PHILIPS

50” LCD TV
chassis PL13.16

Service Manual

Contents

TYPE A

50PFL3708/F7	PHILIPS	(Serial No.: DS1)

TYPE B

50PFL3908/F7	PHILIPS	(Serial No.: DS1, DS2)
50PFL3908/F8	PHILIPS	(Serial No.: XA1)
50PFL1908/F8	PHILIPS	(Serial No.: XA1, XA2)

TYPE C

50PFL3708/F7	PHILIPS	(Serial No.: DS2)
50PFL3708/F8	PHILIPS	(Serial No.: XA1)
50PFL1708/F8	PHILIPS	(Serial No.: DS1, XA1)

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

140327

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	dBμV dBμV dBμV	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	1920 1080	--- ---
2. Brightness (w / filter)		cd/m^2 cd/m^2	270 ***1** 300 ***2**	--- ---
3. Viewing Angle	Horizontal Vertical	° °	-88 to 88 -88 to 88	--- ---

***1: All models except 50PFL1908/F8 (Serial No. XA1)** ***2: 50PFL1908/F8 (Serial No. XA1)**

< 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%
	<Measurement condition> Input signal: HDMI1 Raster (40/80IRE) 1080i@60 Measurement point: Screen center Measuring instrument: Made of KONICA MINOLTA Luminance meter CA-310 Aging time: 60min. (Retail MODE / 100IRE Raster HDMI 1080i@60) MODE setting of TV: Shipment setting / Retail MODE Ambient temperature: 25°C ±5°C			
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.

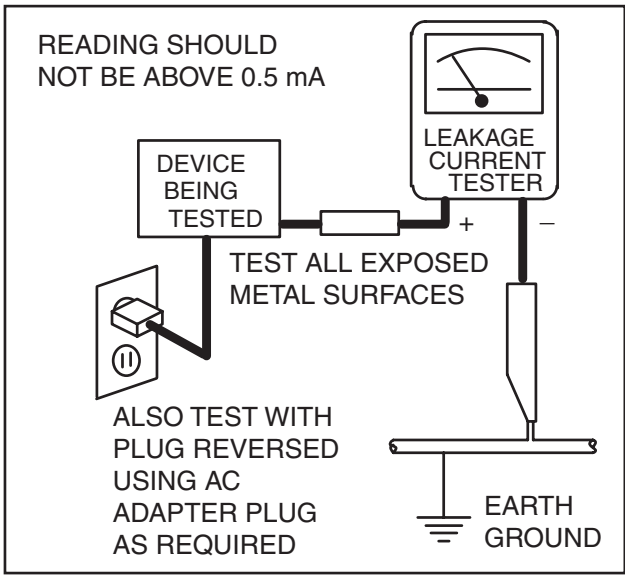
Description	Condition	Unit	Nominal	Limit
1. Audio MAX Output (ATSC 0dBfs)	Lch/Rch	W	10.0/10.0	9.0/9.0
2. Audio Distortion (NTSC)	500mW: Lch/Rch	%	0.5/0.5	2.0/2.0

IMPORTANT SAFETY PRECAUTIONS

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

Safety Precautions for LCD TV Circuit

1. **Before returning an instrument to the customer,** always make a safety check of the entire instrument, including, but not limited to, the following items:
   - **a.** Be sure that no built-in protective devices are defective and have been defeated during servicing. (1) Protective shields are provided on this chassis to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience. (2) When reinstalling the chassis and/or other assembly in the cabinet, be sure to put back in place all protective devices, including but not limited to, nonmetallic control knobs, insulating fishpapers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. **Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning. Servicers who defeat safety features or fail to perform safety checks may be liable for any resulting damage.**
   - **b.** Be sure that there are no cabinet openings through which an adult or child might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, (1) spacing between the Liquid Crystal Panel and the cabinet mask, (2) excessively wide cabinet ventilation slots, and (3) an improperly fitted and/or incorrectly secured cabinet back cover.
   - **c. Antenna Cold Check -** With the instrument AC plug removed from any AC source, connect an electrical jumper across the two AC plug prongs. Place the instrument AC switch in the on position. Connect one lead of an ohmmeter to the AC plug prongs tied together and touch the other ohmmeter lead in turn to each tuner antenna input exposed terminal screw and, if applicable, to the coaxial connector. If the measured resistance is less than 1.0 megohm or greater than 5.2 megohm, an abnormality exists that must be corrected before the instrument is returned to the customer. Repeat this test with the instrument AC switch in the off position.
   - **d. Leakage Current Hot Check -** With the instrument completely reassembled, plug the AC line cord directly into a 120 V AC outlet. (Do not use an isolation transformer during this test.) Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI) C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) 1410, (50.7). With the instrument AC switch first in the on position and then in the off position, measure from a known earth ground (metal water pipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle brackets, metal cabinet, screw heads, metallic overlays, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5 milli-ampere. Reverse the instrument power cord plug in the outlet and repeat the test.



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

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

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

Precautions during Servicing

A. Parts identified by the ⚠ symbol are critical for safety.
Replace only with part number specified.

B. In addition to safety, other parts and assemblies are specified for conformance with regulations applying to spurious radiation. These must also be replaced only with specified replacements.
Examples: RF converters, RF cables, noise blocking capacitors, and noise blocking filters, etc.

C. Use specified internal wiring. Note especially:

1) Wires covered with PVC tubing
2) Double insulated wires
3) High voltage leads

D. Use specified insulating materials for hazardous live parts. Note especially:

1) Insulation Tape
2) PVC tubing
3) Spacers
4) Insulators for transistors.

E. When replacing AC primary side components (transformers, power cord, etc.), wrap ends of wires securely about the terminals before soldering.

F. Observe that the wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.)

G. Check that replaced wires do not contact sharp edged or pointed parts.

H. When a power cord has been replaced, check that 11~13 lb (5~6 kg) of force in any direction will not loosen it.

I. Also check areas surrounding repaired locations.

J. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

K. When connecting or disconnecting the internal connectors, first, disconnect the AC plug from the AC supply outlet.

L. When installing parts or assembling the cabinet parts, be sure to use the proper screws and tighten certainly.

Safety Check after Servicing

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

1. Clearance Distance

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

Table 1: Ratings for selected area

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

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

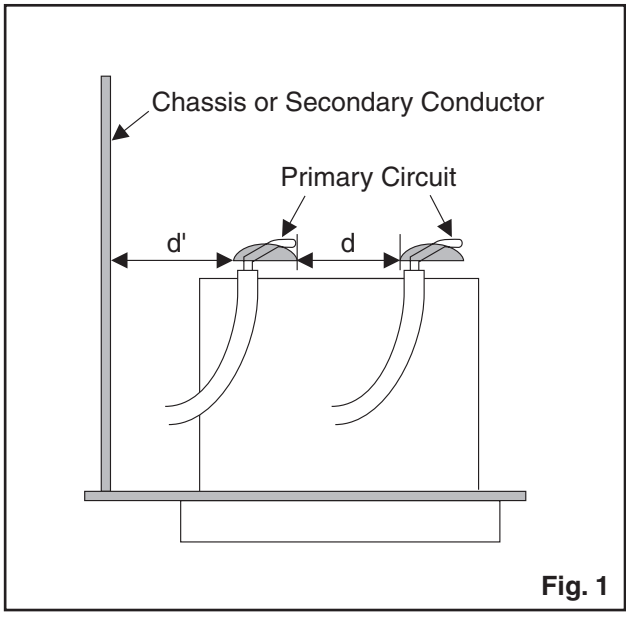


Fig. 1

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.

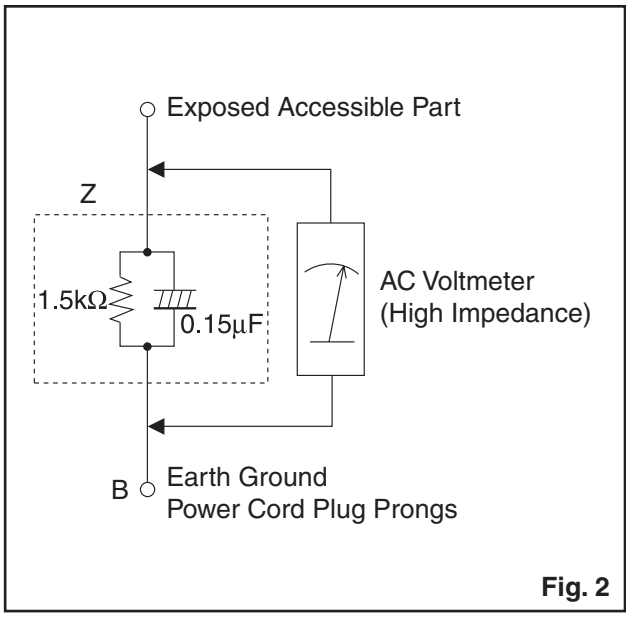


Fig. 2

Table 2: Leakage current ratings for selected areas

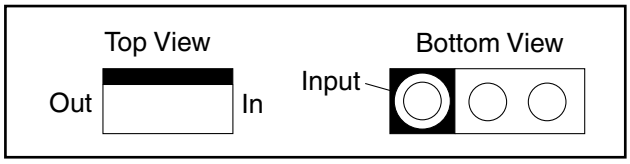
AC Line Voltage	Region	Load Z	Leakage Current (i)	Earth Ground (B) to:
110 to 130 V	U.S.A. or Canada	0.15 μF CAP. & 1.5 kΩ RES. Connected in parallel	i ≤ 0.5 mA rms	Exposed accessible parts

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

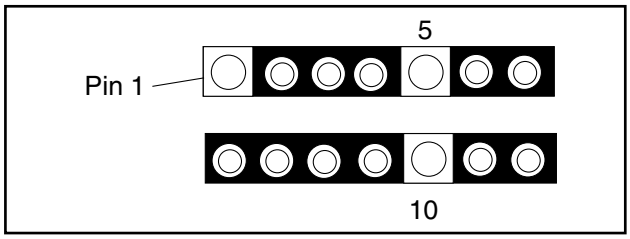
STANDARD NOTES FOR SERVICING

Circuit Board Indications

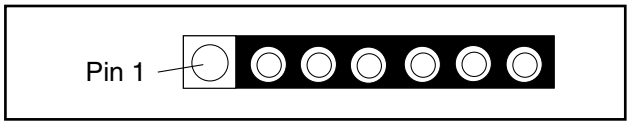
1. The output pin of the 3 pin Regulator ICs is indicated as shown.



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

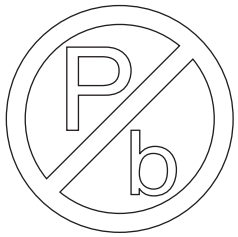


3. The 1st pin of every male connector is indicated as shown.



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)

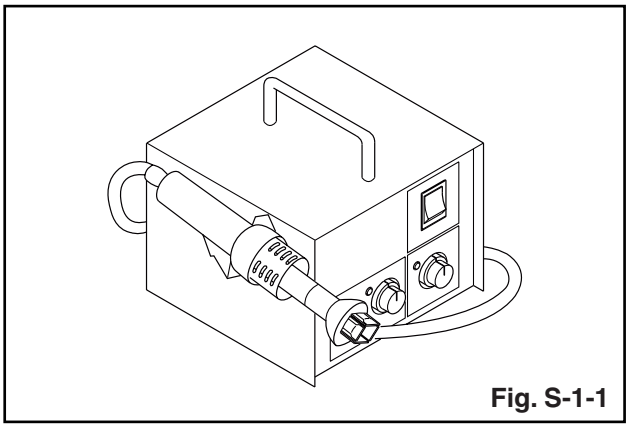


Fig. S-1-1

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.

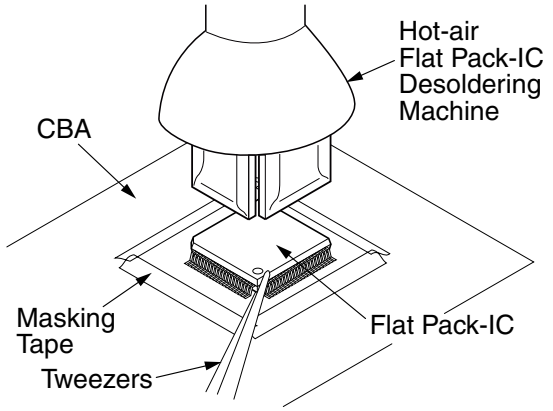


Fig. S-1-2

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)

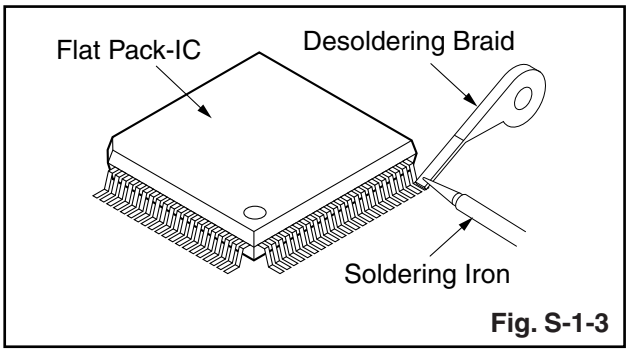


Fig. S-1-3

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)

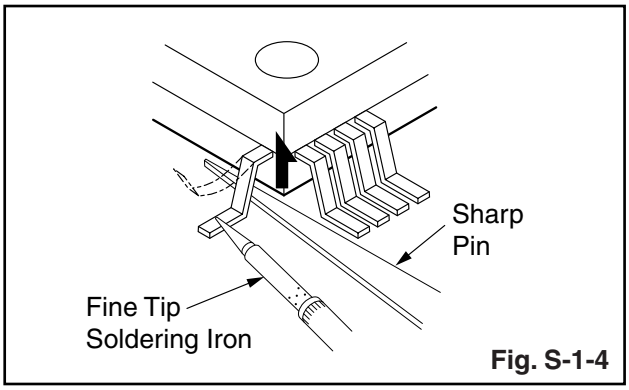


Fig. S-1-4

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.

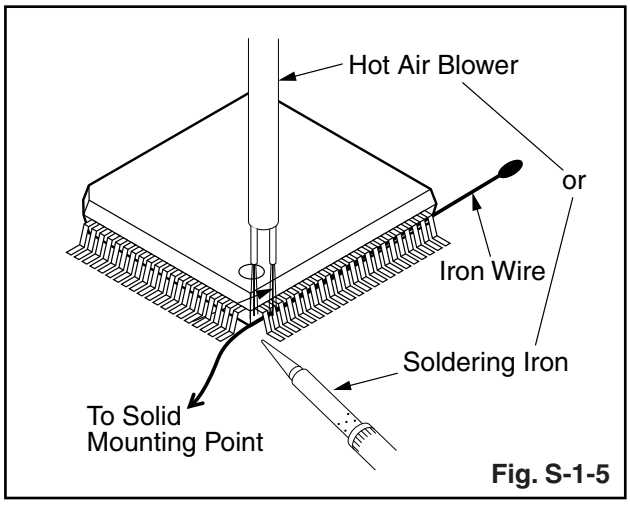


Fig. S-1-5

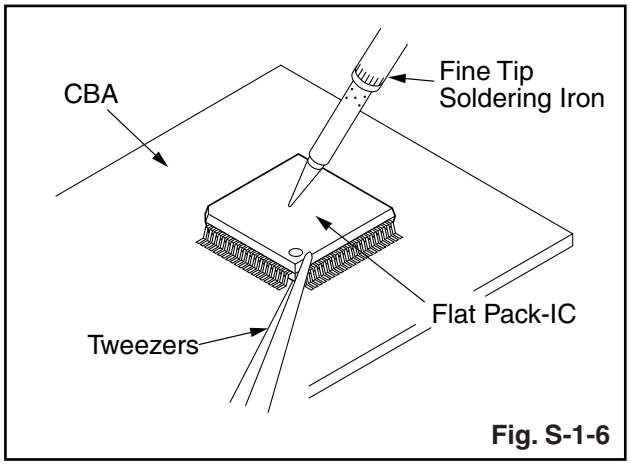


Fig. S-1-6

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.

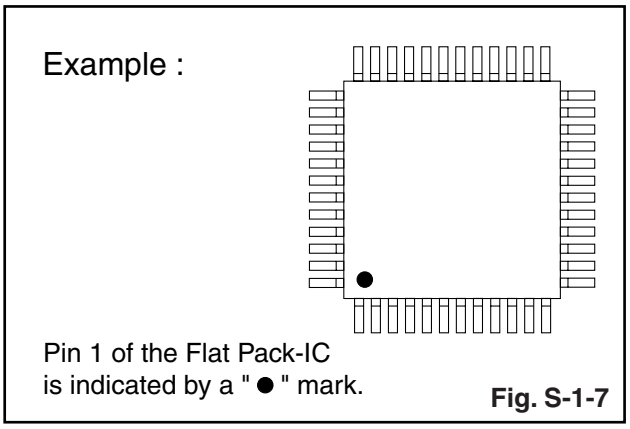


Fig. S-1-7

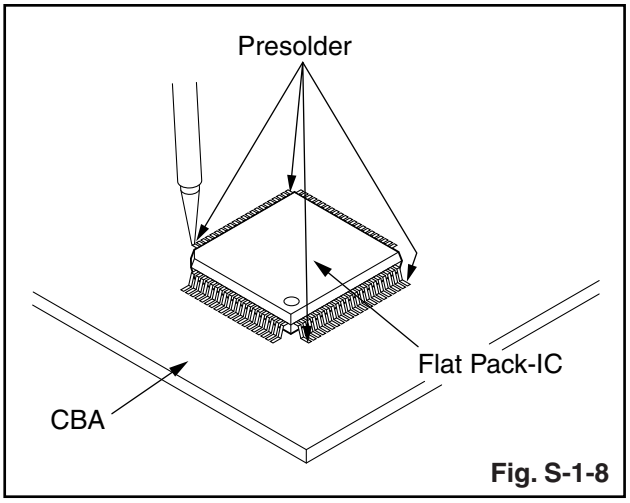


Fig. S-1-8

Instructions for Handling Semi-conductors

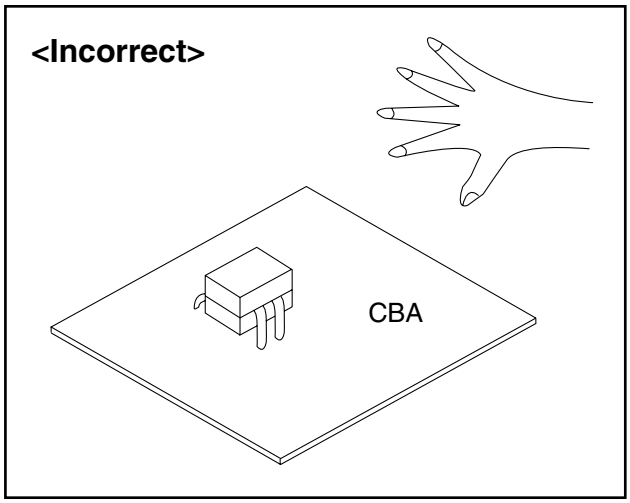
Electrostatic breakdown of the semi-conductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

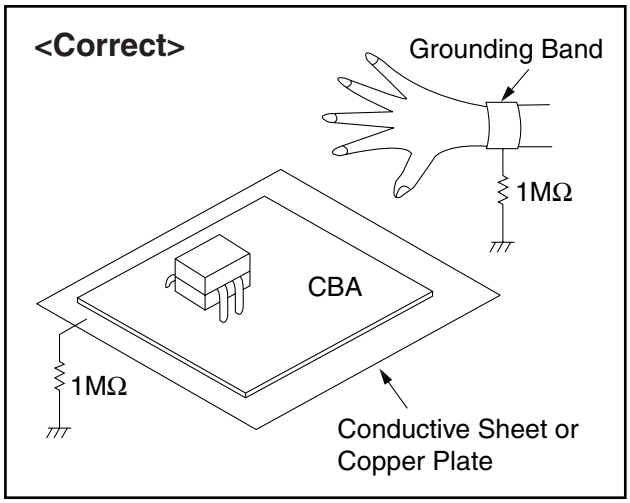
1. Ground for Human Body

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

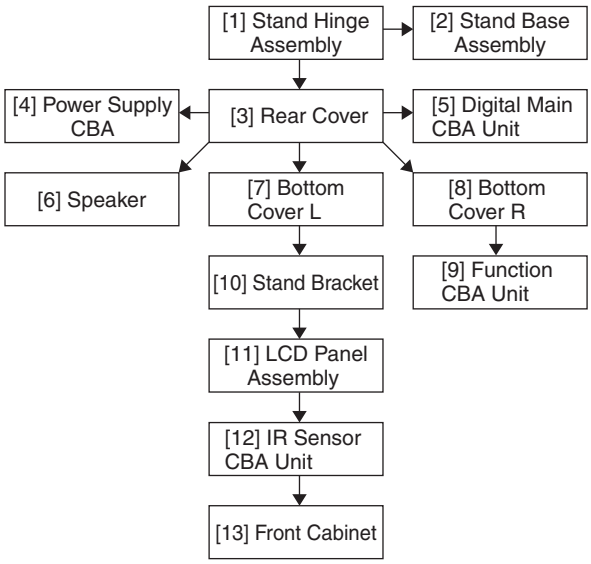
Screw Torque Specification

Ref. No.	Part Number	Part Name	Tightening Torque
L6	GCJP3100	SCREW F-PAN 3CHROM +P-TITE M3X10.0	5.2±0.9lb·in
L10	GCHP3120	SCREW F-PAN BLACK_NI +P-TITE M3X12.0	
L23	GBJS3060	SCREW BIND 3CHROM +S-TITE M3X6.0	
L24	GBHS3060	SCREW BIND BLACK_NI +S-TITE M3X6.0	
L35	GBJB3080	SCREW BIND 3CHROM +B-TITE M3X8.0	
L44	FPJ34080	SEMS-SW PAN 3CHROM + M4X8.0	
SSK1	1ESA34506	STAND SCREW KIT (SEMS-SW PAN BLACK_NI + M4X12.0)	(approx. 8.7±0.9lb·in)*

*** For reference**

1. Disassembly Flowchart

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



2. Disassembly Method

Step/ Loc. No.	Part	Fig. No.	Removal	Note
[1]	Stand Hinge Assembly	D1	4(S-1), 4(S-2)	---
[2]	Stand Base Assembly	D1	----------	---
[3]	Rear Cover	D1	5(S-3), 6(S-4)	---
[4]	Power Supply CBA	D2 D5	4(S-5), CN501, CN601, CN1001	---
[5]	Digital Main CBA Unit	D2 D5	4(S-6), CN3013*1, CN3101*1, CN3105*2, CN3906*2, CN3801, Jack Holder	---
[6]	Speaker	D3	----------	---
[7]	Bottom Cover L	D3	2(S-7), (S-8)	---
[8]	Bottom Cover R	D3	2(S-9), (S-10), Function Knob	2
[9]	Function CBA Unit	D3 D5	CN4001	2
[10]	Stand Bracket	D3	4(S-11)	---
[11]	LCD Panel Assembly	D3	----------	---
[12]	IR Sensor CBA Unit	D4	Sensor Plate	2
[13]	Front Cabinet	D4	11(S-12), Decoration Plate	1
		↓ (1)	↓ (2)	↓ (3)	↓ (4)	↓ (5)

***1: TYPE A, TYPE C**

***2: TYPE B**

Note:

(1) Order of steps in procedure. When reassembling, follow the steps in reverse order. These numbers are also used as the Identification (location) No. of parts in figures.

(2) Parts to be removed or installed.

(3) Fig. No. showing procedure of part location

(4) Identification of parts to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.
P = Spring, L = Locking Tab, S = Screw,
H = Hex Screw, CN = Connector
e.g. 2(S-2) = two Screws of (S-2),
2(L-2) = two Locking Tabs of (L-2)

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

Precautions concerning the LCD Panel Assembly:

1. When you disassemble/re-assemble the Front Cabinet

- Do not pull the FFC Cable and Board Cable forcefully when you re-assemble.
- Be careful not to scratch the display panel when assembling.
- The screw tightening torque must be 5.2lb·in (6kgf·cm).
- Make sure to replace the Decoration Plate to a new one when replacing the Front Cabinet.
- Be careful not to scratch the rear frame when disassembling/re-assembling or when tightening the screws.

2. When you disassemble/re-assemble the Function CBA Unit or the IR Sensor CBA Unit

- Be careful not to break the hooks. If you pull with too much force, the hooks may be damaged.
- Make sure the hooks are securely in place when assembling.
- The Function CBA Unit and Function Knob are fixed in place by the hooks. Make sure these hooks are not damaged. Make sure the Function CBA Unit and Function Knob are securely in place when re-assembling.
- The IR Sensor CBA Unit and Sensor Plate are fixed in place by the hooks. Make sure these hooks are not damaged. Make sure the IR Sensor CBA Unit and Sensor Plate are securely in place when re-assembling.
- When assembling the IR Sensor CBA Unit, make sure the Sensor Plate is properly set so that it contacts the LCD Panel Assembly.

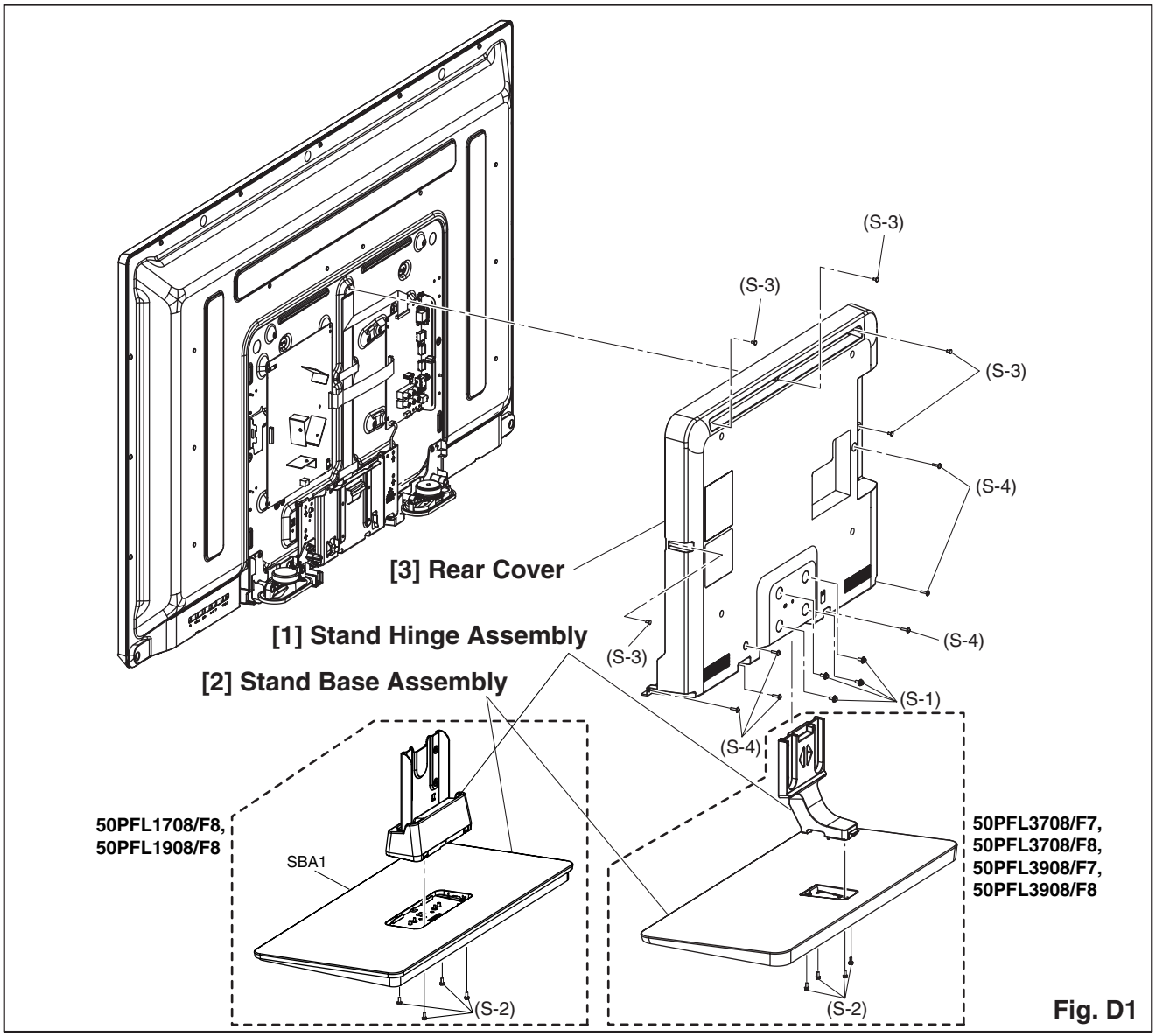


Fig. D1

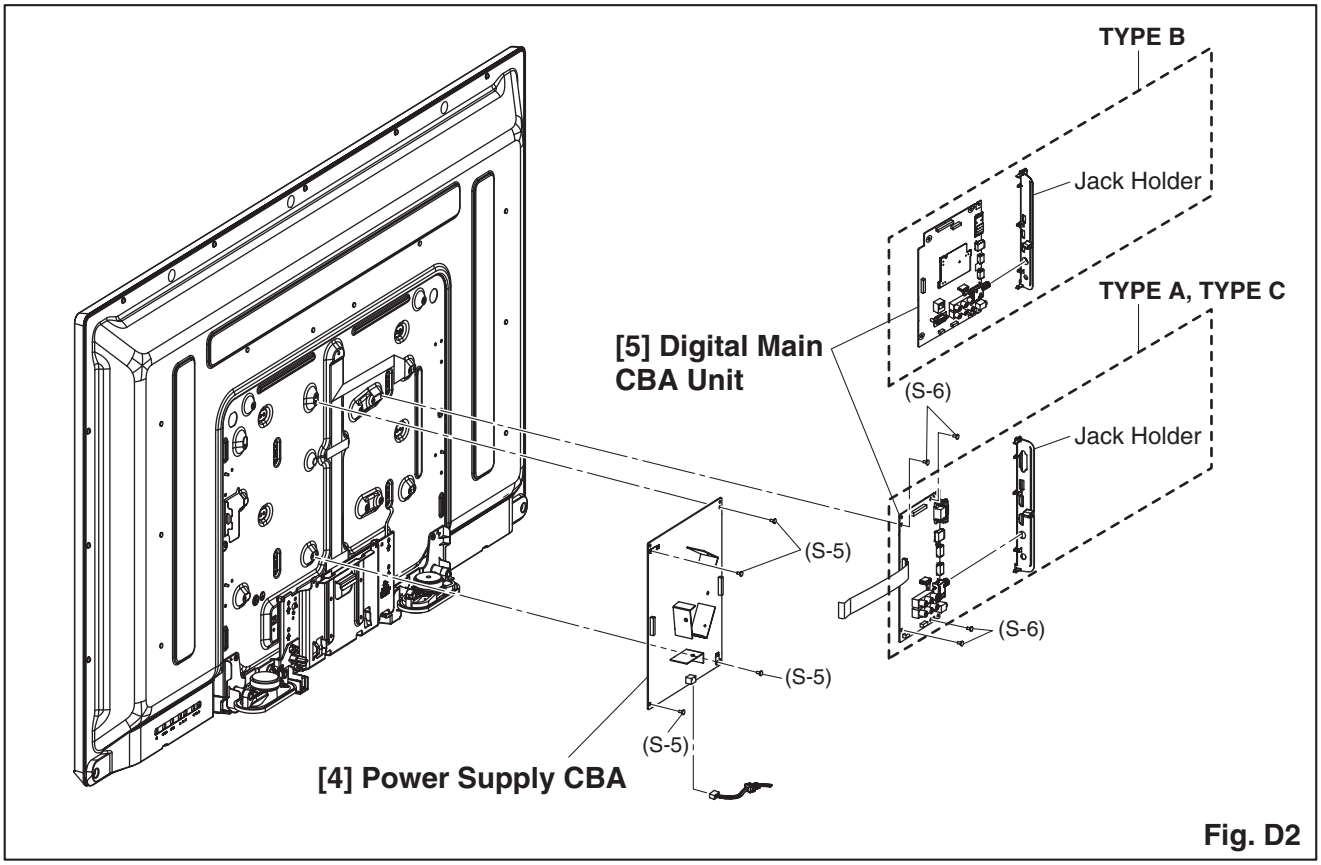

TYPE B
Jack Holder
TYPE A, TYPE C
[5] Digital Main
CBA Unit
(S-6)
Jack Holder
(S-5)
(S-6)
(S-5)
(S-5)
[4] Power Supply CBA

Fig. D2

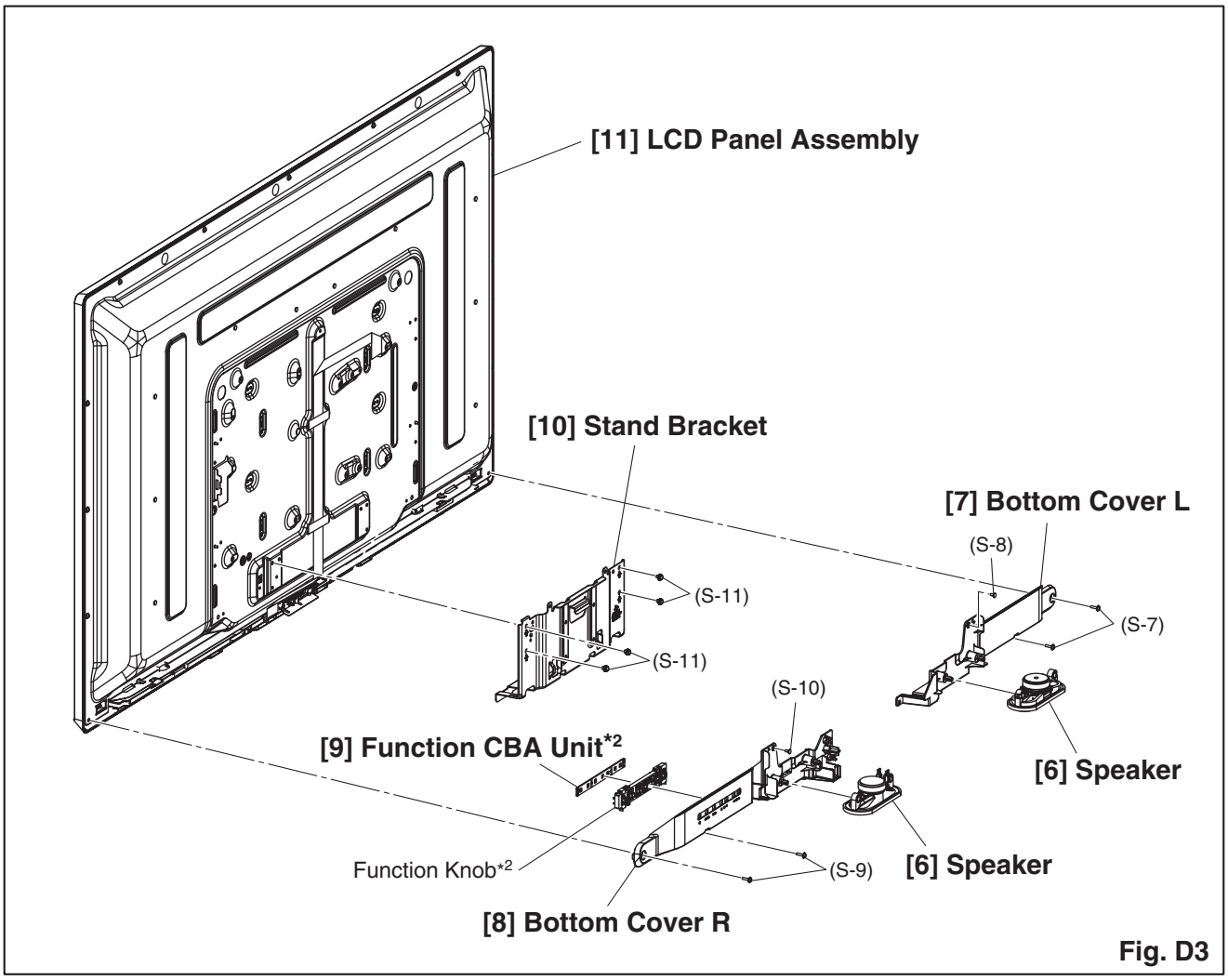


Fig. D3

***2: Make sure to read all the precautions on page 4-2 when you disassemble/re-assemble the Function CBA Unit.**

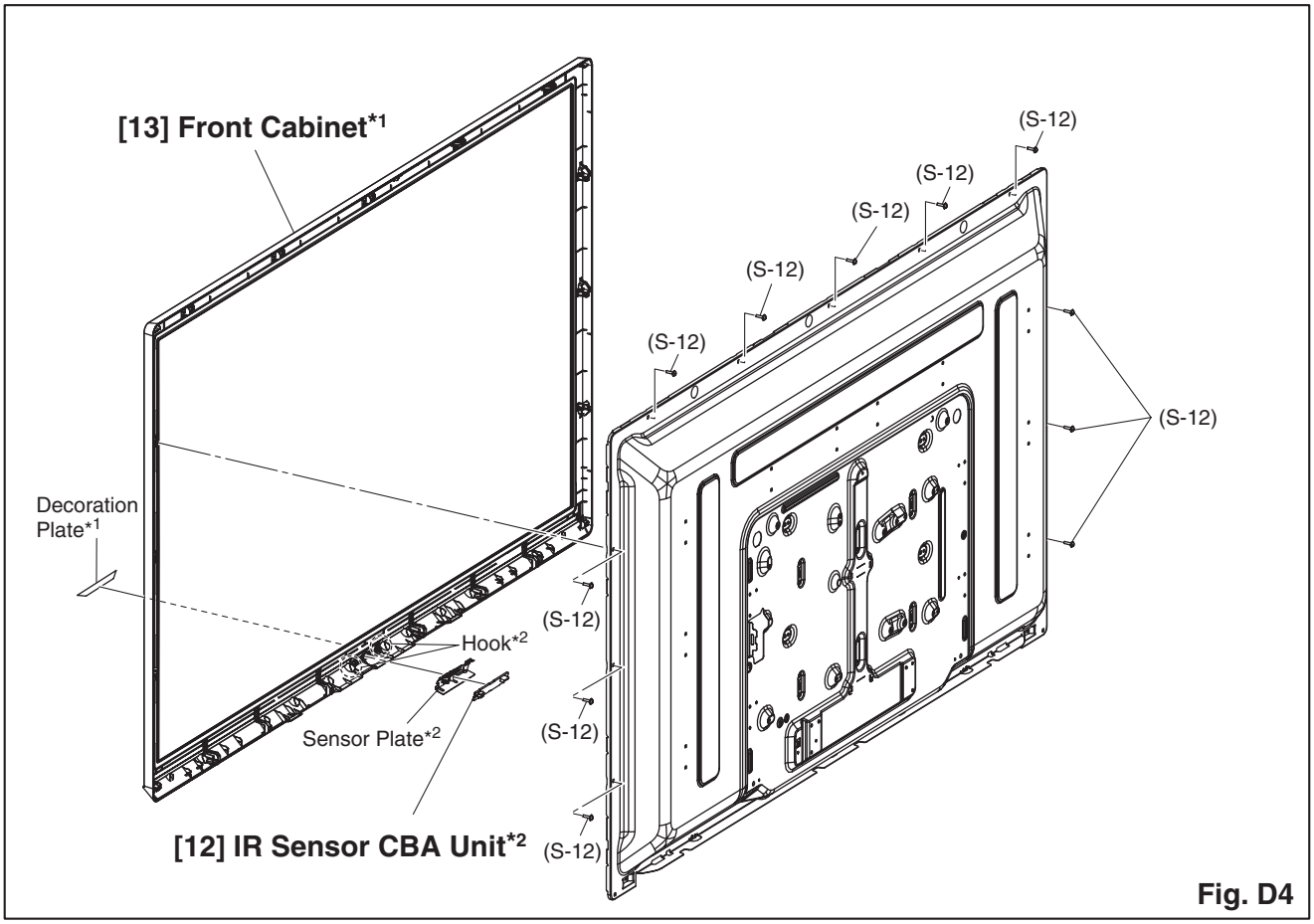


Fig. D4

***1: Make sure to read all the precautions on page 4-2 when you disassemble/re-assemble the Front Cabinet.**

***2: Make sure to read all the precautions on page 4-2 when you disassemble/re-assemble the IR Sensor CBA Unit.**

TV Cable Wiring Diagram

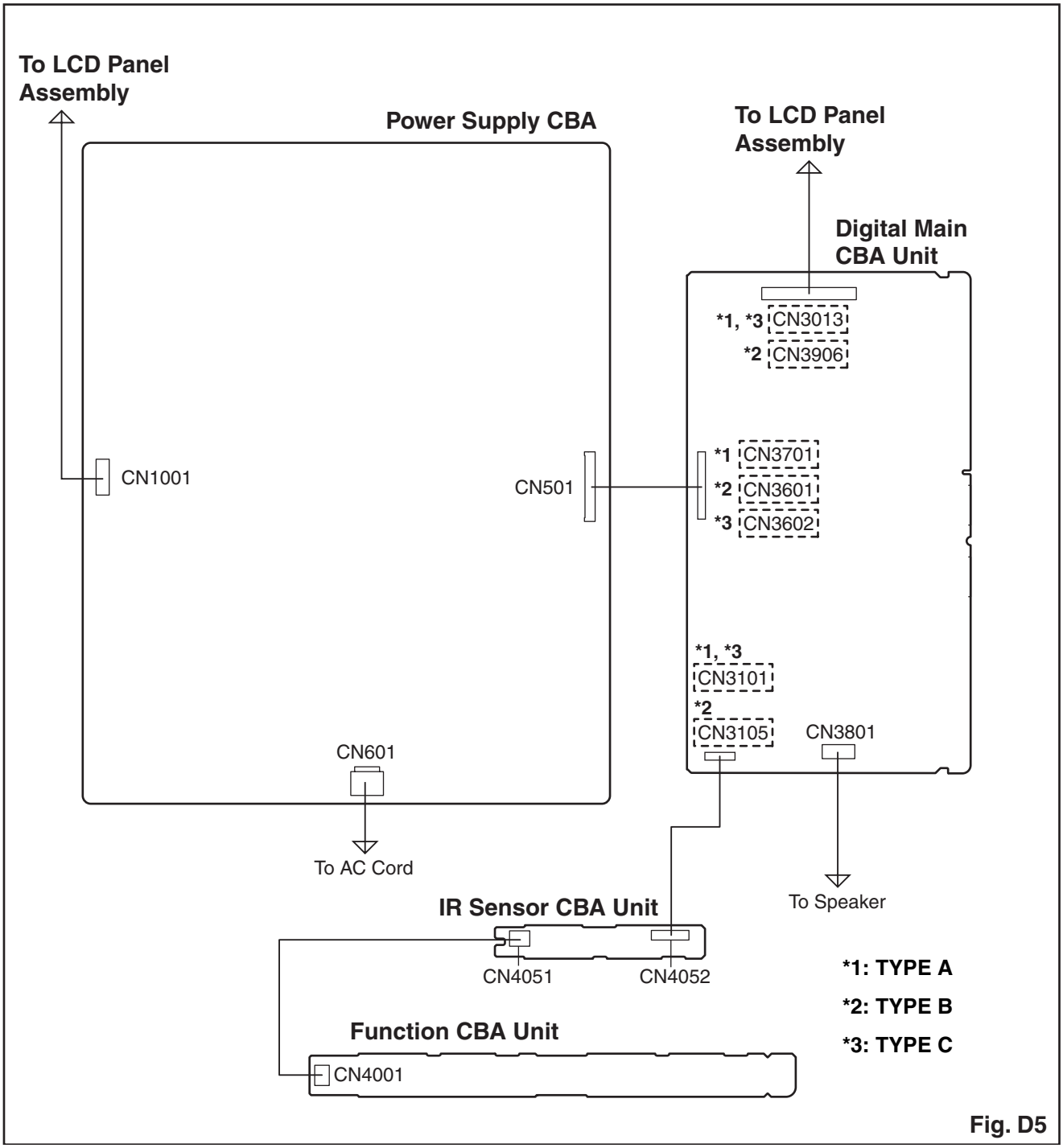


Fig. D5

ELECTRICAL ADJUSTMENT INSTRUCTIONS

[TYPE A, TYPE C]

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. Remote control unit
2. Color Analyzer,
   CA-310 (KONICA MINOLTA Luminance meter) or measuring instrument as good as CA-310.

