

# PHILIPS

## LCD TV chassis PL10.0

# Service Manual


### Contents

19"	19PFL3505D/F7	(Serial No. : DS1A*****)
19"	19PFL3505D/F7	(Serial No. : DS2A*****)
19"	19PFL3505D/F7	(Serial No. : DS3A*****)
19"	19PFL3505D/F7	(Serial No. : DS4A*****)
19"	19PFL3505D/F7	(Serial No. : XA1A*****)

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## **IMPORTANT SAFETY NOTICE**

**Proper service and repair is important to the safe, reliable operation of all P&F Equipment. The service procedures recommended by P&F and described in this service manual are effective methods of performing service operations. Some of these service special tools should be used when and as recommended.**

**It is important to note that this service manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It also is important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. P&F could not possibly know, evaluate and advice the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, P&F has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by P&F must first use all precautions thoroughly so that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.**

<p><b>The LCD panel is manufactured to provide many years of useful life. Occasionally a few non active pixels may appear as a tiny spec of color. This is not to be considered a defect in the LCD screen.</b></p>
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# SPECIFICATIONS

## < TUNER / NTSC >

ANT. Input ----- 75  $\Omega$  Unbal., F type

Description	Condition	Unit	Nominal	Limit
1. AFT Pull-In Range	---	MHz	$\pm 2.3$	$\pm 2.1$
2. Synchronizing Sens.	TV.ch.4	dB $\mu$	18	20
	CA.ch.31	dB $\mu$	18	20
	CA.ch.87	dB $\mu$	18	23

## < TUNER / ATSC >

Description	Condition	Unit	Nominal	Limit
1. Received Freq. Range (-28dBm)	---	kHz	---	$\pm 100$
2. ATSC Dynamic Range (min / max)	ch.4	dBm	---	-76/0
	ch.10	dBm	---	-76/0
	ch.41	dBm	---	-76/+4

## < LCD PANEL >

Description	Condition	Unit	Nominal	Limit
1. Native Pixel Resolution	Horizontal	pixels	1366	---
	Vertical	pixels	768	---
2. Brightness (w / filter)	---	cd/m <sup>2</sup>	250	---
3. Viewing Angle	Horizontal	°	-85 to 85	---
	Vertical	°	-80 to 80	---

## < VIDEO >

Description	Condition	Unit	Nominal	Limit
1. Over Scan	Horizontal	%	5	5 $\pm$ 5
	Vertical	%	5	5 $\pm$ 5
2. Color Temperature	---	°K	12000	---
	x	---	0.272	$\pm 3\%$
	y	---	0.278	$\pm 3\%$
3. Resolution (composite video)	Horizontal	line	400	---
	Vertical	line	350	---

## < AUDIO >

All items are measured across 8  $\Omega$  load at speaker output terminal with L.P.F.

Description	Condition	Unit	Nominal	Limit
1. Audio Output Vol. Max (ATSC 0 dBfs)	Lch/Rch	W	3.0/3.0	2.8/2.8
2. Audio Distortion (NTSC)	500mW: Lch/Rch	%	0.5/0.5	2.0/2.0
3. Audio Freq. Response (NTSC)	-6dB: Lch	Hz	70 to 10 k	---
	-6dB: Rch	Hz	70 to 10 k	---



# IMPORTANT SAFETY PRECAUTIONS

Prior to shipment from the factory, our products are strictly inspected for recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

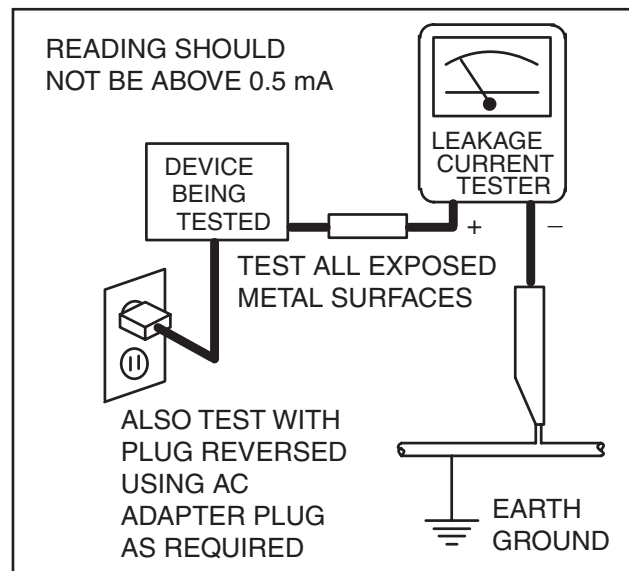
## Safety Precautions for LCD TV Circuit

1. **Before returning an instrument to the customer**, always make a safety check of the entire instrument, including, but not limited to, the following items:

- a. Be sure that no built-in protective devices are defective and have been defeated during servicing. (1) Protective shields are provided on this chassis to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience. (2) When reinstalling the chassis and/or other assembly in the cabinet, be sure to put back in place all protective devices, including but not limited to, nonmetallic control knobs, insulating fishpapers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. **Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning. Servicers who defeat safety features or fail to perform safety checks may be liable for any resulting damage.**
- b. Be sure that there are no cabinet openings through which an adult or child might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, (1) spacing between the Liquid Crystal Panel and the cabinet mask, (2) excessively wide cabinet ventilation slots, and (3) an improperly fitted and/or incorrectly secured cabinet back cover.


- c. **Antenna Cold Check** - With the instrument AC plug removed from any AC source, connect an electrical jumper across the two AC plug prongs. Place the instrument AC switch in the on position. Connect one lead of an ohmmeter to the AC plug prongs tied together and touch the other ohmmeter lead in turn to each tuner antenna input exposed terminal screw and, if applicable, to the coaxial connector. If the measured resistance is less than 1.0 megohm or greater than 5.2 megohm, an abnormality exists that must be corrected before the instrument is returned to the customer. Repeat this test with the instrument AC switch in the off position.

- d. **Leakage Current Hot Check** - With the instrument completely reassembled, plug the AC line cord directly into a 120 V AC outlet. (Do not use an isolation transformer during this test.) Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI) C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) 1410, (50.7). With the instrument AC switch first in the on position and then in the off position, measure from a known earth ground (metal water pipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle brackets, metal cabinet, screw heads, metallic overlays, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5 milli-ampere. Reverse the instrument power cord plug in the outlet and repeat the test.



**ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE INSTRUMENT TO THE CUSTOMER OR BEFORE CONNECTING THE ANTENNA OR ACCESSORIES.**

2. Read and comply with all caution and safety-related notes on or inside the receiver cabinet, on the receiver chassis, or on the Liquid Crystal Panel.

3. **Design Alteration Warning** - Do not alter or add to the mechanical or electrical design of this TV receiver. Design alterations and additions, including, but not limited to circuit modifications and the addition of items such as auxiliary audio and/or video output connections, might alter the safety characteristics of this receiver and create a hazard to the user. Any design alterations or additions will void the manufacturer's warranty and may make you, the servicer, responsible for personal injury or property damage resulting therefrom.
4. **Hot Chassis Warning** -
  - a. Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord and maybe safety-serviced without an isolation transformer only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC power source. To confirm that the AC power plug is inserted correctly, with an AC voltmeter, measure between the chassis and a known earth ground. If a voltage reading in excess of 1.0 V is obtained, remove and reinsert the AC power plug in the opposite polarity and again measure the voltage potential between the chassis and a known earth ground.
  - b. Some TV receiver chassis normally have 85V AC(RMS) between chassis and earth ground regardless of the AC plug polarity. This chassis can be safety-serviced only with an isolation transformer inserted in the power line between the receiver and the AC power source, for both personnel and test equipment protection.
  - c. Some TV receiver chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulation material that must not be defeated or altered.
5. Observe original lead dress. Take extra care to assure correct lead dress in the following areas: a. near sharp edges, b. near thermally hot parts-be sure that leads and components do not touch thermally hot parts, c. the AC supply, d. high voltage, and, e. antenna wiring. Always inspect in all areas for pinched, out of place, or frayed wiring. Check AC power cord for damage.
6. Components, parts, and/or wiring that appear to have overheated or are otherwise damaged should be replaced with components, parts, or wiring that meet original specifications. Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential safety hazard.
7. **Product Safety Notice** - Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by a  on schematics and in parts lists. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire, and/or other hazards. The product's safety is under review continuously and new instructions are issued whenever appropriate. Prior to shipment from the factory, our products are strictly inspected to confirm they comply with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

## Precautions during Servicing

- A.** Parts identified by the **▲** symbol are critical for safety.  
Replace only with part number specified.
- B.** In addition to safety, other parts and assemblies are specified for conformance with regulations applying to spurious radiation. These must also be replaced only with specified replacements.  
Examples: RF converters, RF cables, noise blocking capacitors, and noise blocking filters, etc.
- C.** Use specified internal wiring. Note especially:
  - 1) Wires covered with PVC tubing
  - 2) Double insulated wires
  - 3) High voltage leads
- D.** Use specified insulating materials for hazardous live parts. Note especially:
  - 1) Insulation Tape
  - 2) PVC tubing
  - 3) Spacers
  - 4) Insulators for transistors.
- E.** When replacing AC primary side components (transformers, power cord, etc.), wrap ends of wires securely about the terminals before soldering.
- F.** Observe that the wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.)
- G.** Check that replaced wires do not contact sharp edged or pointed parts.
- H.** When a power cord has been replaced, check that 11~13 lb (5~6 kg) of force in any direction will not loosen it.
- I.** Also check areas surrounding repaired locations.
- J.** Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.
- K.** When connecting or disconnecting the internal connectors, first, disconnect the AC plug from the AC supply outlet.
- L.** When installing parts or assembling the cabinet parts, be sure to use the proper screws and tighten certainly.

## Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

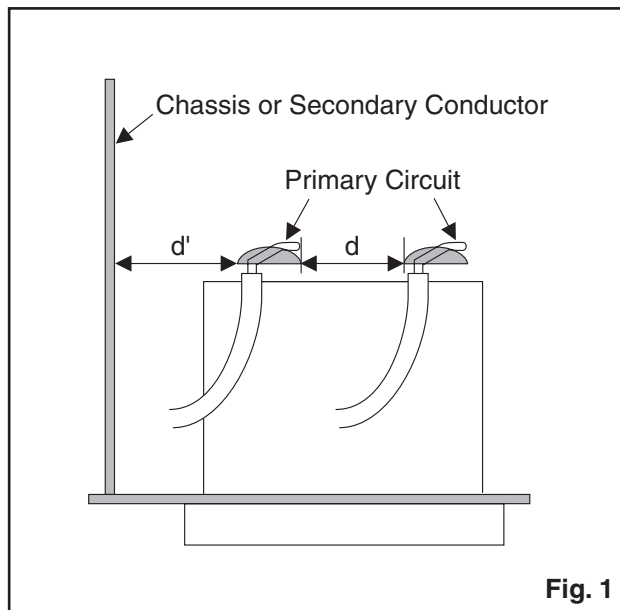
### 1. Clearance Distance

When replacing primary circuit components, confirm specified clearance distance (d) and (d') between soldered terminals, and between terminals and surrounding metallic parts. (See Fig. 1)

**Table 1: Ratings for selected area**

AC Line Voltage	Region	Clearance Distance (d), (d')
110 to 130 V	U.S.A. or Canada	$\geq 3.2$ mm (0.126 inches)

**Note:** This table is unofficial and for reference only. Be sure to confirm the precise values.



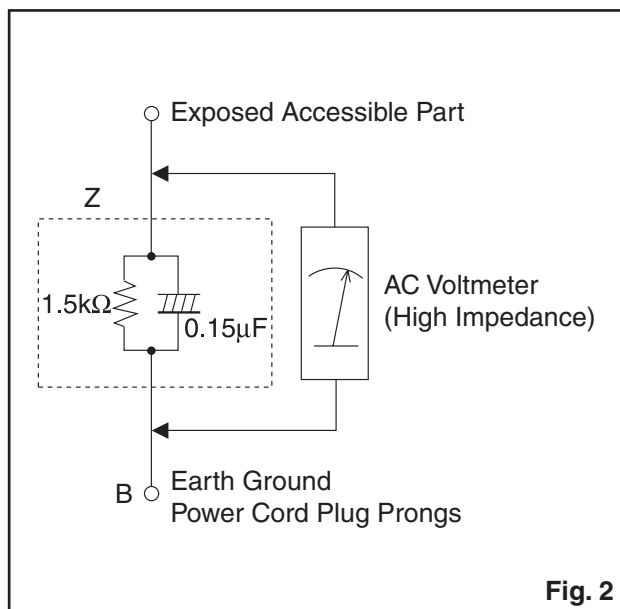
**Fig. 1**

### 2. Leakage Current Test

Confirm the specified (or lower) leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.) is lower than or equal to the specified value in the table below.

#### Measuring Method: (Power ON)

Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See Fig. 2 and following table.



**Fig. 2**

**Table 2: Leakage current ratings for selected areas**

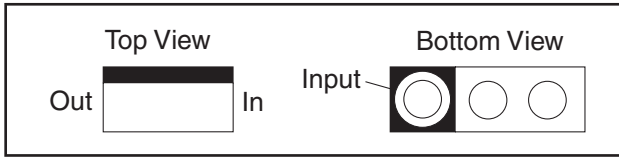
AC Line Voltage	Region	Load Z	Leakage Current (i)	Earth Ground (B) to:
110 to 130 V	U.S.A. or Canada	0.15 $\mu$ F CAP. & 1.5 kΩ RES. Connected in parallel	$i \leq 0.5$ mA rms	Exposed accessible parts

**Note:** This table is unofficial and for reference only. Be sure to confirm the precise values.

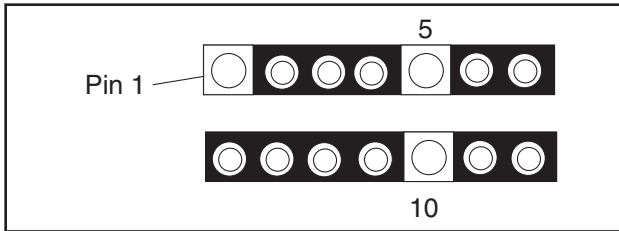
# STANDARD NOTES FOR SERVICING

## Circuit Board Indications

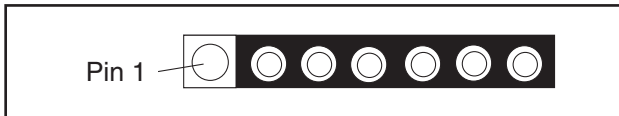
1. The output pin of the 3 pin Regulator ICs is indicated as shown.



2. For other ICs, pin 1 and every fifth pin are indicated as shown.

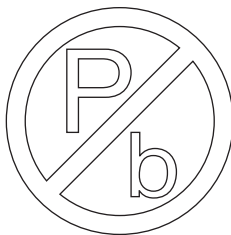


3. The 1st pin of every male connector is indicated as shown.



## Pb (Lead) Free Solder

**Pb free mark will be found on PCBs which use Pb free solder. (Refer to figure.) For PCBs with Pb free mark, be sure to use Pb free solder. For PCBs without Pb free mark, use standard solder.**



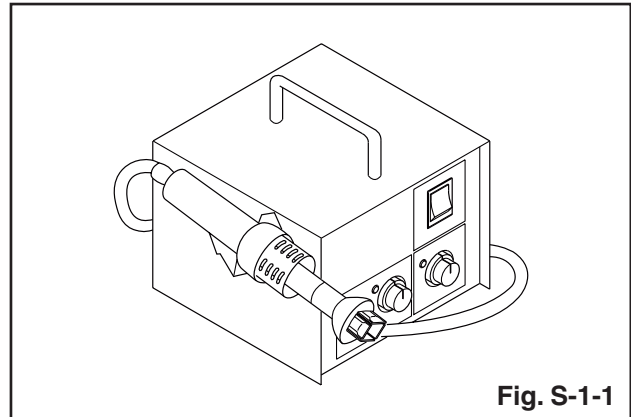
Pb free mark

## How to Remove / Install Flat Pack-IC

### 1. Removal

**With Hot-Air Flat Pack-IC Desoldering Machine:**

1. Prepare the hot-air flat pack-IC desoldering machine, then apply hot air to the Flat Pack-IC (about 5 to 6 seconds). (Fig. S-1-1)

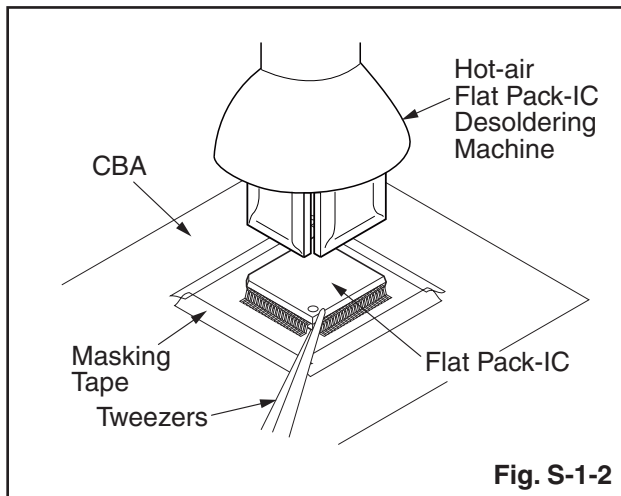


2. Remove the flat pack-IC with tweezers while applying the hot air.
3. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
4. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

### CAUTION:

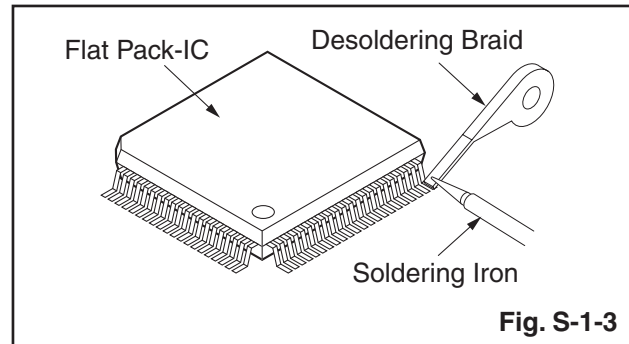
1. The Flat Pack-IC shape may differ by models. Use an appropriate hot-air flat pack-IC desoldering machine, whose shape matches that of the Flat Pack-IC.
2. Do not supply hot air to the chip parts around the flat pack-IC for over 6 seconds because damage to the chip parts may occur. Put masking tape around the flat pack-IC to protect other parts from damage. (Fig. S-1-2)

3. The flat pack-IC on the CBA is affixed with glue, so be careful not to break or damage the foil of each pin or the solder lands under the IC when removing it.

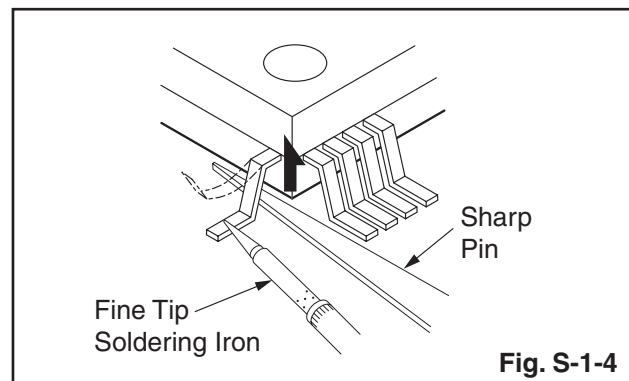


#### With Soldering Iron:

1. Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)



2. Lift each lead of the flat pack-IC upward one by one, using a sharp pin or wire to which solder will not adhere (iron wire). When heating the pins, use a fine tip soldering iron or a hot air desoldering machine. (Fig. S-1-4)

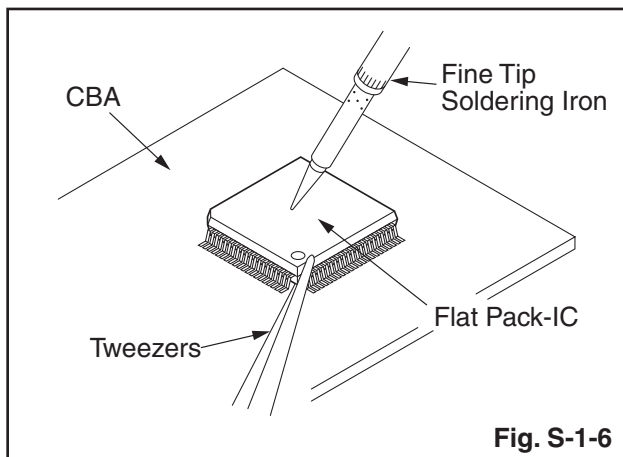
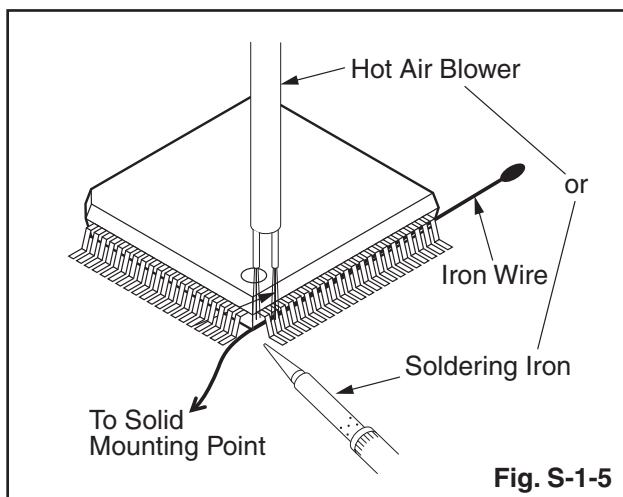


3. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
4. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

### With Iron Wire:

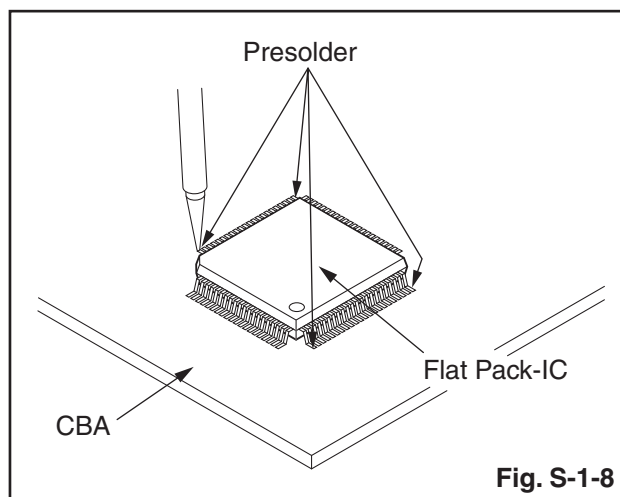
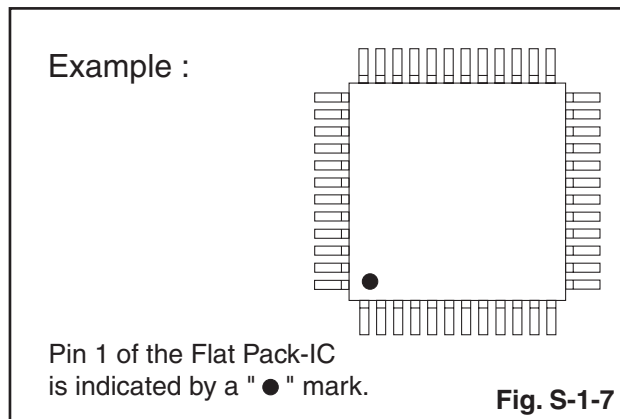
1. Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)
2. Affix the wire to a workbench or solid mounting point, as shown in Fig. S-1-5.
3. While heating the pins using a fine tip soldering iron or hot air blower, pull up the wire as the solder melts so as to lift the IC leads from the CBA contact pads as shown in Fig. S-1-5.
4. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
5. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

**Note:** When using a soldering iron, care must be taken to ensure that the flat pack-IC is not being held by glue. When the flat pack-IC is removed from the CBA, handle it gently because it may be damaged if force is applied.



## 2. Installation

1. Using desoldering braid, remove the solder from the foil of each pin of the flat pack-IC on the CBA so you can install a replacement flat pack-IC more easily.
2. The "●" mark on the flat pack-IC indicates pin 1. (See Fig. S-1-7.) Be sure this mark matches the pin 1 on the PCB when positioning for installation. Then presolder the four corners of the flat pack-IC. (See Fig. S-1-8.)
3. Solder all pins of the flat pack-IC. Be sure that none of the pins have solder bridges.



# Instructions for Handling Semi-conductors

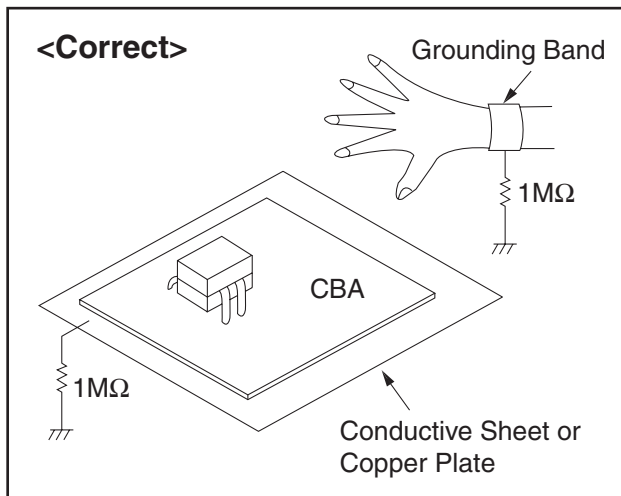
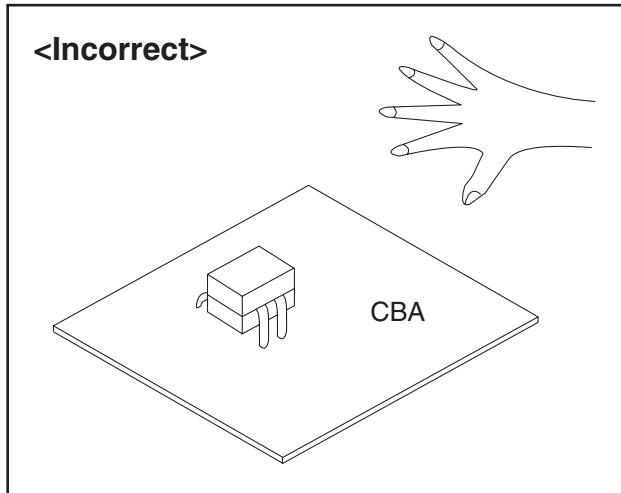
Electrostatic breakdown of the semi-conductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

## 1. Ground for Human Body

Be sure to wear a grounding band ( $1\text{ M}\Omega$ ) that is properly grounded to remove any static electricity that may be charged on the body.

## 2. Ground for Workbench

Be sure to place a conductive sheet or copper plate with proper grounding ( $1\text{ M}\Omega$ ) on the workbench or other surface, where the semi-conductors are to be placed. Because the static electricity charge on clothing will not escape through the body grounding band, be careful to avoid contacting semi-conductors with your clothing.

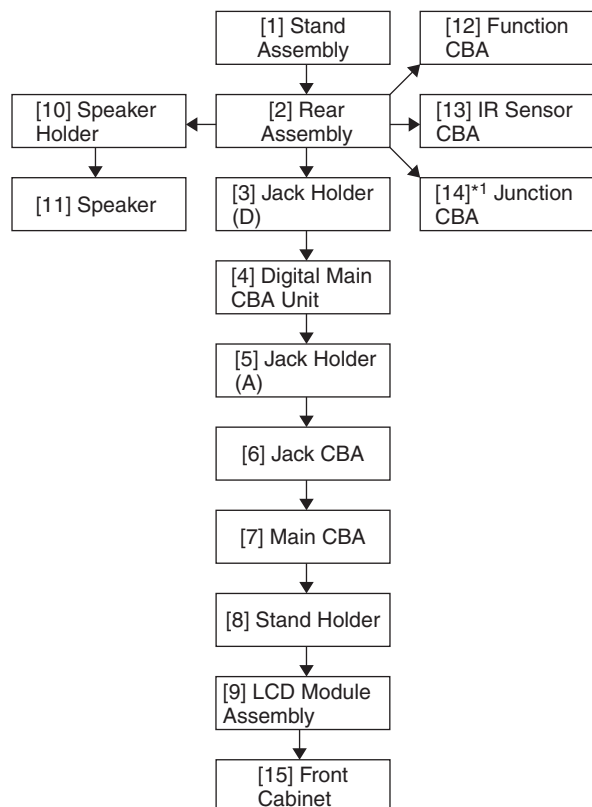




# CABINET DISASSEMBLY INSTRUCTIONS

## 1. Disassembly Flowchart

This flowchart indicates the disassembly steps for the cabinet parts and the CBA in order to gain access to items to be serviced. When reassembling, follow the steps in reverse order. Bend, route and dress the cables as they were.



## 2. Disassembly Method

Step/ Loc. No.	Part	Fig. No.	Removal	Note
[1]	Stand Assembly	D1	4(S-1)	---
[2]	Rear Assembly	D1	9(S-2), (S-3)	---
[3]	Jack Holder(D)	D2	(S-4)	---
[4]	Digital Main CBA Unit	D2 D3	4(S-5), 4(S-6), 2(H-1), CN3701, CN3702, CN3902, Shield Box	---
[5]	Jack Holder(A)	D2	(S-7)	---
[6]	Jack CBA	D2 D3	4(S-8), CN701, CN871	---

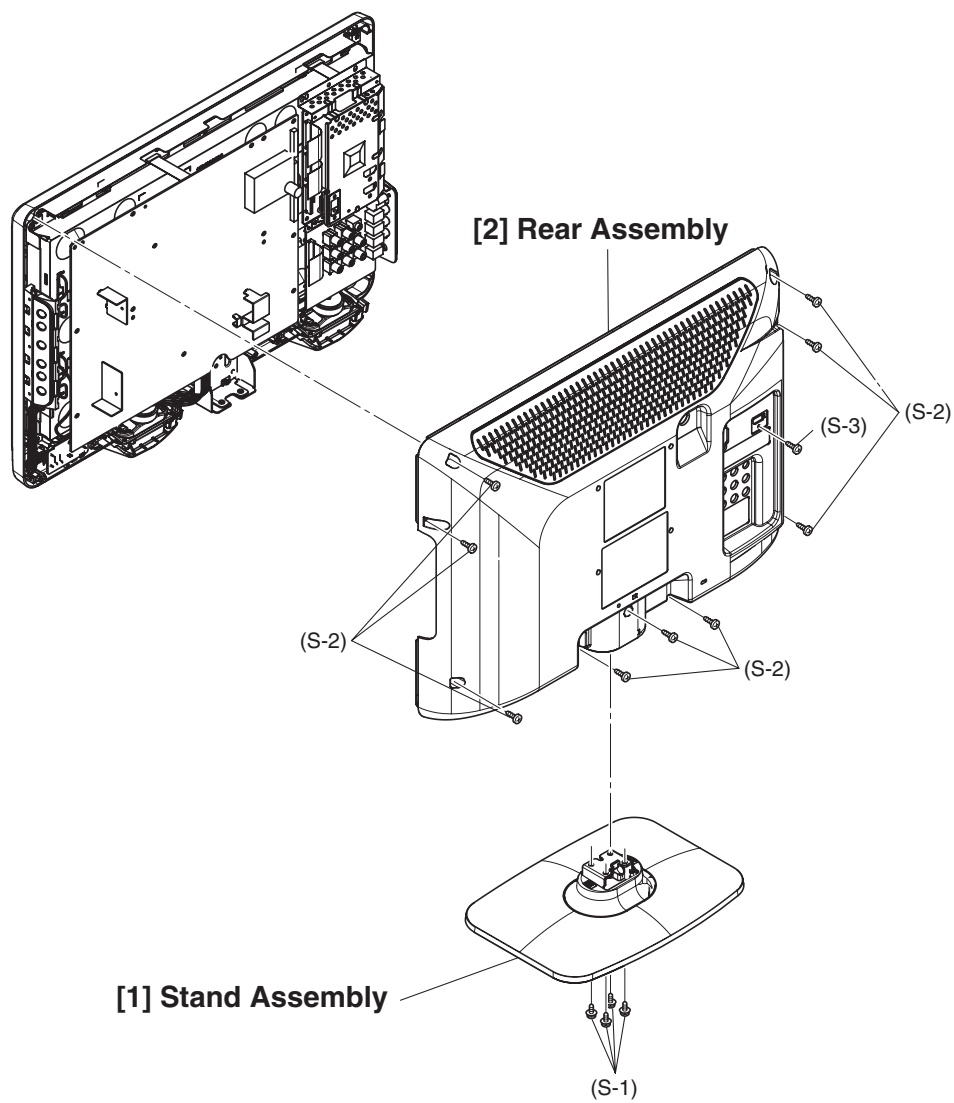
Step/ Loc. No.	Part	Fig. No.	Removal	Note
[7]	Main CBA	D2 D3	11(S-9), CN102, CN201, CN872, CN1001, CN1002	---
[8]	Stand Holder	D2	2(S-10), 2(S-11)	---
[9]	LCD Module Assembly	D2	-----	---
[10]	Speaker Holder	D2	3(S-12)	---
[11]	Speaker	D2	4(S-13), Speaker Cushion	---
[12]	Function CBA	D2 D3	CL103B	---
[13]	IR Sensor CBA	D2 D3	(S-14), CL102A* <sup>1</sup>	---
[14]* <sup>1</sup>	Junction CBA	D2 D3	-----	---
[15]	Front Cabinet	D2	-----	---

↓                      ↓                      ↓                      ↓                      ↓  
 (1)                      (2)                      (3)                      (4)                      (5)

\*<sup>1</sup>: 19PFL3505D/F7 (Serial No.: DS1A)

### Note:

- (1) Order of steps in procedure. When reassembling, follow the steps in reverse order. These numbers are also used as the Identification (location) No. of parts in figures.
- (2) Parts to be removed or installed.
- (3) Fig. No. showing procedure of part location
- (4) Identification of parts to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.  
P = Spring, L = Locking Tab, S = Screw,  
H = Hex Screw, CN = Connector  
e.g. 2(S-2) = two Screws of (S-2),  
2(L-2) = two Locking Tabs of (L-2)
- (5) Refer to the following "Reference Notes in the Table."



**Fig. D1**

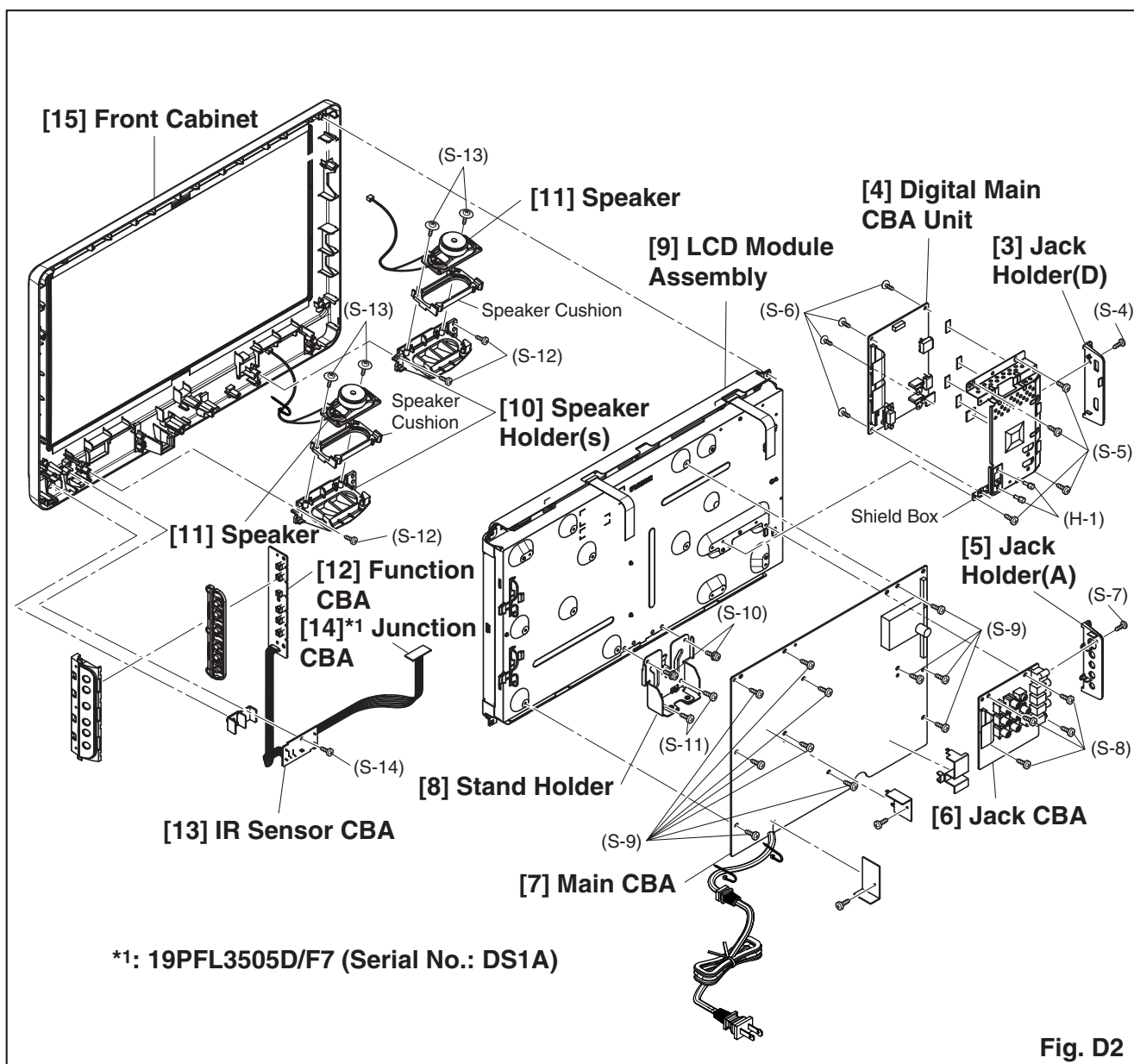
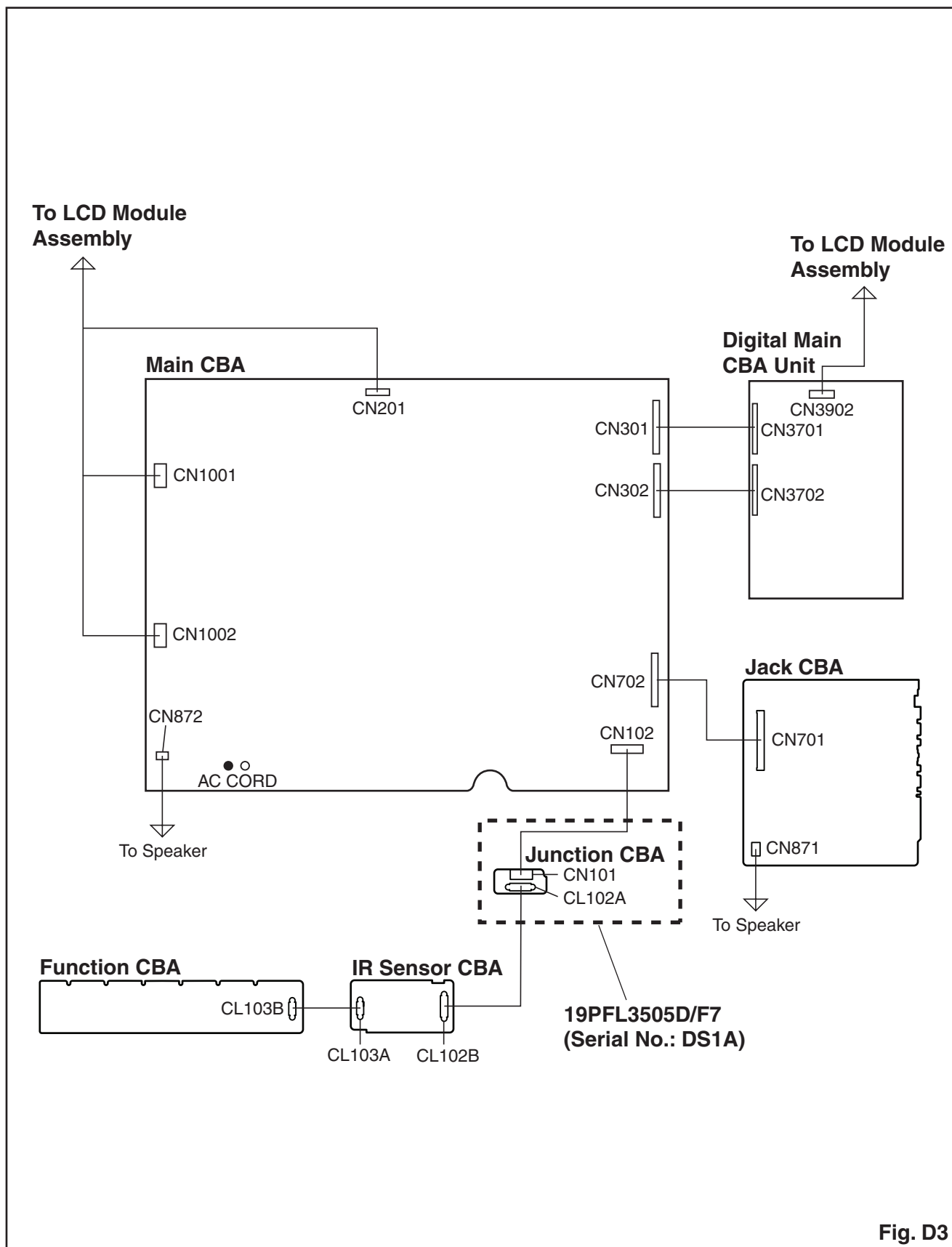


Fig. D2

# TV Cable Wiring Diagram



# ELECTRICAL ADJUSTMENT INSTRUCTIONS

**General Note: “CBA” is abbreviation for “Circuit Board Assembly.”**

**Note:** Electrical adjustments are required after replacing circuit components and certain mechanical parts. It is important to perform these adjustments only after all repairs and replacements have been completed. Also, do not attempt these adjustments unless the proper equipment is available.

## Test Equipment Required

1. NTSC Pattern Generator (Color Bar W/White Window, Red Color, Dot Pattern, Gray Scale, Monoscope, Multi-Burst)
2. Remote control unit
3. Color Analyzer

## How to set up the service mode:

### Service mode:

1. Turn the power on.
2. Press [MENU] button to display Setup menu.
3. Select “Features”.
4. Select “Current Software Info”.
5. Press [0], [6], [2], [5], [9], [6] and [Info] buttons on the remote control unit in this order. The following screen appears.

“\*” differs depending on the models.

Code : \*\*\*\*\*\_\*\*\*\_\*\_\*\*\*\*\*\_\*\*\*\*  
Pic code : \*\*\_\*\*\*\*\*\_\*\*\*\*\*\_\*\*  
MIPS : Push 0key

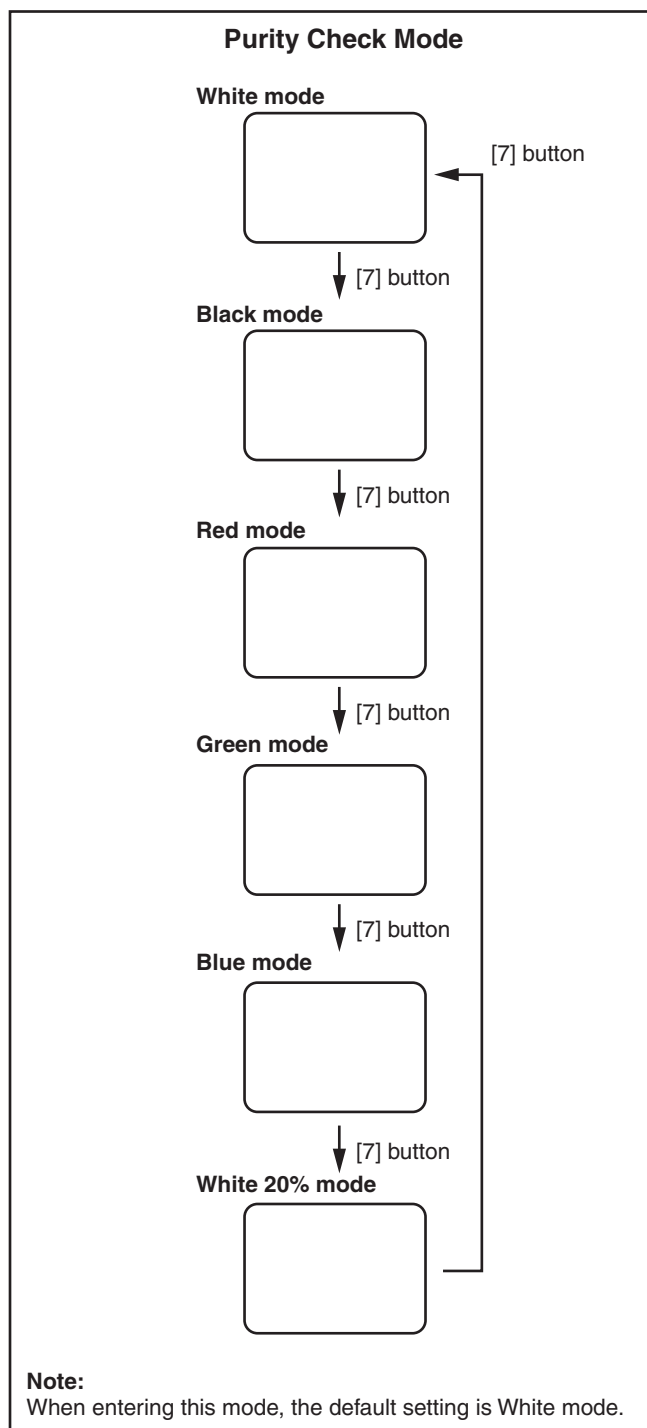
Press “POWER” key to exit.

Tuner : \*\*\*\*\_\*\*\*\*\*\_\*\*\*\*  
Safety : safety\_Non

## 1. Purity Check Mode

This mode cycles through full-screen displays of red, green, blue, and white to check for non-active pixels.

1. Enter the Service mode.
2. Each time the [7] button on the remote control unit is pressed, the display changes as follows.

