

(*1)

GREEN PRODUCT PROCUREMENT

The EC is actively promoting the WEEE & RoHS Directives that define standards for recycling and reuse of Waste Electrical and Electronic Equipment and for the Restriction of the use of certain Hazardous Substances. From July 1, 2006, the RoHS Directive will prohibit any marketing of new products containing the restricted substances.

Increasing attention is given to issues related to the global environmental. Toshiba Corporation recognizes environmental protection as a key management tasks, and is doing its utmost to enhance and improve the quality and scope of its environmental activities. In line with this, Toshiba proactively promotes Green Procurement, and seeks to purchase and use products, parts and materials that have low environmental impacts.

Green procurement of parts is not only confined to manufacture. The same green parts used in manufacture must also be used as replacement parts.

(*2)

LEAD-FREE SOLDER

This product is manufactured using lead-free solder as a part of a movement within the consumer products industry at large to be environmentally responsible. Lead-free solder must be used in the servicing and repair of this product.

WARNING

This product is manufactured using lead free solder.

DO NOT USE LEAD BASED SOLDER TO REPAIR THIS PRODUCT !

The melting temperature of lead-free solder is higher than that of leaded solder by 86°F to 104°F (30°C to 40°C). Use of a soldering iron designed for lead-based solders to repair product made with lead-free solder may result in damage to the component and or PCB being soldered. Great care should be made to ensure high-quality soldering when servicing this product — especially when soldering large components, through-hole pins, and on PCBs — as the level of heat required to melt lead-free solder is high.

SERVICING NOTICES ON CHECKING

1. KEEP THE NOTICES

As for the places which need special attentions, they are indicated with the labels or seals on the cabinet, chassis and parts. Make sure to keep the indications and notices in the operation manual.

2. AVOID AN ELECTRIC SHOCK

There is a high voltage part inside. Avoid an electric shock while the electric current is flowing.

3. USE THE DESIGNATED PARTS

The parts in this equipment have the specific characters of incombustibility and withstand voltage for safety. Therefore, the part which is replaced should be used the part which has the same character.

Especially as to the important parts for safety which is indicated in the circuit diagram or the table of parts as a  mark, the designated parts must be used.

4. BE CAREFUL WITH THE LCD PANEL

Avoid a shock to the panel while servicing. Take enough care to deal with it.

5. PUT PARTS AND WIRES IN THE ORIGINAL POSITION AFTER ASSEMBLING OR WIRING

There are parts which use the insulation material such as a tube or tape for safety, or which are assembled in the condition that these do not contact with the printed board. The inside wiring is designed not to get closer to the pyrogenic parts and high voltage parts. Therefore, put these parts in the original positions.

6. PERFORM A SAFETY CHECK AFTER SERVICING

Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are the portions which are deteriorated around the serviced places serviced or not. Check the insulation between the antenna terminal or external metal and the AC cord plug blades. And be sure the safety of that.

(INSULATION CHECK PROCEDURE)

1. Unplug the plug from the AC outlet.
2. Remove the antenna terminal on TV and turn on the TV.
3. Insulation resistance between the cord plug terminals and the external exposure metal **[Note 2]** should be more than 1M ohm by using the 500V insulation resistance meter **[Note 1]**.
4. If the insulation resistance is less than 1M ohm, the inspection repair should be required.

[Note 1]

If you have not the 500V insulation resistance meter, use a Tester.

[Note 2]

External exposure metal: Antenna terminal
Earphone jack

HOW TO ORDER PARTS

Please include the following informations when you order parts. (Particularly the VERSION LETTER.)

1. MODEL NUMBER and VERSION LETTER

The MODEL NUMBER can be found on the back of each product and the VERSION LETTER can be found at the end of the SERIAL NUMBER.

2. PART NO. and DESCRIPTION

You can find it in your SERVICE MANUAL.

IMPORTANT

When you exchange IC and Transistor with a heat sink, apply silicon grease on the contact section of the heat sink. Before applying new silicon grease, remove all the old silicon grease.
(Old grease may cause damage to the IC and Transistor).

PARENTAL CONTROL - RATING LEVEL 4 DIGIT PASSWORD CANCELLATION

If the stored 4 digit password in the Rating Level menu needs to be cancelled, please follow the steps below.

1. Turn on the power.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button **(3)** on the remote control for more than 2 seconds.
4. The 4 digit password has now been cancelled.

NOTE: No indications on the screen when the Parental Lock is setting.
Initializing password is 0000.

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GENERAL SPECIFICATIONS

G-1	TV System	LCD	LCD Size / Visual Size	26.01 inch / 660.5mmV
			LCD Type	Color TFT LCD
			Number of Pixels	1366(H) x 768(V)
			View Range	80/80 degree
			Left/Right Up/Down	80/80 degree
		Color System		PAL / SECAM
G-2	Tuning System	Broadcasting System	Analog	U.K., I.R., CCIR, FRENCH System B/G, D/K, I/I, L
			Digital	DVB-T (OFDM 2k/8k 16QAM/64QAM)
		Tuner and Receive CH	System	1Tuner (Analog+Digital)
		CH Coverage	Destination	UK, I.R., CCIR Hyper+France CATV
			Analog	IreE2-E4, X-Z+2, S1-S10, E5-E12, S11-S41, E21-E69
			Digital	E5-E12, ItaE-G, F1-F6, Rus6-12, E21-E69
		Intermediate Frequency	Analog	BG / II / DK, L / L' (SECAM VL)
			Picture(FP)	38.9 / 38.9 / 38.9 / 33.9MHz
			Sound(FS)	33.4 / 32.9 / 32.4 / 40.4MHz
			FP-FS	5.5 / 6.0 / 6.5 / 6.5MHz
			Digital	36.167MHz
		Auto Tuning Method		ALL Band (Not C.C.I.R. CH Plan)
G-3	Power	Preset CH	Analog	99
			Digital	Carrier 200 / Service 1000
		Stereo/Dual TV Sound		Nicam/A2 Dual
		Tuner Sound Muting		Yes
		Power Source	AC	220-240V AC 50Hz/60Hz
			DC	---
G-4	Regulation	Power Consumption	at AC	115 W at AC 230 V 50 Hz
			at DC	--
		Stand by	w/ EPG Timer	9 W at 230V 50Hz
			w/o EPG Timer	1 W at 230V 50Hz
			Per Year	-- kWh/Year
G-5	Temperature	Protector	Power Fuse	Yes
			Safety	CE(EN60065:2002)
			Radiation	CE
G-6	Operating Humidity		X-Radiation	---
			Operation	+5°C ~ +40°C
G-7	OSD Language		Storage	-20°C ~ +60°C
				Less than 80% RH
G-8	Clock and Timer			English, Spanish, German, French, Italian, Swedish, Dutch, Russian, Portuguese, Turkish, Greek, Finnish, Polish
		Sleep Timer	Max Time	120 Min
			Step	10 Min
		On/Off Timer	Program(On Timer / Off Timer)	-- Program
		Wake Up Timer		No
G-9	Timer Back-up (at Power Off Mode)			-- Min Sec
			more than	

GENERAL SPECIFICATIONS

G-9	Remote Control	Unit	RC-NY	
		Glow in Dark Remocon	Yes	
		Remocon Format	TOSHIBA	
		Format	NEC	
		Custom Code	40-BF h	
		Power Source	Voltage(D.C)	3V
			UM size x pcs	UM-3 x 2 pcs
		Total Keys	42 Keys	
		Keys	Power (Stand By)	Yes
			Display / (Status)	Yes
			Analog Menu	Yes
			Digital Menu	Yes
			Input Select	Yes
			TV/DVB-T	Yes
			Guide	Yes
			Picture Size	Yes
			1	Yes
			2	Yes
			3	Yes
			4	Yes
			5	Yes
			6	Yes
			7	Yes
			8	Yes
			9	Yes
			0	Yes
			Sleep	Yes
			Mute	Yes
			Volume Up	No
			Volume Down	No
			Volume Up	Yes
			Volume Down	Yes
			CH Down	No
			CH Up	No
			Menu	No
			Up	Yes
			Down	Yes
			LEFT	Yes
			RIGHT	Yes
			Enter/CH List	Yes
			Exit	Yes
			Freeze frame	No
			TV/Radio	Yes
			Subtitle	Yes
		T*TEXT Keys	TEXT / TAP / TV	Yes
			Reveal / Skip	No
			Reveal	Yes
			Display Cancel	No
			HOLD / Freeze	Yes
			Red	Yes
			Green	Yes
			Yellow	Yes
			Cyan	Yes
			Normal	No
			F/T/B(Expand)	Yes
			F/T/B(Expand) / Normal	No
			Quick View	No
			Sub Page / Quick View	Yes
			Up/CH Up	No
			CH Up / Page Up	No
			CH Up / Page Up	Yes
			Down / CH Down	No
			CH Down / Page Down	No
			CH Down / Page Down	Yes
			Reset	No
			Audio 1/2	Yes
			Reset / Audio 1/2	No

GENERAL SPECIFICATIONS

G-10	Features	Power On Memory	Yes
		Auto Shut Off	Yes
		Just Clock Function	No
		Game Position	No
		DNR	Yes 3D
		Comb Filter	Yes 3D
		Auto Set Up (Fast installation)	Yes
		Auto tuning (Analog tuner)	Yes
		CH sort	Yes
		ATS	Yes
		Auto clock (Analog tuner)	No
		Plug in start	Yes
		Picture Setting(TV)	Yes
		Picture Preference	Yes
		Brightness , Contrast , Color	Yes
		Tint	Yes
		Sharpness	Yes
		DNR	Yes
		Color Temperature	Yes
		Blue Back	Yes
		Backlight Control	Yes
		Film Mode	No
		Picture Setting(PC)	Yes
		BRIGHTNESS , CONTRAST	Yes
		HOR POSITION , VER POSITION	Yes
		PHASE , CLOCK	Yes
		AUTO ADJUST	No
		RED , GREEN , BLUE	Yes
		Backlight	Yes
		WXGA INPUT	Yes
		WVGA INPUT	No
		Audio	Yes
		Nicam	Yes
		Tone Control (Bass/Treble/Balance)	Yes
		Surround	Yes
		BBE	No
		SRS WOW (SRS 3D/Focus/Tru Bass)	No
		Variable Audio Out	Yes
		Tuning	Yes
		Auto Tuning	Yes
		Manual Tuning	Yes
		CH Allocation	Yes
		Lock (Analog)	No
		Panel Lock	No
		Channel Lock	No
		Hotel Lock	No
		Screen Saver	No
		Inversion	No
		Full White	No
		Screen Saver	No
		Static Image	No
		Black Side Panel	No
		CH Label	Yes
		T*Text	Yes
		Text type	Fasttext / Toptext
		Text Language	English , French, Swedish, Hungarian Turkish, German, Portuguese, Spanish, Italian, Greek, Slovakian, Russian, Polish, Czech, Rumanian, Estonian, Lettish, Lithuanian, Ukrainian, Croatian, Slovenian, Latvian
		Wide Mode (AUTO/4:3/FULL SCREEN/16:9/CINEMA/14:9)	Yes
		HD Zoom	No
		Picture Scroll (Vertical Position)	Yes
		PFC(Power Factor circuit)	Yes
		Freeze frame	Yes (w/o720p, 1080i)
		HD-Ready	Yes
		Plug and Play	No
		Reset TV Setting	Yes
	Scart Spec	Scart1	Yes
		AV in	Yes
		AV out	Yes (A.Tuner/D.Tuner)
		S-Video in	Yes
		RGB in	Yes
		Scart2	Yes
		AV in	Yes
		AV out	Yes (Monitor)
		S-Video in	Yes
		RGB in	Yes
		Digital Text (VBI teletext)	Yes
		MHEG-5	Yes
		MHP	No
		EPG (BBC type 8Days Digital tuner only)	Yes
		OAD (Over Air Download)	No

