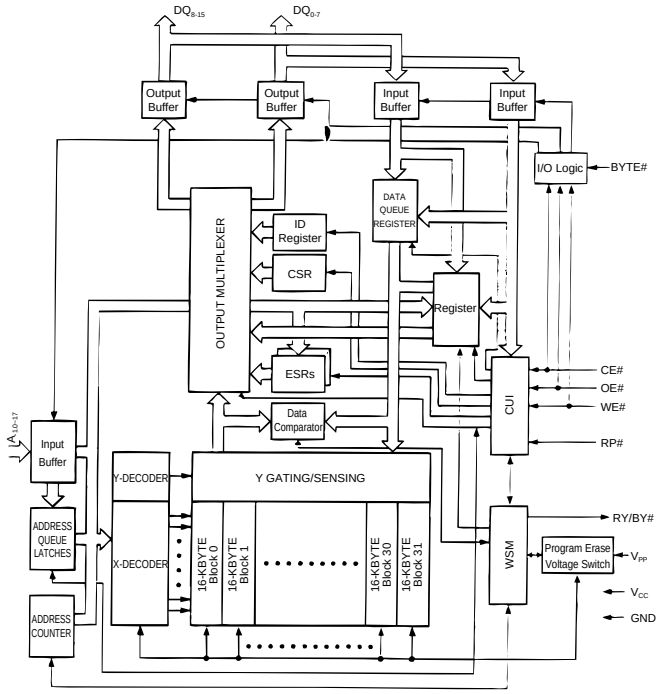
Pin No.	Terminal name	I/O	Operation function	Remarks
1	DPCK1	I	Signal processing reference clock input.	0.5-3.3Vp-p Feedback resistor built in.
2	DVDD3	–	Digital power. (3.3V)	For logic cell
3	SVCK1	I	Servo reference clock input. (Oscillation circuit input terminal)	3.3V-I/F Feedback resistor built in.
4	SVCK0	O	Servo reference clock output. (Oscillation circuit input terminal)	
5	DVSS	–	Digital power. (0V)	For logic cell
6	DVDD2	–	Digital power. (3.3V)	For logic cell
7	N.C.	–	User use prohibited.	Open
8	HDWR	I	MPU write signal.	TTL level
9	HDRD	I	MPU read signal.	TTL level
10	ECCCS	I	MPU chip selection.	TTL level
11	D8	I/O	MPU data bus.	TTL level
12	D9	I/O	MPU data bus.	TTL level
13	D10	I/O	MPU data bus.	TTL level
14	D11	I/O	MPU data bus.	TTL level
15	D12	I/O	MPU data bus.	TTL level
16	D13	I/O	MPU data bus.	TTL level
17	D14	I/O	MPU data bus.	TTL level
18	D15	I/O	MPU data bus.	TTL level
19	DVSS	–	Digital power. (0V)	For I/O cell
20	DVDD5	–	Digital power. (5V)	For I/O cell
21	HINT	O	MPU interruption signal. (Occurrence of interruption = “L”)	OPEN DRAIN
22	HA0	I	MPU address bus.	TTL level
23	HA1	I	MPU address bus.	TTL level
24	PLCK	I/O	Read channel clock input/output terminal.	
25	ED0	–	User use is prohibited (N.C.) since it is for shipping adjustment.	Open
26	ED1	–		
27	ED2	–		
28	ED3	–		
29	ED4	–		
30	ED5	–		
31	ED6	–		
32	ED7	–		
33	TEST	I	For shipping adjustment.	Set to “L”
34	PDON	O	PLL phase error signal output. (Negative polarity)	
35	PDOP	O	PLL phase error signal output. (Positive polarity)	
36	RLLD	O	RLL detection result output.	
37	LPFN	I	PLL loop filter amp. reverse input.	
38	LPFO	O	PLL loop filter amp. output.	
39	VCOF	O	VCO filter terminal.	
40	SLCO	O	Built-in comparator reference voltage output terminal.	
41	AVSS	–	Analog power. (0V)	
42	AVR	O	Non-PLL system analog reference potential. (1.65V)	
43	VRC	–	Resistance division point potential. (For analog reference potential generation: 1.65)	
44	PVR	O	PLL system analog reference potential. (1.65V)	
45	AVDD	–	Analog power. (3.3V)	
46	RVR2	–	2nd reference voltage. (For capacitor connection)	
47	RVDD	–	Exclusive-use power terminal. (3.3V)	
48	RFIN	I	RF signal input.	
49	RVSS	–	Exclusive-use power terminal. (0V)	
50	RVR1	–	1nd reference voltage. (For capacitor connection)	
51	DVR	I	DMO reference potential. (1.65V recommended)	
52	DMO	O	Disc equalizer output for DVD. (Triple value PWM + HiZ)	
53	RASN	O	External RAM row address selection. (Negative logic)	
54	CASN	O	External RAM row address selection. (Negative logic)	

Pin No.	Terminal name	I/O	Operation function	Remarks
55	MOEN	O	External RAM output permission signal.	
56	MWEN	O	External RAM read/write selection.	
57	DVSS	–	Digital power. (0V)	For logic cell
58	DVDD3	–	Digital power. (3.3V)	For logic cell
59	MA9	O	External RAM address bus.	
60	MA8	O	External RAM address bus.	
61	MA7	O	External RAM address bus.	
62	MA6	O	External RAM address bus.	
63	MA5	O	External RAM address bus.	
64	MA4	O	External RAM address bus.	
65	MA3	O	External RAM address bus.	
66	MA2	O	External RAM address bus.	
67	MA1	O	External RAM address bus.	
68	MA0	O	External RAM address bus.	
69	DVSS	–	Digital power. (0V)	For I/O cell
70	DVDD5	–	Digital power. (5V)	For I/O cell
71	MD7	I/O	External RAM data bus.	TTL level
72	MD6	I/O	External RAM data bus.	TTL level
73	MD5	I/O	External RAM data bus.	TTL level
74	MD4	I/O	External RAM data bus.	TTL level
75	MD3	I/O	External RAM data bus.	TTL level
76	MD2	I/O	External RAM data bus.	TTL level
77	MD1	I/O	External RAM data bus.	TTL level
78	MD0	I/O	External RAM data bus.	TTL level
79	SD7	O	MPEG data output.	
80	SD6	O	MPEG data output.	
81	SD5	O	MPEG data output.	
82	SD4	O	MPEG data output.	
83	DVSS	–	Digital power. (0V)	For logic cell
84	DVDD3	–	Digital power. (3.3V)	For logic cell
85	SD3	O	MPEG data output.	
86	SD2	O	MPEG data output.	
87	SD1	O	MPEG data output.	
88	SD0	O	MPEG data output.	
89	SERR	O	MPEG data reliability flag. (Data error: “L”)	
90	SOSO	O	MPEG output sector sync signal. (Sector top: “L”)	
91	SVAL	O	MPEG data effective flag. (Effective state: “L”)	
92	SDCK	O	MPEG data transfer clock.	
93	DVSS	–	Digital power. (0V)	For logic cell
94	SREQ	I	MPEG data request flag. (Request state: “L”)	TTL level
95	RSTN	I	Hard reset input. (Reset state: “L”)	
96	DVDD3	–	Digital power. (3.3V)	For logic cell
97	STDA	O	Operation state monitor data. (Output synchronizing with SDCK fall)	Common with PWM.
98	STCK	O	Operation state monitor sync signal. (Data top bit: “L”)	Common with PWM.
99	UPWM	O	General-use PWM output.	4mA, 5V-I/F
100	DVSS	–	Digital power. (0V)	For logic cell

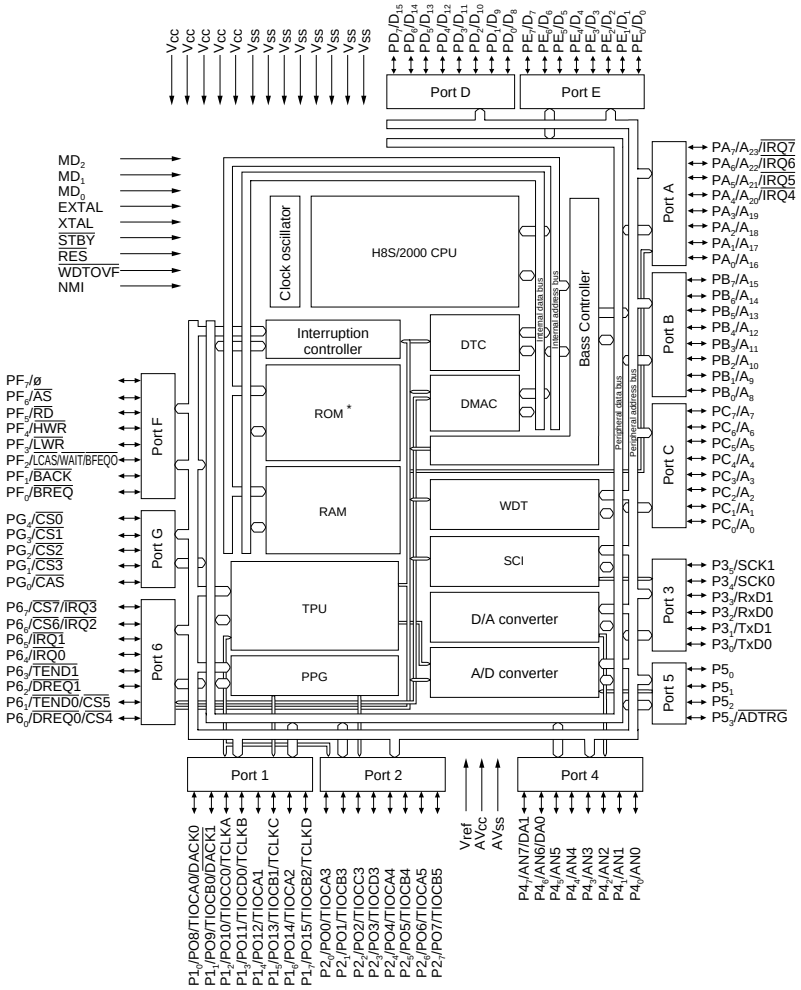
11-6. IC501 IX1539GE FLASH

Symbol	Type	Name and function
DQ_{15}/A_{-1}	Input	Byte selection address: When the device is in the x8 mode, the low or high order byte is selected. It is not used in the x16 mode. (If BYTE# is high, DQ_{15}/A_{-1} input circuit does not operate.)
A_0-A_{12}	Input	Word selection address: Selection of one word of 16k byte block. These addresses are latched during data wiring operation.
A_{13}-A_{17}	Input	Block selection address: Selection of 1/32 erase block. These addresses are latched during data writing, erasing and lock block operation.
DQ_0-DQ_7	Input/Output	Low order byte data input/output: Command user interface writing cycle data and command input. Various data read memory identifier and status data output Chip nonselection or output disable: Float state
DQ_8-DQ_{15}	Input/Output	High order byte data input/output: The function is the same as that of low order byte data input/output. Operative only in x16 mode. x8 mode: Float state DQ_{15}/A_{-1} is address.
CE#	Input	Chip enable: Device control logic, input buffer, decoder and sense amp. are activated. Chip becomes active only when CE# is “Low”.
RP#	Input	Reset/Power down: If RP# is set to “Low”, the control circuit is initialized when power is turned on. Hence, the RP#pin is set to “Low”. When power is turned on or off or in case of fluctuation it is kept at “Low” so as to protect data from noise. When RP# is in “Low” state, the device is in deep power down state. 480 ns is required to recover from the deep power down state. If the RP# pin becomes “Low”, the whole chip operation is interrupted and reset. After recovery the device is set to array read state.
OE#	Input	Output enable: When OE# is set to “Low”, data is output from the DQ pin. When OE# is set to “High”, the DQ pin is set to float state.
WE#	Input	Write enable: Command user interface, data Q register and address Q latch access is controlled. In “Low” state WE# becomes active. At rise edge the address and data are fetched.
RY/BY#	Output	Ready/busy: The state of internal write state machine is output. In “Low” state it is indicated that the write state machine is in operation. If the write state machine waits for next operation instruction, erase is suspended or it is in deep power down state, the RY/BY# pin is in float state.
BYTE#	Input	Byte enable: When BYTE# is set to “Low”, the device is set to the x8 mode. At this time the DQ_8-DQ_{15} pin becomes float state. Address A_{-1} selects high order/low order byte. When BYTE# is “High”, the device is set to the x16 mode. The A_{-1} input circuit is disabled.
Vpp		Write/erase power supply: 5.0 ± 0.5V is applied during writing/erasing.
Vcc		Device power supply: 5.0 ± 0.5V
GND		Ground
NC		Nonconnection

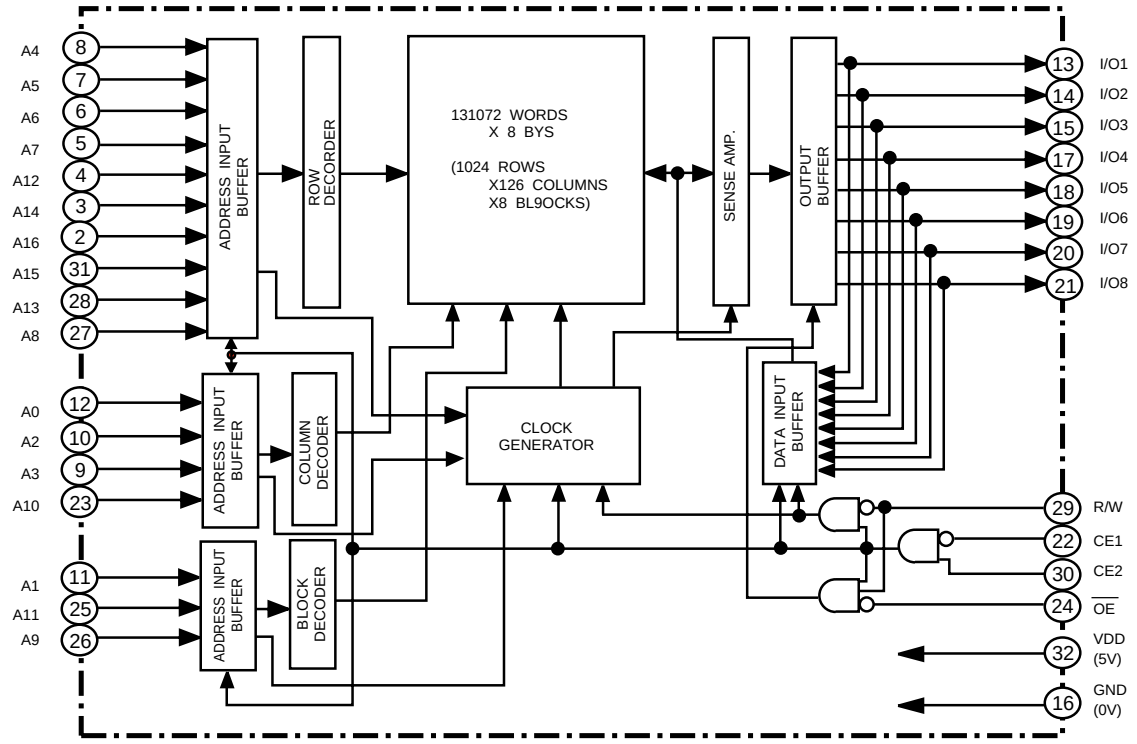
• Block Diagram



11-7. IC504 IX1478GE SYSCON



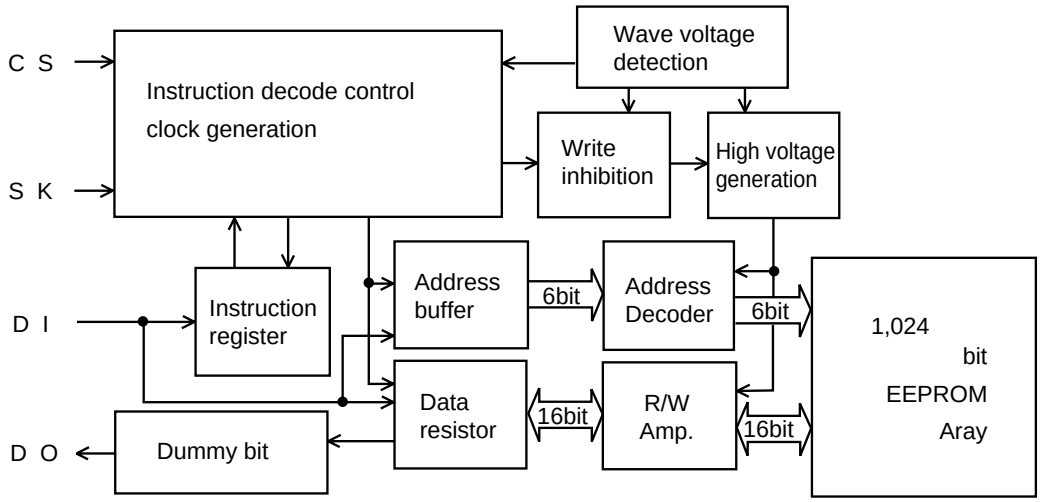
11-8. IC506 M51008BF 1M SRAM



11-9. IC507 BR93L46F EEPROM

Terminal	Terminal name	In/Output	Function
2	VCC	–	Power
7	GND	–	All input/output reference voltage, 0V
3	CS	Input	Tip select input
4	CLK	Input	Sirial clock input
5	DIN	Input	Start bit, operation code, address and serial data input
6	OCNT	Output	Serial data output, READY/BUSY internal status indication output

• Block Diagram

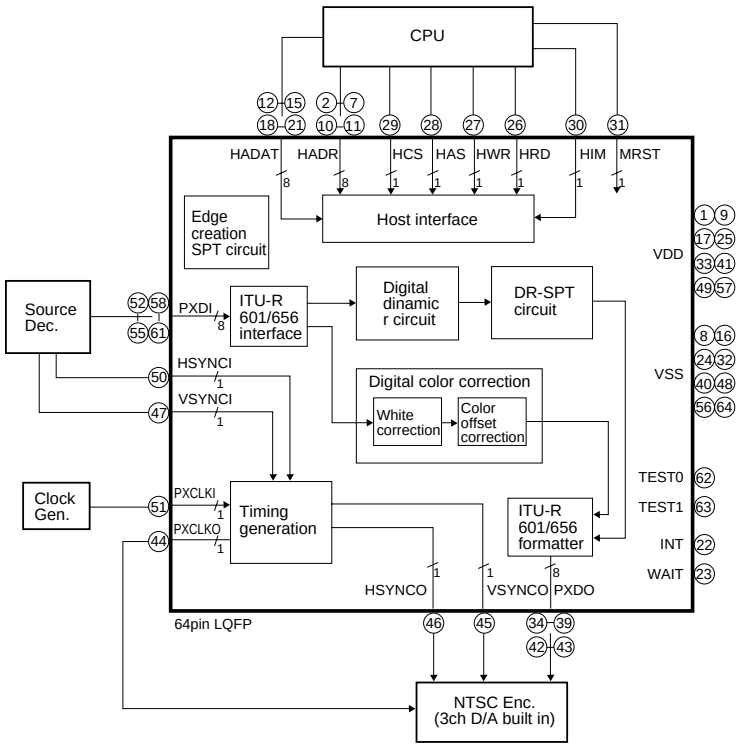


11-10. IC508 IX1516GE GAMMA S-P-TONE

Terminal	Terminal name	In/Output	Function
1	VDD	–	Digitan power +3.3V
2	HADR (0)	Input	CPU Address bus
3	HADR (1)	Input	CPU Address bus
4	HADR (2)	Input	CPU Address bus
5	HADR (3)	Input	CPU Address bus
6	HADR (4)	Input	CPU Address bus
7	HADR (5)	Input	CPU Address bus
8	VSS	–	Digital GND
9	VDD	–	Digitan power +3.3V
10	HADR (6)	Input	CPU Address bus
11	HADR (7)	Input	CPU Address bus
12	HADAT (0)	Input	CPU Data bus
13	HADAT (1)	Input	CPU Data bus
14	HADAT (2)	Input	CPU Data bus
15	HADAT (3)	Input	CPU Data bus
16	VSS	–	Digital GND
17	VDD	–	Digitan power +3.3V
18	HADAT (4)	Input	CPU Data bus
19	HADAT (5)	Input	CPU Data bus
20	HADAT (6)	Input	CPU Data bus
21	HADAT (7)	Input	CPU Data bus
22	INT	Input	CPU Data bus
23	WAIT	Input	CPU Data bus
24	VSS	–	Digital GND
25	VDD	–	Digitan power +3.3V
26	HRD	Input	CPU read signal
27	HWR	Input	CPU write signal
28	HAS	Input	CPU address strobe signal
29	HCS	Input	CPU tip select signal
30	HIM	Input	CPU bus control selection signal (I/M mode = H/L)

Terminal	Terminal name	In/Output	Function
31	MRST	Input	Reset signal
32	VSS	–	Digital GND
33	VDD	–	Digital power +3.3V
34 35 36 37 38 39	PXDO (0) PXDO (1) PXDO (2) PXDO (3) PXDO (4) PXDO (5)	Output Output Output Output Output Output	Pixel data output 8-bit parallel video data conforming to ITU-R BT.601 and BT.656 standard (Cb/Y/Cr/Y) MSB=PXDO(7), LSB=PXDO(0)
40	VSS	–	Digital GND
41	VDD	–	Digital power +3.3V
42 43	PXDO (6) PXDO (7)	Output Output	
44	PXCLKO	Output	Reference clock output for pixel data. 27 MHz
45	VSYNCO	Output	Vertical sync signal output
46	HSYNCO	Output	Horizontal sync signal output
47	VSYNCI	Input	Vertical sync signal output
48	VSS	–	Digital GND
49	VDD	–	Digital power +3.3V
50	HSYNCI	Input	Horizontal sync signal output
51	PXCLKI	Input	Reference clock output for pixel data. 27 MHz
52 53 54 55	PXDI (0) PXDI (1) PXDI (2) PXDI (3)	Input Input Input Input	Pixel data output 8-bit parallel video data conforming to ITU-R BT.601 and BT.656 standard (Cb/Y/Cr/Y) MSB=PXDI(7), LSB=PXDI(0)
56	VSS	–	Digital GND
57	VDD	–	Digital power +3.3V
58 59 60 61	PXDI (4) PXDI (5) PXDI (6) PXDI (7)	Input Input Input Input	
62	TEST0	Input	Test terminal
63	TEST1	Input	Test terminal
64	VSS	–	Digital GND

• Block Diagram

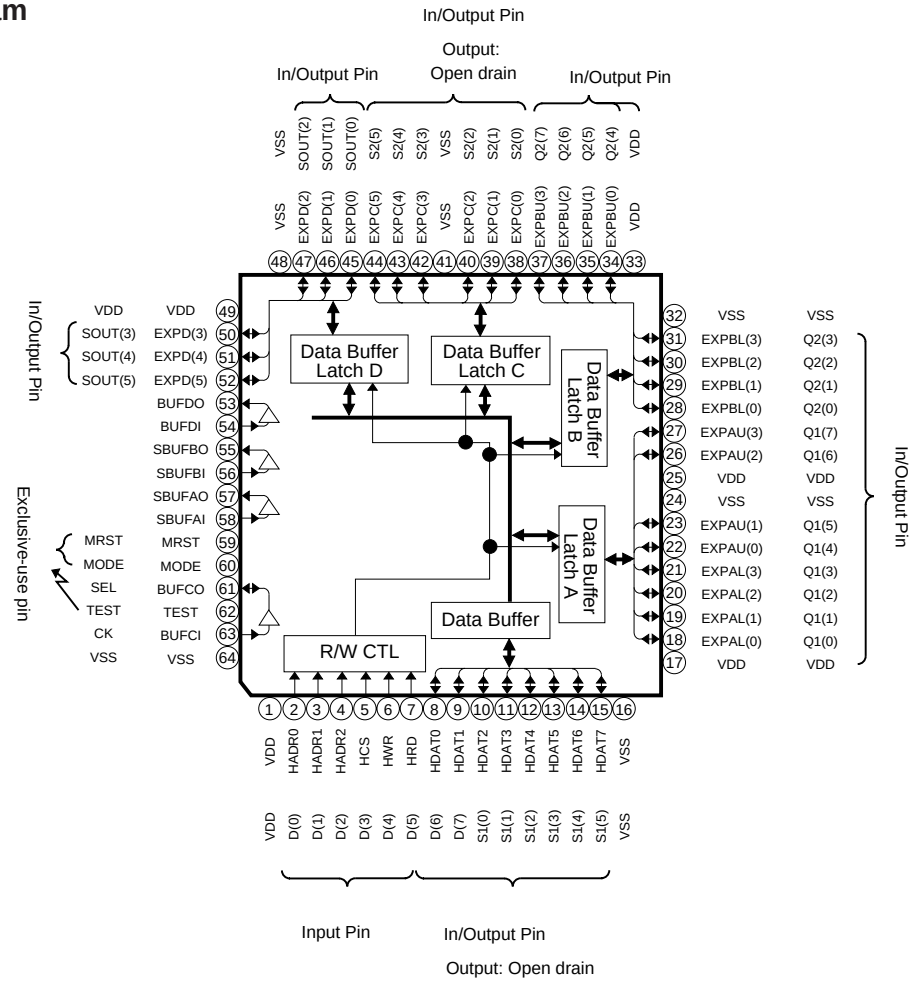


11-11. IC512 IX1535GE HOST I/F

Terminal	Terminal name	In/Output	Function
1	VDD	–	Power +3.3V
2	HADR0	Input	CPU Address bus
3	HADR1	Input	CPU Address bus
4	HADR2	Input	CPU Address bus
5	HCS	Input	CPU Tip select
6	HWR	Input	CPU Write signal
7	HRD	Input	CPU Read signal
8	HDAT0	In/Output	CPU Data bus
9	HDAT1	In/Output	CPU Data bus
10	HDAT2	In/Output	CPU Data bus
11	HDAT3	In/Output	CPU Data bus
12	HDAT4	In/Output	CPU Data bus
13	HDAT5	In/Output	CPU Data bus
14	HDAT6	In/Output	CPU Data bus
15	HDAT7	In/Output	CPU Data bus
16	VSS	–	Digital GND
17	VDD	–	Power +3.3V
18	EXPAL (0)	In/Output	General-use input/output terminal Gr.A
19	EXPAL (1)	In/Output	General-use input/output terminal Gr.A
20	EXPAL (2)	In/Output	General-use input/output terminal Gr.A
21	EXPAL (3)	In/Output	General-use input/output terminal Gr.A
22	EXPAU (0)	In/Output	General-use input/output terminal Gr.A
23	EXPAU (1)	In/Output	General-use input/output terminal Gr.A
24	VSS	–	Digital GND
25	VDD	–	Power +3.3V
26	EXPAU (2)	In/Output	General-use input/output terminal Gr.A
27	EXPAU (3)	In/Output	General-use input/output terminal Gr.A
28	EXPBL (0)	In/Output	General-use input/output terminal Gr.B
29	EXPBL (1)	In/Output	General-use input/output terminal Gr.B
30	EXPBL (2)	In/Output	General-use input/output terminal Gr.B
31	EXPBL (3)	In/Output	General-use input/output terminal Gr.B
32	VSS	–	Digital GND
33	VDD	–	Power +3.3V
34	EXPBU (0)	In/Output	General-use input/output terminal Gr.B
35	EXPBU (1)	In/Output	General-use input/output terminal Gr.B
36	EXPBU (2)	In/Output	General-use input/output terminal Gr.B
37	EXPBU (3)	In/Output	General-use input/output terminal Gr.B
38	EXPC (0)	In/Output	General-use input/output terminal Gr.C
39	EXPC (1)	In/Output	General-use input/output terminal Gr.C
40	EXPC (2)	In/Output	General-use input/output terminal Gr.C
41	VSS	–	Digital GND
42	EXPC (3)	In/Output	General-use input/output terminal Gr.C
43	EXPC (4)	In/Output	General-use input/output terminal Gr.C
44	EXPC (5)	In/Output	General-use input/output terminal Gr.C
45	EXPD (0)	In/Output	General-use input/output terminal Gr.D
46	EXPD (1)	In/Output	General-use input/output terminal Gr.D
47	EXPD (2)	In/Output	General-use input/output terminal Gr.D
48	VSS	–	Digital GND
49	VDD	–	Power +3.3V
50	EXPD (3)	In/Output	General-use input/output terminal Gr.D
51	EXPD (4)	In/Output	General-use input/output terminal Gr.D
52	EXPD (5)	In/Output	General-use input/output terminal Gr.D
53	BUFDO	Output	Buffer output D
54	BUFDI	Input	Buffer input D
55	SBUFBO	Output	Schmidt buffer output B
56	SBUFBI	Input	Schmidt buffer input B
57	SBUFAO	Output	Schmidt buffer output A
58	SBUFAI	Input	Schmidt buffer input A
59	MRST	Input	Reset terminal
60	MODE	Input	Mode selection terminal
61	BUFCO	In/Output	Buffer output C
62	TEST	Input	Test terminal (for Epson)
63	BUFCI	Input	Buffer input C
64	VSS	–	Digital GND

Pin1~15..... There is a possibility of simultaneous change. Operating frequency: Approx. 10 MHz
Pin18~47 ..... There is a possibility of simultaneous change.(Static signal) Operating frequency: Approx. 1 MHz
Pin50~57 ..... There is almost no possibility of simultaneous change. Operating frequency: Approx. 1 MHz
Pin63..... Not used

• Block Diagram



11-12. IC601 IX1521GE SOURCE DECODER

Pin No.	Pin name	Type	Direction	Function
Microcomputer interface				
22 24-26	HA[3:0]	I	I	Address bus input for microcomputer connection. Used for register access and so on
27	HWR# (HR/W#)	I	I	HTYPE = L It works as HR/W#(read/write) input terminal for connection to Motorola type microcomputer. HTYPE = H It works as HWR# (write) input terminal for connection to general purpose microcomputer.
29	HCS#	I	I	Chip select input for connection to microcomputer
30	HRD# (HDS#)	I	I	HTYPE = L It works as HDS#(data strobe) input terminal for connection to Motorola type microcomputer. HTYPE = H It works as HRD# (read) input terminal for connection to general purpose microcomputer.
31	HRDY	3-S	O	Bit stream input ready output terminal If the bit stream is input from microcomputer, the terminal is bored. For 3-state output, connect the pull-up resistor. HRDY = L Bit stream can not be input. HRDY = H The number of bytes which are set by CodBurstLen parameter can be transferred from the microcomputer. During the time from transfer start of the number of set bytes to transfer end, the terminal varies in 3 states.

Microcomputer interface terminal list

Pin No.	Pin name	Type	Direction	Function
Microcomputer interface				
32	HACK# (HR/W#)			HTYPE = L It works as HACK# (acknowledge) output terminal for connection to Motorola type microcomputer. It can be used as the weight terminal for connection to the general pur pose microcomputer. For 3-state output, connect the pull-up resistor.
34	HIRQ#	3-S	O	Interrupt request. If interrupt status register is read, interrupt is masked or device is reset, the signal is deasserted. For 3-state output, connect the pull-up resistor.
35	HWID	I	I	The bus width of the microcomputer interface If the device is worked as CD-G decoder or CD-DSP is connected, select the 8-bit bus mode. Fix it before power up. L=8bit bus mode H=16bit bus mode
36	HORD	I	I	When HWID is H (16-bit bus MODE), byte order is set. Setting is valid only when HWID is H. Fix it before power up. L=HD [15:8] is regarded as m.s. byte. (Motorola type) H=HD [7:0] is regarded as m.s. byte. (Intel type)
37	HTYPE	I	I	Bus type of microcomputer interface is set. Fix it before power up. L=Motorola type H=General purpose type
141	RESET#	I	I	RESET is input.
142	IDLE	3-S	O	It is output to indicate the idle state.