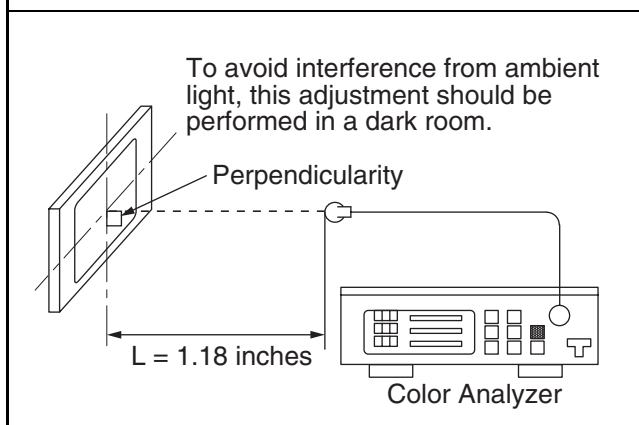


3. To cancel or to exit from the Purity Check Mode, press [PREV CH] button.

## 2. VCOM Adjustment

Test Point	Adj. Point
Screen	[CHANNEL UP/DOWN] buttons
M. EQ.	Spec.
Color analyzer	See below

**Figure**



1. Operate the unit for more than 60 minutes.
2. Set the color analyzer at the zero point calibration and bring the optical receptor pointing at the center of the LCD-Panel at a distance of 1.18 inches (3cm) away from the LCD-Panel surface.  
**Note:** The optical receptor must be set perpendicularly to the LCD Panel surface.
3. Enter the Service mode.
4. Press [3] button on the remote control unit.
5. Press [CHANNEL UP/DOWN] buttons on the remote control unit so that the color analyzer value becomes minimum.
6. To cancel or to exit from the VCOM Adjustment, press [PREV CH] button.

**The White Balance Adjustment should be performed when replacing the LCD Panel or Digital Main CBA.**

### 3. White Balance Adjustment

**Purpose:** To mix red, green and blue beams correctly for pure white.

**Symptom of Misadjustment:** White becomes bluish or reddish.

Test Point	Adj. Point	Mode	Input
Screen	[VOLUME DOWN] button	[VIDEO1] C/D	White Raster (APL 70%) or (APL 40%)
M. EQ.		Spec.	
Pattern Generator, Color analyzer		x= 0.272 ± 0.005 y= 0.278 ± 0.005	

**Figure**

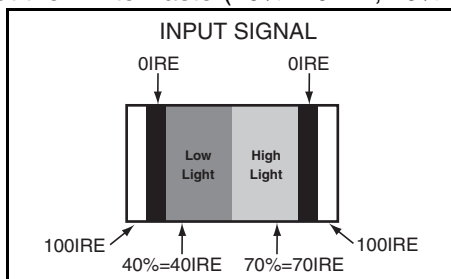
To avoid interference from ambient light, this adjustment should be performed in a dark room.

Perpendicularity

INPUT: WHITE 70%, 40%

Color Analyzer

1. Operate the unit for more than 60 minutes.
2. Input the White Raster(70%=70IRE, 40%=40IRE).



3. Set the color analyzer at the CHROMA mode and zero point calibration. Bring the optical receptor pointing at the center of the LCD-Panel at a distance of 1.18 inches(3cm) away from the LCD-Panel surface.

**Note:** The optical receptor must be set perpendicularly to the LCD Panel surface.

4. Enter the Service mode. Press [VOLUME DOWN] button on the remote control unit and select "C/D" mode.

#### 5. [CUTOFF]

Press [1] button to select "COR" for Red Cutoff adjustment. Press [3] button to select "COB" for Blue Cutoff adjustment.

#### [DRIVE]

Press [4] button to select "DR" for Red Drive adjustment. Press [6] button to select "DB" for Blue Drive adjustment.

6. In each color mode, press [CHANNEL UP/DOWN] buttons to adjust the values of color.
7. Adjust Cutoff and Drive so that the color temperature becomes 12000°K ( $x = 0.272$  /  $y = 0.278 \pm 0.005$ ).
8. To cancel or to exit from the White Balance Adjustment, press [PREV CH] button.

# HOW TO INITIALIZE THE LCD TV

The purpose of initialization is to place the set in a new out of box condition. The customer will be prompted to select a language and program channels after the set has been initialized.

To put the program back at the factory-default, initialize the LCD TV using the following procedure.

1. Turn the power on.
2. Enter the service mode.
  - To cancel the service mode, press [POWER] button on the remote control unit.
3. Press [INFO] button on the remote control unit to initialize the LCD television.
4. "INITIALIZED" will appear in the upper right of the screen. "INITIALIZED" color will change to green from red when initializing is completed.



# FIRMWARE RENEWAL MODE

## Equipment Required

- USB storage device
- Remote Control Unit

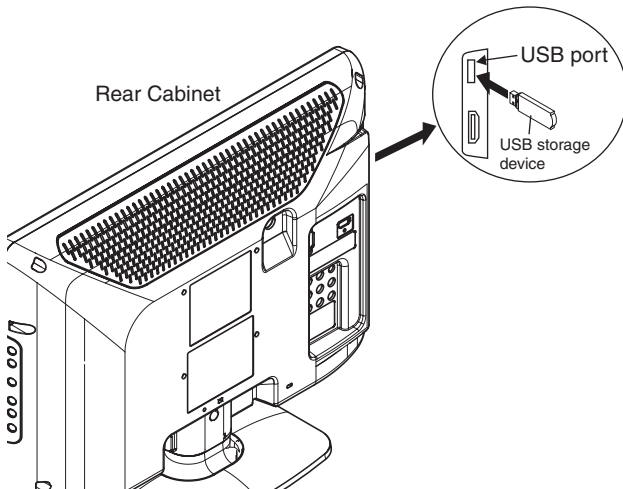
## Firmware Update Procedure

**Note:** There are two states (the User Upgrade and the Factory Upgrade) in firmware update.

User Upgrade	Upgrade the firmware only. The setting values are not initialized.
Factory upgrade	Upgrade the firmware and initialize the setting values.

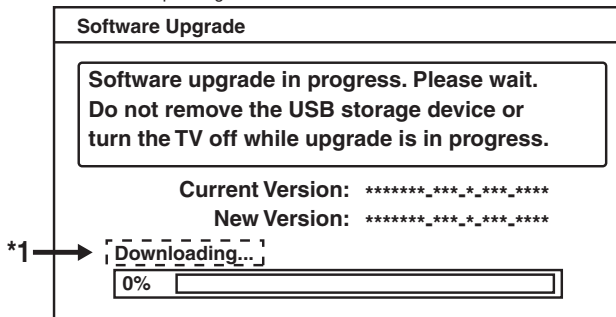
The identification of User Upgrade and Factory Upgrade are done by the filename.

- Turn the power off and unplug the AC Cord.
- Insert the USB storage device to the USB port as shown below.



- Plug the AC cord in the wall outlet and turn the power on.
- The update will start and the following will appear on the screen.

"\*" differs depending on the models.

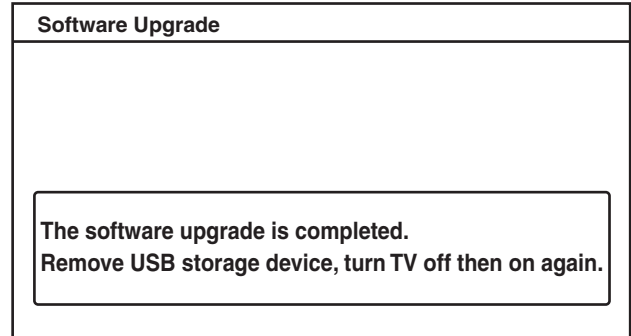


**Note:** If the above screen isn't displayed, repeat from step 1.

The appearance shown in \*1 is described as follows.

Appearance	State
Downloading...	Downloading the firmware from the USB storage device.
Writing...	Writing the downloaded firmware in flash memory.
Checking...	Checking the new firmware.

- When the firmware update is completed, the following will appear on the screen.



Remove the USB storage device from the USB port.

Turn the power off and turn the power on again.

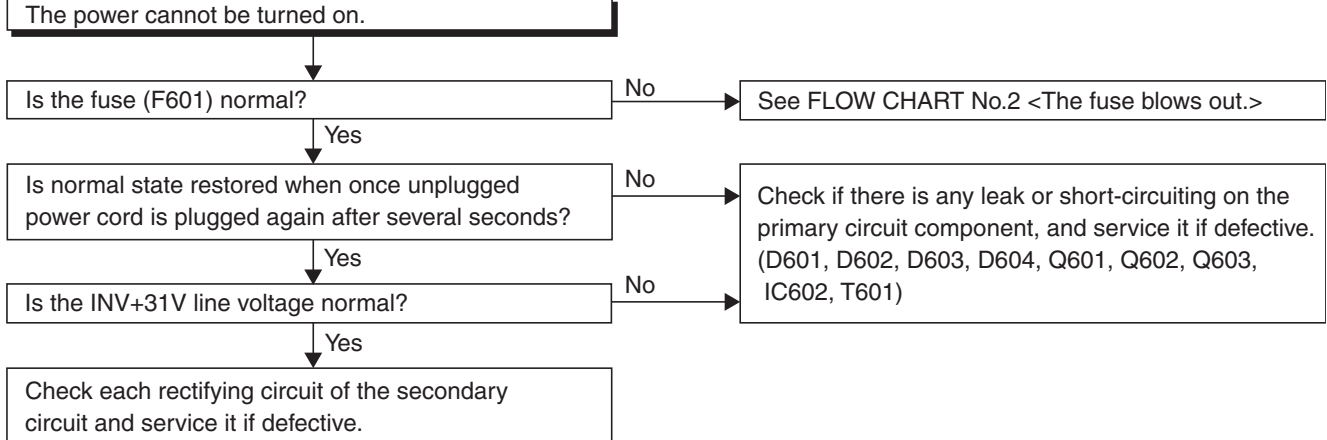
### Note:

When the Factory Upgrade is used, after restarting TV, shift to initial screen menu in service mode. "INITIALIZED" will appear on the upper right of the screen. "INITIALIZED" color will change to green from red when initializing is completed.

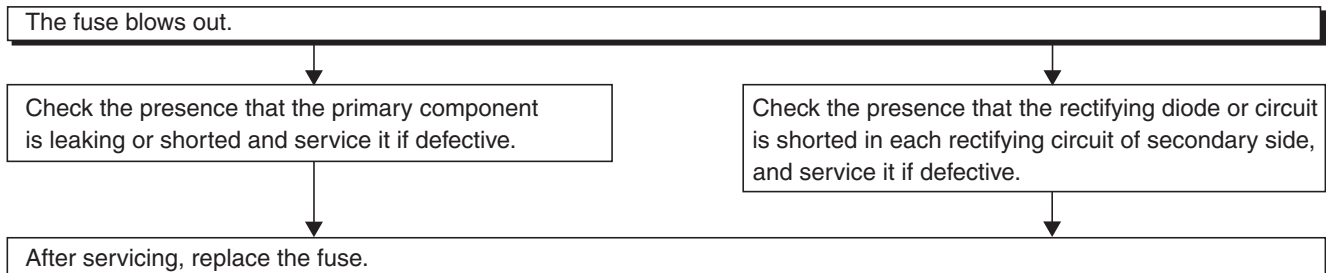
# TROUBLESHOOTING

## [ Power Supply Section ]

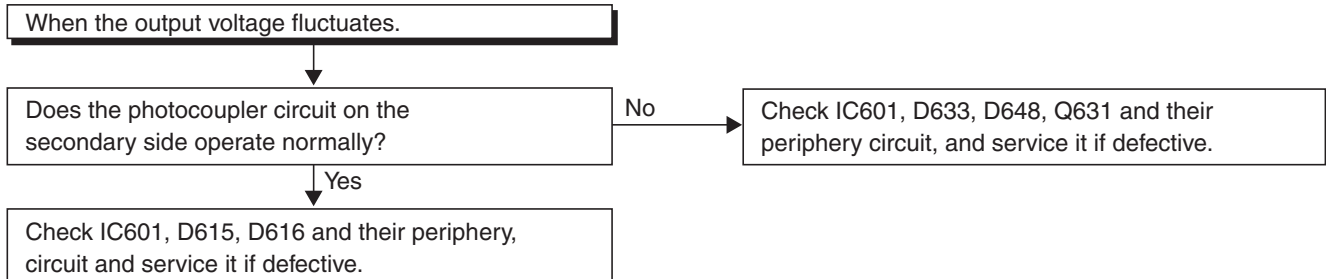
### FLOW CHART NO.1



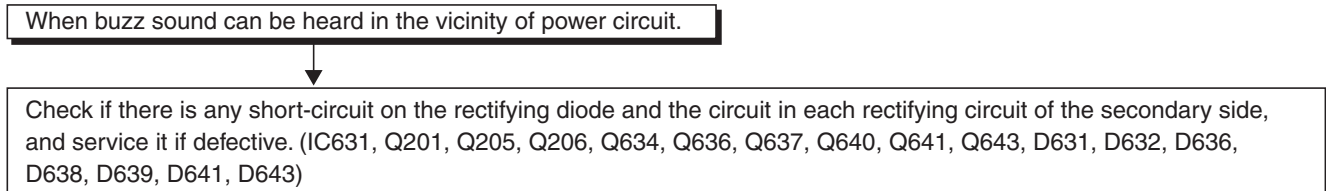
### FLOW CHART NO.2



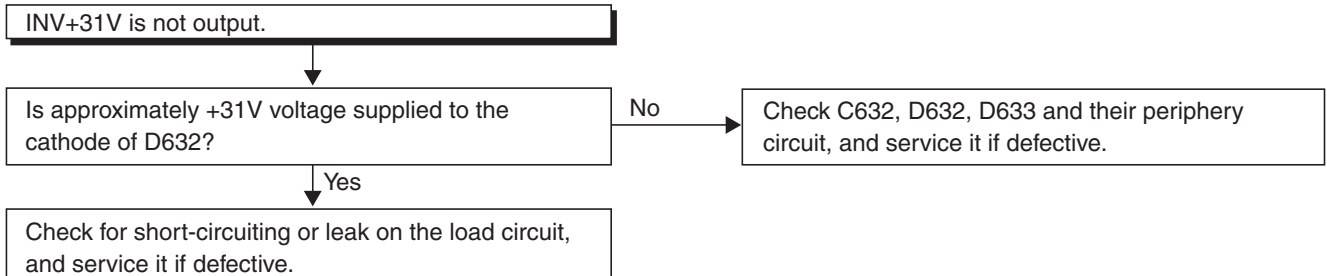
### FLOW CHART NO.3



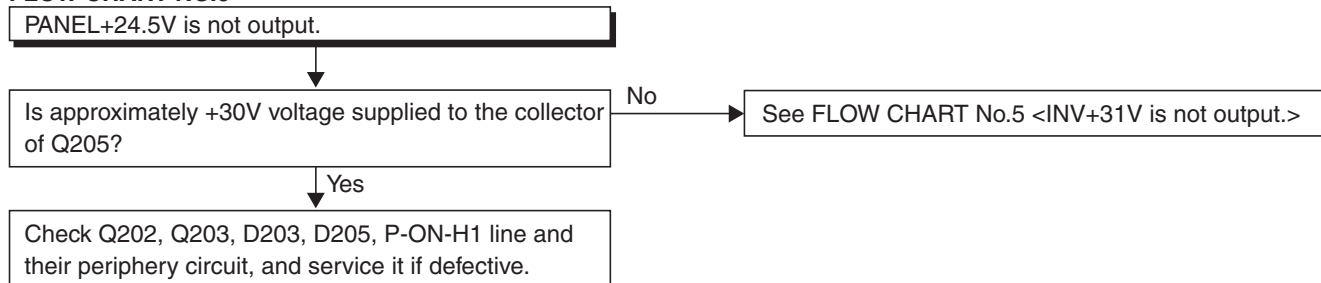
### FLOW CHART NO.4



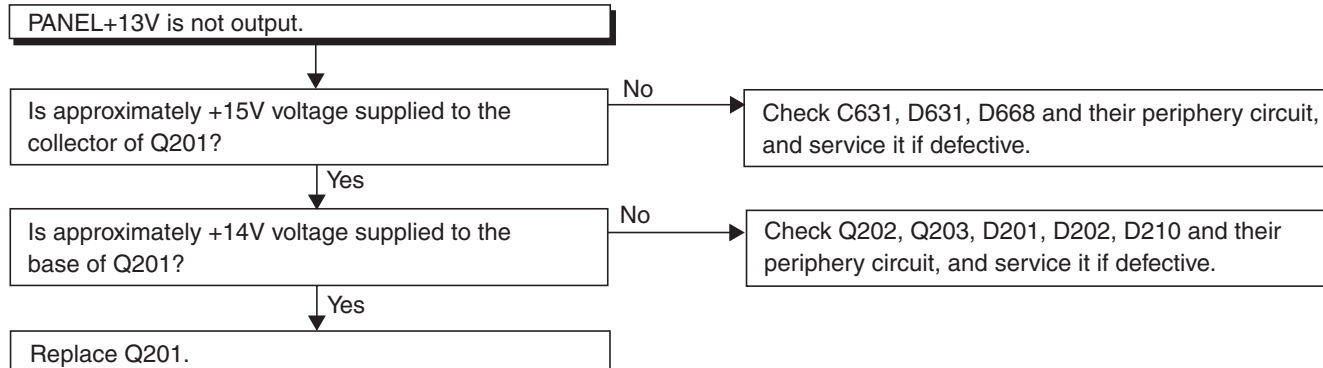
### FLOW CHART NO.5



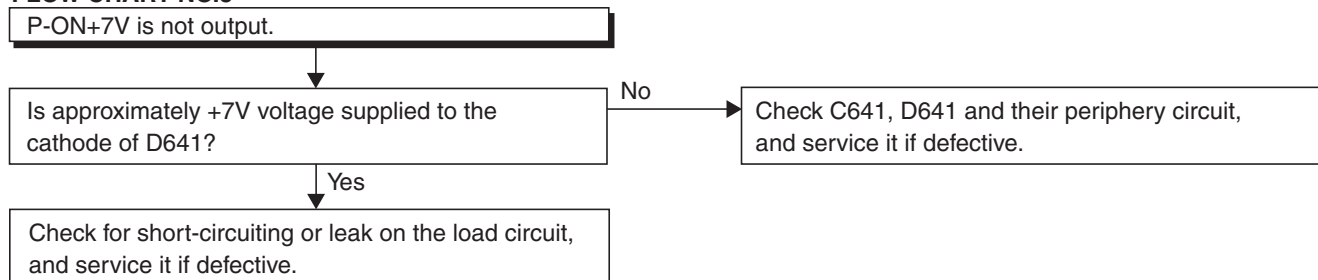
#### FLOW CHART NO.6



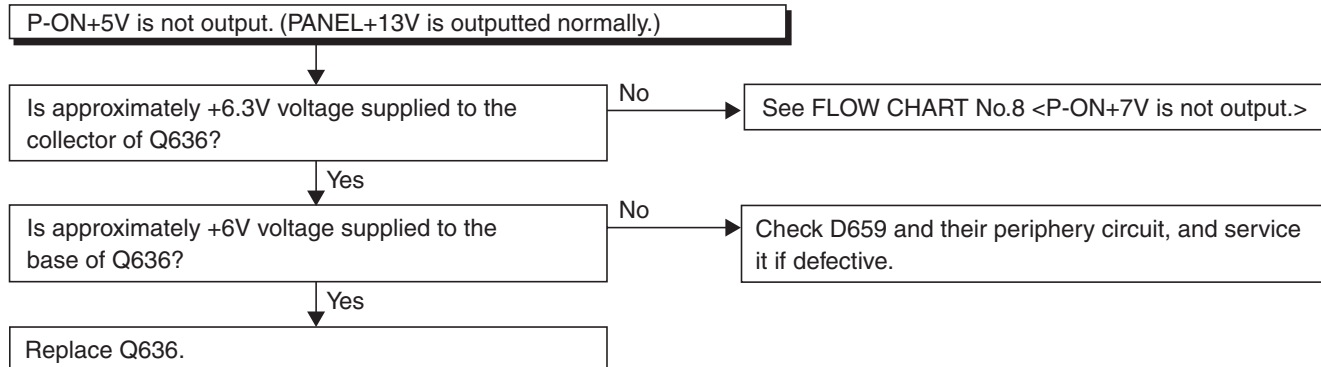
#### FLOW CHART NO.7



#### FLOW CHART NO.8

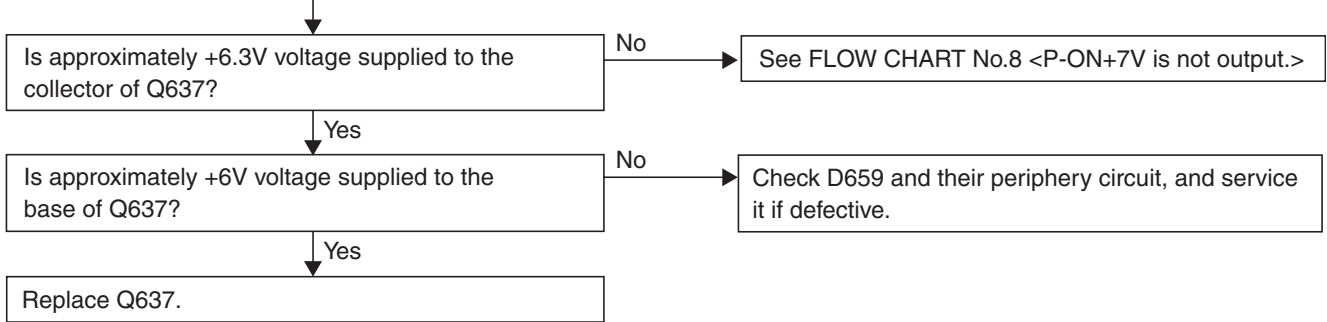


#### FLOW CHART NO.9



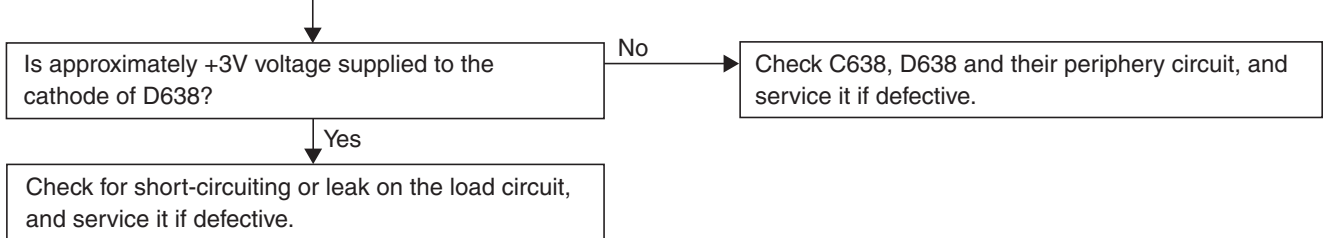
#### FLOW CHART NO.10

TUNER+5V is not output. (PANEL+13V is outputted normally.)



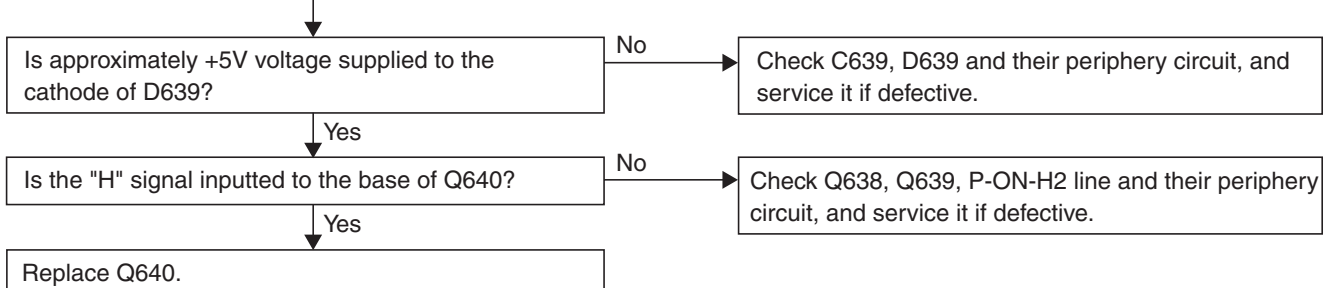
#### FLOW CHART NO.11

P-ON+3V is not output.



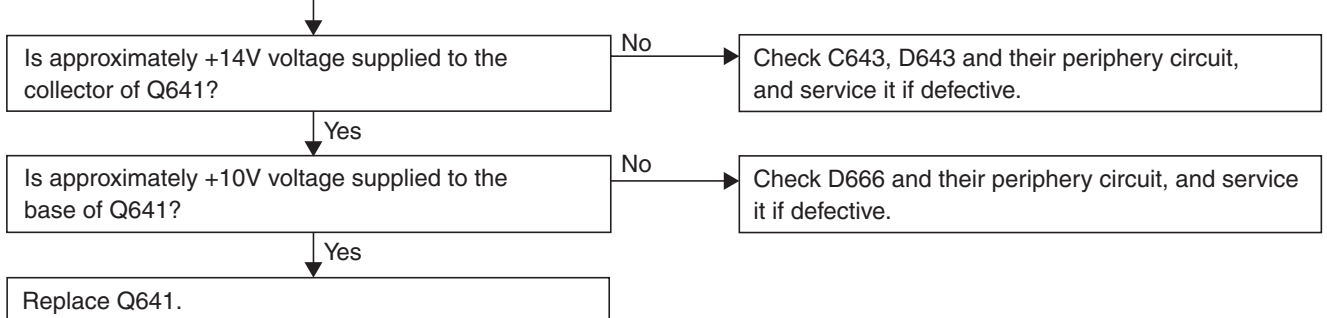
#### FLOW CHART NO.12

P-ON+3.3V(PANEL+3.3V) is not output.



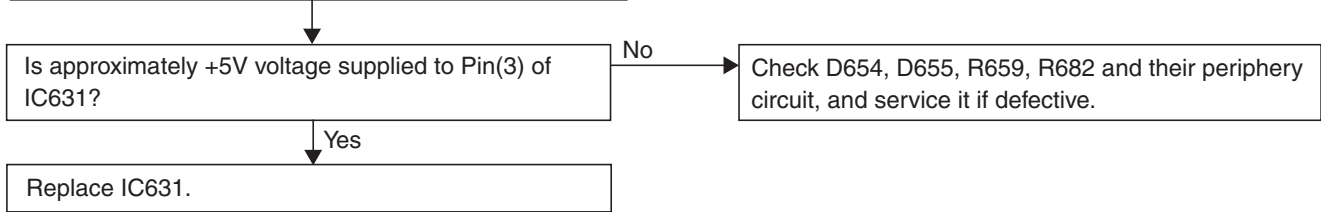
#### FLOW CHART NO.13

P-ON+9V is not output. (PANEL+13V is outputted normally.)



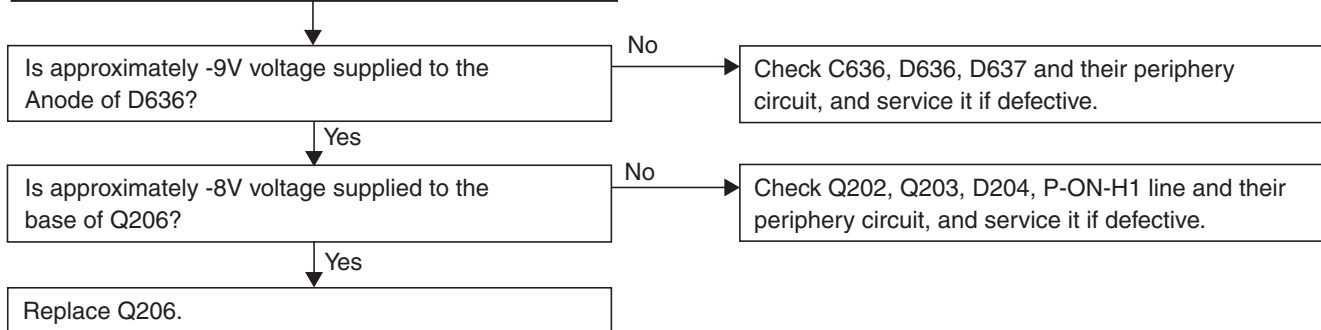
#### FLOW CHART NO.14

AL+3.3V is not output. (P-ON+7V is outputted normally)



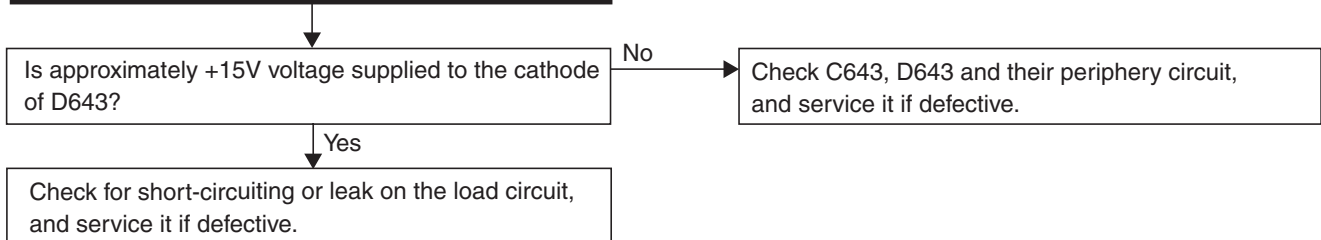
#### FLOW CHART NO.15

LCD-7.1V is not output.



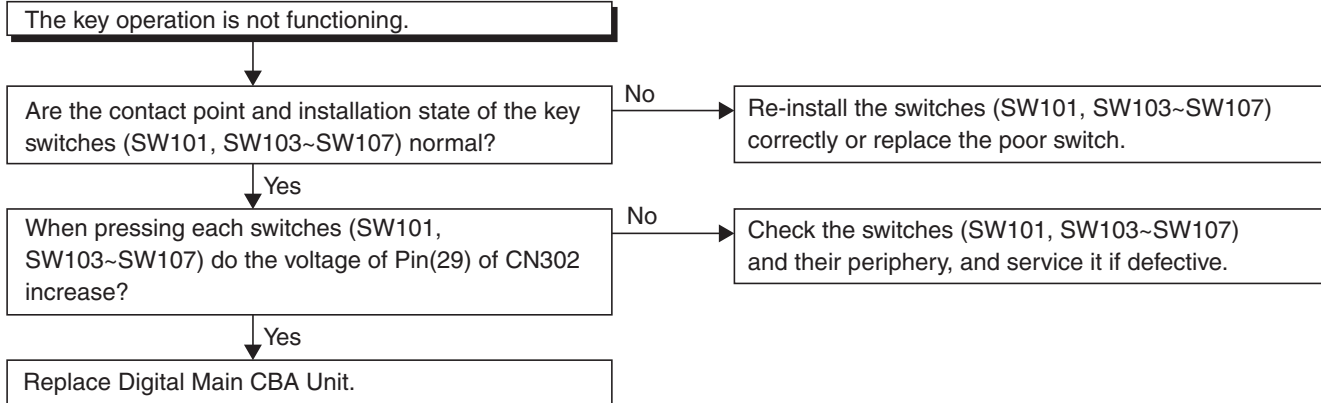
#### FLOW CHART NO.16

SP+14V is not output.