GENERAL SPECIFICATIONS

		Common Interface (Digital tuner only)	Yes
		Rec Screen Status	Yes
		Ch sorting based on Ch List (Digital/Germany only)	No
		Rename Carrier (Digital)	Yes
		Edit Event Timer	Yes
		Software Update via CI Slot	Yes
		Preference Language (Audio/Subtitle/Digital Service)(Digital)	Yes
		Ch Organizer (Fav, Lock, Skip, Go To, Delete, Rename, Move, Move to)	Yes
		Parental Lock (Digital)	Yes
		DVB Subtitle (Digital)	Yes
		PC Monitor Input	Yes
		VGA (640x480)	Yes (60Hz)
		VGA (720x400)	Yes (70Hz)
		WVGA (848x480)	No
		SVGA (800x600)	Yes (60Hz)
		XGA (1024x768)	Yes (60Hz)
		WXGA (1280x768)	Yes (60Hz)
		WXGA (1280x720)	Yes (60Hz)
		WXGA (1360x768)	Yes (60Hz)
		SXGA (1280x1024)	No
		HDMI Input	Yes (Ver. 1.2)
		VGA (640 ~480)	Yes (60Hz)
		720x480i (4:3)	Yes (60Hz)
		720x480i (16:9)	Yes (60Hz)
		720x480p (4:3)	Yes (60Hz)
		720x480p (16:9)	Yes (60Hz)
		720x576i (4:3)	Yes (50Hz)
		720x576i (16:9)	Yes (50Hz)
		720x576p (4:3)	Yes (50Hz)
		720x576p (16:9)	Yes (50Hz)
		1280x720p	Yes (50/60Hz)
		1920x1080i	Yes (50/60Hz)
		Component Input	Yes
		720x480i (4:3)	Yes (60Hz)
		720x480i (16:9)	Yes (60Hz)
		720x480p (4:3)	Yes (60Hz)
		720x480p (16:9)	Yes (60Hz)
		720x576i (4:3)	Yes (50Hz)
		720x576i (16:9)	Yes (50Hz)
		720x576p (4:3)	Yes (50Hz)
		720x576p (16:9)	Yes (50Hz)
		1280x720p	Yes (50/60Hz)
		1920x1080i	Yes (50/60Hz)
G-11	Accessories	Owner's Manual	Italy/French/Spanish/English
		Language w/Guarantee Card	No
		Remote Control Unit	Yes
		Rod Antenna	No
		Poles	-
		Terminal	-
		Loop Antenna (W/ Antenna Change Plug)	No
		Terminal	-
		U/V Mixer	No
		DC Car Cord (Center+)	No
		Guarantee Card	No
		Warning Sheet	No
		Circuit Diagram	No
		Antenna Change Plug	No
		Service Facility List	No
		Important Safeguard	No
		Quick Set-up Sheet	No
		Battery	Yes
		UM size x pcs	UM-3 x 2 pcs
		OEM Brand	No
		AC Adapter	No
		AC Cord (for AC Adapter)	No
		AC Cord	Yes
		AV Cord (2Pin-1Pin)	No
		HDMI-DVI Cable	No
		Registration Card	No
		300 ohm to 75 ohm Antenna Adapter	No

GENERAL SPECIFICATIONS

G-12	Interface	Switch	Power (Tact)	Yes
			System Select	No
			Main Power SW	No
			Channel Up/Menu Up	Yes
			Channel Down/Menu Down	Yes
			Volume Up/Menu >	Yes
			Volume Down/Menu <	Yes
		Indicator	Input Select/Enter	Yes
			Menu	Yes
		Terminals	Power/Stand-by/EPG Timer	Yes(GREEN / RED / ORANGE)
			On Timer	No
			Video Input 1	RCA x 1
			Audio Input 1	RCA x 2(L/MONO, R)
			S- Input 1	Yes
			Video Input 2	No
			Audio Input 2	No
			S- Input 2	No
			Video Output	No
			Audio Output	RCA x 2(Variable) (L, R)
			Digital Audio Out (Coaxial)	Yes
			Other Terminal	No
			Euro Scart (21Pin)	2Scart
			Component In	Yes
			Audio Input (Component In use)	RCA x 2(L/MONO, R)
			PC Monitor Input (D-Sub)	Yes
			Audio Input	Mini Pin Jack(3.5), STEREO
			HDMI Input 1	Yes
			Audio Input (HDMI/DVI In use)	PC Monitor Audio Input Alternative
			HDMI Input 2	Yes
			Audio Input (HDMI/DVI In use)	Mini Pin Jack(3.5), STEREO
			Sub Woofer Output	No
			Diversity	No
			Ext Speaker	No
			DC Jack 12V(Center +)	No
			VHF/UHF Antenna Input	DIN Type
			AC Inlet	Yes
			Other Terminal	Headphone
			CI Card Slot	Yes
G-13	Set Size	Approx. W x D x H (mm)		663 x 211 x 495.0
		w/o Stand,Handle Approx. W x D x H (mm)		663 x 114 x 450.5
G-14	Weight	Net Approx.		11.5kg (25.4lbs)
		Net w/o Stand,Handle Approx.		10.5kg (23.2lbs)
		Gross Approx.		14.0kg (30.9lbs)
G-15	Carton	Master Carton		No
			Content	---- Sets
			Material	-- /--
			Dimensions W x D x H(mm)	-- x -- x --
			Description of Origin	No
		Gift Box		Yes
			Material	Double/Brown
			Dimensions W x D x H(mm)	758 x 265 x 610
			Design	As per Buyer's
			Description of Origin	Yes
		Drop Test		Natural Dropping At 2 Corner / 2 Edges / 2 Surfaces
			Height (cm)	65
		Container Stuffing		405 Sets/40' container
		w/Pallet		No
		w/Wrapping		No
G-16	Material	Cabinet	Cabinet Front	PS 94V0 NON-DECABROM
			Cabinet Rear	PS 94V0 NON-DECABROM
		PCB	Non-Halogen	No
			Eyelet	Yes
G-17	Environment	Environmental standard requirement		Green procurement of TOSHIBA
		Pb- Free		Phase3(PHASE3A)
			Measures for Whisker	Yes
		WEEE		Yes

DISASSEMBLY INSTRUCTIONS

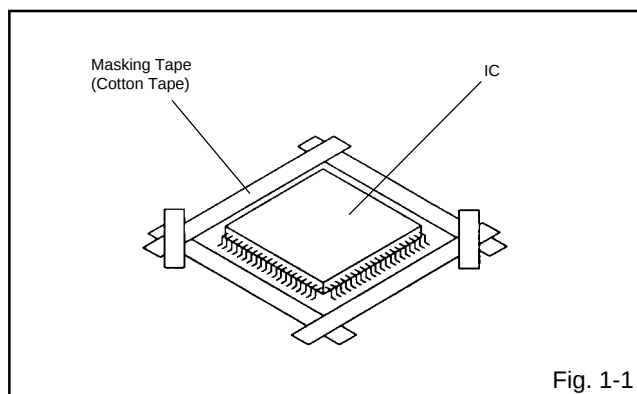
1. REMOVAL AND INSTALLATION OF FLAT PACKAGE IC

REMOVAL

1. Put Masking Tape (cotton tape) around the Flat Package IC to protect other parts from any damage. **(Refer to Fig. 1-1.)**

NOTE

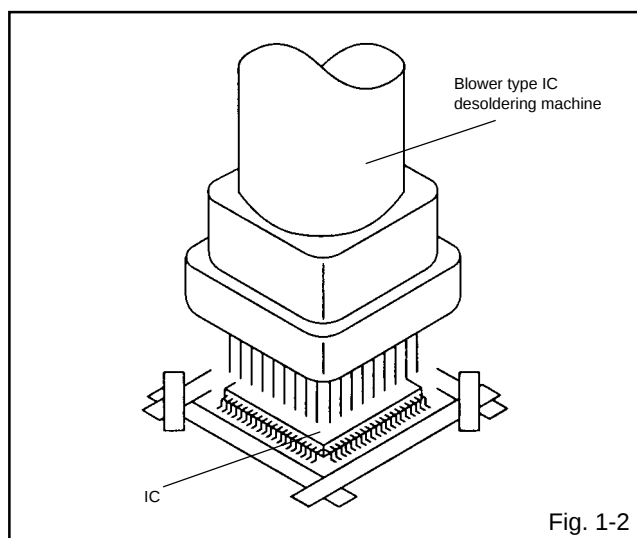
Masking is carried out on all the parts located within 10 mm distance from IC leads.



2. Heat the IC leads using a blower type IC desoldering machine. **(Refer to Fig. 1-2.)**

NOTE

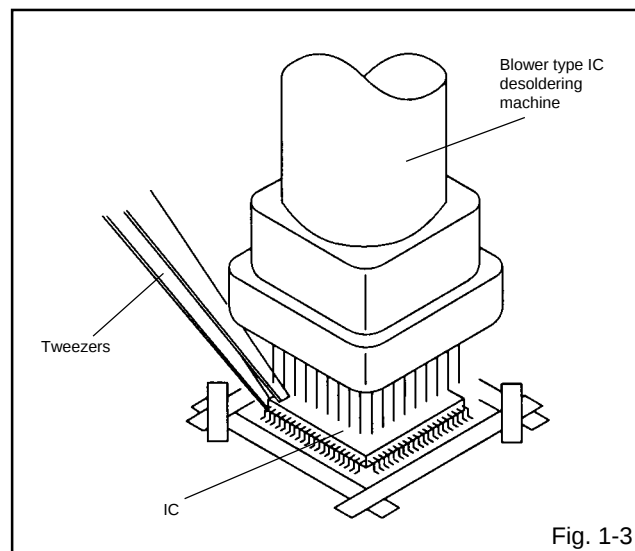
Do not rotate or move the IC back and forth, until IC can move back and forth easily after desoldering the leads completely.



3. When IC starts moving back and forth easily after desoldering completely, pickup the corner of the IC using tweezers and remove the IC by moving with the IC desoldering machine. **(Refer to Fig. 1-3.)**

NOTE

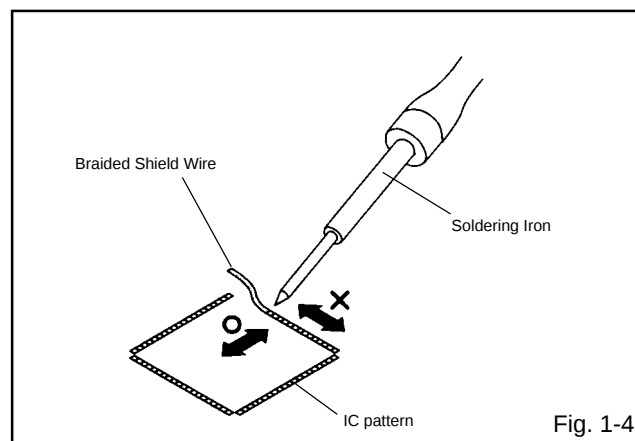
Some ICs on the PCB are affixed with glue, so be careful not to break or damage the foil of each IC leads or solder lands under the IC when removing it.



4. Peel off the Masking Tape.
5. Absorb the solder left on the pattern using the Braided Shield Wire. **(Refer to Fig. 1-4.)**

NOTE

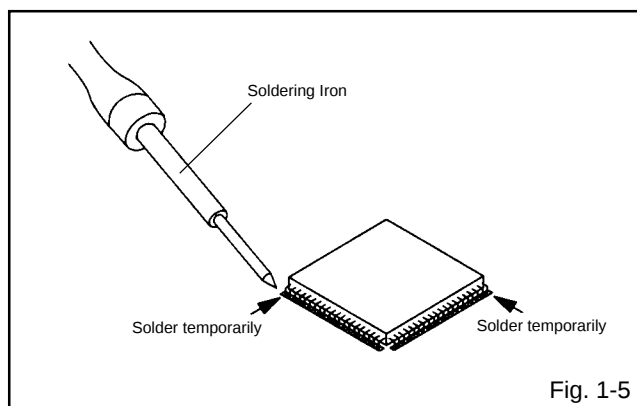
Do not move the Braided Shield Wire in the vertical direction towards the IC pattern.



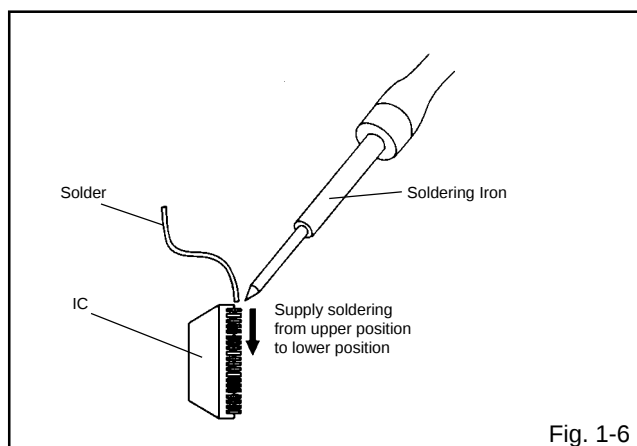
DISASSEMBLY INSTRUCTIONS

INSTALLATION

1. Take care of the polarity of new IC and then install the new IC fitting on the printed circuit pattern. Then solder each lead on the diagonal positions of IC temporarily. **(Refer to Fig. 1-5.)**



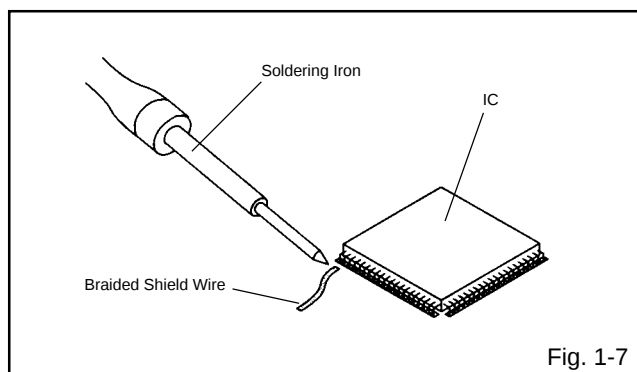
2. Supply the solder from the upper position of IC leads sliding to the lower position of the IC leads. **(Refer to Fig. 1-6.)**



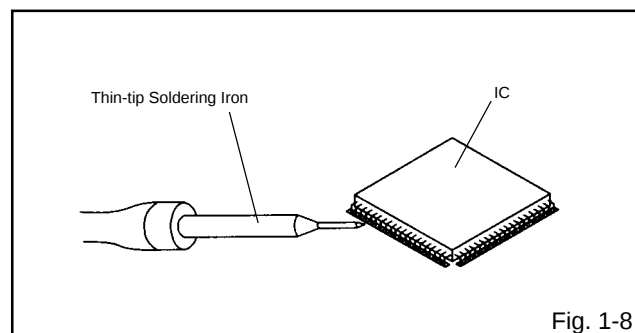
3. Absorb the solder left on the lead using the Braided Shield Wire. **(Refer to Fig. 1-7.)**

NOTE

Do not absorb the solder to excess.