Microcomputer / CD·subcode interface terminal list

Pin No.	Pin name	Type	Direction	Function
Microcomputer interface / CD·subcode interface				
3	HD15 (CDERR)	3-S (I)	I/O (I)	When 16-bit bus width is selected, (HWID=low) It works as the microcomputer data bus of 15th bit. When 8-bit bus width is selected, (HWID=high) It works as the terminal to input bit clock from DC-DSP.
4	HD14 (CDFRM)	3-S (I)	I/O (I)	When 16-bit bus width is selected, (HWID=low) It works as the microcomputer data bus of 14th bit. When 8-bit bus width is selected, (HWID=high) It works as the terminal to input the stream/PCM data from CD-DSP.
5	HD13 (CDDAT)	3-S (I)	I/O (I)	When 16-bit bus width is selected, (HWID=low) It works as the microcomputer data bus of 13th bit. When 8-bit bus width is selected, (HWID=high) It works as the terminal to input frame synchronous signal from CD-DSP.
6	HD12 (CDCLK)	3-S (I)	I/O (I)	When 16-bit bus width is selected, (HWID=low) It works as the microcomputer data bus of 12th bit. When 8-bit bus width is selected, (HWID=high) It works as the terminal to input error signal to CD-DSP.
7	HD11 (SCCLK)	3-S (O)	I/O (O)	When 16-bit bus width is selected, (HWID=low) It works as the microcomputer data bus of 11th bit. When 8-bit bus width is selected, (HWID=high) It works as the terminal to output the subcode reading clock to the subcode interface of CD-DSP.
9	HD10 (SCDAT)	3-S (I)	I/O (I)	When 16-bit bus width is selected, (HWID=low) It works as the microcomputer data bus of 10th bit. When 8-bit bus width is selected, (HWID=high) It works as the terminal to input subcode data from subcode interface of CD-DSP.

General port terminal list

Pin No.	Pin name	Type	Direction	Function
General port				
2	GPSI	I	I	General purpose terminal.
122-123	GPAIO[1:0]	3-S	I/O	General input/output terminal. After resetting, it becomes the input direction.
159	GPSO	O	O	General output terminal.

Microcomputer / CD·subcode interface terminal list

Pin No.	Pin name	Type	Direction	Function
Microcomputer interface / CD·subcode interface				
10	HD9 (SCSYN)	3-S (I)	I/O (I)	When 16-bit bus width is selected, (HWID=low) It works as the microcomputer data bus of 9th bit. When 8-bit bus width is selected, (HWID=high) It works as the terminal to input the subcode synchronous signal from the subcode interface of CD-DSP.
11	HD8 (SCFRM)	3-S (I)	I/O (I)	When 16-bit bus width is selected, (HWID=low) It works as the microcomputer data bus of 9th bit. When 8-bit bus width is selected, (HWID=high) It works as the terminal to input the frame synchronous signal from the subcode interface of CD-DSP.
12 14-17 19-21	HD[7:0]	3-S	I/O	It works as the microcomputer bus of bits 7 thru 0.

PLL interface terminal list

Pin No.	Pin name	Type	Direction	Function
PLL interface				
126	GCLK1	I	I	Test terminal. Don't connect it.
128	XO	O	O	If quartz oscillator is connected to GCLK terminal, connect the other terminal of quartz oscillator to this pin.
129	GCLK	I	I	Master clock input terminal of device Input 27 MHz.
135, 137	PLLGFG[1:0]	I	I	PLL is set. Before power-up, fix it.
136	PLLCA	–	–	External capacitor terminal for PLL.

Video/OSD interface terminal list

Pin No.	Pin name	Type	Direction	Function
Video interface · OSD interface				
102	C7 (N.C.)	3-S (3-S)	O (O)	Video8 register = 0 Color difference signal output terminal of 7th bit. Video8 register = 1 The terminal becomes invalid.
104	C6 (N.C.)	3-S (3-S)	O (O)	Video8 register = 0 Color difference signal output terminal of 6th bit. Video8 register = 1 The terminal becomes invalid.
105	C5 (N.C.)	3-S (3-S)	O (O)	Video8 register = 0 Color difference signal output terminal of 5th bit. Video8 register = 1 The terminal becomes invalid.
106	C4 (OSDPLT)	3-S (3-S)	O (I)	Video8 register = 0 Color difference signal output terminal of 4th bit. Video8 register = 1 Input terminal to select pallet table of OSD. For OSDPLT=low, pallet table 0 is used. For OSDPLT=high, pallet table 1 is used.
107	C3 (OSDPEL3)	3-S (3-S)	O (I)	Video8 register = 0 Color difference signal output terminal of 3th bit. Video8 register = 1 It works as the OSD pallet data input terminal of 3rd bit.

Video/OSD interface terminal list

Pin No.	Pin name	Type	Direction	Function
Video interface · OSD interface				
109	C2 (OSDPEL2)	3-S (3-S)	O (I)	Video8 register = 0 Color difference signal output terminal of 2th bit. Video8 register = 1 It works as the OSD pallet data input terminal of 2rd bit.
110	C1 (OSDPEL1)	3-S (3-S)	O (I)	Video8 register = 0 Color difference signal output terminal of 1th bit. Video8 register = 1 It works as the OSD pallet data input terminal of 1rd bit.
111	C0 (OSDPEL0)	3-S (3-S)	O (I)	Video8 register = 0 Color difference signal output terminal of 0th bit. Video8 register = 1 It works as the OSD pallet data input terminal of 0rd bit.

Video interface terminal list

Pin No.	Pin name	Type	Direction	Function
Video interface				
84	VCLK	3-S	I/O	Clock gained by dividing VCLK x 2 signal into halves.
85	VMASTER	I	I	Input terminal to switch video master/slave. VMASTER=L Video master mode. Video synchronizing signal and video clock are internally generated. HTYPE=H Video slave mode. Video synchronizing signal and video clock are re ceived from the external.
87	VDEN#	I	I	Video output enable input terminal VDEN#=H Y [7:0] and C [7:0] terminals are made to be disable (3-state). VDEN#=L Y [7:0] and C [7:0] terminals are made to be enable. Note: C [7:0] terminal is the multiplexed terminal as OSDPLT [3:0] and so on. For Video8 register = 0, VDEN# terminal is valid for Y [7:0] alone.
88	CBLANK	O	O	Composite blank output terminal. Horizontal/vertical blanking area and polarity are programmable.
89	VSYNC	3-S	I/O	Input/output terminal of vertically synchronous signal. Polarity and synchronous signal length are programmable.
90	HSYNC	3-S	I/O	Input/output terminal of horizontally synchronous signal.Polarity and synchronous signal length are programmable.
91	FI	3-S	I/O	Input/output terminal for identification of even/odd number field. Polarity is programmable.
92 94-97 99-101	Y[7:0]	3-S	O	Video8 register = 0 Brightness signal output/input terminal. Video8 register = 1 Brightness/color difference multiplex terminal as ITU-T656
124	VCLK X 2	3-S	I/O	Terminal to input video clock or output 27 MHz.

Audio interface terminal list

Pin No.	Pin name	Type	Direction	Function
Audio interface				
112	AIN	I	I	Audio (PCM) input terminal. Stereo x1
114-116	AOUT[2:0]	O	O	Audio (PCM) output terminal. Stereo x3
117	S/PDIF (AOUT[3])	O	O	S/PDIF output terminal AC-3 stream or PCM stream can be output. Moreover, it works as the audio output terminal of 7th and 8th channels
118	ALRCLK	O	O	Left/Right clock output terminal of AOUT [2:0] and AIN. The polarity is programmable.
119	ABCLK	O	O	Bit clock output terminal of AOUT [2:0] and AIN. The polarity is programmable.
132	AMCLK	3-S	I/O	Audio master clock input/output terminal. 256 Fs or 386 Fs can be used.

DVD-DSP interface terminal list

Pin No.	Pin name	Type	Direction	Function
DVD-DSP interface				
143	DVDERR	I	I	Data error input for DVD-DSP connection.
144	DVDSOS	I	I	Sector start input for DVD-DSP connection.
146	DVDVALID	I	I	Data valid input for DVD-DSP connection.
147	DVDSTRB	I	I	Data strobe input for DVD-DSP connection.
148	DVDREQ	O	O	Data request output for DVD-DSP connection.
149 151-154 156-158	DVDDAT[7:0]	I	I	Stream input for DVD-DSP connection

SD-RAM interface terminal list

Pin No.	Pin name	Type	Direction	Function
SDRAM interface				
38-39 42-47 49-52	RAMADD[11:0]	O	O	Address bus output for SDRAM connection.
54	RAMCS0#	O	O	Tip select output for SDRAM connection.
55	RAMCS1#	O	O	Tip select output terminal for SDRAM connection. It is connected to 2nd SDRAM.
56	RAMRAS#	O	O	RAS output terminal for SDRAM connection.
57	PCLK	O	O	Clock output terminal for SDRAM connection.
59	RAMCAS#	O	O	CAS output terminal for SDRAM connection.
60	RAMWE#	O	O	Write enable output terminal for SDRAM.
61	RAMDQM	O	O	Data masking output terminal for SDRAM.
62 64-67 69-72 74-79 82	RAMDAT[15:0]	3-S	I/O	Bi-directional data bus for SDRAM.

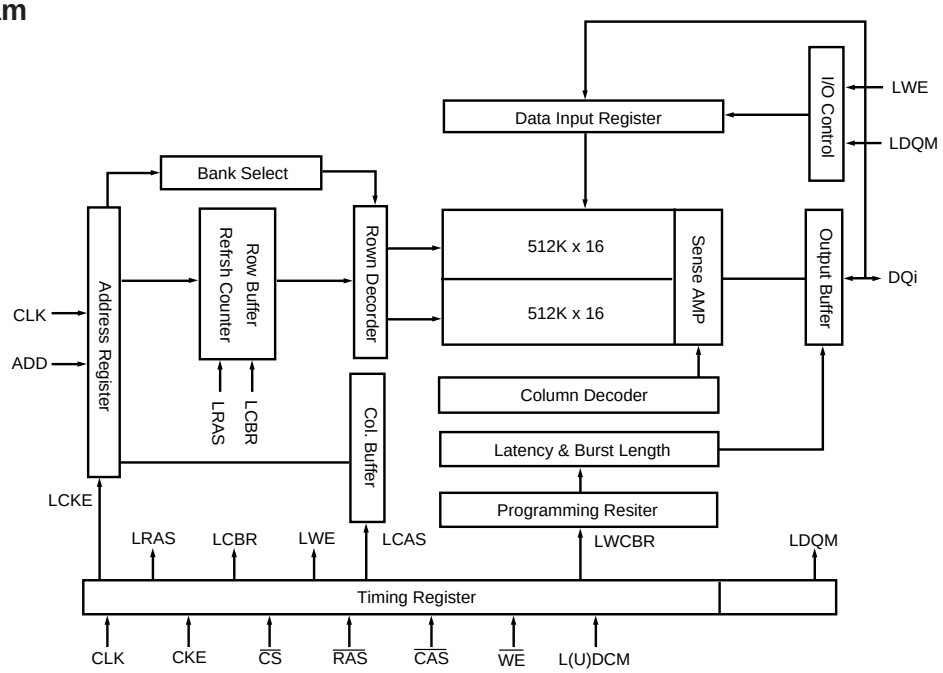
Power terminal · other list

Pin No.	Pin name	Type	Direction	Function
Power terminal · other				
1, 13, 23 40, 41 53, 68 80, 81 93, 108 120, 121 125, 131 145, 160	GND			Ground terminal
8, 18, 28 33, 48 58, 63 73, 86 98, 103 113, 133 140, 150, 155	VDD			+ 3.3V power input terminal
83	TESTMODE	I	I	Test terminal. Pull it down to GND.
127	SCNENBL	I	I	Test terminal. Pull it up to VDD.
130	PWRDN#	I	I	Power-down terminal. When it is [low], current consumption becomes minimum with all functions of the device stopped. (Power-down mode) To return it to normal state, set the terminal at [high]. Then, reset the device with RESET# terminal.
134	PLLGND			Ground terminal for internal PLL.
138	PLLVDD			Internal PLL + 3.3V power input terminal.
139	ICEMODE	I	I	Test terminal. Pull it down to GND.

11-13. IC602 IX1537GE 16M SDARM

Terminal	Terminal Name	Name	Input Function
35	CLK	System Clock	Active on the positive going edge to sample all inputs.
18	$\overline{CS}$	Chip Select	Disables or enables device operation by masking or enabling all inputs except CLK. CKE and L(U)DQM
34	CKE	Clock Enable	Masks system clock to freeze operation from the next clock cycle. CKE should be enabled at least one cycle prior to new command. Disable input buffers for power down in stanby.
21~24 27~32 20	A0~A10/AP	Address	Row/column address are multiplexed on the same pins. Row address: RA0~RA10, column address: CA0~CA7
19	BA	Bank Select Address	Selects bank to be activated during row address latch time. Selects bank for read/write during clumn address latch time.
17	$\overline{RAS}$	Row Address Strobe	Latches row address on the positive going edge of the CLK with RAS low. Enables row access & precharge.
16	$\overline{CAS}$	Column Address Strobe	Latches addresses on the positive going edge of the CLK with CAS low. Enables row access.
15	$\overline{WE}$	Write Enable	Enable write operation and row precharge. Latches data in starting from CAS, WE active.
14, 36	L(U)DOM	Data Input/Output Mask	Makes data output Hi-Z, tsHZ after the clock and masks the output. Blocks data input when L(U)DQM active.
2, 3, 5, 6, 8, 9, 11, 12, 39, 40, 42, 43, 45, 46, 48, 49	DQ0~15	Data Input/Output	Data inputs/outputs are multiplexed on the same pins.
25, 1/26, 50	Vcc/Vss	Power Supply/Ground	Power and ground for the input buffers and the core logic.
44, 38, 13, 7/4, 10, 41, 47	Vcc/VssO	Data Output Power/Ground	Isolated power supply and ground for the output buffers to provide improved noise immunity.
37	NC/RFU	No Connection/ Reserved for Future Use	This pin is recommanded to be left No Connection on the device

• Block Diagram



• Samsung Electronics reserves the right to change products or specification without

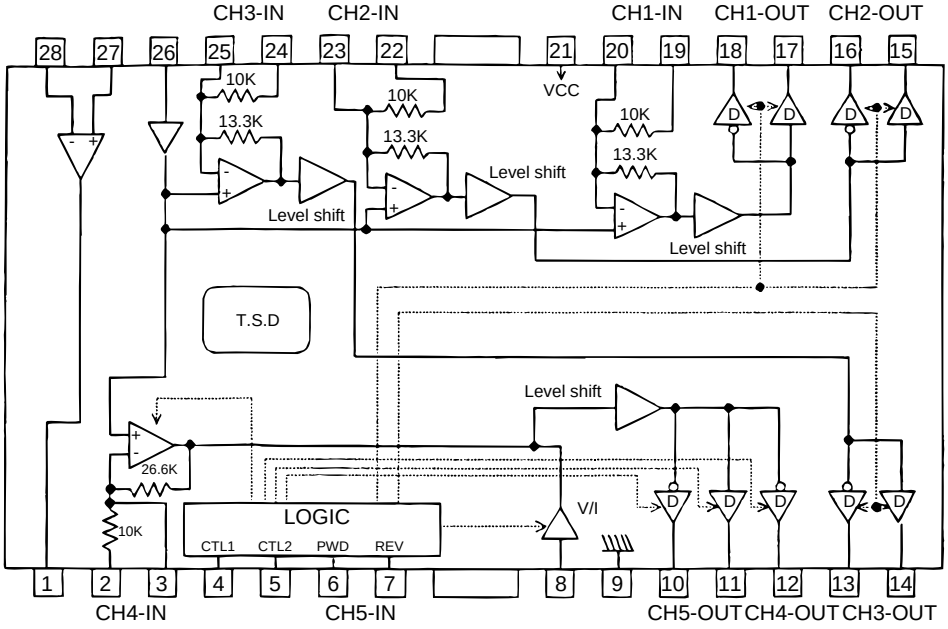
11-14. IC702 BA6796FP MOTOR DRIVER

Pin No.	Terminal name	Operation function	Pin No.	Terminal name	Operation function
1	OPOUT	Ope amp. output terminal	15	CH2-OUT-	CH2 Negative output terminal
2	CH4-IN	CH4 Input terminal	16	CH2-OUT+	CH2 Positive output terminal
3	CH4-IN'	CH4 Gain adjustment input terminal	17	CH1-OUT-	CH1 Negative output terminal
4	CTL1	Contorol 1 input terminal	18	CH1-OUT+	CH1 Positive output terminal
5	CTL2	Contorol 2 input terminal	19	CH1-IN	CH1 Input terminal
6	FWD	Tray forward input terminal	20	CH1-IN'	CH1 Input terminal for gain adjustment
7	REV	Tray reverse input terminal	21	VCC	VCC
8	TRAY-IN	Tray input terminal	22	CH2-IN	CH2 Input terminal
9	GND	Sub-straight GND	23	CH2-IN'	CH2 Input terminal for gain adjustment
10	CH5-OUT-	Tray negative output terminal	24	CH3-IN	CH3 Input terminal
11	COM-OUT	Tray positive output terminal/CH4 negative output terminal	25	CH3-IN'	CH3 Input terminal for gain adjustment
12	CH4-OUT+	CH4 Positive output terminal	26	VREF-IN	Bias amp. input terminal
13	CH3-OUT+	CH3 Positive output terminal	27	OPIN+	Operational amplifier nonreverse input terminal
14	CH3-OUT-	CH3 Negative output terminal	28	OPIN-	Operational amplifier reverse input terminal

Note 1: Positive and negative output have polarity with respect to input. (An example: 19 pin input 'H': 18 pin output 'H')

Note 2: Tray positive output and tray negative output have polarity with respect to mode. (An example: 11 pin output 'H' in FORWARD mode)

• Block Diagram



T.S.D ; Thermal shutdown
D; Drive buffer
Unit of resistance is [Ω].

• Mode change table

CTL1 and CTL2

CTL1	CTL2	CH1	CH2	CH3	CH4	CH5
L	L	OFF				ON
L	H					
H	L					OFF
H	H	OFF		ON	OFF	ON

Note: OFF state: Output has high impedance.

For F and R (CH5 control, valid only when CH5 is ON)

F	R	Output mode
L	L	High impedance
L	H	Reversing (reverse)
H	L	Forward rotation (forward)
H	H	Brake

11-15. IC707 IX1473GE SERVO PROCCESSOR

Pin No.	Terminal name	I/O	Operation function	Remarks
1	VSS	–	Digital ground terminal.	
2	BCK	O	Bit clock (1.4122MHz) output terminal.	
3	AOUT	O	Audio data output terminal.	
4	DOUT	O	Digital out output terminal.	
5	MBOB	O	Buffer memory over signal output terminal. Over: “H”	
6	IPF	O	Correction flag output terminal. When correction disable symbol is given if AOUT output is C2 correction: “H”.	
7	SBOK	O	Sub-code Q data CRCC judgment result output terminal. Judgment result OK: “H”.	
8	CLCK	I/O	Sub-code P to W data read clock output/input terminal. Selectable with command bit.	
9	VDD	–	Digital + power terminal	
10	VSS	–	Digital ground terminal	
11	DATA	O	Sub code P-W data output terminal.	
12	SFSY	O	Playback system frame sync signal output terminal.	
13	SBSY	O	Subcode block sync output terminal. When subcode sync is detected, S1 position: “H”.	
14	SPCK	O	Processor status signal read clock (176.4 kHz) output terminal.	
15	SPDA	O	Processor status signal output terminal.	
16	COFS	O	Correction system frame clock (7.35 kHz) output terminal.	
17	MONIT	O	LSI internal signal monitor terminal. DSP internal flag and PLL system clock can be monitored with microcomputer command.	
18	VDD	–	Digital + power terminal.	
19	TESIO0	I	Test input/output terminal. Usually fixed to “L”.	
20	P2VREF	–	PLL system 2VREF terminal.	
21	SPDO	O	VCO center frequency shift terminal.	
22	PDOS	O	EFM and PLCK signal phase error signal output terminal. (To be used when x8 speed operation is used)	
23	PDO	O	EFM and PLCK signal phase error signal output terminal.	
24	XMAXS	O	TMAX detection result output terminal. To be selected with command bit TMPS.	
25	TMAX	O		
26	LPFN	I	Reverse input terminal for low pass filter amplifier.	
27	LPFO	O	Output terminal for low pass filter amplifier.	
28	PVREF	–	PLL system VREF terminal.	
29	VCOREF	I	VCO center frequency reference level terminal. To be fixed usually to “PVREF”.	
30	VCOF	O	Filter terminal for VCO.	
31	AVSS	–	Analog system ground terminal.	
32	SLCO	O	Data slice level generation DAC output terminal.	
33	RFIN	I	RF signal input terminal.	
34	AVDD	–	Analog system power terminal.	
35	RFCT	I	RFRP signal center level input terminal.	
36	RFZI	I	RFRP zero cross input terminal.	
37	RFRP	I	RF ripple signal input terminal.	
38	FEIN	I	Focus error signal input terminal.	
39	SBAD	I	Sub-beam addition signal input terminal.	
40	TSIN	I	Test input terminal. To be fixed usually to “Vref”	
41	TEIN	I	Tracking error signal input terminal. (Fetching when tracking servo is ON)	
42	TEZI	I	Tracking error zero cross input terminal.	
43	FOO	O	Focus equalizer output terminal.	

TMAX detection result	TMAXoutput
Longer than specific period	“P2VREFF”
Shorter than specific period	“VSS”
Within specified period	“HiZ”

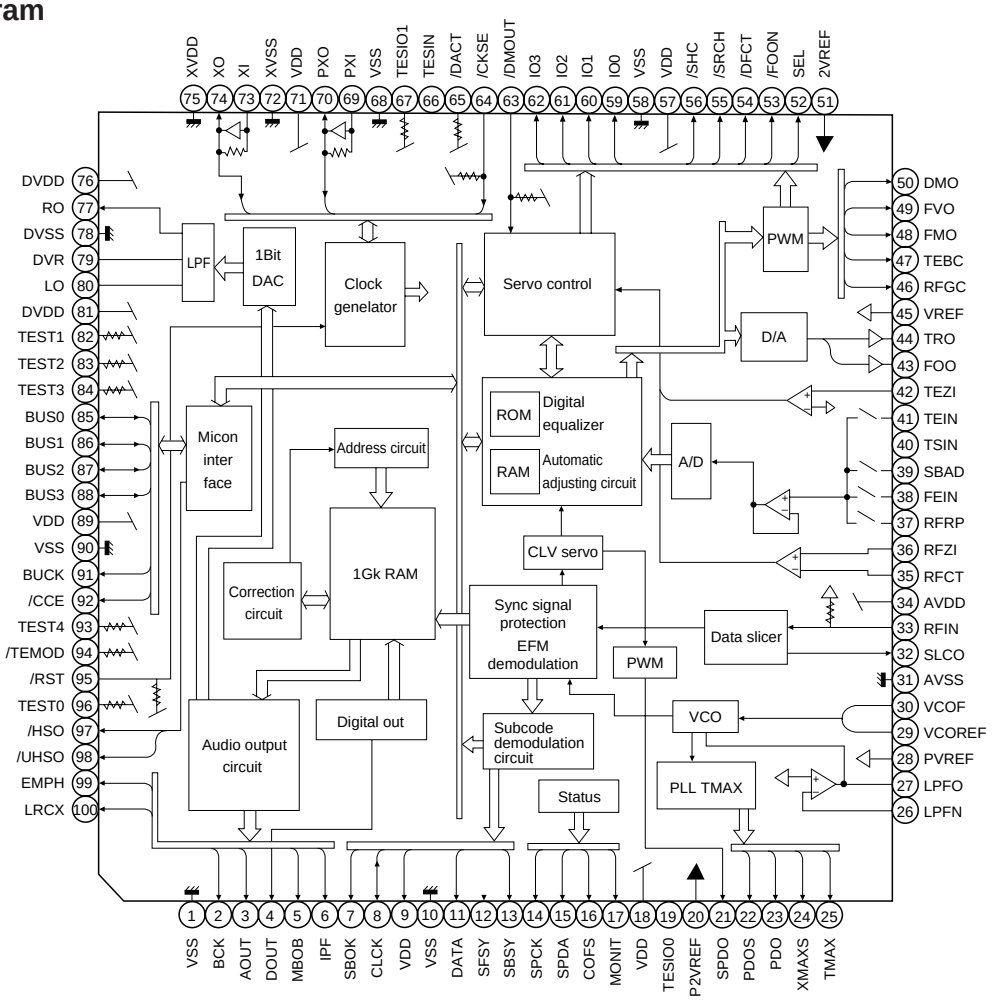
Pin No.	Terminal name	I/O	Operation function	Remarks
44	TRO	O	Tracking equalizer output terminal.	
45	VREF	–	Analog reference power terminal.	
46	RFGC	O	RF amplitude adjustment control signal output terminal. Output of 3-pole PWM signal. (PWM carrier = 88.2 kHz)	
47	TEBC	O	Tracking balance control signal output terminal. Output of 3-pole PWM signal. (PWM carrier = 88.2 kHz)	
48	FMO	O	Feed equalizer output terminal. Output of 3-pole PWM signal. (PWM carrier = 88.2 kHz)	
49	FVO	O	Speed error signal or feed search EQ output terminal. Output of 3-pole PWM signal. (PWM carrier = 88.2 kHz)	
50	DMO	O	Disc equalizer output terminal. Output of 3-pole PWM signal. (PWM carrier = DSP system 88.2kHz, to be synchronized with PXO)	
51	2VREF	–		
52	SEL	O		
53	/FOON	O		
54	/DFCT	O		
55	/SRCH	O		
56	/SHC	O		
57	VDD	–		
58	VSS	–		
59	IO0	I/O	General use I/O port. It is possible to select the input port and output port according to command. In case of input port the terminal state (H/L) can be read with the read command. In case of output port the terminal state (H/L/HiZ) can be controlled with the command.	
60	IO1			
61	IO2			
62	IO3			
63	/DMOUT		Terminal to set the mode to output dual value PWM of feed equalizer from the IO0,1 terminal and to output the dual value PWM from disc equalizer of IO2,3 terminal “L” Active.	
64	/CKSE		X’tal selection terminal. When 16.9344 MHz: “H” When 33.8688 MHz: “L”	
65	/DACT		Test terminal.	
66	TESIN		Test input terminal.	
67	TESIO1		Test input/output terminal.	
68	VSS		Digital ground terminal.	
69	PXI		DSP system clock oscillation circuit input terminal.	
70	PXO		DSP system clock oscillation circuit output terminal.	
71	VDD		Digital + power terminal.	
72	XVSS		Ground terminal for system clock oscillation circuit.	
73	XI		System clock oscillation circuit input terminal.	
74	XO		System clock oscillation circuit output terminal.	
75	XVDD		Positive power terminal for system clock oscillation circuit.	
76	DVDD	–	D/A converting section power terminal.	
77	RO	O	R channel data forward rotation output terminal.	
78	DVSS	–	D/A converting section analog ground terminal.	
79	DVR	–	D/A converting section reference voltage terminal.	
80	LO	O	L channel data forward rotation output terminal.	
81	DVDD	–	D/A converting section power terminal.	
82	TEST1	I	Test terminal. To be opened usually.	Pull-up resistor built in.
83	TEST2	I	Test terminal. To be opened usually.	Pull-up resistor built in.
84	TEST3	I	Test terminal. To be opened usually.	Pull-up resistor built in.
85	BUS0	I/O	Microcomputer interface data input/output terminal.	Schmidt input CMOS port
86	BUS1	I/O		
87	BUS2	I/O		

Pin No.	Terminal name	I/O	Operation function	Remarks
88	BUS3	I/O		
89	VDD	–	Digital + power terminal.	
90	VSS	–	Digital ground terminal.	
91	BUCK	I	Microcomputer interface clock input terminal.	Schmidt input
92	/CCE	I	Microcomputer interface chip enable signal input terminal. BUS0 to 3 is active in “L” state.	Schmidt input
93	TEST4	I	Test terminal. To be opened usually.	Pull-up resistor built in.
94	/TEMOD	I	Local test mode selection terminal.	Pull-up resistor built in.
95	/RST	I	Reset signal input terminal. Reset state: “L”	Pull-up resistor built in.
96	TEST0	I	Test terminal. To be opened usually.	Pull-up resistor built in.
97	/HSO	O	Playback speed mode flag output terminal.	
98	/UHSO	O		

/UHSO	/HSO	Playback speed
H	H	x1 speed playback
H	L	x2 speed playback
L	H	x4 speed playback
L	L	x8 speed playback

99	EMPH	O	Subcode Q data emphasis flag output terminal. Emphasis ON: “H” OFF: “L” Output polarity can be inverted by the command.	
100	LRCK	O	Channel clock (44.1 kHz) output terminal. L channel “L” R channel: “H” Output polarity can be inverted by the command.	

