

# JVC

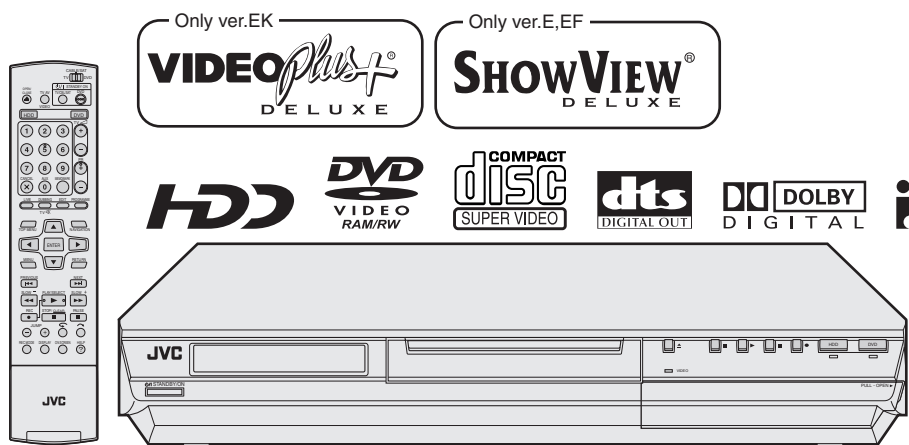
## SERVICE MANUAL

DVD&HDD VIDEO RECORDER

### DR-MH50SE, DR-MH50SEF DR-MH50SEK

**Area Suffix**

E ----- Continental Europe  
EF ----- France  
EK ----- U.K.



DR-MH50SE, DR-MH50SEF, DR-MH50SEK [D4HR30]

Since the whole mechanism assembly unit is replaced, the DVD recorder mechanism of this unit need not be adjusted.

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# SPECIFICATION

		DR-MH50SE	DR-MH50SEF	DR-MH50SEK	
<b>GENERAL</b>					
Power requirement	AC 220 V - 240 V~, 50 Hz/60 Hz				
Power consumption	Power on : 37 W Power off : 15.6 W				
Temperature	Operating : 5°C to 35°C Storage : -20°C to 60°C				
Operating position	Horizontal only				
Dimensions (W × H × D)	435 mm × 70 mm × 345.5 mm				
Weight	6.1 kg				
<b>Input/Output</b>					
Video input	Y:0.5-2.0 Vp-p, 75 ohms(pin jack)				
Audio input	-8 dB, 50 kilohms (pin jack) Corresponding to mono (left)				
Audio output	-8 dB, 1 kilohms (pin jack)				
21-pin SCART connectors	IN/OUT x 1, IN/DECODER x 1				
S-video input	Y: 0.8 - 1.2 Vp-p, 75 ohms C: 0.2 - 0.4 Vp-p, 75 ohms				
S-video output	Y: 1.0 Vp-p, 75 ohms C: 0.3 Vp-p, 75 ohms				
i.Link	4-pin for DV input				
Component video output	Y: 1.0 Vp-p, 75 ohms CB/CR, PB/PR: 0.7 Vp-p, 75 ohms Corresponding to copy protection				
SAT Control	3.5 mm				
Digital audio output	Optical: -18 dBm, 660 nm Coaxial: 0.7 Vp-p, 75 ohms Corresponding to Dolby Digital and DTS Digital Surround Bit stream Selectable in digital audio output setting menu				
<b>VIDEO/AUDIO (DVD Deck)</b>					
Recording time	Maximum 8 hours (with 4.7 GB disc) (XP) : Approx. 1 hour, (SP) : Approx. 2 hours, (LP) : Approx. 4 hours, (EP) : Approx. 6 hours, (FR) : Approx. 1 hour - 8 hours				
Audio recording system	Dolby Digital (2 ch) Linear PCM (XP mode only)				
Video recording compression system	MPEG2 (CBR/VBR)				
<b>VIDEO/AUDIO (HDD Deck)</b>					
Video recording compression system	MPEG2 (VBR)				
Audio recording system	Dolby Digital (2 ch) Linear PCM (XP mode only)				
Recording time	Maximum 473 hours(with 250 GB HDD) (XP) : Approx.53 hours, (SP) : Approx.109 hours,(LP) : Approx.218 hours, (EP) : Approx.328 hours, (FR) : Approx. 473 hours				
<b>TUNER/TIMER</b>					
Signal system	PAL-type colour signal and CCIR monochrome signal, 625 lines/50 fields				
TV channel storage capacity	99 positions (+AUX position)				
Tuning system					
Channel coverage (SECAM L)	Frequency	VHF	-	LOW: 49 MHz -65 MHz/ HIGH: 104 MHz -300 MHz	-
		Hyper	-	300MHz-470MHz	-
		UHF	-	470 MHz -862 MHz	-
	Canaux	VHF	-	LOW: 2-4 HIGH: 5-10 CATV	-
		Hyper	-	CATV	-
		UHF	-	21-69	-
Channel coverage (PAL B/G)	Frequency	VHF	47 MHz -89 MHz/ 104 MHz -300 MHz/ 302 MHz -470 MHz	LOW: 47 MHz -89 MHz/ HIGH: 104 MHz -300 MHz	44.5MHz-143MHz/ 143MHz-470MHz
		Hyper	-	302 MHz -470 MHz	-
		UHF	470 MHz -862 MHz	-	-
	Canaux	VHF	-	LOW: E2-E4, X, Y, Z HIGH: E5-E12,S1-S20,M1-M10,U1-U10	-
		Hyper	-	S21-S41	-
		UHF	-	E21-E69	-
Memory backup time	Approx. 60 seconds				
<b>ACCESSORIES</b>					
Provided accessories	RF cable,21-pin SCART cable,Satellite Controller,Infrared remote control unit,"AA" battery x 2				

E. & O.E. Design and specifications subject to change without notice.

**ATTENTION:**

This unit contains microcomputers. External electronic noise or interference could cause malfunctioning. In such cases, switch the unit off and unplug the mains power cord. Then plug it in again and turn the unit on. Take out the disc. After checking the disc, operate the unit as usual.

- Manufactured under licence from Dolby Laboratories. "Dolby" and double-D symbol are trademarks of Dolby Laboratories.
- "DTS" and "DTS DIGITAL OUT" are trademarks of Digital Theater Systems, Inc.
- VIDEO Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation. The VIDEO Plus+ system is manufactured under license from Gemstar Development Corporation.
- This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing users only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

# SECTION 1 PRECAUTION

## 1.1 Safety Precautions

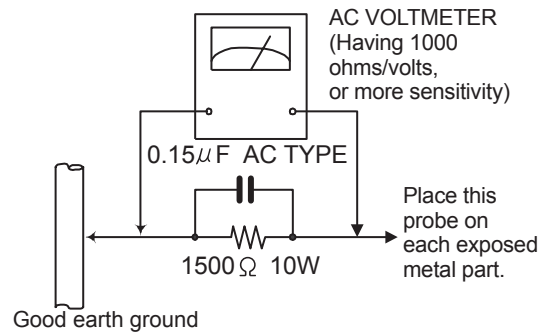
- (1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by ( $\Delta$ ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
- (4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
- (5) Leakage shock hazard testing

After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method  
Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 $\Omega$  per volt or more sensitivity in the following manner. Connect a 1,500 $\Omega$  10W resistor paralleled by a 0.15 $\mu$ F AC-type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC

voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



## 1.2 Warning

- (1) This equipment has been designed and manufactured to meet international safety standards.
- (2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
- (3) Repairs must be made in accordance with the relevant safety standards.
- (4) It is essential that safety critical components are replaced by approved parts.
- (5) If mains voltage selector is provided, check setting for local voltage.

## 1.3 Caution

**Burrs formed during molding may be left over on some parts of the chassis.**

**Therefore, pay attention to such burrs in the case of pre-forming repair of this system.**

## 1.4 Critical parts for safety

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (■), diode (■) and ICP (●) or identified by the " $\Delta$ " mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer. (This regulation does not Except the J and C version)

## 1.5 Important for laser products

### 1.CLASS 1 LASER PRODUCT


**2.DANGER** : Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

**3.CAUTION** : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

**4.CAUTION** : The CD,MD and DVD player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

**5.CAUTION** : If safety switches malfunction, the laser is able to function.

**6.CAUTION** : Use of controls, adjustments or performance of procedures other than those specified here in may result in hazardous radiation exposure.

 **CAUTION** Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

**CAUTION** : Visible and invisible laser radiation when open and interlock failed or defeated.

AVOID DIRECT EXPOSURE TO BEAM.

**ADVARSEL** : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling.

**VARNING** : Synlig och osynlig laserstråling när den öppnas och spärren är urkopplad. Betrakta ej strålen.

**VARO** : Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi.

## REPRODUCTION AND POSITION OF LABEL

On mechaism assembly



**CAUTION** VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.  
**ADVARSEL** SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGA UDSAETTELSE FOR STRÅLING SE IKKE IND I STRÅLEN - HELLER IKKE MED OPTISKE INSTRUMENTER.  
**ADVARSEL** SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNDGA EKSPONERING FOR STRÅLEN STIRR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.  
**VARO!** AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LÄPI.  
**VARNING** SYNLIG OCH OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD. STRÅLEN ÄR FARLIG STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.

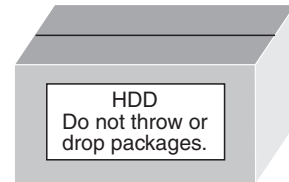
## 1.6 Hard Disk Drive (HDD) Handling Precautions

The HDD is a precision device for use in reading and writing a large amount of data on or from a disk rotating at a high speed. If it is not handled carefully, either abnormal operation may result or it may not be possible to read data. The HDD is sensitive to the following items and special care is required in safeguarding against them when handling an HDD. Also take care in handling a set incorporating an HDD.

- (1) Vibrations and impacts
- (2) Static electricity
- (3) Rough handling

### 1.6.1 Handling in transport, etc.

- Be sure to place the HDD in the manufacturer's specified package carton before transport.
- When receiving a package containing an HDD, check that the package carton is not damaged (such as having holes in the carton, crushed corners, etc.).
- Do not impact the packaging carton when loading or unloading it.
- It is not permitted to use the inner package carton only for transporting an HDD.
- Do not stack package cartons one upon another.

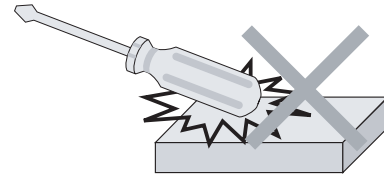


Be sure to package and transport the HDDs correctly.

### 1.6.2 Handling an HDD in the stand-alone status

- When handling an HDD on a hard workbench, place an anti-static mat (rubber sheet) or similar object on the hard surface (to prevent any impacts occurring between the HDD and bench).
- Do not stack the HDDs one upon another.
- Do not knock an HDD with a hard object (such as a screwdriver).

- Do not place an HDD on its side panel without using a support (do not place an HDD in an unstable position).



### 1.6.3 Handling the installation of an HDD

- Place antistatic mats or similar sheets on all of the surfaces on which work is conducted or when the HDD is transported.
- Do not permit the HDD to knock against the set's brackets.
- When screwing the brackets, be careful not to knock the HDD. When using a power screwdriver, use a low-shock model and arrange the tightening torque properly.
- When mounting an HDD in a main body, take care not to apply excessive force to the brackets.

**SECTION 2**  
**SPECIFIC SERVICE INSTRUCTIONS**

This service manual does not describe SPECIFIC SERVICE INSTRUCTIONS.

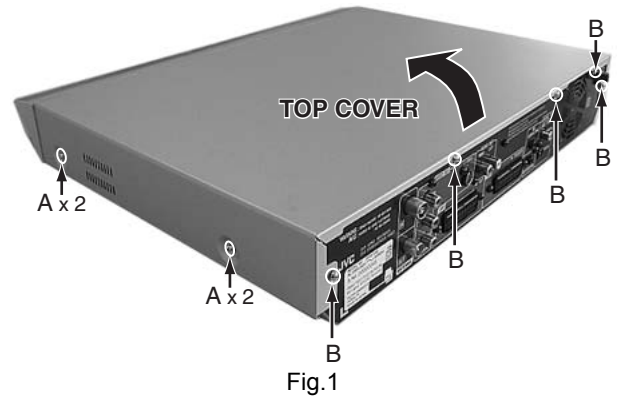
## SECTION 3 DISASSEMBLY

The photograph used by this explanation might be different from the actual one according to the destination etc.

### 3.1 Main body section

#### 3.1.1 Remove the top cover (See figure 1)

- (1) Remove the four screws **A** attaching the top cover on both sides of the main body.
- (2) Remove the five screws **B** attaching the top cover on the back of the main body.
- (3) Raise the both sides and lower part of the rear of the top cover, with opening them slightly in an outward direction. And the top cover will be removed.



### 3.1.2 Remove the front panel assembly and HDD (See figure 2, figure 3, figure 4, and figure 5)

- Prior to performing the following procedure, remove the top cover.
- There is no need to remove the drive unit.
  - (1) Remove the four screws **C** attaching the HDD.
  - (2) Disconnect the socket wire from connector **CN5307** on the switching regulator board.
  - (3) Disconnect the card wire from connector on the HDD.
  - (4) Disconnect the card wires from connector **CN3001**, **CN3002**, **CN4001** on the main board.
  - (5) Hooks **a** and **b** are removed respectively, and the front panel assembly is removed.

**NOTE:**

In case of attach a front panel assembly, please let a card wire pass in the hole in the front part of a chassis, respectively, and connect.

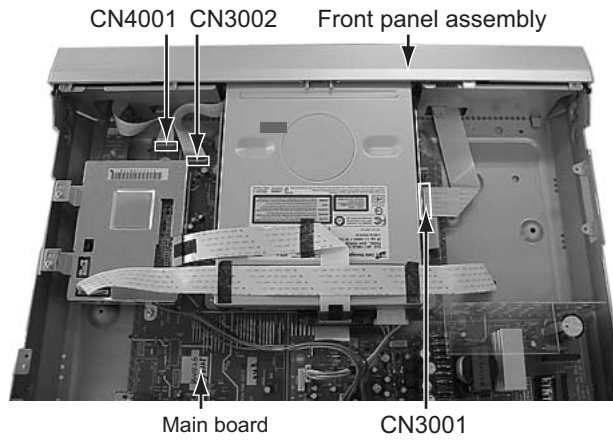


Fig.3

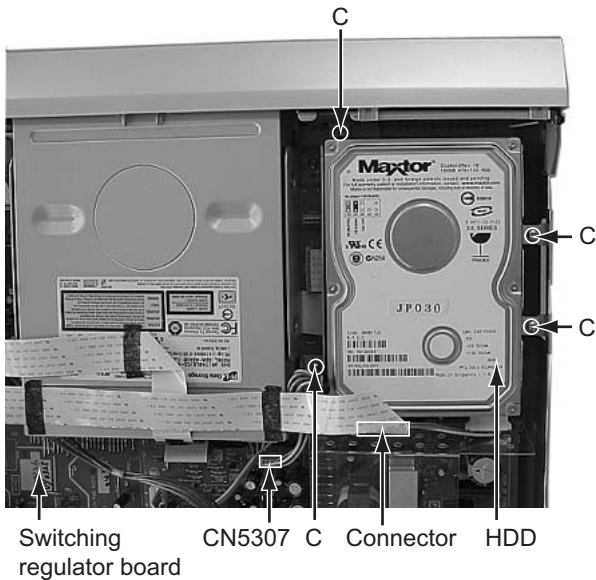


Fig.2

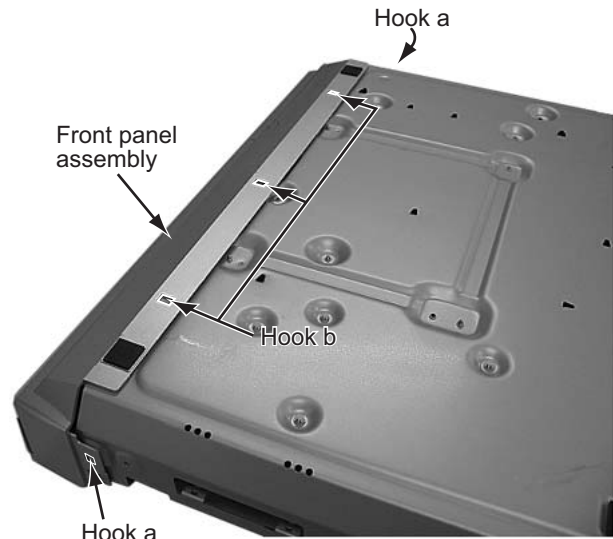


Fig.4

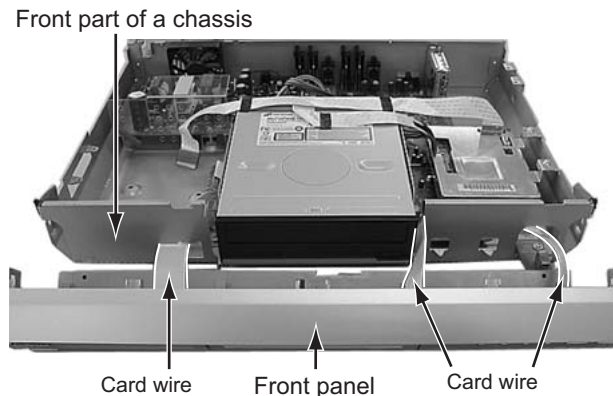


Fig.5



### 3.1.3 Remove the drive unit (See figure 6)

- Prior to performing the following procedure, remove the top cover.
- There is no need to remove the front panel assembly.
  - (1) Disconnect the socket wire from connector [CN5303](#) on the switching regulator board.
  - (2) Disconnect the card wire from connector [CN2201](#) on the digital board.
  - (3) The tape which is fixing the card wire is removed two places.
  - (4) Remove the four screws **D** attaching the drive unit.
  - (5) Remove the one screw **E** attaching the lug wire.

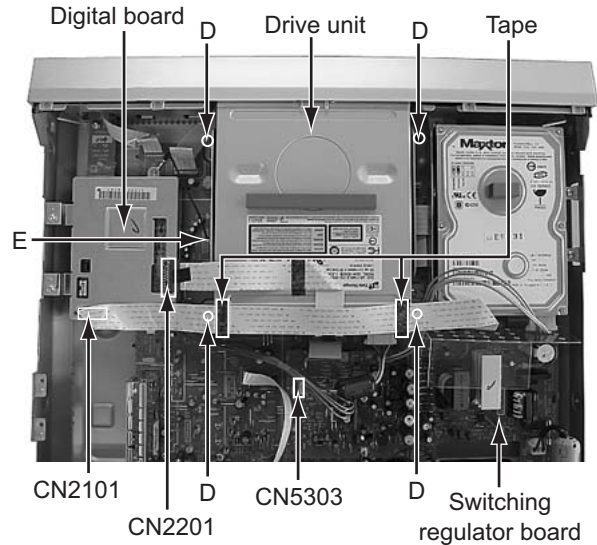


Fig.6

### 3.1.4 Remove the digital board (See figure 7, figure 8)

- Prior to performing the following procedure, remove the top cover.
  - (1) Disconnect the card wire from connector [CN2201](#), [CN2101](#) on the digital board.
  - (2) Disconnect the socket wire from connector [CN1003](#) on the digital board.
  - (3) Remove the four screws **F** attaching the digital board.
  - (4) Lift the digital board up, and remove it. Then, the digital board is removed from the connectors [CN4101](#), [CN4102](#) on the main board and [CN4104](#) on the jack board. In attaching the digital board, insert the connector on the digital board in these connectors securely.

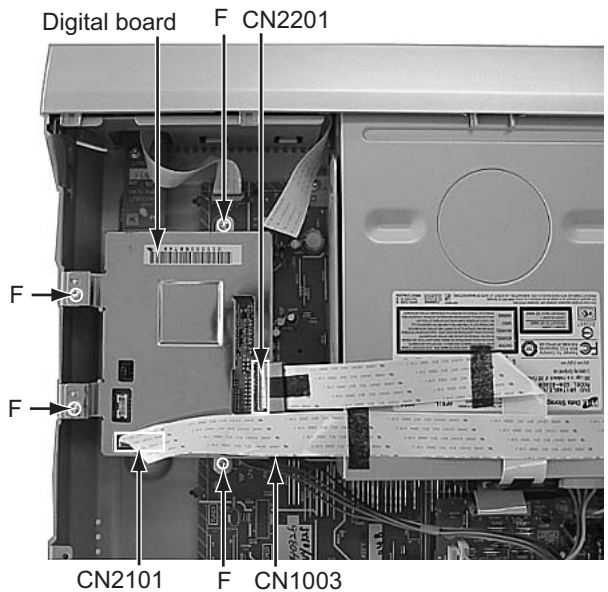


Fig.7

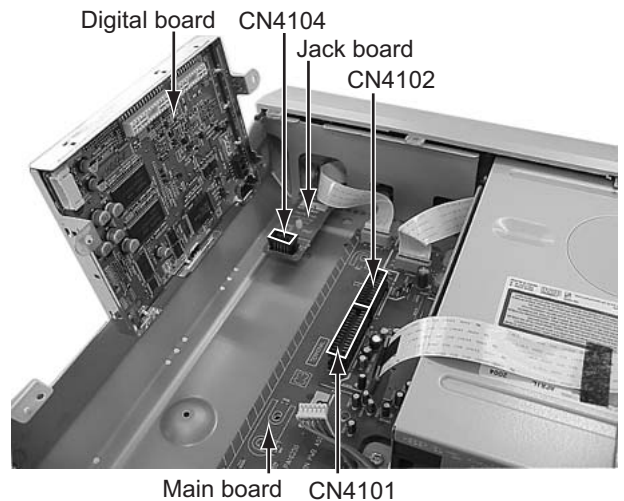
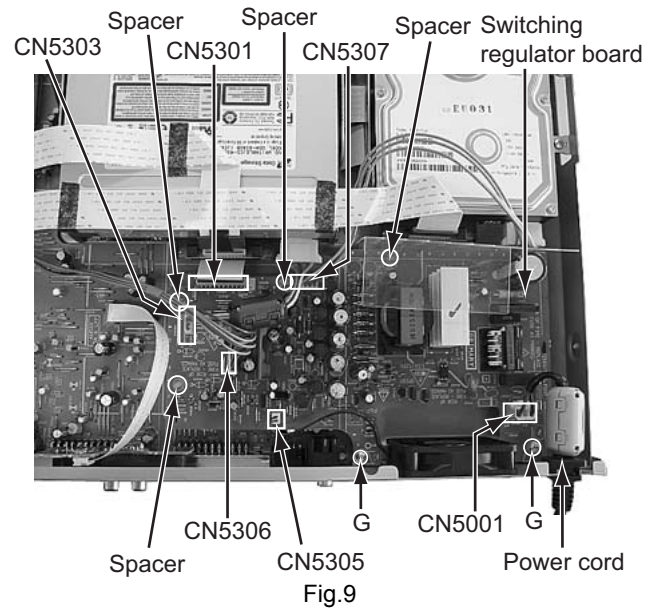


Fig.8

### 3.1.5 Remove the switching regulator board (See figure 9)

- Prior to performing the following procedure, remove the top cover.
- (1) Disconnect the card wire from connector [CN5301](#) on the switching regulator board.
- (2) Disconnect the socket wire from connector [CN5303](#), [CN5305](#), [CN5306](#), [CN5307](#) on the switching regulator board.
- (3) Disconnect the power cord from connector [CN5001](#) on the switching regulator board.
- (4) Remove the two screws **G** attaching the switching regulator board.
- (5) Four spacers are removed.



### 3.1.6 Remove the main board (See figure 10, figure 11)

- Prior to performing the following procedure, remove the top cover, drive unit, digital board, switching regulator board, HDD.
- (1) Disconnect the card wire from connector [CN3001](#), [CN3002](#), [CN4001](#), [CN7301](#) on the main board.
- (2) Remove the two screws **H** attaching the main board.
- (3) Remove the seven screws **I** attaching the rear panel with main board.

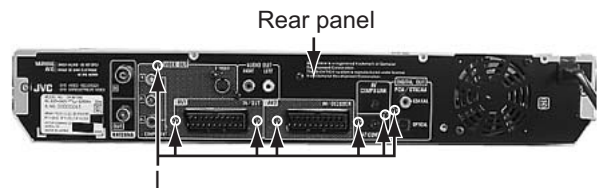
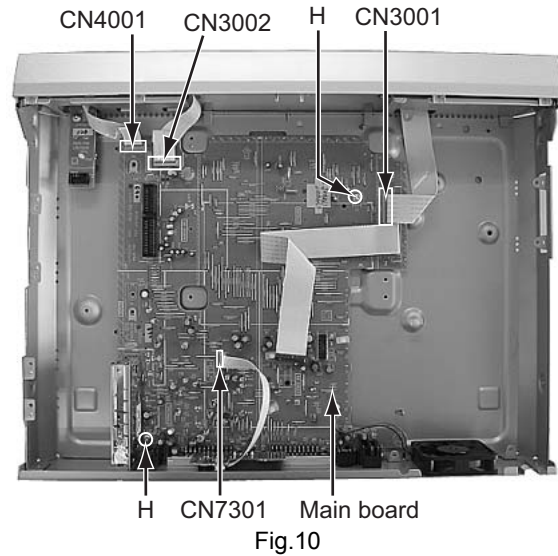


Fig.11

## SECTION 4 ADJUSTMENT

### 4.1 Timer clock adjustment (for only ver.E)

If an error comes to arise for a clock, the following procedure will adjust.

Signal	(A1)	No signal
Mode	(B)	EE
Equipment	(C)	Frequency counter
Measuring point	(D1) (D2) (D3)	IC3001 pin 61 IC3001 pin 17 C3026 + and -
Adjustment part	(F)	C3025 (TIMER CLOCK)
Specified value	(G1)	1024.008 $\pm$ 0.001 Hz (976.5549 $\pm$ 0.0010 usec)

- (1) Connect the frequency counter to the measuring point (D1).
- (2) Connect the short wire between the short point (D2) and Vcc (5V).
- (3) Short the leads of capacitor (D3) once in order to reset the microprocessor of the system controller.
- (4) Disconnect the short wire between the short point (D2) and Vcc then connect it again.
- (5) Adjust the Adjustment part (F) so that the output frequency becomes the specified value (G).


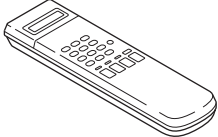
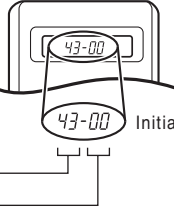
# SECTION 5 TROUBLESHOOTING

## 5.1 JIG Mode

The following remote control units are required to set and cancel JIG mode.

For setting : a remote control unit attached to product.

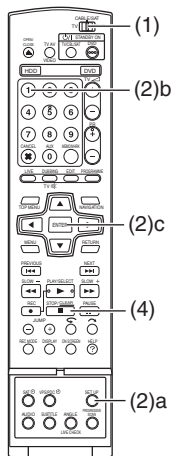
For cancellation : JIG remote control unit (part number : PTU94023B)

Remote control unit attached to product	JIG remote control unit
	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  <p>JIG remote control unit [Data transmission] Set the data code, and then press the " [3] " button.</p> </div> <div style="width: 50%;"> <p>Custom code</p> <p>43:A Code</p> <p>53:B Code</p> <p>6F:C Code</p> <p>7F:D Code</p> <hr/> <p>Data code</p> </div> </div> <div style="text-align: right; margin-top: 20px;">  <p>Initial mode</p> </div>

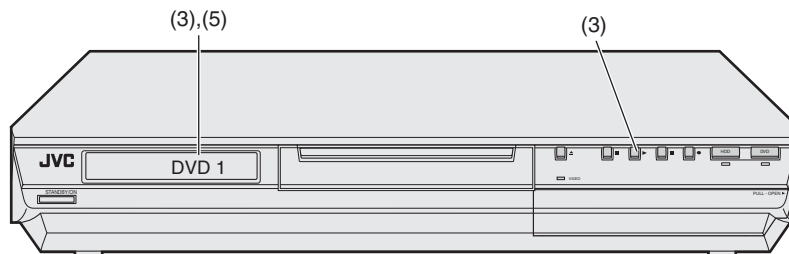
When the main body is set to JIG mode and when the main body is under JIG mode, the remote control unit attached to product operates only in "Remote Control Code 1". Since main body is in "Remote Control Code 3" when it is shipped and just after its batteries are changed, "Remote Control Code 3" needs to be changed to "Remote Control Code 1."

### < Changing Remote Control Code >

- (1) Switch TV/CABLE/SAT/DVD Switch to "DVD"
- (2) Press the numeric button "1" of the remote control unit while pressing the "SET UP" button of the remote control unit. Then, press the "ENTER" button, and then release the "SET UP" button.
- (3) Press the "PLAY" button of the main body for five seconds or longer while the main body is in stand-by mode, and a current remote control code of the main body is displayed in FL indicator of the main body.
- (4) While keeping the state of (3), press the "STOP" button of the remote control unit toward the main body.
- (5) The code that was set by the remote control unit blinks for 5 seconds, before the code is set to the main body. When the FL indicator changes to "DVD 1", it shows that the Remote Control Code has been changed to "1".