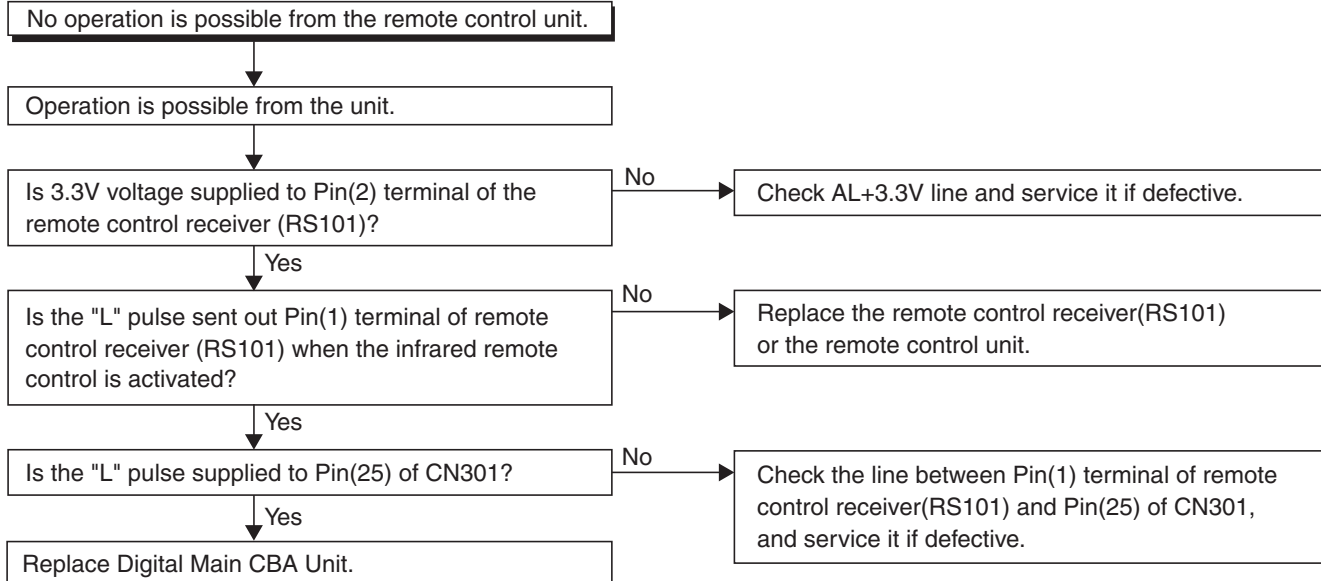


## [ Video Signal Section ]

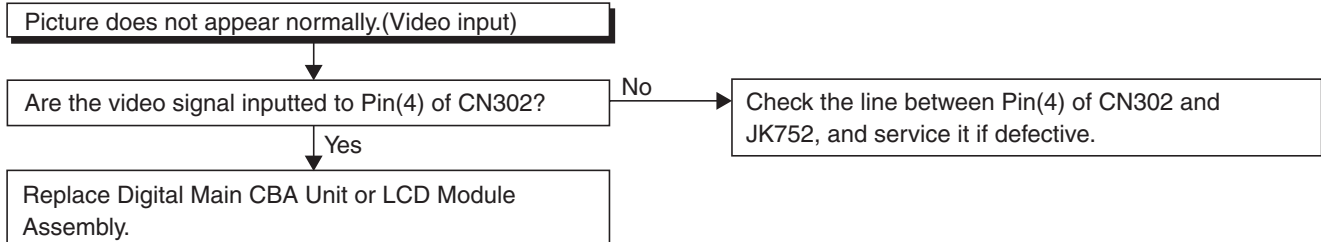
### FLOW CHART NO.1



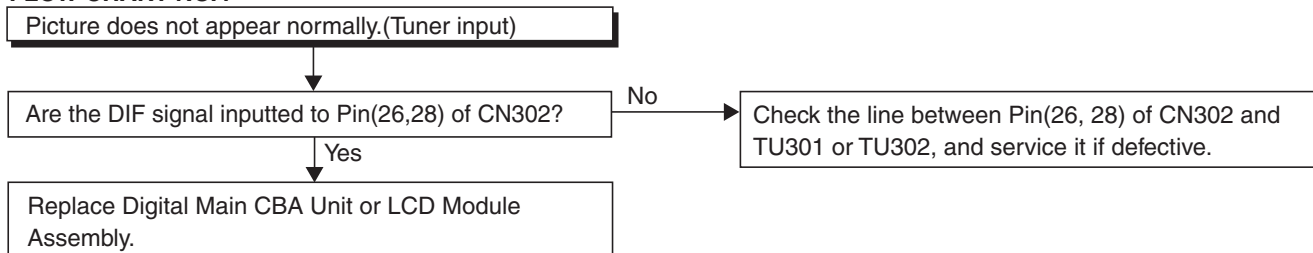
### FLOW CHART NO.2



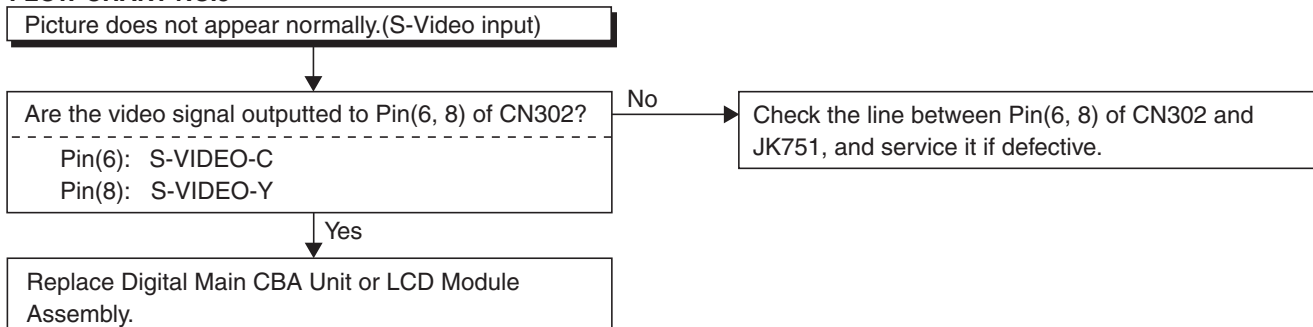
### FLOW CHART NO.3



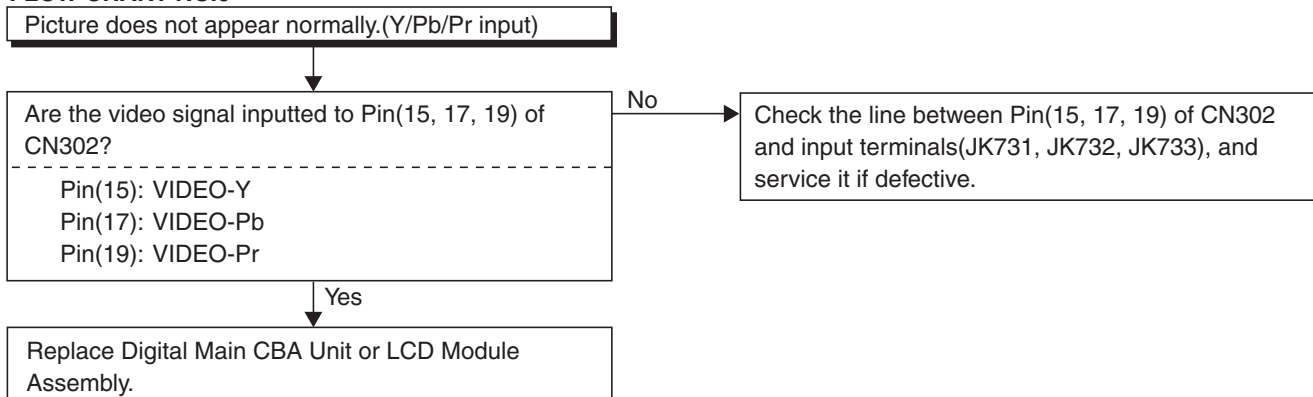
#### FLOW CHART NO.4



#### FLOW CHART NO.5

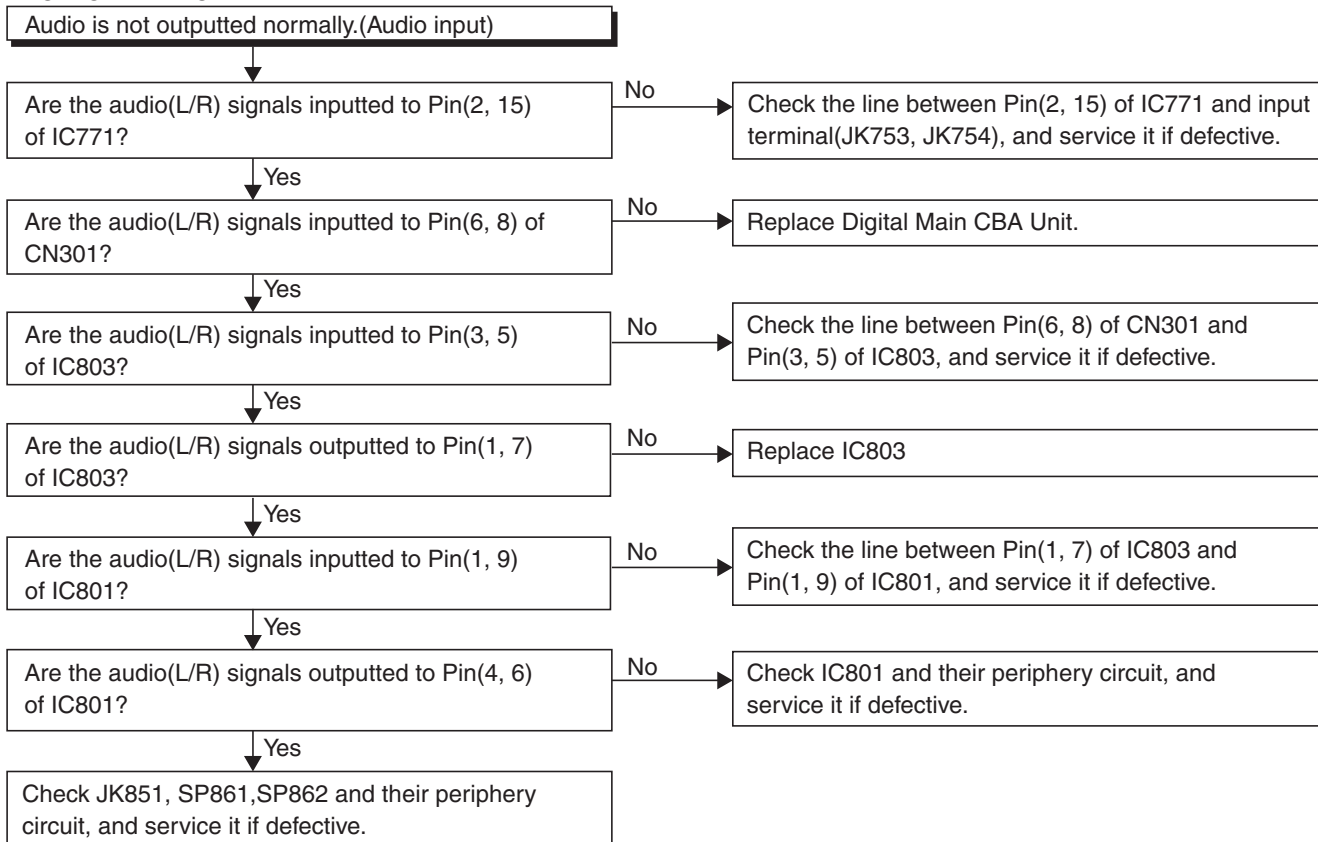


#### FLOW CHART NO.6

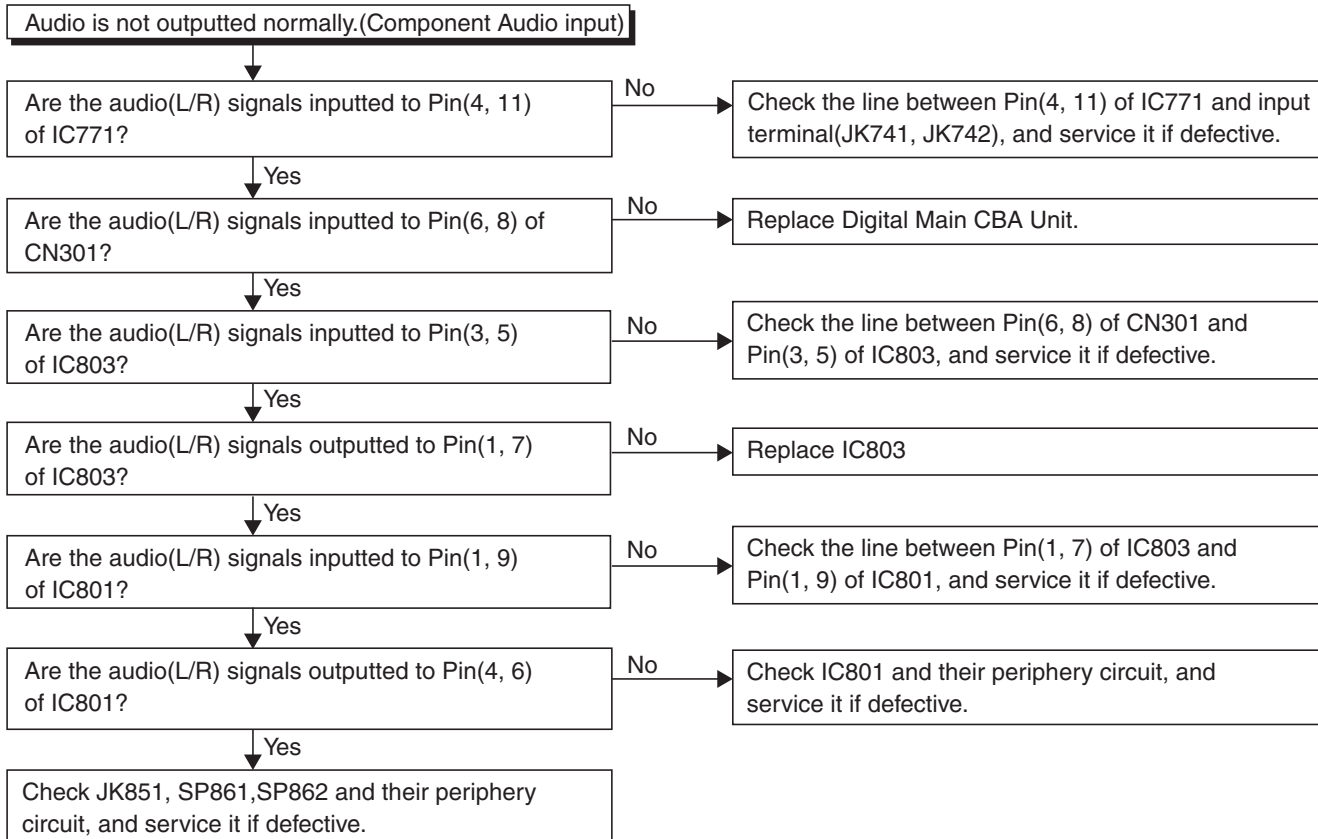


## [ Audio Signal Section ]

### FLOW CHART NO.1

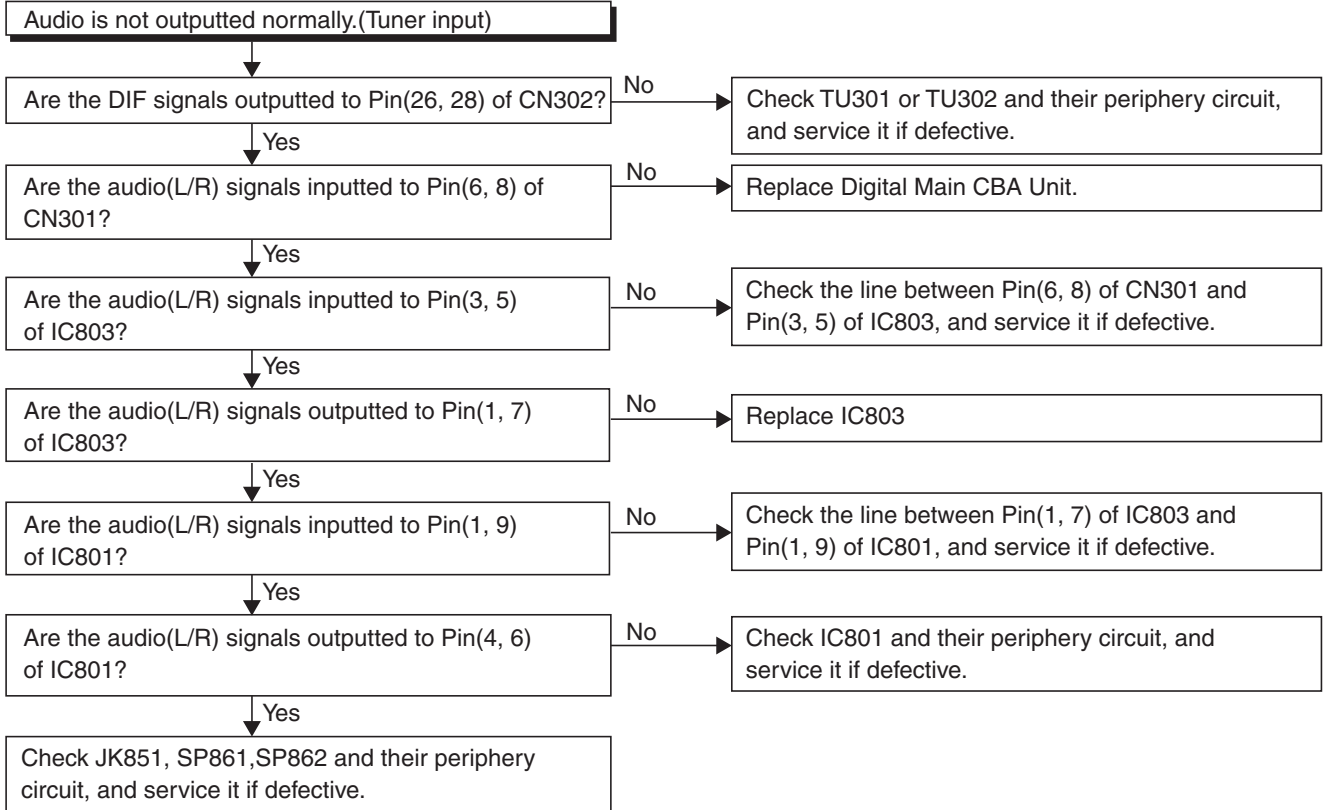


### FLOW CHART NO.2

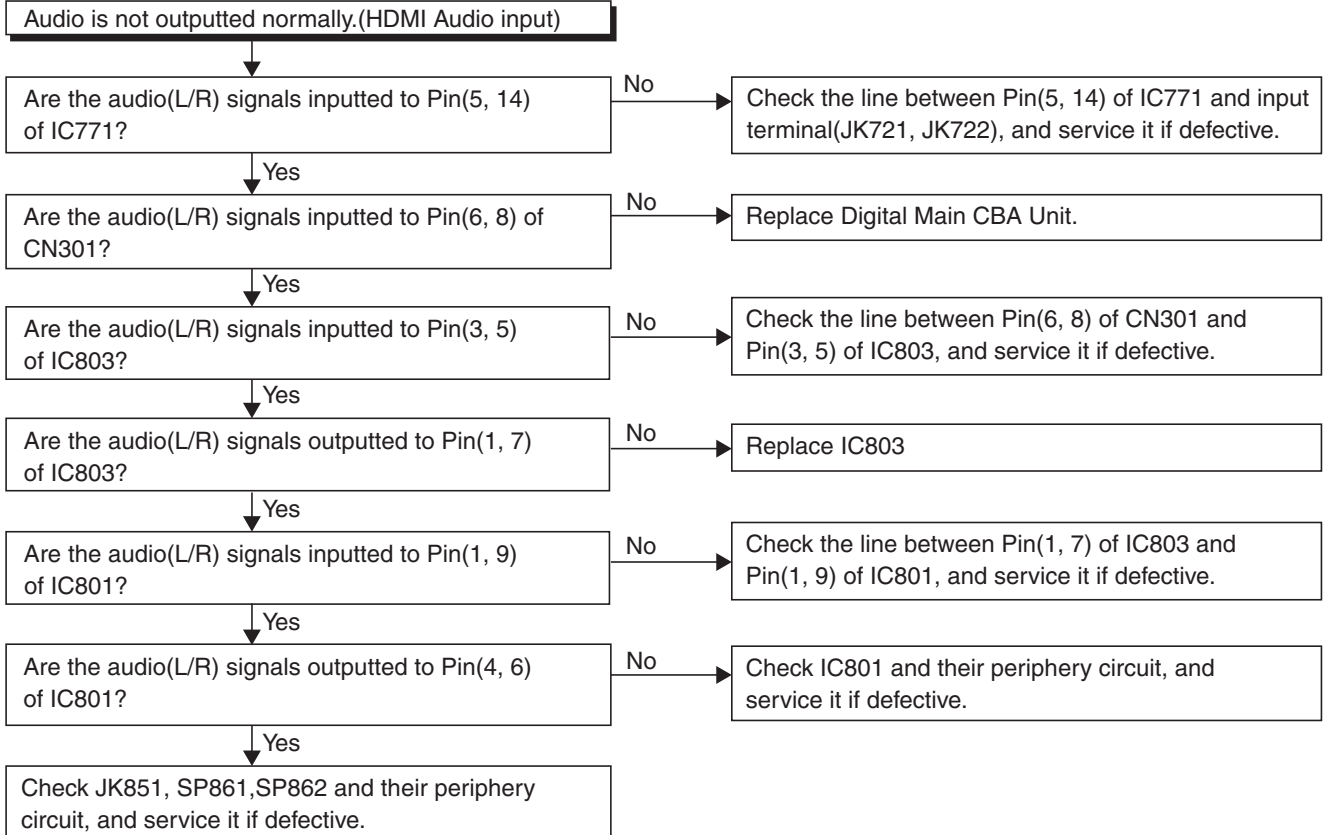




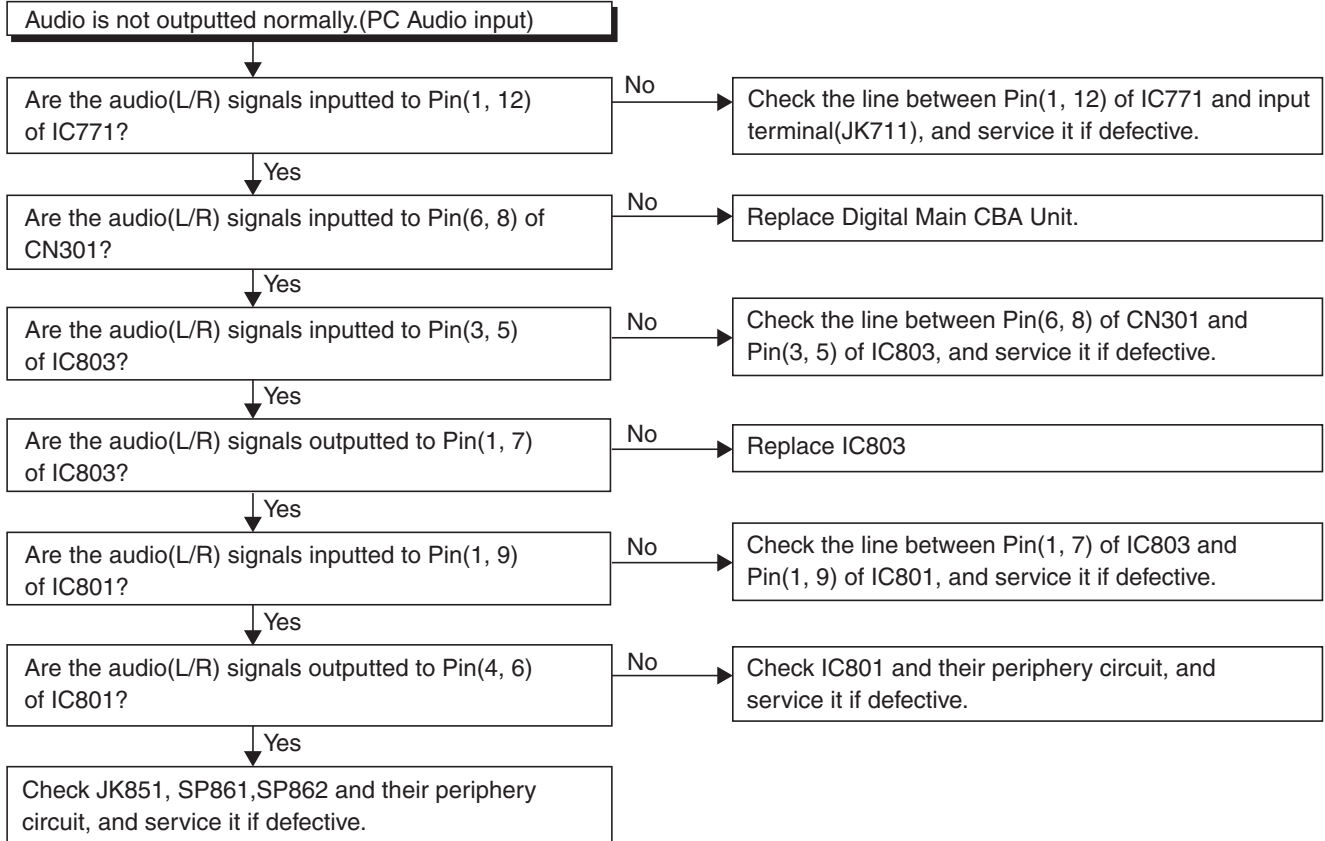
### FLOW CHART NO.3



### FLOW CHART NO.4

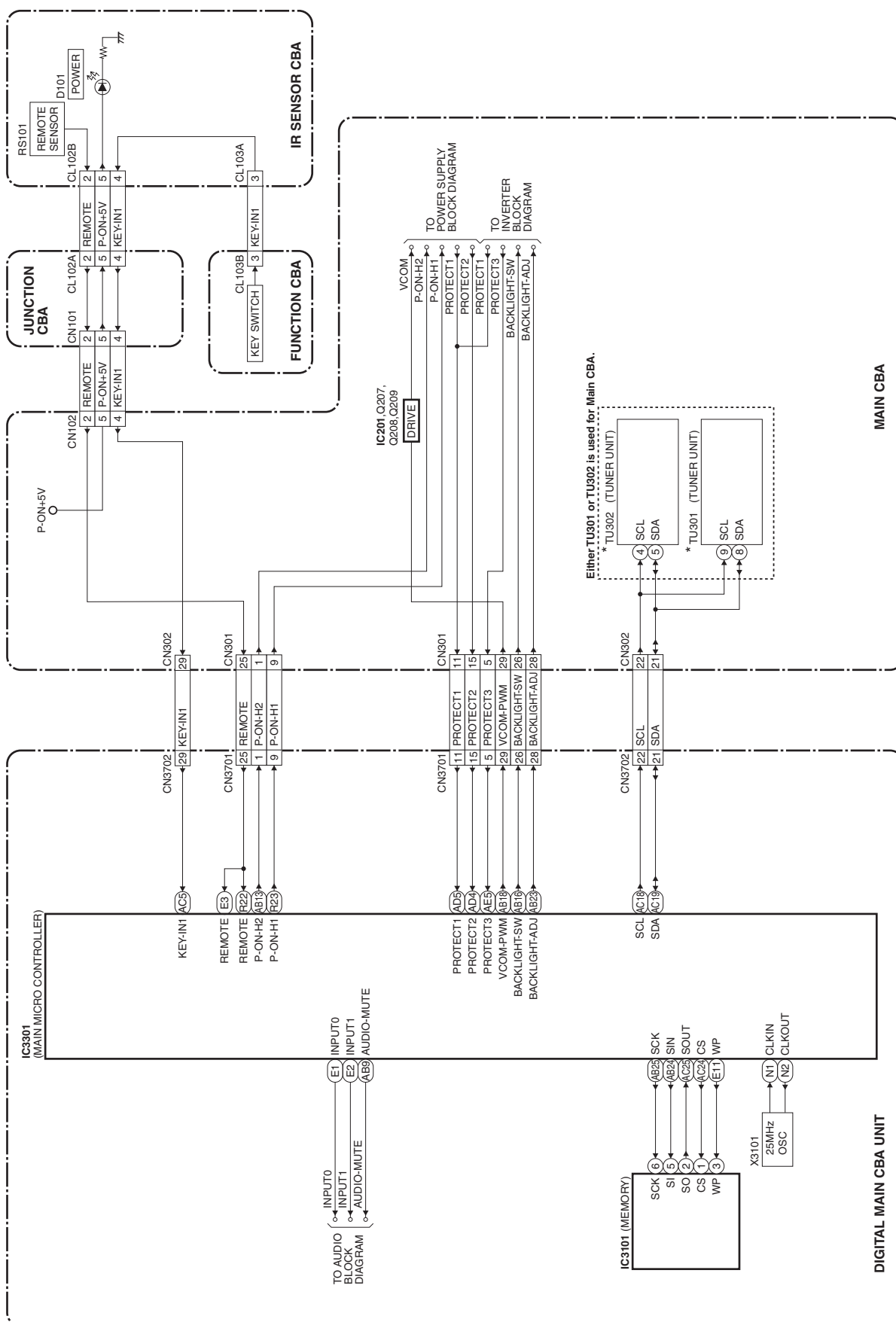


### FLOW CHART NO.5

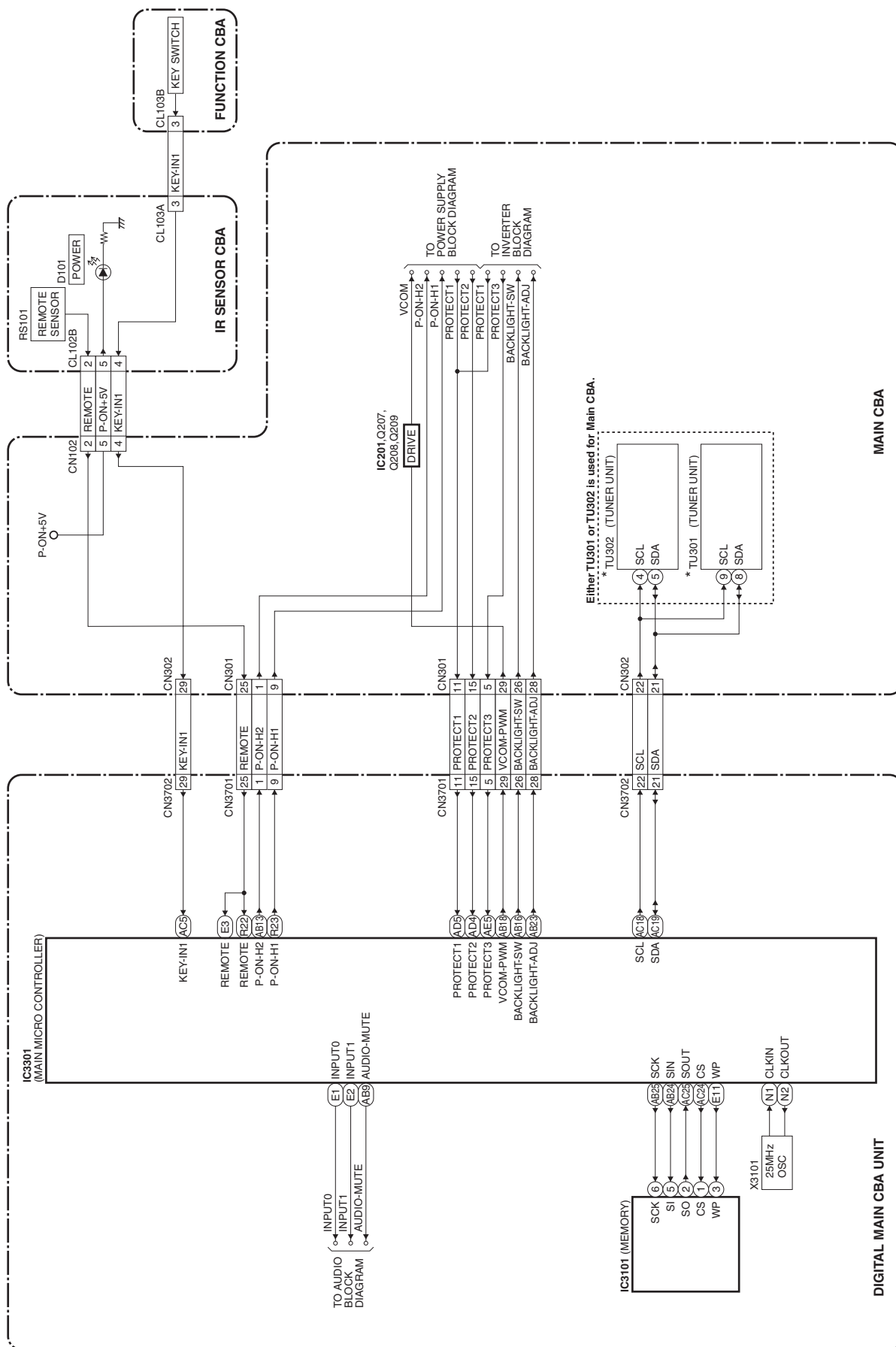


# BLOCK DIAGRAMS

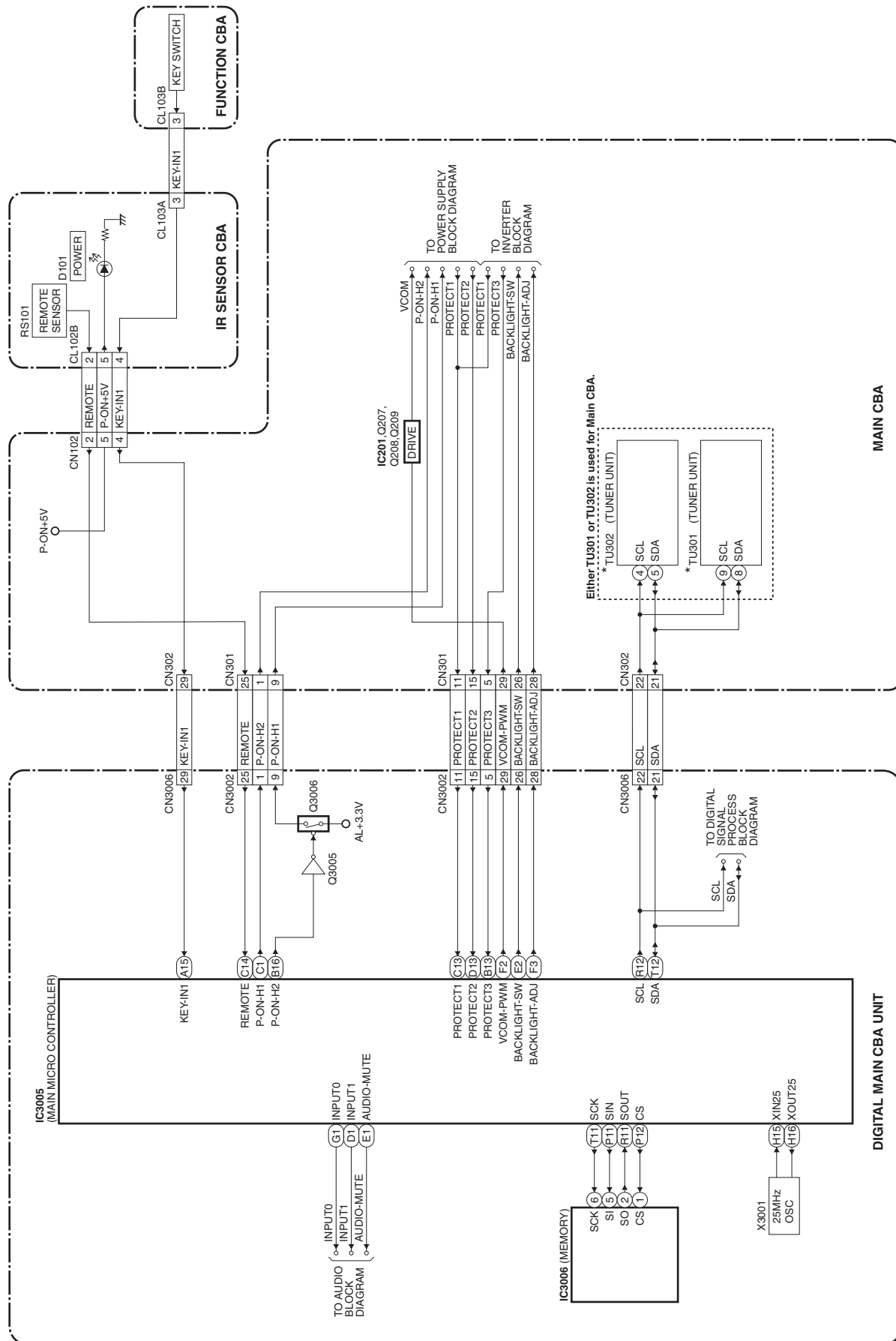
## System Control Block Diagram [19PFL3505D/F7 (Serial No.:DS1A)]



# System Control Block Diagram [19PFL3505D/F7 (Serial No.:DS2A, DS3A, XA1A)]

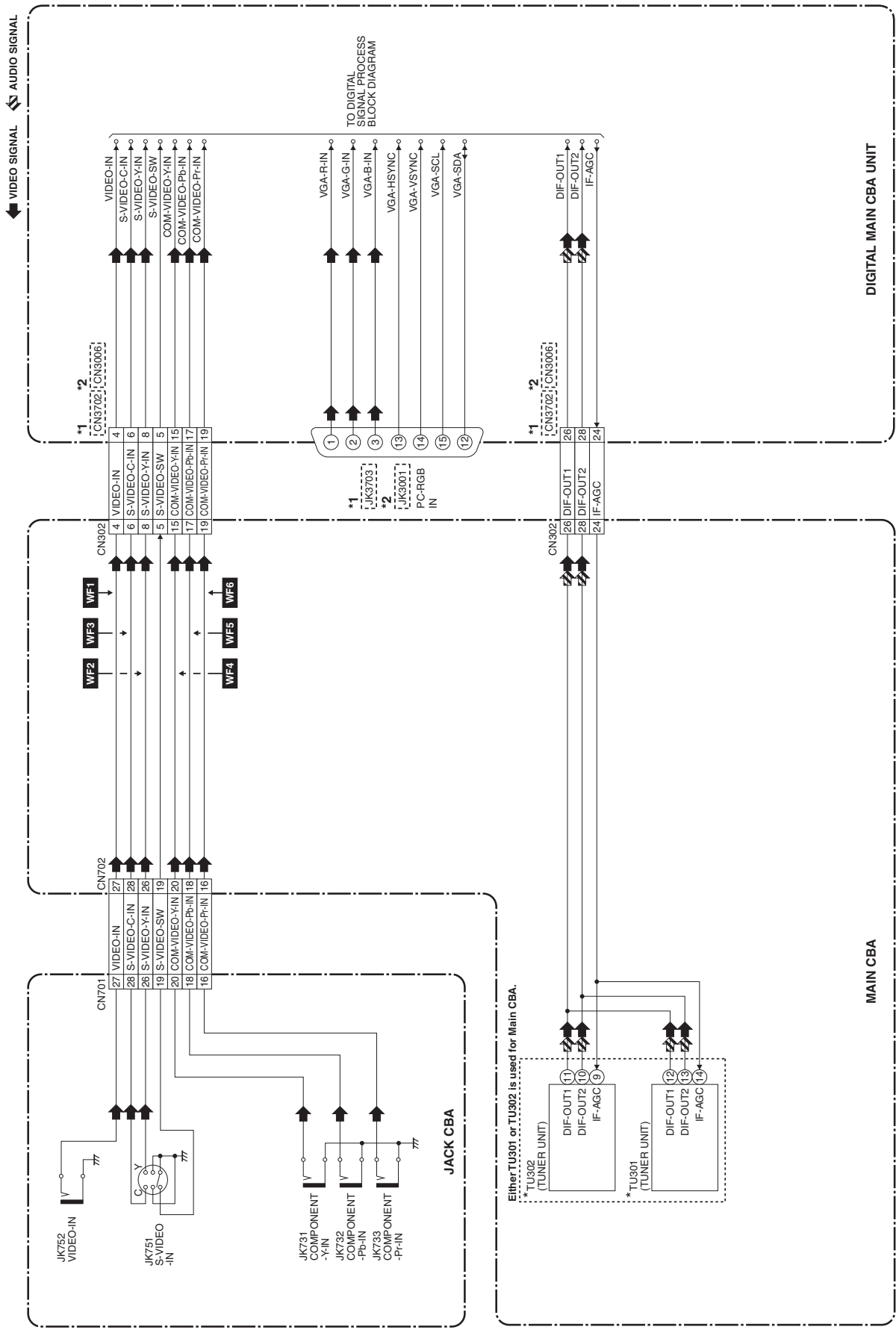


### System Control Block Diagram [19PFL3505D/F7 (Serial No.:DS4A)]

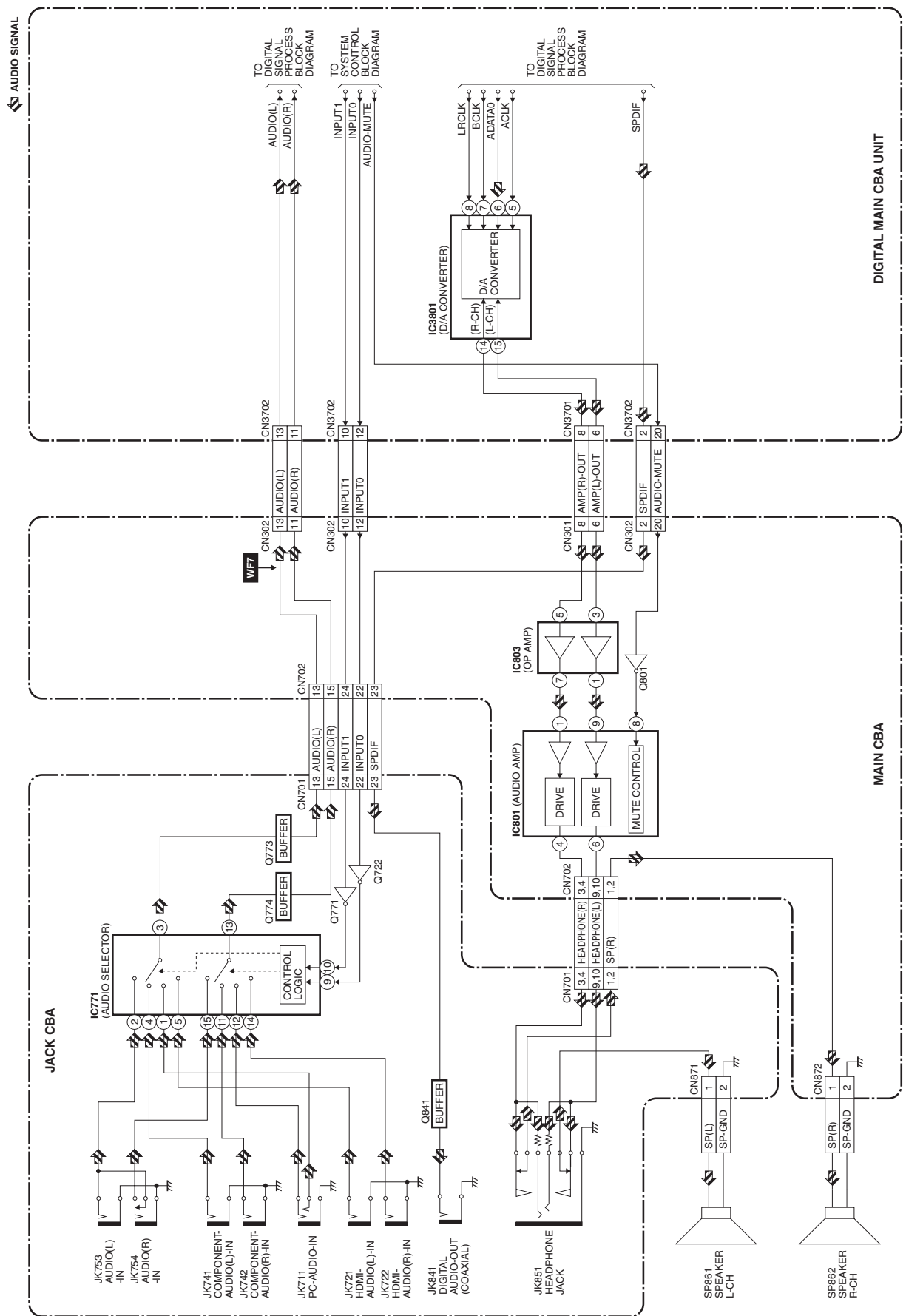


# Video Block Diagram

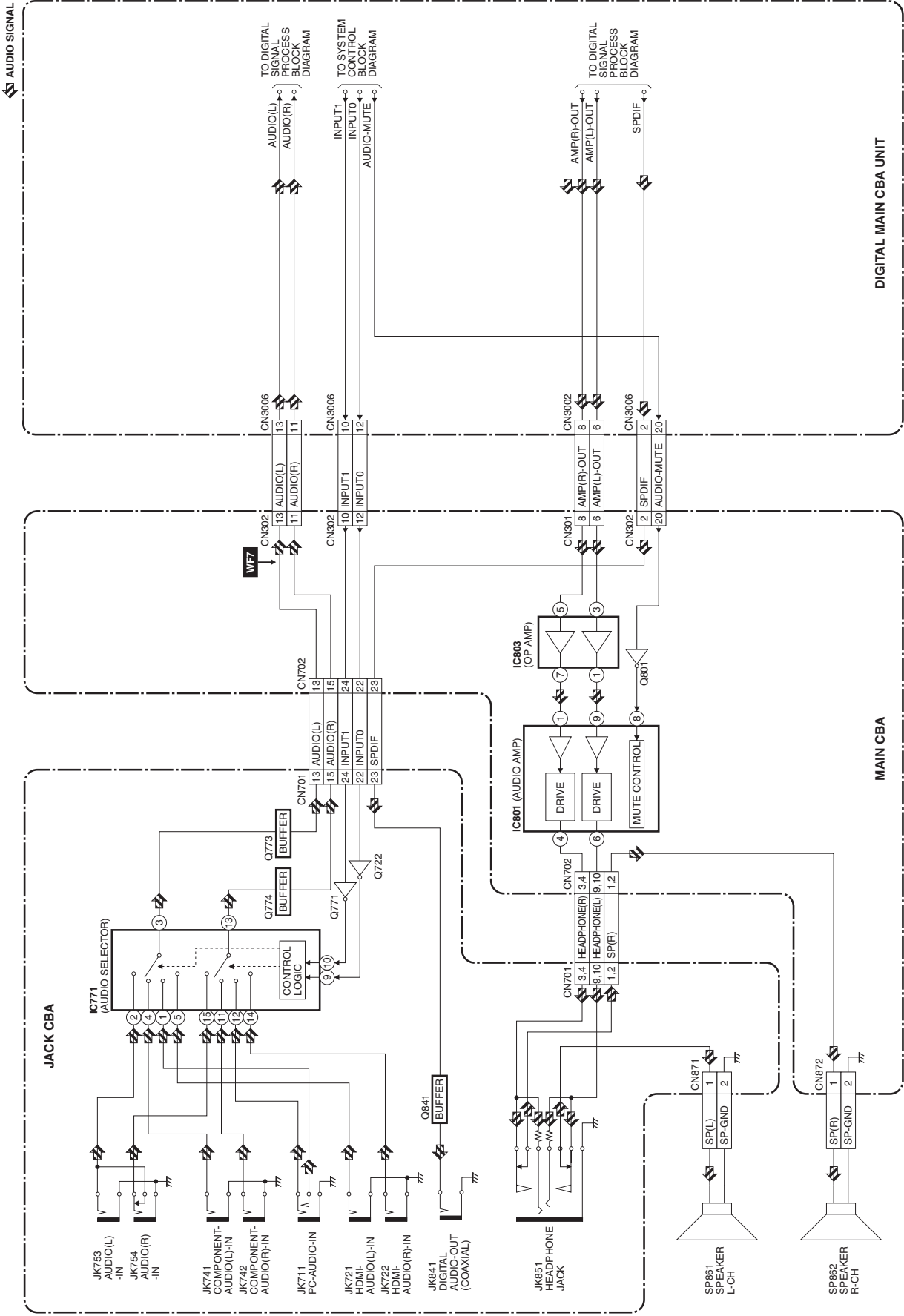
\*1 19PFL3505D/F7 (Serial No.:DS1A, DS2A, DS3A, XA1A)  
 \*2 19PFL3505D/F7 (Serial No.: DS4A)



Audio Block Diagram [19PFL3505D/F7 (Serial No.:DS1A, DS2A, DS3A, XA1A)]



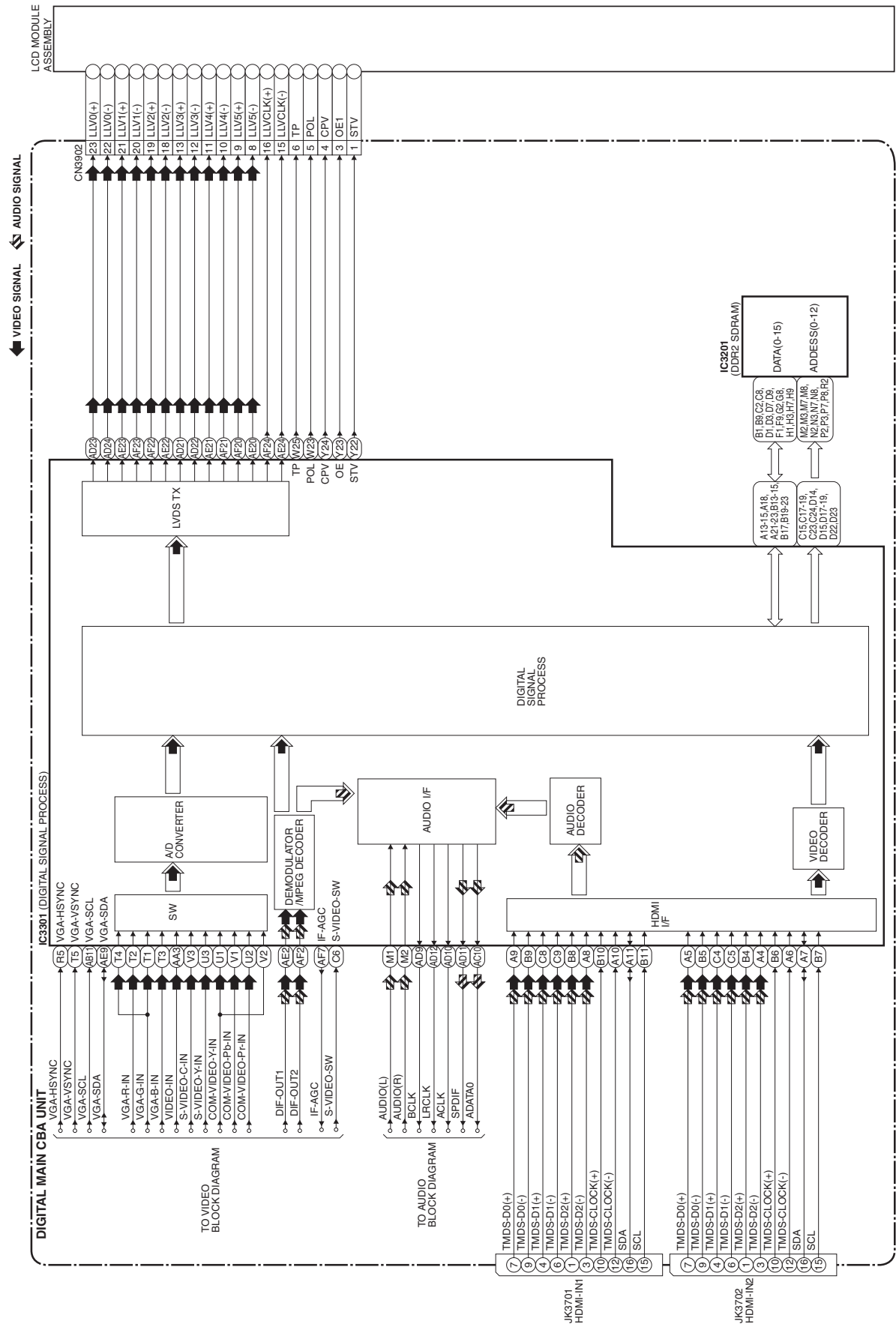
Audio Block Diagram [19PFL3505D/F7 (Serial No.:DS4A)]



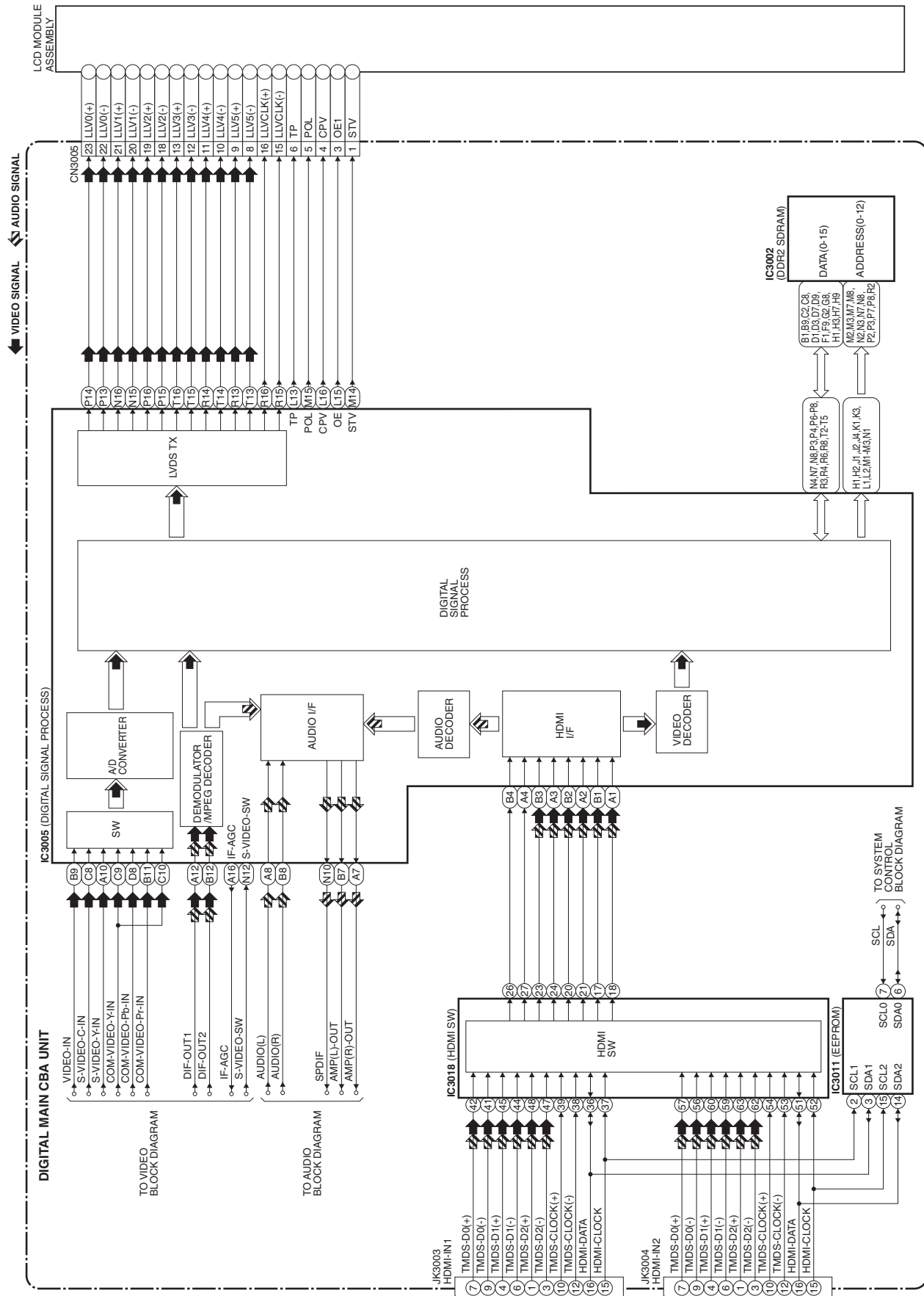


# Digital Signal Process Block Diagram

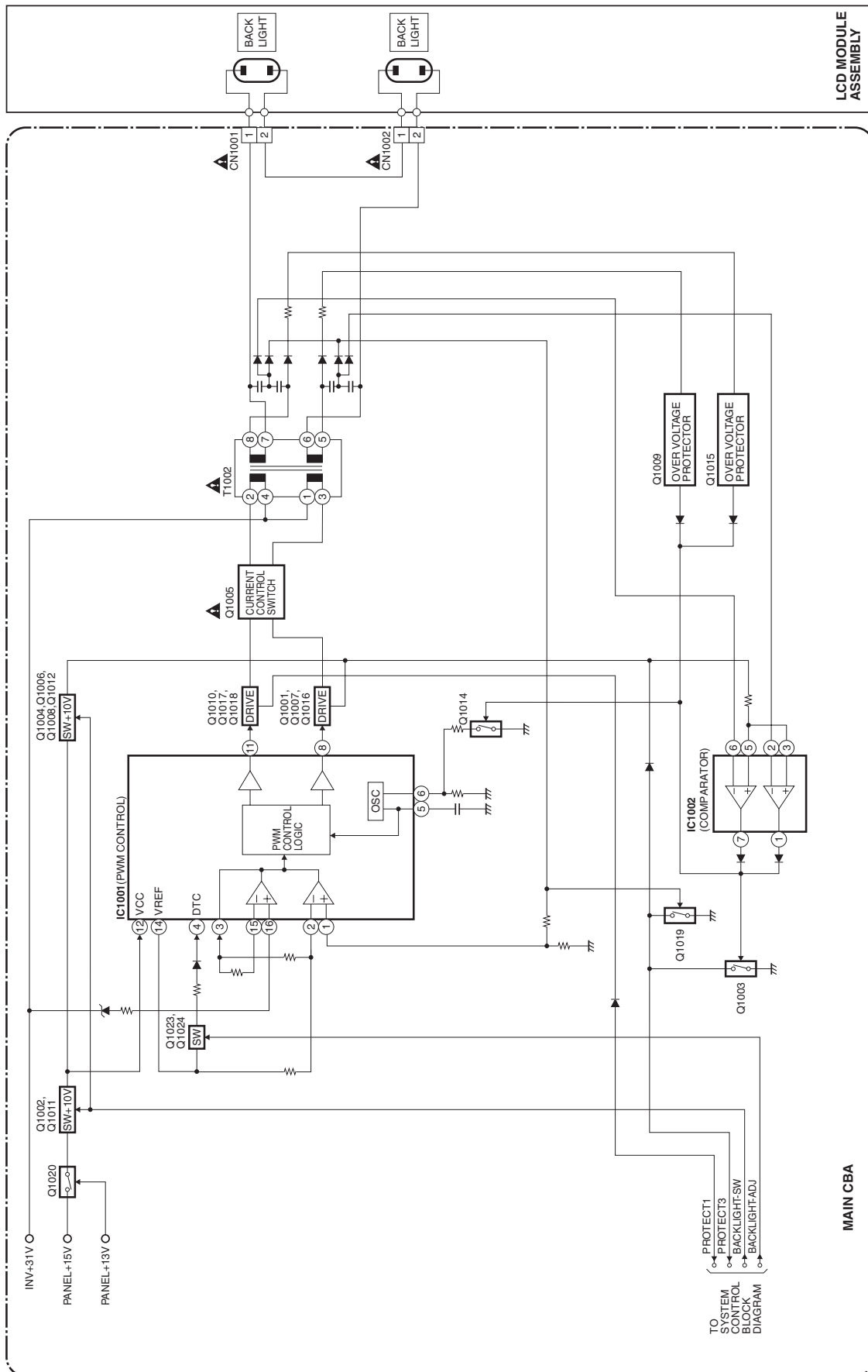
[19PFL3505D/F7 (Serial No.:DS1A, DS2A, DS3A, XA1A)]



# Digital Signal Process Block Diagram [19PFL3505D/F7 (Serial No.:DS4A)]



## Inverter Block Diagram



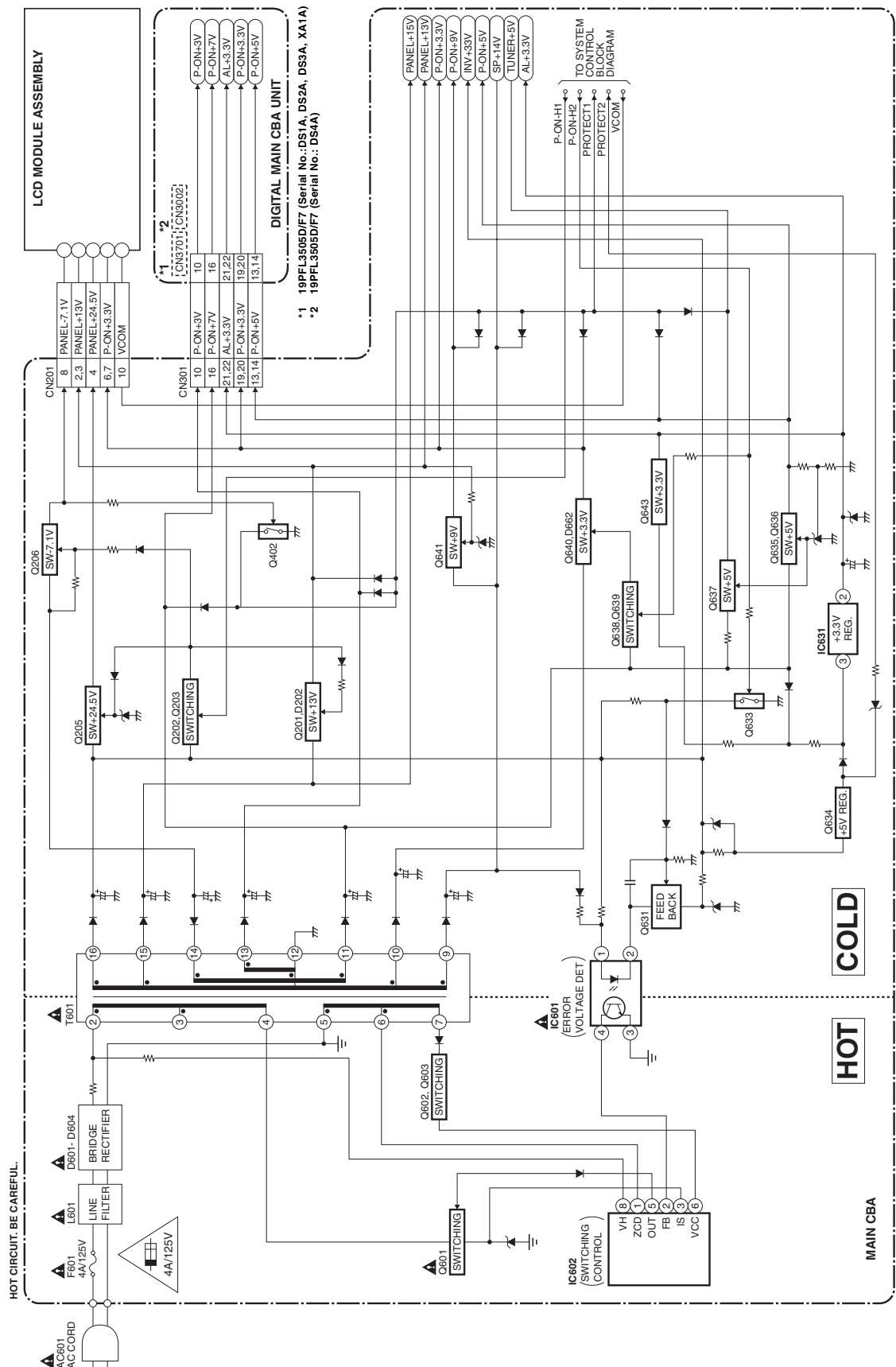
# Power Supply Block Diagram

**CAUTION !** Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

**CAUTION !!** For continued protection against risk of fire, replace only with same type 4 A, 125V fuse.

**ATTENTION :** Utiliser un fusible de rechange de même type de 4A, 125V.

**NOTE:** The voltage for parts in hot circuit is measured using hot GND as a common terminal.



# SCHEMATIC DIAGRAMS / CBA AND TEST POINTS

## Standard Notes

### WARNING

Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the mark “▲” in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

### Notes:

1. Do not use the part number shown on these drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since these drawings were prepared.
2. All resistance values are indicated in ohms ( $K = 10^3$ ,  $M = 10^6$ ).
3. Resistor wattages are 1/4W or 1/6W unless otherwise specified.
4. All capacitance values are indicated in  $\mu F$  ( $P = 10^{-6} \mu F$ ).
5. All voltages are DC voltages unless otherwise specified.
6. This schematic diagrams are masterized version that should cover the entire PL10.0 chassis models. Thus some parts in detail illustrated on this schematic diagrams may vary depend on the model within the PL10.0 chassis. Please refer to the parts lists for each models.
7. The Circuit Board layout illustrated on this service manual is the latest version for this chassis at the moment of making this service manual. Depend on the mass production date of each model, the actual layout of each Board may differ slightly from this version.

