PHILIPS

32” LCD TV
chassis PL10.3

Service Manual

Contents

TYPE A

32PFL3505D/F7	PHILIPS	(Serial No.: DS1A, DS2A, DS3A, YA1A)
32PFL3515D/F7	PHILIPS	(Serial No.: YA1A)

TYPE B

32PFL3505D/F7	PHILIPS	(Serial No.: DS4A)

TYPE C

32PFL3505D/F7	PHILIPS	(Serial No.: DS8A, DS9A, YA2A, YA4A)

This service manual contains information of different types of models.
Make sure to refer to the section describing your model.

101202

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.

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.

TABLE OF CONTENTS

SPECIFICATIONS

< TUNER / NTSC >

ANT. Input ---------- 75 Ω Unbal., F type

Description	Condition	Unit	Nominal	Limit
1. AFT Pull-In Range	---	MHz	±2.3	±2.1
2. Synchronizing Sens.	TV.ch.4 CA.ch.31 CA.ch.87	dBμ dBμ dBμ	18 18 18	20 20 23

< TUNER / ATSC >

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

< LCD PANEL >

Description	Condition	Unit	Nominal	Limit
1. Native Pixel Resolution	Horizontal Vertical	pixels pixels	1366 768	--- ---
2. Brightness (w / filter)	---	cd/m^2	380	---
3. Viewing Angle	Horizontal Vertical	° °	-88 to 88 -88 to 88	--- ---

< VIDEO >

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

< AUDIO >

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

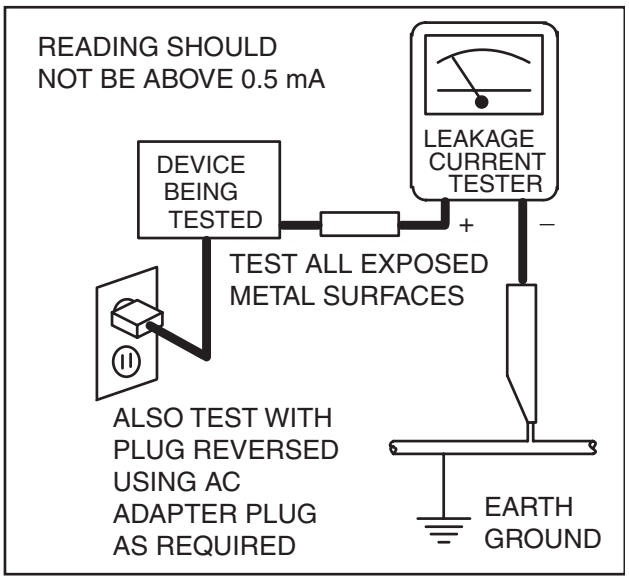
Description	Condition	Unit	Nominal	Limit
1. Audio Output 10% Distortion (ATSC 0 dBfs)	Lch/Rch	W	10.0/10.0	8.0/8.0
2. Audio Distortion (NTSC)	500mW: Lch/Rch	%	0.5/0.5	2.0/2.0
3. Audio Freq. Response (NTSC)	–6dB: Lch –6dB: Rch	Hz Hz	70 to 10 k 70 to 10 k	--- ---

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 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	≥ 3.2 mm (0.126 inches)

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

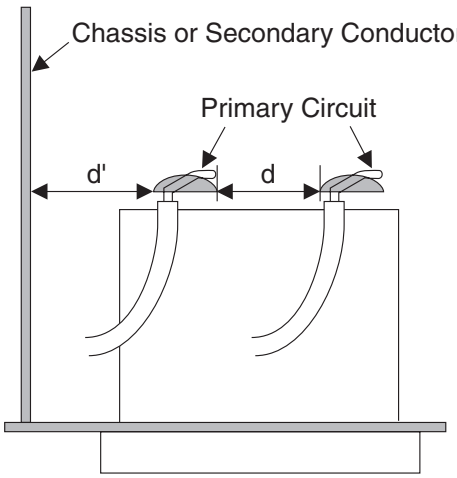


Fig. 1

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.

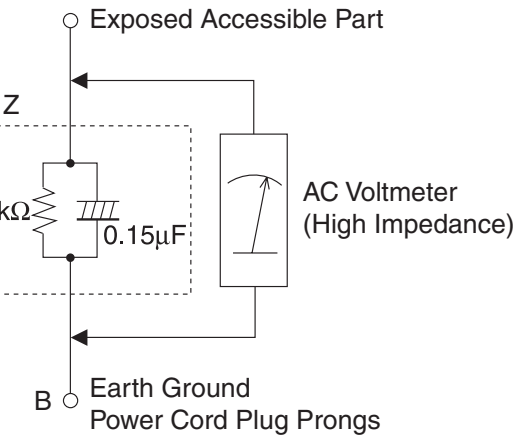


Fig. 2

Table 2: Leakage current ratings for selected areas

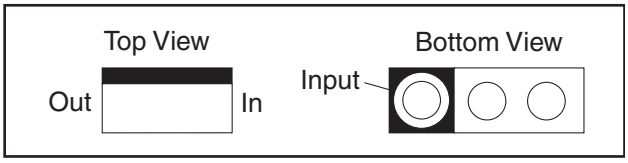
AC Line Voltage	Region	Load Z	Leakage Current (i)	Earth Ground (B) to:
110 to 130 V	U.S.A. or Canada	0.15 μF CAP. & 1.5 kΩ RES. Connected in parallel	i ≤ 0.5 mA rms	Exposed accessible parts

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

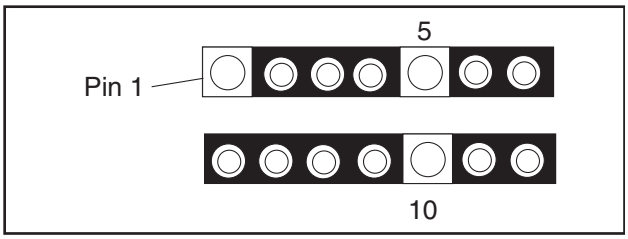
STANDARD NOTES FOR SERVICING

Circuit Board Indications

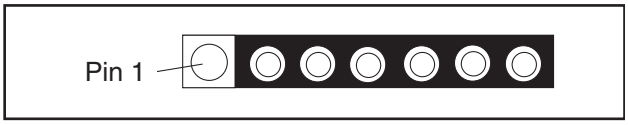
1. The output pin of the 3 pin Regulator ICs is indicated as shown.



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

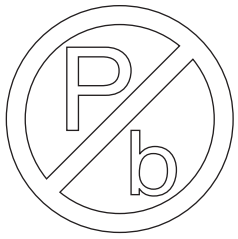


3. The 1st pin of every male connector is indicated as shown.



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)

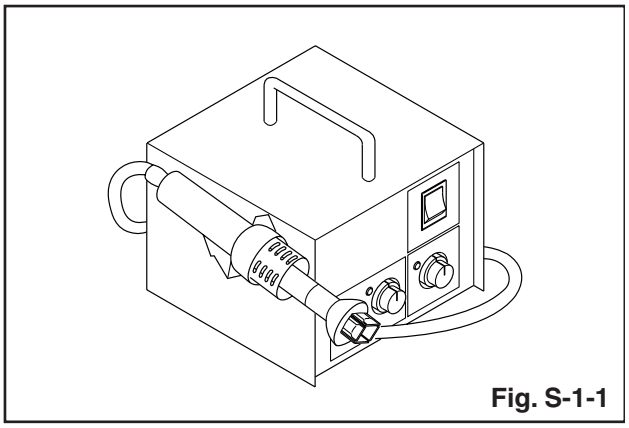


Fig. S-1-1

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.

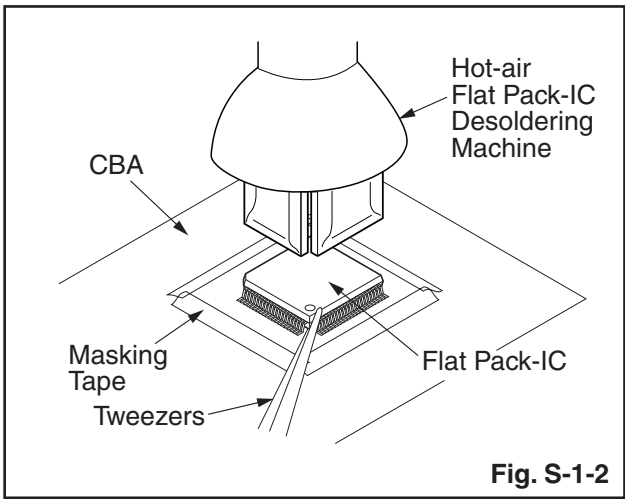


Fig. S-1-2

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)

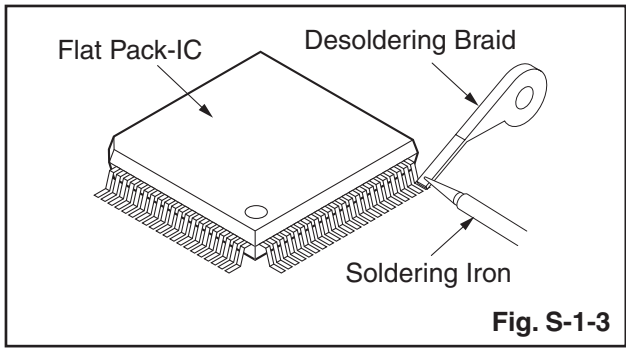


Fig. S-1-3

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)

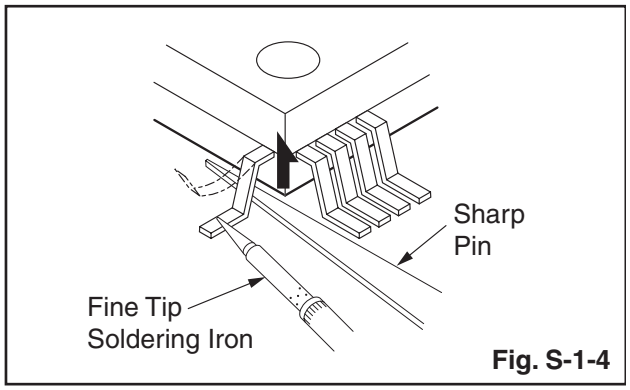


Fig. S-1-4

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.

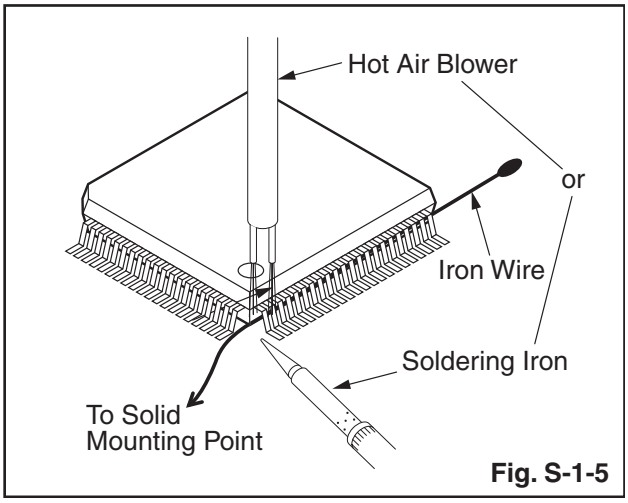


Fig. S-1-5

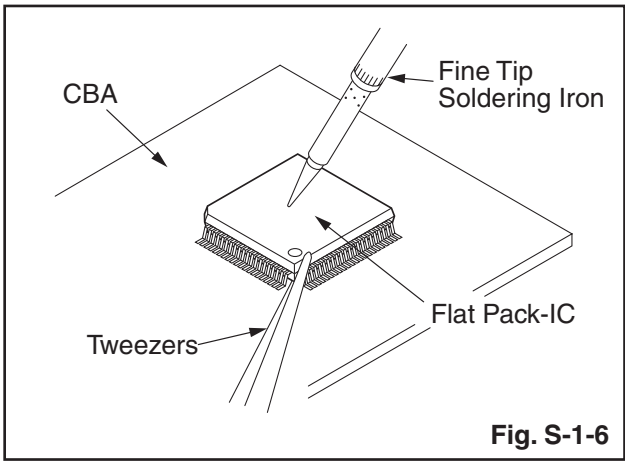


Fig. S-1-6

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.

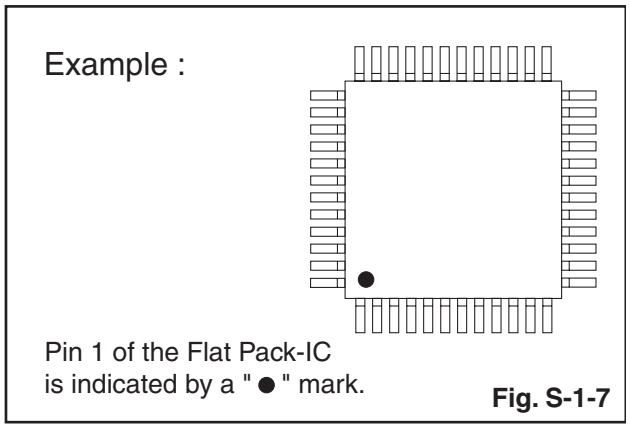


Fig. S-1-7

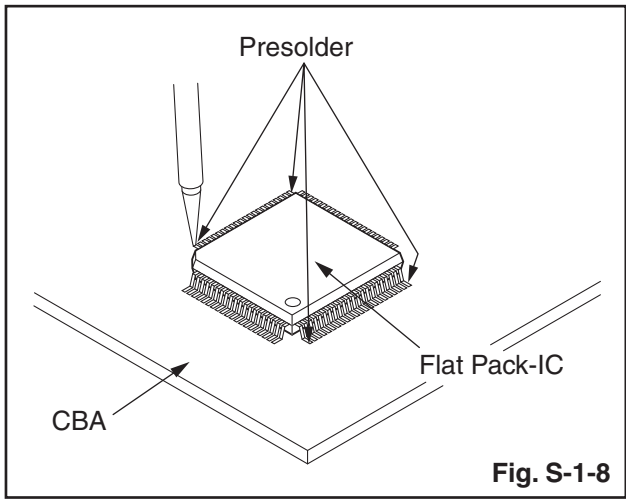


Fig. S-1-8

Instructions for Handling Semi-conductors

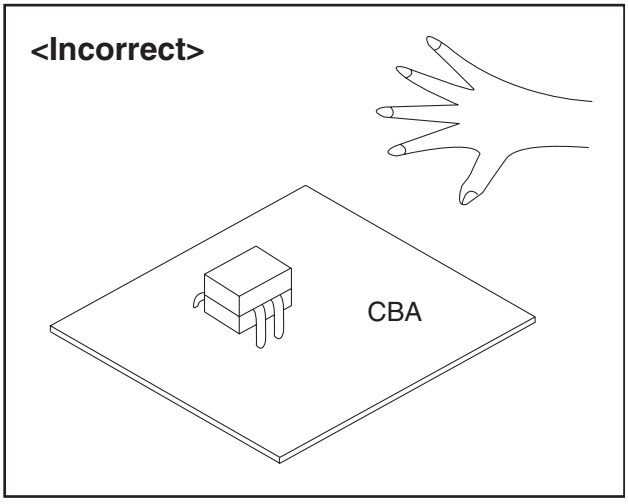
Electrostatic breakdown of the semi-conductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

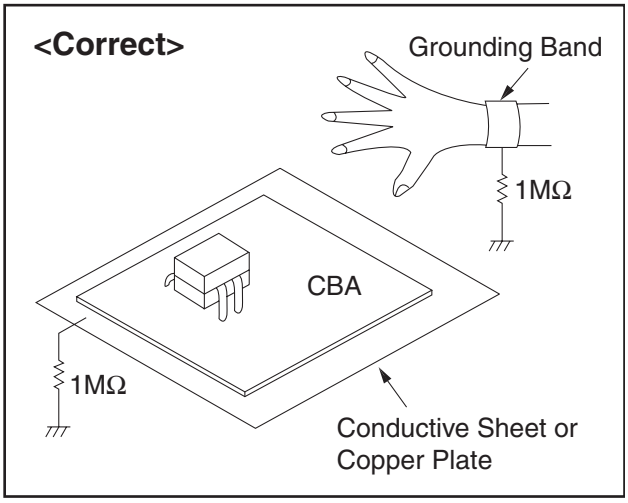
1. Ground for Human Body

Be sure to wear a grounding band (1 MΩ) 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 MΩ) 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.



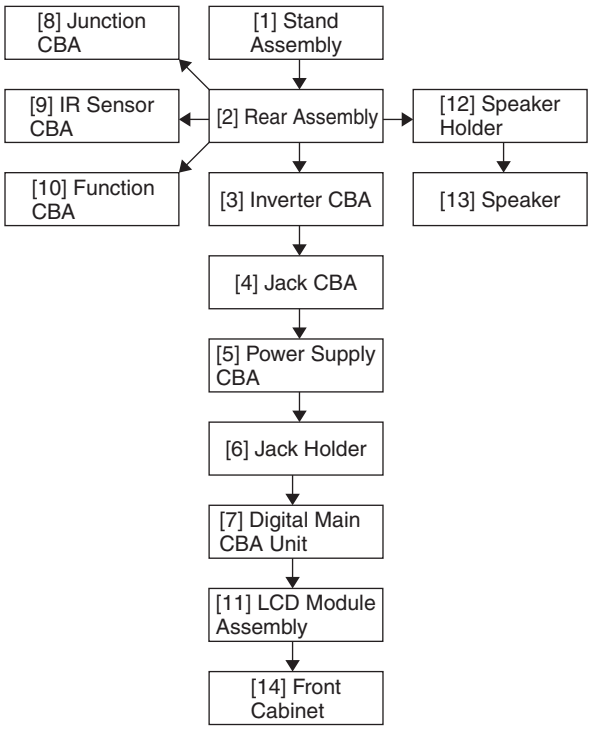


CABINET DISASSEMBLY INSTRUCTIONS

[TYPE A, TYPE B]

1. Disassembly Flowchart

This flowchart indicates the disassembly steps for the cabinet parts, and the CBA in order to gain access to item(s) 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	Removal		
		Fig. No.	Remove/*Unhook/ Unlock/Release/ Unplug/Unclamp/ Desolder	Note
[1]	Stand Assembly	D1	3(S-1)	---
[2]	Rear Assembly	D1	13(S-2), 2(S-3), 3(S-4)	---
[3]	Inverter CBA	D2 D4	6(S-5), *CN1001, *CN1003, *CN1050, *CN1100, *CN1150, *CN1200, *CN1900	---
[4]	Jack CBA	D2 D4	2(S-6), *CL701B	---
[5]	Power Supply CBA	D2 D4	9(S-7), *CN101, *CN301, *CN302, *CN801, *CN802	---
[6]	Jack Holder	D2	2(S-8)	---
[7]	Digital Main CBA Unit	D2 D4	4(S-9), 4(S-10), *CN3902, Shield Box	---
[8]	Junction CBA	D3 D4	*CL102A	---
[9]	IR Sensor CBA	D3 D4	(S-11), *CL103B	---
[10]	Function CBA	D3 D4	----------	---
[11]	LCD Module Assembly	D3	4(S-12)	---
[12]	Speaker Holder	D3	2(S-13), 4(S-14)	---
[13]	Speaker	D3	----------	---
[14]	Front Cabinet	D3	----------	---
		↓ (3)	↓ (4)	↓ (5)

↓ (1) ↓ (2)

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
* = Unhook, Unlock, Release, Unplug, or Desolder
e.g. 2(S-2) = two Screws (S-2),
2(L-2) = two Locking Tabs (L-2)

(5) Refer to the following "Reference Notes in the Table."

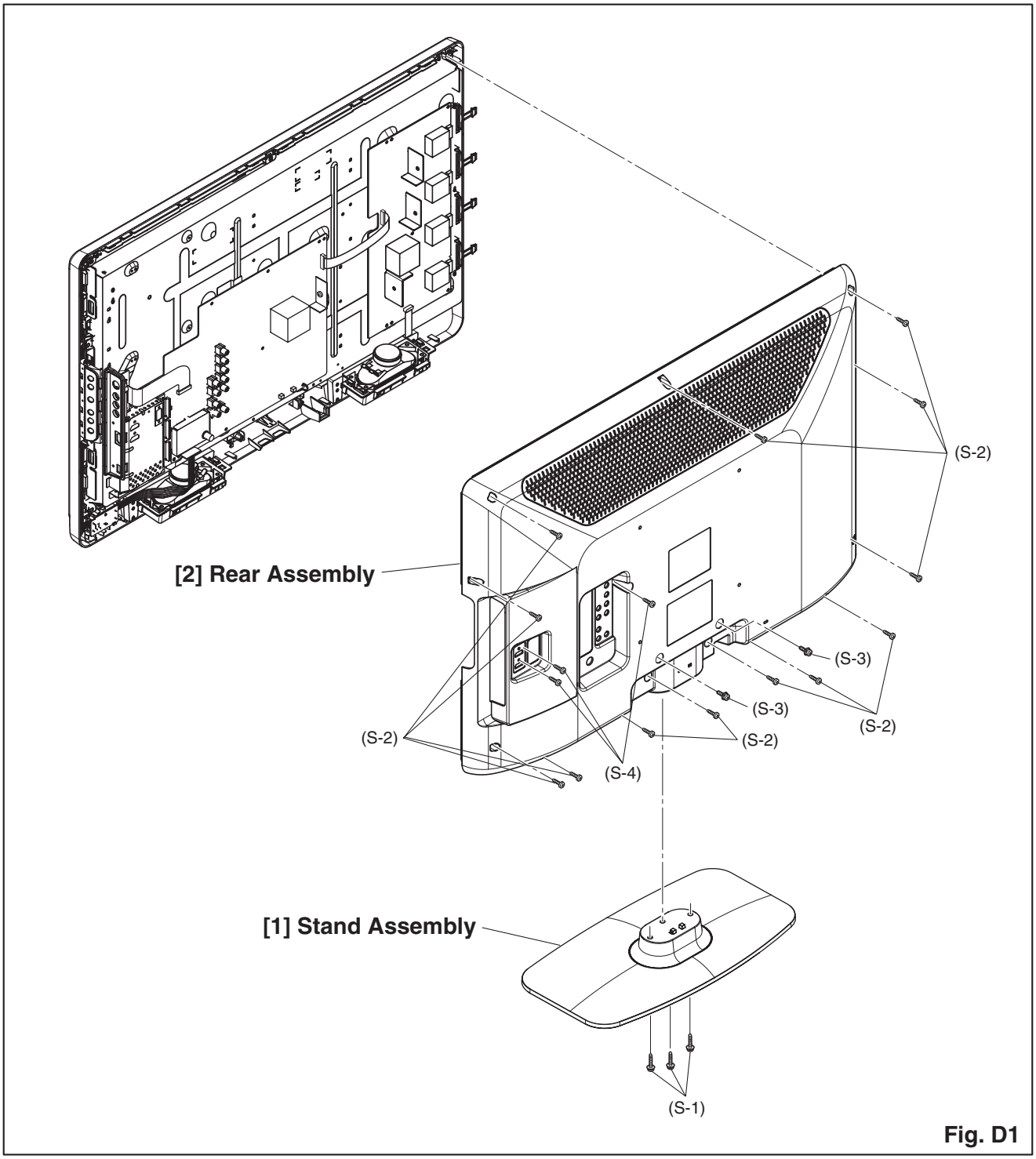


Fig. D1

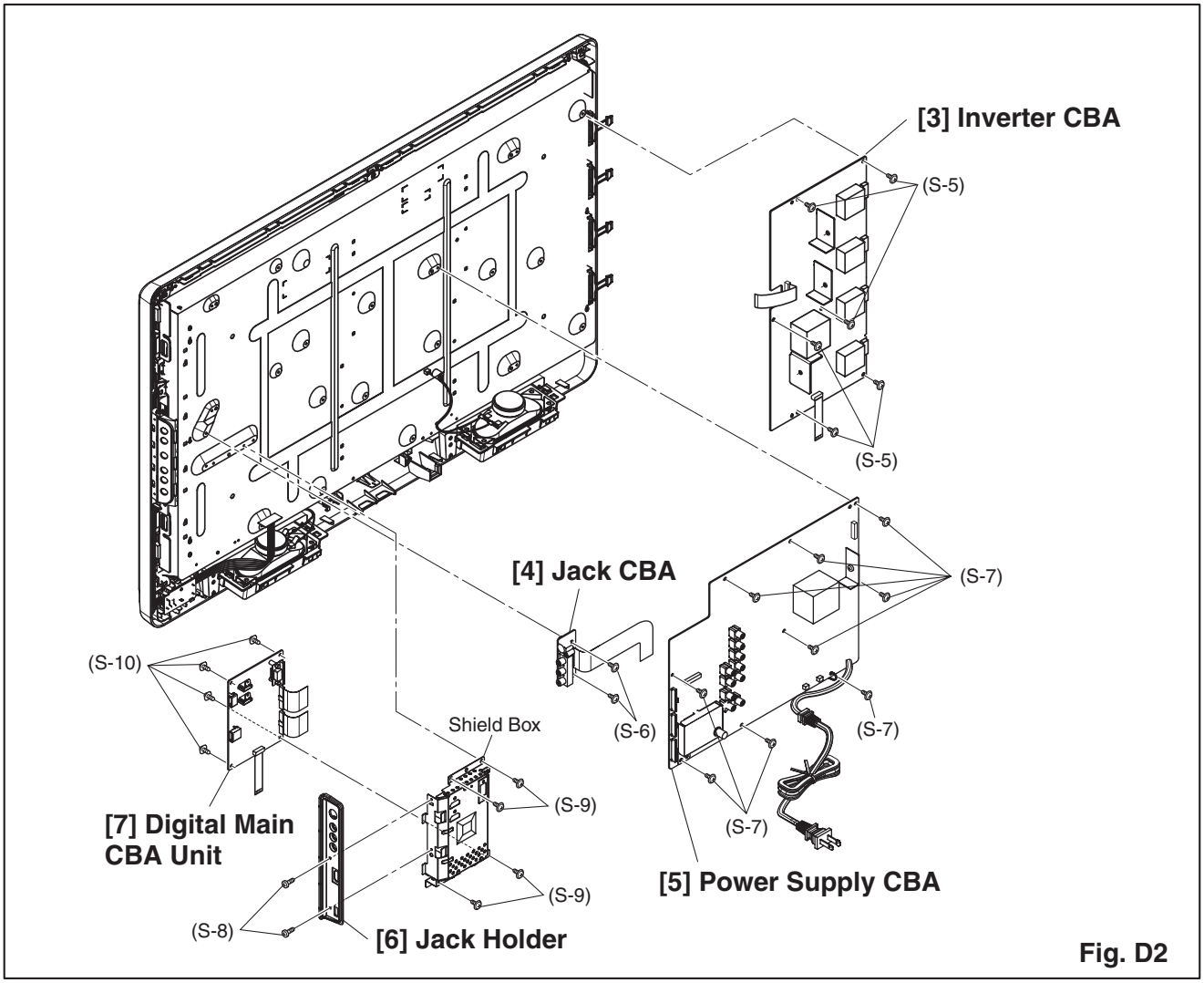

[3] Inverter CBA
(S-5)
(S-5)
[4] Jack CBA
(S-7)
(S-10)
(S-6)
(S-7)
Shield Box
(S-9)
[7] Digital Main
CBA Unit
(S-7)
[5] Power Supply CBA
(S-9)
(S-8)
[6] Jack Holder

Fig. D2

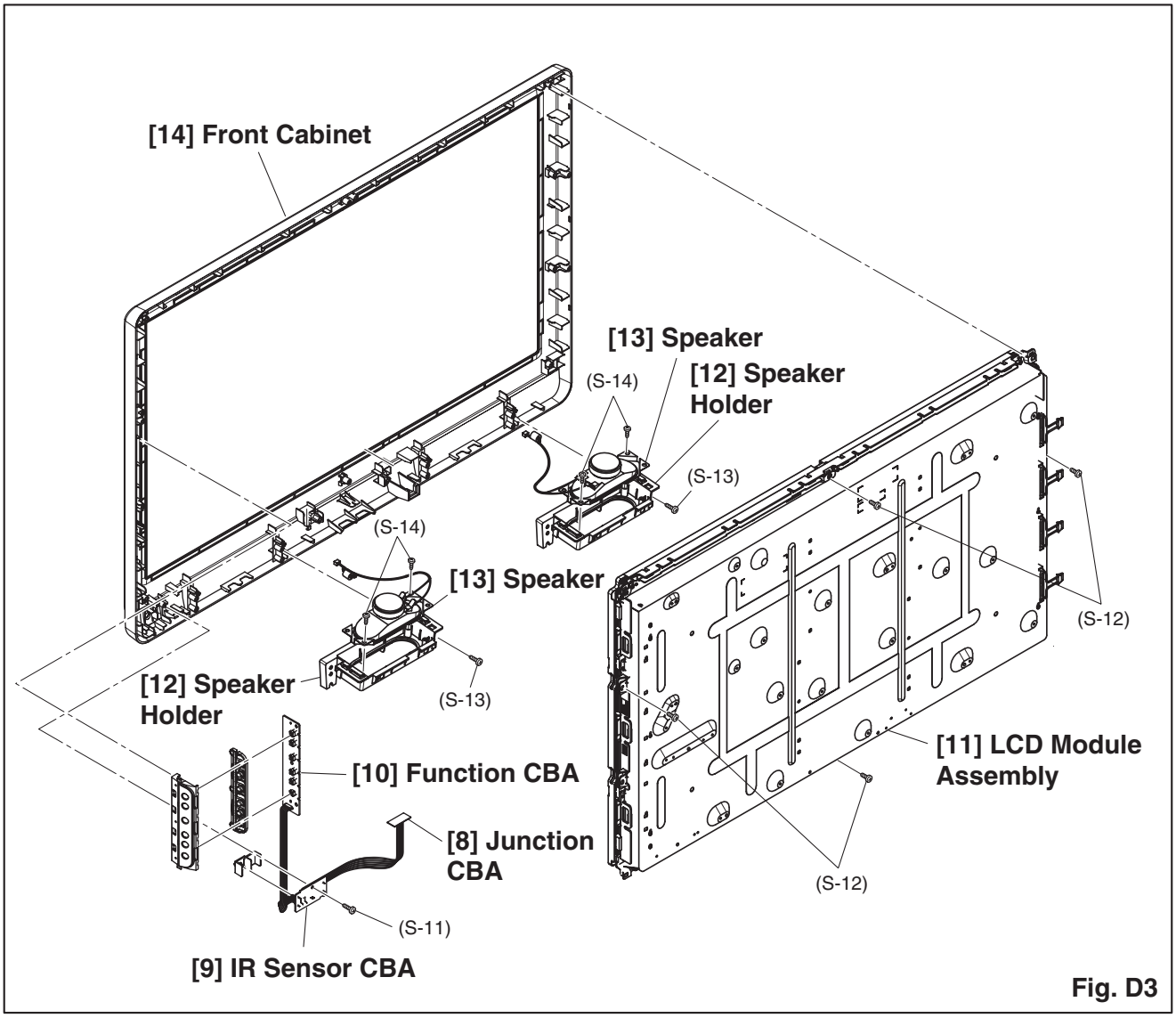

[14] Front Cabinet
[13] Speaker
[12] Speaker Holder
(S-14)
(S-13)
(S-14)
[13] Speaker
(S-12)
[12] Speaker Holder
(S-13)
[11] LCD Module Assembly
[10] Function CBA
[8] Junction CBA
(S-12)
(S-11)
[9] IR Sensor CBA

Fig. D3

TV Cable Wiring Diagram

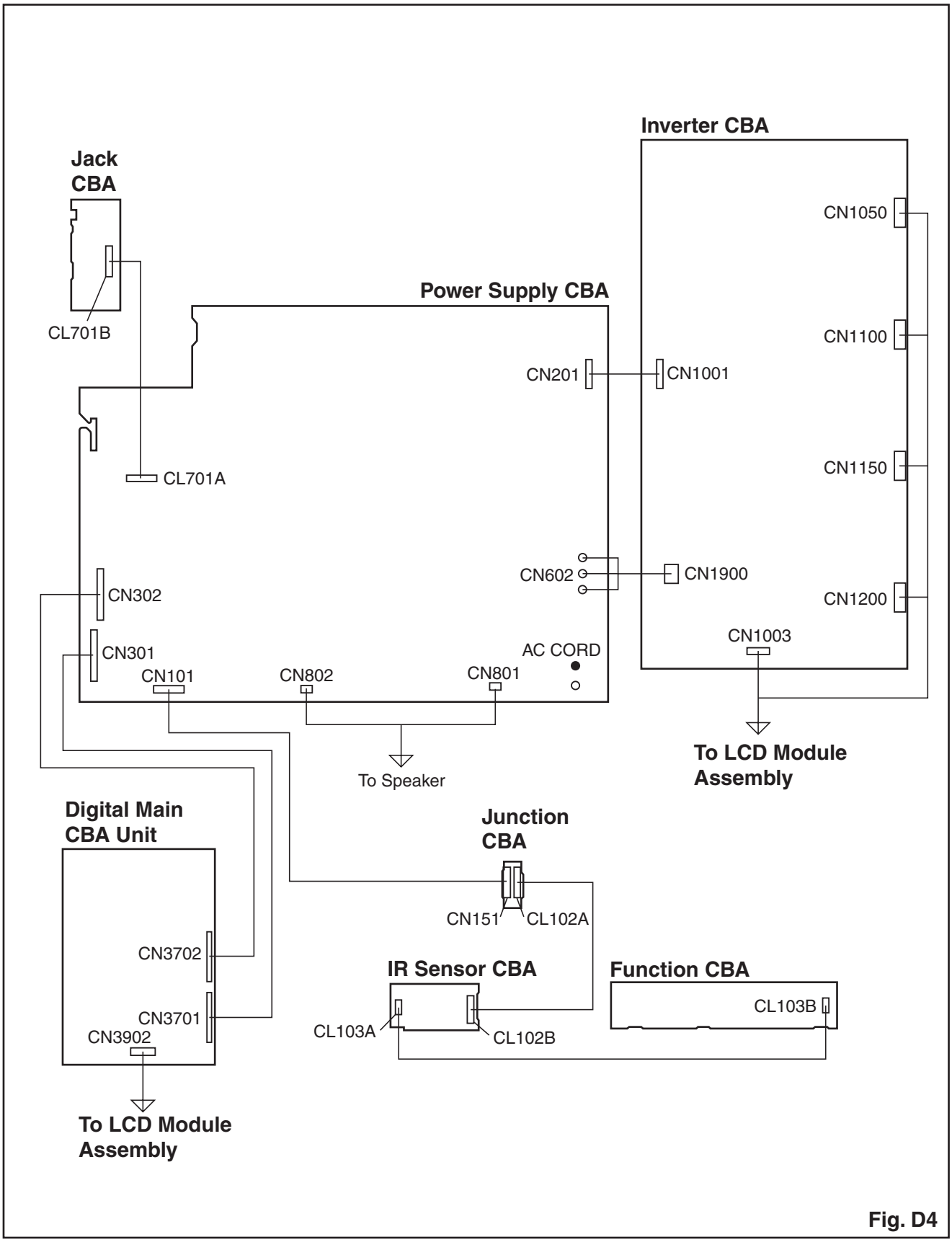
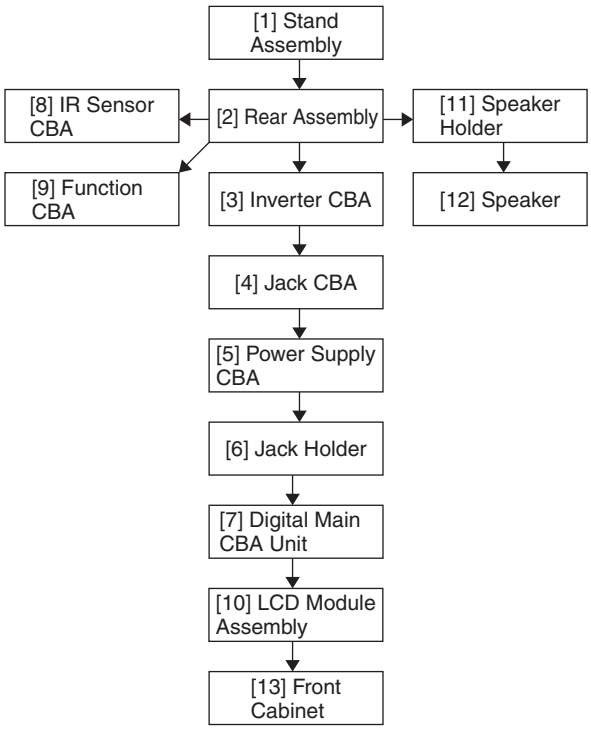


Fig. D4

[TYPE C]

1. Disassembly Flowchart

This flowchart indicates the disassembly steps for the cabinet parts, and the CBA in order to gain access to item(s) 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	Removal		
		Fig. No.	Remove/*Unhook/ Unlock/Release/ Unplug/Unclamp/ Desolder	Note
[1]	Stand Assembly	D1	3(S-1)	---
[2]	Rear Assembly	D1	13(S-2), 2(S-3), 3(S-4)	---
[3]	Inverter CBA	D2 D4	6(S-5), *CN1001, *CN1003, *CN1050, *CN1100, *CN1150, *CN1200, *CN1900	---
[4]	Jack CBA	D2 D4	2(S-6), *CL701B	---
[5]	Power Supply CBA	D2 D4	9(S-7), *CN101, *CN301, *CN302, *CN801, *CN802	---
[6]	Jack Holder	D2	2(S-8)	---
[7]	Digital Main CBA Unit	D2 D4	4(S-9), 4(S-10), *CN3902, Shield Box	---
[8]	IR Sensor CBA	D3 D4	(S-11), *CL103B	---
[9]	Function CBA	D3 D4	----------	---
[10]	LCD Module Assembly	D3	4(S-12)	---
[11]	Speaker Holder	D3	2(S-13), 4(S-14)	---
[12]	Speaker	D3	----------	---
[13]	Front Cabinet	D3	----------	---
		↓ (3)	↓ (4)	↓ (5)

↓ (1) ↓ (2)

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
* = Unhook, Unlock, Release, Unplug, or Desolder
e.g. 2(S-2) = two Screws (S-2),
2(L-2) = two Locking Tabs (L-2)

(5) Refer to the following "Reference Notes in the Table."