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 “Software Upgrade”.
5. Select “Current Software Info”.
6. Press [0], [6], [2], [5], [9], [6] and [INFO] buttons on the remote control unit in this order. The following screen appears.

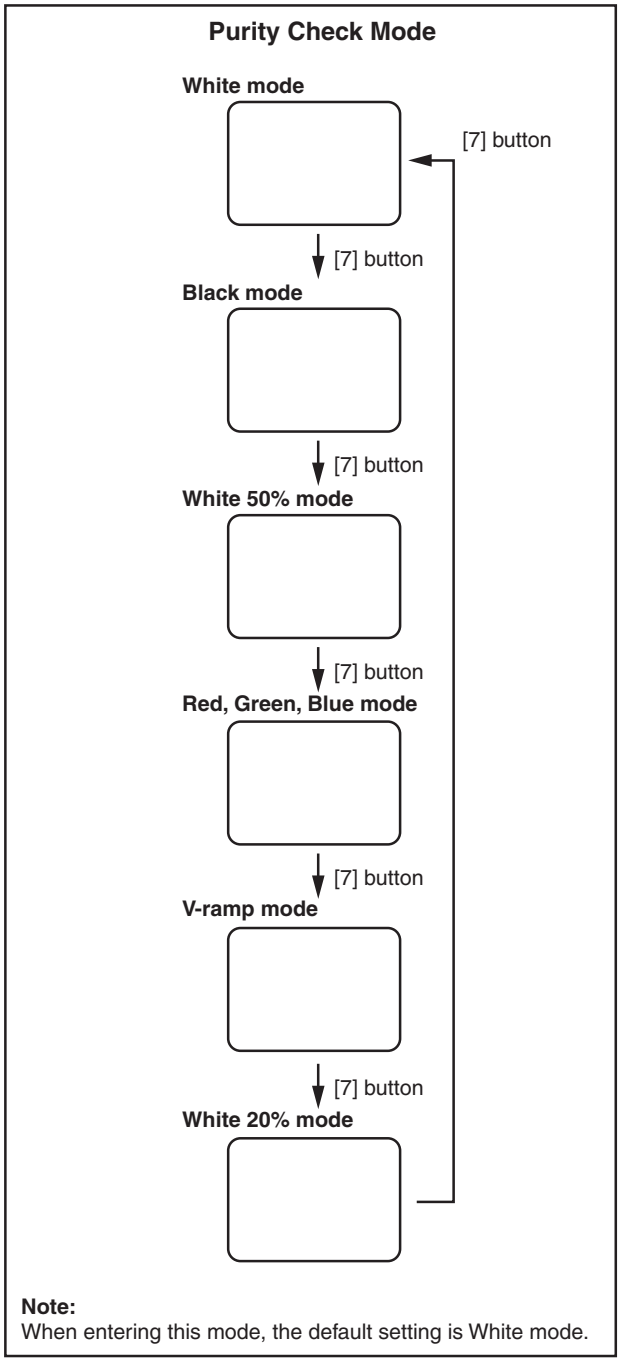
"⋆" differs depending on the models.

Code:	*******-**-**-****-**		
Pic code:	**-***-**-*****-***		
Panel-Option code:	**-***-***-***-***		
MIPS:	**		
Press "POWER" key to exit.			
Safety:	**Safety_Non**		
HDMI EDID:	**		
HDMI UART:	**OFF**	**Total Watch Time:**	*****
Touch Sensor Ver:	**-.-- / ---**	**Lightsensor:**	**

1. Purity Check Mode

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

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



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

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

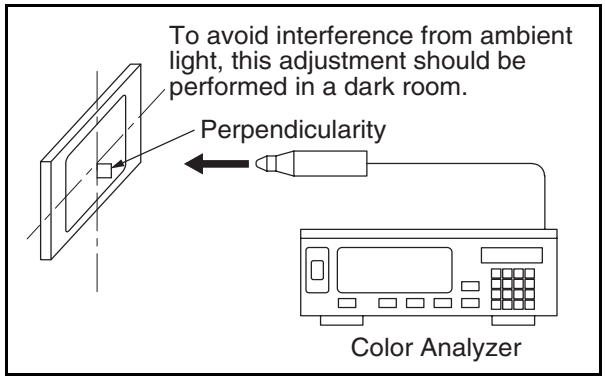
2. White Balance Adjustment

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

Symptom of Misadjustment: White becomes bluish or reddish.

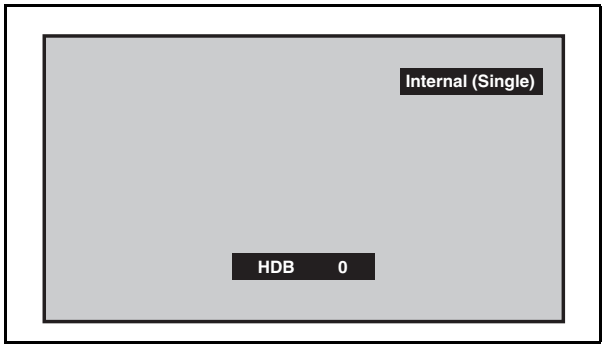
ITEM	SPECIFICATION
Color temperature	x= 0.272 ± 0.003 y= 0.278 ± 0.003
Input Signal	Internal pattern (40/80% raster)
Measurement point	Screen center
M. EQ.	CA-310 (KONICA MINOLTA Luminance meter) or measuring instrument as good as CA-310.
Aging time	60min. (Retail MODE/100IRE Raster HDMI 1080i@60)
MODE setting of TV	Shipment setting/ Retail MODE
Ambient temperature	25°C ± 5°C

1. Operate the unit for more than 60 minutes.
2. Enter the service mode.
3. Press [VOLUME DOWN] button three times on the remote control unit to select “Drive setting” mode. “Drive” appears in the screen.
4. Set the color analyzer at the CHROMA mode and zero point calibration. Bring the optical receptor pointing at the center of the LCD-Panel.

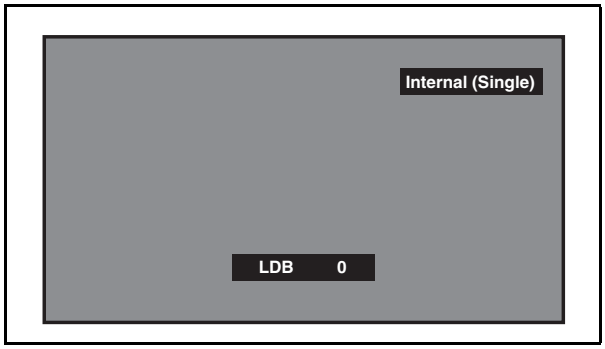


Note: The optical receptor must be set perpendicularly to the LCD Panel surface.

5. Press [3] button to select the “HDB” for High Drive Blue adjustment. (“HDB” appears in the screen.)
6. Press [MENU] button. The internal Raster signal appears in the screen. (“Internal (Single)” appears in the upper right of the screen as shown below.)



7. Press [CHANNEL UP/DOWN] buttons to adjust the color temperature becomes 12000°K (x= 0.272 / y= 0.278 ± 0.003).
8. Press [1] button to select the “HDR” for High Drive Red adjustment (“HDR” appears in the screen.) and press [CHANNEL UP/DOWN] buttons to adjust the color temperature.
9. If necessary, adjust the “HDB” or “HDR” again.
10. Press [6] button to select the “LDB” for Low Drive Blue adjustment (“LDB” appears in the screen.) and press [CHANNEL UP/DOWN] buttons to adjust the color temperature.



11. Press [4] button to select the “LDR” for Low Drive Red adjustment (“LDR” appears in the screen.) and press [CHANNEL UP/DOWN] buttons to adjust the color temperature.
12. If necessary, adjust the “LDB” or “LDR” again.
13. Press [VOLUME DOWN] button to shift to the “Debugging Message” mode.
    If there is no message under “[WB]” section, this adjustment completes.
    If “Drive settings are NG. Retry again.” is displayed, repeat above steps from 5. to 12. Then check “Debugging Message” again. If “Drive settings are NG. Retry again.” is displayed, replace the LCD Panel or Digital Main CBA.
14. To cancel or to exit from the White Balance Adjustment, press [CH RETURN] or [PREV CH] button.

[TYPE B]

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. Remote control unit
2. Color Analyzer,
   CA-310 (KONICA MINOLTA Luminance meter) or measuring instrument as good as CA-310.

How to set up the service mode:

Service mode:

1. Turn the power on.
2. Press [0], [6], [2], [5], [9], [6] and [INFO] buttons on the remote control unit in this order. The following screen appears.

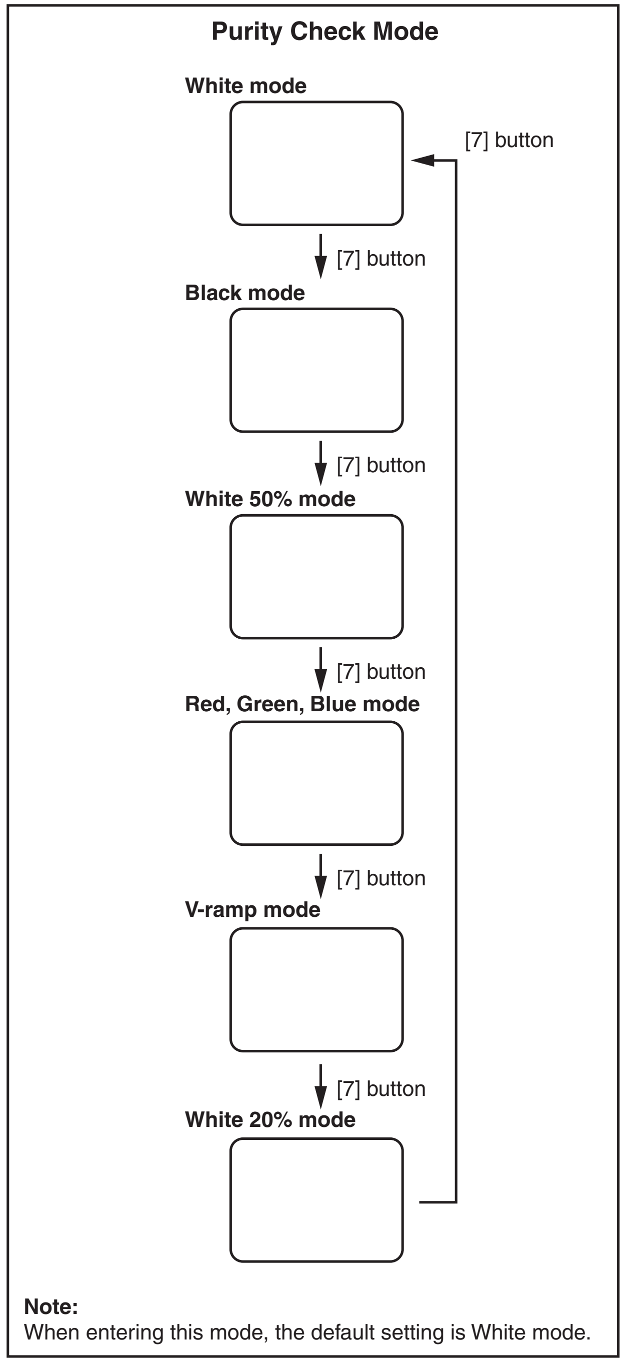
"*" differs depending on the models.

```
[current]
File code:            ***-****_***_*
Total checksum:       Push "0" key
Panel-Option code:    **-***-***-***-***-***
                        ***-***-***-***-***

          Press "POWER" key to exit.

          MAC address:    **:**:**:**:**:**
          ESN:            ******************************

Flicker:              *****
Tuner:                ****
HDMI UART:            OFF             Total Watch Time:  *****
Touch Sensor Ver:     ------ / -.--.--  System Time:     **:**
EDID:                 Push "0" key    Lightsensor:       **
```

1. Purity Check Mode

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

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



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

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

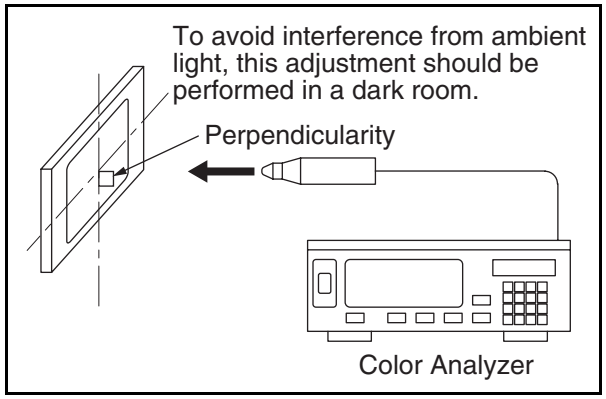
2. White Balance Adjustment

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

Symptom of Misadjustment: White becomes bluish or reddish.

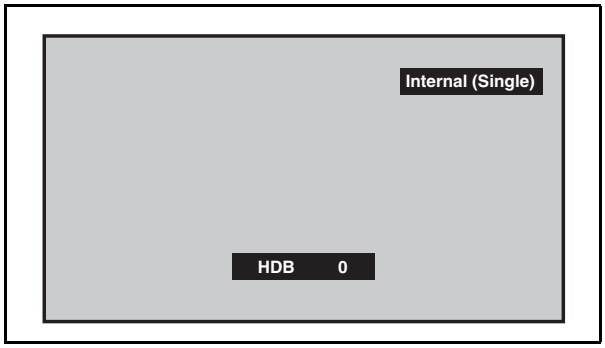
ITEM	SPECIFICATION
Color temperature	x= 0.272 ± 0.003 y= 0.278 ± 0.003
Input Signal	Internal pattern (30/80% raster)
Measurement point	Screen center
M. EQ.	CA-310 (KONICA MINOLTA Luminance meter) or measuring instrument as good as CA-310.
Aging time	60min. (Retail MODE/100IRE Raster HDMI 1080i@60)
MODE setting of TV	Shipment setting/ Retail MODE
Ambient temperature	25°C ± 5°C

1. Operate the unit for more than 60 minutes.
2. Enter the service mode.
3. Press [VOLUME DOWN] button three times on the remote control unit to select “Drive setting” mode. “Drive” appears in the screen.
4. Set the color analyzer at the CHROMA mode and zero point calibration. Bring the optical receptor pointing at the center of the LCD-Panel.

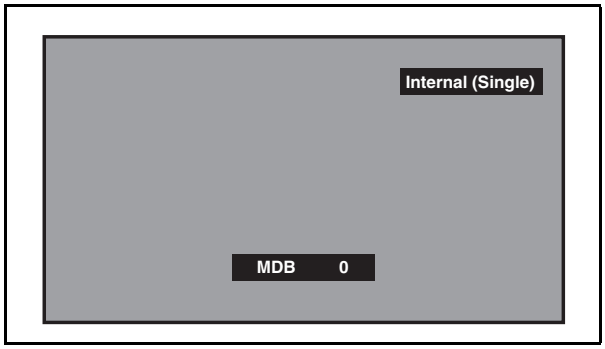


Note: The optical receptor must be set perpendicularly to the LCD Panel surface.

5. Press [3] button to select the “HDB” for High Drive Blue adjustment. (“HDB” appears in the screen.)
6. Press [MENU] button. The internal Raster signal appears in the screen. (“Internal (Single)” appears in the upper right of the screen as shown below.)

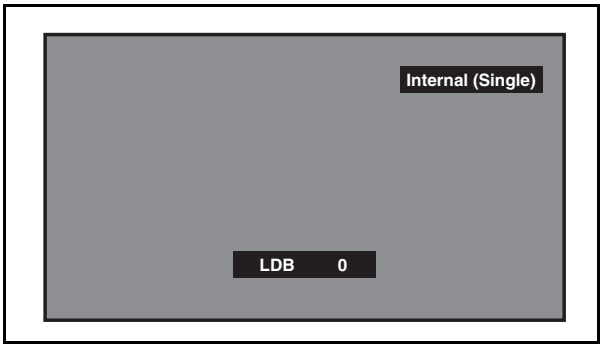


7. Press [CHANNEL UP/DOWN] buttons to adjust the color temperature becomes 12000°K (x= 0.272 / y= 0.278 ± 0.003).
8. Press [1] button to select the “HDR” for High Drive Red adjustment (“HDR” appears in the screen.) and press [CHANNEL UP/DOWN] buttons to adjust the color temperature.
9. If necessary, adjust the “HDB” or “HDR” again.
10. Press [6] button to select the “MDB” for Middle Drive Blue adjustment (“MDB” appears in the screen.) and press [CHANNEL UP/DOWN] buttons to adjust the color temperature.



11. Press [4] button to select the “MDR” for Middle Drive Red adjustment (“MDR” appears in the screen.) and press [CHANNEL UP/DOWN] buttons to adjust the color temperature.
12. If necessary, adjust the “MDB” or “MDR” again.

13. Press [9] button to select the “LDB” for Low Drive Blue adjustment (“LDB” appears in the screen.) and press [CHANNEL UP/DOWN] buttons to adjust the color temperature.



14. Press [7] button to select the “LDR” for Low Drive Red adjustment (“LDR” appears in the screen.) and press [CHANNEL UP/DOWN] buttons to adjust the color temperature.
15. If necessary, adjust the “LDB” or “LDR” again.
16. Press [CH RETURN] or [PREV CH] to shift to the initial screen in the service mode.
    If [White Balance] message with a green color is displayed on the upper right of the screen, this adjustment completes.
    If [White Balance] message with a red color is displayed, repeat above steps from 5. to 15. Then check the initial screen in the service mode again.
    If [White Balance] message with a red color is displayed, replace the LCD Panel or Digital Main CBA.
17. To cancel or to exit from the White Balance Adjustment, press [CH RETURN] or [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.

NOTE: Disconnect any device from the USB Port before you conduct on this procedure.

[TYPE A, TYPE C]

1. Turn the power on.
2. Enter the service mode.
   - To cancel the service mode, press [⏻] button on the remote control unit.
3. Press [BACK] button to enter the Control Panel Key Confirmation Menu.
4. Press any button on the control panel.
5. Press [INFO] button to proceed with the self check mode.
6. Make sure to confirm the "INITIALIZED FINISH" appears in the green screen.
7. Unplug the AC Cord and plug it back on again.

[TYPE B]

1. Turn the power on.
2. Enter the service mode.
   - To cancel the service mode, press [⏻] button on the remote control unit.
3. Press [BACK] button to enter the Control Panel Key Confirmation Menu.
4. Press any button on the control panel.
5. Press [INFO] button to proceed with the self check mode.
6. Make sure to confirm the "INITIALIZED : OK" appears in the green screen.
7. Unplug the AC Cord and plug it back on again.

FIRMWARE RENEWAL MODE

[TYPE A, TYPE C]

Equipment Required

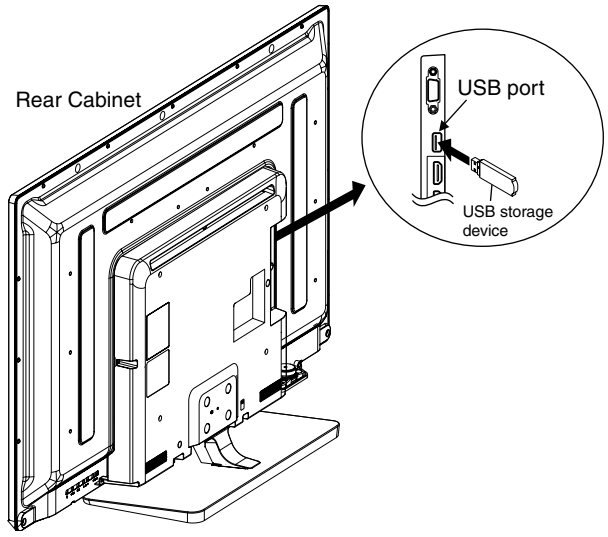
a. USB storage device
b. Remote Control Unit

Firmware Update Procedure

User Upgrade (Filename example: TVNB012_00_PF_XX91_BC.ecc or TVNB1012_00_PG_XX91_BA0.bin)
Upgrade the firmware only. The setting values will not be initialized.
The User Upgrade and the Firmware Upgrade (Factory Upgrade) will be done by the same file. If you want to upgrade the firmware and initialize the setting values also, add “FACT_” at the beginning of the filename.
If you want to upgrade the firmware only and leave the setting values as they are, eliminate the “FACT_” from the filename.

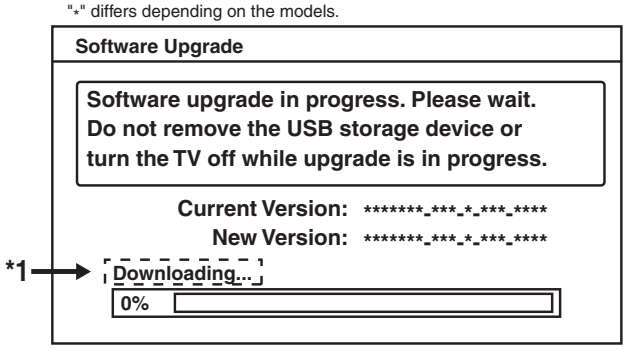
Update procedure

1. Turn the power on.
2. Press [MENU] button to display Menu.
3. Select “Features”.
4. Select “Software Upgrade”.
5. Select “Upgrade” to display Upgrade screen.
6. Press [OK] button to display Software Upgrade screen.
7. Select “USB” and press [OK] button.
8. Insert the USB storage device to the USB port as shown below.



9. Select “Check” and press [OK] button.
10. Select “Upgrade” and press [OK] button to start software upgrade.
11. The update will start and the following will appear in the screen.

"*" differs depending on the models.

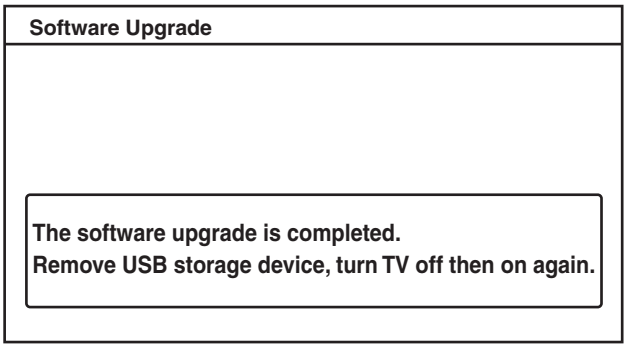


Note: If the above screen isn’t displayed, repeat from step 1.

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.

12. When the firmware update is completed, the following will appear in the screen.



Remove the USB storage device from the USB port.
Turn the power off and turn the power on again.

Factory Upgrade (Firmware Upgrade/Flash Upgrade)

Firmware Upgrade

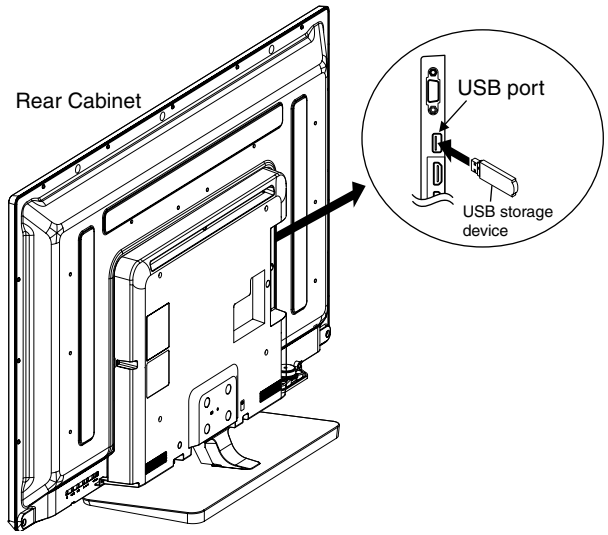
(Filename example: FACT_TVNB012_00_PF_XX91_BC.ecc or FACT_TVNB1012_00_PG_XX91_BA0.bin)
Upgrade the firmware and initialize the setting values.
The User Upgrade and the Firmware Upgrade (Factory Upgrade) will be done by the same file. If you want to upgrade the firmware and initialize the setting values also, add “FACT_” at the beginning of the filename.
If you want to upgrade the firmware only and leave the setting values as they are, eliminate the “FACT_” from the filename.

Flash Upgrade

(Filename example: ALL_TVNB012_00_PF_XX91_BC.ecc or ALL_TVNB1012_00_PG_XX91_BA0.bin)
Upgrade the firmware and initialize the setting values along with the factory default such as White Balance, etc.
Before the upgrade, you will need to make a note of all the factory default so you will be able to set it back on the TV after the initialization.
The Flash Upgrade will be done by it's unique file.
The User Upgrade/Firmware Upgrade (Factory Upgrade) file cannot be used for this upgrade.

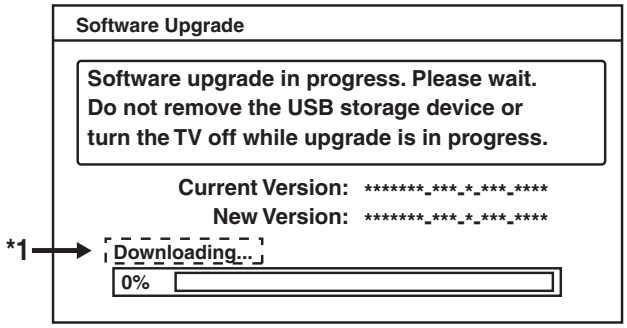
Update procedure

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



3. Turn the power on.
4. The update will start and the following will appear in the screen.

"⋆" differs depending on the models.

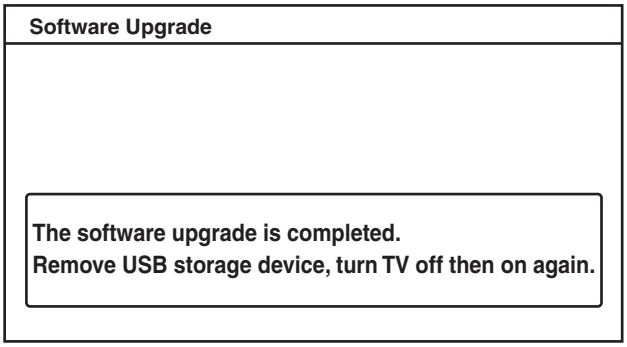


Note: If the above screen isn’t displayed, repeat from step 1.

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 in the screen.



Remove the USB storage device from the USB port.
Turn the power off and turn the power on again.
Service mode initial screen with a word “INITIALIZED” will appear in the screen. The color of the word “INITIALIZED” will change from red to green when initialization is completed.

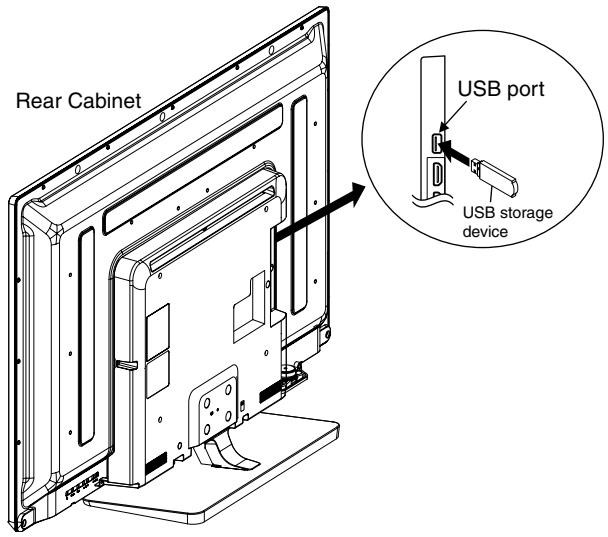
[TYPE B]

Equipment Required

1. USB storage device
2. Remote Control Unit

Firmware Update Procedure

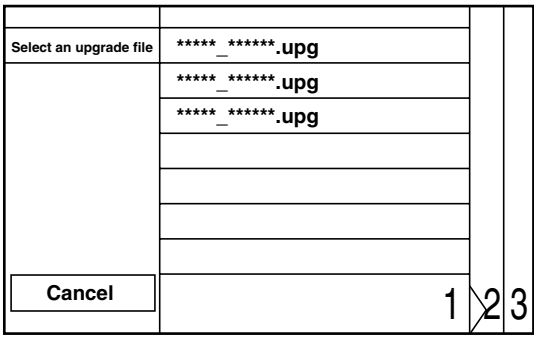
1. Turn the power off and unplug the AC Cord.
2. Insert the USB storage device to the USB port as shown below.



3. Plug the AC Cord and turn the power on.
4. After few seconds, the menu mode will appear in the screen.

   Note:
   After 30 seconds without an operation, the menu mode will disappear automatically.
   To display the menu mode again, press the [MENU] button on the remote control unit.
5. Select “Setup” and press the [OK] button to display the setup menu.
6. Select “Software”.
7. Select “Software update”.
8. Select “USB”.
9. Press the [OK] button on the remote control unit to enter the update mode. Update file selection screen appears as follows. (Files included in the USB storage device are displayed.)

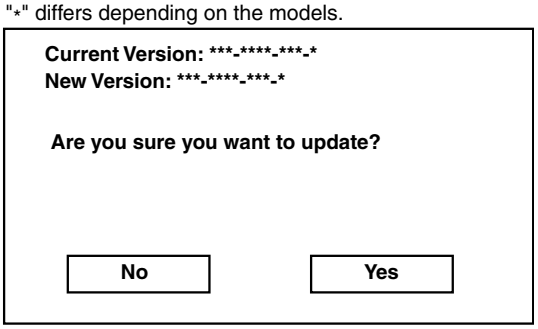
"⋆" differs depending on the models.



Note:
To cancel the update mode, select “Cancel” and press the [OK] button.

10. Select the file and press [OK] button.
11. The update will start and the following will appear in the screen.

"⋆" differs depending on the models.



Note:

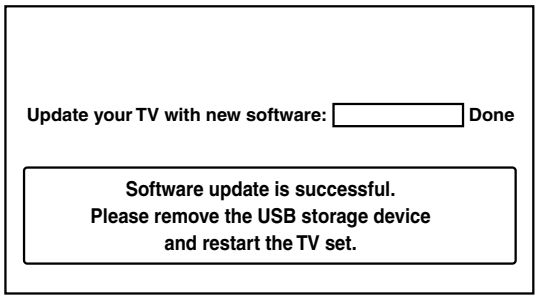
If the above screen isn’t displayed, repeat from step 1.

12. Select “Yes” and press the [OK] button to update.

Note:

Do not remove the USB storage device or turn the TV off while update is in progress.

13. When the firmware update is completed, the following will appear in the screen.



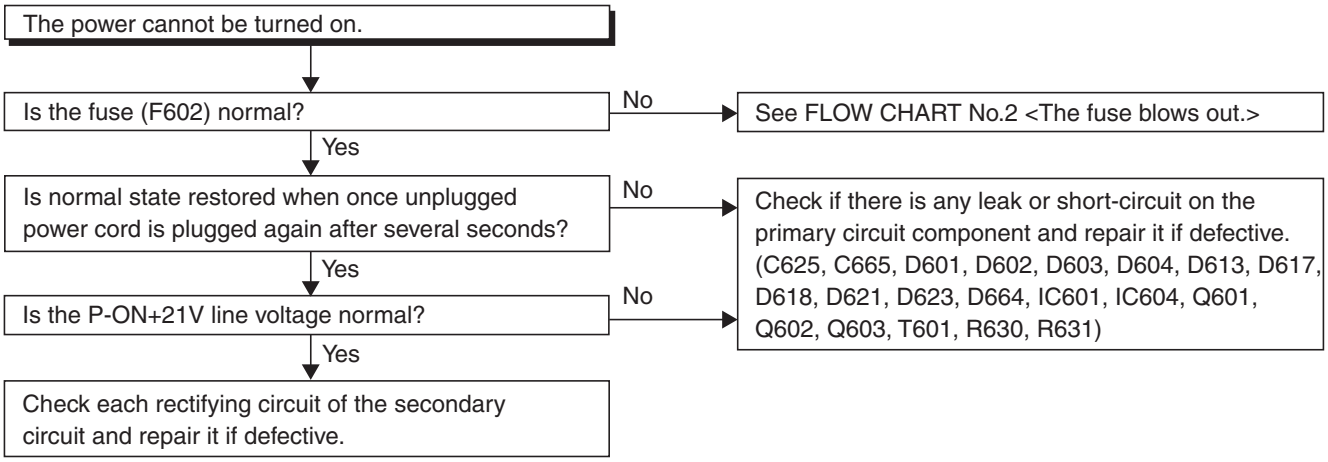
Remove the USB storage device from the USB port.
Turn the power off and turn the power on again.

TROUBLESHOOTING

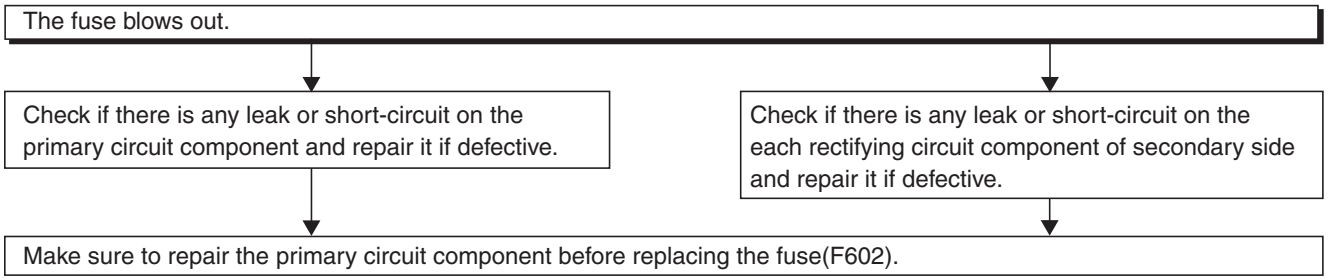
Note: This Troubleshooting section covers the entire PL13.16 chassis models. Thus some Reference number of parts shown below may not be used depending on the model. Please refer to the parts list for each model.

[Power Supply Section]

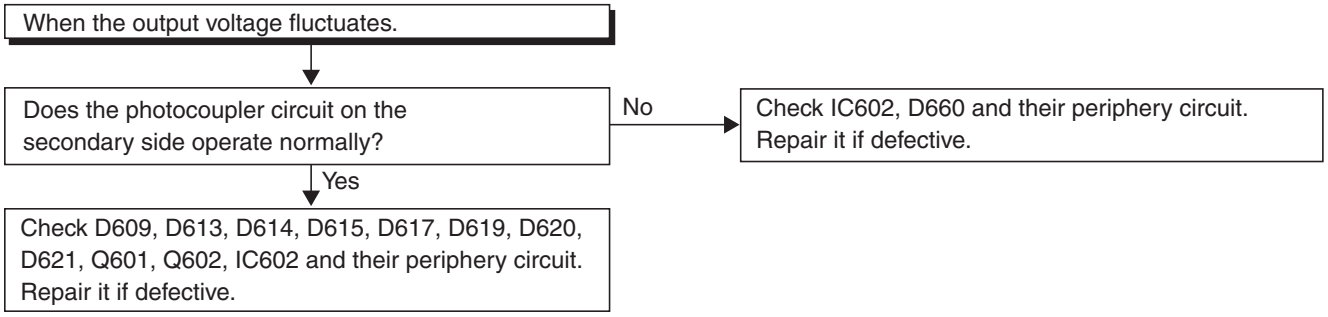
FLOW CHART NO.1



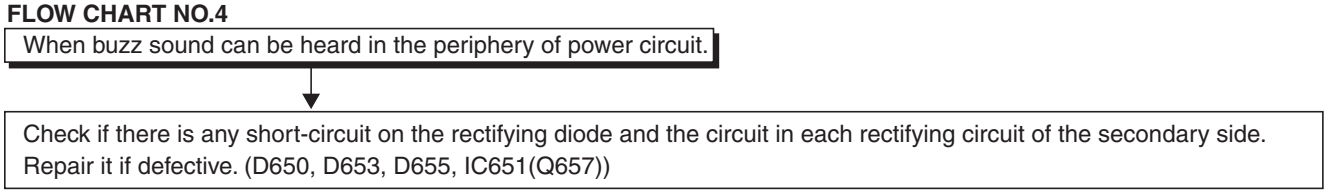
FLOW CHART NO.2



FLOW CHART NO.3



FLOW CHART NO.4



FLOW CHART NO.5

P-ON+21V is not output.

↓

Is approximately +21V voltage supplied to the cathode of D650?

No → Check C651, C652, D650 and their periphery circuit. Repair it if defective.

↓ Yes

Check if there is any leak or short-circuit on the load circuit. Repair it if defective.

FLOW CHART NO.6

AMP+13V is not output.

↓

Is approximately +13V voltage supplied to the cathode of D653(D655)?

No → Check C654, C655, D653, D654, D655 and their periphery circuit. Repair it if defective.

↓ Yes

Check if there is any leak or short-circuit on the load circuit. Repair it if defective.

FLOW CHART NO.7
[TYPE A, TYPE B]

AL+3.3V is not output.

↓

Is approximately +13V voltage supplied to Pin(3) of IC651?

No → Check C654, C655, D653, D654, D655, R676, R678, R679, R683, R684 and their periphery circuit. Repair it if defective.

↓ Yes

Replace IC651.

[TYPE C]

AL+3.3V is not output.

↓

Is approximately +10V voltage supplied to the emitter of Q657 and Pin(3) of IC651?

No → Check C654, C655, D653, D654, D655, R676, R678, R679, R683, R684, R688, R689 and their periphery circuit. Repair it if defective.

↓ Yes

Is approximately +3.3V voltage supplied to the collector of Q657?

No → Replace Q657.

↓ Yes

Replace IC651.

[Video Signal Section]

FLOW CHART NO.1

The key operation is not functioning.

↓

When touching each buttons, does the Pin(2) voltage of CN4001 decrease?

No → Replace the Function CBA Unit.

↓ Yes

Replace the Digital Main CBA Unit.

FLOW CHART NO.2

No operation is possible from the remote control unit. (Operation is possible from the unit.)

↓

Is approximately +3.3V voltage supplied to Pin(3) terminal of the remote control receiver (RS4051)?

No → Check AL+3.3V line and repair it if defective.

↓ Yes

Is the "L" pulse supplied to Pin(5) of CN4052?

No → Replace the IR Sensor CBA Unit.

↓ Yes

Replace the Digital Main CBA Unit.

FLOW CHART NO.3

Picture does not appear normally.

↓

Is approximately +21V voltage supplied to Pin(20, 21, 22, 23) of CN501?

No → See FLOW CHART NO.5 <P-ON+21V is not output. [Power Supply Section]>

↓ Yes

Is approximately +3.3V voltage supplied to Pin(8) of CN501?

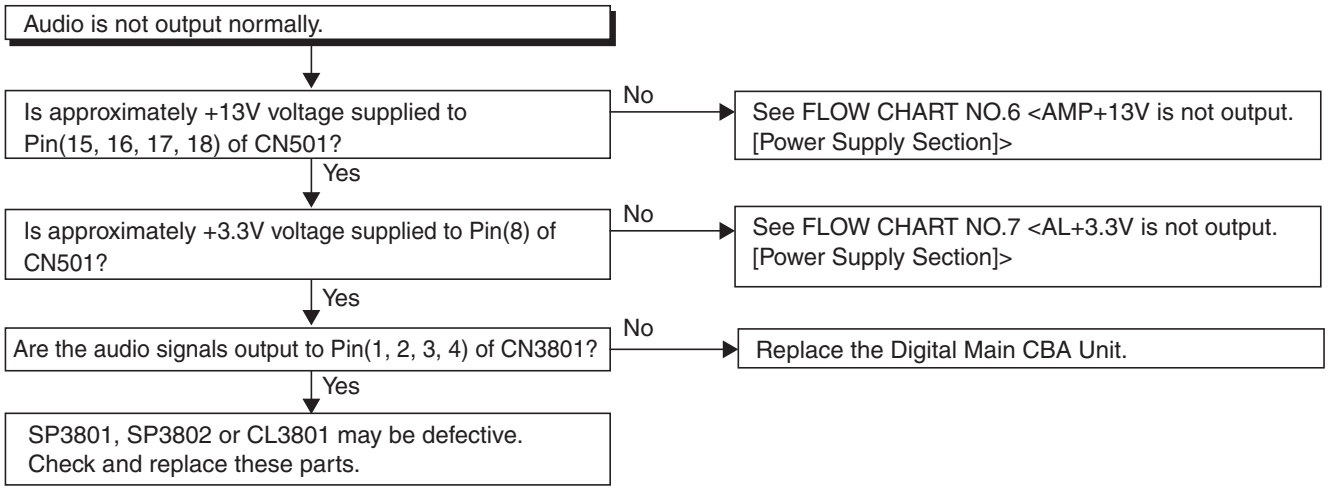
No → See FLOW CHART NO.7 <AL+3.3V is not output. [Power Supply Section]>

↓ Yes

Digital Main CBA Unit or LCD Panel Assembly may be defective.
Check and replace these parts.