• Block Diagram

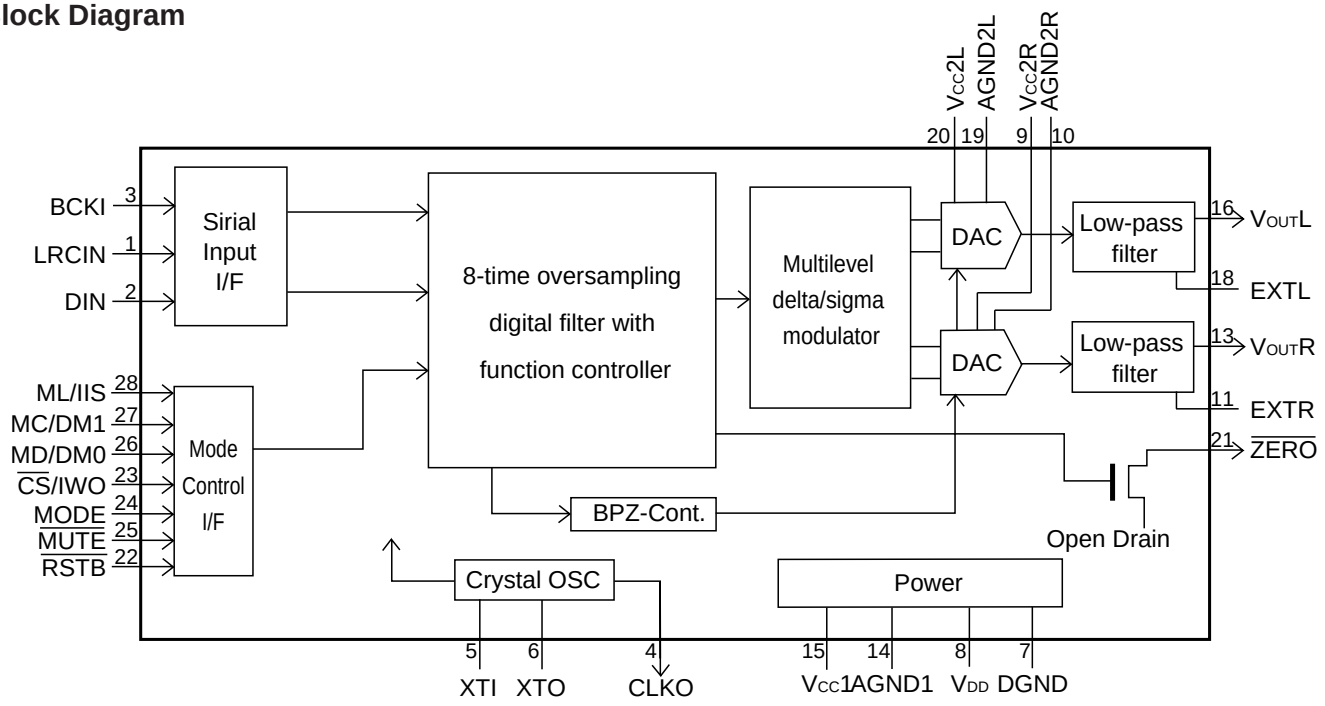


11-16. IC801 PCM1716E AUDIO D/A CONVERTER

Pin No.	Terminal name	I/O	Operation function
1	LRCIN	I	LRCK clock input (fs) (3)
2	DIN	I	Data input (3)
3	BCKI	I	Bit clock input for data.
4	CLKO	O	System clock buffered output.
5	XTI	I	Connection of crystal oscillator or external clock input.
6	XTO	O	Connection of crystal oscillator
7	DGND	–	Digital GND
8	V_{DD}	–	Digital power +5V
9	V_{CC}2R	–	Analog power +5V
10	AGND2R	–	Analog GND
11	EXTR	O	Rch Analog output amp. • common
12	NC	–	Not connected.
13	V_{OUT}R	O	Rch Analog voltage output
14	AGND1	–	Analog GND
15	V_{CC}1	–	Analog power +5V
16	V_{OUT}L	O	Lch Analog voltage output
17	NC	–	Not connected.
18	EXTL	O	Lch Analog output amp. • common
19	AGND2L	–	Analog GND
20	V_{CC}2L	–	Analog power +5V
21	$\overline{\text{ZERO}}$	O	Zero data • flug
22	$\overline{\text{RSTB}}$	I	Resetting. While this pin is in "L" state, the DF and delta -sigma modulator is in reset state. (1)
23	$\overline{\text{CS}}$/IWO	I	Chip selection/input format selection (2)
24	MODE	I	Mode control selection (H: Software, L: Hardware) (1)
25	$\overline{\text{MUTE}}$	I	Mute control (1)
26	MD/DM0	I	Mode control data/deemphasis selection 1 (1)
27	MC/DM1	I	Mode control BCK/deemphasis selection 2 (2)
28	ML/IIS	I	Mode control latch/input format selection (1)

Note: (1) Pins 22, 24, 25, 26, 27, and 28: With Schmidt trigger input pull-up resistor (2) Pin 23: With Schmidt trigger input pull-down resistor
(3) Pins 1, 2, and 3: Schmidt trigger input

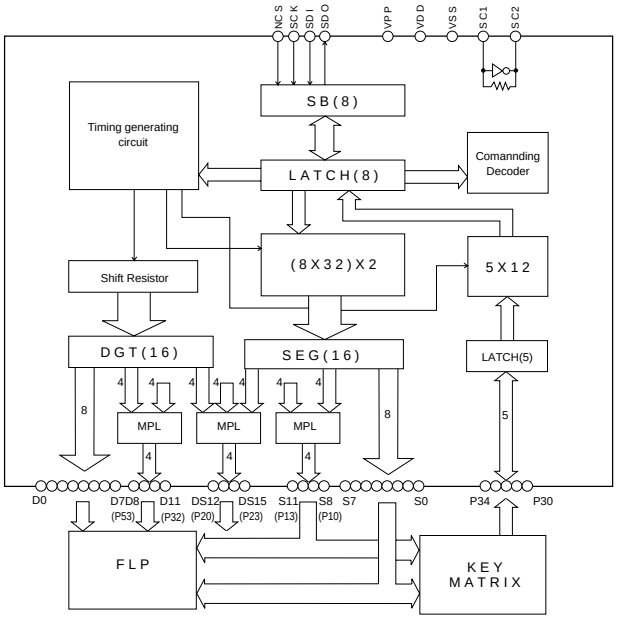
• Block Diagram



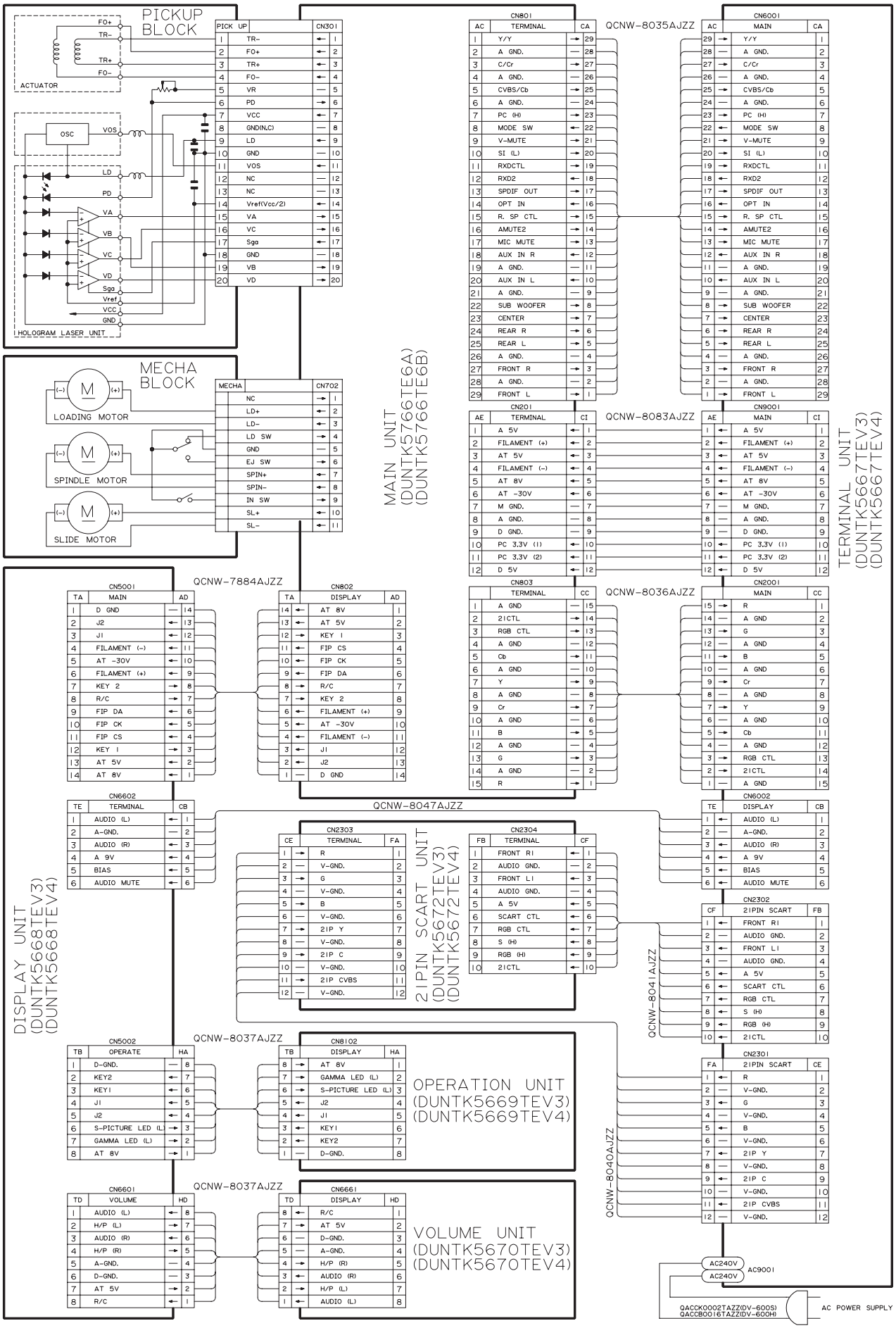
11-17. IC5001 IMN12510F FL DRIVER

Terminal	Terminal Name	Name	In/Output	Function
18 21	VDD VSS	Power supply terminal	Input	VDD: +5V±0.5V VSS: 0V
16	VPP	FLP driver power	Input	VPP: VDD–35V The voltage to be supplied to the SEG 0 to 7, DGT 0 to 7 pull-down resistor is applied.
19 20	OSCI OSCO	Clock input Clock output	Input	Oscillation input terminal Oscillation output terminal A terminal to which the ceramic oscillation terminal is connected. To OSCI in case of clock input from outside in case of separate excitation
22 23 24 25	NCS SCK SDI SDO	Chip select input Sirial clock input Sirial data input Sirial data output	Input Input Input Output	"L": Serial input allowed "H": Serial input inhibited Serial transfer clock input Sirial data input The command data, address data, indication data, control register data, and port output data are input. Sirial data output The key scan input data and port input data are output.
26~30	P30~P34	Key scan input	In/Output	There are 5 bits. Bitwise selection of key scan input/general-use input/general-use output is enabled. The pull-down resistor is pro vided between this terminal and the VSS terminal. The general-use output is large current output for LED drive.
31~38	SEG0~SEG7	High voltage resistance output	Output	8-bit high voltage resistance output port. (Segment output) The output type is Pch open drain. The pull-down resistor is built in between this terminal and the VPP terminal.
39~42	P10~P13 SEG8~SEG11	High voltage resistance output	Output	4-bit high voltage resistance output port. Bitwise selection of general-use output/segment output is enabled. The output type is Pch open drain.
43, 44 1, 2	P20~23 DGT12/SEG15 ~ DGT15/SEG12	High voltage resistance output	In/Output	4-bit high voltage resistance output port. Bitwise selection of general-use input/general-use output/seg ment output/digit output is enabled. The output type is Pch open drain. Large current output for LED drive
3~6	P00~P03 DGT8~DGT11	High voltage resistance output	Output	4-bit high voltage resistance output port. Bitwise selection of general-use output/digit output is enabled. The output type is Pch open drain.
7~10 12~15	DGT0~DGT7	High voltage resistance output	Output	8-bit high voltage resistance output port. (Digit output) The output type is Pch open drain. The pull-down resistor is built in between this terminal and the VPP terminal.

• Block Diagram

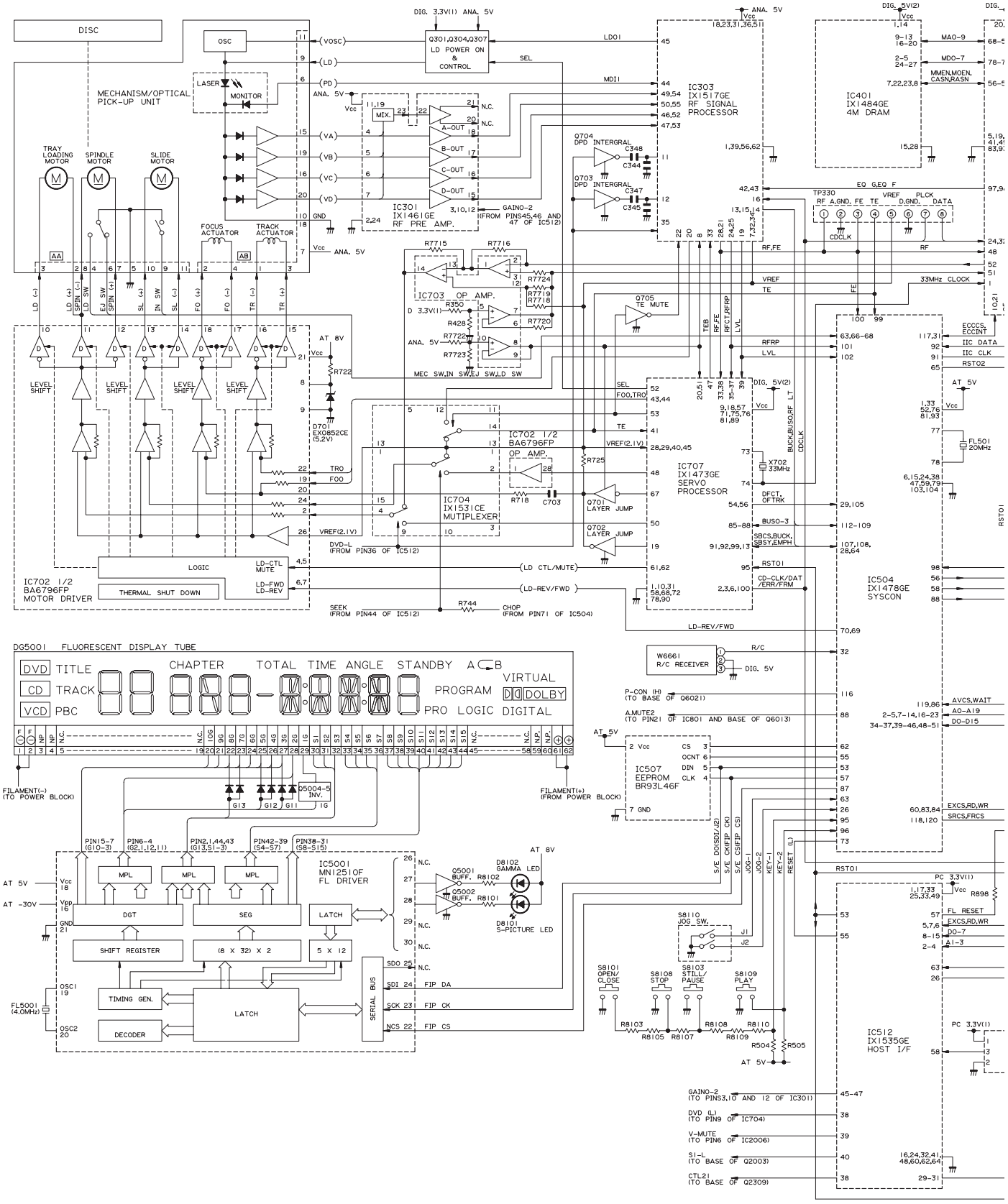


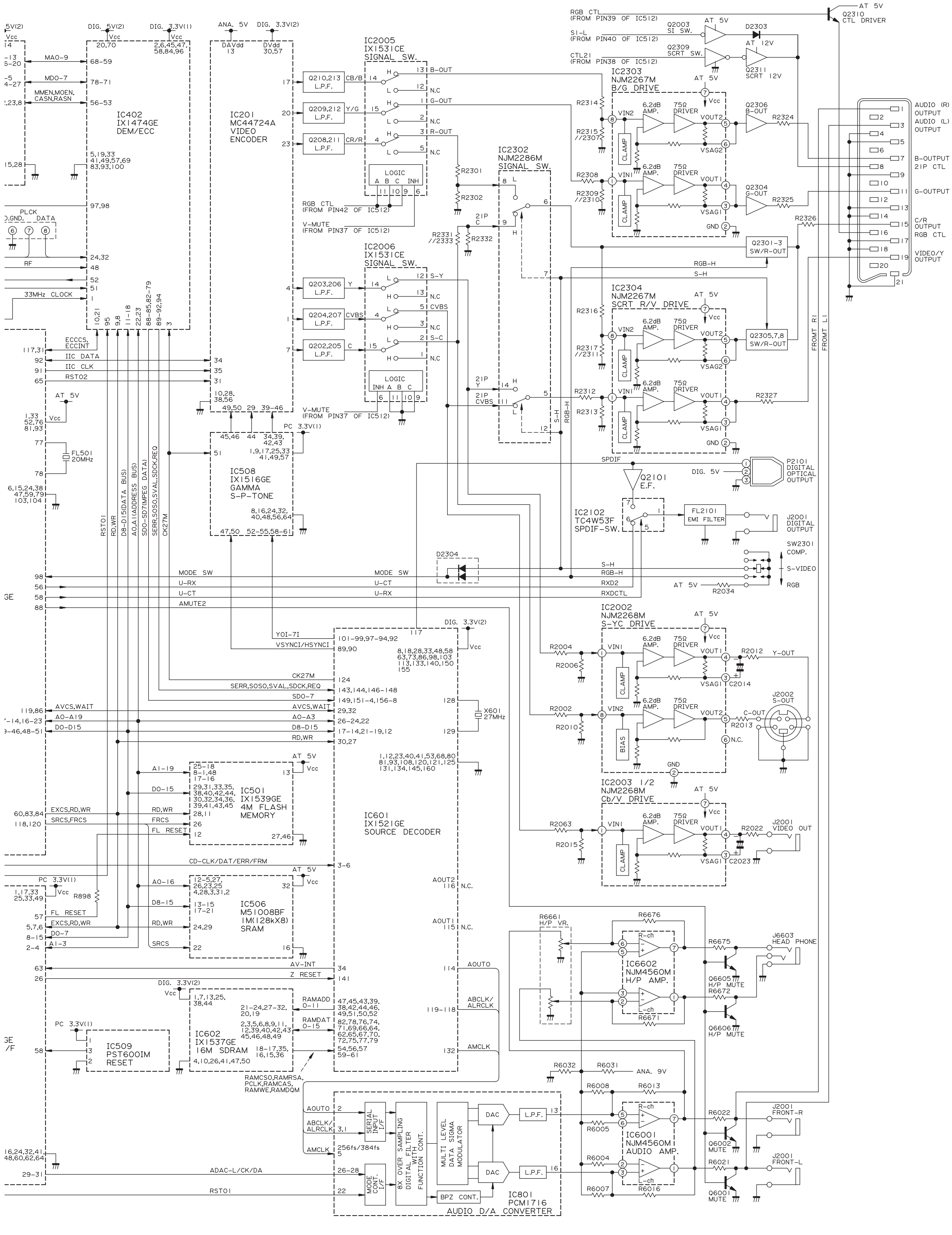
12. WIRING DIAGRAM



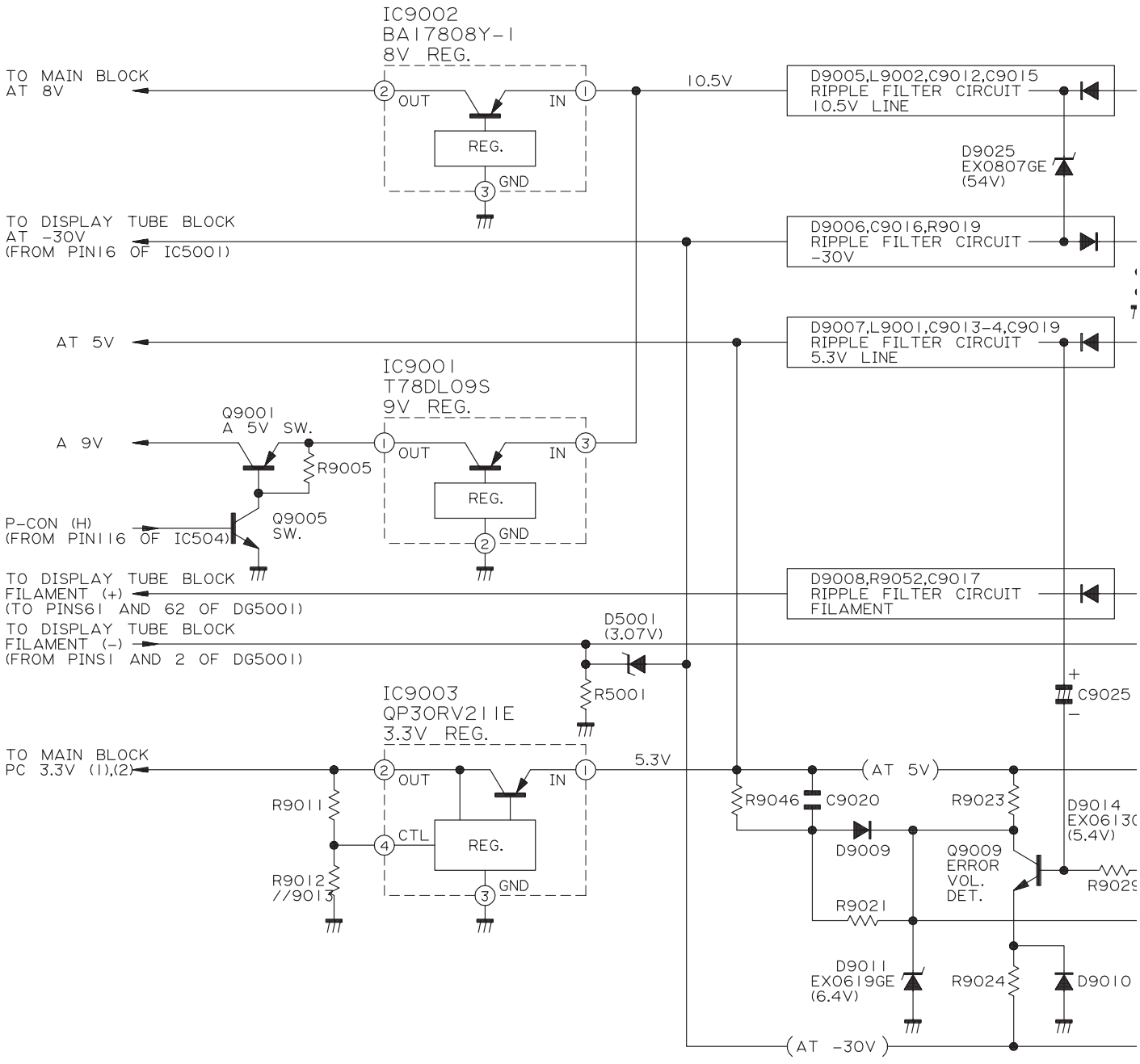
13. BLOCK DIAGRAMS

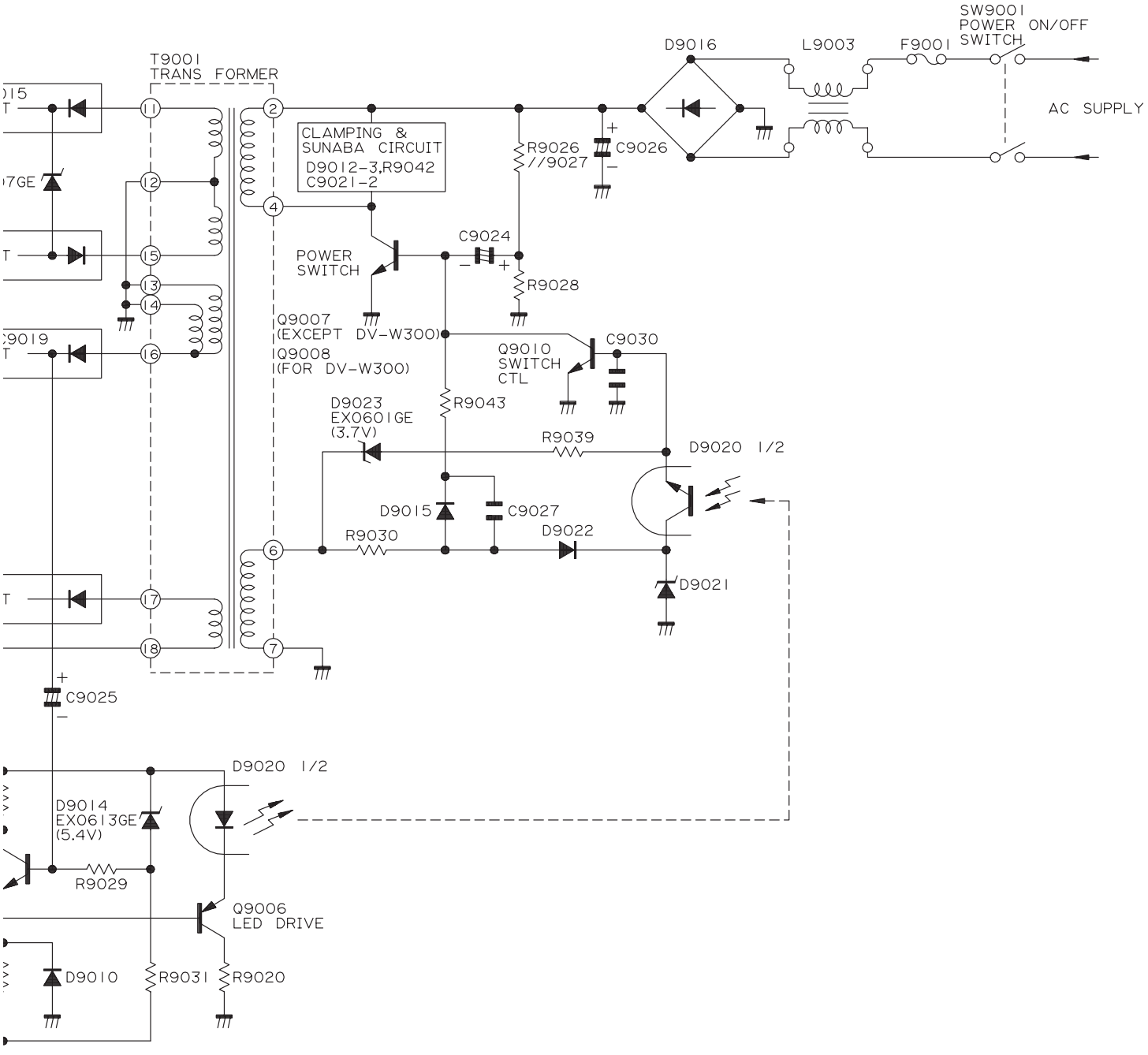
13-1. MAIN BLOCK DIAGRAM




IC402
IX1474GE
DEM/ECC
IC201
MC44724A
VIDEO
ENCODER
IC2005
IX1531CE
SIGNAL SW.
IC2006
IX1531CE
SIGNAL SW.
IC2302
NJM2286M
SIGNAL SW.
IC2303
NJM2267M
B/G DRIVE
IC2304
NJM2267M
SCRT R/V DRIVE
IC508
IX1516GE
GAMMA
S-P-TONE
IC2102
TC4W53F
SPDIF-SW.
IC2002
NJM2268M
S-YC DRIVE
IC2003 1/2
NJM2268M
Cb/V DRIVE
IC501
IX1539GE
4M FLASH
MEMORY
IC601
IX1521GE
SOURCE DECODER
IC506
M51008BF
1M(128kX8)
SRAM
IC509
PST600IM
RESET
IC602
IX1537GE
16M SDRAM
IC6602
NJM4560M
H/P AMP.
IC6001
NJM4560M
AUDIO AMP.
IC801
PCM1716
AUDIO D/A CONVERTER
Q2310
CTL DRIVER
P2101
DIGITAL
OPTICAL
OUTPUT
J2001
DIGITAL
OUTPUT
J2002
S-OUT
J2001
VIDEO OUT
J6603
HEAD PHONE
J2001
FRONT-R
J2001
FRONT-L
SW2301
COMP.
S-VIDEO
RGB
AUDIO (R) OUTPUT
AUDIO (L) OUTPUT
B-OUTPUT
21P CTL
G-OUTPUT
C/R OUTPUT
RGB CTL
VIDEO/Y OUTPUT

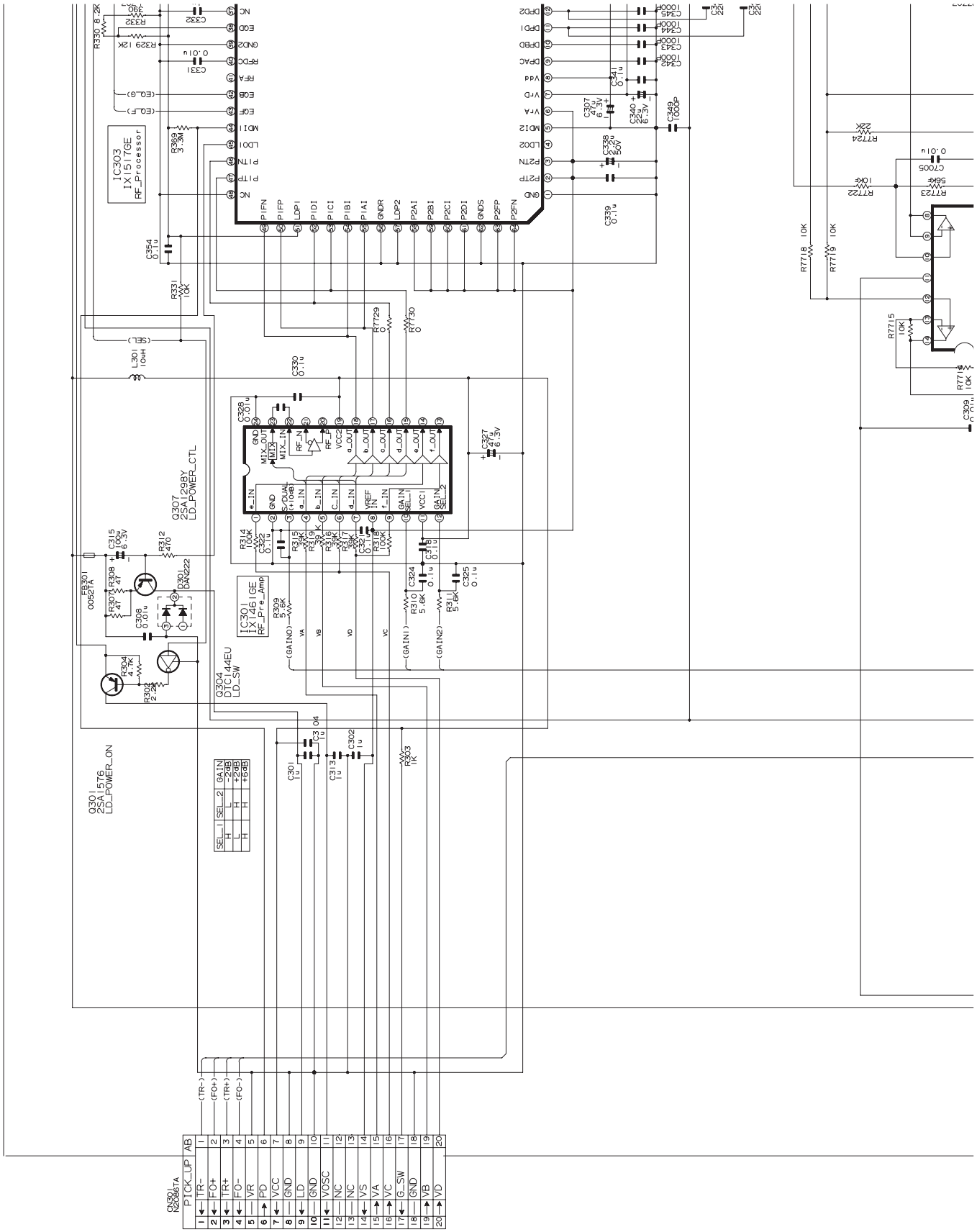
13-2. POWER BLOCK DIAGRAM




SW9001
POWER ON/OFF
SWITCH
D9016
L9003
F9001
AC SUPPLY
T9001
TRANS FORMER
CLAMPING &
SUNABA CIRCUIT
D9012-3,R9042
C9021-2
R9026
//9027
C9026
C9024
POWER
SWITCH
R9028
Q9007
(EXCEPT DV-W300)
Q9008
(FOR DV-W300)
Q9010
SWITCH
CTL
C9030
D9023
EX0601GE
(3.7V)
R9043
R9039
D9020 1/2
D9015
C9027
R9030
D9022
D9021
C9025
D9020 1/2
D9014
EX0613GE
(5.4V)
R9029
Q9006
LED DRIVE
D9010
R9031
R9020