"(2) a-c" shows the order of pressing the buttons.



### 5.1.1 Setting JIG mode

To display SYSTEM INFO or to update firmware, the main body needs to be set to JIG mode.

- (1) Turn the main body ON.
- (2) Press the buttons of the remote control unit attached to product in the following order : "SET UP" → "2" → "8" → "ENTER"
- (3) When a colon ":" between "hour" and "minute" of a clock in FL indicator blink, it means that the main body has been set to JIG mode properly.

[ Example ]

Not in JIG mode

15 : 07



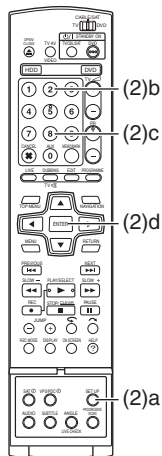
In JIG mode

15:07

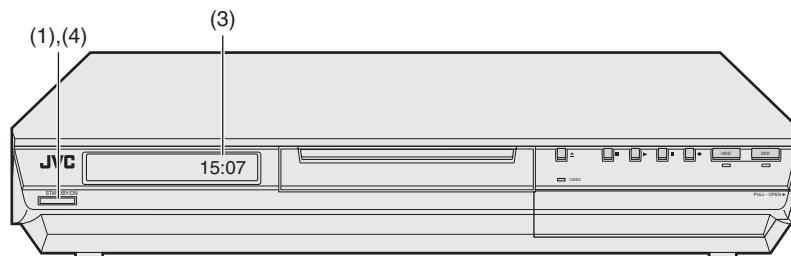
A colon blinks.

- (4) Turn the main body OFF, and then turn it ON again.

\*Once the main body is set to JIG mode, the JIG mode cannot be cancelled even if the power cord is pulled out from the wall socket.



"(2) a-d" shows the order of pressing the buttons.



### 5.1.2 Canceling JIG mode

- (1) Transmit "43-9D" to the main body by using JIG remote control unit.(Please end a setting menu pushing "SET UP" button of the remote control unit appended to the commodity beforehand when a setting menu is displayed.)
- (2) A colon ":" between "hour" and "minute" of a clock in FL indicator light.
- (3) Turn the main body OFF, and then turn it ON again.

#### NOTE:

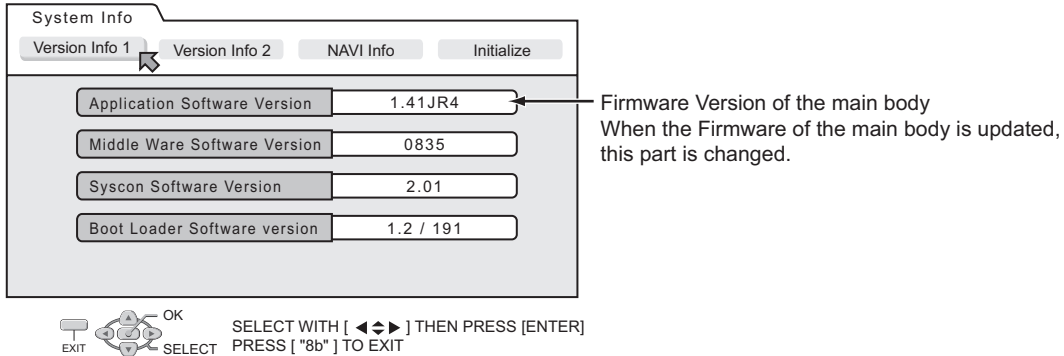
After repair work, be sure to cancel JIG mode. Before returning product to a user, confirm that a colon ":" between "hour" and "minute" of a clock in FL indicator light.

## 5.2 Displaying SYSTEM INFO

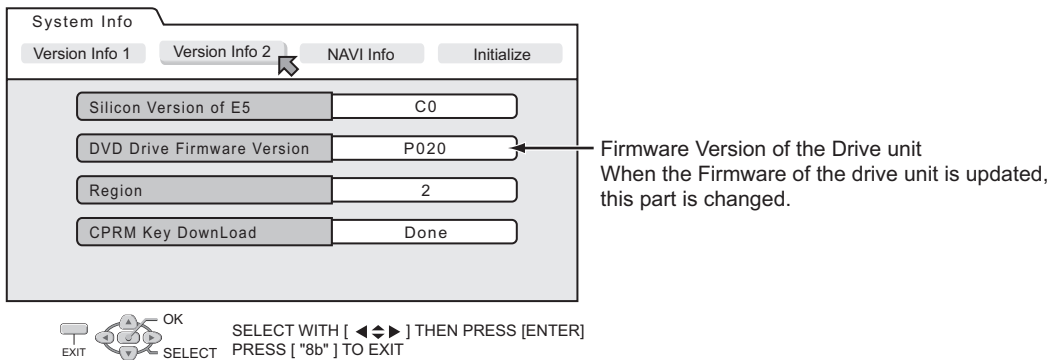
In the SYSTEM INFO there is information including Firmware Versions of the main body and the drive unit.

- (1) Set the main body to JIG mode.
- (2) Transmit "43-8B" to the main body by using JIG remote control unit. (Please end a setting menu pushing "SET UP" button of the remote control unit appended to the commodity beforehand when a setting menu is displayed.)
- (3) SYSTEM INFO menu is displayed in the television screen.
- (4) To move cursor in SYSTEM INFO, use the "▲", "▼", "◀", and "▶" buttons of a remote control unit attached to product.

### The example of a display < Version Info 1 >



### The example of a display < Version Info 2 >



#### NOTE :

Items other than the ones described above are not used in service work.

- (5) To quit the SYSTEM INFO menu, transmit "43-8B" to the main body by using JIG remote control unit.
- (6) Cancel JIG mode.

### 5.3 Updating the firmware of the main body

- Firmware update disc supports CD-R media.
- When firmware update is necessary, information is available from the homepage of DIGITAL VIDEO STORAGE CATEGORY, CS group.

#### 5.3.1 Creating an update disc

Please check the details of the update disc creation method by JS-NET.

- (1) Download the update file from JS-NET.
  - (2) Write the update file into CD-R. Pay attention in the following points when writing the update disc.
- Make sure to write in "Disc at Once".
  - Set the file compatibility to "ISO9660 format". (ROMEO, JOLIET are disapproved.) If the writing method is not correct, the update results in an error.

#### 5.3.2 Update procedure

- There are two methods of updating firmware, using JIG mode <method 1> or not using JIG mode (User update mode) <method 2>. Updating can be operated in either method.

##### <Method 1>

- (1) Set to the JIG mode.
- (2) Load the update disc on the tray, and then close the tray.
- (3) When the disc reading operation is completed, transmit "43-70" with the JIG remote control unit.  
If the update disc is not correct, FL indicator displays an "ERROR" after transmitting "43-70". Transmit "43-70" once and make the FL indicator to normal display, and then reload the disc then transmit "43-70" again.
- (4) "UPDATE" is displayed in the FL indicator, and the FL indicator changes to "FL UPDATE" afterwards. It takes approx. 2 minutes for the change.
- (5) Remove the disc as the tray is ejected, and then transmit "43-70" with the JIG remote control unit. Then the FL indicator changes from "UPDATE" to the normal display.
- (6) Close the tray and turn the main body OFF. Pull out the power code from the wall socket, then plug the power cord into the wall socket again.
- (7) When "LOADING" in the FL indicator disappears, turn the main body ON.
- (8) Display the SYSTEM INFO menu, and check the version of the firmware.
- (9) Cancel the JIG mode.

##### <Method 2>

- (1) Turn the power ON. Load the update disc on the tray and close the tray.
- (2) When the disc reading operation is completed, turn the power OFF.
- (3) Keep pressing the "PAUSE" button and the "POWER" button at the same time. (Until FL indicator changes to "UPDATE").
- (4) In approx. 2 minutes the tray is ejected. Remove the disc and close the tray.
- (5) Reset operation is carried out automatically, and it becomes standby condition.
- (6) Then, display the SYSTEM INFO menu in the JIG mode and check the version.

#### 5.4 Updating the firmware of the drive unit

- Firmware update disc supports only DVD-RAM media.
- When firmware update is necessary, written discs are distributed by DIGITAL VIDEO STORAGE CATEGORY, CS group.
  - (1) Turn the main body ON.
  - (2) Load the update DVD-RAM disc on the tray and close the tray.
  - (3) "READING" is displayed in the FL indicator and the update is started.
  - (4) In a short while "READING" in the FL indicator disappears, open the tray to remove the disc and close the tray.
  - (5) Turn the power OFF and pull out the power code from the wall socket, then plug the power cord into the wall socket again.
  - (6) Set to the JIG mode and check the firmware version of the drive.

#### 5.5 Taking out a disc

##### <Method 1 >

There is a forced tray eject mode with electrical operation.

- (1) Right after plugging in the power code (while "LOADING" is displayed), keep pressing the OPEN/CLOSE button of the main body.
- (2) Remove the disc as the tray is ejected in a short while.
- (3) Make sure to close the tray afterwards.

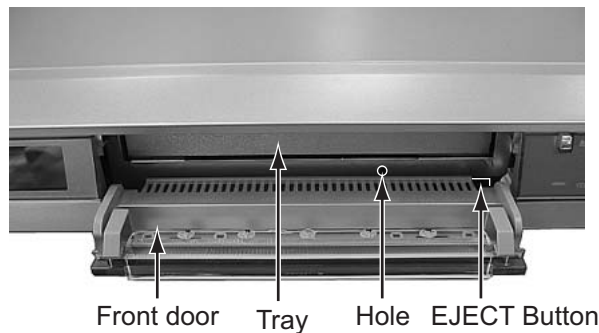
##### <Method 2 >

When the disc cannot be removed by operating above <Method 1 >, open the front door of the main body manually and directly press the EJECT button located in the lower right of the drive unit.

##### <Method 3 >

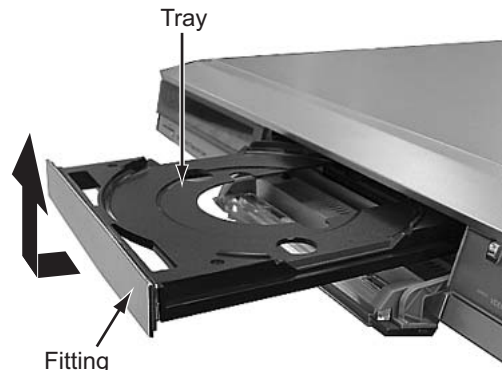
When neither <Method 1> nor <Method 2> can remove the disc, the tray can be ejected mechanically without turning the power on.

- (1) Open the front door of the main body manually.
- (2) Insert a fine wire (e.g. a straightened paper clip) into the hole in the lower part of the tray of the drive unit.
- (3) As the tray ejects a little, pull out the tray manually.



#### 5.6 Exchanging the fitting

As the fitting that comes with the service drive unit cannot be used, make sure to attach a service fitting when the drive unit is exchanged. The fitting that is removed from the old drive unit can be attached to the new drive unit. The fitting can be removed by pulling upwards while opening out the lower part of the fitting outwards.





## 5.7 Initialization to the factory shipment state

When the initialization is operated, internal information changes as follows. It is essential to obtain the client's permission before the operation.

- All DVD library is all deleted.
- All the DVD initial settings go back to the initial status.
  - (1) Set to the JIG mode.
  - (2) Transmit "43-6F" with the JIG remote control unit.
  - (3) FL indicator displays "FACTORY", and changes to "CHECK OK" after blinking for a short while.
  - (4) Pull out the power code from the wall socket.
  - (5) The JIG mode is forced to cancel at the same time with the initialization, check whether the JIG mode is canceled by plugging the power code into the wall socket again. (The colon ":" in time display should be continuously ON, not blinking.) If the JIG mode is not canceled, transmit "43-9D" with JIG remote control unit to cancel the JIG mode.

## 5.8 Setting after the drive unit replacement

When the drive unit is replaced, it is necessary to set a region code. Service drive units for replacement are not set for any region code, and they are in an indefinite condition.

Make sure to set region code after attaching the drive unit to the main body.

**Without the setting of the region code, discs that have regions cannot be played back.**

### 5.8.1 Creating a region setting disc.

Please check the details of the region setting disc creation method by JS-NET.

- (1) Download the region setting file from JS-NET.
- (2) Write the region setting file into CD-R. Pay attention in the following points when writing the file into CD-R.
  - Make sure to write in "Disc at Once".
  - Set the file compatibility to "ISO9660 format". (ROMEO, JOLIET are disapproved).  
If the writing method is not correct, the normal setting cannot be performed.

### 5.8.2 Setting the region

- (1) Set for the JIG mode.
- (2) Load the region setting disc on the tray, and then close the tray.
- (3) When the disc reading operation is completed, transmit "43-70" with the JIG remote control unit.
- (4) FL indicator changes to "UPDATE". Remove the disc as the tray will open for a few seconds.
- (5) Then, check whether the FL indicator is "REGION 2".
- (6) Transmit "43-70" with the JIG remote control unit. When FL indicator changes to "OPEN", close the tray.
- (7) Turn the power OFF, and pull out the power code, and then plug the power code in again.
- (8) Cancel the JIG mode.



**JVC**

Victor Company of Japan, Limited

AV & MULTIMEDIA COMPANY DIGITAL VIDEO STORAGE CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

(No.YD060)



Printed in Japan  
VPT

# JVC

## SCHEMATIC DIAGRAMS

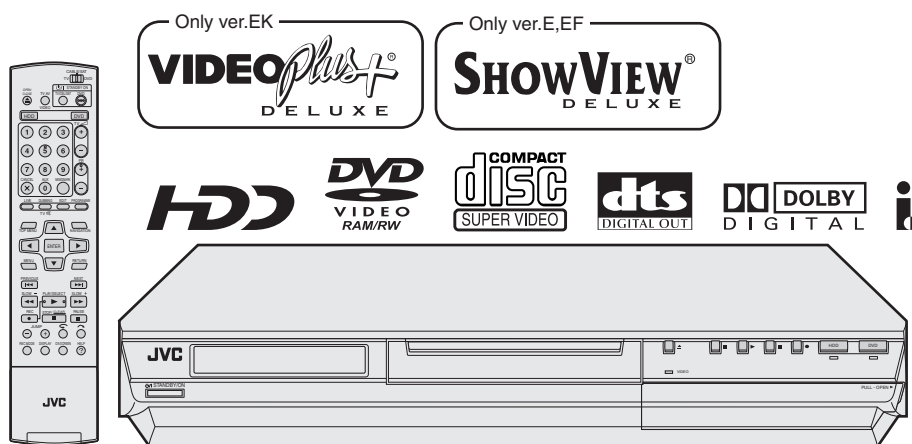
DVD & HDD VIDEO RECORDER

### DR-MH50SE, DR-MH50SEF, DR-MH50SEK

CD-ROM No.SML200503

**Area Suffix**

E ----- Continental Europe  
EF ----- France  
EK ----- U.K.



DR-MH50SE, DR-MH50SEF, DR-MH50SEK [D4HR30]


Since the whole mechanism assembly unit is replaced, the DVD recorder mechanism of this unit need not be adjusted.



# CHARTS AND DIAGRAMS

## NOTES OF SCHEMATIC DIAGRAM

### Safety precautions

The Components identified by the symbol  are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

### 1. Units of components on the schematic diagram

Unless otherwise specified.

- 1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).  
Chip resistors are 1/16 W.  
K: KΩ(1000Ω), M: MΩ (1000KΩ)
- 2) All capacitance values are in μF, (P: PF).
- 3) All inductance values are in μH, (m: mH).
- 4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

**Note:** The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

### 2. Indications of control voltage

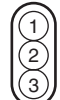
AUX : Active at high.

$\overline{\text{AUX}}$  or AUX(L) : Active at low.

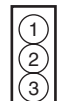
### 3. Interpreting Connector indications



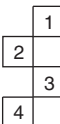
Removable connector



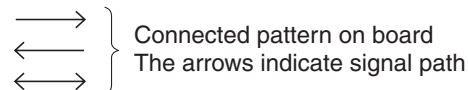
Wire soldered directly on board



Non-removable Board connector



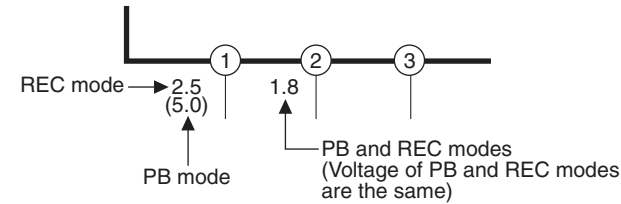
Board to Board



**Note:** For the destination of each signal and further line connections that are cut off from the diagram, refer to "BOARD INTERCONNECTIONS"

### 4. Voltage measurement

- 1) Regulator (DC/DC CONV) circuits  
REC : Colour bar signal.  
PB : Alignment tape (Colour bar).  
— : Unmeasurable or unnecessary to measure.
- 2) Indication on schematic diagram  
Voltage indications for REC and PB mode on the schematic diagram are as shown below.



**Note:** If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

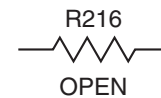
### 6. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



### 7. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.



## CIRCUIT BOARD NOTES

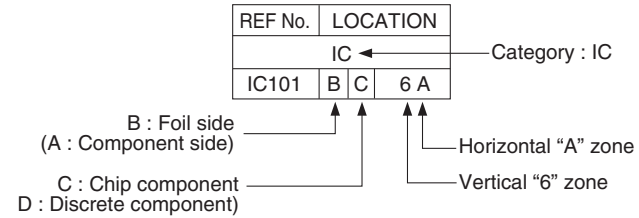
### 1. Foil and Component sides

- 1) Foil side (B side) :  
Parts on the foil side seen from foil face (pattern face) are indicated.
- 2) Component side (A side) :  
Parts on the component side seen from component face (parts face) indicated.

Parts location are indicated by guide scale on the circuit board.

### 2. Parts location guides

Parts location are indicated by guide scale on the circuit board.