[Audio Signal Section]

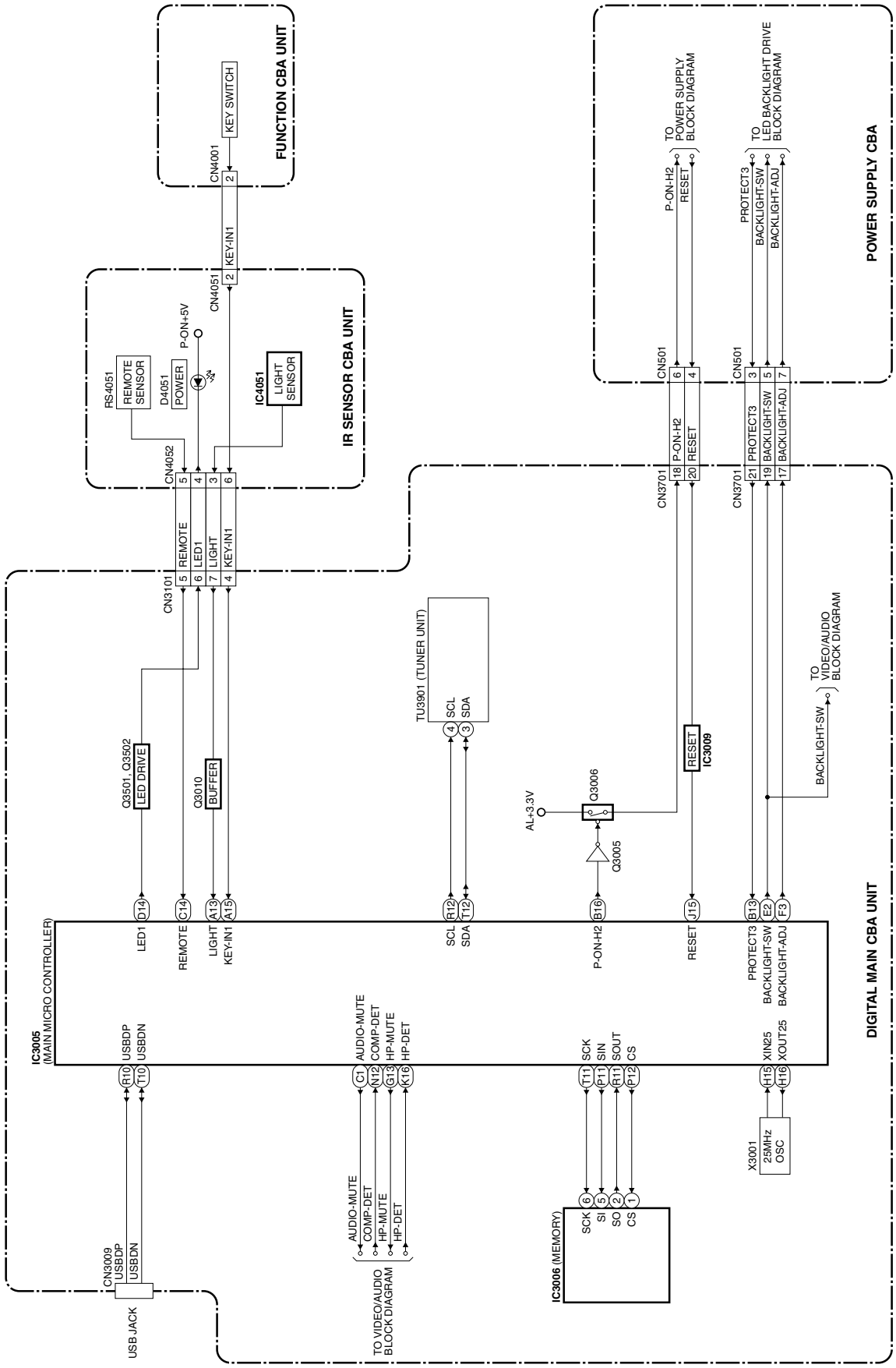
FLOW CHART NO.1



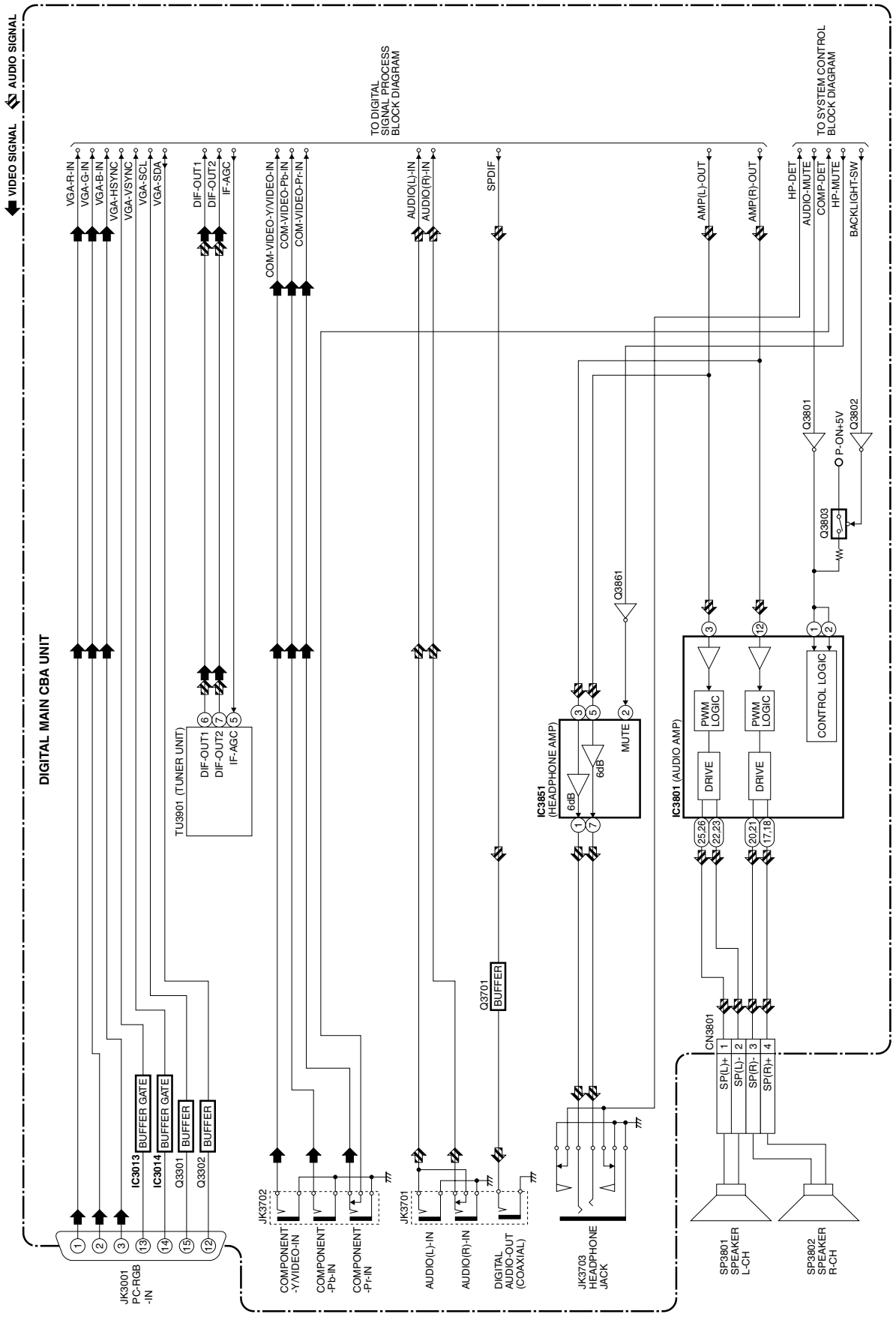
BLOCK DIAGRAMS

[TYPE A]

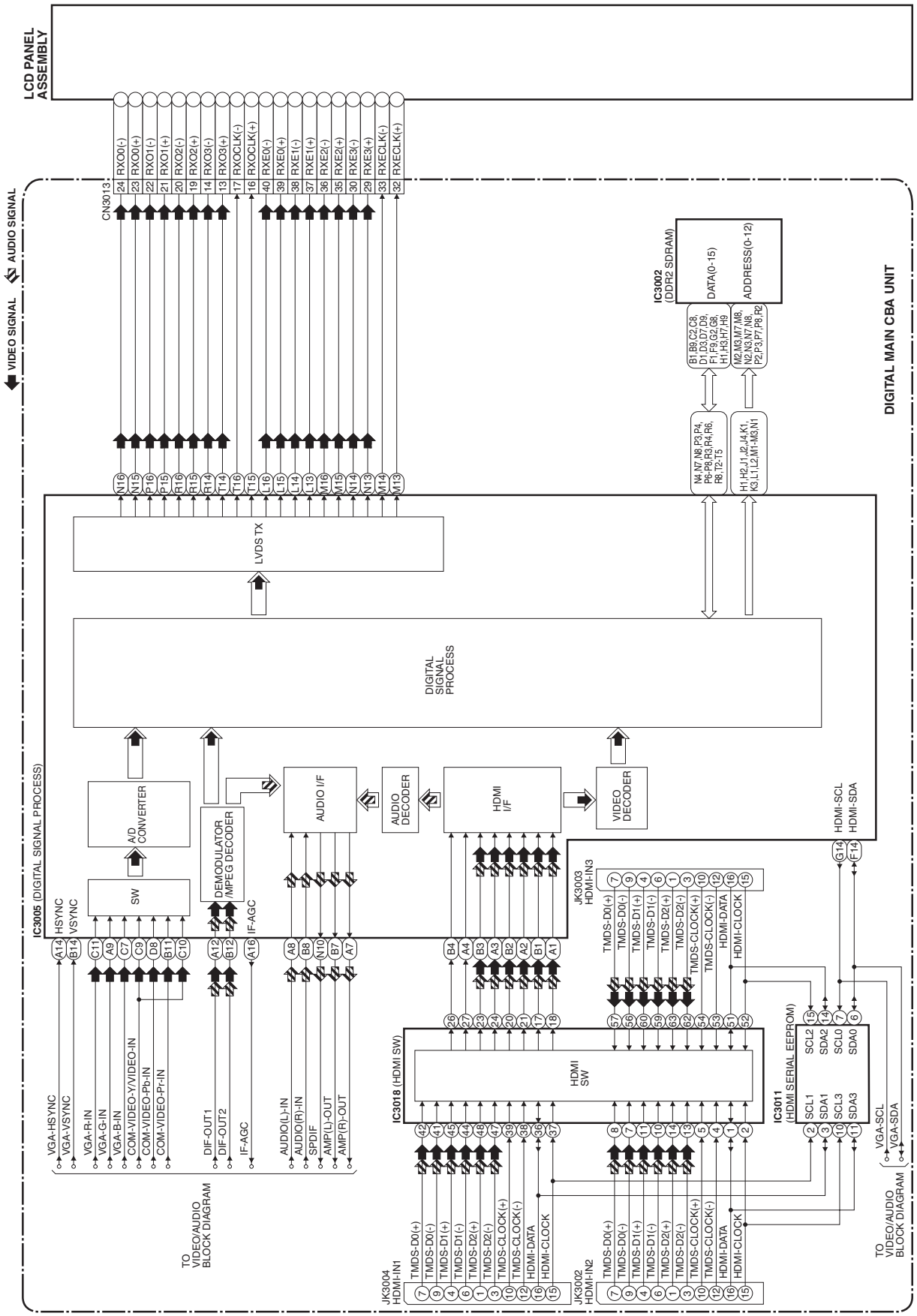
1. System Control Block Diagram



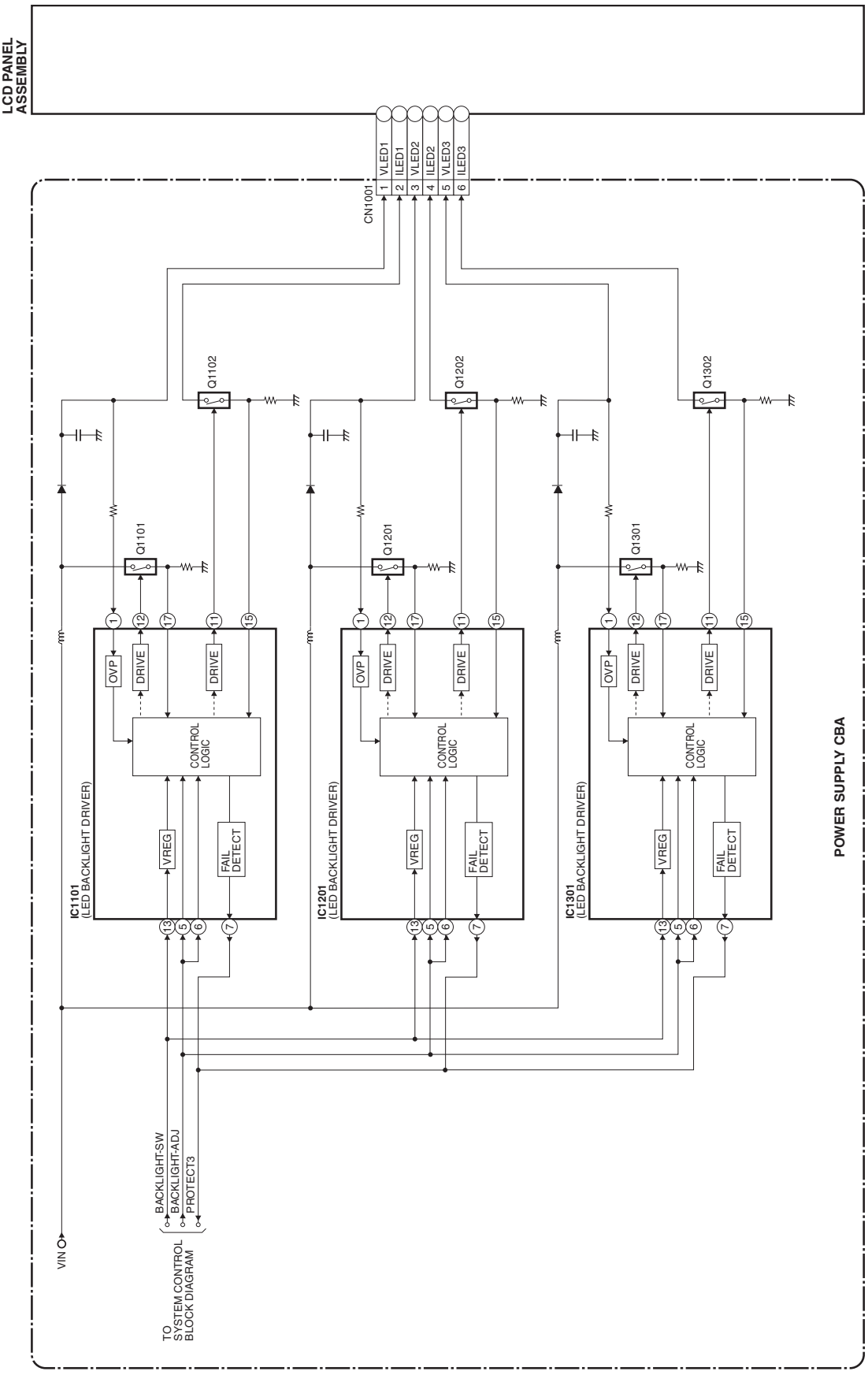
2. Video/Audio Block Diagram



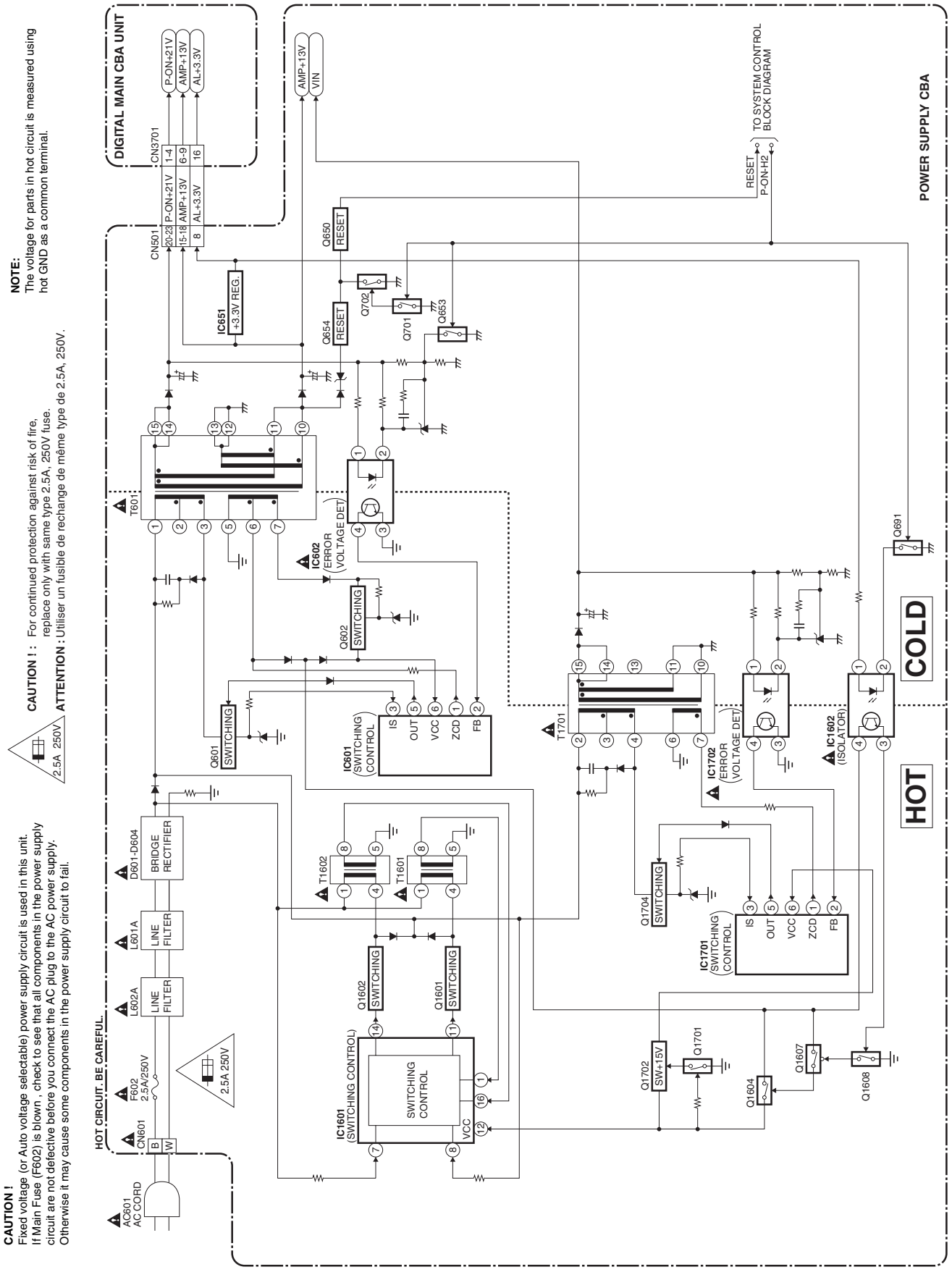
3. Digital Signal Process Block Diagram



4. LED Backlight Drive Block Diagram



5. Power Supply Block Diagram

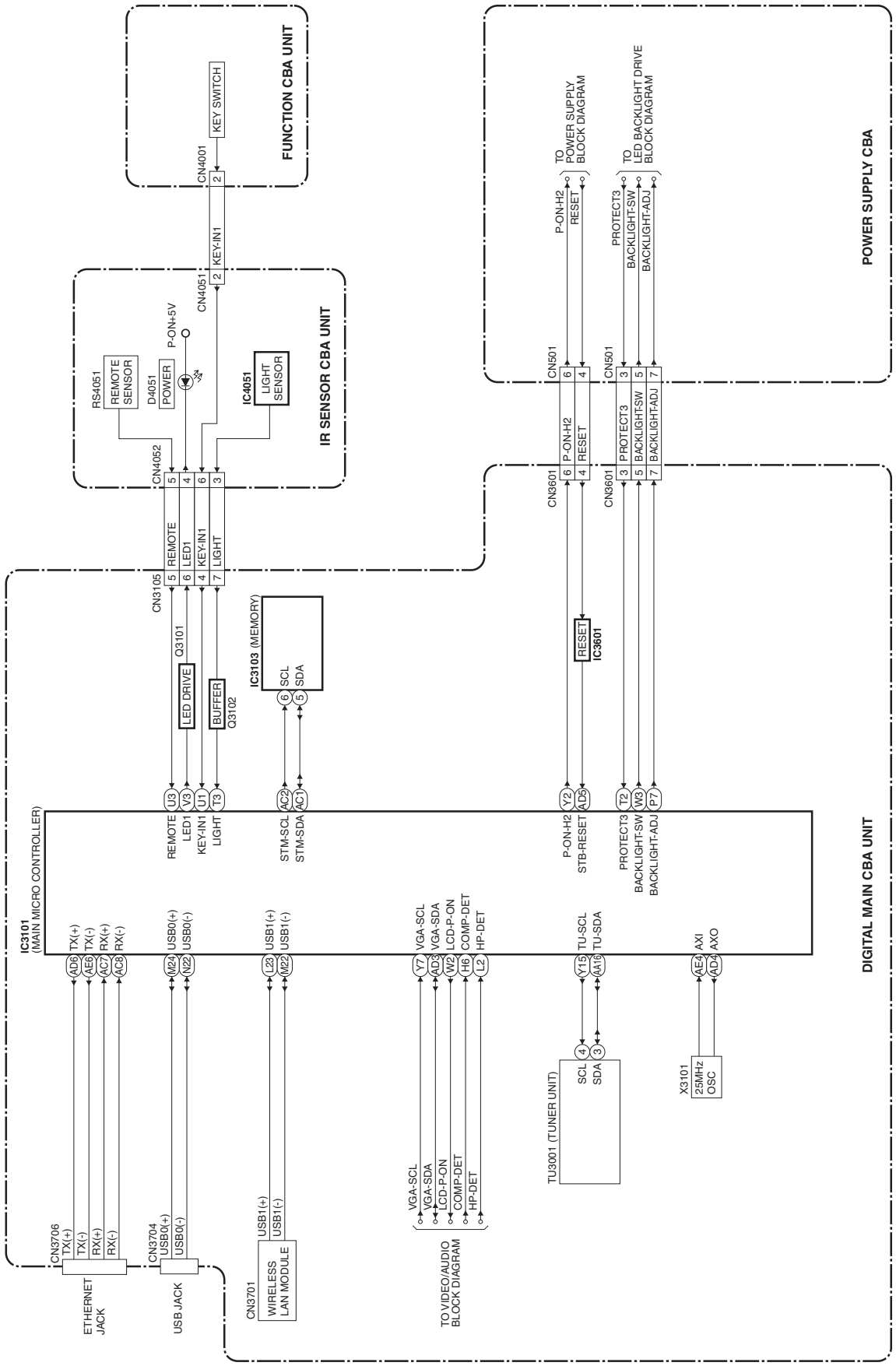


CAUTION ! Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F602) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

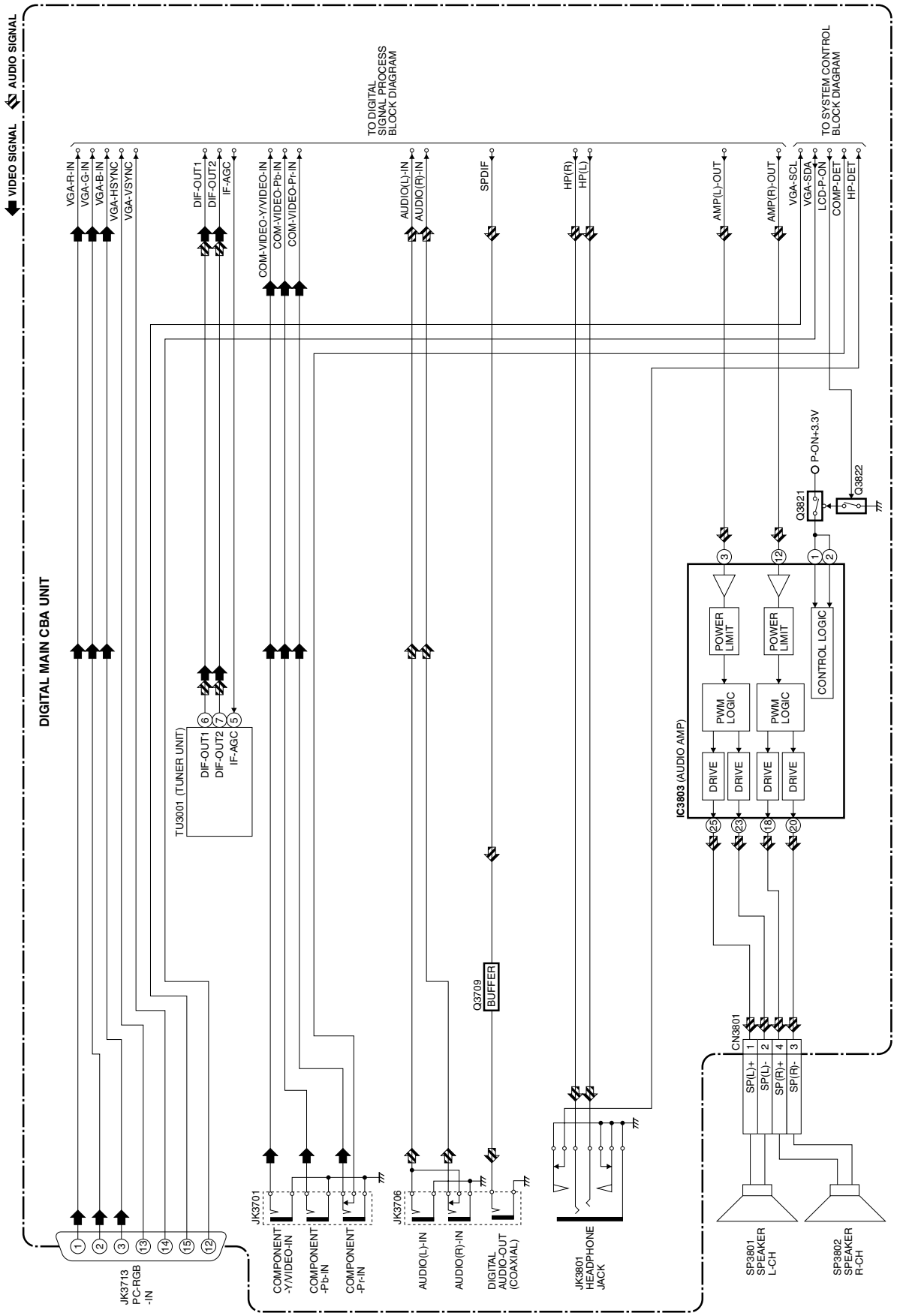
CAUTION ! : For continued protection against risk of fire, replace only with same type 2.5A, 250V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 2.5A, 250V.

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

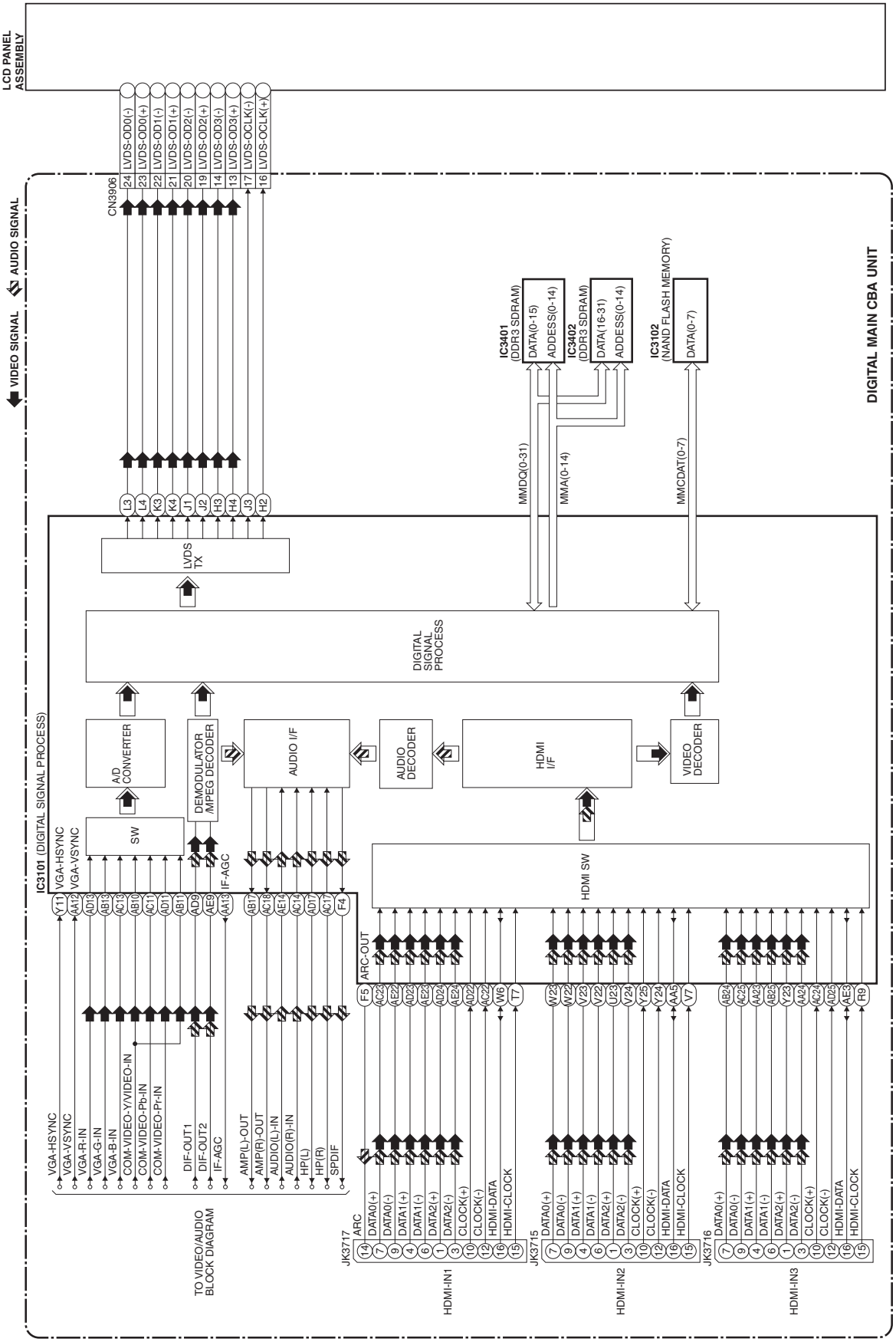
[TYPE B]
1. System Control Block Diagram



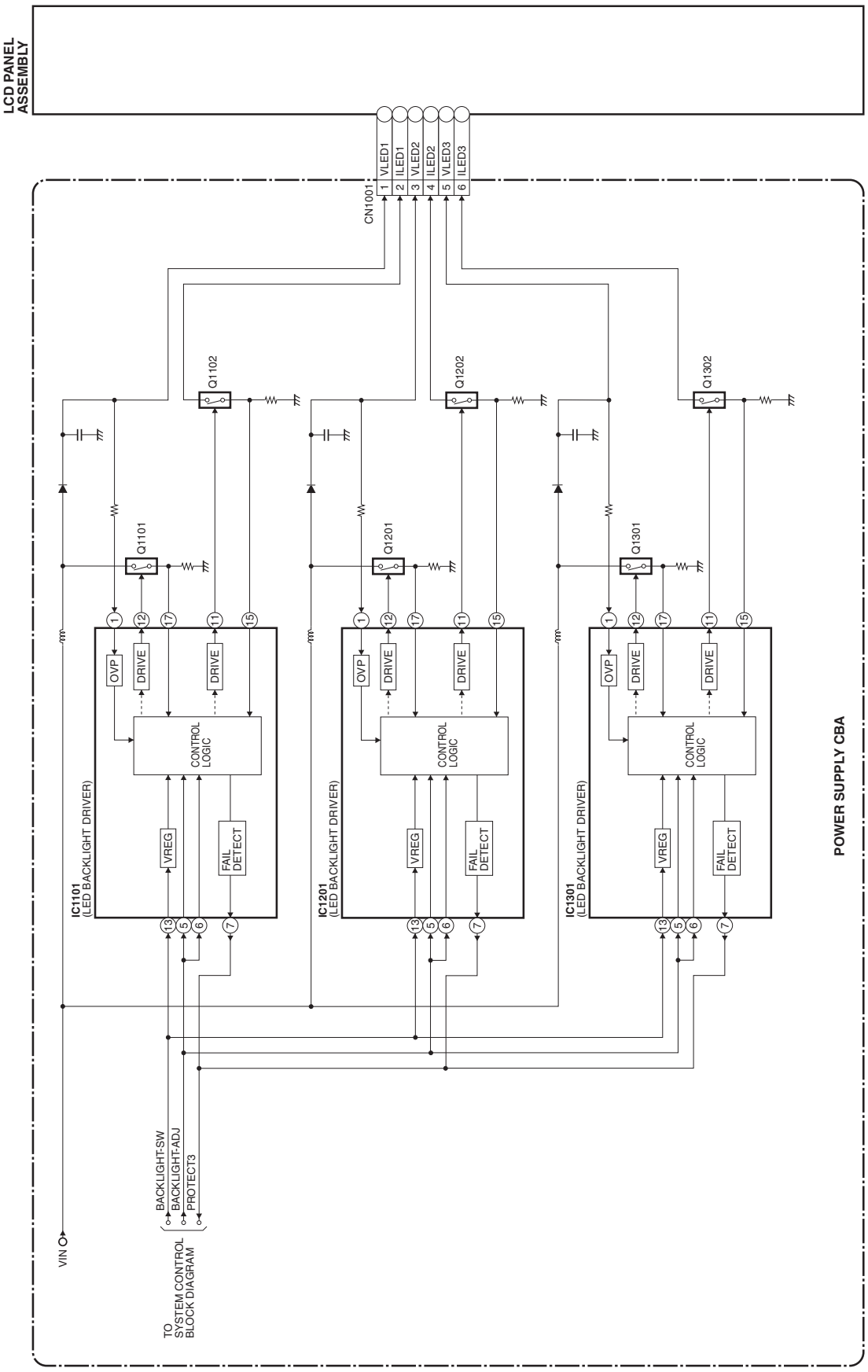
2. Video/Audio Block Diagram



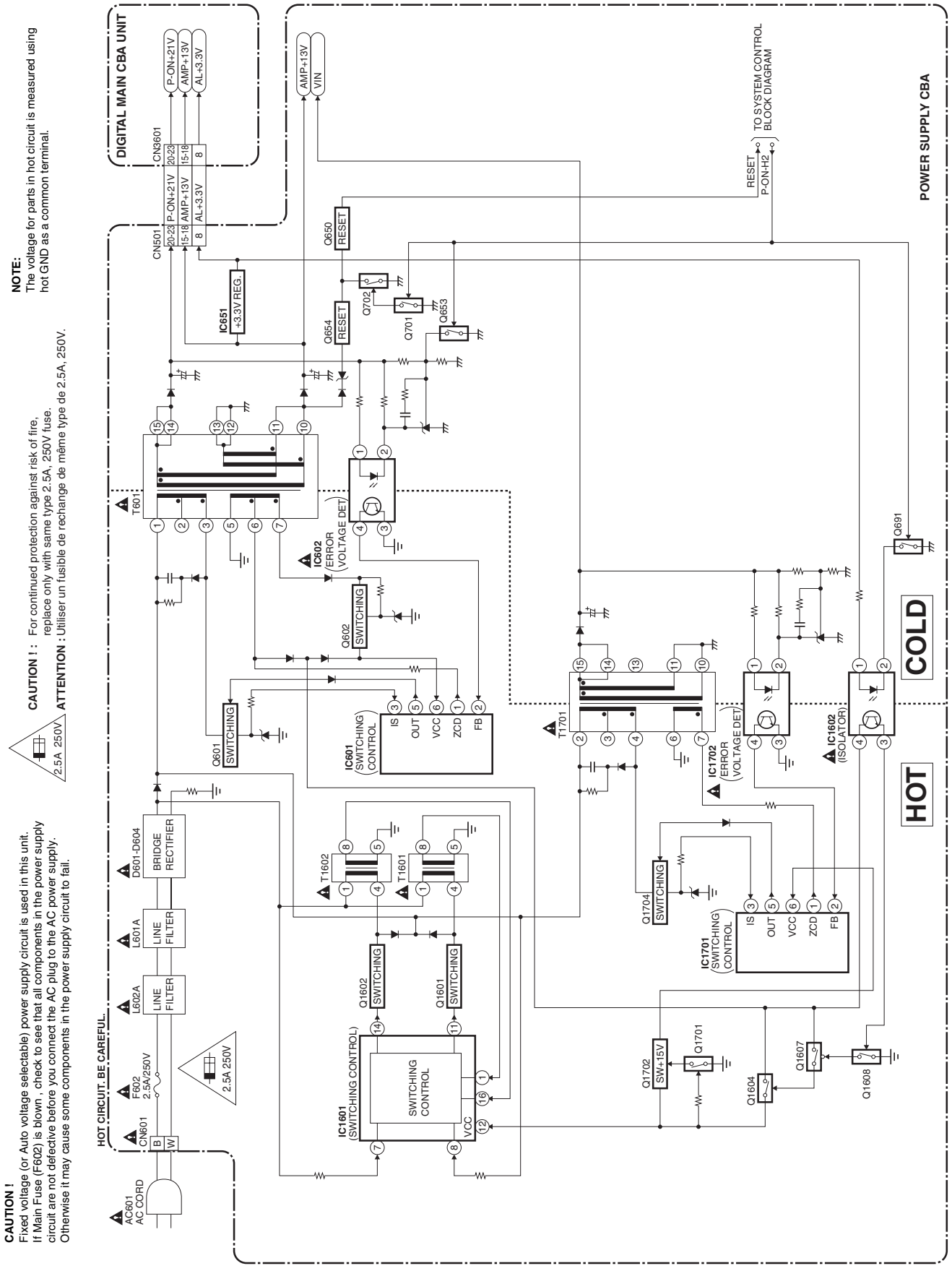
3. Digital Signal Process Block Diagram



4. LED Backlight Drive Block Diagram



5. Power Supply Block Diagram

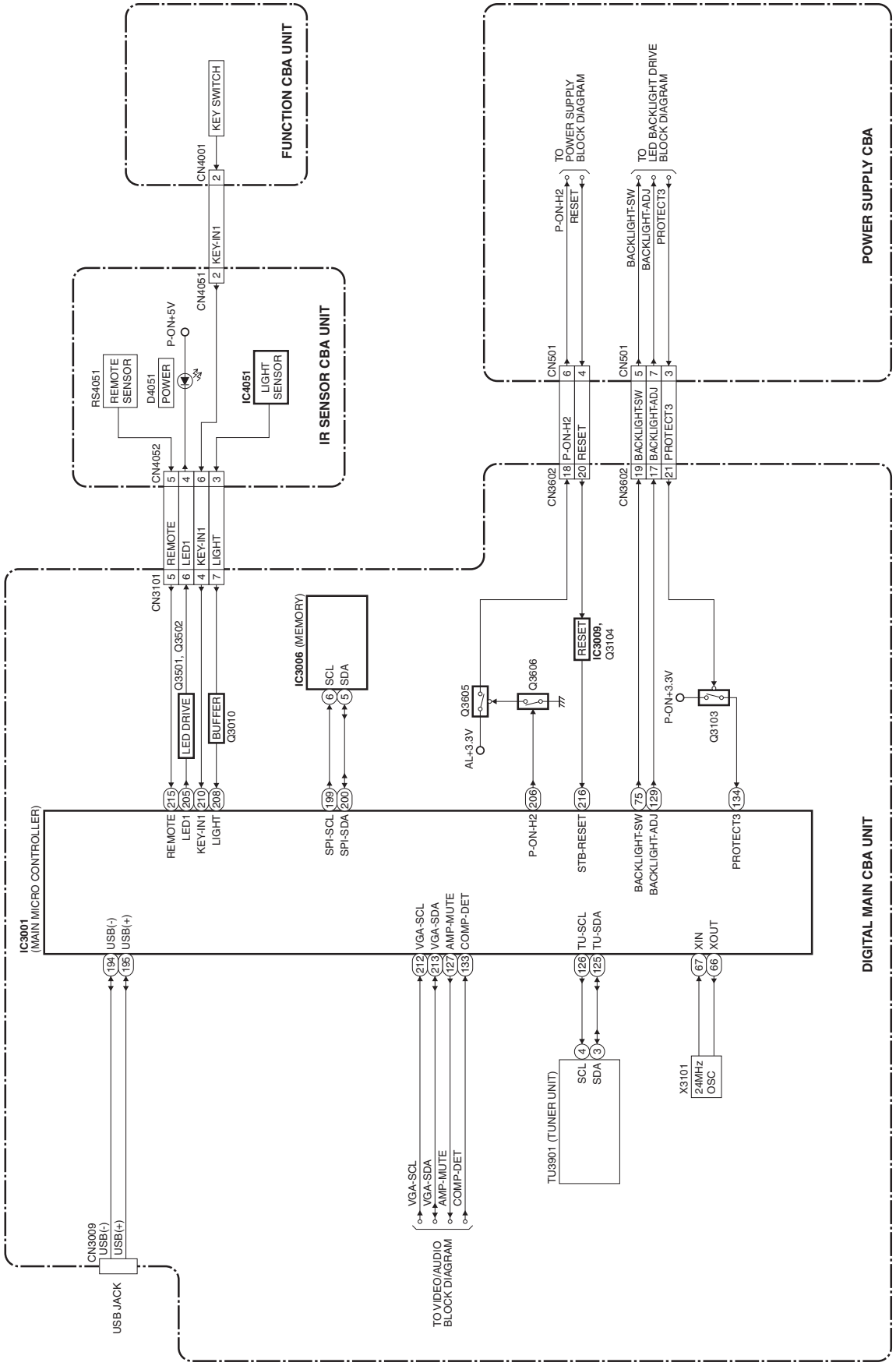


CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F602) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

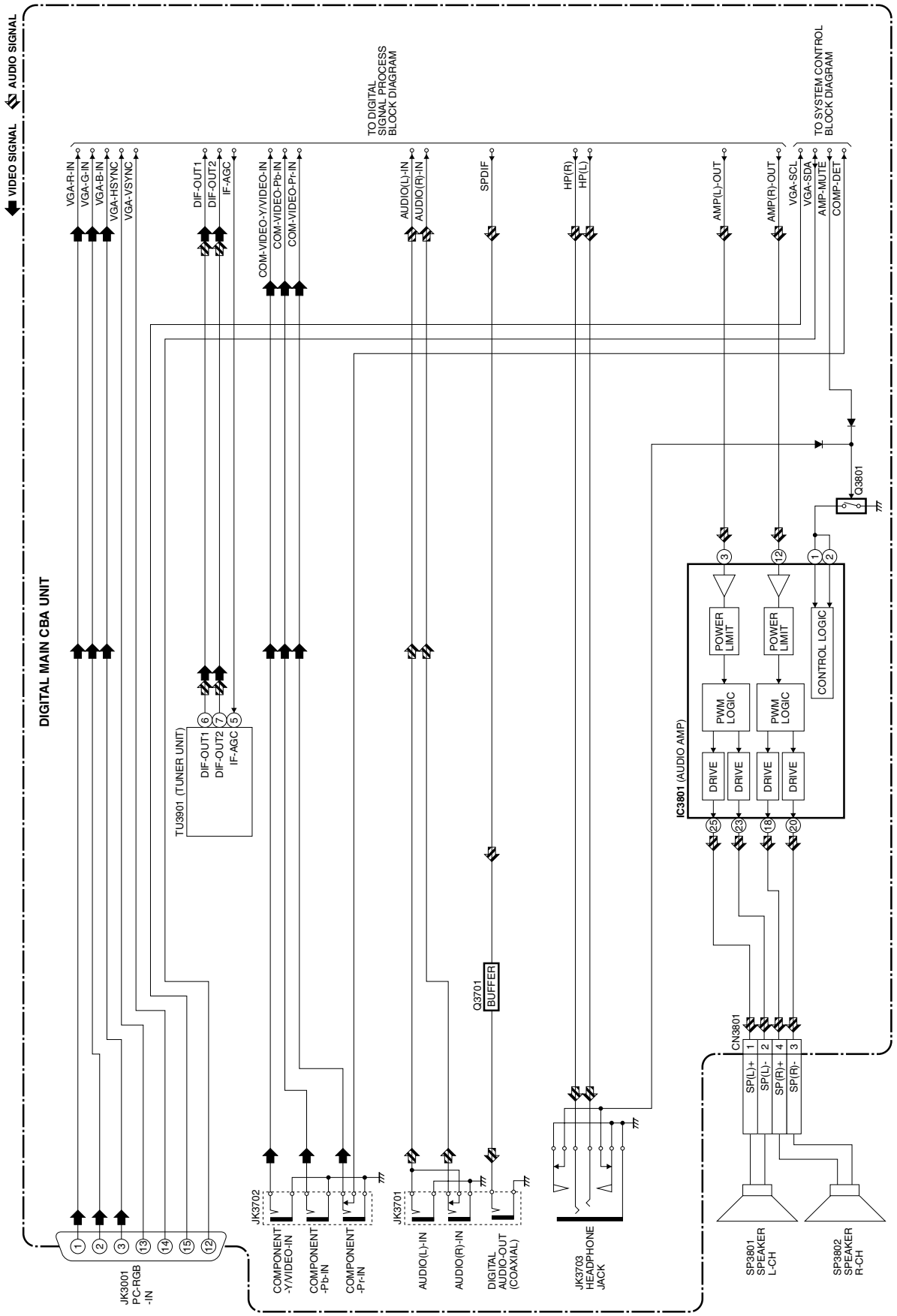
CAUTION ! : For continued protection against risk of fire, replace only with same type 2.5A, 250V fuse.
ATTENTION : Utiliser un fusible de recharge de même type de 2.5A, 250V.