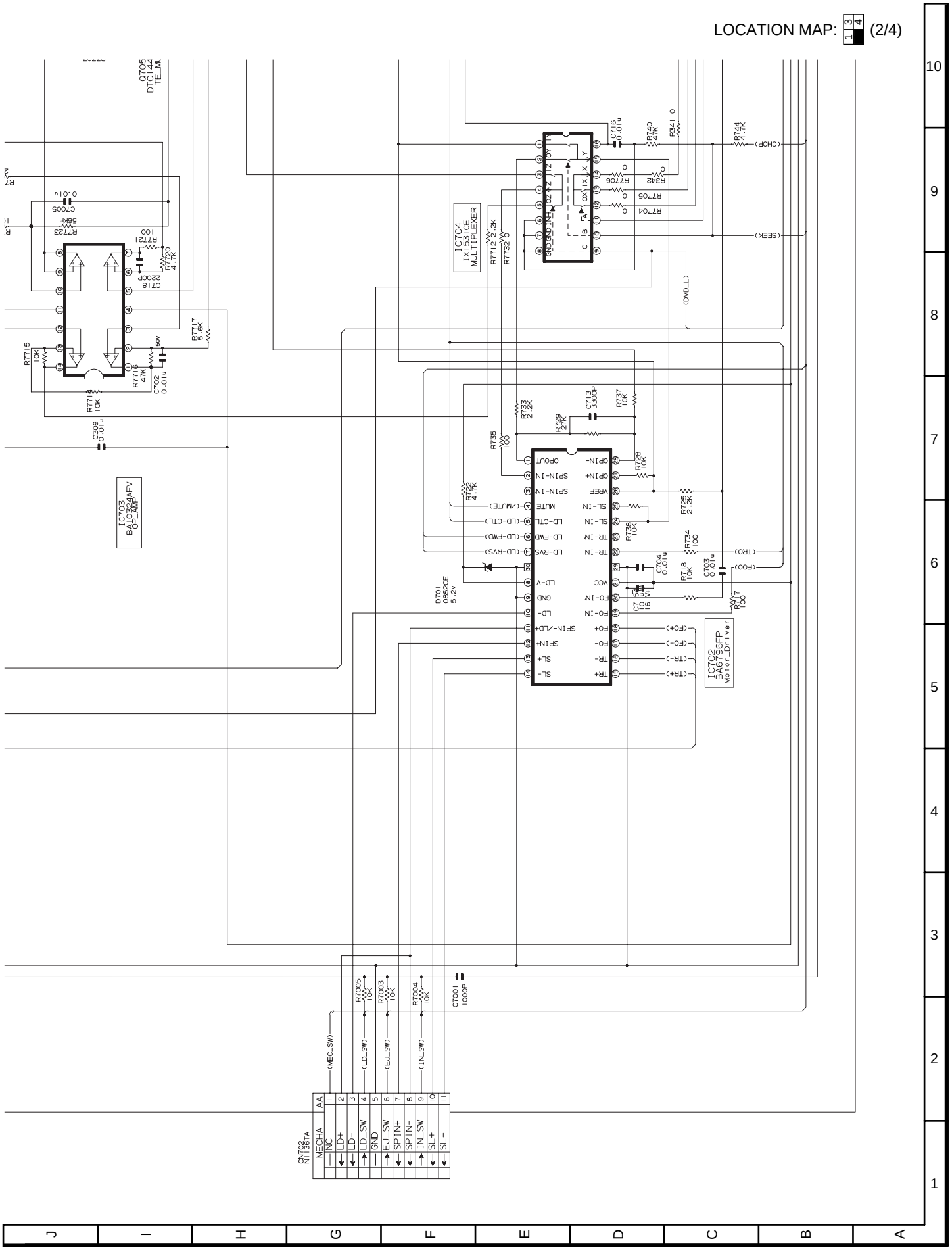
14. SCHEMATIC DIAGRAMS 14-1. MAIN (1) CIRCUIT SCHEMATIC DIAGRAM

LOCATION MAP: 3 4 / 2 (1/4)

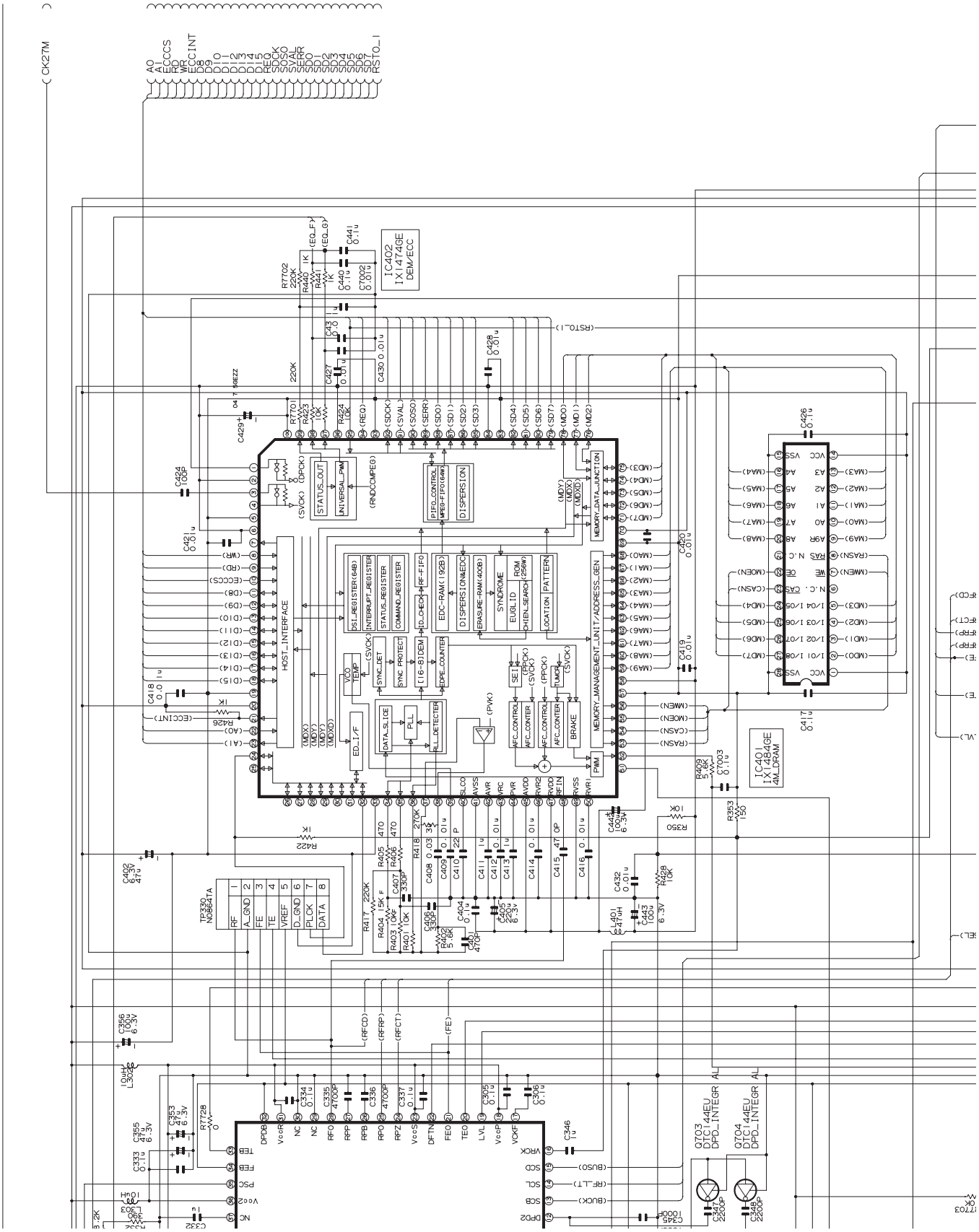


S	R	Q	P	O	N	M	L	K	J

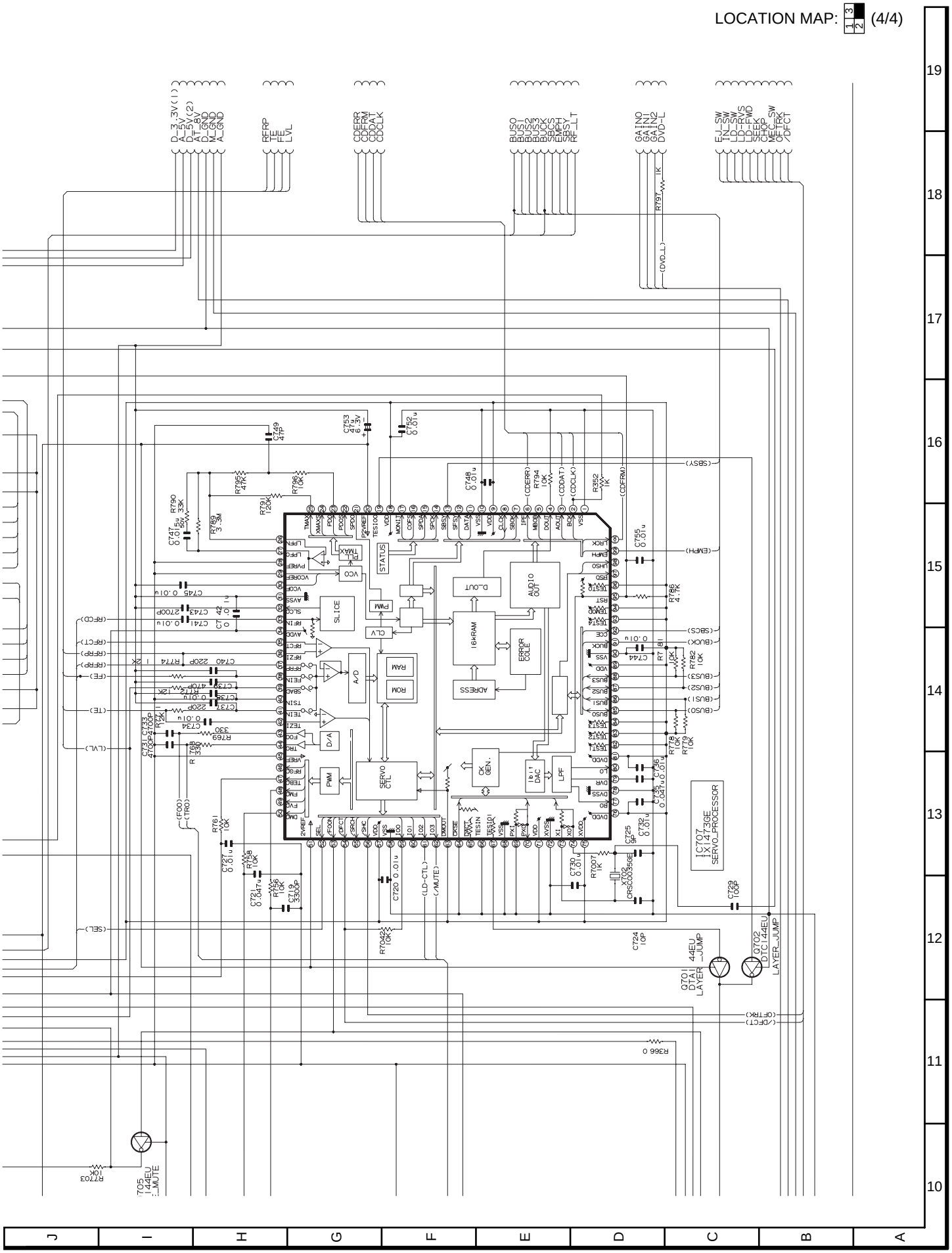
LOCATION MAP: 1 3 4 (2/4)



LOCATION MAP: 1 2 4 (3/4)

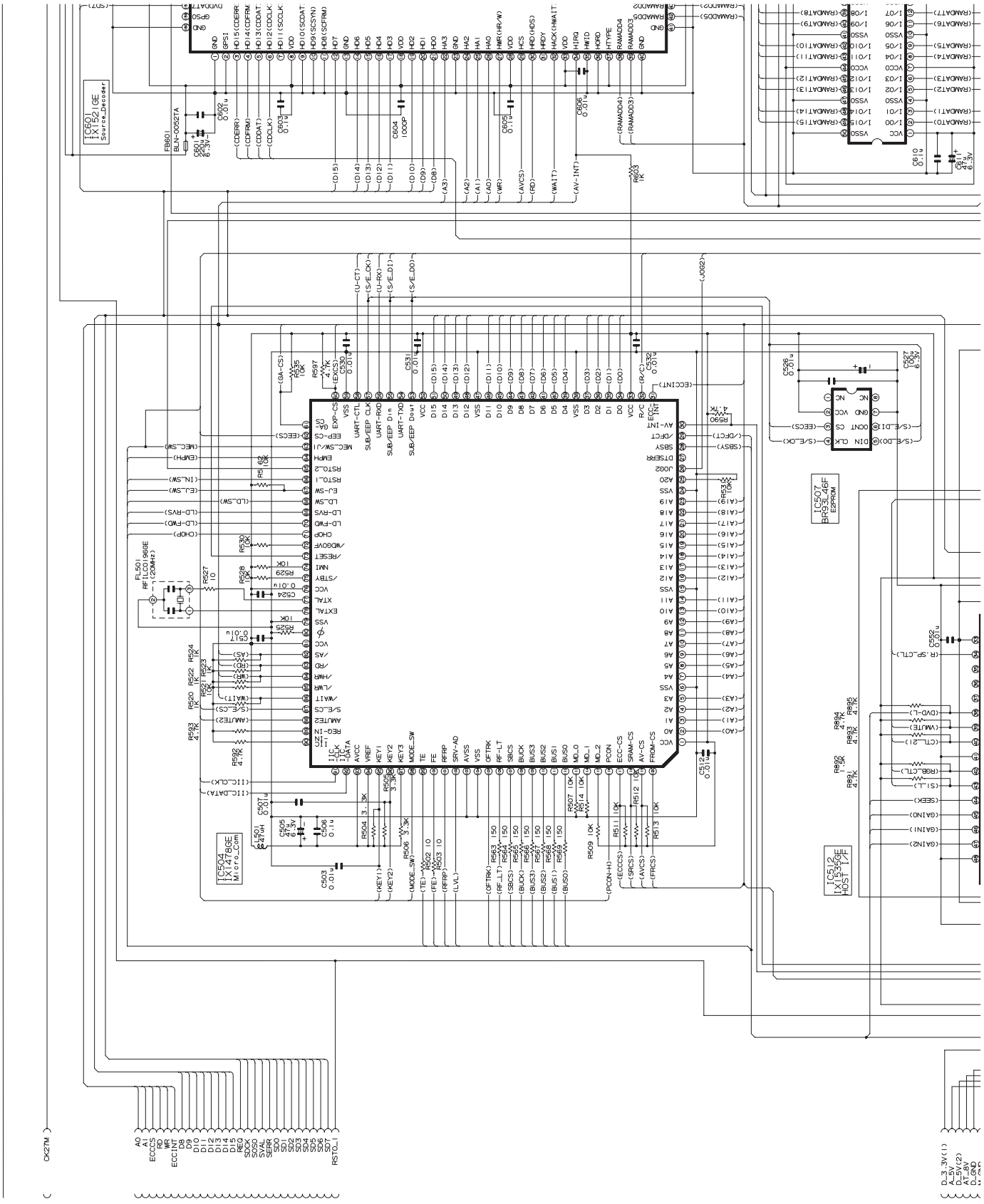


LOCATION MAP: 1 3 2 (4/4)

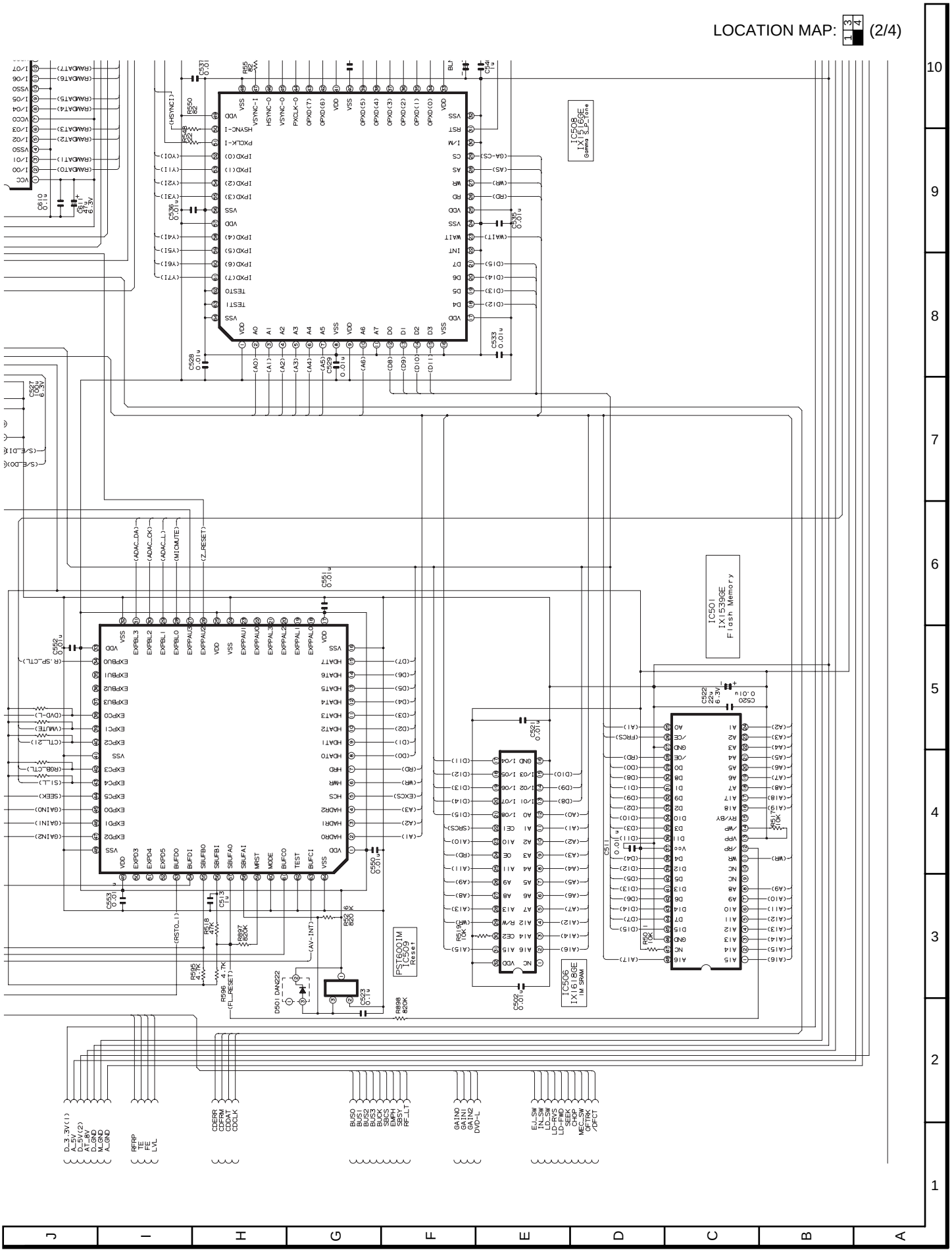


14-2. MAIN (2) CIRCUIT SCHEMATIC DIAGRAM

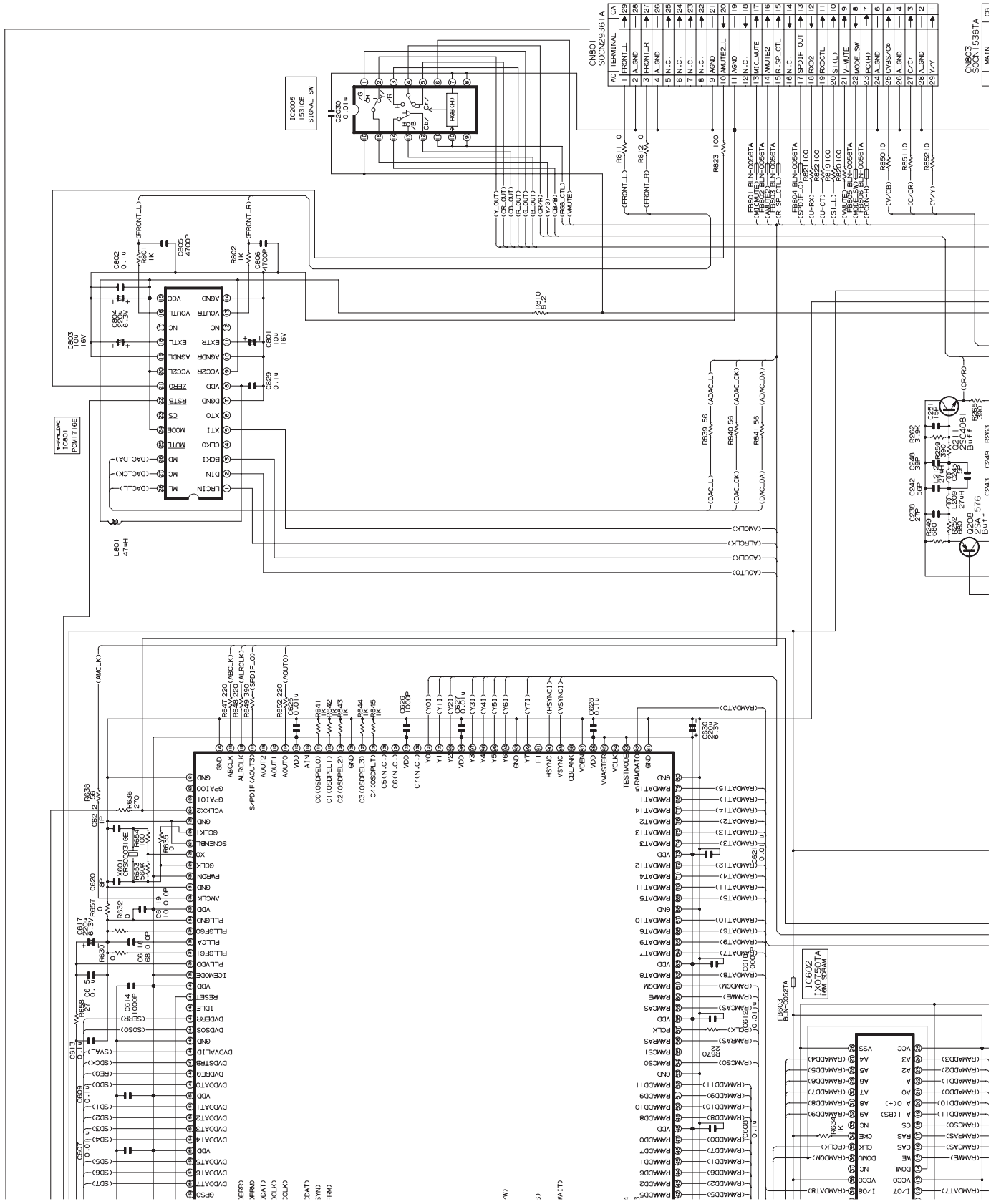
LOCATION MAP: 3 4 / 2 (1/4)



LOCATION MAP: 1 3 4 (2/4)

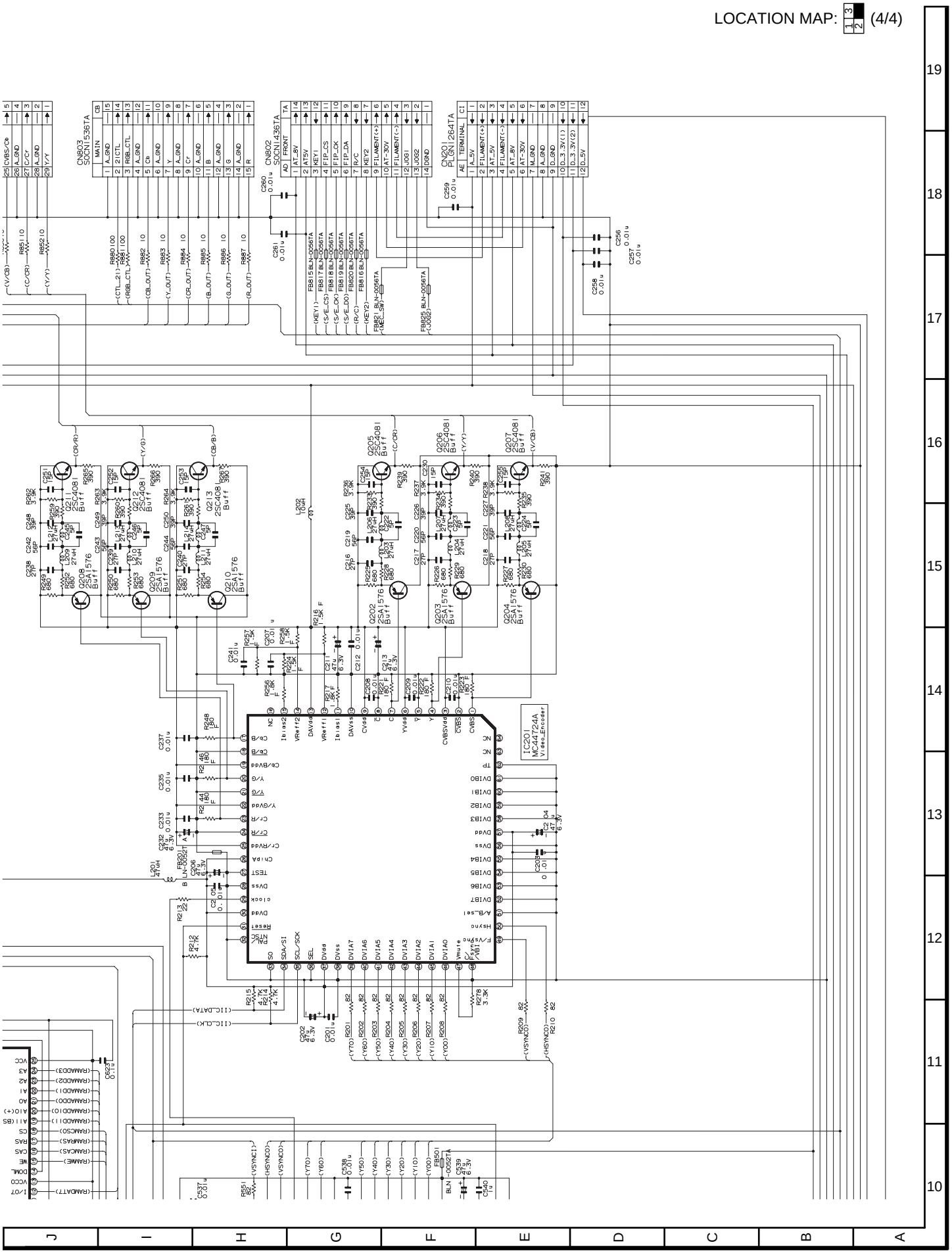


LOCATION MAP: 1 2 4 (3/4)

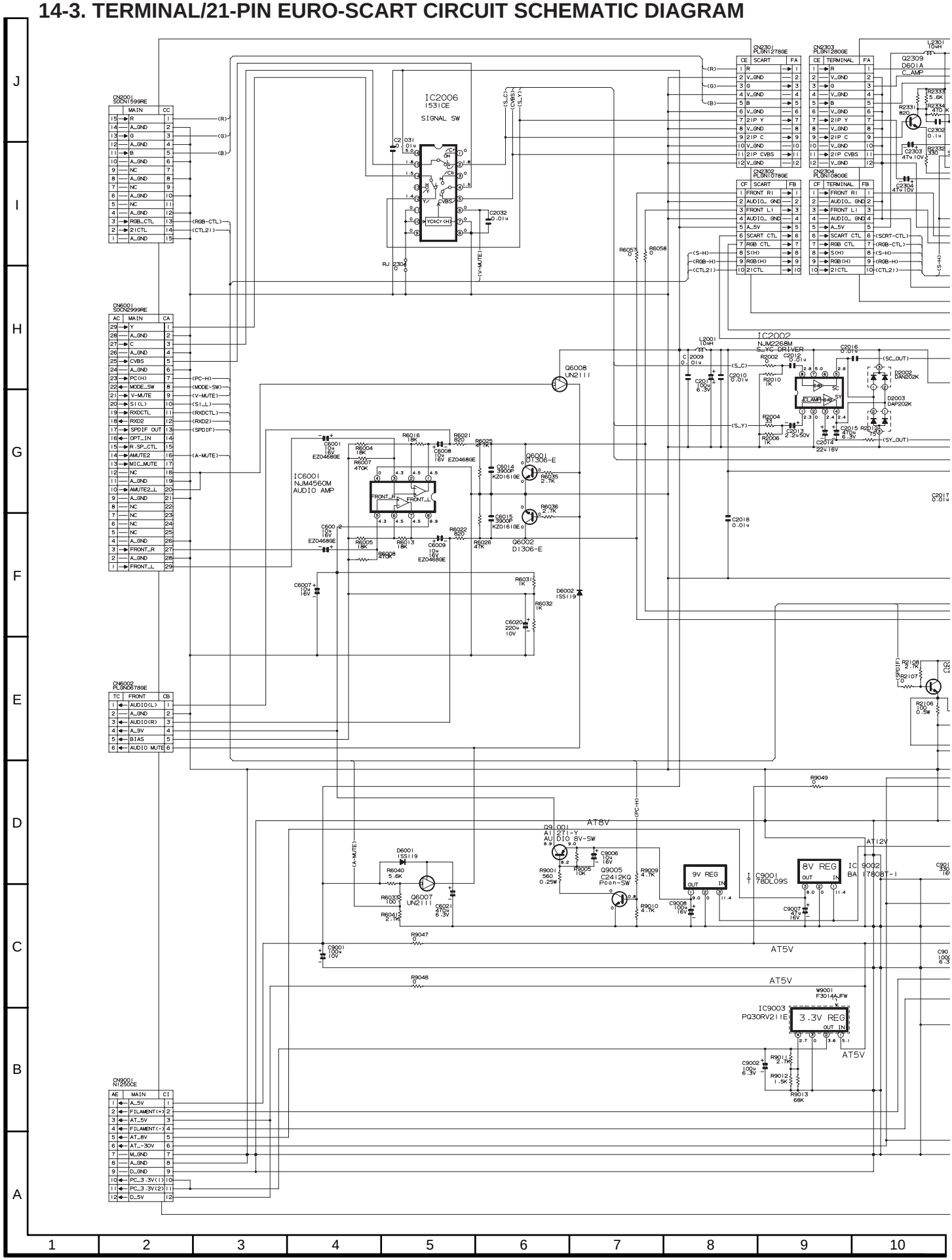


S	R	Q	P	O	N	M	L	K	J

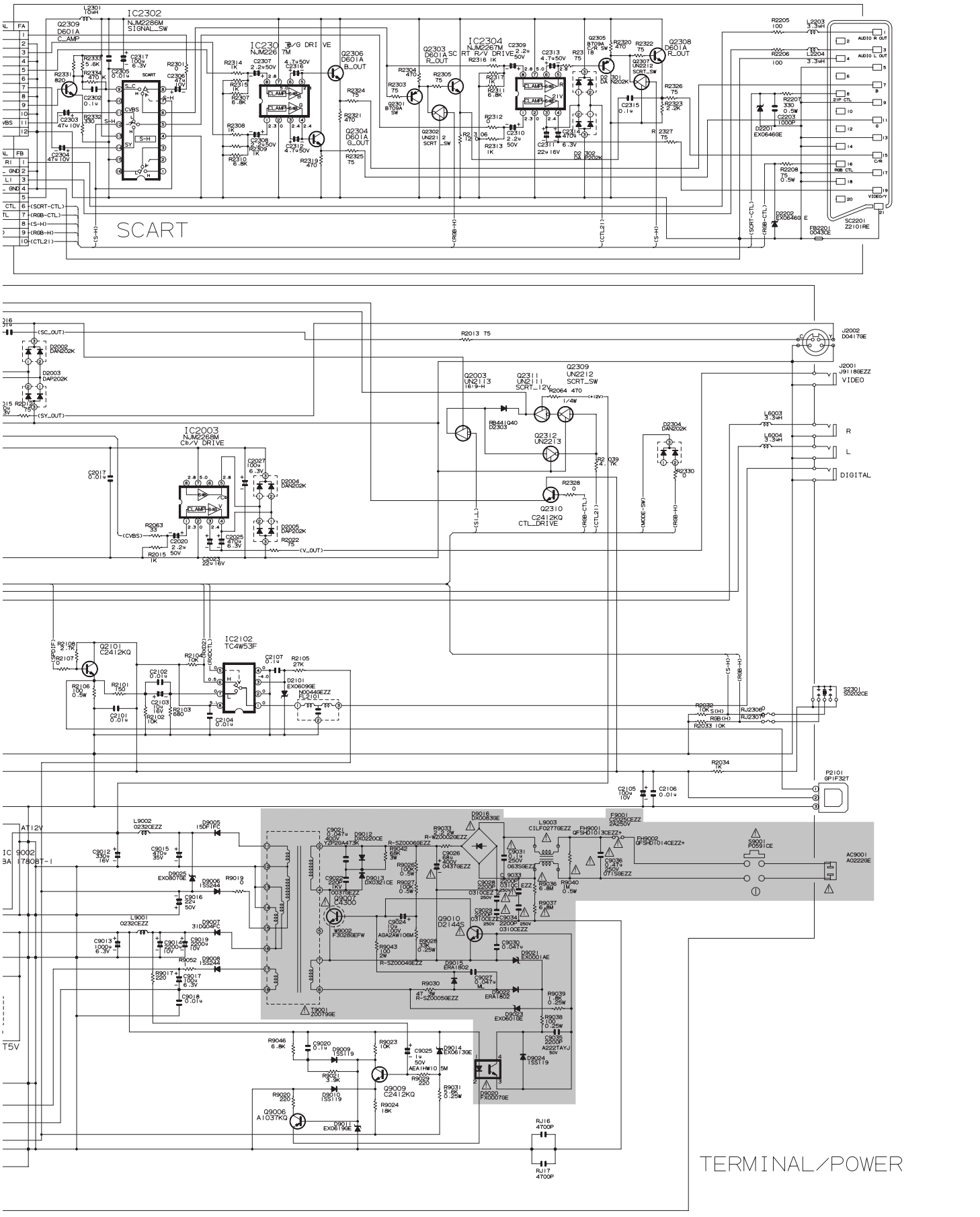
LOCATION MAP: 1 3 / 2 (4/4)