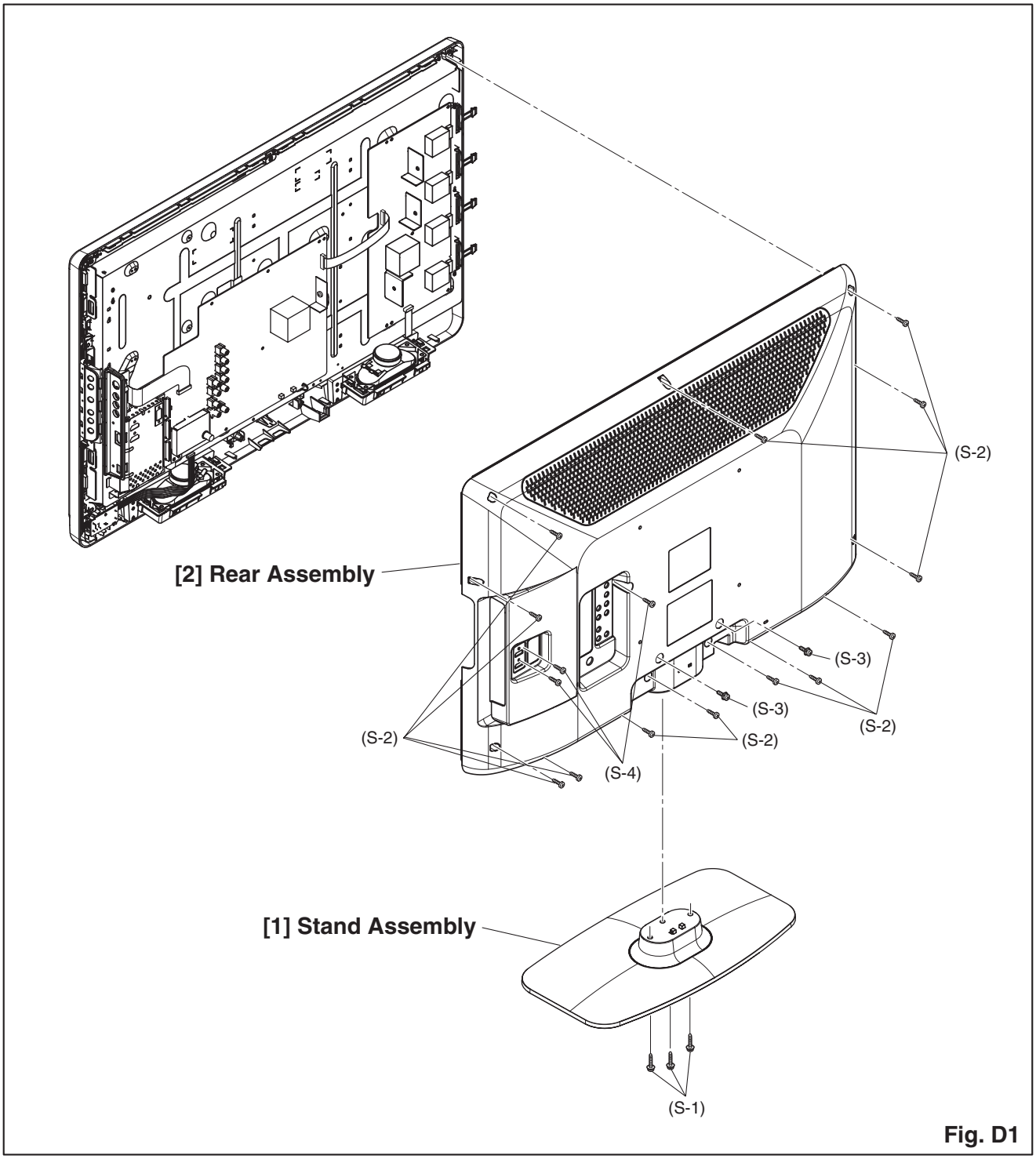


Fig. D1

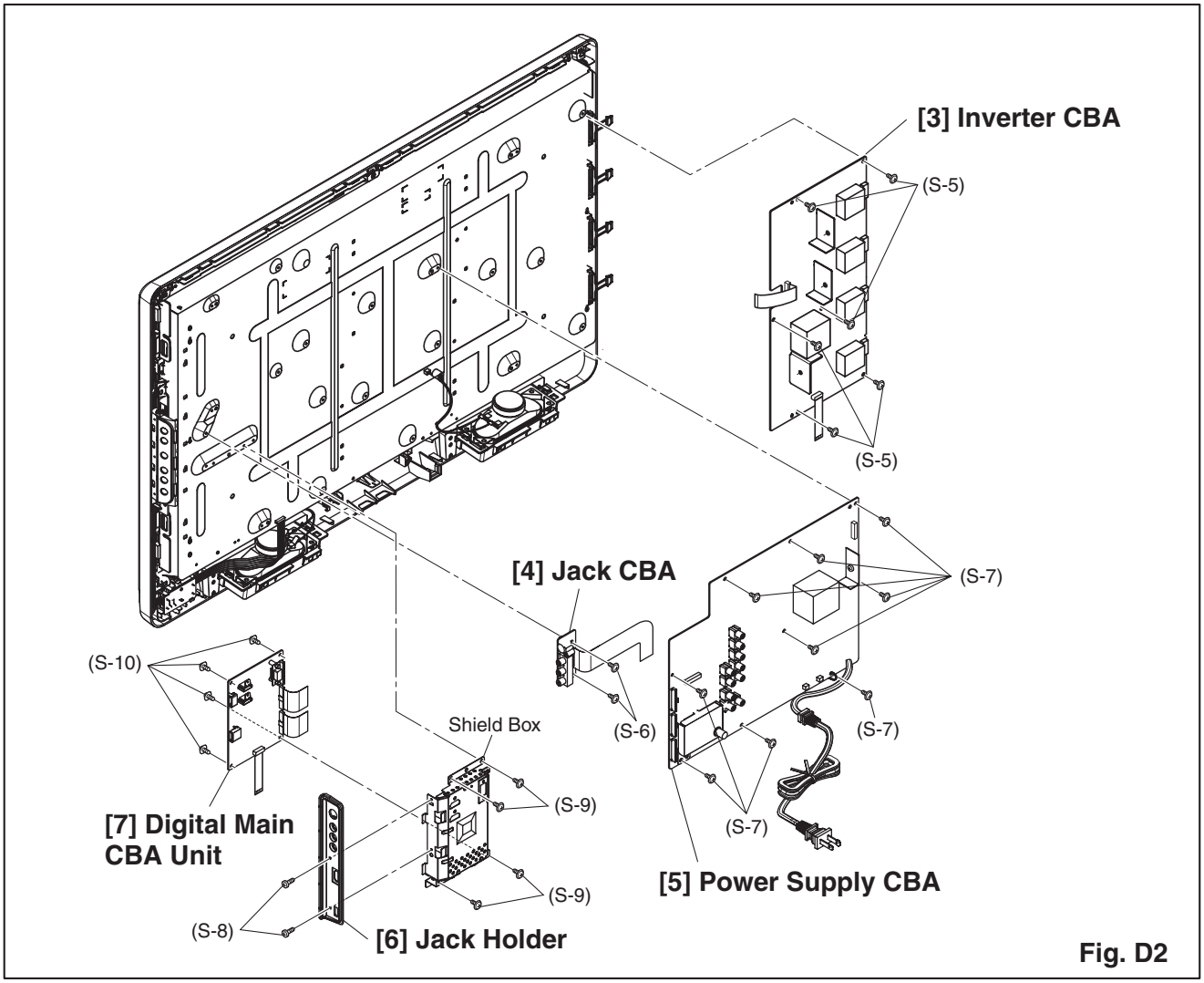

[3] Inverter CBA
(S-5)
(S-5)
[4] Jack CBA
(S-7)
(S-10)
(S-6)
Shield Box
(S-7)
(S-9)
[7] Digital Main
CBA Unit
(S-7)
[5] Power Supply CBA
(S-9)
(S-8)
[6] Jack Holder

Fig. D2

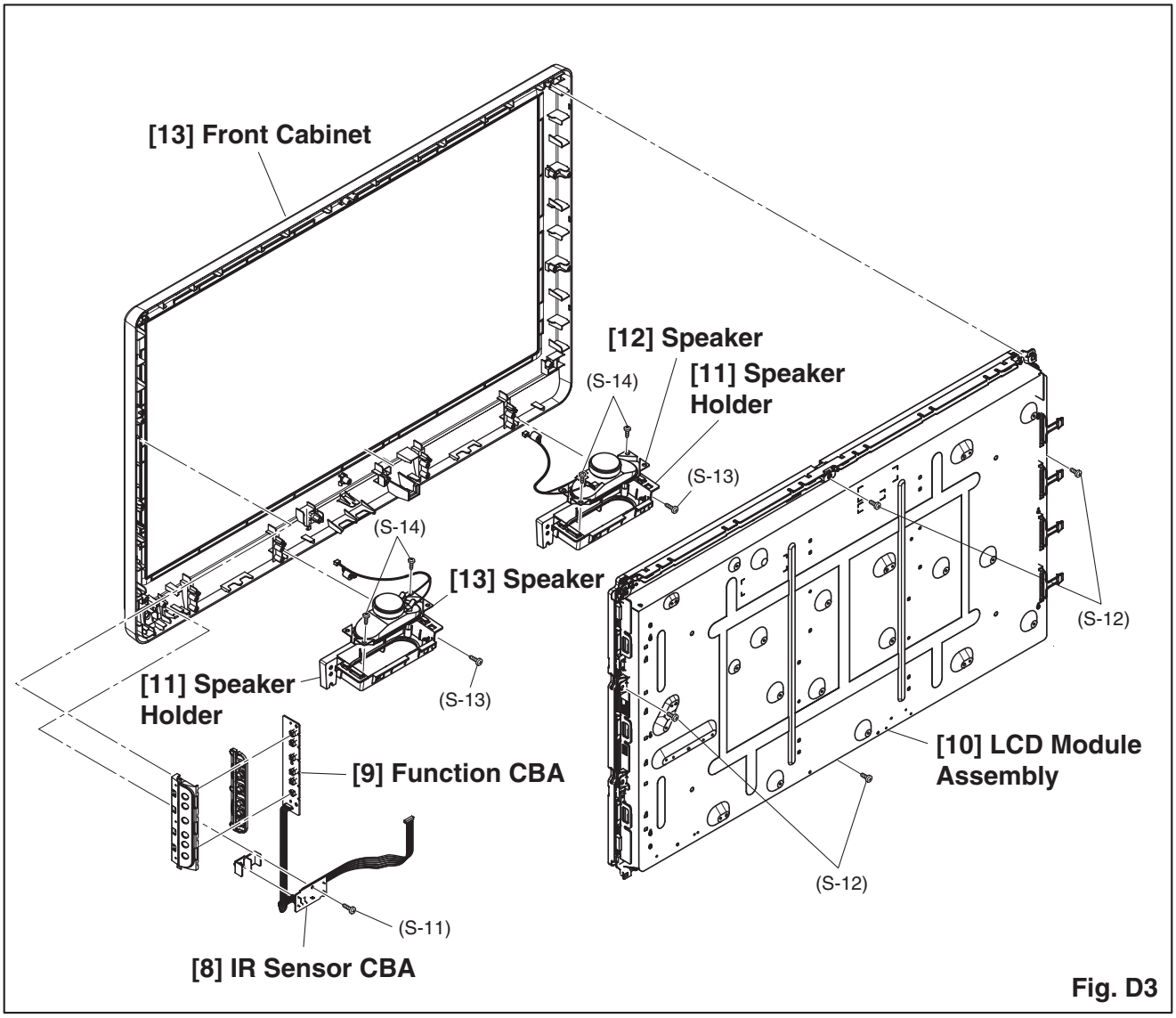

[13] Front Cabinet
[12] Speaker
[11] Speaker Holder
(S-14)
(S-13)
(S-14)
[13] Speaker
(S-13)
[11] Speaker Holder
(S-12)
[10] LCD Module Assembly
[9] Function CBA
(S-12)
(S-11)
[8] IR Sensor CBA

Fig. D3

TV Cable Wiring Diagram

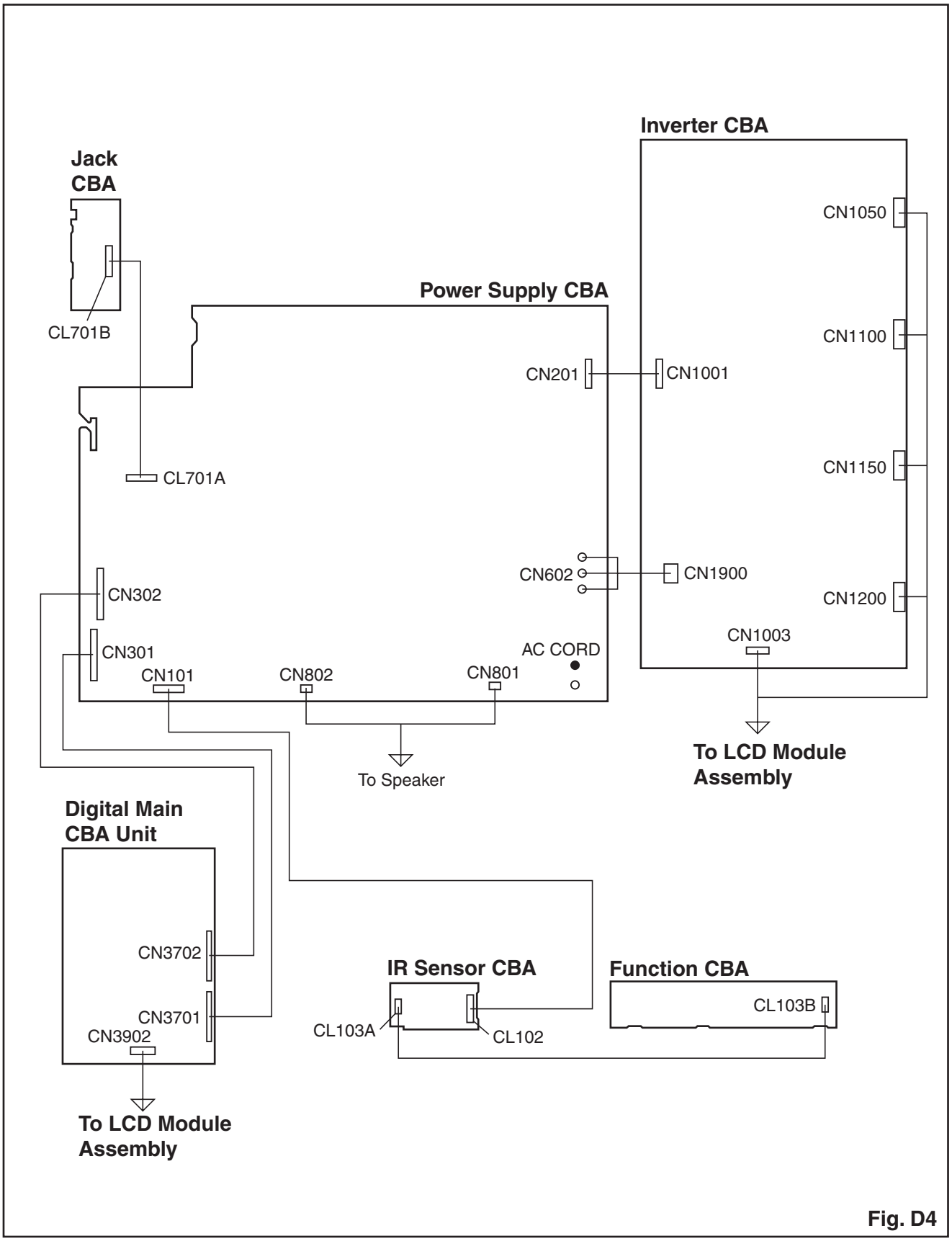


Fig. D4

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

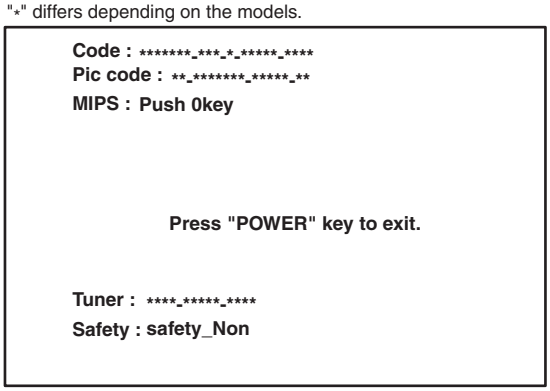
1. NTSC Pattern Generator (Color Bar W/White Window, Red Color, Dot Pattern, Gray Scale, Monoscope, Multi-Burst)
2. Remote control unit
3. Color Analyzer

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.

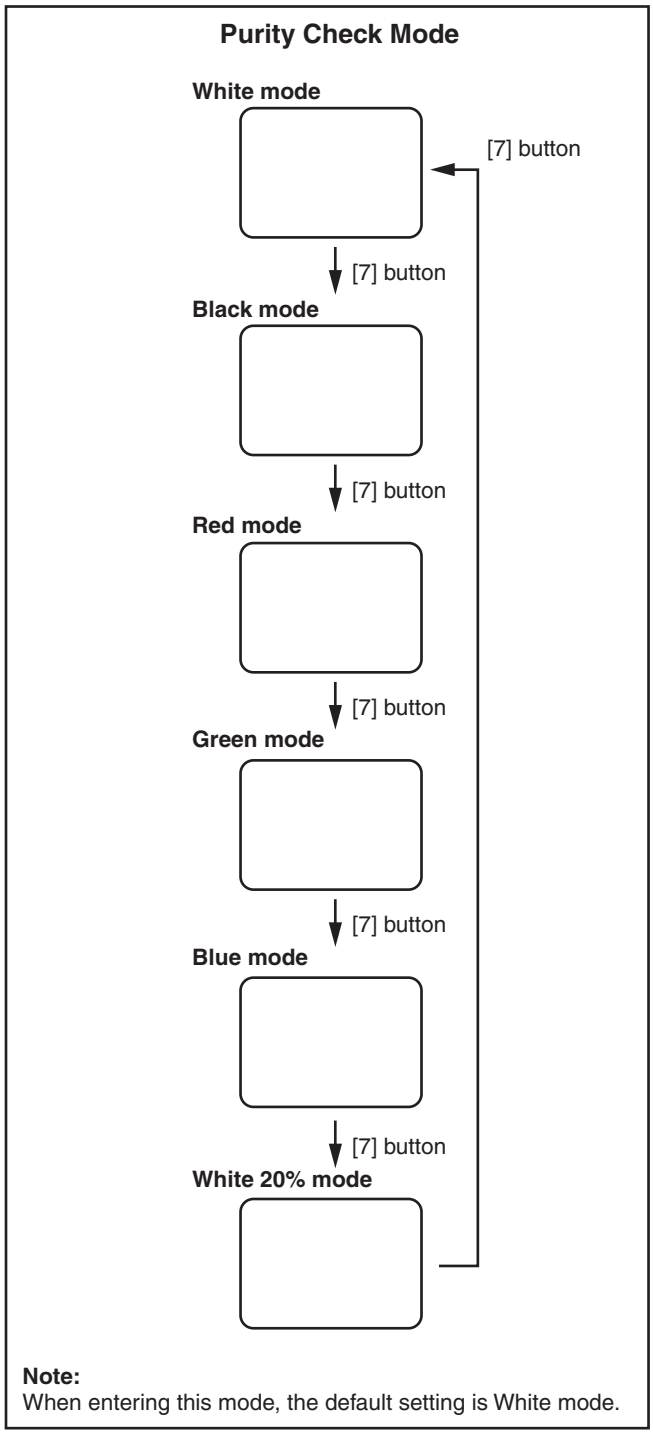
"⋆" differs depending on the models.



1. Purity Check Mode

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

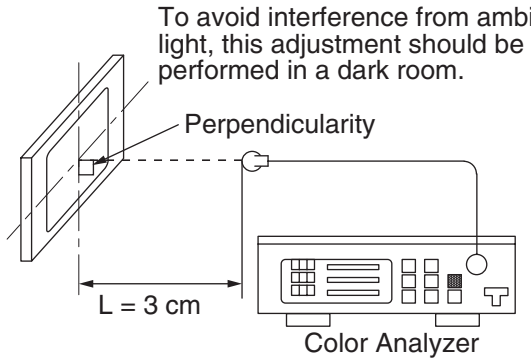
1. Enter the Service mode.
2. Each time pressing [7] button on the remote control unit, the display changes as follows.



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	



TYPE A:

1. Operate the unit for more than 60 minutes.
2. Set the color analyzer and bring the optical receptor to the center on the LCD-Panel surface after zero point calibration as shown above.
   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.

TYPE B, TYPE C:

1. Set the color analyzer and bring the optical receptor to the center on the LCD-Panel surface after zero point calibration as shown above.
   Note: The optical receptor must be set perpendicularly to the LCD Panel surface.
2. Enter the Service mode.
3. Press [2] button on the remote control unit.
4. Press [CHANNEL UP/DOWN] buttons on the remote control unit so that the color analyzer value becomes minimum within 2minutes from Power-On.
5. To cancel or to exit from the VCOM Adjustment, press [PREV CH] button.

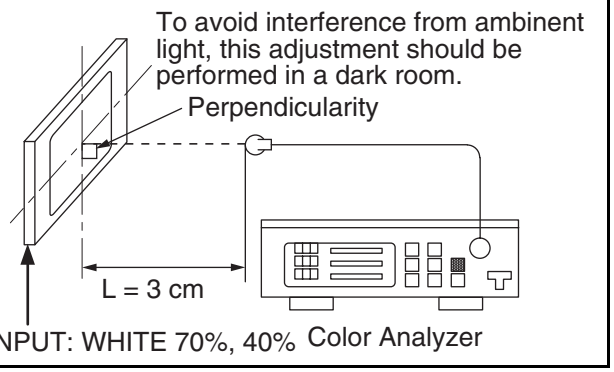
The White Balance Adjustment should be performed when replacing the LCD Panel or Digital Main CBA.

3. White Balance Adjustment

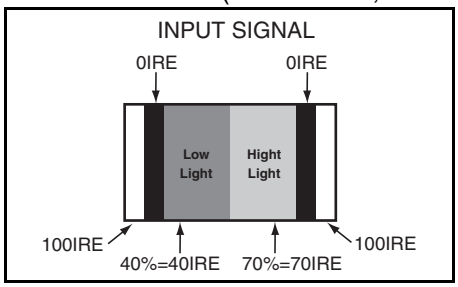
Purpose: To mix red, green and blue beams correctly for pure white.

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			



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



3. Set the color analyzer to the CHROMA mode and bring the optical receptor to the center on the LCD-Panel surface after zero point calibration as shown above.
   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 ±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

a. USB storage device
b. Remote Control Unit

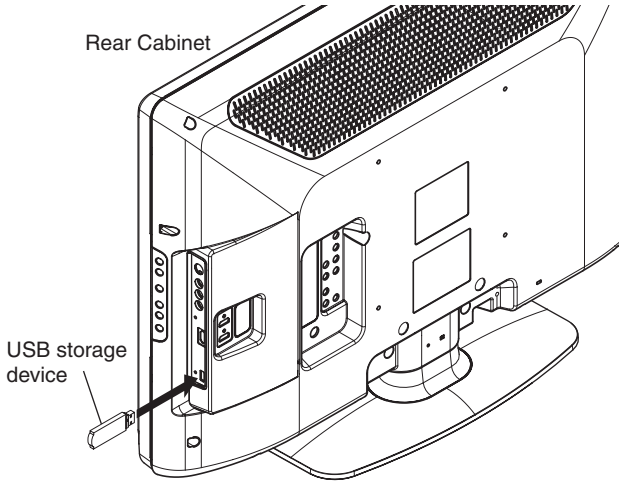
Firmware Update Procedure

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.

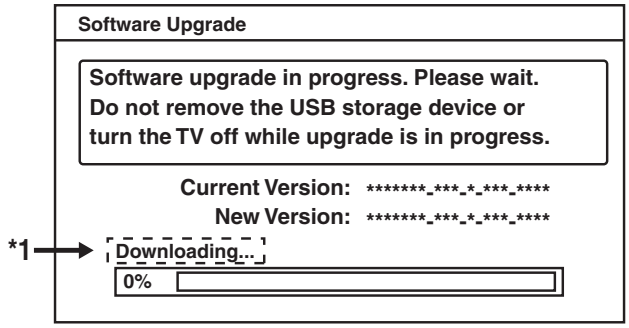
The identification of User Upgrade and Factory Upgrade are done by the filename.

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



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

"⋆" differs depending on the models.

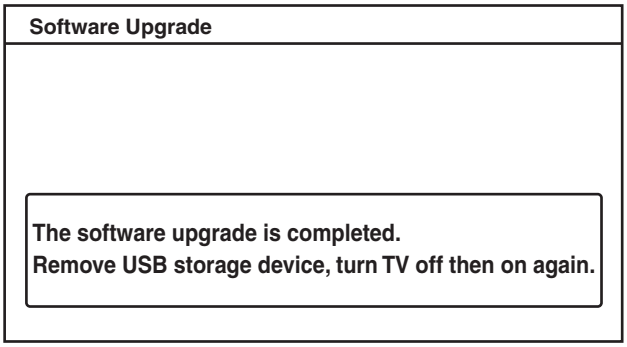


Note: If the above screen isn't displayed, repeat from step 1.

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.

5. 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

The power cannot be turned on.

↓

Is the fuse (F601) normal? — No → See FLOW CHART No.2 <The fuse blows out.>

↓ Yes

Is normal state restored when once unplugged power cord is plugged again several seconds? — No → Check if there is any leak or short-circuiting on the primary circuit component, and service it if defective. (C605, D601, D602, D603, D604, Q601, Q602, Q603, Q604, IC602, T601)

↓ Yes

Is the AL+33V line voltage normal? — No → (same as above)

↓ Yes

Check each rectifying circuit of the secondary circuit and service it if defective.

FLOW CHART NO.2

The fuse blows out.

↓

Check the presence that the primary component is leaking or shorted and service it if defective.

Check the presence that the rectifying diode or circuit is shorted in each rectifying circuit of secondary side, and service it if defective.

↓

After servicing, replace the fuse.

FLOW CHART NO.3

When the output voltage fluctuates.

↓

Does the photocoupler circuit on the secondary side operate normally? — No → Check IC601, D639, D652, D653, Q631 and their periphery circuit, and service it if defective.

↓ Yes

Check IC601, D615, D616, IC602 and their periphery, circuit and service it if defective.

FLOW CHART NO.4

When buzz sound can be heard in the vicinity of power circuit.

↓

Check if there is any short-circuit on the rectifying diode and the circuit in each rectifying circuit of the secondary side, and service it if defective. (IC631, Q207, Q209, Q210, Q211, Q501, Q635, Q636, Q637, Q640, Q641, Q642, Q643, D631, D632, D633, D638, D641, D642, D646, D647)

FLOW CHART NO.5

AL+33V is not output.

↓

Is approximately +34V voltage supplied to the cathode of D638? — No → Check C638, D638, D639 and their periphery circuit, and service it if defective.

↓ Yes

Check D657, R661 and their periphery circuit, and service it if defective.

FLOW CHART NO.6

LCD+24.5V is not output.

↓

Is approximately +30V voltage supplied to the collector of Q210?

No → See FLOW CHART No.5<AL+33V is not output>

↓ Yes

Check Q207, Q208, D205, P-ON-H1 line and their periphery circuit, and service it if defective.

FLOW CHART NO.7

LCD+16V is not output.

↓

Is approximately +17V voltage supplied to the collector of Q209?

No → Check C631, D631, D635 and their periphery circuit, and service it if defective.

↓ Yes

Is approximately +16.5V voltage supplied to the base of Q209?

No → Check Q207, Q208, D203, D204, D211, P-ON-H1 line and their periphery circuit, and service it if defective.

↓ Yes

Replace Q209.

FLOW CHART NO.8

INV+16V is not output.

↓

Is approximately +17V voltage supplied to the collector of Q501?

No → Check C631, D631, D635 and their periphery circuit, and service it if defective.

↓ Yes

Is approximately +16.5V voltage supplied to the base of Q501?

No → Check Q207, Q208, D203, D204, D211, P-ON-H1 line and their periphery circuit, and service it if defective.

↓ Yes

Replace Q501.

FLOW CHART NO.9

P-ON+7V is not output.

↓

Is approximately +7V voltage supplied to the collector of D646?

No → Check C644, D646 and their periphery circuit, and service it if defective.

↓ Yes

Check if there is any leak or short-circuit on the loaded circuit, and service it if defective.

FLOW CHART NO.10

P-ON+5V is not output. (LCD+16V is outputted normally.)

Is approximately +6.8V voltage supplied to the collector of Q641?

No → See FLOW CHART No.9 <P-ON+7V is not output.>

Yes

Is approximately +6V voltage supplied to the base of Q641?

No → Check D645 and their periphery circuit, and service it if defective.

Yes

Replace Q641.

FLOW CHART NO.11

TUNER+5V is not output. (LCD+16V is outputted normally.)

Is approximately +6.7V voltage supplied to the collector of Q640?

No → See FLOW CHART No.9 <P-ON+7V is not output.>

Yes

Is approximately +6V voltage supplied to the base of Q640?

No → Check D645 and their periphery circuit, and service it if defective.

Yes

Replace Q640.

FLOW CHART NO.12

AL+13V is not output.

Is approximately +13V voltage supplied to the cathode of D641 and D642?

No → Check C639, D641, D642 and their periphery circuit, and service it if defective.

Yes

Check if there is any leak or short-circuit on the loaded circuit, and service it if defective.

FLOW CHART NO.13

P-ON+3V is not output.

Is approximately +3V voltage supplied to the cathode of D647?

No → Check C645, D647 and their periphery circuit, and service it if defective.

Yes

Check if there is any leak or short-circuit on the loaded circuit, and service it if defective.

FLOW CHART NO.14

P-ON+3.3V is not output.

Is approximately +5V voltage supplied to the cathode of D633?

No → Check C633, D633 and their periphery circuit, and service it if defective.

Yes

Is the "H" signal (approximately +3.5V) inputted to the base of Q637?

No → Check Q638, Q639, D666, P-ON-H2 line and their periphery circuit, and service it if defective.

Yes

Replace Q637.

FLOW CHART NO.15

P-ON+9V is not output. (LCD+16V is outputted normally.)

Is approximately +13V voltage supplied to the collector of Q642?

No → See FLOW CHART No.12 <AL+13V is not output.>

Yes

Is approximately +10V voltage supplied to the base of Q642?

No → Check D670 and their periphery circuit, and service it if defective.

Yes

Replace Q642.

FLOW CHART NO.16

AL+3.3V is not output.

Is approximately +34V voltage supplied to the collector of Q635?

No → See FLOW CHART No.5 <AL+33V is not output.>

Yes

Is approximately +5V voltage supplied to Pin(3) of IC631?

No → Check Q635, D659 and their periphery circuit, and service it if defective.

Yes

Replace IC631.

FLOW CHART NO.17

LCD-6.8V is not output.

Is approximately -9V voltage supplied to the Anode of D632?

No → Check C632, D632 and their periphery circuit, and service it if defective.

Yes

Is approximately -8V voltage supplied to the base of Q211?

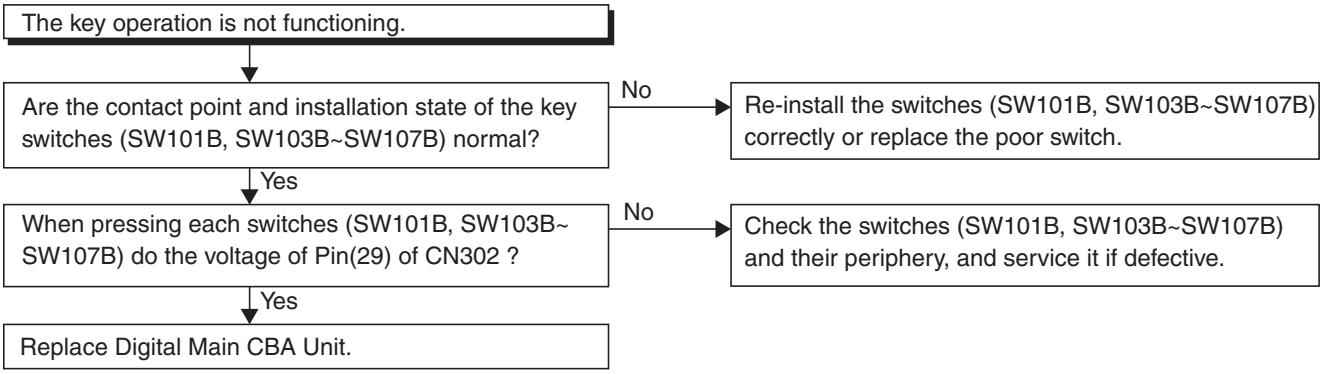
No → Check Q207, Q208, D208, P-ON-H1 line and their periphery circuit, and service it if defective.

Yes

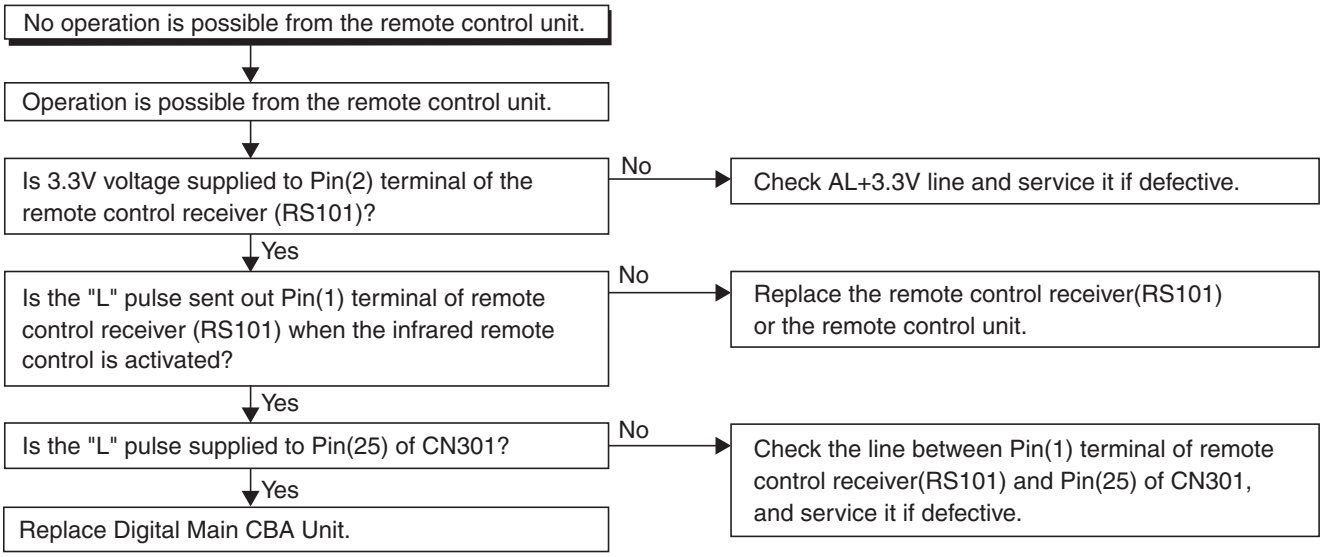
Replace Q211.

[Video Signal Section]

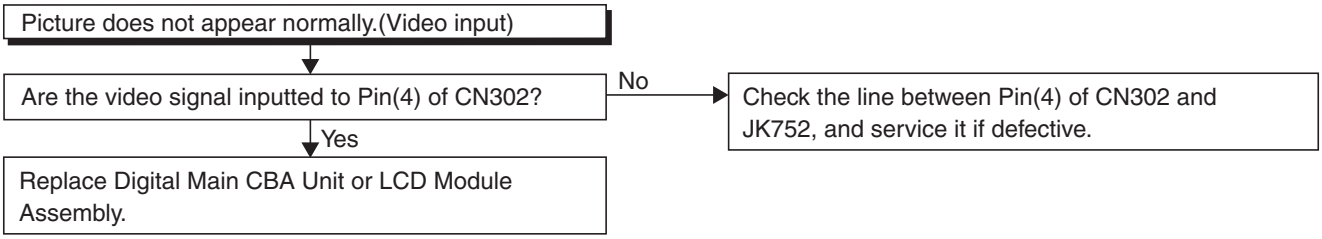
FLOW CHART NO.1



FLOW CHART NO.2



FLOW CHART NO.3



FLOW CHART NO.4

Picture does not appear normally.(Tuner input)

↓

Are the DIF signal inputted to the Pin(26,28) of CN302?

No → Check the line between Pin(26, 28) of CN302 and Pin(12, 13) of TU301, and service it if defective.

Yes ↓

Replace Digital Main CBA Unit or LCD Module Assembly.

FLOW CHART NO.5

Picture does not appear normally.(S-Video input)

↓

Are the video signal outputted to the Pin(6, 8) of CN302?

Pin(6): S-VIDEO-C
Pin(8): S-VIDEO-Y

No → Check the line between Pin(6, 8) of CN302 and JK751, and service it if defective.

Yes ↓

Replace Digital Main CBA Unit or LCD Module Assembly.

FLOW CHART NO.6

Picture does not appear normally.(Y/Pb/Pr input)

↓

Are the video signal inputted to the Pin(15, 17, 19) of CN302?

Pin(15): VIDEO-Y
Pin(17): VIDEO-Pb
Pin(19): VIDEO-Pr

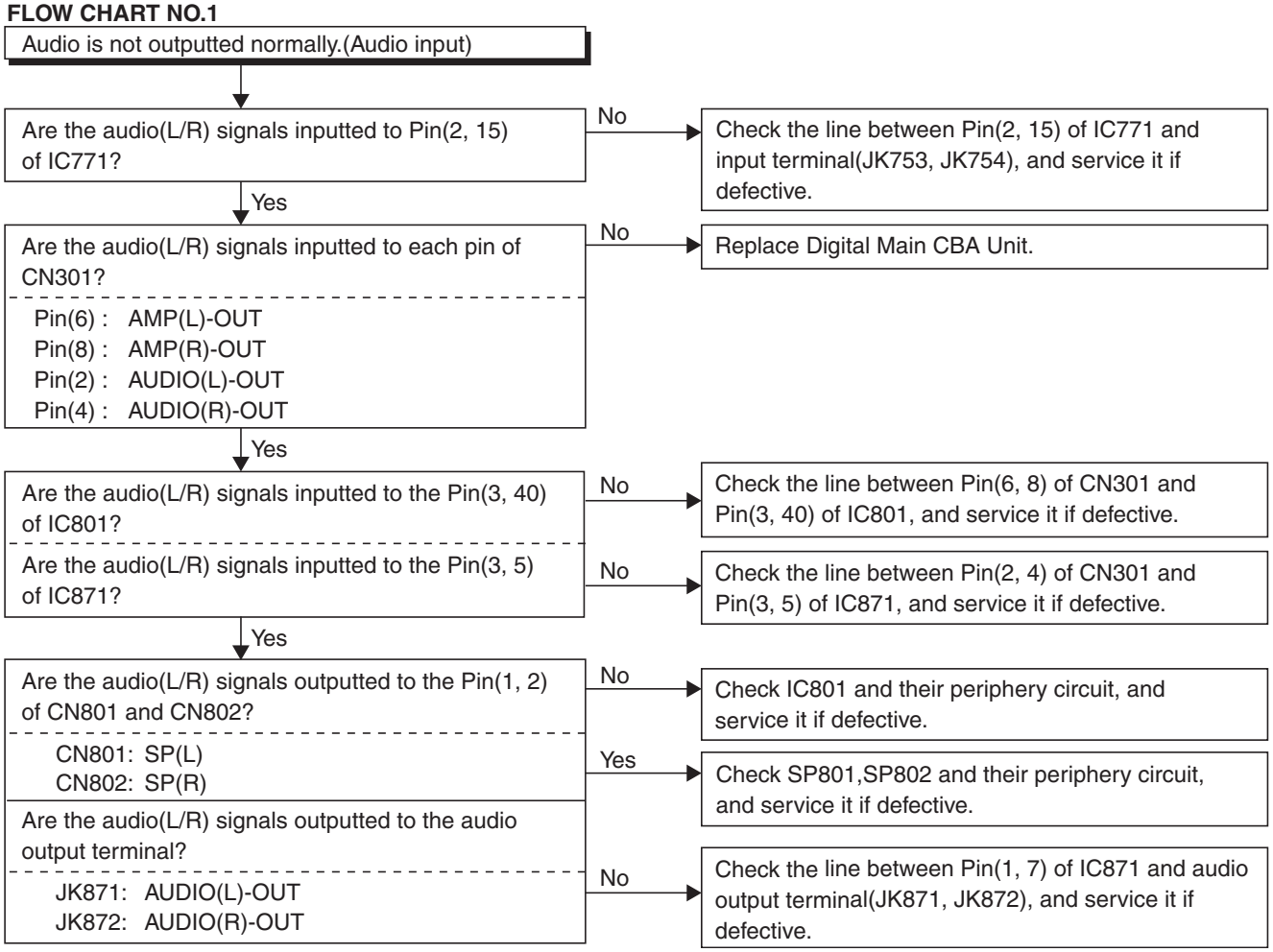
No → Check the line between Pin(15, 17, 19) of CN302 and input terminals(JK731, JK732, JK733), and service it if defective.

Yes ↓

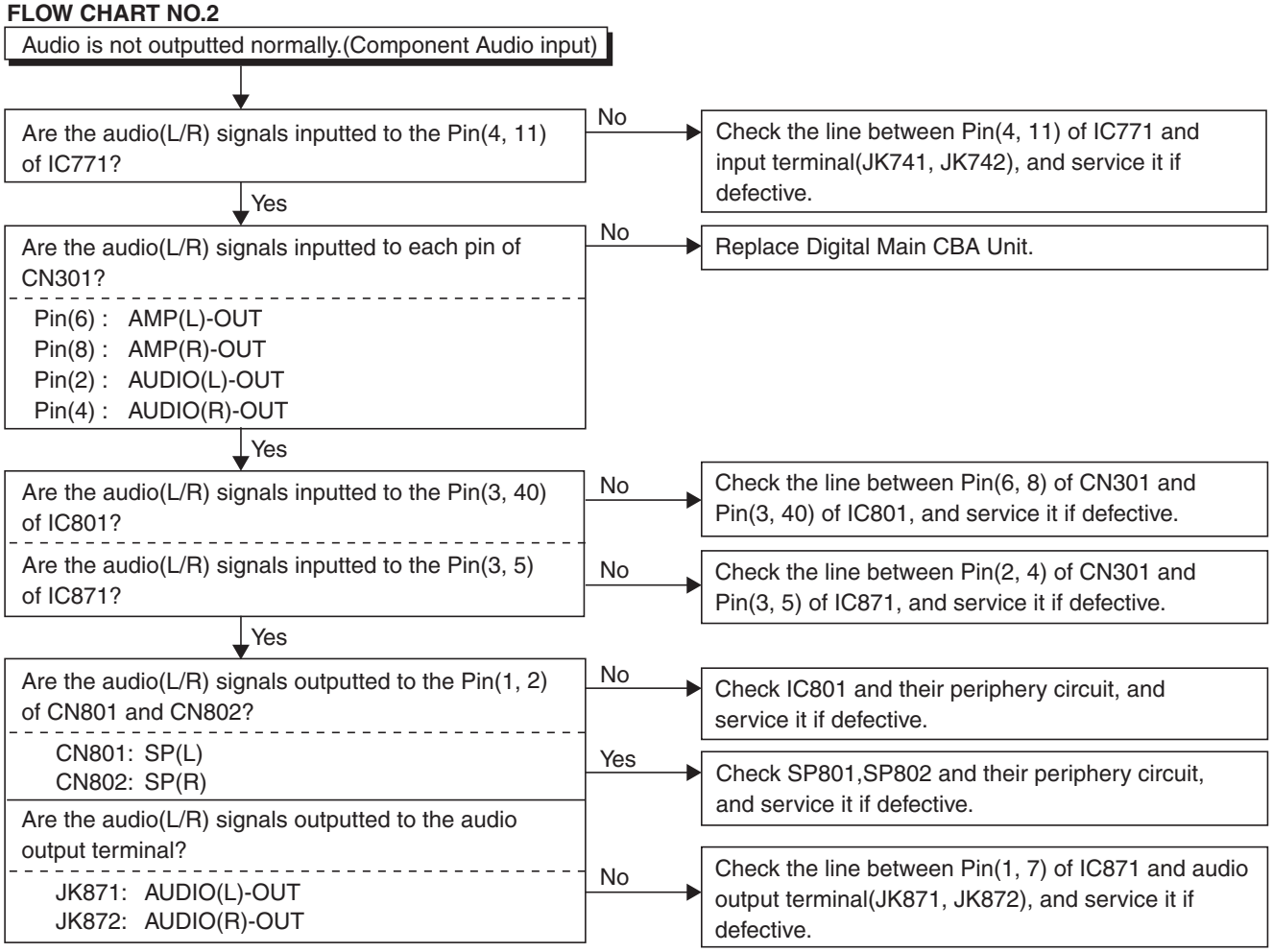
Replace Digital Main CBA Unit or LCD Module Assembly.