## LIST OF CAUTION, NOTES, AND SYMBOLS USED IN THE SCHEMATIC DIAGRAMS ON THE FOLLOWING PAGES:

### 1. CAUTION:

**CAUTION:** FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE\_A,\_V FUSE.

**ATTENTION:** UTILISER UN FUSIBLE DE RECHANGE DE MÊME TYPE DE\_A,\_V.

### 2. CAUTION:

Fixed Voltage (or Auto voltage selectable) power supply circuit is used in this unit.

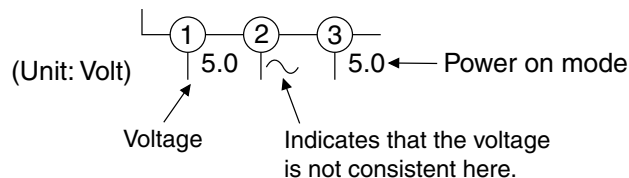
If Main Fuse (F601) is blown, first check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

### 3. Note:

1. Do not use the part number shown on the drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since the drawings were prepared.
2. To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

### 4. Voltage indications on the schematics are as shown below:

Plug the TV power cord into a standard AC outlet.:

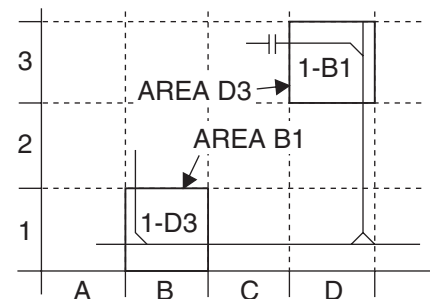


### 5. How to read converged lines

1-D3  
 ↑ Distinction Area  
 Line Number  
 (1 to 3 digits)

Examples:

1. "1-D3" means that line number "1" goes to the line number "1" of the area "D3".
2. "1-B1" means that line number "1" goes to the line number "1" of the area "B1".



### 6. Test Point Information

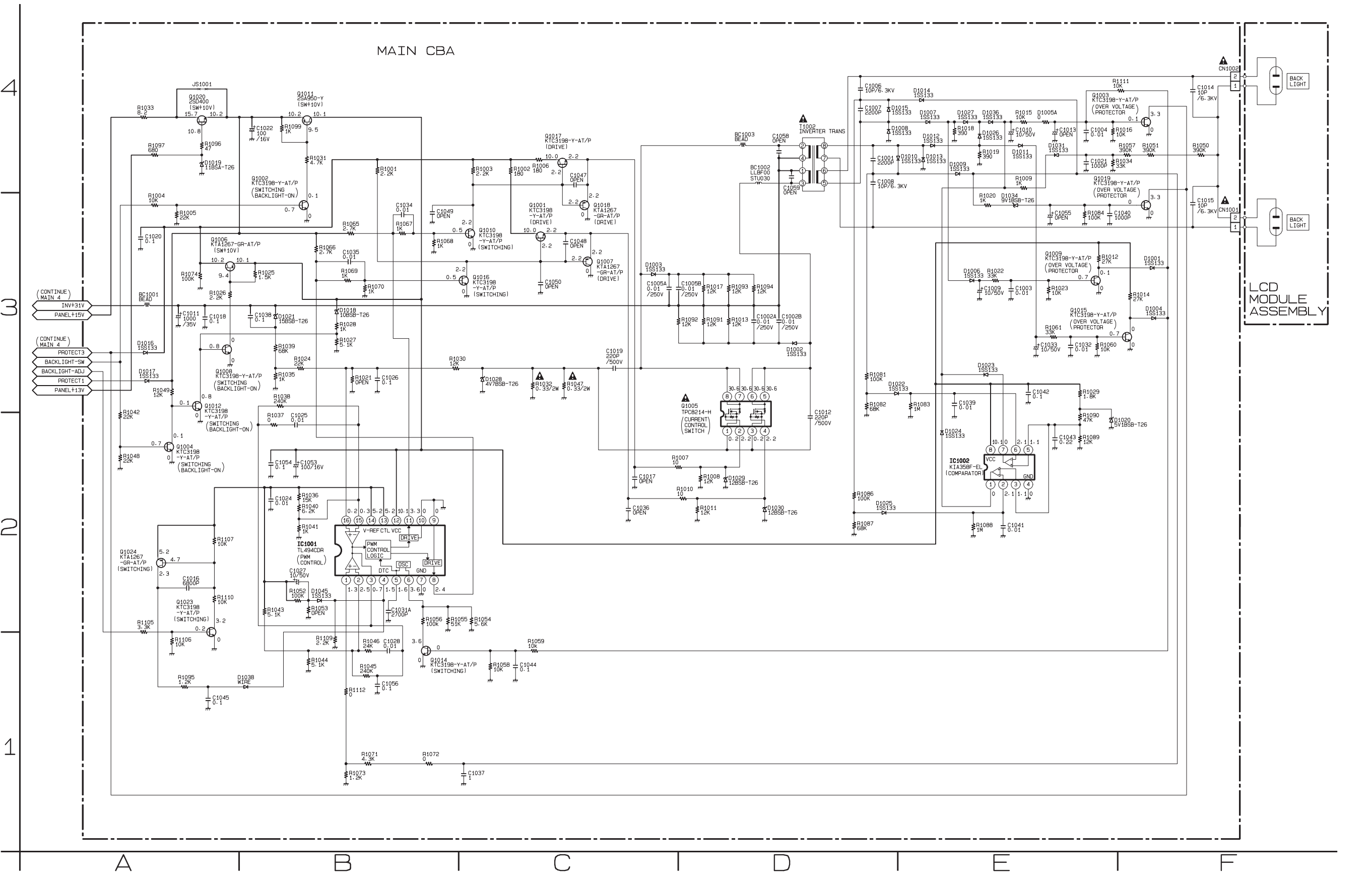
⊙ : Indicates a test point with a jumper wire across a hole in the PCB.

□→ : Used to indicate a test point with a component lead on foil side.

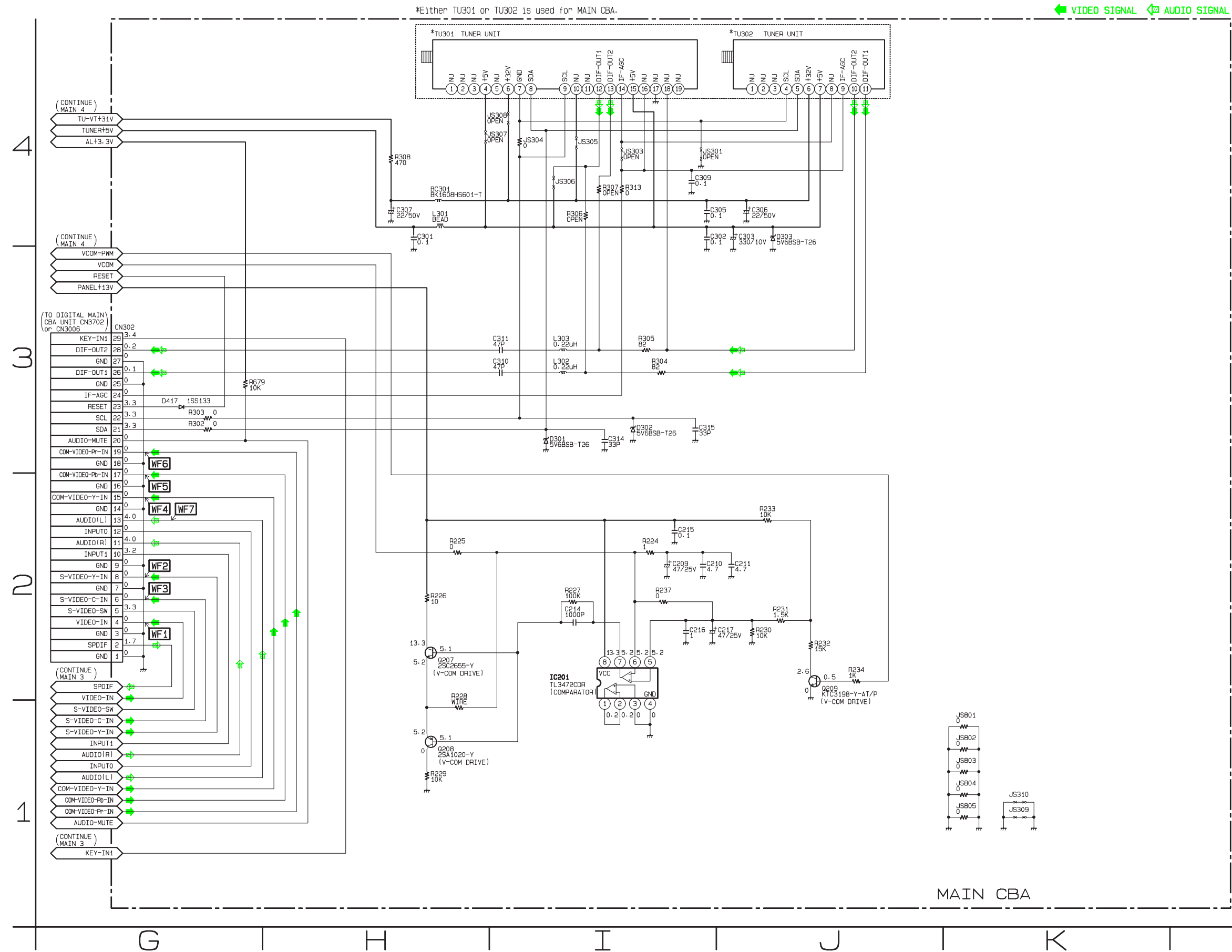
⊗ : Used to indicate a test point with no test pin.

● : Used to indicate a test point with a test pin.

Main 1 Schematic Diagram

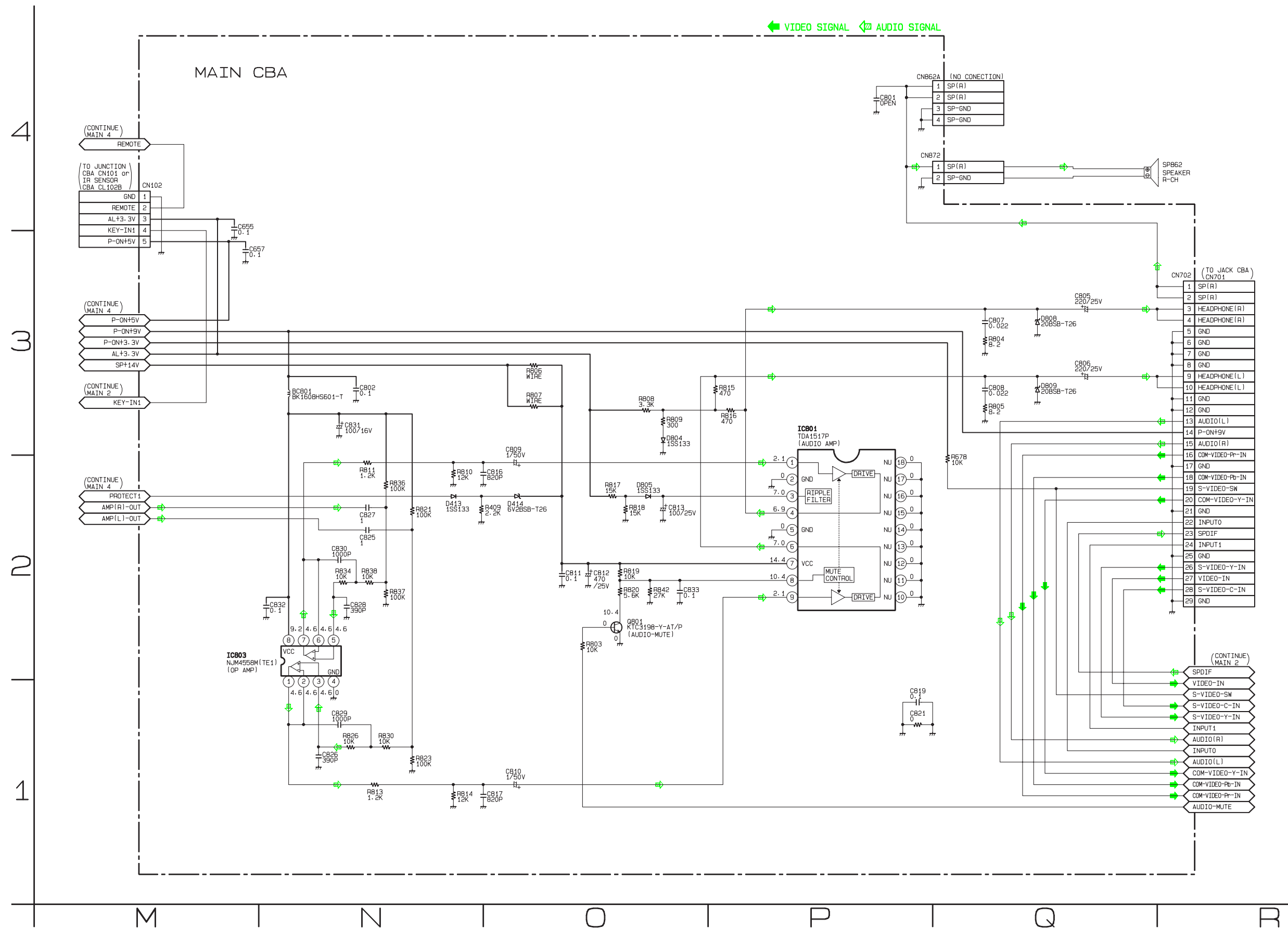


## Main 2 Schematic Diagram





### Main 3 Schematic Diagram

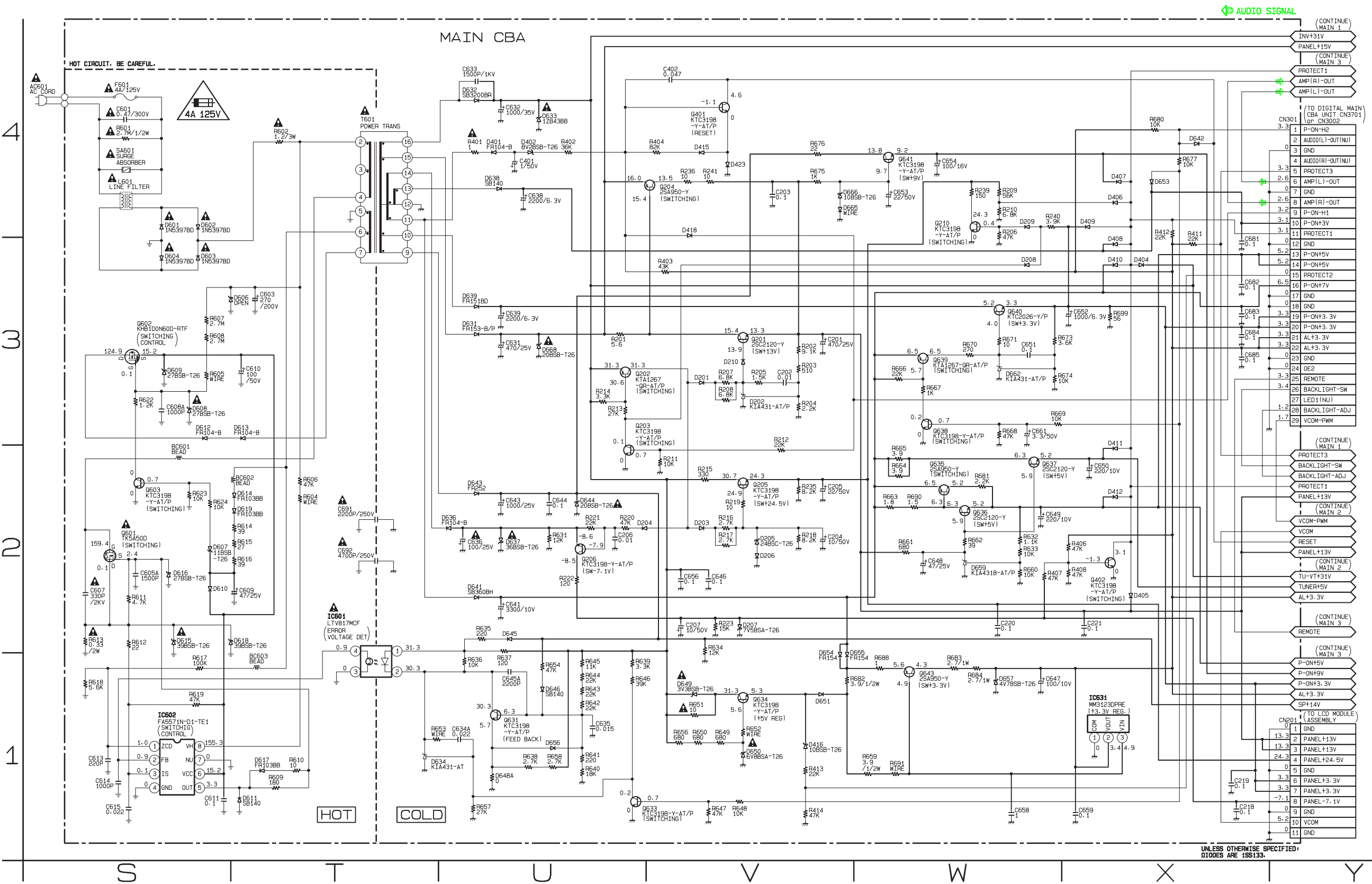


Main 4 Schematic Diagram

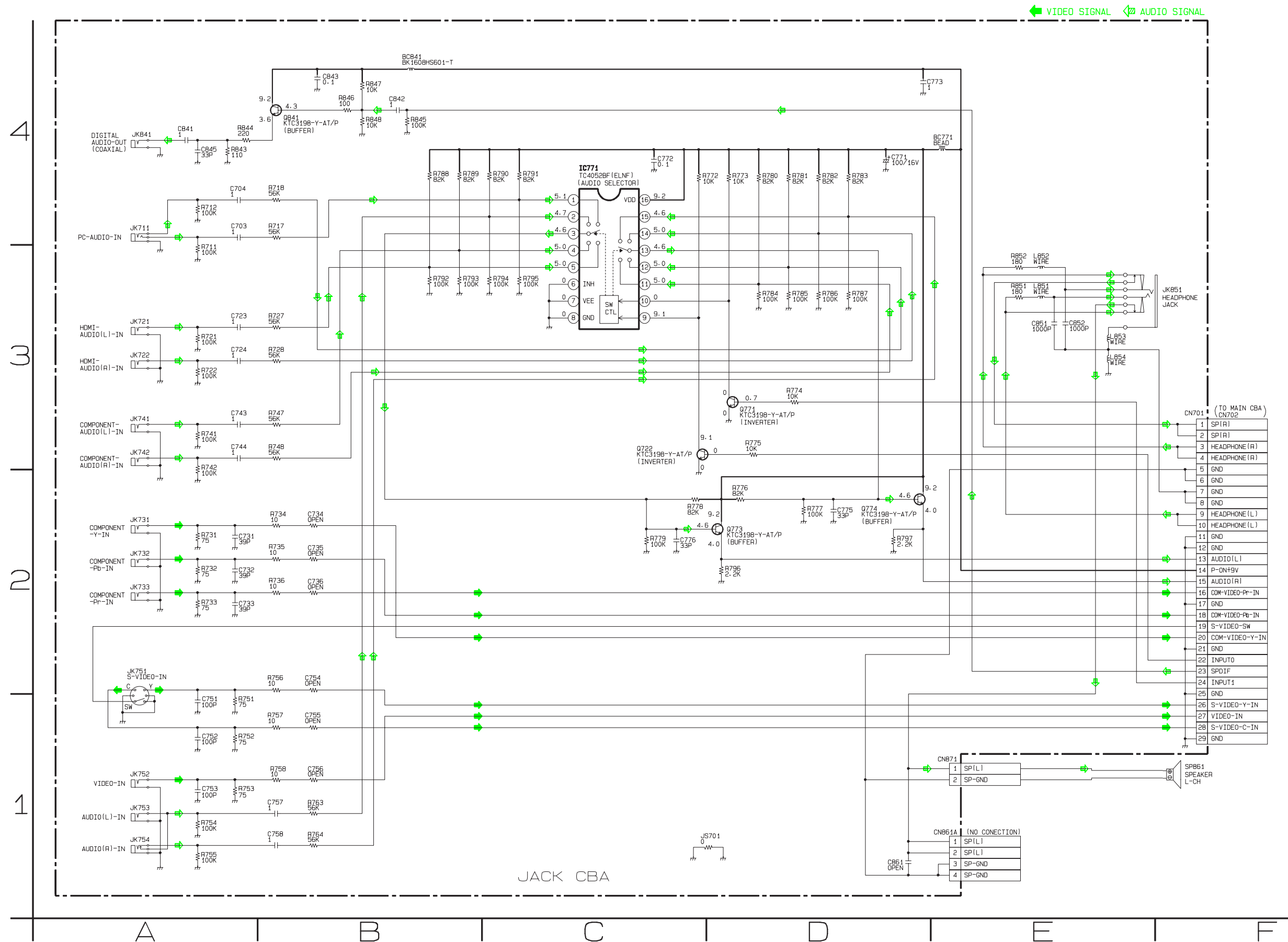
**CAUTION !**  
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
If Main Fuse (F601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.  
Otherwise it may cause some components in the power supply circuit to fail.

**CAUTION ! :** For continued protection against risk of fire,  
replace only with same type 4 A, 125V fuse.  
**ATTENTION :** Utiliser un fusible de rechange de même type de 4A, 125V.

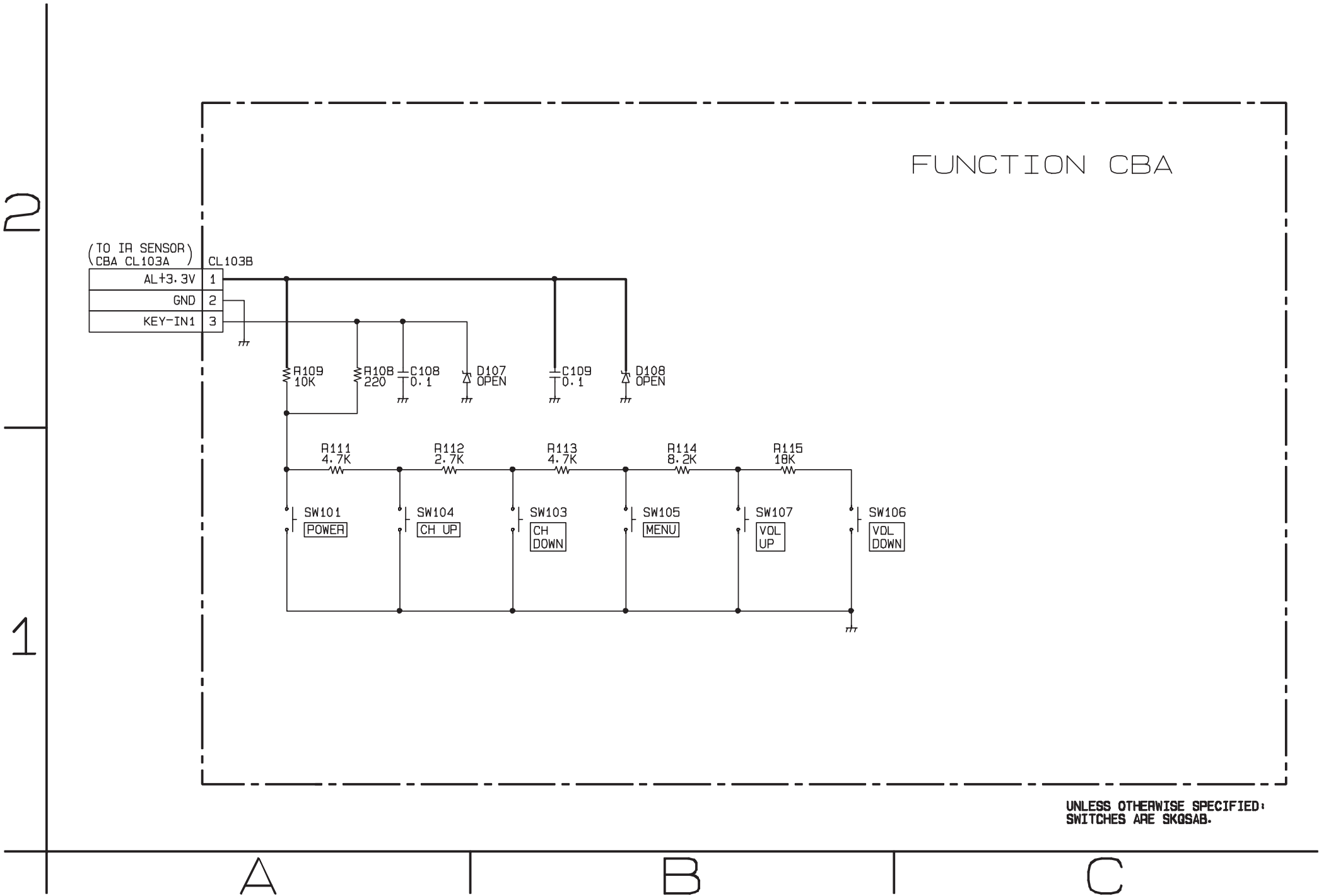
**NOTE:**  
The voltage for parts in hot circuit is measured using  
hot GND as a common terminal.



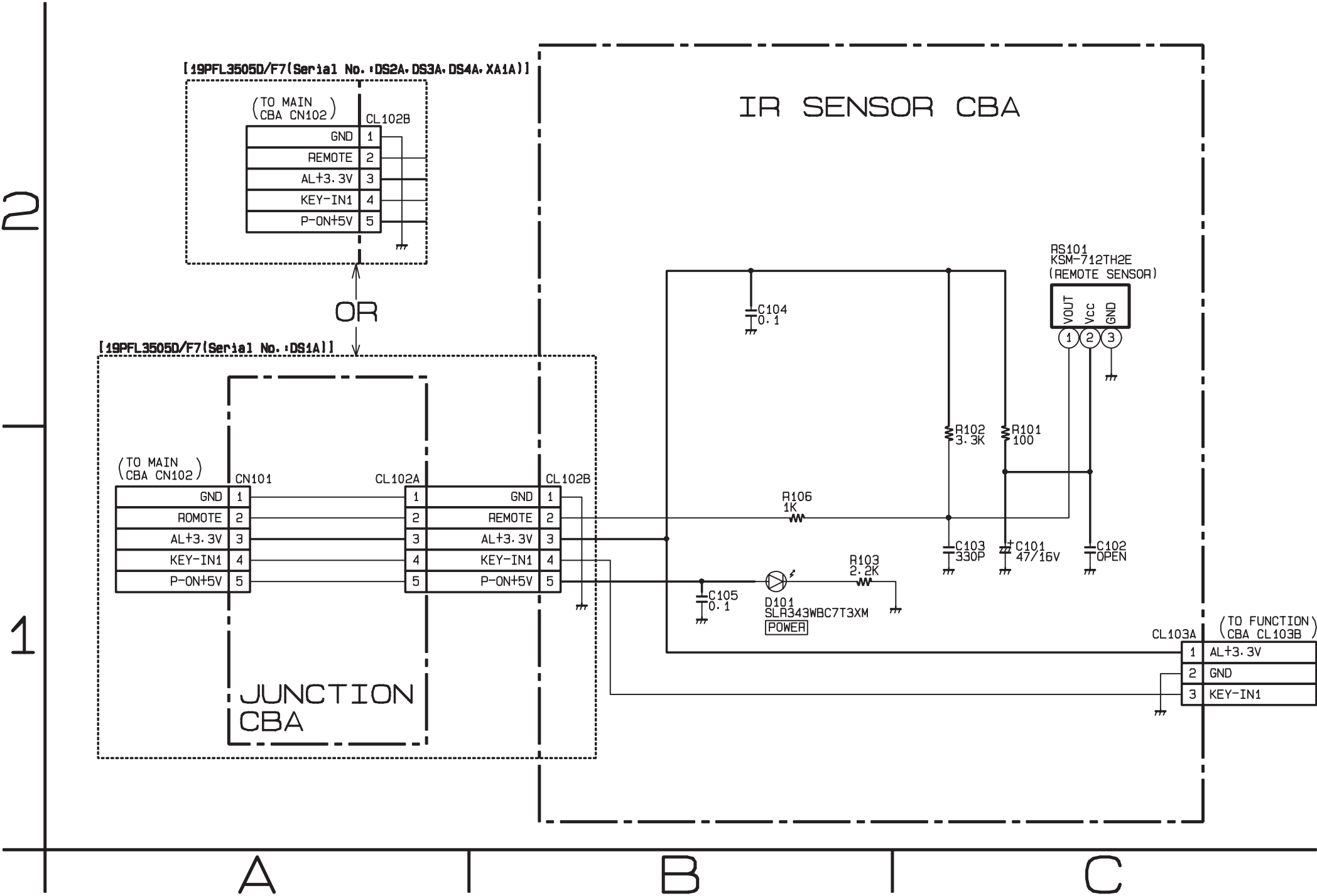
### Jack Schematic Diagram



Function Schematic Diagram

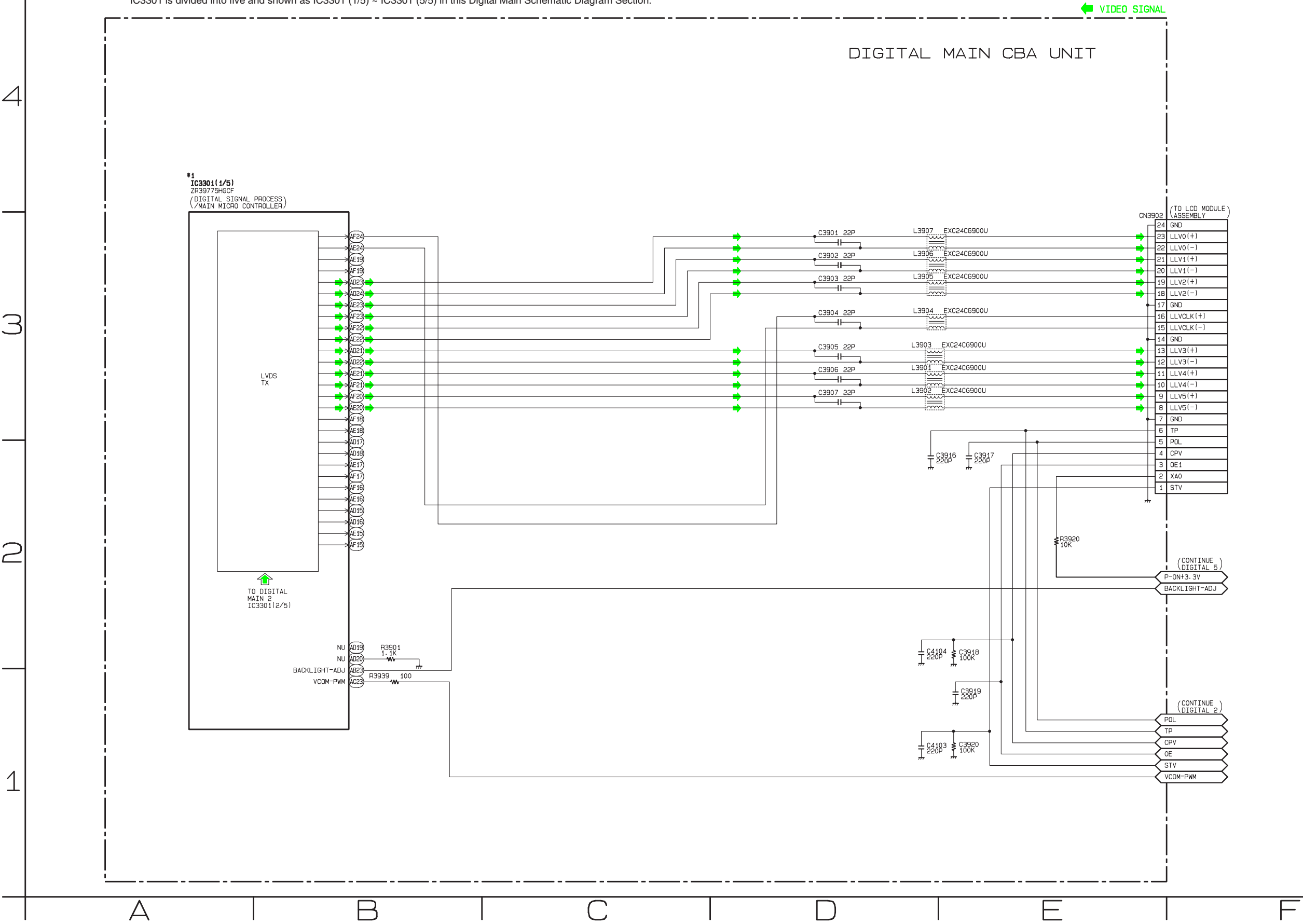


IR Sensor & Junction Schematic Diagram



Digital Main 1 Schematic Diagram [19PFL3505D/F7 (Serial No.:DS1A, DS2A, DS3A, XA1A)]

\*1 NOTE:  
The order of pins shown in this diagram is different from that of actual IC3301.  
IC3301 is divided into five and shown as IC3301 (1/5) ~ IC3301 (5/5) in this Digital Main Schematic Diagram Section.

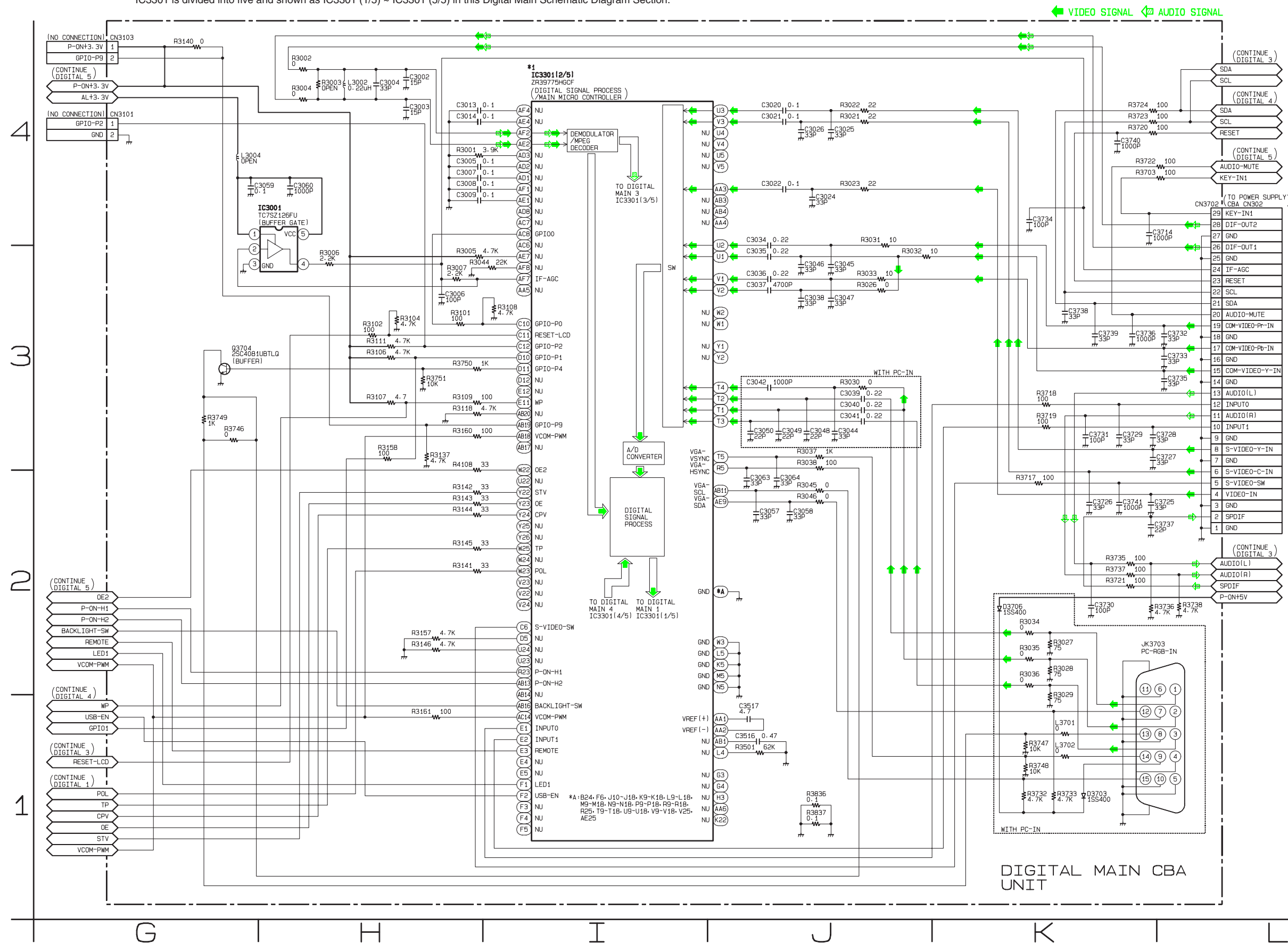


### Digital Main 2 Schematic Diagram [19PFL3505D/F7 (Serial No.:DS1A, DS2A, DS3A, XA1A)]

**\*1 NOTE:**

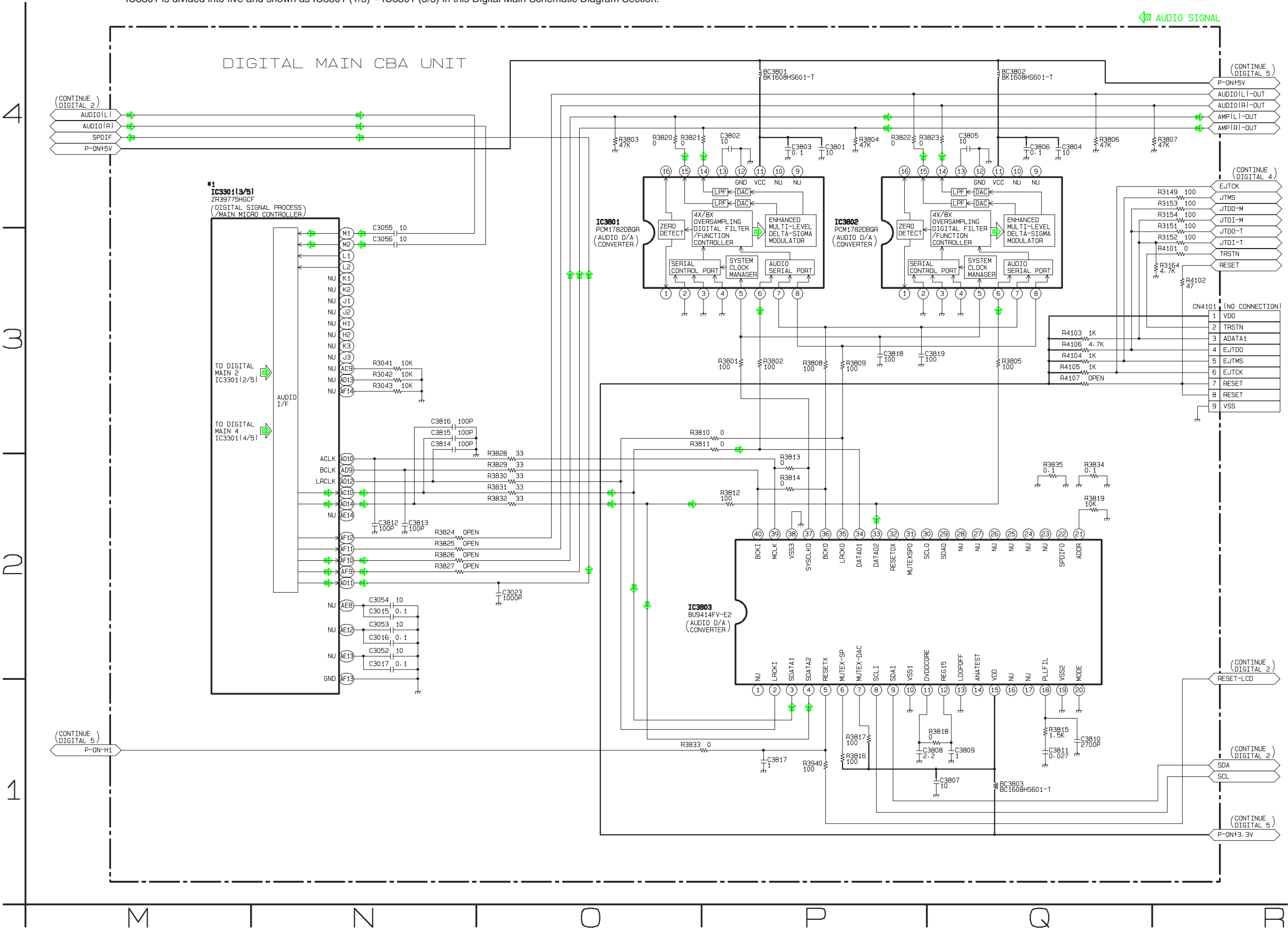
The order of pins shown in this diagram is different from that of actual IC3301.

IC3301 is divided into five and shown as IC3301 (1/5) ~ IC3301 (5/5) in this Digital Main Schematic Diagram Section.



Digital Main 3 Schematic Diagram [19PFL3505D/F7 (Serial No.:DS1A, DS2A, DS3A, XA1A)]

\*1 NOTE:  
The order of pins shown in this diagram is different from that of actual IC3301.  
IC3301 is divided into five and shown as IC3301 (1/5) ~ IC3301 (5/5) in this Digital Main Schematic Diagram Section.



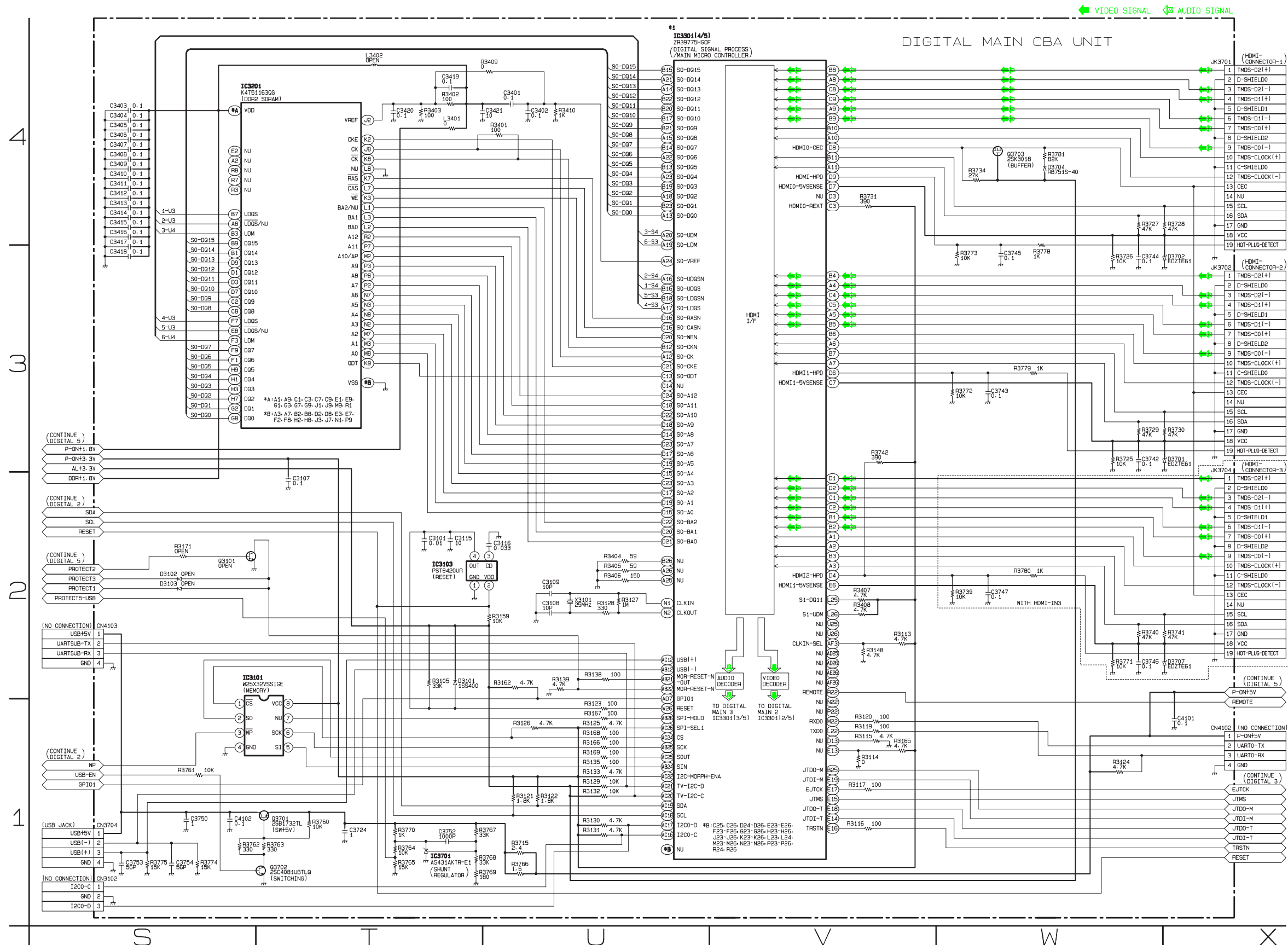


### Digital Main 4 Schematic Diagram [19PFL3505D/F7 (Serial No.:DS1A, DS2A, DS3A, XA1A)]

**\*1 NOTE:**

The order of pins shown in this diagram is different from that of actual IC3301.