**Note:** For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).

# Wiring diagram

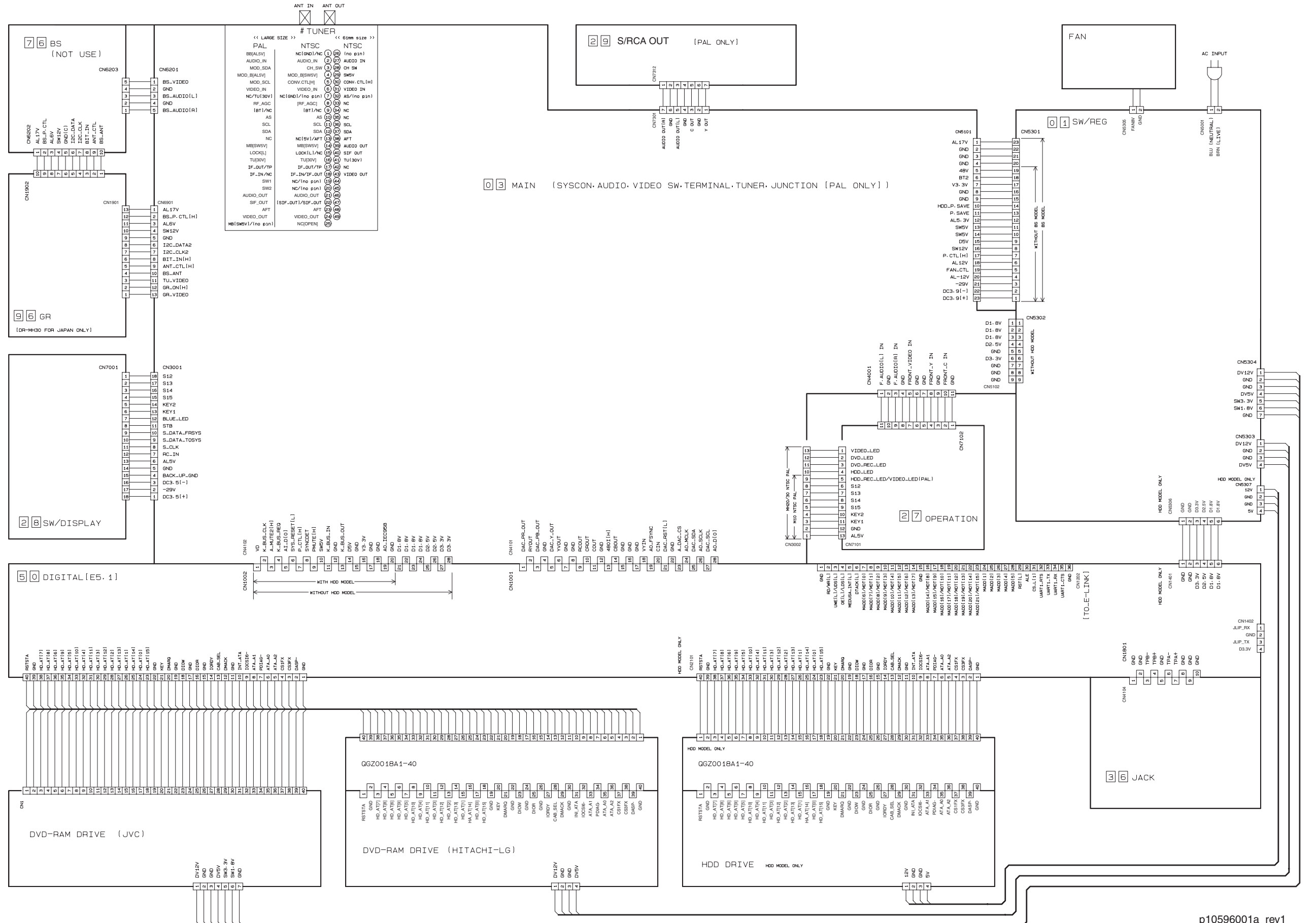
5

4

3

2

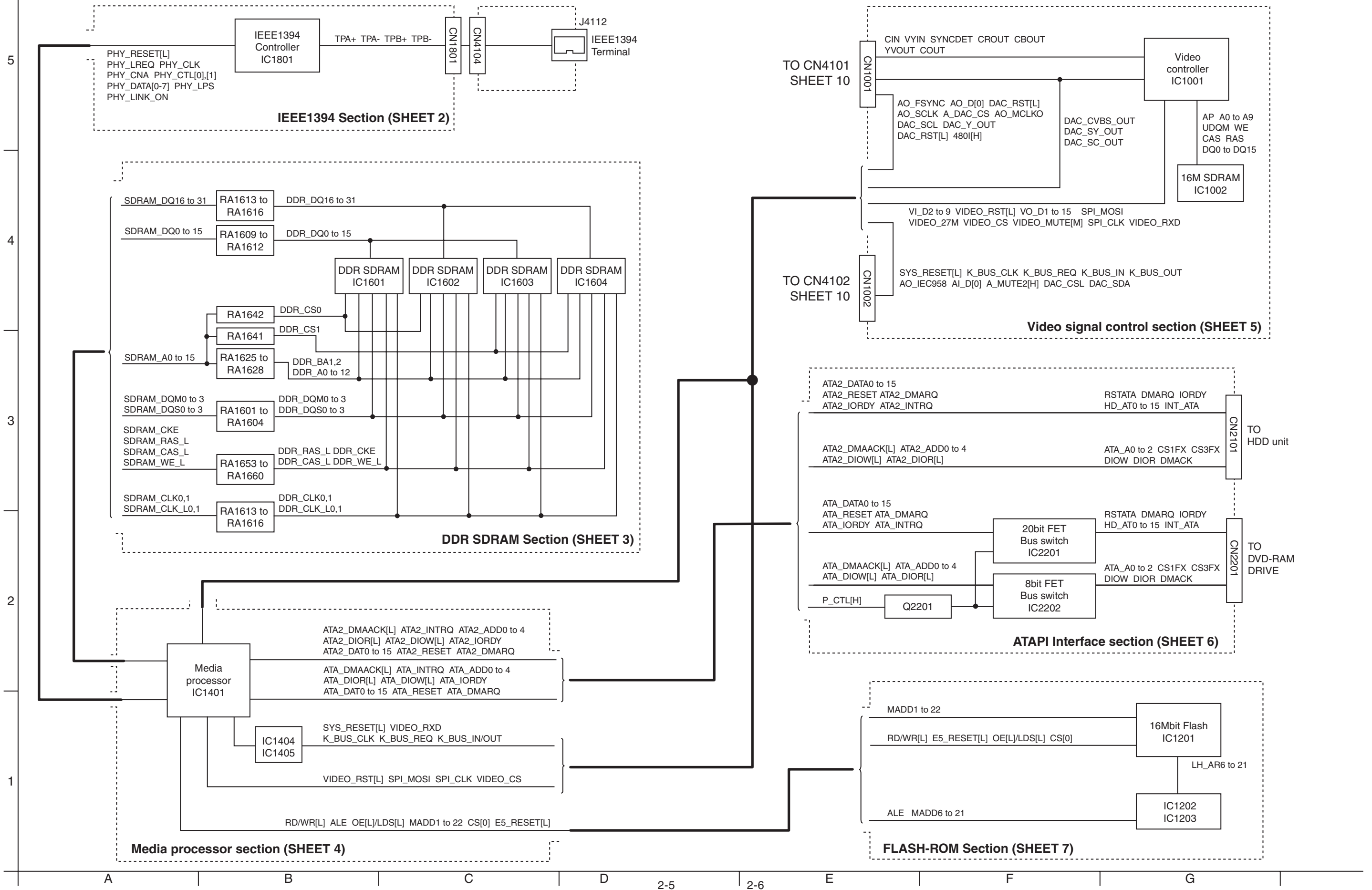
1



NO	NAME
0 1	SW/REG
0 2	DIGITAL
0 3	MAIN
2 7	OPERATION
2 8	SK/DISPLAY
2 9	AV OUT
3 6	JACK
7 6	BS
9 6	GR

# Block diagrams

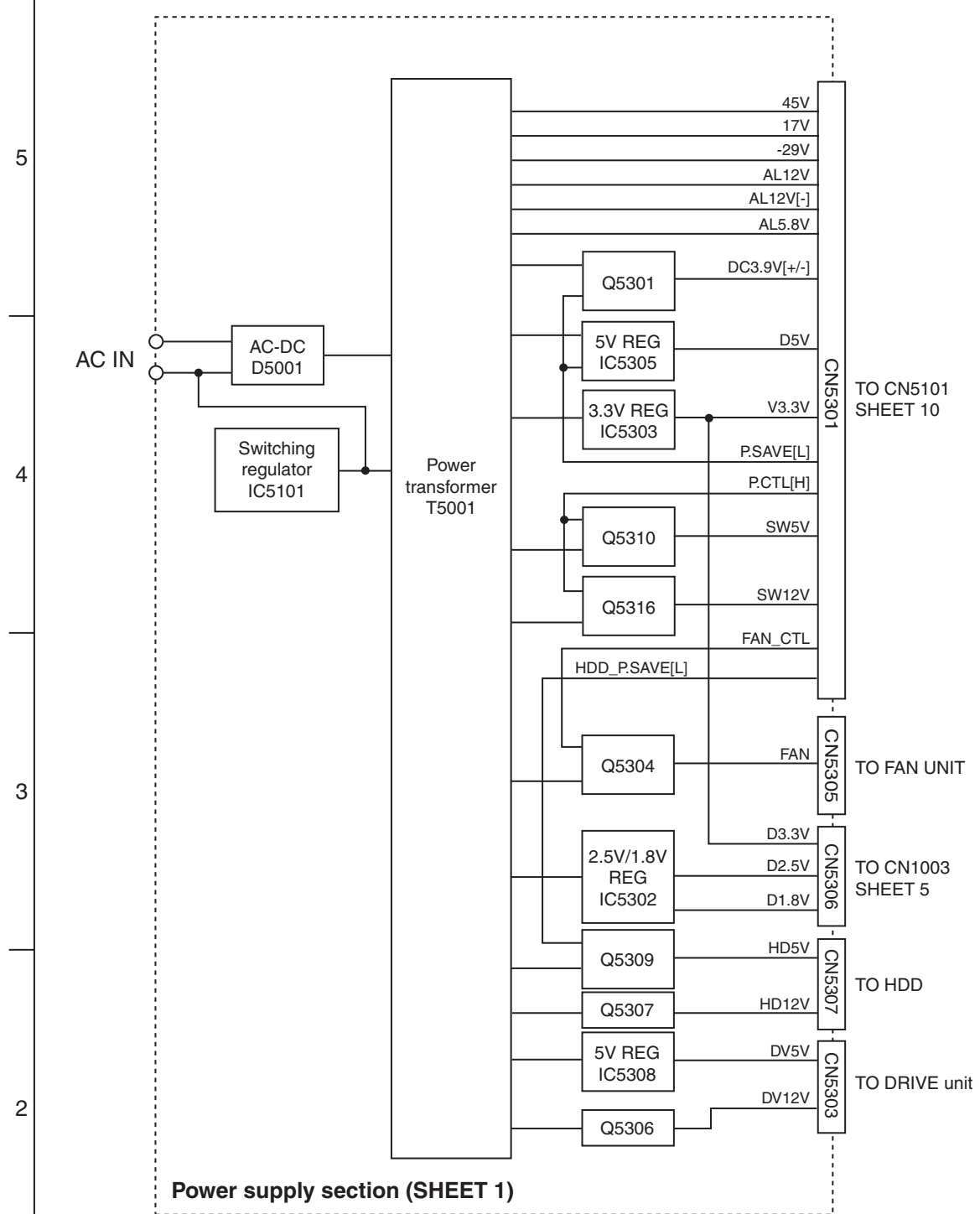
■ DIGITAL 50



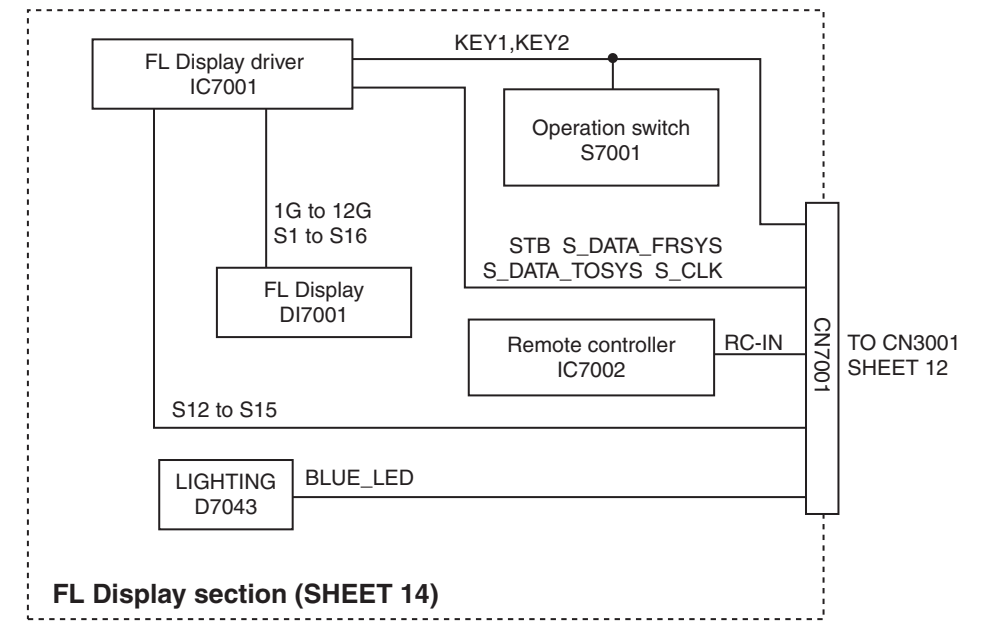




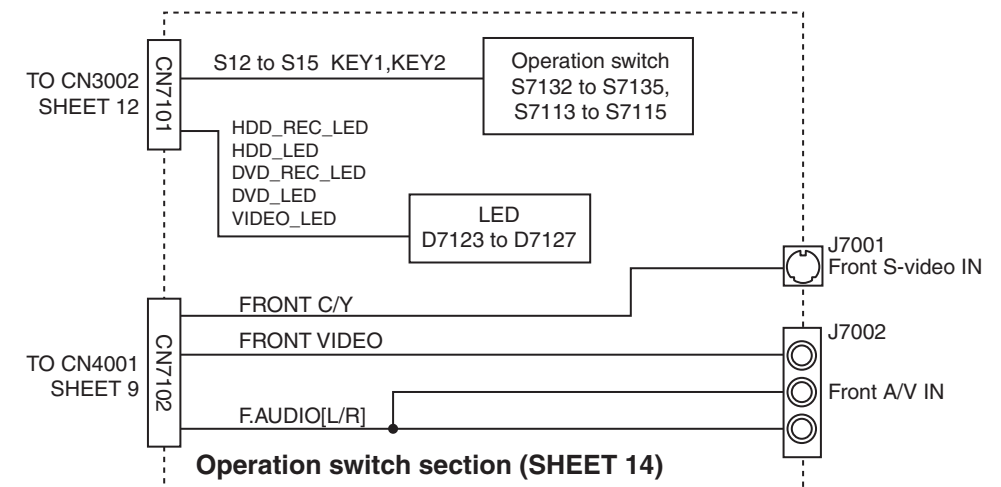
■ SW.REG 0 1



■ SW/DISPLAY 2 8



■ OPERATE 2 7



# Standard schematic diagrams

## Power supply section

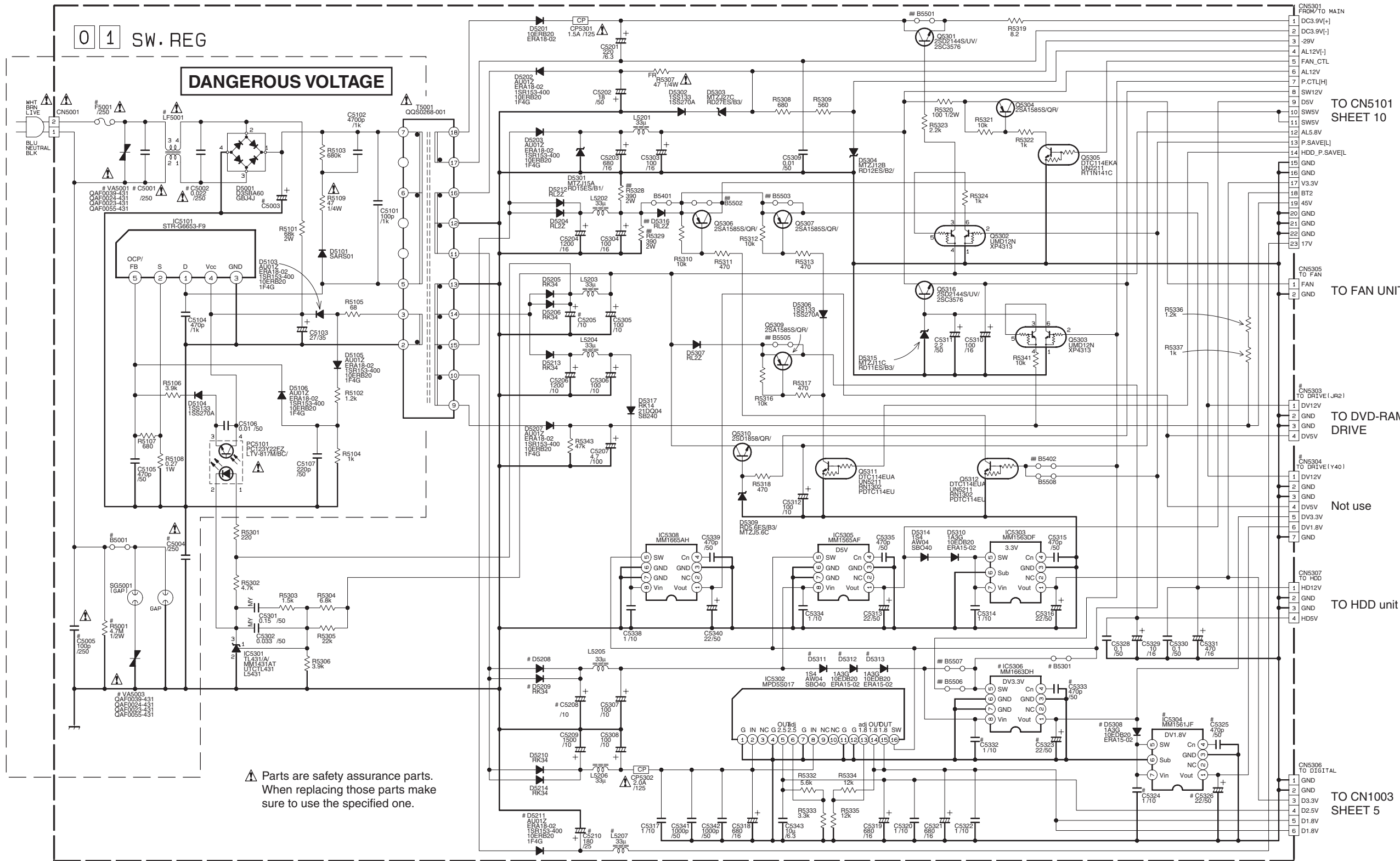
5

4

3

2

1



**⚠ Parts are safety assurance parts.**  
When replacing those parts make sure to use the specified one.

##MARK ELEMENTS ARE NOT MOUNTED.

#DIFFERENCE TABLE 1

	B5001	C5001	D5001	IC5001	CN5303	CN5304	C5208	D5208
Y40 DRIVE	YES	NO	NO	NO	NO	NO	1200	RK34
JR2 DRIVE	NO	NO	NO	NO	YES	NO	1000	RK14 210004 58240

#DIFFERENCE TABLE 2

	B5001	C5001	C5002	C5003	C5004	C5005	F5001	R5001	LF5001	VA5001	VA5003
JPN	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
US	YES	0.047	NO	330 7200	4700p	YES	1.6A	YES	QGR9008-001 QGR994-001 QGR1210-001	YES	NO
AUTO NTSC	NO	0.068	YES	100 7400	2200p	NO	T2AL	NO	QGR1031-001	NO	NO
AUTO PAL	NO	0.068	YES	100 7400	2200p	NO	T2AL	NO	QGR1031-001	NO	NO
EURO	NO	0.068	YES	100 7400	2200p	NO	T2AL	NO	QGR1031-001	NO	NO

#DIFFERENCE TABLE 3

	GR	C5205
W/O	1500	NO
WITH	2700	WITH

#DIFFERENCE TABLE 4

	BS	C5210	C5211	L5207
W/O	NO	NO	NO	NO
WITH	YES	YES	YES	YES

NOTES: UNLESS OTHERWISE SPECIFIED.  
ALL RESISTANCE VALUES ARE IN OHMS.  
ALL INDUCTANCE VALUES ARE IN H.  
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC  
 CERAMIC  
 MYLER  
 NON POLAR

\* Refer to the "JR2 DRIVE" column of a table for this model.

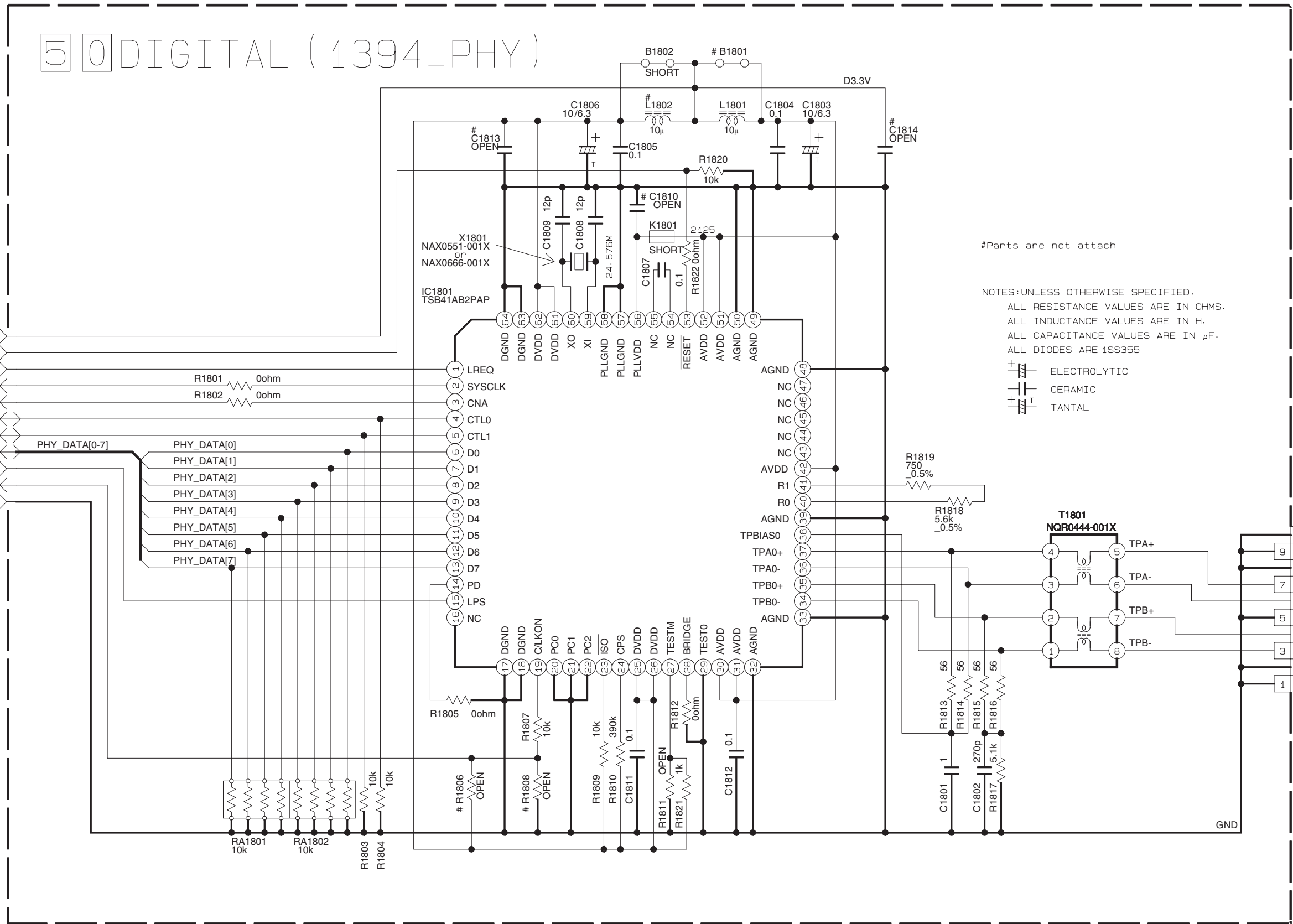
50 DIGITAL (1394\_PHY)

5  
4  
3  
2  
1

TO SHEET 4

FROM/TO MEDIA\_PROCESSOR  
 D3.3V  
 PHY\_RESET[L]  
 PHY\_LREQ  
 PHY\_CLK  
 PHY\_CNA  
 PHY\_CTL[0]  
 PHY\_CTL[1]  
 PHY\_DATA[0-7]  
 PHY\_LPS  
 PHY\_LINK\_ON  
 GND

PHY\_DATA[0]  
 PHY\_DATA[1]  
 PHY\_DATA[2]  
 PHY\_DATA[3]  
 PHY\_DATA[4]  
 PHY\_DATA[5]  
 PHY\_DATA[6]  
 PHY\_DATA[7]



#Parts are not attach

NOTES: UNLESS OTHERWISE SPECIFIED.  
 ALL RESISTANCE VALUES ARE IN OHMS.  
 ALL INDUCTANCE VALUES ARE IN H.  
 ALL CAPACITANCE VALUES ARE IN  $\mu$ F.  
 ALL DIODES ARE 1SS355

ELECTROLYTIC  
 CERAMIC  
 TANTAL

CN1801  
 QGB2027L1-10X

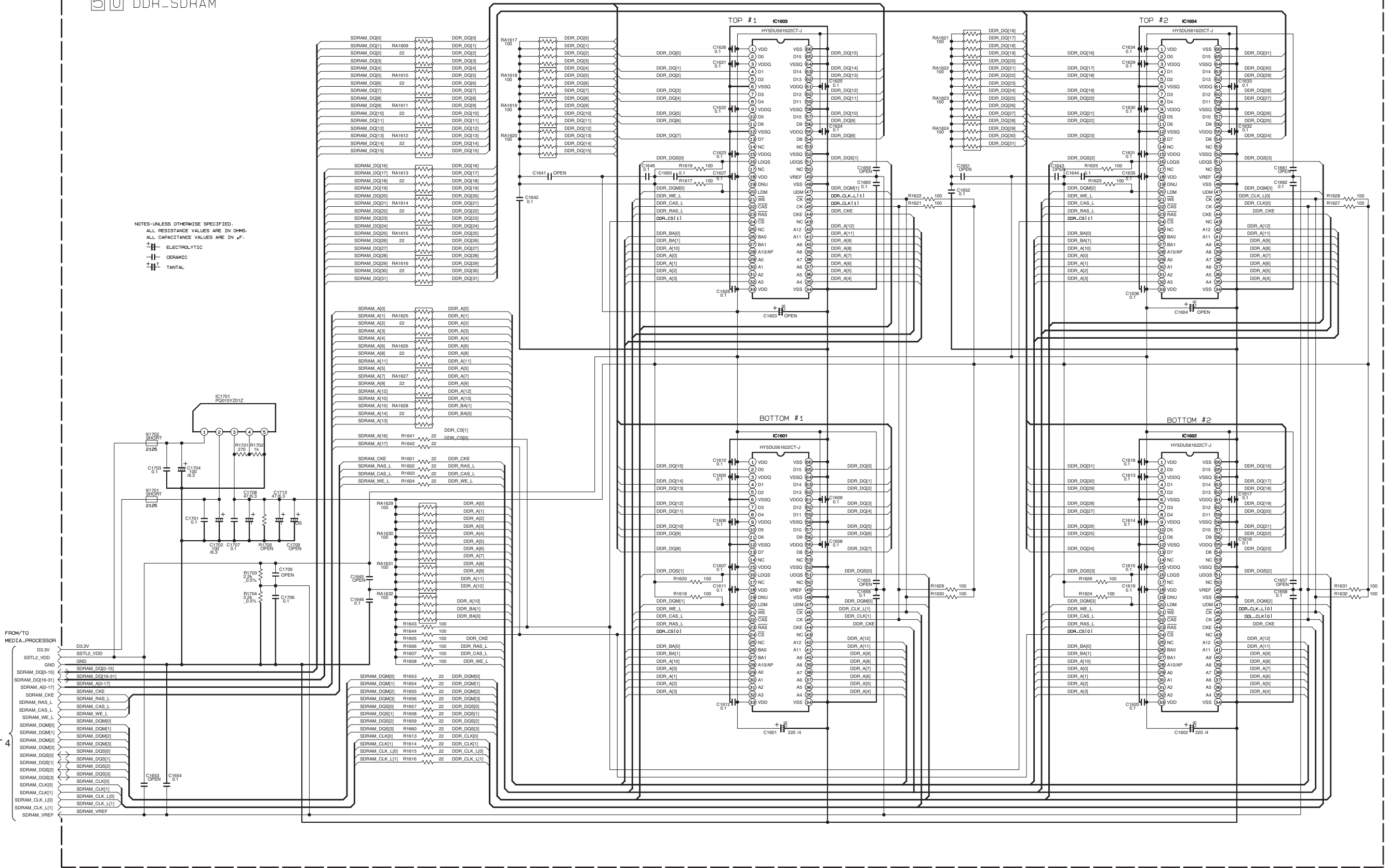
10 GND  
 9 GND  
 8 GND  
 7 TPA+  
 6 TPA-  
 5 GND  
 4 TPB+  
 3 TPB-  
 2 GND  
 1 GND

TO CN4104 SHEET 10

DDR SDRAM Section

5 0 DDR\_SDRAM

NOTES: UNLESS OTHERWISE SPECIFIED,  
ALL RESISTANCE VALUES ARE IN OHMS.  
ALL CAPACITANCE VALUES ARE IN nF.  
ELECTROLYTIC  
CERAMIC  
TANTAL



5

4

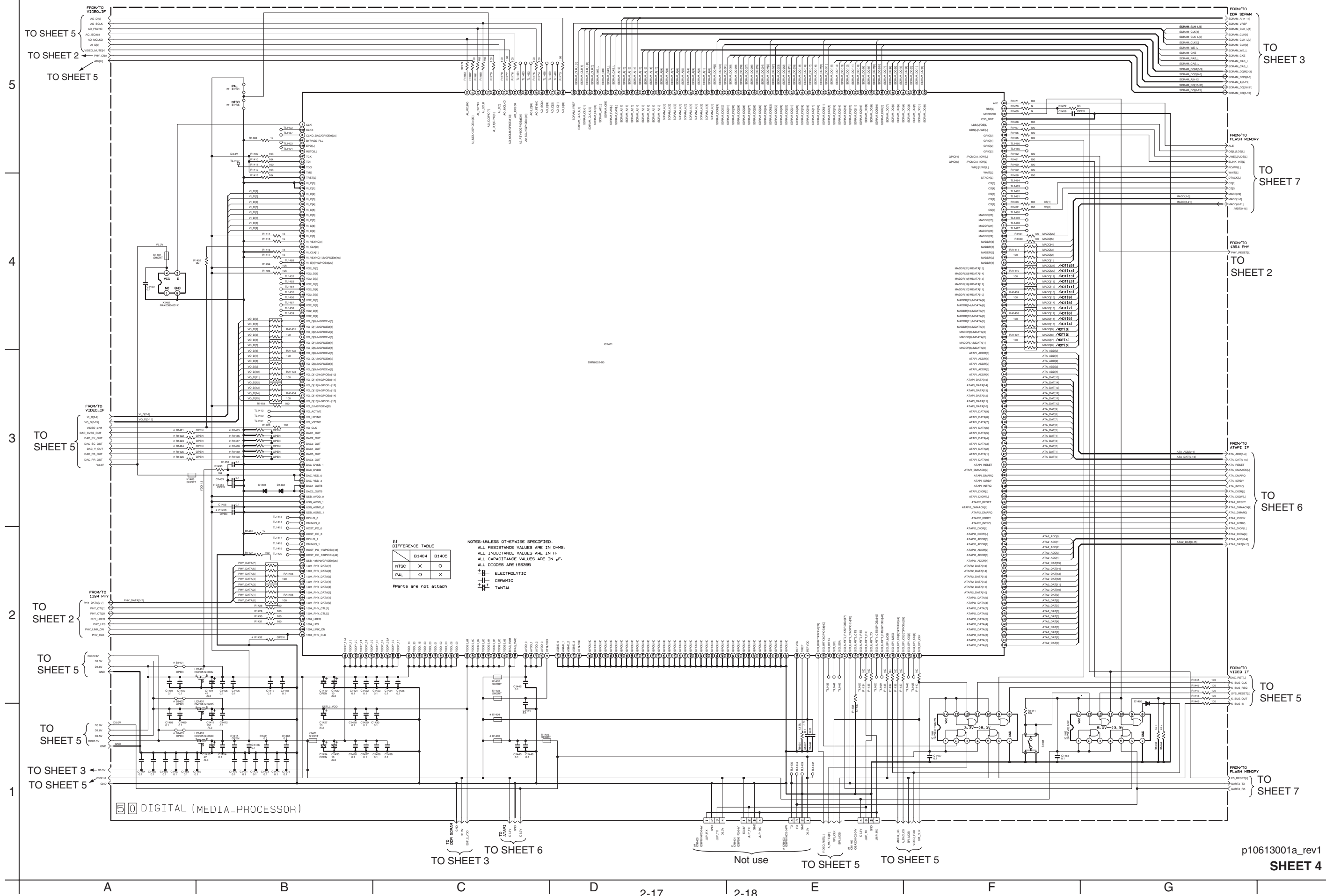
3

2

1

TO SHEET 4

# Media processor section



## DIFFERENCE TABLE

	B1404	B1405
NTSC	X	O
PAL	O	X

#Parts are not attach

NOTES: UNLESS OTHERWISE SPECIFIED:  
 ALL RESISTANCE VALUES ARE IN OHMS.  
 ALL INDUCTANCE VALUES ARE IN μH.  
 ALL CAPACITANCE VALUES ARE IN μF.  
 ALL DIODES ARE 1SS395  
 ELECTROLYTIC  
 CERAMIC  
 TANTAL



# Video signal control section

TO CN5306  
SHEET 1

DIGITAL  
(VIDEO-IF)

NOTES (UNLESS OTHERWISE SPECIFIED):  
 ALL RESISTANCE VALUES ARE IN OHMS.  
 ALL INDUCTANCE VALUES ARE IN H.  
 ALL CAPACITANCE VALUES ARE IN P.  
 ALL NPN TYPE TRANSISTORS ARE 2SC2418K/G/S/ or 2SC3928A/G/S/ or 2SD6511/G/S/  
 ALL PNP TYPE TRANSISTORS ARE 2SA1037M/G/S/ or 2SA1530A/G/S/ or 2SB709A/G/S/  
 ALL DIODES ARE 1S8395  
 ELECTROLYTIC  
 CERAMIC  
 TANTALUM