[Audio Signal Section]

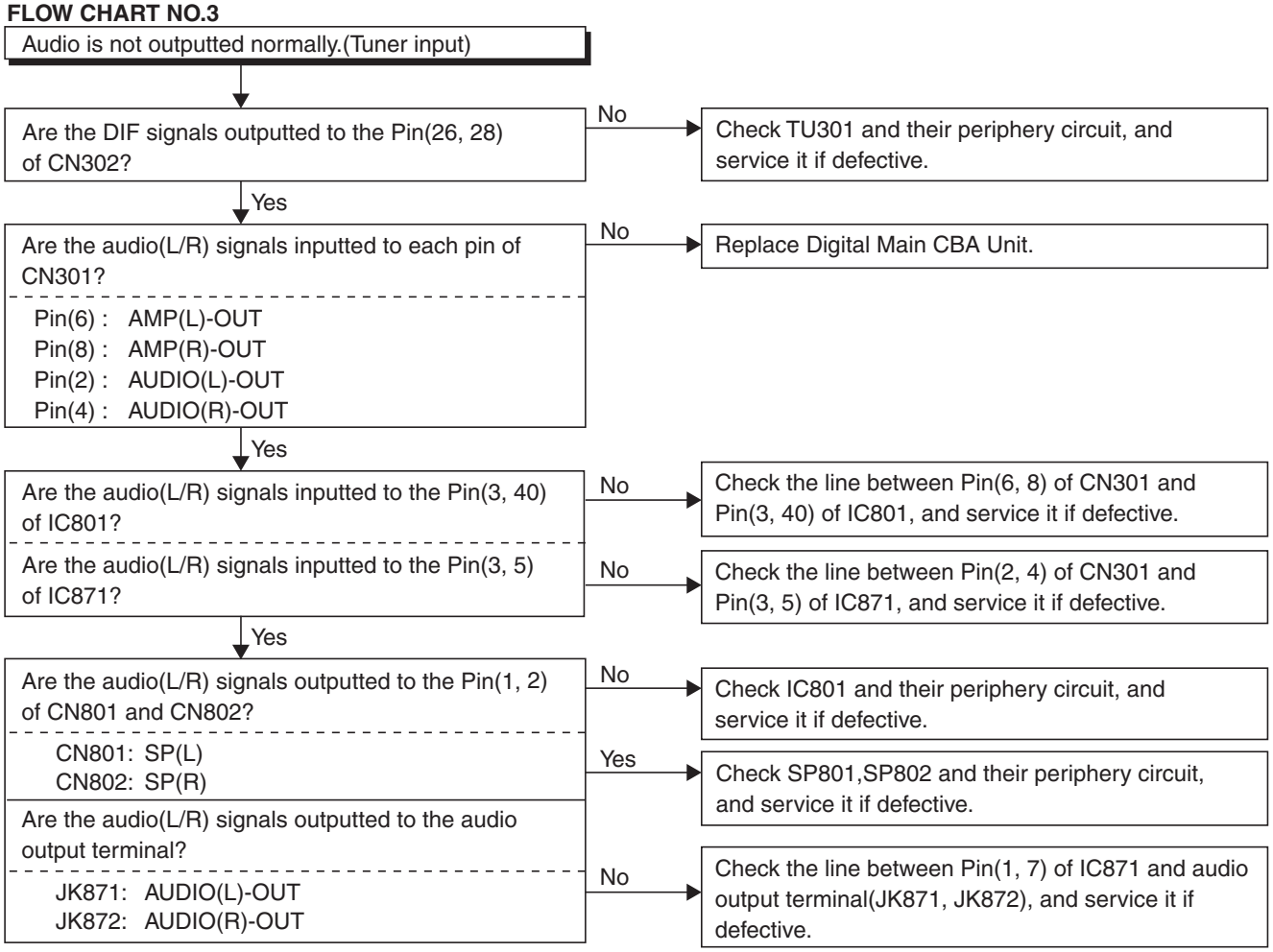
FLOW CHART NO.1



FLOW CHART NO.2



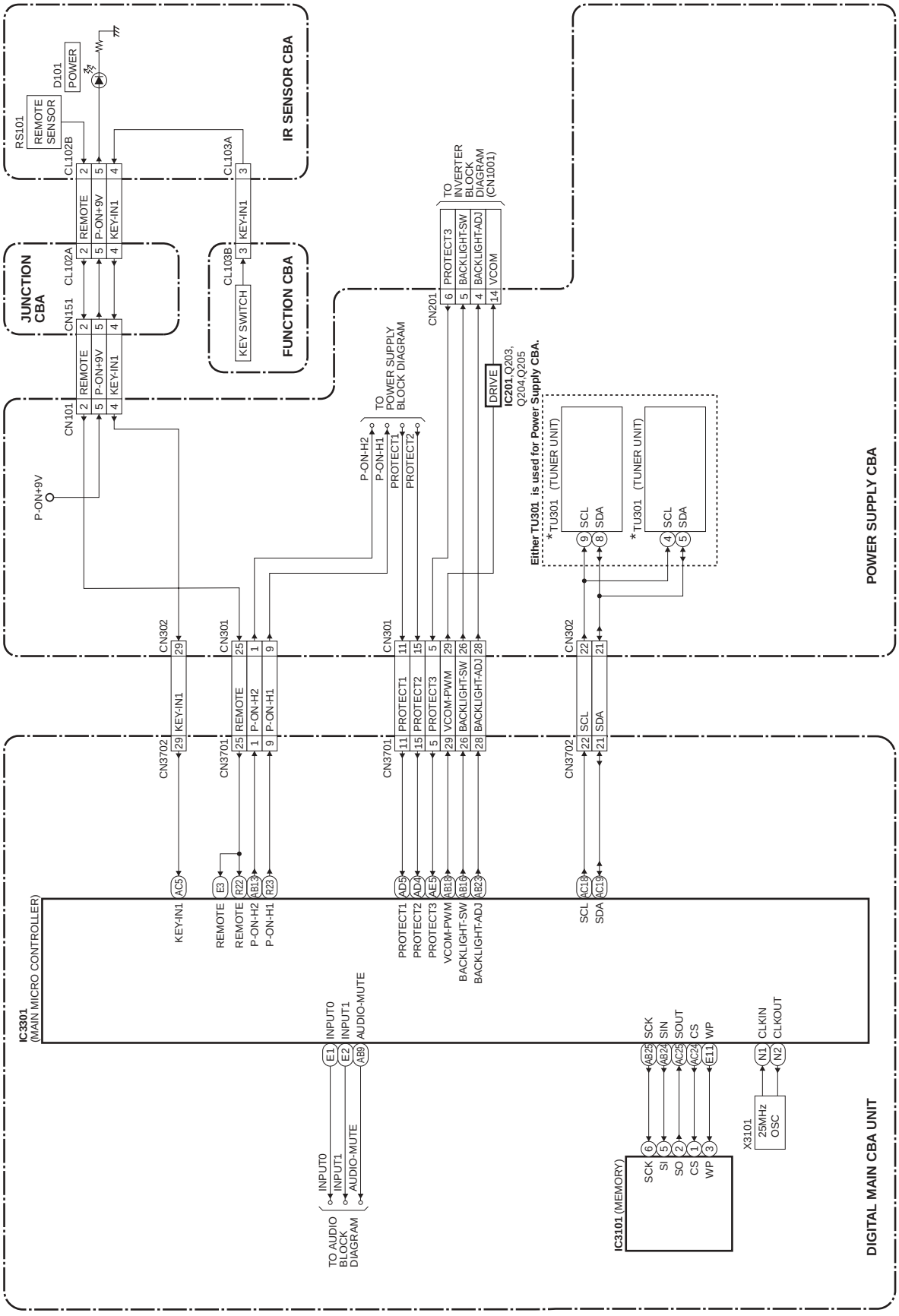
FLOW CHART NO.3



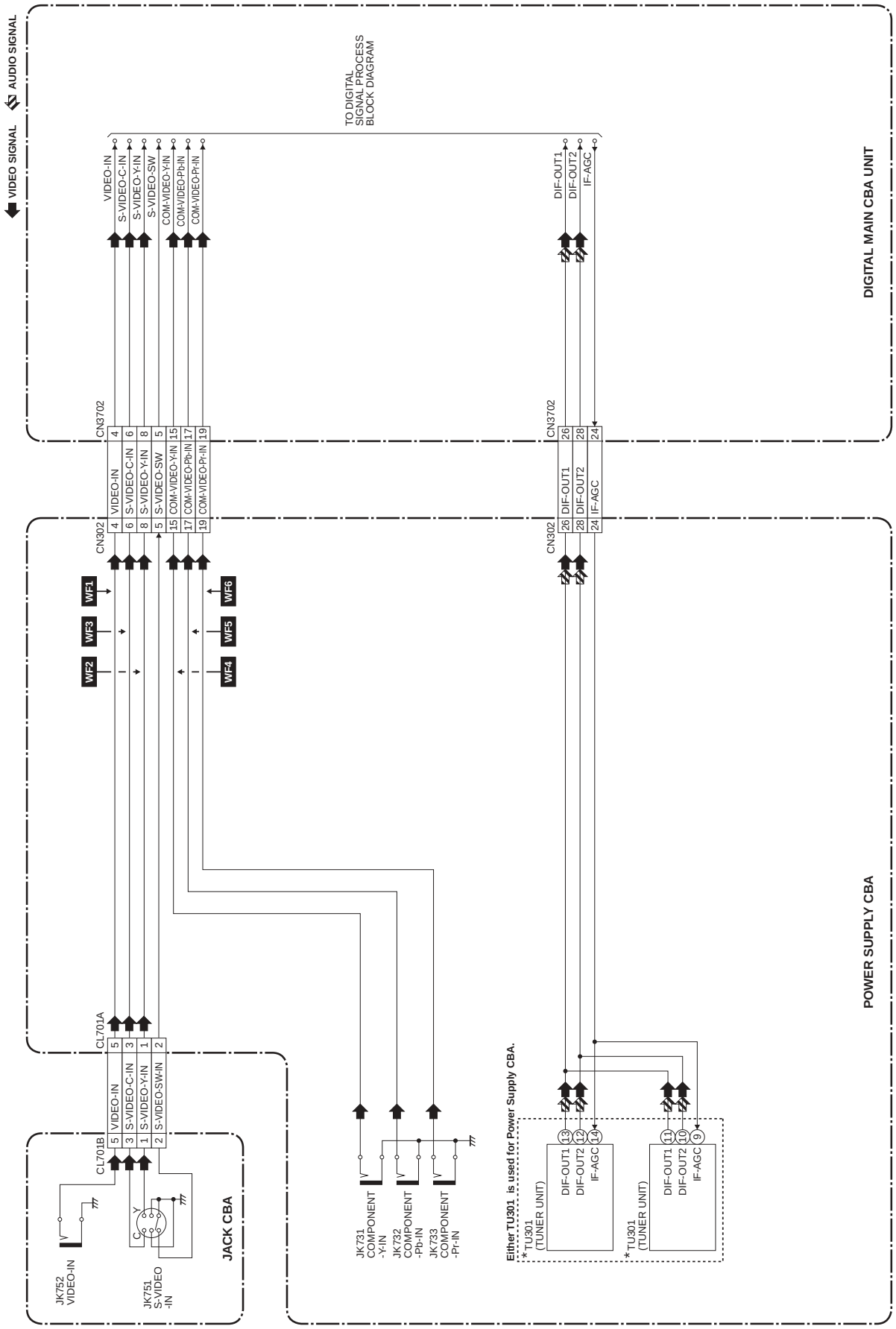
BLOCK DIAGRAMS

[TYPE A]

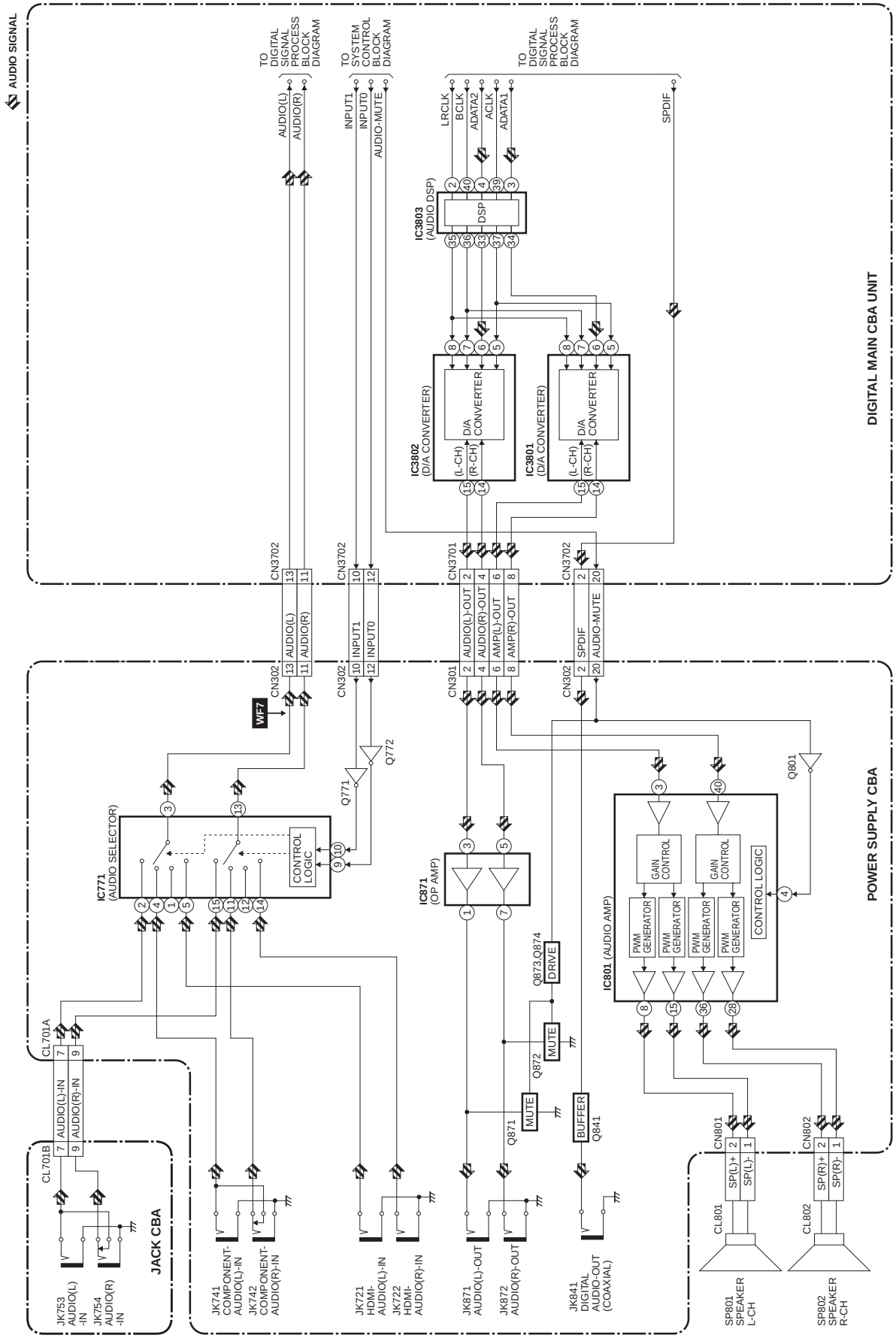
1. System Control Block Diagram



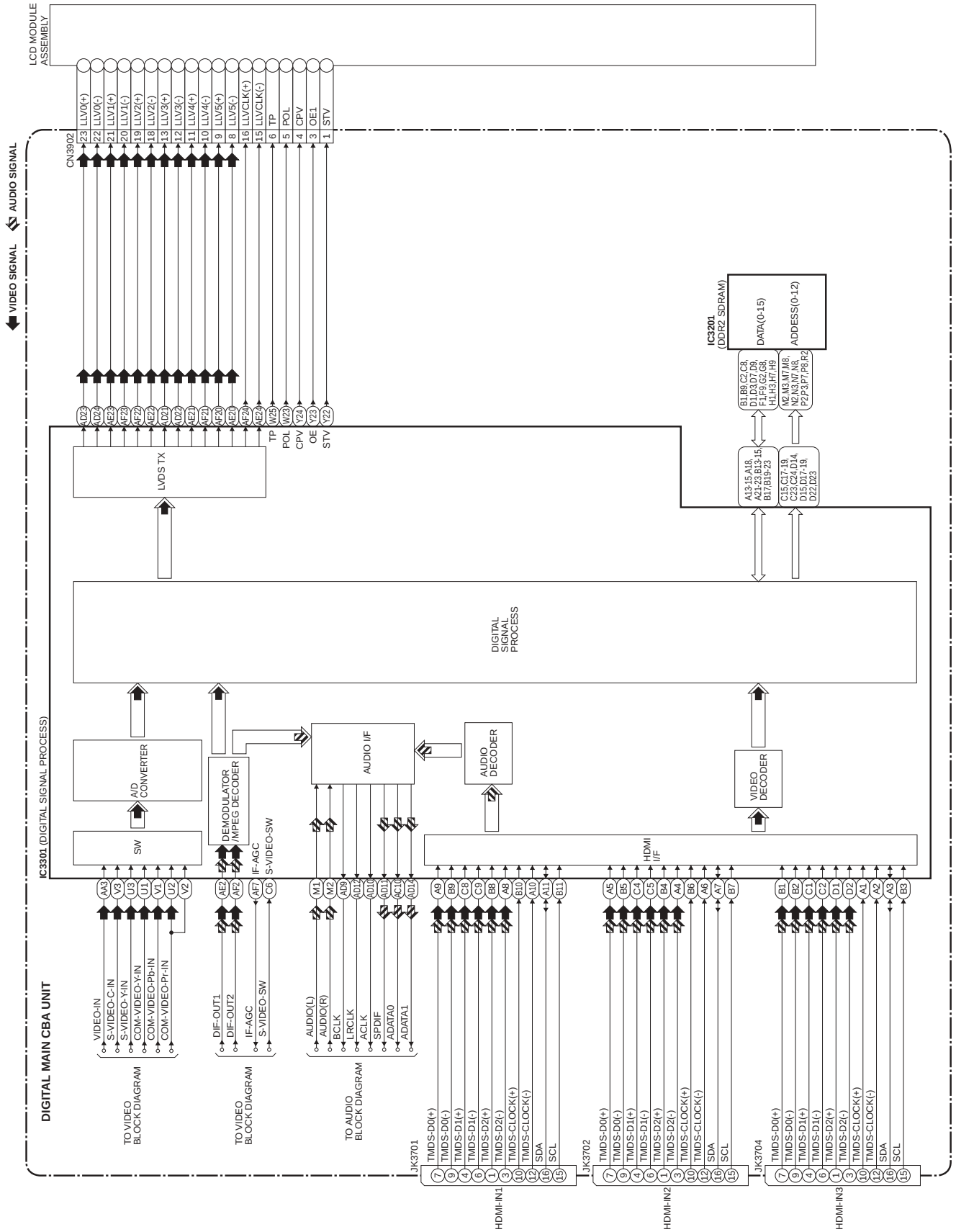
2. Video Block Diagram



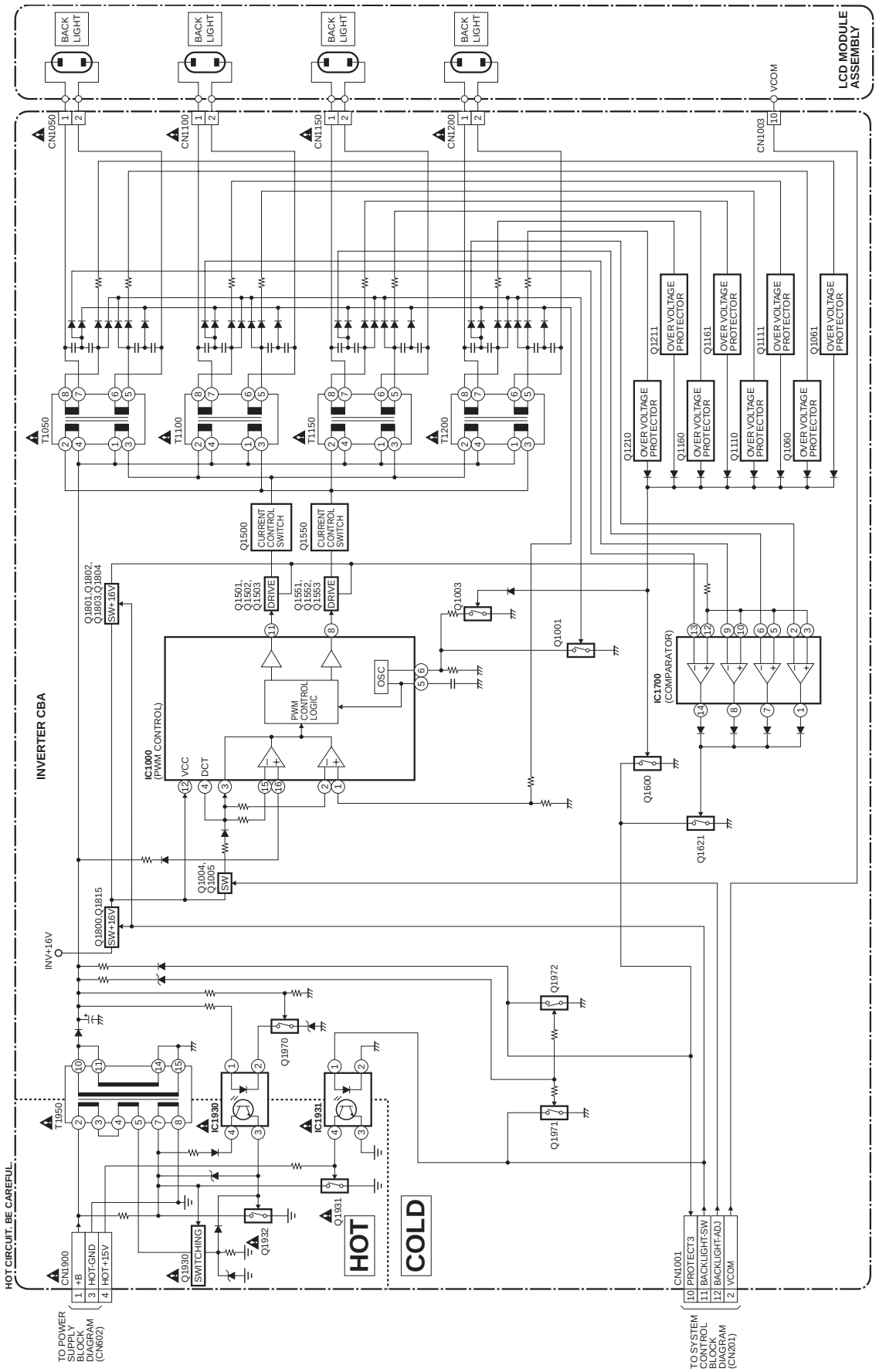
3. Audio Block Diagram



4. Digital Signal Process Block Diagram

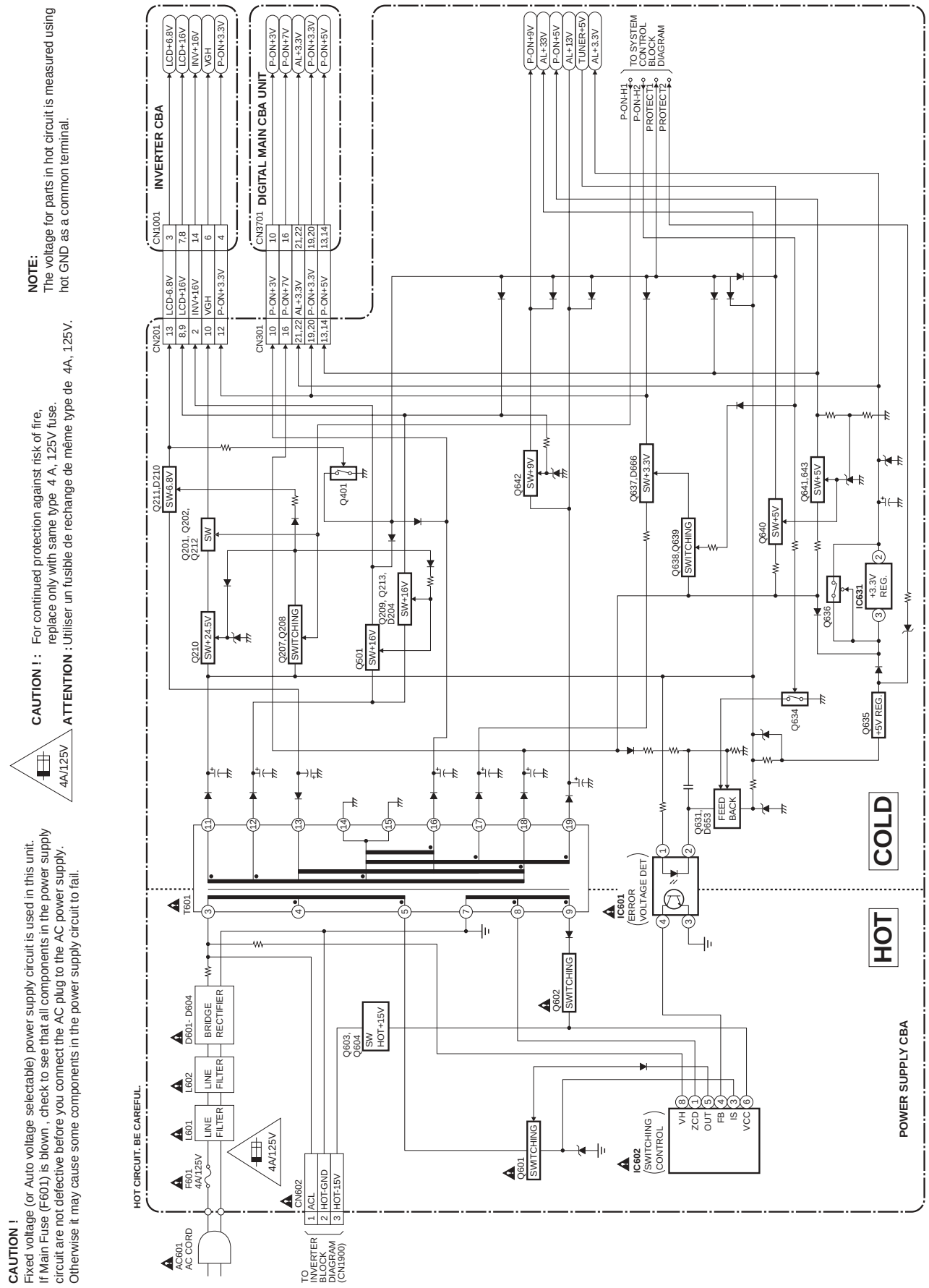


5. Inverter Block Diagram



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

6. Power Supply Block Diagram



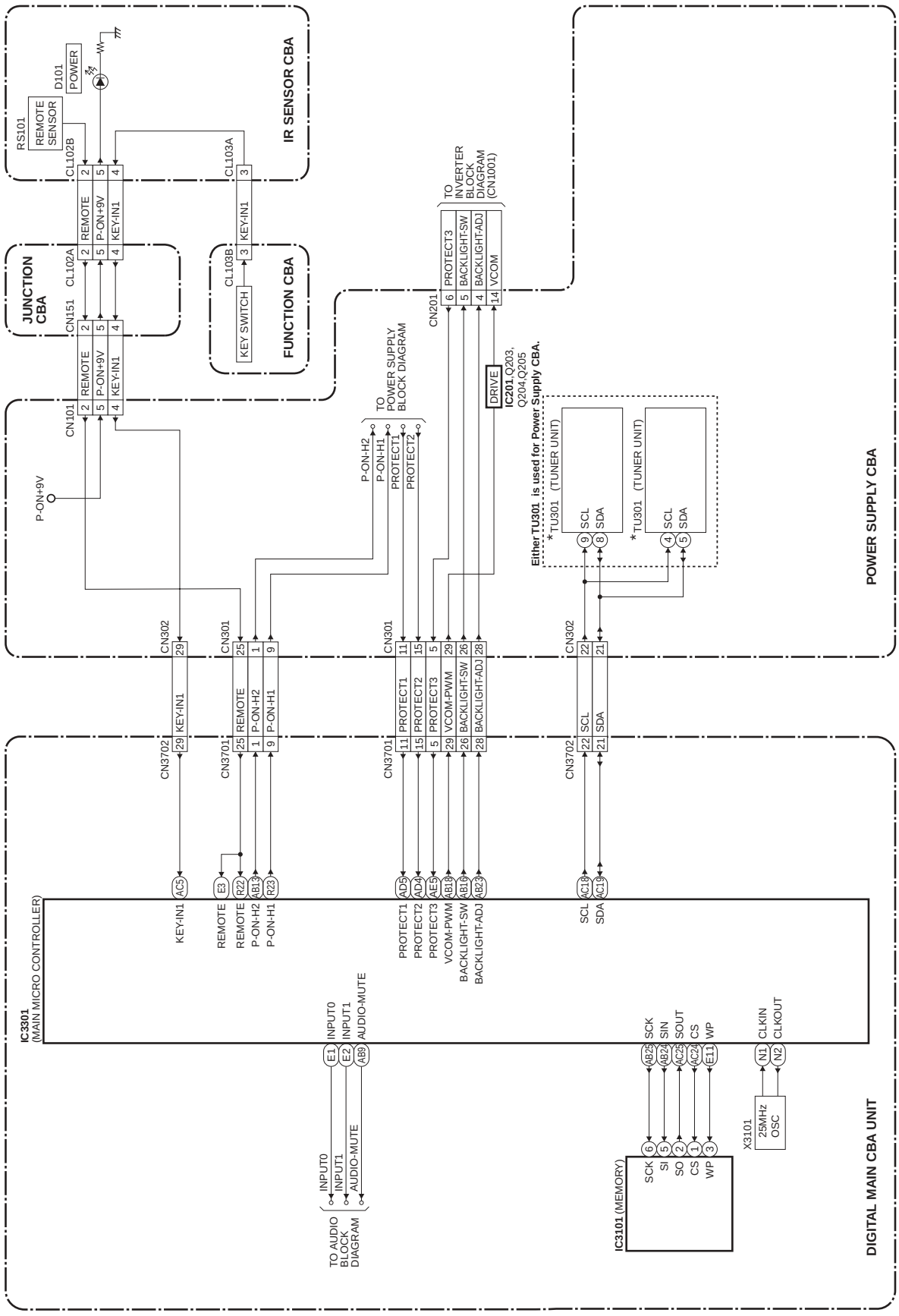
CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in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

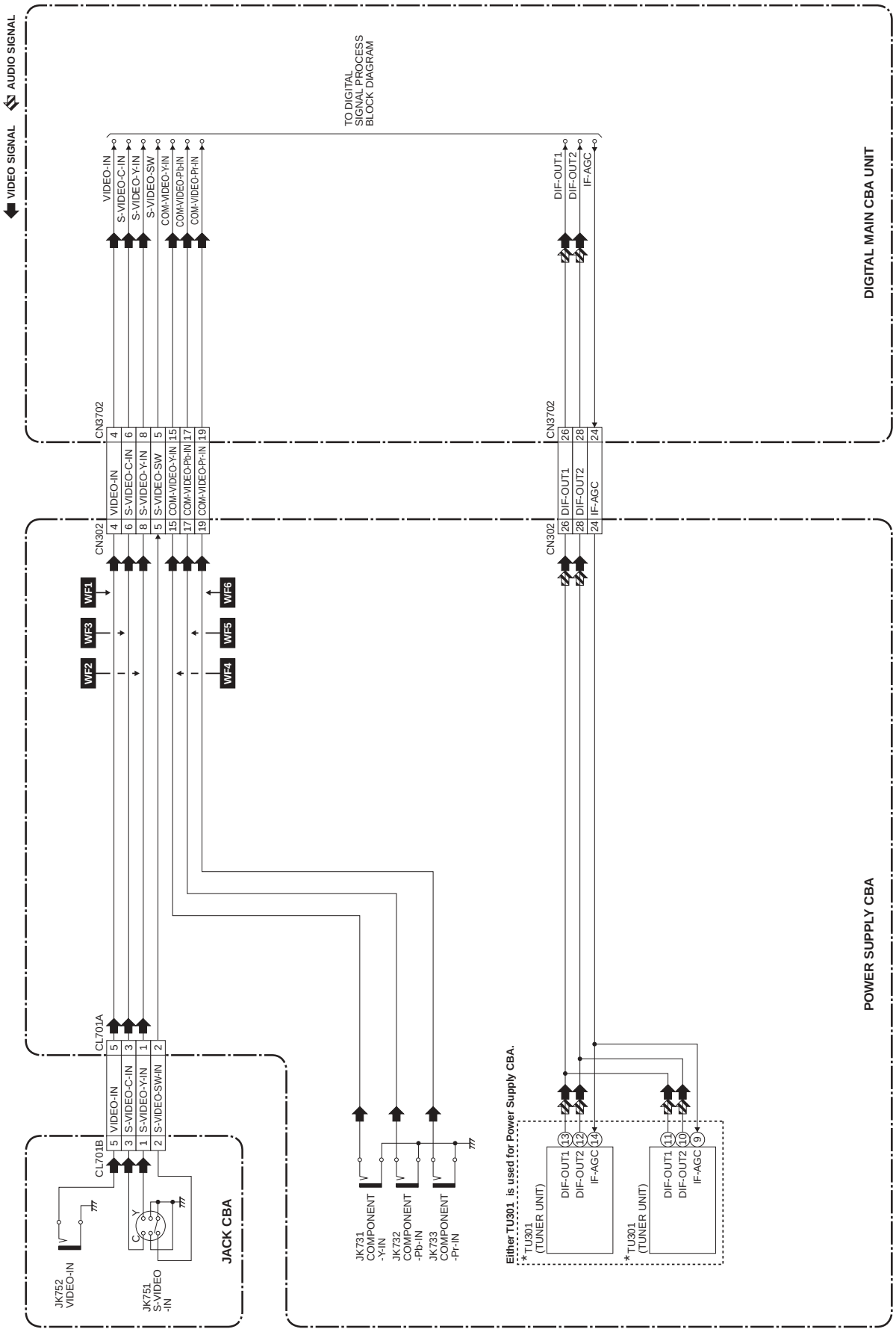
NOTE:
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

[TYPE B]