4. When bridge-soldering between terminals and/or the soldering amount are not enough, resolder using a Thin-tip Soldering Iron. **(Refer to Fig. 1-8.)**



5. Finally, confirm the soldering status on four sides of the IC using a magnifying glass. Confirm that no abnormality is found on the soldering position and installation position of the parts around the IC. If some abnormality is found, correct by resoldering.

NOTE

When the IC leads are bent during soldering and/or repairing, do not repair the bending of leads. If the bending of leads are repaired, the pattern may be damaged. So, always be sure to replace the IC in this case.

SERVICE MODE LIST

This unit is provided with the following SERVICE MODES so you can repair, examine and adjust easily.

To enter to the SERVICE MODE function, press and hold both buttons simultaneously on the main unit and on the remote control for more than the standard time in the appropriate condition. (See below chart.)

Set Condition	Set Key	Remocon Key	Standard Time	Operations
TV mode	VOL. DOWN (Minimum)	1	2 sec.	Initialization of factory TV data. NOTE: If you set factory initialization, the memories are reset such as the channel setting, and the POWER ON total hours.
ALL mode	VOL. DOWN (Minimum)	2	2 sec.	Check of the SUM DATA, POWER ON total hours and MICON VERSION on the screen. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
DTV mode	VOL. DOWN (Minimum)	3	2 sec.	Initialization of password of PARENTAL LOCK (DIGITAL). Refer to the "PARENTAL CONTROL - RATING LEVEL".
TV mode	VOL. DOWN (Minimum)	6	2 sec.	Can be checked of the INITIAL DATA of MEMORY IC. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
ALL mode	VOL. DOWN (Minimum)	9	2 sec.	Display of the Adjustment MENU on the screen. Refer to the "ELECTRICAL ADJUSTMENT" (On-Screen Display Adjustment).

WHEN REPLACING EEPROM (MEMORY) IC

CONFIRMATION OF CHECK SUM, POWER ON TOTAL HOURS AND MICON VERSION

Initial total of MEMORY IC, POWER ON total hours and MICON VERSION can be checked on the screen. Total hours are displayed in 16 system of notation.

NOTE: If you set a factory initialization, the total hours is reset to "0".

Please refer to "CONFIRMATION OF INITIAL DATA" when SUM DATA is not corresponding.

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button **(2)** on the remote control for more than 2 seconds.
4. After the confirmation of each check sum, POWER ON total hours and MICON VERSION, turn off the power.

NOTE: The each item value might be different according to each set.

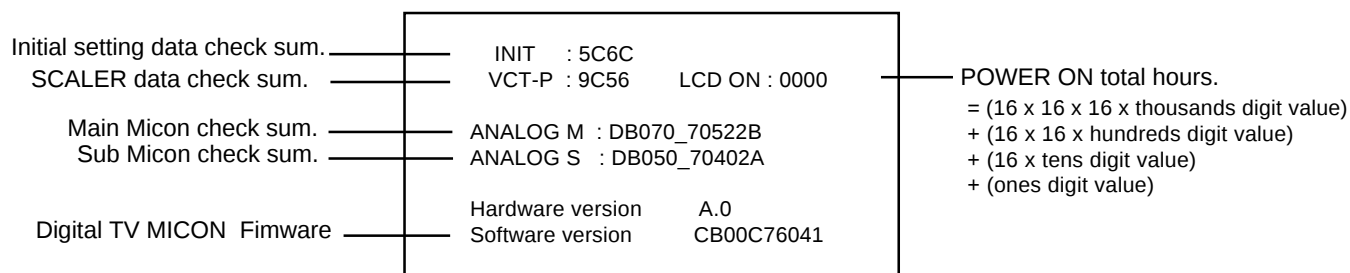


FIG. 1

WHEN REPLACING EEPROM (MEMORY) IC

CONFIRMATION OF INITIAL DATA

If a service repair is undertaken where it has been required to change the MEMORY IC(IC801), the following steps should be taken to ensure correct data settings while making reference to INITIAL SETTING TABLE (Attached "INITIAL DATA").

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button **(6)** on the remote control for more than 2 seconds. ADDRESS and DATA should appear as FIG 2.

	ADDRESS	DATA
INIT	0000	81
LCD ON :	0000	
ANALOG M :	DB070_70522B	
ANALOG S :	DB050_70402A	

FIG. 2

4. ADDRESS is now selected and should "blink". Using the UP/DOWN button on the remote, step through the ADDRESS until required ADDRESS to be changed is reached.
5. Press VOL. UP/DOWN button to select DATA. When DATA is selected, it will "blink".
6. Again, step through the DATA using UP/DOWN button until required DATA value has been selected.
7. Pressing LEFT/RIGHT button will take you back to ADDRESS for further selection if necessary.
8. Repeat steps 4 to 6 until all data has been checked.
9. When satisfied correct DATA has been entered, turn POWER off (return to STANDBY MODE) to finish DATA input.

After the data input, set to the initializing of shipping.

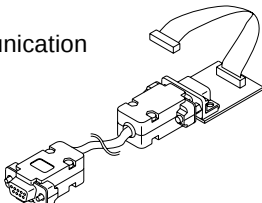
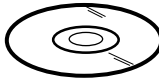
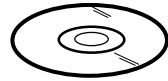
10. Turn on the POWER, and set to the TV mode.
11. Set the VOLUME to minimum.
12. Press both VOL. DOWN button on the set and Channel button **(1)** on the remote control for more than 2 seconds.
13. After the finishing of the initializing of factory, the unit will turn off automatically.

The unit will now have the correct DATA for the new MEMORY IC.

When you exchange the IC2409, please see the following steps.

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button **(1)** on the remote control for more than 2 seconds.
4. After the finishing of the initializing of factory, the unit will turn off automatically.
5. Please Re-write the DIGITAL SOFT FIRMWARE. (**Refer to the "RE-WRITE FOR DIGITAL SOFT FIRMWARE".**)

RE-WRITE FOR DIGITAL SOFT FIRMWARE

JG201 Serial Communication Change JIG 	JG200 Flash UP-Date Soft Disc 	JG176 2007 EU DTV ROM Disc 
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Ref. No.	Part No.	Parts Name	Remarks
JG201	APJG201000	Serial Communication Change JIG	Connect the set to personal computer
JG200	APJG200000	Flash UP-Date Soft Disc	Up-Date of the Firmware
JG176	APJG176130	2007 EU DTV ROM Disc	Up-Date of the Firmware

1. Confirm that the AC cord is plugged out.
2. Using the Serial Communication Change JIG (**JG201**), connect the set to personal computer. (**Refer to Fig. 1**)

NOTE: It is possible to write only with the personal computer of WINDOWS.

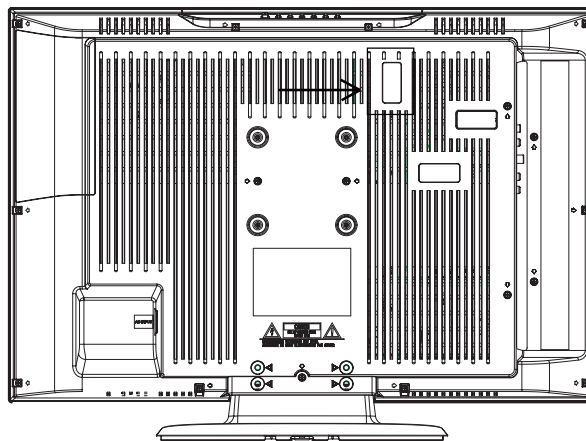


Fig. 1

3. Using the Flash UP-Date Soft Disc (**JG200**) and 2007 EU DTV ROM Disc (**JG176**), please Re-write the DIGITAL SOFT FIRMWARE.
The operating manual for Re-writing is included in Flash UP-Date Soft Disc (**JG200**).

ELECTRICAL ADJUSTMENTS

1. ADJUSTMENT PROCEDURE

Read and perform these adjustments when repairing the circuits or replacing electrical parts or PCB assemblies.

CAUTION

- Use an isolation transformer when performing any service on this chassis.
- When removing a PCB or related component, after unfastening or changing a wire, be sure to put the wire back in its original position.
- When you exchange IC and Transistor with a heat sink, apply silicon grease on the contact section of the heat sink. Before applying new silicon grease, remove all the old silicon grease. (Old grease may cause damage to the IC and Transistor).

Prepare the following measurement tools for electrical adjustments.

1. Pattern Generator

2. BASIC ADJUSTMENTS

On-Screen Display Adjustment

1. Set the VOLUME to minimum.
2. Press the VOL. DOWN button on the set and the channel button **(9)** on the remote control for more than 2 seconds to display adjustment mode on the screen as shown in **Fig. 2-1**.

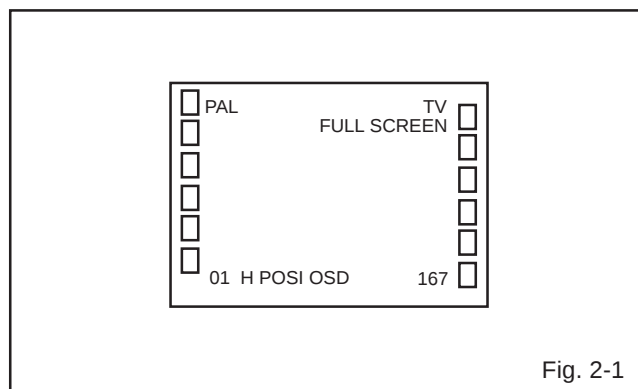


Fig. 2-1

3. Use the UP/DOWN button or Channel button **(0-9)** on the remote control to select the options shown in **Fig. 2-2**.
4. Press the ANALOG MENU button on the remote control to end the adjustments.
5. To display the adjustment screen for TUNER, AV, COMPONENT, HDMI and PC mode, press the INPUT SELECT button on the remote control to set to the TUNER, AV, COMPONENT, HDMI and PC mode.
6. Receive the DIGITAL broadcasting.
7. To display the adjustment screen for DTV mode, press the ATV/DTV button on the remote control to set to the DTV mode.
8. Press the VOL.DOWN button on the set and the channel **(9)** on the remote control for more than 2 seconds.

NO.	FUNCTION	NO.	FUNCTION
01	OSD H POSI	23	H POSI MIN
02	OSD V POSI	24	V POSI
03	R DRIVE (N)	25	V POSI MAX
04	R CUT OFF (N)	26	V POSI MIN
05	G DRIVE (N)	27	BACKLIGHT CENTER
06	G CUT OFF (N)	28	BACKLIGHT MAX
07	B DRIVE (N)	29	BACKLIGHT MIN
08	B CUT OFF (N)	30	BRIGHT CENTER
09	R DRIVE (C)	31	BRIGHT MAX
10	R CUT OFF (C)	32	BRIGHT MIN
11	G DRIVE (C)	33	TINT CENTER
12	G CUT OFF (C)	34	CONTRAST CENTER
13	B DRIVE (C)	35	CONTRAST MAX
14	B CUT OFF (C)	36	CONTRAST MIN
15	R DRIVE (W)	37	CONTRAST 40
16	R CUT OFF (W)	38	COLOR CENTER
17	G DRIVE (W)	39	COLOR MAX
18	G CUT OFF (W)	40	COLOR MIN
19	B DRIVE (W)	41	TEXT H POSI
20	B CUT OFF (W)	42	TEXT V POSI
21	H POSI	43	DAC VCOM
22	H POSI MAX		

Fig. 2-2

2-1: WHITE BALANCE

1. Place the set in Aging Test for more than 15 minutes.
2. Receive the gray scale pattern from the Pattern Generator.
3. Press the INPUT SELECT button on the remote control to set to the AV mode.
4. Using the remote control, set the brightness and contrast to normal position.
5. Activate the adjustment mode display of **Fig. 2-1** and press the channel button **(05)** on the remote control to select "G DRIVE (N)".
6. Press the CH. UP/DOWN button on the remote control to select the "G CUT OFF(N)", "B DRIVE(N)", "B CUT OFF(N)", "G DRIVE(C)", "G CUT OFF(C)", "B DRIVE(C)", "B CUT OFF(C)", "G DRIVE(W)", "G CUT OFF(W)", "B DRIVE(W)" or "B CUT OFF(W)".
7. Adjust the VOL. UP/DOWN button on the remote control to whiten the G CUT OFF(N), B DRIVE(N), B CUT OFF(N), G DRIVE(C), G CUT OFF(C), B DRIVE(C), B CUT OFF(C), G DRIVE(W), G CUT OFF(W), B DRIVE(W) and B CUT OFF(W) at each step tone sections equally.
8. Perform the above adjustments 6 and 7 until the white color is achieved.