DIFFERENCE TABLE

	R1047	R1048-R1049 R1051-Q1006	R1052-R1053 R1055-Q1007	R1034-Q1001
NTSC	200	X	X	O
PAL	200	O	O	X

#Parts are not attach

5 TO SHEET 4

TO CN4102  
SHEET 10

4

TO SHEET 4

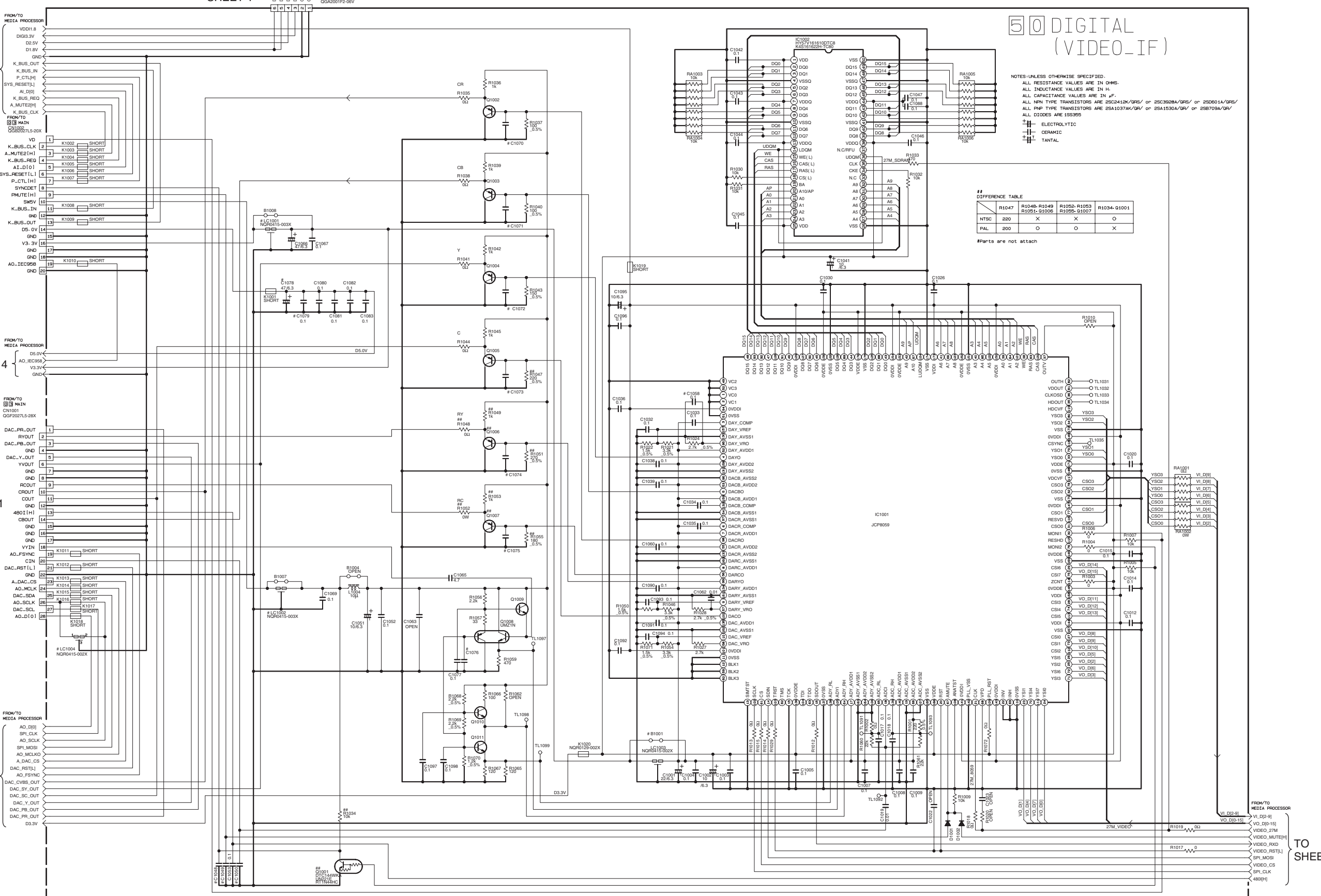
3

TO CN4101  
SHEET 10

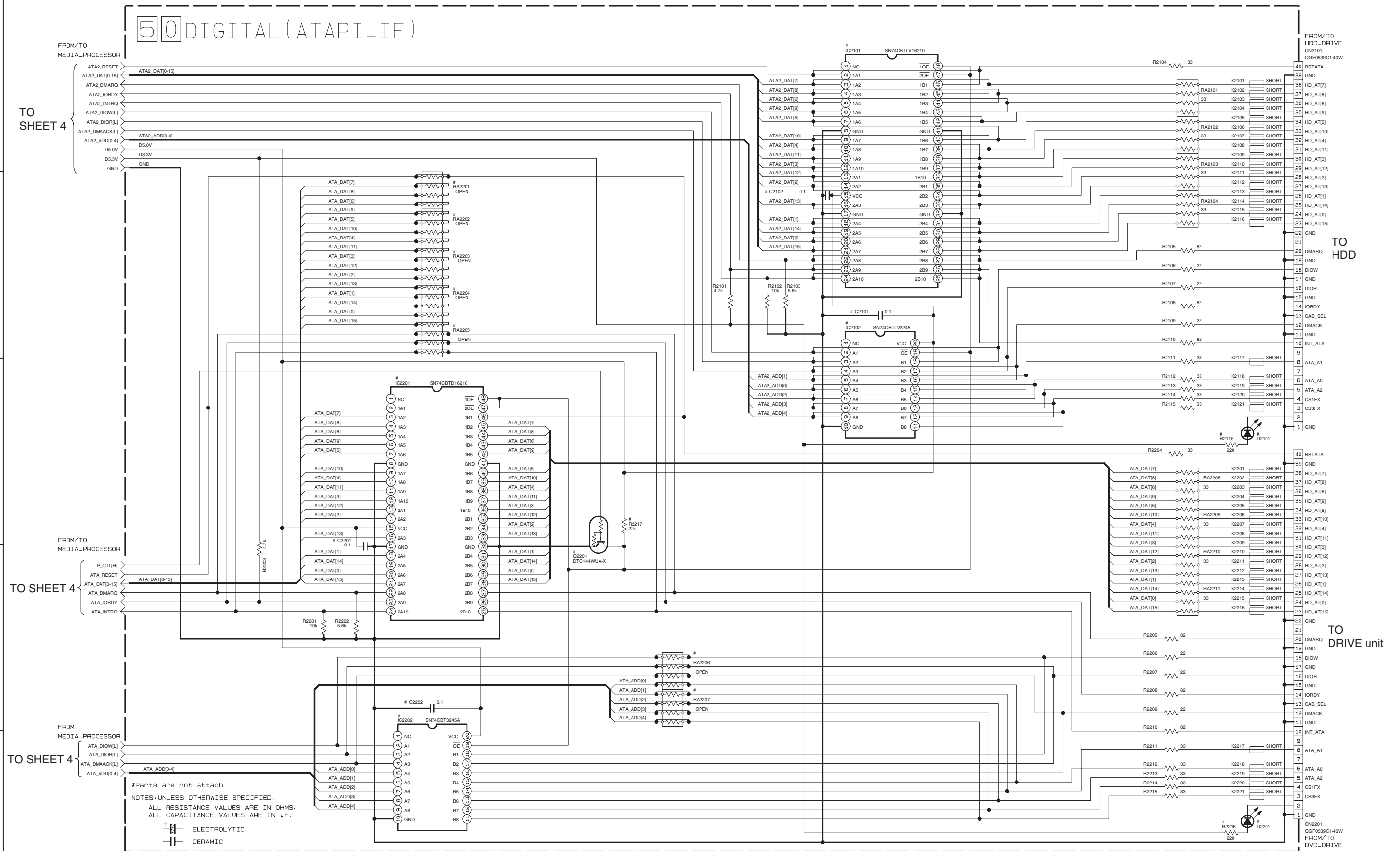
2

TO SHEET 4

1

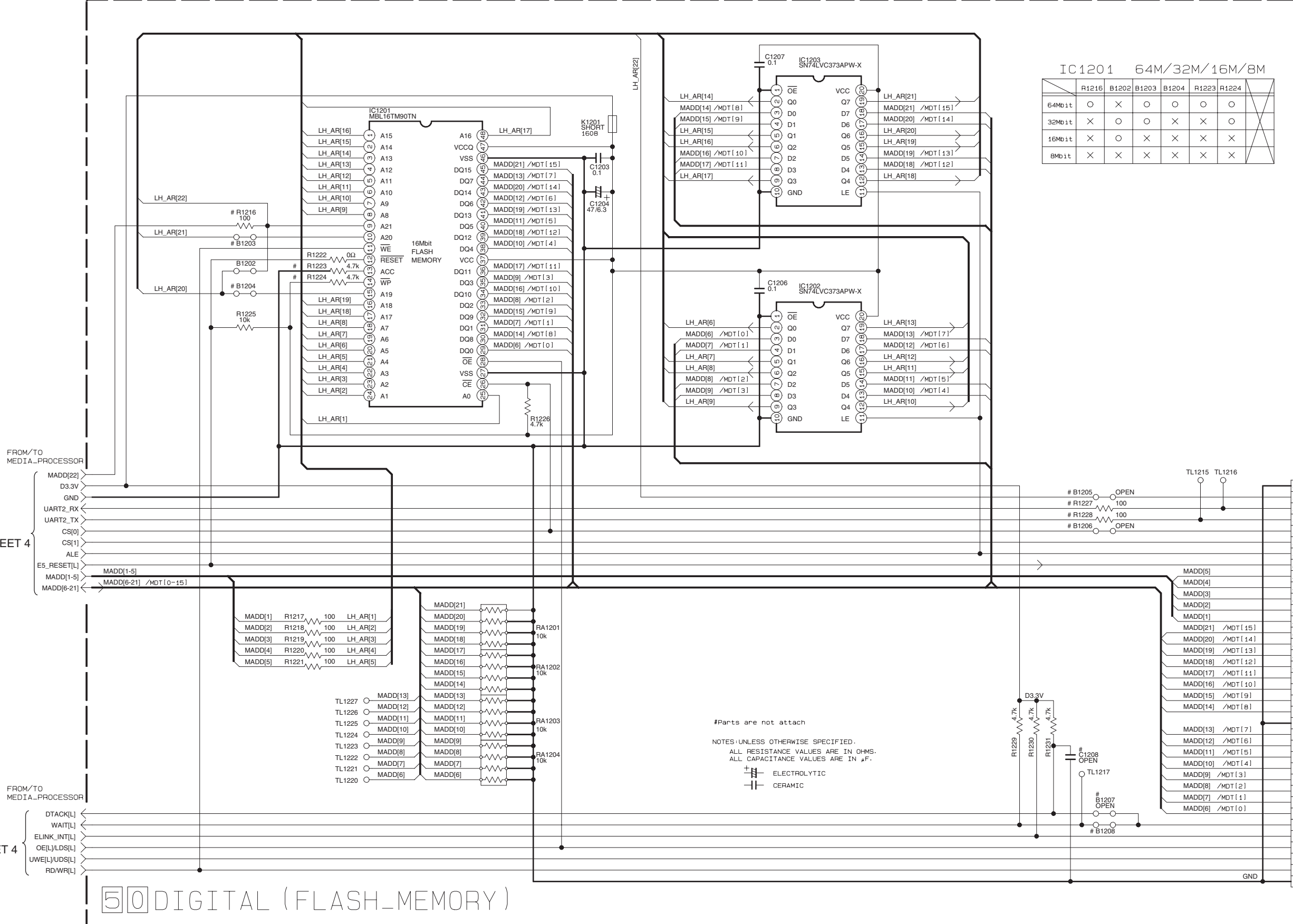


# ATAPI Interface section



FLASH-ROM Section

5  
4  
3  
2  
1

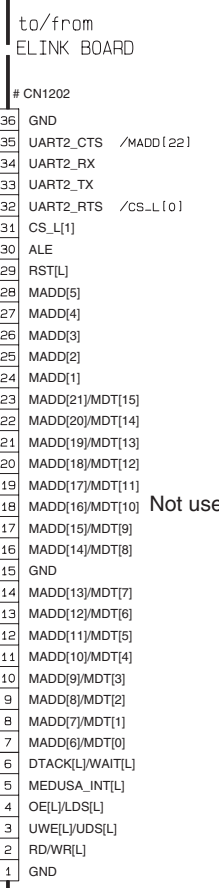


IC1201 64M/32M/16M/8M

	R1216	B1202	B1203	B1204	R1223	R1224
64Mbit	○	×	○	○	○	○
32Mbit	×	○	○	×	×	○
16Mbit	×	○	×	×	×	×
8Mbit	×	×	×	×	×	×

#Parts are not attach  
 NOTES: UNLESS OTHERWISE SPECIFIED.  
 ALL RESISTANCE VALUES ARE IN OHMS.  
 ALL CAPACITANCE VALUES ARE IN #F.  
 + - ELECTROLYTIC  
 - - CERAMIC

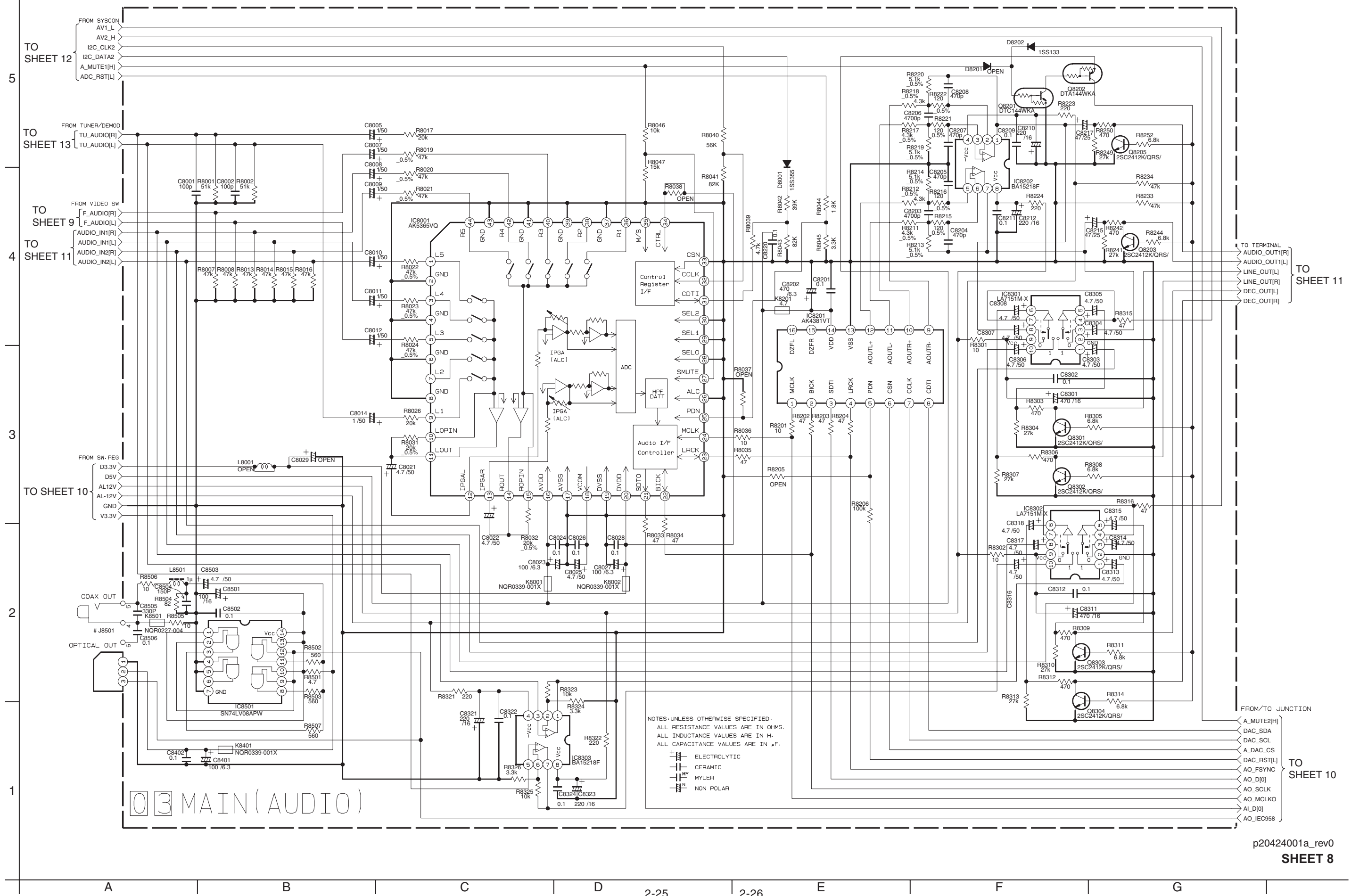
50 DIGITAL (FLASH\_MEMORY)



A B C D E F G



■ Audio signal control section



03 MAIN (AUDIO)

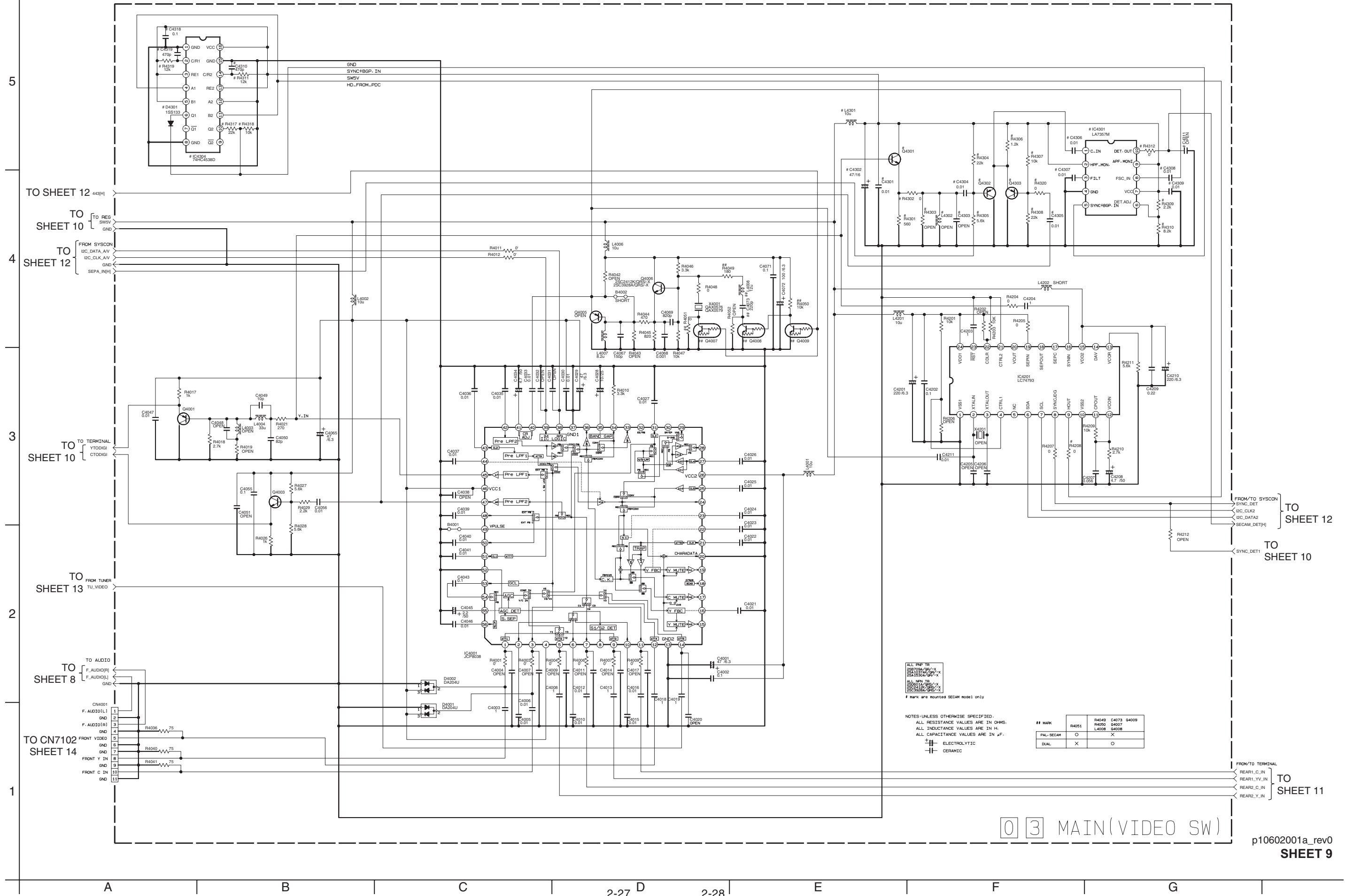
NOTES: UNLESS OTHERWISE SPECIFIED.  
 ALL RESISTANCE VALUES ARE IN OHMS.  
 ALL INDUCTANCE VALUES ARE IN H.  
 ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC  
 CERAMIC  
 MYLER  
 NON POLAR

TO SHEET 10

A\_MUTE2[H]  
 DAC\_SDA  
 DAC\_SCL  
 A\_DAC\_CS  
 DAC\_RST[L]  
 AO\_FSYNC  
 AO\_D[0]  
 AO\_SCLK  
 AO\_MCLKO  
 AI\_D[0]  
 AO\_IEC958

# Audio/Video signal input control section



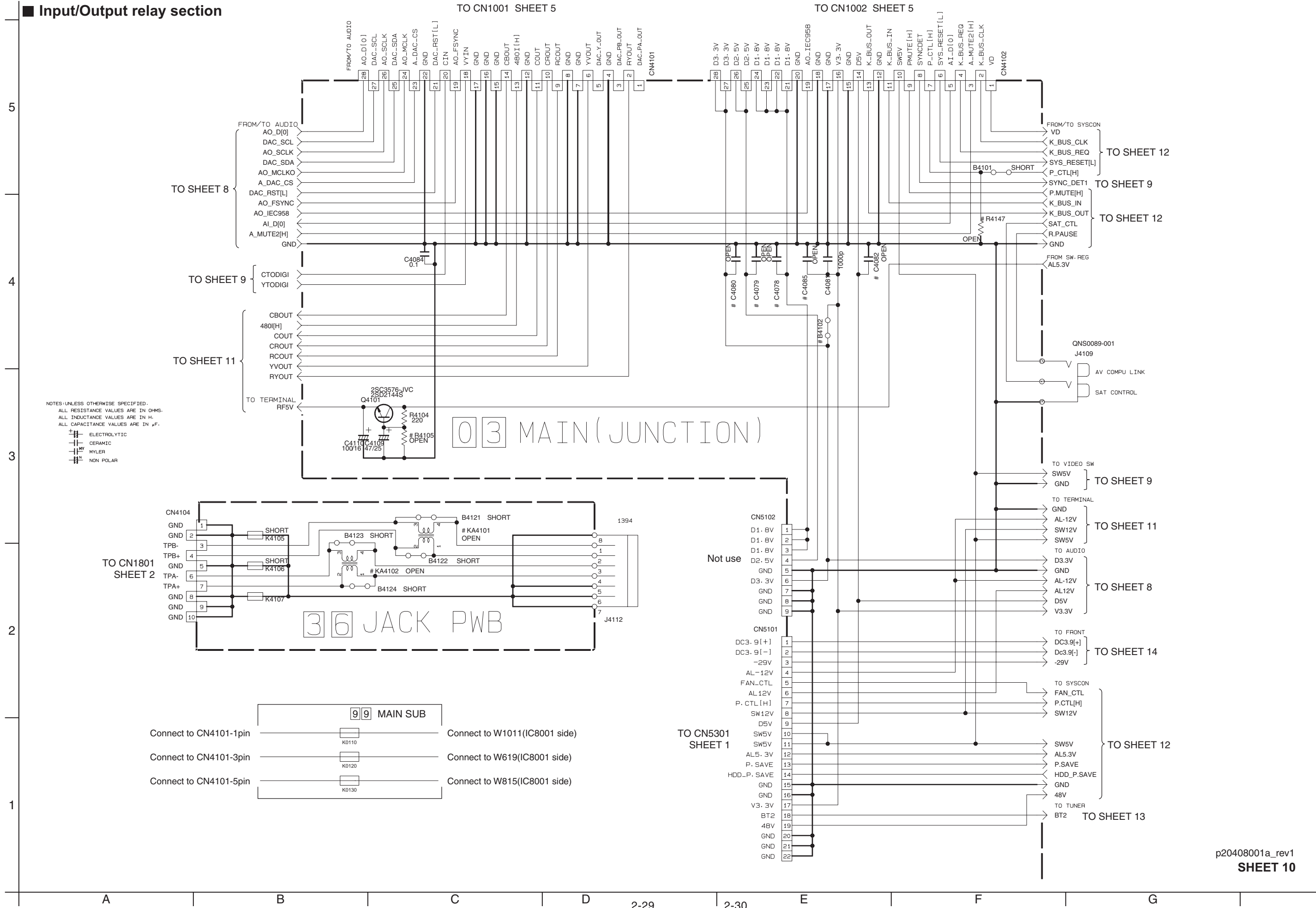
ALL PARTS ARE  
 SHOWN IN THE  
 PARTS LIST  
 UNLESS OTHERWISE SPECIFIED.  
 ALL RESISTANCE VALUES ARE IN OHMS.  
 ALL INDUCTANCE VALUES ARE IN H.  
 ALL CAPACITANCE VALUES ARE IN μF.  
 \* MARK ARE MOUNTED SECAM MODEL ONLY

NOTES-UNLESS OTHERWISE SPECIFIED.  
 ALL RESISTANCE VALUES ARE IN OHMS.  
 ALL INDUCTANCE VALUES ARE IN H.  
 ALL CAPACITANCE VALUES ARE IN μF.

## MARK	R4051	R4049	C4073	Q4009
PAL-SECAM	O	O	X	X
DUAL	X	X	O	O

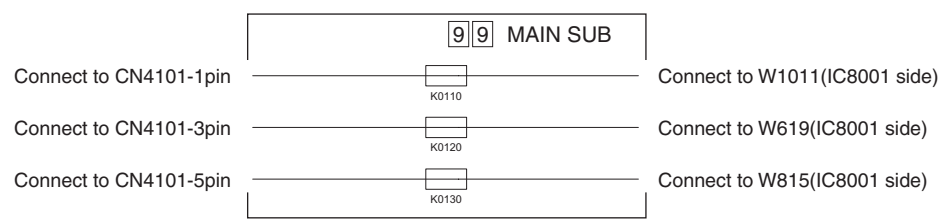
03 MAIN(VIDEO SW)

Input/Output relay section



NOTES: UNLESS OTHERWISE SPECIFIED.  
 ALL RESISTANCE VALUES ARE IN OHMS.  
 ALL INDUCTANCE VALUES ARE IN H.  
 ALL CAPACITANCE VALUES ARE IN µF.

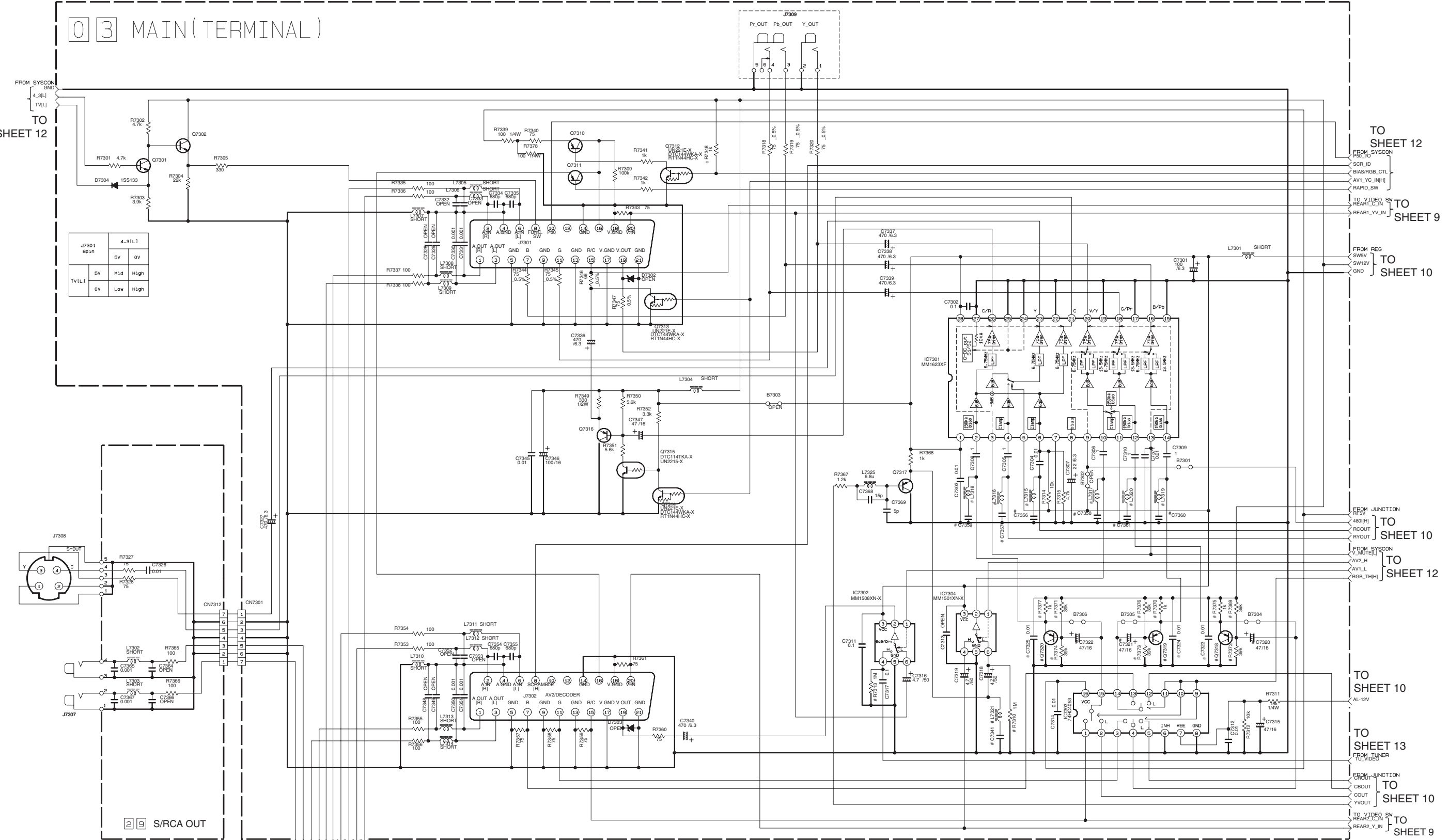
ELECTROLYTIC  
 CERAMIC  
 MYLAR  
 NON POLAR



Input/Output terminal section

5  
4  
3  
2  
1

0 3 MAIN (TERMINAL)



FROM/TO AUDIO  
AUDIO OUT(L)  
DEC. OUT(L)  
LINE. OUT(L)  
AUDIO IN(L)  
AUDIO IN(R)  
TO SHEET 8

ALL TRP TR  
S81155A/06-X  
S81155A/07-X  
S81155A/08-X  
ALL NPW TR  
S81155A/06-X  
S81155A/07-X  
S81155A/08-X  
\* mark are not mounted.