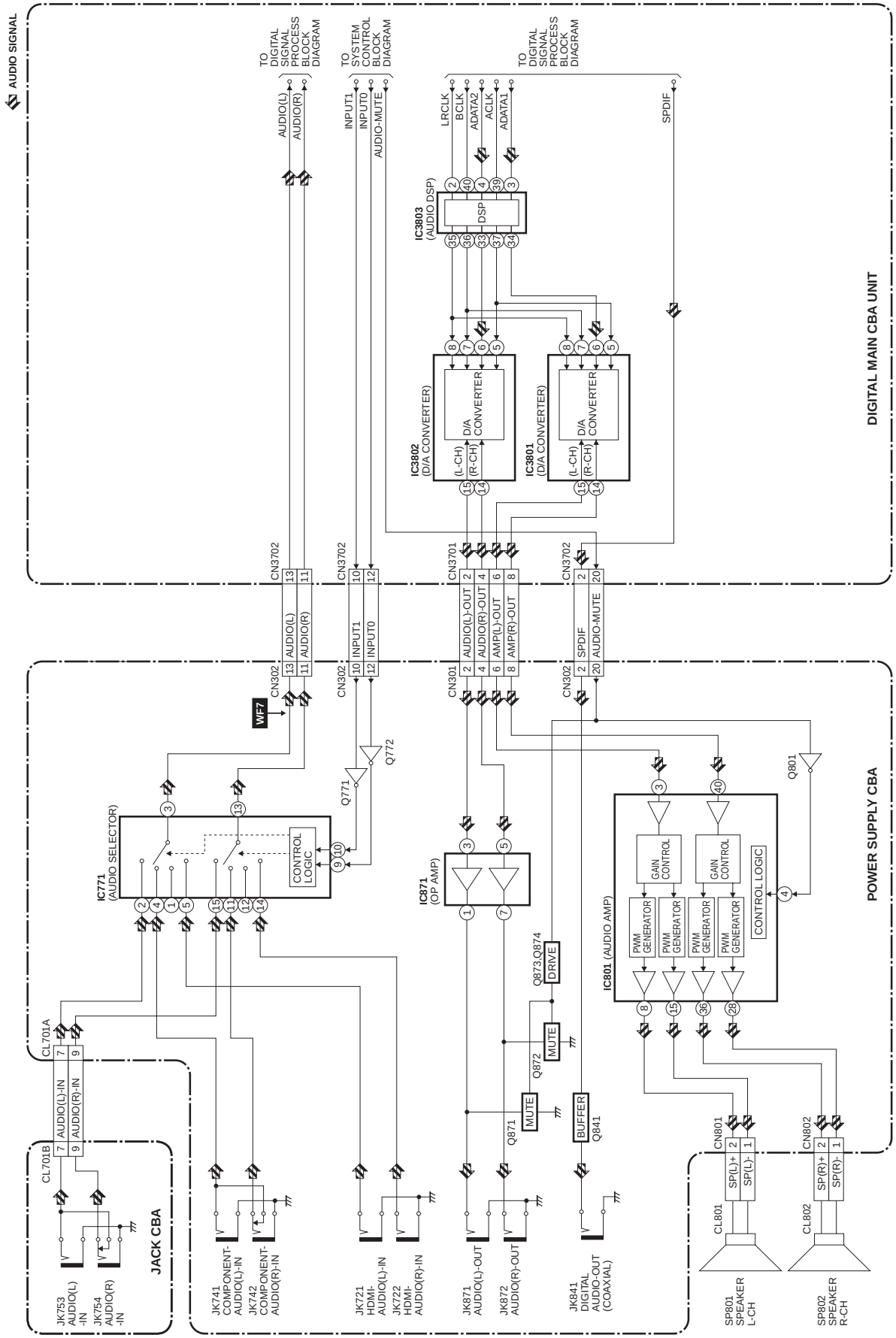
1. System Control Block Diagram



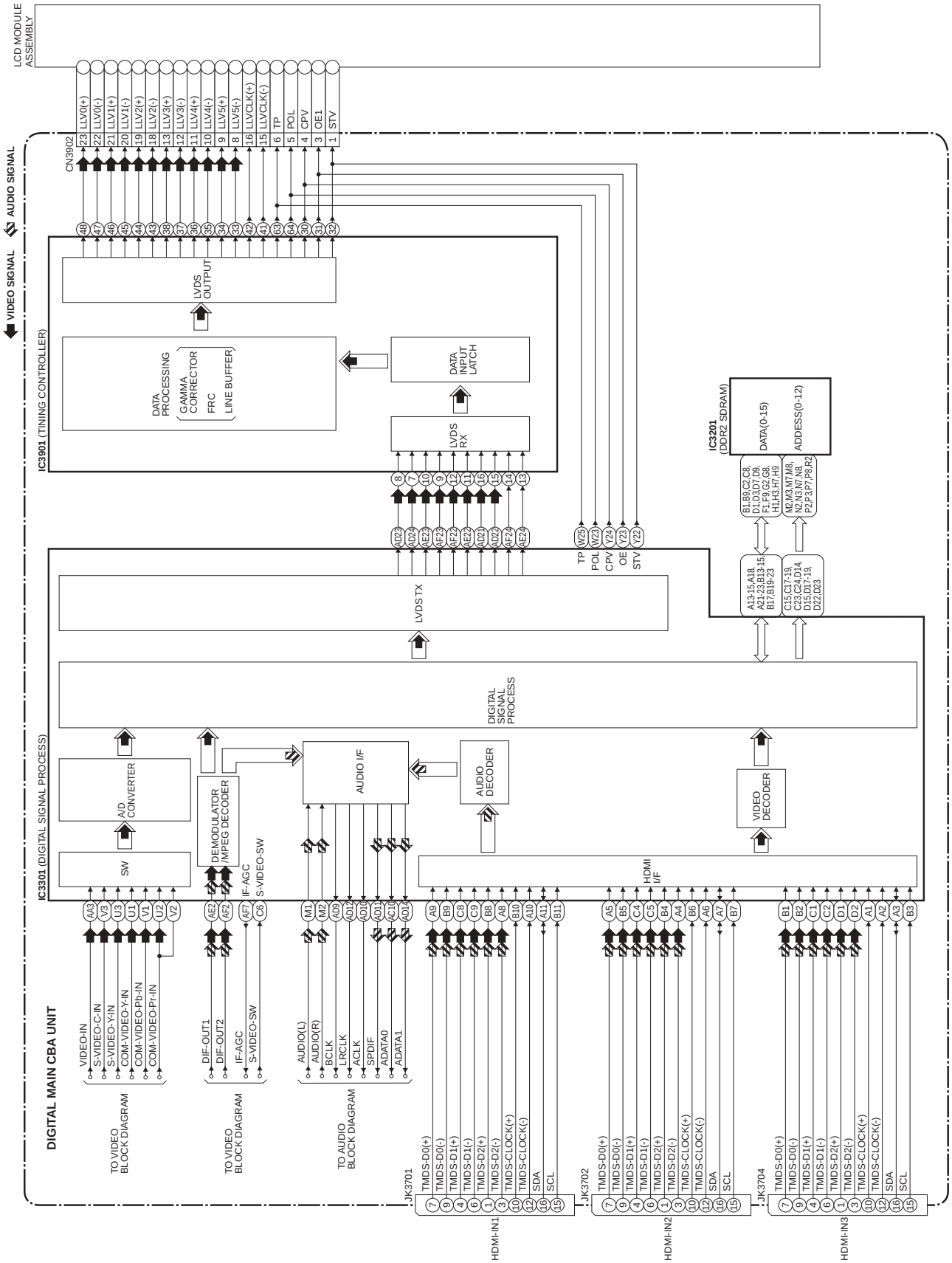
2. Video Block Diagram



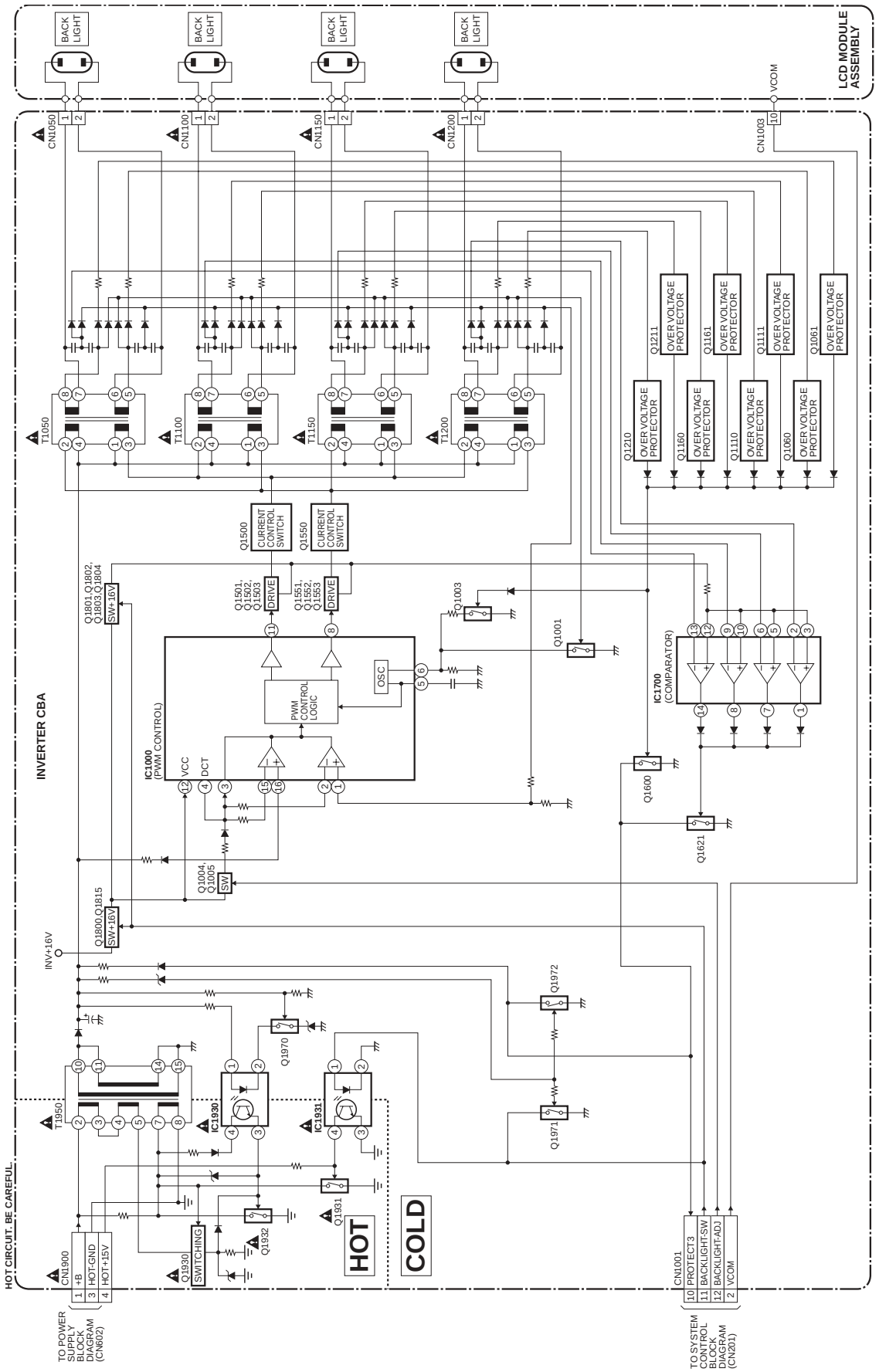
3. Audio Block Diagram



4. Digital Signal Process Block Diagram

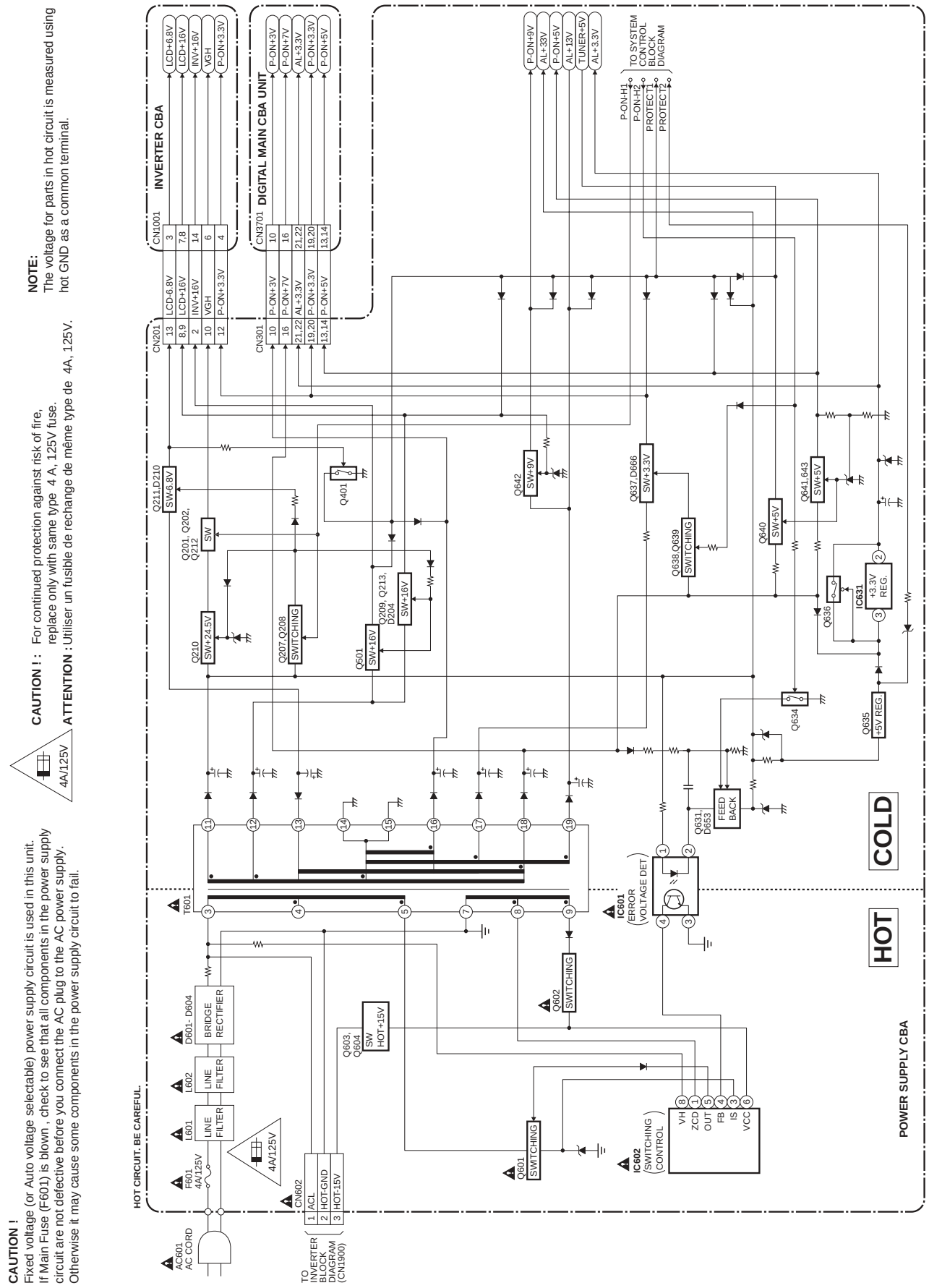


5. Inverter Block Diagram



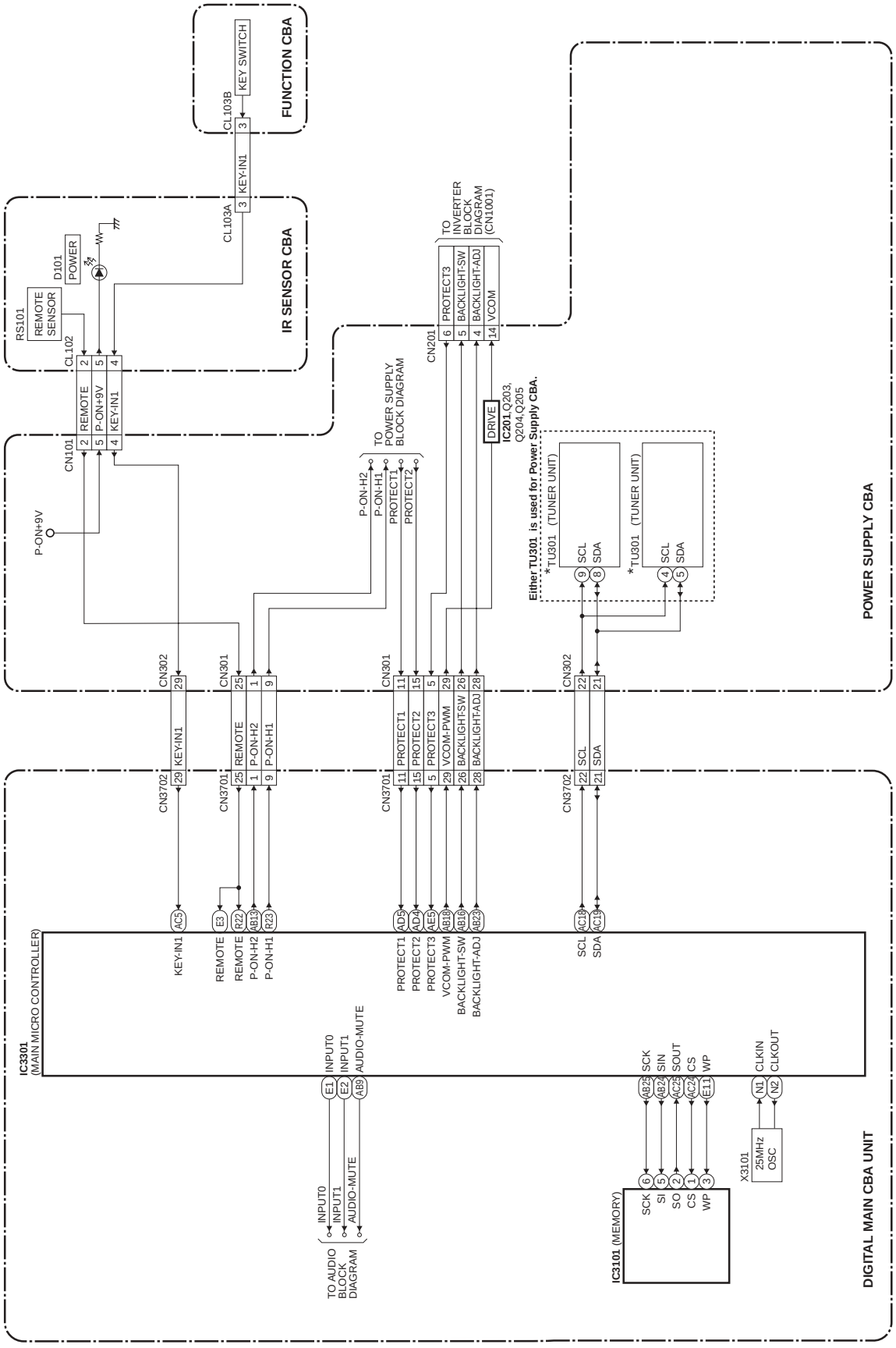
NOTE:
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

6. Power Supply Block Diagram

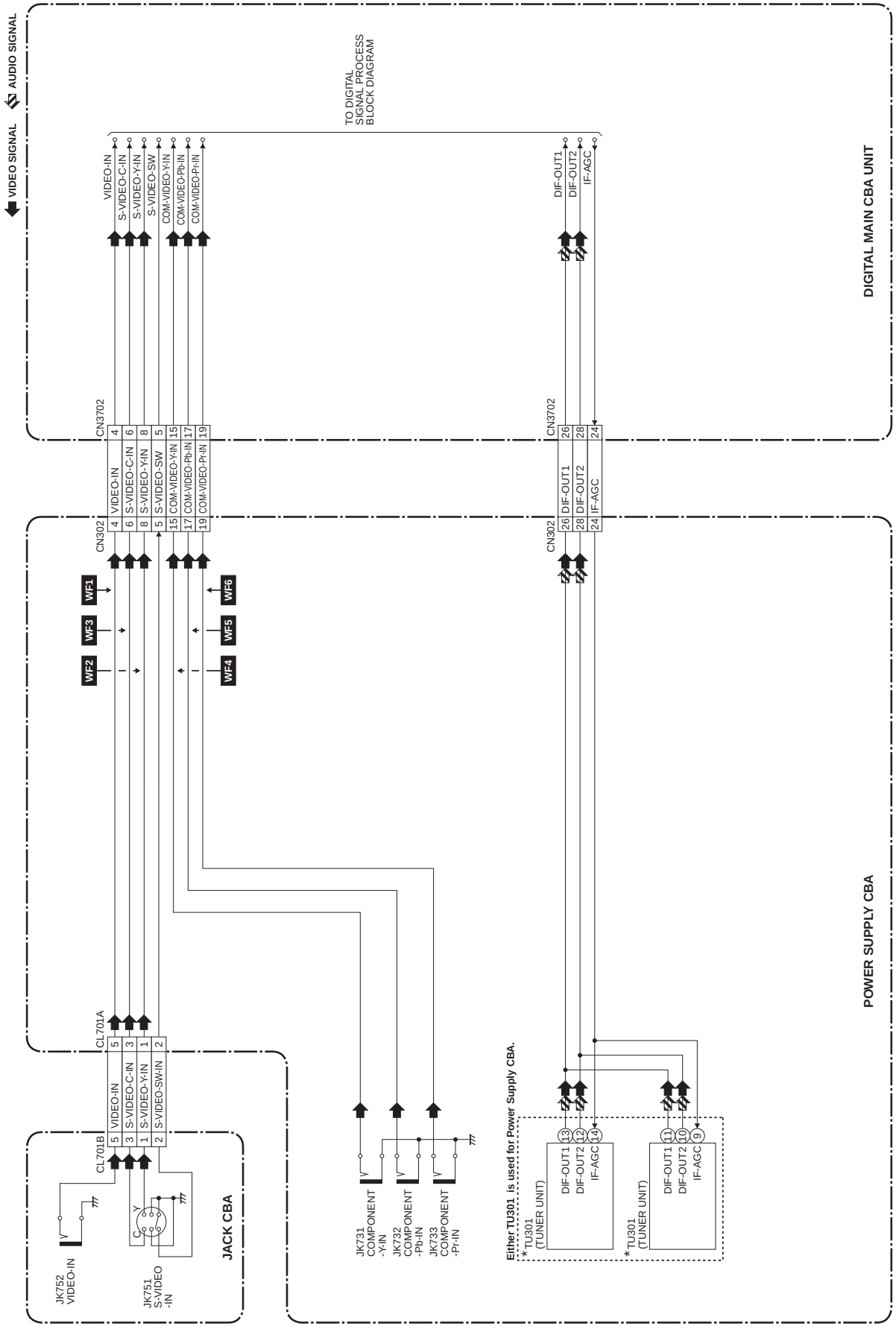


[TYPE C]

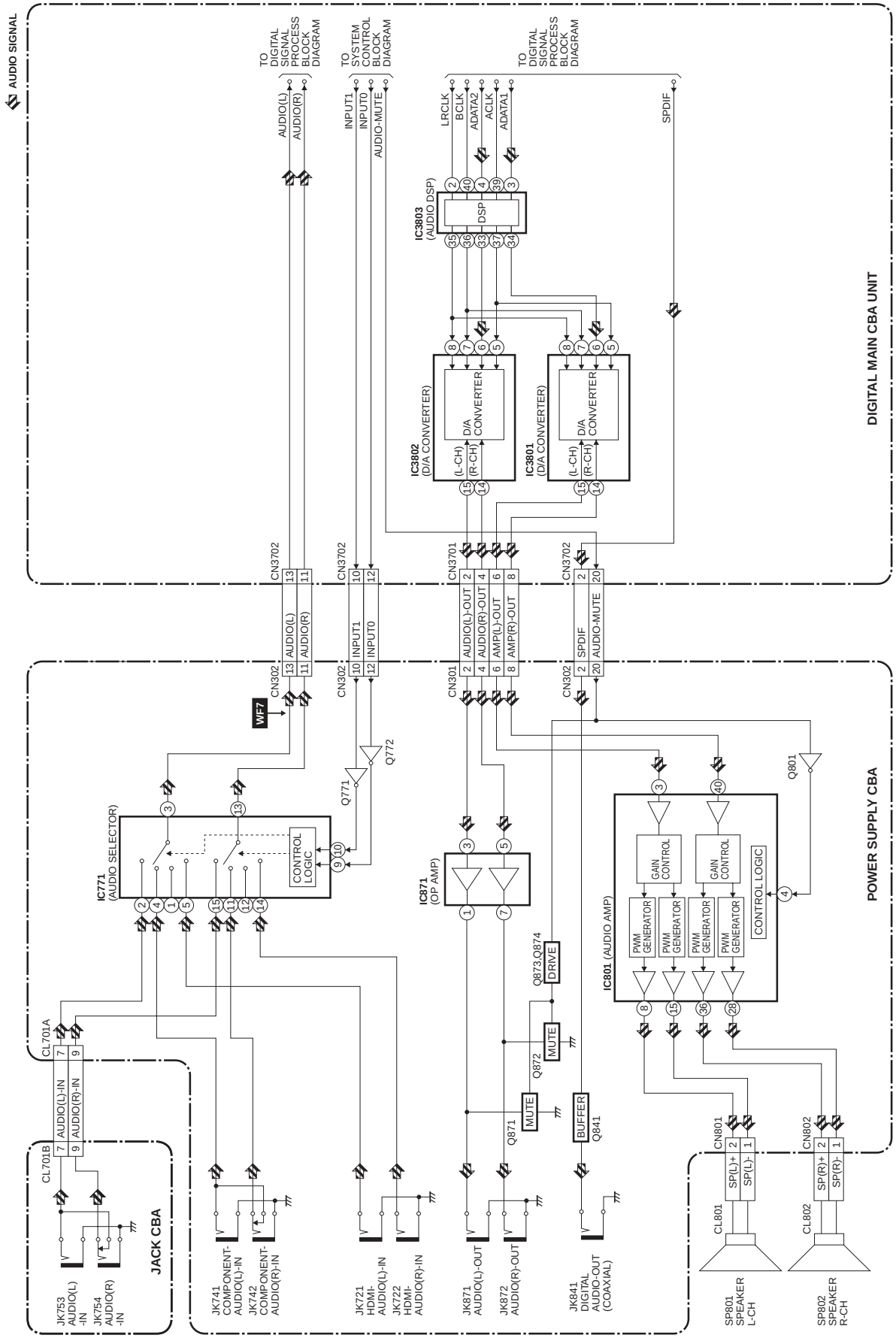
1. System Control Block Diagram



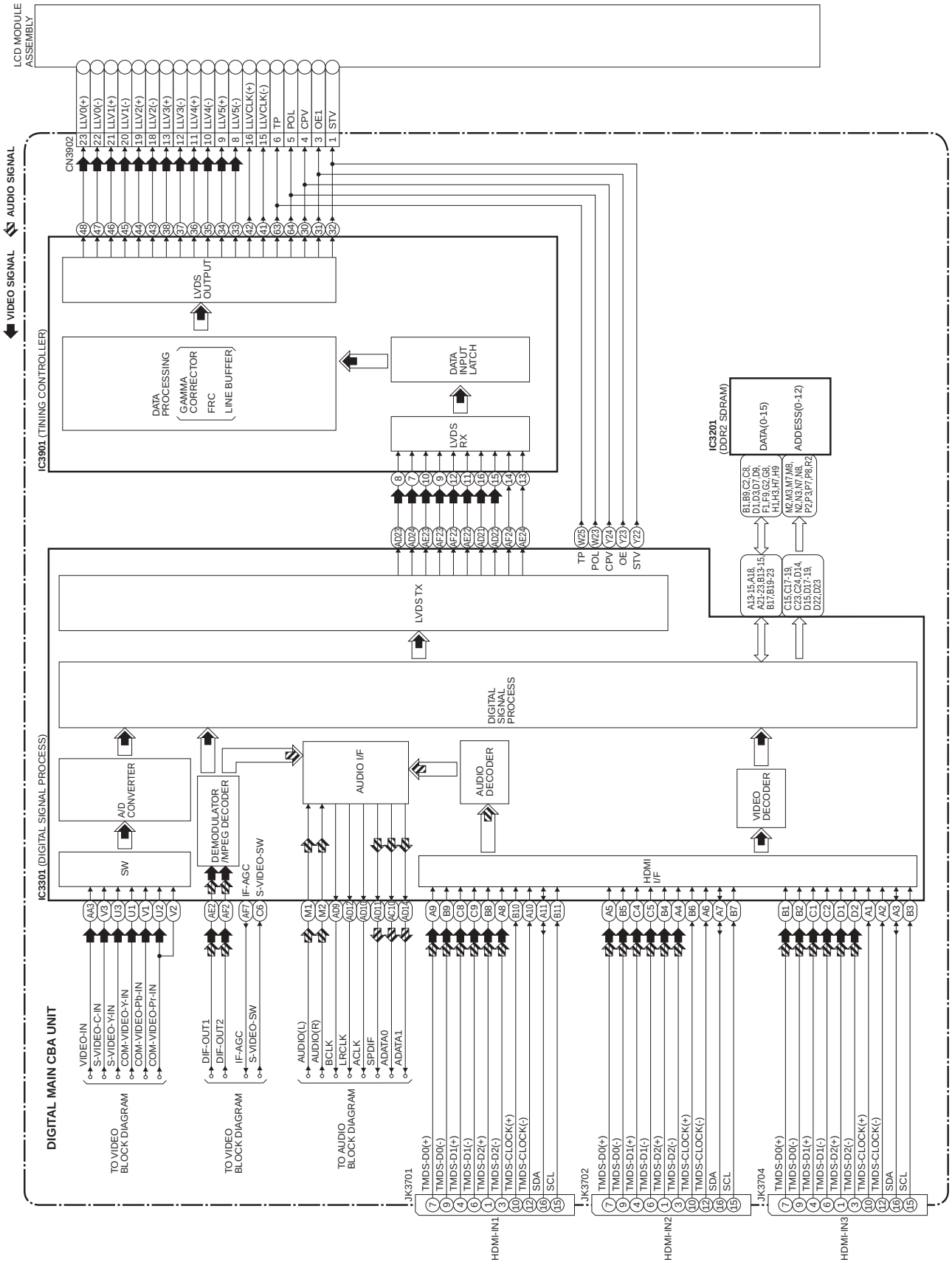
2. Video Block Diagram



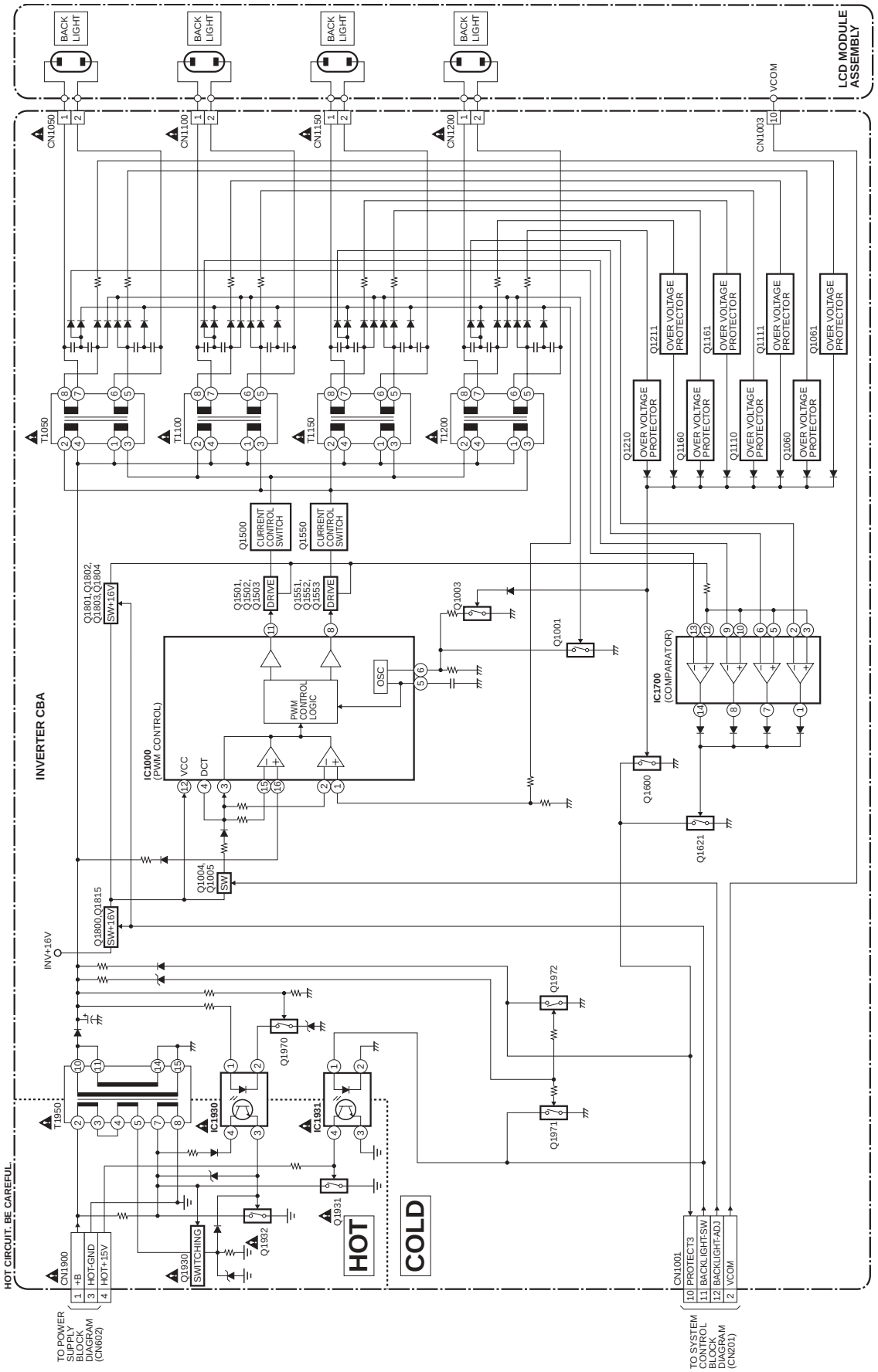
3. Audio Block Diagram



4. Digital Signal Process Block Diagram

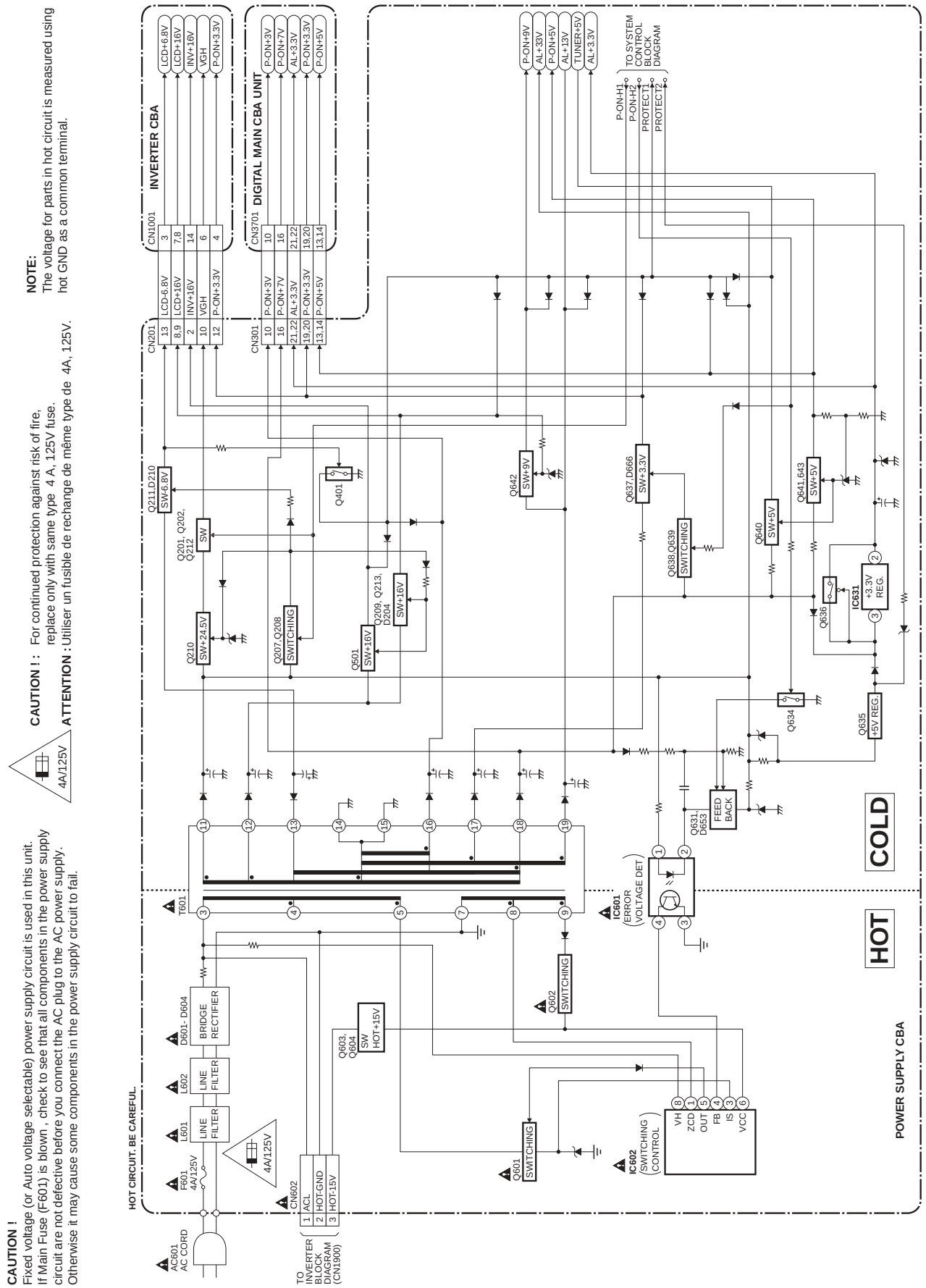


5. Inverter Block Diagram



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

6. 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 μF ($P = 10^{-6}$ μF).
5. All voltages are DC voltages unless otherwise specified.
6. This schematic diagrams are masterized version that should cover the entire PL10.3 chassis models. Thus some parts in detail illustrated on this schematic diagrams may vary depend on the model within the PL10.3 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:

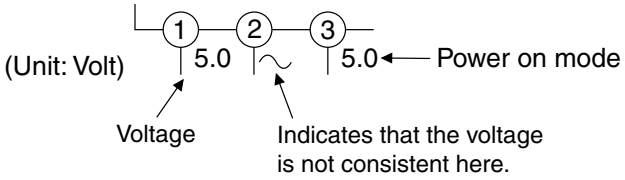
Fixed Voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F601) is blown, first check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the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

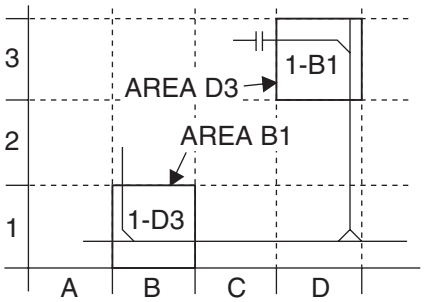
Plug the TV power cord into a standard AC outlet.:



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.

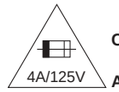
: Used to indicate a test point with a component lead on foil side.

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

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

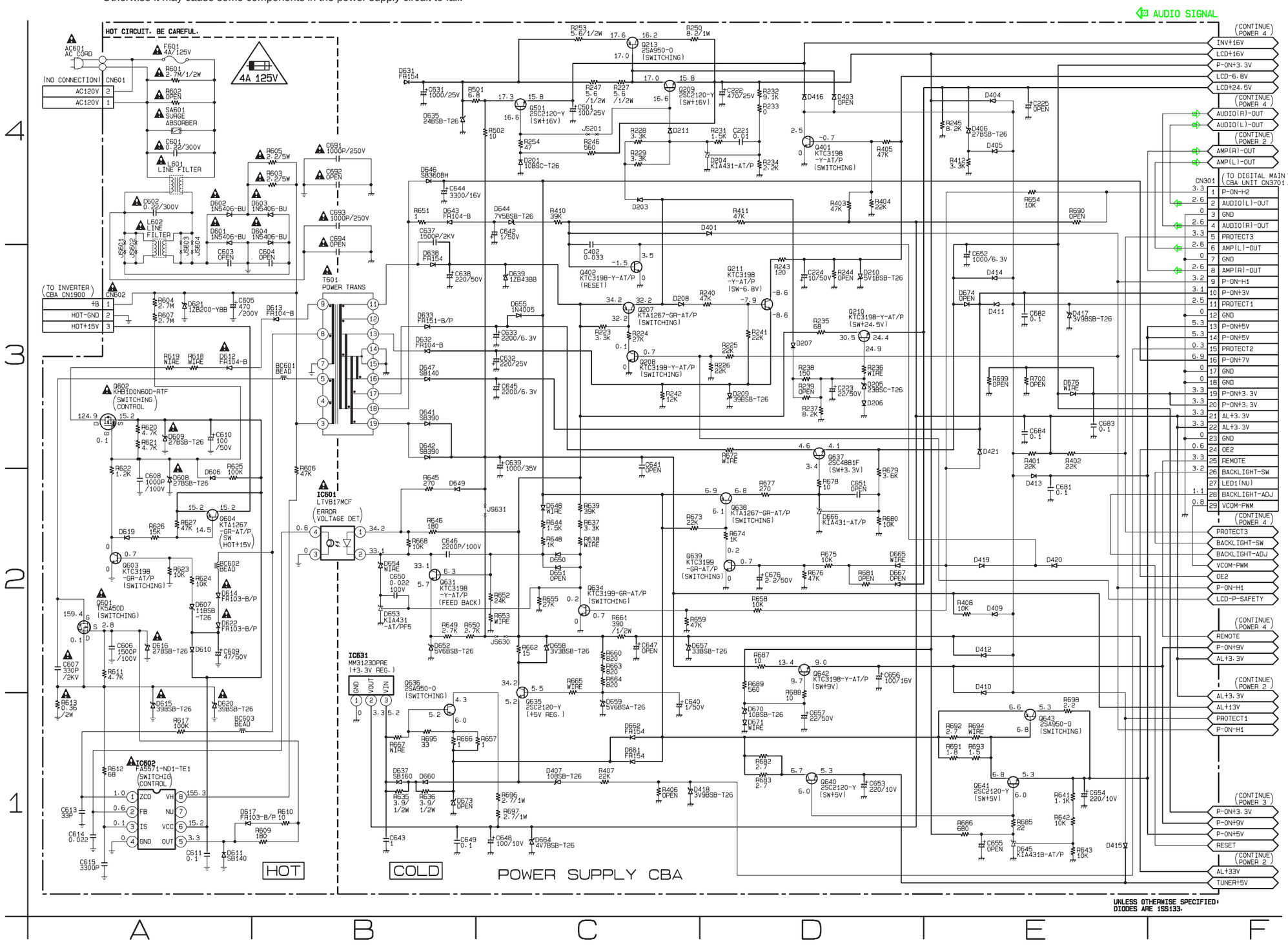
Power Supply 1 Schematic Diagram

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.

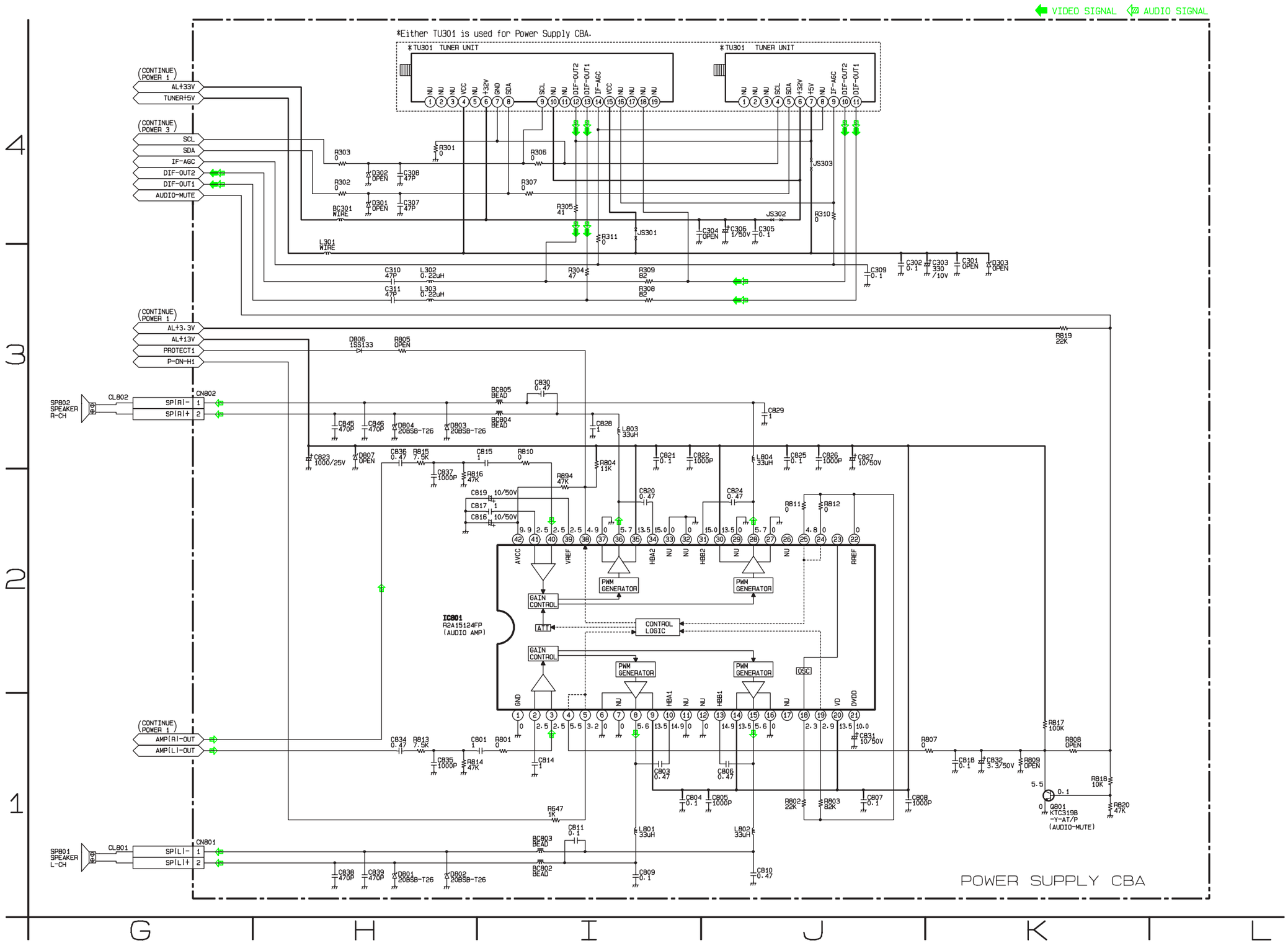


CAUTION ! : For continued protection against risk of fire, replace only with same type 4 A, 125V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 4A, 125V.