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

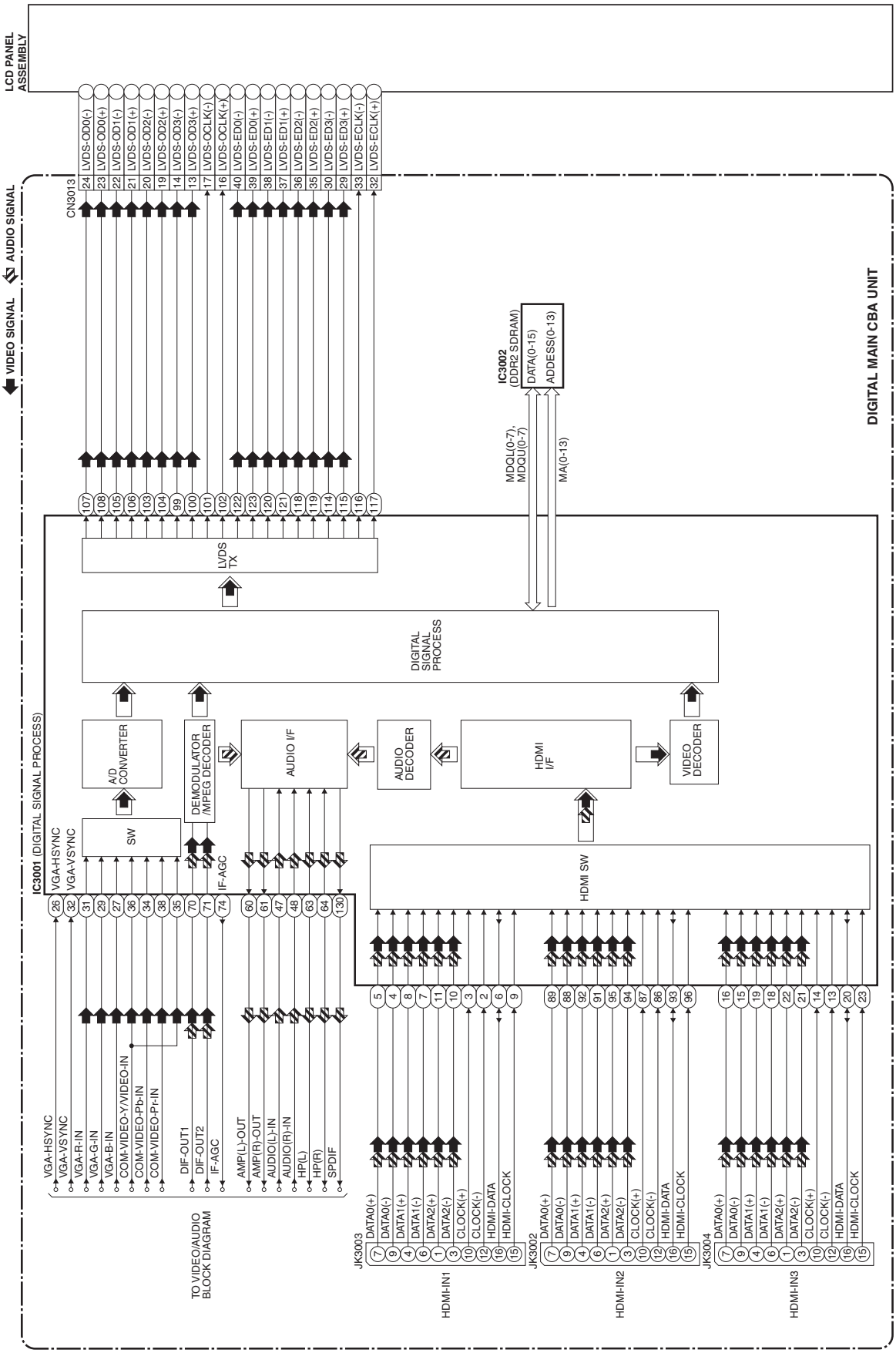
[TYPE C]
1. System Control Block Diagram



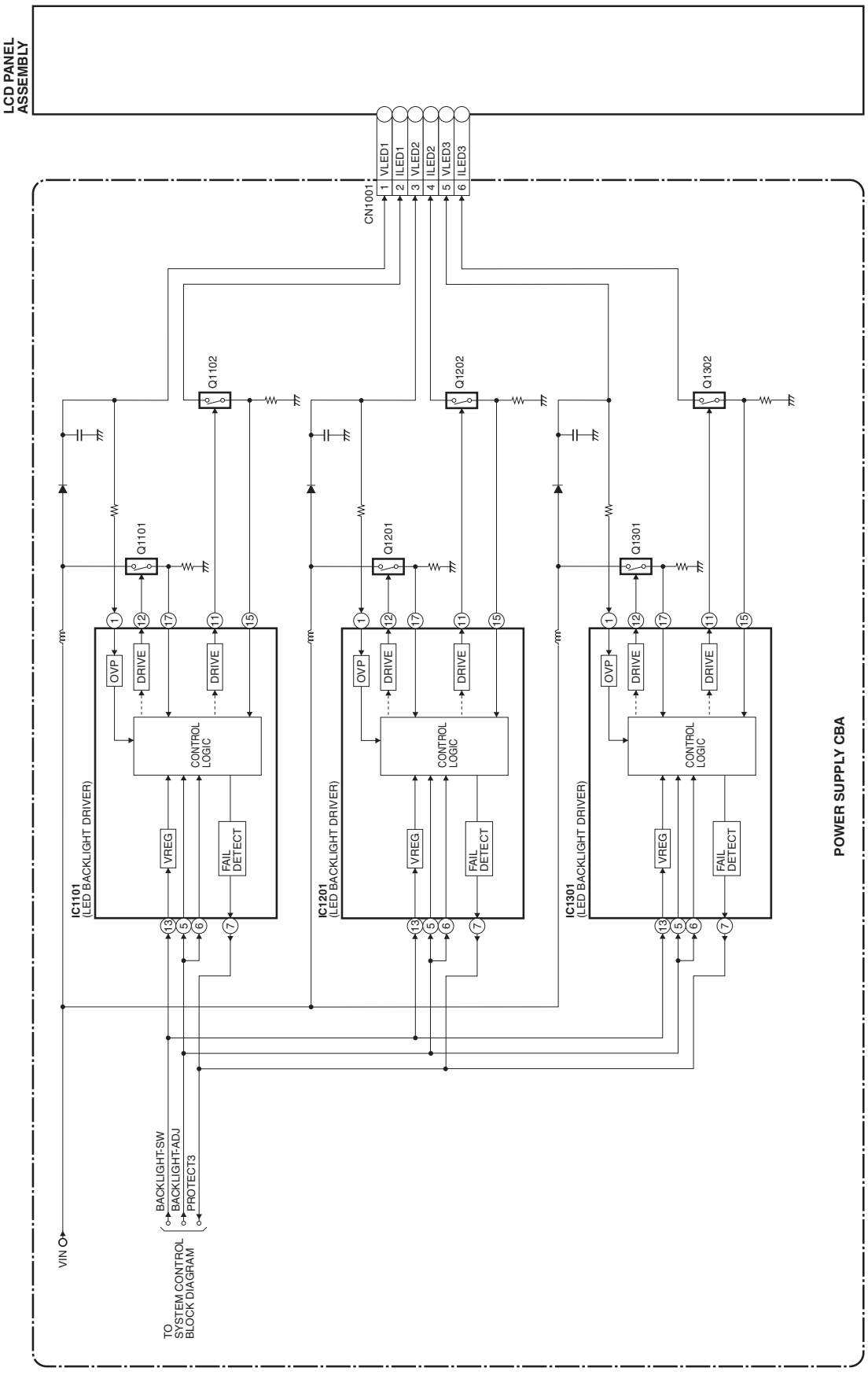
2. Video/Audio Block Diagram



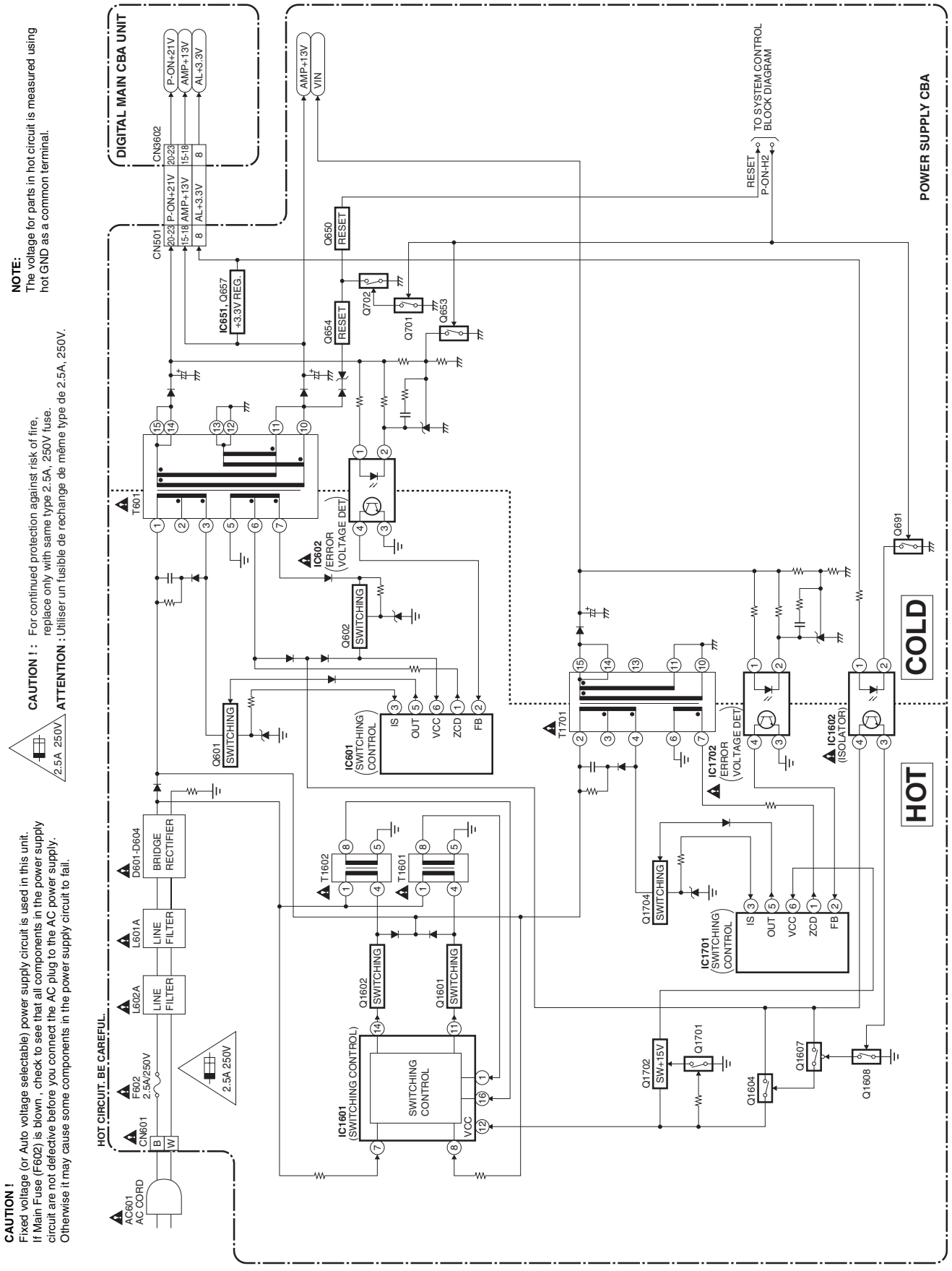
3. Digital Signal Process Block Diagram



4. LED Backlight Drive Block Diagram



5. Power Supply Block Diagram



CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F602) 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 2.5A, 250V fuse.
ATTENTION : Utiliser un fusible de recharge de même type de 2.5A, 250V.

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 PL13.16 chassis models.
   Thus some parts in detail illustrated on this schematic diagrams may vary depend on the model within the PL13.16 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:

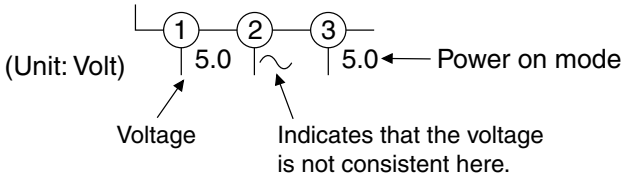
Fixed Voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F602) is blown, first check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the 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:

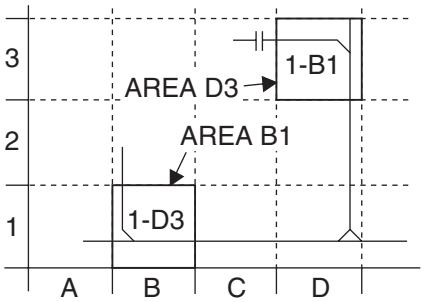
Plug the TV power cord into a standard AC outlet.:



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.

The reference number of parts on Schematic Diagrams/CBA can be retrieved by application search function.

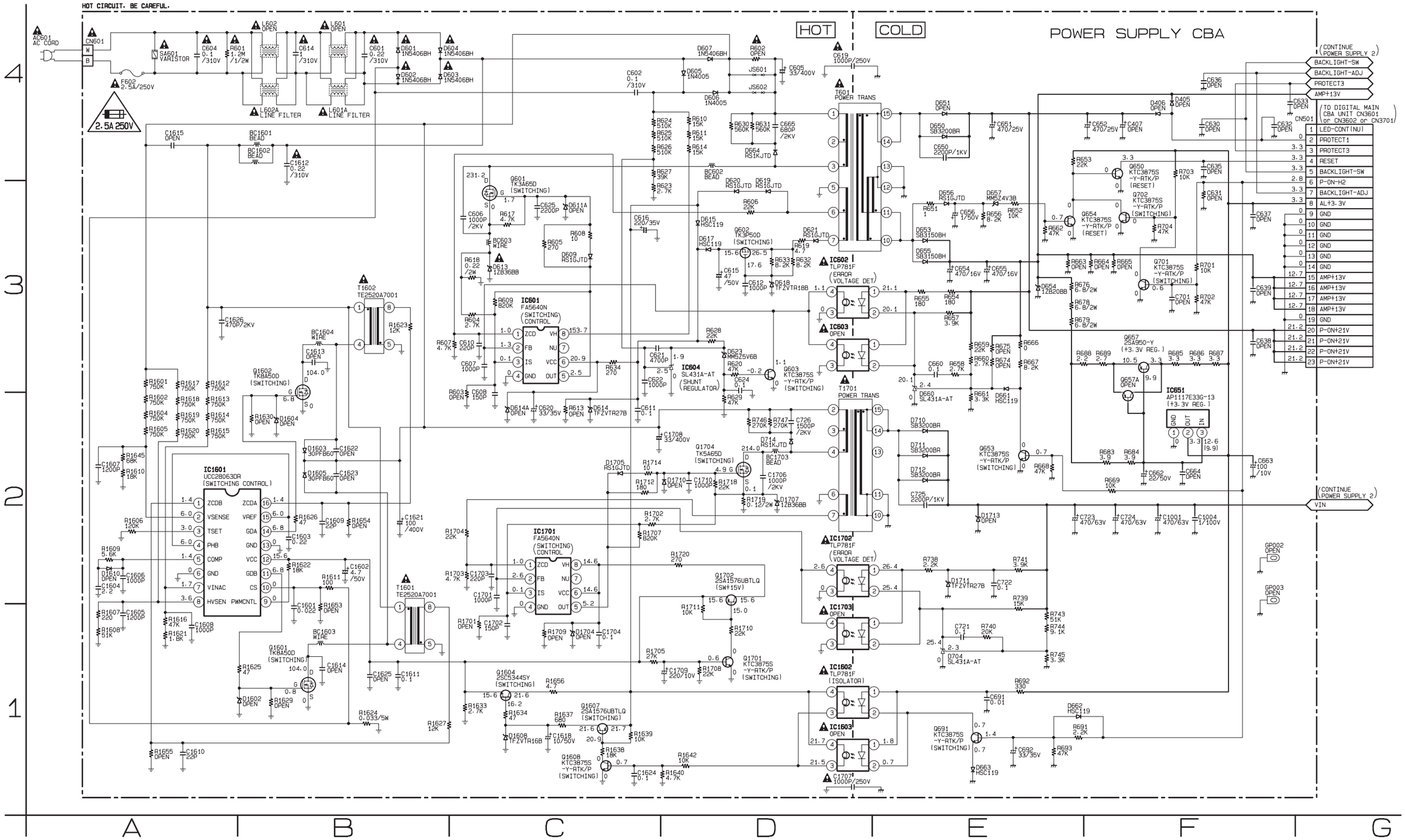
Power Supply 1 Schematic Diagram

CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F602) 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.

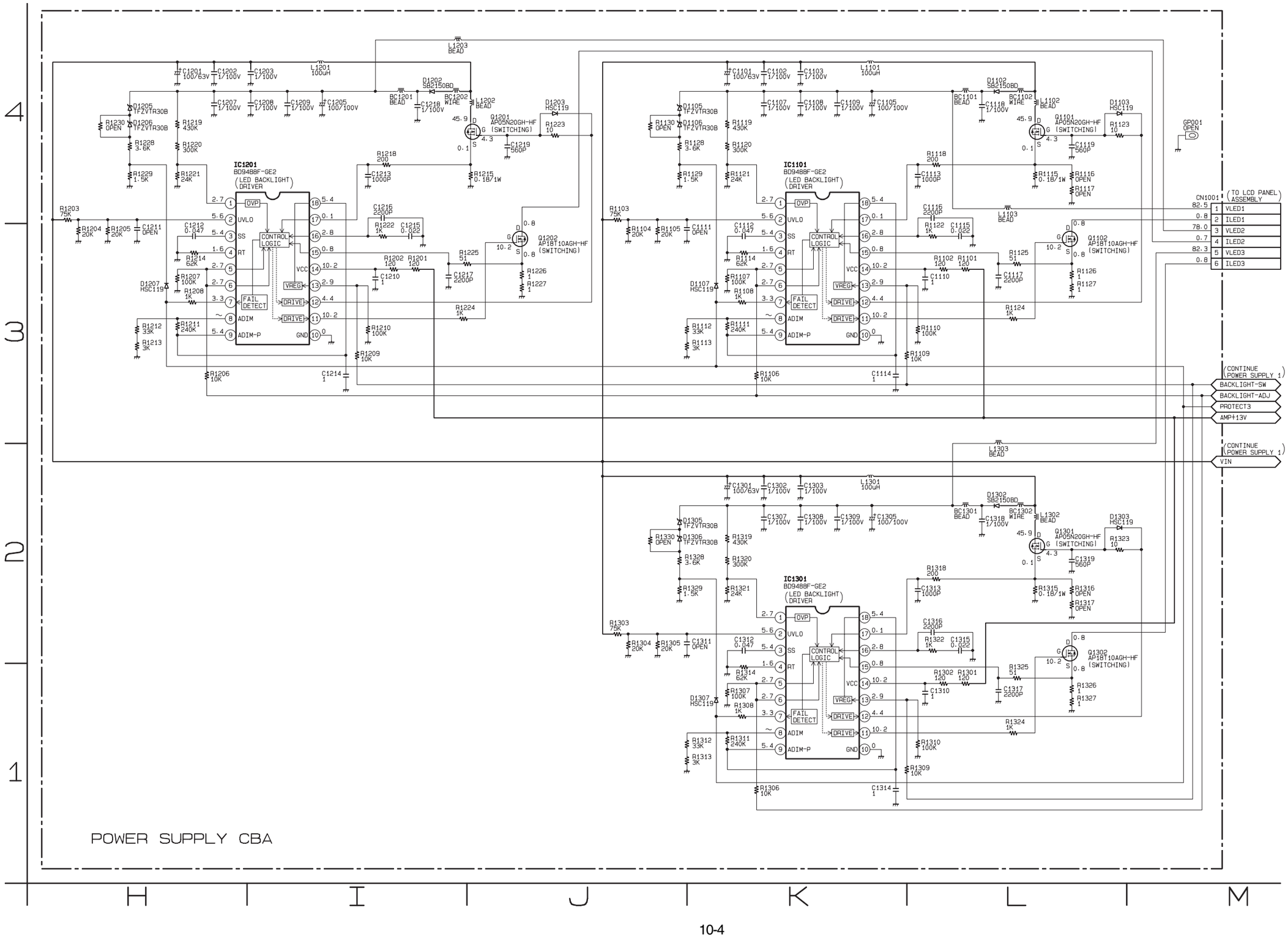
2.5A 250V

CAUTION ! : For continued protection against risk of fire, replace only with same type 2.5A, 250V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 2.5A, 250V.

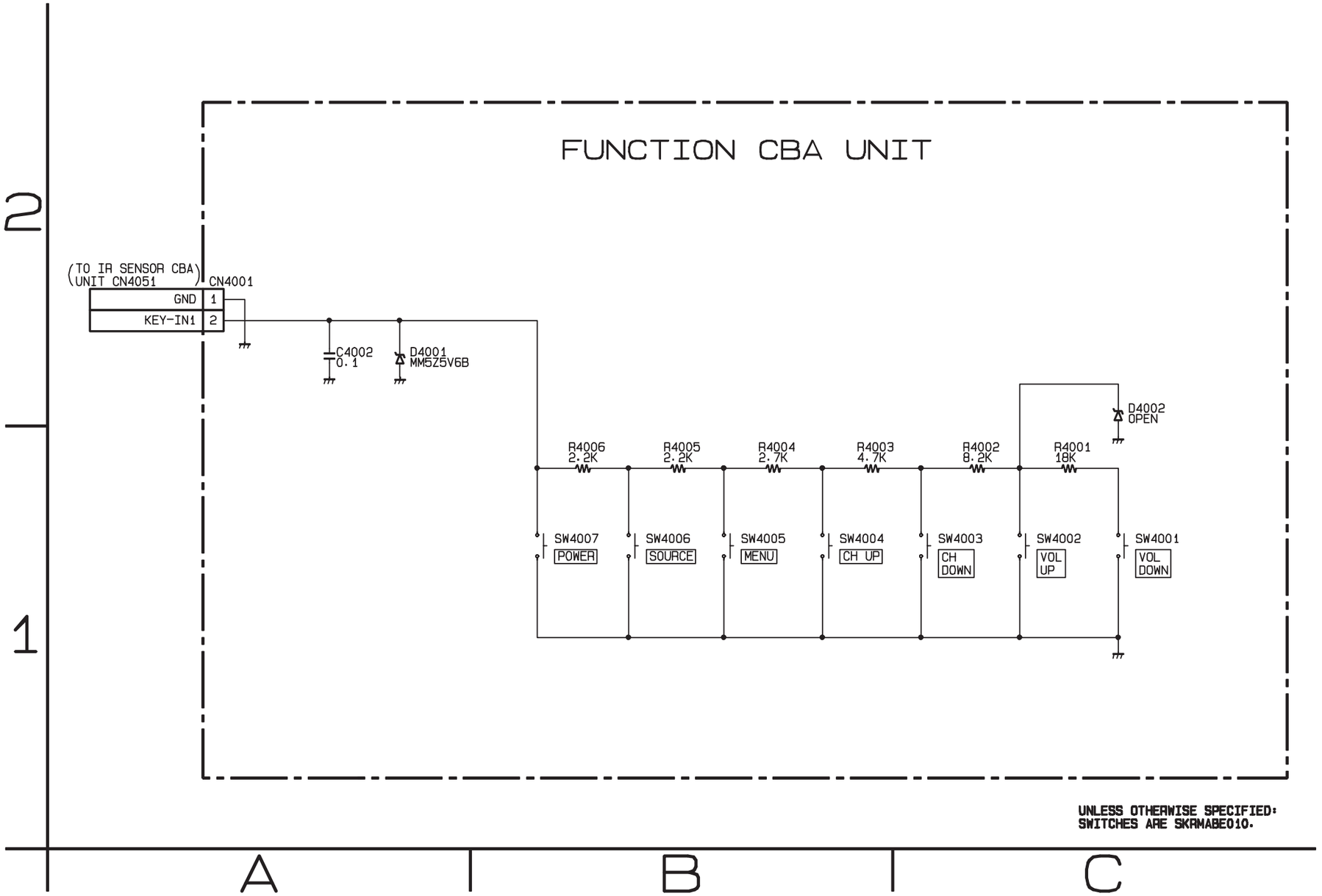
NOTE:
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



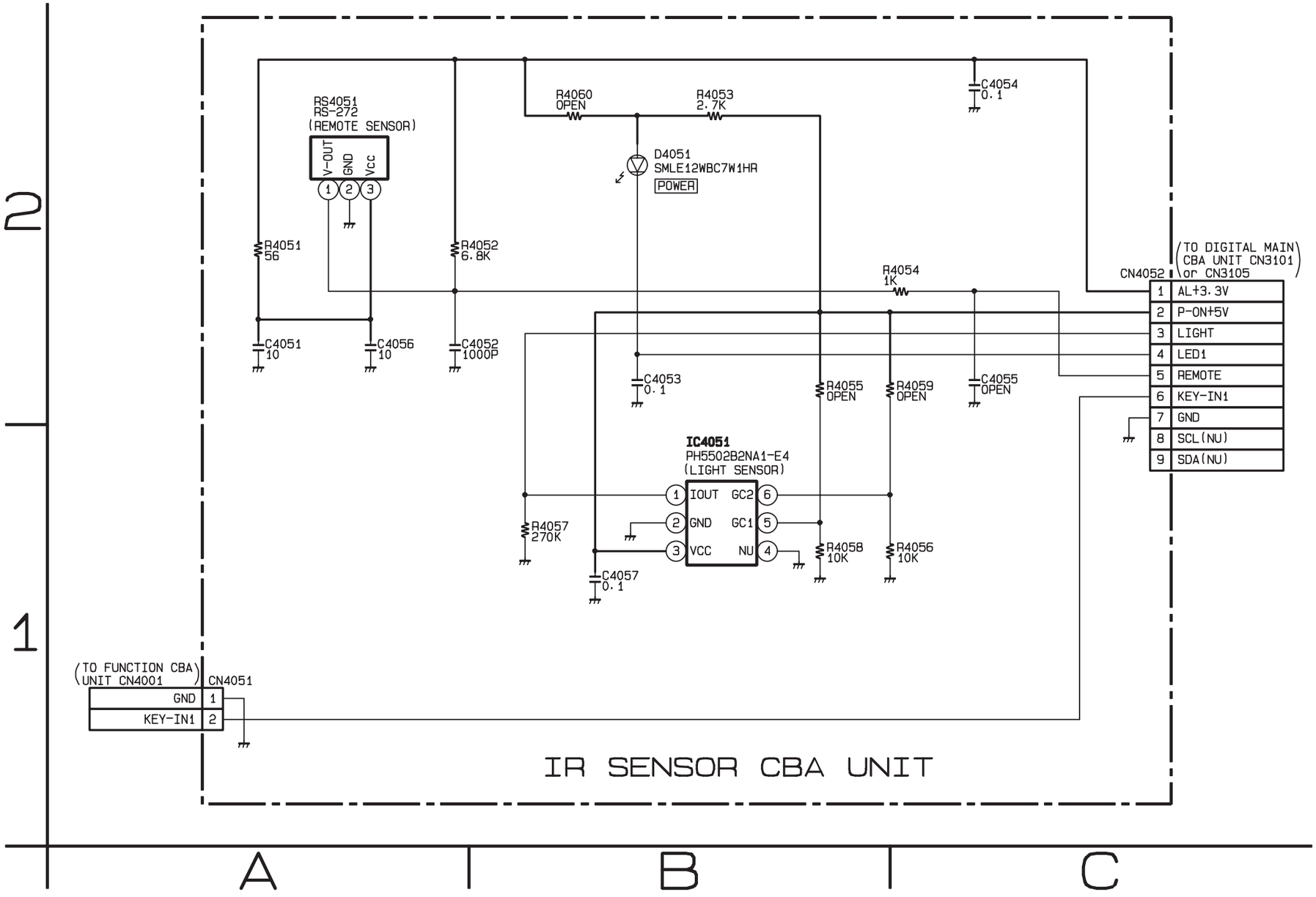
Power Supply 2 Schematic Diagram



Function Schematic Diagram

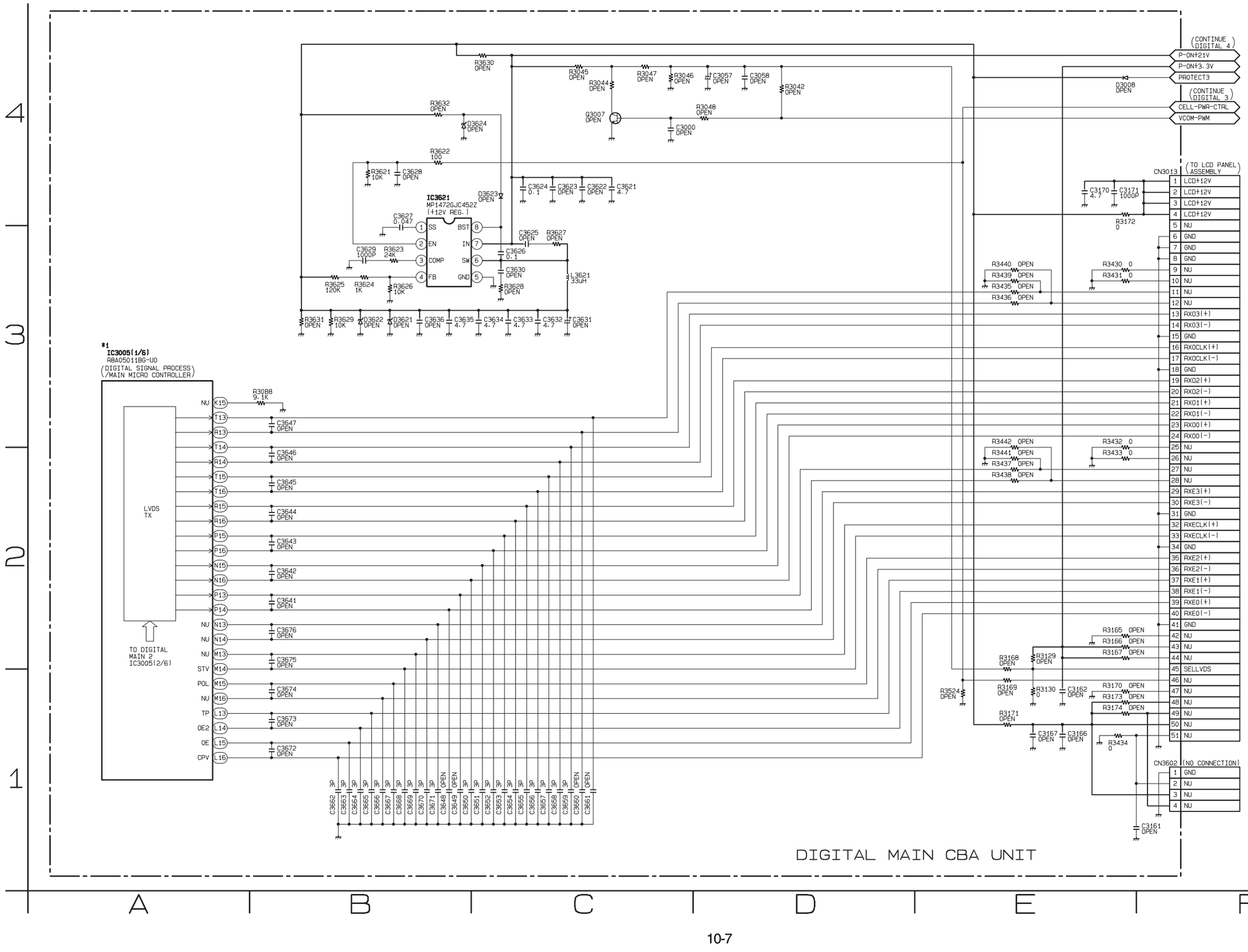


IR Sensor Schematic Diagram



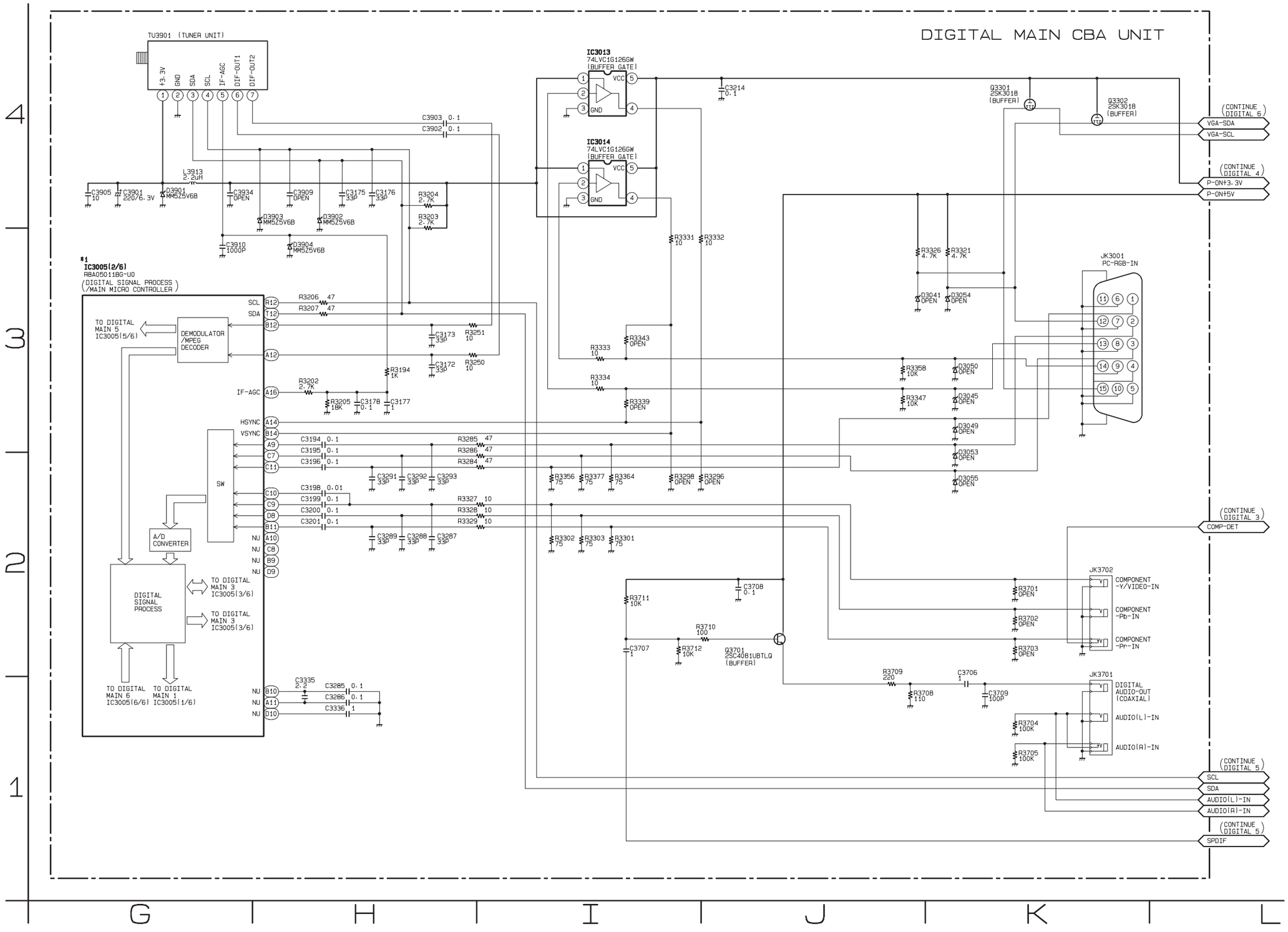
Digital Main 1 Schematic Diagram [TYPE A]

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



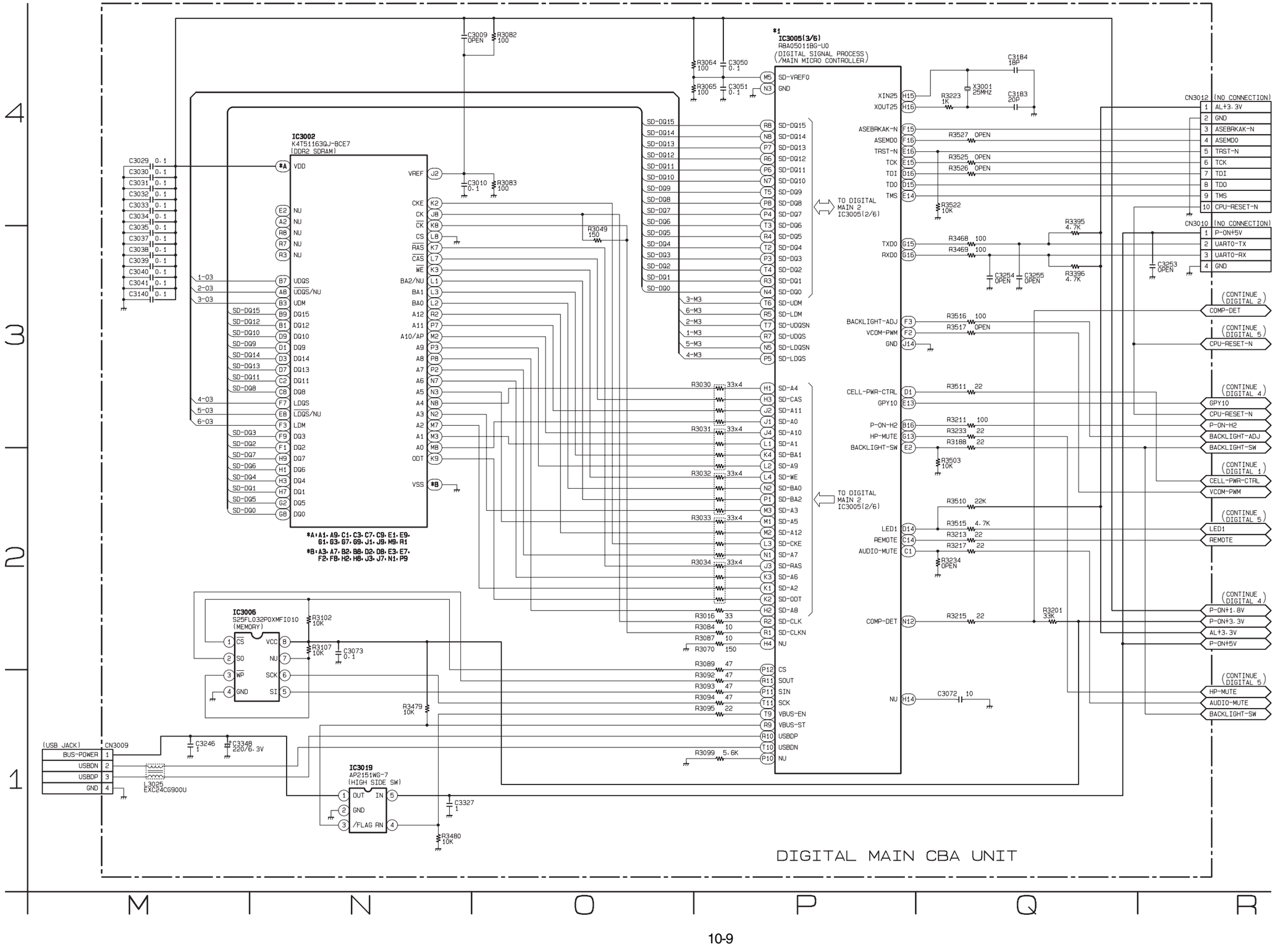
Digital Main 2 Schematic Diagram [TYPE A]