14-3. TERMINAL/21-PIN EURO-SCART CIRCUIT SCHEMATIC DIAGRAM

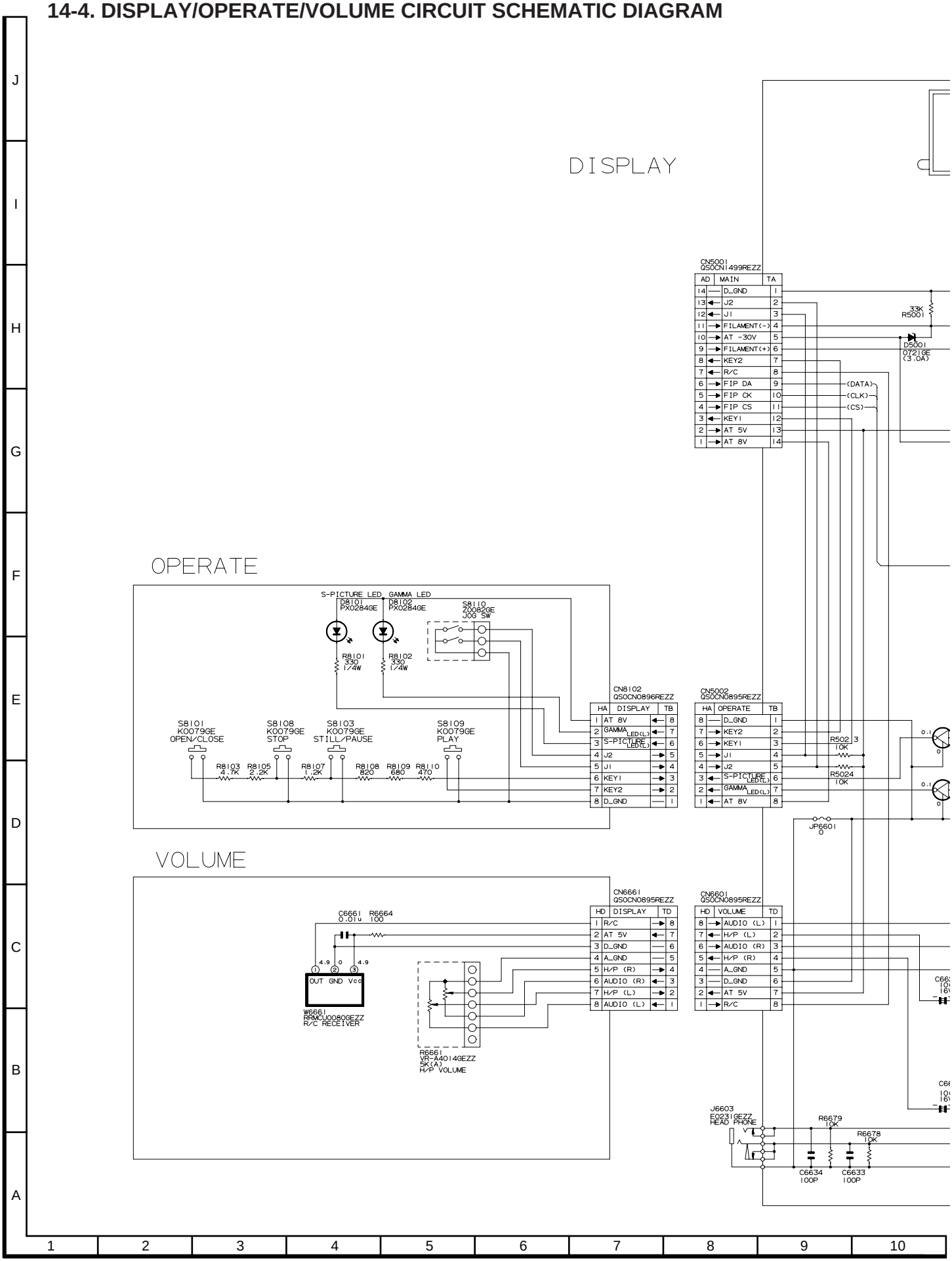


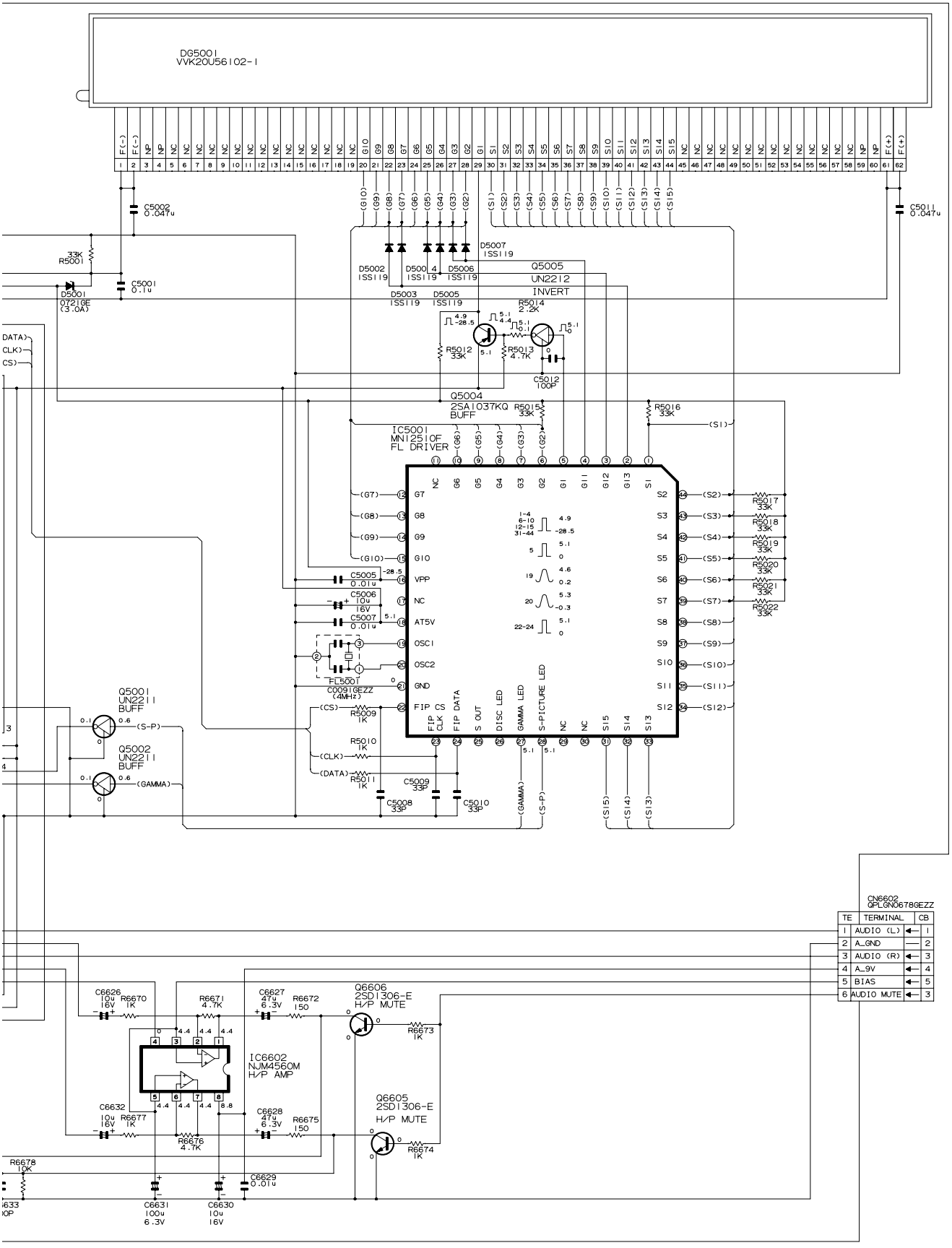
⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS



10	11	12	13	14	15	16	17	18	19

14-4. DISPLAY/OPERATE/VOLUME CIRCUIT SCHEMATIC DIAGRAM

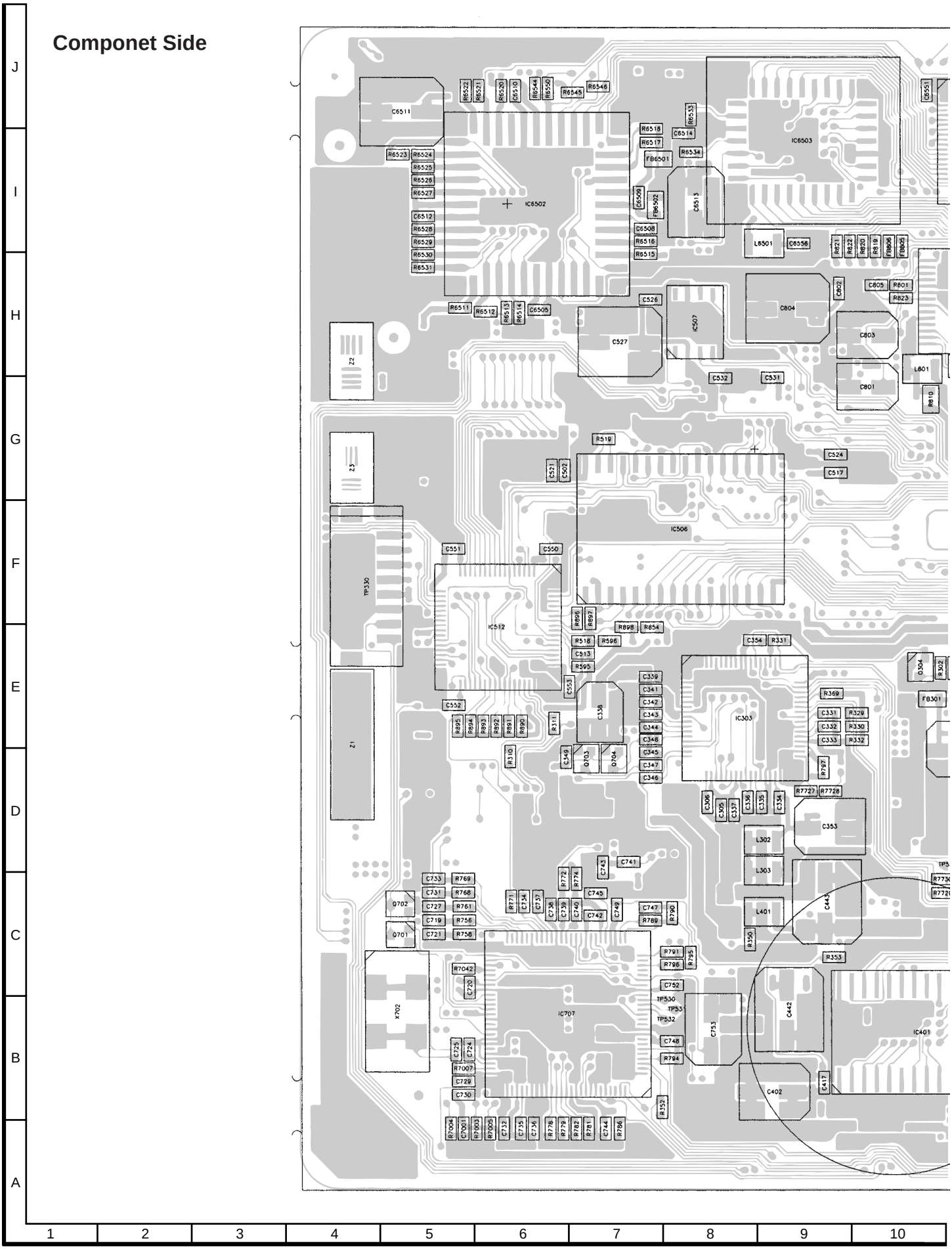


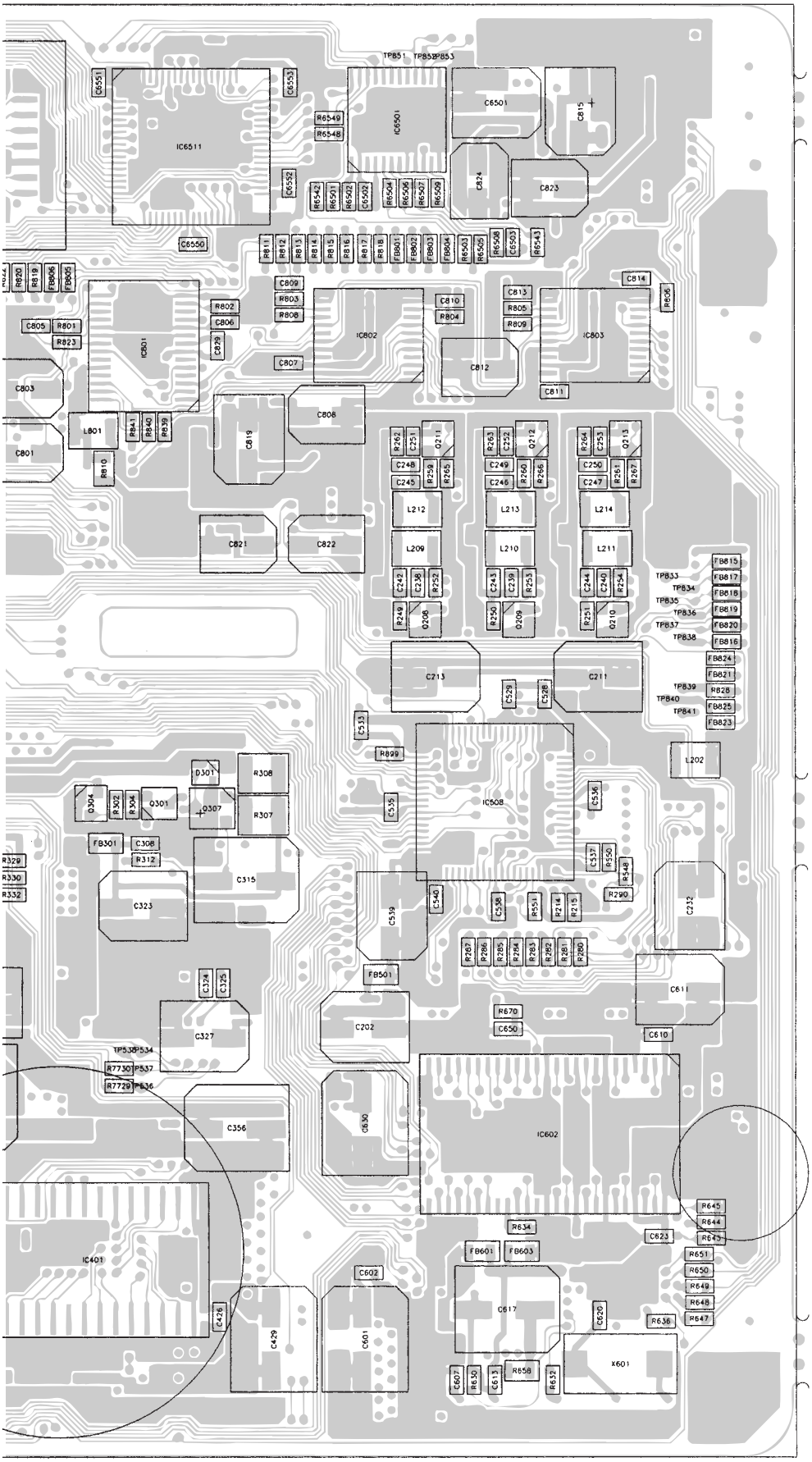


10	11	12	13	14	15	16	17	18	19

15. PRINTED WIRING BOARD ASSEMBLIES 15-1. MAIN P.W.B.

Componet Side

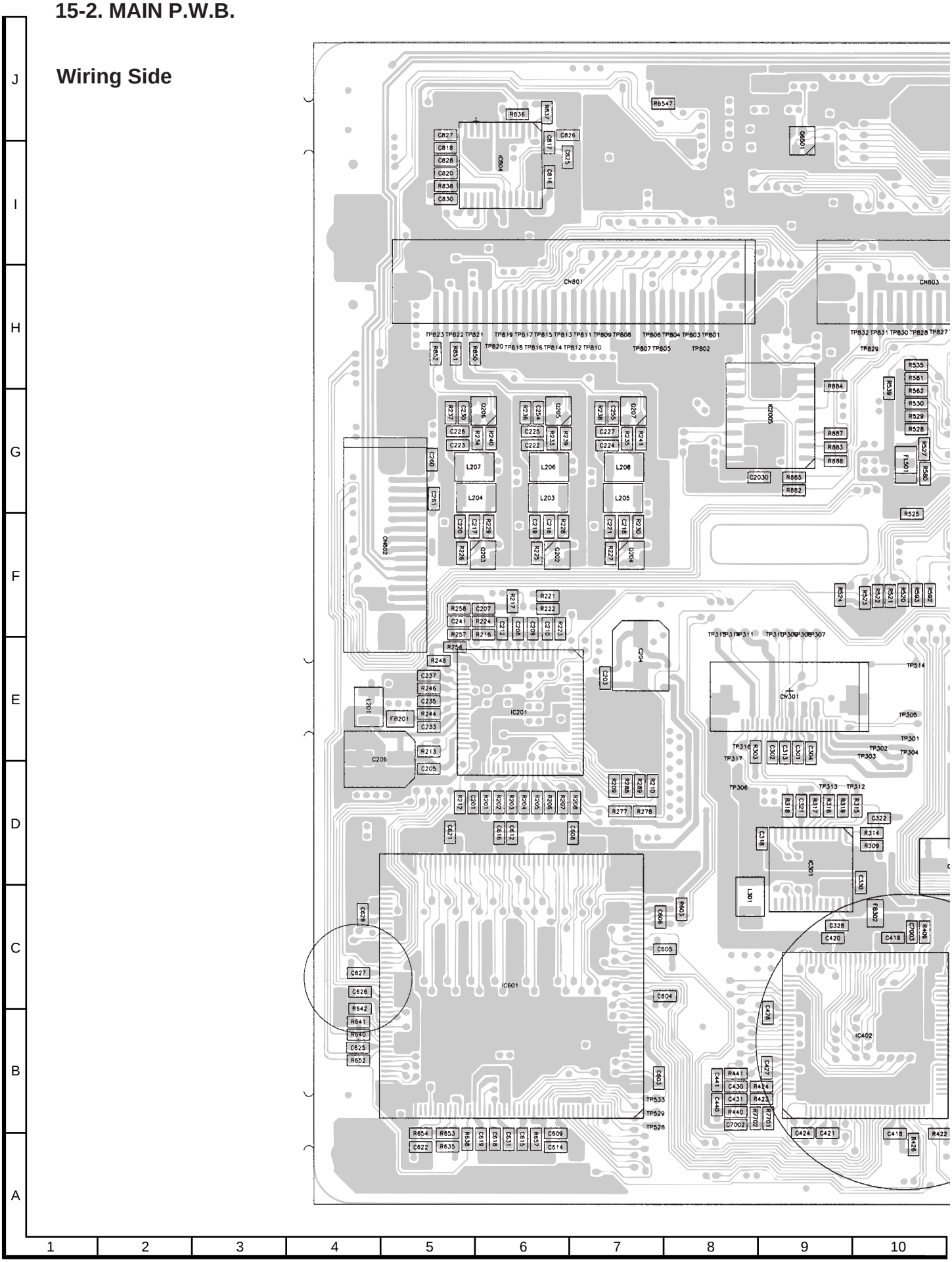


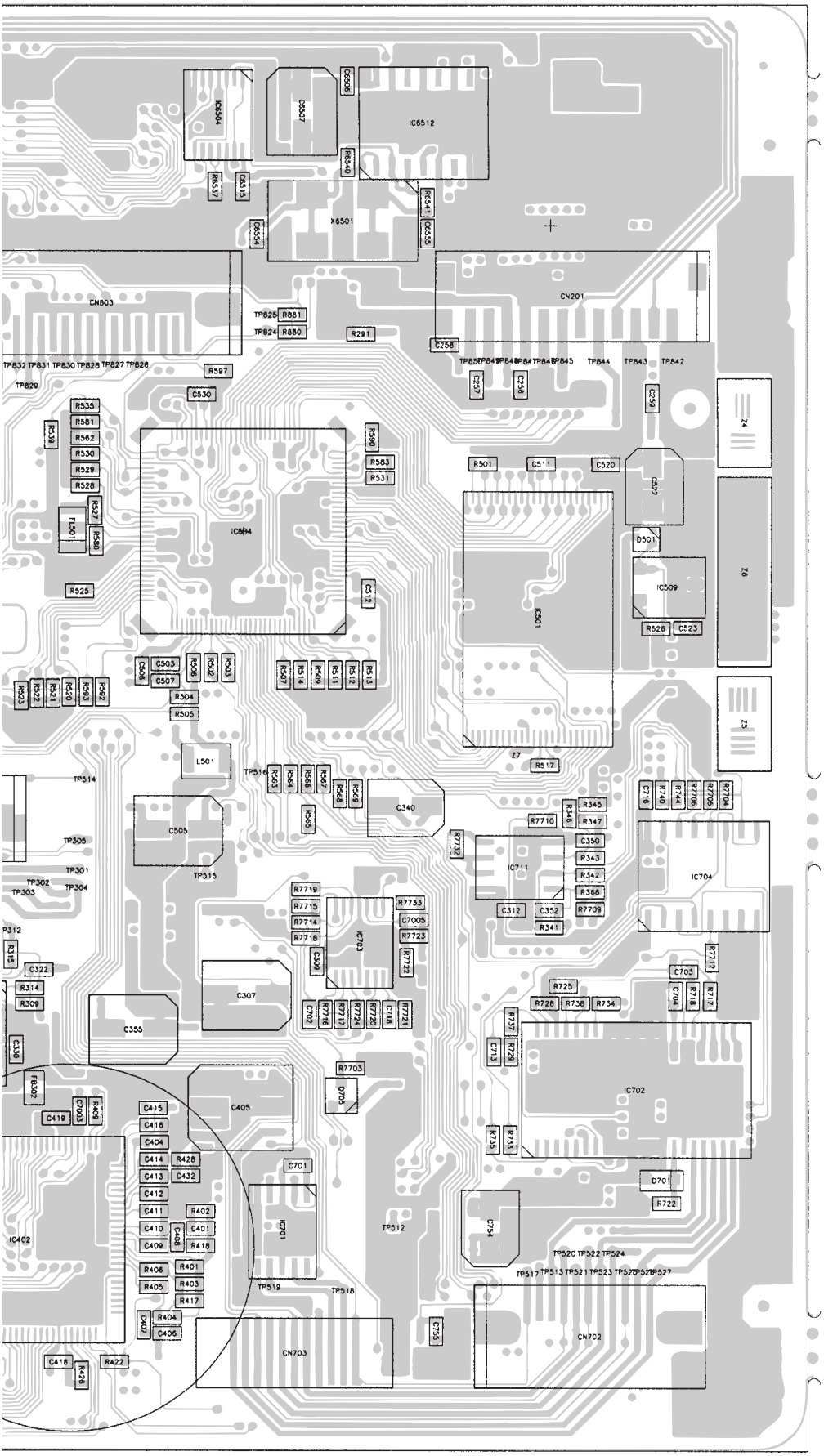


10	11	12	13	14	15	16	17	18	19

15-2. MAIN P.W.B.

Wiring Side

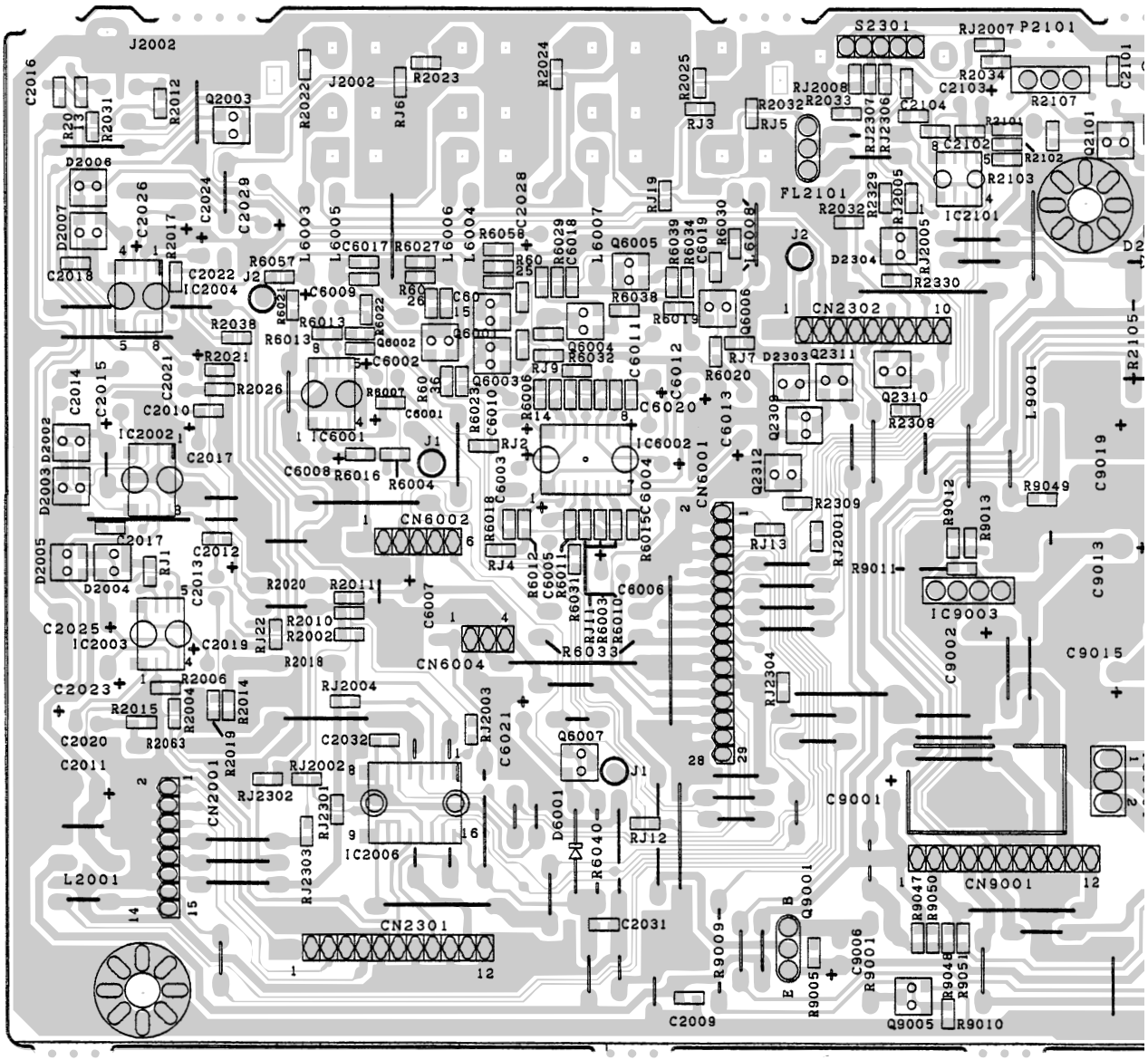




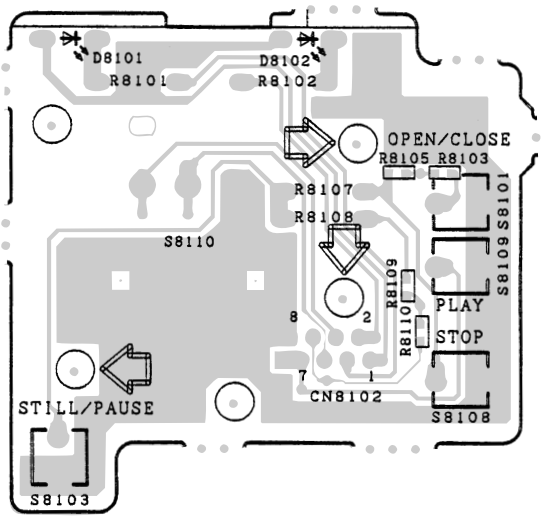
10	11	12	13	14	15	16	17	18	19

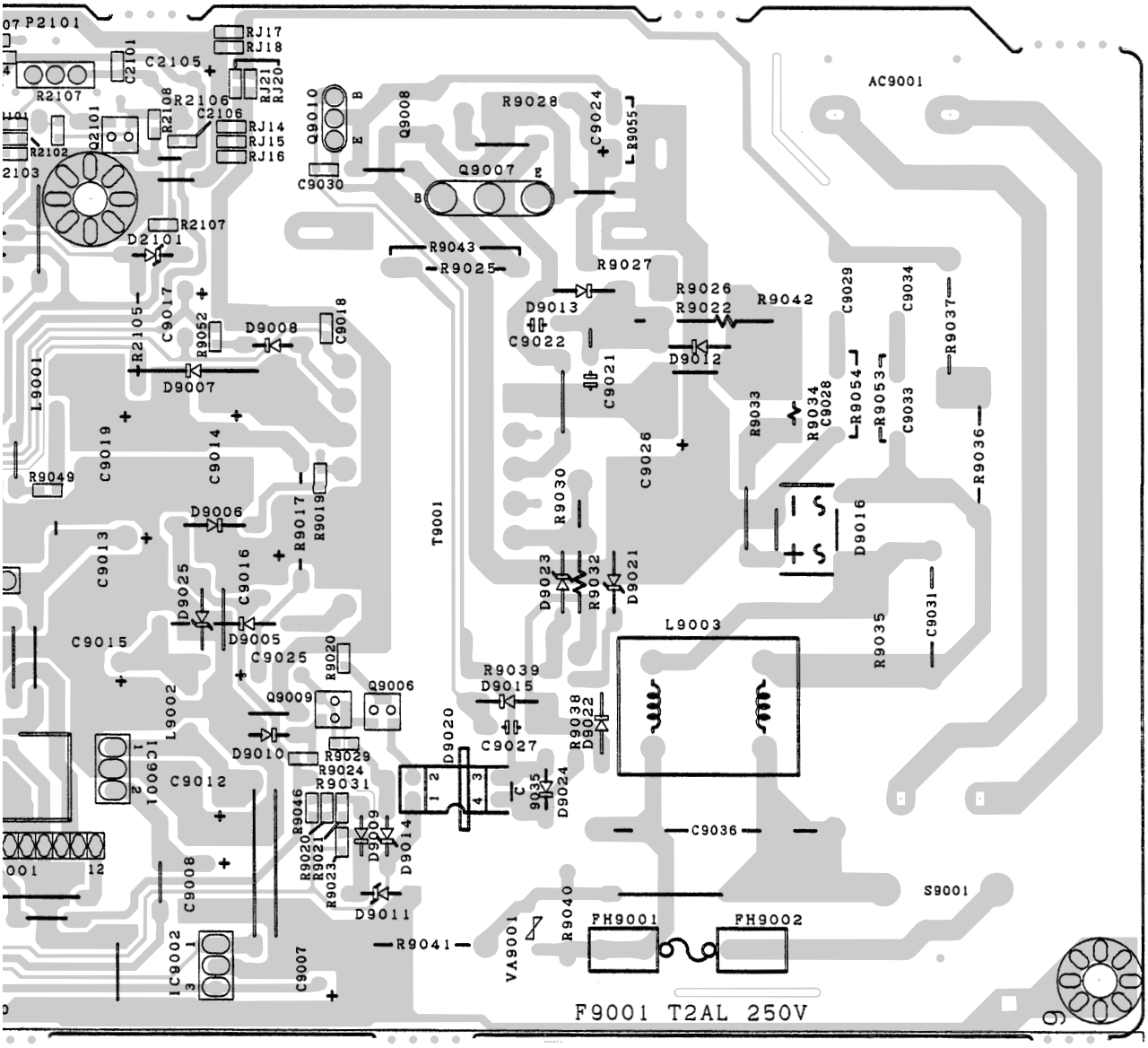
15-3. TERMINAL/OPERATE/VOLUME P.W.B.