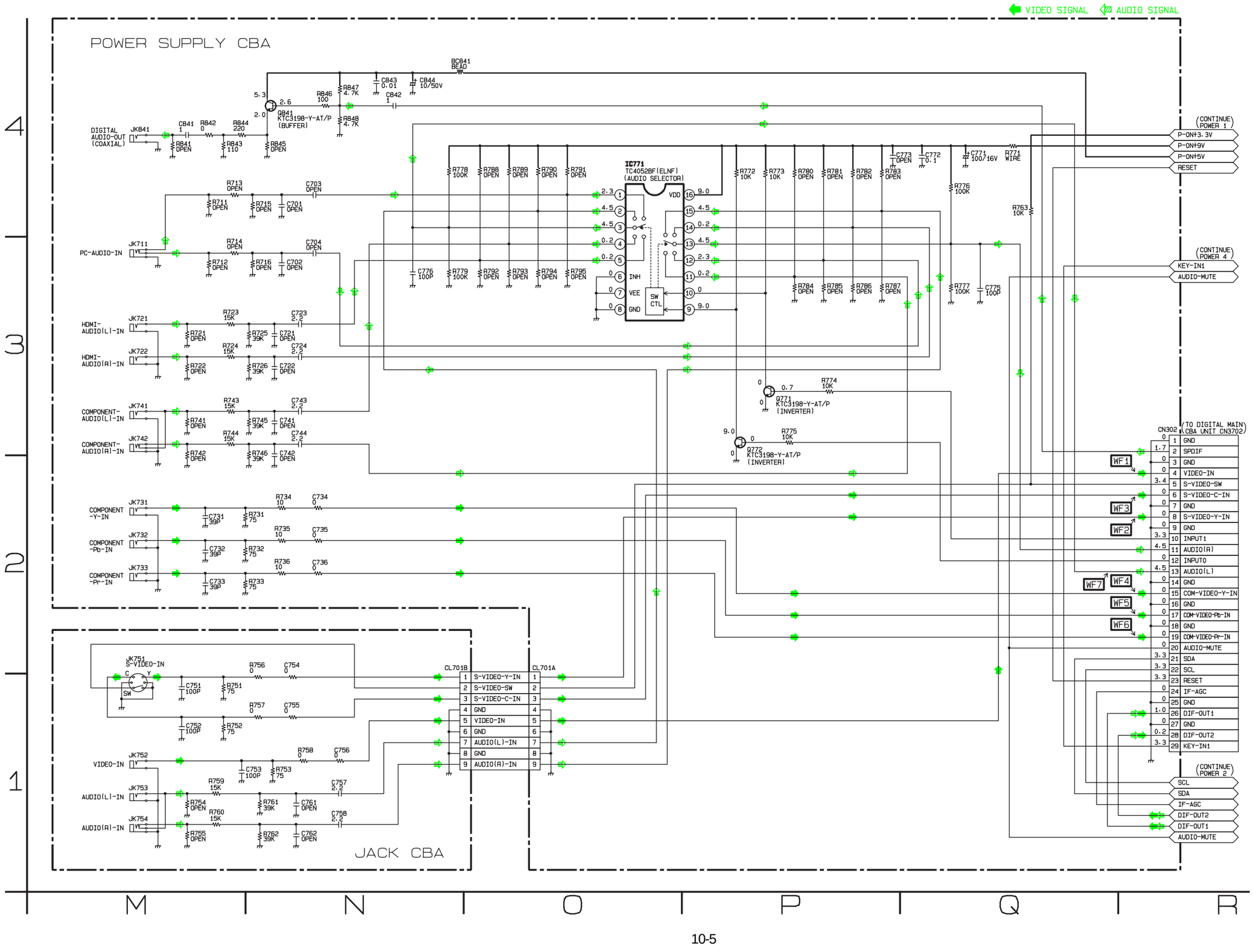
NOTE:
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



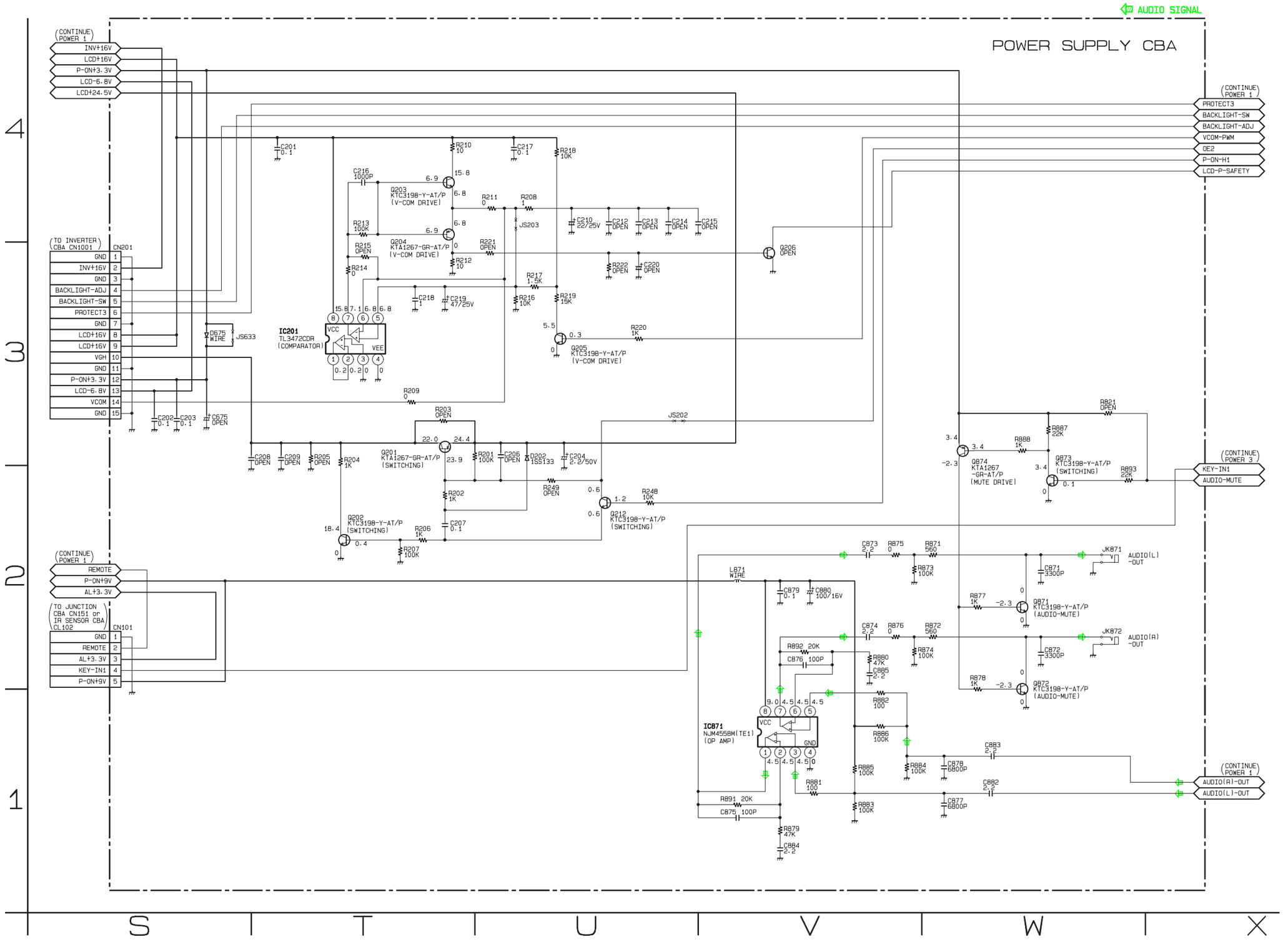
Power Supply 2 Schematic Diagram



Power Supply 3 & Jack Schematic Diagram

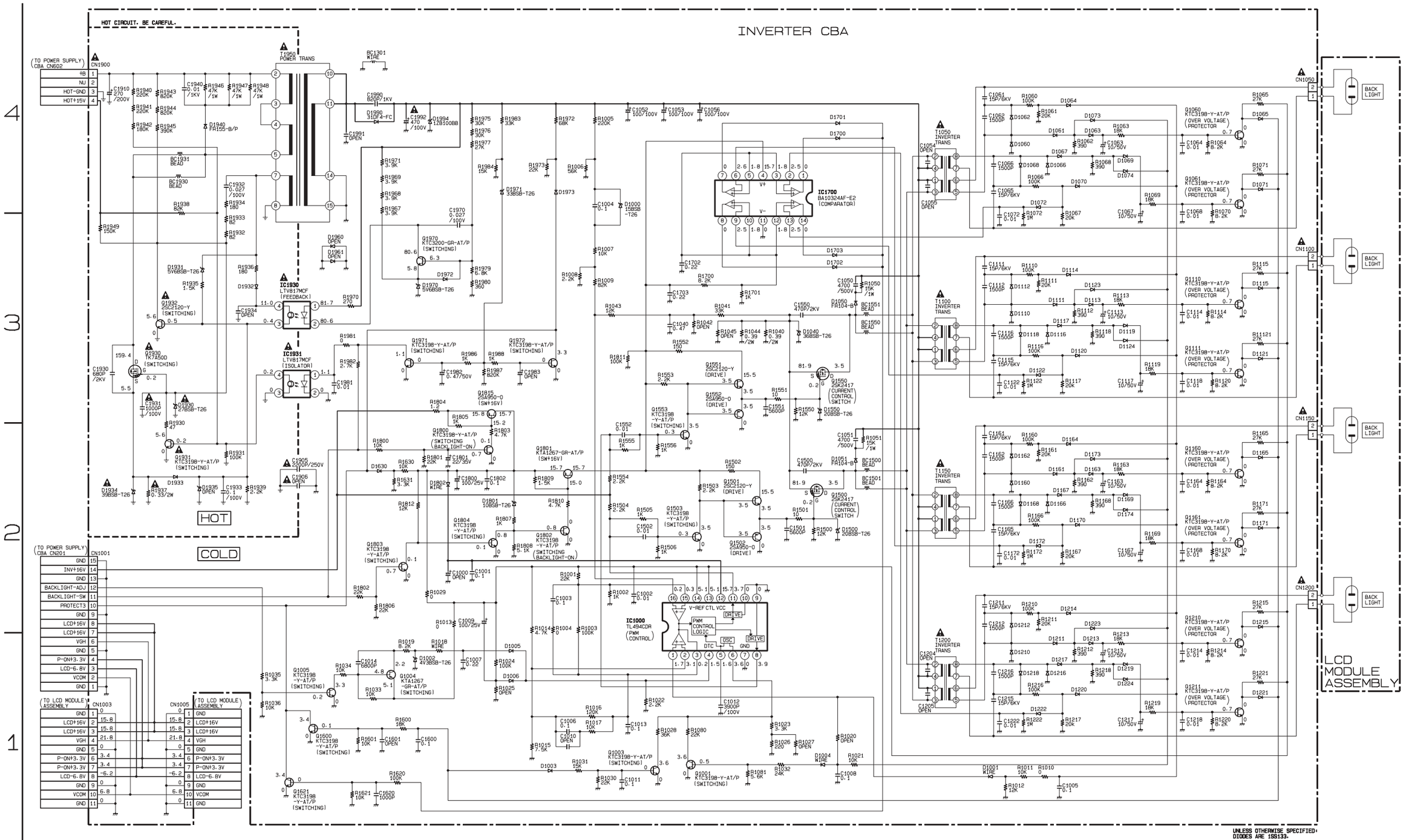


Power Supply 4 Schematic Diagram

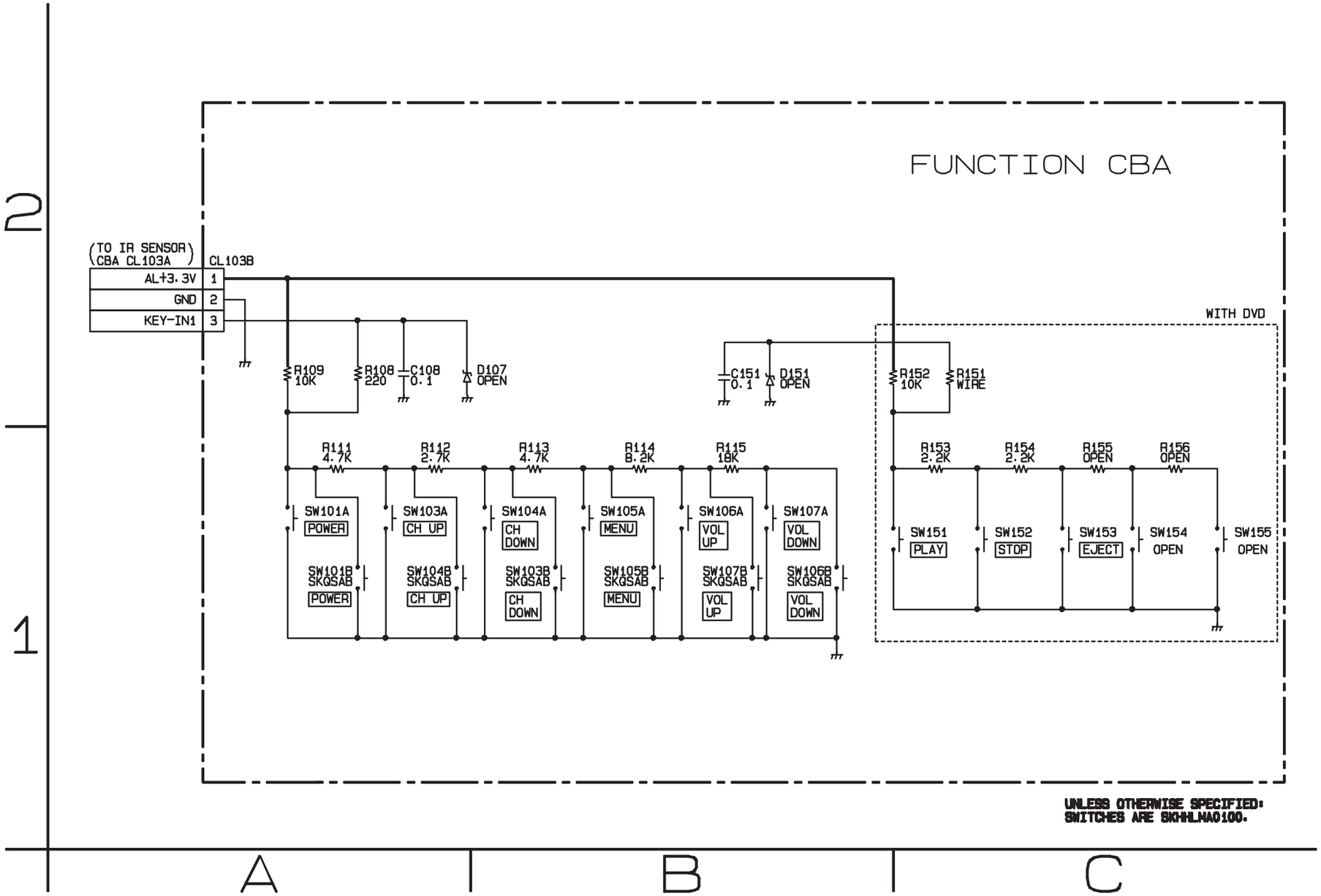


Inverter Schematic Diagram

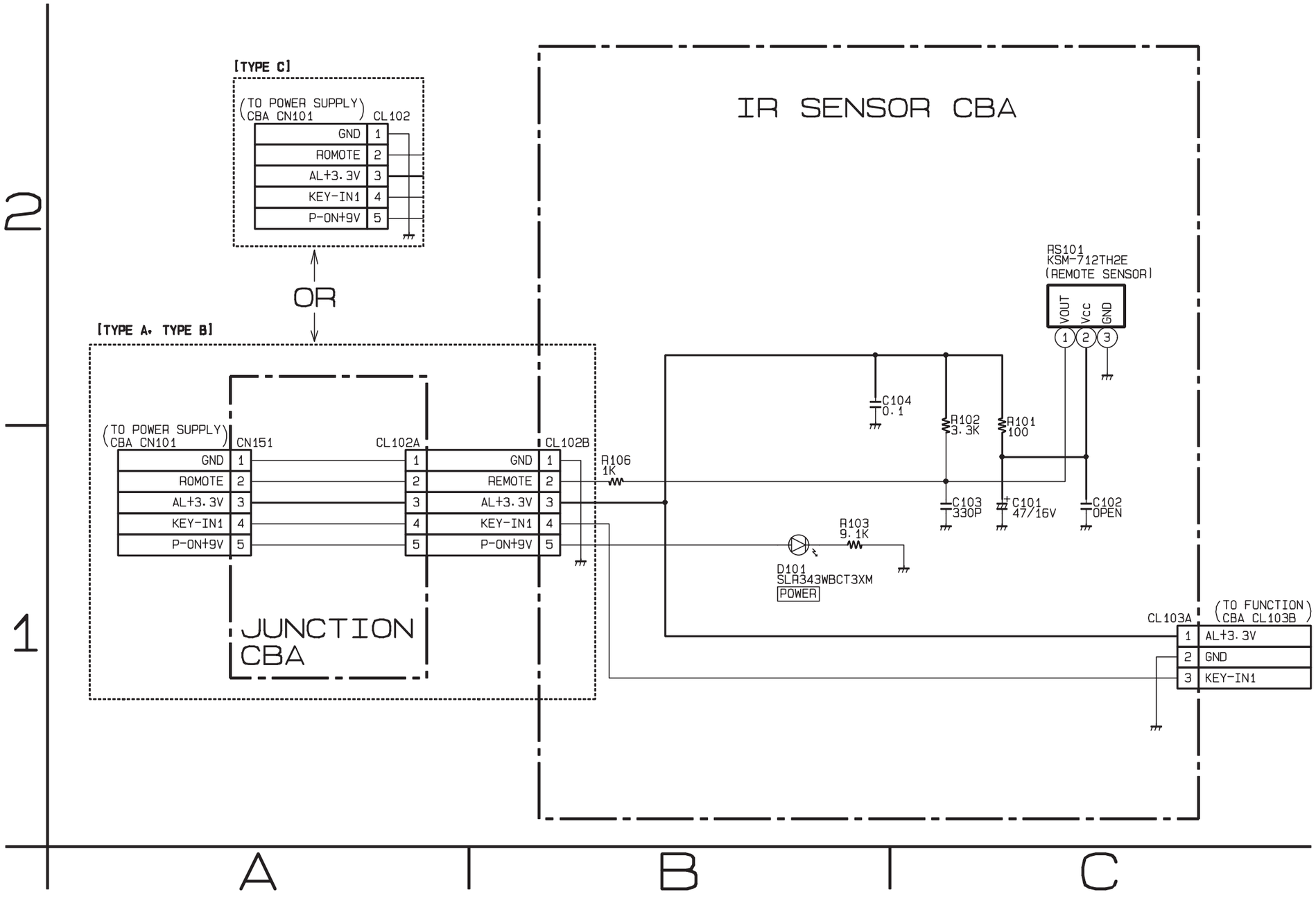
NOTE:
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



Function Schematic Diagram

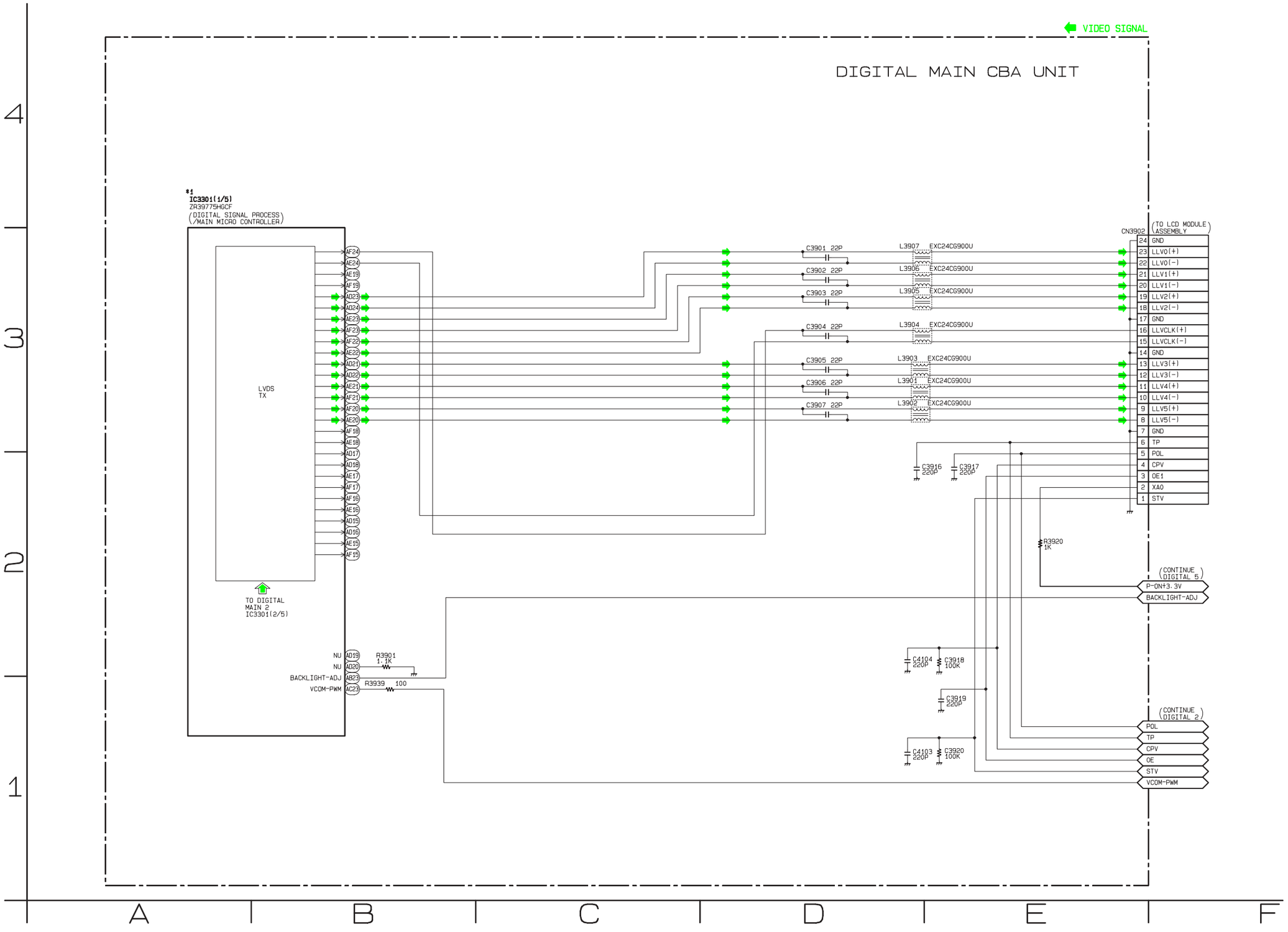


IR Sensor & Junction Schematic Diagram



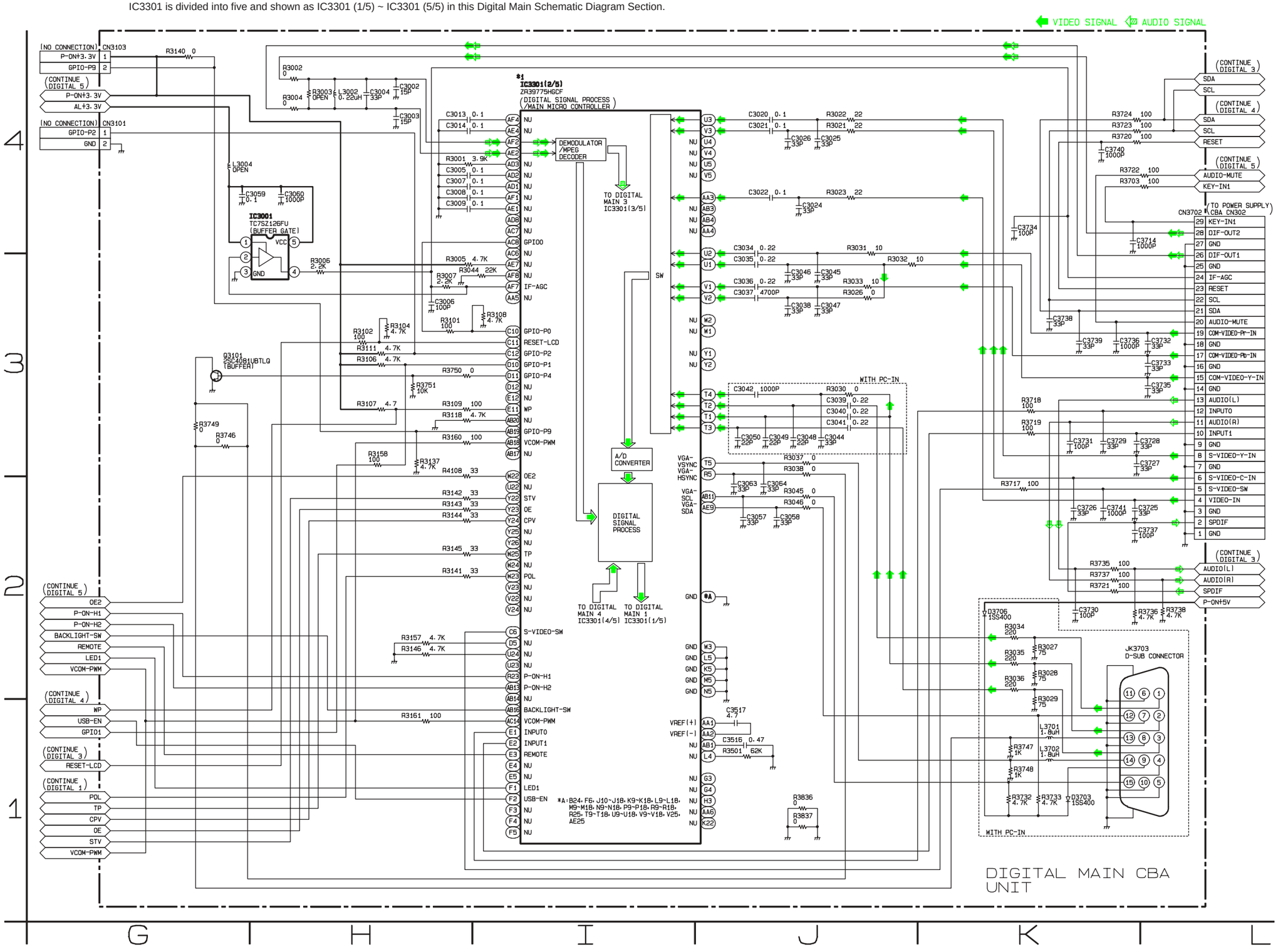
Digital Main 1 Schematic Diagram [TYPE A]

∗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.



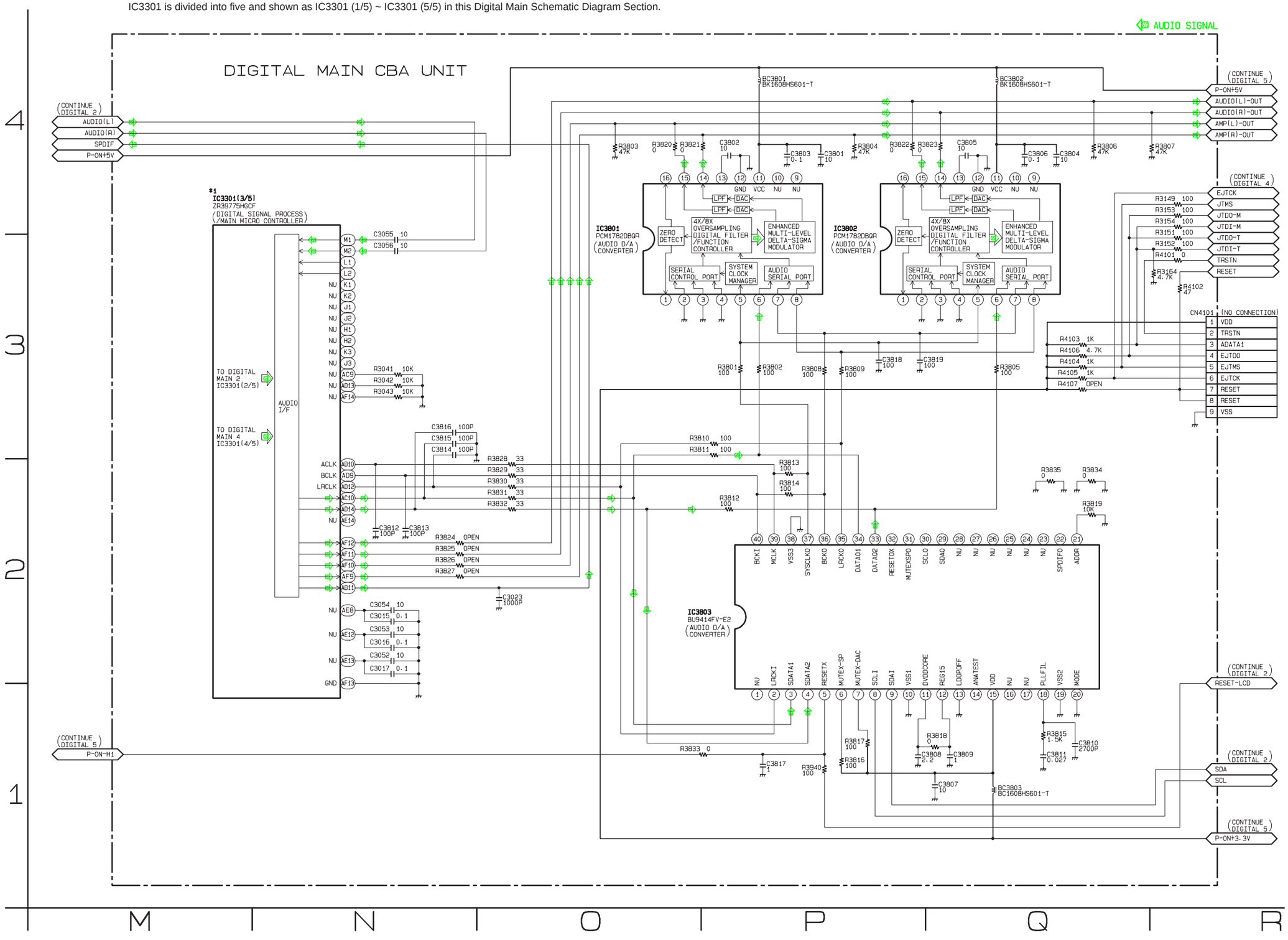
Digital Main 2 Schematic Diagram [TYPE A]

∗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.



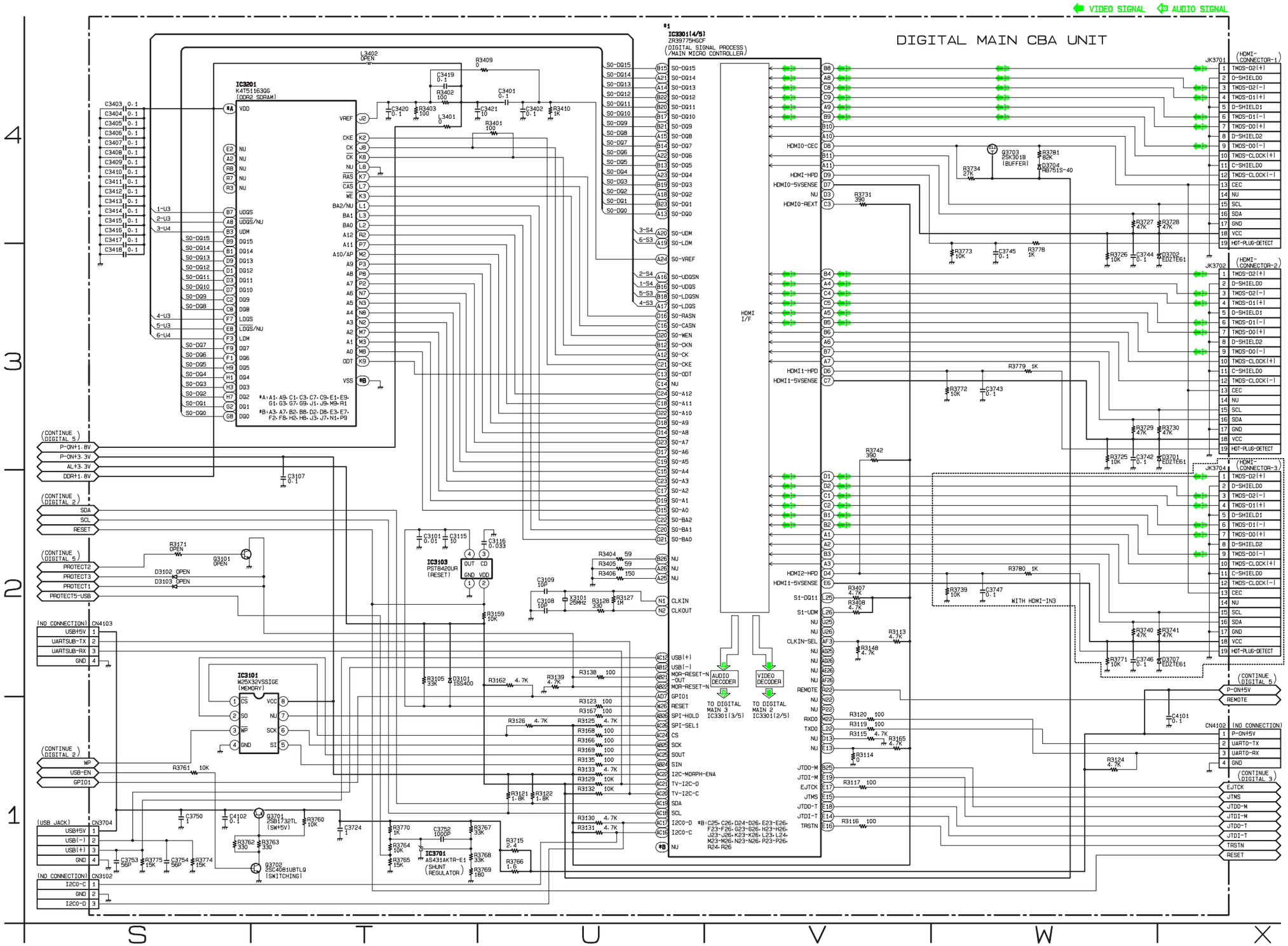
Digital Main 3 Schematic Diagram [TYPE A]

＊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.



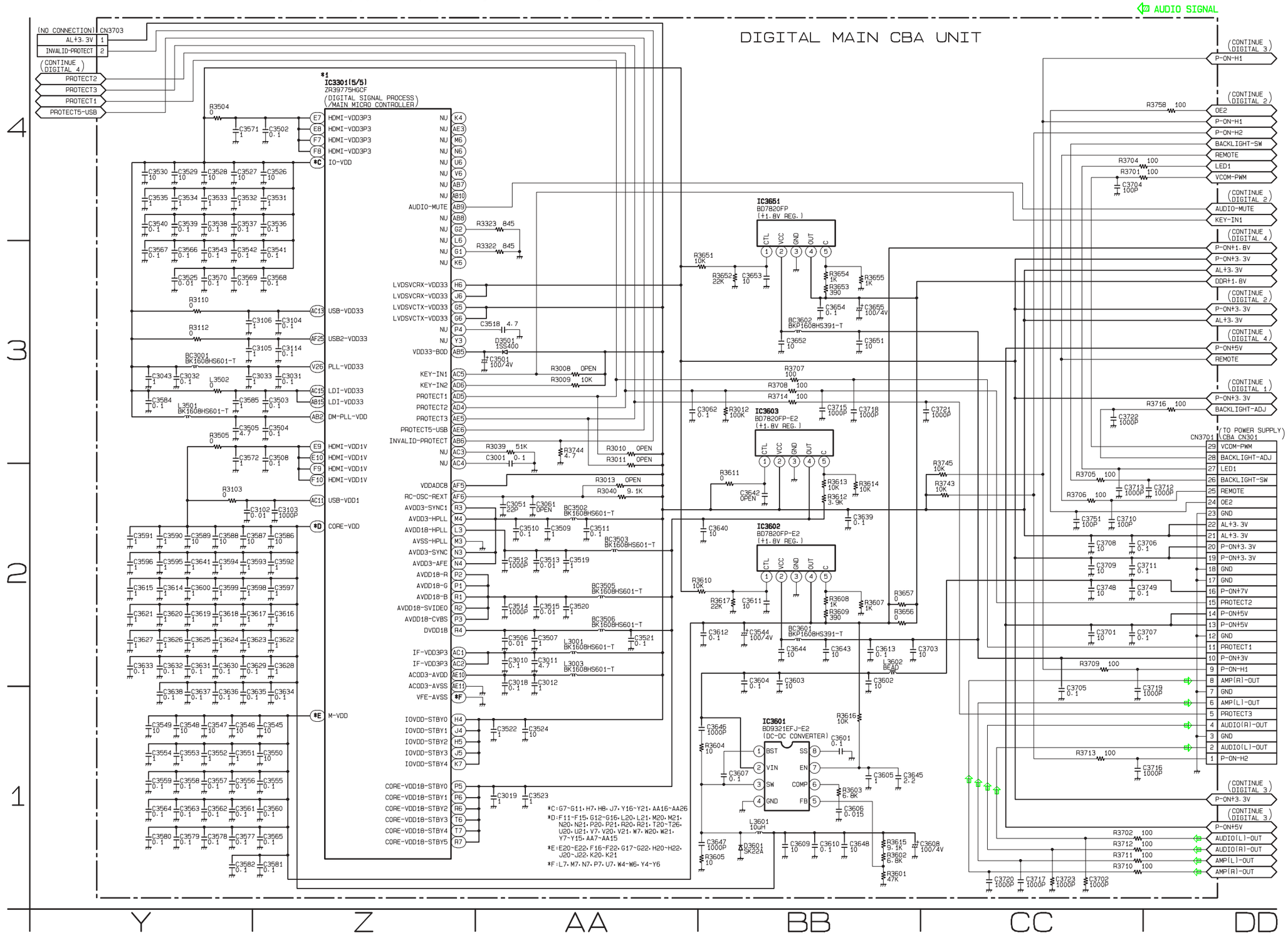
Digital Main 4 Schematic Diagram [TYPE A]

∗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.



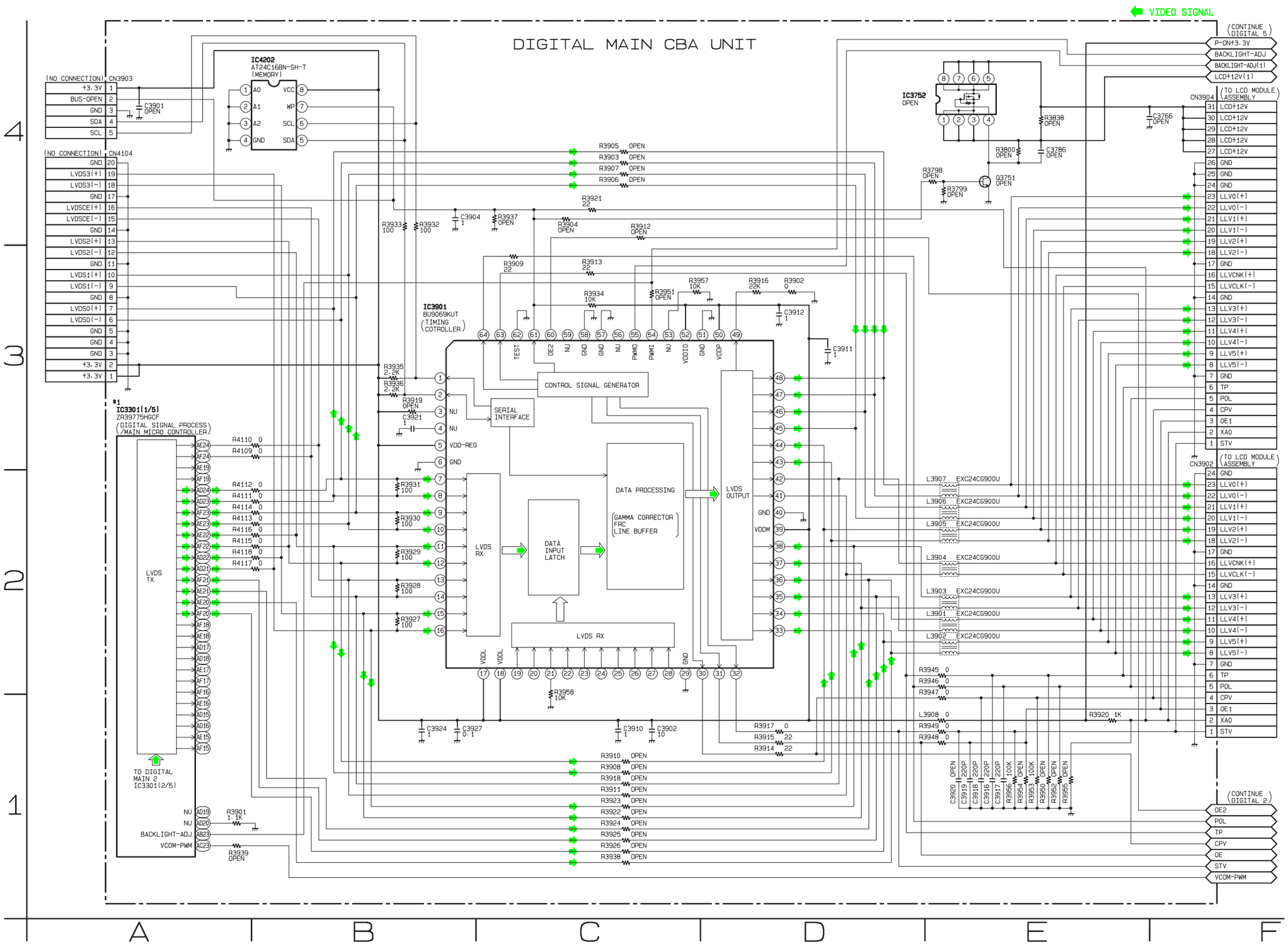
Digital Main 5 Schematic Diagram [TYPE A]

＊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.