NOTES: UNLESS OTHERWISE SPECIFIED,  
ALL RESISTANCE VALUES ARE IN OHMS.  
ALL INDUCTANCE VALUES ARE IN H.  
ALL CAPACITANCE VALUES ARE IN μF.  
ELECTROLYTIC  
CERAMIC

TO SHEET 12  
FROM SYSCON  
SCR\_ID  
BIAS/RGB\_CTL  
AV1\_YC\_IN(H)  
RAPID\_SW  
TO VIDEO SW  
REAR1\_C\_IN  
REAR1\_YV\_IN  
TO SHEET 9

TO SHEET 10  
FROM REG  
SW5V  
SW12V  
GND

TO SHEET 10  
FROM JUNCTION  
R30V  
480(H)  
RCOUT  
RYOUT

TO SHEET 12  
FROM SYSCON  
AV2\_H  
AV1\_L  
RGB\_TH(H)

TO SHEET 10  
AL-12V

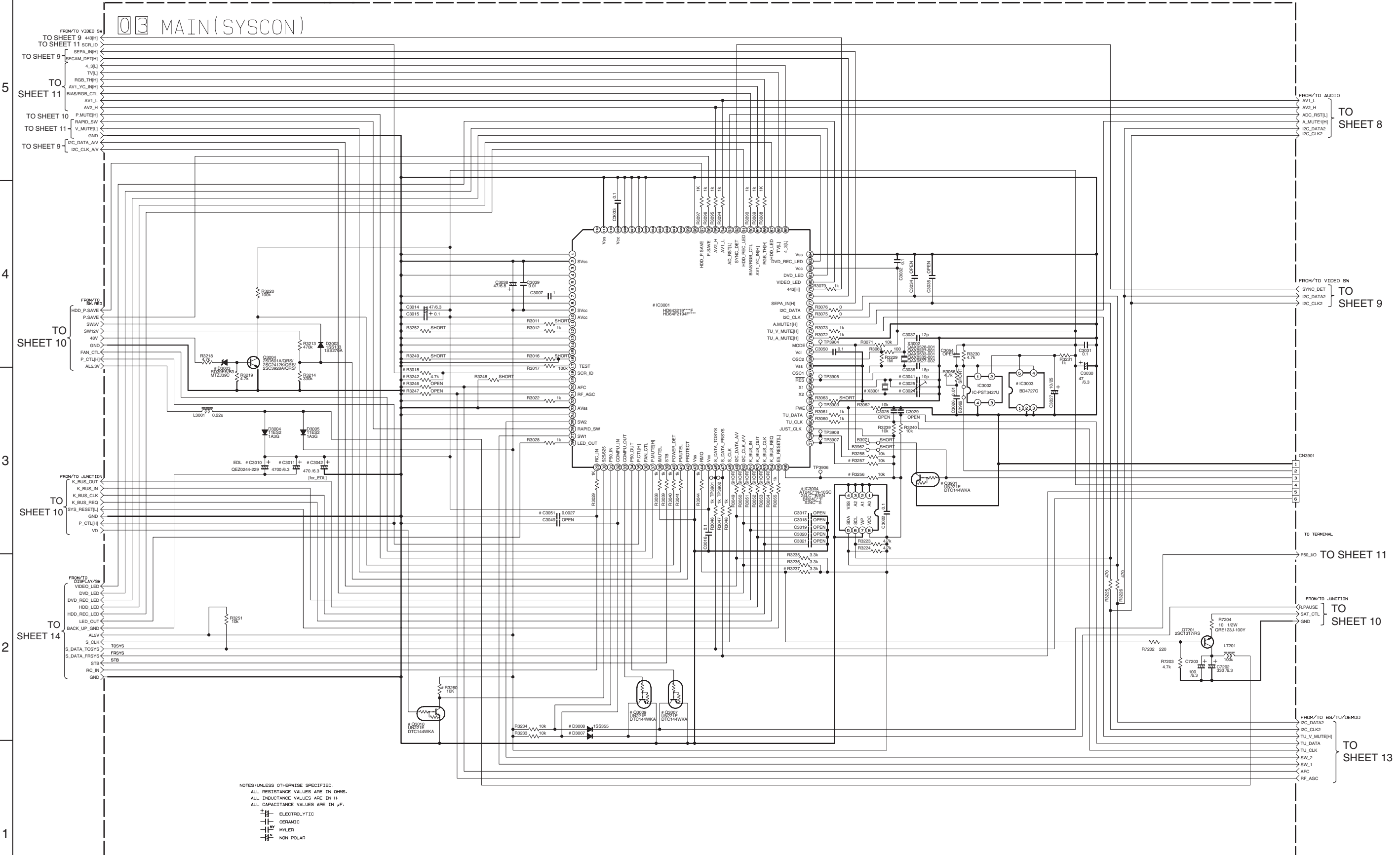
TO SHEET 13  
FROM TUNER  
TU\_VIDEO

TO SHEET 10  
FROM JUNCTION  
CBOUT  
COUT  
YVOUT

TO SHEET 9  
TO VIDEO SW  
REAR2\_C\_IN  
REAR2\_YV\_IN

# System controller section

## 03 MAIN(SYSCON)



NOTES: UNLESS OTHERWISE SPECIFIED,  
ALL RESISTANCE VALUES ARE IN OHMS.  
ALL INDUCTANCE VALUES ARE IN H.  
ALL CAPACITANCE VALUES ARE IN μF.  
— ELECTROLYTIC  
— CERAMIC  
— MYLER  
— NON POLAR

FROM/TO VIDEO SW TO SHEET 9 443[H]  
TO SHEET 11 SCRL\_ID  
TO SHEET 9 SEPA\_IN[H]  
TO SHEET 9 SECAM\_DET[H]  
4\_3[L]  
TV\_L[L]  
RGB\_TH[H]  
AV1\_YG\_IN[H]  
BAS/RGB\_CTL  
AV1\_L  
AV2\_H  
P\_MUTE[H]  
TO SHEET 10 RAPID\_SW  
TO SHEET 11 V\_MUTE[H]  
TO SHEET 9 I2C\_DATA\_AV  
I2C\_CLK\_AV

FROM/TO SW\_REG TO SHEET 10  
HDD\_P\_SAVE  
P\_SAVE  
SW12V  
SW12V  
GND  
FAN\_CTL  
P\_CTL[H]  
ALS\_2V

FROM/TO JUNCTION TO SHEET 10  
K\_BUS\_OUT  
K\_BUS\_IN  
K\_BUS\_CLK  
K\_BUS\_REC  
SYS\_RESETH  
P\_CTL[H]  
VD

FROM/TO DISPLAY/SW TO SHEET 14  
VIDEO\_LED  
DVD\_LED  
DVD\_REC\_LED  
HDD\_LED  
HDD\_REC\_LED  
LED\_OUT  
BACK\_UP\_GND  
ALS\_V  
S\_CLK  
S\_DATA\_TOSYS  
S\_DATA\_FRSYS  
STB  
RC\_IN  
GND

A B C D 2-33 E 2-34 F G

FROM/TO AUDIO TO SHEET 8  
AV1\_L  
AV2\_H  
ADC\_RST[L]  
A\_MUTE[H]  
I2C\_DATA2  
I2C\_CLK2

FROM/TO VIDEO SW TO SHEET 9  
SYNC\_DET  
I2C\_DATA2  
I2C\_CLK2

TO TERMINAL TO SHEET 11  
P50\_ID

FROM/TO JUNCTION TO SHEET 10  
PAUSE  
SAT\_CTL  
GND

FROM/TO BS/TU/DEM00 TO SHEET 13  
I2C\_DATA2  
I2C\_CLK2  
TU\_V\_MUTE[H]  
TU\_DATA  
TU\_CLK  
SW\_2  
SW\_1  
AFC  
RF\_AGC

■ Tuner section

5

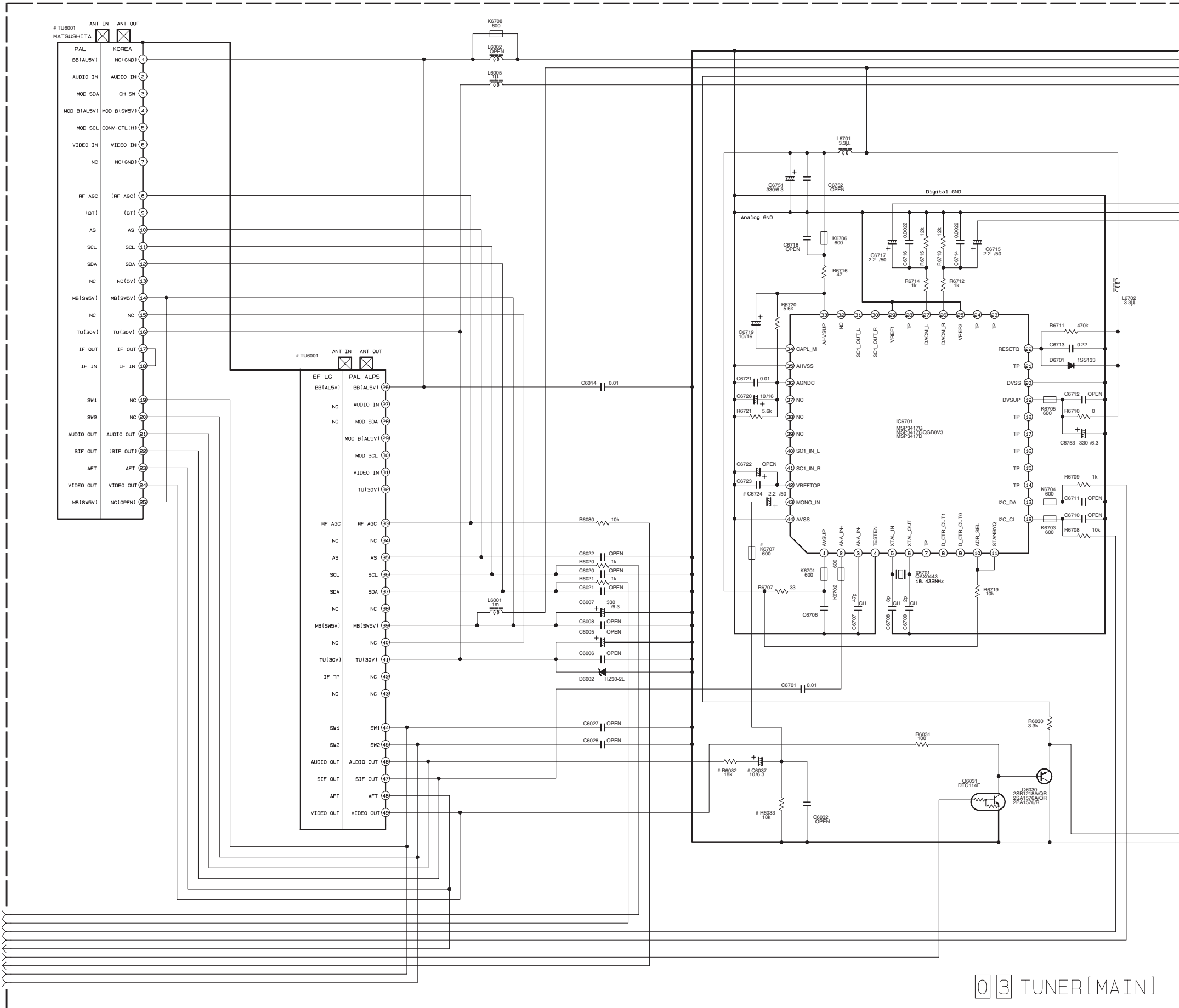
4

3

2

1

TO SHEET 12



FROM TERMINAL  
GND  
RF5V  
SW5V  
SW12V  
BT2  
} TO SHEET 10

FROM/TO AUDIO  
TU\_AUDIO(L)  
GND  
TU\_AUDIO(R)  
} TO SHEET 8

# DIFFERENCE TABLE

	EU/EX		EF
	M10	M20/30	M10-M20/30
TU6001	PAL LG GAU0323	PAL ALPS GAU0261	EF LG GAU0299
R6032-R6033- C6037, C6724- K6707	X	X	○

	E/EX	EF
	M10	M10
TU6001	PAL LG GAU0323	SECAM LG GAU0299
R6032-R6033- C6037, C6724- K6707	X	○

FROM/TO VIDEO  
TU\_VIDEO  
GND  
} TO SHEET 9

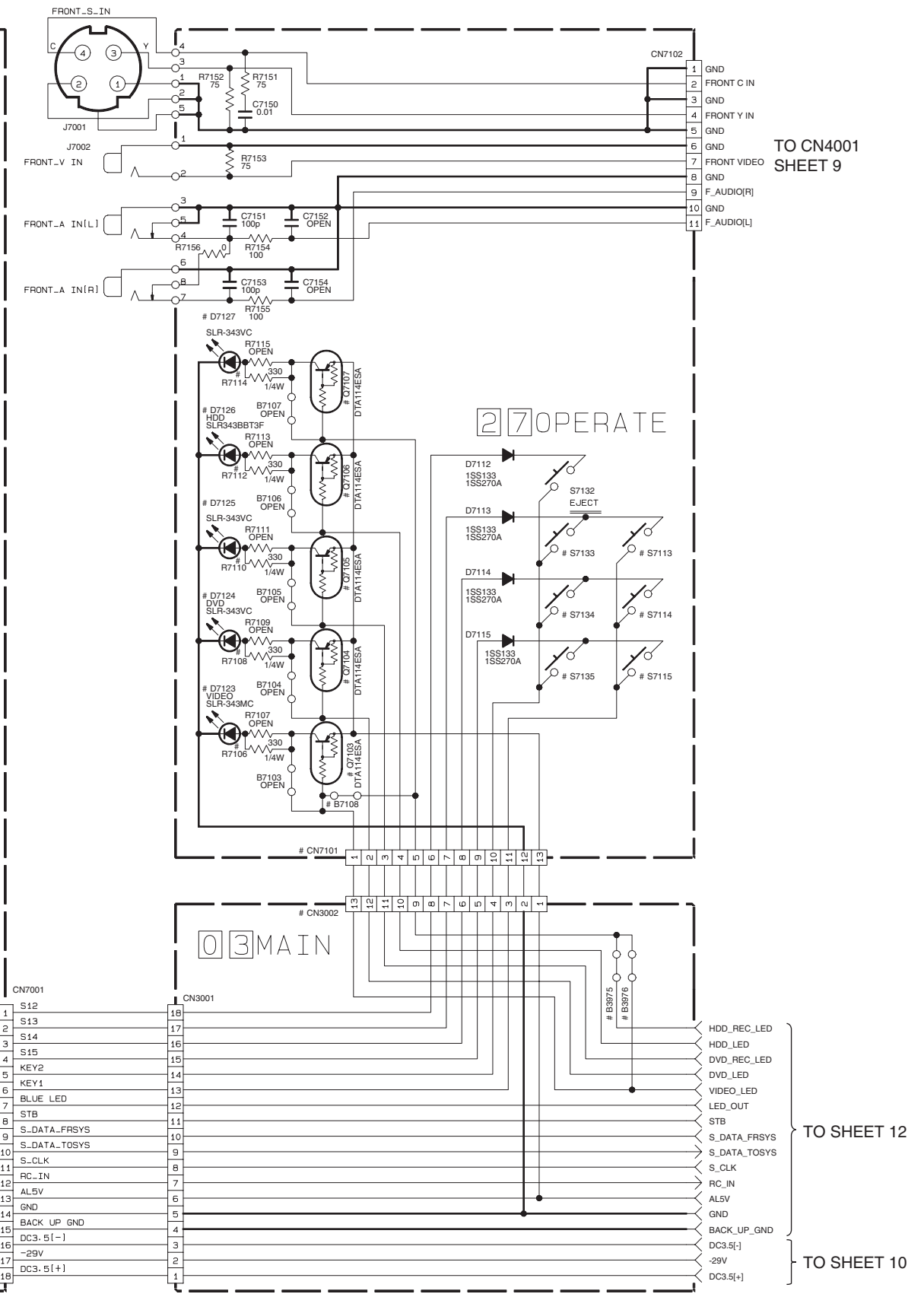
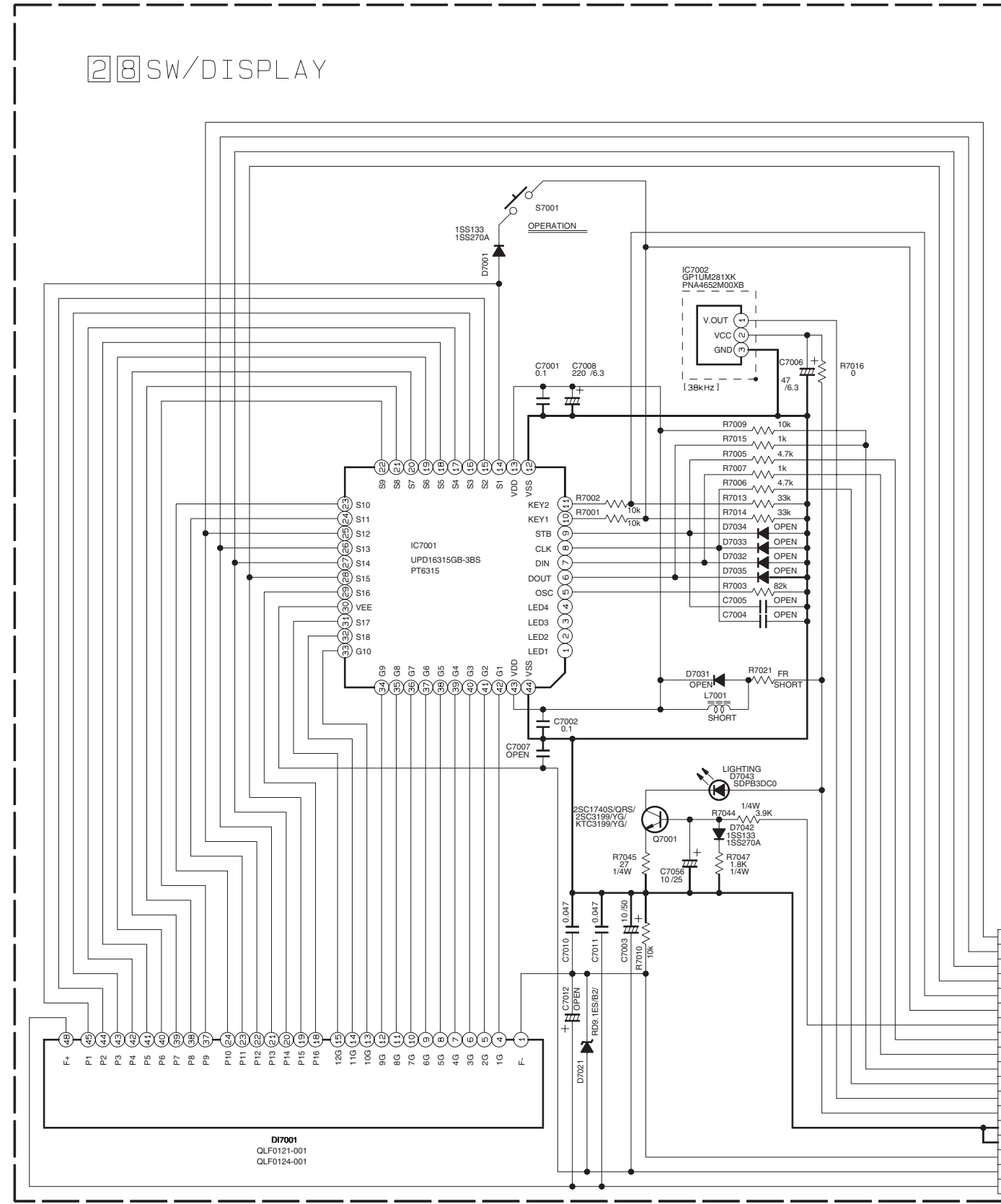
NOTES: UNLESS OTHERWISE SPECIFIED,  
ALL RESISTANCE VALUES ARE IN OHMS.  
ALL INDUCTANCE VALUES ARE IN H.  
ALL CAPACITANCE VALUES ARE IN μF.  
⊕ - ELECTROLYTIC  
⊖ - CERAMIC  
MY - MYLER  
NP - NON POLAR

03 TUNER [MAIN]

p10630001a\_rev1  
SHEET 13



FL Display and operation switch section



# DIFFERENCE TABLE

	S7113	S7114	S7115	S7133	S7134	S7135	D7123-R7106 D7103-B7108 B3976	D7124-D7127-R7108 R7110-R7112-R7114 D7104-Q7107-B3975	D7001-D7042-D7043 R7044-R7045-R7047 C7056	CN7101	CN3002
M10	REC	REC MODE	PAUSE	X	STOP	PLAY	X	X	O	9PIN(15-13)	9PIN(1-9)
MH20/MH30	DVD	HDD	REC	STOP	PLAY	PAUSE	X	O	X	13PIN	13PIN
MH50	DVD	HDD	REC	STOP	PLAY	PAUSE	X	O	O	13PIN	13PIN

NOTES: UNLESS OTHERWISE SPECIFIED,  
 ALL RESISTANCE VALUES ARE IN OHMS.  
 ALL INDUCTANCE VALUES ARE IN H.  
 ALL CAPACITANCE VALUES ARE IN μF.  
 + ELECTROLYTIC  
 - CERAMIC  
 - MYLAR  
 - NON POLAR

LAST No.	VACANT No.
R 7047 7156	7004-7008-7011-7012-7017-7020-7022-7043-7046
C 7056 7154	7009-7013-7055
D 7043 7127	7002-7020-7022-7030-7036-7041
Q 7001 7107	7101-7111-7116-7122
L 7001	7101-7102
IC 7002	
DI 7001	
S 7001 7135	7101-7112-7116-7131
CN 7001 7102	