TERMINAL

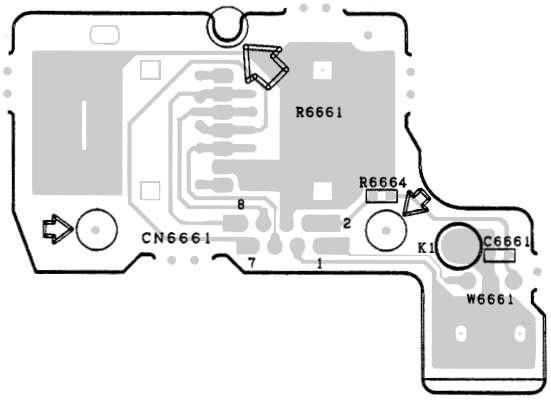


OPERATE





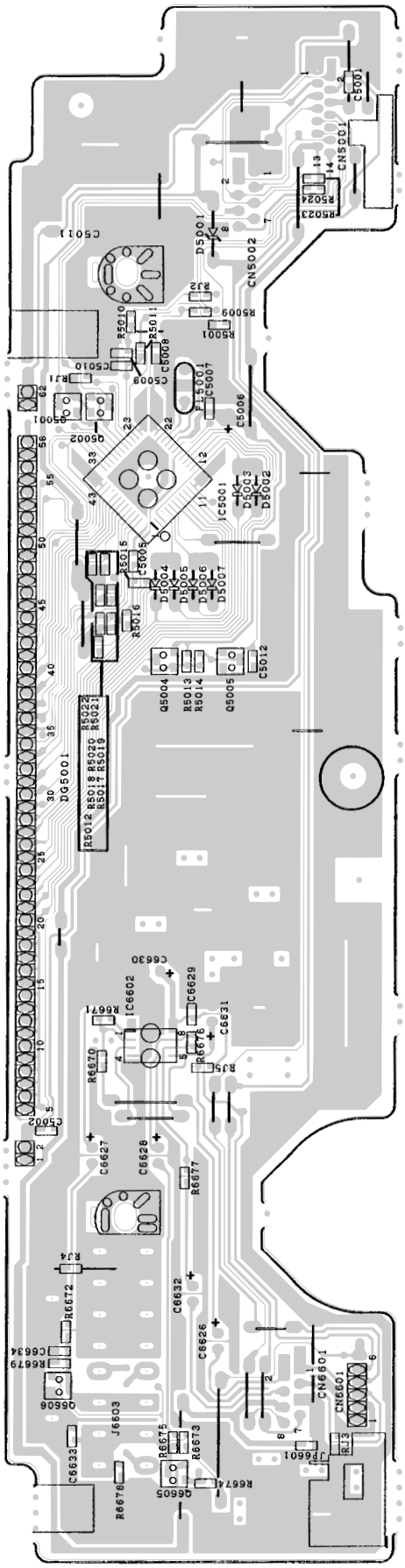
VOLUME



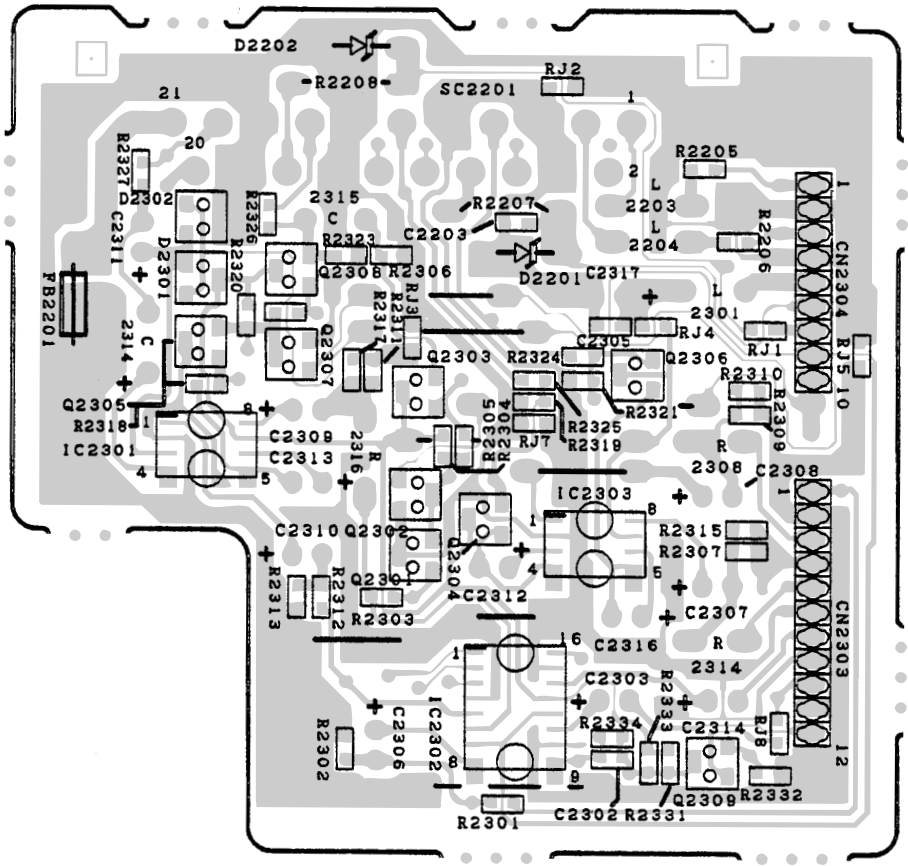
10	11	12	13	14	15	16	17	18	19

15-4. DISPLAY/21-PIN EURO-SCART P.W.B.

DISPLAY

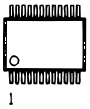


21-PIN EURO-SCART

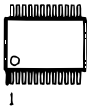


10	11	12	13	14	15	16	17	18	19

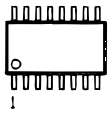
16. SEMICONDUCTOR LEAD IDENTIFICATION



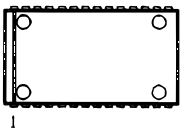
IC301
RH-iX1461GEZZ



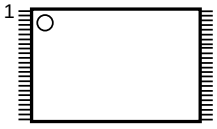
IC801
VHiPCM1716E-1



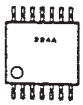
IC2302
VHiNJM2286M-1



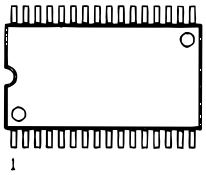
IC401
RH-iX1484GEZZ



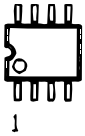
IC501
RH-iX1539GEZZ



IC703
VHi10324AFV-1

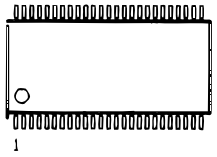


IC506
RH-iX1618GEZZ

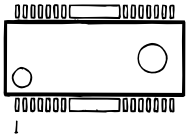


IC507
VHiBR93L46F-1

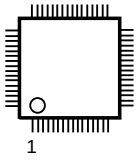
IC509
VHiPST600iM-1



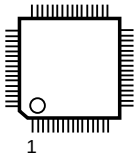
IC602
RH-iX0750TAZZ



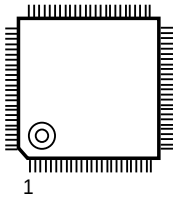
IC702
VHiBA6796FP-1



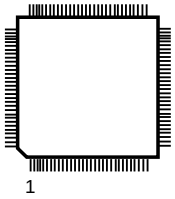
IC201
VHiMC44724A-1



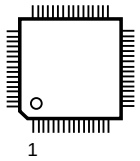
IC303
RH-iX1517GEZZ



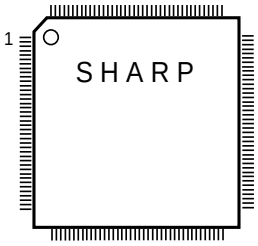
IC402
RH-iX1474GEZZ



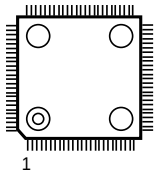
IC504
RH-iX1478GEZZ



IC508
RH-iX1516GEZZ
IC512
RH-iX1535GEZZ

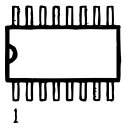


IC601
RH-iX1521GEZZ



IC707
RH-iX1473GEZZ

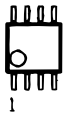
X601
RCRSC0031GEZZ
X702
RCRSC0035GEZZ



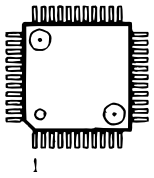
IC2006 IC2005
IC704
RH-iX1531CEZZ

IC2002 IC2003
VHiNJM2268M-1
IC2303 IC2304
VHiNJM2267M-1

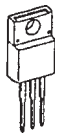
IC2102
VHiTC4W53F/-1



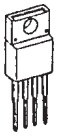
IC6001 IC6602
VHiNJM4560M-1



IC5001
VHiMN12510F-1



IC9001
VHiT78DL09S-1
IC9002
VHiBA17808T-1



IC9003
VHiPQ30RV211E

17. REPLACEMENT PARTS LIST/ EXPLODED VIEWS

ELECTRICAL PARTS LIST

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

"HOW TO ORDER REPLACEMENT PARTS"

★MARK : SPARE PARTS-DELIVERY SECTION : ALL MALAYSIA

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER **2. REF. NO.**
3. PART NO. **4. DESCRIPTION**
5. PRICE CODE

⚠ **MARK: SAFETY RELATED PARTS**

PWB ASSEMBLY IS NOT REPLACEMENT ITEM

Ref. No.	Part No.	★	Description	Code

PRINTED WIRING BOARD ASSEMBLIES *(NOT REPLACEMENT ITEM)*

DUNTK5766TE6A	-	Main PWB Unit(DV-600S)	—
DUNTK5766TE6B	-	Main PWB Unit(DV-600H)	—
DUNTK5667TEV3	-	Terminal PWB Unit(DV-600S)	—
DUNTK5667TEV4	-	Terminal PWB Unit(DV-600H)	—
DUNTK5668TEV3	-	Display PWB Unit(DV-600S)	—
DUNTK5668TEV4	-	Display PWB Unit(DV-600H)	—
DUNTK5669TEV3	-	Operate PWB Unit(DV-600S)	—
DUNTK5669TEV4	-	Operate PWB Unit(DV-600H)	—
DUNTK5670TEV3	-	Volume PWB Unit(DV-600S)	—
DUNTK5670TEV4	-	Volume PWB Unit(DV-600H)	—
DUNTK5672TEV3	-	21-Pin Euro Scart PWB Unit(DV-600S)	—
DUNTK5672TEV4	-	21-Pin Euro Scart PWB Unit(DV-600H)	—

DUNTK5766TE6A(DV-600S) DUNTK5766TE6B(DV-600H) MAIN PWB UNIT

INTEGRATED CIRCUITS

IC201	VHiMC44724A-1	MC44724A, Video Encoder	AY
IC301	RH-iX1461GEZZ	IX1461GE, RF Pre Amp	AP
IC303	RH-iX1517GEZZ	IX1517GE, RF Signal Processor	AX
IC401	RH-iX1484GEZZ	IX1484GE, 4M DRAM	AU
IC402	RH-iX1474GEZZ	IX1474GE, DEM/ECC	BG
IC501	RH-iX1539GEZZ	IX1539GE, Flash Memory	AX
IC504	RH-iX1478GEZZ	IX1478GE, Microcomputer	BA
IC506	RH-iX1618GEZZ	IX1618GE, 1M SRAM	AS
IC507	VHiBR93L46F-1	BR93L46F, E²PROM	AG
IC508	RH-iX1516GEZZ	IX1516GE, Gamma S P Tone	AV
IC509	VHiPST600iM-1	PST600iM, Reset	AE
IC512	RH-iX1535GEZZ	IX1535GE, Host I/F	AN
IC601	RH-iX1521GEZZ	IX1521GE, Source Decoder	BQ
IC602	RH-iX0750TAZZ	IX0750GE, 16M SDRAM	AW
IC702	VHiBA6796FP-1	BA6796FP, Motor Driver	AN
IC703	VHi10324AFV-1	BA10324AFV, OP Amp	AF
IC704	RH-iX1531CEZZ	IX1531CE, Multiplexer	AF
IC707	RH-iX1473GEZZ	IX1473GE, Servo Processor	BA
IC801	VHiPCM1716E-1	PCM1716E, Audio D/AC Converter	AV
IC2005	RH-iX1531CEZZ	IX1531CE, Signal SW	AF

Ref. No.	Part No.	★	Description	Code

TRANSISTORS

Q202	VS2SA1576//-1	2SA1576	AB
Q203	VS2SA1576//-1	2SA1576	AB
Q204	VS2SA1576//-1	2SA1576	AB
Q205	VS2SC4081//-1	2SC4081	AB
Q206	VS2SC4081//-1	2SC4081	AB
Q207	VS2SC4081//-1	2SC4081	AB
Q208	VS2SA1576//-1	2SA1576	AB
Q209	VS2SA1576//-1	2SA1576	AB
Q210	VS2SA1576//-1	2SA1576	AB
Q211	VS2SC4081//-1	2SC4081	AB
Q212	VS2SC4081//-1	2SC4081	AB
Q213	VS2SC4081//-1	2SC4081	AB
Q301	VS2SA1576//-1	2SA1576	AB
Q304	VSDTC144EU/-1	DTC144EU	AB
Q307	VS2SA1298Y/-1	2SA1298Y	AB
Q701	VSDTA144EU/-1	DTA144EU	AC
Q702	VSDTC144EU/-1	DTC144EU	AB
Q703	VSDTC144EU/-1	DTC144EU	AB
Q704	VSDTC144EU/-1	DTC144EU	AB
Q705	VSDTC144EU/-1	DTC144EU	AB

DIODES

D301	VHDDAN222//-1	DAN222	AA
D501	VHDDAN222//-1	DAN222	AA
D701	RH-EX0852CEZZ	Zener, EX0852CE	AC

PACKAGED CIRCUITS

X601	RCRSC0031GEZZ	Crystal, CRSC0031GE	AK
X702	RCRSC0035GEZZ	Crystal, CRSC0035GE	AG

FILTER

FL501	RFiLC0196GEZZ	Filter, FiLC0196GE	AE

COILS

L201	VP-NM470K2R0N	Peaking, 47µH	AB
L202	VP-NM100KR42N	Peaking, 10µH	AB
L203	VP-1M270K3R8N	Peaking, 27µH	AC
L204	VP-1M270K3R8N	Peaking, 27µH	AC
L205	VP-1M270K3R8N	Peaking, 27µH	AC
L206	VP-1M270K3R8N	Peaking, 27µH	AC
L207	VP-1M270K3R8N	Peaking, 27µH	AC
L208	VP-1M270K3R8N	Peaking, 27µH	AC
L209	VP-1M270K3R8N	Peaking, 27µH	AC,
L210	VP-1M270K3R8N	Peaking, 27µH	AC
L211	VP-1M270K3R8N	Peaking, 27µH	AC
L212	VP-1M270K3R8N	Peaking, 27µH	AC
L213	VP-1M270K3R8N	Peaking, 27µH	AC
L214	VP-1M270K3R8N	Peaking, 27µH	AC
L301	VP-NM100KR42N	Peaking, 10µH	AB
L302	VP-NM100KR42N	Peaking, 10µH	AB
L303	VP-NM100KR42N	Peaking, 10µH	AB
L401	VP-NM470K2R0N	Peaking, 47µH	AB
L501	VP-NM470K2R0N	Peaking, 47µH	AB
L801	VP-NM470K2R0N	Peaking, 47µH	AB

CAPACITORS

C201	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C202	VCEAPF0JW476M	47	6.3V	Electrolytic	AB
C203	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C204	VCEAPF0JW476M	47	6.3V	Electrolytic	AB
C205	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C206	VCEAPF0JW476M	47	6.3V	Electrolytic	AB
C207	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C208	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C209	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C210	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C211	VCEAPF0JW476M	47	6.3V	Electrolytic	AB
C212	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C213	VCEAPF0JW476M	47	6.3V	Electrolytic	AB
C216	VCCCCY1HH270J	27p	50V	Ceramic	AA
C217	VCCCCY1HH270J	27p	50V	Ceramic	AA
C218	VCCCCY1HH270J	27p	50V	Ceramic	AA
C219	VCCCCY1HH560J	56p	50V	Ceramic	AA

DUNTK5766TE6A(DV-600S)
DUNTK5766TE6B(DV-600H)
MAIN PWB UNIT(Continued)

Ref. No.	Part No.	★	Description			Code
C220	VCCCCY1HH560J		56p	50V	Ceramic	AA
C221	VCCCCY1HH560J		56p	50V	Ceramic	AA
C222	VCCCCY1HH5R0C		5p	50V	Ceramic	AA
C223	VCCCCY1HH5R0C		5p	50V	Ceramic	AA
C224	VCCCCY1HH5R0C		5p	50V	Ceramic	AA
C225	VCCCCY1HH390J		39p	50V	Ceramic	AA
C226	VCCCCY1HH390J		39p	50V	Ceramic	AA
C227	VCCCCY1HH390J		39p	50V	Ceramic	AA
C230	VCCCCY1HH150J		15p	50V	Ceramic	AA
C232	VCEAPF0JW476M		47	6.3V	Electrolytic	AB
C233	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C235	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C237	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C238	VCCCCY1HH270J		27p	50V	Ceramic	AA
C239	VCCCCY1HH270J		27p	50V	Ceramic	AA
C240	VCCCCY1HH270J		27p	50V	Ceramic	AA
C241	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C242	VCCCCY1HH560J		56p	50V	Ceramic	AA
C243	VCCCCY1HH560J		56p	50V	Ceramic	AA
C244	VCCCCY1HH560J		56p	50V	Ceramic	AA
C245	VCCCCY1HH5R0C		5p	50V	Ceramic	AA
C246	VCCCCY1HH5R0C		5p	50V	Ceramic	AA
C247	VCCCCY1HH5R0C		5p	50V	Ceramic	AA
C248	VCCCCY1HH390J		39p	50V	Ceramic	AA
C249	VCCCCY1HH390J		39p	50V	Ceramic	AA
C250	VCCCCY1HH390J		39p	50V	Ceramic	AA
C251	VCCCCY1HH150J		15p	50V	Ceramic	AA
C252	VCCCCY1HH150J		15p	50V	Ceramic	AA
C253	VCCCCY1HH150J		15p	50V	Ceramic	AA
C254	VCCCCY1HH150J		15p	50V	Ceramic	AA
C255	VCCCCY1HH150J		15p	50V	Ceramic	AA
C256	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C257	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C258	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C259	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C260	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C261	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C301	VCKYCY1AF105Z		1	10V	Ceramic	AC
C302	VCKYCY1AF105Z		1	10V	Ceramic	AC
C304	VCKYCY1AF105Z		1	10V	Ceramic	AC
C305	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C306	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C307	VCEAPF0JW476M		47	6.3V	Electrolytic	AB
C308	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C309	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C313	VCKYCY1AF105Z		1	10V	Ceramic	AC
C315	VCEAPF0JW107M		100	6.3V	Electrolytic	AC
C318	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C321	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C322	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C324	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C325	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C327	VCEAPF0JW476M		47	6.3V	Electrolytic	AB
C328	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C330	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C331	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C332	VCKYCY1AF105Z		1	10V	Ceramic	AC
C333	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C334	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C335	VCKYCY1HB472K		4700p	50V	Ceramic	AA
C336	VCKYCY1HB472K		4700p	50V	Ceramic	AA
C337	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C338	VCEAPF1HW225M		2.2	50V	Electrolytic	AB
C339	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C340	VCEAPF0JW226M		22	6.3V	Electrolytic	AB
C341	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C342	VCKYCY1HB102K		1000p	50V	Ceramic	AA
C343	VCKYCY1HB102K		1000p	50V	Ceramic	AA
C344	VCKYCY1HB102K		1000p	50V	Ceramic	AA
C345	VCKYCY1HB102K		1000p	50V	Ceramic	AA
C346	VCKYCY1AF105Z		1	10V	Ceramic	AC
C347	VCKYCY1HB222K		2200p	50V	Ceramic	AA
C348	VCKYCY1HB222K		2200p	50V	Ceramic	AA
C349	VCKYCY1HB102K		1000p	50V	Ceramic	AA
C353	VCEAPF0JW476M		47	6.3V	Electrolytic	AB
C354	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C355	VCEAPF0JW476M		47	6.3V	Electrolytic	AB
C356	VCEAPF0JW107M		100	6.3V	Electrolytic	AC
C401	VCKYCY1HB471K		470p	50V	Ceramic	AA
C402	VCEAPF0JW476M		47	6.3V	Electrolytic	AB
C404	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C405	RC-EZ0475GEZZ		220	6.3V	Electrolytic	AD
C406	VCCCCY1HH331J		330p	50V	Ceramic	AA
C407	VCCCCY1HH331J		330p	50V	Ceramic	AA
C408	VCKYCY1CB333K		0.033	16V	Ceramic	AA
C409	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C410	VCCCCY1HH220J		22p	50V	Ceramic	AA
C411	VCKYCY1AF105Z		1	10V	Ceramic	AC
C412	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C413	VCKYCY1AF105Z		1	10V	Ceramic	AC
C414	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C415	VCKYCY1HB471K		470p	50V	Ceramic	AA
C416	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C417	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C418	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C419	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C420	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C421	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C424	VCCCCY1HH101J		100p	50V	Ceramic	AA
C426	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C427	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C428	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C429	RC-EZ0475GEZZ		220	6.3V	Electrolytic	AD
C430	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C431	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C432	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C440	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C441	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C442	VCEAPF0JW107M		100	6.3V	Electrolytic	AC
C443	VCEAPF0JW107M		100	6.3V	Electrolytic	AC
C502	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C503	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C505	VCEAPF0JW476M		47	6.3V	Electrolytic	AB
C506	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C507	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C511	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C512	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C513	VCKYCY1AF105Z		1	10V	Ceramic	AC
C517	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C520	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C521	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C522	VCEAPF0JW226M		22	6.3V	Electrolytic	AB
C523	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C524	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C526	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C527	VCEAPF0JW107M		100	6.3V	Electrolytic	AC
C528	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C529	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C530	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C531	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C532	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C533	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C535	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C536	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C537	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C538	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C539	VCEAPF0JW476M		47	6.3V	Electrolytic	AB
C540	VCKYCY1AF105Z		1	10V	Ceramic	AC
C550	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C551	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C552	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C553	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C601	RC-EZ0475GEZZ		220	6.3V	Electrolytic	AD
C602	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C603	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C604	VCKYCY1HB102K		1000p	50V	Ceramic	AA

DUNTK5766TE6A(DV-600S)
DUNTK5766TE6B(DV-600H)
MAIN PWB UNIT(Continued)

Ref. No.	Part No.	★		Description	Code
C605	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C606	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C607	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C608	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C609	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C610	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C611	VCEAPF0JW476M	47	6.3V	Electrolytic	AB
C612	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C613	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C614	VCKYCY1HB102K	1000p	50V	Ceramic	AA
C615	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C616	VCKYCY1HB102K	1000p	50V	Ceramic	AA
C617	RC-EZ0475GEZZ	220	6.3V	Electrolytic	AD
C618	VCKYCY1HB682K	6800p	50V	Ceramic	AA
C619	VCKYCY1HB102K	1000p	50V	Ceramic	AA
C620	VCCCCY1HH8R0D	8p	50V	Ceramic	AA
C621	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C622	VCCCCY1HH1R0C	1p	50V	Ceramic	AA
C623	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C625	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C626	VCKYCY1HB102K	1000p	50V	Ceramic	AA
C627	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C628	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C630	RC-EZ0475GEZZ	220	6.3V	Electrolytic	AD
C702	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C703	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C704	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C713	VCKYCY1HB332K	3300p	50V	Ceramic	AA
C716	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C718	VCKYCY1HB222K	2200p	50V	Ceramic	AA
C719	VCKYCY1HB332K	3300p	50V	Ceramic	AA
C720	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C721	VCKYCY1CB473K	0.047	16V	Ceramic	AA
C724	VCCCCY1HH100D	10p	50V	Ceramic	AA
C725	VCCCCY1HH9R0D	9p	50V	Ceramic	AA
C727	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C729	VCCCCY1HH101J	100p	50V	Ceramic	AA
C730	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C731	VCKYCY1HB472K	4700p	50V	Ceramic	AA
C732	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C733	VCKYCY1HB472K	4700p	50V	Ceramic	AA
C734	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C735	VCKYCY1CB473K	0.047	16V	Ceramic	AA
C736	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C737	VCCCCY1HH221J	220p	50V	Ceramic	AA
C738	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C739	VCKYCY1HB471K	470p	50V	Ceramic	AA
C740	VCCCCY1HH221J	220p	50V	Ceramic	AA
C741	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C742	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C743	VCKYCY1HB272K	2700p	50V	Ceramic	AA
C744	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C745	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C747	VCKYCY1HB153K	0.015	50V	Ceramic	AA
C748	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C749	VCCCCY1HH470J	47p	50V	Ceramic	AA
C752	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C753	VCEAPF0JW476M	47	6.3V	Electrolytic	AB
C754	VCEAPF1CW106M	10	16V	Electrolytic	AB
C755	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C801	VCEAPF1CW106M	10	16V	Electrolytic	AB
C802	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C803	VCEAPF1CW106M	10	16V	Electrolytic	AB
C804	RC-EZ0475GEZZ	220	6.3V	Electrolytic	AD
C805	RC-KZ0162GEZZ	4700p	16V	Ceramic	AB
C806	RC-KZ0162GEZZ	4700p	16V	Ceramic	AB
C829	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C2030	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C7001	VCKYCY1HB102K	1000p	50V	Ceramic	AA
C7002	VCKYCY1HB103K	0.01	50V	Ceramic	AA
C7003	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C7005	VCKYCY1HB103K	0.01	50V	Ceramic	AA

RESISTORS

Ref. No.	Part No.	★		Description	Code
R201	VRS-CY1JF820J	82	1/16W	Metal Oxide	AA
R202	VRS-CY1JF820J	82	1/16W	Metal Oxide	AA
R203	VRS-CY1JF820J	82	1/16W	Metal Oxide	AA
R204	VRS-CY1JF820J	82	1/16W	Metal Oxide	AA
R205	VRS-CY1JF820J	82	1/16W	Metal Oxide	AA
R206	VRS-CY1JF820J	82	1/16W	Metal Oxide	AA
R207	VRS-CY1JF820J	82	1/16W	Metal Oxide	AA
R208	VRS-CY1JF820J	82	1/16W	Metal Oxide	AA
R209	VRS-CY1JF820J	82	1/16W	Metal Oxide	AA
R210	VRS-CY1JF820J	82	1/16W	Metal Oxide	AA
R212	VRS-CY1JF472J	4.7k	1/16W	Metal Oxide	AA
R213	VRS-CY1JF220J	22	1/16W	Metal Oxide	AA
R214	VRS-CY1JF472J	4.7k	1/16W	Metal Oxide	AA
R215	VRS-CY1JF472J	4.7k	1/16W	Metal Oxide	AA
R216	VRS-CY1JF152F	1.5k	1/16W	Metal Oxide	AA
R217	VRS-CY1JF182F	1.8k	1/16W	Metal Oxide	AA
R221	VRS-CY1JF181F	180	1/16W	Metal Oxide	AA
R222	VRS-CY1JF181F	180	1/16W	Metal Oxide	AA
R223	VRS-CY1JF181F	180	1/16W	Metal Oxide	AA
R224	VRS-CY1JF152F	1.5k	1/16W	Metal Oxide	AA
R225	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R226	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R227	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R228	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R229	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R230	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R233	VRS-CY1JF391J	390	1/16W	Metal Oxide	AA
R234	VRS-CY1JF391J	390	1/16W	Metal Oxide	AA
R235	VRS-CY1JF391J	390	1/16W	Metal Oxide	AA
R236	VRS-CY1JF392J	3.9k	1/16W	Metal Oxide	AA
R237	VRS-CY1JF392J	3.9k	1/16W	Metal Oxide	AA
R238	VRS-CY1JF392J	3.9k	1/16W	Metal Oxide	AA
R239	VRS-CY1JF391J	390	1/16W	Metal Oxide	AA
R240	VRS-CY1JF391J	390	1/16W	Metal Oxide	AA
R241	VRS-CY1JF391J	390	1/16W	Metal Oxide	AA
R244	VRS-CY1JF181F	180	1/16W	Metal Oxide	AA
R246	VRS-CY1JF181F	180	1/16W	Metal Oxide	AA
R248	VRS-CY1JF181F	180	1/16W	Metal Oxide	AA
R249	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R250	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R251	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R252	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R253	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R254	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R256	VRS-CY1JF182F	1.8k	1/16W	Metal Oxide	AA
R257	VRS-CY1JF152F	1.5k	1/16W	Metal Oxide	AA
R258	VRS-CY1JF152F	1.5k	1/16W	Metal Oxide	AA
R259	VRS-CY1JF391J	390	1/16W	Metal Oxide	AA
R260	VRS-CY1JF391J	390	1/16W	Metal Oxide	AA
R261	VRS-CY1JF391J	390	1/16W	Metal Oxide	AA
R262	VRS-CY1JF392J	3.9k	1/16W	Metal Oxide	AA
R263	VRS-CY1JF392J	3.9k	1/16W	Metal Oxide	AA
R264	VRS-CY1JF392J	3.9k	1/16W	Metal Oxide	AA
R265	VRS-CY1JF391J	390	1/16W	Metal Oxide	AA
R266	VRS-CY1JF391J	390	1/16W	Metal Oxide	AA
R267	VRS-CY1JF391J	390	1/16W	Metal Oxide	AA
R278	VRS-CY1JF332J	3.3k	1/16W	Metal Oxide	AA
R302	VRS-CY1JF222J	2.2k	1/16W	Metal Oxide	AA
R303	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R304	VRS-CY1JF472J	4.7k	1/16W	Metal Oxide	AA
R307	VRS-TW2ED470J	47	1/4W	Metal Oxide	AA
R308	VRS-TW2ED470J	47	1/4W	Metal Oxide	AA
R309	VRS-CY1JF562J	5.6k	1/16W	Metal Oxide	AA
R310	VRS-CY1JF562J	5.6k	1/16W	Metal Oxide	AA
R311	VRS-CY1JF562J	5.6k	1/16W	Metal Oxide	AA
R312	VRS-CY1JF471J	470	1/16W	Metal Oxide	AA
R314	VRS-CY1JF104J	100k	1/16W	Metal Oxide	AA
R315	VRS-CY1JF393J	39k	1/16W	Metal Oxide	AA
R316	VRS-CY1JF393J	39k	1/16W	Metal Oxide	AA
R317	VRS-CY1JF393J	39k	1/16W	Metal Oxide	AA
R318	VRS-CY1JF104J	100k	1/16W	Metal Oxide	AA
R319	VRS-CY1JF393J	39k	1/16W	Metal Oxide	AA

DUNTK5766TE6A(DV-600S)
DUNTK5766TE6B(DV-600H)
MAIN PWB UNIT(Continued)