ELECTRICAL ADJUSTMENTS

2-2: CONTRAST MAX

1. Receive the monoscope pattern. (RF Input)
2. Using the remote control, set the brightness and contrast to normal position.
3. Activate the adjustment mode display of **Fig. 2-1** and press the channel button **(35)** on the remote control to select "CONTRAST MAX".
4. Press the LEFT/RIGHT button on the remote control until the contrast step No. becomes "53"
5. Check if the picture is normal.
6. Receive the monoscope pattern. (VIDEO Input)
7. Press the INPUT SELECT button on the remote control to set to the AV mode.
8. Using the remote control, set the brightness and contrast to normal position.
9. Activate the adjustment mode display of **Fig. 2-1** and press the channel button **(35)** on the remote control to select "CONTRAST MAX".
10. Press the LEFT/RIGHT button on the remote control until the contrast step No. becomes "53".
11. Check if the picture is normal.
12. Playback the DVD(480i) disc. (COMPONENT Input)
13. Press the INPUT SELECT button on the remote control to set to the COMPONENT mode.
14. Using the remote control, set the brightness and contrast to normal position.
15. Activate the adjustment mode display of **Fig. 2-1** and press the channel button **(35)** on the remote control to select "CONTRAST MAX".
16. Press the LEFT/RIGHT button on the remote control until the contrast step No. becomes "59".
17. Playback the DVD(480i) disc. (HDMI Input)
18. Press the INPUT SELECT button on the remote control to set to the HDMI mode.
19. Using the remote control, set the brightness and contrast to normal position.
20. Activate the adjustment mode display of **Fig. 2-1** and press the channel button **(35)** on the remote control to select "CONTRAST MAX".
21. Press the LEFT/RIGHT button on the remote control until the contrast step No. becomes "56".
22. Check if the picture is normal.

ELECTRICAL ADJUSTMENTS

2-3: Confirmation of Fixed Value (Step No.)

Please check if the fixed values of each of the adjustment item is set correctly referring below. (TUNER/AV/COMPONENT/HDMI/PC/DTV)

NO.	FUNCTION	TUNER	AV				COMPONENT(NTSC)				COMPONENT(PAL)				HDMI(NTSC)					HDMI(PAL)					PC								DTV
			CVBS	S(Y/C)	RGB		480i	480p	720p	1080i	576i	576p	720p	1080i	480i	480p	VGA	720p	1080i	576i	576p	720p	1080i	640×480	720×400	800×600	1024×768	1280×720	1280×768	1360×768			
		Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.			
1	OSD H POSI	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21			
2	OSD V POSI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
3	R DRIVE(N)	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736			
4	R CUT OFF(N)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	0			
5	G DRIVE(N)	*773	*773	*773	*773	*773	*773	*773	*773	*773	*773	*773	*773	*773	*773	*773	*773	*773	*773	*773	*773	773	773	773	773	773	773	773	773	*773			
6	G CUT OFF(N)	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	-	-	-	-	-	-	-	-	*5			
7	B DRIVE(N)	*711	*711	*711	*711	*711	*711	*711	*711	*711	*711	*711	*711	*711	*711	*711	*711	*711	*711	*711	*711	711	711	711	711	711	711	711	711	*711			
8	B CUTOFF(N)	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9	-	-	-	-	-	-	-	-	*9			
9	R DRIVE(C)	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	-	-	-	-	-	-	-	-	736			
10	R CUT OFF(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	0			
11	G DRIVE(C)	*816	*816	*816	*816	*816	*816	*816	*816	*816	*816	*816	*816	*816	*816	*816	*816	*816	*816	*816	*816	-	-	-	-	-	-	-	-	*816			
12	G CUT OFF(C)	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	-	-	-	-	-	-	-	-	*7			
13	B DRIVE(C)	*762	*762	*762	*762	*762	*762	*762	*762	*762	*762	*762	*762	*762	*762	*762	*762	*762	*762	*762	*762	-	-	-	-	-	-	-	-	*762			
14	B CUTOFF(C)	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	-	-	-	-	-	-	-	-	*7			
15	R DRIVE(W)	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	736	-	-	-	-	-	-	-	-	736			
16	R CUT OFF(W)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	0			
17	G DRIVE(W)	*745	*745	*745	*745	*745	*745	*745	*745	*745	*745	*745	*745	*745	*745	*745	*745	*745	*745	*745	*745	-	-	-	-	-	-	-	-	*745			
18	G CUT OFF(W)	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	*5	-	-	-	-	-	-	-	-	*5			
19	B DRIVE(W)	*686	*686	*686	*686	*686	*686	*686	*686	*686	*686	*686	*686	*686	*686	*686	*686	*686	*686	*686	*686	-	-	-	-	-	-	-	-	*686			
20	B CUTOFF(W)	*23	*23	*23	*23	*23	*23	*23	*23	*23	*23	*23	*23	*23	*23	*23	*23	*23	*23	*23	*23	-	-	-	-	-	-	-	-	*23			
21	H POSI 50Hz 4:3(PC)	643	643	643	637	-	-	-	-	597	284	-	-	-	-	-	-	-	76	3	-	-	-	-	-	-	-	-	-	529			
	H POSI 50Hz 4:3 OTHER (PC)	643	643	643	640	-	-	-	-	597	284	307	256	-	-	-	-	-	76	3	146	94	-	-	-	-	-	-	-	528			
	H POSI 60Hz 4:3(PC)	583	583	583	590	553	266	-	-	-	-	-	-	52	2	2	-	-	-	-	-	131	147	192	280	204	302	344	-	529			
	H POSI CENTER (PC)																																
	H POSI 60Hz 4:3 OTHER (PC)	584	584	584	592	553	266	306	256	-	-	-	-	52	2	2	92	33	-	-	-	-	130	146	192	280	-	-	-	-	529		
22	H POSI MAX (PC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	181	197	242	330	254	352	394	-			
23	H POSI MIN (PC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81	97	142	230	154	252	294	-			
24	V POSI 50Hz FULL SCREEN/ Cinema OTHER (PC)	27	27	27	26	-	-	-	-	27	54	22	18	-	-	-	-	-	16	42	17	19	-	-	-	-	-	-	-	27			
	V POSI 50Hz FULL SCREEN(PC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	V POSI 50Hz Cinema(PC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	V POSI 60Hz FULL SCREEN/ Cinema OTHER (PC)	21	21	21	20	21	44	20	18	-	-	-	-	10	31	34	22	19	-	-	-	-	28	26	26	25	32	25	17	-			
	V POSI CENTER(PC)																																
	V POSI 60Hz FULL SCREEN(PC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	V POSI 60Hz Cinema(PC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
25	V POSI MAX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53	51	51	50	57	50	42	-			
26	V POSI MIN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	1	0	7	0	0	-			
27	BACKLIGHT CENTER	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128			
28	BACKLIGHT MAX	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255			
29	BACKLIGHT MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
30	BRIGHT CENTER	+	+	+	+	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10			
31	BRIGHT MAX	+	+	+	+	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26			
32	BRIGHT MIN	+	+	+	+	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64			
33	TINT CENTER	+	+	+	+	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-9	-9	-9	-9	-9	-9	-9	-9	-6			
34	CONTRAST CENTER	*+	*+	*+	*+	*36	*35	*34	*34	*36	*35	*34	*34	*35	*35	*35	*35	*35	*35	*35	*												

NOTE: For the step no. with + mark, please adjust it according to the 2-4.
For the step no. with * mark, please adjust it according to the situation of the set.

ELECTRICAL ADJUSTMENTS

2-4: Confirmation of Fixed Value (Step No.)

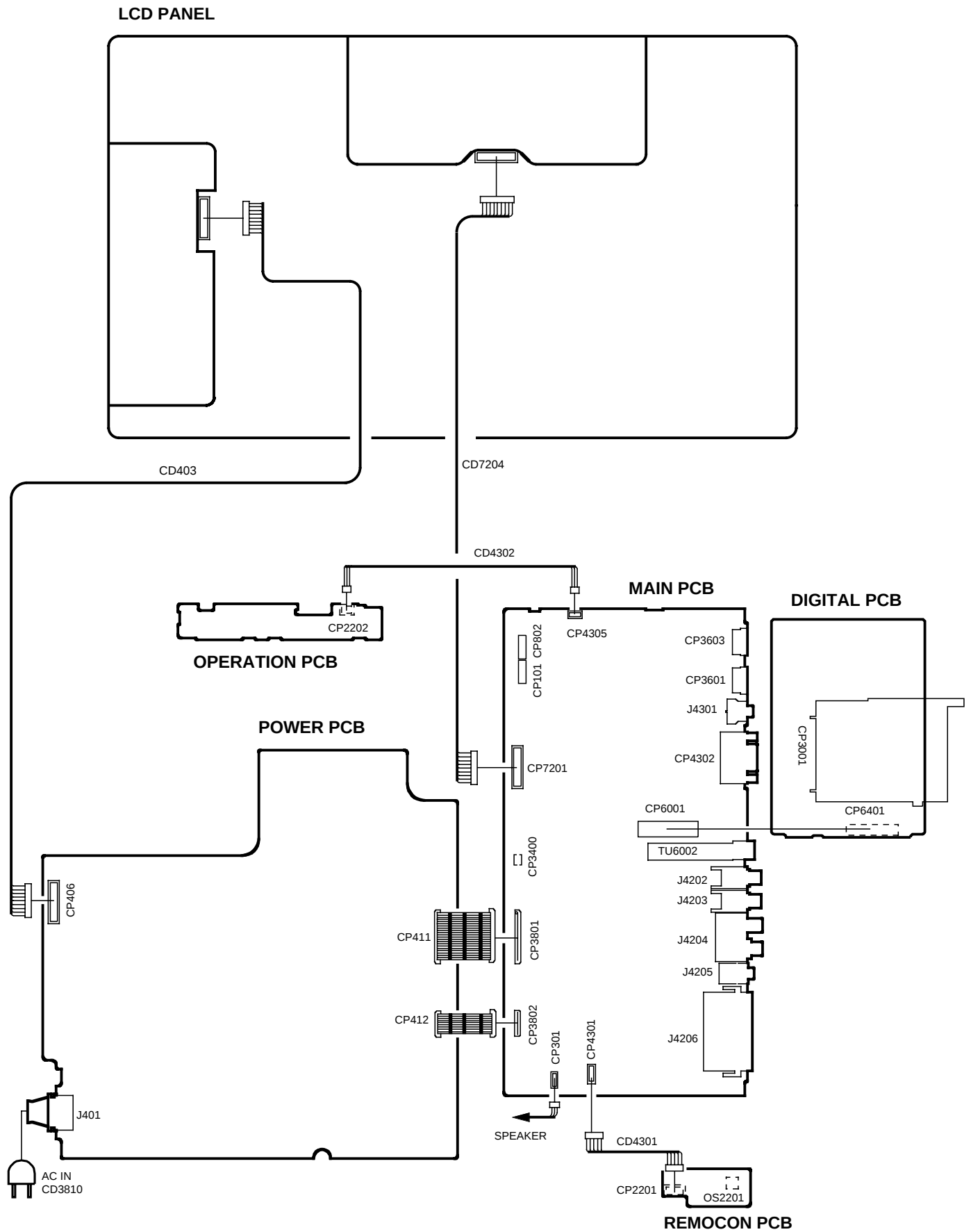
Please check if the fixed values of each of the adjustment item is set correctly referring below. (TUNER/AV)

NO.	FUNCTION	TUNER			AV1(SCART1),AV2(SCART2)					AV3(RCA)					AV2(SCART2)					AV3(RCA)					AV1(SCART1)				
					CVBS					CVBS					S(Y/C)					S(Y/C)					RGB				
		576i			576i			480i		576i			480i		576i			480i		576i			480i		576i			480i	
		PAL50	PAL60	SECAM	PAL50	PAL60	SECAM	NTSC3.58	NTSC4.43	PAL50	PAL60	SECAM	NTSC3.58	NTSC4.43	PAL50	PAL60	SECAM	NTSC3.58	NTSC4.43	PAL50	PAL60	SECAM	NTSC3.58	NTSC4.43	PAL50	PAL60	SECAM	NTSC3.58	NTSC4.43
		Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.
30	BRIGHT CENTER	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
31	BRIGHT MAX	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
32	BRIGHT MIN	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64
33	TINT CENTER	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4
34	CONTRAST CENTER	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34	*34
35	CONTRAST MAX	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46	*46
36	CONTRAST MIN	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
37	CONTRAST 40	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44	*44
38	COLOR CENTER	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
39	COLOR MAX	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
40	COLOR MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