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



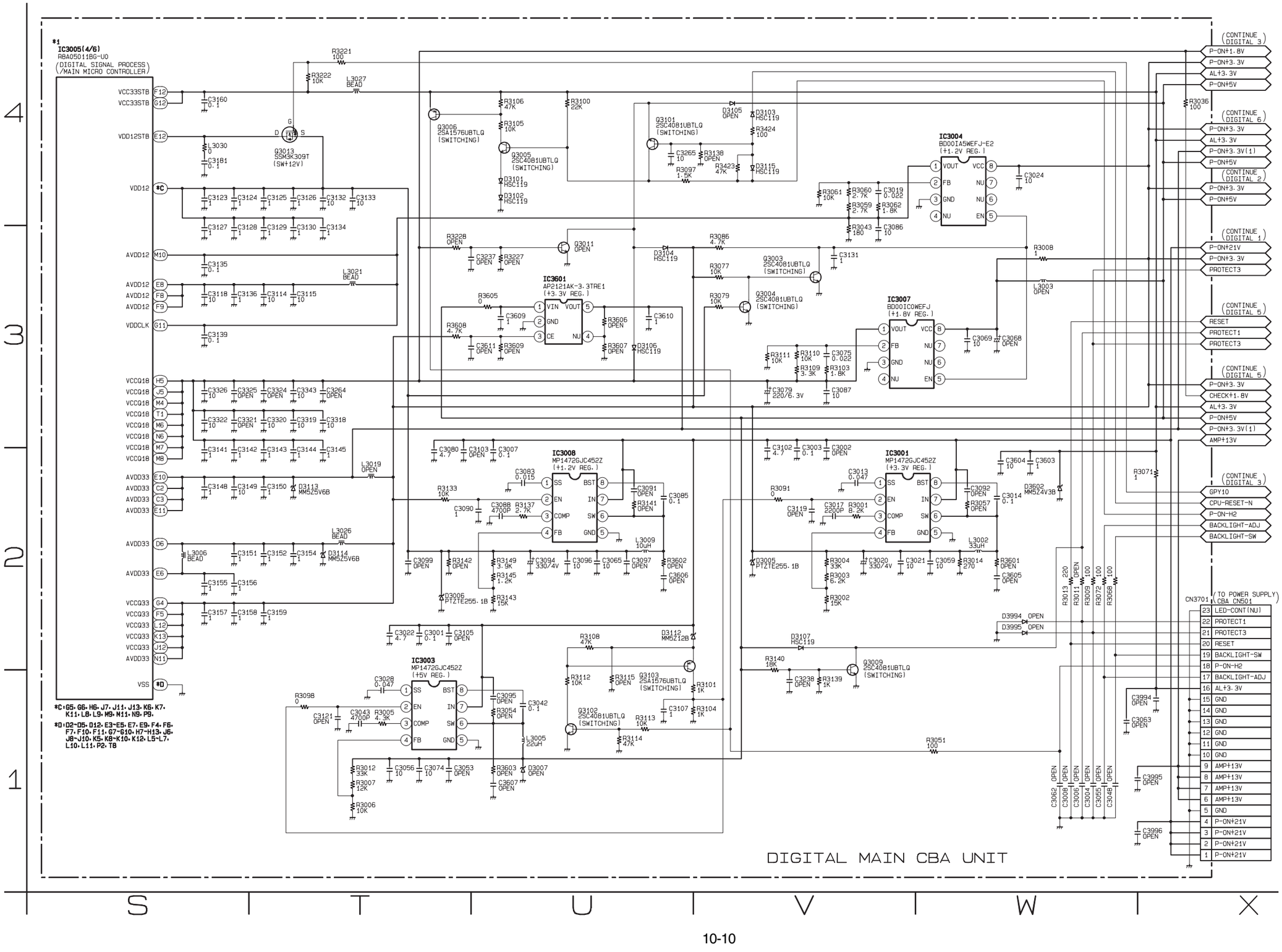
Digital Main 3 Schematic Diagram [TYPE A]

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



Digital Main 4 Schematic Diagram [TYPE A]

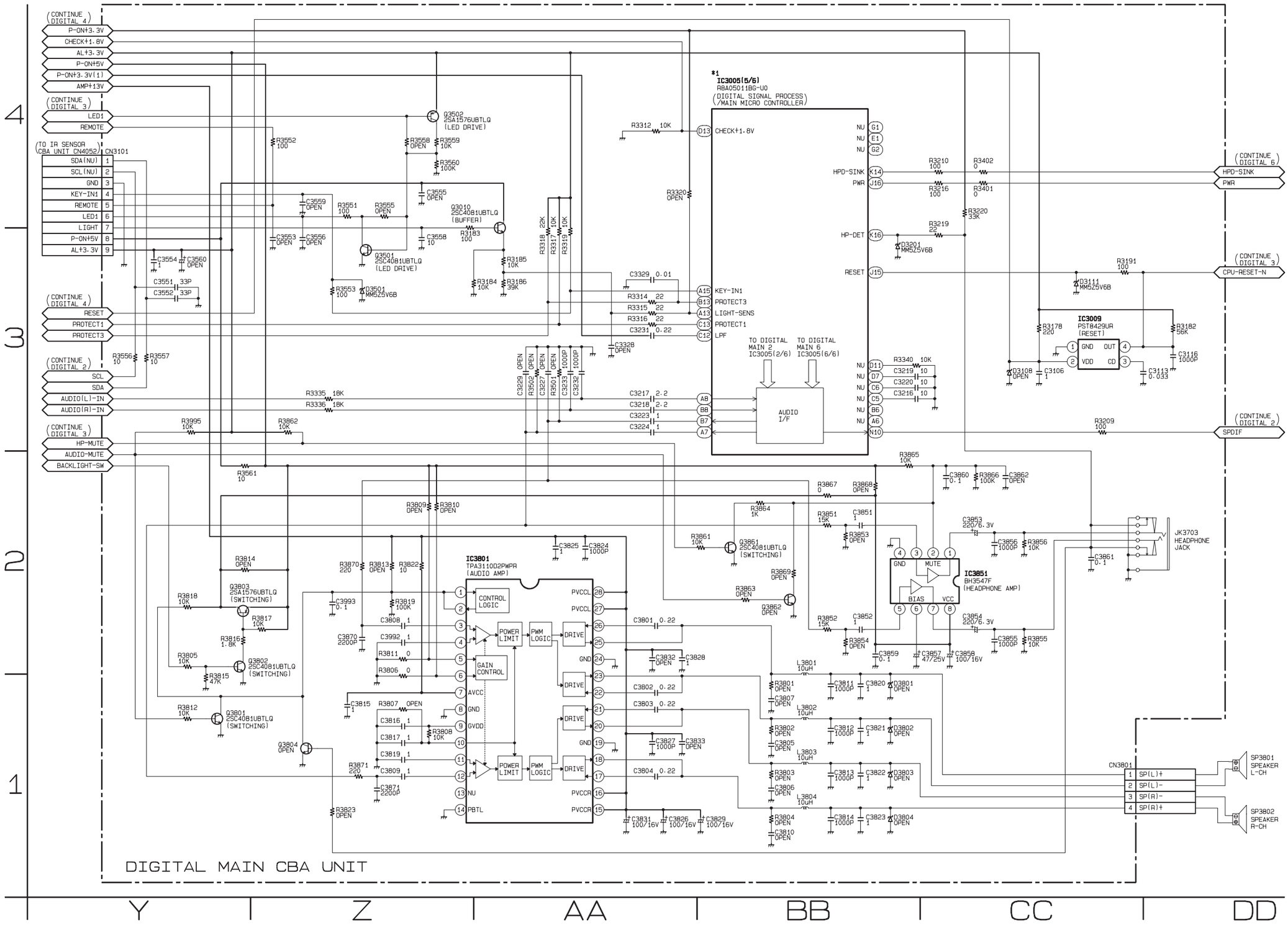
∗1 NOTE:
The order of pins shown in this diagram is different from that of actual IC3005.
IC3005 is divided into six and shown as IC3005 (1/6) ~ IC3005 (6/6) in this Digital Main Schematic Diagram Section.



PL13.16ASCD4

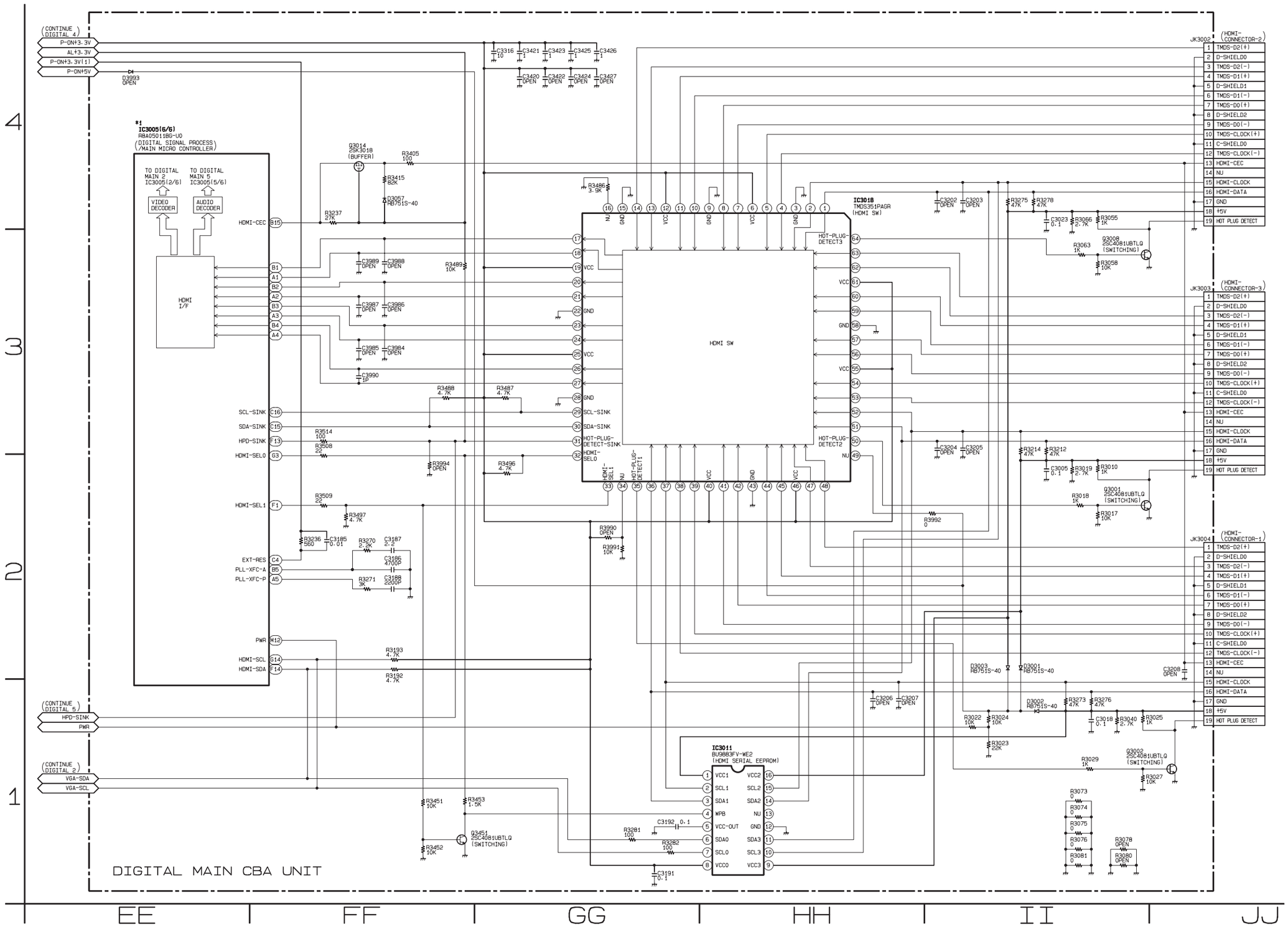
Digital Main 5 Schematic Diagram [TYPE A]

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



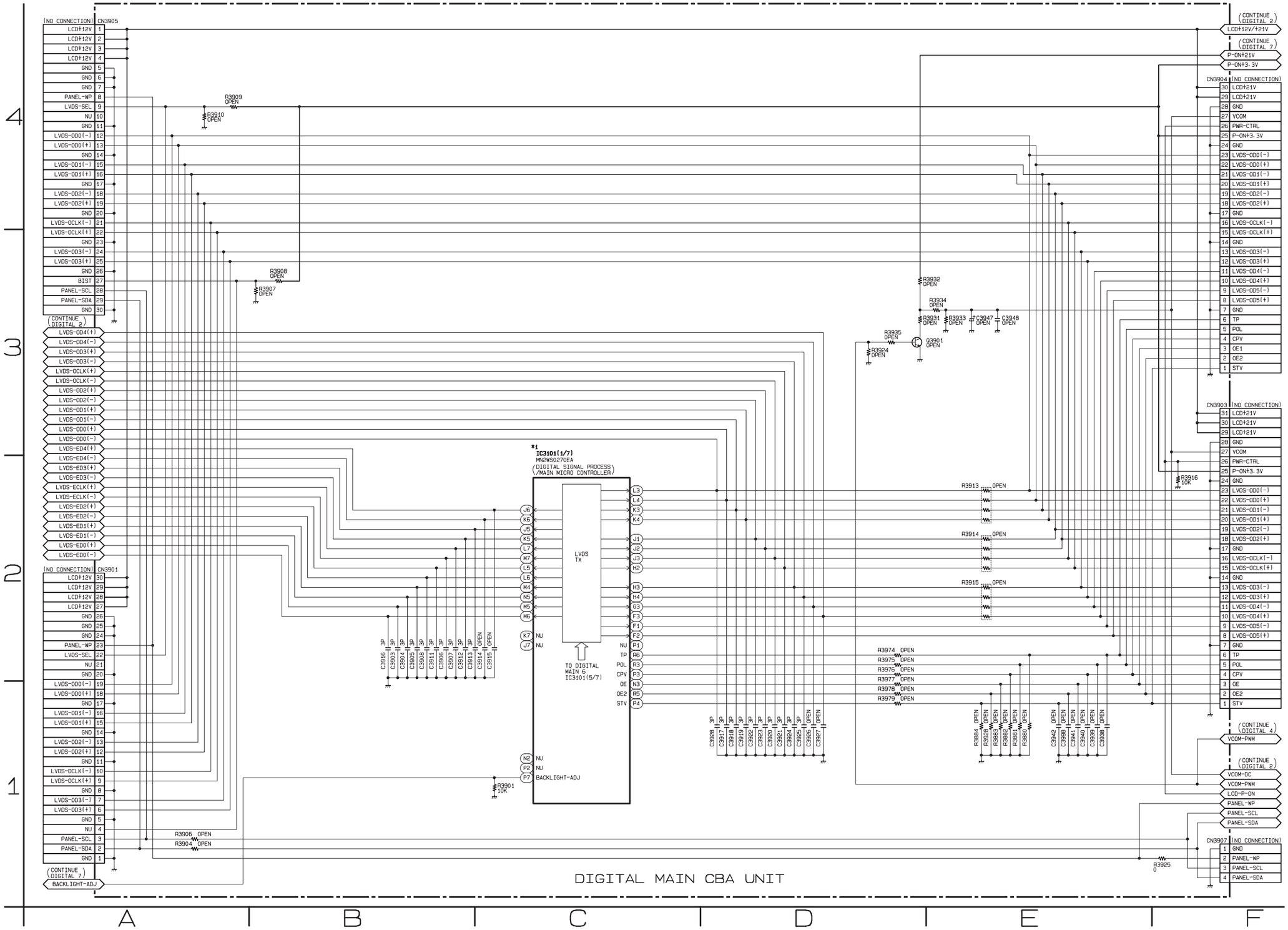
Digital Main 6 Schematic Diagram [TYPE A]

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

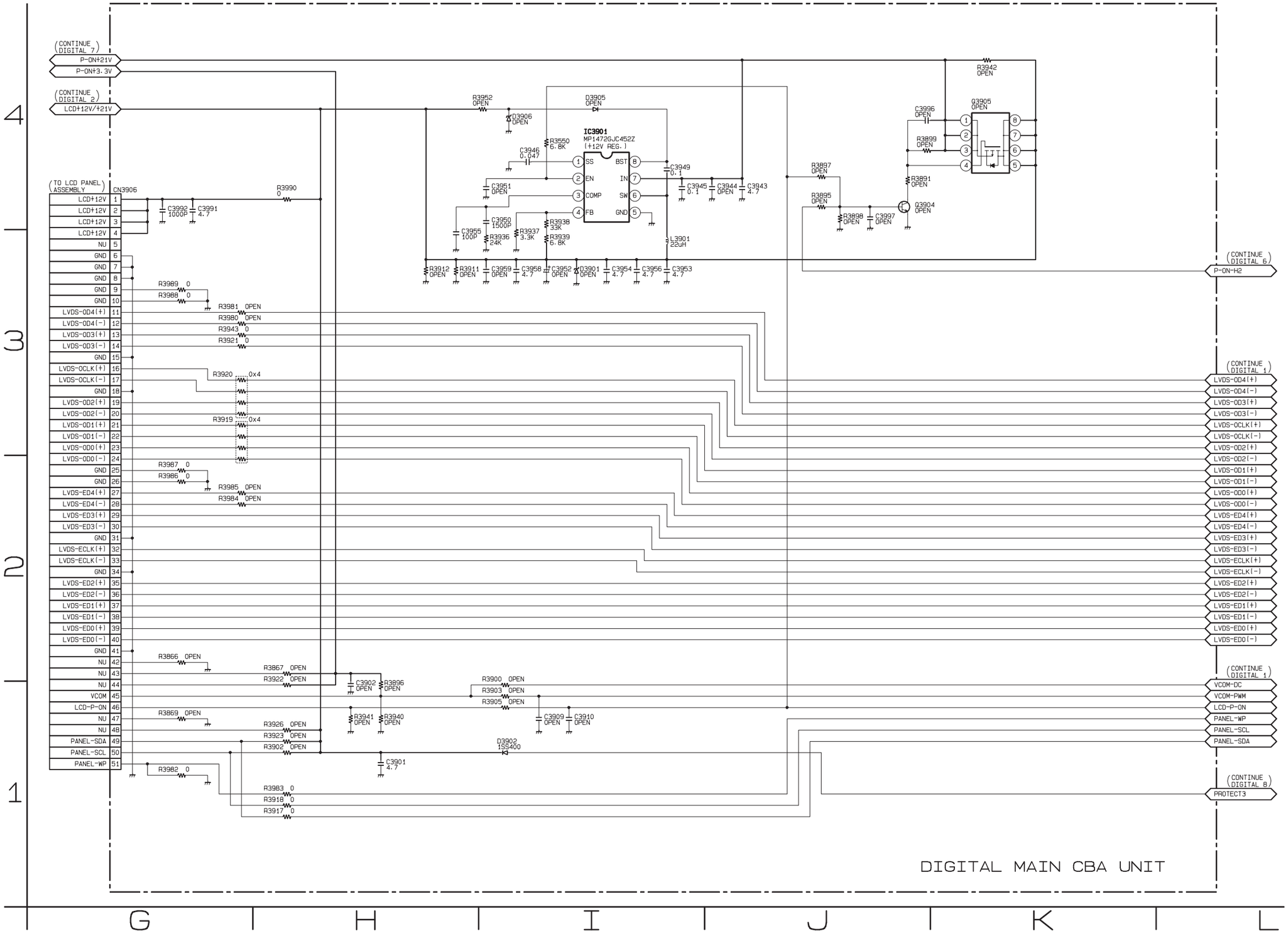


Digital Main 1 Schematic Diagram [TYPE B]

∗1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3101.
IC3101 is divided into seven and shown as IC3101 (1/7) ~ IC3101 (7/7) in this Digital Main Schematic Diagram Section.

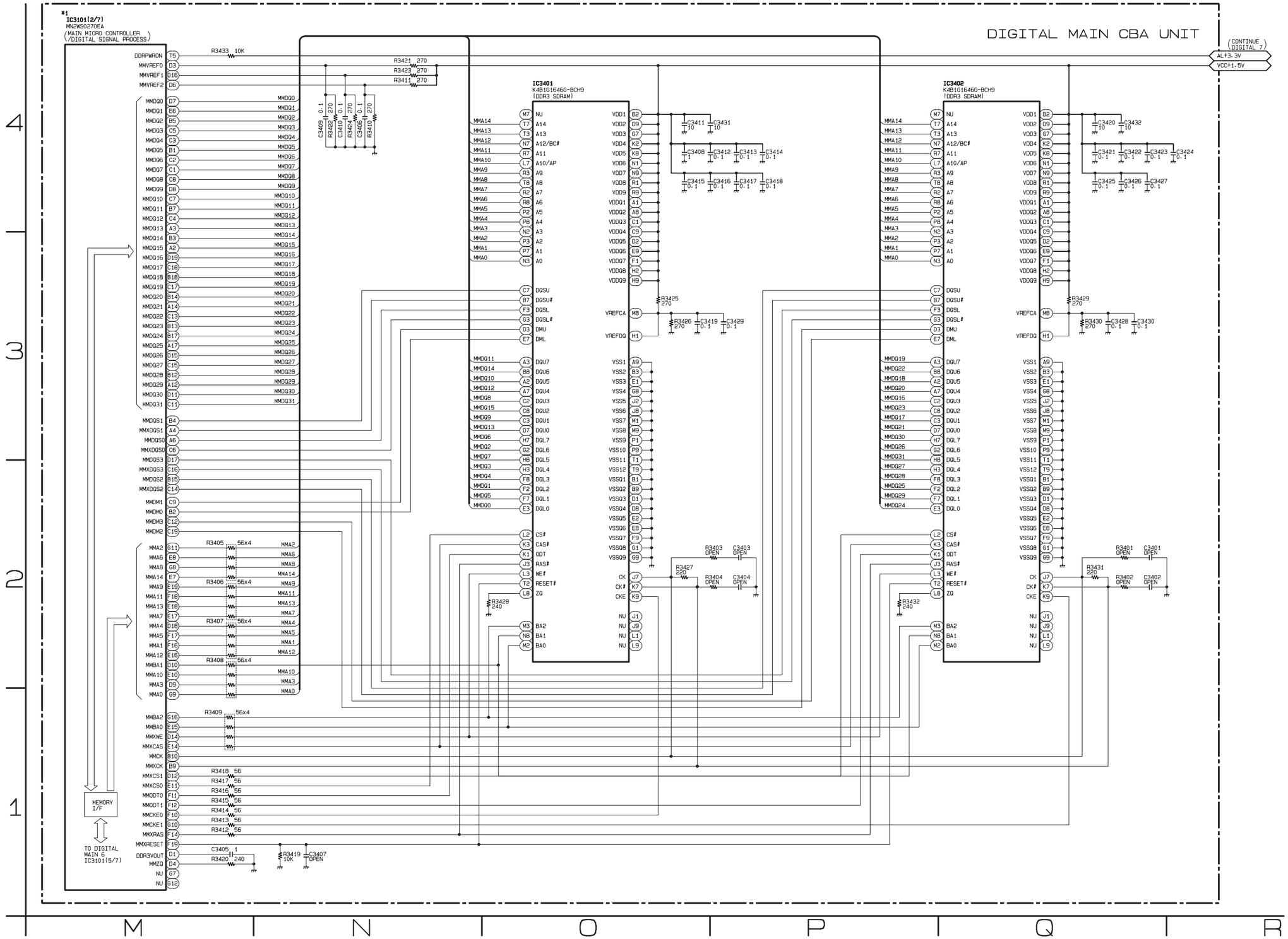


Digital Main 2 Schematic Diagram [TYPE B]



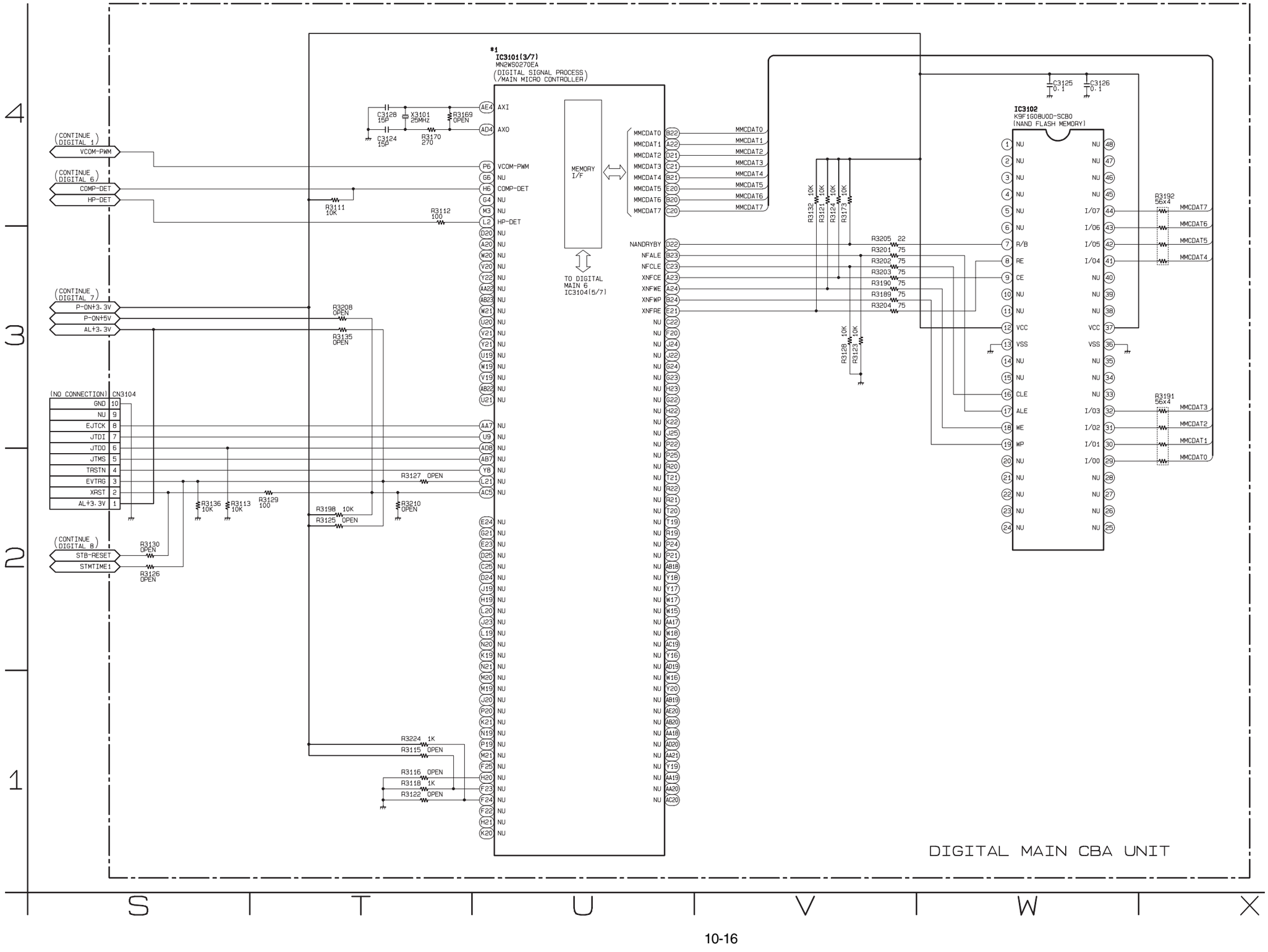
Digital Main 3 Schematic Diagram [TYPE B]

∗1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3101.
IC3101 is divided into seven and shown as IC3101 (1/7) ~ IC3101 (7/7) in this Digital Main Schematic Diagram Section.



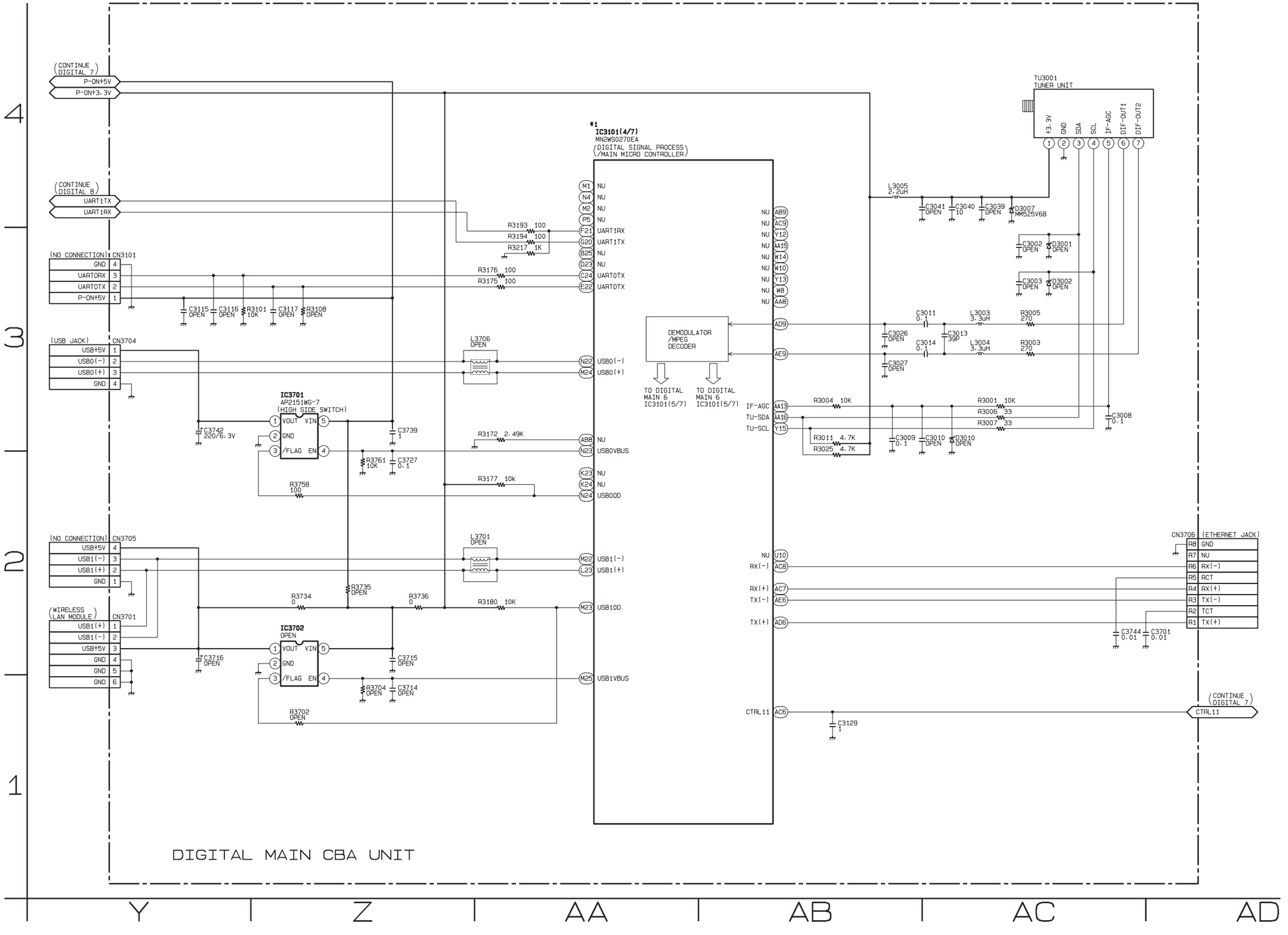
Digital Main 4 Schematic Diagram [TYPE B]

∗1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3101.
IC3101 is divided into seven and shown as IC3101 (1/7) ~ IC3101 (7/7) in this Digital Main Schematic Diagram Section.



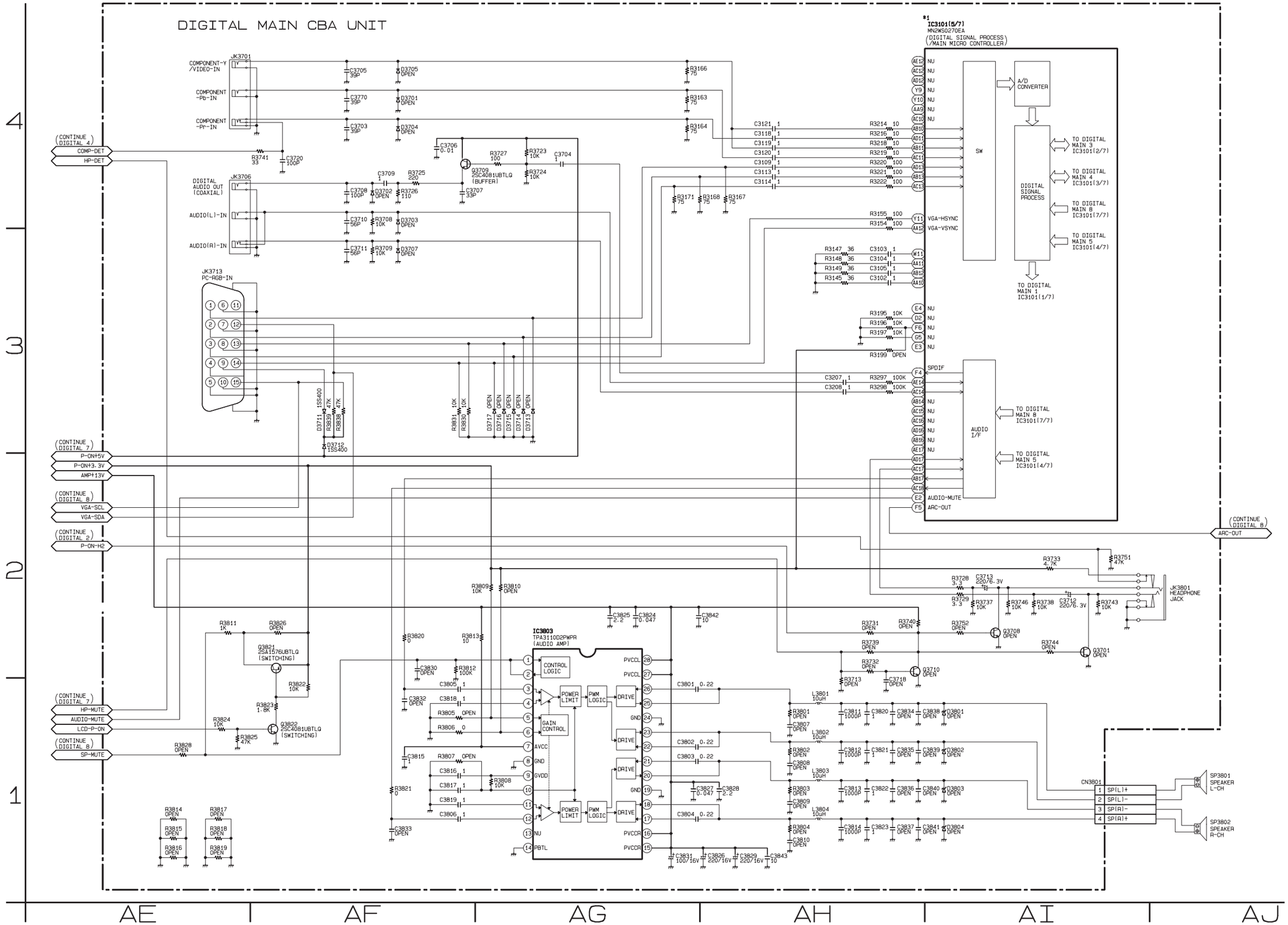
Digital Main 5 Schematic Diagram [TYPE B]

∗1 NOTE:
The order of pins shown in this diagram is different from that of actual IC3101.
IC3101 is divided into seven and shown as IC3101 (1/7) ~ IC3101 (7/7) in this Digital Main Schematic Diagram Section.



Digital Main 6 Schematic Diagram [TYPE B]

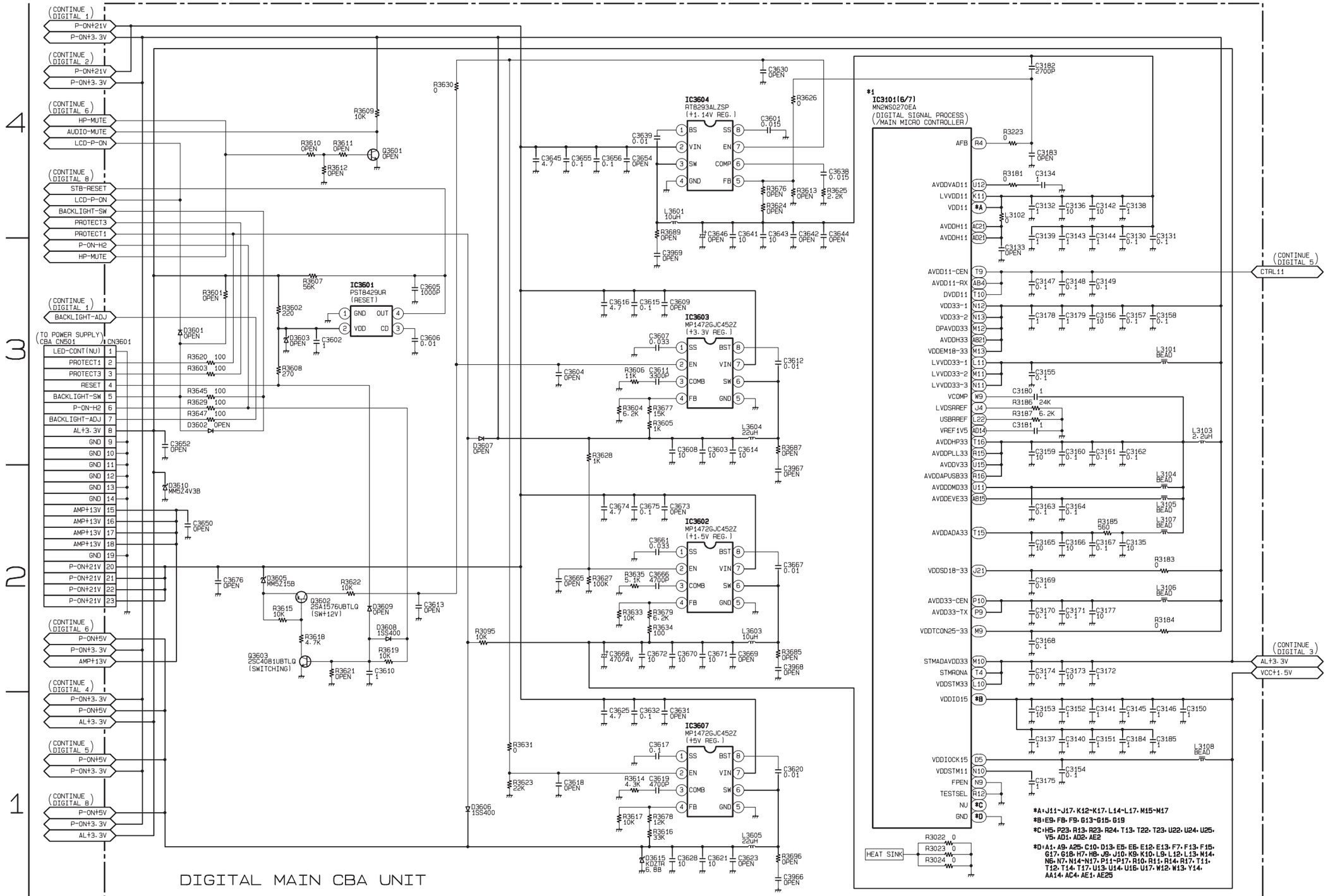
∗1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3101.
IC3101 is divided into seven and shown as IC3101 (1/7) ~ IC3101 (7/7) in this Digital Main Schematic Diagram Section.



Digital Main 7 Schematic Diagram [TYPE B]

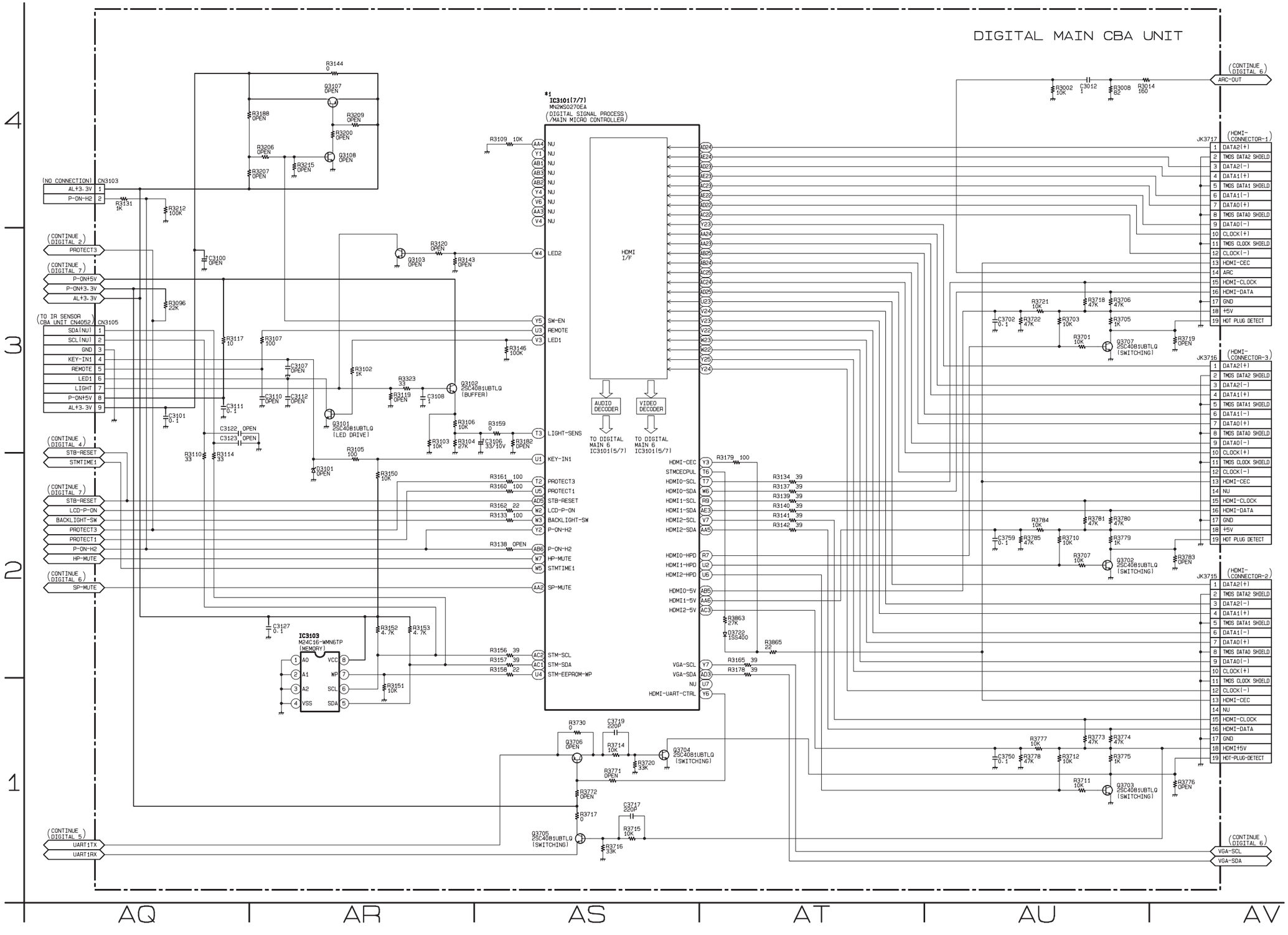
∗1 **NOTE:**

The order of pins shown in this diagram is different from that of actual IC3101.
IC3101 is divided into seven and shown as IC3101 (1/7) ~ IC3101 (7/7) in this Digital Main Schematic Diagram Section.