IC3301 is divided into five and shown as IC3301 (1/5) ~ IC3301 (5/5) in this Digital Main Schematic Diagram Section.

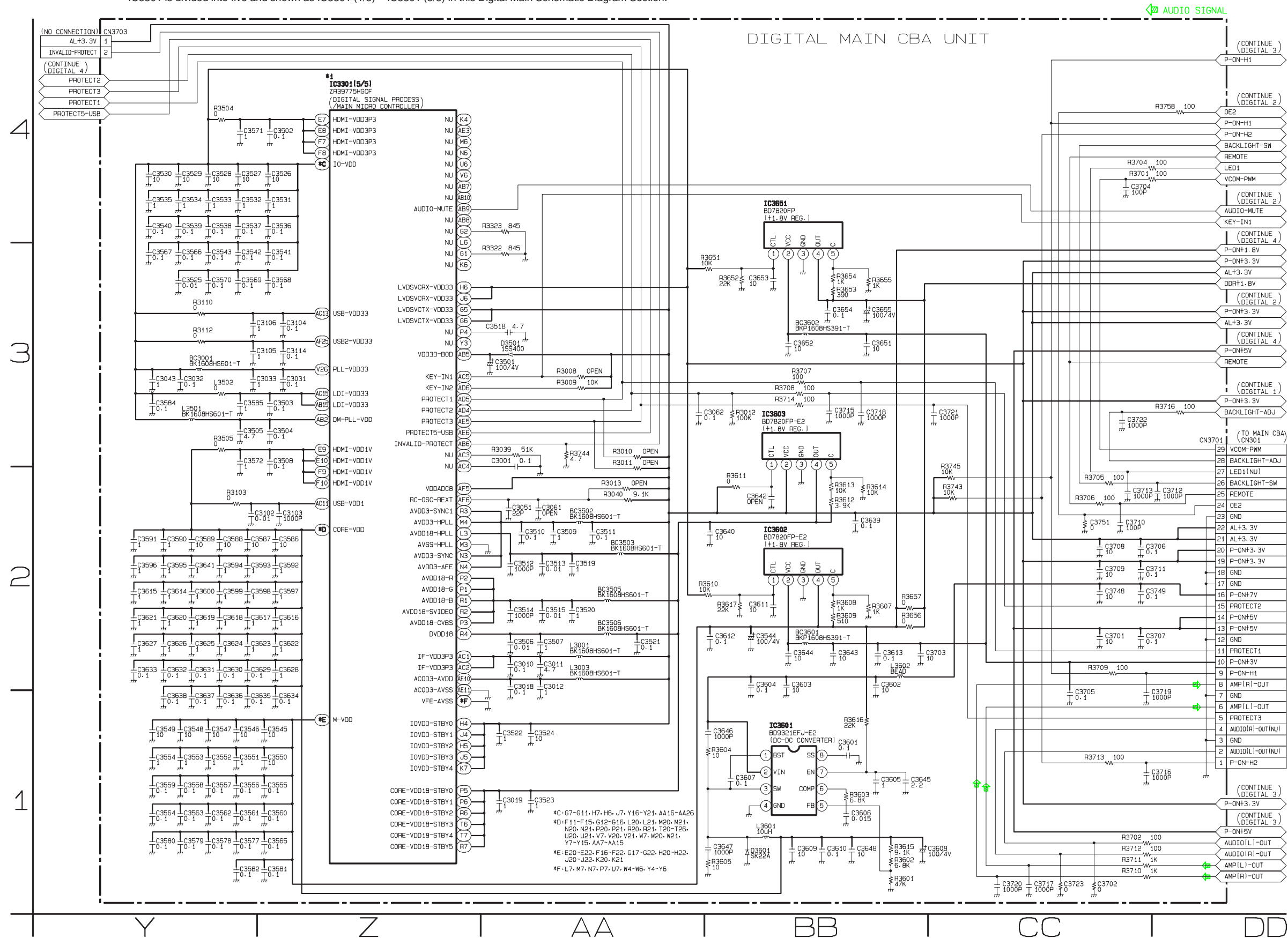


### Digital Main 5 Schematic Diagram [19PFL3505D/F7 (Serial No.:DS1A, DS2A, DS3A, XA1A)]

**\*1 NOTE:**

The order of pins shown in this diagram is different from that of actual IC3301.

IC3301 is divided into five and shown as IC3301 (1/5) ~ IC3301 (5/5) in this Digital Main Schematic Diagram Section.

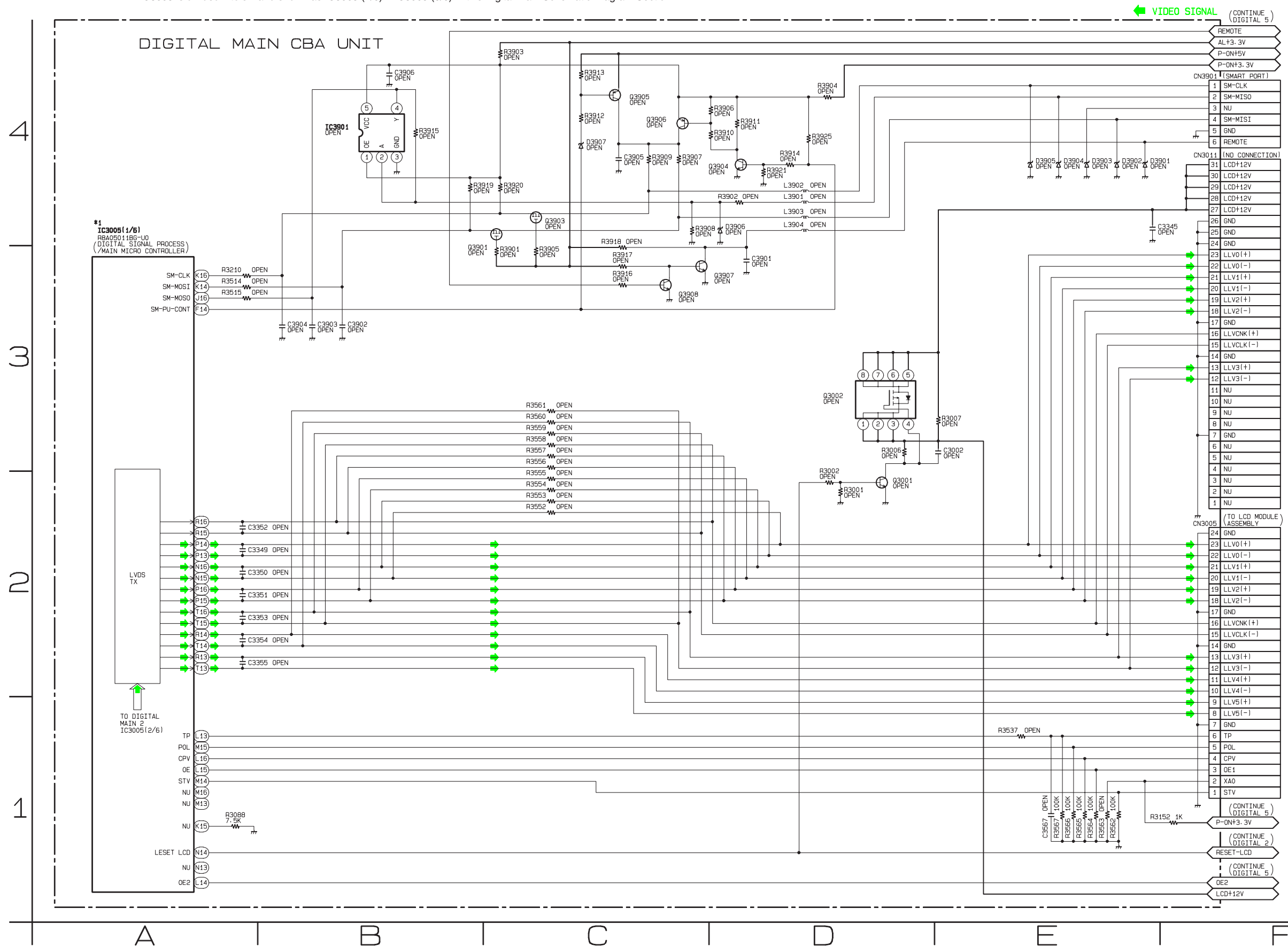


## Digital Main 1 Schematic Diagram [19PFL3505D/F7 (Serial No.:DS4A)]

**\*1 NOTE:**

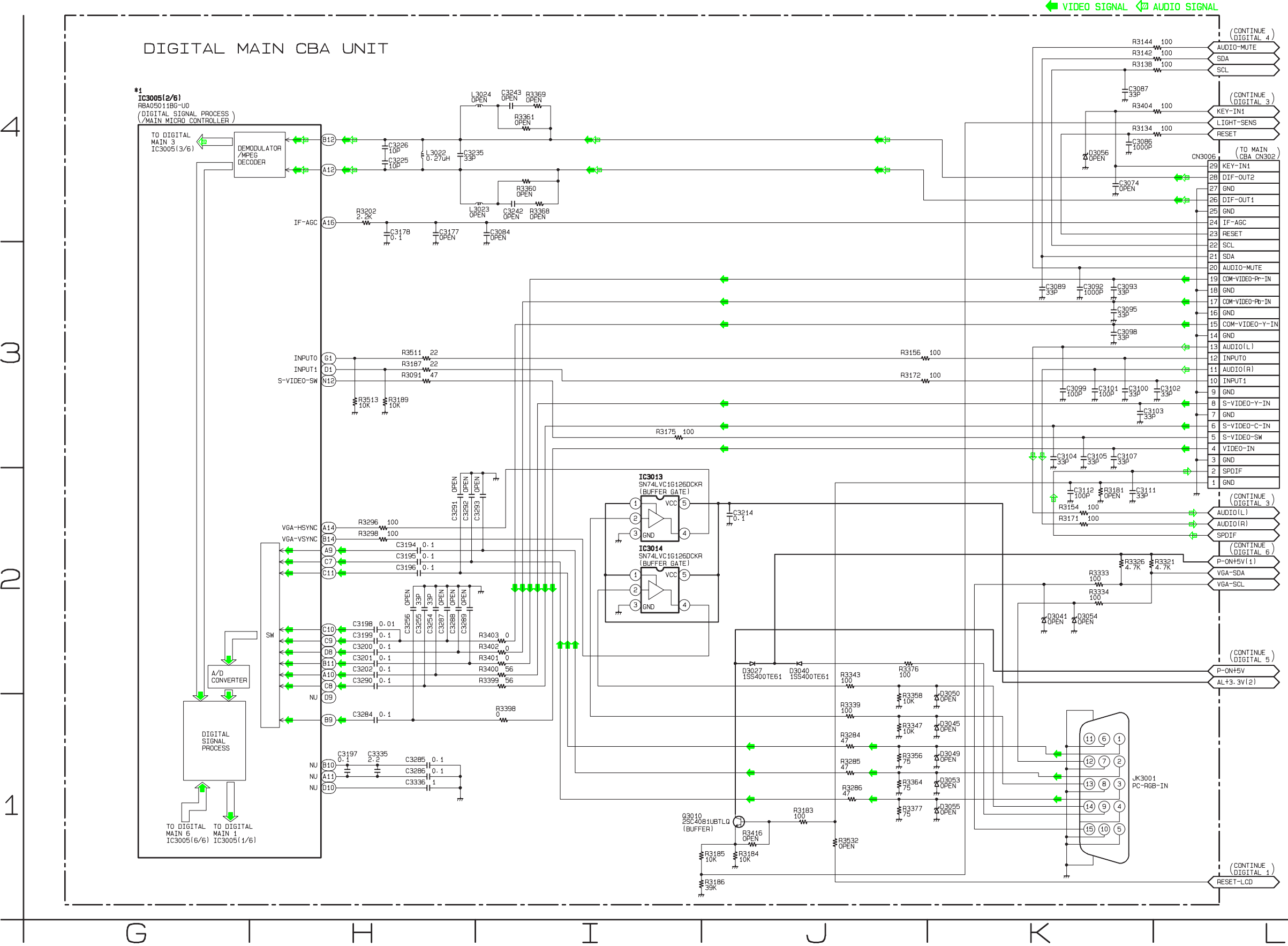
The order of pins shown in this diagram is different from that of actual IC3005.

IC3005 is divided into six and shown as IC3005 (1/6) ~ IC3005 (6/6) in this Digital Main Schematic Diagram Section.



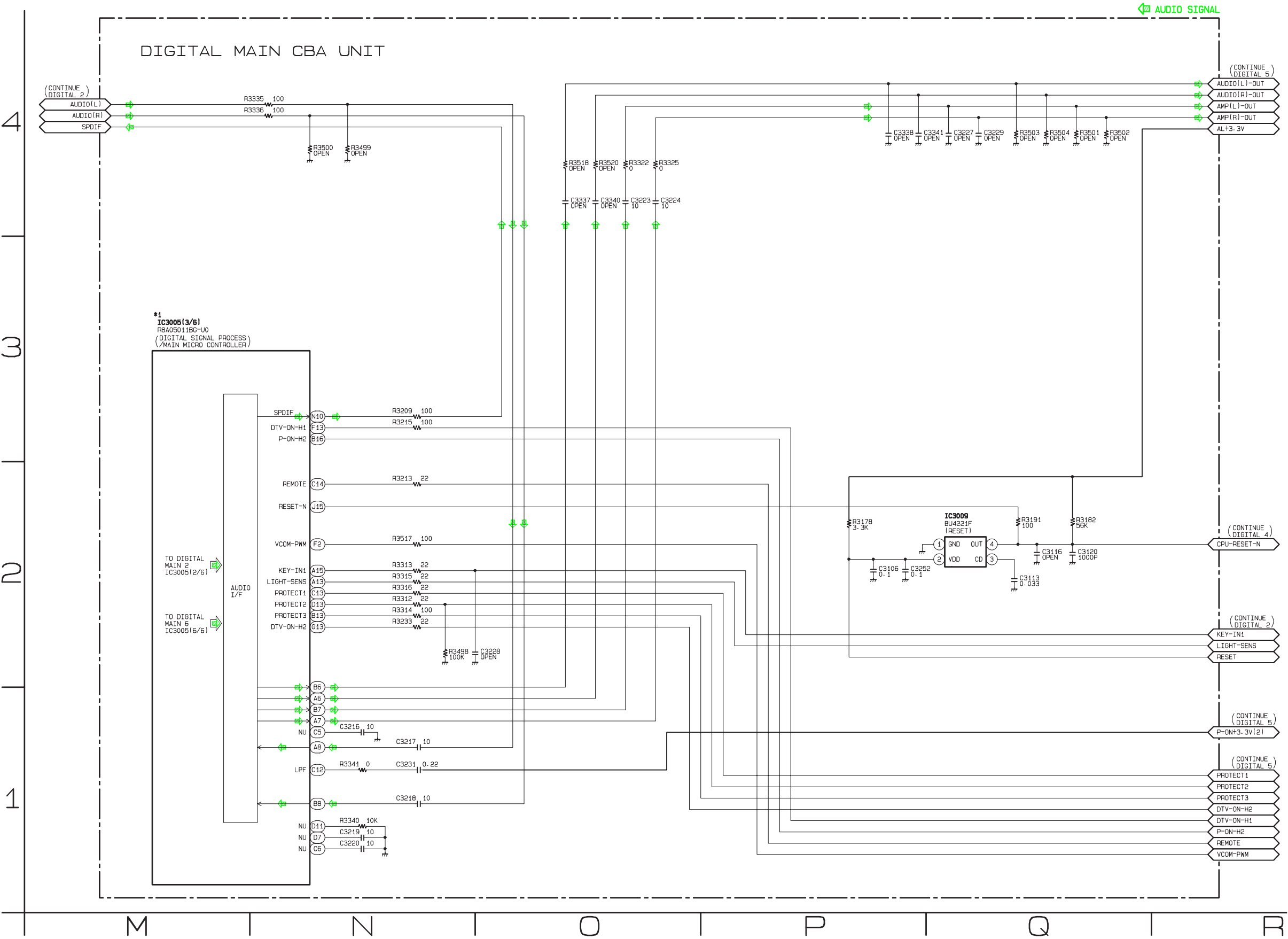
Digital Main 2 Schematic Diagram [19PFL3505D/F7 (Serial No.:DS4A)]

\*1 NOTE:  
The order of pins shown in this diagram is different from that of actual IC3005.  
IC3005 is divided into six and shown as IC3005 (1/6) ~ IC3005 (6/6) in this Digital Main Schematic Diagram Section.



Digital Main 3 Schematic Diagram [19PFL3505D/F7 (Serial No.:DS4A)]

\*1 NOTE:  
The order of pins shown in this diagram is different from that of actual IC3005.  
IC3005 is divided into six and shown as IC3005 (1/6) ~ IC3005 (6/6) in this Digital Main Schematic Diagram Section.

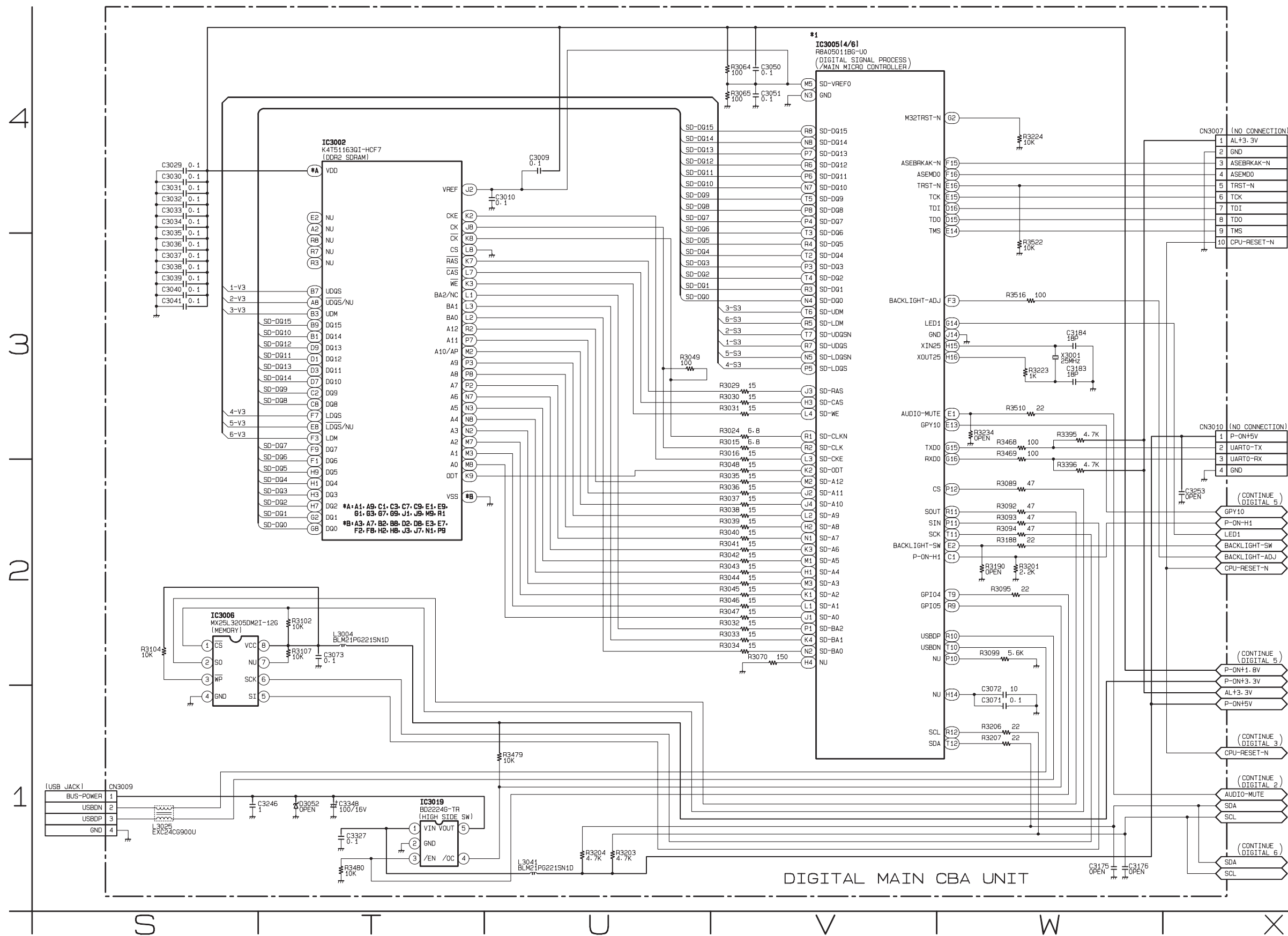


### Digital Main 4 Schematic Diagram [19PFL3505D/F7 (Serial No.:DS4A)]

**\*1 NOTE:**

The order of pins shown in this diagram is different from that of actual IC3005.

IC3005 is divided into six and shown as IC3005 (1/6) ~ IC3005 (6/6) in this Digital Main Schematic Diagram Section.



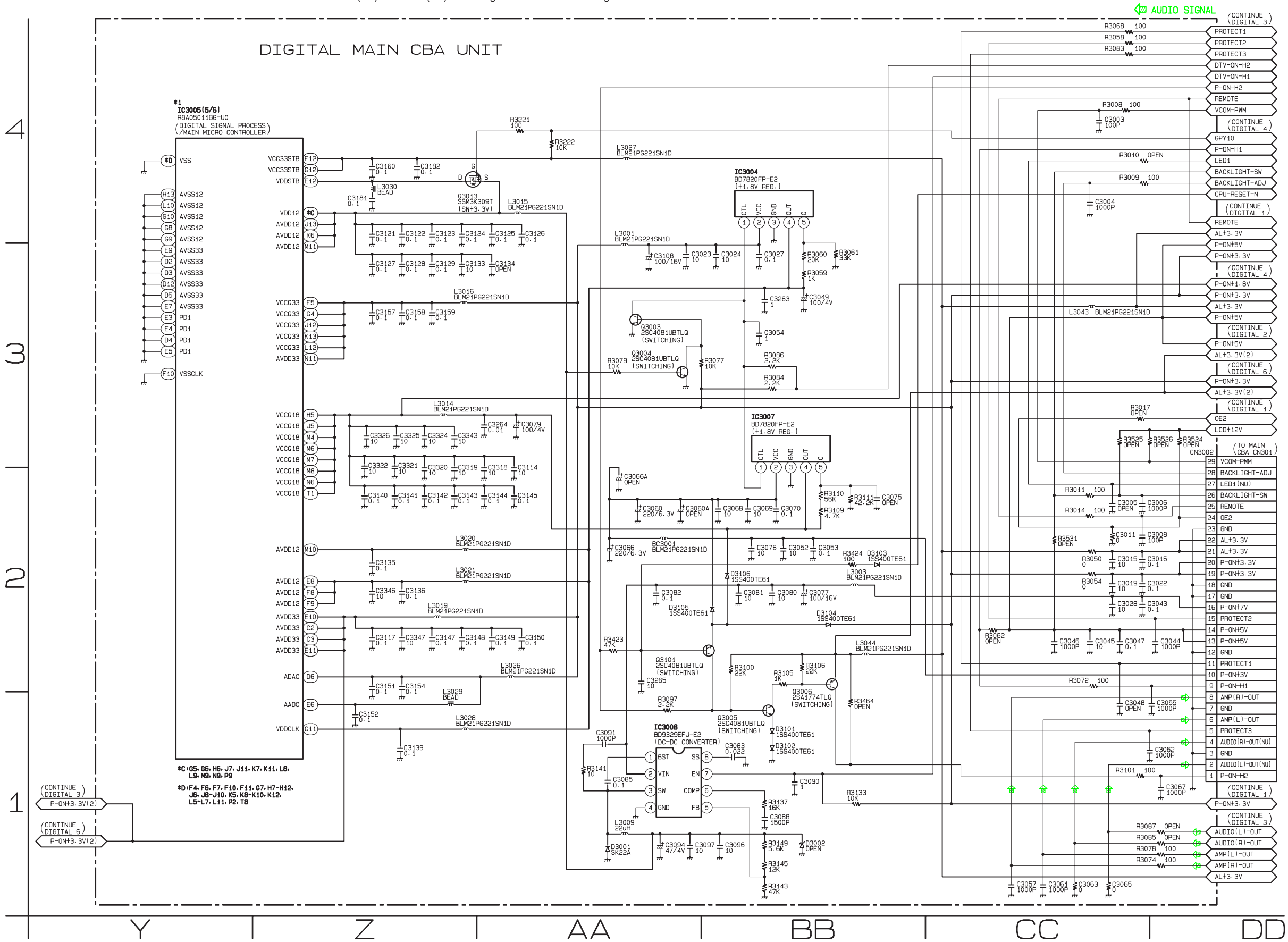


## Digital Main 5 Schematic Diagram [19PFL3505D/F7 (Serial No.:DS4A)]

**\*1 NOTE:**

The order of pins shown in this diagram is different from that of actual IC3005.

IC3005 is divided into six and shown as IC3005 (1/6) ~ IC3005 (6/6) in this Digital Main Schematic Diagram Section.

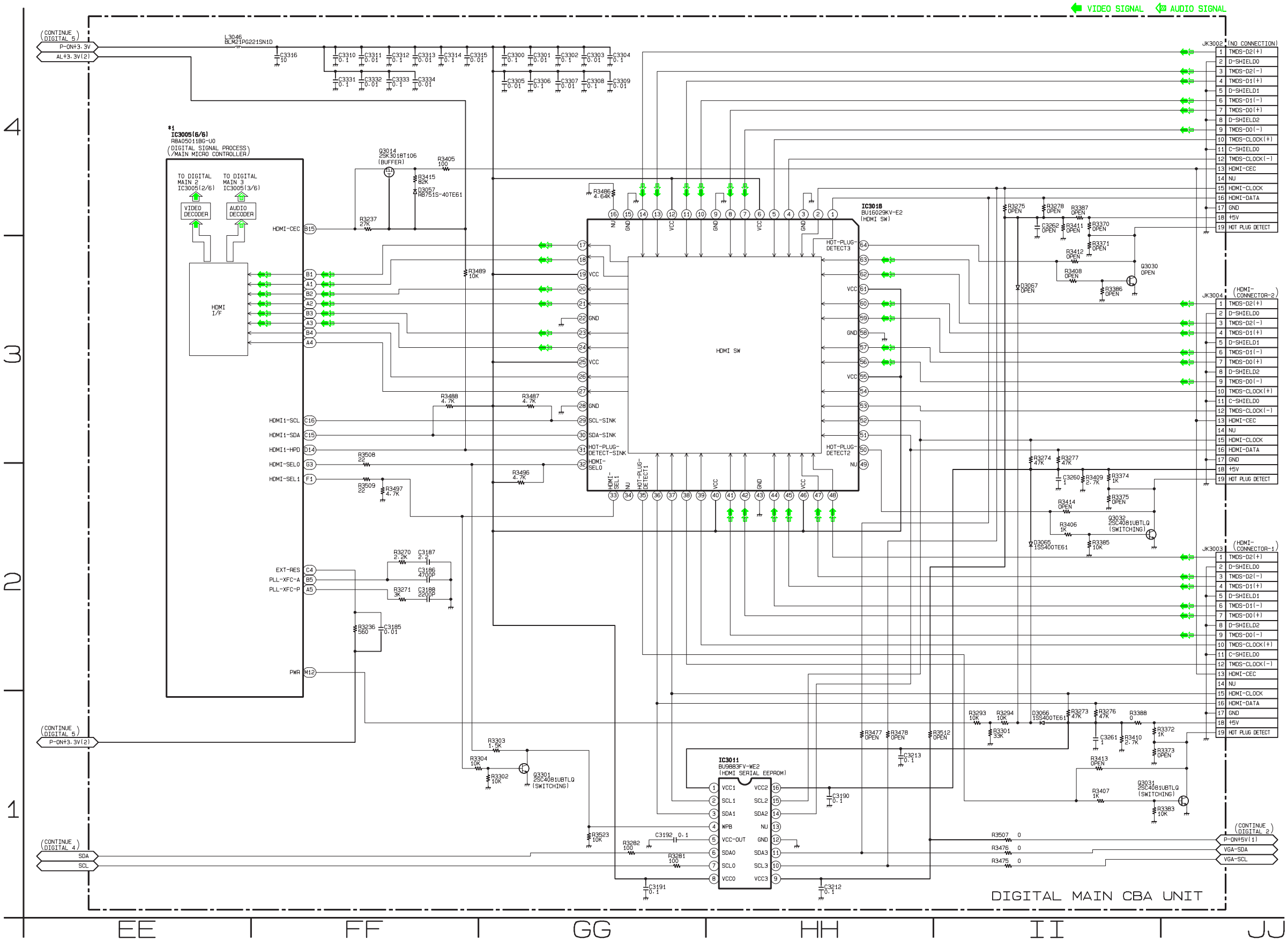


## Digital Main 6 Schematic Diagram [19PFL3505D/F7 (Serial No.:DS4A)]

**\*1 NOTE:**

The order of pins shown in this diagram is different from that of actual IC3005.

IC3005 is divided into six and shown as IC3005 (1/6) ~ IC3005 (6/6) in this Digital Main Schematic Diagram Section.

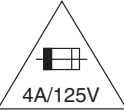




Main CBA Top View [19PFL3505D/F7 (Serial No.:DS1A, DS2A, DS3A, XA1A)]

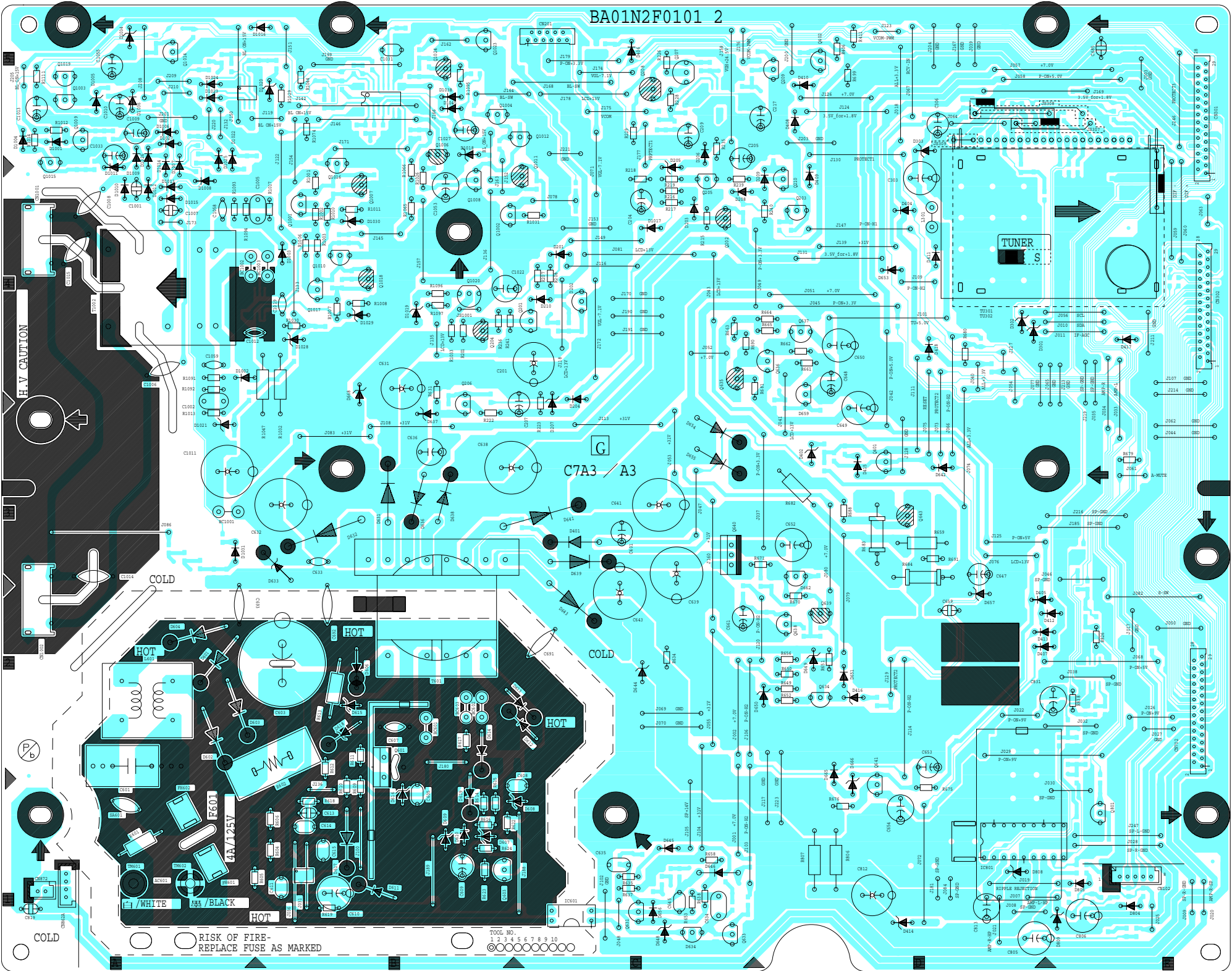
Because a hot chassis ground is present in the power supply circuit, an isolation transformer must be used when repairing. Also, in order to have the ability to increase the input slowly, when troubleshooting this type of power supply circuit, a variable isolation transformer is required.

**CAUTION !**  
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
If Main Fuse (F601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.



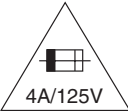
**CAUTION ! :** For continued protection against risk of fire, replace only with same type 4 A, 125V fuse.  
**ATTENTION :** Utiliser un fusible de rechange de même type de 4A, 125V.

**NOTE:**  
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



Main CBA Bottom View [19PFL3505D/F7 (Serial No.:DS1A, DS2A, DS3A, XA1A)]

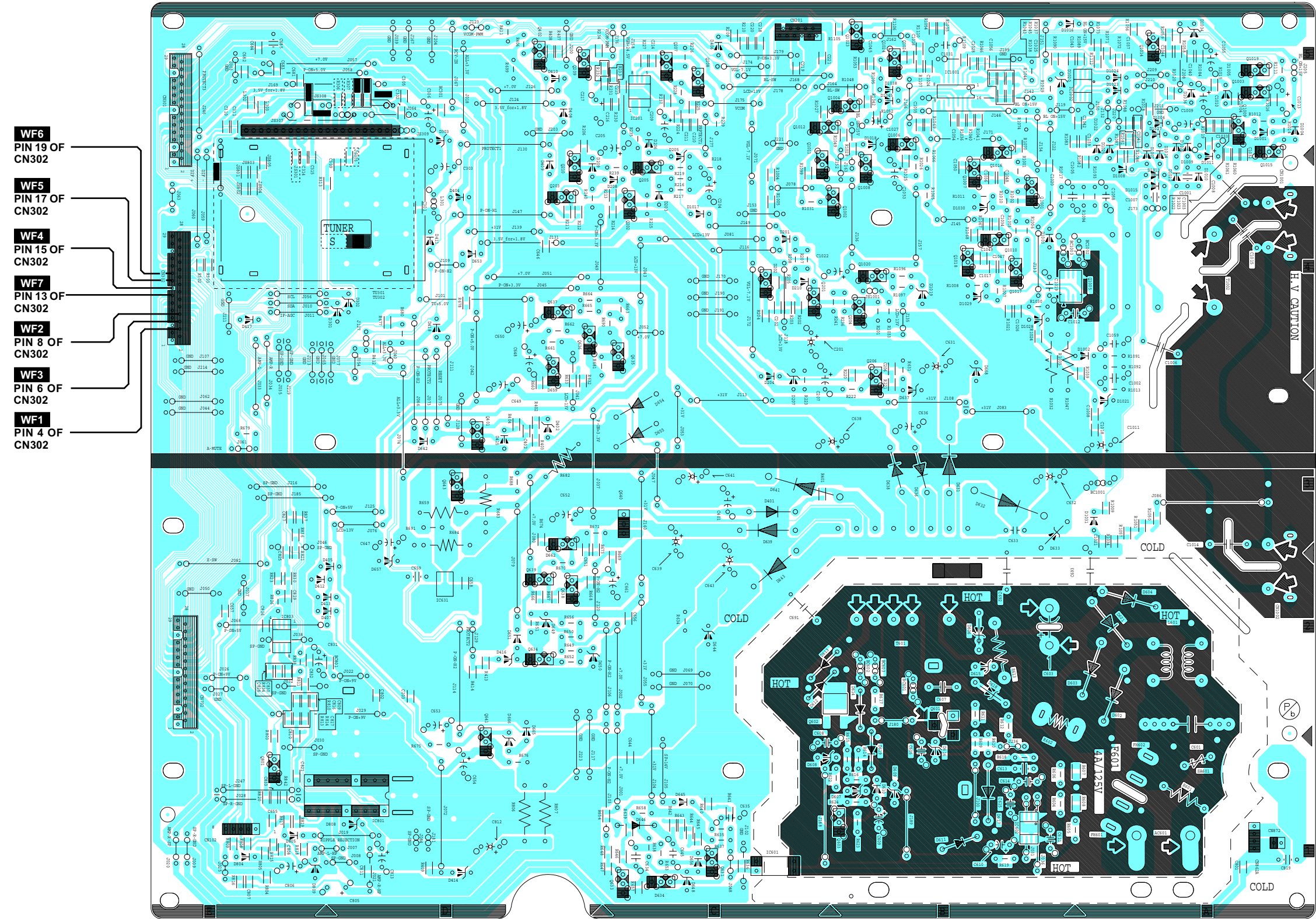
**CAUTION !**  
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
If Main Fuse (F601) is blown , check to see that all components in the power supply  
circuit are not defective before you connect the AC plug to the AC power supply.  
Otherwise it may cause some components in the power supply circuit to fail.



**CAUTION ! :** For continued protection against risk of fire,  
replace only with same type 4 A, 125V fuse.  
**ATTENTION :** Utiliser un fusible de rechange de même type de 4A, 125V.

**NOTE:**  
The voltage for parts in hot circuit is measured using  
hot GND as a common terminal.

Because a hot chassis ground is present in the power supply  
circuit, an isolation transformer must be used when repairing.  
Also, in order to have the ability to increase the input slowly,  
when troubleshooting this type of power supply circuit,  
a variable isolation transformer is required.






Main CBA Top View [19PFL3505D/F7 (Serial No.:DS4A)]

Because a hot chassis ground is present in the power supply circuit, an isolation transformer must be used when repairing. Also, in order to have the ability to increase the input slowly, when troubleshooting this type of power supply circuit, a variable isolation transformer is required.

**CAUTION !**  
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
If Main Fuse (F601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.  
Otherwise it may cause some components in the power supply circuit to fail.

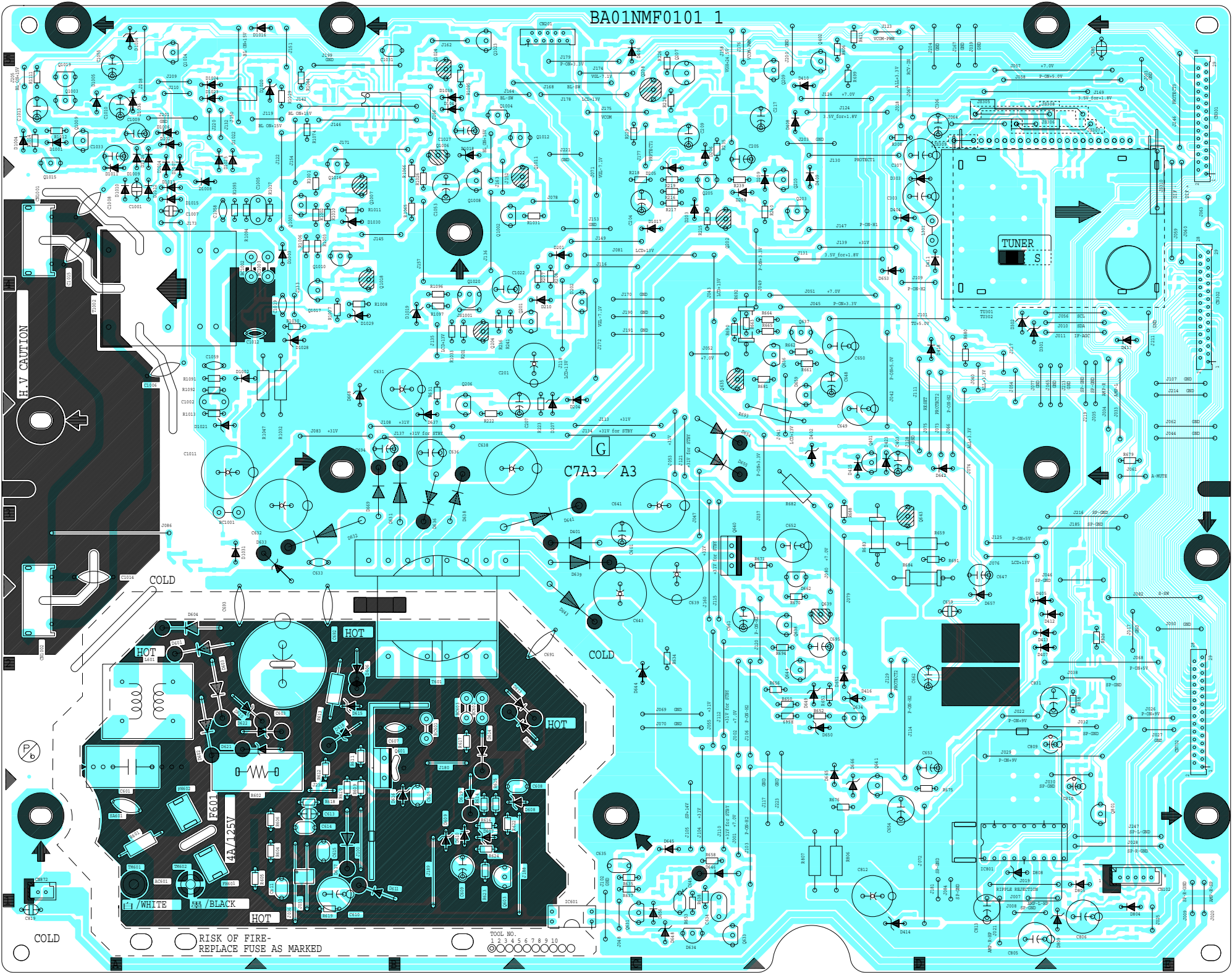


4A/125V

**CAUTION ! :** For continued protection against risk of fire, replace only with same type 4 A, 125V fuse.

**ATTENTION :** Utiliser un fusible de rechange de même type de 4A, 125V.

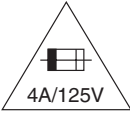
**NOTE:**  
The voltage for parts in hot circuit is measured using hot GND as a common terminal.





Main CBA Bottom View [19PFL3505D/F7 (Serial No.:DS4A)]

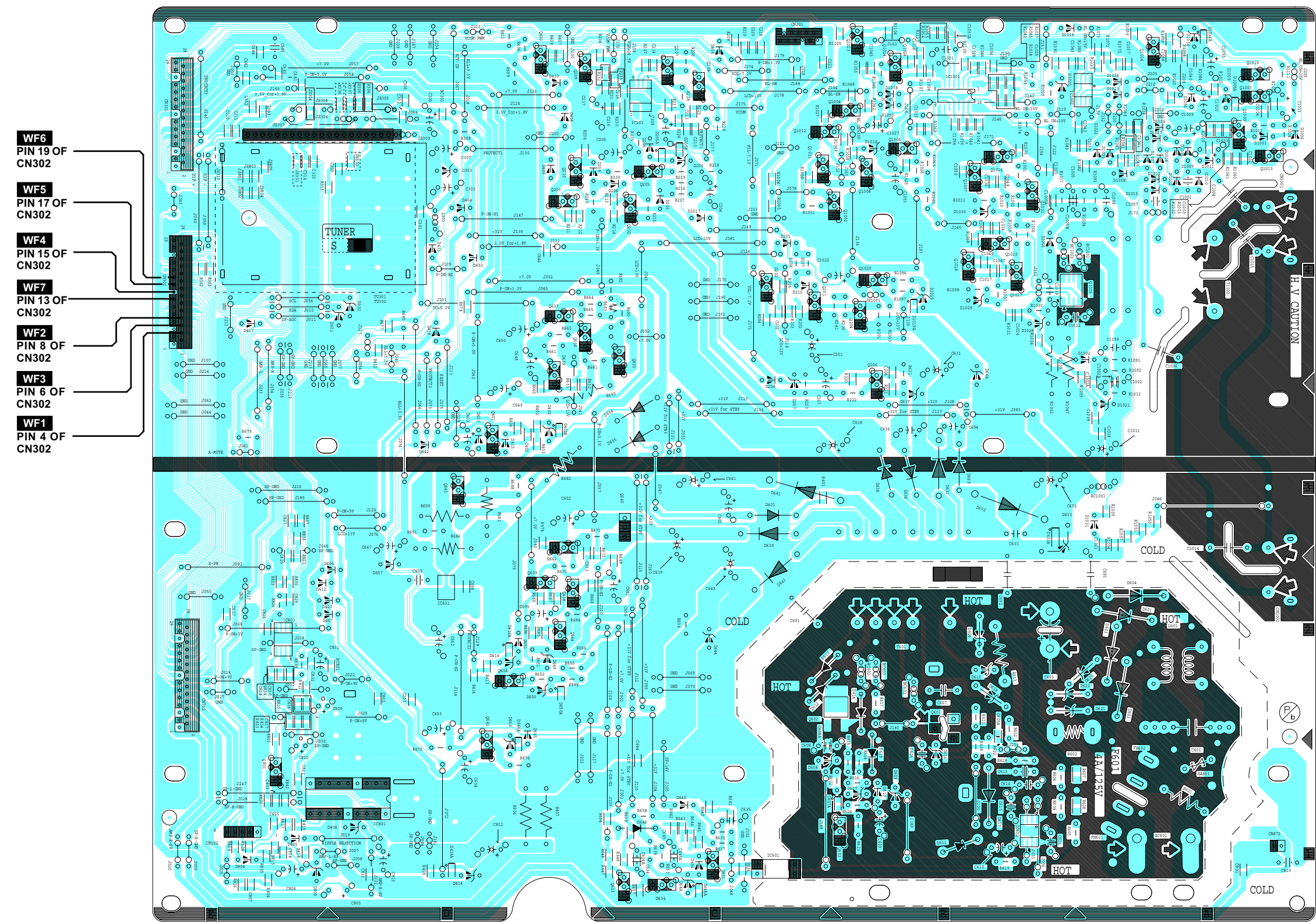
**CAUTION !**  
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
If Main Fuse (F601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.  
Otherwise it may cause some components in the power supply circuit to fail.