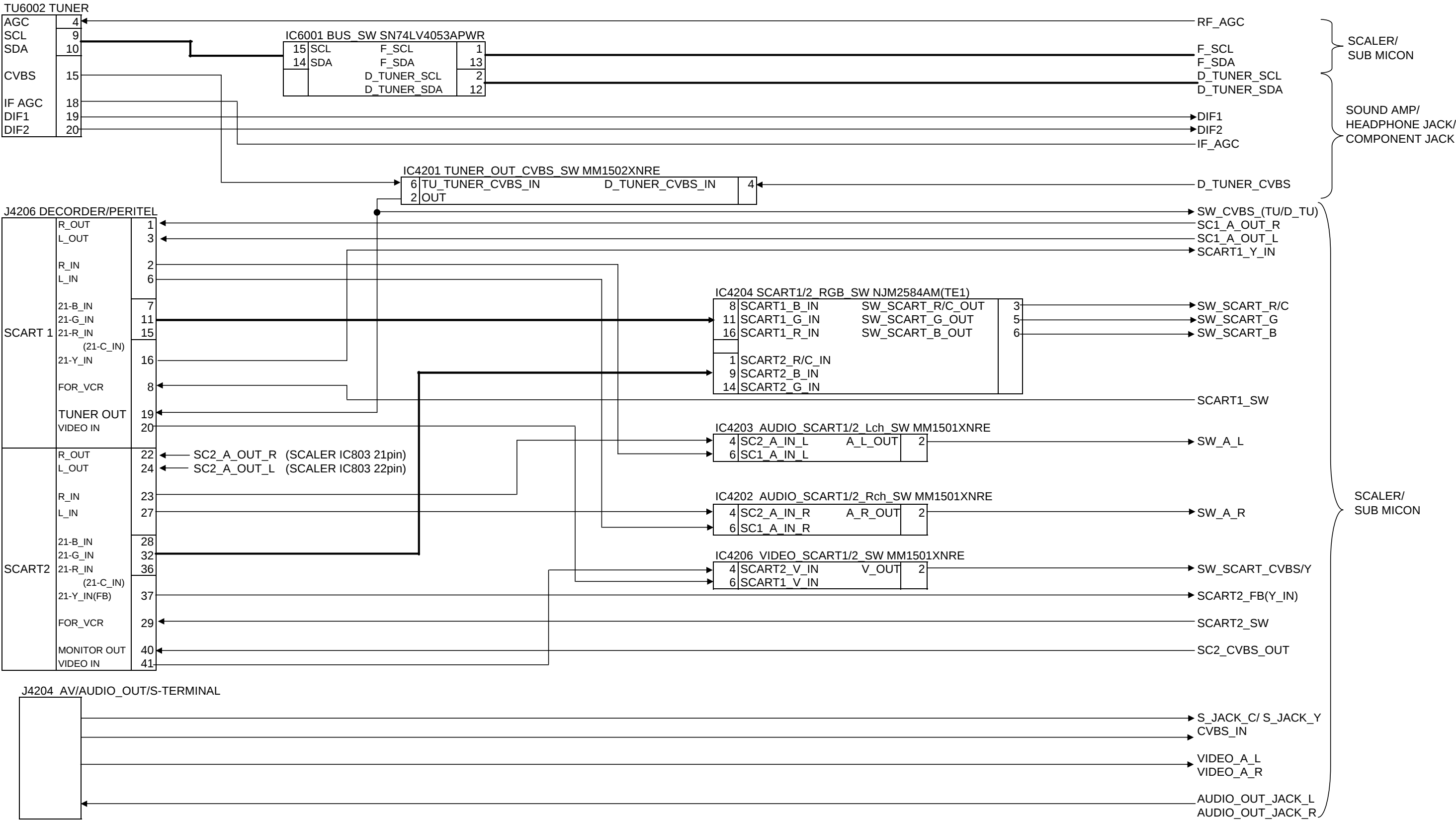
NOTE: For the step no. with * mark, please adjust it according to the situation of the set.

ELECTRICAL ADJUSTMENTS

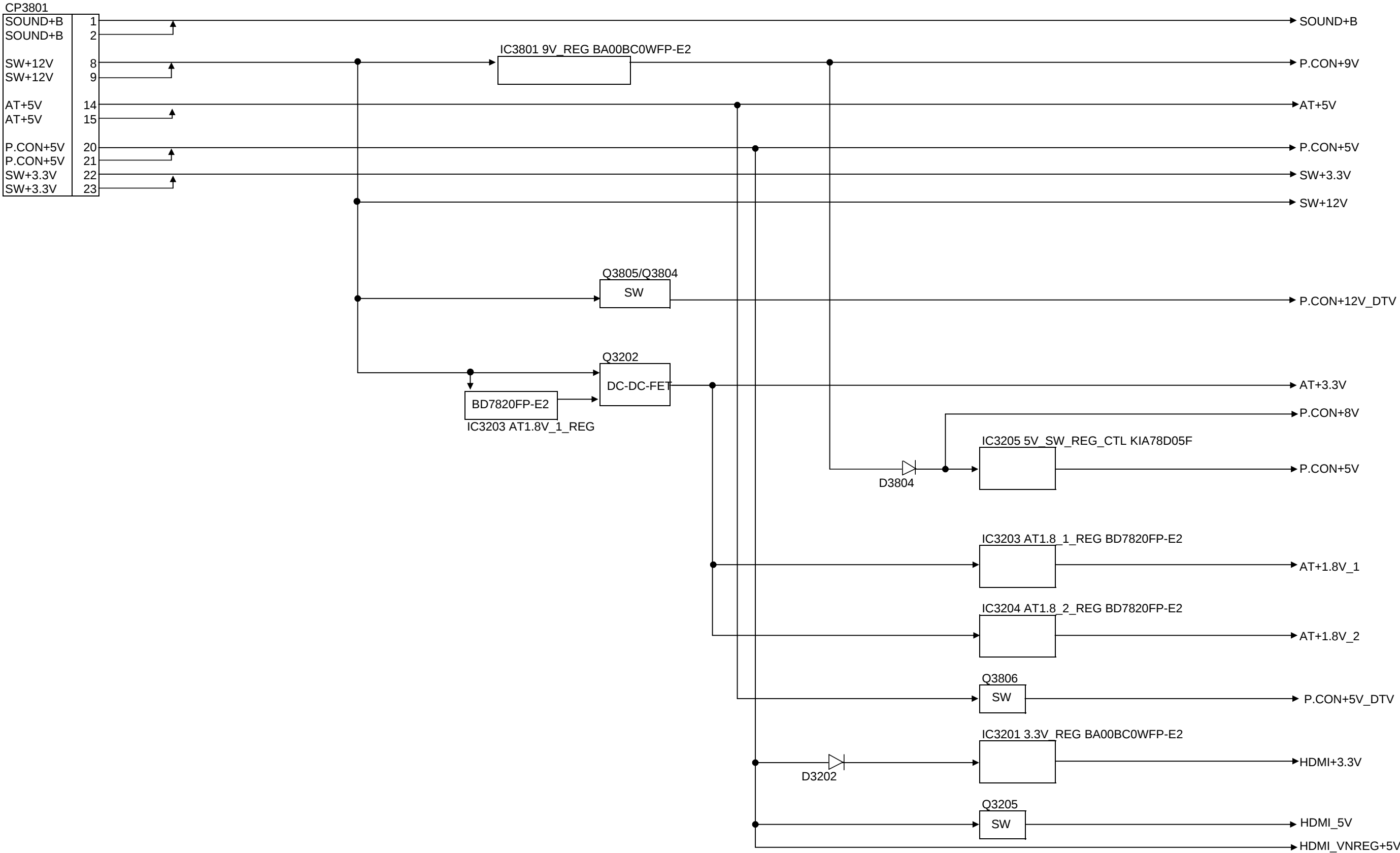
3. ELECTRICAL ADJUSTMENT PARTS LOCATION GUIDE (WIRING CONNECTION)



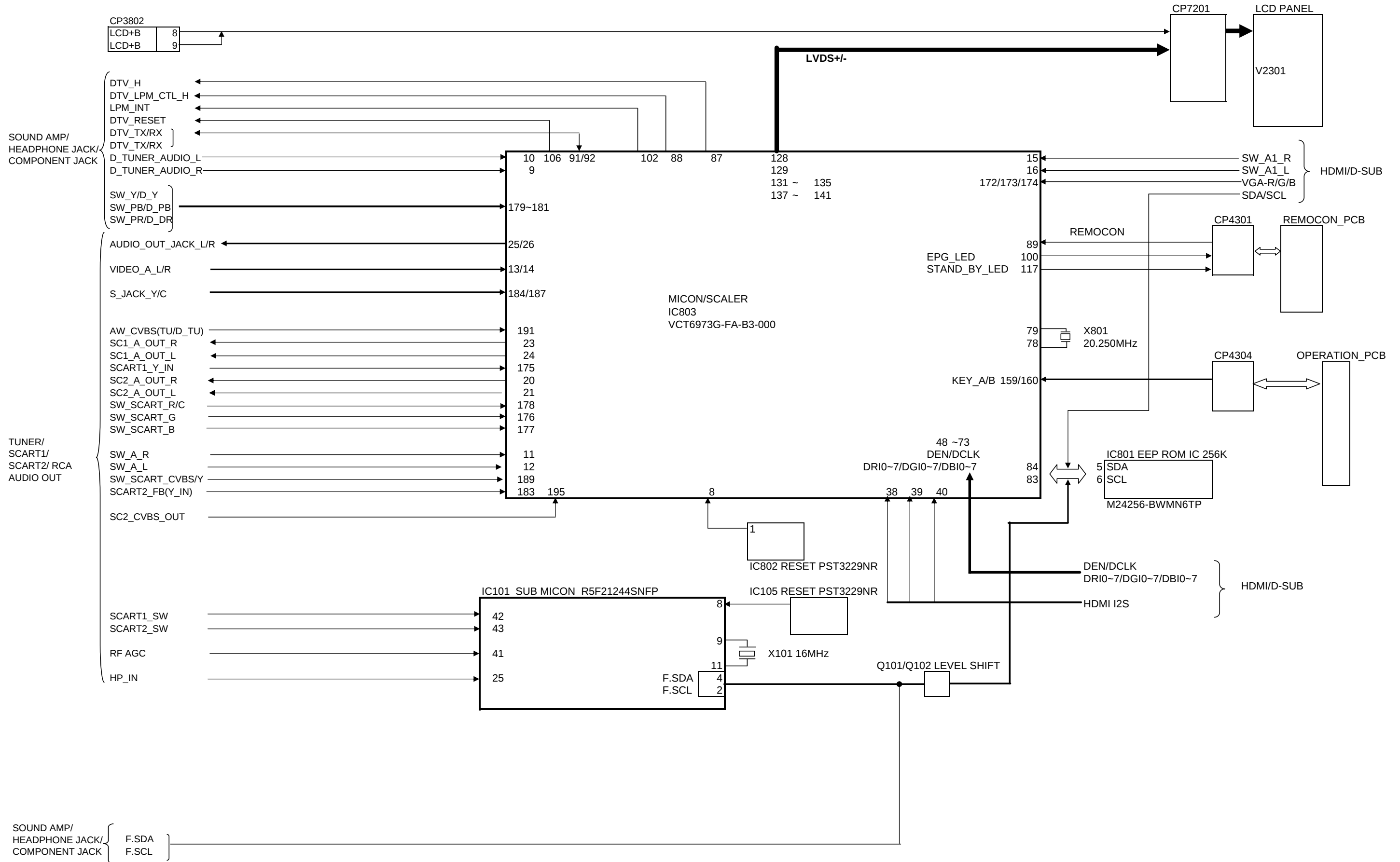
TUNER/SCART1/SCART2/RCA AUDIO OUT BLOCK DIAGRAM