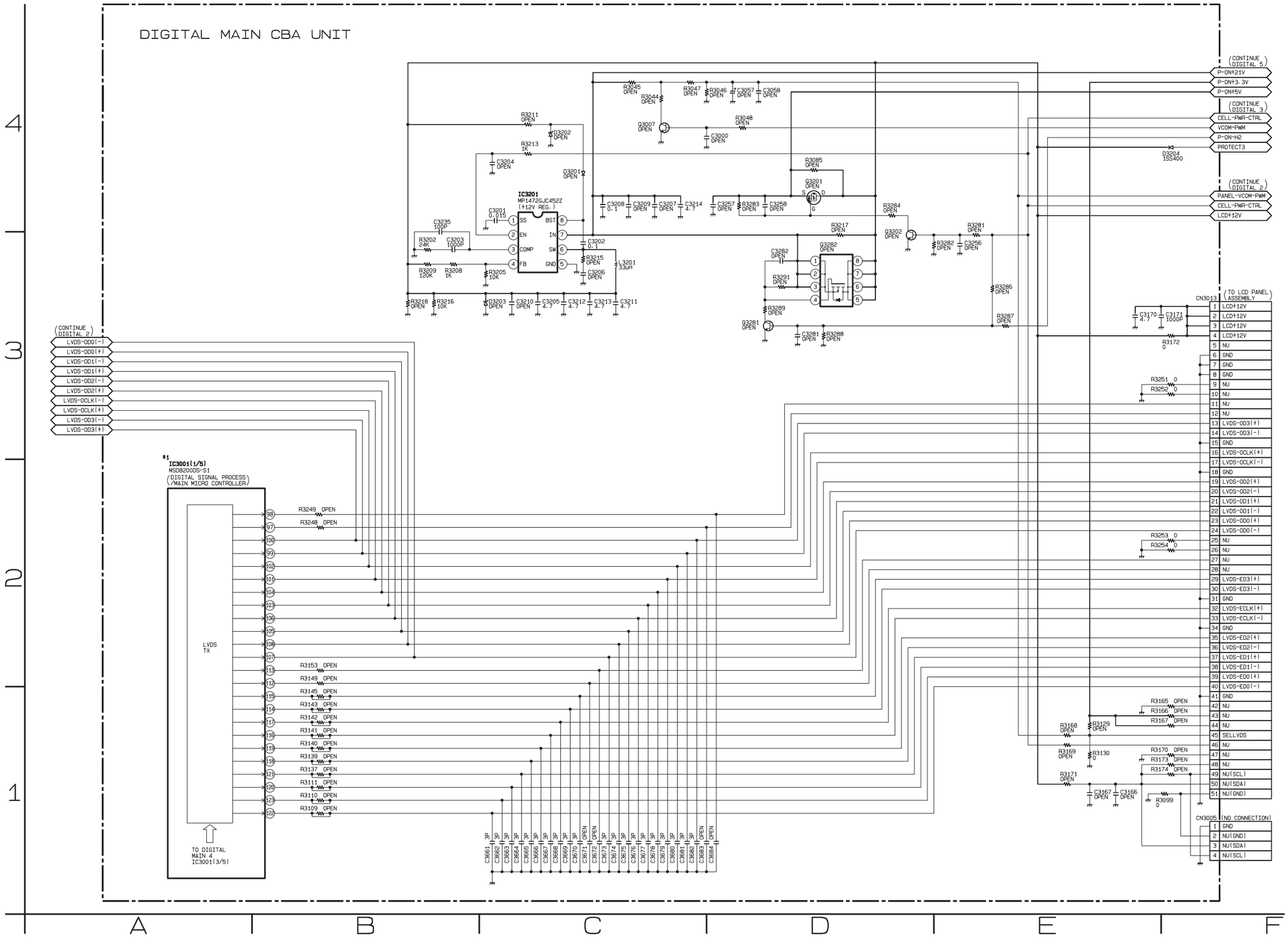
Digital Main 8 Schematic Diagram [TYPE B]

∗1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3101.
IC3101 is divided into seven and shown as IC3101 (1/7) ~ IC3101 (7/7) in this Digital Main Schematic Diagram Section.

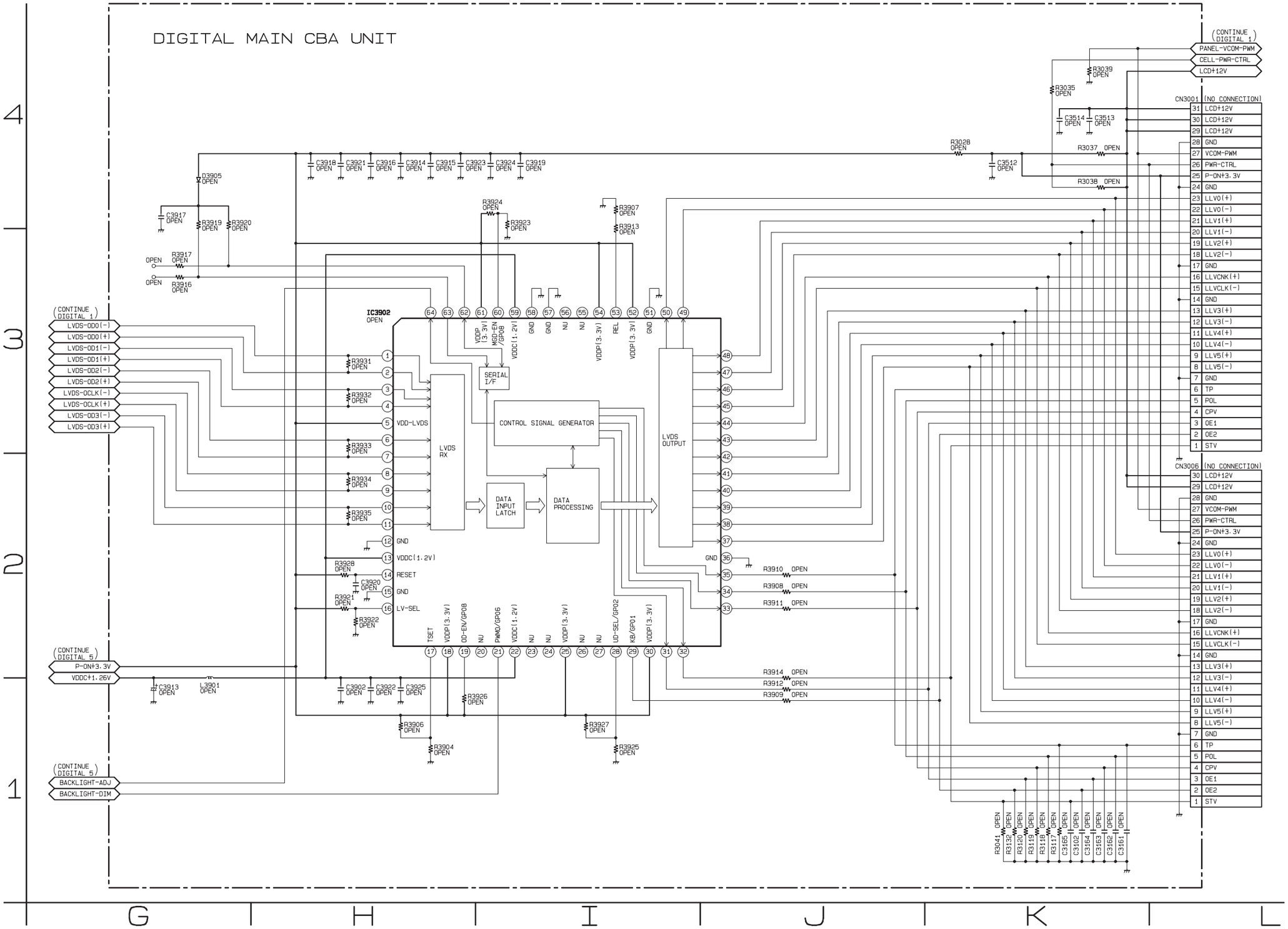


Digital Main 1 Schematic Diagram [TYPE C]

∗1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3001.
IC3001 is divided into five and shown as IC3001 (1/5) ~ IC3001 (5/5) in this Digital Main Schematic Diagram Section.

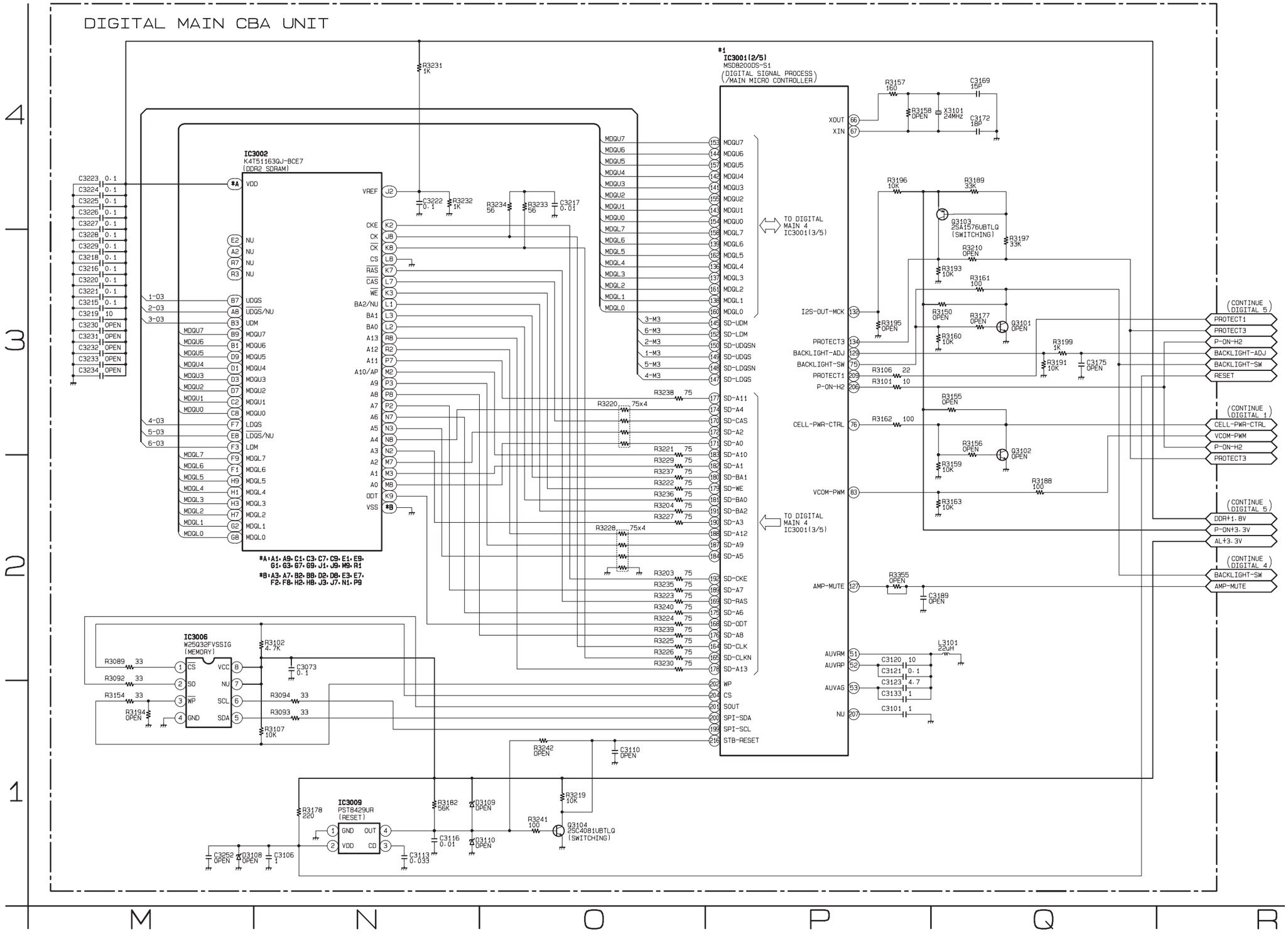


Digital Main 2 Schematic Diagram [TYPE C]



Digital Main 3 Schematic Diagram [TYPE C]

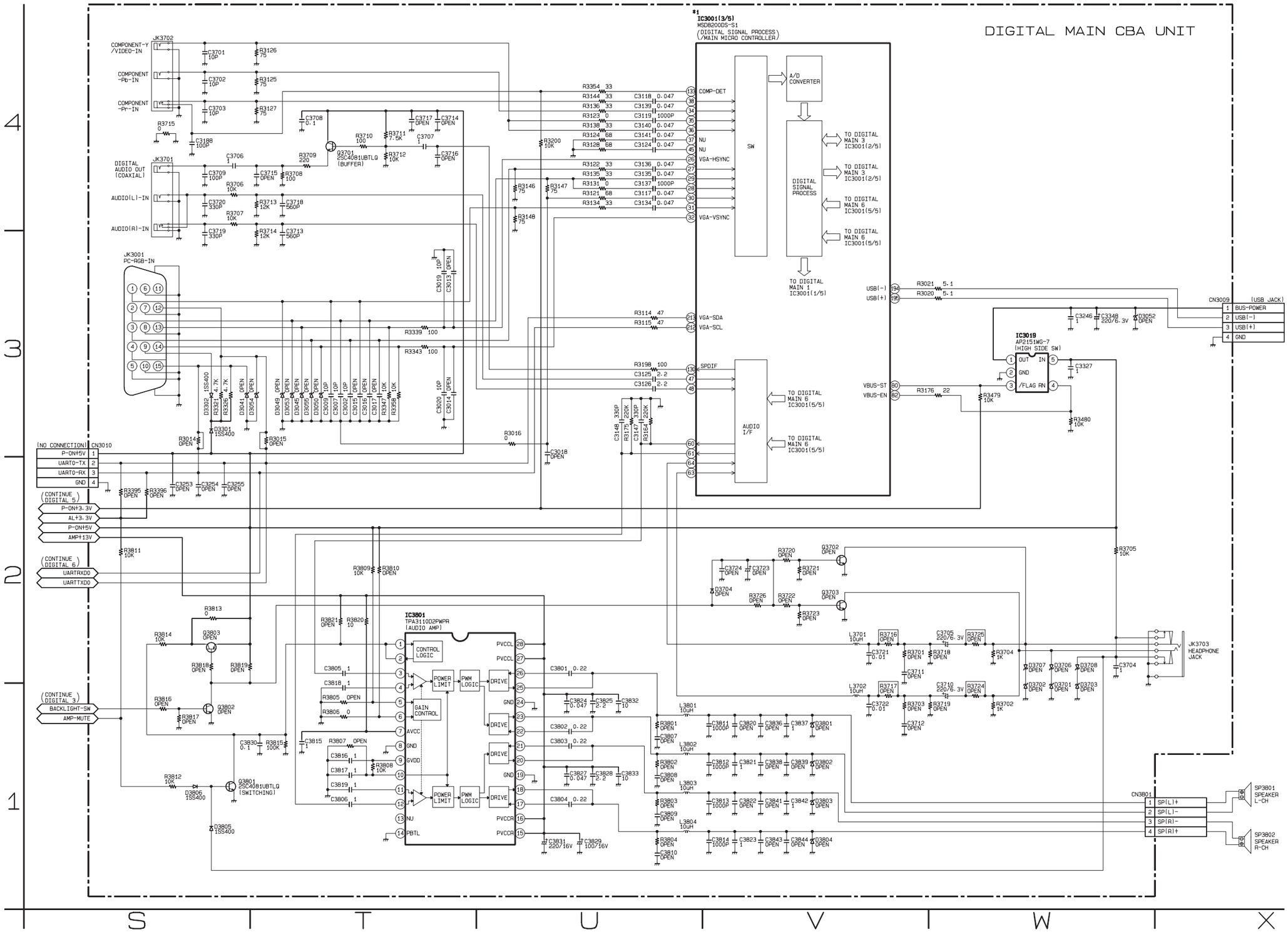
∗1 NOTE:
The order of pins shown in this diagram is different from that of actual IC3001.
IC3001 is divided into five and shown as IC3001 (1/5) ~ IC3001 (5/5) in this Digital Main Schematic Diagram Section.



PL13.16CSCD3

Digital Main 4 Schematic Diagram [TYPE C]

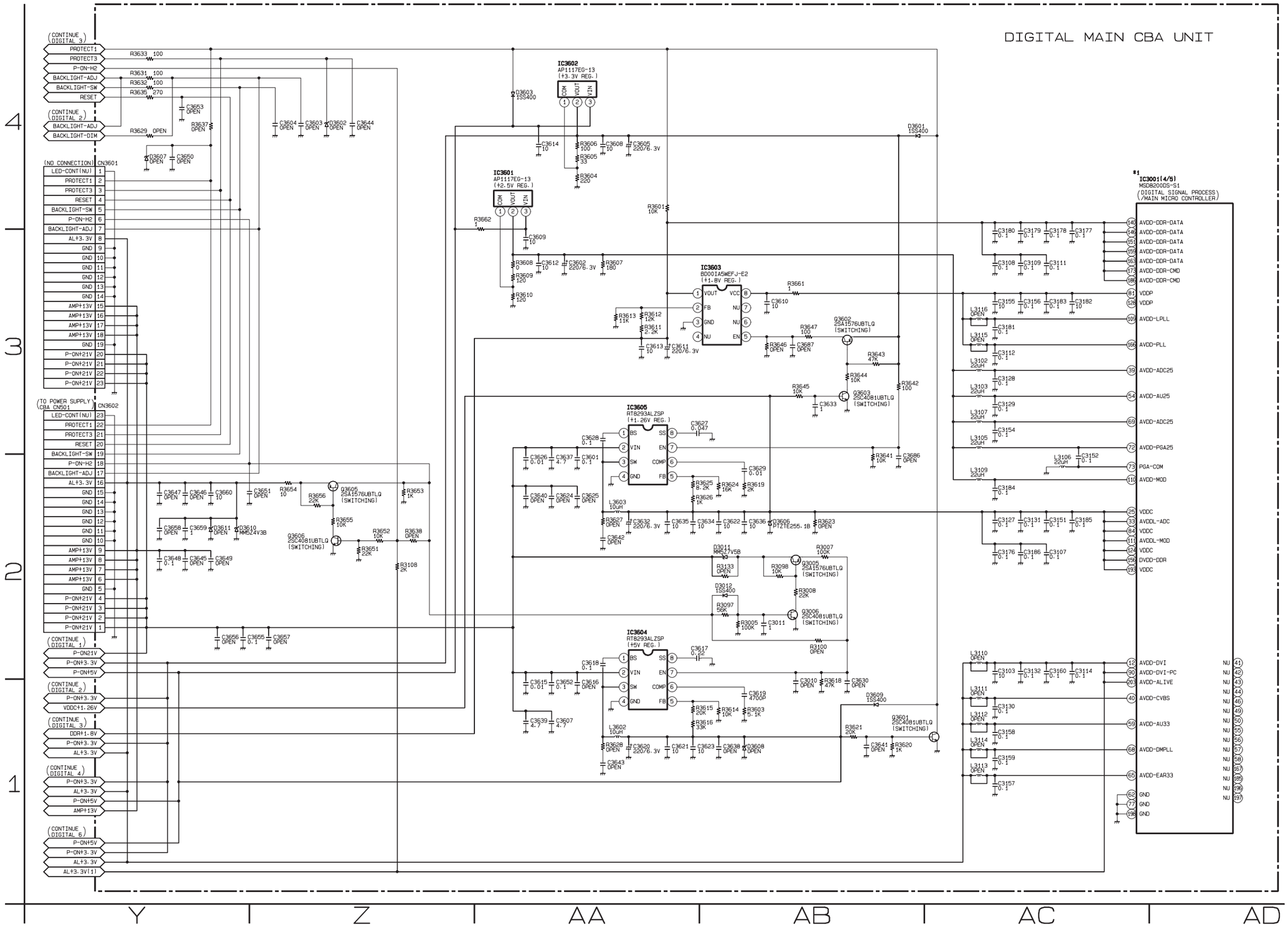
∗1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3001.
IC3001 is divided into five and shown as IC3001 (1/5) ~ IC3001 (5/5) in this Digital Main Schematic Diagram Section.



PL13.16CSCD4

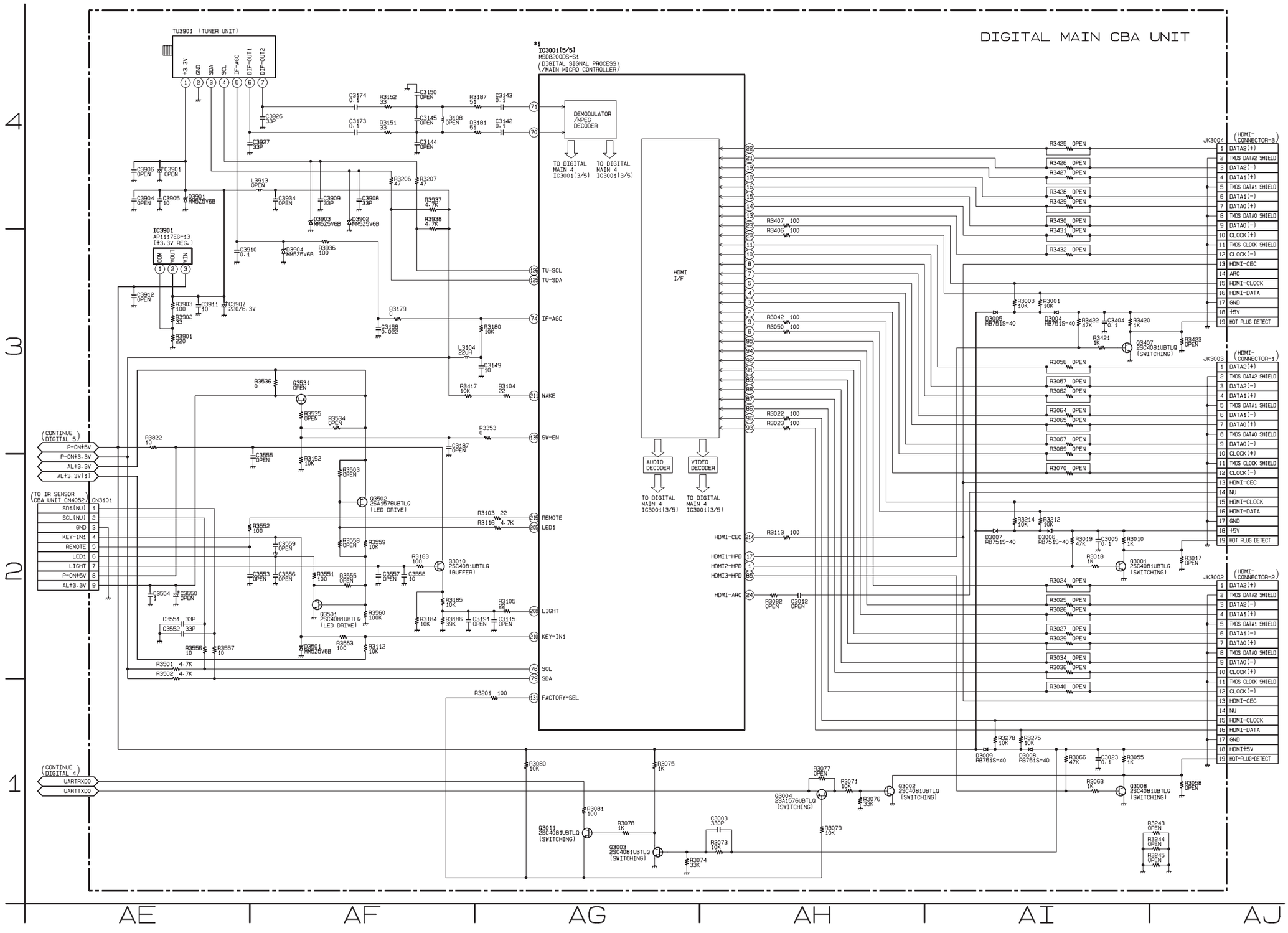
Digital Main 5 Schematic Diagram [TYPE C]

∗1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3001.
IC3001 is divided into five and shown as IC3001 (1/5) ~ IC3001 (5/5) in this Digital Main Schematic Diagram Section.



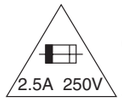
Digital Main 6 Schematic Diagram [TYPE C]

∗1 **NOTE:**
The order of pins shown in this diagram is different from that of actual IC3001.
IC3001 is divided into five and shown as IC3001 (1/5) ~ IC3001 (5/5) in this Digital Main Schematic Diagram Section.



Power Supply CBA Top View

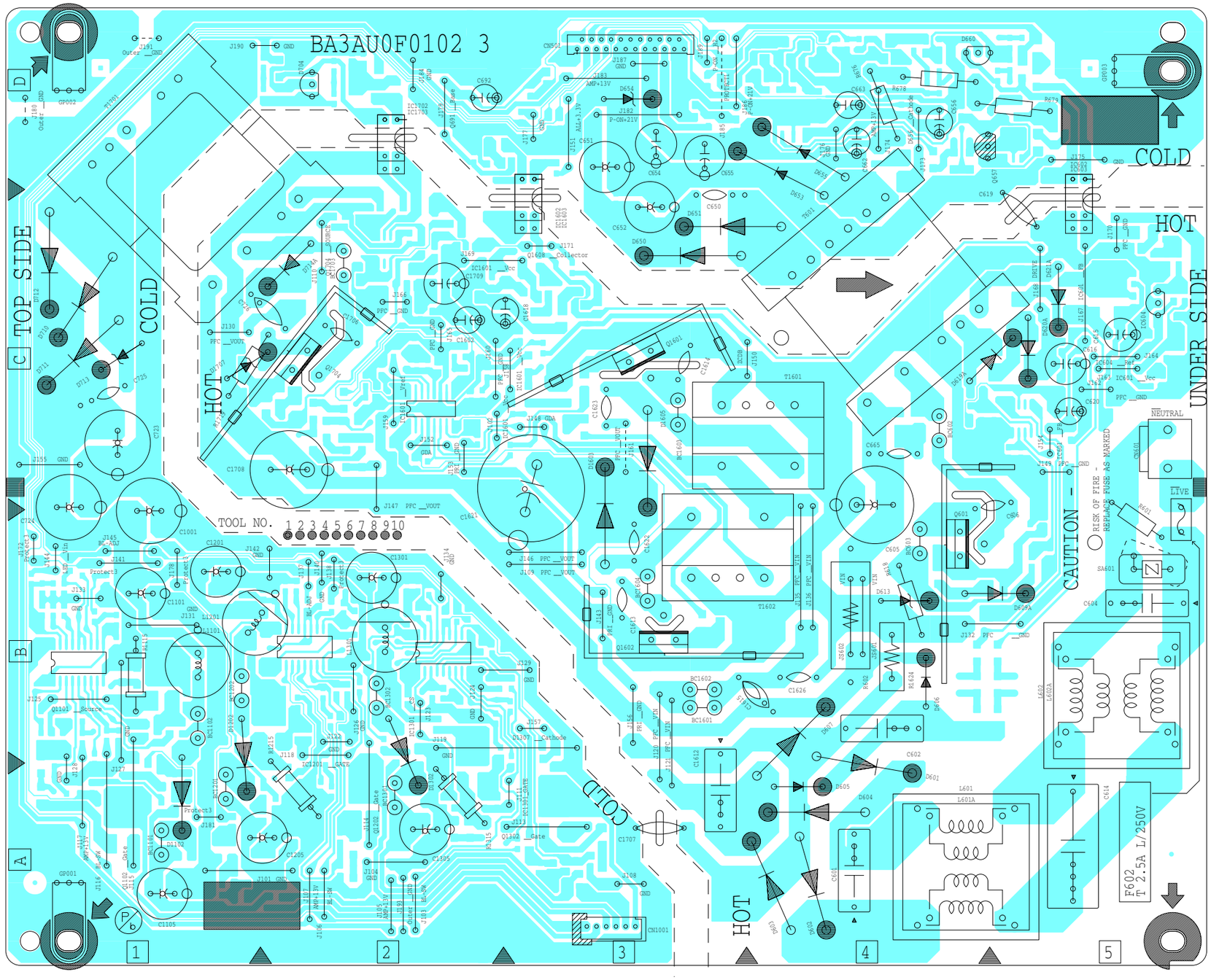
CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F602) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.



CAUTION ! : For continued protection against risk of fire, replace only with same type 2.5A, 250V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 2.5A, 250V.

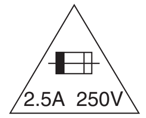
Because a hot chassis ground is present in the power supply circuit, an isolation transformer must be used when repairing. Also, in order to have the ability to increase the input slowly, when troubleshooting this type of power supply circuit, a variable isolation transformer is required.

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



Power Supply CBA Bottom View

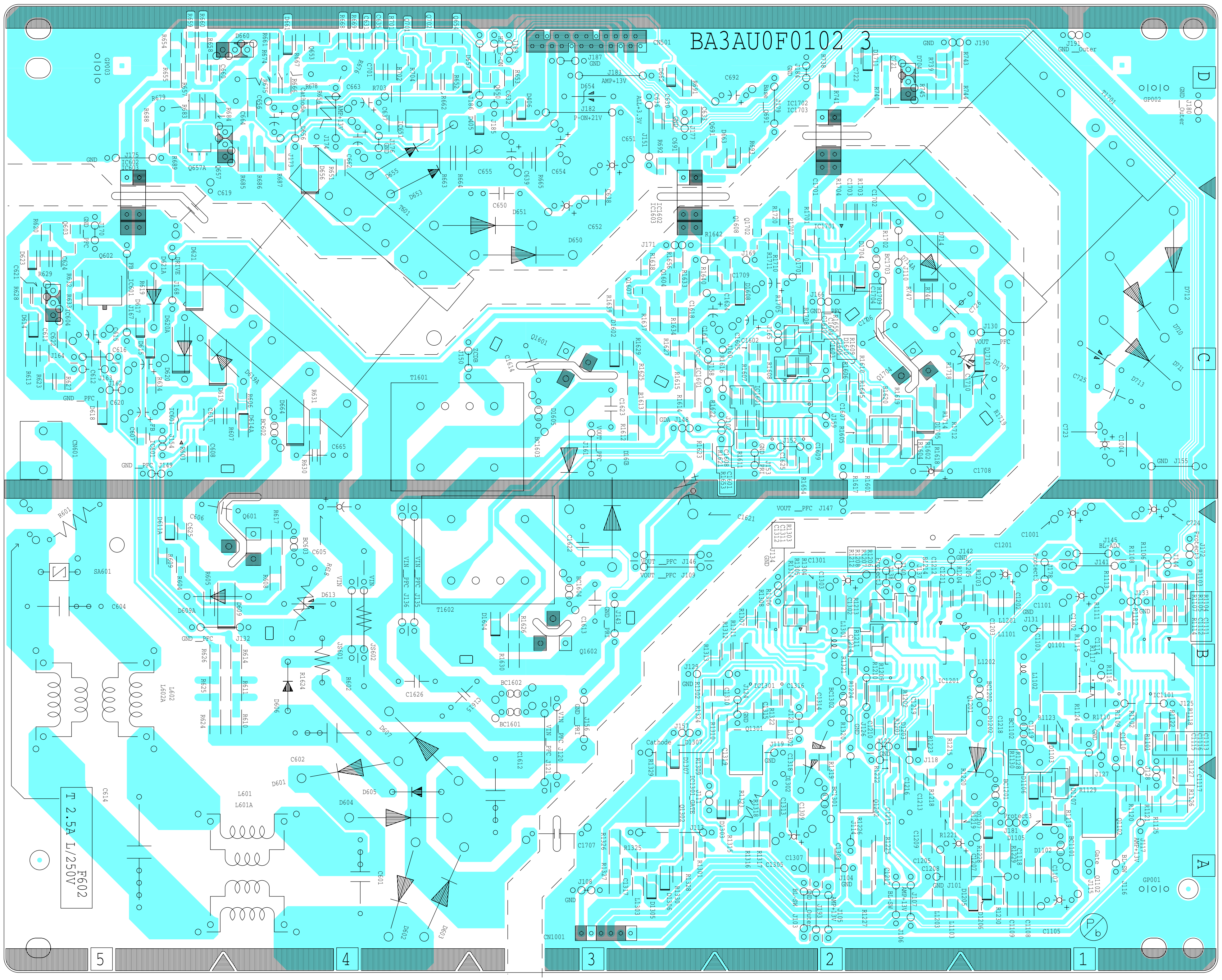
CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F602) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.



CAUTION ! : For continued protection against risk of fire, replace only with same type 2.5A, 250V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 2.5A, 250V.

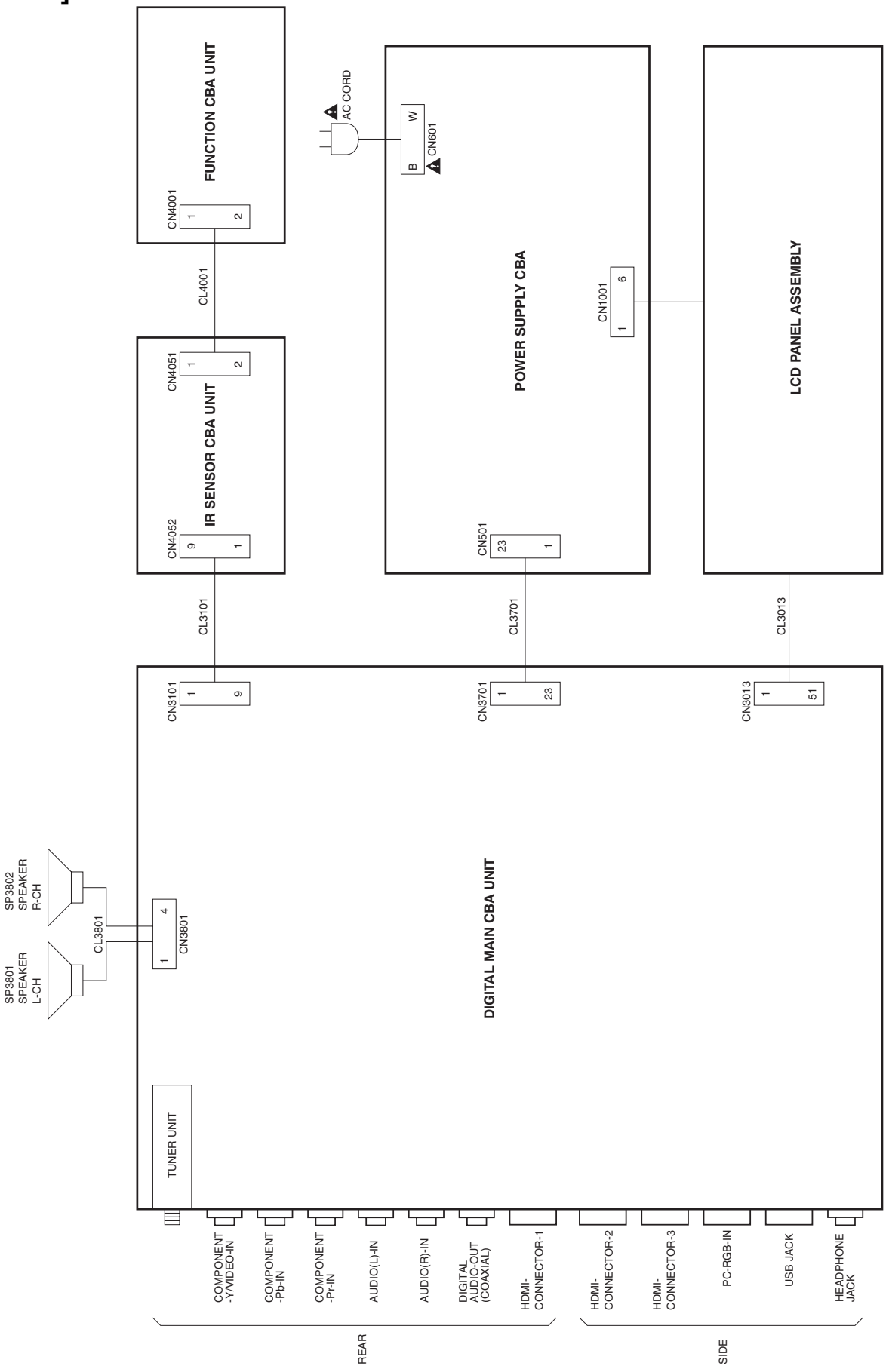
Because a hot chassis ground is present in the power supply circuit, an isolation transformer must be used when repairing. Also, in order to have the ability to increase the input slowly, when troubleshooting this type of power supply circuit, a variable isolation transformer is required.