**CAUTION ! :** For continued protection against risk of fire,  
replace only with same type 4 A, 125V fuse.  
**ATTENTION :** Utiliser un fusible de rechange de même type de 4A, 125V.

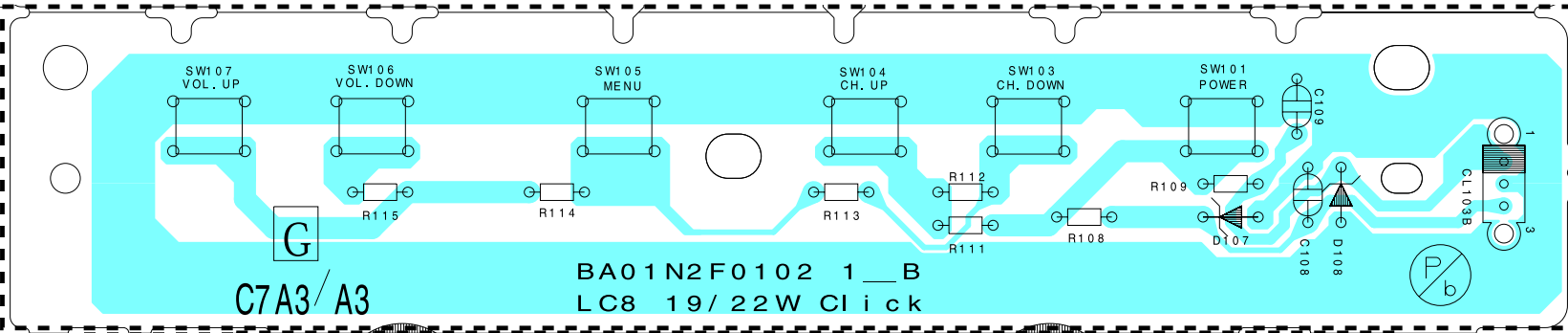
**NOTE:**  
The voltage for parts in hot circuit is measured using  
hot GND as a common terminal.

Because a hot chassis ground is present in the power supply circuit, an isolation transformer must be used when repairing.  
Also, in order to have the ability to increase the input slowly, when troubleshooting this type of power supply circuit, a variable isolation transformer is required.



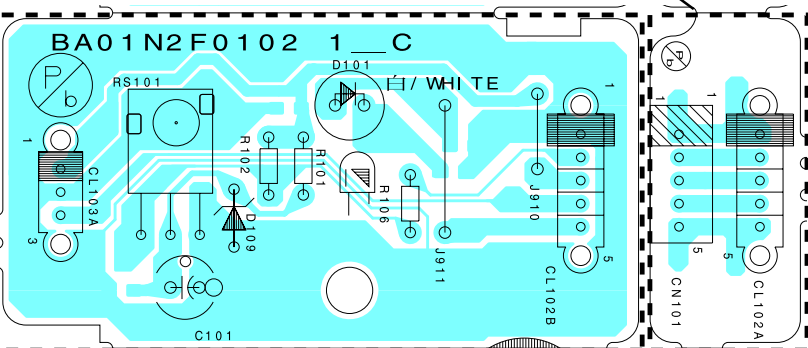
Jack CBA, Function CBA, IR Sensor CBA & Junction CBA Top View

Function CBA



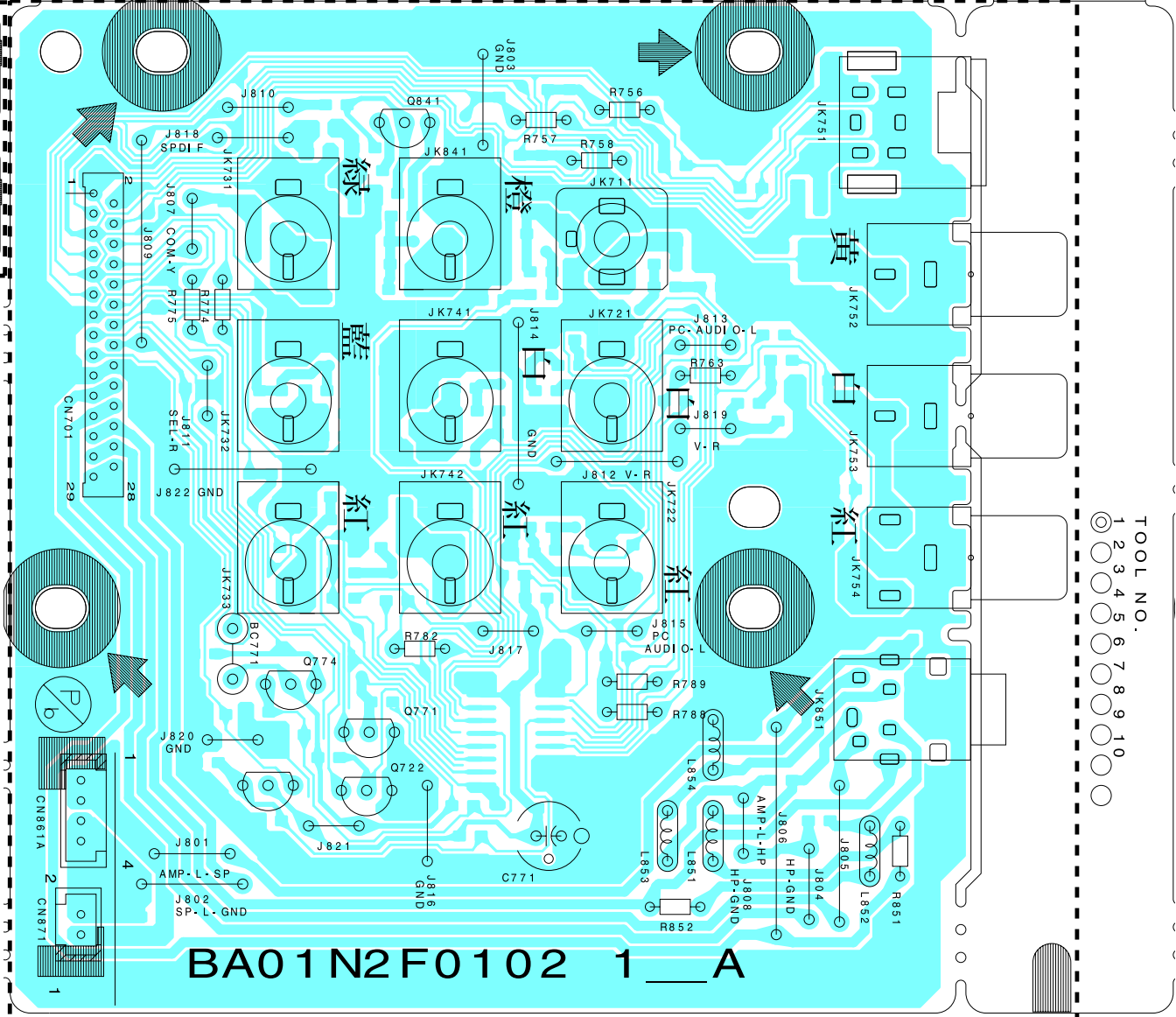
Not Used

IR Sensor CBA



Junction CBA  
[19PFL3505D/F7 (Serial No.:DS1A)]

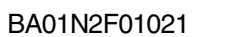
Not Used



Jack CBA

TOOL NO.  
1 2 3 4 5 6 7 8 9 10

**Junction CBA [19PFL3505D/F7 (Serial No.:DS1A)]**



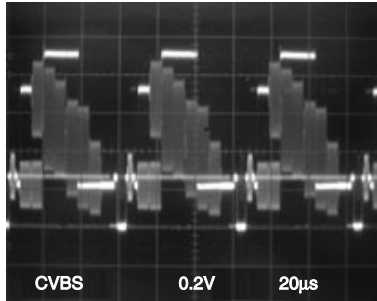


# WAVEFORMS

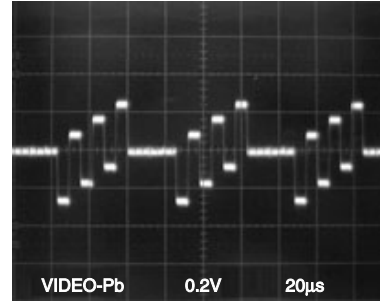
**WF1 ~ WF7 =** Waveforms to be observed at  
Waveform check points.  
(Shown in Schematic Diagram.)

**Input:** NTSC Color Bar Signal (with 1kHz Audio Signal)

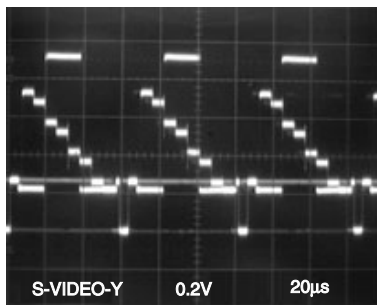
**WF1** Pin 4 of CN302



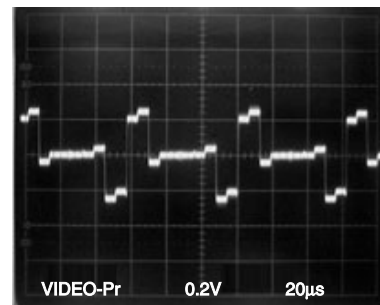
**WF5** Pin 17 of CN302



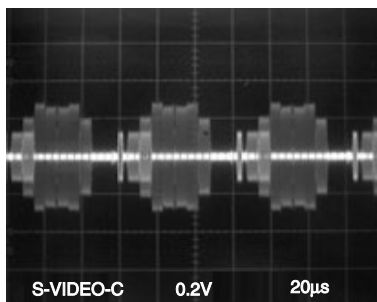
**WF2** Pin 8 of CN302



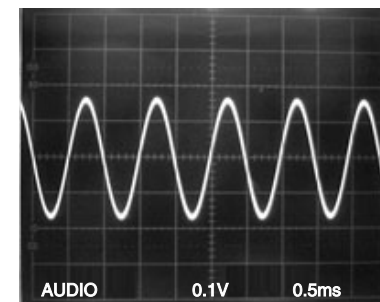
**WF6** Pin 19 of CN302



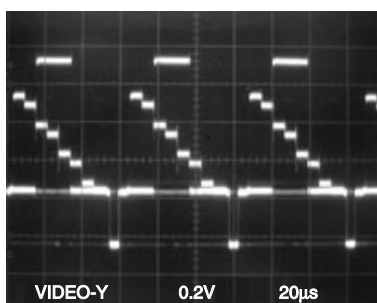
**WF3** Pin 6 of CN302



**WF7** Pin 13 of CN302

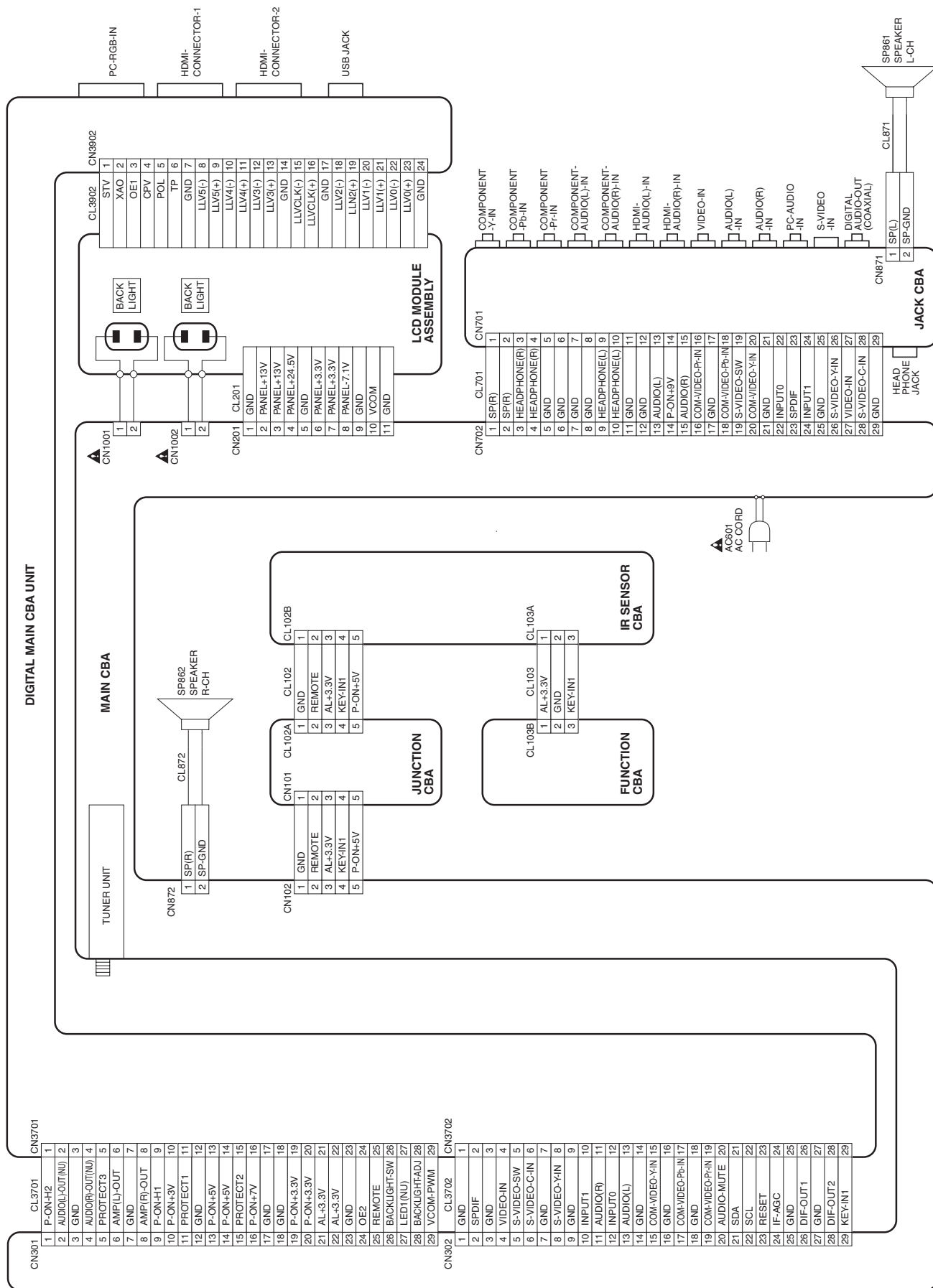


**WF4** Pin 15 of CN302



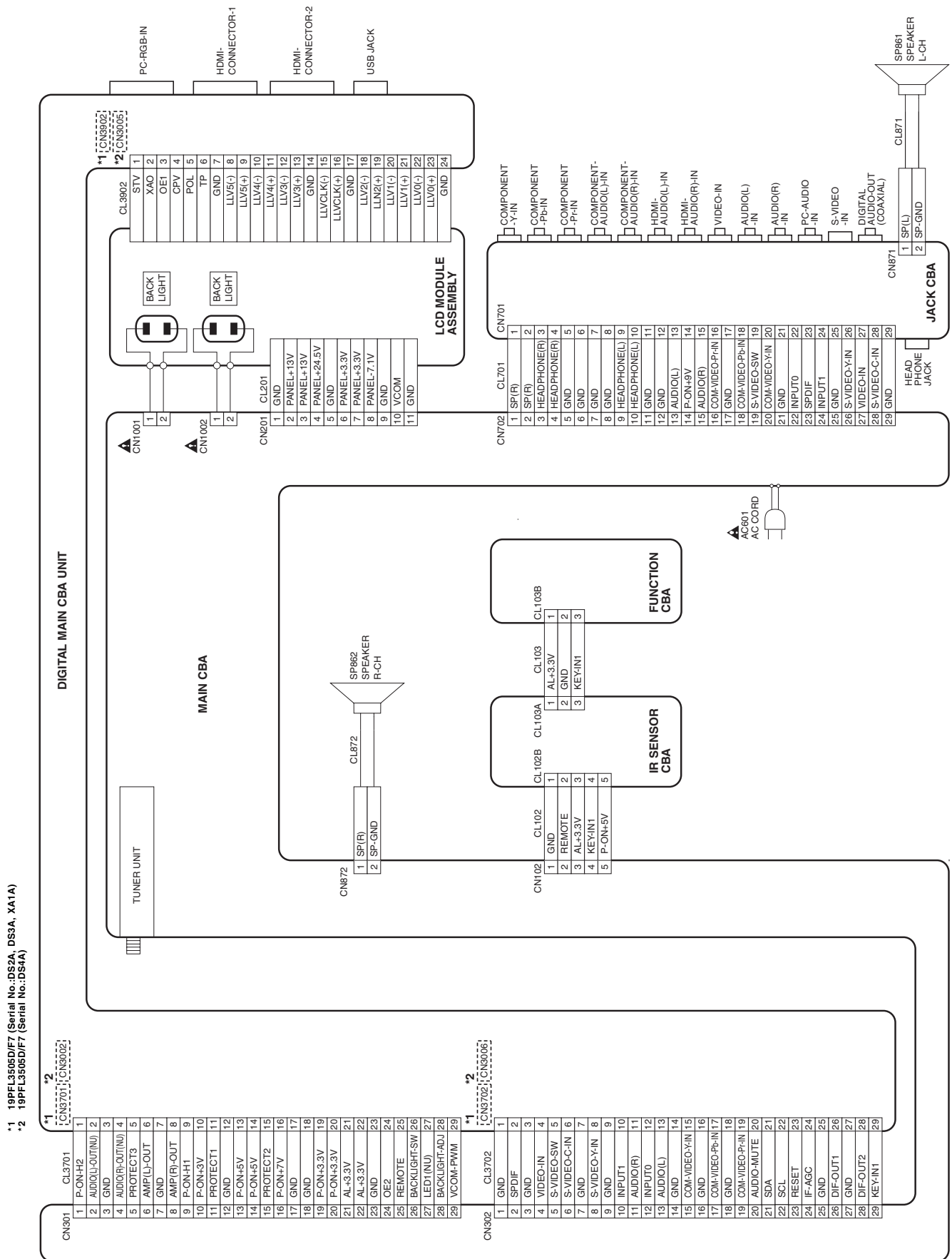
# WIRING DIAGRAM

## [19PFL3505D/F7 (Serial No.:DS1A)]



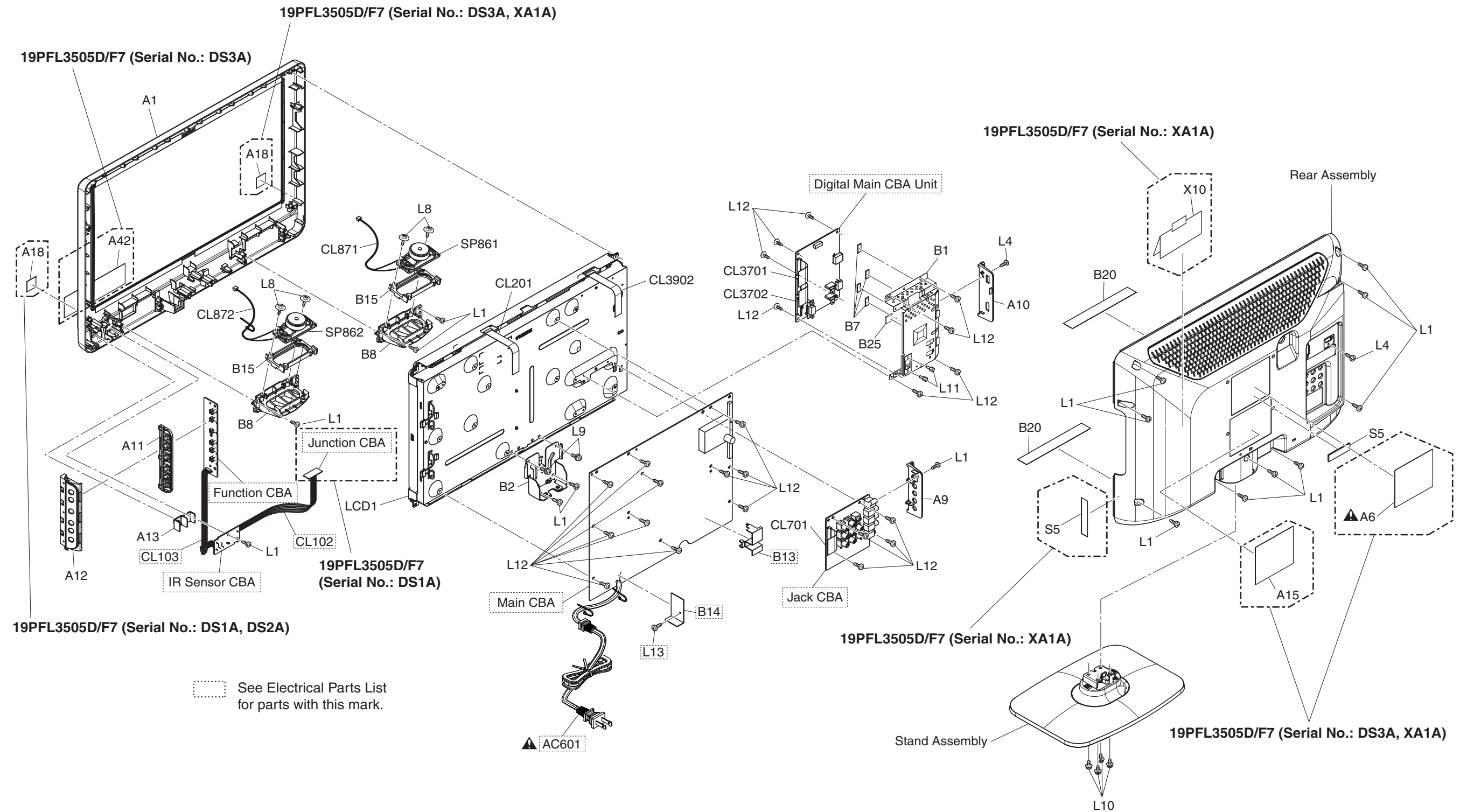


# [19PFL3505D/F7 (Serial No.:DS2A, DS3A, DS4A, XA1A)]

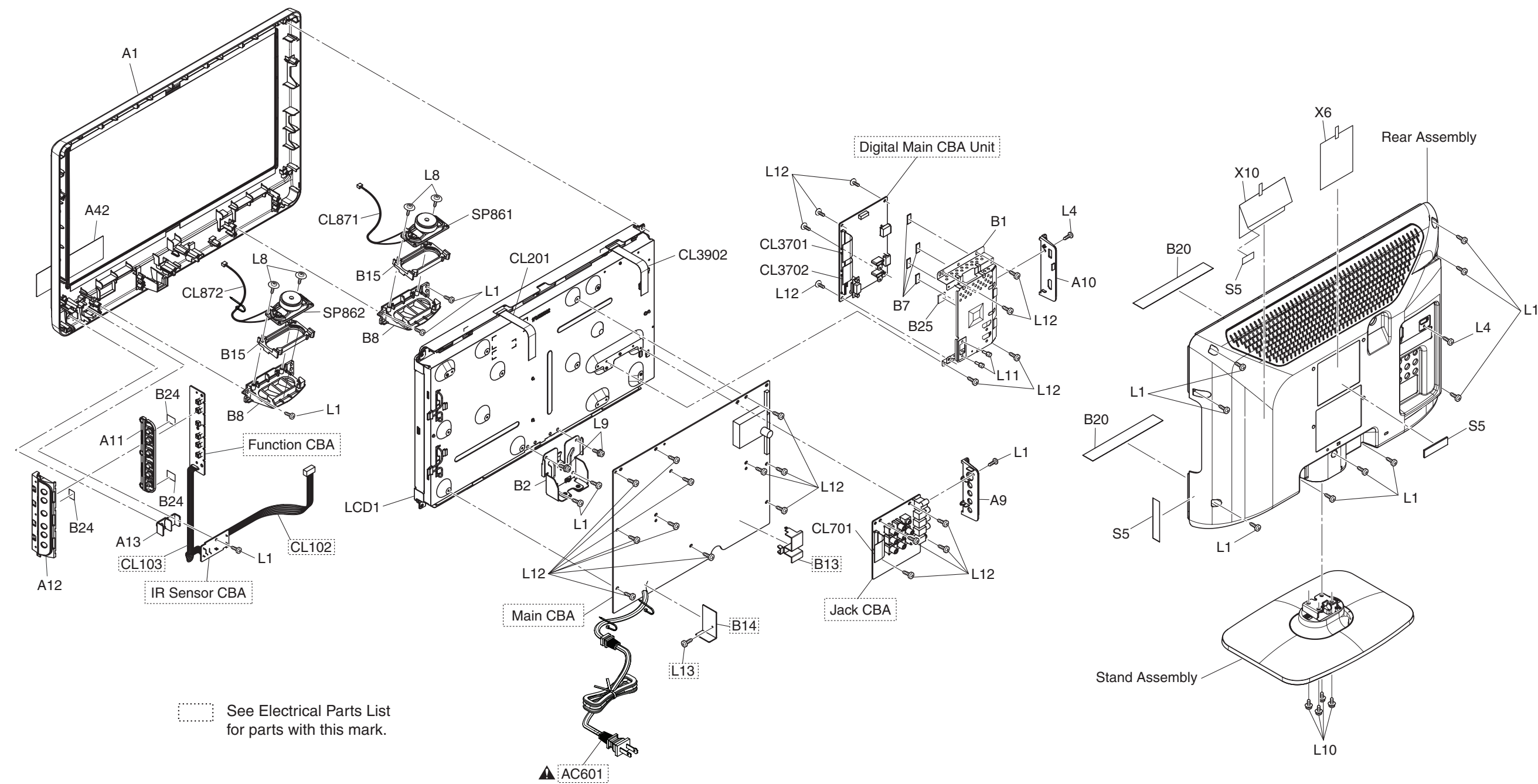


# EXPLODED VIEWS

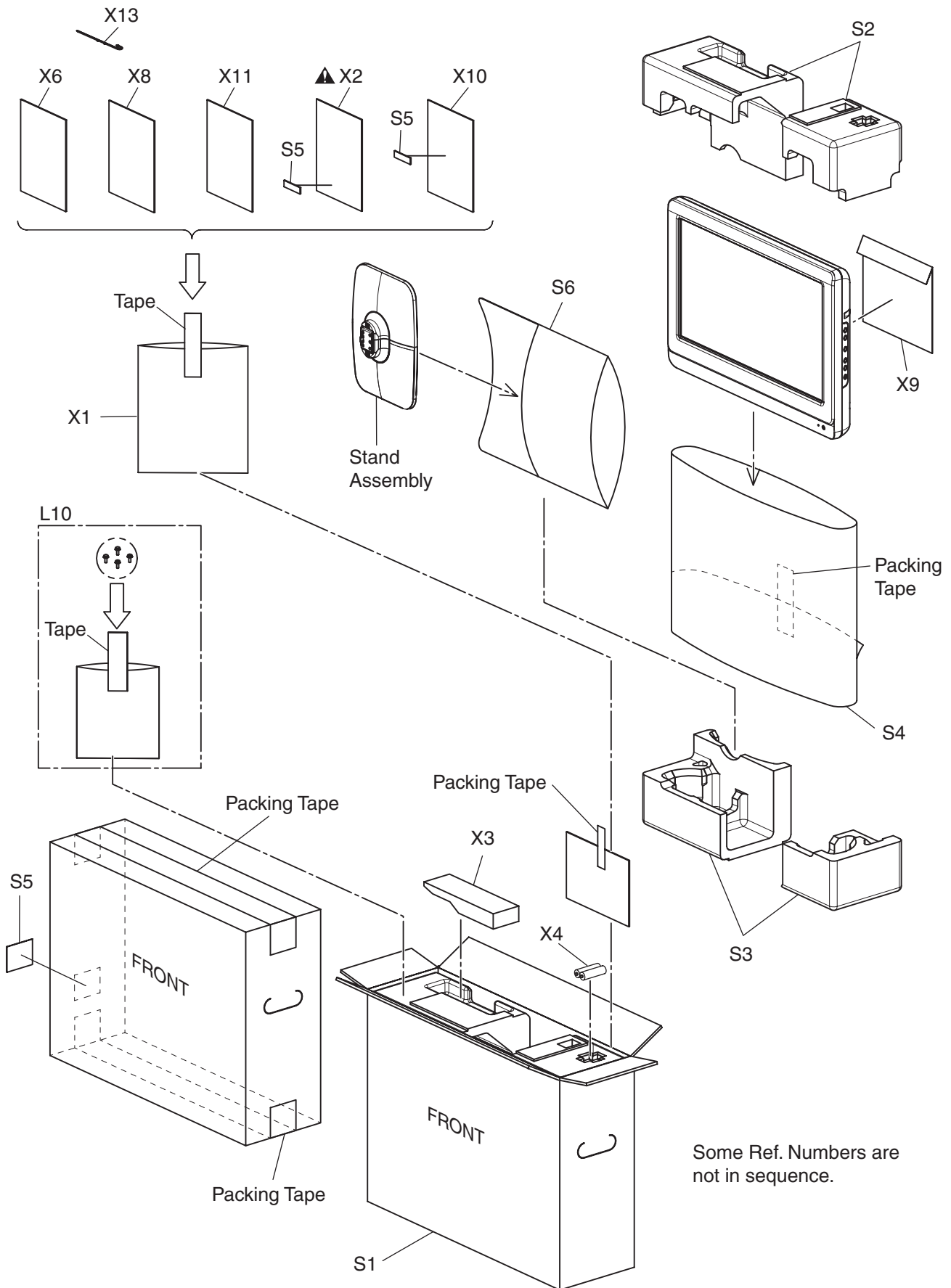
Cabinet [19PFL3505D/F7 (Serial No.: DS1A, DS2A, DS3A, XA1A)]



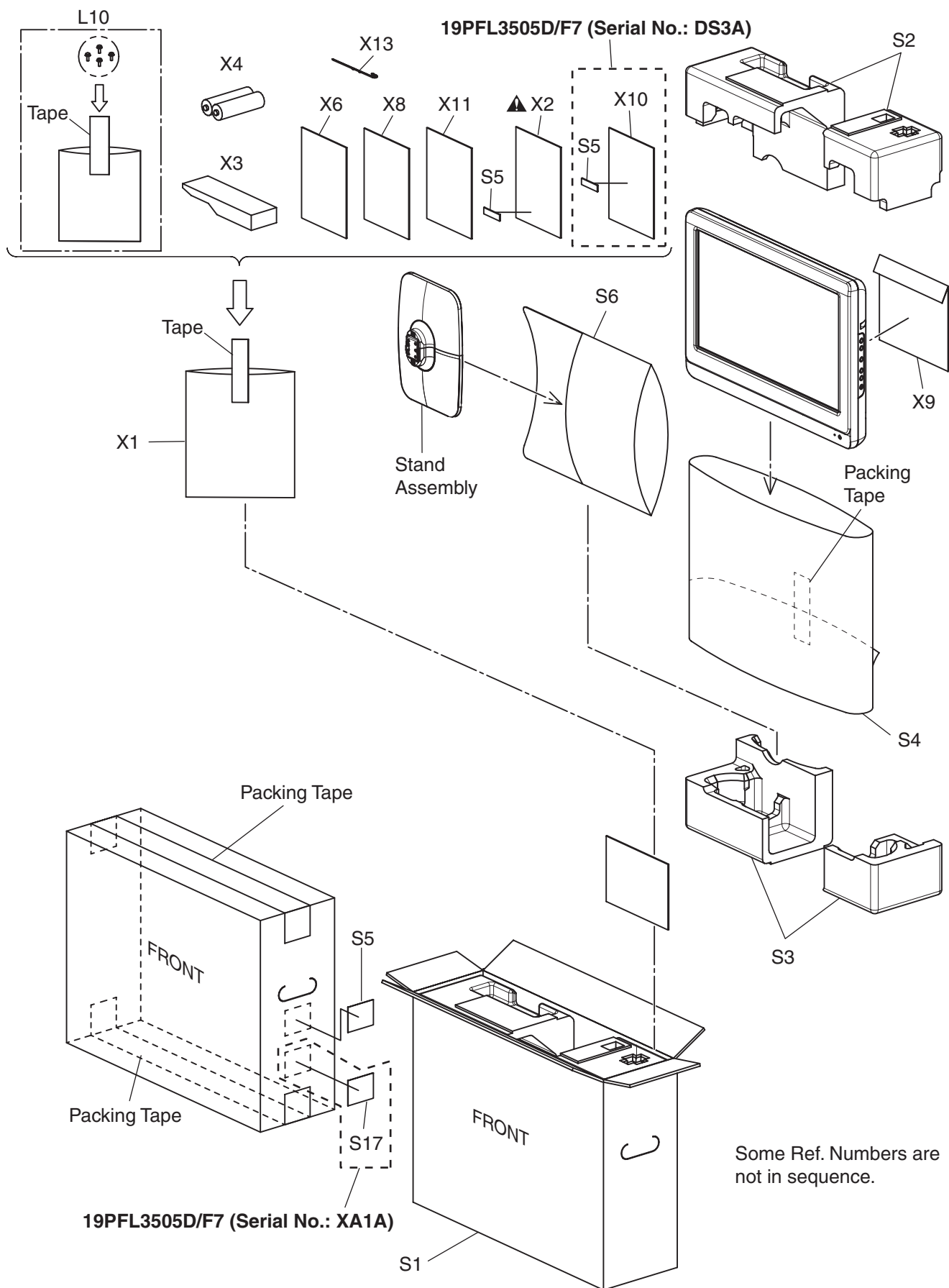
Cabinet [19PFL3505D/F7 (Serial No.: DS4A)]



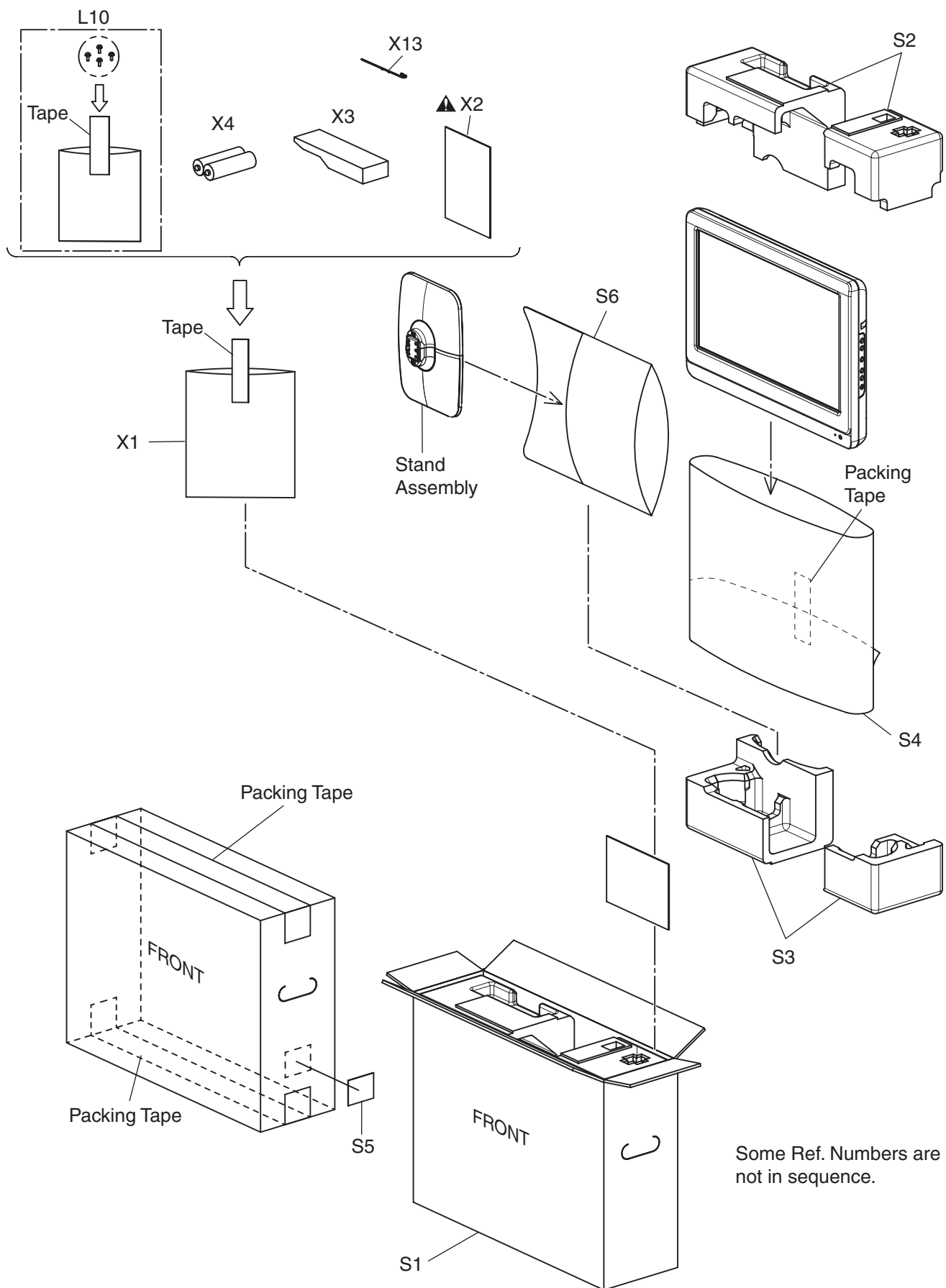
## Packing [19PFL3505D/F7 (Serial No.: DS1A, DS2A)]



# Packing [19PFL3505D/F7 (Serial No.: DS3A, XA1A)]




# Packing [19PFL3505D/F7 (Serial No.: DS4A)]



# PARTS LIST [19PFL3505D/F7 (Serial No. : DS1A)]

## Mechanical Parts

**PRODUCT SAFETY NOTE:** Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

**NOTE:** Parts that are not assigned part numbers (-----) are not available.

Ref. No.	Description	Part No.
X4	BATTERY R03-B500/01S	XB0M451CZB01
X6	QUICK START GUIDE A01N2UH	1EMN25699
X8	CHILD SAFETY SHEET A91H2UH	1EMN24526
X9	CONNECTION GUIDE A91N2UH	1EM325917
X10	REGISTRATION CARD(PHILIPS) A01F2UH	1EMN25799B
X11	WALL MOUNT INSTRUCTION A01F2UH	1EMN25659
X13	CABLE MANAGEMENT TIE(BLACK) A01F2UH	1EM431197

Ref. No.	Description	Part No.
	STAND ASSEMBLY A91N2UH	1ESA19905
	REAR ASSEMBLY A01N2UH	1ESA23008
A1	FRONT CABINET A91N2UH	1EM023605
A9	JACK HOLDER(A) A01N2UH	1EM223903
A10	JACK HOLDER(D) A01N2UH	1EM223904
A11	FUNCTION KNOB A91H2UH	1EM222865
A12	KNOB FRAME A01F2UH	1EM327217
A13	SENSOR LED LENS A91H2UH	1EM325697
A18	ENERGY STAR LABEL A91F2UH	-----
B1	SHIELD BOX A01F2UH	1EM224323
B2	STAND HOLDER A91N2UH	1EM223043
B7	GASKET A8AF0UH	1EM425861
B8	SPEAKER HOLDER A91N2UH	1EM222983
B15	SPEAKER CUSHION A91N2UH	1EM325798
B20	CLOTH(10X90XT1.0) A7120UH	1EM424258
B25	THERMOSTAR TMS-L-2(12*12HC)	XK10000X4003
CL201	WIRE ASSEMBLY 11PIN FFC 11PIN 75MM	WX1A94N0-105
CL701	WIRE ASSEMBLY 29PIN FFC 29PIN 50MM	WX1A94F0-101
CL871	2PIN WIRE ASSEMBLY 2PIN / 95MM	WX1A91N2-003
CL872	2PIN WIRE ASSEMBLY 2PIN / 95MM / TUBE	WX1A01N2-003
CL3701	WIRE ASSEMBLY 29PIN FFC 29PIN 50MM	WX1A94F0-101
CL3702	WIRE ASSEMBLY 29PIN FFC 29PIN 50MM	WX1A94F0-101
CL3902	WIRE ASSEMBLY 24PIN FFC 24PIN 65MM	WX1A94N0-106
L1	SCREW P-TIGHT 3X10 BIND HEAD+	GBHP3100
L4	SCREW S-TIGHT M3X8 BIND HEAD+	GBHS3080
L8	ASSEMBLED SCREW M3X10	1EM420633A
L9	DOUBLE SEMS SCREW M4X10 + BLK	FPH34100
L10	STAND SCREW KIT A91N2UH	1ESA19909
L11	HEX SCREW #4-40 7MM	1EM430139
L12	ASSEMBLED SCREW ( D9 M3X6 ) A71F0UH	1EM424392B
LCD1	LCD MODULE 18.5INCH WIDE CMO 18.5INCH WXGA	UJ19MXB
SP861	SPEAKER S0307F03	DS08070XQ001
SP862	SPEAKER S0307F03	DS08070XQ001
<b>PACKING</b>		
S1	CARTON A01N2UH	1EM431818
S2	STYROFOAM TOP A91N2UH	1EM024027
S3	STYROFOAM BOTTOM A91N2UH	1EM024028
S4	SET BAG A81N0UH	1EM322872A
S5	SERIAL NO. LABEL A01P0UH	-----
S6	STAND BAG A81N0UH	1EM425888
<b>ACCESSORIES</b>		
X1	BAG POLYETHYLENE 235X365XT0.03	0EM408420A
X2 	OWNERS MANUAL A01N2UH	1EMN25619
X3	REMOTE CONTROL TRANSMITTER YKF259-001	URMT34JHG001

# Electrical Parts

**PRODUCT SAFETY NOTE:** Products marked with a **▲** have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

## NOTES:

- Parts that are not assigned part numbers (-----) are not available.
- Tolerance of Capacitors and Resistors are noted with the following symbols.