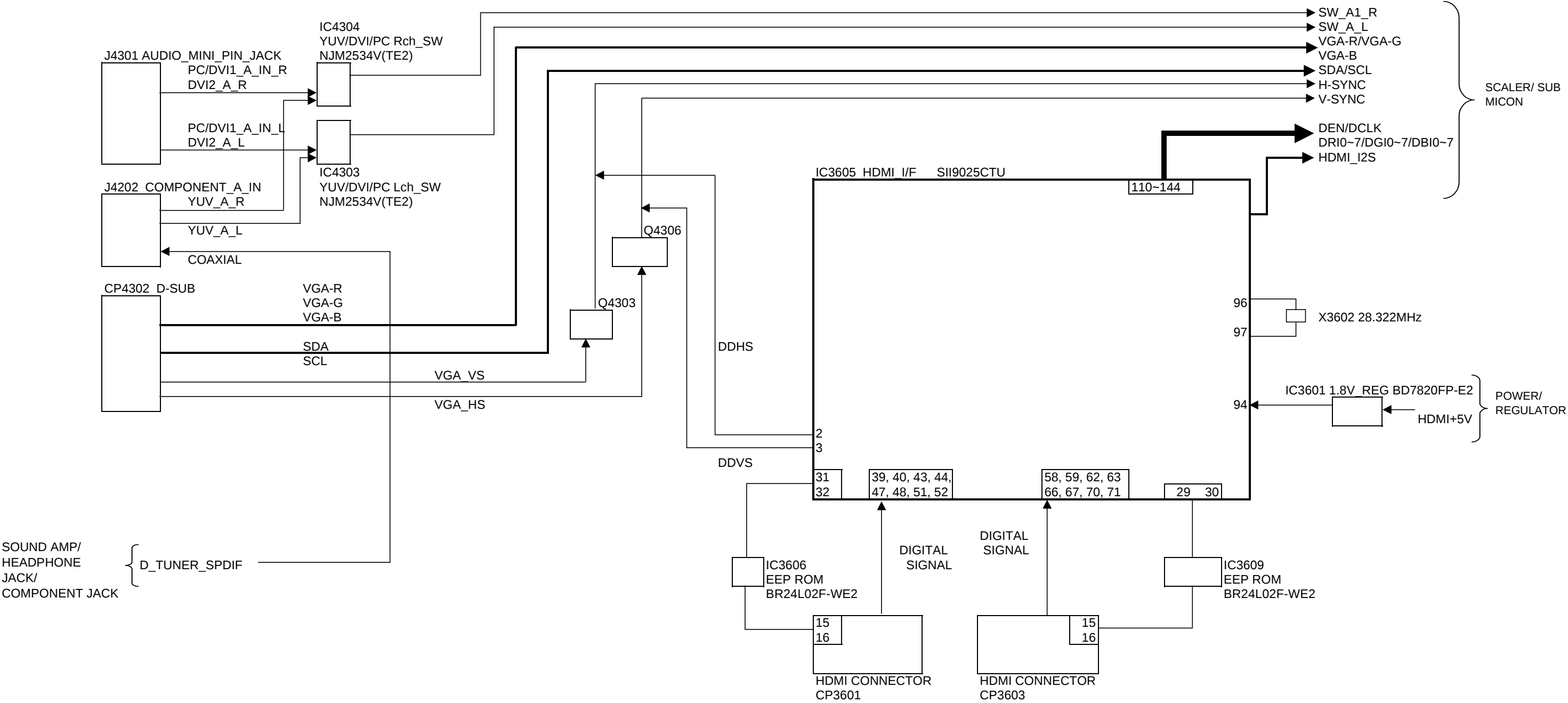
POWER/REGULATOR BLOCK DIAGRAM



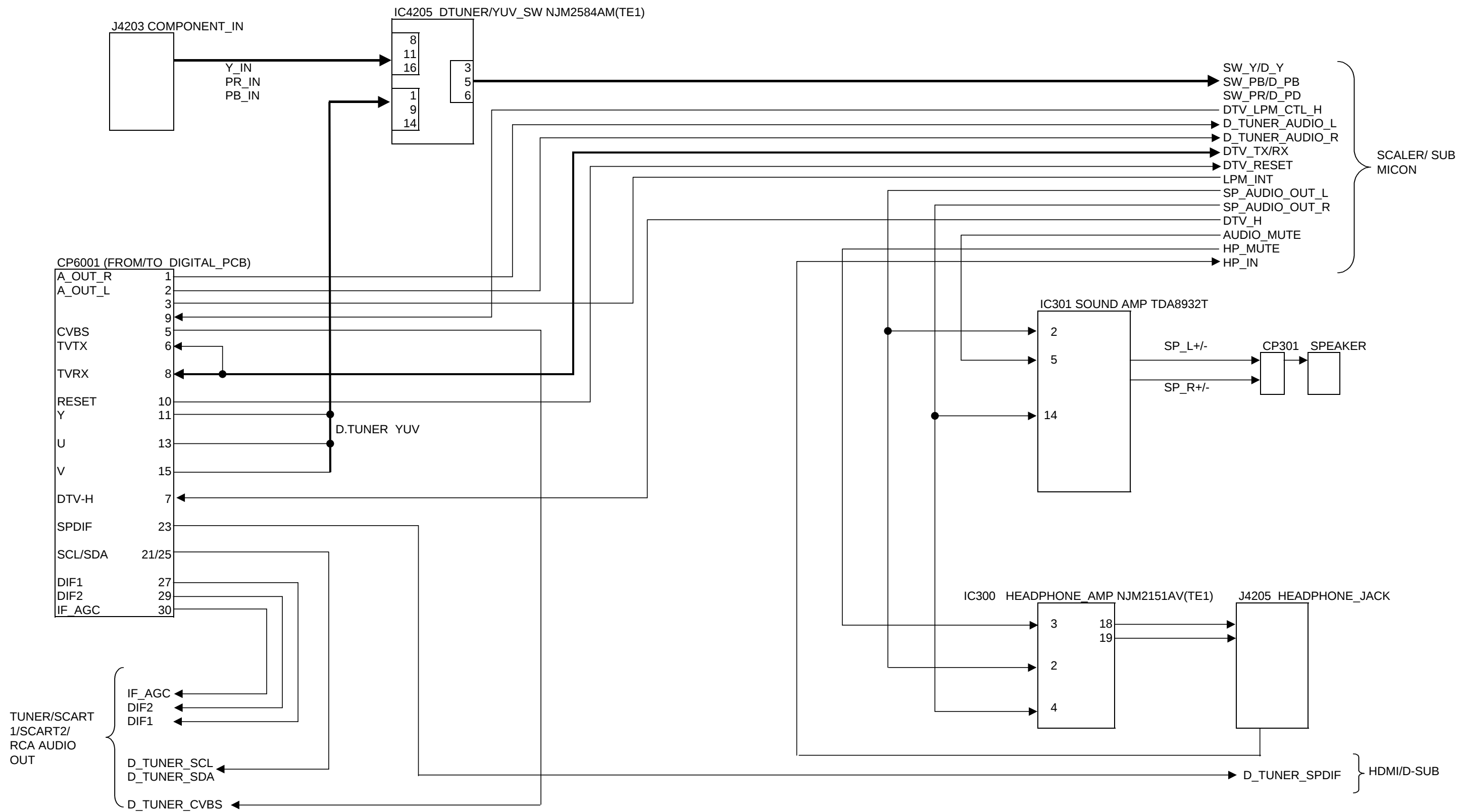
SCALER/SUB MICON BLOCK DIAGRAM



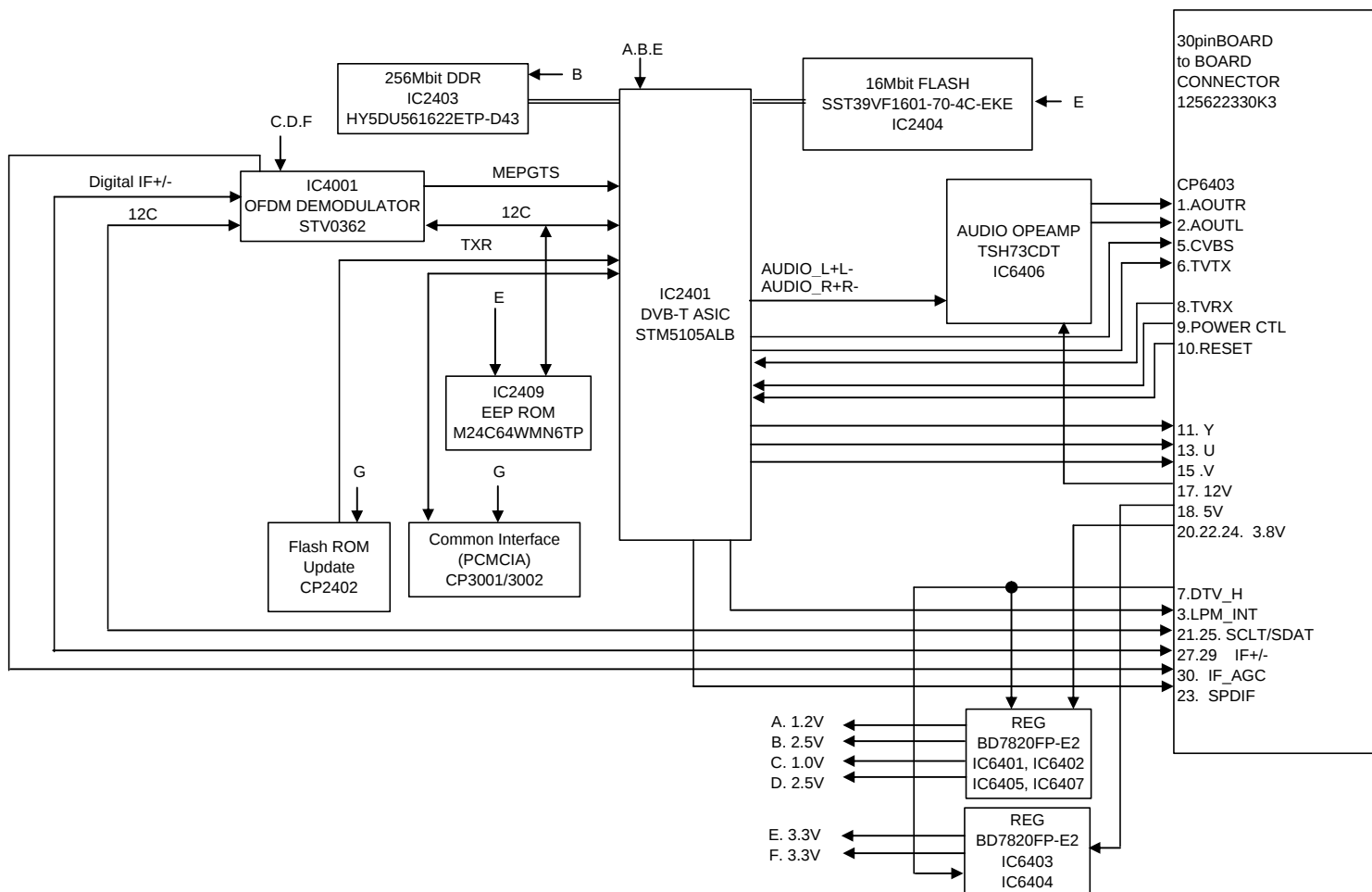
HDMI/D-SUB BLOCK DIAGRAM



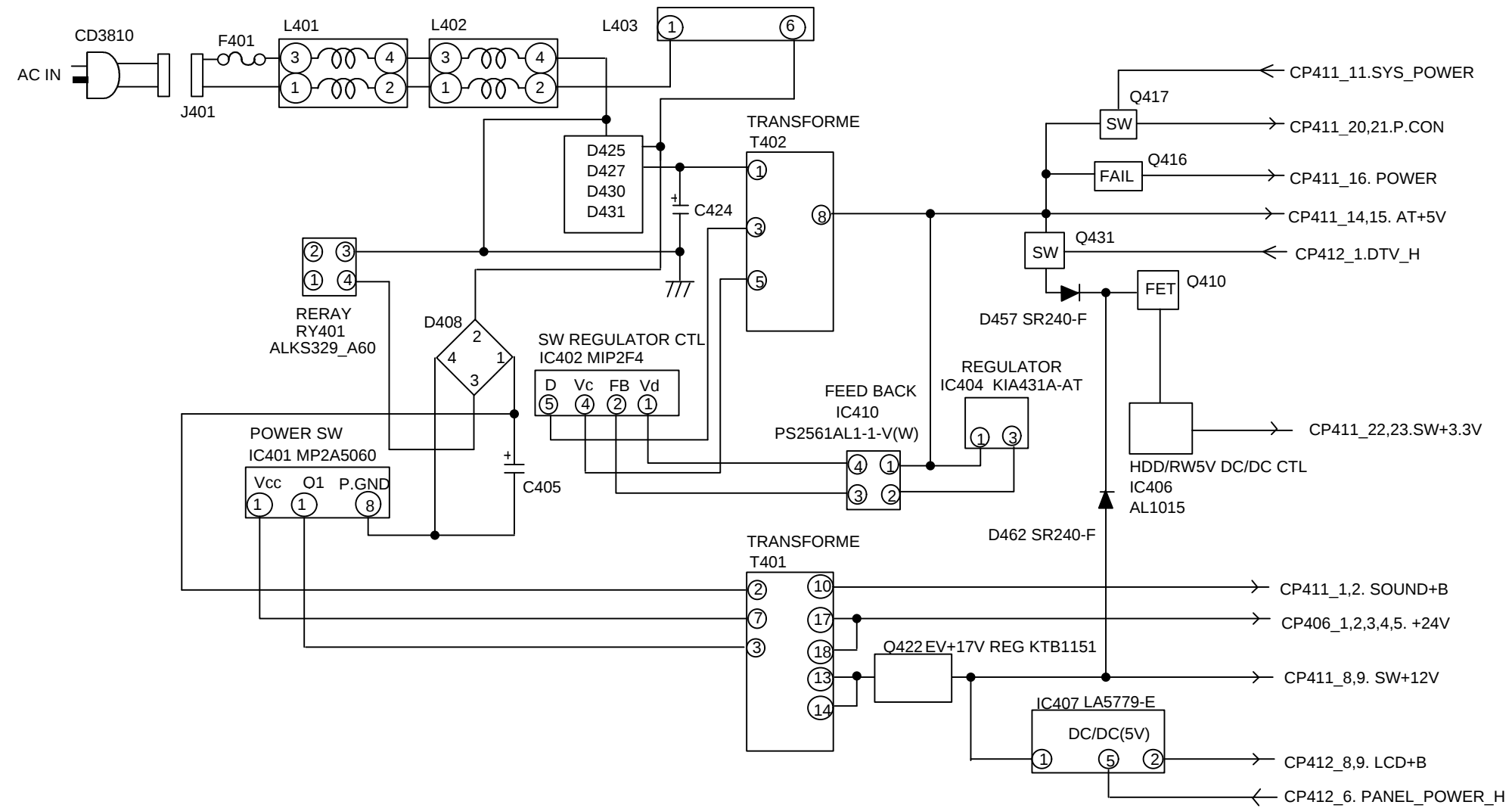
SOUND AMP/HEADPHONE JACK/COMPONENT JACK BLOCK DIAGRAM