Ref. No.	Part No.	★	Description	Code
R329	VRS-CY1JF123J		12k 1/16W Metal Oxide	AA
R330	VRS-CY1JF822J		8.2k 1/16W Metal Oxide	AA
R331	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R332	VRS-CY1JF391J		390 1/16W Metal Oxide	AA
R341	VRS-CY1JF000J		0 1/16W Metal Oxide	AA
R342	VRS-CY1JF000J		0 1/16W Metal Oxide	AA
R350	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R352	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R353	VRS-CY1JF151J		150 1/16W Metal Oxide	AA
R366	VRS-CY1JF000J		0 1/16W Metal Oxide	AA
R369	VRS-CY1JF335J		3.3M 1/16W Metal Oxide	AA
R401	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R402	VRS-CY1JF562J		5.6k 1/16W Metal Oxide	AA
R403	VRS-CY1JF103F		10k 1/16W Metal Oxide	AA
R404	VRS-CY1JF153F		15k 1/16W Metal Oxide	AA
R405	VRS-CY1JF471J		470 1/16W Metal Oxide	AA
R406	VRS-CY1JF471J		470 1/16W Metal Oxide	AA
R409	VRS-CY1JF562J		5.6k 1/16W Metal Oxide	AA
R417	VRS-CY1JF224J		220k 1/16W Metal Oxide	AA
R418	VRS-CY1JF274J		270k 1/16W Metal Oxide	AA
R422	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R423	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R424	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R426	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R428	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R440	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R441	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R501	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R502	VRS-CY1JF100J		10 1/16W Metal Oxide	AA
R503	VRS-CY1JF100J		10 1/16W Metal Oxide	AA
R504	VRS-CY1JF332J		3.3k 1/16W Metal Oxide	AA
R505	VRS-CY1JF332J		3.3k 1/16W Metal Oxide	AA
R506	VRS-CY1JF332J		3.3k 1/16W Metal Oxide	AA
R507	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R509	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R511	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R512	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R513	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R514	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R517	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R518	VRS-CY1JF473J		47k 1/16W Metal Oxide	AA
R519	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R520	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R521	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R522	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R523	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R524	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R525	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R526	VRS-CY1JF824J		820k 1/16W Metal Oxide	AA
R527	VRS-CY1JF100J		10 1/16W Metal Oxide	AA
R528	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R529	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R530	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R531	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R535	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R548	VRS-CY1JF220J		22 1/16W Metal Oxide	AA
R550	VRS-CY1JF820J		82 1/16W Metal Oxide	AA
R551	VRS-CY1JF820J		82 1/16W Metal Oxide	AA
R562	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R563	VRS-CY1JF151J		150 1/16W Metal Oxide	AA
R564	VRS-CY1JF151J		150 1/16W Metal Oxide	AA
R565	VRS-CY1JF151J		150 1/16W Metal Oxide	AA
R566	VRS-CY1JF151J		150 1/16W Metal Oxide	AA
R567	VRS-CY1JF151J		150 1/16W Metal Oxide	AA
R568	VRS-CY1JF151J		150 1/16W Metal Oxide	AA
R569	VRS-CY1JF151J		150 1/16W Metal Oxide	AA
R590	VRS-CY1JF472J		4.7k 1/16W Metal Oxide	AA
R592	VRS-CY1JF472J		4.7k 1/16W Metal Oxide	AA
R593	VRS-CY1JF472J		4.7k 1/16W Metal Oxide	AA
R595	VRS-CY1JF472J		4.7k 1/16W Metal Oxide	AA
R596	VRS-CY1JF472J		4.7k 1/16W Metal Oxide	AA
R597	VRS-CY1JF472J		4.7k 1/16W Metal Oxide	AA
R603	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R630	VRS-CY1JF000J		0 1/16W Metal Oxide	AA
R632	VRS-CY1JF000J		0 1/16W Metal Oxide	AA
R634	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R635	VRS-CY1JF000J		0 1/16W Metal Oxide	AA
R636	VRS-CY1JF271J		270 1/16W Metal Oxide	AA
R638	VRS-CY1JF560J		56 1/16W Metal Oxide	AA
R641	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R642	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R643	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R644	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R645	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R647	VRS-CY1JF221J		220 1/16W Metal Oxide	AA
R648	VRS-CY1JF221J		220 1/16W Metal Oxide	AA
R649	VRS-CY1JF391J		390 1/16W Metal Oxide	AA
R652	VRS-CY1JF221J		220 1/16W Metal Oxide	AA
R653	VRS-CY1JF564J		560k 1/16W Metal Oxide	AA
R654	VRS-CY1JF101J		100 1/16W Metal Oxide	AA
R657	VRS-CY1JF000J		0 1/16W Metal Oxide	AA
R658	VRS-TV1JD270J		27 1/16W Metal Oxide	AA
R670	VRS-CY1JF220J		22 1/16W Metal Oxide	AA
R717	VRS-CY1JF101J		100 1/16W Metal Oxide	AA
R718	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R722	VRS-CY1JF472J		4.7k 1/16W Metal Oxide	AA
R725	VRS-CY1JF222J		2.2k 1/16W Metal Oxide	AA
R728	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R729	VRS-CY1JF273J		27k 1/16W Metal Oxide	AA
R733	VRS-CY1JF222J		2.2k 1/16W Metal Oxide	AA
R734	VRS-CY1JF101J		100 1/16W Metal Oxide	AA
R735	VRS-CY1JF101J		100 1/16W Metal Oxide	AA
R737	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R738	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R740	VRS-CY1JF473J		47k 1/16W Metal Oxide	AA
R744	VRS-CY1JF472J		4.7k 1/16W Metal Oxide	AA
R756	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R758	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R761	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R768	VRS-CY1JF331J		330 1/16W Metal Oxide	AA
R769	VRS-CY1JF331J		330 1/16W Metal Oxide	AA
R771	VRS-CY1JF123J		12k 1/16W Metal Oxide	AA
R772	VRS-CY1JF123J		12k 1/16W Metal Oxide	AA
R774	VRS-CY1JF123J		12k 1/16W Metal Oxide	AA
R778	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R779	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R781	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R782	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R786	VRS-CY1JF472J		4.7k 1/16W Metal Oxide	AA
R789	VRS-CY1JF335J		3.3M 1/16W Metal Oxide	AA
R790	VRS-CY1JF333J		33k 1/16W Metal Oxide	AA
R791	VRS-CY1JF124J		120k 1/16W Metal Oxide	AA
R797	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R794	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R795	VRS-CY1JF473J		47k 1/16W Metal Oxide	AA
R796	VRS-CY1JF103J		10k 1/16W Metal Oxide	AA
R801	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R802	VRS-CY1JF102J		1k 1/16W Metal Oxide	AA
R810	VRS-TV1JD8R2J		8.2 1/16W Metal Oxide	AA
R811	VRS-CY1JF000J		0 1/16W Metal Oxide	AA
R812	VRS-CY1JF000J		0 1/16W Metal Oxide	AA
R819	VRS-CY1JF101J		100 1/16W Metal Oxide	AA
R820	VRS-CY1JF101J		100 1/16W Metal Oxide	AA
R821	VRS-CY1JF101J		100 1/16W Metal Oxide	AA
R822	VRS-CY1JF101J		100 1/16W Metal Oxide	AA
R823	VRS-CY1JF101J		100 1/16W Metal Oxide	AA
R839	VRS-CY1JF560J		56 1/16W Metal Oxide	AA
R840	VRS-CY1JF560J		56 1/16W Metal Oxide	AA
R841	VRS-CY1JF560J		56 1/16W Metal Oxide	AA
R850	VRS-CY1JF100J		10 1/16W Metal Oxide	AA
R851	VRS-CY1JF100J		10 1/16W Metal Oxide	AA
R852	VRS-CY1JF100J		10 1/16W Metal Oxide	AA
R880	VRS-CY1JF101J		100 1/16W Metal Oxide	AA
R881	VRS-CY1JF101J		100 1/16W Metal Oxide	AA
R882	VRS-CY1JF100J		10 1/16W Metal Oxide	AA
R883	VRS-CY1JF100J		10 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code

DUNTK5766TE6A(DV-600S)
DUNTK5766TE6B(DV-600H)
MAIN PWB UNIT(Continued)

R884	VRS-CY1JF100J		10	1/16W	Metal Oxide	AA
R885	VRS-CY1JF100J		10	1/16W	Metal Oxide	AA
R886	VRS-CY1JF100J		10	1/16W	Metal Oxide	AA
R887	VRS-CY1JF100J		10	1/16W	Metal Oxide	AA
R891	VRS-CY1JF472J		4.7k	1/16W	Metal Oxide	AA
R892	VRS-CY1JF152J		1.5k	1/16W	Metal Oxide	AA
R893	VRS-CY1JF472J		4.7k	1/16W	Metal Oxide	AA
R894	VRS-CY1JF472J		4.7k	1/16W	Metal Oxide	AA
R895	VRS-CY1JF472J		4.7k	1/16W	Metal Oxide	AA
R897	VRS-CY1JF824J		820k	1/16W	Metal Oxide	AA
R898	VRS-CY1JF824J		820k	1/16W	Metal Oxide	AA
R7003	VRS-CY1JF103J		10k	1/16W	Metal Oxide	AA
R7004	VRS-CY1JF103J		10k	1/16W	Metal Oxide	AA
R7005	VRS-CY1JF103J		10k	1/16W	Metal Oxide	AA
R7007	VRS-CY1JF102J		1k	1/16W	Metal Oxide	AA
R7042	VRS-CY1JF103J		10k	1/16W	Metal Oxide	AA
R7701	VRS-CY1JF224J		220k	1/16W	Metal Oxide	AA
R7702	VRS-CY1JF224J		220k	1/16W	Metal Oxide	AA
R7703	VRS-CY1JF103J		10k	1/16W	Metal Oxide	AA
R7704	VRS-CY1JF000J		0	1/16W	Metal Oxide	AA
R7705	VRS-CY1JF000J		0	1/16W	Metal Oxide	AA
R7706	VRS-CY1JF000J		0	1/16W	Metal Oxide	AA
R7712	VRS-CY1JF222J		2.2k	1/16W	Metal Oxide	AA
R7714	VRS-CY1JF103J		10k	1/16W	Metal Oxide	AA
R7715	VRS-CY1JF103J		10k	1/16W	Metal Oxide	AA
R7716	VRS-CY1JF473J		47k	1/16W	Metal Oxide	AA
R7717	VRS-CY1JF562J		5.6k	1/16W	Metal Oxide	AA
R7718	VRS-CY1JF103J		10k	1/16W	Metal Oxide	AA
R7719	VRS-CY1JF103J		10k	1/16W	Metal Oxide	AA
R7720	VRS-CY1JF472J		4.7k	1/16W	Metal Oxide	AA
R7721	VRS-CY1JF101J		100	1/16W	Metal Oxide	AA
R7722	VRS-CY1JF103F		10k	1/16W	Metal Oxide	AA
R7723	VRS-CY1JF563F		56k	1/16W	Metal Oxide	AA
R7724	VRS-CY1JF223J		22k	1/16W	Metal Oxide	AA
R7728	VRS-CY1JF000J		0	1/16W	Metal Oxide	AA
R7729	VRS-CY1JF000J		0	1/16W	Metal Oxide	AA
R7730	VRS-CY1JF000J		0	1/16W	Metal Oxide	AA
R7732	VRS-CY1JF000J		0	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

CN201	QPLGN1264TAZZ	Plug, 12Pin	AE
CN301	QSOCN2086TAZZ	Socket, 20Pin	AD
CN702	QSOCN1136TAZZ	Socket, 11Pin	AD
CN801	QSOCN2936TAZZ	Socket, 29Pin	AF
CN802	QSOCN1436TAZZ	Socket, 14Pin	AE
CN803	QSOCN1536TAZZ	Socket, 15Pin	AE
FB201	RBLN-0052TAZZ	Balun, BLN-0052TA	AC
FB301	RBLN-0052TAZZ	Balun, BLN-0052TA	AC
FB501	RBLN-0052TAZZ	Balun, BLN-0052TA	AC
FB601	RBLN-0052TAZZ	Balun, BLN-0052TA	AC
FB603	RBLN-0052TAZZ	Balun, BLN-0052TA	AC
FB801	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB802	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB803	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB804	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB805	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB806	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB815	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB816	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB817	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB818	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB819	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB820	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB821	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
FB825	RBLN-0056TAZZ	Balun, BLN-0056TA	AC
TP330	QPLGN0864TAZZ	Plug, 8Pin	AD

Ref. No.	Part No.	★	Description	Code

DUNTK5667TEV3(DV-600S)
DUNTK5667TEV4(DV-600H)
TERMINAL PWB UNIT

INTEGRATED CIRCUITS

IC2002	VHiNJM2268M-1	NJM2268M, S YC Driver	AF
IC2003	VHiNJM2268M-1	NJM2268M, Cb/V Drive	AF
IC2006	RH-iX1531CEZZ	IX1531CE, Signal SW	AF
IC2102	VHiTC4W53F/-1	TC4W53F	AE
IC6001	VHiNJM4560M-1	NJM4560M, Audio Amp	AG
IC9001	VHiT78DL09S-1	T78DL09S	AG
IC9002	VHiBA17808T-1	BA17808T-1	AE
IC9003	VHiPQ30RV211E	PQ30RV21	AK

TRANSISTORS

Q2003	VSUN2113///-1	UN2113	AA
Q2101	VS2SC2412KQ-1	2SC2412KQ	AA
Q2309	VSUN2212///-1	UN2212	AA
Q2310	VS2SC2412KQ-1	2SC2412KQ	AA
Q2311	VSUN2111///-1	UN2111	AA
Q2312	VSUN2213///-1	UN2213	AA
Q6001	VS2SD1306-E1E	2SD1306-E	AD
Q6002	VS2SD1306-E1E	2SD1306-E	AD
Q6007	VSUN2111///-1	UN2111	AA
Q6008	VSUN2111///-1	UN2111	AA
Q9001	VS2SA1271-Y-1	2SA1271	AB
Q9005	VS2SC2412KQ-1	2SC2412KQ	AA
Q9006	VS2SA1037KQ-1	2SA1037KQ	AA
⚠ Q9007	VS2SC4300//-1	2SC4300	AM
Q9009	VS2SC2412KQ-1	2SC2412KQ	AA
⚠ Q9010	VS2SD2144S/-1	2SD2144S	AC

DIODES

D2002	VHDDAN202K/-1	DAN202K	AB
D2003	VHDDAP202K/-1	DAP202K	AB
D2004	VHDDAN202K/-1	DAN202K	AB
D2005	VHDDAP202K/-1	DAP202K	AB
D2101	RH-EX0609GEZZ	Zener, EX0609GE	AA
D2303	VHDRB441Q40-1	RB441Q40	AC
D2304	VHDDAN202K/-1	DAN202K	AB
D6001	VHD1SS119//-1	1SS119	AB
D6002	VHD1SS119//-1	1SS119	AB
D9005	VHD15DF1FC/1E	15DF1FC	AD
D9006	VHD1SS244//-1	1SS244	AB
D9007	VHD31DQ04FC1E	31DQ04FC	AC
D9008	VHD1SS244//-1	1SS244	AB
D9009	VHD1SS119//-1	1SS119	AB
D9010	VHD1SS119//-1	1SS119	AB
D9011	RH-EX0619GEZZ	Zener, EX0619GE	AA
⚠ D9012	RH-DX0220CEZZ	DX0220CE	AB
⚠ D9013	RH-DX0321CEZZ	DX0321CE	AC
D9014	RH-EX0613GEZZ	Zener, EX0613GE	AA
⚠ D9015	VHDERA1802/-1	ERA1802	AB
⚠ D9016	RH-DX0083GEZZ	DX0083GE	AC
⚠ D9020	RH-FX0007GEZZ	FX0007GE	AD
⚠ D9021	RH-EX0001AEZZ	Zener, EX0001AE	AC
⚠ D9022	VHDERA1802/-1	ERA1802	AB
⚠ D9023	RH-EX0601GEZZ	Zener, EX0601GE	AA
⚠ D9024	VHD1SS119//-1	1SS119	AB
D9025	RH-EX0807GEZZ	Zener, EX0807GE	AC
P2101	VHPGP1F32T/-1	PhotoDiode	AK

FILTER

FL2101	RFiLN0044GEZZ	Filter, FiLN0044GE	AB

COILS AND TRANSFORMER

L2001	VP-MK100K0000	Peaking, 10µH	AB
L6003	VP-XF3R3K0000	Peaking, 3.3µH	AB
L6004	VP-XF3R3K0000	Peaking, 3.3µH	AB
L9001	RCiLP0232CEZZ	Coil, CiLP0232CE	AD
L9002	RCiLP0232CEZZ	Coil, CiLP0232CE	AD
⚠ L9003	RCiLF0277GEZZ	Coil, CiLF0277GE	AG
⚠ T9001	RTRNZ0079GEZZ	Transformer	AN

Ref. No.	Part No.	★	Description			Code

DUNTK5667TEV3(DV-600S)
DUNTK5667TEV4(DV-600H)
TERMINAL PWB UNIT(Continued)

CAPACITORS

C2009	VCKYCY1EB103K		0.01	25V	Ceramic	AA
C2010	VCKYCY1EB103K		0.01	25V	Ceramic	AA
C2011	VCEAEM0JW107M		100	6.3V	Electrolytic	AB
C2012	VCKYCY1EB103K		0.01	25V	Ceramic	AA
C2013	VCEAEM1HW225M		2.2	50V	Electrolytic	AB
C2014	VCEAEM1CW226M		22	16V	Electrolytic	AB
C2015	VCEA2A0JW477M		470	6.3V	Electrolytic	AB
C2016	VCKYCY1EB103K		0.01	25V	Ceramic	AA
C2017	VCKYCY1EB103K		0.01	25V	Ceramic	AA
C2018	VCKYCY1EB103K		0.01	25V	Ceramic	AA
C2020	VCEAEM1HW225M		2.2	50V	Electrolytic	AB
C2023	VCEAEA1CW226M		22	16V	Electrolytic	AB
C2025	VCEA2A0JW477M		470	6.3V	Electrolytic	AB
C2027	VCEAEM0JW107M		100	6.3V	Electrolytic	AB
C2031	VCKYCY1EB103K		0.01	25V	Ceramic	AA
C2032	VCKYCY1EB103K		0.01	25V	Ceramic	AA
C2101	VCKYCY1EB103K		0.01	25V	Ceramic	AA
C2102	VCKYCY1EB103K		0.01	25V	Ceramic	AA
C2103	VCEAEM1CW106M		10	16V	Electrolytic	AB
C2104	VCKYCY1EB103K		0.01	25V	Ceramic	AA
C2105	VCEAEA1AW107M		100	10V	Electrolytic	AB
C2106	VCKYCY1EB103K		0.01	25V	Ceramic	AA
C2107	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C6001	RC-EZ0468GEZZ		10	16V	Electrolytic	AC
C6002	RC-EZ0468GEZZ		10	16V	Electrolytic	AC
C6007	VCEAEM1CW106M		10	16V	Electrolytic	AB
C6008	RC-EZ0468GEZZ		10	16V	Electrolytic	AC
C6009	RC-EZ0468GEZZ		10	16V	Electrolytic	AC
C6014	RC-KZ0161GEZZ		3900p	50V	Ceramic	AB
C6015	RC-KZ0161GEZZ		3900p	50V	Ceramic	AB
C6020	VCEA2A1AW227M		220	10V	Electrolytic	AB
C6021	VCEA2A0JW477M		470	6.3V	Electrolytic	AB
C9001	VCEAEA1AW107M		100	10V	Electrolytic	AB
C9002	VCEAEA0JW107M		100	6.3V	Electrolytic	AB
C9006	VCEAEM1CW106M		10	16V	Electrolytic	AB
C9007	VCEAEM1CW476M		47	16V	Electrolytic	AB
C9008	RC-EZ0476GEZZ		100	16V	Electrolytic	AD
C9012	RC-EZ0477GEZZ		330	16V	Electrolytic	AD
C9013	VCEA2A0JW108M		1000	6.3V	Electrolytic	AB
C9014	VCEA0A1AW228M		2200	10V	Electrolytic	AD
C9015	RC-EZ0478GEZZ		470	35V	Electrolytic	AE
C9016	VCEAEA1HW226M		22	50V	Electrolytic	AB
C9017	VCEA0A0JW107M		100	6.3V	Electrolytic	AB
C9018	VCKYCY1HF103Z		0.01	50V	Ceramic	AA
C9019	VCEA0A1AW228M		2200	10V	Electrolytic	AD
C9020	VCKYCY1CF104Z		0.1	16V	Ceramic	AA
⚠ C9021	VCFYZP2GA473K		0.047	400V	Mylar	AC
⚠ C9022	RC-KZ0037GEZZ		220p	1kV	Ceramic	AC
⚠ C9024	VCEAGA2AW106M		10	100V	Electrolytic	AC
C9025	VCEAEA1HW105M		1	50V	Electrolytic	AB
⚠ C9026	RC-EZ0437GEZZ		68	400V	Electrolytic	AK
⚠ C9027	VCFYSA1HB473J		0.047	50V	Mylar	AA
⚠ C9028	RC-KZ0310CEZZ		2200p	250V	Ceramic	AC
⚠ C9029	RC-KZ0310CEZZ		2200p	250V	Ceramic	AC
⚠ C9030	VCKYCY1CB473K		0.047	16V	Ceramic	AA
⚠ C9031	RC-FZ063SGEZZ		0.1	250V	Special	AE
⚠ C9033	RC-KZ0310CEZZ		2200p	250V	Ceramic	AC
⚠ C9034	RC-KZ0310CEZZ		2200p	250V	Ceramic	AC
⚠ C9035	RC-QZA222TAYJ		2200p	50V	Mylar	AB
⚠ C9036	RC-FZ071SGEZZ		0.47	250V	Special	AF
RJ16	VCKYCY1HB472K		4700p	50V	MIC	AA
RJ17	VCKYCY1HB472K		4700p	50V	MIC	AA

RESISTORS

RJ2304	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
RJ2306	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
RJ2307	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R2002	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R2004	VRS-CY1JF330J	33	1/16W	Metal Oxide	AA
R2006	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R2010	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R2012	VRS-CY1JF750J	75	1/16W	Metal Oxide	AA
R2013	VRS-CY1JF750J	75	1/16W	Metal Oxide	AA
R2015	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R2022	VRS-CY1JF750J	75	1/16W	Metal Oxide	AA
R2032	VRS-CY1JF103J	10k	1/16W	Metal Oxide	AA
R2033	VRS-CY1JF103J	10k	1/16W	Metal Oxide	AA
R2034	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R2039	VRS-CY1JF472J	4.7k	1/16W	Metal Oxide	AA
R2063	VRD-RA2BE330J	33	1/8W	Carbon	AA
R2064	VRD-RA2EE471J	470	1/4W	Carbon	AA
R2101	VRS-CY1JF151J	150	1/16W	Metal Oxide	AA
R2102	VRS-CY1JF103J	10k	1/16W	Metal Oxide	AA
R2103	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R2104	VRS-CY1JF103J	10k	1/16W	Metal Oxide	AA
R2105	VRD-RA2BE273J	27k	1/8W	Carbon	AA
R2106	VRD-RM2HD101J	100	1/2W	Carbon	AA
R2107	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R2108	VRS-CY1JF272J	2.7k	1/16W	Metal Oxide	AA
R2328	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R2330	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R6004	VRS-CY1JF183J	18k	1/16W	Metal Oxide	AA
R6005	VRS-CY1JF183J	18k	1/16W	Metal Oxide	AA
R6007	VRS-CY1JF474J	470k	1/16W	Metal Oxide	AA
R6008	VRS-CY1JF474J	470k	1/16W	Metal Oxide	AA
R6013	VRS-CY1JF183J	18k	1/16W	Metal Oxide	AA
R6016	VRS-CY1JF183J	18k	1/16W	Metal Oxide	AA
R6021	VRS-CY1JF821J	820	1/16W	Metal Oxide	AA
R6022	VRS-CY1JF821J	820	1/16W	Metal Oxide	AA
R6025	VRS-CY1JF473J	47k	1/16W	Metal Oxide	AA
R6026	VRS-CY1JF473J	47k	1/16W	Metal Oxide	AA
R6031	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R6032	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R6033	VRD-RA2BE101J	100	1/8W	Carbon	AB
R6035	VRS-CY1JF272J	2.7k	1/16W	Metal Oxide	AA
R6036	VRS-CY1JF272J	2.7k	1/16W	Metal Oxide	AA
R6040	VRD-RA2BE562J	5.6k	1/8W	Carbon	AA
R6041	VRS-CY1JF272J	2.7k	1/16W	Metal Oxide	AA
R6057	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R6058	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R9001	VRD-RA2EE561J	560	1/4W	Carbon	AA
R9005	VRS-CY1JF103J	10k	1/16W	Metal Oxide	AA
R9009	VRD-RA2BE472J	4.7k	1/8W	Carbon	AA
R9010	VRS-CY1JF472J	4.7k	1/16W	Metal Oxide	AA
R9011	VRS-CY1JF272J	2.7k	1/16W	Metal Oxide	AA
R9012	VRS-CY1JF152J	1.5k	1/16W	Metal Oxide	AA
R9013	VRS-CY1JF683J	68k	1/16W	Metal Oxide	AA
R9017	VRD-RA2BE221J	220	1/8W	Carbon	AA
R9019	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R9020	VRS-CY1JF221J	220	1/16W	Metal Oxide	AA
R9021	VRS-CY1JF392J	3.9k	1/16W	Metal Oxide	AA
R9023	VRS-CY1JF103J	10k	1/16W	Metal Oxide	AA
R9024	VRS-CY1JF183J	18k	1/16W	Metal Oxide	AA
⚠ R9026	VRD-RM2HD104J	100k	1/2W	Carbon	AA
⚠ R9027	VRD-RM2HD104J	100k	1/2W	Carbon	AA
⚠ R9028	VRD-RA2EE333J	33k	1/4W	Carbon	AA
R9029	VRS-CY1JF221J	220	1/16W	Metal Oxide	AA
⚠ R9030	RR-SZ0005GEZZ	47	3W	Metal Oxide	AD
R9031	VRD-RA2EE562J	5.6k	1/4W	Carbon	AA
⚠ R9033	RR-WZ0002GEZZ	2.2	2W		AD
⚠ R9036	VRC-UA2HG685K	6.8M	1/2W	Solid	AA
⚠ R9037	VRC-UA2HG685K	6.8M	1/2W	Solid	AA
⚠ R9038	VRD-RA2EE101J	100	1/4W	Carbon	AA
⚠ R9039	VRD-RA2EE182J	1.8k	1/4W	Carbon	AA
⚠ R9040	VRD-RM2HD105J	1M	1/2W	Carbon	AA
⚠ R9042	RR-SZ0006GEZZ	68k	3W	Metal Oxide	AD
⚠ R9043	RR-SZ0004GEZZ	100	2W	Metal Oxide	AB
R9046	VRS-CY1JF682J	6.8k	1/16W	Metal Oxide	AA
R9047	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R9048	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R9049	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R9052	VRS-CY1JF1R0J	1	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code

DUNTK5667TEV3(DV-600S)
DUNTK5667TEV4(DV-600H)
TERMINAL PWB UNIT(Continued)

MISCELLANEOUS PARTS

⚠	AC9001	QSOCA0222GEZZ	Socket, 2Pin	AE
	CN2001	QSOCN1599REZZ	Socket, 15Pin	AD
	CN2301	QPLGN1278GEZZ	Plug, 12Pin	AC
	CN2302	QPLGN1078GEZZ	Plug, 10Pin	AC
	CN6001	QSOCN2999REZZ	Socket, 29Pin	AE
	CN6002	QPLGN0678GEZZ	Plug, 6Pin	AB
	CN9001	QPLGN1250CEZZ	Plug, 12Pin	AE
⚠	FH9001	QFSHD1013CEZZ	Fuse Holder	AC
⚠	FH9002	QFSHD1014CEZZ	Fuse Holder	AC
⚠	F9001	QFS-C2025CEZZ	Fuse, 2A 250V	AD
	J2001	QTANJ9118GEZZ	Terminal	AL
	J2002	QSOCD0417GEZZ	Socket	AG
	S2301	QSW-S0202CEZZ	Switch	AF
⚠	S9001	QSW-P0591CEZZ	Switch	AQ
	W9001	PRDAF3014AJFW	Heat Sink	AE
⚠	W9002	PRDAF3028GEFW	Heat Sink	AF

DUNTK5668TEV3(DV-600S)
DUNTK5668TEV4(DV-600H)
DISPLAY PWB UNIT

INTEGRATED CIRCUITS

IC5001	VHiMN12510F-1	MN12510F, FL Driver	AM
IC6602	VHiNJM4560M-1	NJM4560M, H/A Amp	AG

TRANSISTORS

Q5001	VSUN2211///-1	UN2211	AA
Q5002	VSUN2211///-1	UN2211	AA
Q5004	VS2SA1037KQ-1	2SA1037KQ	AA
Q5005	VSUN2212///-1	UN2212	AA
Q6605	VS2SD1306-E1E	2SD1306-E	AD
Q6606	VS2SD1306-E1E	2SD1306-E	AD

DIODES

DG5001	VVK20U56102-1	Display	AV
D5001	RH-EX0721GEZZ	Zener, EX0721GE	AA
D5002	VHD1SS119//-1	1SS119	AB
D5003	VHD1SS119//-1	1SS119	AB
D5004	VHD1SS119//-1	1SS119	AB
D5005	VHD1SS119//-1	1SS119	AB
D5006	VHD1SS119//-1	1SS119	AB
D5007	VHD1SS119//-1	1SS119	AB

FILTER

FL5001	RFiLC0091GEZZ	Filter, 4MHz	AD

CAPACITORS

C5001	VCKYCY1CF104Z	0.1	16V	Ceramic	AA
C5002	VCKYCY1HF473Z	0.047	50V	Ceramic	AA
C5005	VCKYCY1HF103Z	0.01	50V	Ceramic	AA
C5006	VCEAEM1CW106M	10	16V	Electrolytic	AB
C5007	VCKYCY1HF103Z	0.01	50V	Ceramic	AA
C5008	VCCCCY1HH330J	33p	50V	Ceramic	AA
C5009	VCCCCY1HH330J	33p	50V	Ceramic	AA
C5010	VCCCCY1HH330J	33p	50V	Ceramic	AA
C5011	VCKYD41HF473Z	0.047	50V	Ceramic	AA
C5012	VCCCCY1HH101J	100p	50V	Ceramic	AA
C6626	VCEAEM1CW106M	10	16V	Electrolytic	AB
C6627	VCEAEM0JW476M	47	6.3V	Electrolytic	AB
C6628	VCEAEM0JW476M	47	6.3V	Electrolytic	AB
C6629	VCKYCY1HF103Z	0.01	50V	Ceramic	AA
C6630	VCEAEM1CW106M	10	16V	Electrolytic	AB
C6631	VCEAEM0JW107M	100	6.3V	Electrolytic	AB
C6632	VCEAEM1CW106M	10	16V	Electrolytic	AB
C6633	VCCCCY1HH101J	100p	50V	Ceramic	AA
C6634	VCCCCY1HH101J	100p	50V	Ceramic	AA

RESISTORS

JP6601	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R5001	VRS-CY1JF333J	33k	1/16W	Metal Oxide	AA
R5009	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R5010	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R5011	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R5012	VRS-CY1JF333J	33k	1/16W	Metal Oxide	AA
R5013	VRS-CY1JF472J	4.7k	1/16W	Metal Oxide	AA
R5014	VRS-CY1JF222J	2.2k	1/16W	Metal Oxide	AA
R5015	VRS-CY1JF333J	33k	1/16W	Metal Oxide	AA
R5016	VRS-CY1JF333J	33k	1/16W	Metal Oxide	AA
R5017	VRS-CY1JF333J	33k	1/16W	Metal Oxide	AA
R5018	VRS-CY1JF333J	33k	1/16W	Metal Oxide	AA
R5019	VRS-CY1JF333J	33k	1/16W	Metal Oxide	AA
R5020	VRS-CY1JF333J	33k	1/16W	Metal Oxide	AA
R5021	VRS-CY1JF333J	33k	1/16W	Metal Oxide	AA
R5022	VRS-CY1JF333J	33k	1/16W	Metal Oxide	AA
R5023	VRS-CY1JF103J	10k	1/16W	Metal Oxide	AA
R5024	VRS-CY1JF103J	10k	1/16W	Metal Oxide	AA
R6670	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R6671	VRS-CY1JF472J	4.7k	1/16W	Metal Oxide	AA
R6672	VRS-CY1JF151J	150	1/16W	Metal Oxide	AA
R6673	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R6674	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R6675	VRS-CY1JF151J	150	1/16W	Metal Oxide	AA
R6676	VRS-CY1JF472J	4.7k	1/16W	Metal Oxide	AA
R6677	VRS-CY1JF102J	1k	1/16W	Metal Oxide	AA
R6678	VRS-CY1JF103J	10k	1/16W	Metal Oxide	AA
R6679	VRS-CY1JF103J	10k	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