C.....±0.25%    D.....±0.5%    F.....±1%  
 G.....±2%    J.....±5%    K.....±10%  
 M.....±20%    N.....±30%    Z.....+80/-20%

## DIGITAL MAIN CBA UNIT

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A01N2MMA-004

## MAIN CBA

Ref. No.	Description	Part No.
	MAIN CBA Consists of the following:	A01N2MPWA001
<b>CAPACITORS</b>		
C201	ELECTROLYTIC CAP. 470µF/25V M	CE1EMASDL471
C202	CHIP CERAMIC CAP.(1608) B K 0.01µF/50V	CHD1JK30B103
C203	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C204	ELECTROLYTIC CAP. 10µF/50V M	CE1JMASDL100
C207	ELECTROLYTIC CAP. 10µF/50V M	CE1JMASDL100
C209	ELECTROLYTIC CAP. 47µF/25V M	CE1EMASDL470
C214	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C215	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C216	CHIP CERAMIC CAP. (1608) B K 1µF/16V	CHD1CK30B105
C217	ELECTROLYTIC CAP. 47µF/25V M	CE1EMASDL470
C218	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C219	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C220	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C221	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C301	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C302	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C303	ELECTROLYTIC CAP. 330µF/10V M	CE1AMASDL331
C305	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C306	ELECTROLYTIC CAP. 22µF/50V M	CE1JMASDL220
C309	CHIP CERAMIC CAP.(1608) B K 0.1µF/25V	CHD1EK30B104
C310	CHIP CERAMIC CAP.(1608) CH J 47pF/50V	CHD1JJ3CH470
C311	CHIP CERAMIC CAP.(1608) CH J 47pF/50V	CHD1JJ3CH470
C314	CHIP CERAMIC CAP.(1608) CH J 33pF/50V	CHD1JJ3CH330
C315	CHIP CERAMIC CAP.(1608) CH J 33pF/50V	CHD1JJ3CH330
C401	ELECTROLYTIC CAP. 1µF/50V M	CE1JMASDL1R0
C601▲	CAP METALIZED FILM 0.47µF/300V K 3.5MM	CT2F474DC004
C603	CAP ELECTROLYTIC 270µF/200V	CEA271DYG005
C605	POLYESTER FILM CAP. (PB FREE) 0.0015µF/100V J	CA2A152DT018
C607▲	CERAMIC CAP. 330pF/2KV	CA3D331PAN04
C608	POLYESTER FILM CAP. (PB FREE) 0.001µF/100V J	CA2A102DT018

Ref. No.	Description	Part No.
C609	ELECTROLYTIC CAP. 47µF/25V M	CE1EMASDL470
C610	ELECTROLYTIC CAP. 100µF/50V M	CE1JMASDL101
C611	CAP CERAMIC (AX) 0.1µF/50V/B/K	CA1J104TU061
C613	CAP CERAMIC (AX) 220pF/50V/B/K	CA1J221TU061
C614	CAP CERAMIC (AX) 1000pF/50V/B/K	CA1J102TU061
C615	CAP CERAMIC (AX) 0.022µF/50V/B/K	CA1J223TU061
C631	ELECTROLYTIC CAP. 470µF/25V M	CE1EMASDL471
C632	ELECTROLYTIC CAP. 1000µF/35V M	CE1GMZNDL102
C633	CERAMIC CAP. B K 1500pF/1KV	CCD3AKN0B152
C634	POLYESTER FILM CAP. (PB FREE) 0.022µF/100V J	CA2A223DT018
C636▲	ELECTROLYTIC CAP. 100µF/25V M	CE1EMASDL101
C638	CAP ALUMINUM ELECTROLYTIC 2200µF/6.3V M	CE0KMZNDL222
C639	CAP ALUMINUM ELECTROLYTIC 2200µF/6.3V M	CE0KMZNDL222
C641	ELECTROLYTIC CAP 3300µF/10V	CE1AMZNDL332
C643	ELECTROLYTIC CAP. 1000µF/25V M	CE1EMZNDL102
C645	POLYESTER FILM CAP. (PB FREE) 0.0022µF/100V J	CA2A222DT018
C646	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C647	ELECTROLYTIC CAP. 100µF/10V M	CE1AMASDL101
C648	ELECTROLYTIC CAP. 47µF/25V M	CE1EMASDL470
C649	ELECTROLYTIC CAP. 220µF/10V M	CE1AMASDL221
C650	ELECTROLYTIC CAP. 220µF/10V M	CE1AMASDL221
C652	ELECTROLYTIC CAP. 1000µF/6.3V M	CE0KMASDL102
C653	ELECTROLYTIC CAP. 22µF/50V M	CE1JMASDL220
C654	ELECTROLYTIC CAP. 100µF/16V M	CE1CMASDL101
C655	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C656	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C657	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C658	CHIP CERAMIC CAP. (1608) B K 1µF/16V	CHD1CK30B105
C659	CAP CERAMIC (AX) 0.1µF/50V/B/K	CA1J104TU061
C661	ELECTROLYTIC CAP. 3.3µF/50V M	CE1JMASDL3R3
C681	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C682	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C683	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C684	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C685	CAP CERAMIC (AX) 0.1µF/50V/B/K	CA1J104TU061
C691▲	SAFTY CAP. 2200pF/250V KX	CA2E222MR101
C692▲	CAP CERAMIC 4700pF/250V/M/KX	CA2E472MR101
C802	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C805	ELECTROLYTIC CAP. 220µF/25V M	CE1EMASDL221
C806	ELECTROLYTIC CAP. 220µF/25V M	CE1EMASDL221
C807	CHIP CERAMIC CAP.(1608) B K 0.022µF/25V	CHD1EK30B223
C808	CHIP CERAMIC CAP.(1608) B K 0.022µF/25V	CHD1EK30B223
C809	CHIP CERAMIC CAP. (1608) B K 1µF/16V	CHD1CK30B105
C810	CHIP CERAMIC CAP. (1608) B K 1µF/16V	CHD1CK30B105
C811	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C812	ELECTROLYTIC CAP. 470µF/25V M	CE1EMASDL471
C813	ELECTROLYTIC CAP. 100µF/25V M	CE1EMASDL101
C816	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C817	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C825	CHIP CERAMIC CAP. (1608) B K 1µF/16V	CHD1CK30B105
C826	CHIP CERAMIC CAP.(1608) CH J 390pF/50V	CHD1JJ3CH391
C827	CHIP CERAMIC CAP. (1608) B K 1µF/16V	CHD1CK30B105
C828	CHIP CERAMIC CAP.(1608) CH J 390pF/50V	CHD1JJ3CH391
C829	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C830	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C831	ELECTROLYTIC CAP. 100µF/16V M	CE1CMASDL101
C832	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104



Ref. No.	Description	Part No.
C833	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C1001	CAP CERAMIC (AX) 2200pF/50V/B/K	CA1J222TU061
C1002	POLYESTER FILM CAP. (PB FREE) 0.022μF/100V J	CA2A223DT018
C1003	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1004	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1005	POLYESTER FILM CAP. (PB FREE) 0.022μF/100V J	CA2A223DT018
C1006	CAP CERAMIC HV 10pF/6.3KV/SL/J	CCA1000MR001
C1007	CAP CERAMIC (AX) 2200pF/50V/B/K	CA1J222TU061
C1008	CAP CERAMIC HV 10pF/6.3KV/SL/J	CCA1000MR001
C1009	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1010	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1011	ELECTROLYTIC CAP. 1000μF/35V M	CE1GMZNDL102
C1012	CERAMIC CAP. B K 220pF/500V	CCD2JKS0B221
C1014	CAP CERAMIC HV 10pF/6.3KV/SL/J	CCA1000MR001
C1015	CAP CERAMIC HV 10pF/6.3KV/SL/J	CCA1000MR001
C1016	CHIP CERAMIC CAP.(1608) B K 6800pF/50V	CHD1JK30B682
C1018	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C1019	CERAMIC CAP. B K 220pF/500V	CCD2JKS0B221
C1020	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C1022	ELECTROLYTIC CAP. 100μF/16V M	CE1CMASDL101
C1024	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1025	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1026	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C1027	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1028	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1031	POLYESTER FILM CAP. (PB FREE) 0.0027μF/100V J	CA2A272DT018
C1032	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1033	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1034	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1035	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1037	CHIP CERAMIC CAP. (1608) B K 1μF/16V	CHD1CK30B105
C1038	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C1039	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1040	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102
C1041	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1042	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C1043	CHIP CERAMIC CAP.(1608) B K 0.22μF/16V	CHD1CK30B224
C1044	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C1045	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C1053	ELECTROLYTIC CAP. 100μF/16V M	CE1CMASDL101
C1054	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C1056	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
<b>CONNECTORS</b>		
CN102	242 SERIES CONNECTOR 224202105W1	J322C05TG001
CN201	FFC CONNECTOR IMSA-9615S-11A-PP-A	JC96J11ER007
CN301	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN302	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN702	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN872	CONNECTOR PRINT OSU 008283021200000S+	J383C02UG004
CN1001▲	CONNECTOR PRINT OSU KW05-120-02-00	J30502KET001
CN1002▲	CONNECTOR PRINT OSU KW05-120-02-00	J30502KET001
<b>DIODES</b>		
D201	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D202	IC SHUNT REGULATOR KIA431-AT/P	NSZBA0TJY036
D203	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D204	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D205	DIODE ZENER 24BSB-T26	NDTC024BST26
D206	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D207	DIODE ZENER 7VBSA-T26	NDTA7R5BST26
D208	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133

Ref. No.	Description	Part No.
D209	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D210	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D401	DIODE FR104-B	NDLZ000FR104
D402	DIODE ZENER 8V2BSB-T26	NDTB8R2BST26
D404	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D405	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D406	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D407	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D408	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D409	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D410	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D411	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D412	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D413	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D414	DIODE ZENER 6V2BSB-T26	NDTB6R2BST26
D416	DIODE ZENER 10BSB-T26	NDTB010BST26
D417	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D418	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D601▲	DIODE 1N5397BD	NDL1001N5397
D602▲	DIODE 1N5397BD	NDL1001N5397
D603▲	DIODE 1N5397BD	NDL1001N5397
D604▲	DIODE 1N5397BD	NDL1001N5397
D607	DIODE ZENER 11BSB-T26	NDTB011BST26
D608▲	DIODE ZENER 27BSB-T26	NDTB027BST26
D609	DIODE ZENER 27BSB-T26	NDTB027BST26
D610	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D612	DIODE FR104-B	NDLZ000FR104
D613	DIODE FR104-B	NDLZ000FR104
D614	DIODE FAST RECOVERY FR103BB	NDWZ0FR103BB
D615▲	DIODE ZENER 39BSB-T26	NDTB039BST26
D616	DIODE ZENER 27BSB-T26	NDTB027BST26
D617	DIODE FAST RECOVERY FR103BB	NDWZ0FR103BB
D619	DIODE FAST RECOVERY FR103BB	NDWZ0FR103BB
D631	DIODE FAST RECOVERY FR153-B/P	NDWZ0FR153BP
D632	DIODE SHOTTKY SB3200BR	NDWZ3200D027
D633▲	DIODE ZENER 1ZB43BB	NDWZ0001ZB43
D634	IC SHUNT REGULATOR KIA431-AT/PF5	NSZBB0TJY036
D636	DIODE FR104-B	NDLZ000FR104
D637▲	DIODE ZENER 36BSB-T26	NDTB036BST26
D638	SCHOTTKY BARRIER DIODE SB140	NDWZ000SB140
D639	DIODE FAST RECOVERY FR151BD	NDWZ0FR151BD
D641	DIODE SCHOTTKY SB360BH	NDWZ000SB360
D642	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D643	FAST RECOVERY DIODE FR252	NDWZ000FR252
D646	SCHOTTKY BARRIER DIODE SB140	NDWZ000SB140
D648	DIODE ZENER 5V6BSB-T26	NDTB5R6BST26
D649▲	DIODE ZENER 3V3BSB-T26	NDTB3R3BST26
D650▲	DIODE ZENER 5V6BSA-T26	NDTA5R6BST26
D651	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D653	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D654	DIODE FR154	NDLZ000FR154
D655	DIODE FR154	NDLZ000FR154
D656	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D657	DIODE ZENER 4V7BSB-T26	NDTB4R7BST26
D659	SHUNT REGULATOR KIA431B-AT/P	NSZBA0TJY038
D662	IC SHUNT REGULATOR KIA431-AT/P	NSZBA0TJY036
D665	WIRE CP STP-S-0.50	XZ40FOREN001
D666	DIODE ZENER 10BSB-T26	NDTB010BST26
D668▲	DIODE ZENER 20BSB-T26	NDTB020BST26
D804	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D805	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D808	DIODE ZENER 20BSB-T26	NDTB020BST26
D809	DIODE ZENER 20BSB-T26	NDTB020BST26

Ref. No.	Description	Part No.
D1001	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1002	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1003	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1004	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1005	DIODE ZENER 6V2BSB-T26	NDTB6R2BST26
D1006	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1007	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1008	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1009	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1010	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1011	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1012	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1013	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1014	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1015	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1016	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1017	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1018	DIODE ZENER 6V8BSB-T26	NDTB6R8BST26
D1019	DIODE ZENER 11BSA-T26	NDTA011BST26
D1020	DIODE ZENER 5V1BSB-T26	NDTB5R1BST26
D1021	DIODE ZENER 15BSB-T26	NDTB015BST26
D1022	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1023	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1024	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1025	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1026	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1027	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1028	DIODE ZENER 4V7BSB-T26	NDTB4R7BST26
D1029	DIODE ZENER 12BSB-T26	NDTB012BST26
D1030	DIODE ZENER 12BSB-T26	NDTB012BST26
D1031	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1034	DIODE ZENER 9V1BSB-T26	NDTB9R1BST26
D1036	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1038	WIRE CP STP-S-0.50	XZ40FOREN001
D1045	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
<b>ICS</b>		
IC201	IC TL3472CDR	NSZBA0TTY115
IC601▲	PHOTO COUPLER LTV817MCF	NPECLTV817MF
IC602	IC SWITING FA5571N-D1-TE1/SOP-8	QSCA0T0FD003
IC631	IC REGULATOR MM3123DPRE	QSCA0T0MM108
IC801	AUDIO AMP IC TDA1517P/N3 112	NSCA0SNXP003
IC803	IC OP AMP NJM4558M(Te1)-#ZZZB	QSZBA0TJR089
IC1001	IC PULSE-WIDTH-MODULATION CONT TL494CDR	NSCA0T0TY006
IC1002	IC OPERATIONNAL AMPLIFIER KIA358F-EL	NSZBA0TJY030
<b>COILS</b>		
L301	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
L302	COIL CHIP FERITE INDUCTOR SDFL1608LR22KT(F)	LLFR22SSN011
L303	COIL CHIP FERITE INDUCTOR SDFL1608LR22KT(F)	LLFR22SSN011
L601▲	LINE FILTER 5.0MH 96005	LLBG00ZKT004
<b>TRANSISTORS</b>		
Q201	TRANSISTOR 2SC2120-Y(Te2 F T)	QQSY2SC2120F
Q202	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q203	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q204	TRANSISTOR 2SA950-Y(Te2 F T)	QQSY02SA950F
Q205	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q206	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q207	TRANSISTOR 2SC2655-Y(Te6 F M)	QQSY2SC2655F
Q208	TRANSISTOR 2SA1020-Y(Te6 F M)	QQSY2SA1020F
Q209	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q210	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q401	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P

Ref. No.	Description	Part No.
Q402	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q601▲	FET MOS TK5A50D	QEWZTK5A50DQ
Q602	FET POWER MOS SMD KHB1D0N60D-RTF/PMC	NF1ZKH1D0N6
Q603	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q631	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q633	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q634	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q635	TRANSISTOR 2SA950-Y(Te2 F T)	QQSY02SA950F
Q636	TRANSISTOR 2SC2120-Y(Te2 F T)	QQSY2SC2120F
Q637	TRANSISTOR 2SC2120-Y(Te2 F T)	QQSY2SC2120F
Q638	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q639	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q640	TRANSISTOR(PB FREE) KTC2026-Y/P	NQEYKTC2026P
Q641	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q643	TRANSISTOR 2SA950-Y(Te2 F T)	QQSY02SA950F
Q801	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1001	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1002	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1003	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1004	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1005▲	FET MOS SMD TPC8214-H	QF2ZTPC8214H
Q1006	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q1007	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q1008	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1009	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1010	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1011	TRANSISTOR 2SA950-Y(Te2 F T)	QQSY02SA950F
Q1012	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1014	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1015	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1016	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1017	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1018	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q1019	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1020	TRANSISTOR 2SD400(F)	QQUF002SD400
Q1023	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1024	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
<b>RESISTORS</b>		
R201	RES CARBON FILM T 1/4W J 5.6 Ω	RCX45R6T1001
R202	CHIP RES. 1/10W F 9.1k Ω	RRXAFR5H9101
R203	CHIP RES. 1/10W F 510 Ω	RRXAFR5H5100
R204	CHIP RES. 1/10W F 2.2k Ω	RRXAFR5H2201
R205	CHIP RES. 1/10W J 1.5k Ω	RRXAJR5Z0152
R206	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R207	RES CARBON FILM T 1/4W J 6.8k Ω	RCX4682T1001
R208	RES CARBON FILM T 1/4W J 6.8k Ω	RCX4682T1001
R209	CHIP RES. 1/10W J 56k Ω	RRXAJR5Z0563
R210	CHIP RES. 1/10W J 6.8k Ω	RRXAJR5Z0682
R211	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R212	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R213	CHIP RES. 1/10W J 27k Ω	RRXAJR5Z0273
R214	CHIP RES. 1/10W J 3.3k Ω	RRXAJR5Z0332
R215	RES CARBON FILM T 1/4W J 330 Ω	RCX4331T1001
R216	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R217	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R218	RES CARBON FILM T 1/4W J 8.2k Ω	RCX4822T1001
R219	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R220	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R221	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R222	RES CARBON FILM T 1/4W J 120 Ω	RCX4121T1001
R223	RES CARBON FILM T 1/4W J 15k Ω	RCX4153T1001
R224	CHIP RES. 1/10W J 1 Ω	RRXAJR5Z01R0

Ref. No.	Description	Part No.
R225	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R226	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R227	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R228	WIRE CP STP-S-0.50	XZ40FOREN001
R229	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R230	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R231	CHIP RES. 1/10W J 1.5k Ω	RRXAJR5Z0152
R232	CHIP RES. 1/10W J 15k Ω	RRXAJR5Z0153
R233	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R234	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R236	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R239	RES CARBON FILM T 1/4W J 150 Ω	RCX4151T1001
R240	RES CARBON FILM T 1/4W J 3.9k Ω	RCX4392T1001
R241	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R302	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R303	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R304	CHIP RES. 1/10W J 82 Ω	RRXAJR5Z0820
R305	CHIP RES. 1/10W J 82 Ω	RRXAJR5Z0820
R313	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R401▲	CHIP RES. 1/10W J 1 Ω	RRXAJR5Z01R0
R402	CHIP RES. 1/10W F 36k Ω	RRXAFR5H3602
R403	CHIP RES. 1/10W F 43.0 k Ω	RRXAFR5H4302
R406	RES CARBON FILM T 1/4W J 47k Ω	RCX4473T1001
R407	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R408	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R409	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R411	RES CARBON FILM T 1/4W J 22k Ω	RCX4223T1001
R412	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R413	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R601▲	GLASS GLAZE RES. 1/2W J 2.7M Ω	RXX2JZLZ0275
R602▲	CEMENT RES. 3W K 1.2 Ω	RW031R2PG007
R604	WIRE CP STP-S-0.50	XZ40FOREN001
R605	WIRE CP STP-S-0.50	XZ40FOREN001
R606	RES CARBON FILM T 1/4W J 47k Ω	RCX4473T1001
R607	RES CHIP 3216 1/4W J 2.7M Ω	RRX4275HH034
R608	RES CHIP 3216 1/4W J 2.7M Ω	RRX4275HH034
R609	RES CARBON FILM T 1/4W J 180 Ω	RCX4181T1001
R610	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R611	RES CARBON FILM T 1/4W J 4.7k Ω	RCX4472T1001
R612	RES CARBON FILM T 1/4W J 22 Ω	RCX4220T1001
R613▲	METAL OXIDE FILM RES. 2W J 0.33 Ω	RN02R33ZU001
R614	RES CARBON FILM T 1/4W J 39 Ω	RCX4390T1001
R615	RES CARBON FILM T 1/4W J 27 Ω	RCX4270T1001
R616	RES CARBON FILM T 1/4W J 39 Ω	RCX4390T1001
R617	RES CARBON FILM T 1/4W J 100k Ω	RCX4104T1001
R618	RES CARBON FILM T 1/4W J 5.6k Ω	RCX4562T1001
R622	RES CARBON FILM T 1/4W J 1.2k Ω	RCX4122T1001
R623	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R624	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R631	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R632	RES CHIP.(1608) 1/10W D 1.1k Ω	RRXADR5H1101
R633	RES CHIP.(1608) 1/10W D 10k Ω	RRXADR5H1002
R636	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R637	RES CARBON FILM T 1/4W J 120 Ω	RCX4121T1001
R638	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R639	CHIP RES. 1/10W F 3.3k Ω	RRXAFR5H3301
R640	CHIP RES. 1/10W F 18k Ω	RRXAFR5H1802
R641	CHIP RES. 1/10W F 220 Ω	RRXAFR5H2200
R642	CHIP RES. 1/10W F 22k Ω	RRXAFR5H2202
R643	CHIP RES. 1/10W F 22k Ω	RRXAFR5H2202
R644	CHIP RES. 1/10W F 22k Ω	RRXAFR5H2202
R645	CHIP RES. 1/10W F 11k Ω	RRXAFR5H1102
R646	CHIP RES. 1/10W F 39k Ω	RRXAFR5H3902

Ref. No.	Description	Part No.
R647	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R648	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R649	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R650	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R651▲	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R652	WIRE CP STP-S-0.50	XZ40FOREN001
R653	WIRE CP STP-S-0.50	XZ40FOREN001
R654	CHIP RES. 1/10W F 47.0 k Ω	RRXAFR5H4702
R656	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R657	CHIP RES. 1/10W F 27k Ω	RRXAFR5H2702
R658	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R659	RES. CARBON FILM J 1/2W J 3.9 Ω	RCX23R9T1003
R660	RES CHIP.(1608) 1/10W D 10k Ω	RRXADR5H1002
R661	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R662	RES CARBON FILM T 1/4W J 39 Ω	RCX4390T1001
R663	RES CARBON FILM T 1/4W J 1.8 Ω	RCX41R8T1001
R664	RES CARBON FILM T 1/4W J 3.9 Ω	RCX43R9T1001
R665	RES CARBON FILM T 1/4W J 3.9 Ω	RCX43R9T1001
R666	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R667	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R668	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R669	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R670	RES CARBON FILM T 1/4W J 270 Ω	RCX4271T1001
R671	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R673	CHIP RES. 1/10W F 3.6k Ω	RRXAFR5H3601
R674	CHIP RES. 1/10W F 10k Ω	RRXAFR5H1002
R675	RES CARBON FILM T 1/4W J 1.0k Ω	RCX4102T1001
R676	RES CARBON FILM T 1/4W J 22 Ω	RCX4220T1001
R677	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R678	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R679	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R681	RES CARBON FILM T 1/4W J 2.2 Ω	RCX42R2T1001
R682	RES. CARBON FILM J 1/2W J 3.9 Ω	RCX23R9T1003
R683	METAL OXIDE FILM RES. 1W J 2.7 Ω	RN012R7ZU001
R684	METAL OXIDE FILM RES. 1W J 2.7 Ω	RN012R7ZU001
R688	RES CARBON FILM T 1/4W J 1.0 Ω	RCX41R0T1001
R690	RES CARBON FILM T 1/4W J 1.5 Ω	RCX41R5T1001
R691	WIRE CP STP-S-0.50	XZ40FOREN001
R699	RES CARBON FILM T 1/4W J 56 Ω	RCX4560T1001
R803	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R804	CHIP RES. 1/10W J 8.2 Ω	RRXAJR5Z08R2
R805	CHIP RES. 1/10W J 8.2 Ω	RRXAJR5Z08R2
R806	WIRE CP STP-S-0.50	XZ40FOREN001
R807	WIRE CP STP-S-0.50	XZ40FOREN001
R808	CHIP RES. 1/10W F 3.3k Ω	RRXAFR5H3301
R809	CHIP RES. 1/10W F 300 Ω	RRXAFR5H3000
R810	CHIP RES. 1/10W J 4.3k Ω	RRXAJR5Z0432
R811	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R813	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R814	CHIP RES. 1/10W J 4.3k Ω	RRXAJR5Z0432
R815	CHIP RES. 1/10W J 470 Ω	RRXAJR5Z0471
R816	CHIP RES. 1/10W J 470 Ω	RRXAJR5Z0471
R817	CHIP RES. 1/10W F 15k Ω	RRXAFR5H1502
R818	CHIP RES. 1/10W F 15k Ω	RRXAFR5H1502
R819	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R820	CHIP RES. 1/10W J 5.6k Ω	RRXAJR5Z0562
R821	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R823	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R826	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R830	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R834	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R836	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R837	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104

Ref. No.	Description	Part No.
R838	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R842	CHIP RES. 1/10W J 27k Ω	RRXAJR5Z0273
R1001	RES CARBON FILM T 1/4W J 2.2k Ω	RCX4222T1001
R1002	RES CARBON FILM T 1/4W J 180 Ω	RCX4181T1001
R1003	RES CARBON FILM T 1/4W J 2.2k Ω	RCX4222T1001
R1004	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1005	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R1006	RES CARBON FILM T 1/4W J 180 Ω	RCX4181T1001
R1007	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R1008	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R1009	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1010	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R1011	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R1012	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1013	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R1014	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1015	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1017	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R1018	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1019	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1020	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1022	CHIP RES. 1/10W J 33k Ω	RRXAJR5Z0333
R1023	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1024	CHIP RES. 1/10W F 22k Ω	RRXAFR5H2202
R1025	CHIP RES. 1/10W J 1.5k Ω	RRXAJR5Z0152
R1026	RES CARBON FILM T 1/4W J 2.2k Ω	RCX4222T1001
R1027	CHIP RES. 1/10W J 5.1k Ω	RRXAJR5Z0512
R1028	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1029	RES CARBON FILM T 1/4W J 1.8k Ω	RCX4182T1001
R1030	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R1031	RES CARBON FILM T 1/4W J 4.7k Ω	RCX4472T1001
R1032▲	METAL OXIDE FILM RES. 2W J 0.33 Ω	RN02R33ZU001
R1033	RES CARBON FILM T 1/4W J 8.2 Ω	RCX48R2T1001
R1034	CHIP RES. 1/10W J 33k Ω	RRXAJR5Z0333
R1035	CHIP RES. 1/10W F 1.0k Ω	RRXAFR5H1001
R1036	CHIP RES. 1/10W F 15k Ω	RRXAFR5H1502
R1037	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1038	CHIP RES. 1/10W J 240k Ω	RRXAJR5Z0244
R1039	CHIP RES. 1/10W F 68k Ω	RRXAFR5H6802
R1040	CHIP RES. 1/10W F 6.2k Ω	RRXAFR5H6201
R1041	CHIP RES. 1/10W F 1.0k Ω	RRXAFR5H1001
R1042	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R1043	CHIP RES. 1/10W F 5.1k Ω	RRXAFR5H5101
R1044	RES CARBON FILM T 1/4W G 5.1k Ω	RCX4512T1002
R1045	CHIP RES. 1/10W J 240k Ω	RRXAJR5Z0244
R1046	CHIP RES. 1/10W J 24k Ω	RRXAJR5Z0243
R1048	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R1049	CHIP RES. 1/10W J 12k Ω	RRXAJR5Z0123
R1050	CHIP RES. 1/10W J 390k Ω	RRXAJR5Z0394
R1051	CHIP RES. 1/10W J 390k Ω	RRXAJR5Z0394
R1052	CHIP RES. 1/10W F 100k Ω	RRXAFR5H1003
R1054	CHIP RES. 1/10W F 5.6k Ω	RRXAFR5H5601
R1055	CHIP RES. 1/10W F 51.0k Ω	RRXAFR5H5102
R1056	CHIP RES. 1/10W F 100k Ω	RRXAFR5H1003
R1057	CHIP RES. 1/10W J 390k Ω	RRXAJR5Z0394
R1058	CHIP RES. 1/10W F 10k Ω	RRXAFR5H1002
R1059	CHIP RES. 1/10W F 10k Ω	RRXAFR5H1002
R1060	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1061	CHIP RES. 1/10W J 33k Ω	RRXAJR5Z0333
R1065	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R1066	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R1067	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1068	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102

Ref. No.	Description	Part No.
R1069	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1070	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1071	CHIP RES. 1/10W F 4.3k Ω	RRXAFR5H4301
R1072	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1073	CHIP RES. 1/10W F 1.2k Ω	RRXAFR5H1201
R1074	RES CARBON FILM T 1/4W J 100k Ω	RCX4104T1001
R1081	CHIP RES. 1/10W F 100k Ω	RRXAFR5H1003
R1082	CHIP RES. 1/10W F 68k Ω	RRXAFR5H6802
R1083	CHIP RES. 1/10W F 1M Ω	RRXAFR5H1004
R1084	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R1086	CHIP RES. 1/10W F 100k Ω	RRXAFR5H1003
R1087	CHIP RES. 1/10W F 68k Ω	RRXAFR5H6802
R1088	CHIP RES. 1/10W F 1M Ω	RRXAFR5H1004
R1089	CHIP RES. 1/10W F 12k Ω	RRXAFR5H1202
R1090	CHIP RES. 1/10W F 47.0k Ω	RRXAFR5H4702
R1091	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R1092	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R1093	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R1094	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R1095	RES CARBON FILM T 1/4W J 1.2k Ω	RCX4122T1001
R1096	RES CARBON FILM T 1/4W J 47 Ω	RCX4470T1001
R1097	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R1099	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1105	CHIP RES. 1/10W J 3.3k Ω	RRXAJR5Z0332
R1106	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1107	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1109	CHIP RES. 1/10W F 2.2k Ω	RRXAFR5H2201
R1110	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1111	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R1112	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
<b>MISCELLANEOUS</b>		
AC601▲	AC CORD W/O A GND WIRE UL/CSA 1770 NO BLACK	WAC0172LW022
B13	HEAT SINK PMU A8A70UH	1EM324377
B14	POW HEAT SINK A7120UH	1EM423993
BC301	CHIP INDUCTOR BK1608HS601-T	LLC601NTU017
BC601	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC602	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC603	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC801	CHIP INDUCTOR BK1608HS601-T	LLC601NTU017
BC1001	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC1002	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC1003	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
F601▲	FUSE STC4A125V U/CT	PAGE20CW3402
FH601	FUSE HOLDER MSF-015 LF (B110)	XH01Z00LY002
FH602	FUSE HOLDER MSF-015 LF (B110)	XH01Z00LY002
JS304	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JS305	WIRE CP STP-S-0.50	XZ40F0REN001
JS306	WIRE CP STP-S-0.50	XZ40F0REN001
JS310	WIRE CP STP-S-0.50	XZ40F0REN001
JS801	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JS802	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JS803	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JS804	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
L13	SCREW B-TIGHT D3X8 BIND HEAD+	GBJB3080
SA601▲	SURGE ABSORBER 470V+-10PER	NVQZ10D471KB
T601▲	TRANS POWER BCK-28-9911	LTT2PC0XB055
T1002▲	TRANS INVERTER HVT-160	LTZ3PZ0XB014
TU302	TUNER UNIT ATSC TDAU4-D05A	UTNATS0AL002
TM601	EYELET TYPE D-1	0VM406868
TM602	EYELET TYPE D-1	0VM406868

## JACK ASSEMBLY

Ref. No.	Description	Part No.
	JACK ASSEMBLY Consists of the following:	A01N2MJC-001
	JACK CBA (MJC-A)	A01N2MJC-001-JK
	FUNCTION CBA (MJC-B) IR SENSOR CBA (MJC-C) JUNCTION CBA (MJC-D)	A01N2MJC-001-FNIRJN

## JACK CBA (MJC-A)

Ref. No.	Description	Part No.
	JACK CBA (MJC-A) Consists of the following:	-----
<b>CAPACITORS</b>		
C703	CHIP CERAMIC CAP. (1608) B K 1 $\mu$ F/16V	CHD1CK30B105
C704	CHIP CERAMIC CAP. (1608) B K 1 $\mu$ F/16V	CHD1CK30B105
C723	CHIP CERAMIC CAP. (1608) B K 1 $\mu$ F/16V	CHD1CK30B105
C724	CHIP CERAMIC CAP. (1608) B K 1 $\mu$ F/16V	CHD1CK30B105
C731	CHIP CERAMIC CAP. CH J 33pF/50V	CHD1JJ3CH390
C732	CHIP CERAMIC CAP. CH J 33pF/50V	CHD1JJ3CH390
C733	CHIP CERAMIC CAP. CH J 33pF/50V	CHD1JJ3CH390
C743	CHIP CERAMIC CAP. (1608) B K 1 $\mu$ F/16V	CHD1CK30B105
C744	CHIP CERAMIC CAP. (1608) B K 1 $\mu$ F/16V	CHD1CK30B105
C751	CHIP CERAMIC CAP.(1608) CH J 100pF/50V	CHD1JJ3CH101
C752	CHIP CERAMIC CAP.(1608) CH J 100pF/50V	CHD1JJ3CH101
C753	CHIP CERAMIC CAP.(1608) CH J 100pF/50V	CHD1JJ3CH101
C757	CHIP CERAMIC CAP. (1608) B K 1 $\mu$ F/16V	CHD1CK30B105
C758	CHIP CERAMIC CAP. (1608) B K 1 $\mu$ F/16V	CHD1CK30B105
C771	ELECTROLYTIC CAP. 100 $\mu$ F/16V M H7	CE1CMAVSL101
C772	CHIP CERAMIC CAP.(1608) F Z 0.1 $\mu$ F/50V	CHD1JZ30F104
C773	CHIP CERAMIC CAP. (1608) F Z 0.1 $\mu$ F/16V	CHD1CZ30F105
C775	CHIP CERAMIC CAP.(1608) CH J 33pF/50V	CHD1JJ3CH330
C776	CHIP CERAMIC CAP.(1608) CH J 33pF/50V	CHD1JJ3CH330
C841	CHIP CERAMIC CAP. (1608) B K 1 $\mu$ F/16V	CHD1CK30B105
C842	CHIP CERAMIC CAP. (1608) B K 1 $\mu$ F/16V	CHD1CK30B105
C843	CHIP CERAMIC CAP.(1608) F Z 0.1 $\mu$ F/50V	CHD1JZ30F104
C845	CHIP CERAMIC CAP.(1608) CH J 33pF/50V	CHD1JJ3CH330
<b>CONNECTORS</b>		
CN701	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN871	CONNECTOR PRINT OSU 008283021200000S+	J383C02UG004
<b>IC</b>		
IC771	IC SWITCHING TC4052BF(ELNF)	QSZBA0TTS162
<b>COILS</b>		
L851	WIRE CP STP-S-0.50	XZ40FOREN001
L852	WIRE CP STP-S-0.50	XZ40FOREN001
L853	WIRE CP STP-S-0.50	XZ40FOREN001
<b>TRANSISTORS</b>		
Q722	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q771	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q773	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q774	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q841	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
<b>RESISTORS</b>		
R711	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R712	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R717	CHIP RES. 1/10W J 56k $\Omega$	RRXAJR5Z0563
R718	CHIP RES. 1/10W J 56k $\Omega$	RRXAJR5Z0563
R721	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R722	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R727	CHIP RES. 1/10W J 56k $\Omega$	RRXAJR5Z0563
R728	CHIP RES. 1/10W J 56k $\Omega$	RRXAJR5Z0563

Ref. No.	Description	Part No.
R731	CHIP RES.(1608) 1/10W F 75 $\Omega$	RRXAFR5H75R0
R732	CHIP RES.(1608) 1/10W F 75 $\Omega$	RRXAFR5H75R0
R733	CHIP RES.(1608) 1/10W F 75 $\Omega$	RRXAFR5H75R0
R734	CHIP RES. 1/10W J 10 $\Omega$	RRXAJR5Z0100
R735	CHIP RES. 1/10W J 10 $\Omega$	RRXAJR5Z0100
R736	CHIP RES. 1/10W J 10 $\Omega$	RRXAJR5Z0100
R741	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R742	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R747	CHIP RES. 1/10W J 56k $\Omega$	RRXAJR5Z0563
R748	CHIP RES. 1/10W J 56k $\Omega$	RRXAJR5Z0563
R751	CHIP RES. 1/10W J 75 $\Omega$	RRXAJR5Z0750
R752	CHIP RES. 1/10W J 75 $\Omega$	RRXAJR5Z0750
R753	CHIP RES. 1/10W J 75 $\Omega$	RRXAJR5Z0750
R754	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R755	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R756	RES CARBON FILM T 1/4W J 10 $\Omega$	RCX4100T1001
R757	RES CARBON FILM T 1/4W J 10 $\Omega$	RCX4100T1001
R758	RES CARBON FILM T 1/4W J 10 $\Omega$	RCX4100T1001
R763	RES CARBON FILM T 1/4W J 56k $\Omega$	RCX4563T1001
R764	CHIP RES. 1/10W J 56k $\Omega$	RRXAJR5Z0563
R772	CHIP RES. 1/10W J 10k $\Omega$	RRXAJR5Z0103
R773	CHIP RES. 1/10W J 10k $\Omega$	RRXAJR5Z0103
R774	RES CARBON FILM T 1/4W J 10k $\Omega$	RCX4103T1001
R775	RES CARBON FILM T 1/4W J 10k $\Omega$	RCX4103T1001
R780	CHIP RES. 1/10W J 82k $\Omega$	RRXAJR5Z0823
R781	CHIP RES. 1/10W J 82k $\Omega$	RRXAJR5Z0823
R782	RES CARBON FILM T 1/4W J 82k $\Omega$	RCX4823T1001
R783	CHIP RES. 1/10W J 82k $\Omega$	RRXAJR5Z0823
R784	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R785	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R786	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R787	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R788	RES CARBON FILM T 1/4W J 82k $\Omega$	RCX4823T1001
R789	RES CARBON FILM T 1/4W J 82k $\Omega$	RCX4823T1001
R790	CHIP RES. 1/10W J 82k $\Omega$	RRXAJR5Z0823
R791	CHIP RES. 1/10W J 82k $\Omega$	RRXAJR5Z0823
R792	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R793	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R794	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R795	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R796	CHIP RES. 1/10W J 2.2k $\Omega$	RRXAJR5Z0222
R797	CHIP RES. 1/10W J 2.2k $\Omega$	RRXAJR5Z0222
R843	CHIP RES. 1/10W J 110 $\Omega$	RRXAJR5Z0111
R844	CHIP RES. 1/10W J 220 $\Omega$	RRXAJR5Z0221
R845	CHIP RES. 1/10W J 100k $\Omega$	RRXAJR5Z0104
R846	CHIP RES. 1/10W J 100 $\Omega$	RRXAJR5Z0101
R847	CHIP RES. 1/10W J 10k $\Omega$	RRXAJR5Z0103
R848	CHIP RES. 1/10W J 10k $\Omega$	RRXAJR5Z0103
R851	RES CARBON FILM T 1/4W J 180 $\Omega$	RCX4181T1001
R852	RES CARBON FILM T 1/4W J 180 $\Omega$	RCX4181T1001
<b>MISCELLANEOUS</b>		
BC771	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC841	CHIP INDUCTOR BK1608HS601-T	LLC601NTU017
JK711	JACK HPEP SML PCB S PJ-358H	JXSJ020YUQ01
JK721	JACK RCA PCB S WHITE 01/RCA-101H(WH)	JXRJ010YUQ02
JK722	JACK RCA PCB S RED 01/RCA-101H(RD)	JXRJ010YUQ01
JK731	JACK RCA PCB S GREEN 01/RCA-101H(GN)	JXRJ010YUQ03
JK732	JACK RCA PCB S BLUE 01/RCA-101H(BL)	JXRJ010YUQ04
JK733	JACK RCA PCB S RED 01/RCA-101H(RD)	JXRJ010YUQ01
JK741	JACK RCA PCB S WHITE 01/RCA-101H(WH)	JXRJ010YUQ02
JK742	JACK RCA PCB S RED 01/RCA-101H(RD)	JXRJ010YUQ01
JK751	JACK SW DIN PCB L DIN-435C(777D)	JYEL040YUQ03

Ref. No.	Description	Part No.
JK752	JACK RCA PCB L RCA-101S(1)-03	JXRL010YUQ12
JK753	JACK RCA PCB L RCA-101S(1)-04	JXRL010YUQ13
JK754	JACK SW RCA PCB L RCA-102F(RD)	JYRL010YUQ05
JK841	JACK RCA PCB S ORANGE 01/RCA-101H(OR)	JXRJ010YUQ06
JK851	JACK SW HPEP SML PCB L PJ-350	JYSL010YUQ03
JS701	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000

## FUNCTION CBA (MJC-B)

Ref. No.	Description	Part No.
	FUNCTION CBA (MJC-B) Consists of the following:	-----
<b>CAPACITORS</b>		
C108	CAP CERAMIC (AX) 0.1μF/50V/F/Z	CA1J104TU062
C109	CAP CERAMIC (AX) 0.1μF/50V/F/Z	CA1J104TU062
<b>RESISTORS</b>		
R108	RES CARBON FILM T 1/4W J 220 Ω	RCX4221T1001
R109	RES CARBON FILM T 1/4W G 10k Ω	RCX4103T1002
R111	RES CARBON FILM T 1/4W G 4.7k Ω	RCX4472T1002
R112	RES CARBON FILM T 1/4W G 2.7k Ω	RCX4272T1002
R113	RES CARBON FILM T 1/4W G 4.7k Ω	RCX4472T1002
R114	RES CARBON FILM T 1/4W G 8.2k Ω	RCX4822T1002
R115	RES CARBON FILM T 1/4W G 18k Ω	RCX4183T1002
<b>SWITCHES</b>		
SW101	TACT SWITCH SKQSAB	SST0101AL038
SW103	TACT SWITCH SKQSAB	SST0101AL038
SW104	TACT SWITCH SKQSAB	SST0101AL038
SW105	TACT SWITCH SKQSAB	SST0101AL038
SW106	TACT SWITCH SKQSAB	SST0101AL038
SW107	TACT SWITCH SKQSAB	SST0101AL038

## IR SENSOR CBA (MJC-C)


Ref. No.	Description	Part No.
	IR SENSOR CBA (MJC-C) Consists of the following:	-----
<b>CAPACITORS</b>		
C101	ELECTROLYTIC CAP. 47μF/16V M H7	CE1CMAVSL470
C103	CHIP CERAMIC CAP. CH J 330pF/50V	CHD1JJ3CH331
C104	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C105	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
<b>DIODE</b>		
D101	LED (WHITE) SLR343WBC7T3XM	QPWM343WBC7T
<b>RESISTORS</b>		
R101	RES CARBON FILM T 1/4W J 100 Ω	RCX4101T1001
R102	RES CARBON FILM T 1/4W J 3.3k Ω	RCX4332T1001
R103	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R106	RES CARBON FILM T 1/4W J 1.0k Ω	RCX4102T1001
<b>MISCELLANEOUS</b>		
CL102	WIRE ASSEMBLY 5PIN 5PIN/305MM	WX1A01N2-001
CL103	WIRE ASSEMBLY 3PIN 3PIN/85MM	WX1A01N2-004
RS101	SENSOR REMOTE RECEIVER KSM-712TH2E	USESJR5K044

## JUNCTION CBA (MJC-D)

Ref. No.	Description	Part No.
	JUNCTION CBA (MJC-D) Consists of the following:	-----
<b>CONNECTOR</b>		
CN101	242 SERIES CONNECTOR TUC-P05X-B1 WHT ST	JCTUB05TG002

# PARTS LIST [19PFL3505D/F7 (Serial No. : DS2A)]

## Mechanical Parts


**PRODUCT SAFETY NOTE:** Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

**NOTE:** Parts that are not assigned part numbers (-----) are not available.

### Different parts from the original model 19PFL3505D/F7 (Serial No.: DS1A)

Ref. No.	Description	Part No.
B25	THERMAL SHEET TMS-14-20 12X12	XK10000X4011

# Electrical Parts

**PRODUCT SAFETY NOTE:** Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

**NOTE:** Parts that are not assigned part numbers (-----) are not available.


## Different parts from the original model 19PFL3505D/F7 (Serial No.: DS1A)

Ref. No.	Description	Part No.
	MAIN CBA	A01N2MPWA002
C821	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
CN102	CONNECTOR PRINT OSU B5B-PH-K-S (LF)(SN)	J3PHC05JG029
JS805	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
	JACK ASSEMBLY Consists of the following	A01N2MJC-002
	JACK CBA	A01N2MJC-002-JK
	----- FUNCTION CBA IR SENSOR CBA	A01N2MJC-002-FNIR
	JACK CBA	-----
CL102	WIRE ASSEMBLY 5PIN 5PIN/305MM	WX1A01N2-011
	JUNCTION CBA (In this model, the JUNCTION CBA is not used.)	
CN101	Not used	





# PARTS LIST [19PFL3505D/F7 (Serial No. : DS3A)]

## Mechanical Parts


**PRODUCT SAFETY NOTE:** Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

**NOTE:** Parts that are not assigned part numbers (-----) are not available.

### Different parts from the original model 19PFL3505D/F7 (Serial No.: DS1A)

Ref. No.	Description	Part No.
	STAND ASSEMBLY A9172UH	1ESA19910
A6 	RATING LABEL A01N2UH	-----
A42	ENERGY GUIDE LABEL A01N2UH	-----
B25	THERMAL SHEET TMS-14-20 12X12	XK10000X4011
S4	SET BAG A81N0UH	1EM323958A
X2 	OWNERS MANUAL A01NKHU	1EMN28499
X6	QUICK START GUIDE A01NKHU	1EMN28500
X10	REGISTRATION CARD(PHILIPS) A11P4UH	1EMN27321

# Electrical Parts

**PRODUCT SAFETY NOTE:** Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

**NOTE:** Parts that are not assigned part numbers (-----) are not available.

## Different parts from the original model 19PFL3505D/F7 (Serial No.: DS1A)

Ref. No.	Description	Part No.
	MAIN CBA	A01N2MPWA002
C821	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
CN102	CONNECTOR PRINT OSU B5B-PH-K-S (LF)(SN)	J3PHC05JG029
JS805	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
	JACK ASSEMBLY Consists of the following	A01N2MJC-002
	JACK CBA	A01N2MJC-002-JK
	----- FUNCTION CBA IR SENSOR CBA	A01N2MJC-002-FNIR
	JACK CBA(MJC-A)	-----
CL102	WIRE ASSEMBLY 5PIN 5PIN/305MM	WX1A01N2-011
	JUNCTION CBA (In this model, the JUNCTION CBA is not used.)	
CN101	Not used	

		20110701	
		19PFL3505D/F7(A01NMUH) [Serial No. : DS4A]	
Ref. No.	Description	Parts No.	
MECHANICAL PARTS			
	STAND ASSEMBLY A9172UH	1ESA19910	
	REAR ASSEMBLY A01N2UH	1ESA30251	
A1	FRONT CABINET A91N2UH	1EM023605	
A9	JACK HOLDER(A) A01N2UH	1EM223903	
A10	JACK HOLDER(D) A01N2UH	1EM226564	
A11	FUNCTION KNOB A91H2UH	1EM222865	
A12	KNOB FRAME A01F2UH	1EM327217	
A13	SENSOR LED LENS A91H2UH	1EM325697	
A42	ENERGY GUIDE LABEL A01N2UH	-----	
B1	SHIELD BOX A17F4UH	1EM225624	
B2	STAND HOLDER A91N2UH	1EM223043	
B7	GASKET A8AF0UH	1EM425861	
B8	SPEAKER HOLDER A91N2UH	1EM222983	
B15	SPEAKER CUSHION A91N2UH	1EM325798	
B20	CLOTH(10X90XT1.0) A7120UH	1EM424258	
B24	CLOTH 15X10XT0.5	1EM420293	
B25	THERMAL SHEET TMS-14-20 12X12	XK10000X4011	
CL201	WIRE ASSEMBLY 11PIN FFC 11PIN 75MM	WX1A94N0-105	
CL701	WIRE ASSEMBLY 29PIN FFC 29PIN 50MM	WX1A94F0-101	
CL871	2PIN WIRE ASSEMBLY 2PIN / 95MM	WX1A91N2-003	
CL872	2PIN WIRE ASSEMBLY 2PIN / 95MM / TUBE	WX1A01N2-003	
CL3701	WIRE ASSEMBLY 29PIN FFC 29PIN 50MM	WX1A94F0-101	
CL3702	WIRE ASSEMBLY 29PIN FFC 29PIN 50MM	WX1A94F0-101	
CL3902	WIRE ASSEMBLY 24PIN FFC 24PIN 65MM	WX1A94N0-106	
L1	SCREW P-TIGHT 3X10 BIND HEAD+	GBHP3100	
L4	SCREW S-TIGHT M3X8 BIND HEAD+	GBHS3080	
L8	ASSEMBLED SCREW M3X10	1EM420633A	
L9	DOUBLE SEMS SCREW M4X10 + BLK	FPH34100	
L10	STAND SCREW KIT A91N2UH	1ESA19909	
L11	HEX SCREW #4-40 7MM	1EM430139	
L12	ASSEMBLED SCREW ( D9 M3X6 ) A71F0UH	1EM424392B	
LCD1	LCD MODULE 18.5INCH WIDE CMO 18.5INCH WXGA	UJ19MXB	
SP861	SPEAKER S0307F03	DS08070XQ001	
SP862	SPEAKER S0307F03	DS08070XQ001	
S1	CARTON A01N2UH	1EM436640	
S2	STYROFOAM TOP A91N2UH	1EM024027	
S3	STYROFOAM BOTTOM A91N2UH	1EM024028	
S4	SET BAG A81N0UH	1EM323958A	
S5	SERIAL NO. LABEL A01PBUH	-----	
S6	STAND BAG A81N0UH	1EM425888	
X1	BAG POLYETHYLENE 235X365XT0.03	0EM408420A	
X2!	OWNERS MANUAL A01N2UH	1EMN28779	
X3	REMOTE CONTROL TRANSMITTER YKF259-001	URMT34JHG001	
X4	BATTERY R03-B500/01S	XB0M451CZB01	
X6	QUICK START GUIDE A01N2UH	1EMN28780	
X10	REGISTRATION CARD(PHILIPS) A11P4UH	1EMN27321	
X13	CABLE MANAGEMENT TIE(BLACK) A01F2UH	1EM431197	
ELECTRICAL PARTS			
	DIGITAL MAIN CBA UNIT	A01NMMMA-001	
	MAIN CBA	A01NMMPW-001	
C201	ELECTROLYTIC CAP. 470UF/25V M	CE1EMASDL471	