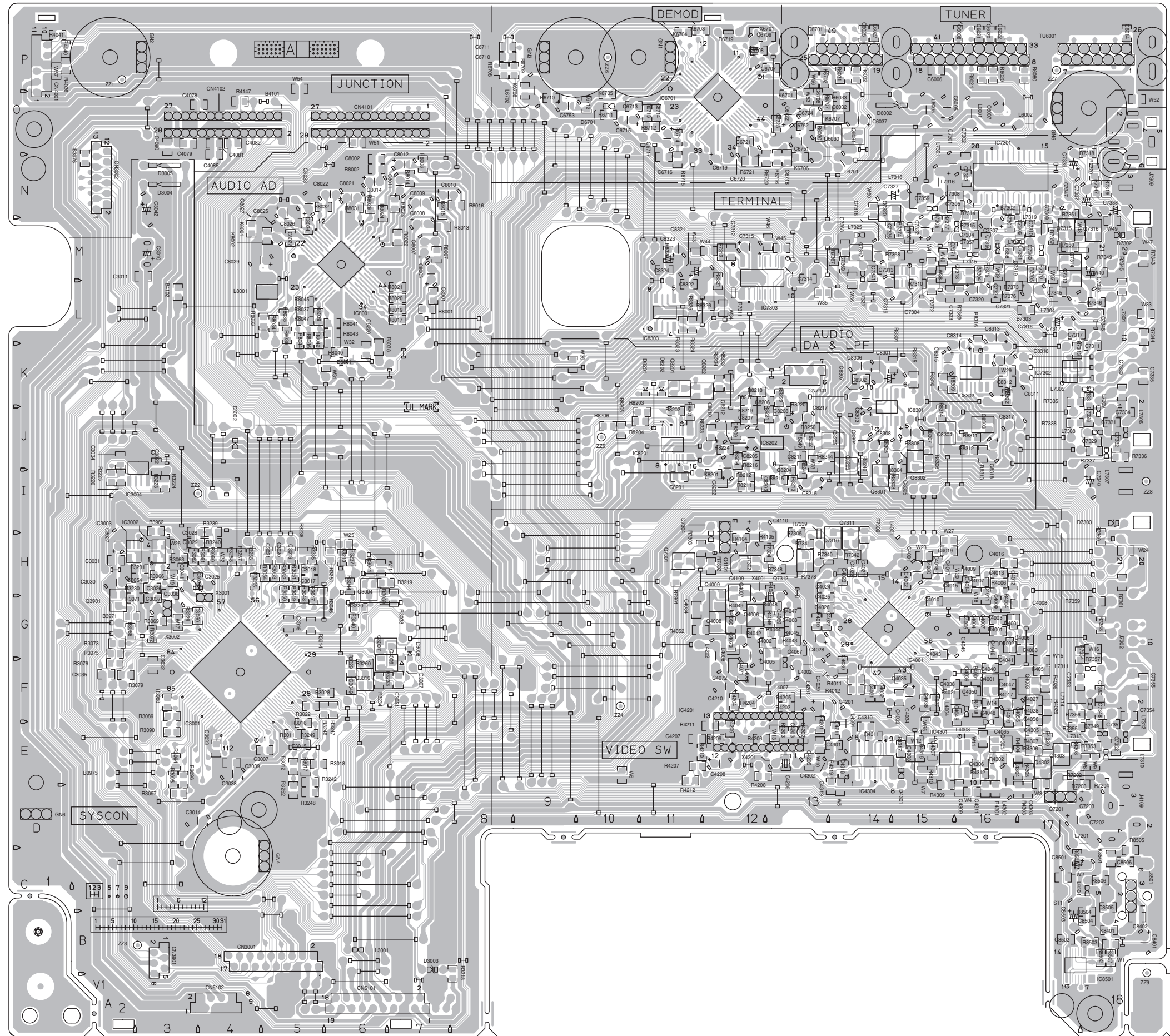
TO CN4001 SHEET 9

TO SHEET 12

TO SHEET 10

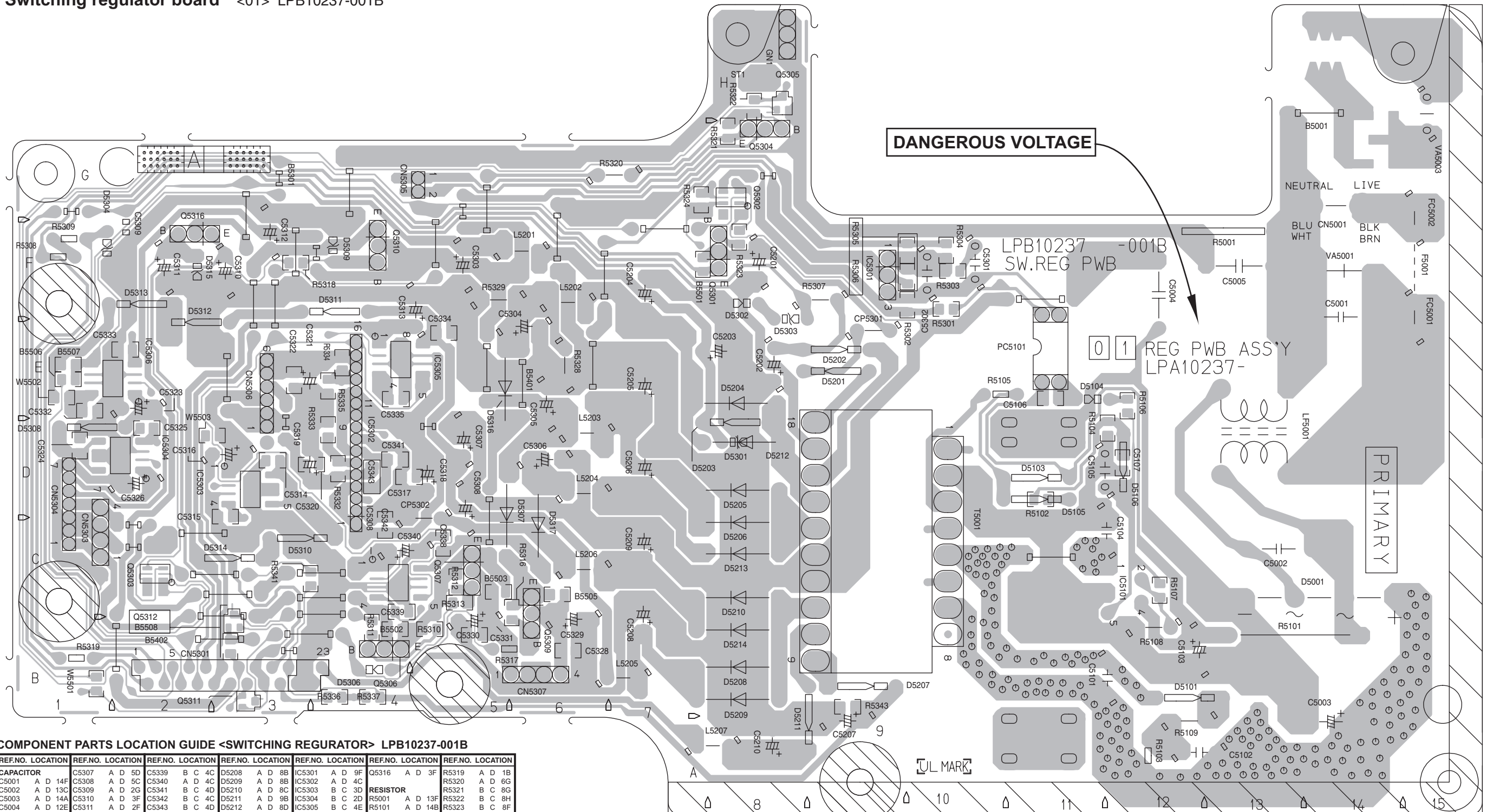
# Printed circuit boards

■ Main board <03> LPB10239-001D







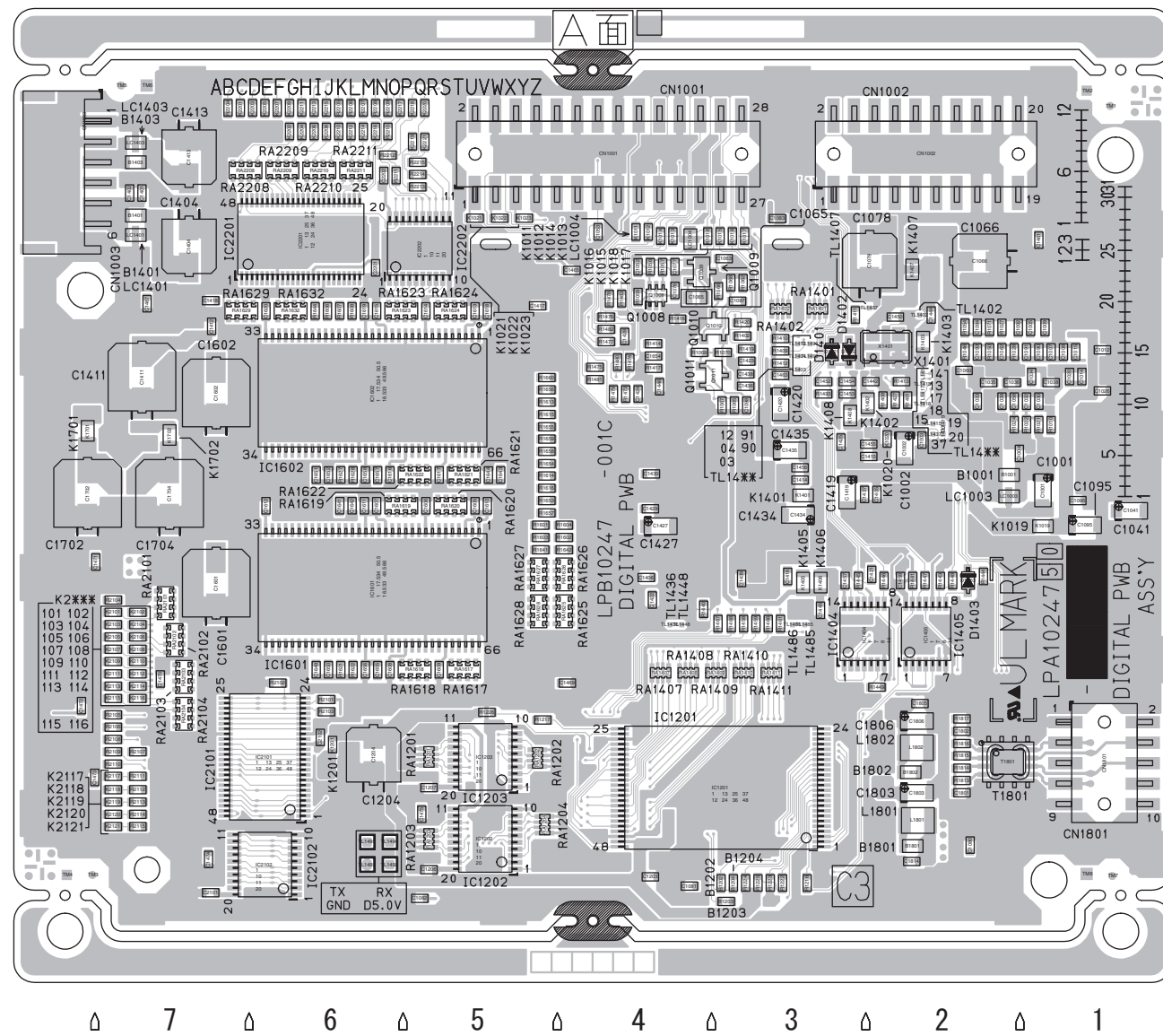


COMPONENT PARTS LOCATION GUIDE <SWITCHING REGURATOR> LPB10237-001B

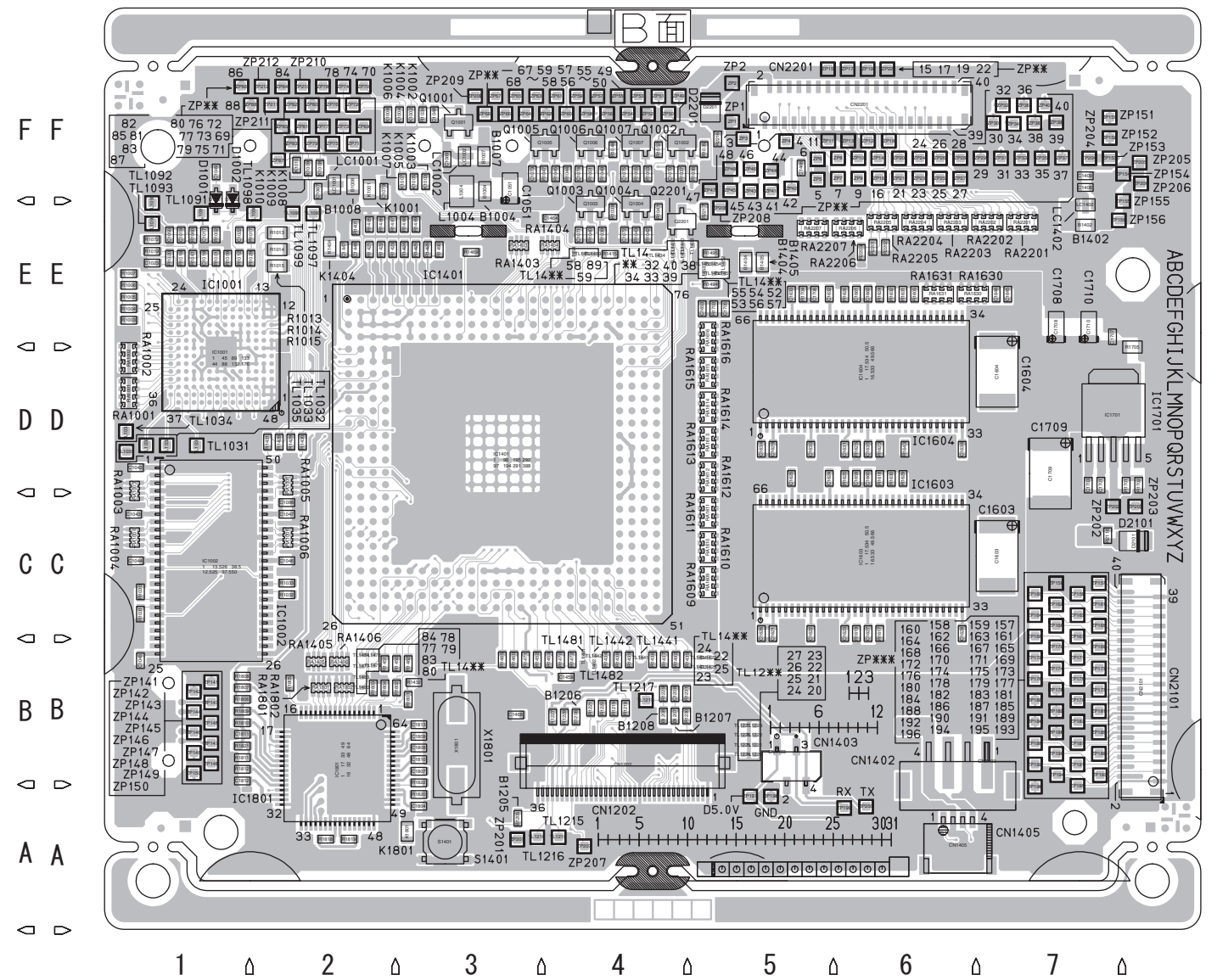
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<b>CAPACITOR</b>	C5001	A D 14F	C5307	A D 5D	C5339	B C 4C	D5208	A D 8B	IC5301	A D 9F	Q5316	A D 3F	R5319	A D 1B		
	C5002	A D 13C	C5308	A D 5C	C5340	A D 4C	D5209	A D 8B	IC5302	A D 4C	R5320	A D 4C	R5321	A D 6G		
	C5003	A D 14A	C5309	A D 2G	C5341	B C 4D	D5210	A D 8C	IC5303	B C 3D	R5322	B C 8G	R5323	B C 8G		
	C5004	A D 12E	C5311	A D 2F	C5342	B C 4C	D5211	A D 9B	IC5304	B C 2D	R5324	B C 11D	R5325	B C 7F		
	C5005	A D 13F	C5312	A D 3F	C5343	B C 4D	D5212	A D 8D	IC5305	B C 4E	R5326	B C 8F	R5327	B C 7G		
	C5101	A D 12B	C5313	A D 5E	<b>CONNECTOR</b>			D5213	A D 8C	IC5306	B C 2E	R5328	A D 6E	R5329	A D 5F	
	C5102	A D 12A	C5314	B C 3D	CN5001	A D 14G	D5214	A D 8B	IC5308	B C 4C	R5330	A D 12A	R5331	A D 5E	R5332	A D 5F
	C5103	A D 12B	C5315	B C 3D	CN5001	A D 2B	D5301	A D 8D	<b>COIL</b>			R5333	B C 4D	R5334	B C 4D	
	C5104	A D 12C	C5316	A D 3D	CN5003	A D 1C	D5302	A D 8F	L5201	A D 6F	R5335	B C 12E	R5336	B C 4D	R5337	B C 4E
	C5105	A D 12D	C5317	B C 4D	CN5004	A D 1C	D5303	A D 9F	L5202	A D 6F	R5338	B C 12C	R5339	B C 4E	R5340	B C 4E
	C5106	B C 11E	C5318	A D 5D	CN5005	A D 5G	D5304	A D 1F	L5203	A D 6D	R5341	A D 12B	R5342	B C 4E	R5343	B C 4E
	C5107	B C 12D	C5319	A D 3D	CN5006	A D 3D	D5305	A D 4B	L5204	A D 6D	R5344	A D 13A	R5345	B C 4B	R5346	B C 4B
	C5201	A D 8F	C5320	B C 4D	CN5007	A D 6B	D5306	A D 5D	L5205	A D 7B	R5347	B C 10F	R5348	B C 4C	R5349	B C 4C
	C5202	A D 8E	C5321	A D 3E	D5307	A D 4F	D5307	A D 4F	L5206	A D 6C	R5350	B C 10F	R5351	B C 4C	R5352	B C 4C
	C5203	A D 7E	C5322	A D 3E	D5308	A D 3C	D5308	A D 4F	L5207	A D 8A	R5353	B C 10F	R5354	B C 10F	R5355	B C 10F
	C5204	A D 7F	C5323	A D 2E	D5310	A D 4F	D5311	A D 4F	<b>TRANSISTOR</b>			R5356	B C 10F	R5357	B C 10F	
	C5205	A D 7E	C5324	B C 1D	D5311	A D 14C	D5312	A D 3E	Q5301	A D 8F	R5358	B C 10F	R5359	B C 10F	R5360	B C 10F
	C5206	A D 7D	C5325	B C 2D	D5313	A D 2F	D5313	A D 2F	Q5302	B C 8G	R5361	B C 10F	R5362	B C 10F	R5363	B C 10F
	C5207	A D 9A	C5326	A D 2D	D5314	A D 11E	D5314	A D 2C	Q5303	B C 2C	R5364	B C 10F	R5365	B C 10F	R5366	B C 10F
	C5208	A D 7B	C5328	B C 6B	D5315	A D 10D	D5315	A D 2F	Q5304	A D 8G	R5367	B C 10F	R5368	B C 10F	R5369	B C 10F
	C5209	A D 7C	C5329	A D 6B	D5316	A D 12D	D5316	A D 5E	Q5305	B C 8H	R5370	B C 10F	R5371	B C 10F	R5372	B C 10F
	C5210	A D 8A	C5330	B C 5B	D5317	A D 6D	D5317	A D 6D	Q5306	A D 4B	R5373	B C 10F	R5374	B C 10F	R5375	B C 10F
	C5301	A D 10F	C5331	A D 5B	D5202	A D 8E	D5203	A D 8E	Q5307	A D 5C	R5376	B C 10F	R5377	B C 10F	R5378	B C 10F
	C5302	A D 10F	C5332	B C 1E	D5203	A D 8D	D5204	A D 8E	Q5308	A D 6C	R5379	B C 10F	R5380	B C 10F	R5381	B C 10F
	C5303	A D 5F	C5333	B C 2E	D5204	A D 8E	D5205	A D 8E	Q5309	A D 6C	R5382	B C 10F	R5383	B C 10F	R5384	B C 10F
	C5304	A D 5E	C5334	B C 5E	D5205	A D 8D	D5206	A D 8D	Q5310	A D 4F	R5385	B C 10F	R5386	B C 10F	R5387	B C 10F
	C5305	A D 6D	C5335	B C 4E	D5206	A D 8C	D5207	A D 8C	Q5311	B C 3B	R5388	B C 10F	R5389	B C 10F	R5390	B C 10F
	C5306	A D 6D	C5338	B C 5C	D5207	A D 9B	D5208	A D 9B	Q5312	B C 3B	R5391	B C 10F	R5392	B C 10F	R5393	B C 10F



Forward side



Reverse side







**JVC**

**Victor Company of Japan, Limited**

AV & MULTIMEDIA COMPANY DIGITAL VIDEO STORAGE CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

No.YD060SCH



Printed in Japan  
VPT

# PARTS LIST

[DR-MH50SE, DR-MH50SEF, DR-MH50SEK]

**\* SAFETY PRECAUTION**

Parts identified by the  $\triangle$  symbol are critical for safety. Replace only with specified part numbers.

**\* BEWARE OF BOGUS PARTS**

Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.

\* (x\_) in a description column shows the number of the used part.

**Area Suffix**

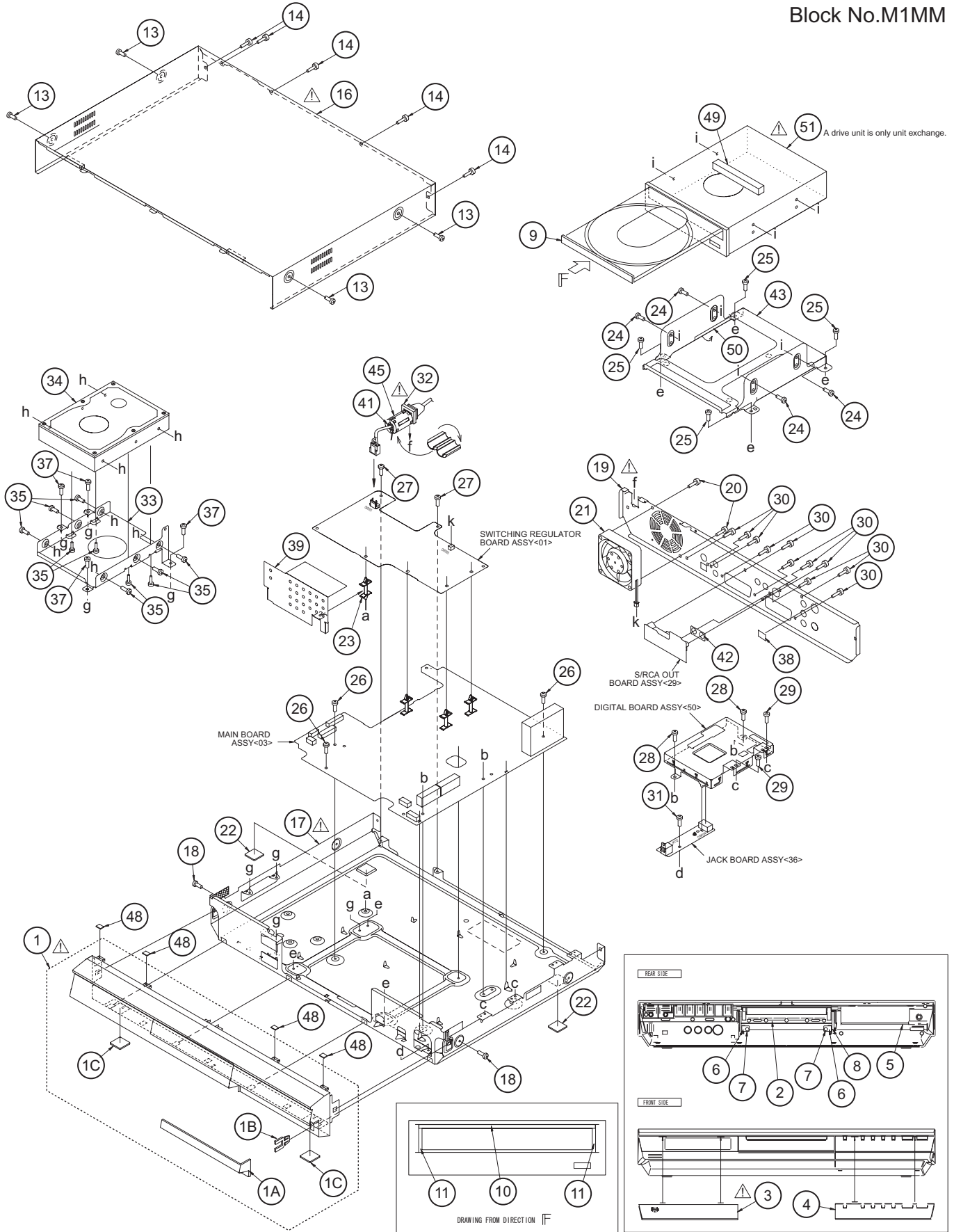
E	-----	Continental Europe
EF	-----	France
EK	-----	U.K.

**- Contents -**

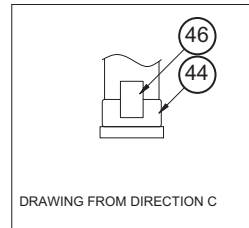
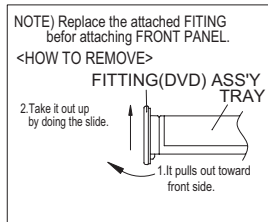
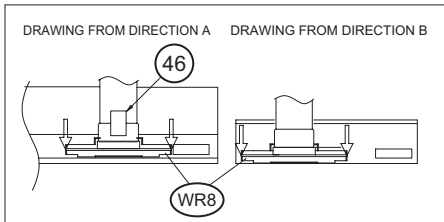
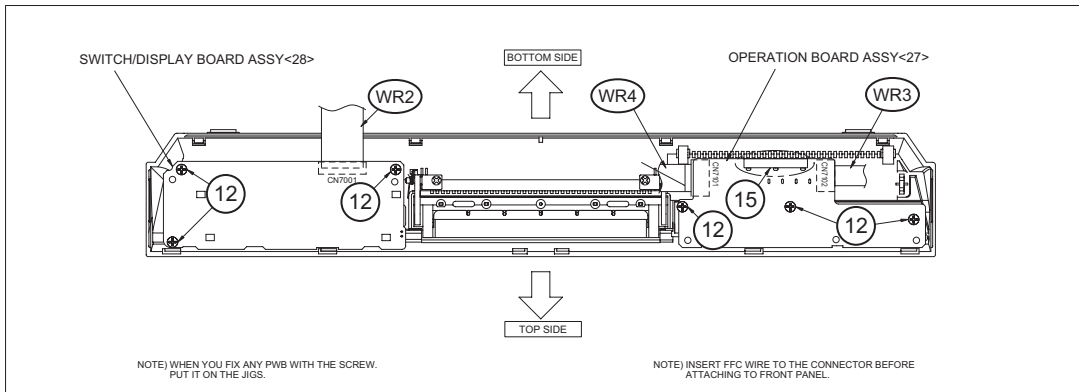
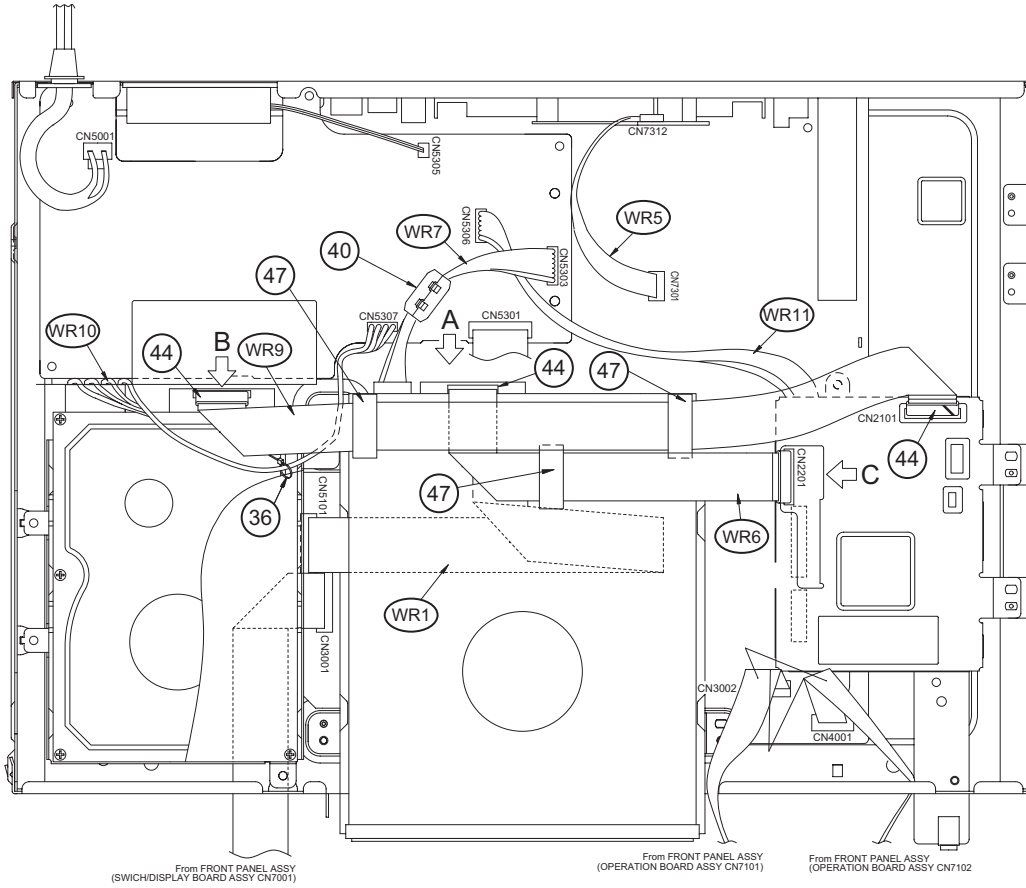
Exploded view of general assembly and parts list	-----	3-2
Electrical parts list	-----	3-5
Packing materials and accessories parts list	-----	3-17

# Exploded view of general assembly and parts list

Block No.M1MM







# General assembly

Block No. [M][1][M][M]

Symbol No.	Part No.	Part Name	Description	Local
△ 1	LP10533-226A	FRONT PANEL ASSY		
1A	LP21252-201A	DOOR		
1B	PU60109	CATCHER		
1C	LP31348-002A	FOOT	FOOT(x2)	
2	LP31512-001A	LID ASSY		
△ 3	LP21246-204A	WINDOW SCREEN(L)		
4	LP21248-223A	W.SCREEN(R)		E,EF
4	LP21248-224A	W.SCREEN(R)		EK
5	LP31383-002A	FL SCREEN		
6	LP31382-201A	STOPPER	(x2)	
7	QYSBSF2608ZA	TAP SCREW	M2.6 x 8mm(x2)	
8	LP41141-001A	SPRING	LID	
9	LP21347-002B	FITTING	DRIVE	
10	LP41217-001A	GASKET	DVD FRONT	
11	LP41218-001A	GASKET	DVD FRONT(x2)	
12	QYTDSF2608ZA	TAP SCREW	FRONT PWB(x6)	
13	QYSBSG3006NA	TAP SCREW	TOP SIDE(x4)	
14	QYSBSG3006NA	TAP SCREW	TOP REAR(x5)	
15	LP41175-001A	SPACER	DOOR	
△ 16	LP21256-006A	METAL COVER	(SERVICE)	
△ 17	LP10564-001A	BOTTOM CHASSIS		
18	QYSDSG3008NA	TAP SCREW	B.CHASSIS(x2)	
△ 19	LP21321-006A	REAR PANEL		E,EF
△ 19	LP21321-007A	REAR PANEL		EK
20	QYSDSF3008MA	TAP SCREW	FAN(x2)	
21	QAR0326-001	COOLING FAN		
22	LP31348-002A	FOOT	FOOT(x2)	
23	PEME0946-08	SPACER	REG PWB	
24	QYTDST3006ZA	TAP SCREW	DRIVE(x4)	
25	QYSDSGY3006ZA	TAP SCREW	BKT(DVD)(x4)	
26	QYSPSGG3006ZA	TAP SCREW	MAIN PWB(x3)	
27	QYSPSGG3006ZA	TAP SCREW	REG PWB(x2)	
28	QYSBSGG3008EA	TAP SCREW	DIGI PWB(x2)	
29	QYSBSGG3008EA	TAP SCREW	DIGI PWB(x2)	
30	QYSBSGY3008MA	TAP SCREW	JACK(x11)	
31	QYSPSGG3006ZA	TAP SCREW	DV PWB	
△ 32	QMPK340-170-JC	POWER CORD(EU)	1.7m BLACK	E,EF
△ 32	QMP51K0-170-K	POWER CORD(EU)	1.7m BLACK	EK
33	LP21280-202A	BRACKET(HDD)		
34	LP40267-020A	HDD	(SERVICE)	E,EK
34	LP40267-021A	HDD	(SERVICE)	EF
35	LP40738-001B	SCREW	(x10)	
36	QZW0004-001	WIRE CLAMP		
37	QYSDSGY3006ZA	TAP SCREW	M3 x 6mm(x4)	
38	LP41107-002A	GASKET	REAR PANEL	
39	LP31442-001A	PROTECT COVER		
40	QQR0917-002	CORE FILTER	DRIVE REG	
41	QZW0004-001	WIRE CLAMP		
42	LP41165-002A	GASKET	S/RCA JACK	
43	LP21156-003A	BRACKET(DVD DRIVE)	DVD DRIVE	
44	QQR1439-003	FERRITE CORE	ATA DVD/HD(x4)	
45	QQR0491-001	FERRITE CORE	AC CORD	
46	LP30002-0F6A	SPACER	ATA WIRE(x2)	
47	LP30002-0A9A	SPACER	ATA WIRE(x3)	
48	LP30002-0G2A	SPACER	F.PANEL(x4)	
49	LP41107-001A	GASKET	DVD DRIVE	
50	LP30002-0H5A	SPACER	DVD BKT	
△ 51	QAL0651-001	DRIVE UNIT		
WR 1	QUQ112-1926CJ-E	FFC WIRE	REGULATOR CN5301-MAIN CN5101	
WR 2	QUQ112-1818CJ-E	FFC WIRE	SWICH DISPLAY CN7001-MAIN CN3001	
WR 3	QUQ112-1312CG-E	FFC WIRE	OPERATION CN7102-MAIN CN4001	
WR 4	QUQ112-1112CG-E	FFC WIRE	OPERATION CN7101-MAIN CN3002	
WR 5	QUQ112-0714CG-E	FFC WIRE	S/RCA OUT CN7312-MAIN CN7301	
WR 6	QUQ105-4022AH-E	FFC WIRE	DIGITAL CN2201-DVD UNIT	
WR 7	QJJ032-041214-E	SIN CR C-C WIRE	REGULATOR CN5303-DVD UNIT	
WR 8	QG20021A1-40	CONNECTOR	HDD & DVD UNIT(x2)	
WR 9	QUQ105-4038AH-E	FFC WIRE	HDD-DIGITAL CN2101	
WR10	QJJ032-042204-E	SIN CR C-C WIRE	HDD-REGULATOR CN5307	
WR11	QJJ015-062211-E	SIN CR C-C WIRE	REGULATOR CN5306-DIGITAL CN1003	

# Electrical parts list

## Switching regulator board

Block No. [0][1]