CN5001	QSOCN1499REZZ	Socket, 14Pin	AD
CN5002	QSOCN0895REZZ	Socket, 8Pin	AC
CN6601	QSOCN0895REZZ	Socket, 8Pin	AC
CN6602	QPLGN0678GEZZ	Plug, 6Pin	AB
J6603	QJAKE0231GEZZ	Jack, Head Phone	AG

DUNTK5669TEV3(DV-600S)
DUNTK5669TEV4(DV-600H)
OPERATE PWB UNIT

DIODES

D8101	RH-PX0284GEZZ	LED, S-Picture	AC
D8102	RH-PX0284GEZZ	LED, Ganma	AC

RESISTORS

R8101	VRD-RA2EE331J	330	1/4W	Carbon	AA
R8102	VRD-RA2EE331J	330	1/4W	Carbon	AA
R8103	VRS-CY1JF472J	4.7k	1/16W	Metal Oxide	AA
R8105	VRS-CY1JF222J	2.2k	1/16W	Metal Oxide	AA
R8107	VRD-RA2BE122J	1.2k	1/8W	Carbon	AA
R8108	VRD-RA2BE821J	820	1/8W	Carbon	AA
R8109	VRS-CY1JF681J	680	1/16W	Metal Oxide	AA
R8110	VRS-CY1JF471J	470	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

CN8102	QSOCN0896REZZ	Socket, 8Pin	AC
S8101	QSW-K0079GEZZ	Switch, Open/Close	AB
S8103	QSW-K0079GEZZ	Switch, Still/Pause	AB
S8108	QSW-K0079GEZZ	Switch, Step	AB
S8109	QSW-K0079GEZZ	Switch, Play	AB
S8110	QSW-Z0082GEZZ	Switch, Jog	AG

DUNTK5670TEV3(DV-600S)
DUNTK5670TEV4(DV-600H)
VOLUME PWB UNIT

CONTROL

R6661	RVR-A4014GEZZ	5k(A), Head Phone Volume AF

Ref. No.	Part No.	★	Description			Code
			CAPACITOR			
C6661	VCKYCY1HF103Z		0.01	50V	Ceramic	AA
			RESISTOR			
R6664	VRS-CY1JF101J		100	1/16W	Metal Oxide	AA
			MISCELLANEOUS PARTS			
CN6661	QSOCN0895REZZ		Socket, 8Pin			AC
W6661	RRMCU0080GEZZ		Remote Receiver			AG

DUNTK5672TEV3(DV-600S)
DUNTK5672TEV4(DV-600H)
21-PIN EURO SCART PWB UNIT

			INTEGRATED CIRCUITS			
IC2302	VHiNJM2286M-1		NJM2286M, Signal SW			AE
IC2303	VHiNJM2267M-1		NJM2267M, B/G Drive			AF
IC2304	VHiNJM2267M-1		NJM2267M, SC RT R/V Drive			AF
			TRANSISTORS			
Q2301	VS2SB709A//-1		2SB709A			AA
Q2302	VSUN2212///-1		UN2212			AA
Q2303	VS2SD601A//-1		2SD601A			AC
Q2304	VS2SD601A//-1		2SD601A			AC
Q2305	VS2SB709A//-1		2SB709A			AA
Q2306	VS2SD601A//-1		2SD601A			AC
Q2307	VSUN2212///-1		UN2212			AA
Q2308	VS2SD601A//-1		2SD601A			AC
Q2309	VS2SD601A//-1		2SD601A			AC
			DIODES			
D2201	RH-EX0646GEZZ		Zener, EX0646GE			AA
D2202	RH-EX0646GEZZ		Zener, EX0646GE			AA
D2301	VHDDAN202K/-1		DAN202K			AB
D2302	VHDDAP202K/-1		DAP202K			AB
			COILS			
L2203	VP-XF3R3K0000		Peaking, 3.3µH			AB
L2204	VP-XF3R3K0000		Peaking, 3.3µH			AB
L2301	VP-MK100K0000		Peaking, 10µH			AB
			CAPACITORS			
C2203	VCKYCY1HB102K		1000p	50V	Ceramic	AA
C2302	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C2303	VCEAEM1AW476M		47	10V	Electrolytic	AB
C2304	VCEAEM1AW476M		47	10V	Electrolytic	AB
C2305	VCKYCY1HB103K		0.01	50V	Ceramic	AA
C2306	VCEAEM1AW476M		47	10V	Electrolytic	AB
C2307	VCEAEM1HW225M		2.2	50V	Electrolytic	AB
C2308	VCEAEM1HW225M		2.2	50V	Electrolytic	AB
C2309	VCEAEM1HW225M		2.2	50V	Electrolytic	AB
C2310	VCEAEM1HW225M		2.2	50V	Electrolytic	AB
C2311	VCEAEM1CW226M		22	16V	Electrolytic	AB
C2312	VCEAEM1HW475M		4.7	50V	Electrolytic	AB
C2313	VCEAEM1HW475M		4.7	50V	Electrolytic	AB
C2314	VCEA2A0JW477M		470	6.3V	Electrolytic	AB
C2315	VCQYTA1HM104J		0.1	50V	Mylar	AA
C2316	VCEAEM1HW475M		4.7	50V	Electrolytic	AB
C2317	VCEAEM0JW107M		100	6.3V	Electrolytic	AB
			RESISTORS			
R2205	VRS-CY1JF101J		100	1/16W	Metal Oxide	AA
R2206	VRS-CY1JF101J		100	1/16W	Metal Oxide	AA
R2207	VRD-RM2HD331J		330	1/2W	Carbon	AA
R2208	VRD-RM2HD750J		75	1/2W	Carbon	AA
R2301	VRS-CY1JF000J		0	1/16W	Metal Oxide	AA
R2303	VRS-CY1JF750J		75	1/16W	Metal Oxide	AA
R2304	VRS-CY1JF471J		470	1/16W	Metal Oxide	AA
R2305	VRS-CY1JF750J		75	1/16W	Metal Oxide	AA
R2306	VRS-CY1JF121J		120	1/16W	Metal Oxide	AA
R2307	VRS-CY1JF682J		6.8k	1/16W	Metal Oxide	AA
R2308	VRD-RA2BE102J		1k	1/8W	Carbon	AA
R2309	VRS-CY1JF102J		1k	1/16W	Metal Oxide	AA
R2310	VRS-CY1JF682J		6.8k	1/16W	Metal Oxide	AA
R2311	VRS-CY1JF682J		6.8k	1/16W	Metal Oxide	AA
R2312	VRS-CY1JF000J		0	1/16W	Metal Oxide	AA
R2313	VRS-CY1JF102J		1k	1/16W	Metal Oxide	AA
R2314	VRD-RA2BE102J		1k	1/8W	Carbon	AA
R2315	VRS-CY1JF102J		1k	1/16W	Metal Oxide	AA
R2316	VRD-RA2BE102J		1k	1/8W	Carbon	AA
R2317	VRS-CY1JF102J		1k	1/16W	Metal Oxide	AA
R2318	VRS-CY1JF750J		75	1/16W	Metal Oxide	AA
R2319	VRS-CY1JF471J		470	1/16W	Metal Oxide	AA
R2320	VRS-CY1JF471J		470	1/16W	Metal Oxide	AA
R2321	VRS-CY1JF471J		470	1/16W	Metal Oxide	AA
R2322	VRS-CY1JF750J		75	1/16W	Metal Oxide	AA
R2323	VRS-CY1JF222J		2.2k	1/16W	Metal Oxide	AA
R2324	VRS-CY1JF750J		75	1/16W	Metal Oxide	AA
R2325	VRS-CY1JF750J		75	1/16W	Metal Oxide	AA
R2326	VRS-CY1JF750J		75	1/16W	Metal Oxide	AA
R2327	VRS-CY1JF750J		75	1/16W	Metal Oxide	AA
R2331	VRS-CY1JF821J		820	1/16W	Metal Oxide	AA
R2332	VRS-CY1JF331J		330	1/16W	Metal Oxide	AA
R2333	VRS-CY1JF562J		5.6k	1/16W	Metal Oxide	AA
R2334	VRS-CY1JF474J		470k	1/16W	Metal Oxide	AA
			MISCELLANEOUS PARTS			
CN2303	QPLGN1280GEZZ		Plug, 12Pin			AC
CN2304	QPLGN1080GEZZ		Plug, 10Pin			AC
FB2201	RBLN-0043CEZZ		Balun, BLN-0043CE			AB
SC2201	QSOCZ2101REZZ		Socket, 21Pin			AK

OTHER PARTS

QCNW-7884AJZZ	Connecting Cord, 14 Pin CN5001-CN802	AF
QCNW-8035AJZZ	Connecting Cord, 29 pin CN801-CN6001	AF
QCNW-8036AJZZ	Connecting Cord, 15 Pin CN803-CN2001	AE
QCNW-8037AJZZ	Connecting Cord, 8 Pin CN5002-CN8102, CN6601-CN6661	AD
QCNW-8083AJZZ	Connecting Cord, 12 Pin CN201-CN9001	AH
QCNW-8040AJZZ	Connecting Cord, 12 Pin CN2301-CN2303	AG
QCNW-8041AJZZ	Connecting Cord, 10 Pin CN2302-CN2304	AG
QCNW-8047AJZZ	Connecting Cord, 6 Pin CN6602-CN6002	AF

Ref. No.	Part No.	★	Description	Code

SUPPLIED ACCESSORIES

⚠	QACCB0016TAZZ	AC Power Cord(600H)	AV
⚠	QACCK0002TAZZ	AC Power Cord(600S)	AM
	QCNW-1688TAZZ	S-Video Cord	AK
	QCNW-7581GEZZ	Video/Audio Cord	AM
	RRMCG1160GESA	Remote Control Unit	AX
	95J251248C	R/C Battery Cover	AH
	TiNS-3614AJZZ	Operation Manual(600S)	AY
	TiNS-3613AJZZ	Operation Manual(600H)	AR

PACKING PARTS
(NOT REPLACEMENT ITEM)

SPAKC4110AJZZ	Packing Case(600S)	—
SPAKC4109AJZZ	Packing Case(600H)	—
SPAKL0030GEZZ	Handle	—
SPAKP0155AJZZ	Polystylene Sack	—
SPAKX1006AJZZ	Packing Add.	—
SSAKA0160CEZZ	Polyethylene Bag, Accessories	—

MECHANISM PARTS

1	CCHSS0164GE02	Chassis Ass'y	BU
1-1	MSPRC0216GEZZ	Rack Spring	AB
1-2	LX-BZ3163GEFN	Screw(M1.7+2.5S)	AC
1-3	LX-BZ1003GEZZ	Thrust Holding Screw	AC
1-4	LANGT9174GEFW	Sled Motor Angle	AD
1-5	LX-BZ3185GEFN	Screw(M1.4+2.5S)	AB
1-6	LX-BZ3192GEZZ	Screw(M1.4+3.5S)	AA
1-7	NGERR1009GEZZ	Rack	AD
1-8	NGERR1010GEZZ	Double-acting Rack	AC
1-9	CMOTV1022GE03	Sled Motor	AP
1-10	QCNW-7914GEZZ	Sled Motor Read Wire	AC
1-11	PCUSU0001GEZZ	Sled Cushion	AB
1-12	NGERP1003GEZZ	Sled Pinion	AC
1-13	LX-WZ1076GE02	Washer	AA
14	QSW-M0045GEZZ	In Switch	AD
15	QCNW-7936GEZZ	In Switch Read Wire	AD
16	LANGG9105GEZZ	Clamper Angle	
17	LHLDM1001GEZZ	Clamper Hunger	AC
18	LX-WZ0102GEFD	Yoke Plate	AB
20	LCRA-0001GEZZ	Disc Clamper	AC
21	LHLDZ2051GEZZ	Base Chassis	AM
22	RMOTM1077GEZZ	Loading Motor	AL
23	NPLYD0001GEZZ	L Motor Pulley	AD
24	NBLTT0012GEZZ	Timing Belt S	AE
25	NGERH1291GEZZ	Idler Gear 1	AD
26	NGERH1292GEZZ	Idler Gear 2	AC
27	NGERP1001GEZZ	Tray Pinion	AC
28	MSLiP0009GEZZ	Slide Rack	AF
29	LCHSS0046GEZZ	Moving Chassis	AG
30	PCUSG0001GEZZ	Insulator	AC
31	QSW-B0007GEZZ	Loading Switch	AD
32	CPWBF5437GE01	L Idler PWB Ass'y	AH
33	GCOVA2120GESB	Tray	AH
37	LX-BZ3186GEZZ	Screw(M2.6+8S P TAI)	AB
41	XAPSF20P06000	Screw(M2+6S)	AA
43	LX-BZ3163GEFN	Screw(M1.7+2.5S)	AC
44	LX-HZ3037GEFD	Screw(M2.6S P TAI)	AA
45	XEPSD26P06000	Screw(M2.6+6S P TAI)	AA
52	PMAGS1001GEZZ	Clamper Magnet	AF
53	PCUSU0002GEZZ	Tray Cussion	AC

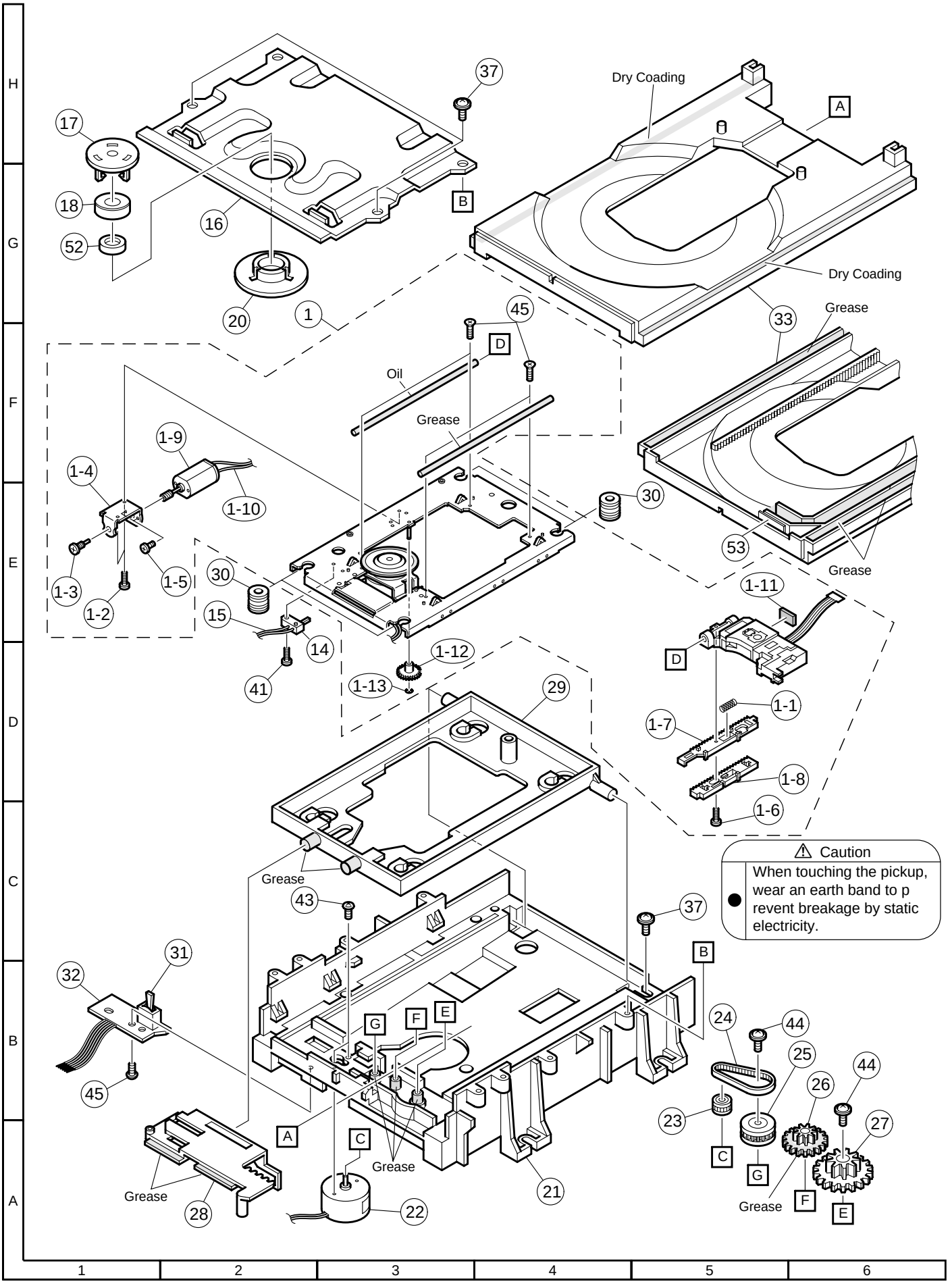
CABINET PARTS

601	GCABA3115AJSJ	Top Cabinet	AS
603	JBTN-2861AJSD	Power Button	AH
604	NSFTZ0202AJFW	Shaft	AG
605	CDECQ1959TEV1	KS Tray DEC Plate	AN
606	TLABM4047AJZZ	Model Label(600S)	AD
606	TLABM4130AJZZ	Model Label(600H)	
607	XEBSF30P08000	Screw	AA
609	XEBSF26P10000	Screw	AA
610	XHPSD30P06WS0	Screw	AA
611	GBDYU3107AJFW	Chassis	AR
612	GLEGP9001AJ00	Foot	AC
613	GCOVA3033AJZZ	Terminal Angle	AN
614	LHLDZ2032AJZZ	Switch Holder	AD
615	GLEGP9113AJSC	Leg	AK
616	LX-HZ3100GEFF	Screw	AA
617	XHPSF30P10WS0	Screw	AA
618	XEPSD26P08000	Screw	AA
619	PSPAZ0548AJZZ	Spacer	AE
620	PSHEP0014AJZZ	Insulator Sheet	AG
621	PSPAZ0532AJZZ	Spacer	AD
622	PSPAZ0046AJZZ	Spacer	AA
623	PSPAZ0478AJZZ	Spacer	AA
624	DUNTK5766TE6A	- Main PWB Unit(600S)	—
624	DUNTK5766TE6B	- Main PWB Unit(600H)	—
625	DUNTK5667TEV3	- Terminal PWB Unit(600S)	—
625	DUNTK5667TEV4	- Terminal PWB Unit(600H)	—
626	DUNTK5668TEV3	- Display PWB Unit(600S)	—
626	DUNTK5668TEV4	- Display PWB Unit(600H)	—
627	QCNW-7888GEZZ	Connector	AF
628	LX-HZ3099GEFD	Screw	AB
629	LX-HZ3096GEZZ	Screw	AB
630	PSHEP0021AJZZ	Sheet	AF
631	DUNTK5672TEV3	- 21-Pin Euro Scart PWB Unit(600S)	—
631	DUNTK5672TEV4	- 21-Pin Euro Scart PWB Unit(600H)	—
632	QSOCZ4298GEZZ	21 Pin Socket	AH
633	TLABZ1625AJZZ	FE-Label	AG

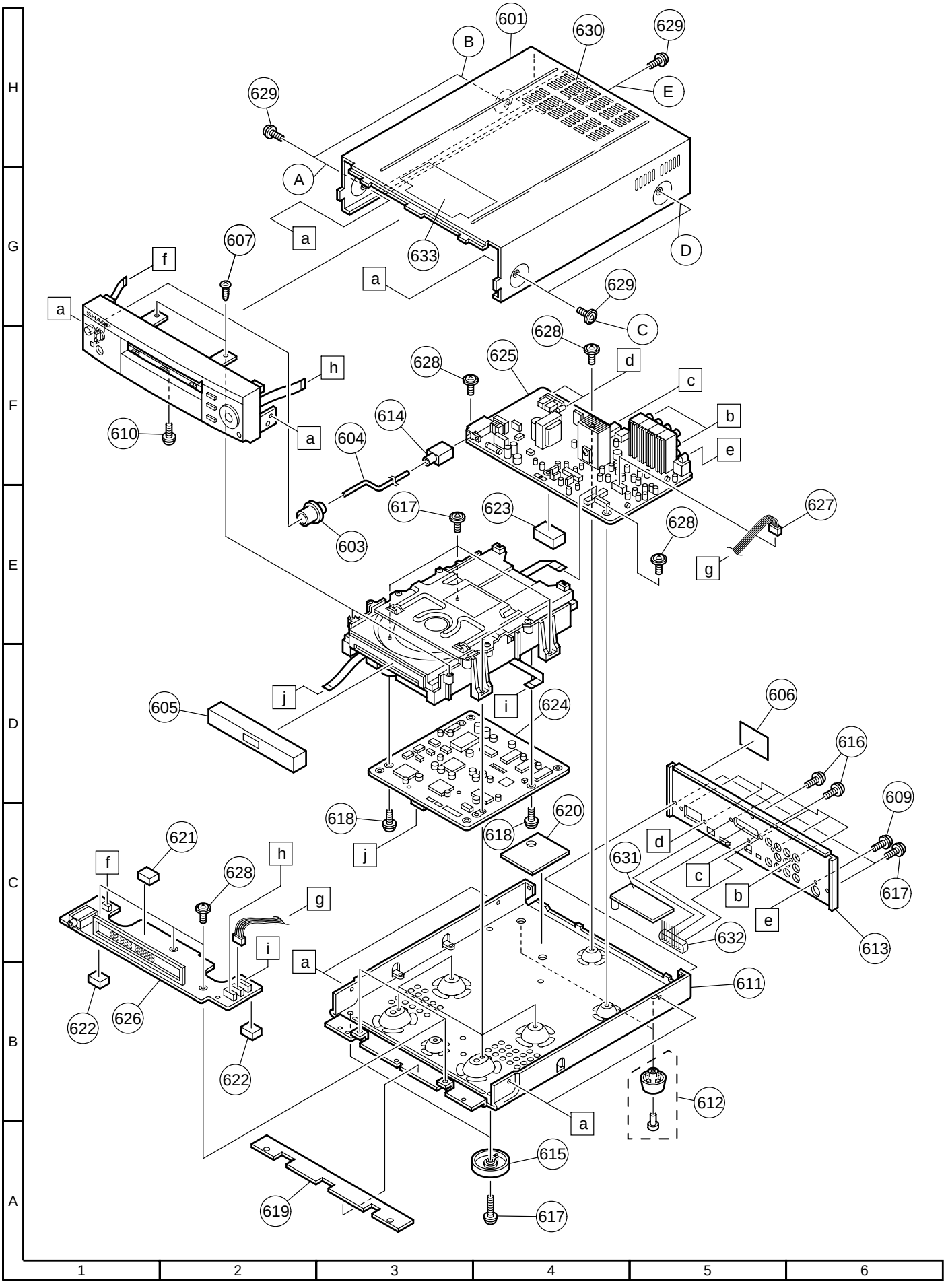
FRONT PANEL PARTS

501	CPNLC2629TEV1	KS Front Panel	AY
501-2	CBTN-2935TEV1	Operation Button Unit	AM
501-2-1	HDECQ1993AJZZ	LED Cover	AF
501-3	HBDGB3032AJSB	SHARP Badge	AG
501-4	HDECQ1610AJZZ	Remote Control Decoration	AD
501-5	HDECQ1960AJSA	Display Window	AK
501-6	TLABZ1589AJZZ	Feature Label	AF
501-7	JKNBK1107AJSD	Volume Knob	AH
501-8	JKNBK1125AJSA	Shuttle Knob	AK
501-9	LX-NZ3055GEZZ	Screw	AB
501-10	LX-WZ3031GEZZ	Screw	AB
501-11	XEPSD26P08000	Screw	AA
501-12	DUNTK5670TEV3	- Volume PWB Unit(600S)	—
501-12	DUNTK5670TEV4	- Volume PWB Unit(600H)	—
501-13	DUNTK5669TEV3	- Operate PWB Unit(600S)	—
501-13	DUNTK5669TEV4	- Operate PWB Unit(600H)	—

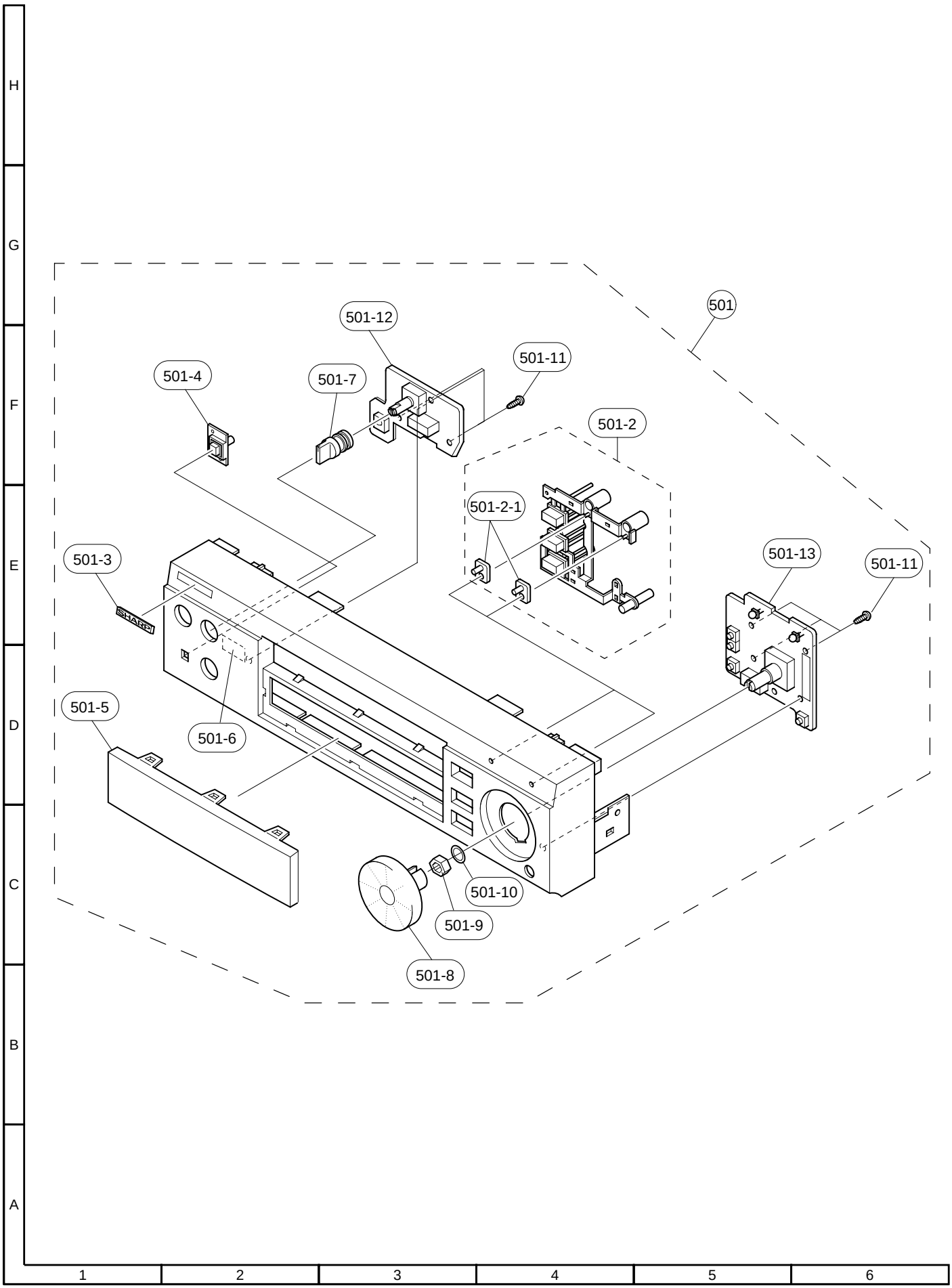
MECHANISM EXPLODED VIEW



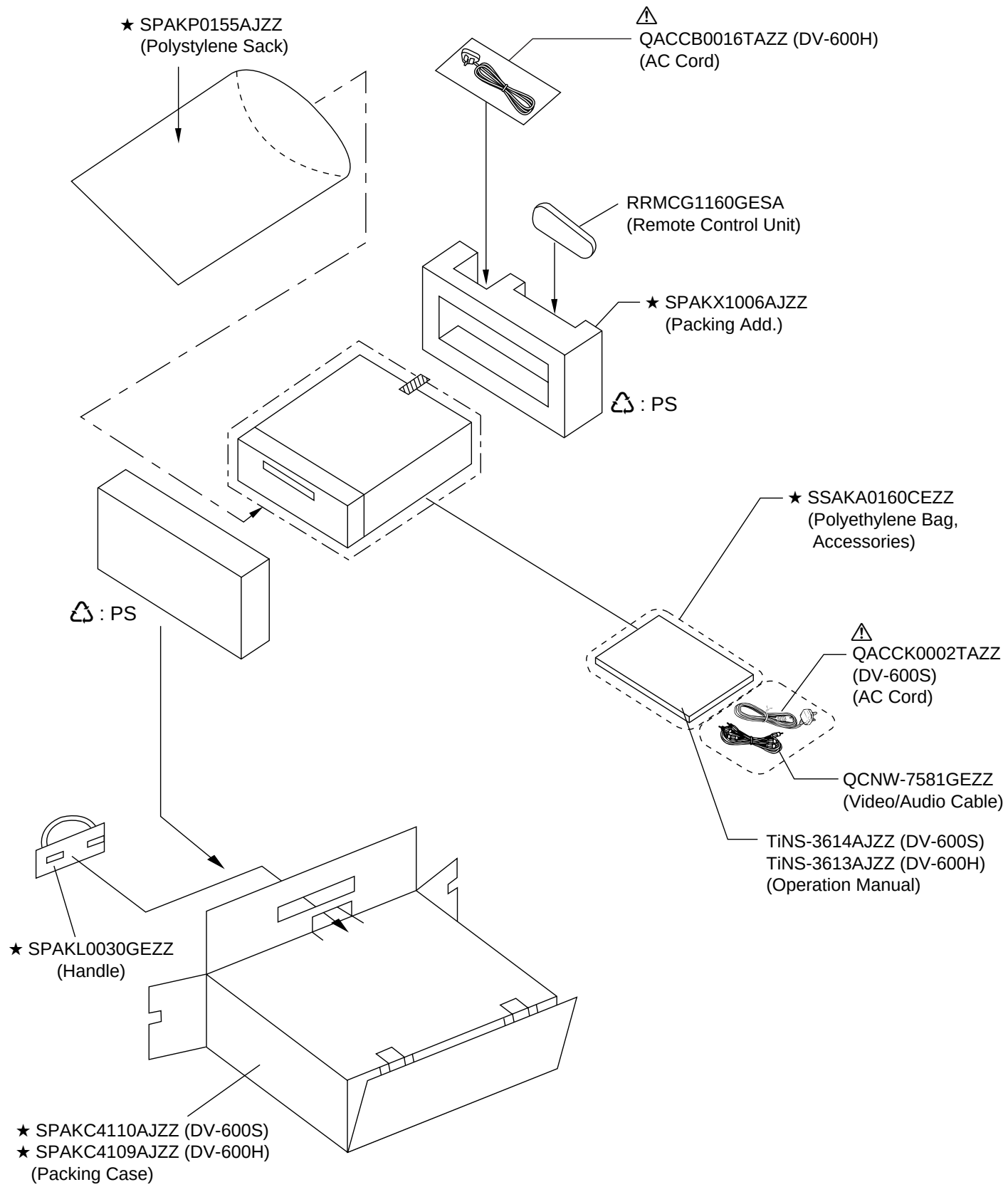
CABINET EXPLODED VIEW



FRONT PANEL PARTS EXPLODED VIEW



18. PACKING OF THE SET



★ Not Replacement Items

SHARP

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