C202	CHIP CERAMIC CAP.(1608) B K 0.01UF/50V	CHD1JK30B103
C203	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C204	ELECTROLYTIC CAP. 10UF/50V M	CE1JMASDL100
C207	ELECTROLYTIC CAP. 10UF/50V M	CE1JMASDL100
C209	ELECTROLYTIC CAP. 47UF/25V M	CE1EMASDL470
C214	CHIP CERAMIC CAP.(1608) CH J 1000PF/50V	CHD1JJ3CH102
C215	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C216	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C217	ELECTROLYTIC CAP. 47UF/25V M	CE1EMASDL470
C218	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C219	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C220	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C221	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C301	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C302	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C303	ELECTROLYTIC CAP. 330UF/10V M	CE1AMASDL331
C305	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C306	ELECTROLYTIC CAP. 22UF/50V M	CE1JMASDL220
C307	ELECTROLYTIC CAP. 22UF/50V M	CE1JMASDL220
C309	CHIP CERAMIC CAP.(1608) B K 0.1UF/25V	CHD1EK30B104
C310	CHIP CERAMIC CAP.(1608) CH J 47PF/50V	CHD1JJ3CH470
C311	CHIP CERAMIC CAP.(1608) CH J 47PF/50V	CHD1JJ3CH470
C314	CHIP CERAMIC CAP.(1608) CH J 33PF/50V	CHD1JJ3CH330
C315	CHIP CERAMIC CAP.(1608) CH J 33PF/50V	CHD1JJ3CH330
C401	ELECTROLYTIC CAP. 1UF/50V M	CE1JMASDL1R0
C601!	CAP METALIZED FILM 0.47UF/300V K 3.5MM	CT2F474DC004
C603	CAP ELECTROLYTIC 270UF/200V	CEA271DYG005
C605A	CHIP CERAMIC CAP. B K 1500PF/50V	CHD1JK30B152
C607!	CERAMIC CAP. 330PF/2KV	CA3D331PAN04
C608A	CHIP CERAMIC CAP.(1608) B K 1000PF/50V	CHD1JK30B102
C609	ELECTROLYTIC CAP. 47UF/25V M	CE1EMASDL470
C610	ELECTROLYTIC CAP. 100UF/50V M	CE1JMASDL101
C611	CAP CERAMIC (AX) 0.1UF/50V/B/K	CA1J104TU061
C613	CAP CERAMIC (AX) 220PF/50V/B/K	CA1J221TU061
C614	CAP CERAMIC (AX) 1000PF/50V/B/K	CA1J102TU061
C615	CAP CERAMIC (AX) 0.022UF/50V/B/K	CA1J223TU061
C631	ELECTROLYTIC CAP. 470UF/25V M	CE1EMASDL471
C632	ELECTROLYTIC CAP. 1000UF/35V M	CE1GMZNDL102
C633	CERAMIC CAP. B K 1500PF/1KV	CCD3AKN0B152
C634A	CHIP CERAMIC CAP.(1608) B K 0.022UF/50V	CHD1JK30B223
C636!	ELECTROLYTIC CAP. 100UF/25V M	CE1EMASDL101
C638	CAP ALUMINUM ELECTROLYTIC 2200UF/6.3V M	CE0KMZNDL222
C639	CAP ALUMINUM ELECTROLYTIC 2200UF/6.3V M	CE0KMZNDL222
C641	ELECTROLYTIC CAP 3300UF/10V	CE1AMZNDL332
C643	ELECTROLYTIC CAP. 1000UF/25V M	CE1EMZNDL102
C645A	CHIP CERAMIC CAP. B K 2200PF/50V	CHD1JK30B222
C646	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C647	ELECTROLYTIC CAP. 100UF/10V M	CE1AMASDL101
C648	ELECTROLYTIC CAP. 47UF/25V M	CE1EMASDL470
C649	ELECTROLYTIC CAP. 220UF/10V M	CE1AMASDL221
C650	ELECTROLYTIC CAP. 220UF/10V M	CE1AMASDL221
C652	ELECTROLYTIC CAP. 1000UF/6.3V M	CE0KMASDL102
C653	ELECTROLYTIC CAP. 22UF/50V M	CE1JMASDL220
C654	ELECTROLYTIC CAP. 100UF/16V M	CE1CMASDL101
C655	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C656	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C657	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C658	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C659	CAP CERAMIC (AX) 0.1UF/50V/B/K	CA1J104TU061
C661	ELECTROLYTIC CAP. 3.3UF/50V M	CE1JMASDL3R3

C681	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C682	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C683	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C684	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C685	CAP CERAMIC (AX) 0.1UF/50V/B/K	CA1J104TU061
C691!	SAFTY CAP. 2200PF/250V KX	CA2E222MR101
C692!	CAP CERAMIC 4700PF/250V/M/KX	CA2E472MR101
C802	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C805	ELECTROLYTIC CAP. 220UF/25V M	CE1EMASDL221
C806	ELECTROLYTIC CAP. 220UF/25V M	CE1EMASDL221
C807	CHIP CERAMIC CAP.(1608) B K 0.022UF/25V	CHD1EK30B223
C808	CHIP CERAMIC CAP.(1608) B K 0.022UF/25V	CHD1EK30B223
C809	ELECTROLYTIC CAP. 1UF/50V M H7	CE1JMAVSL1R0
C810	ELECTROLYTIC CAP. 1UF/50V M H7	CE1JMAVSL1R0
C811	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C812	ELECTROLYTIC CAP. 470UF/25V M	CE1EMASDL471
C813	ELECTROLYTIC CAP. 100UF/25V M	CE1EMASDL101
C816	CHIP CERAMIC CAP. CH J 820PF/50V	CHD1JJ3CH821
C817	CHIP CERAMIC CAP. CH J 820PF/50V	CHD1JJ3CH821
C821	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
C825	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C826	CHIP CERAMIC CAP.(1608) CH J 390PF/50V	CHD1JJ3CH391
C827	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C828	CHIP CERAMIC CAP.(1608) CH J 390PF/50V	CHD1JJ3CH391
C829	CHIP CERAMIC CAP.(1608) CH J 1000PF/50V	CHD1JK30B102
C830	CHIP CERAMIC CAP.(1608) CH J 1000PF/50V	CHD1JJ3CH102
C831	ELECTROLYTIC CAP. 100UF/16V M	CE1CMASDL101
C832	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C833	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C1001	CAP CERAMIC (AX) 2200PF/50V/B/K	CA1J222TU061
C1002A	CAP CHIP CERAMIC 0.01UF/250V	CA2E103MR088
C1002B	CAP CHIP CERAMIC 0.01UF/250V	CA2E103MR088
C1003	CHIP CERAMIC CAP.(1608) B K 0.01UF/50V	CHD1JK30B103
C1004	CHIP CERAMIC CAP.(1608) B K 0.01UF/50V	CHD1JK30B103
C1005A	CAP CHIP CERAMIC 0.01UF/250V	CA2E103MR088
C1005B	CAP CHIP CERAMIC 0.01UF/250V	CA2E103MR088
C1006	CAP CERAMIC HV 10PF/6.3KV/SLJ	CCA1000MR001
C1007	CAP CERAMIC (AX) 2200PF/50V/B/K	CA1J222TU061
C1008	CAP CERAMIC HV 10PF/6.3KV/SLJ	CCA1000MR001
C1009	ELECTROLYTIC CAP. 10UF/50V M	CE1JMASDL100
C1010	ELECTROLYTIC CAP. 10UF/50V M	CE1JMASDL100
C1011	ELECTROLYTIC CAP. 1000UF/35V M	CE1GMZNDL102
C1012	CERAMIC CAP. B K 220PF/500V	CCD2JKS0B221
C1014	CAP CERAMIC HV 10PF/6.3KV/SLJ	CCA1000MR001
C1015	CAP CERAMIC HV 10PF/6.3KV/SLJ	CCA1000MR001
C1016	CHIP CERAMIC CAP.(1608) B K 6800PF/50V	CHD1JK30B682
C1018	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C1019	CERAMIC CAP. B K 220PF/500V	CCD2JKS0B221
C1020	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C1022	ELECTROLYTIC CAP. 100UF/16V M	CE1CMASDL101
C1024	CHIP CERAMIC CAP.(1608) B K 0.01UF/50V	CHD1JK30B103
C1025	CHIP CERAMIC CAP.(1608) B K 0.01UF/50V	CHD1JK30B103
C1026	CHIP CERAMIC CAP.(1608) B K 0.1UF/25V	CHD1EK30B104
C1027	ELECTROLYTIC CAP. 10UF/50V M	CE1JMASDL100
C1028	CHIP CERAMIC CAP.(1608) B K 0.01UF/50V	CHD1JK30B103
C1031A	CHIP CERAMIC CAP.(1608) B K 2700PF/50V	CHD1JK30B272
C1032	CHIP CERAMIC CAP.(1608) B K 0.01UF/50V	CHD1JK30B103
C1033	ELECTROLYTIC CAP. 10UF/50V M	CE1JMASDL100
C1034	CHIP CERAMIC CAP.(1608) B K 0.01UF/50V	CHD1JK30B103
C1035	CHIP CERAMIC CAP.(1608) B K 0.01UF/50V	CHD1JK30B103

C1037	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C1038	CHIP CERAMIC CAP.(1608) B K 0.1UF/25V	CHD1EK30B104
C1039	CHIP CERAMIC CAP.(1608) B K 0.01UF/50V	CHD1JK30B103
C1040	CHIP CERAMIC CAP.(1608) B K 1000PF/50V	CHD1JK30B102
C1041	CHIP CERAMIC CAP.(1608) B K 0.01UF/50V	CHD1JK30B103
C1042	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C1043	CHIP CERAMIC CAP.(1608) B K 0.22UF/16V	CHD1CK30B224
C1044	CHIP CERAMIC CAP.(1608) B K 0.1UF/25V	CHD1EK30B104
C1045	CHIP CERAMIC CAP.(1608) B K 0.1UF/25V	CHD1EK30B104
C1053	ELECTROLYTIC CAP. 100UF/16V M	CE1CMASDL101
C1054	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C1056	CHIP CERAMIC CAP.(1608) B K 0.1UF/25V	CHD1EK30B104
CN102	CONNECTOR PRINT OSU B5B-PH-K-S (LF)(SN)	J3PHC05JG029
CN201	FFC CONNECTOR IMSA-9615S-11A-PP-A	JC96J11ER007
CN301	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN302	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN702	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN872	CONNECTOR PRINT OSU 008283021200000S+	J383C02UG004
CN1001!	CONNECTOR PRINT OSU KW05-120-02-00	J30502KET001
CN1002!	CONNECTOR PRINT OSU KW05-120-02-00	J30502KET001
D201	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D202	IC SHUNT REGULATOR KIA431-AT/P	NSZBA0TJY036
D203	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D204	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D205	DIODE ZENER 24BSC-T26	NDTC024BST26
D206	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D207	DIODE ZENER 7V5BSA-T26	NDTA7R5BST26
D208	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D209	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D210	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D401	DIODE FR104-B	NDLZ000FR104
D402	DIODE ZENER 8V2BSB-T26	NDTB8R2BST26
D404	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D405	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D406	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D407	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D408	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D409	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D410	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D411	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D412	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D413	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D414	DIODE ZENER 6V2BSB-T26	NDTB6R2BST26
D416	DIODE ZENER 10BSB-T26	NDTB010BST26
D417	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D418	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D423	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D601!	DIODE 1N5397BD	NDL1001N5397
D602!	DIODE 1N5397BD	NDL1001N5397
D603!	DIODE 1N5397BD	NDL1001N5397
D604!	DIODE 1N5397BD	NDL1001N5397
D607	DIODE ZENER 11BSB-T26	NDTB011BST26
D608!	DIODE ZENER 27BSB-T26	NDTB027BST26
D609	DIODE ZENER 27BSB-T26	NDTB027BST26
D610	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D612	DIODE FR104-B	NDLZ000FR104
D613	DIODE FR104-B	NDLZ000FR104
D614	DIODE FAST RECOVERY FR103BB	NDWZ0FR103BB
D615!	DIODE ZENER 39BSB-T26	NDTB039BST26
D616	DIODE ZENER 27BSB-T26	NDTB027BST26

D617	DIODE FAST RECOVERY FR103BB	NDWZ0FR103BB
D619	DIODE FAST RECOVERY FR103BB	NDWZ0FR103BB
D631	DIODE FAST RECOVERY FR153-B/P	NDWZ0FR153BP
D632	DIODE SHOTTKY SB3200BR	NDWZ3200D027
D633!	DIODE ZENER 1ZB43BB	NDWZ0001ZB43
D634	IC SHUNT REGULATOR KIA431-AT/PF5	NSZBB0TJY036
D636	DIODE FR104-B	NDLZ000FR104
D637!	DIODE ZENER 36BSB-T26	NDTB036BST26
D638	SCHOTTKY BARRIER DIODE SB140	NDWZ000SB140
D639	DIODE FAST RECOVERY FR151BD	NDWZ0FR151BD
D641	DIODE SCHOTTKY SB360BH	NDWZ000SB360
D642	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D643	FAST RECOVERY DIODE FR252	NDWZ000FR252
D646	SCHOTTKY BARRIER DIODE SB140	NDWZ000SB140
D648	DIODE ZENER 5V6BSB-T26	NDTB5R6BST26
D648A	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
D649!	DIODE ZENER 3V3BSB-T26	NDTB3R3BST26
D650!	DIODE ZENER 5V6BSA-T26	NDTA5R6BST26
D651	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D653	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D654	DIODE FR154	NDLZ000FR154
D655	DIODE FR154	NDLZ000FR154
D656	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D657	DIODE ZENER 4V7BSB-T26	NDTB4R7BST26
D659	SHUNT REGULATOR KIA431B-AT/P	NSZBA0TJY038
D662	IC SHUNT REGULATOR KIA431-AT/P	NSZBA0TJY036
D665	WIRE CP STP-S-0.50	XZ40F0REN001
D666	DIODE ZENER 10BSB-T26	NDTB010BST26
D668!	DIODE ZENER 20BSB-T26	NDTB020BST26
D804	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D805	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D808	DIODE ZENER 20BSB-T26	NDTB020BST26
D809	DIODE ZENER 20BSB-T26	NDTB020BST26
D1001	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1002	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1003	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1004	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1005	DIODE ZENER 6V2BSB-T26	NDTB6R2BST26
D1005A	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
D1006	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1007	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1008	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1009	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1010	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1011	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1012	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1013	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1014	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1015	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1016	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1017	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1018	DIODE ZENER 6V8BSB-T26	NDTB6R8BST26
D1019	DIODE ZENER 11BSA-T26	NDTA011BST26
D1020	DIODE ZENER 5V1BSB-T26	NDTB5R1BST26
D1021	DIODE ZENER 15BSB-T26	NDTB015BST26
D1022	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1023	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1024	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1025	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1026	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133

D1027	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1028	DIODE ZENER 4V7BSB-T26	NDTB4R7BST26
D1029	DIODE ZENER 12BSB-T26	NDTB012BST26
D1030	DIODE ZENER 12BSB-T26	NDTB012BST26
D1031	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1034	DIODE ZENER 9V1BSB-T26	NDTB9R1BST26
D1036	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1038	WIRE CP STP-S-0.50	XZ40F0REN001
D1045	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
IC201	IC TL3472CDR	NSZBA0TTY115
IC601!	PHOTO COUPLER LTV817MCF	NPECLTV817MF
IC602	IC SWITING FA5571N-D1-TE1/SOP-8	QSCA0T0FD003
IC631	IC REGULATOR MM3123DPRE	QSCA0T0MM108
IC801	AUDIO AMP IC TDA1517P/N3 112	NSCA0SNXP003
IC803	IC OP AMP NJM4558M(TE1)-#ZZZB	QSZBA0TJR089
IC1001	IC PULSE-WIDTH-MODULATION CONT TL494CDR	NSCA0T0TY006
IC1002	IC OPERATIONNAL AMPLIFIER KIA358F-EL	NSZBA0TJY030
L301	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
L302	COIL CHIP FERITE INDUCTOR SDFL1608LR22KT(F)	LLFR22SSN011
L303	COIL CHIP FERITE INDUCTOR SDFL1608LR22KT(F)	LLFR22SSN011
L601!	LINE FILTER 5.0MH 96005	LLBG00ZKT004
Q201	TRANSISTOR 2SC2120-Y(Te2 F T)	QQSY2SC2120F
Q202	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q203	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q204	TRANSISTOR 2SA950-Y(Te2 F T)	QQSY02SA950F
Q205	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q206	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q207	TRANSISTOR 2SC2655-Y(Te6 F M)	QQSY2SC2655F
Q208	TRANSISTOR 2SA1020-Y(Te6 F M)	QQSY2SA1020F
Q209	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q210	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q401	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q402	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q601!	FET MOS TK5A50D(FUNAI	QEWZTK5A50DQ
Q602	FET POWER MOS SMD KHB1D0N60D-RTF/PMC	NF1ZKHB1D0N6
Q603	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q631	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q633	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q634	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q635	TRANSISTOR 2SA950-Y(Te2 F T)	QQSY02SA950F
Q636	TRANSISTOR 2SC2120-Y(Te2 F T)	QQSY2SC2120F
Q637	TRANSISTOR 2SC2120-Y(Te2 F T)	QQSY2SC2120F
Q638	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q639	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q640	TRANSISTOR(PB FREE) KTC2026-Y/P	NQEYKTC2026P
Q641	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q643	TRANSISTOR 2SA950-Y(Te2 F T)	QQSY02SA950F
Q801	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1001	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1002	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1003	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1004	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1005!	FET MOS SMD TPC8214-H	QF22TPC8214H
Q1006	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q1007	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q1008	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1009	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1010	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1011	TRANSISTOR 2SA950-Y(Te2 F T)	QQSY02SA950F
Q1012	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P

Q1014		TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1015		TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1016		TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1017		TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1018		TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q1019		TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1020		TRANSISTOR 2SD400(F)	QQUF002SD400
Q1023		TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1024		TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
R201		RES CARBON FILM T 1/4W J 5.6 OHM	RCX45R6T1001
R202		RES CHIP 1608 1/10W F 9.10K OHM	RTW9101HH008
R203		RES CHIP 1608 1/10W F 510 OHM	RTW5100HH008
R204		RES CHIP 1608 1/10W F 2.20K OHM	RTW2201HH008
R205		RES CHIP 1608 1/10W J 1.5K OHM	RRXA152HH013
R206		RES CHIP 1608 1/10W J 47K OHM	RRXA473HH013
R207		RES CARBON FILM T 1/4W J 6.8K OHM	RCX4682T1001
R208		RES CARBON FILM T 1/4W J 6.8K OHM	RCX4682T1001
R209		RES CHIP 1608 1/10W J 56K OHM	RRXA563HH013
R210		RES CHIP 1608 1/10W J 6.8K OHM	RRXA682HH013
R211		RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R212		RES CHIP 1608 1/10W J 22K OHM	RRXA223HH013
R213		RES CHIP 1608 1/10W J 27K OHM	RRXA273HH013
R214		RES CHIP 1608 1/10W J 3.3K OHM	RRXA332HH013
R215		RES CARBON FILM T 1/4W J 330 OHM	RCX4331T1001
R216		RES CARBON FILM T 1/4W J 2.7K OHM	RCX4272T1001
R217		RES CARBON FILM T 1/4W J 2.7K OHM	RCX4272T1001
R218		RES CARBON FILM T 1/4W J 8.2K OHM	RCX4822T1001
R219		RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R220		RES CHIP 1608 1/10W J 47K OHM	RRXA473HH013
R221		RES CHIP 1608 1/10W J 22K OHM	RRXA223HH013
R222		RES CARBON FILM T 1/4W J 120 OHM	RCX4121T1001
R223		RES CARBON FILM T 1/4W J 15K OHM	RCX4153T1001
R224		RES CHIP 1608 1/10W J 1.0 OHM	RRXA1R0HH013
R225		RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
R226		RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R227		RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R228		WIRE CP STP-S-0.50	XZ40F0REN001
R229		RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R230		RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R231		RES CHIP 1608 1/10W J 1.5K OHM	RRXA152HH013
R232		RES CHIP 1608 1/10W J 15K OHM	RRXA153HH013
R233		RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R234		RES CHIP 1608 1/10W J 1.0K OHM	RRXA102HH013
R236		RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R239		RES CARBON FILM T 1/4W J 150 OHM	RCX4151T1001
R240		RES CARBON FILM T 1/4W J 3.9K OHM	RCX4392T1001
R241		RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R302		RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
R303		RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
R304		RES CHIP 1608 1/10W J 82 OHM	RRXA820HH013
R305		RES CHIP 1608 1/10W J 82 OHM	RRXA820HH013
R308		RES CARBON FILM T 1/4W J 470 OHM	RCX4471T1001
R313		RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
R401!		RES CHIP 1608 1/10W J 1.0 OHM	RRXA1R0HH013
R402		RES CHIP 1608 1/10W F 36.0K OHM	RTW3602HH008
R403		RES CHIP 1608 1/10W F 43.0K OHM	RTW4302HH008
R406		RES CARBON FILM T 1/4W J 47K OHM	RCX4473T1001
R407		RES CHIP 1608 1/10W J 47K OHM	RRXA473HH013
R408		RES CHIP 1608 1/10W J 47K OHM	RRXA473HH013
R409		RES CHIP 1608 1/10W J 2.2K OHM	RRXA222HH013

R411		RES CARBON FILM T 1/4W J 22K OHM	RCX4223T1001
R412		RES CHIP 1608 1/10W J 22K OHM	RRXA223HH013
R413		RES CHIP 1608 1/10W J 22K OHM	RRXA223HH013
R601!		GLASS GLAZE RES. 1/2W J 2.7M OHM	RXX2JZLZ0275
R602!		CEMENT RES. 3W K 1.2 OHM	RW031R2PG007
R604		WIRE CP STP-S-0.50	XZ40F0REN001
R605		WIRE CP STP-S-0.50	XZ40F0REN001
R606		RES CARBON FILM T 1/4W J 47K OHM	RCX4473T1001
R607		RES CHIP 3216 1/4W J 2.7M OHM	RRX4275HH034
R608		RES CHIP 3216 1/4W J 2.7M OHM	RRX4275HH034
R609		RES CARBON FILM T 1/4W J 180 OHM	RCX4181T1001
R610		RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R611		RES CARBON FILM T 1/4W J 4.7K OHM	RCX4472T1001
R612		RES CARBON FILM T 1/4W J 22 OHM	RCX4220T1001
R613!		METAL OXIDE FILM RES. 2W J 0.33 OHM	RN02R33ZU001
R614		RES CARBON FILM T 1/4W J 39 OHM	RCX4390T1001
R615		RES CARBON FILM T 1/4W J 27 OHM	RCX4270T1001
R616		RES CARBON FILM T 1/4W J 39 OHM	RCX4390T1001
R617		RES CARBON FILM T 1/4W J 100K OHM	RCX4104T1001
R618		RES CARBON FILM T 1/4W J 5.6K OHM	RCX4562T1001
R622		RES CARBON FILM T 1/4W J 1.2K OHM	RCX4122T1001
R623		RES CARBON FILM T 1/4W J 10K OHM	RCX4103T1001
R624		RES CARBON FILM T 1/4W J 10K OHM	RCX4103T1001
R631		RES CARBON FILM T 1/4W J 12K OHM	RCX4123T1001
R632		RES CHIP 1608 1/10W D 1.10K OHM	RTW1101HH007
R633		RES CHIP 1608 1/10W D 10.0K OHM	RTW1002HH007
R636		RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R637		RES CARBON FILM T 1/4W J 120 OHM	RCX4121T1001
R638		RES CARBON FILM T 1/4W J 2.7K OHM	RCX4272T1001
R639		RES CHIP 1608 1/10W F 3.30K OHM	RTW3301HH008
R640		RES CHIP 1608 1/10W F 18.0K OHM	RTW1802HH008
R641		RES CHIP 1608 1/10W F 220 OHM	RTW2200HH008
R642		RES CHIP 1608 1/10W F 22.0K OHM	RTW2202HH008
R643		RES CHIP 1608 1/10W F 22.0K OHM	RTW2202HH008
R644		RES CHIP 1608 1/10W F 22.0K OHM	RTW2202HH008
R645		RES CHIP 1608 1/10W F 11.0K OHM	RTW1102HH008
R646		RES CHIP 1608 1/10W F 39.0K OHM	RTW3902HH008
R647		RES CHIP 1608 1/10W J 47K OHM	RRXA473HH013
R648		RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R649		RES CARBON FILM T 1/4W J 680 OHM	RCX4681T1001
R650		RES CARBON FILM T 1/4W J 680 OHM	RCX4681T1001
R651!		RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R652		WIRE CP STP-S-0.50	XZ40F0REN001
R653		WIRE CP STP-S-0.50	XZ40F0REN001
R654		RES CHIP 1608 1/10W F 47.0K OHM	RTW4702HH008
R656		RES CARBON FILM T 1/4W J 680 OHM	RCX4681T1001
R657		RES CHIP 1608 1/10W F 27.0K OHM	RTW2702HH008
R658		RES CARBON FILM T 1/4W J 2.7K OHM	RCX4272T1001
R659		RES. CARBON FILM J 1/2W J 3.9 OHM	RCX23R9T1003
R660		RES CHIP 1608 1/10W D 10.0K OHM	RTW1002HH007
R661		RES CARBON FILM T 1/4W J 680 OHM	RCX4681T1001
R662		RES CARBON FILM T 1/4W J 39 OHM	RCX4390T1001
R663		RES CARBON FILM T 1/4W J 1.8 OHM	RCX41R8T1001
R664		RES CARBON FILM T 1/4W J 3.9 OHM	RCX43R9T1001
R665		RES CARBON FILM T 1/4W J 3.9 OHM	RCX43R9T1001
R666		RES CHIP 1608 1/10W J 22K OHM	RRXA223HH013
R667		RES CHIP 1608 1/10W J 1.0K OHM	RRXA102HH013
R668		RES CHIP 1608 1/10W J 47K OHM	RRXA473HH013
R669		RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R670		RES CARBON FILM T 1/4W J 270 OHM	RCX4271T1001

R671	RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R673	RES CHIP 1608 1/10W F 3.60K OHM	RTW3601HH008
R674	RES CHIP 1608 1/10W F 10.0K OHM	RTW1002HH008
R675	RES CARBON FILM T 1/4W J 1.0K OHM	RCX4102T1001
R676	RES CARBON FILM T 1/4W J 22 OHM	RCX4220T1001
R677	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R678	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R679	RES CARBON FILM T 1/4W J 10K OHM	RCX4103T1001
R681	RES CARBON FILM T 1/4W J 2.2 OHM	RCX42R2T1001
R682	RES. CARBON FILM J 1/2W J 3.9 OHM	RCX23R9T1003
R683	METAL OXIDE FILM RES. 1W J 2.7 OHM	RN012R7ZU001
R684	METAL OXIDE FILM RES. 1W J 2.7 OHM	RN012R7ZU001
R688	RES CARBON FILM T 1/4W J 1.0 OHM	RCX41R0T1001
R690	RES CARBON FILM T 1/4W J 1.5 OHM	RCX41R5T1001
R691	WIRE CP STP-S-0.50	XZ40F0REN001
R699	RES CARBON FILM T 1/4W J 56 OHM	RCX4560T1001
R803	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R804	RES CHIP 1608 1/10W J 8.2 OHM	RRXA8R2HH013
R805	RES CHIP 1608 1/10W J 8.2 OHM	RRXA8R2HH013
R806	WIRE CP STP-S-0.50	XZ40F0REN001
R807	WIRE CP STP-S-0.50	XZ40F0REN001
R808	RES CHIP 1608 1/10W F 3.30K OHM	RTW3301HH008
R809	RES CHIP 1608 1/10W F 300 OHM	RTW3000HH008
R810	RES CHIP 1608 1/10W J 12K OHM	RRXA123HH013
R811	RES CHIP 1608 1/10W J 1.2K OHM	RRXA122HH013
R813	RES CHIP 1608 1/10W J 1.2K OHM	RRXA122HH013
R814	RES CHIP 1608 1/10W J 12K OHM	RRXA123HH013
R815	RES CHIP 1608 1/10W J 470 OHM	RRXA471HH013
R816	RES CHIP 1608 1/10W J 470 OHM	RRXA471HH013
R817	RES CHIP 1608 1/10W F 15.0K OHM	RTW1502HH008
R818	RES CHIP 1608 1/10W F 15.0K OHM	RTW1502HH008
R819	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R820	RES CHIP 1608 1/10W J 5.6K OHM	RRXA562HH013
R821	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R823	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R826	RES CARBON FILM T 1/4W J 10K OHM	RCX4103T1001
R830	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R834	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R836	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R837	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R838	RES CARBON FILM T 1/4W J 10K OHM	RCX4103T1001
R842	RES CHIP 1608 1/10W J 27K OHM	RRXA273HH013
R1001	RES CARBON FILM T 1/4W J 2.2K OHM	RCX4222T1001
R1002	RES CARBON FILM T 1/4W J 180 OHM	RCX4181T1001
R1003	RES CARBON FILM T 1/4W J 2.2K OHM	RCX4222T1001
R1004	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R1005	RES CHIP 1608 1/10W J 22K OHM	RRXA223HH013
R1006	RES CARBON FILM T 1/4W J 180 OHM	RCX4181T1001
R1007	RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R1008	RES CARBON FILM T 1/4W J 12K OHM	RCX4123T1001
R1009	RES CHIP 1608 1/10W J 1.0K OHM	RRXA102HH013
R1010	RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R1011	RES CARBON FILM T 1/4W J 12K OHM	RCX4123T1001
R1012	RES CARBON FILM T 1/4W J 27K OHM	RCX4273T1001
R1013	RES CARBON FILM T 1/4W J 12K OHM	RCX4123T1001
R1014	RES CARBON FILM T 1/4W J 27K OHM	RCX4273T1001
R1015	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R1017	RES CARBON FILM T 1/4W J 12K OHM	RCX4123T1001
R1018	RES CHIP 1608 1/10W J 390 OHM	RRXA391HH013
R1019	RES CHIP 1608 1/10W J 390 OHM	RRXA391HH013

R1020	RES CHIP 1608 1/10W J 1.0K OHM	RRXA102HH013
R1022	RES CHIP 1608 1/10W J 33K OHM	RRXA333HH013
R1023	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R1024	RES CHIP 1608 1/10W F 22.0K OHM	RTW2202HH008
R1025	RES CHIP 1608 1/10W J 1.5K OHM	RRXA152HH013
R1026	RES CARBON FILM T 1/4W J 2.2K OHM	RCX4222T1001
R1027	RES CHIP 1608 1/10W J 5.1K OHM	RRXA512HH013
R1028	RES CHIP 1608 1/10W J 1.0K OHM	RRXA102HH013
R1029	RES CARBON FILM T 1/4W J 1.8K OHM	RCX4182T1001
R1030	RES CARBON FILM T 1/4W J 12K OHM	RCX4123T1001
R1031	RES CARBON FILM T 1/4W J 4.7K OHM	RCX4472T1001
R1032!	METAL OXIDE FILM RES. 2W J 0.33 OHM	RN02R33ZU001
R1033	RES CARBON FILM T 1/4W J 8.2 OHM	RCX48R2T1001
R1034	RES CHIP 1608 1/10W J 33K OHM	RRXA333HH013
R1035	RES CHIP 1608 1/10W F 1.00K OHM	RTW1001HH008
R1036	RES CHIP 1608 1/10W F 15.0K OHM	RTW1502HH008
R1037	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
R1038	RES CHIP 1608 1/10W J 240K OHM	RRXA244HH013
R1039	RES CHIP 1608 1/10W F 68.0K OHM	RTW6802HH008
R1040	RES CHIP 1608 1/10W F 6.20K OHM	RTW6201HH008
R1041	RES CHIP 1608 1/10W F 1.00K OHM	RTW1001HH008
R1042	RES CHIP 1608 1/10W J 22K OHM	RRXA223HH013
R1043	RES CHIP 1608 1/10W F 5.10K OHM	RTW5101HH008
R1044	RES CARBON FILM T 1/4W G 5.1K OHM	RCX4512T1002
R1045	RES CHIP 1608 1/10W J 24K OHM	RRXA244HH013
R1046	RES CHIP 1608 1/10W J 24K OHM	RRXA243HH013
R1048	RES CHIP 1608 1/10W J 22K OHM	RRXA223HH013
R1049	RES CHIP 1608 1/10W J 12K OHM	RRXA123HH013
R1050	RES CHIP 1608 1/10W J 390K OHM	RRXA394HH013
R1051	RES CHIP 1608 1/10W J 390K OHM	RRXA394HH013
R1052	RES CHIP 1608 1/10W F 100K OHM	RTW1003HH008
R1054	RES CHIP 1608 1/10W F 5.60K OHM	RTW5601HH008
R1055	RES CHIP 1608 1/10W F 51.0K OHM	RTW5102HH008
R1056	RES CHIP 1608 1/10W F 100K OHM	RTW1003HH008
R1057	RES CHIP 1608 1/10W J 390K OHM	RRXA394HH013
R1058	RES CHIP 1608 1/10W F 10.0K OHM	RTW1002HH008
R1059	RES CHIP 1608 1/10W F 10.0K OHM	RTW1002HH008
R1060	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R1061	RES CHIP 1608 1/10W J 33K OHM	RRXA333HH013
R1065	RES CARBON FILM T 1/4W J 2.7K OHM	RCX4272T1001
R1066	RES CARBON FILM T 1/4W J 2.7K OHM	RCX4272T1001
R1067	RES CHIP 1608 1/10W J 1.0K OHM	RRXA102HH013
R1068	RES CHIP 1608 1/10W J 1.0K OHM	RRXA102HH013
R1069	RES CHIP 1608 1/10W J 1.0K OHM	RRXA102HH013
R1070	RES CHIP 1608 1/10W J 1.0K OHM	RRXA102HH013
R1071	RES CHIP 1608 1/10W F 4.30K OHM	RTW4301HH008
R1072	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
R1073	RES CHIP 1608 1/10W F 1.20K OHM	RTW1201HH008
R1074	RES CARBON FILM T 1/4W J 100K OHM	RCX4104T1001
R1081	RES CHIP 1608 1/10W F 100K OHM	RTW1003HH008
R1082	RES CHIP 1608 1/10W F 68.0K OHM	RTW6802HH008
R1083	RES CHIP 1608 1/10W F 1.00M OHM	RTW1004HH008
R1084	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R1086	RES CHIP 1608 1/10W F 100K OHM	RTW1003HH008
R1087	RES CHIP 1608 1/10W F 68.0K OHM	RTW6802HH008
R1088	RES CHIP 1608 1/10W F 1.00M OHM	RTW1004HH008
R1089	RES CHIP 1608 1/10W F 12.0K OHM	RTW1202HH008
R1090	RES CHIP 1608 1/10W F 47.0K OHM	RTW4702HH008
R1091	RES CARBON FILM T 1/4W J 12K OHM	RCX4123T1001
R1092	RES CARBON FILM T 1/4W J 12K OHM	RCX4123T1001



R1093	RES CARBON FILM T 1/4W J 12K OHM	RCX4123T1001
R1094	RES CARBON FILM T 1/4W J 12K OHM	RCX4123T1001
R1095	RES CARBON FILM T 1/4W J 1.2K OHM	RCX4122T1001
R1096	RES CARBON FILM T 1/4W J 47 OHM	RCX4470T1001
R1097	RES CARBON FILM T 1/4W J 680 OHM	RCX4681T1001
R1099	RES CHIP 1608 1/10W J 1.0K OHM	RRXA102HH013
R1105	RES CHIP 1608 1/10W J 3.3K OHM	RRXA332HH013
R1106	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R1107	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R1109	RES CHIP 1608 1/10W F 2.20K OHM	RTW2201HH008
R1110	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R1111	RES CARBON FILM T 1/4W J 10K OHM	RCX4103T1001
R1112	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
AC601!	AC CORD W/O A GND WIRE UL/CSA 1770 NO BLACK	WAC0172LW022
B13	HEAT SINK PMU A8A70UH	1EM324377
B14	POW HEAT SINK A7120UH	1EM423993
BC301	CHIP INDUCTOR BK1608HS601-T	LLC601NTU017
BC601	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC602	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC603	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC801	CHIP INDUCTOR BK1608HS601-T	LLC601NTU017
BC1001	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC1002	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC1003	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
F601!	FUSE STC4A125V U/CT	PAGE20CW3402
FH601	FUSE HOLDER MSF-015 LF (B110)	XH01Z00LY002
FH602	FUSE HOLDER MSF-015 LF (B110)	XH01Z00LY002
JS304	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
JS305	WIRE CP STP-S-0.50	XZ40F0REN001
JS306	WIRE CP STP-S-0.50	XZ40F0REN001
JS310	WIRE CP STP-S-0.50	XZ40F0REN001
JS801	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
JS802	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
JS803	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
JS804	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
JS805	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
L13	SCREW B-TIGHT D3X8 BIND HEAD+	GBJB3080
SA601!	SURGE ABSORBER 470V+-10PER	NVQZ10D471KB
T601!	TRANS POWER BCK-28-9911	LTT2PC0XB055
T1002!	TRANS INVERTER HVT-160	LTZ3PZ0XB014
TM601	EYELET TYPE D-1	0VM406868
TM602	EYELET TYPE D-1	0VM406868
TU302	TUNER UNIT ATSC TDAU4-D05A	UTNATS0AL002
	JACK ASSEMBLY	A01NMMJC-001
	Consists of the following	
	JACK CBA	A01NMMJC-001-JK
	FUNCTION CBA	A01NMMJC-001-FNIR
	IR SENSOR CBA	
	JACK CBA	-----
C703	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C704	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C723	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C724	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C731	CHIP CERAMIC CAP. CH J 39PF/50V	CHD1JJ3CH390
C732	CHIP CERAMIC CAP. CH J 39PF/50V	CHD1JJ3CH390
C733	CHIP CERAMIC CAP. CH J 39PF/50V	CHD1JJ3CH390
C743	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C744	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105

C751	CHIP CERAMIC CAP.(1608) CH J 100PF/50V	CHD1JJ3CH101
C752	CHIP CERAMIC CAP.(1608) CH J 100PF/50V	CHD1JJ3CH101
C753	CHIP CERAMIC CAP.(1608) CH J 100PF/50V	CHD1JJ3CH101
C757	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C758	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C771	ELECTROLYTIC CAP. 100UF/16V M H7	CE1CMAVSL101
C772	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C773	CHIP CERAMIC CAP. (1608) F Z 1UF/16V	CHD1CZ30F105
C775	CHIP CERAMIC CAP.(1608) CH J 33PF/50V	CHD1JJ3CH330
C776	CHIP CERAMIC CAP.(1608) CH J 33PF/50V	CHD1JJ3CH330
C841	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C842	CHIP CERAMIC CAP. (1608) B K 1UF/16V	CHD1CK30B105
C843	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C845	CHIP CERAMIC CAP.(1608) CH J 33PF/50V	CHD1JJ3CH330
CN701	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN871	CONNECTOR PRINT OSU 008283021200000S+	J383C02UG004
IC771	IC SWITCHING TC4052BF(ELNF)	QSZBA0TTS162
L851	WIRE CP STP-S-0.50	XZ40F0REN001
L852	WIRE CP STP-S-0.50	XZ40F0REN001
L853	WIRE CP STP-S-0.50	XZ40F0REN001
Q722	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q771	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q773	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q774	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q841	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
R711	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R712	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R717	RES CHIP 1608 1/10W J 56K OHM	RRXA563HH013
R718	RES CHIP 1608 1/10W J 56K OHM	RRXA563HH013
R721	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R722	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R727	RES CHIP 1608 1/10W J 56K OHM	RRXA563HH013
R728	RES CHIP 1608 1/10W J 56K OHM	RRXA563HH013
R731	RES CHIP 1608 1/10W F 75.0 OHM	RTW75R0HH008
R732	RES CHIP 1608 1/10W F 75.0 OHM	RTW75R0HH008
R733	RES CHIP 1608 1/10W F 75.0 OHM	RTW75R0HH008
R734	RES CHIP 1608 1/10W J 10 OHM	RRXA100HH013
R735	RES CHIP 1608 1/10W J 10 OHM	RRXA100HH013
R736	RES CHIP 1608 1/10W J 10 OHM	RRXA100HH013
R741	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R742	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R747	RES CHIP 1608 1/10W J 56K OHM	RRXA563HH013
R748	RES CHIP 1608 1/10W J 56K OHM	RRXA563HH013
R751	RES CHIP 1608 1/10W J 75 OHM	RRXA750HH013
R752	RES CHIP 1608 1/10W J 75 OHM	RRXA750HH013
R753	RES CHIP 1608 1/10W J 75 OHM	RRXA750HH013
R754	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R755	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R756	RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R757	RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R758	RES CARBON FILM T 1/4W J 10 OHM	RCX4100T1001
R763	RES CARBON FILM T 1/4W J 56K OHM	RCX4563T1001
R764	RES CHIP 1608 1/10W J 56K OHM	RRXA563HH013
R772	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R773	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R774	RES CARBON FILM T 1/4W J 10K OHM	RCX4103T1001
R775	RES CARBON FILM T 1/4W J 10K OHM	RCX4103T1001
R780	RES CHIP 1608 1/10W J 82K OHM	RRXA823HH013
R781	RES CHIP 1608 1/10W J 82K OHM	RRXA823HH013
R782	RES CARBON FILM T 1/4W J 82K OHM	RCX4823T1001

R783	RES CHIP 1608 1/10W J 82K OHM	RRXA823HH013
R784	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R785	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R786	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R787	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R788	RES CARBON FILM T 1/4W J 82K OHM	RCX4823T1001
R789	RES CARBON FILM T 1/4W J 82K OHM	RCX4823T1001
R790	RES CHIP 1608 1/10W J 82K OHM	RRXA823HH013
R791	RES CHIP 1608 1/10W J 82K OHM	RRXA823HH013
R792	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R793	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R794	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R795	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R796	RES CHIP 1608 1/10W J 2.2K OHM	RRXA222HH013
R797	RES CHIP 1608 1/10W J 2.2K OHM	RRXA222HH013
R843	RES CHIP 1608 1/10W J 110 OHM	RRXA111HH013
R844	RES CHIP 1608 1/10W J 220 OHM	RRXA221HH013
R845	RES CHIP 1608 1/10W J 100K OHM	RRXA104HH013
R846	RES CHIP 1608 1/10W J 100 OHM	RRXA101HH013
R847	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R848	RES CHIP 1608 1/10W J 10K OHM	RRXA103HH013
R851	RES CARBON FILM T 1/4W J 180 OHM	RCX4181T1001
R852	RES CARBON FILM T 1/4W J 180 OHM	RCX4181T1001
BC771	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC841	CHIP INDUCTOR BK1608HS601-T	LLC601NTU017
CL102	WIRE ASSEMBLY 5PIN 5PIN/305MM	WX1A01N2-011
JK711	JACK HPEP SML PCB S PJ-358H	JXSJ020YUQ01
JK721	JACK RCA PCB S WHITE 01/RCA-101H(WH)	JXRJ010YUQ02
JK722	JACK RCA PCB S RED 01/RCA-101H(RD)	JXRJ010YUQ01
JK731	JACK RCA PCB S GREEN 01/RCA-101H(GN)	JXRJ010YUQ03
JK732	JACK RCA PCB S BLUE 01/RCA-101H(BL)	JXRJ010YUQ04
JK733	JACK RCA PCB S RED 01/RCA-101H(RD)	JXRJ010YUQ01
JK741	JACK RCA PCB S WHITE 01/RCA-101H(WH)	JXRJ010YUQ02
JK742	JACK RCA PCB S RED 01/RCA-101H(RD)	JXRJ010YUQ01
JK751	JACK SW DIN PCB L DIN-435C(777D)	JYEL040YUQ03
JK752	JACK RCA PCB L RCA-101S(1)-03	JXRL010YUQ12
JK753	JACK RCA PCB L RCA-101S(1)-04	JXRL010YUQ13
JK754	JACK SW RCA PCB L RCA-102F(RD)	JYRL010YUQ05
JK841	JACK RCA PCB S ORANGE 01/RCA-101H(OR)	JXRJ010YUQ06
JK851	JACK SW HPEP SML PCB L PJ-350	JYSL010YUQ03
JS701	RES CHIP 1608 1/10W 0 OHM	RRXA000HH014
	FUNCTION CBA	-----
C108	CAP CERAMIC (AX) 0.1UF/50V/F/Z	CA1J104TU062
C109	CAP CERAMIC (AX) 0.1UF/50V/F/Z	CA1J104TU062
R108	RES CARBON FILM T 1/4W J 220 OHM	RCX4221T1001
R109	RES CARBON FILM T 1/4W G 10K OHM	RCX4103T1002
R111	RES CARBON FILM T 1/4W G 4.7K OHM	RCX4472T1002
R112	RES CARBON FILM T 1/4W G 2.7K OHM	RCX4272T1002
R113	RES CARBON FILM T 1/4W G 4.7K OHM	RCX4472T1002
R114	RES CARBON FILM T 1/4W G 8.2K OHM	RCX4822T1002
R115	RES CARBON FILM T 1/4W G 18K OHM	RCX4183T1002
SW101	TACT SWITCH SKQSAB	SST0101AL038
SW103	TACT SWITCH SKQSAB	SST0101AL038
SW104	TACT SWITCH SKQSAB	SST0101AL038
SW105	TACT SWITCH SKQSAB	SST0101AL038
SW106	TACT SWITCH SKQSAB	SST0101AL038
SW107	TACT SWITCH SKQSAB	SST0101AL038
	IR SENSOR CBA	-----

C101	ELECTROLYTIC CAP. 47UF/16V M H7	CE1CMAVSL470
C103	CHIP CERAMIC CAP. CH J 330PF/50V	CHD1JJ3CH331
C104	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
C105	CHIP CERAMIC CAP.(1608) F Z 0.1UF/50V	CHD1JZ30F104
D101	LED (WHITE) SLR343WBC7T3XM	QPWM343WBC7T
R101	RES CARBON FILM T 1/4W J 100 OHM	RCX4101T1001
R102	RES CARBON FILM T 1/4W J 3.3K OHM	RCX4332T1001
R103	RES CHIP 1608 1/10W J 2.2K OHM	RRXA222HH013
R106	RES CARBON FILM T 1/4W J 1.0K OHM	RCX4102T1001
CL103	WIRE ASSEMBLY 3PIN 3PIN/85MM	WX1A01N2-004
RS101	SENSOR REMOTE RECEIVER KSM-712TH2E	USESJRSKK044

# REVISION HISTORY

## Chassis PL10.0

- 2009-12-24 19PFL3505D/F7 (Serial No. : DS1A) added
- 2010-11-06 19PFL3505D/F7 (Serial No. : DS2A) added
- 2011-05-31 19PFL3505D/F7 (Serial No. : DS3A) added
- TBD 19PFL3505D/F7 (Serial No. : XA1A) added
- TBD 19PFL3505D/F7 (Serial No. : DS4A) added

# COMPARISON LIST OF MODEL NAME

## Chassis PL10.0

19PFL3505D/F7	(DS1A)	A01N2UH
	(DS2A)	A01N2UH
	(DS3A)	A01NKUH
	(DS4A)	A01N2UH
	(XA1A)	A01NLMA