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10237-04D	SW.REG BOARD ASSY			D5306	or 1SS270A-T2	SI DIODE		
IC5101	STR-G6653-F9	IC			D5307	RK34-LFB2	SB DIODE		
IC5301	TL431/A-T	IC			D5309	MTZJ5.6C-T2	Z DIODE		
IC5301	or MM1431AT-T	IC			D5310	10EDB20-T2	SI DIODE		
IC5301	or UTCTL431-T	IC			D5310	or ERA15-02-T2	SI DIODE		
IC5301	or L5431-T	IC			D5314	AW04-T2	SB DIODE		
IC5302	MPD5S017	IC(HYBRID)			D5315	MTZJ12A-T2	Z DIODE		
IC5303	MM1563DF-X	IC			D5317	RK14-LFB2	SB DIODE		
IC5305	MM1565AF-X	IC			△ PC5101	PC123Y22FZ	PHOTO COUPLER		
IC5308	MM1665AH-X	IC			△ C5001	QFZ9075-683	MPP CAPACITOR	0.068uF AC275V M	
Q5301	2SD2144S/UV/-T	TRANSISTOR			△ C5002	QFZ9075-223	MPP CAPACITOR	0.022uF AC275V M	
Q5301	or 2SC3576-JVC-T	TRANSISTOR			C5003	QEZO374-107	E CAPACITOR	100uF 400V M	
Q5302	UMD12N-W	DIGI TRANSISTOR			△ C5004	QCZ9079-222	C CAPACITOR	2200pF AC250V M	
Q5302	or XP4313-W	DIGI TRANSISTOR			C5101	QCZ0353-101Z	C CAPACITOR	100pF 1kV K	
Q5303	UMD12N-W	DIGI TRANSISTOR			C5102	QCZ0349-472Z	C CAPACITOR	4700pF 1kV K	
Q5303	or XP4313-W	DIGI TRANSISTOR			C5103	QEMU1VM-276Z	E CAPACITOR	27uF 35V M	
Q5304	2SA1585S/QR/-T	TRANSISTOR			C5104	QCZ0136-471Z	C CAPACITOR	470pF 1kV K	
Q5305	DTC114EKA-X	DIGI TRANSISTOR			C5105	QFLC1HJ-471Z	M CAPACITOR	470pF 50V J	
Q5305	or UN2211-X	TRANSISTOR			C5106	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
Q5305	or RT1N141C-X	DIGI TRANSISTOR			C5107	NCB31HK-221X	C CAPACITOR	220pF 50V K	
Q5306	2SA1585S/QR/-T	TRANSISTOR			C5201	QEMX0JM-227Z	E CAPACITOR	220uF 6.3V M	
Q5307	2SA1585S/QR/-T	TRANSISTOR			C5202	QEMU1HM-186Z	E CAPACITOR	18uF 50V M	
Q5309	2SA1585S/QR/-T	TRANSISTOR			C5203	QEMT1CM-687	E CAPACITOR	680uF 16V M	
Q5310	2SD1858/QR/-T	TRANSISTOR			C5204	QEMT1CM-128	E CAPACITOR	1200uF 16V M	
Q5311	DTC114EUA-X	DIGI TRANSISTOR			C5205	QEMT1AM-158	E CAPACITOR	1500uF 10V M	
Q5311	or UN5211-X	DIGI TRANSISTOR			C5206	QEMT1AM-128	E CAPACITOR	1200uF 10V M	
Q5311	or PDT114EU-X	DIGI TRANSISTOR			C5207	QETN2AM-475Z	E CAPACITOR	4.7uF 100V M	
Q5311	or RT1N141M-X	DIGI TRANSISTOR			C5208	QEMT1AM-108	E CAPACITOR	1000uF 10V M	
Q5312	DTC114EUA-X	DIGI TRANSISTOR			C5209	QEMT1AM-158	E CAPACITOR	1500uF 10V M	
Q5312	or UN5211-X	DIGI TRANSISTOR			C5301	QFVF1HJ-154Z	MF CAPACITOR	0.15uF 50V J	
Q5312	or PDT114EU-X	DIGI TRANSISTOR			C5302	QFLC1HJ-333Z	M CAPACITOR	0.033uF 50V J	
Q5312	or RT1N141M-X	DIGI TRANSISTOR			C5303	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
Q5316	2SD2144S/UV/-T	TRANSISTOR			C5304	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
Q5316	or 2SC3576-JVC-T	TRANSISTOR			C5305	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
D5001	D3SBA60	DIODE			C5306	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
D5101	SARS01-T2	SI DIODE			C5307	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
D5103	AU01Z-T2	FR DIODE			C5308	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
D5103	or 10ERB40-T2	FR DIODE			C5309	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
D5103	or 10ERB20-T2	FR DIODE			C5310	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
D5104	1SS133-T2	SI DIODE			C5311	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	
D5104	or 1SS270A-T2	SI DIODE			C5312	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
D5105	AU01Z-T2	FR DIODE			C5313	QETN1HM-226Z	E CAPACITOR	22uF 50V M	
D5105	or 10ERB40-T2	FR DIODE			C5314	NCB21AK-105X	C CAPACITOR	1uF 10V K	
D5106	AU01Z-T2	FR DIODE			C5315	NCB31HK-471X	C CAPACITOR	470pF 50V K	
D5106	or 10ERB40-T2	FR DIODE			C5316	QETN1HM-226Z	E CAPACITOR	22uF 50V M	
D5106	or 10ERB20-T2	FR DIODE			C5317	NCB21AK-105X	C CAPACITOR	1uF 10V K	
D5201	10ERB20-T2	FR DIODE			C5318	QECS1CM-477	E CAPACITOR	470uF 16V M	
D5202	AU01Z-T2	FR DIODE			C5319	QECS1CM-477	E CAPACITOR	470uF 16V M	
D5202	or 10ERB40-T2	FR DIODE			C5321	QECS1CM-477	E CAPACITOR	470uF 16V M	
D5202	or 10ERB20-T2	FR DIODE			C5322	NCB21AK-105X	C CAPACITOR	1uF 10V K	
D5203	AU01Z-T2	FR DIODE			C5328	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	
D5203	or 10ERB20-T2	FR DIODE			C5329	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
D5204	RL2Z-LFB2	FR DIODE			C5330	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	
D5205	RK34-LFB2	SB DIODE			C5331	QETN1CM-477Z	E CAPACITOR	470uF 16V M	
D5206	RK34-LFB2	SB DIODE			C5334	NCB21AK-105X	C CAPACITOR	1uF 10V K	
D5207	AU01Z-T2	FR DIODE			C5335	NCB31HK-471X	C CAPACITOR	470pF 50V K	
D5207	or 10ERB20-T2	FR DIODE			C5338	NCB21AK-105X	C CAPACITOR	1uF 10V K	
D5208	RK14-LFB2	SB DIODE			C5339	NCB31HK-471X	C CAPACITOR	470pF 50V K	
D5210	RK34-LFB2	SB DIODE			C5340	QETN1HM-226Z	E CAPACITOR	22uF 50V M	
D5212	RL2Z-LFB2	FR DIODE			C5341	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
D5213	RK34-LFB2	SB DIODE			C5342	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
D5214	RK34-LFB2	SB DIODE			R5101	QRG02GJ-683	OMF RESISTOR	68kΩ 2W J	
D5301	MTZJ15A-T2	Z DIODE			R5102	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
D5302	1SS133-T2	SI DIODE			R5103	QRE141J-684Y	C RESISTOR	680kΩ 1/4W J	
D5302	or 1SS270A-T2	SI DIODE			R5104	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
D5303	MTZJ27C-T2	Z DIODE			R5105	QRE141J-680Y	C RESISTOR	68Ω 1/4W J	
D5304	MTZJ12B-T2	Z DIODE			R5106	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
D5304	or MTZJ12C-T2	Z DIODE			R5107	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
D5306	1SS133-T2	SI DIODE			R5108	QRT01DJ-R27X	MF RESISTOR	0.27Ω 1W J	
					△ R5109	QRZ9005-470X	FUSI RESISTOR	47Ω 1/4W G	
					R5301	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	

Symbol No.	Part No.	Part Name	Description	Local
R5302	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R5303	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R5304	NRSA63D-682X	MG RESISTOR	6.8kΩ 1/16W D	
R5305	NRSA63D-223X	MG RESISTOR	22kΩ 1/16W D	
R5306	NRSA63D-392X	MG RESISTOR	3.9kΩ 1/16W D	
△ R5307	QRZ9005-470X	FUSI RESISTOR	47Ω 1/4W G	
R5308	QRE141J-681Y	C RESISTOR	680Ω 1/4W J	
R5309	QRE141J-561Y	C RESISTOR	560Ω 1/4W J	
R5310	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5311	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R5312	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5313	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R5316	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5317	QRE141J-181Y	C RESISTOR	180Ω 1/4W J	
R5318	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R5319	QRE141J-8R2Y	C RESISTOR	8.2Ω 1/4W J	
R5320	QRE123J-101X	C RESISTOR	100Ω 1/2W J	
R5321	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5322	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R5323	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R5324	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R5332	NRSA63D-562X	MG RESISTOR	5.6kΩ 1/16W D	
R5333	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R5334	NRSA63D-123X	MG RESISTOR	12kΩ 1/16W D	
R5335	NRSA63D-123X	MG RESISTOR	12kΩ 1/16W D	
R5336	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R5337	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R5341	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5343	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
L5201	QQR0934-001	CHOKO COIL		
L5202	QQR0934-001	CHOKO COIL		
L5203	QQR0934-001	CHOKO COIL		
L5204	QQR0934-001	CHOKO COIL		
L5205	QQR0934-001	CHOKO COIL		
L5206	QQR0934-001	CHOKO COIL		
△ T5001	QQS0268-001	SW TRANSF		
B5508	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
△ CN5001	QGA7901C3-02	CONNECTOR	AC IN	
CN5301	QGF1207C1-19	CONNECTOR	MAIN 1-19	
CN5303	QGA2501C1-04	CONNECTOR	T0 LG DRV	
CN5305	QGA2001C1-02	CONNECTOR	T0 FAN	
CN5306	QGA2001C1-06	CONNECTOR	T0 DIGITAL	
CN5307	QGA2501C1-04	CONNECTOR	T0 HDD	
△ CP5301	QMFZ050-1R5X-E	FUSE	1.5A 125V	
△ CP5302	QMFZ050-2R0X-E	FUSE	2A 125V	
△ F5001	QMF5AE2-2R0-J1	FUSE	2A AC250V	
FC5001	QNG0020-001Z	FUSE CLIP		
FC5002	QNG0020-001Z	FUSE CLIP		
△ LF5001	QQR1031-001	LINE FILTER		
ST1	QZW0007-001	POST PIN		
W5501	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W5502	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W5503	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
HS1	QZW0162-001	HEAT SINK	FOR IC5101	
OT1	QYTDST3008ZA	TAP SCREW	FOR IC5101 M3 x 8mm	

## Main board

Block No. [0][3]

Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10239-06F1	MAIN BOARD ASSY		E
PW1	LPA10239-04G1	MAIN BOARD ASSY		EF
PW1	LPA10239-05F1	MAIN BOARD ASSY		EK
IC3001	HD6432194SX01F	IC(MCU)	MASK	
IC3002	S-80827CNNB-G-W	IC		
IC3004	LPN0876-001B-32	IC(EEPROM)	*(REFER TO BELOW) EK	
IC3004	LPN0876-002B-31	IC(EEPROM)	*(REFER TO BELOW) E	
IC3004	LPN0876-003B-33	IC(EEPROM)	*(REFER TO BELOW) EF	
IC4001	JCP8038-I	IC		
IC4001	or JCP8038	IC		
IC4201	LC74793-E	IC		
IC4301	LA7357M-E-W	IC		EF
IC4304	74HC4538D-X	IC		EF
IC6701	MSP3417GQGB8V3X	IC		
IC7301	MM1623XF-X	IC		
IC7302	MM1508XN-X	IC		
IC7303	TC74HC4053AF-X	IC		
IC7303	or CD74HC4053NS-X	IC		
IC7304	MM1501XN-X	IC		
IC8001	AK5365VQ	IC		
IC8201	AK4385VT-X	IC		
IC8201	or AK4385ET-X	IC		
IC8202	BA15218F-XE	IC		
IC8301	LA7151M-X	IC		
IC8302	LA7151M-X	IC		
IC8303	BA15218F-XE	IC		
IC8501	SN74LV08APW-X	IC		
Q3004	2SC2412K/QRS/-X	TRANSISTOR		
Q3004	or 2SD601A/QRS/-X	TRANSISTOR		
Q3004	or 2SC3928A/QRS/-X	TRANSISTOR		
Q3007	UN221E-X	TRANSTSTOR		
Q3007	or DTC144WKA-X	DIGI TRANSISTOR		
Q3007	or RT1N44HC-X	DIGI TRANSISTOR		
Q3009	UN221E-X	TRANSTSTOR		
Q3009	or DTC144WKA-X	DIGI TRANSISTOR		
Q3009	or RT1N44HC-X	DIGI TRANSISTOR		
Q3010	UN221E-X	TRANSTSTOR		
Q3010	or DTC144WKA-X	DIGI TRANSISTOR		
Q3010	or RT1N44HC-X	DIGI TRANSISTOR		
Q4001	2SB709A/QR/-X	TRANSISTOR		
Q4001	or 2SA1037AK/QR/-X	TRANSISTOR		
Q4001	or 2SA1530A/QR/-X	TRANSISTOR		
Q4003	2SD601A/QRS/-X	TRANSISTOR		
Q4003	or 2SC2412K/QRS/-X	TRANSISTOR		
Q4003	or 2SC3928A/QRS/-X	TRANSISTOR		
Q4006	2SC2412K/QRS/-X	TRANSISTOR		
Q4006	or 2SC3928A/QRS/-X	TRANSISTOR		
Q4101	2SD2144S/UV/-T	TRANSISTOR		
Q4101	or 2SC3576-JVC-T	TRANSISTOR		
Q4301	2SD601A/QRS/-X	TRANSISTOR		EF
Q4301	or 2SC2412K/QRS/-X	TRANSISTOR		EF
Q4301	or 2SC3928A/QRS/-X	TRANSISTOR		EF
Q4302	2SB709A/QR/-X	TRANSISTOR		EF
Q4302	or 2SA1037AK/QR/-X	TRANSISTOR		EF
Q4302	or 2SA1530A/QR/-X	TRANSISTOR		EF
Q4303	2SB709A/QR/-X	TRANSISTOR		EF
Q4303	or 2SA1037AK/QR/-X	TRANSISTOR		EF
Q4303	or 2SA1530A/QR/-X	TRANSISTOR		EF
Q6030	2SA1037AK/QR/-X	TRANSISTOR		
Q6030	or 2SB709A/QR/-X	TRANSISTOR		
Q6030	or 2SA1530A/QR/-X	TRANSISTOR		
Q6031	UN2211-X	TRANSISTOR		
Q6031	or DTC114EKA-X	DIGI TRANSISTOR		
Q6031	or RT1N141C-X	DIGI TRANSISTOR		
Q7201	2SC1317/RS/-T	TRANSISTOR		
Q7301	2SD601A/QRS/-X	TRANSISTOR		
Q7301	or 2SC2412K/QRS/-X	TRANSISTOR		
Q7301	or 2SC3928A/QRS/-X	TRANSISTOR		
Q7302	2SD601A/QRS/-X	TRANSISTOR		
Q7302	or 2SC2412K/QRS/-X	TRANSISTOR		
Q7302	or 2SC3928A/QRS/-X	TRANSISTOR		
Q7310	2SB709A/QR/-X	TRANSISTOR		

After exchanging EEPROMs, a main part does not correspond to some remote control commands at Jig RCU mode.  
Please cancel the Jig RCU mode of a main part after exchanging EEPROMs. Please refer to the "Canceling JIG mode"  
about the release method.

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
Q7310	or 2SA1037AK/QR/-X	TRANSISTOR			C3030	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
Q7310	or 2SA1530A/QR/-X	TRANSISTOR			C3031	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q7311	2SB709A/QR/-X	TRANSISTOR			C3032	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q7311	or 2SA1037AK/QR/-X	TRANSISTOR			C3033	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q7311	or 2SA1530A/QR/-X	TRANSISTOR			C3036	NDC31HJ-180X	C CAPACITOR	18pF 50V J	
Q7312	UN221E-X	TRANSISTOR			C3037	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
Q7312	or DTC144WKA-X	DIGI TRANSISTOR			C3038	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
Q7312	or RT1N44HC-X	DIGI TRANSISTOR			C3039	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q7313	UN221E-X	TRANSISTOR			C3041	NDC31HJ-180X	C CAPACITOR	18pF 50V J	EF,EK
Q7313	or DTC144WKA-X	DIGI TRANSISTOR			C3042	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
Q7313	or RT1N44HC-X	DIGI TRANSISTOR			C3050	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q7314	UN221E-X	TRANSISTOR			C3051	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
Q7314	or DTC144WKA-X	DIGI TRANSISTOR			C3054	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q7314	or RT1N44HC-X	DIGI TRANSISTOR			C4001	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
Q7315	DTC114TKA-X	TRANSISTOR			C4002	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q7315	or RT1N140C-X	DIGI TRANSISTOR			C4003	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
Q7315	or UN2215-X	TRANSISTOR			C4005	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q7316	2SB709A/QR/-X	TRANSISTOR			C4006	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q7316	or 2SA1037AK/QR/-X	TRANSISTOR			C4008	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
Q7316	or 2SA1530A/QR/-X	TRANSISTOR			C4010	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q7317	2SB709A/QR/-X	TRANSISTOR			C4012	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q7317	or 2SA1037AK/QR/-X	TRANSISTOR			C4013	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
Q7317	or 2SA1530A/QR/-X	TRANSISTOR			C4015	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8201	UN221E-X	TRANSISTOR			C4016	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8201	or DTC144WKA-X	DIGI TRANSISTOR			C4018	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
Q8201	or RT1N44HC-X	DIGI TRANSISTOR			C4019	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
Q8202	UN211E-X	DIGI TRANSISTOR			C4021	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8202	or DTA144WKA-X	TRANSISTOR			C4022	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8202	or RT1P44HC-X	DIGI TRANSISTOR			C4023	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8203	2SC2412K/QRS/-X	TRANSISTOR			C4024	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8203	or 2SD601A/QRS/-X	TRANSISTOR			C4025	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8203	or 2SC3928A/QRS/-X	TRANSISTOR			C4026	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8205	2SC2412K/QRS/-X	TRANSISTOR			C4027	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8205	or 2SD601A/QRS/-X	TRANSISTOR			C4028	QERF1CM-106Z	E CAPACITOR	10uF 16V M	
Q8205	or 2SC3928A/QRS/-X	TRANSISTOR			C4029	QERF0JM-476Z	E CAPACITOR	47uF 6.3V M	
Q8301	2SC2412K/QRS/-X	TRANSISTOR			C4030	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8301	or 2SD601A/QRS/-X	TRANSISTOR			C4033	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8301	or 2SC3928A/QRS/-X	TRANSISTOR			C4034	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M	
Q8302	2SC2412K/QRS/-X	TRANSISTOR			C4035	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8302	or 2SD601A/QRS/-X	TRANSISTOR			C4036	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8302	or 2SC3928A/QRS/-X	TRANSISTOR			C4037	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8303	2SC2412K/QRS/-X	TRANSISTOR			C4039	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8303	or 2SD601A/QRS/-X	TRANSISTOR			C4040	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8303	or 2SC3928A/QRS/-X	TRANSISTOR			C4041	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
Q8304	2SC2412K/QRS/-X	TRANSISTOR			C4043	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
Q8304	or 2SD601A/QRS/-X	TRANSISTOR			C4045	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
Q8304	or 2SC3928A/QRS/-X	TRANSISTOR			C4046	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
					C4047	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
D3002	1SS133-T2	SI DIODE			C4049	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
D3002	or 1SS270A-T2	SI DIODE			C4055	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
D3003	MTZJ39C-T2	Z DIODE			C4056	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
D3004	10EDB20-T2	SI DIODE			C4065	QERF0JM-476Z	E CAPACITOR	47uF 6.3V M	
D3005	10EDB20-T2	SI DIODE			C4067	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
D3007	1SS355-X	SI DIODE			C4068	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
D3007	or MA111-X	SI DIODE			C4069	NDC31HJ-821X	C CAPACITOR	820pF 50V J	
D3008	1SS355-X	SI DIODE			C4071	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D3008	or MA111-X	SI DIODE			C4072	QERF0JM-107Z	E CAPACITOR	100uF 6.3V M	
D4001	DA204U-X	SI DIODE			C4081	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
D4002	DA204U-X	SI DIODE			C4109	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
D4301	1SS133-T2	SI DIODE		EF	C4110	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
D6002	HZ30-2L-T2	Z DIODE			C4201	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
D6701	1SS133-T2	SI DIODE			C4202	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D6701	or 1SS270A-T2	SI DIODE			C4203	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
D7304	1SS133-T2	SI DIODE			C4204	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
D8001	1SS355-X	SI DIODE			C4207	NCB31CK-563X	C CAPACITOR	0.056uF 16V K	
D8001	or MA111-X	SI DIODE			C4208	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
D8202	1SS355-X	SI DIODE			C4209	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
					C4210	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C3007	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C4211	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C3010	QEZ0244-229	EDL CAPACITOR	0.022F 5.5V Z		C4301	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	EF
C3014	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		C4302	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
C3015	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C4304	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	EF
C3016	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C4305	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	EF
C3022	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C4306	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	EF
C3024	NDC31HJ-220X	C CAPACITOR	22pF 50V J	E	C4307	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	EF
C3024	NDC31HJ-120X	C CAPACITOR	12pF 50V J	EF,EK	C4308	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	EF
C3025	QAT3725-300Z	TRIM CAPACITOR	TIMER CLOCK 30pF E		C4309	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	EF
C3027	QERF1CM-106Z	E CAPACITOR	10uF 16V M		C4310	NDC31HJ-471X	C CAPACITOR	470pF 50V J	EF

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C4318	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	EF	C8027	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C4319	NDC31HJ-471X	C CAPACITOR	470pF 50V J	EF	C8028	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6006	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	E,EK	C8201	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6007	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M		C8202	QETJ0JM-477Z	E CAPACITOR	470uF 6.3V M	
C6014	NCB21HK-103X	C CAPACITOR	0.01uF 50V K		C8203	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C6037	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	EF	C8204	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C6701	NCB21HK-102X	C CAPACITOR	1000pF 50V K		C8205	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C6707	NDC21HJ-470X	C CAPACITOR	47pF 50V J		C8206	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C6708	NDC21HJ-8R0X	C CAPACITOR	8pF 50V J		C8207	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C6709	NDC21HJ-8R0X	C CAPACITOR	8pF 50V J		C8208	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C6713	NCF21CZ-224X	C CAPACITOR	0.22uF 16V Z		C8209	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6714	NCB21HK-222X	C CAPACITOR	2200pF 50V K		C8210	QETJ1CM-227Z	E CAPACITOR	220uF 16V M	
C6715	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M		C8211	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6716	NCB21HK-222X	C CAPACITOR	2200pF 50V K		C8212	QETJ1CM-227Z	E CAPACITOR	220uF 16V M	
C6717	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M		C8215	QETJ1EM-476Z	E CAPACITOR	47uF 25V M	
C6719	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M		C8217	QETJ1EM-476Z	E CAPACITOR	47uF 25V M	
C6720	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M		C8220	NCF31EZ-104X	C CAPACITOR	0.1uF 25V Z	
C6721	NCB21HK-103X	C CAPACITOR	0.01uF 50V K		C8301	QETN1CM-477Z	E CAPACITOR	470uF 16V M	
C6723	NCB21HK-103X	C CAPACITOR	0.01uF 50V K		C8302	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6724	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	EF	C8303	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C6753	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M		C8304	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7202	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M		C8305	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7203	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		C8306	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7301	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		C8307	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7302	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C8308	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7303	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C8311	QETN1CM-477Z	E CAPACITOR	470uF 16V M	
C7304	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C8312	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7305	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C8313	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7306	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C8314	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7307	QEKJ0JM-226Z	E CAPACITOR	22uF 6.3V M		C8315	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7308	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C8316	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7309	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C8317	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7310	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C8318	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7311	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C8321	QETN1CM-227Z	E CAPACITOR	220uF 16V M	
C7312	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C8322	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7313	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C8323	QETN1CM-227Z	E CAPACITOR	220uF 16V M	
C7314	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C8324	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7315	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M		C8401	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C7316	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C8402	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7317	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C8501	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C7318	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C8502	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7319	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C8503	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7327	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M		C8504	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C7330	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C8505	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C7331	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C8506	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7334	NDC31HJ-681X	C CAPACITOR	680pF 50V J		R3011	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C7335	NDC31HJ-681X	C CAPACITOR	680pF 50V J		R3012	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C7336	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M		R3016	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C7337	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M		R3017	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
C7338	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M		R3018	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
C7339	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M		R3022	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C7340	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M		R3028	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7345	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		R3029	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7346	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M		R3038	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C7347	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M		R3039	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C7350	NCB31HK-102X	C CAPACITOR	1000pF 50V K		R3040	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7351	NCB31HK-102X	C CAPACITOR	1000pF 50V K		R3041	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C7354	NDC31HJ-681X	C CAPACITOR	680pF 50V J		R3044	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7355	NDC31HJ-681X	C CAPACITOR	680pF 50V J		R3046	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7368	NDC31HJ-120X	C CAPACITOR	12pF 50V J		R3047	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7369	NDC31HJ-6R0X	C CAPACITOR	6pF 50V J		R3048	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7371	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		R3049	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C8001	NDC31HJ-101X	C CAPACITOR	100pF 50V J		R3050	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C8002	NDC31HJ-101X	C CAPACITOR	100pF 50V J		R3051	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C8005	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		R3052	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C8007	QERF1HM-105Z	E CAPACITOR	1uF 50V M		R3053	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C8008	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		R3054	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C8009	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		R3055	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C8010	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		R3060	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C8011	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		R3061	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C8012	QERF1HM-105Z	E CAPACITOR	1uF 50V M		R3062	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C8014	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		R3063	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C8021	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		R3066	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C8022	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		R3069	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C8023	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		R3071	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C8024	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R3072	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C8025	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		R3073	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C8026	NCB31CK-104X	C CAPACITOR	0.1uF 16V K						

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R3075	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R4309	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	EF
R3076	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R4310	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	EF
R3079	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R4311	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	EF
R3088	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R4312	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	EF
R3089	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R4317	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	EF
R3090	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R4318	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	EF
R3094	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R4319	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	EF
R3095	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R4320	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	EF
R3096	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R6020	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R3097	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R6021	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R3213	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J		R6030	NRSA02J-332X	MG RESISTOR	3.3kΩ 1/10W J	
R3214	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J		R6031	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R3218	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R6032	NRSA02J-183X	MG RESISTOR	18kΩ 1/10W J	EF
R3219	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R6033	NRSA02J-183X	MG RESISTOR	18kΩ 1/10W J	EF
R3220	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		R6080	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R3223	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R6707	NRSA02J-330X	MG RESISTOR	33kΩ 1/10W J	
R3224	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R6708	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R3225	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R6709	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R3226	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R6710	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R3229	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J		R6711	NRSA02J-104X	MG RESISTOR	100kΩ 1/10W J	
R3230	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R6712	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R3231	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R6713	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
R3233	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R6714	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R3234	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R6715	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
R3235	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R6716	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R3236	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R6719	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R3237	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R6720	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J	
R3239	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R6721	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J	
R3240	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7202	NRSA63J-221X	MG RESISTOR	22kΩ 1/16W J	
R3242	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R7203	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3248	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7204	QRE121J-100Y	C RESISTOR	10Ω 1/2W J	
R3249	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7301	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3251	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7302	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3252	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7303	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R3256	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7304	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R3257	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7305	NRSA63J-331X	MG RESISTOR	33kΩ 1/16W J	
R3258	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7309	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R3260	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7311	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
R4001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7312	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R4003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7314	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R4004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7315	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R4006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7318	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R4007	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7319	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R4009	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7320	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R4010	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R7335	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R4011	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7336	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R4012	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7337	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R4017	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R7338	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R4018	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J		R7339	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R4021	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J		R7340	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R4026	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R7341	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4027	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		R7342	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4028	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		R7343	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R4029	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R7344	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R4044	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R7345	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R4045	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R7346	NRSA63D-680X	MG RESISTOR	68Ω 1/16W D	
R4046	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R7347	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R4047	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7349	QRE121J-331Y	C RESISTOR	330Ω 1/2W J	
R4048	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7350	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R4051	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7351	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R4104	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R7352	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R4105	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J		R7353	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R4201	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7354	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R4203	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7355	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R4204	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7356	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R4205	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7357	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R4207	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7358	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R4208	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7359	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R4209	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7360	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R4210	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J		R7361	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R4211	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		R7367	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R4301	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	EF	R7368	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4302	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	EF	R7378	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R4304	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	EF	R8001	NRSA63J-513X	MG RESISTOR	51kΩ 1/16W J	
R4305	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	EF	R8002	NRSA63J-513X	MG RESISTOR	51kΩ 1/16W J	
R4306	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	EF	R8007	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R4307	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	EF	R8008	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R4308	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	EF	R8013	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R8014	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R8504	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R8015	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R8505	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R8016	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R8506	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R8017	NRSA63J-203X	MG RESISTOR	20kΩ 1/16W J		R8507	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R8019	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D		L3001	QQL231J-R22Y	COIL	0.22uH J	
R8020	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D		L4001	QQL29BJ-100Z	P COIL	10uH J	
R8021	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D		L4002	QQL29BJ-100Z	P COIL	10uH J	
R8022	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D		L4006	QQL29BJ-100Z	P COIL	10uH J	
R8023	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D		L4007	QQL071J-8R2Y	COIL	8.2uH J	
R8024	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D		L4201	QQL29BJ-100Z	P COIL	10uH J	
R8026	NRSA63J-203X	MG RESISTOR	20kΩ 1/16W J		L4301	QQL29BJ-100Z	P COIL	10uH J	EF
R8031	NRSA63D-203X	MG RESISTOR	20kΩ 1/16W D		L6001	QQL29BK-1R0Z	P COIL	1uH K	
R8032	NRSA63D-203X	MG RESISTOR	20kΩ 1/16W D		L6002	QQL29BK-1R0Z	P COIL	1uH K	
R8033	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		L6005	QQL29BK-1R0Z	P COIL	1uH K	
R8034	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		L6701	QQL29BJ-3R3Z	P COIL	3.3uH J	
R8035	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		L7201	QQL29BJ-100Z	P COIL	10uH J	
R8036	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		L7304	QQL29BJ-100Z	P COIL	10uH J	
R8039	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		L7325	QQL071J-6R8Y	COIL	6.8uH J	
R8040	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J		L8501	QQL071J-1R0Y	COIL	1uH J	
R8041	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J		B4001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8042	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J		B4002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8043	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J		B4102	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8044	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J		B7301	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8045	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		B7304	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8046	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		B7305	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8047	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J		B7306	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8201	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		CN3001	QGF1207C1-18	CONNECTOR	SW/DISPLAY	
R8202	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		CN3002	QGF1207C1-13	CONNECTOR	SW	
R8203	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		CN4001	QGF1207C1-11	CONNECTOR	FRONT IN	
R8204	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		CN4101	QGB2027M5-28S	CONNECTOR	DIGITAL	
R8206	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		CN4102	QGB2027M5-20S	CONNECTOR	DIGI(1-20)	
R8211	NRSA63D-432X	MG RESISTOR	4.3kΩ 1/16W D		CN5101	QGF1207C1-19	CONNECTOR	REG	
R8212	NRSA63D-432X	MG RESISTOR	4.3kΩ 1/16W D		CN7301	QGF1207C1-07	CONNECTOR	S/RCA OUT	
R8213	NRSA63D-512X	MG RESISTOR	5.1kΩ 1/16W D		GN1	QNZ0136-001Z	EARTH PLATE		
R8214	NRSA63D-512X	MG RESISTOR	5.1kΩ 1/16W D		GN2	QNZ0136-001Z	EARTH PLATE		
R8215	NRSA63D-121X	MG RESISTOR	120Ω 1/16W D		GN5	QNZ0136-001Z	EARTH PLATE		
R8216	NRSA63D-121X	MG RESISTOR	120Ω 1/16W D		GN6	QNZ0136-001Z	EARTH PLATE		
R8217	NRSA63D-432X	MG RESISTOR	4.3kΩ 1/16W D		J4109	QNS0089-001	3.5 JACK	COMPU/SAT	
R8218	NRSA63D-432X	MG RESISTOR	4.3kΩ 1/16W D		J7301	QNZ0516-001	RGB CONNECTOR	AV1	
R8219	NRSA63D-512X	MG RESISTOR	5.1kΩ 1/16W D		J7302	QNZ0516-001	RGB CONNECTOR	AV2	
R8220	NRSA63D-512X	MG RESISTOR	5.1kΩ 1/16W D		J7309	QNN0635-002	PIN JACK	SIKISA	
R8221	NRSA63D-121X	MG RESISTOR	120Ω 1/16W D		J8501	GP1FP513TKBF	OPT TRANSMITTER		
R8222	NRSA63D-121X	MG RESISTOR	120Ω 1/16W D		K6701	NQR0200-003X	FERRITE BEADS		
R8223	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		K6702	NQR0200-003X	FERRITE BEADS		
R8224	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		K6703	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R8233	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		K6704	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R8234	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		K6705	NQR0200-003X	FERRITE BEADS		
R8241	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		K6706	NQR0200-003X	FERRITE BEADS		
R8242	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		K6707	NQR0129-003X	FERRITE BEADS		EF
R8244	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		K6708	NQR0200-003X	FERRITE BEADS		
R8249	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		K8001	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R8250	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		K8002	NQR0339-001X	FERRITE BEADS		
R8252	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		K8201	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R8301	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		K8401	NQR0339-001X	FERRITE BEADS		
R8302	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		K8501	NQR0227-004X	FERRITE BEADS		
R8303	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		TU6001	QAU0299-002	TUNER	LG SECAM	EF
R8304	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		TU6001	QAU0323-002	TUNER	LG PAL	E,EK
R8305	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		W1	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8306	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		W2	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8307	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		W3	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8308	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		W4	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8309	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		W5	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8310	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		W6	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8311	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		W7	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8312	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		W8	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8313	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		W9	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8314	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		W10	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8315	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		W11	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8316	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		W12	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8321	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		W13	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8322	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		W14	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8323	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		W15	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8324	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		W16	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8325	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		W17	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8326	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		W18	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8501	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J		W19	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R8502	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J						
R8503	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J						