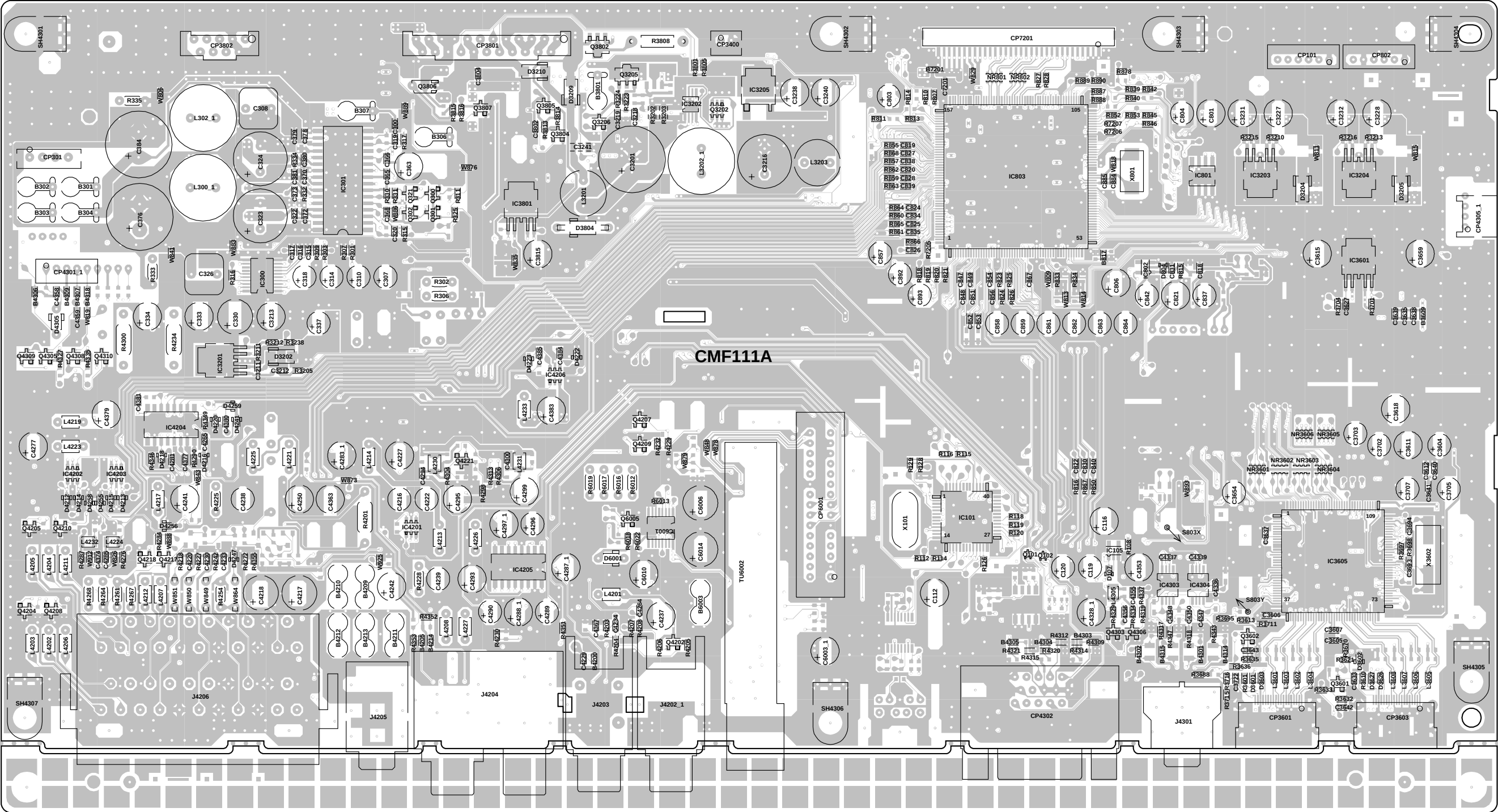
DIGITAL BLOCK DIAGRAM



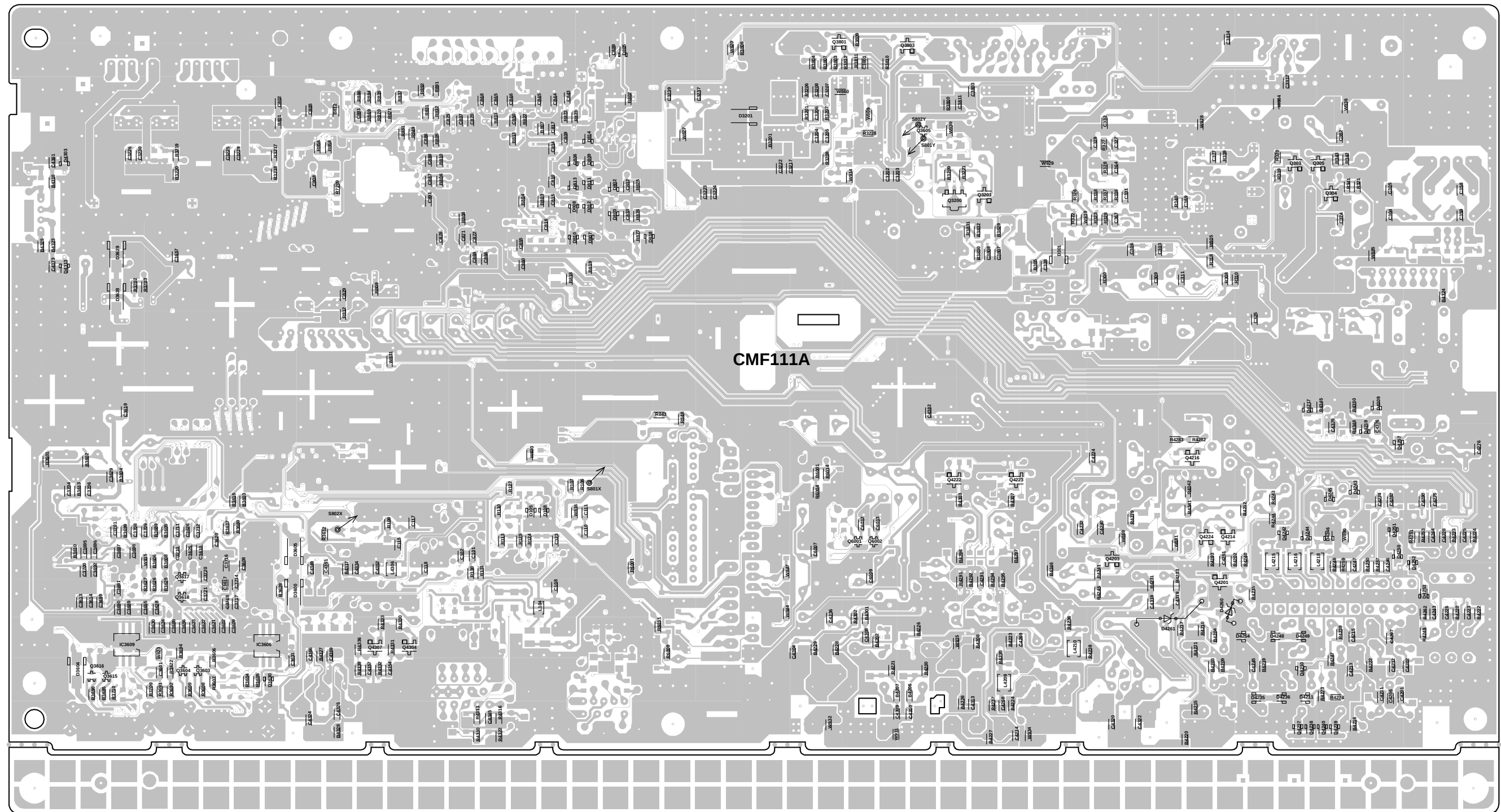
POWER(POWER PCB) BLOCK DIAGRAM



PRINTED CIRCUIT BOARDS
MAIN (TOP SIDE)

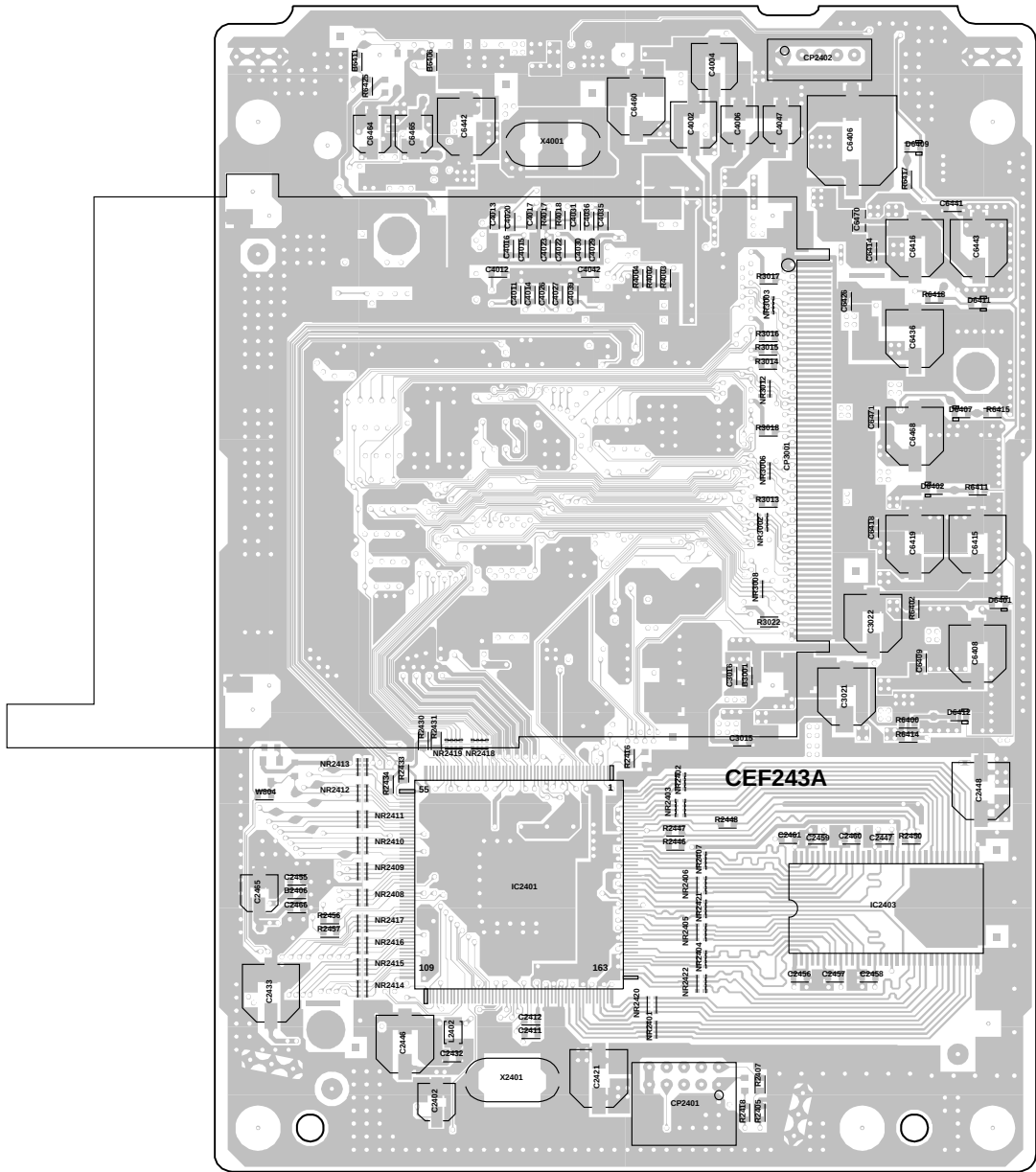


PRINTED CIRCUIT BOARDS MAIN (BOTTOM SIDE)