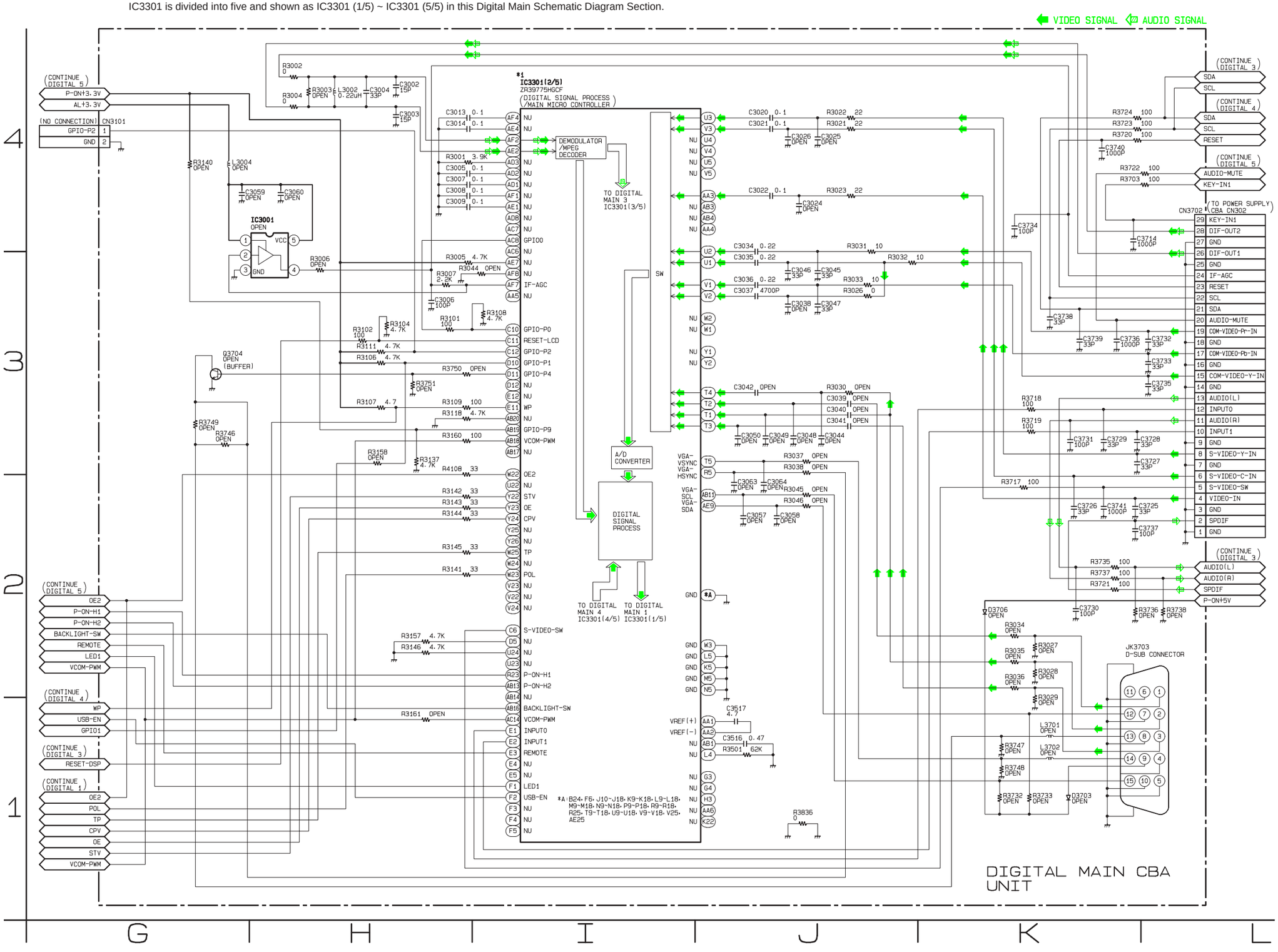
Digital Main 1 Schematic Diagram [TYPE B, TYPE C]

＊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.



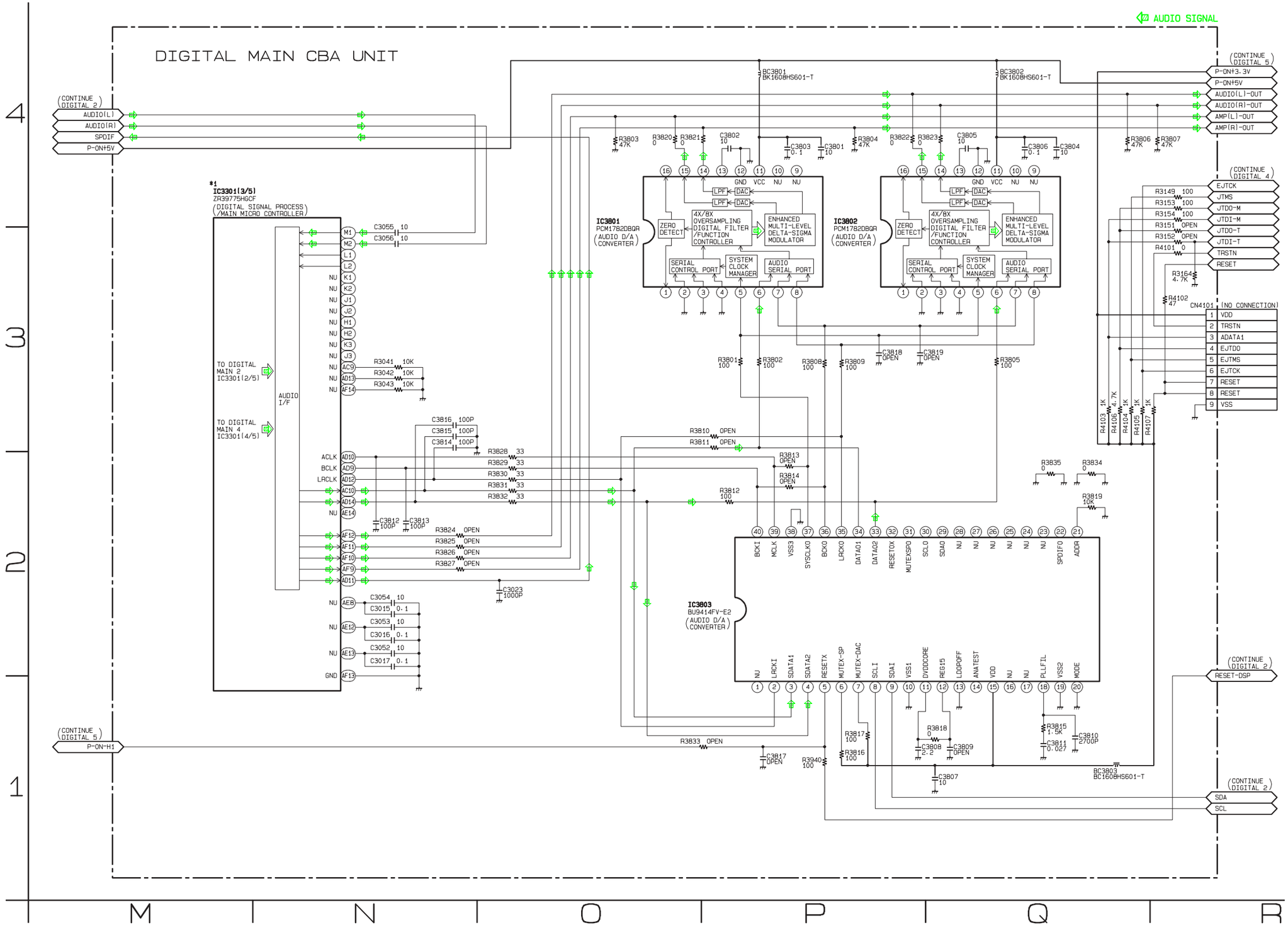
Digital Main 2 Schematic Diagram [TYPE B, TYPE C]

∗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.



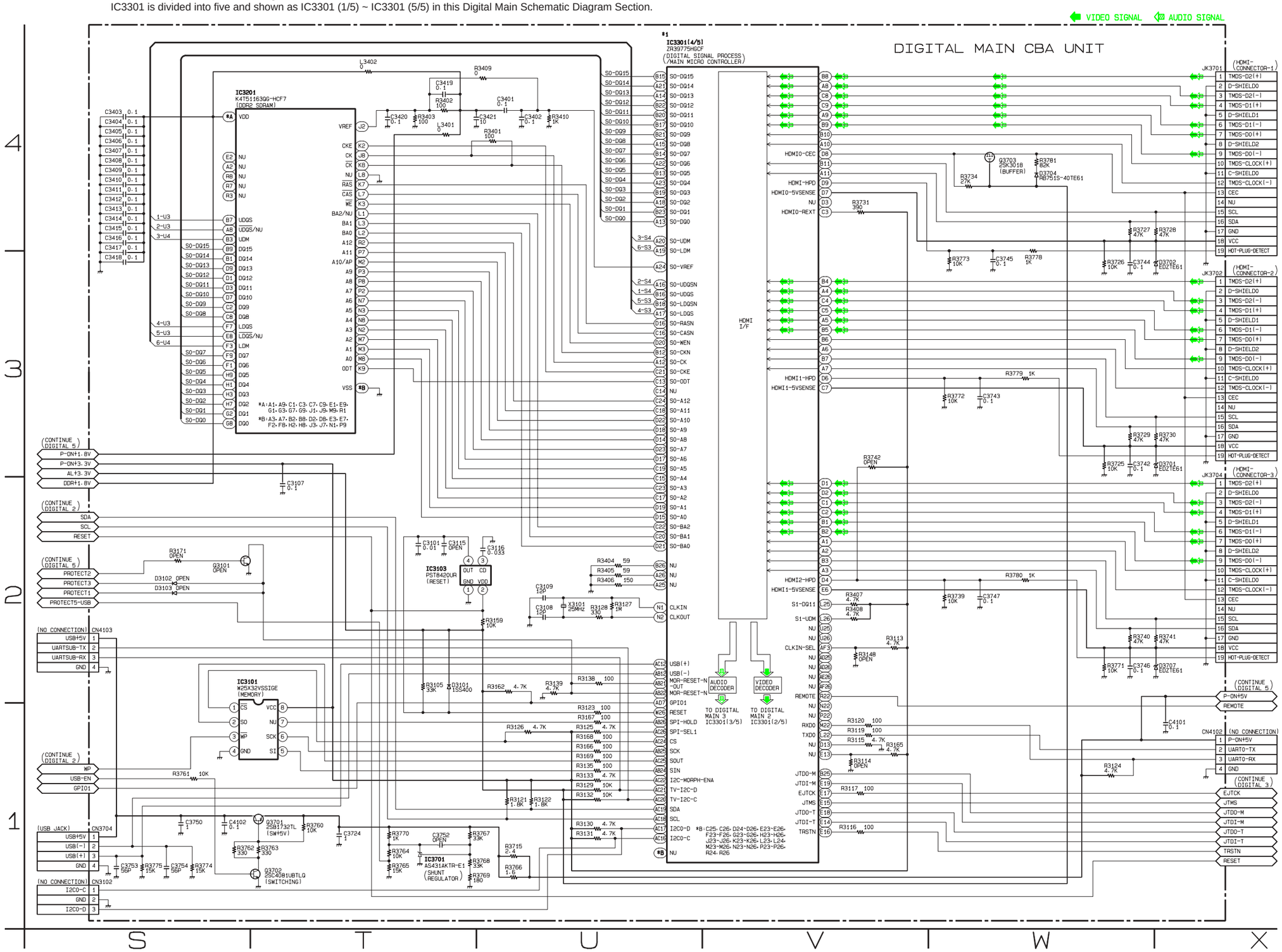
Digital Main 3 Schematic Diagram [TYPE B, TYPE C]

＊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.



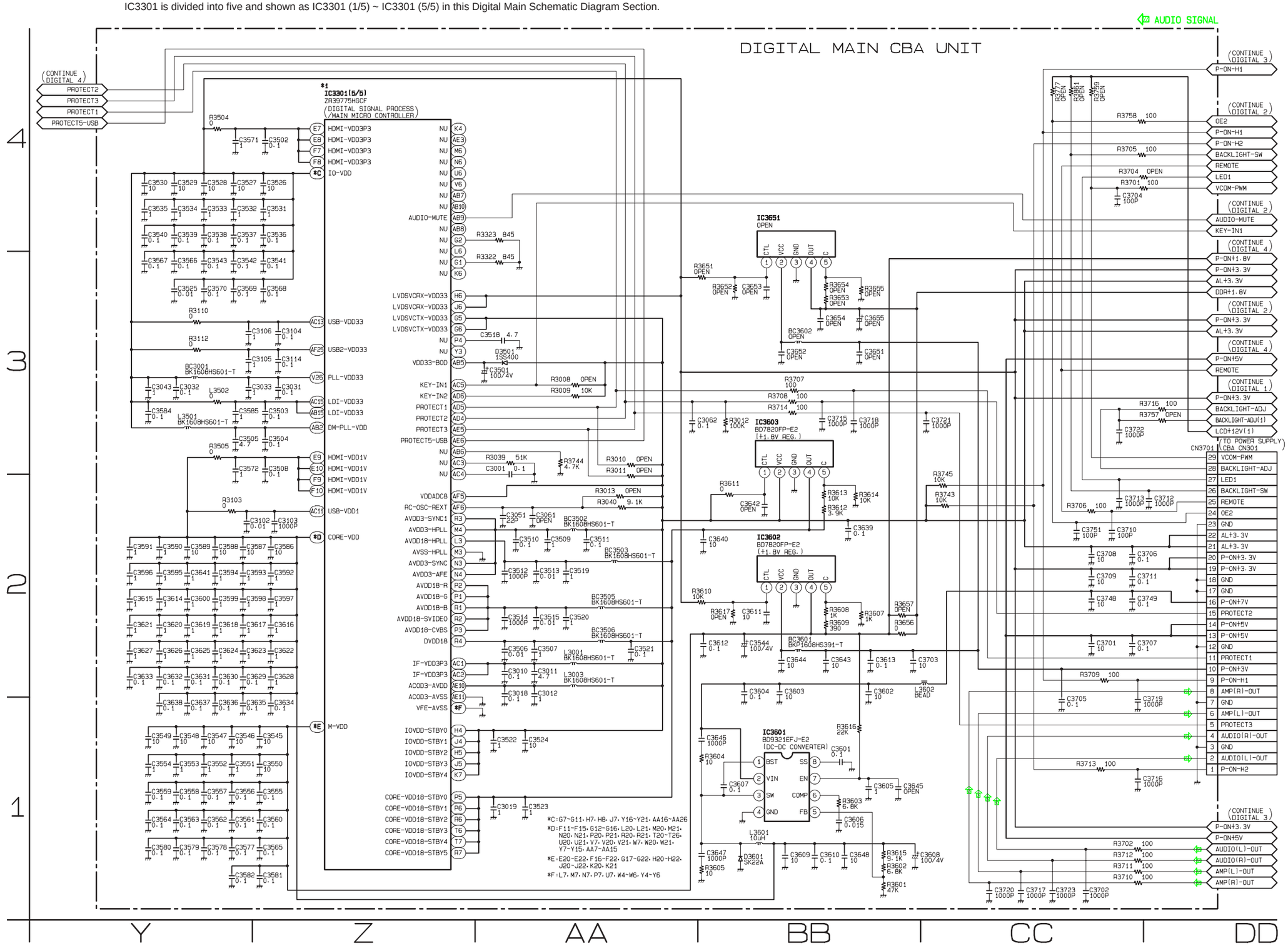
Digital Main 4 Schematic Diagram [TYPE B, TYPE C]

∗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 [TYPE B, TYPE C]

∗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.



Power Supply CBA & Jack CBA Top View

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.

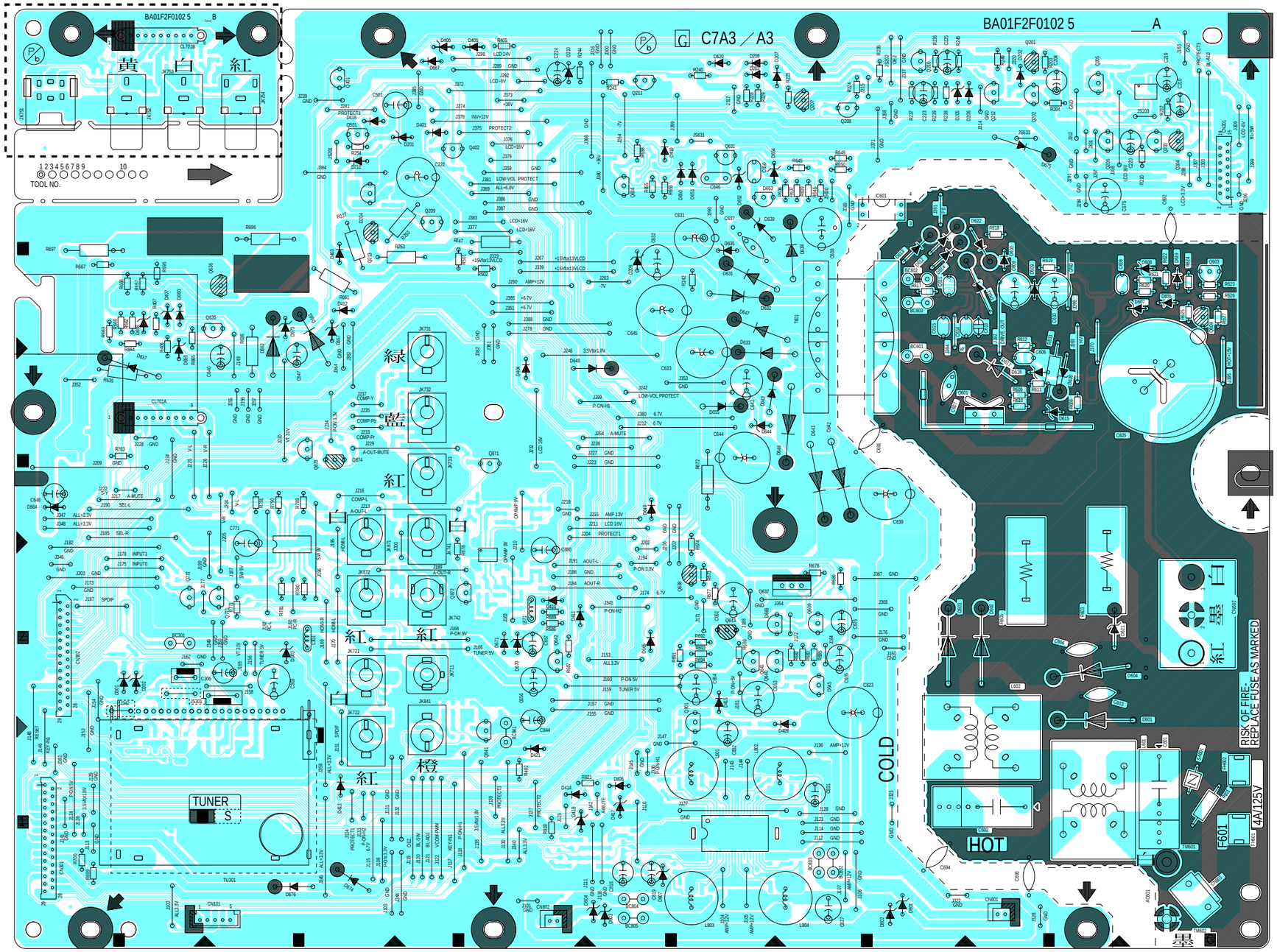
4A/125V

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.

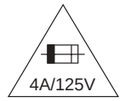
Jack CBA

Power Supply CBA



Power Supply CBA & Jack CBA Bottom View

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.



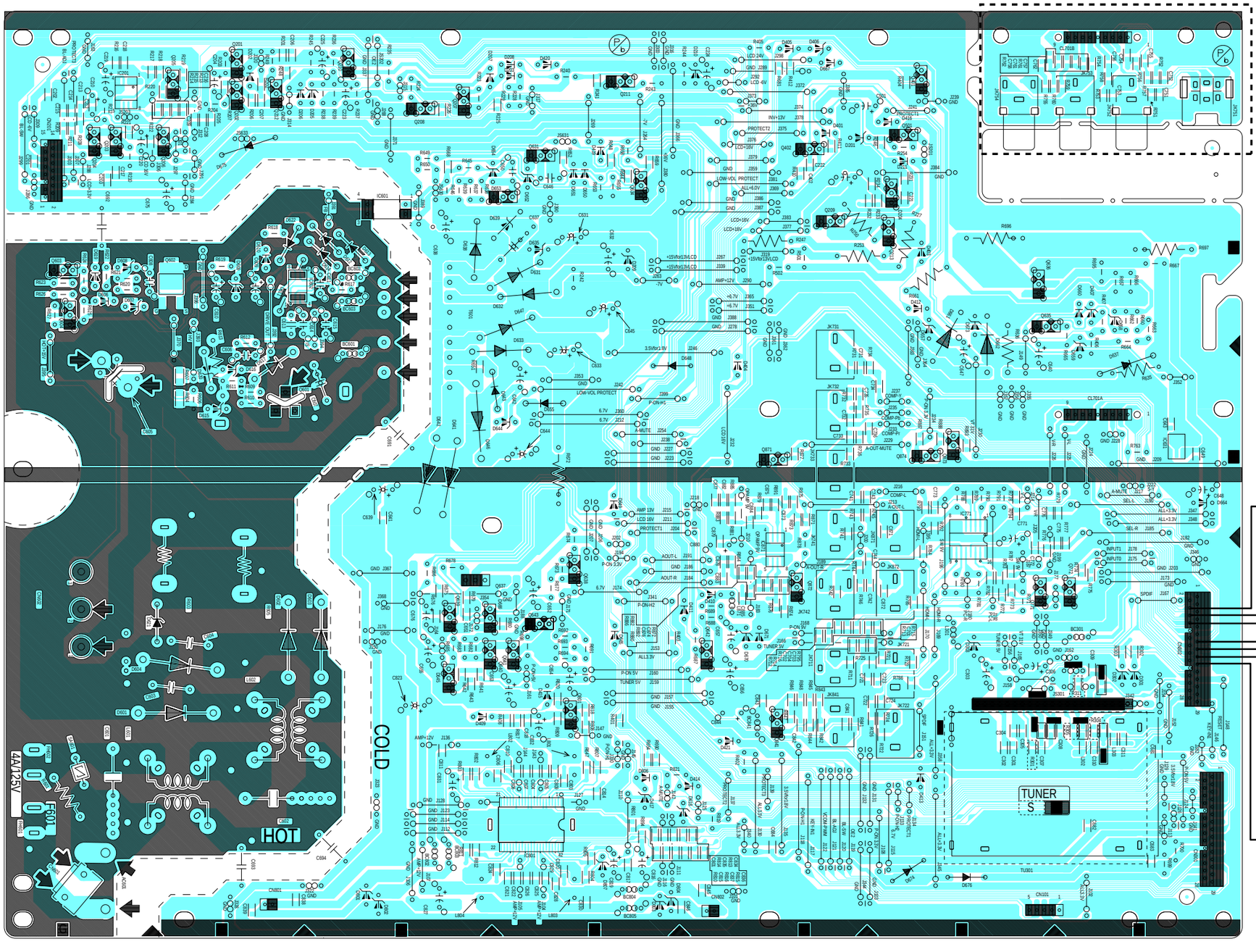
CAUTION ! : For continued protection against risk of fire, replace only with same type 4 A, 125V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 4A, 125V.

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.

Power Supply CBA

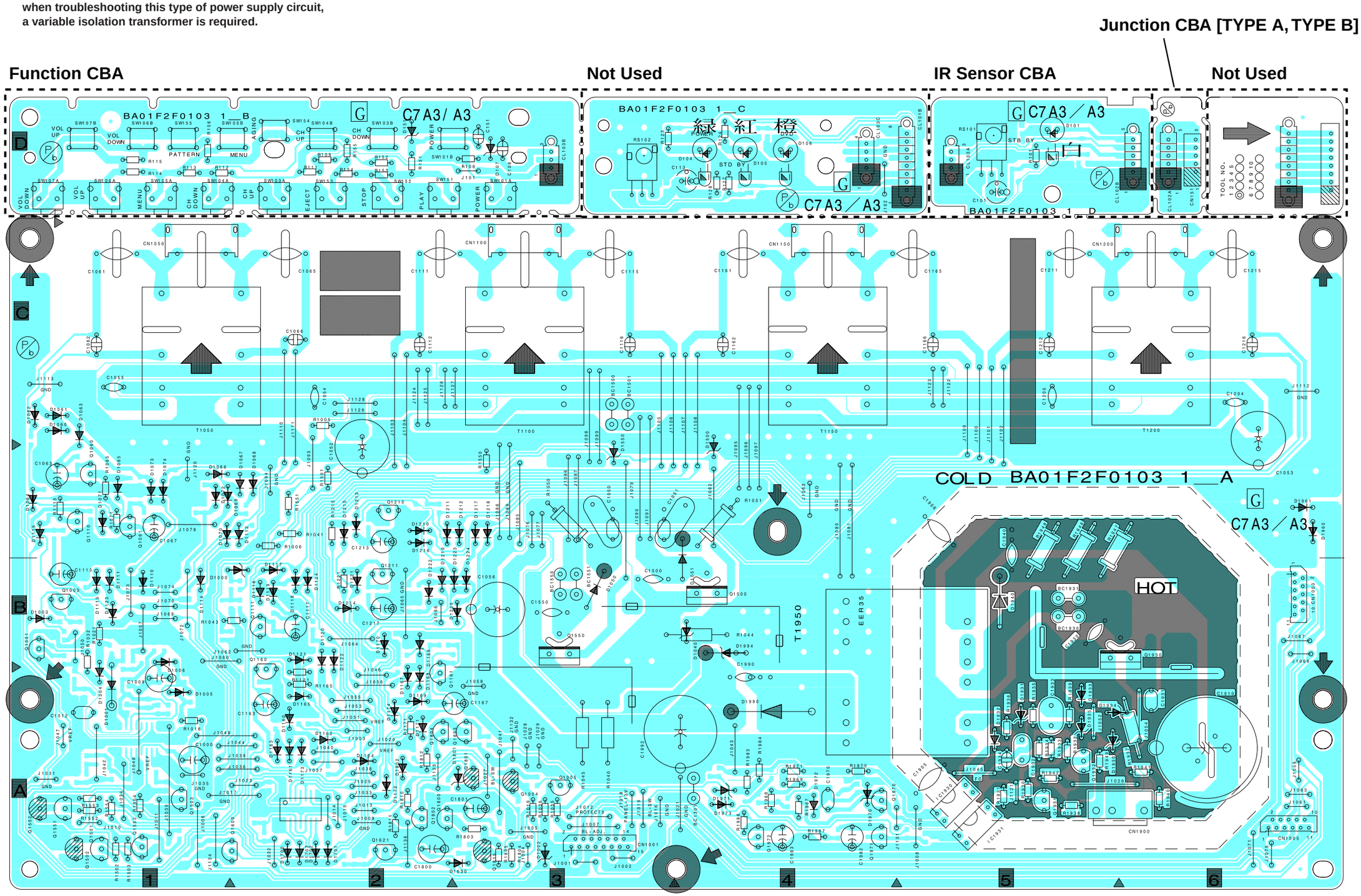
Jack CBA



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

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.

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

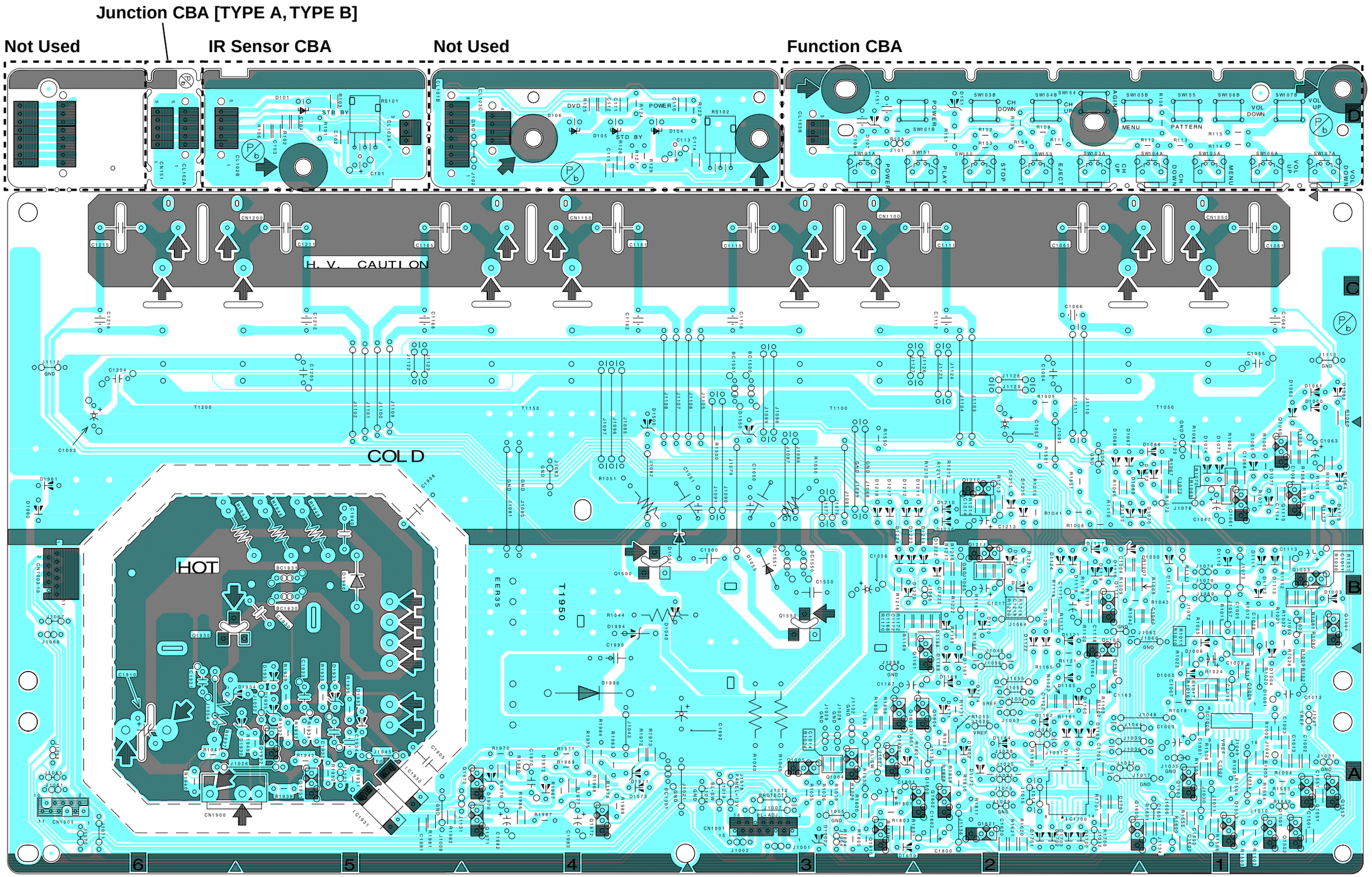


Inverter CBA

Inverter CBA, Function CBA, IR Sensor CBA & Junction CBA Bottom View

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.

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



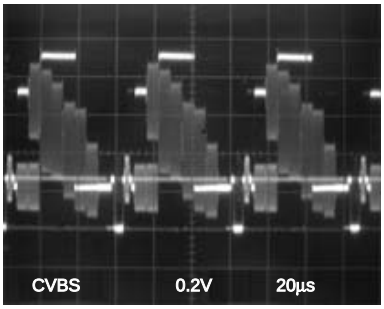
Inverter CBA

WAVEFORMS

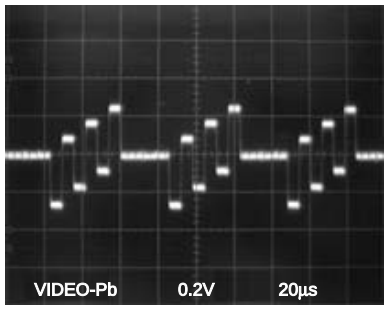
WF1 ~ WF7 = Waveforms to be observed at
Waveform check points.
(Shown in Schematic Diagram.)

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

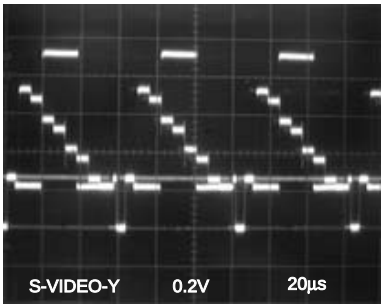
WF1 Pin 4 of CN302



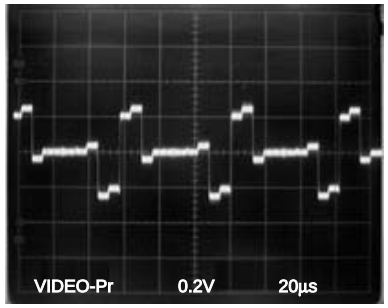
WF5 Pin 17 of CN302



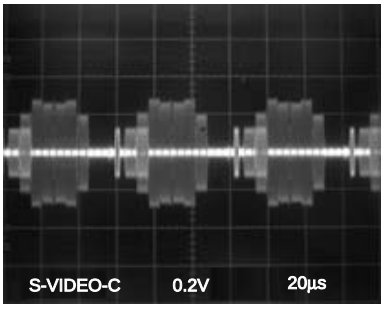
WF2 Pin 8 of CN302



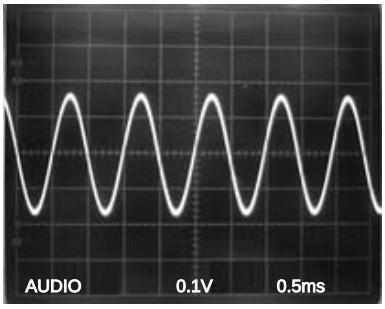
WF6 Pin 19 of CN302



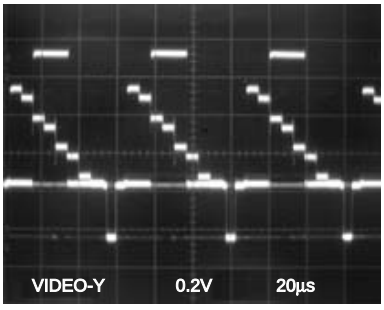
WF3 Pin 6 of CN302



WF7 Pin 13 of CN302

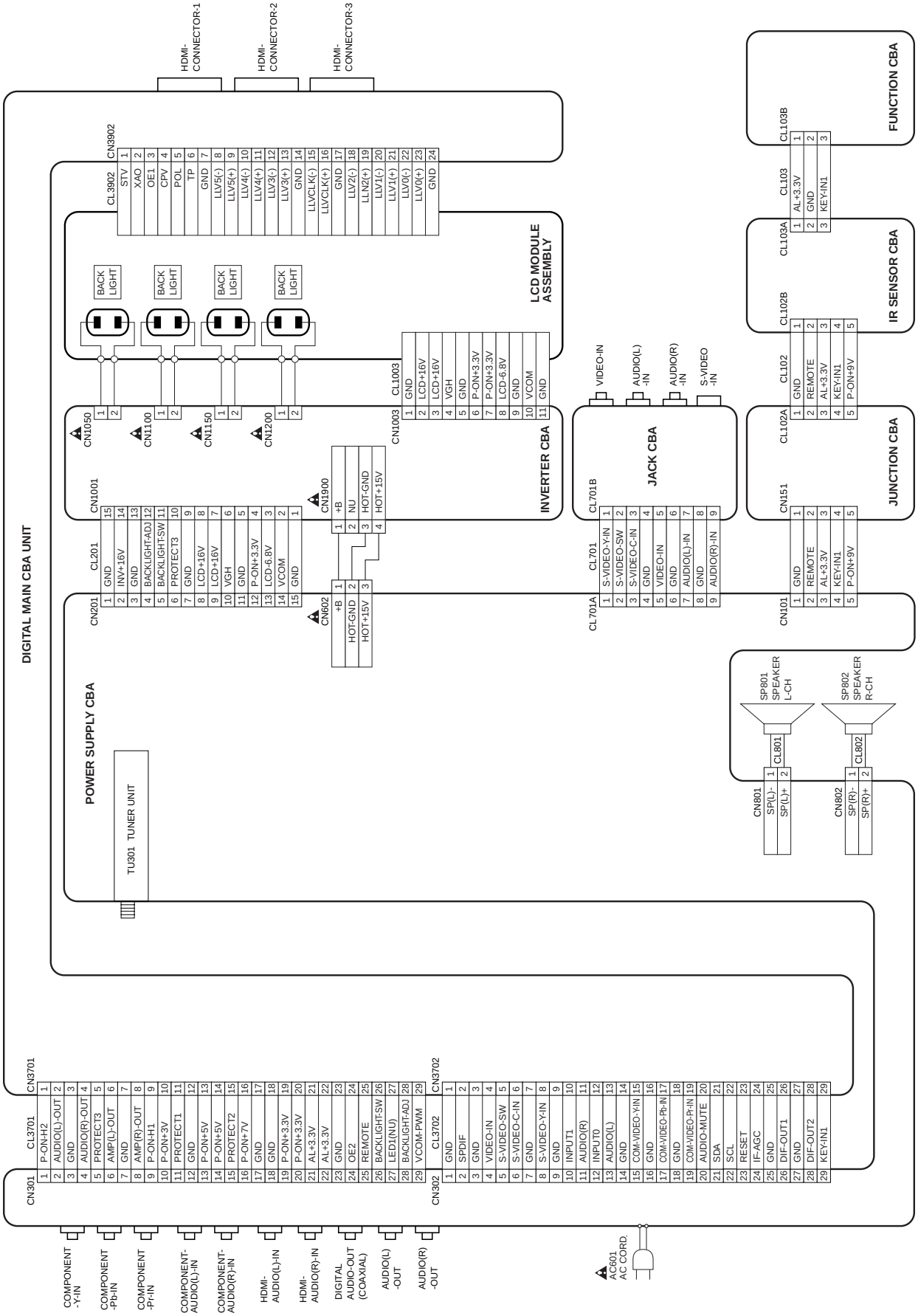


WF4 Pin 15 of CN302

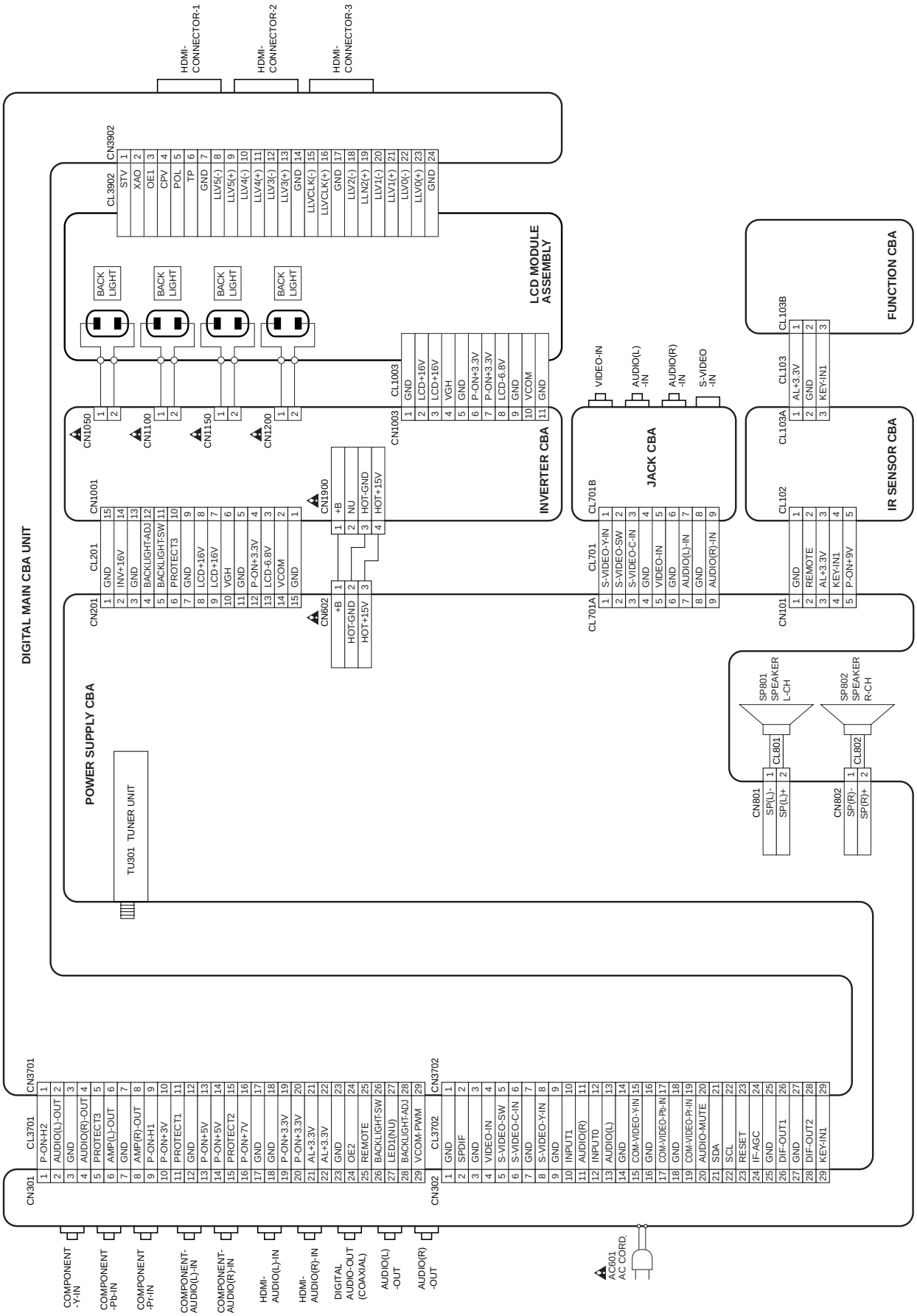


WIRING DIAGRAM

[TYPE A, TYPE B]



[TYPE C]