△ Symbol No. Part No. Part Name Description Local

## Operation board

Block No. [2][7]

△ Symbol No.	Part No.	Part Name	Description	Local
W20	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W21	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W22	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W23	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W24	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W25	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W26	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W27	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W28	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W29	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W30	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W31	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W32	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W33	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W34	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W35	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W36	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W37	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W38	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W39	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W40	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W41	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W42	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W43	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W44	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W45	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W46	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W47	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W48	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W49	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W50	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W51	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W52	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W53	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W54	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W55	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W56	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W57	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
X3001	QAX0445-001	CRYSTAL	32.768kHz	E
X3001	QAX0444-001	CRYSTAL	32.768kHz	EF,EK
X3002	QAX0527-001	CRYSTAL	10.000000MHz	
X4001	QAX0576-001	CRYSTAL	4.433619MHz	
X6701	QAX0773-001Z	CRYSTAL	18.432000MHz	
HD1	PQ34949-1-1	FL HOLDER(L)	FOR DI7001	EF
HD2	LP21255-001A	FL HOLDER(R)	FOR DI7001	EF
OT1	PEME0946-04	SPACER	REG-MAIN(x3)	

△ Symbol No. Part No. Part Name Description Local

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10239-06F3	OPERATION BOARD ASSY		E
PW1	LPA10239-04G3	OPERATION BOARD ASSY		EF
PW1	LPA10239-05F3	OPERATION BOARD ASSY		EK
Q7103	DTA114ESA-T	DIGI TRANSISTOR	VIDEO LED	
Q7104	DTA114ESA-T	DIGI TRANSISTOR	DVD LED	
Q7105	DTA114ESA-T	DIGI TRANSISTOR	DVD REC LE	
Q7106	DTA114ESA-T	DIGI TRANSISTOR	HDD LED	
Q7107	DTA114ESA-T	DIGI TRANSISTOR	HDD REC LE	
D7112	1SS133-T2	SI DIODE		
D7112	or 1SS270A-T2	SI DIODE		
D7113	1SS133-T2	SI DIODE		
D7113	or 1SS270A-T2	SI DIODE		
D7114	1SS133-T2	SI DIODE		
D7114	or 1SS270A-T2	SI DIODE		
D7115	1SS133-T2	SI DIODE		
D7115	or 1SS270A-T2	SI DIODE		
D7123	SLR-343MC-T	LED	VIDEO LED	
D7124	SDPC3DC0	LED	DVD LED	
D7125	SLI-343URC3F	LED	DVD REC LE	
D7126	SDPB3DC0	LED	HDD LED	
D7127	SLI-343URC3F	LED	HDD REC LE	
C7150	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C7151	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C7153	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
R7106	QRE141J-181Y	C RESISTOR	180Ω 1/4W J	
R7108	QRE141J-681Y	C RESISTOR	680Ω 1/4W J	
R7110	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7112	QRE141J-471Y	C RESISTOR	470Ω 1/4W J	
R7114	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7151	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7152	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7153	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7154	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7155	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7156	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
CN7101	QGF1208F1-13	CONNECTOR	FFC/FPC (1-13)	
CN7102	QGF1208F1-11	CONNECTOR	FFC/FPC (1-11)	
J7001	QND0084-001	S JACK		
J7002	QNN0364-002	PIN JACK		
S7113	QSW0381-001Z	TACT SWITCH	DVD	
S7114	QSW0381-001Z	TACT SWITCH	HDD	
S7115	QSW0381-001Z	TACT SWITCH	REC	
S7132	QSW0381-001Z	TACT SWITCH	OPEN/CLOSE	
S7133	QSW0381-001Z	TACT SWITCH	STOP	
S7134	QSW0381-001Z	TACT SWITCH	PLAY	
S7135	QSW0381-001Z	TACT SWITCH	PAUSE	
W7151	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W7152	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W7153	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W7154	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	

## Switch display board

Block No. [2][8]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10239-06F2	SWITCH DISPLAY BOARD ASSY		E
PW1	LPA10239-04G2	SWITCH DISPLAY BOARD ASSY		EF
PW1	LPA10239-05F2	SWITCH DISPLAY BOARD ASSY		EK
IC7001	PT6315	IC		
IC7002	GP1UM281XKVF	IR DETECT UNIT		
IC7002	or PNA4652M00XB	IR DETECT UNIT	38kHz	
Q7001	2SC1740S/QRS/-T	TRANSISTOR	LED DRIVE	
Q7001	or KTC3199/YG/-T	TRANSISTOR	LED DRIVE	
D7001	1SS133-T2	SI DIODE		
D7001	or 1SS270A-T2	SI DIODE		
D7021	MTZJ9.1B-T2	Z DIODE		
D7042	1SS133-T2	SI DIODE		
D7042	or 1SS270A-T2	SI DIODE		
D7043	SDPB3DC0Z1/	LED	BLUE LIGHT	
C7001	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
C7002	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
C7003	QEKJ1HM-106Z	E CAPACITOR	10uF 50V M	
C7006	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C7007	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
C7008	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C7010	QCFB1HZ-473Y	C CAPACITOR	0.047uF 50V Z	
C7011	QCFB1HZ-473Y	C CAPACITOR	0.047uF 50V Z	
C7056	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
R7001	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R7002	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R7003	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R7005	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R7006	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R7007	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R7009	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7010	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R7013	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R7014	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R7015	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R7044	QRE141J-182Y	C RESISTOR	1.8kΩ 1/4W J	
R7045	QRE141J-470Y	C RESISTOR	47Ω 1/4W J	
R7047	QRE141J-182Y	C RESISTOR	1.8kΩ 1/4W J	
CN7001	QGF1207C1-18	CONNECTOR	FFC/FPC (1-18)	
DI7001	QLF0121-001	FL TUBE		
S7001	QSW0381-001Z	TACT SWITCH	OPERATION	
HD1	PQ34949-1-1	FL HOLDER(L)	FOR DI7001	E,EK
HD2	LP21255-001A	FL HOLDER(R)	FOR DI7001	E,EK

## S/RCA Out board

Block No. [2][9]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10239-06F5	S/RCA OUT BOARD ASSY		E
PW1	LPA10239-04G5	S/RCA OUT BOARD ASSY		EF
PW1	LPA10239-05F5	S/RCA OUT BOARD ASSY		EK
C7326	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7365	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C7367	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
R7327	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R7328	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R7365	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7366	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
CN7312	QGF1208F1-07	CONNECTOR	FFC/FPC (1-7)	
J7307	QNN0631-001	PIN JACK		
J7308	QND0009-001	S JACK		

## Jack board

Block No. [3][6]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10239-06F4	JACK BOARD ASSY		E
PW1	LPA10239-04G4	JACK BOARD ASSY		EF
PW1	LPA10239-05F4	JACK BOARD ASSY		EK
CN4104	QGB2027M1-10S	CONNECTOR	DIGITAL	
J4112	QNZ0575-001	D CONNECTOR	F-DV	
OT1	QZW0021-001	PC SUPPORT		

## Digital board

Block No. [5][0]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10247-03G	DIGITAL BOARD ASSY		
IC1001	JCP8059-2	IC		
IC1002	HY57V161610ET-8	IC		
IC1002	or K4S161622H-UC60	IC		
IC1002	or HY57V161610ETP7	IC		
IC1002	or HY57V161610ET-8	IC		
IC1201	LPN0877-001A	IC(FLASH)	(SERVICE)	
IC1202	SN74LVC373APW-X	IC(DIGITAL)		
IC1203	SN74LVC373APW-X	IC(DIGITAL)		
IC1401	DMN8652-B0L	IC(DIGITAL)		
IC1404	SN74HCT08APW-X	IC		
IC1405	SN74LV08APW-X	IC		
IC1601	HY5DU561622DT-J	IC		
IC1602	HY5DU561622DT-J	IC		
IC1603	HY5DU561622DT-J	IC		
IC1604	HY5DU561622DT-J	IC		
IC1701	PQ015Y201Z-X	IC		
IC1801	TSB41AB2PAP	IC		
Q1002	2SA1037AK/QR/-X	TRANSISTOR		
Q1002	or 2SA1530A/QR/-X	TRANSISTOR		
Q1002	or 2SB709A/QR/-X	TRANSISTOR		
Q1003	2SA1037AK/QR/-X	TRANSISTOR		
Q1003	or 2SA1530A/QR/-X	TRANSISTOR		
Q1003	or 2SB709A/QR/-X	TRANSISTOR		
Q1004	2SA1037AK/QR/-X	TRANSISTOR		
Q1004	or 2SA1530A/QR/-X	TRANSISTOR		
Q1004	or 2SB709A/QR/-X	TRANSISTOR		
Q1005	2SA1037AK/QR/-X	TRANSISTOR		
Q1005	or 2SA1530A/QR/-X	TRANSISTOR		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
Q1005	or 2SB709A/QR/-X	TRANSISTOR			C1095	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
Q1006	2SA1037AK/QR/-X	TRANSISTOR			C1096	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1006	or 2SA1530A/QR/-X	TRANSISTOR			C1097	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1006	or 2SB709A/QR/-X	TRANSISTOR			C1098	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1007	2SA1037AK/QR/-X	TRANSISTOR			C1203	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1007	or 2SA1530A/QR/-X	TRANSISTOR			C1204	NEHMOJM-476X	E CAPACITOR	47uF 6.3V M	
Q1007	or 2SB709A/QR/-X	TRANSISTOR			C1206	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1008	UMZ1N-W	PAIR TRANSISTOR			C1207	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1008	or BC847PN-X	PAIR TRANSISTOR			C1401	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1008	or BC846PN-X	PAIR TRANSISTOR			C1402	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1009	2SC2412K/QRS/-X	TRANSISTOR			C1404	NEHMOJM-476X	E CAPACITOR	47uF 6.3V M	
Q1009	or 2SC3928A/QRS/-X	TRANSISTOR			C1405	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1009	or 2SD601A/QRS/-X	TRANSISTOR			C1406	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1010	2SC2412K/QRS/-X	TRANSISTOR			C1408	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1010	or 2SC3928A/QRS/-X	TRANSISTOR			C1409	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1010	or 2SD601A/QRS/-X	TRANSISTOR			C1411	NEHMOJM-107X	E CAPACITOR	100uF 6.3V M	
Q1011	2SC2412K/QRS/-X	TRANSISTOR			C1412	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q1011	or 2SC3928A/QRS/-X	TRANSISTOR			C1413	NEHMOJM-476X	E CAPACITOR	47uF 6.3V M	
Q1011	or 2SD601A/QRS/-X	TRANSISTOR			C1414	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D1001	1SS355-X	SI DIODE			C1416	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D1001	or MA111-X	SI DIODE			C1417	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D1002	1SS355-X	SI DIODE			C1418	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D1002	or MA111-X	SI DIODE			C1420	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
D1401	1SS355-X	SI DIODE			C1421	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D1401	or MA111-X	SI DIODE			C1422	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D1402	1SS355-X	SI DIODE			C1423	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D1402	or MA111-X	SI DIODE			C1424	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D1403	1SS355-X	SI DIODE			C1425	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D1403	or MA111-X	SI DIODE			C1427	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1001	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M		C1428	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1002	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M		C1429	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1003	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1430	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1004	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1435	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1005	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1436	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1007	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1437	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1008	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1438	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1009	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1439	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1010	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1442	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1012	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1444	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1014	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1445	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1015	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1446	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1017	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1447	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1018	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1448	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1019	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C1450	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1020	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1452	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1026	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1453	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1030	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1455	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1032	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1457	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1033	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1458	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1034	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1461	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1035	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1463	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1036	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1464	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1038	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1465	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1039	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1466	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1041	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M		C1467	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1042	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1468	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1043	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1469	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1044	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1470	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1045	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1471	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1046	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1472	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1047	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1473	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1051	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M		C1474	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1052	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1475	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1053	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C1601	NEZ0019-157X	OS E CAPACITOR	150uF 4V M	
C1060	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1602	NEZ0019-157X	OS E CAPACITOR	150uF 4V M	
C1062	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C1605	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1065	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M		C1606	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1077	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1607	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1080	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1608	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1081	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1609	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1082	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1610	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1083	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1611	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1090	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1612	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1091	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1613	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1092	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1614	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1093	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1615	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1094	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1616	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
					C1617	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C1618	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1039	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C1619	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1040	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D	
C1620	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1041	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1621	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1042	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C1622	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1043	NRSA63D-151X	MG RESISTOR	150Ω 1/16W D	
C1623	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1044	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1624	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1045	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C1625	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1046	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
C1626	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1047	NRSA63D-201X	MG RESISTOR	200Ω 1/16W D	
C1627	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1048	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1628	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1049	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C1629	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1050	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
C1630	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1051	NRSA63D-271X	MG RESISTOR	270Ω 1/16W D	
C1631	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1052	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1632	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1053	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C1633	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1054	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
C1634	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1055	NRSA63D-181X	MG RESISTOR	180Ω 1/16W D	
C1635	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1056	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C1636	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1057	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
C1642	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1059	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C1644	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1060	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
C1646	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1061	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
C1650	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1065	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
C1652	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1066	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C1654	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1067	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
C1656	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1068	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
C1658	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1069	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
C1660	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1070	NRSA63D-122X	MG RESISTOR	1.2kΩ 1/16W D	
C1662	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1071	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
C1701	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1072	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1702	NEHM0JM-107X	E CAPACITOR	100uF 6.3V M		R1217	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C1703	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1218	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C1704	NEHM0JM-107X	E CAPACITOR	100uF 6.3V M		R1219	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C1706	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1220	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C1707	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1221	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C1708	NBE20JM-476X	TA E CAPACITOR	47uF 6.3V M		R1222	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1710	NBE20JM-476X	TA E CAPACITOR	47uF 6.3V M		R1225	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C1801	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		R1226	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C1802	NDC31HJ-271X	C CAPACITOR	270pF 50V J		R1229	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C1803	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M		R1230	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C1804	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1231	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C1805	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1401	NRSA63F-1181X	MG RESISTOR	1.18kΩ 1/16W F	
C1806	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M		R1402	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1807	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1408	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C1808	NDC31HJ-120X	C CAPACITOR	12pF 50V J		R1409	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C1809	NDC31HJ-120X	C CAPACITOR	12pF 50V J		R1410	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C1811	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1411	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C1812	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1412	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1001	NRSA63D-221X	MG RESISTOR	220Ω 1/16W D		R1413	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R1414	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R1415	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R1416	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1005	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R1417	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R1419	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1007	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R1420	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1009	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R1427	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1012	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R1428	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1013	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		R1429	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1014	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		R1430	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1015	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		R1431	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1017	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R1434	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1018	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R1435	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1019	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R1436	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1021	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D		R1437	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1022	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D		R1438	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1024	NRSA63D-272X	MG RESISTOR	2.7kΩ 1/16W D		R1439	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1027	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J		R1440	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1028	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J		R1441	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1029	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R1443	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1030	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R1444	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1031	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R1445	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1032	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R1446	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1033	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R1447	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1035	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R1448	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1036	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R1449	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1037	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D		R1450	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1038	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R1451	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
					R1452	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	



△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
RA1622	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2105	NQR0129-002X	FERRITE BEADS		
RA1623	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2106	NQR0129-002X	FERRITE BEADS		
RA1624	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2107	NQR0129-002X	FERRITE BEADS		
RA1625	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		K2108	NQR0129-002X	FERRITE BEADS		
RA1626	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		K2109	NQR0129-002X	FERRITE BEADS		
RA1627	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		K2110	NQR0129-002X	FERRITE BEADS		
RA1628	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		K2111	NQR0129-002X	FERRITE BEADS		
RA1629	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2112	NQR0129-002X	FERRITE BEADS		
RA1630	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2113	NQR0129-002X	FERRITE BEADS		
RA1631	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2114	NQR0129-002X	FERRITE BEADS		
RA1632	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2115	NQR0129-002X	FERRITE BEADS		
RA1801	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4		K2116	NQR0129-002X	FERRITE BEADS		
RA1802	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4		K2117	NQR0129-002X	FERRITE BEADS		
RA2101	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4		K2118	NQR0129-002X	FERRITE BEADS		
RA2102	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4		K2119	NQR0129-002X	FERRITE BEADS		
RA2103	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4		K2120	NQR0129-002X	FERRITE BEADS		
RA2104	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4		K2121	NQR0129-002X	FERRITE BEADS		
RA2208	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4		K2201	NQR0129-002X	FERRITE BEADS		
RA2209	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4		K2202	NQR0129-002X	FERRITE BEADS		
RA2210	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4		K2203	NQR0129-002X	FERRITE BEADS		
RA2211	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4		K2204	NQR0129-002X	FERRITE BEADS		
L1004	NQL144K-100X	P COIL	10uH K		K2205	NQR0129-002X	FERRITE BEADS		
L1801	NQL144K-100X	P COIL	10uH K		K2206	NQR0129-002X	FERRITE BEADS		
T1801	NQR0444-001X	CHOKO COIL			K2207	NQR0129-002X	FERRITE BEADS		
B1001	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		K2208	NQR0129-002X	FERRITE BEADS		
B1007	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		K2209	NQR0129-002X	FERRITE BEADS		
B1008	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		K2210	NQR0129-002X	FERRITE BEADS		
B1202	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		K2211	NQR0129-002X	FERRITE BEADS		
B1405	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		K2212	NQR0129-002X	FERRITE BEADS		
B1802	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		K2213	NQR0129-002X	FERRITE BEADS		
CN1001	QGB2027L5-28X	CONNECTOR	28PIN STR		K2214	NQR0129-002X	FERRITE BEADS		
CN1002	QGB2027L5-20X	CONNECTOR	20PIN STR		K2215	NQR0129-002X	FERRITE BEADS		
CN1003	QGA2001F6-06X	CONNECTOR	W-B (1-6)		K2216	NQR0129-002X	FERRITE BEADS		
CN1402	QGA2001C6-04X	CONNECTOR	W-B (1-4)		K2217	NQR0129-002X	FERRITE BEADS		
CN1403	QGF1016C2-04W	CONNECTOR	FFC/FPC (1-4)		K2218	NQR0129-002X	FERRITE BEADS		
CN1801	QGB2027L1-10X	CONNECTOR	B-B (1-10)		K2219	NQR0129-002X	FERRITE BEADS		
CN2101	QGF0539C1-40W	CONNECTOR	HD		K2220	NQR0129-002X	FERRITE BEADS		
CN2201	QGF0539C1-40W	CONNECTOR	F/T F_END		K2221	NQR0129-002X	FERRITE BEADS		
K1001	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		LC1401	NQR0512-008X	EMI FILTER		
K1002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		LC1402	NQR0512-008X	EMI FILTER		
K1003	NQR0129-002X	FERRITE BEADS			LC1403	NQR0512-008X	EMI FILTER		
K1004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		X1401	NAX0580-001X	CXO	27.0000MHz	
K1005	NQR0129-002X	FERRITE BEADS			X1801	NAX0551-001X	CRYSTAL	24.576MHz	
K1006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		OT1	LP40769-001A	SPACER	FOR IC1401	
K1007	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		SD1	LP21279-001A	SHIELD CASE		
K1008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
K1009	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
K1010	NQR0129-002X	FERRITE BEADS							
K1011	NQR0129-002X	FERRITE BEADS							
K1012	NQR0129-002X	FERRITE BEADS							
K1013	NQR0129-002X	FERRITE BEADS							
K1014	NQR0129-002X	FERRITE BEADS							
K1015	NQR0129-002X	FERRITE BEADS							
K1016	NQR0129-002X	FERRITE BEADS							
K1017	NQR0129-002X	FERRITE BEADS							
K1018	NQR0129-002X	FERRITE BEADS							
K1019	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						
K1020	NQR0129-002X	FERRITE BEADS							
K1021	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
K1022	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
K1023	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
K1201	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
K1401	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						
K1402	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						
K1403	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						
K1404	NQR0339-001X	FERRITE BEADS							
K1406	NQR0339-001X	FERRITE BEADS							
K1407	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						
K1408	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						
K1701	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						
K1702	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						
K1801	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J						
K2101	NQR0129-002X	FERRITE BEADS							
K2102	NQR0129-002X	FERRITE BEADS							
K2103	NQR0129-002X	FERRITE BEADS							
K2104	NQR0129-002X	FERRITE BEADS							

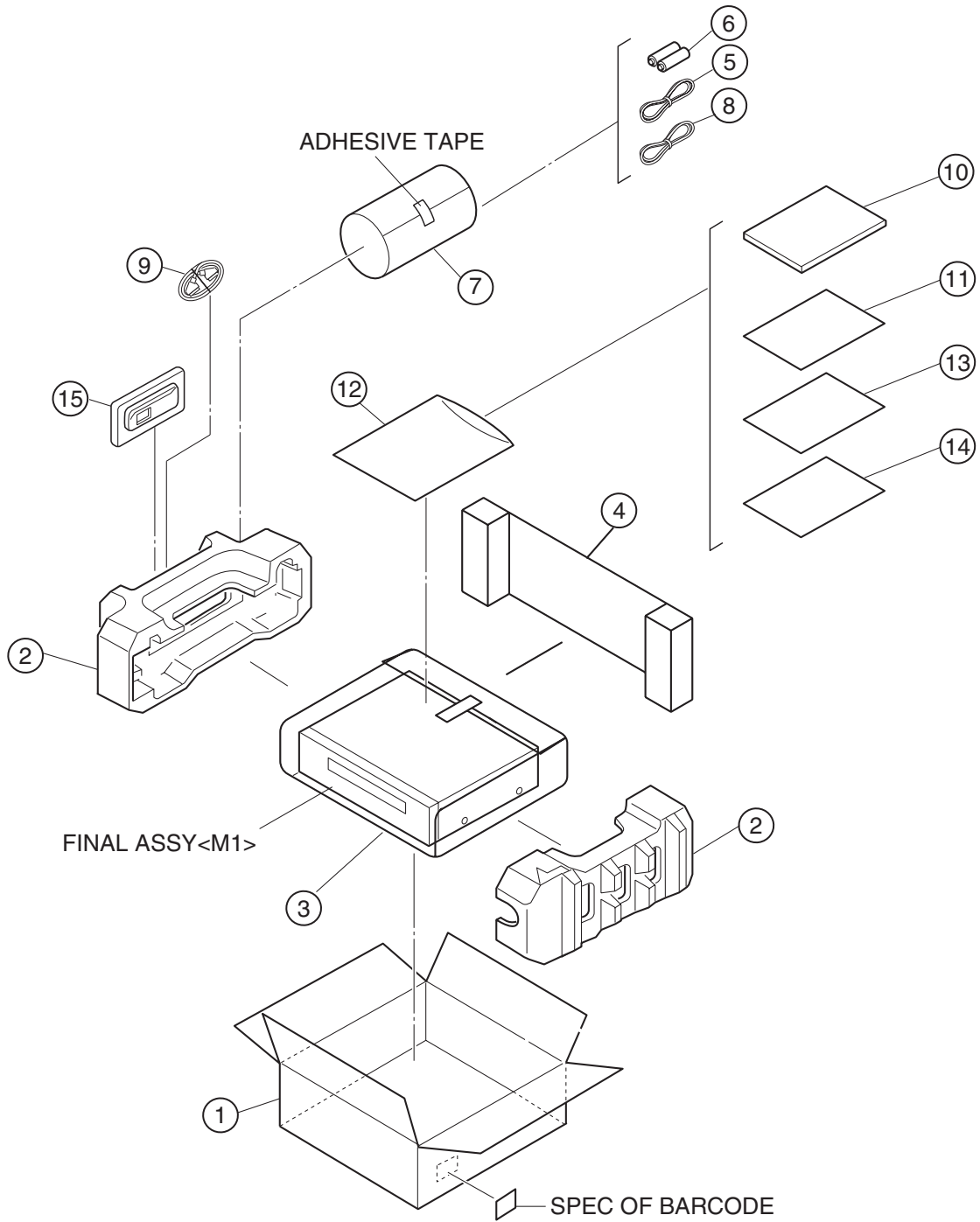
## MAIN SUB board

Block No. [9][9]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	YB20835	MAIN SUB CM ASSY		
K0110	NQR0129-002X	FERRITE BEADS		
K0120	NQR0129-002X	FERRITE BEADS		
K0130	NQR0129-002X	FERRITE BEADS		

# Packing materials and accessories parts list

Block No.M2MM



# Packing and accessories

Block No. [M][2][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
1	LP31384-038A	PACKING CASE		E
1	LP31384-040A	PACKING CASE		EF
1	LP31384-039A	PACKING CASE		EK
2	LP31387-002A	CUSHION ASSY		
3	PQM30021-93	POLY BAG		
4	LP31399-002A	SHEET ASSY		EK
5	QAM0525-002	RF CABLE		
6	-----	BATTERY	R6TYPE(x2)	
7	QPC02202230P	POLY BAG	CABLE	
8	QAL0517-005	LED CABLE ASSY		
9	QAM0502-002	PERI CABLE		
△ 10	LPT1028-001A	INST.BOOK	GERMANY	E
△ 10	LPT1028-002A	INST.BOOK	DUTCH	E
△ 10	LPT1028-003A	INST.BOOK	SPANISH	E
△ 10	LPT1028-004A	INST.BOOK	ITALIAN	E
△ 10	LPT1028-005A	INST.BOOK	DANISH	E
△ 10	LPT1028-006A	INST.BOOK	FINNISH	E
△ 10	LPT1028-007A	INST.BOOK	SWEDISH	E
△ 10	LPT1028-008A	INST.BOOK	NORWEGIAN	E
△ 10	LPT1028-009A	INST.BOOK	PORTUGUESE	E
△ 10	LPT1028-010A	INST.BOOK	CZECH	E
△ 10	LPT1028-011A	INST.BOOK	POLISH	E
△ 10	LPT1028-012A	INST.BOOK	HUNGARIAN	E
△ 10	LPT1030-001A	INST.BOOK	FRENCH	EF
△ 10	LPT1029-001A	INST.BOOK	ENGLISH	EK
11	LPT1012-001A	SHEET(LOADING)		
12	QPC02503530P	POLY BAG	INST	
13	LYT0194-001B	Q.CARD		EK
14	-----	WARRANTY CARD	BT-54026-1	
15	RM-SDR011E	REMOCON UNIT		