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

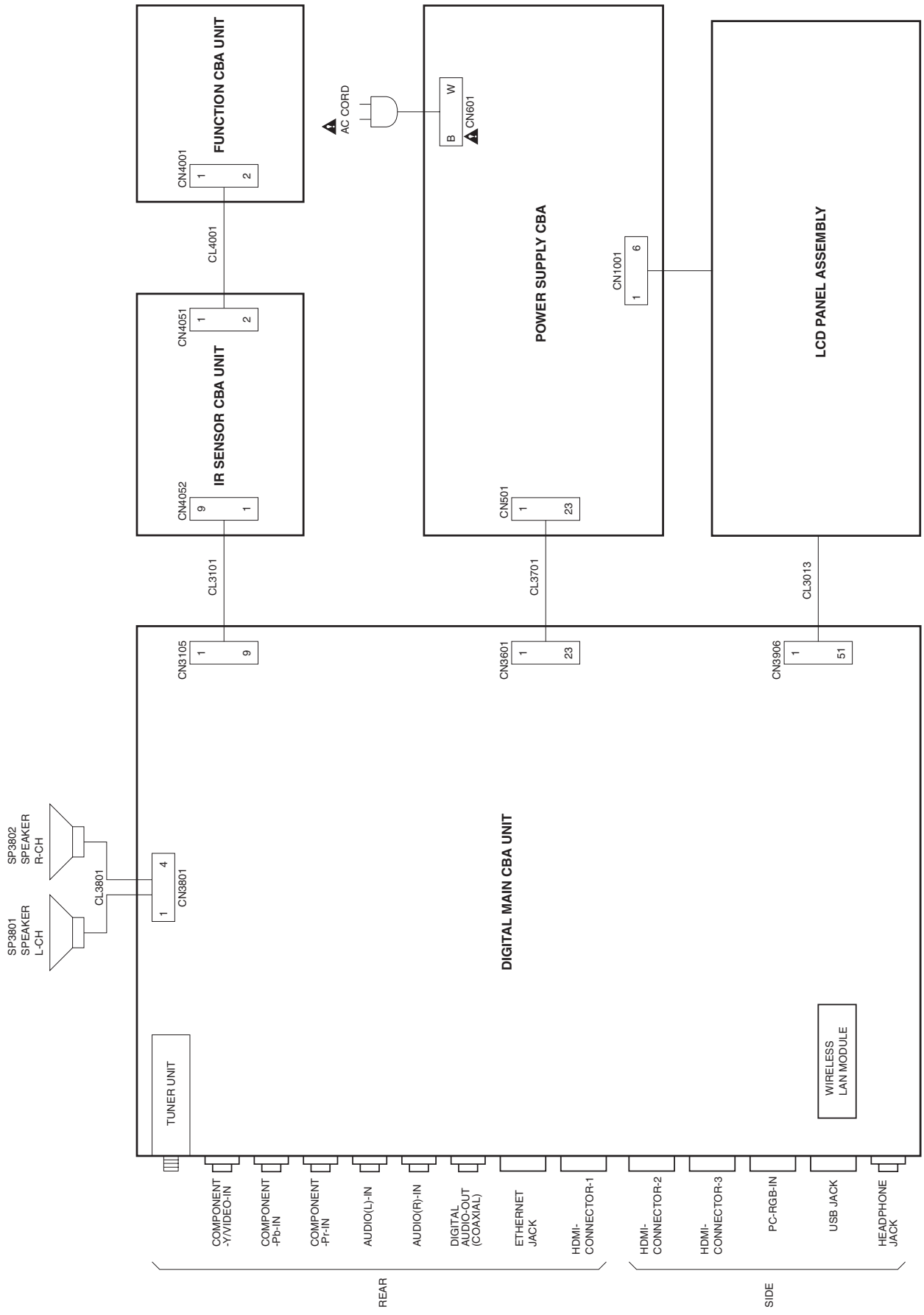


WIRING DIAGRAMS

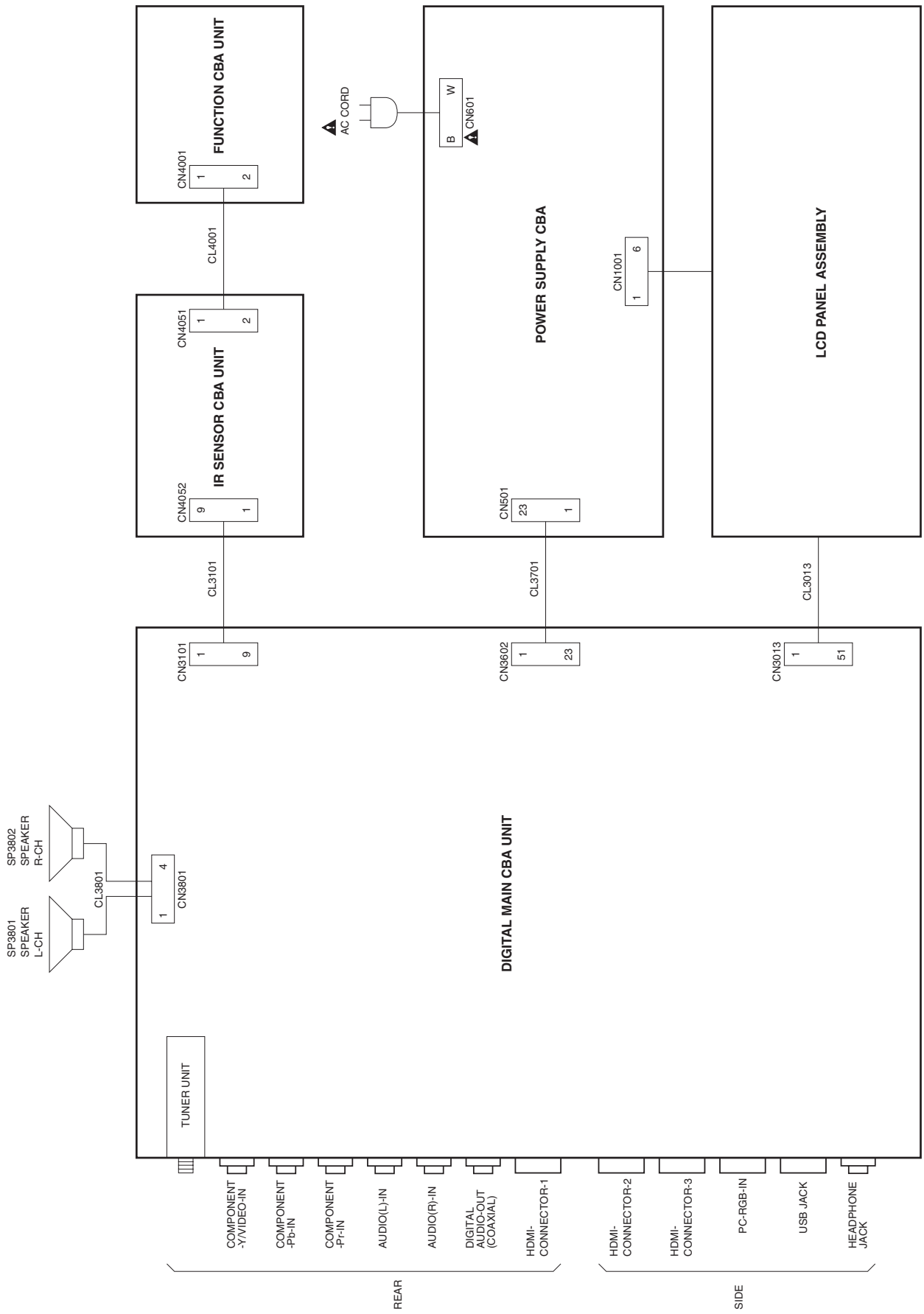
[TYPE A]



[TYPE B]

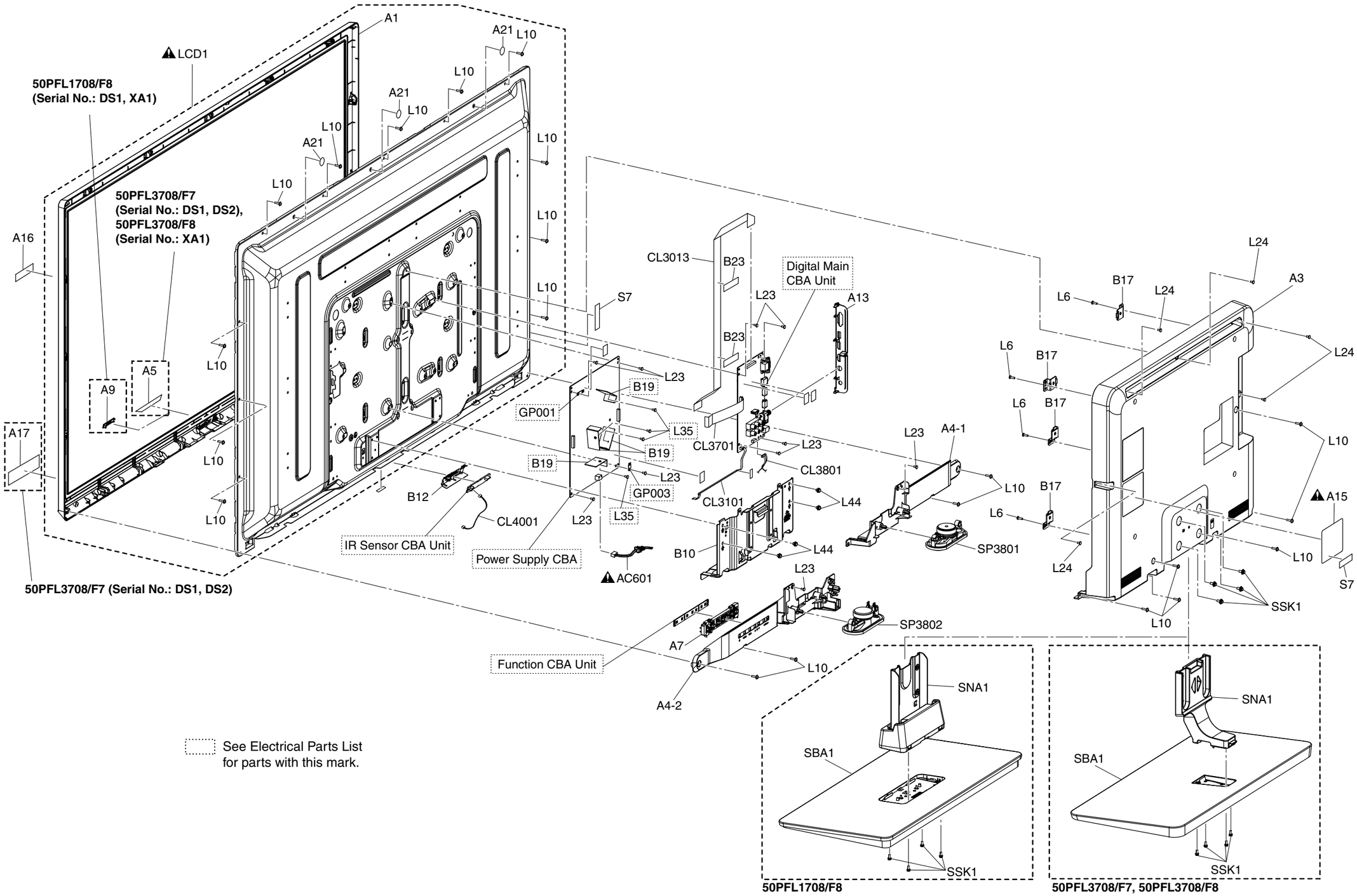

FUNCTION CBA UNIT
CN4001
1
2
CL4001
IR SENSOR CBA UNIT
CN4051
CN4052
9
1
CL3101
AC CORD
CN601
B
W
POWER SUPPLY CBA
CN501
1
23
CL3701
CN1001
6
LCD PANEL ASSEMBLY
CL3013
CN3105
CN3601
CN3906
51
DIGITAL MAIN CBA UNIT
SP3802
SPEAKER
R-CH
SP3801
SPEAKER
L-CH
CL3801
CN3801
4
TUNER UNIT
WIRELESS
LAN MODULE
COMPONENT
-Y/VIDEO-IN
COMPONENT
-Pb-IN
COMPONENT
-Pr-IN
AUDIO(L)-IN
AUDIO(R)-IN
DIGITAL
AUDIO-OUT
(COAXIAL)
ETHERNET
JACK
HDMI-
CONNECTOR-1
HDMI-
CONNECTOR-2
HDMI-
CONNECTOR-3
PC-RGB-IN
USB JACK
HEADPHONE
JACK
REAR
SIDE

[TYPE C]


FUNCTION CBA UNIT
CN4001
1
2
CL4001
IR SENSOR CBA UNIT
CN4051
CN4052
9
AC CORD
CN601
B
W
POWER SUPPLY CBA
CN501
23
CN1001
6
LCD PANEL ASSEMBLY
CL3101
CL3701
CL3013
CN3101
CN3602
CN3013
51
DIGITAL MAIN CBA UNIT
SP3802
SPEAKER
R-CH
SP3801
SPEAKER
L-CH
CL3801
CN3801
4
TUNER UNIT
COMPONENT -Y/VIDEO-IN
COMPONENT -Pb-IN
COMPONENT -Pr-IN
AUDIO(L)-IN
AUDIO(R)-IN
DIGITAL AUDIO-OUT (COAXIAL)
HDMI-CONNECTOR-1
HDMI-CONNECTOR-2
HDMI-CONNECTOR-3
PC-RGB-IN
USB JACK
HEADPHONE JACK
REAR
SIDE

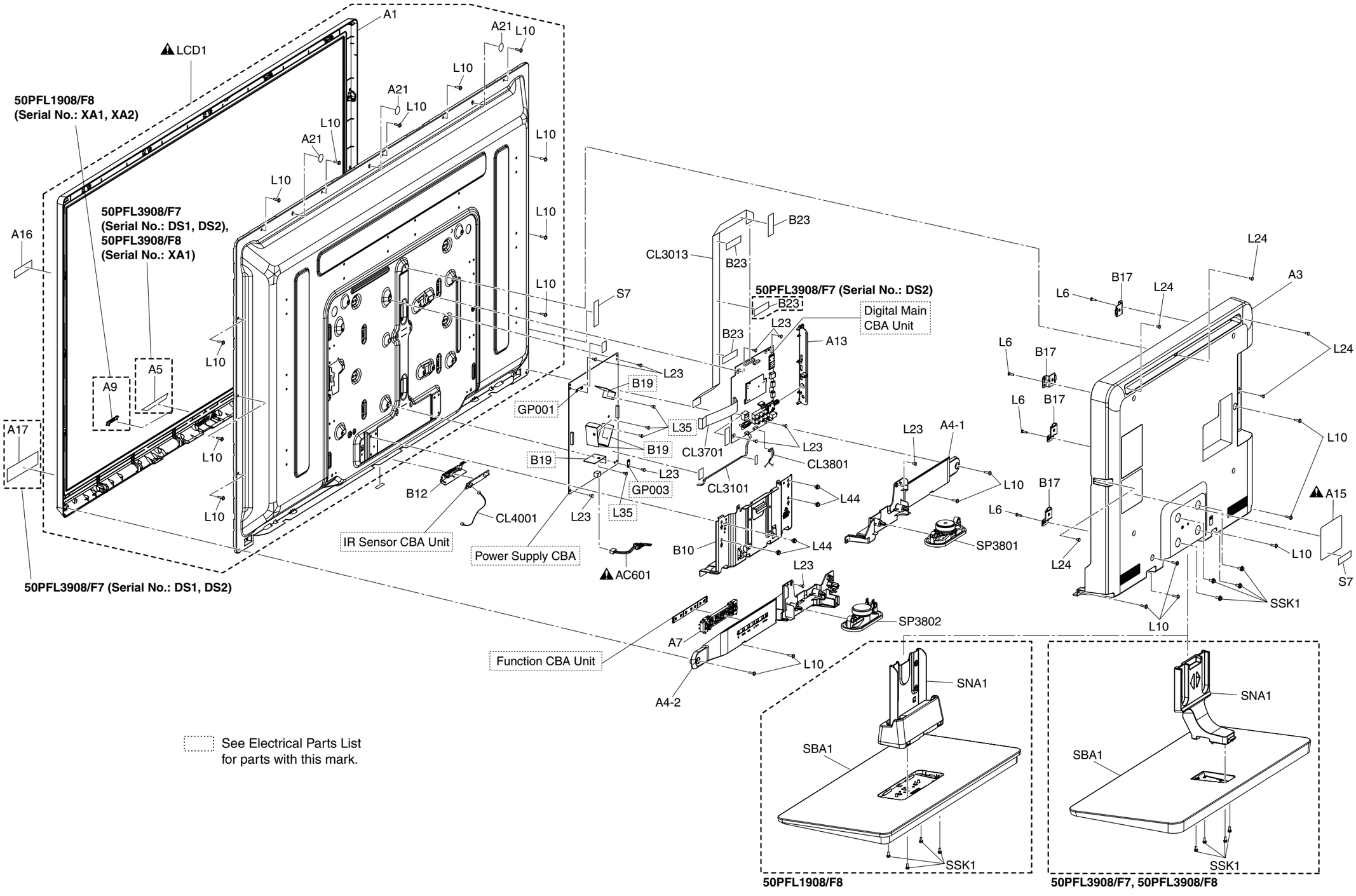
EXPLODED VIEWS

[TYPE A, TYPE C]



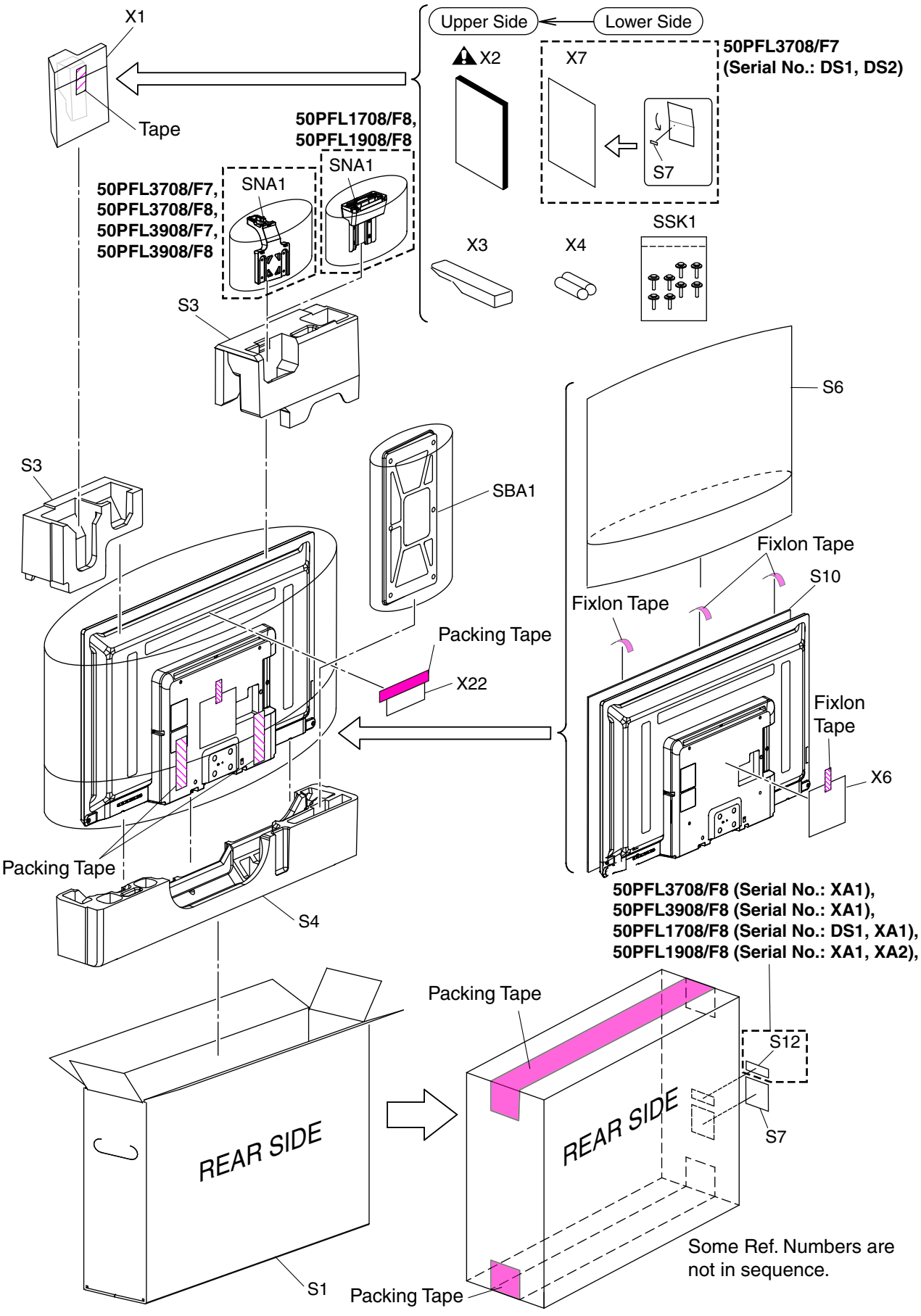
See Electrical Parts List
for parts with this mark.

[TYPE B]



See Electrical Parts List
for parts with this mark.

Packing


X1
Tape
Upper Side
Lower Side
X2
X7
50PFL3708/F7
(Serial No.: DS1, DS2)
S7
50PFL1708/F8,
50PFL1908/F8
SNA1
SNA1
50PFL3708/F7,
50PFL3708/F8,
50PFL3908/F7,
50PFL3908/F8
SSK1
X3
X4
S3
S6
S3
SBA1
Fixlon Tape
S10
Fixlon Tape
Packing Tape
X22
Fixlon
Tape
X6
Packing Tape
S4
50PFL3708/F8 (Serial No.: XA1),
50PFL3908/F8 (Serial No.: XA1),
50PFL1708/F8 (Serial No.: DS1, XA1),
50PFL1908/F8 (Serial No.: XA1, XA2),
Packing Tape
S12
REAR SIDE
REAR SIDE
S7
Some Ref. Numbers are
not in sequence.
S1
Packing Tape

TYPE A

PARTS LIST [50PFL3708/F7 (Serial No.: DS1)]

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.
A3	REAR COVER A3AU0UH	1EM030226
A4-1	BOTTOM COVER L A3AU0UH	1EM030227A
A4-2	BOTTOM COVER R A3AU0UH	1EM030228A
A7	FUNCTION KNOB A3AU0UH	1EM334497
A13	JACK HOLDER A3AU0UH	1EM334651
A15⚠	RATING LABEL A3AU2UH	----------
A16	LOGO LABEL A3AU2UH	----------
A17	ENERGY GUIDE LABEL A3AU2UH	----------
AC601⚠	AC CORD W/O A GND WIRE UL/CSA/1775/NO/ BLACK	WAC172LTE010
B10	STAND BRACKET A3AU0UH	1EM030229A
B12	SENSOR PLATE A3AU0UH	1EM334578
B17	WALL MOUNT BRACKET M6 A21U0UD	1EM332001
B23	WIRE LABEL A3AF0UT	----------
CL3013	FFC WIRE ASSEMBLY 51PIN W/SHIELD 117001-51813	WX1U3AU0-F01
CL3101	FFC WIRE ASSEMBLY 9PIN 9PIN/WHITE/ 322.5MM	WX1A3AU0S105
CL3701	FFC WIRE ASSEMBLY 23PIN 23PIN/WHITE/ 205MM	WX1A3AU0S103
CL3801	WIRE ASSEMBLY 4PIN 4PIN/395MM&160MM	WX1A3AU0C303
CL4001	WIRE ASSEMBLY 2PIN 2PIN/360MM	WX1A3AU0C304
L6	SCREW F-PAN 3CHROM +P-TITE M3X10.0 M3*10 WASHERHEAD+	GCJP3100
L10	SCREW F-PAN BLACK_NI +P-TITE M3X12.0 3X12 WASHER HEAD+BLK	GCHP3120
L23	SCREW BIND 3CHROM +S-TITE M3X6.0 M3X6 BIND HEAD+	GBJS3060
L24	SCREW BIND BLACK_NI +S-TITE M3X6.0 M3X6 BIND HEAD+BLACK	GBHS3060
L44	SEMS-SW PAN 3CHROM + M4X8.0 M4X8 PAN HEAD +	FPJ34080
SBA1	50W STAND BASE ASSEMBLY (PF) A21U2UD	1EMN29164
SNA1	50W STAND HINGE ASSEMBLY (PF) A21U2UD	1EMN29163
SP3801	SPEAKER MAGNETIC 8Ω/10W S0411F19	DS08110XQ004
SP3802	SPEAKER MAGNETIC 8Ω/10W S0411F19	DS08110XQ004
SSK1	STAND SCREW KIT A3AU0UH(SEMS-SW PAN BLACK_NI + M4X12.0)	1ESA34506
PACKING		
S1	CARTON A3AU2UH	1EM334387A
S3	STYROFOAM TOP A3AU0UH	1EM030620A
S4	STYROFOAM BOTTOM A3AU0UH	1EM030925A
S6	SET BAG A3AUCUH	2EMC00085
S7	SERIAL NO. LABEL A01PBUH	----------
S10	PAD A3AU0UH	2EMC00127
ACCESSORIES		
X1	POLYETHYLENE BAG HDPE 180X340XT0.03	1EM435579
X2⚠	OWNERS MANUAL A31T2UH	2EMN00084A
X3	REMOTE CONTROL UNIT YKF335-001	URMT39JHG001
X4	BATTERY R03-B500/01S	XB0M451CZB01
X6	QUICK START GUIDE A31T2UH	1EMN30381
X7	REGISTRATION CARD(PHILIPS) A11P4UH	1EMN27321
X22	WARNING MESSAGE FLIER A3AU2UH	2EMN00059A

LCD PANEL ASSEMBLY

Ref. No.	Description	Part No.
LCD1⚠	LCD PANEL ASSEMBLY	U3AU0P0
	Consists of the following	
A1	FRONT CABINET A3AU2UH	1EM030345
A5	DECORATION PLATE A3AU2UH	1EM228163
A21	BLIND LABEL A3AU0UH	----------
L10	SCREW F-PAN BLACK_NI +P-TITE M3X12.0 3X12 WASHER HEAD+BLK	GCHP3120
	LCD MODULE	----------

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	A3AUDMMA-001
IC3001	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3002	IC 512MB DDR2 SDRAM K4T51163QJ-BCE7	NSCA0R0SM048
IC3003	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3004	IC REGULATOR BD00IA5WEFJ-E2	QSCA0T0RM233
IC3005	IC DTV-C7V R8A05011BG-U0/256FHP	QSAA0R0HT057
IC3006	32MBIT C-MOS SERIAL FLASH S25FL032P0XMFI010 /S	QSCA0R0FJ008
IC3007	IC LDO REGULATOR BD00IC0WEFJ/HTSOP-J8	QSCA0T0RM397
IC3008	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3009	IC RESET IC-PST8429UR	QSCA0T0MM075
IC3011	IC EEPROM BU9883FV-WE2	QSCA0T0RM105
IC3013	IC SINGLE BUS BUFFER 74LVC1G126GW	NSCA0TNXP004
IC3014	IC SINGLE BUS BUFFER 74LVC1G126GW	NSCA0TNXP004
IC3018	IC HDMI SW TMDS351PAGR /PAG-64	NSCA0T0TY068
IC3019	IC USB HIGH-SIDE SW AP2151WG-7/SOT25/5PI	NSCA0TDES015
IC3601	IC REGULATOR AP2121AK-3.3TRE1	NSCA0TBCD026
IC3621	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3801	IC D-CLASS AUDIO POWER AMPLIFI TPA3110D2PWPR	NSCA0T0TY073
IC3851	IC HEADPHONE AMP BH3547F SOP 8PIN	QSZBA0TRM119
TU3901	TUNER UNIT U9001UH	U9001UH

MSW ASSEMBLY

Ref. No.	Description	Part No.
	MSW ASSEMBLY Consists fo the following	A3AUDMSW-001
	FUNCTION CBA UNIT	A3AUDMSW-001-FN
	IR SENSOR CBA UNIT	A3AUDMSW-001-IR
IC4051	IC LIGHT SENSOR PH5502B2NA1-E4	QP1ZPH5502B2

POWER SUPPLY CBA

Ref. No.	Description	Part No.
	POWER SUPPLY CBA Consists fo the following	A3AUCMPW-001
	CAPACITORS	
C601⚠	CAP METALLIZED FILM 0.22µF/310V /K/LE-MX	CTA2240DC001
C602	CAP METALLIZED FILM 0.1µF/310V /K/LE-MX	CTA1040DC001
C604⚠	CAP METALLIZED FILM 0.1µF/310V /K/LE-MX	CTA1040DC001
C605	CAP ELE 33µF/400V/M/85	CEN3300V8007
C606	CERAMIC CAP RB 1000pF/2kV	CA3D102TE006
C607	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102
C608	CHIP CERAMIC CAP. CH J 150pF/50V	CHD1JJ3CH151
C610	CHIP CERAMIC CAP. B K 220pF/50V	CHD1JK30B221
C611	CHIP CERAMIC CAP.(1608) B K 0.1µF/50V	CHD1JK30B104
C612	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102
C614⚠	CAP METALLIZED FILM 1.0µF/310V /K/LE-MX	CTA1050DC001
C615	CAP ELE 47µF/50V/M/85	CEF4700V8006
C616	CAP ELE 220µF/35V/M/85	CEE2210V8006
C619⚠	SAFTY CAP. 1000pF/250V KX	CA2E102MR101
C620	CAP ELE 33µF/35V/M/85	CEE3300V8006
C621	CHIP CERAMIC CAP.(1608) B K 4700pF/50V	CHD1JK30B472
C622	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102
C624	CHIP CERAMIC CAP.(1608) B K 0.1µF/50V	CHD1JK30B104
C625	CHIP CERAMIC CAP. B K 2200pF/50V	CHD1JK30B222
C631	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102HH013
C650	CAP CERAMIC HV 2200pF/1kV B K	CA3A222TE006
C651	CAP ELE 470µF/25V/M/85	CED4710V8006
C652	CAP ELE 470µF/25V/M/85	CED4710V8006
C654	CAP ELE 470µF/16V/M/85	CEC4710V8006
C655	CAP ELE 470µF/16V/M/85	CEC4710V8006
C656	CAP ELE 1µF/50V/M/85	CEF1R00V8006
C660	CHIP CERAMIC CAP.(1608) B K 0.1µF/50V	CHD1JK30B104
C662	CAP ELE 22µF/50V/M/85	CEF2200V8006
C663	CAP ELE 100µF/10V/M/85	CEB1010V8006
C665	CERAMIC CAP. RB 680pF/2kV	CA3D681TE006
C691	CHIP CERAMIC CAP.(1608) B K 0.01µF/50V	CHD1JK30B103
C692	CAP ELE 33µF/35V/M/85	CEE3300V8006
C721	CHIP CERAMIC CAP.(1608) B K 0.1µF/50V	CHD1JK30B104
C722	CHIP CERAMIC CAP.(1608) B K 0.1µF/50V	CHD1JK30B104
C723	CAP ELE 470µF/63V/M/85	CEG4710V8007
C724	CAP ELE 470µF/63V/M/85	CEG4710V8007
C725	CAP CERAMIC HV 2200pF/1kV B K	CA3A222TE006
C726	CERAMIC CAP RB 1500pF/2kV	CA3D152TE006
C1001	CAP ELE 470µF/63V/M/85	CEG4710V8007
C1004	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1101	CAP ELE 100µF/63V/M/85	CEG1010V8006
C1102	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1103	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1105	CAP ELE 100µF/100V/M/85	CEH1010V8007
C1107	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1108	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1109	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1110	CHIP CERAMIC CAP.(1608) B K 1µF/25V	CHD1EK30B105
C1112	CHIP CERAMIC CAP.(1608) B K 0.047µF/25V	CHD1EK30B473
C1113	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102
C1114	CHIP CERAMIC CAP.(1608) B K 1µF/25V	CHD1EK30B105
C1115	CHIP CERAMIC CAP.(1608) B K 0.022µF/50V	CHD1JK30B223
C1116	CHIP CERAMIC CAP. B K 2200pF/50V	CHD1JK30B222
C1117	CHIP CERAMIC CAP. B K 2200pF/50V	CHD1JK30B222
C1118	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080

Ref. No.	Description	Part No.
C1119	CHIP CERAMIC CAP. B K 560pF/50V	CHD1JK30B561
C1201	CAP ELE 100µF/63V/M/85	CEG1010V8006
C1202	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1203	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1205	CAP ELE 100µF/100V/M/85	CEH1010V8007
C1207	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1208	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1209	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1210	CHIP CERAMIC CAP.(1608) B K 1µF/25V	CHD1EK30B105
C1212	CHIP CERAMIC CAP.(1608) B K 0.047µF/25V	CHD1EK30B473
C1213	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102
C1214	CHIP CERAMIC CAP.(1608) B K 1µF/25V	CHD1EK30B105
C1215	CHIP CERAMIC CAP.(1608) B K 0.022µF/50V	CHD1JK30B223
C1216	CHIP CERAMIC CAP. B K 2200pF/50V	CHD1JK30B222
C1217	CHIP CERAMIC CAP. B K 2200pF/50V	CHD1JK30B222
C1218	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1219	CHIP CERAMIC CAP. B K 560pF/50V	CHD1JK30B561
C1301	CAP ELE 100µF/63V/M/85	CEG1010V8006
C1302	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1303	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1305	CAP ELE 100µF/100V/M/85	CEH1010V8007
C1307	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1308	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1309	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1310	CHIP CERAMIC CAP.(1608) B K 1µF/25V	CHD1EK30B105
C1312	CHIP CERAMIC CAP.(1608) B K 0.047µF/25V	CHD1EK30B473
C1313	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102
C1314	CHIP CERAMIC CAP.(1608) B K 1µF/25V	CHD1EK30B105
C1315	CHIP CERAMIC CAP.(1608) B K 0.022µF/50V	CHD1JK30B223
C1316	CHIP CERAMIC CAP. B K 2200pF/50V	CHD1JK30B222
C1317	CHIP CERAMIC CAP. B K 2200pF/50V	CHD1JK30B222
C1318	CHIP CERAMIC CAP.(3216) X7R K 1.0µF/100V	CA2A105MR080
C1319	CHIP CERAMIC CAP. B K 560pF/50V	CHD1JK30B561
C1601	CHIP CERAMIC CAP.(1608) B K 0.022µF/50V	CHD1JK30B223
C1602	CAP ELE 4.7µF/50V/M/85	CEF4R70V8006
C1603	CHIP CERAMIC CAP.(1608) B K 0.22µF/25V	CHD1EK30B224
C1604	CHIP CERAMIC CAP.(1608) B K 2.2µF/10V	CHD1AK30B225
C1605	CHIP CERAMIC CAP. B K 1200pF/50V	CHD1JK30B122
C1606	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102
C1607	CHIP CERAMIC CAP. B K 1200pF/50V	CHD1JK30B122
C1608	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102
C1609	CHIP CERAMIC CAP.(1608) CH J 22pF/50V	CHD1JJ3CH220
C1610	CHIP CERAMIC CAP.(1608) CH J 22pF/50V	CHD1JJ3CH220
C1611	CHIP CERAMIC CAP.(1608) B K 0.1µF/50V	CHD1JK30B104
C1612⚠	CAP METALLIZED FILM 0.22µF/310V /K/LE-MX	CTA2240DC001
C1618	CAP ELE 10µF/50V/M/85	CEF1000V8006
C1621	CAP ELECTROLYTIC 100µF/400V/M/22/25	CA2H101DYG17
C1624	CHIP CERAMIC CAP.(1608) B K 0.1µF/50V	CHD1JK30B104
C1626	CERAMIC CAP. RB 470pF/2kV	CA3D471TE006
C1701	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102
C1702	CHIP CERAMIC CAP. CH J 150pF/50V	CHD1JJ3CH151
C1703	CHIP CERAMIC CAP. B K 220pF/50V	CHD1JK30B221
C1704	CHIP CERAMIC CAP.(1608) B K 0.1µF/50V	CHD1JK30B104
C1706	CERAMIC CAP RB 1000pF/2kV	CA3D102TE006
C1707⚠	SAFTY CAP. 1000pF/250V KX	CA2E102MR101
C1708	CAP ELE 33µF/400V/M/85	CEN3300V8007
C1709	CAP ELE 220µF/10V/M/85	CEB2210V8006
C1710	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102
CONNECTORS		
CN501	FFC CONNECTOR IMSA-9615S-23A-PP-A	JC96J23ER007
CN601⚠	CONNECTOR B2P3-VH(LF)(SN)	J3VH020JG001
CN1001	PH CONNECTOR TOP 6P B6B-PH-K-S (LF)(SN)	J3PHC06JG029

Ref. No.	Description	Part No.
DIODES		
D601⚠	DIODE 1N5406BH	NDL1001N5406
D602⚠	DIODE 1N5406BH	NDL1001N5406
D603⚠	DIODE 1N5406BH	NDL1001N5406
D604⚠	DIODE 1N5406BH	NDL1001N5406
D605	RECTIFIER DIODE 1N4005	NDWZ001N4005
D606	RECTIFIER DIODE 1N4005	NDWZ001N4005
D607	DIODE 1N5406BH	NDL1001N5406
D609	DIODE FAST RECOVERY RS1GJTD	ND1Z0RS1GJTD
D613⚠	DIODE ZENER 1ZB36BB	NDWZ0001ZB36
D614	ZENER DIODE SMD TFZVTR27B	QD1B00TFZV27
D615	DIODE SWITCHING HSC119 TRF -E	QD1Z00HSC119
D617	DIODE SWITCHING HSC119 TRF -E	QD1Z00HSC119
D618	ZENER DIODE SMD TFZVTR18B	QD1B00TFZV18
D619	DIODE FAST RECOVERY RS1GJTD	ND1Z0RS1GJTD
D620	DIODE FAST RECOVERY RS1GJTD	ND1Z0RS1GJTD
D621	DIODE FAST RECOVERY RS1GJTD	ND1Z0RS1GJTD
D623	ZENER DIODE MM5Z5V6B	ND1BMM5Z5V6B
D650	DIODE SHOTTKY SB3200BR	NDWZ3200D027
D653	DIODE SCHOTTKY SB3150BH	NDWZ00SB3150
D654	DIODE ZENER 1ZB20BB	NDWZ0001ZB20
D655	DIODE SCHOTTKY SB3150BH	NDWZ00SB3150
D656	DIODE FAST RECOVERY RS1GJTD	ND1Z0RS1GJTD
D657	ZENER DIODE MM5Z4V3B	ND1BMM5Z4V3B
D660	IC SHUNT REGULATOR SL431A-AT	NSZBA0TAUK01
D661	DIODE SWITCHING HSC119 TRF -E	QD1Z00HSC119
D662	DIODE SWITCHING HSC119 TRF -E	QD1Z00HSC119
D663	DIODE SWITCHING HSC119 TRF -E	QD1Z00HSC119
D664	DIODE FAST RECOVERY RS1KJTD	ND1Z0RS1KJTD
D704	IC SHUNT REGULATOR SL431A-AT	NSZBA0TAUK01
D710	DIODE SHOTTKY SB3200BR	NDWZ3200D027
D711	DIODE SHOTTKY SB3200BR	NDWZ3200D027
D712	DIODE SHOTTKY SB3200BR	NDWZ3200D027
D714	DIODE FAST RECOVERY RS1KJTD	ND1Z0RS1KJTD
D1102	DIODE SCHOTTKY BARRIER SB2150BD	NDWZ00SB2150
D1103	DIODE SWITCHING HSC119 TRF -E	QD1Z00HSC119
D1105	ZENER DIODE SMD TFZVTR30B	QD1B00TFZV30
D1106	ZENER DIODE SMD TFZVTR30B	QD1B00TFZV30
D1107	DIODE SWITCHING HSC119 TRF -E	QD1Z00HSC119
D1202	DIODE SCHOTTKY BARRIER SB2150BD	NDWZ00SB2150
D1203	DIODE SWITCHING HSC119 TRF -E	QD1Z00HSC119
D1205	ZENER DIODE SMD TFZVTR30B	QD1B00TFZV30
D1206	ZENER DIODE SMD TFZVTR30B	QD1B00TFZV30
D1207	DIODE SWITCHING HSC119 TRF -E	QD1Z00HSC119
D1302	DIODE SCHOTTKY BARRIER SB2150BD	NDWZ00SB2150
D1303	DIODE SWITCHING HSC119 TRF -E	QD1Z00HSC119
D1305	ZENER DIODE SMD TFZVTR30B	QD1B00TFZV30
D1306	ZENER DIODE SMD TFZVTR30B	QD1B00TFZV30
D1307	DIODE SWITCHING HSC119 TRF -E	QD1Z00HSC119
D1603	DIODE FAST RECOVERY 30PFB60	QDWZ030PFB60
D1605	DIODE FAST RECOVERY 30PFB60	QDWZ030PFB60
D1608	ZENER DIODE SMD TFZVTR16B	QD1B00TFZV16
D1705	DIODE FAST RECOVERY RS1GJTD	ND1Z0RS1GJTD
D1707	DIODE ZENER 1ZB36BB	NDWZ0001ZB36
D1711	ZENER DIODE SMD TFZVTR27B	QD1B00TFZV27
ICS		
IC601	IC SWITCHING FA5640N-C6-TE3/SOP-8	QSCA0T0FD007
IC602⚠	IC PHOTOCOUPLER TLP781F(D4-FUNBLL F)	QPEL781FBLLF
IC604	IC SHUNT REGULATOR SL431A-AT	NSZBA0TAUK01
IC651	IC REGULATOR AP1117E33G-13 /3PIN	NSCA0TDES017
IC1101	IC LED BACKLIGHT CONTROLLER BD9488F-GE2/SOP/18P	QSCA0T0RM418

Ref. No.	Description	Part No.
IC1201	IC LED BACKLIGHT CONTROLLER BD9488F-GE2/SOP/18P	QSCA0T0RM418
IC1301	IC LED BACKLIGHT CONTROLLER BD9488F-GE2/SOP/18P	QSCA0T0RM418
IC1601	IC DUAL-PHASE PFC CONTROLLER UCC28063DR/R-PDSO-G	NSCA0T0TY087
IC1602⚠	IC PHOTOCOUPLER TLP781F(D4-FUNBLL F)	QPEL781FBLLF
IC1701	IC SWITCHING FA5640N-C6-TE3/SOP-8	QSCA0T0FD007
IC1702⚠	IC PHOTOCOUPLER TLP781F(D4-FUNBLL F)	QPEL781FBLLF
COILS		
L601A⚠	LINE FILTER JLB24136	LLEG0Z0XB032
L602A⚠	LINE FILTER JLB24136	LLEG0Z0XB032
L1101	COIL POWER INDUCTORS DIP RP1315BNP-101M/100µH	LLF1010SF013
L1102	COIL CHIP BEADS PZ2012D121-2R5T(F)	LLF121SSN006
L1103	COIL CHIP BEADS PZ2012D121-2R5T(F)	LLF121SSN006
L1201	COIL POWER INDUCTORS DIP RP1315BNP-101M/100µH	LLF1010SF013
L1202	COIL CHIP BEADS PZ2012D121-2R5T(F)	LLF121SSN006
L1203	COIL CHIP BEADS PZ2012D121-2R5T(F)	LLF121SSN006
L1301	COIL POWER INDUCTORS DIP RP1315BNP-101M/100µH	LLF1010SF013
L1302	COIL CHIP BEADS PZ2012D121-2R5T(F)	LLF121SSN006
L1303	COIL CHIP BEADS PZ2012D121-2R5T(F)	LLF121SSN006
TRANSISTORS		
Q601	FET MOS TK3A65D(FND Q)	QEWZTK3A65DQ
Q602	FET MOS TK3P50D RQ(S	QF2Z0TK3P50D
Q603	CHIP TRANSISTOR KTC3875S-Y-RTK/P	NQ1YKTC3875S
Q650	CHIP TRANSISTOR KTC3875S-Y-RTK/P	NQ1YKTC3875S
Q653	CHIP TRANSISTOR KTC3875S-Y-RTK/P	NQ1YKTC3875S
Q654	CHIP TRANSISTOR KTC3875S-Y-RTK/P	NQ1YKTC3875S
Q691	CHIP TRANSISTOR KTC3875S-Y-RTK/P	NQ1YKTC3875S
Q701	CHIP TRANSISTOR KTC3875S-Y-RTK/P	NQ1YKTC3875S
Q702	CHIP TRANSISTOR KTC3875S-Y-RTK/P	NQ1YKTC3875S
Q1101	FET MOS SMD AP05N20GH-HF	NF2ZP05N20GH
Q1102	FET MOS SMD AP18T10AGH-HF	NF2Z18T10AGH
Q1201	FET MOS SMD AP05N20GH-HF	NF2ZP05N20GH
Q1202	FET MOS SMD AP18T10AGH-HF	NF2Z18T10AGH
Q1301	FET MOS SMD AP05N20GH-HF	NF2ZP05N20GH
Q1302	FET MOS SMD AP18T10AGH-HF	NF2Z18T10AGH
Q1601	MOS FET TK8A50D	QFWZTK8A50DQ
Q1602	MOS FET TK8A50D	QFWZTK8A50DQ
Q1604	NPN TRANSISTOR SMD 2SC5344SY	NQZY2SC5344S
Q1607	PNP TRANSISTOR SMD 2SA1576UBTLQ	QQ1Q2SA1576U
Q1608	CHIP TRANSISTOR KTC3875S-Y-RTK/P	NQ1YKTC3875S
Q1701	CHIP TRANSISTOR KTC3875S-Y-RTK/P	NQ1YKTC3875S
Q1702	PNP TRANSISTOR SMD 2SA1576UBTLQ	QQ1Q2SA1576U
Q1704	FET MOS TK5A65D(STA4 A Q)	QFEZTK5A65DQ
RESISTORS		
R601⚠	RES. CARBON FILM J 1/2W J 1.2M Ω	RCX2125T1003
R604	RES CHIP 1608 1/10W F 2.70k Ω	RTW2701HH008
R605	RES CHIP 3216 1/4W J 270 Ω	RRX4271HH034
R606	RES CHIP 1608 1/10W J 22k Ω	RRXA223HH013
R607	RES CHIP 1608 1/10W J 4.7k Ω	RRXA472HH013
R608	RES CHIP 3216 1/4W J 10 Ω	RRX4100HH034
R609	RES CHIP 1608 1/10W J 820k Ω	RRXA824HH013
R610	RES CHIP 3216 1/4W J 15k Ω	RRX4153HH034
R611	RES CHIP 3216 1/4W J 15k Ω	RRX4153HH034
R614	RES CHIP 3216 1/4W J 15k Ω	RRX4153HH034
R617	RES CHIP 3216 1/4W J 4.7k Ω	RRX4472HH034
R618	METAL OXIDE FILM RES. 2W J 0.22 Ω	RN02R22ZU001
R619	RES CHIP 1608 1/10W J 4.7 Ω	RRXA4R7HH013
R620	RES CHIP 1608 1/10W J 47k Ω	RRXA473HH013
R623	RES CHIP 1608 1/10W F 2.70k Ω	RTW2701HH008