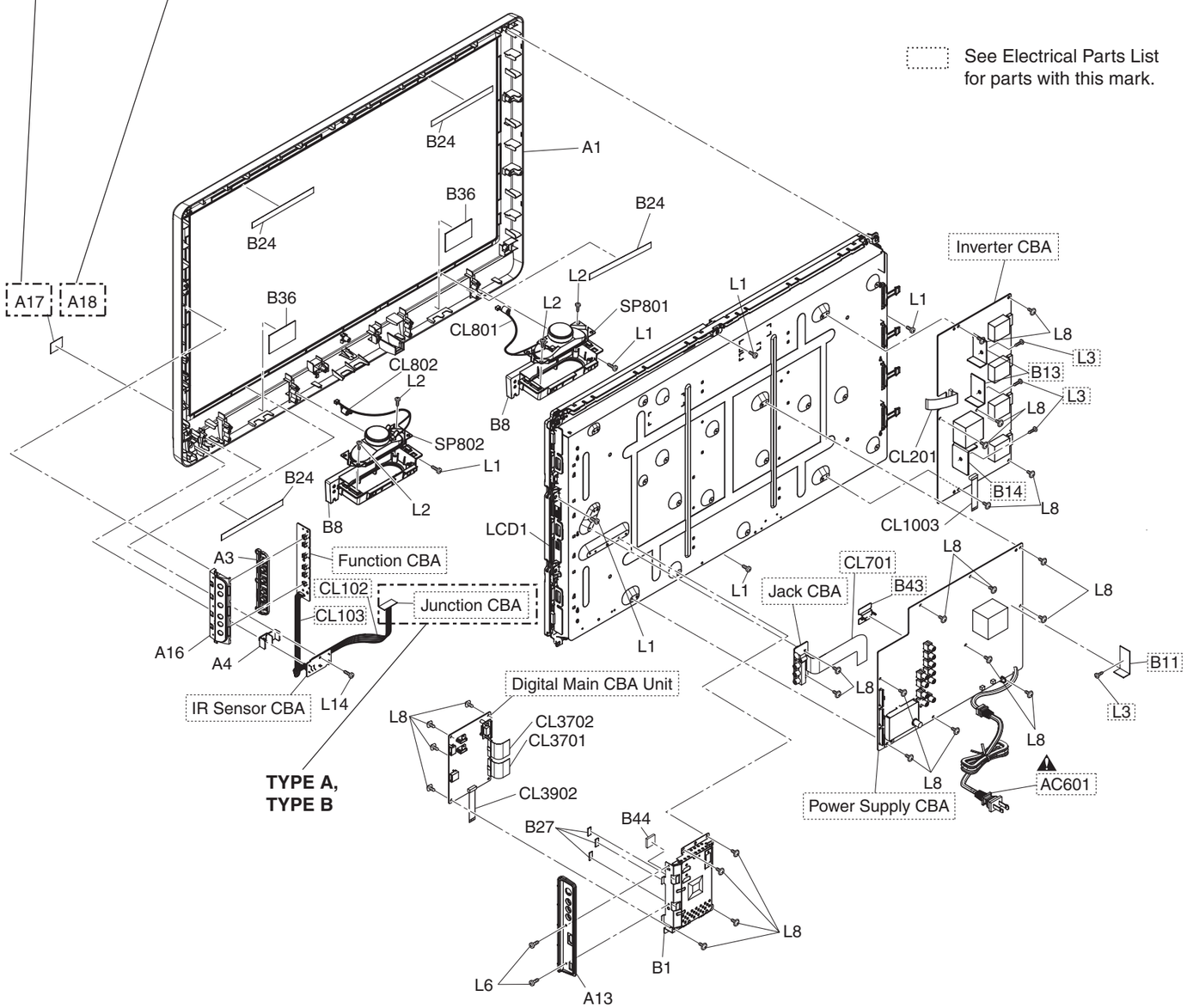

DIGITAL MAIN CBA UNIT
POWER SUPPLY CBA
TU301 TUNER UNIT
INVERTER CBA
LCD MODULE ASSEMBLY
JACK CBA
IR SENSOR CBA
FUNCTION CBA
HDMI-CONNECTOR-1
HDMI-CONNECTOR-2
HDMI-CONNECTOR-3
BACK LIGHT
VIDEO-IN
AUDIO(L)-IN
AUDIO(R)-IN
S-VIDEO-IN
SP801 SPEAKER L-CH
SP802 SPEAKER R-CH
AC601 AC CORD
COMPONENT-Y-IN
COMPONENT-Pb-IN
COMPONENT-Pr-IN
COMPONENT-AUDIO(L)-IN
COMPONENT-AUDIO(R)-IN
HDMI-AUDIO(L)-IN
HDMI-AUDIO(R)-IN
DIGITAL AUDIO-OUT (COAXIAL)
AUDIO(L)-OUT
AUDIO(R)-OUT

EXPLODED VIEWS

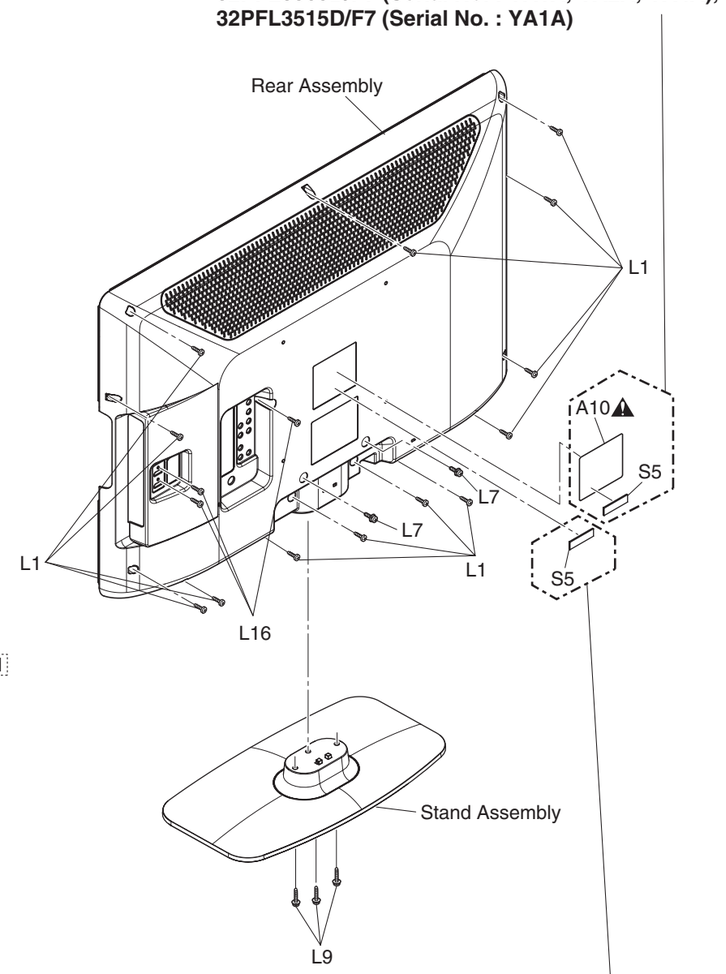
Cabinet

32PFL3505D/F7 (Serial No. : YA1A, YA2A, YA4A),
32PFL3515D/F7 (Serial No. : YA1A)

32PFL3505D/F7 (Serial No. : DS1A, DS2A, DS3A, DS4A, DS8A, DS9A)

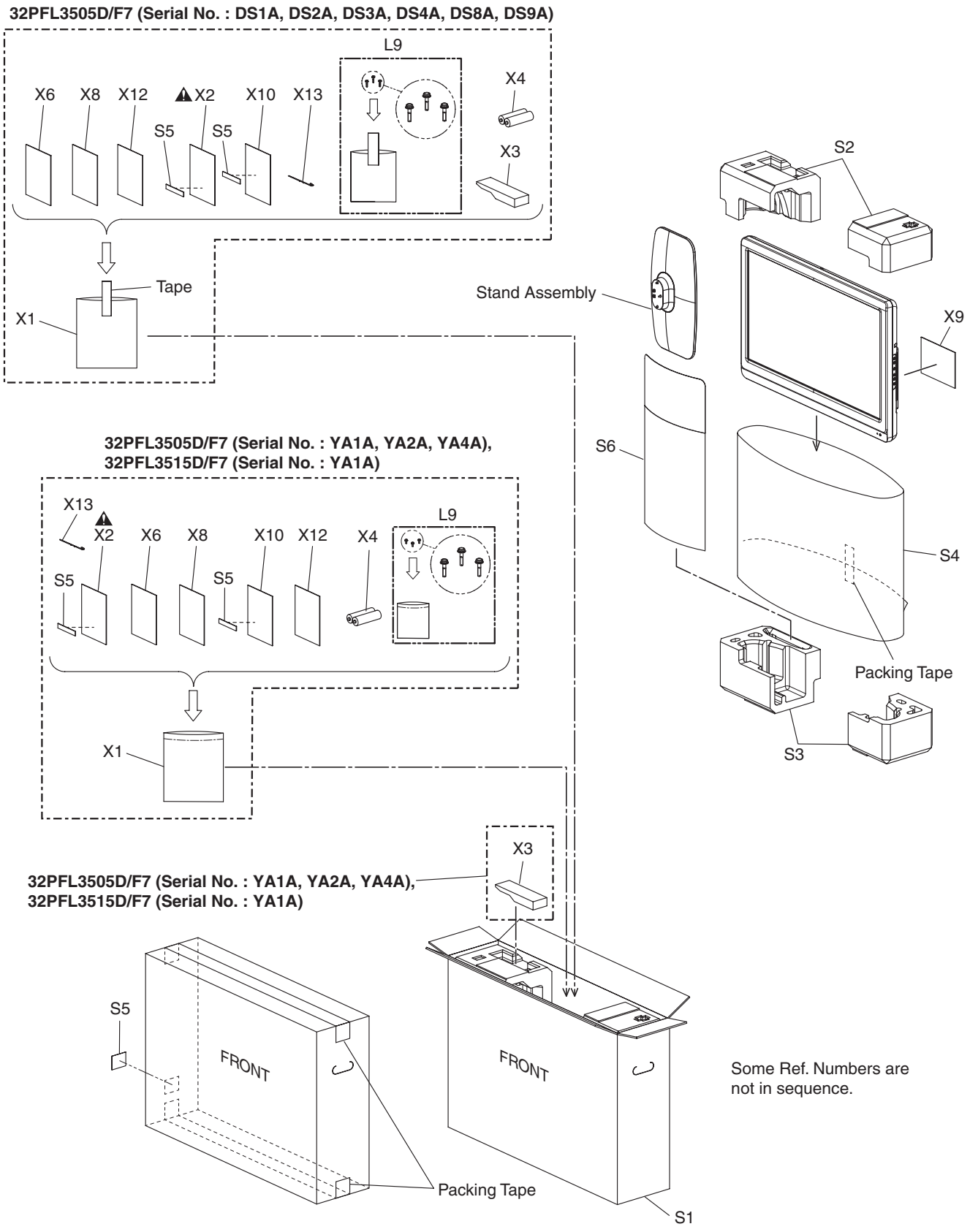


32PFL3505D/F7 (Serial No. : YA1A, YA2A, YA4A),
32PFL3515D/F7 (Serial No. : YA1A)



32PFL3505D/F7 (Serial No. : DS1A, DS2A, DS3A, DS4A, DS8A, DS9A)

Packing



Some Ref. Numbers are not in sequence.

PARTS LIST [32PFL3505D/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.
	STAND ASSEMBLY A91F2UH	1ESA19912
	REAR ASSEMBLY A01F2UH	1ESA23041
A1	FRONT CABINET A91F2UH	1EM023525
A3	FUNCTION KNOB A91H2UH	1EM222865
A4	SENSOR LED LENS A91H2UH	1EM325697
A13	JACK HOLDER A01F2UH	1EM124273
A16	KNOB FRAME A01F2UH	1EM327217
A18	ENERGY STAR LABEL A91F2UH	----------
B1	SHIELD BOX A01F2UH	1EM224323
B8	SPEAKER HOLDER A91F2UH	1EM123393E
B24	CLOTH 10X150XT1.0	1EM421092
B27	GASKET A8AF0UH	1EM425861
B36	CLOTH(30X50XT1.0) 30X50XT1.0	1EM429138
B44	THERMOSTAR TMS-L-2(12*12HC)	XK10000X4003
CL201	WIRE ASSEMBLY 15PIN FFC 15PIN 140MM	WX1A94F0-104
CL801	WIRE ASSEMBLY 2PIN 2PIN/310MM/CORE	WX1A01F2-004
CL802	WIRE ASSEMBLY 2PIN 2PIN/110MM/CORE	WX1A01F2-003
CL1003	WIRE ASSEMBLY 11PIN FFC 11PIN 129MM	WX1A91F6-101
CL3701	WIRE ASSEMBLY 29PIN FFC 29PIN 50MM	WX1A94F0-101
CL3702	WIRE ASSEMBLY 29PIN FFC 29PIN 50MM	WX1A94F0-101
CL3902	WIRE ASSEMBLY 24PIN FFC 24PIN 117.5MM	WX1A91F6-102
L1	SCREW P-TIGHT M4X14 BIND HEAD+BLK	GBHP4140
L2	SCREW P-TIGHT 3X10 BIND HEAD+	GBHP3100
L6	SCREW S-TIGHT M3X8 BIND HEAD+	GBHS3080
L7	DOUBLE SEMS SCREW M4X10 + BLK	FPH34100
L8	ASSEMBLED SCREW (D9 M3X6) A71F0UH	1EM424392B
L14	SCREW P-TIGHT M3X8 BIND HEAD+ BLK	GBHP3080
L16	SCREW TAP TIGHT M3X10 BIND HEAD+BLK NI	GBHS3100
LCD1	LCD MODULE CMO 8BIT A GRADE	UJ32MXB
SP801	SPEAKER MAGNETIC S0412F06A	DSD0809XQ006
SP802	SPEAKER MAGNETIC S0412F06A	DSD0809XQ006
PACKING		
S1	CARTON A01F2UH	1EM430617
S2	STYROFOAM TOP A91F2UH	1EM024025
S3	STYROFOAM BOTTOM A91F2UH	1EM024026
S4	SET BAG (900X850) A8AFFUH	1EM324904A
S5	SERIAL NO. LABEL A01P0UH	----------
S6	STAND BAG A94F0UH	1EM428757
ACCESSORIES		
L9	STAND SCREW KIT A91F2UH	1ESA19986
X1	BAG POLYETHYLENE 235X365XT0.03	0EM408420A
X2⚠	OWNERS MANUAL A01F2UH	1EMN25539
X3	REMOTE CONTROL TRANSMITTER YKF259-001	URMT34JHG001
X4	BATTERY R03-B500/01S	XB0M451CZB01
X6	QUICK START GUIDE A01F2UH	1EMN25660
X8	CHILD SAFETY SHEET A91H2UH	1EMN24526
X9	CONNECTION GUIDE A91F2UH	1EM325921B
X10	REGISTRATION CARD(PHILIPS) A01F2UH	1EMN25799B
X12	WALL MOUNT INSTRUCTION A01F2UH	1EMN25659
X13	CABLE MANAGEMENT TIE(BLACK) A01F2UH	1EM431197

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:

1. Parts that are not assigned part numbers (---------) are not available.
2. 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	A01F2MMA-006

MPW CBA

Ref. No.	Description	Part No.
	MPW CBA Consists of the following:	A01F2MPWS001
	POWER SUPPLY CBA(MPW-A) JACK CBA(MPW-B)	---------- ----------

POWER SUPPLY CBA(MPW-A)

Ref. No.	Description	Part No.
	POWER SUPPLY CBA(MPW-A) Consists of the following:	----------
	CAPACITORS	
C201	CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V	CHD1EZ30F104
C202	CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V	CHD1EZ30F104
C203	CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V	CHD1EZ30F104
C204	ELECTROLYTIC CAP. 2.2μF/50V M	CE1JMASDL2R2
C207	CHIP CERAMIC CAP.(1608) B K 0.1μF/16V	CHD1CK30B104
C210	ELECTROLYTIC CAP. 22μF/50V M	CE1JMASDL220
C216	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C217	CHIP CERAMIC CAP.(1608) B K 0.1μF/16V	CHD1CK30B104
C218	CHIP CERAMIC CAP.(1608) B K 1μF/25V	CHD1EK30B105
C219	ELECTROLYTIC CAP. 47μF/25V M	CE1EMASDL470
C221	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C222	ELECTROLYTIC CAP. 470μF/25V M	CE1EMASDL471
C223	ELECTROLYTIC CAP. 22μF/50V M	CE1JMASDL220
C224	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C302	CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V	CHD1EZ30F104
C303	ELECTROLYTIC CAP. 330μF/10V M	CE1AMASDL331
C305	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C306	ELECTROLYTIC CAP. 1μF/50V M	CE1JMASDL1R0
C307	CHIP CERAMIC CAP.(1608) CH J 47pF/50V	CHD1JJ3CH470
C308	CHIP CERAMIC CAP.(1608) CH J 47pF/50V	CHD1JJ3CH470
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
C501	ELECTROLYTIC CAP. 100μF/25V M	CE1EMASDL101
C601⚠	CAP METALIZED FILM 0.22μF/300V K 3.5MM	CT2F224DC004
C602⚠	CAP METALIZED FILM 0.22μF/300V K 3.5MM	CT2F224DC004
C605	CAP ELECTROLYTIC 470μF/200V M	CA2D471DYG07
C606	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
C609	ELECTROLYTIC CAP. 47μF/50V M	CE1JMASDL470
C610	ELECTROLYTIC CAP. 100μF/50V M	CE1JMASDL101
C611	CAP CERAMIC (AX) 0.1μF/50V/F/Z	CA1J104TU062
C613	CAP CERAMIC (AX) 33pF/50V/CH/J	CA1J330TU059
C614	CAP CERAMIC (AX) 0.022μF/50V/B/K	CA1J223TU061
C615	CAP CERAMIC (AX) 3300pF/50V/B/K	CA1J332TU061
C631	ELECTROLYTIC CAP. 1000μF/25V M	CE1EMZNDL102
C632	ELECTROLYTIC CAP. 220μF/25V M	CE1EMASDL221
C633	CAP ALUMINUM ELECTOLYTIC 2200μF/6.3V M	CE0KMZNDL222
C637	CERAMIC CAP. 1500pF/2KV	CA3D152PAN04
C638	ELECTROLYTIC CAP. 220μF/50V M	CE1JMASDL221
C639	ELECTROLYTIC CAP. 1000μF/35V M	CE1GMZADL102
C640	ELECTROLYTIC CAP. 1μF/50V M	CE1JMASDL1R0
C642	ELECTROLYTIC CAP. 1μF/50V M	CE1JMASDL1R0
C643	CHIP CERAMIC CAP.(1608) B K 1μF/10V	CHD1AK30B105
C644	ELECTROLYTIC CAP 3300μF/16V M	CE1CMZNDL332
C645	CAP ALUMINUM ELECTOLYTIC 2200μF/6.3V M	CE0KMZNDL222
C646	POLYESTER FILM CAP. (PB FREE) 0.0022μF/100V J	CA2A222DT018
C648	ELECTROLYTIC CAP. 100μF/10V M	CE1AMASDL101
C649	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C650	POLYESTER FILM CAP. (PB FREE) 0.022μF/100V J	CA2A223DT018
C652	ELECTROLYTIC CAP. 1000μF/6.3V M	CE0KMASDL102
C653	ELECTROLYTIC CAP. 220μF/10V M	CE1AMASDL221
C654	ELECTROLYTIC CAP. 220μF/10V M	CE1AMASDL221
C656	ELECTROLYTIC CAP. 100μF/16V M	CE1CMASDL101
C657	ELECTROLYTIC CAP. 22μF/50V M	CE1JMASDL220
C676	ELECTROLYTIC CAP. 2.2μF/50V M	CE1JMASDL2R2
C681	CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V	CHD1EZ30F104
C682	CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V	CHD1EZ30F104
C683	CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V	CHD1EZ30F104
C684	CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V	CHD1EZ30F104
C691⚠	SAFTY CAP. 1000pF/250V KX	CA2E102MR101
C693⚠	SAFTY CAP. 1000pF/250V KX	CA2E102MR101
C723	CHIP CERAMIC CAP.(1608) B K 2.2μF/10V	CHD1AK30B225
C724	CHIP CERAMIC CAP.(1608) B K 2.2μF/10V	CHD1AK30B225
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
C734	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
C735	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
C736	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
C743	CHIP CERAMIC CAP.(1608) B K 2.2μF/10V	CHD1AK30B225
C744	CHIP CERAMIC CAP.(1608) B K 2.2μF/10V	CHD1AK30B225
C771	ELECTROLYTIC CAP. 100μF/16V M	CE1CMASDL101
C772	CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V	CHD1EZ30F104
C775	CHIP CERAMIC CAP.(1608) CH J 100pF/50V	CHD1JJ3CH101
C776	CHIP CERAMIC CAP.(1608) CH J 100pF/50V	CHD1JJ3CH101
C801	CHIP CERAMIC CAP.(1608) B K 1μF/25V	CHD1EK30B105
C803	CHIP CERAMIC CAP.(1608) B K 0.47μF/25V	CHD1EK30B474

Ref. No.	Description	Part No.
C804	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C805	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C806	CHIP CERAMIC CAP.(1608) B K 0.47μF/25V	CHD1EK30B474
C807	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C808	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C809	CHIP CERAMIC CAP.(1608) B K 1μF/25V	CHD1EK30B105
C810	CHIP CERAMIC CAP.(1608) B K 1μF/25V	CHD1EK30B105
C814	CHIP CERAMIC CAP.(1608) B K 1μF/25V	CHD1EK30B105
C815	CHIP CERAMIC CAP.(1608) B K 1μF/25V	CHD1EK30B105
C816	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C817	CHIP CERAMIC CAP.(1608) B K 1μF/25V	CHD1EK30B105
C818	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C819	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C820	CHIP CERAMIC CAP.(1608) B K 0.47μF/25V	CHD1EK30B474
C821	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C822	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C823	ELECTROLYTIC CAP. 1000μF/25V M	CE1EMZNDL102
C824	CHIP CERAMIC CAP.(1608) B K 0.47μF/25V	CHD1EK30B474
C825	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C826	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C827	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C828	CHIP CERAMIC CAP.(1608) B K 1μF/25V	CHD1EK30B105
C829	CHIP CERAMIC CAP.(1608) B K 1μF/25V	CHD1EK30B105
C831	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C834	CHIP CERAMIC CAP.(1608) B K 0.47μF/16V	CHD1CK30B474
C835	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C836	CHIP CERAMIC CAP.(1608) B K 0.47μF/16V	CHD1CK30B474
C837	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C838	CHIP CERAMIC CAP.(1608) CH J 470pF/50V	CHD1JJ3CH471
C839	CHIP CERAMIC CAP.(1608) CH J 470pF/50V	CHD1JJ3CH471
C841	CHIP CERAMIC CAP. F Z 1μF/10V	CHD1AZ30F105
C842	CHIP CERAMIC CAP. F Z 1μF/10V	CHD1AZ30F105
C843	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C844	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C845	CHIP CERAMIC CAP.(1608) CH J 470pF/50V	CHD1JJ3CH471
C846	CHIP CERAMIC CAP.(1608) CH J 470pF/50V	CHD1JJ3CH471
C871	CHIP CERAMIC CAP.(1608) B K 3300pF/50V	CHD1JK30B332
C872	CHIP CERAMIC CAP.(1608) B K 3300pF/50V	CHD1JK30B332
C873	CHIP CERAMIC CAP.(1608) B K 2.2μF/10V	CHD1AK30B225
C874	CHIP CERAMIC CAP.(1608) B K 2.2μF/10V	CHD1AK30B225
C875	CHIP CERAMIC CAP.(1608) CH J 100pF/50V	CHD1JJ3CH101
C876	CHIP CERAMIC CAP.(1608) CH J 100pF/50V	CHD1JJ3CH101
C877	CHIP CERAMIC CAP.(1608) B K 6800pF/50V	CHD1JK30B682
C878	CHIP CERAMIC CAP.(1608) B K 6800pF/50V	CHD1JK30B682
C879	CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V	CHD1EZ30F104
C880	ELECTROLYTIC CAP. 100μF/16V M	CE1CMASDL101
C882	CHIP CERAMIC CAP.(1608) B K 2.2μF/10V	CHD1AK30B225
C883	CHIP CERAMIC CAP.(1608) B K 2.2μF/10V	CHD1AK30B225
C884	CHIP CERAMIC CAP.(1608) B K 2.2μF/10V	CHD1AK30B225
C885	CHIP CERAMIC CAP.(1608) B K 2.2μF/10V	CHD1AK30B225
CONNECTORS		
CN101	242 SERIES CONNECTOR 224202105W1	J322C05TG001
CN201	FFC CONNECTOR 15P IMSA-9615S-15A-PP-A	JC96J15ER007
CN301	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN302	FFC CONNECTOR IMSA-9615S-29A-PP-A	JC96J29ER007
CN602⚠	WIRE ASSEMBLY 3PIN 3PIN 145MM RED BLACK	WX1A01F0-201
CN801	PH CONNECTOR TOP 2P B2B-PH-K-S (LF)(SN)	J3PHC02JG029
CN802	PH CONNECTOR TOP 2P B2B-PH-K-S (LF)(SN)	J3PHC02JG029
DIODES		
D202	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133

Ref. No.	Description	Part No.
D203	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D204	IC SHUNT REGULATOR KIA431-AT/P	NSZBA0TJY036
D205	DIODE ZENER 24BSC-T26	NDTC024BST26
D206	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D207	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D208	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D209	DIODE ZENER 39BSB-T26	NDTB039BST26
D210	DIODE ZENER 6V2BSB-T26	NDTB6R2BST26
D211	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D401	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D404	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D405	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D406	DIODE ZENER 15BSB-T26	NDTB015BST26
D407	DIODE ZENER 10BSB-T26	NDTB010BST26
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	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D415	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D416	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D417	DIODE ZENER 3V9BSB-T26	NDTB3R9BST26
D418	DIODE ZENER 3V9BSB-T26	NDTB3R9BST26
D419	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D420	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D421	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D601⚠	DIODE GENERAL PURPOSE 1N5406-BU	NDLZ1N5406BU
D602⚠	DIODE GENERAL PURPOSE 1N5406-BU	NDLZ1N5406BU
D603⚠	DIODE GENERAL PURPOSE 1N5406-BU	NDLZ1N5406BU
D604⚠	DIODE GENERAL PURPOSE 1N5406-BU	NDLZ1N5406BU
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 FR103-B/P	NDWZ0FR103BP
D615⚠	DIODE ZENER 39BSB-T26	NDTB039BST26
D616⚠	DIODE ZENER 27BSB-T26	NDTB027BST26
D617	DIODE FAST RECOVERY FR103-B/P	NDWZ0FR103BP
D619	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D622⚠	DIODE FAST RECOVERY FR103-B/P	NDWZ0FR103BP
D631	DIODE FR154	NDLZ000FR154
D632	DIODE FR104-B	NDLZ000FR104
D633	DIODE FAST RECOVERY FR151-B/P	NDWZ0FR151BP
D635	DIODE ZENER 24BSB-T26	NDTB024BST26
D638	DIODE FR154	NDLZ000FR154
D639	DIODE ZENER 1ZB43BB	NDWZ0001ZB43
D641	SCHOTTKY BARRIER DIODE SB390	NDWZ000SB390
D642	SCHOTTKY BARRIER DIODE SB390	NDWZ000SB390
D643	DIODE FR104-B	NDLZ000FR104
D644	DIODE ZENER 6V2BSB-T26	NDTB6R2BST26
D645	SHUNT REGULATOR KIA431B-AT/P	NSZBA0TJY038
D646	DIODE SCHOTTKY SB360BH	NDWZ000SB360
D647	SCHOTTKY BARRIER DIODE SB140	NDWZ000SB140
D648	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
D652	DIODE ZENER 5V6BSB-T26	NDTB5R6BST26
D653	IC SHUNT REGULATOR KIA431-AT/PF5	NSZBB0TJY036
D654	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
D655	RECTIFIER DIODE 1N4005	NDQZ001N4005
D657	DIODE ZENER 33BSB-T26	NDTB033BST26
D658	DIODE ZENER 3V3BSB-T26	NDTB3R3BST26

Ref. No.	Description	Part No.
D659	DIODE ZENER 5V6BSA-T26	NDTA5R6BST26
D660	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D661	DIODE FR154	NDLZ000FR154
D662	DIODE FR154	NDLZ000FR154
D664	DIODE ZENER 4V7BSB-T26	NDTB4R7BST26
D665	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
D666	IC SHUNT REGULATOR KIA431-AT/P	NSZBA0TJY036
D670	DIODE ZENER 10BSB-T26	NDTB010BST26
D671	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
D676	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
D801	DIODE ZENER 20BSB-T26	NDTB020BST26
D802	DIODE ZENER 20BSB-T26	NDTB020BST26
D803	DIODE ZENER 20BSB-T26	NDTB020BST26
D804	DIODE ZENER 20BSB-T26	NDTB020BST26
	ICS	
IC201	IC TL3472CDR	NSZBA0TTY115
IC601⚠	PHOTO COUPLER LTV817MCF	NPECLTV817MF
IC602⚠	IC SWITING FA5571N-D1-TE1/SOP-8	QSCA0T0FD003
IC631	IC REGULATOR MM3123DPRE	QSCA0T0MM108
IC771	IC SWITCHING TC4052BF(ELNF)	QSZBA0TTS162
IC801	IC D-CLASS POWER AMPLIFER R2A15124FP/HSSOP/42	QSCA0T0HT006
IC871	IC OP AMP NJM4558M(TE1)-#ZZZB	QSZBA0TJR089
	COILS	
L301	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
L302	CHIP INDUCTOR LK1608R22K-T	LLACKB3TUR22
L303	CHIP INDUCTOR LK1608R22K-T	LLACKB3TUR22
L601⚠	COIL LINE FILTER ST0908ET28V-016	LLEG0Z0Y2008
L602⚠	COIL LINE FILTER ST0908ET28V-016	LLEG0Z0Y2008
L801	RADIAL LEAD INDUCTORS 33μH	LLARKGQTU330
L802	RADIAL LEAD INDUCTORS 33μH	LLARKGQTU330
L803	RADIAL LEAD INDUCTORS 33μH	LLARKGQTU330
L804	RADIAL LEAD INDUCTORS 33μH	LLARKGQTU330
L871	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
	TRANSISTORS	
Q201	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q202	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q203	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q204	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q205	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q207	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q208	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q209	TRANSISTOR 2SC2120-Y(TE2 F T)	QQSY2SC2120F
Q210	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q211	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q212	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q213	TRANSISTOR 2SA950-O (TE2 F T)	QQS002SA950F
Q401	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q402	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q501	TRANSISTOR 2SC2120-Y(TE2 F T)	QQSY2SC2120F
Q601⚠	FET MOS TK5A50D	QEWZTK5A50DQ
Q602⚠	FET POWER MOS SMD KHB1D0N60D-RTF/PMC	NF1ZKHB1D0N6
Q603	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q604	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q631	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q634	TRANSISTOR KTC3199-GR-AT/P	NQS4KTC3199P
Q635	TRANSISTOR 2SC2120-Y(TE2 F T)	QQSY2SC2120F
Q636	TRANSISTOR 2SA950-O (TE2 F T)	QQS002SA950F
Q637	NPN TRANSISTOR POWER 2SC4881F HFE MAX320	QQWZ2SC4881F
Q638	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q639	TRANSISTOR KTC3199-GR-AT/P	NQS4KTC3199P

Ref. No.	Description	Part No.
Q640	TRANSISTOR 2SC2120-Y(TE2 F T)	QQSY2SC2120F
Q641	TRANSISTOR 2SC2120-Y(TE2 F T)	QQSY2SC2120F
Q642	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q643	TRANSISTOR 2SA950-O (TE2 F T)	QQS002SA950F
Q771	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q772	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q801	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q841	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q871	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q872	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q873	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q874	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
	RESISTORS	
R201	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R202	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R204	RES CARBON FILM T 1/4W J 560 Ω	RCX4561T1001
R206	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R207	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R208	CHIP RES. 1/10W J 1 Ω	RRXAJR5Z01R0
R209	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R210	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R211	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R212	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R213	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R214	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R216	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R217	CHIP RES. 1/10W J 1.5k Ω	RRXAJR5Z0152
R218	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R219	CHIP RES. 1/10W J 15k Ω	RRXAJR5Z0153
R220	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R223	RES CARBON FILM T 1/4W J 3.3k Ω	RCX4332T1001
R224	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R225	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R226	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R227	RES. CARBON FILM J 1/2W J 3.9 Ω	RCX23R9T1003
R228	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R229	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R231	CHIP RES. 1/10W J 1.5k Ω	RRXAJR5Z0152
R232	CHIP RES. 1/10W F 11k Ω	RRXAFR5H1102
R233	CHIP RES. 1/10W F 750 Ω	RRXAFR5H7500
R234	CHIP RES. 1/10W F 2.2k Ω	RRXAFR5H2201
R235	RES CARBON FILM T 1/4W J 330 Ω	RCX4331T1001
R236	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R237	RES CARBON FILM T 1/4W J 8.2k Ω	RCX4822T1001
R238	RES CARBON FILM T 1/4W J 1.5k Ω	RCX4152T1001
R240	RES CARBON FILM T 1/4W J 47k Ω	RCX4473T1001
R241	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R242	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R243	RES CARBON FILM T 1/4W J 220 Ω	RCX4221T1001
R245	RES CARBON FILM T 1/4W J 8.2k Ω	RCX4822T1001
R247	RES. CARBON FILM J 1/2W J 4.7 Ω	RCX24R7T1003
R248	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R250	METAL OXIDE FILM RES. 1W J 8.2 Ω	RN018R2ZU001
R253	RES. CARBON FILM J 1/2W J 6.8 Ω	RCX26R8T1003
R301	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R302	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R303	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R304	CHIP RES. 1/10W J 47 Ω	RRXAJR5Z0470
R305	CHIP RES. 1/10W J 47 Ω	RRXAJR5Z0470
R311	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R401	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R402	RES CARBON FILM T 1/4W J 22k Ω	RCX4223T1001

Ref. No.	Description	Part No.
R403	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R404	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R405	RES CARBON FILM T 1/4W J 47k Ω	RCX4473T1001
R407	RES CARBON FILM T 1/4W J 22k Ω	RCX4223T1001
R408	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R410	CHIP RES. 1/10W F 51.0 k Ω	RRXAFR5H5102
R411	CHIP RES. 1/10W F 30k Ω	RRXAFR5H3002
R412	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R501	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R601⚠	GLASS GLAZE RES. 1/2W J 2.7M Ω	RXX2JZLZ0275
R603⚠	CEMENT RESISTOR 5W J 2.2 Ω H 10MM	RW052R2PAK10
R604	RES CHIP 3216 1/4W J 2.7M Ω	RRX4275HH034
R605⚠	CEMENT RESISTOR 5W J 2.2 Ω H 10MM	RW052R2PAK10
R606	RES CARBON FILM T 1/4W J 47k Ω	RCX4473T1001
R607	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 68 Ω	RCX4680T1001
R613⚠	METAL OXIDE RES. 2W J 0.36 Ω	RN02R36ZU001
R617	RES CARBON FILM T 1/4W J 100k Ω	RCX4104T1001
R618	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
R619	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
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
R626	RES CARBON FILM T 1/4W J 15k Ω	RCX4153T1001
R635	RES. CARBON FILM J 1/2W J 3.9 Ω	RCX23R9T1003
R636	RES. CARBON FILM J 1/2W J 3.9 Ω	RCX23R9T1003
R637	RES CARBON FILM T 1/4W G 3.3k Ω	RCX4332T1002
R638	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
R639	RES CARBON FILM T 1/4W G 39k Ω	RCX4393T1002
R641	RES CHIP.(1608) 1/10W D 1.1k Ω	RRXADR5H1101
R642	RES CHIP.(1608) 1/10W D 10k Ω	RRXADR5H1002
R643	RES CHIP.(1608) 1/10W D 10k Ω	RRXADR5H1002
R644	CHIP RES. 1/10W F 1.5k Ω	RRXAFR5H1501
R646	RES CARBON FILM T 1/4W J 180 Ω	RCX4181T1001
R647	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R648	CHIP RES. 1/10W F 1.0k Ω	RRXAFR5H1001
R649	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R650	RES CARBON FILM T 1/4W J 2.7k Ω	RCX4272T1001
R651	CHIP RES. 1/10W J 1 Ω	RRXAJR5Z01R0
R652	CHIP RES. 1/10W F 24k Ω	RRXAFR5H2402
R653	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
R654	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R655	RES CARBON FILM T 1/4W G 27k Ω	RCX4273T1002
R657	RES CARBON FILM T 1/4W J 1.0 Ω	RCX41R0T1001
R658	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R659	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R660	RES CARBON FILM T 1/4W J 820 Ω	RCX4821T1001
R661	RES. CARBON FILM J 1/2W J 390 Ω	RCX2391T1003
R662	RES CARBON FILM T 1/4W J 15 Ω	RCX4150T1001
R663	RES CARBON FILM T 1/4W J 820 Ω	RCX4821T1001
R664	RES CARBON FILM T 1/4W J 820 Ω	RCX4821T1001
R665	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
R667	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
R668	CHIP RES. 1/10W F 10k Ω	RRXAFR5H1002
R672	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
R673	RES CARBON FILM T 1/4W J 22k Ω	RCX4223T1001
R674	RES CARBON FILM T 1/4W J 1.0k Ω	RCX4102T1001
R675	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R676	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R677	RES CARBON FILM T 1/4W J 270 Ω	RCX4271T1001

Ref. No.	Description	Part No.
R678	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R679	CHIP RES. 1/10W F 3.6k Ω	RRXAFR5H3601
R680	CHIP RES. 1/10W F 10k Ω	RRXAFR5H1002
R682	RES CARBON FILM T 1/4W J 2.7 Ω	RCX42R7T1001
R683	RES CARBON FILM T 1/4W J 2.7 Ω	RCX42R7T1001
R685	RES CARBON FILM T 1/4W J 22 Ω	RCX4220T1001
R686	RES CARBON FILM T 1/4W J 1.0k Ω	RCX4102T1001
R687	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R688	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R689	RES CARBON FILM T 1/4W J 1.2k Ω	RCX4122T1001
R691	RES CARBON FILM T 1/4W J 1.8 Ω	RCX41R8T1001
R693	RES CARBON FILM T 1/4W J 1.5 Ω	RCX41R5T1001
R696	METAL OXIDE FILM RES. 1W J 2.7 Ω	RN012R7ZU001
R697	METAL OXIDE FILM RES. 1W J 2.7 Ω	RN012R7ZU001
R698	RES CARBON FILM T 1/4W J 2.2 Ω	RCX42R2T1001
R723	CHIP RES. 1/10W J 15k Ω	RRXAJR5Z0153
R724	CHIP RES. 1/10W J 15k Ω	RRXAJR5Z0153
R725	CHIP RES. 1/10W J 39k Ω	RRXAJR5Z0393
R726	CHIP RES. 1/10W J 39k Ω	RRXAJR5Z0393
R731	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R732	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R733	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R734	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R735	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R736	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R743	CHIP RES. 1/10W J 15k Ω	RRXAJR5Z0153
R744	CHIP RES. 1/10W J 15k Ω	RRXAJR5Z0153
R745	CHIP RES. 1/10W J 39k Ω	RRXAJR5Z0393
R746	CHIP RES. 1/10W J 39k Ω	RRXAJR5Z0393
R763	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R771	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
R772	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R773	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R774	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R775	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R776	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R777	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R778	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R779	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R801	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R802	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R807	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R810	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R811	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R812	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R813	CHIP RES. 1/10W J 7.5k Ω	RRXAJR5Z0752
R814	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R815	CHIP RES. 1/10W J 7.5k Ω	RRXAJR5Z0752
R816	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R817	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R818	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R819	RES CARBON FILM T 1/4W J 22k Ω	RCX4223T1001
R820	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R842	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R843	CHIP RES. 1/10W J 110 Ω	RRXAJR5Z0111
R844	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R846	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R847	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R848	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R871	CHIP RES. 1/10W J 560 Ω	RRXAJR5Z0561
R872	CHIP RES. 1/10W J 560 Ω	RRXAJR5Z0561
R873	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R874	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104

Ref. No.	Description	Part No.
R875	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R876	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R877	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R878	RES CARBON FILM T 1/4W J 1.0k Ω	RCX4102T1001
R879	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R880	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R881	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R882	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R883	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R884	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R885	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R886	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R887	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R888	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R891	CHIP RES. 1/10W J 20k Ω	RRXAJR5Z0203
R892	CHIP RES. 1/10W J 20k Ω	RRXAJR5Z0203
R893	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R894	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
	MISCELLANEOUS	
AC601⚠	AC CORD W/O A GND WIRE UL/CSA 1770 NO BLACK	WAC0172LW022
B11	POW HEAT SINK A7120UH	1EM423993
B43	HEAT SINK PMM A74F0UH	1EM424517A
BC301	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
BC601	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC602	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC603	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC802	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC803	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC804	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC805	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC841	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
CL701	WIRE ASSEMBLY 9P 9PIN/170MM	WX1A94F0-002
F601⚠	FUSE STC4A125V U/CT	PAGE20CW3402
FH601	FUSE HOLDER MSF-015 LF (B110)	XH01Z00LY002
FH602	FUSE HOLDER MSF-015 LF (B110)	XH01Z00LY002
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 SW RCA PCB S RED RCA-102H(RD)	JYRJ010YUQ03
JK841	JACK RCA PCB S ORANGE 01/RCA-101H(OR)	JXRJ010YUQ06
JK871	JACK RCA PCB S WHITE 01/RCA-101H(WH)	JXRJ010YUQ02
JK872	JACK RCA PCB S RED 01/RCA-101H(RD)	JXRJ010YUQ01
JS201	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
JS202	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
JS301	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
JS630	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
JS633	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
L3	SCREW B-TIGHT D3X8 BIND HEAD+	GBJB3080
SA601⚠	SURGE ABSORBER 470V+-10PER	NVQZ10D471KB
T601⚠	TRANS POWER BCK-28-9910A	LTT2PC0XB058
TM601	EYELET TYPE D-1	0VM406868
TM602	EYELET TYPE D-1	0VM406868
TU301	TUNER UNIT ATSC/NTSC/QAM UC130AF	UTNATS0SP004