Ref. No.	Description	Part No.
R624	RES CHIP 3216 1/4W F 510k Ω	RTC5103YF004
R625	RES CHIP 3216 1/4W F 510k Ω	RTC5103YF004
R626	RES CHIP 3216 1/4W F 510k Ω	RTC5103YF004
R627	RES CHIP 1608 1/10W F 39.0k Ω	RTW3902HH008
R628	RES CHIP 1608 1/10W J 22k Ω	RRXA223HH013
R629	RES CHIP 1608 1/10W J 47k Ω	RRXA473HH013
R630	RES CHIP 3216 1/4W J 560k Ω	RRX4564HH034
R631	RES CHIP 3216 1/4W J 560k Ω	RRX4564HH034
R632	RES CHIP 1608 1/10W J 8.2k Ω	RRXA822HH013
R633	RES CHIP 1608 1/10W J 8.2k Ω	RRXA822HH013
R634	RES CHIP 1608 1/10W J 270 Ω	RRXA271HH013
R651	RES CHIP 1608 1/10W J 1.0 Ω	RRXA1R0HH013
R652	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R653	RES CHIP 1608 1/10W F 22.0k Ω	RTW2202HH008
R654	RES CHIP 3216 1/4W J 180 Ω	RRX4181HH034
R655	RES CHIP 3216 1/4W J 180 Ω	RRX4181HH034
R656	RES CHIP 1608 1/10W J 8.2k Ω	RRXA822HH013
R657	RES CHIP 3216 1/4W J 3.9k Ω	RRX4392HH034
R658	RES CHIP 1608 1/10W J 2.7k Ω	RRXA272HH013
R659	RES CHIP 1608 1/10W F 22.0k Ω	RTW2202HH008
R660	RES CHIP 1608 1/10W F 2.70k Ω	RTW2701HH008
R661	RES CHIP 1608 1/10W F 3.30k Ω	RTW3301HH008
R662	RES CHIP 1608 1/10W J 47k Ω	RRXA473HH013
R666	RES CHIP 1608 1/10W 0 Ω	RRXA000HH014
R667	RES CHIP 1608 1/10W J 8.2k Ω	RRXA822HH013
R668	RES CHIP 1608 1/10W J 47k Ω	RRXA473HH013
R669	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R676	METAL OXIDE FILM RES. 2W J 0.22 Ω	RN02R22ZU001
R678	METAL OXIDE FILM RES. 2W J 0.22 Ω	RN02R22ZU001
R679	METAL OXIDE FILM RES. 2W J 0.22 Ω	RN02R22ZU001
R683	RES CHIP 3216 1/4W 0 Ω	RRX4000HH036
R684	RES CHIP 3216 1/4W 0 Ω	RRX4000HH036
R691	RES CHIP 1608 1/10W J 2.2k Ω	RRXA222HH013
R692	RES CHIP 1608 1/10W J 330 Ω	RRXA331HH013
R693	RES CHIP 1608 1/10W J 47k Ω	RRXA473HH013
R701	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R702	RES CHIP 1608 1/10W J 47k Ω	RRXA473HH013
R703	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R704	RES CHIP 1608 1/10W J 47k Ω	RRXA473HH013
R738	RES CHIP 3216 1/4W J 2.2k Ω	RRX4222HH034
R739	RES CHIP 3216 1/4W J 15k Ω	RRX4153HH034
R740	RES CHIP 1608 1/10W F 20.0k Ω	RTW2002HH008
R741	RES CHIP 3216 1/4W J 3.9k Ω	RRX4392HH034
R743	RES CHIP 1608 1/10W F 51.0k Ω	RTW5102HH008
R744	RES CHIP 1608 1/10W F 9.10k Ω	RTW9101HH008
R745	RES CHIP 1608 1/10W F 3.30k Ω	RTW3301HH008
R746	RES CHIP 3216 1/4W J 270k Ω	RRX4274HH034
R747	RES CHIP 3216 1/4W J 270k Ω	RRX4274HH034
R1101	RES CHIP 1608 1/10W J 120 Ω	RRXA121HH013
R1102	RES CHIP 1608 1/10W J 120 Ω	RRXA121HH013
R1103	RES CHIP 1608 1/10W F 75.0k Ω	RTW7502HH008
R1104	RES CHIP 1608 1/10W F 20.0k Ω	RTW2002HH008
R1105	RES CHIP 1608 1/10W F 20.0k Ω	RTW2002HH008
R1106	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R1107	RES CHIP 1608 1/10W J 100k Ω	RRXA104HH013
R1108	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102HH013
R1109	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R1110	RES CHIP 1608 1/10W J 100k Ω	RRXA104HH013
R1111	RES CHIP 1608 1/10W F 240k Ω	RTW2403HH008
R1112	RES CHIP 1608 1/10W F 33.0k Ω	RTW3302HH008
R1113	RES CHIP 1608 1/10W F 3.00k Ω	RTW3001HH008
R1114	RES CHIP 1608 1/10W F 62.0k Ω	RTW6202HH008
R1115	METAL OXIDE RES. 1W J 0.18 Ω	RN01R18ZU001

Ref. No.	Description	Part No.
R1118	RES CHIP 1608 1/10W J 200 Ω	RRXA201HH013
R1119	RES CHIP 1608 1/10W F 430k Ω	RTW4303HH008
R1120	RES CHIP 1608 1/10W F 300k Ω	RTW3003HH008
R1121	RES CHIP 1608 1/10W F 24.0k Ω	RTW2402HH008
R1122	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102HH013
R1123	RES CHIP 1608 1/10W J 10 Ω	RRXA100HH013
R1124	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102HH013
R1125	RES CHIP 1608 1/10W J 51 Ω	RRXA510HH013
R1126	RES CHIP 3216 1/4W F 1.00 Ω	RT1R00RYL007
R1127	RES CHIP 3216 1/4W F 1.00 Ω	RT1R00RYL007
R1128	RES CHIP 3216 1/4W J 3.6k Ω	RRX4362HH034
R1129	RES CHIP 3216 1/4W J 1.5k Ω	RRX4152HH034
R1201	RES CHIP 1608 1/10W J 120 Ω	RRXA121HH013
R1202	RES CHIP 1608 1/10W J 120 Ω	RRXA121HH013
R1203	RES CHIP 1608 1/10W F 75.0k Ω	RTW7502HH008
R1204	RES CHIP 1608 1/10W F 20.0k Ω	RTW2002HH008
R1205	RES CHIP 1608 1/10W F 20.0k Ω	RTW2002HH008
R1206	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R1207	RES CHIP 1608 1/10W J 100k Ω	RRXA104HH013
R1208	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102HH013
R1209	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R1210	RES CHIP 1608 1/10W J 100k Ω	RRXA104HH013
R1211	RES CHIP 1608 1/10W F 240k Ω	RTW2403HH008
R1212	RES CHIP 1608 1/10W F 33.0k Ω	RTW3302HH008
R1213	RES CHIP 1608 1/10W F 3.00k Ω	RTW3001HH008
R1214	RES CHIP 1608 1/10W F 62.0k Ω	RTW6202HH008
R1215	METAL OXIDE RES. 1W J 0.18 Ω	RN01R18ZU001
R1218	RES CHIP 1608 1/10W J 200 Ω	RRXA201HH013
R1219	RES CHIP 1608 1/10W F 430k Ω	RTW4303HH008
R1220	RES CHIP 1608 1/10W F 300k Ω	RTW3003HH008
R1221	RES CHIP 1608 1/10W F 24.0k Ω	RTW2402HH008
R1222	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102HH013
R1223	RES CHIP 1608 1/10W J 10 Ω	RRXA100HH013
R1224	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102HH013
R1225	RES CHIP 1608 1/10W J 51 Ω	RRXA510HH013
R1226	RES CHIP 3216 1/4W F 1.00 Ω	RT1R00RYL007
R1227	RES CHIP 3216 1/4W F 1.00 Ω	RT1R00RYL007
R1228	RES CHIP 3216 1/4W J 3.6k Ω	RRX4362HH034
R1229	RES CHIP 3216 1/4W J 1.5k Ω	RRX4152HH034
R1301	RES CHIP 1608 1/10W J 120 Ω	RRXA121HH013
R1302	RES CHIP 1608 1/10W J 120 Ω	RRXA121HH013
R1303	RES CHIP 1608 1/10W F 75.0k Ω	RTW7502HH008
R1304	RES CHIP 1608 1/10W F 20.0k Ω	RTW2002HH008
R1305	RES CHIP 1608 1/10W F 20.0k Ω	RTW2002HH008
R1306	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R1307	RES CHIP 1608 1/10W J 100k Ω	RRXA104HH013
R1308	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102HH013
R1309	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R1310	RES CHIP 1608 1/10W J 100k Ω	RRXA104HH013
R1311	RES CHIP 1608 1/10W F 240k Ω	RTW2403HH008
R1312	RES CHIP 1608 1/10W F 33.0k Ω	RTW3302HH008
R1313	RES CHIP 1608 1/10W F 3.00k Ω	RTW3001HH008
R1314	RES CHIP 1608 1/10W F 62.0k Ω	RTW6202HH008
R1315	METAL OXIDE RES. 1W J 0.18 Ω	RN01R18ZU001
R1318	RES CHIP 1608 1/10W J 200 Ω	RRXA201HH013
R1319	RES CHIP 1608 1/10W F 430k Ω	RTW4303HH008
R1320	RES CHIP 1608 1/10W F 300k Ω	RTW3003HH008
R1321	RES CHIP 1608 1/10W F 24.0k Ω	RTW2402HH008
R1322	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102HH013
R1323	RES CHIP 1608 1/10W J 10 Ω	RRXA100HH013
R1324	RES CHIP 1608 1/10W J 1.0k Ω	RRXA102HH013
R1325	RES CHIP 1608 1/10W J 51 Ω	RRXA510HH013
R1326	RES CHIP 3216 1/4W F 1.00 Ω	RT1R00RYL007
R1327	RES CHIP 3216 1/4W F 1.00 Ω	RT1R00RYL007
R1328	RES CHIP 3216 1/4W J 3.6k Ω	RRX4362HH034
R1329	RES CHIP 3216 1/4W J 1.5k Ω	RRX4152HH034
R1601	RES CHIP 3216 1/4W F 750k Ω	RTC7503YF004
R1602	RES CHIP 3216 1/4W F 750k Ω	RTC7503YF004
R1604	RES CHIP 3216 1/4W F 750k Ω	RTC7503YF004
R1605	RES CHIP 3216 1/4W F 750k Ω	RTC7503YF004
R1606	RES CHIP 1608 1/10W J 120k Ω	RRXA124HH013
R1607	RES CHIP 1608 1/10W F 220 Ω	RTW2200HH008
R1608	RES CHIP 1608 1/10W F 51.0k Ω	RTW5102HH008
R1609	RES CHIP 1608 1/10W J 5.6k Ω	RRXA562HH013
R1610	RES CHIP 1608 1/10W F 18.0k Ω	RTW1802HH008
R1611	RES CHIP 1608 1/10W J 100 Ω	RRXA101HH013
R1612	RES CHIP 3216 1/4W F 750k Ω	RTC7503YF004
R1613	RES CHIP 3216 1/4W F 750k Ω	RTC7503YF004
R1614	RES CHIP 3216 1/4W F 750k Ω	RTC7503YF004
R1615	RES CHIP 3216 1/4W F 750k Ω	RTC7503YF004
R1616	RES CHIP 1608 1/10W F 47.0k Ω	RTW4702HH008
R1617	RES CHIP 3216 1/4W F 750k Ω	RTC7503YF004
R1618	RES CHIP 3216 1/4W F 750k Ω	RTC7503YF004
R1619	RES CHIP 3216 1/4W F 750k Ω	RTC7503YF004
R1620	RES CHIP 3216 1/4W F 750k Ω	RTC7503YF004
R1621	RES CHIP 1608 1/10W F 1.80k Ω	RTW1801HH008
R1622	RES CHIP 1608 1/10W J 18k Ω	RRXA183HH013
R1623	RES CHIP 1608 1/10W J 12k Ω	RRXA123HH013
R1624	RES CEMENT 5W J 0.033 Ω	RWJL33PAK002
R1625	RES CHIP 3216 1/4W J 47 Ω	RRX4470HH034
R1626	RES CHIP 3216 1/4W J 47 Ω	RRX4470HH034
R1627	RES CHIP 1608 1/10W J 12k Ω	RRXA123HH013
R1633	RES CHIP 3216 1/4W J 2.7k Ω	RRX4272HH034
R1634	RES CHIP 3216 1/4W J 47 Ω	RRX4470HH034
R1637	RES CHIP 3216 1/4W J 680 Ω	RRX4681HH034
R1638	RES CHIP 1608 1/10W J 18k Ω	RRXA183HH013
R1639	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R1640	RES CHIP 1608 1/10W J 4.7k Ω	RRXA472HH013
R1642	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R1645	RES CHIP 1608 1/10W F 68.0k Ω	RTW6802HH008
R1656	RES CHIP 1608 1/10W J 4.7 Ω	RRXA4R7HH013
R1702	RES CHIP 1608 1/10W F 2.70k Ω	RTW2701HH008
R1703	RES CHIP 1608 1/10W J 4.7k Ω	RRXA472HH013
R1704	RES CHIP 1608 1/10W J 22k Ω	RRXA223HH013
R1705	RES CHIP 1608 1/10W J 27k Ω	RRXA273HH013
R1707	RES CHIP 1608 1/10W J 820k Ω	RRXA824HH013
R1708	RES CHIP 1608 1/10W J 22k Ω	RRXA223HH013
R1710	RES CHIP 1608 1/10W J 22k Ω	RRXA223HH013
R1711	RES CHIP 1608 1/10W J 10k Ω	RRXA103HH013
R1712	RES CHIP 3216 1/4W J 180 Ω	RRX4181HH034
R1714	RES CHIP 3216 1/4W J 10 Ω	RRX4100HH034
R1718	RES CHIP 3216 1/4W J 22k Ω	RRX4223HH034
R1719	METALOXIDE RES 2W J 0.12Ω	RNJR12PAK002
R1720	RES CHIP 1608 1/10W J 270 Ω	RRXA271HH013
MISCELLANEOUS		
B19	POW HEAT SINK A7120UH	1EM423993A
BC602	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC603	WIRE CP STP-S-0.50	XZ40F0REN001
BC1101	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC1102	WIRE CP STP-S-0.50	XZ40F0REN001
BC1201	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC1202	WIRE CP STP-S-0.50	XZ40F0REN001
BC1301	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC1302	WIRE CP STP-S-0.50	XZ40F0REN001
BC1601	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030

Ref. No.	Description	Part No.
BC1602	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
BC1603	WIRE CP STP-S-0.50	XZ40F0REN001
BC1604	WIRE CP STP-S-0.50	XZ40F0REN001
BC1703	BEADS INDUCTOR FBR07HA121SB-00	LLBF00STU030
F602⚠	FUSE TIME RAG SLT250V2.5A	PDGSLB0NG252
GP001	EARTH PLATE A31FBUT	1EM440258
GP003	EARTH PLATE A31FBUT	1EM440258
JS601	WIRE CP STP-S-0.50	XZ40F0REN001
JS602	WIRE CP STP-S-0.50	XZ40F0REN001
L35	SCREW BIND 3CHROM +B-TITE M3X8.0 D3X8 BIND HEAD+	GBJB3080
SA601⚠	VARISTOR 10D 471K SVR	NVQZVR10D471
T601⚠	TRANS POWER BCK-28FX	LTT2PCMEK055
T1601⚠	COIL EF TE2520A7001	LLEE0ZMEK005
T1602⚠	COIL EF TE2520A7001	LLEE0ZMEK005
T1701⚠	TRANS POWER BCK-35CU	LTT3PCMEK028

TYPE B

PARTS LIST [50PFL3908/F7 (Serial No.: DS1)]

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
A3	REAR COVER A37U0UH	1EM030665
A13	JACK HOLDER A37U0UH	1EM334736
A15⚠	RATING LABEL A37U0UH	----------
A16	LOGO LABEL A37U0UH	----------
A17	ENERGY GUIDE LABEL A37U0UH	----------
CL3013	FFC WIRE ASSEMBLY 51PIN(W/SHIELD) 51P/ FFC/SHIELD/800MM	WX1A37U0P402
CL3701	FFC WIRE ASSEMBLY 23PIN 23PIN/WHITE/ 170MM	WX1A37U0S101
S1	CARTON A37U0UH	1EM335389
X2⚠	OWNERS MANUAL A3RT0UH	2EMN00086
X3	REMOTE CONTROL UNIT YKF340-001	URMT39JHG003
X6	QUICK START GUIDE A3RT0UH	1EMN30387A
X7	Not used	

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A37U0MMA-002
CN3701	WIRELESS LAN MODULE WM5504	UWLMDLACM002
IC3001	Not used	
IC3002	Not used	
IC3003	Not used	
IC3004	Not used	
IC3005	Not used	
IC3006	Not used	
IC3007	Not used	
IC3008	Not used	
IC3009	Not used	
IC3011	Not used	
IC3013	Not used	
IC3014	Not used	
IC3018	Not used	
IC3019	Not used	
IC3101	IC MAIN PH1-SLD8 MN2WS0270EA	QSCA0R0MS053
IC3102	IC NAND FLASH 1GB K9F1G08U0D-SCB0	NSCA0R0SM037
IC3103	16KBIT EEPROM M24C16-WMN6TP	NSZBA0TSS259
IC3601	IC RESET IC-PST8429UR	QSCA0T0MM075
IC3602	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3603	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3604	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3607	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3621	Not used	
IC3701	IC USB HIGH-SIDE SW AP2151WG-7/SOT25/5PI	NSCA0TDES015
IC3801	Not used	
IC3803	IC D-CLASS AUDIO POWER AMPLIFI TPA3110D2PWPR	NSCA0T0TY073
IC3851	Not used	
IC3901	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
TU3001	TUNER UNIT U9001UH	U9001UH
TU3901	Not used	
	When you replace one of the below ICs on this CBA, replace with the one that has the same part number. Do not mix ICs with different part number.	
IC3401	IC 1GB DDR3 SDRAM K4B1G1646G-BCH9	NSCA0R0SM043
IC3402	IC 1GB DDR3 SDRAM K4B1G1646G-BCH9	NSCA0R0SM043
	or	
IC3401	IC 1GB DDR3 SDRAM H5TQ1G63DFR-H9C	NSCA0R0HY018
IC3402	IC 1GB DDR3 SDRAM H5TQ1G63DFR-H9C	NSCA0R0HY018
	or	
IC3401	IC 1GB DDR3 SDRAM H5TQ1G63EFR-H9C	NSCA0R0HY035
IC3402	IC 1GB DDR3 SDRAM H5TQ1G63EFR-H9C	NSCA0R0HY035
	MSW ASSEMBLY Consists of the following	A37U0MSW-002
	FUNCTION CBA UNIT	A37U0MSW-002-FN
	IR SENSOR CBA UNIT	A37U0MSW-002-IR
	POWER SUPPLY CBA	A37U0MPW-002
C631	Not used	
R676	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R678	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R679	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R683	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R684	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034

TYPE B

PARTS LIST [50PFL3908/F7 (Serial No.: DS2)]

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
A3	REAR COVER A37U0UH	1EM030665
A13	JACK HOLDER A37U0UH	1EM334736
A15⚠	RATING LABEL A37U0UH	----------
A16	LOGO LABEL A37U0UH	----------
A17	ENERGY GUIDE LABEL A37U0UH	----------
CL3013	FFC WIRE ASSEMBLY 51PIN(W/SHIELD) 51P/ FFC/SHIELD/676MM	WX1A37UCP401
CL3701	FFC WIRE ASSEMBLY 23PIN 23PIN/WHITE/ 170MM	WX1A37U0S101
S1	CARTON A37U0UH	1EM335389
X2⚠	OWNERS MANUAL A3RT0UH	2EMN00086
X3	REMOTE CONTROL UNIT YKF340-001	URMT39JHG003
X6	QUICK START GUIDE A3RT0UH	1EMN30387A
X7	Not used	
LCD1⚠	LCD PANEL ASSEMBLY	U3AU2P0

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A37UCMMA-001
CN3701	WIRELESS LAN MODULE WM5504	UWLMDLACM002
IC3001	Not used	
IC3002	Not used	
IC3003	Not used	
IC3004	Not used	
IC3005	Not used	
IC3006	Not used	
IC3007	Not used	
IC3008	Not used	
IC3009	Not used	
IC3011	Not used	
IC3013	Not used	
IC3014	Not used	
IC3018	Not used	
IC3019	Not used	
IC3101	IC MAIN PH1-SLD8 MN2WS0270EA	QSCA0R0MS053
IC3102	IC NAND FLASH 1GB K9F1G08U0D-SCB0	NSCA0R0SM037
IC3103	16KBIT EEPROM M24C16-WMN6TP	NSZBA0TSS259
IC3601	IC RESET IC-PST8429UR	QSCA0T0MM075
IC3602	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3603	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3604	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3607	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3621	Not used	
IC3701	IC USB HIGH-SIDE SW AP2151WG-7/SOT25/5PI	NSCA0TDES015
IC3801	Not used	
IC3803	IC D-CLASS AUDIO POWER AMPLIFI TPA3110D2PWPR	NSCA0T0TY073
IC3851	Not used	
IC3901	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
TU3001	TUNER UNIT U9001UH	U9001UH
TU3901	Not used	
	When you replace one of the below ICs on this CBA, replace with the one that has the same part number. Do not mix ICs with different part number.	
IC3401	IC 1GB DDR3 SDRAM K4B1G1646G-BCH9	NSCA0R0SM043
IC3402	IC 1GB DDR3 SDRAM K4B1G1646G-BCH9	NSCA0R0SM043
	or	
IC3401	IC 1GB DDR3 SDRAM H5TQ1G63DFR-H9C	NSCA0R0HY018
IC3402	IC 1GB DDR3 SDRAM H5TQ1G63DFR-H9C	NSCA0R0HY018
	or	
IC3401	IC 1GB DDR3 SDRAM H5TQ1G63EFR-H9C	NSCA0R0HY035
IC3402	IC 1GB DDR3 SDRAM H5TQ1G63EFR-H9C	NSCA0R0HY035
	MSW ASSEMBLY Consists of the following	A37U0MSW-002
	FUNCTION CBA UNIT	A37U0MSW-002-FN
	IR SENSOR CBA UNIT	A37U0MSW-002-IR
	POWER SUPPLY CBA	A37U0MPW-002
C631	Not used	
R676	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R678	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R679	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R683	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R684	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034

TYPE B

PARTS LIST [50PFL3908/F8 (Serial No.: XA1)]

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
A3	REAR COVER A37U0UH	1EM030665
A13	JACK HOLDER A37U0UH	1EM334736
A15⚠	RATING LABEL A37UAMA	----------
A16	LOGO LABEL A37UAMA	----------
A17	Not used	
CL3013	FFC WIRE ASSEMBLY 51PIN(W/SHIELD) 51P/FFC/SHIELD/800MM	WX1A37U0P402
CL3701	FFC WIRE ASSEMBLY 23PIN 23PIN/WHITE/170MM	WX1A37U0S101
S1	CARTON A37UAMA	2EMC00095
S12	CARTON LABEL A37UAMA	----------
X2⚠	OWNERS MANUAL A3RTAMA	2EMN00024B
X3	REMOTE CONTROL UNIT YKF340-001	URMT39JHG003
X6	QUICK START GUIDE A3RTAMA	2EMN00025A
X7	Not used	

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A37UAMMA-004
CN3701	WIRELESS LAN MODULE WM5504	UWLMDLACM002
IC3001	Not used	
IC3002	Not used	
IC3003	Not used	
IC3004	Not used	
IC3005	Not used	
IC3006	Not used	
IC3007	Not used	
IC3008	Not used	
IC3009	Not used	
IC3011	Not used	
IC3013	Not used	
IC3014	Not used	
IC3018	Not used	
IC3019	Not used	
IC3101	IC MAIN PH1-SLD8 MN2WS0270EA	QSCA0R0MS053
IC3102	IC NAND FLASH 1GB K9F1G08U0D-SCB0	NSCA0R0SM037
IC3103	16KBIT EEPROM M24C16-WMN6TP	NSZBA0TSS259
IC3601	IC RESET IC-PST8429UR	QSCA0T0MM075
IC3602	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3603	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3604	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3607	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3621	Not used	
IC3701	IC USB HIGH-SIDE SW AP2151WG-7/SOT25/5PI	NSCA0TDES015
IC3801	Not used	
IC3803	IC D-CLASS AUDIO POWER AMPLIFI TPA3110D2PWPR	NSCA0T0TY073
IC3851	Not used	
IC3901	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
TU3001	TUNER UNIT U9001UH	U9001UH
TU3901	Not used	
	When you replace one of the below ICs on this CBA, replace with the one that has the same part number. Do not mix ICs with different part number.	
IC3401	IC 1GB DDR3 SDRAM K4B1G1646G-BCH9	NSCA0R0SM043
IC3402	IC 1GB DDR3 SDRAM K4B1G1646G-BCH9	NSCA0R0SM043
	or	
IC3401	IC 1GB DDR3 SDRAM H5TQ1G63DFR-H9C	NSCA0R0HY018
IC3402	IC 1GB DDR3 SDRAM H5TQ1G63DFR-H9C	NSCA0R0HY018
	or	
IC3401	IC 1GB DDR3 SDRAM H5TQ1G63EFR-H9C	NSCA0R0HY035
IC3402	IC 1GB DDR3 SDRAM H5TQ1G63EFR-H9C	NSCA0R0HY035
	MSW ASSEMBLY Consists of the following	A37U0MSW-002
	FUNCTION CBA UNIT	A37U0MSW-002-FN
	IR SENSOR CBA UNIT	A37U0MSW-002-IR
	POWER SUPPLY CBA	A37U0MPW-002
C631	Not used	
R676	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R678	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R679	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R683	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R684	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034

TYPE B

PARTS LIST [50PFL1908/F8 (Serial No.: XA1)]

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
A3	REAR COVER A37U0UH	1EM030665
A13	JACK HOLDER A37U0UH	1EM334736
A15⚠	RATING LABEL A37UBMA	---------
A16	LOGO LABEL A37UAMA	---------
A17	Not used	
CL3013	FFC WIRE ASSEMBLY 51PIN(W/SHIELD) 51P/ FFC/SHIELD/800MM	WX1A37U0P402
CL3701	FFC WIRE ASSEMBLY 23PIN 23PIN/WHITE/ 170MM	WX1A37U0S101
SBA1	50W STAND BASE ASSEMBLY (FC) A21U0UD	1EMN29162
SNA1	50W STAND HINGE ASSEMBLY (FC) A4GU5UH	2EMN00139
S1	CARTON A37UBMA	2EMC00222
S12	CARTON LABEL A37UBMA	---------
X2⚠	OWNERS MANUAL A3RTAMA	2EMN00024B
X3	REMOTE CONTROL UNIT YKF340-001	URMT39JHG003
X6	QUICK START GUIDE A3RTAMA	2EMN00025A
X7	Not used	
LCD1⚠	LCD PANEL ASSEMBLY	U3AU0P2
A1	FRONT CABINET A3AUHMA	2EMM00213
A5	Not used	
A9	SENSOR LENS A3AU0UH	1EM334557

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A37UBMMA-002
CN3701	WIRELESS LAN MODULE WM5504	UWLMDLACM002
IC3001	Not used	
IC3002	Not used	
IC3003	Not used	
IC3004	Not used	
IC3005	Not used	
IC3006	Not used	
IC3007	Not used	
IC3008	Not used	
IC3009	Not used	
IC3011	Not used	
IC3013	Not used	
IC3014	Not used	
IC3018	Not used	
IC3019	Not used	
IC3101	IC MAIN PH1-SLD8 MN2WS0270EA	QSCA0R0MS053
IC3102	IC NAND FLASH 1GB K9F1G08U0D-SCB0	NSCA0R0SM037
IC3103	16KBIT EEPROM M24C16-WMN6TP	NSZBA0TSS259
IC3601	IC RESET IC-PST8429UR	QSCA0T0MM075
IC3602	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3603	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3604	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3607	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3621	Not used	
IC3701	IC USB HIGH-SIDE SW AP2151WG-7/SOT25/5PI	NSCA0TDES015
IC3801	Not used	
IC3803	IC D-CLASS AUDIO POWER AMPLIFI TPA3110D2PWPR	NSCA0T0TY073
IC3851	Not used	
IC3901	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
TU3001	TUNER UNIT U9001UH	U9001UH
TU3901	Not used	
	When you replace one of the below ICs on this CBA, replace with the one that has the same part number. Do not mix ICs with different part number.	
IC3401	IC 1GB DDR3 SDRAM K4B1G1646G-BCH9	NSCA0R0SM043
	or	
IC3401	IC 1GB DDR3 SDRAM H5TQ1G63DFR-H9C	NSCA0R0HY018
IC3402	IC 1GB DDR3 SDRAM H5TQ1G63DFR-H9C	NSCA0R0HY018
	or	
IC3401	IC 1GB DDR3 SDRAM H5TQ1G63EFR-H9C	NSCA0R0HY035
IC3402	IC 1GB DDR3 SDRAM H5TQ1G63EFR-H9C	NSCA0R0HY035
	MSW ASSEMBLY Consists of the following	A37UBMSW-002
	FUNCTION CBA UNIT	A37UBMSW-002-FN
	IR SENSOR CBA UNIT	A37UBMSW-002-IR
	POWER SUPPLY CBA	A37U0MPW-002
C631	Not used	
R676	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R678	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R679	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R683	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R684	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034

TYPE B

PARTS LIST [50PFL1908/F8 (Serial No.: XA2)]

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
A3	REAR COVER A37U0UH	1EM030665
A13	JACK HOLDER A37U0UH	1EM334736
A15⚠	RATING LABEL A37UBMA	---------
A16	LOGO LABEL A37UAMA	---------
A17	Not used	
CL3013	FFC WIRE ASSEMBLY 51PIN(W/SHIELD) 51P/ FFC/SHIELD/800MM	WX1A37U0P402
CL3701	FFC WIRE ASSEMBLY 23PIN 23PIN/WHITE/ 170MM	WX1A37U0S101
SBA1	50W STAND BASE ASSEMBLY (FC) A21U0UD	1EMN29162
SNA1	50W STAND HINGE ASSEMBLY (FC) A4GU5UH	2EMN00139
S1	CARTON A37UBMA	2EMC00222
S12	CARTON LABEL A37UBMA	---------
X2⚠	OWNERS MANUAL A3RTAMA	2EMN00024B
X3	REMOTE CONTROL UNIT YKF340-001	URMT39JHG003
X6	QUICK START GUIDE A3RTAMA	2EMN00025A
X7	Not used	
LCD1⚠	LCD PANEL ASSEMBLY	U3AU1P1
A1	FRONT CABINET A3AUHMA	2EMM00213
A5	Not used	
A9	SENSOR LENS A3AU0UH	1EM334557

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A37UDMMA-002
CN3701	WIRELESS LAN MODULE WM5504	UWLMDLACM002
IC3001	Not used	
IC3002	Not used	
IC3003	Not used	
IC3004	Not used	
IC3005	Not used	
IC3006	Not used	
IC3007	Not used	
IC3008	Not used	
IC3009	Not used	
IC3011	Not used	
IC3013	Not used	
IC3014	Not used	
IC3018	Not used	
IC3019	Not used	
IC3101	IC MAIN PH1-SLD8 MN2WS0270EA	QSCA0R0MS053
IC3102	IC NAND FLASH 1GB K9F1G08U0D-SCB0	NSCA0R0SM037
IC3103	16KBIT EEPROM M24C16-WMN6TP	NSZBA0TSS259
IC3601	IC RESET IC-PST8429UR	QSCA0T0MM075
IC3602	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3603	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3604	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3607	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3621	Not used	
IC3701	IC USB HIGH-SIDE SW AP2151WG-7/SOT25/5PI	NSCA0TDES015
IC3801	Not used	
IC3803	IC D-CLASS AUDIO POWER AMPLIFI TPA3110D2PWPR	NSCA0T0TY073
IC3851	Not used	
IC3901	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
TU3001	TUNER UNIT U9001UH	U9001UH
TU3901	Not used	
	When you replace one of the below ICs on this CBA, replace with the one that has the same part number. Do not mix ICs with different part number.	
IC3401	IC 1GB DDR3 SDRAM K4B1G1646G-BCH9	NSCA0R0SM043
IC3402	IC 1GB DDR3 SDRAM K4B1G1646G-BCH9	NSCA0R0SM043
	or	
IC3401	IC 1GB DDR3 SDRAM H5TQ1G63DFR-H9C	NSCA0R0HY018
IC3402	IC 1GB DDR3 SDRAM H5TQ1G63DFR-H9C	NSCA0R0HY018
	or	
IC3401	IC 1GB DDR3 SDRAM H5TQ1G63EFR-H9C	NSCA0R0HY035
IC3402	IC 1GB DDR3 SDRAM H5TQ1G63EFR-H9C	NSCA0R0HY035
	MSW ASSEMBLY Consists of the following	A37UBMSW-002
	FUNCTION CBA UNIT	A37UBMSW-002-FN
	IR SENSOR CBA UNIT	A37UBMSW-002-IR
	POWER SUPPLY CBA	A37U0MPW-002
C631	Not used	
R676	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R678	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R679	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R683	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R684	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034

TYPE C

PARTS LIST [50PFL3708/F7 (Serial No.: DS2)]

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 50PFL3708/F7 (Serial No. : DS1)

There is no difference from the original model 50PFL3708/F7 (Serial No.: DS1) for Mechanical Parts section.

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A3AU2MMA-007
IC3001	IC MSD8200DS-S1	NSAA0RMST001
IC3003	Not used	
IC3004	Not used	
IC3005	Not used	
IC3006	IC 32M-BIT SERIAL FLASH MEMORY W25Q32FVSSIG	NSCA0R0ZM018
IC3007	Not used	
IC3008	Not used	
IC3011	Not used	
IC3013	Not used	
IC3014	Not used	
IC3018	Not used	
IC3201	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3601	REGULATOR AP1117EG-13	NSCA0TDES012
IC3602	REGULATOR AP1117EG-13	NSCA0TDES012
IC3603	IC REGULATOR BD00IA5WEFJ-E2	QSCA0T0RM233
IC3604	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3605	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3621	Not used	
IC3851	Not used	
IC3901	REGULATOR AP1117EG-13	NSCA0TDES012
	MSW ASSEMBLY Consists of the following	A3AU2MSW-002
	FUNCTION CBA UNIT	A3AU2MSW-002-FN
	IR SENSOR CBA UNIT	A3AU2MSW-002-IR
	POWER SUPPLY CBA	A3AU0MPW-001
C631	Not used	
Q657	TRANSISTOR 2SA950-O (TE2 F T)	QQS002SA950F
R676	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R678	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R679	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R683	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R684	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R685	RES CHIP 3216 1/4W J 3.3 Ω	RRX43R3HH034
R686	RES CHIP 3216 1/4W J 3.3 Ω	RRX43R3HH034
R687	RES CHIP 3216 1/4W J 3.3 Ω	RRX43R3HH034
R688	RES CHIP 3216 1/4W J 2.2 Ω	RRX42R2HH034
R689	RES CHIP 3216 1/4W J 2.7 Ω	RRX42R7HH034

TYPE C

PARTS LIST [50PFL3708/F8 (Serial No.: XA1)]

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
A15⚠	RATING LABEL A3AUAMA	---------
A16	LOGO LABEL A3AQZUH	---------
A17	Not used	
S1	CARTON A3AUAMA	2EMC00075
S12	CARTON LABEL A3AUAMA	---------
X2⚠	OWNERS MANUAL A31TAMA	1EMN30390
X6	QUICK START GUIDE A31TAMA	1EMN30391
X7	Not used	

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A3AUAMMA-002
IC3001	IC MSD8200DS-S1	NSAA0RMST001
IC3003	Not used	
IC3004	Not used	
IC3005	Not used	
IC3006	IC 32M-BIT SERIAL FLASH MEMORY W25Q32FVSSIG	NSCA0R0ZM018
IC3007	Not used	
IC3008	Not used	
IC3011	Not used	
IC3013	Not used	
IC3014	Not used	
IC3018	Not used	
IC3201	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3601	REGULATOR AP1117EG-13	NSCA0TDES012
IC3602	REGULATOR AP1117EG-13	NSCA0TDES012
IC3603	IC REGULATOR BD00IA5WEFJ-E2	QSCA0T0RM233
IC3604	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3605	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3621	Not used	
IC3851	Not used	
IC3901	REGULATOR AP1117EG-13	NSCA0TDES012
	MSW ASSEMBLY Consists of the following	A3AU2MSW-002
	FUNCTION CBA UNIT	A3AU2MSW-002-FN
	IR SENSOR CBA UNIT	A3AU2MSW-002-IR
	POWER SUPPLY CBA	A3AU0MPW-001
C631	Not used	
Q657	TRANSISTOR 2SA950-O (TE2 F T)	QQS002SA950F
R676	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R678	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R679	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R683	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R684	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R685	RES CHIP 3216 1/4W J 3.3 Ω	RRX43R3HH034
R686	RES CHIP 3216 1/4W J 3.3 Ω	RRX43R3HH034
R687	RES CHIP 3216 1/4W J 3.3 Ω	RRX43R3HH034
R688	RES CHIP 3216 1/4W J 2.2 Ω	RRX42R2HH034
R689	RES CHIP 3216 1/4W J 2.7 Ω	RRX42R7HH034

TYPE C

PARTS LIST [50PFL1708/F8 (Serial No.: DS1)]

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
A15⚠	RATING LABEL A3AUJMH	---------
A16	LOGO LABEL A3AQZUH	---------
A17	Not used	
SBA1	50W STAND BASE ASSEMBLY (FC) A21U0UD	1EMN29162
SNA1	50W STAND HINGE ASSEMBLY (FC) A4GU5UH	2EMN00139
S1	CARTON A3AUHMA	2EMC00207
S12	CARTON LABEL A3AUJMH	---------
X2⚠	OWNERS MANUAL A3ATAMA	2EMN00033A
X6	QUICK START GUIDE A3AUHMA	2EMN00114
X7	Not used	
LCD1⚠	LCD PANEL ASSEMBLY	U3AU0P2
A1	FRONT CABINET A3AUHMA	2EMM00213
A5	Not used	
A9	SENSOR LENS A3AU0UH	1EM334557

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A3AUHMMA-002
IC3001	IC MSD8200DS-S1	NSAA0RMST001
IC3003	Not used	
IC3004	Not used	
IC3005	Not used	
IC3006	IC 32M-BIT SERIAL FLASH MEMORY W25Q32FVSSIG	NSCA0R0ZM018
IC3007	Not used	
IC3008	Not used	
IC3011	Not used	
IC3013	Not used	
IC3014	Not used	
IC3018	Not used	
IC3201	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3601	REGULATOR AP1117EG-13	NSCA0TDES012
IC3602	REGULATOR AP1117EG-13	NSCA0TDES012
IC3603	IC REGULATOR BD00IA5WEFJ-E2	QSCA0T0RM233
IC3604	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3605	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3621	Not used	
IC3851	Not used	
IC3901	REGULATOR AP1117EG-13	NSCA0TDES012
	MSW ASSEMBLY Consists of the following	A3AUHMSW-001
	FUNCTION CBA UNIT	A3AUHMSW-001-FN
	IR SENSOR CBA UNIT	A3AUHMSW-001-IR
	POWER SUPPLY CBA	A3AU0MPW-001
C631	Not used	
Q657	TRANSISTOR 2SA950-O (TE2 F T)	QQS002SA950F
R676	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R678	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R679	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R683	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R684	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R685	RES CHIP 3216 1/4W J 3.3 Ω	RRX43R3HH034
R686	RES CHIP 3216 1/4W J 3.3 Ω	RRX43R3HH034
R687	RES CHIP 3216 1/4W J 3.3 Ω	RRX43R3HH034
R688	RES CHIP 3216 1/4W J 2.2 Ω	RRX42R2HH034
R689	RES CHIP 3216 1/4W J 2.7 Ω	RRX42R7HH034

TYPE C

PARTS LIST [50PFL1708/F8 (Serial No.: XA1)]

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
A15⚠	RATING LABEL A3AUAMA	---------
A16	LOGO LABEL A3AQZUH	---------
A17	Not used	
SBA1	50W STAND BASE ASSEMBLY (FC) A21U0UD	1EMN29162
SNA1	50W STAND HINGE ASSEMBLY (FC) A4GU5UH	2EMN00139
S1	CARTON A3AUHMA	2EMC00207
S12	CARTON LABEL A3AUHMA	---------
X2⚠	OWNERS MANUAL A3ATAMA	2EMN00033A
X6	QUICK START GUIDE A3AUHMA	2EMN00114
X7	Not used	
LCD1⚠	LCD PANEL ASSEMBLY	U3AU0P2
A1	FRONT CABINET A3AUHMA	2EMM00213
A5	Not used	
A9	SENSOR LENS A3AU0UH	1EM334557

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 50PFL3708/F7 (Serial No. : DS1)

Ref. No.	Description	Part No.
	DIGITAL MAIN CBA UNIT	A3AUHMMA-002
IC3001	IC MSD8200DS-S1	NSAA0RMST001
IC3003	Not used	
IC3004	Not used	
IC3005	Not used	
IC3006	IC 32M-BIT SERIAL FLASH MEMORY W25Q32FVSSIG	NSCA0R0ZM018
IC3007	Not used	
IC3008	Not used	
IC3011	Not used	
IC3013	Not used	
IC3014	Not used	
IC3018	Not used	
IC3201	IC DC-DC CONVERTER MP1472GJC452Z	NSCA0T09M021
IC3601	REGULATOR AP1117EG-13	NSCA0TDES012
IC3602	REGULATOR AP1117EG-13	NSCA0TDES012
IC3603	IC REGULATOR BD00IA5WEFJ-E2	QSCA0T0RM233
IC3604	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3605	IC DCDC CONVERTER RT8293ALZSP	NSCA0T00B017
IC3621	Not used	
IC3851	Not used	
IC3901	REGULATOR AP1117EG-13	NSCA0TDES012
	MSW ASSEMBLY Consists of the following	A3AUHMSW-001
	FUNCTION CBA UNIT	A3AUHMSW-001-FN
	IR SENSOR CBA UNIT	A3AUHMSW-001-IR
	POWER SUPPLY CBA	A3AU0MPW-001
C631	Not used	
Q657	TRANSISTOR 2SA950-O (TE2 F T)	QQS002SA950F
R676	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R678	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R679	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8ZU001
R683	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R684	RES CHIP 3216 1/4W J 3.9 Ω	RRX43R9HH034
R685	RES CHIP 3216 1/4W J 3.3 Ω	RRX43R3HH034
R686	RES CHIP 3216 1/4W J 3.3 Ω	RRX43R3HH034
R687	RES CHIP 3216 1/4W J 3.3 Ω	RRX43R3HH034
R688	RES CHIP 3216 1/4W J 2.2 Ω	RRX42R2HH034
R689	RES CHIP 3216 1/4W J 2.7 Ω	RRX42R7HH034

REVISION HISTORY

Chassis PL13.16

- 2013/02/14 50PFL3708/F7 (Serial No.: DS1) added
- 2013/03/25 50PFL3908/F7 (Serial No.: DS1) added
- 2013/05/08 50PFL3708/F8 (Serial No.: XA1) added
- 2013/06/24 50PFL3908/F8 (Serial No.: XA1) added
- 2013/09/20 50PFL1708/F8 (Serial No.: XA1) added
- 2013/09/20 50PFL1708/F8 (Serial No.: DS1) added
- 2013/09/26 50PFL1908/F8 (Serial No.: XA1) added
- 2013/12/24 50PFL3708/F7 (Serial No.: DS2) added
- 2014/01/10 50PFL3908/F7 (Serial No.: DS2) added
- 2014/03/27 50PFL1908/F8 (Serial No.: XA2) added

COMPARISON LIST OF MODEL NAMES

Chassis PL13.16

50PFL3708/F7	(DS1)	A3AUDUH	TYPE A
	(DS2)	A3AU2UH	TYPE C
50PFL3908/F7	(DS1)	A37U0UH	TYPE B
	(DS2)	A37UCUH	TYPE B
50PFL3908/F8	(XA1)	A37UAMA	TYPE B
50PFL1908/F8	(XA1)	A37UBMA	TYPE B
	(XA2)	A37UDMA	TYPE B
50PFL3708/F8	(XA1)	A3AUAMA	TYPE C
50PFL1708/F8	(XA1)	A3AUHMA	TYPE C
	(DS1)	A3AUJMH	TYPE C