JACK CBA(MPW-B)

Ref. No.	Description	Part No.
	JACK CBA(MPW-B) Consists of the following:	----------
	CAPACITORS	
C754	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
C755	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
C756	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
C757	CHIP CERAMIC CAP.(1608) B K 2.2μF/10V	CHD1AK30B225
C758	CHIP CERAMIC CAP.(1608) B K 2.2μF/10V	CHD1AK30B225
	RESISTORS	
R751	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R752	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R753	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R756	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R757	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R758	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R759	CHIP RES. 1/10W J 15k Ω	RRXAJR5Z0153
R760	CHIP RES. 1/10W J 15k Ω	RRXAJR5Z0153
R761	CHIP RES. 1/10W J 39k Ω	RRXAJR5Z0393
R762	CHIP RES. 1/10W J 39k Ω	RRXAJR5Z0393
	MISCELLANEOUS	
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

INVERTER ASSEMBLY

Ref. No.	Description	Part No.
	INVERTER ASSEMBLY Consists of the following:	A01F2M1V-001
	INVERTER CBA ---------- FUNCTION CBA IR SENSOR CBA JUNCTION CBA	A01F2M1V-001-IV ---------- A01F2M1V-001-FNIRJN

INVERTER CBA

Ref. No.	Description	Part No.
	INVERTER CBA Consists of the following:	----------
	CAPACITORS	
C1001	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1002	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1003	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1004	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1005	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1006	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1007	CHIP CERAMIC CAP.(1608) B K 0.22μF/16V	CHD1CK30B224
C1008	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1009	ELECTROLYTIC CAP. 100μF/25V M	CE1EMASDL101
C1011	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1012	POLYESTER FILM CAP. (PB FREE) 0.0039μF/ 100V J	CA2A392DT018
C1013	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1040	CHIP CERAMIC CAP.(1608) B K 0.47μF/10V	CHD1AK30B474
C1052	ELECTROLYTIC CAP 100μF/100V	CE2AMZNDL101
C1053	ELECTROLYTIC CAP 100μF/100V	CE2AMZNDL101
C1056	ELECTROLYTIC CAP 100μF/100V	CE2AMZNDL101
C1061	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1062	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1063	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1064	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103

Ref. No.	Description	Part No.
C1065	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1066	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1067	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1068	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1072	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1111	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1112	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1113	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1114	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1115	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1116	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1117	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1118	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1122	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1161	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1162	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1163	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1164	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1165	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1166	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1167	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1168	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1172	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1211	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1212	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1213	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1214	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1215	CAP CERAMIC HV 15pF/6.3KV/SL/J	CCA1500MR001
C1216	CAP CERAMIC (AX) 1500pF/50V/B/K	CA1J152TU061
C1217	ELECTROLYTIC CAP. 10μF/50V M	CE1JMASDL100
C1218	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1222	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1500	CERAMIC CAP. 470pF/2KV	CA3D471PAN04
C1501	CHIP CERAMIC CAP.(1608) B K 5600pF/50V	CHD1JK30B562
C1502	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1550	CERAMIC CAP. 470pF/2KV	CA3D471PAN04
C1551	CHIP CERAMIC CAP.(1608) B K 5600pF/50V	CHD1JK30B562
C1552	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1600	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1620	CHIP CERAMIC CAP.(1608) CH J 1000pF/50V	CHD1JJ3CH102
C1702	CHIP CERAMIC CAP.(1608) F Z 0.22μF/50V	CHD1JZ30F224
C1703	CHIP CERAMIC CAP.(1608) F Z 0.22μF/50V	CHD1JZ30F224
C1800	ELECTROLYTIC CAP. 100μF/25V M	CE1EMASDL101
C1801	ELECTROLYTIC CAP. 22μF/35V M	CE1GMASDL220
C1802	CHIP CERAMIC CAP.(1608) B K 0.1μF/50V	CHD1JK30B104
C1905⚠	SAFTY CAP. 2200pF/250V KX	CA2E222MR101
C1910	CAP ELECTROLYTIC 270μF/200V	CEA271DYG005
C1930	CERAMIC CAP. 680pF/2KV	CA3D681PAN04
C1931⚠	POLYESTER FILM CAP. (PB FREE) 0.001μF/100V J	CA2A102DT018
C1932	POLYESTER FILM CAP. (PB FREE) 0.027μF/100V J	CA2A273DT018
C1933	POLYESTER FILM CAP. (PB FREE) 0.1μF/100V J	CA2A104DT018
C1970	POLYESTER FILM CAP. (PB FREE) 0.0022μF/100V J	CA2A222DT018
C1981	CHIP CERAMIC CAP. F Z 0.01μF/50V	CHD1JZ30F103
C1982	ELECTROLYTIC CAP. 0.47μF/50V M	CE1JMASDLR47
C1990	CAP CERAMIC HV 820pF/1KV B K	CA3A821TE006
C1992⚠	ELECTROLYTIC CAP 470μF/100V	CE2AMZNDL471
CONNECTORS		
CN1001	FFC CONNECTOR 15P IMSA-9615S-15A-PP-A	JC96J15ER007
CN1003	FFC CONNECTOR IMSA-9615S-11A-PP-A	JC96J11ER007
CN1050⚠	CONNECTOR/JACK 1747386-1	JB17J02AP002
CN1100⚠	CONNECTOR/JACK 1747386-1	JB17J02AP002
CN1150⚠	CONNECTOR/JACK 1747386-1	JB17J02AP002
CN1200⚠	CONNECTOR/JACK 1747386-1	JB17J02AP002
CN1900⚠	CONNECTOR PRINT OSU 3 S B3P4-VH-L	J3VH030JG015
DIODES		
D1000	DIODE ZENER 15BSB-T26	NDTB015BST26
D1001	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
D1002	DIODE ZENER 4V3BSB-T26	NDTB4R3BST26
D1003	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1004	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
D1005	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1006	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1040	DIODE ZENER 36BSB-T26	NDTB036BST26
D1060	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1061	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1062	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1063	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1064	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1065	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1066	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1067	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1068	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1069	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1070	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1071	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1072	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1073	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1074	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1110	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1111	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1112	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1113	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1114	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1115	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1116	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1117	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1118	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1119	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1120	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1121	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1122	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1123	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1124	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1160	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1161	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1162	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1163	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1164	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1165	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1166	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1167	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1168	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1169	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1170	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1171	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1172	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1173	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1174	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1210	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1211	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1212	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1213	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133

Ref. No.	Description	Part No.
D1214	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1215	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1216	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1217	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1218	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1219	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1220	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1221	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1222	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1223	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1224	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1500	DIODE ZENER 20BSB-T26	NDTB020BST26
D1550	DIODE ZENER 20BSB-T26	NDTB020BST26
D1630	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1700	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1701	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1702	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1703	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1801	DIODE ZENER 10BSB-T26	NDTB010BST26
D1802	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
D1930⚠	DIODE ZENER 27BSB-T26	NDTB027BST26
D1931	DIODE ZENER 5V6BSB-T26	NDTB5R6BST26
D1932	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1933	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1934⚠	DIODE ZENER 39BSB-T26	NDTB039BST26
D1970	DIODE ZENER 5V6BSB-T26	NDTB5R6BST26
D1971	DIODE ZENER 30BSB-T26	NDTB030BST26
D1972	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1973	SWITCHING DIODE 1SS133(T-77)	QDTZ001SS133
D1990	DIODE FAST RECOVERY 31DF4-FC	QDWZ031DF4FC
D1994	DIODE ZENER 1ZB100BB	NDWZ001ZB100
	ICS	
IC1000	IC PULSE-WIDTH-MODULATION CONT TL494CDR	NSCA0T0TY006
IC1700	IC BA10324AF-E2	QSZBA0TRM032
IC1930⚠	PHOTO COUPLER LTV817MCF	NPECLTV817MF
IC1931⚠	PHOTO COUPLER LTV817MCF	NPECLTV817MF
	TRANSISTORS	
Q1001	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1003	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1004	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q1005	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1060	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1061	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1110	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1111	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1160	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1161	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1210	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1211	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1500	FET MOS 2SK2417(FT)	QFWZSK2417FT
Q1501	TRANSISTOR 2SC2120-Y(TE2 F T)	QQSY2SC2120F
Q1502	TRANSISTOR 2SA950-O (TE2 F T)	QQS002SA950F
Q1503	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1550	FET MOS 2SK2417(FT)	QFWZSK2417FT
Q1551	TRANSISTOR 2SC2120-Y(TE2 F T)	QQSY2SC2120F
Q1552	TRANSISTOR 2SA950-O (TE2 F T)	QQS002SA950F
Q1553	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1600	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1621	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1800	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1801	TRANSISTOR KTA1267-GR-AT/P	NQS1KTA1267P
Q1802	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P

Ref. No.	Description	Part No.
Q1803	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1804	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1815	TRANSISTOR 2SA950-O (TE2 F T)	QQS002SA950F
Q1930⚠	MOS FET TK7A50D	QEWZTK7A50DQ
Q1931⚠	TRANSISTOR KTC3199-GR-AT/P	NQS4KTC3199P
Q1932⚠	TRANSISTOR 2SC2120-Y(TE2 F T)	QQSY2SC2120F
Q1970	NPN TRANSISTOR KTC3200-GR-AT/P	NQSGKTC3200P
Q1971	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
Q1972	TRANSISTOR KTC3198-Y-AT/P	NQSYKTC3198P
	RESISTORS	
R1001	CHIP RES. 1/10W F 22k Ω	RRXAFR5H2202
R1002	CHIP RES. 1/10W F 1.0k Ω	RRXAFR5H1001
R1003	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R1004	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1005	RES CARBON FILM T 1/4W J 220k Ω	RCX4224T1001
R1006	RES CARBON FILM T 1/4W J 56k Ω	RCX4563T1001
R1007	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1008	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R1009	CHIP RES. 1/10W J 82k Ω	RRXAJR5Z0823
R1010	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1011	CHIP RES. 1/10W F 10k Ω	RRXAFR5H1002
R1012	CHIP RES. 1/10W F 12k Ω	RRXAFR5H1202
R1014	CHIP RES. 1/10W F 4.7k Ω	RRXAFR5H4701
R1015	CHIP RES. 1/10W F 7.50 k Ω	RRXAFR5H7501
R1016	CHIP RES. 1/10W J 120k Ω	RRXAJR5Z0124
R1017	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1018	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
R1019	RES CARBON FILM T 1/4W J 8.2k Ω	RCX4822T1001
R1021	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R1022	CHIP RES. 1/10W F 2.2k Ω	RRXAFR5H2201
R1023	CHIP RES. 1/10W F 3.3k Ω	RRXAFR5H3301
R1024	CHIP RES. 1/10W F 100k Ω	RRXAFR5H1003
R1026	CHIP RES. 1/10W F 220 Ω	RRXAFR5H2200
R1028	CHIP RES. 1/10W F 36k Ω	RRXAFR5H3602
R1029	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1030	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R1031	CHIP RES. 1/10W J 15k Ω	RRXAJR5Z0153
R1032	RES CARBON FILM T 1/4W J 24k Ω	RCX4243T1001
R1033	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1034	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1035	RES CARBON FILM T 1/4W J 3.3k Ω	RCX4332T1001
R1036	RES CARBON FILM T 1/4W J 10k Ω	RCX4103T1001
R1040	METAL OXIDE FILM RES. 2W J 0.39 Ω	RN02R39ZU001
R1041	RES CARBON FILM T 1/4W J 33k Ω	RCX4333T1001
R1043	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R1044	METAL OXIDE FILM RES. 2W J 0.39 Ω	RN02R39ZU001
R1060	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R1061	CHIP RES. 1/10W J 20k Ω	RRXAJR5Z0203
R1062	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1063	CHIP RES. 1/10W F 18k Ω	RRXAFR5H1802
R1064	CHIP RES. 1/10W F 8.2k Ω	RRXAFR5H8201
R1065	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1066	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R1067	CHIP RES. 1/10W J 20k Ω	RRXAJR5Z0203
R1068	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1069	CHIP RES. 1/10W F 18k Ω	RRXAFR5H1802
R1070	CHIP RES. 1/10W F 8.2k Ω	RRXAFR5H8201
R1071	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1072	CHIP RES. 1/10W J 1M Ω	RRXAJR5Z0105
R1080	CHIP RES. 1/10W F 22k Ω	RRXAFR5H2202
R1081	CHIP RES. 1/10W J 5.6k Ω	RRXAJR5Z0562
R1110	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104

Ref. No.	Description	Part No.
R1111	CHIP RES. 1/10W J 20k Ω	RRXAJR5Z0203
R1112	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1113	CHIP RES. 1/10W F 18k Ω	RRXAFR5H1802
R1114	CHIP RES. 1/10W F 8.2k Ω	RRXAFR5H8201
R1115	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1116	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R1117	CHIP RES. 1/10W J 20k Ω	RRXAJR5Z0203
R1118	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1119	CHIP RES. 1/10W F 18k Ω	RRXAFR5H1802
R1120	CHIP RES. 1/10W F 8.2k Ω	RRXAFR5H8201
R1121	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1122	CHIP RES. 1/10W J 1M Ω	RRXAJR5Z0105
R1160	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R1161	CHIP RES. 1/10W J 20k Ω	RRXAJR5Z0203
R1162	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1163	CHIP RES. 1/10W F 18k Ω	RRXAFR5H1802
R1164	CHIP RES. 1/10W F 8.2k Ω	RRXAFR5H8201
R1165	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1166	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R1167	CHIP RES. 1/10W J 20k Ω	RRXAJR5Z0203
R1168	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1169	CHIP RES. 1/10W F 18k Ω	RRXAFR5H1802
R1170	CHIP RES. 1/10W F 8.2k Ω	RRXAFR5H8201
R1171	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1172	CHIP RES. 1/10W J 1M Ω	RRXAJR5Z0105
R1210	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R1211	CHIP RES. 1/10W J 20k Ω	RRXAJR5Z0203
R1212	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1213	CHIP RES. 1/10W F 18k Ω	RRXAFR5H1802
R1214	CHIP RES. 1/10W F 8.2k Ω	RRXAFR5H8201
R1215	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1216	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R1217	CHIP RES. 1/10W J 20k Ω	RRXAJR5Z0203
R1218	CHIP RES. 1/10W J 390 Ω	RRXAJR5Z0391
R1219	CHIP RES. 1/10W F 18k Ω	RRXAFR5H1802
R1220	CHIP RES. 1/10W F 8.2k Ω	RRXAFR5H8201
R1221	RES CARBON FILM T 1/4W J 27k Ω	RCX4273T1001
R1222	CHIP RES. 1/10W J 1M Ω	RRXAJR5Z0105
R1500	CHIP RES. 1/10W J 12k Ω	RRXAJR5Z0123
R1501	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R1502	RES CARBON FILM T 1/4W J 150 Ω	RCX4151T1001
R1503	RES CARBON FILM T 1/4W J 2.2k Ω	RCX4222T1001
R1504	RES CARBON FILM T 1/4W J 2.2k Ω	RCX4222T1001
R1505	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1506	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1550	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R1551	RES CARBON FILM T 1/4W J 10 Ω	RCX4100T1001
R1552	RES CARBON FILM T 1/4W J 150 Ω	RCX4151T1001
R1553	RES CARBON FILM T 1/4W J 2.2k Ω	RCX4222T1001
R1554	RES CARBON FILM T 1/4W J 2.2k Ω	RCX4222T1001
R1555	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1556	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1600	CHIP RES. 1/10W J 18k Ω	RRXAJR5Z0183
R1601	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1620	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R1621	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1630	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1631	CHIP RES. 1/10W J 3.3k Ω	RRXAJR5Z0332
R1700	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R1701	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1800	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R1801	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R1802	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223

Ref. No.	Description	Part No.
R1803	RES CARBON FILM T 1/4W J 4.7k Ω	RCX4472T1001
R1804	RES CARBON FILM T 1/4W J 1.2 Ω	RCX41R2T1001
R1805	RES CARBON FILM T 1/4W J 1.0k Ω	RCX4102T1001
R1806	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R1807	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1808	CHIP RES. 1/10W J 5.1k Ω	RRXAJR5Z0512
R1809	CHIP RES. 1/10W J 1.5k Ω	RRXAJR5Z0152
R1810	RES CARBON FILM T 1/4W J 4.7k Ω	RCX4472T1001
R1811	RES CARBON FILM T 1/4W J 100k Ω	RCX4104T1001
R1812	RES CARBON FILM T 1/4W J 12k Ω	RCX4123T1001
R1930	RES CARBON FILM T 1/4W J 47 Ω	RCX4470T1001
R1931	RES CARBON FILM T 1/4W J 100k Ω	RCX4104T1001
R1932	RES CARBON FILM T 1/4W J 82 Ω	RCX4820T1001
R1933	RES CARBON FILM T 1/4W J 82 Ω	RCX4820T1001
R1934	RES CARBON FILM T 1/4W J 180 Ω	RCX4181T1001
R1935	RES CARBON FILM T 1/4W J 1.5k Ω	RCX4152T1001
R1936	RES CARBON FILM T 1/4W J 180 Ω	RCX4181T1001
R1937⚠	METAL OXIDE FILM RES. 2W J 0.33 Ω	RN02R33ZU001
R1938	RES CARBON FILM T 1/4W J 82k Ω	RCX4823T1001
R1939	RES CARBON FILM T 1/4W J 2.2k Ω	RCX4222T1001
R1949	RES CARBON FILM T 1/4W J 150k Ω	RCX4154T1001
R1967	RES CARBON FILM T 1/4W J 3.9k Ω	RCX4392T1001
R1968	RES CARBON FILM T 1/4W J 3.9k Ω	RCX4392T1001
R1969	RES CARBON FILM T 1/4W J 3.9k Ω	RCX4392T1001
R1970	RES CARBON FILM T 1/4W J 270 Ω	RCX4271T1001
R1971	RES CARBON FILM T 1/4W J 3.9k Ω	RCX4392T1001
R1972	CHIP RES. 1/10W J 68k Ω	RRXAJR5Z0683
R1973	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R1975	CHIP RES. 1/10W F 30k Ω	RRXAFR5H3002
R1976	CHIP RES. 1/10W F 30k Ω	RRXAFR5H3002
R1977	CHIP RES. 1/10W F 27k Ω	RRXAFR5H2702
R1979	CHIP RES. 1/10W F 6.8k Ω	RRXAFR5H6801
R1980	CHIP RES. 1/10W F 360 Ω	RRXAFR5H3600
R1981	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1982	CHIP RES. 1/10W J 2.7k Ω	RRXAJR5Z0272
R1983	RES CARBON FILM T 1/4W J 33k Ω	RCX4333T1001
R1984	RES CARBON FILM T 1/4W J 15k Ω	RCX4153T1001
R1986	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R1987	RES CARBON FILM T 1/4W J 820k Ω	RCX4824T1001
R1988	RES CARBON FILM T 1/4W J 1.0k Ω	RCX4102T1001
	MISCELLANEOUS	
B13	HEAT SINK PNA A94F0UH	1EM428121
B14	HEAT SINK PNB ASSEMBLY A94F0UH	1EM428123
BC1301	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
BC1500	COIL BEADS CORE FBR07VA850TB-00	LLBF00ZTU020
BC1501	COIL BEADS CORE FBR07VA850TB-00	LLBF00ZTU020
BC1550	COIL BEADS CORE FBR07VA850TB-00	LLBF00ZTU020
BC1551	COIL BEADS CORE FBR07VA850TB-00	LLBF00ZTU020
BC1930	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC1931	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
L3	SCREW B-TIGHT D3X8 BIND HEAD+	GBJB3080
T1050⚠	TRANS INVERTER HVT-153	LTZ3PZ0XB009
T1100⚠	TRANS INVERTER HVT-153	LTZ3PZ0XB009
T1150⚠	TRANS INVERTER HVT-153	LTZ3PZ0XB009
T1200⚠	TRANS INVERTER HVT-153	LTZ3PZ0XB009
T1950⚠	TRANS POWER BCK-28-9919	LTT2PC0XB051

FUNCTION CBA

Ref. No.	Description	Part No.
	FUNCTION CBA Consists of the following:	----------
	CAPACITOR	
C108	CAP CERAMIC (AX) 0.1μF/50V/F/Z	CA1J104TU062
	RESISTORS	
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
	SWITCHES	
SW101B	TACT SWITCH SKQSAB	SST0101AL038
SW103B	TACT SWITCH SKQSAB	SST0101AL038
SW104B	TACT SWITCH SKQSAB	SST0101AL038
SW105B	TACT SWITCH SKQSAB	SST0101AL038
SW106B	TACT SWITCH SKQSAB	SST0101AL038
SW107B	TACT SWITCH SKQSAB	SST0101AL038

IR SENSOR CBA

Ref. No.	Description	Part No.
	IR SENSOR CBA Consists of the following:	----------
	CAPACITORS	
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
	DIODE	
D101	LED (WHITE) SLR343WBC7T3XM	QPWM343WBC7T
	RESISTORS	
R101	RES CARBON FILM T 1/4W J 100 Ω	RCX4101T1001
R102	CHIP RES. 1/10W J 3.3k Ω	RRXAJR5Z0332
R103	CHIP RES. 1/10W J 9.1k Ω	RRXAJR5Z0912
R106	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
	MISCELLANEOUS	
CL102	WIRE ASSEMBLY 5PIN 5PIN/205MM	WX1A01F2-001
CL103	WIRE ASSEMBLY 3PIN 3PIN 180MM	WX1A01F2-002
RS101	SENSOR REMOTE RECEIVER KSM-712TH2E	USESJRSKK044

JUNCTION CBA

Ref. No.	Description	Part No.
	JUNCTION CBA Consists of the following:	----------
	CONNECTOR	
CN151	242 SERIES CONNECTOR TUC-P05X-B1 WHT ST	JCTUB05TG002

PARTS LIST [32PFL3505D/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 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	REAR ASSEMBLY A01FBUH	1ESA24106
LCD1	LCD MODULE CMO 8BIT A GRADE	UJ32MXD
S1	CARTON A01F2UH	1EM431817

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:

1. Parts that are not assigned part numbers (---------) are not available.
2. 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%

Different parts from the original model 32PFL3505D/F7 (Serial No. : DS1A)

There are no different parts from the original model 32PFL3505D/F7 (Serial No. : DS1A). Refer to the parts list for the original model 32PFL3505D/F7 (Serial No. : DS1A).

PARTS LIST [32PFL3505D/F7 (Serial No. : DS4A)]

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 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	REAR ASSEMBLY A01FDUH	1ESA24419
CL201	WIRE ASSEMBLY 15PIN FFC 15PIN 140MM	WX1A01F4-102
CL1003	WIRE ASSEMBLY 11PIN FFC 11PIN 129MM	WX1A01F4-101
LCD1	LCD MODULE IPS ALPHA 8BIT	UJ32AXB
S1	CARTON A01F2UH	1EM431817

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:

1. Parts that are not assigned part numbers (---------) are not available.
2. 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%

Different parts from the original model 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A01FDMMA-003
	MPW CBA	A01FDMPWS001
	POWER SUPPLY CBA(MPW-A)	---------
D205	DIODE ZENER 33BSA-T26	NDTA033BST26
D210	DIODE ZENER 5V1BSB-T26	NDTB5R1BST26
D406	DIODE ZENER 27BSB-T26	NDTB027BST26
D621	DIODE ZENER 1ZB200-YBB	NDWZ01ZB200Y
D644	DIODE ZENER 7V5BSB-T26	NDTB7R5BST26
R204	RES CARBON FILM T 1/4W J 1.0k Ω	RCX4102T1001
R227	RES. CARBON FILM J 1/2W J 5.6 Ω	RCX25R6T1003
R228	RES CARBON FILM T 1/4W J 3.3k Ω	RCX4332T1001
R229	RES CARBON FILM T 1/4W J 3.3k Ω	RCX4332T1001
R232	CHIP RES. 1/10W F 9.1k Ω	RRXAFR5H9101
R233	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R235	RES CARBON FILM T 1/4W J 68 Ω	RCX4680T1001
R236	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
R238	RES CARBON FILM T 1/4W J 150 Ω	RCX4151T1001
R243	RES CARBON FILM T 1/4W J 120 Ω	RCX4121T1001
R247	RES. CARBON FILM J 1/2W J 5.6 Ω	RCX25R6T1003
R253	RES. CARBON FILM J 1/2W J 5.6 Ω	RCX25R6T1003
R410	CHIP RES. 1/10W F 39k Ω	RRXAFR5H3902
R411	CHIP RES. 1/10W F 47.0 k Ω	RRXAFR5H4702
R412	CHIP RES. 1/10W J 3.3k Ω	RRXAJR5Z0332
R501	RES CARBON FILM T 1/4W J 6.8 Ω	RCX46R8T1001
R686	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R689	RES CARBON FILM T 1/4W J 560 Ω	RCX4561T1001
T601⚠	TRANS POWER BCK-28-9885	LTT2PC0XB067

PARTS LIST [32PFL3505D/F7 (Serial No. : DS8A)]

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 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	REAR ASSEMBLY A01FDUH	1ESA24419
B44	THERMAL SHEET TMS-14-20 12X12	XK10000X4011
CL201	WIRE ASSEMBLY 15PIN FFC 15PIN 140MM	WX1A01F4-102
CL1003	WIRE ASSEMBLY 11PIN FFC 11PIN 129MM	WX1A01F4-101
LCD1	LCD MODULE IPS ALPHA 8BIT	UJ32AXB
S1	CARTON A01F2UH	1EM431817

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:

1. Parts that are not assigned part numbers (---------) are not available.
2. 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%

Different parts from the original model 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A01FDMMA-003
	MPW CBA	A01FDMPWS002
	POWER SUPPLY CBA(MPW-A)	---------
CN101	CONNECTOR PRINT OSU B5B-PH-K-S (LF)(SN)	J3PHC05JG029
D205	DIODE ZENER 33BSA-T26	NDTA033BST26
D210	DIODE ZENER 5V1BSB-T26	NDTB5R1BST26
D406	DIODE ZENER 27BSB-T26	NDTB027BST26
D621	DIODE ZENER 1ZB200-YBB	NDWZ01ZB200Y
D644	DIODE ZENER 7V5BSB-T26	NDTB7R5BST26
R204	RES CARBON FILM T 1/4W J 1.0k Ω	RCX4102T1001
R227	RES. CARBON FILM J 1/2W J 5.6 Ω	RCX25R6T1003
R228	RES CARBON FILM T 1/4W J 3.3k Ω	RCX4332T1001
R229	RES CARBON FILM T 1/4W J 3.3k Ω	RCX4332T1001
R232	CHIP RES. 1/10W F 9.1k Ω	RRXAFR5H9101
R233	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R235	RES CARBON FILM T 1/4W J 68 Ω	RCX4680T1001
R236	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
R238	RES CARBON FILM T 1/4W J 150 Ω	RCX4151T1001
R243	RES CARBON FILM T 1/4W J 120 Ω	RCX4121T1001
R247	RES. CARBON FILM J 1/2W J 5.6 Ω	RCX25R6T1003
R253	RES. CARBON FILM J 1/2W J 5.6 Ω	RCX25R6T1003
R410	CHIP RES. 1/10W F 39k Ω	RRXAFR5H3902
R411	CHIP RES. 1/10W F 47.0 k Ω	RRXAFR5H4702
R412	CHIP RES. 1/10W J 3.3k Ω	RRXAJR5Z0332
R501	RES CARBON FILM T 1/4W J 6.8 Ω	RCX46R8T1001
R686	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R689	RES CARBON FILM T 1/4W J 560 Ω	RCX4561T1001
T601⚠	TRANS POWER BCK-28-9885	LTT2PC0XB067
	INVERTER ASSEMBLY Consists of the following	A01F2M1V-002
	INVERTER CBA --------- FUNCTION CBA IR SENSOR CBA	A01F2M1V-002-IV --------- A01F2M1V-002-FNIR

Ref. No.	Description	Part No.
	INVERTER CBA	---------
D1971	DIODE ZENER 33BSB-T26	NDTB033BST26
	IR SENSOR CBA	---------
CL102	WIRE ASSEMBLY 5PIN 5PIN/205MM	WX1A01F2-021
	JUNCTION CBA (In this model, the JUNCTION CBA is not used.)	
CN151	Not used	

PARTS LIST [32PFL3505D/F7 (Serial No. : DS9A)]

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 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	REAR ASSEMBLY A0RF2UH	1ESA26470
B44	THERMAL SHEET TMS-14-20 12X12	XK10000X4011
CL201	WIRE ASSEMBLY 15PIN FFC 15PIN 140MM	WX1A01F4-102
CL1003	WIRE ASSEMBLY 11PIN FFC 11PIN 129MM	WX1A01F4-101
LCD1	LCD MODULE IPS ALPHA 8BIT	UJ32AXD
S1	CARTON A01F2UH	1EM431817

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:

1. Parts that are not assigned part numbers (---------) are not available.
2. 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%

Different parts from the original model 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A01FDMMA-003
	MPW CBA	A01FDMPWS002
	POWER SUPPLY CBA(MPW-A)	---------
CN101	CONNECTOR PRINT OSU B5B-PH-K-S (LF)(SN)	J3PHC05JG029
D205	DIODE ZENER 33BSA-T26	NDTA033BST26
D210	DIODE ZENER 5V1BSB-T26	NDTB5R1BST26
D406	DIODE ZENER 27BSB-T26	NDTB027BST26
D621	DIODE ZENER 1ZB200-YBB	NDWZ01ZB200Y
D644	DIODE ZENER 7V5BSB-T26	NDTB7R5BST26
D653	IC SHUNT REGULATOR KIA431-AT/PF5	NSZBB0TJY036
R204	RES CARBON FILM T 1/4W J 1.0k Ω	RCX4102T1001
R227	RES. CARBON FILM J 1/2W J 5.6 Ω	RCX25R6T1003
R228	RES CARBON FILM T 1/4W J 3.3k Ω	RCX4332T1001
R229	RES CARBON FILM T 1/4W J 3.3k Ω	RCX4332T1001
R232	CHIP RES. 1/10W F 9.1k Ω	RRXAFR5H9101
R233	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R235	RES CARBON FILM T 1/4W J 68 Ω	RCX4680T1001
R236	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
R238	RES CARBON FILM T 1/4W J 150 Ω	RCX4151T1001
R243	RES CARBON FILM T 1/4W J 120 Ω	RCX4121T1001
R247	RES. CARBON FILM J 1/2W J 5.6 Ω	RCX25R6T1003
R253	RES. CARBON FILM J 1/2W J 5.6 Ω	RCX25R6T1003
R410	CHIP RES. 1/10W F 39k Ω	RRXAFR5H3902
R411	CHIP RES. 1/10W F 47.0 k Ω	RRXAFR5H4702
R412	CHIP RES. 1/10W J 3.3k Ω	RRXAJR5Z0332
R501	RES CARBON FILM T 1/4W J 6.8 Ω	RCX46R8T1001
R686	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R689	RES CARBON FILM T 1/4W J 560 Ω	RCX4561T1001
T601⚠	TRANS POWER BCK-28-9885	LTT2PC0XB067
	INVERTER ASSEMBLY Consists of the following	A01F2M1V-002
	INVERTER CBA --------- FUNCTION CBA IR SENSOR CBA	A01F2M1V-002-IV --------- A01F2M1V-002-FNIR

Ref. No.	Description	Part No.
	INVERTER CBA	---------
D1971	DIODE ZENER 33BSB-T26	NDTB033BST26
	IR SENSOR CBA	---------
CL102	WIRE ASSEMBLY 5PIN 5PIN/205MM	WX1A01F2-021
	JUNCTION CBA (In this model, the JUNCTION CBA is not used.)	
CN151	Not used	

PARTS LIST [32PFL3505D/F7 (Serial No. : YA1A)]

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 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	REAR CABINET ASSEMBLY A01F9MZ	1ESA24233
	STAND ASSEMBLY A91FQUZ	1ESA22609
A10⚠	RATING LABEL A01F9MF	----------
A17	ENERGY STAR LABEL A91H5UF	----------
A18	Not used	
L9	STAND SCREW KIT A01F9MF	1ESA24389
S1	CARTON A01F9MF	1EM431697
S2	STYROFOAM TOP A01F9MF	1EM025685
S3	STYROFOAM BOTTOM A01F9MF	1EM025686
S5	SERIAL NO.LABEL A01Q0UF	----------
X1	OWNERS MANUAL BAG A91H5UF	1EM429581
X2⚠	OWNERS MANUAL A01F9MF	1EMN26239
X6	QUICK START GUIDE A01F9MF	1EMN26242
X8	CHILD SAFETY SHEET A91H5UF	1EMN25001
X9	CONNECTION GUIDE A91FQUF	1EM327017
X10	REGISTRATION CARD A01P5UF	1EMN26042A
X12	WALL MOUNT INSTRUCTION A01F9MF	1EMN26240

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:

1. Parts that are not assigned part numbers (---------) are not available.
2. 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%

Different parts from the original model 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	INVERTER ASSEMBLY Consists of the following	A01F9M1V-001
	INVERTER CBA ---------- FUNCTION CBA IR SENSOR CBA JUNCTION CBA	A01F9M1V-001-IV ---------- A01F9M1V-001-FNIRJN

PARTS LIST [32PFL3505D/F7 (Serial No. : YA2A)]

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 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	STAND ASSEMBLY A91FQUZ	1ESA22609
	REAR CABINET ASSEMBLY A01F9MZ	1ESA24233
A10⚠	RATING LABEL A01FUMF	----------
A17	ENERGY STAR LABEL A91H5UF	----------
A18	Not used	
B44	THERMAL SHEET TMS-14-20 12X12	XK10000X4011
CL201	WIRE ASSEMBLY 15PIN FFC 15PIN 140MM	WX1A01F4-102
CL1003	WIRE ASSEMBLY 11PIN FFC 11PIN 129MM	WX1A01F4-101
L9	STAND SCREW KIT A01F9MF	1ESA24389
LCD1	LCD MODULE IPS ALPHA 8BIT	UJ32AXB
S1	CARTON A01F9MF	1EM432839
S2	STYROFOAM TOP A01F9MF	1EM025685
S3	STYROFOAM BOTTOM A01F9MF	1EM025686
S5	SERIAL NO.LABEL A01Q0UF	----------
X1	OWNERS MANUAL BAG A91H5UF	1EM429581
X2⚠	OWNERS MANUAL A01F9MF	1EMN26239
X6	QUICK START GUIDE A01F9MF	1EMN26242
X8	CHILD SAFETY SHEET A91H5UF	1EMN25001
X9	CONNECTION GUIDE A91FQUF	1EM327017
X10	REGISTRATION CARD A01P5UF	1EMN26042A
X12	WALL MOUNT INSTRUCTION A01F9MF	1EMN26240

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:

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

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G.....±2% J.....±5% K.....±10%

M.....±20% N.....±30% Z.....+80/-20%

Different parts from the original model 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A01FDMMA-003
	MPW CBA	A01FDMPWS002
	POWER SUPPLY CBA(MPW-A)	---------
CN101	CONNECTOR PRINT OSU B5B-PH-K-S (LF)(SN)	J3PHC05JG029
D205	DIODE ZENER 33BSA-T26	NDTA033BST26
D210	DIODE ZENER 5V1BSB-T26	NDTB5R1BST26
D406	DIODE ZENER 27BSB-T26	NDTB027BST26
D621	DIODE ZENER 1ZB200-YBB	NDWZ01ZB200Y
D644	DIODE ZENER 7V5BSB-T26	NDTB7R5BST26
R204	RES CARBON FILM T 1/4W J 1.0k Ω	RCX4102T1001
R227	RES. CARBON FILM J 1/2W J 5.6 Ω	RCX25R6T1003
R228	RES CARBON FILM T 1/4W J 3.3k Ω	RCX4332T1001
R229	RES CARBON FILM T 1/4W J 3.3k Ω	RCX4332T1001
R232	CHIP RES. 1/10W F 9.1k Ω	RRXAFR5H9101
R233	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R235	RES CARBON FILM T 1/4W J 68 Ω	RCX4680T1001
R236	WIRE COPPER 6111-06003-0120	XZ40C0SHG002
R238	RES CARBON FILM T 1/4W J 150 Ω	RCX4151T1001
R243	RES CARBON FILM T 1/4W J 120 Ω	RCX4121T1001
R247	RES. CARBON FILM J 1/2W J 5.6 Ω	RCX25R6T1003
R253	RES. CARBON FILM J 1/2W J 5.6 Ω	RCX25R6T1003
R410	CHIP RES. 1/10W F 39k Ω	RRXAFR5H3902
R411	CHIP RES. 1/10W F 47.0 k Ω	RRXAFR5H4702
R412	CHIP RES. 1/10W J 3.3k Ω	RRXAJR5Z0332
R501	RES CARBON FILM T 1/4W J 6.8 Ω	RCX46R8T1001
R686	RES CARBON FILM T 1/4W J 680 Ω	RCX4681T1001
R689	RES CARBON FILM T 1/4W J 560 Ω	RCX4561T1001
T601⚠	TRANS POWER BCK-28-9885	LTT2PC0XB067
	INVERTER ASSEMBLY Consists of the following	A01FUM1V-002
	INVERTER CBA ----------	A01FUM1V-002-IV ----------
	FUNCTION CBA IR SENSOR CBA	A01FUM1V-002-FNIR

Ref. No.	Description	Part No.
	INVERTER CBA	---------
D1971	DIODE ZENER 33BSB-T26	NDTB033BST26
	IR SENSOR CBA	---------
CL102	WIRE ASSEMBLY 5PIN 5PIN/205MM	WX1A01F2-021
	JUNCTION CBA (In this model, the JUNCTION CBA is not used.)	
CN151	Not used	

PARTS LIST [32PFL3515D/F7 (Serial No. : YA1A)]

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 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	REAR CABINET ASSEMBLY A01F9MZ	1ESA24233
	STAND ASSEMBLY A91FQUZ	1ESA22609
A10⚠	RATING LABEL A01FEMF	----------
A17	ENERGY STAR LABEL A91H5UF	----------
A18	Not used	
L9	STAND SCREW KIT A01F9MF	1ESA24389
S1	CARTON A01FEMF	1EM431859
S2	STYROFOAM TOP A01F9MF	1EM025685
S3	STYROFOAM BOTTOM A01F9MF	1EM025686
S5	SERIAL NO.LABEL A01Q0UF	----------
X1	OWNERS MANUAL BAG A91H5UF	1EM429581
X2⚠	OWNERS MANUAL A01F9MF	1EMN26239
X6	QUICK START GUIDE A01F9MF	1EMN26242
X8	CHILD SAFETY SHEET A91H5UF	1EMN25001
X9	CONNECTION GUIDE A91FQUF	1EM327017
X10	REGISTRATION CARD A01P5UF	1EMN26042A
X12	WALL MOUNT INSTRUCTION A01F9MF	1EMN26240

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:

1. Parts that are not assigned part numbers (---------) are not available.
2. 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%

Different parts from the original model 32PFL3505D/F7 (Serial No. : DS1A)

Ref. No.	Description	Part No.
	INVERTER ASSEMBLY Consists of the following	A01F9M1V-001
	INVERTER CBA ---------- FUNCTION CBA IR SENSOR CBA JUNCTION CBA	A01F9M1V-001-IV ---------- A01F9M1V-001-FNIRJN

REVISION HISTORY

Chassis PL10.3

- 2009-11-26 32PFL3505D/F7 (Serial No. : DS1A**********) added
- 2010-02-10 32PFL3505D/F7 (Serial No. : DS1A**********) : B44 is added.
- 2010-05-14 32PFL3505D/F7 (Serial No. : DS2A**********) added
- 2010-05-14 32PFL3505D/F7 (Serial No. : YA1A**********) added
- 2010-05-14 32PFL3515D/F7 (Serial No. : YA1A**********) added
- 2010-06-24 Corrected the ELECTRICAL PARTS LIST
  Deleted service parts numbers (POWER SUPPLY CBA, JACK CBA)
- 2010-08-03 32PFL3505D/F7 (Serial No. : DS4A**********) added
- 2010-11-15 32PFL3505D/F7 (Serial No. : DS8A**********) added
- 2010-11-15 32PFL3505D/F7 (Serial No. : YA2A**********) added
- 2010-12-02 32PFL3505D/F7 (Serial No. : DS9A**********) added
- TBD 32PFL3505D/F7 (Serial No. : DS3A**********) added
- TBD 32PFL3505D/F7 (Serial No. : YA4A**********) added

COMPARISON LIST OF MODEL NAME

Chassis PL10.3

32PFL3505D/F7	(DS1A)	A01F2UH
	(DS2A)	A01FBUH
	(DS3A)	A01FCUH
	(DS4A)	A01FDUH
	(DS8A)	A01FDUH
	(DS9A)	A0RF2UH
	(YA1A)	A01F9MF
	(YA2A)	A01FUMF
	(YA4A)	A0RF3MF
32PFL3515D/F7	(YA1A)	A01FEMF