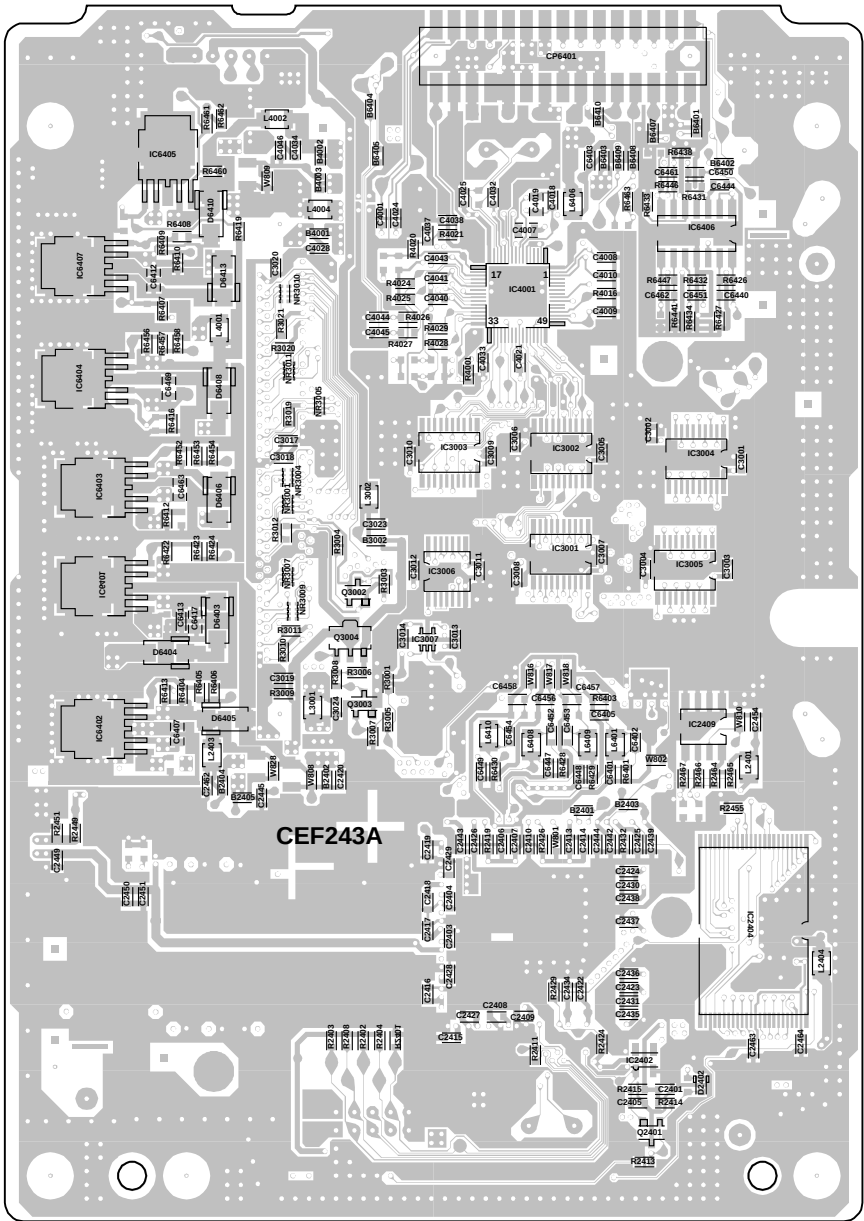


PRINTED CIRCUIT BOARDS

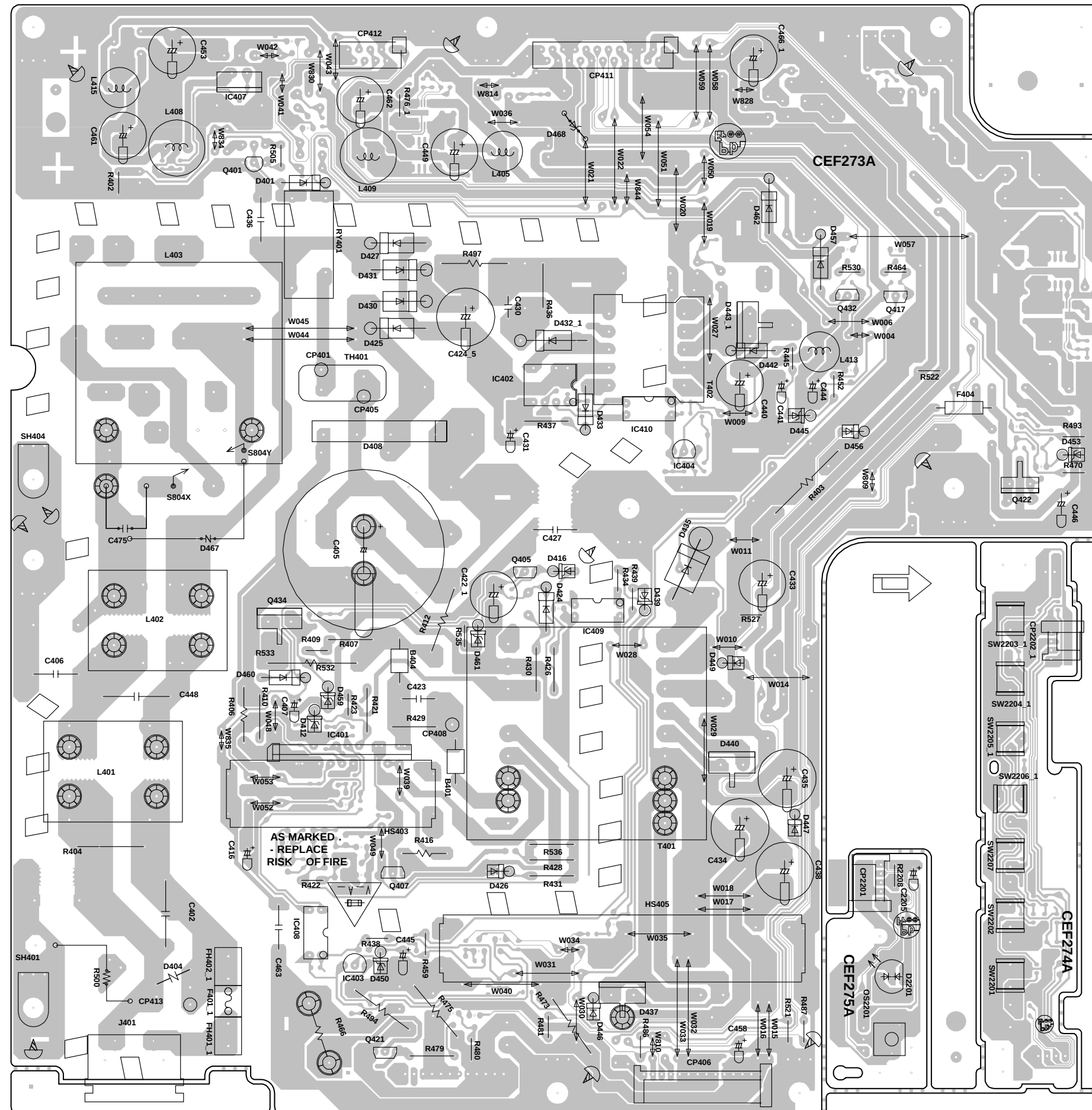
DIGITAL (TOP SIDE)



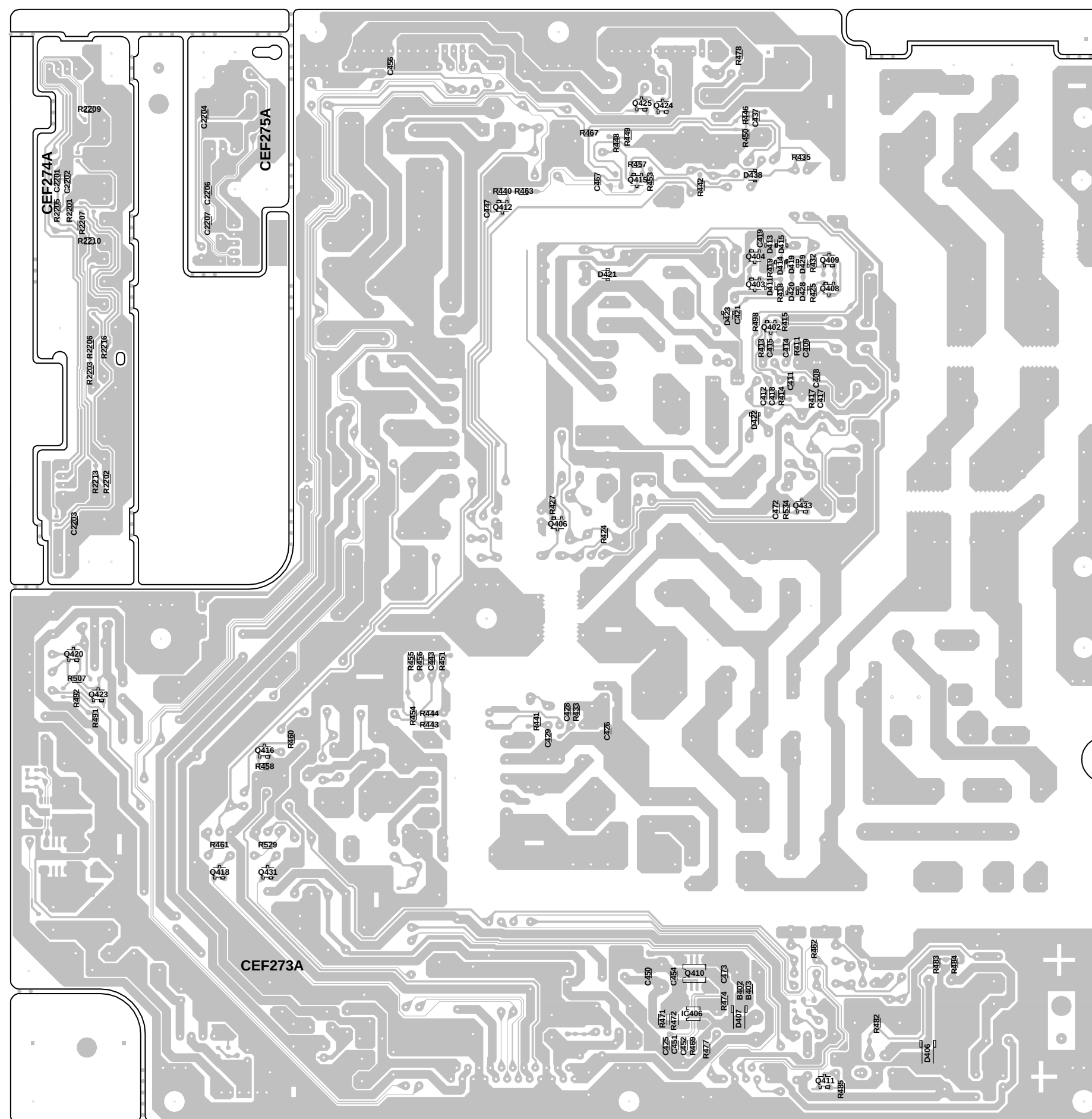
DIGITAL (BOTTOM SIDE)



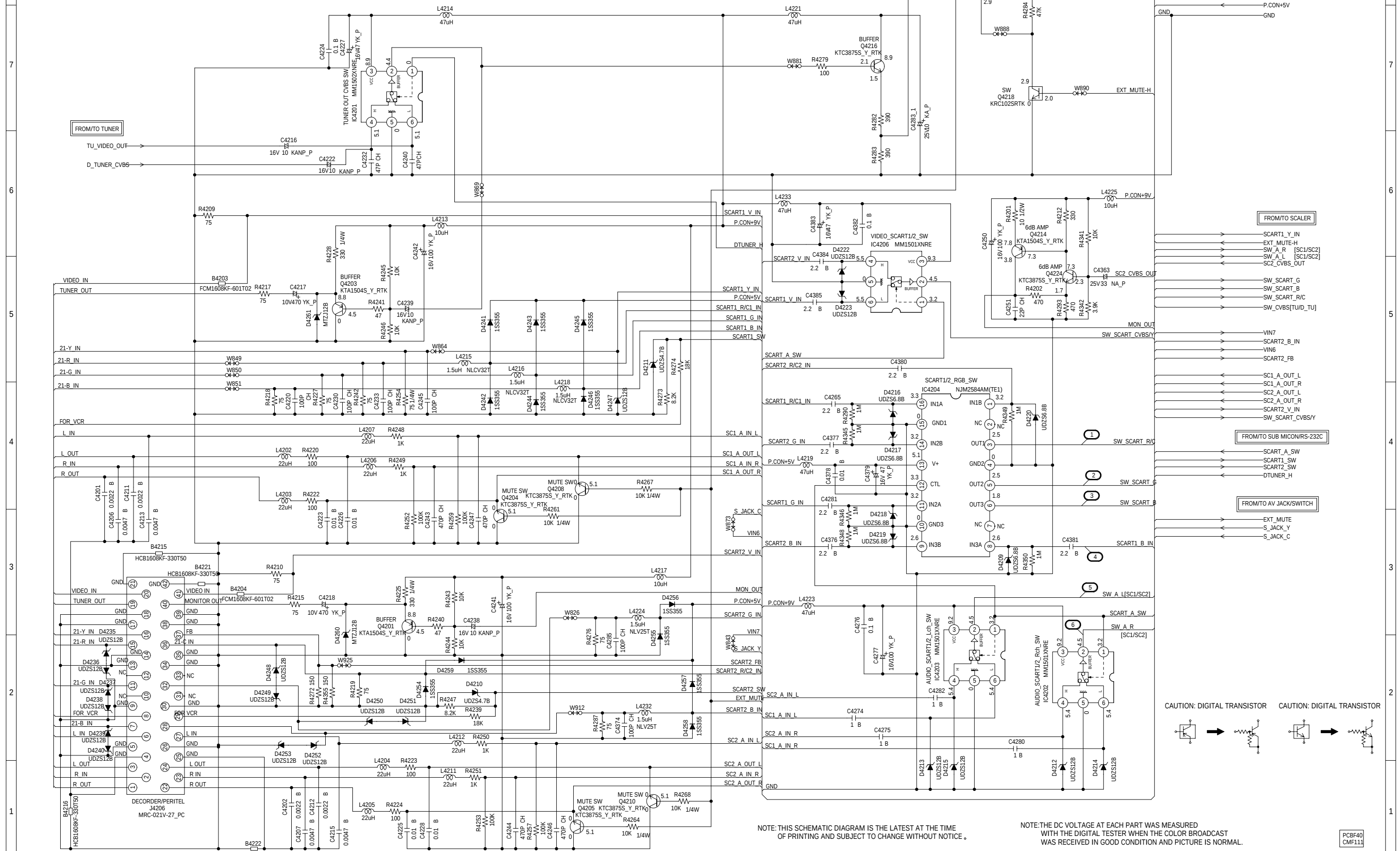
**PRINTED CIRCUIT BOARDS
POWER/OPERATION/REMOCON (INSERTED PARTS)
SOLDER SIDE**



PRINTED CIRCUIT BOARDS
POWER/OPERATION/REMOCON (CHIP MOUNTED PARTS)
SOLDER SIDE



21PIN SCHEMATIC DIAGRAM (MAIN PCB)

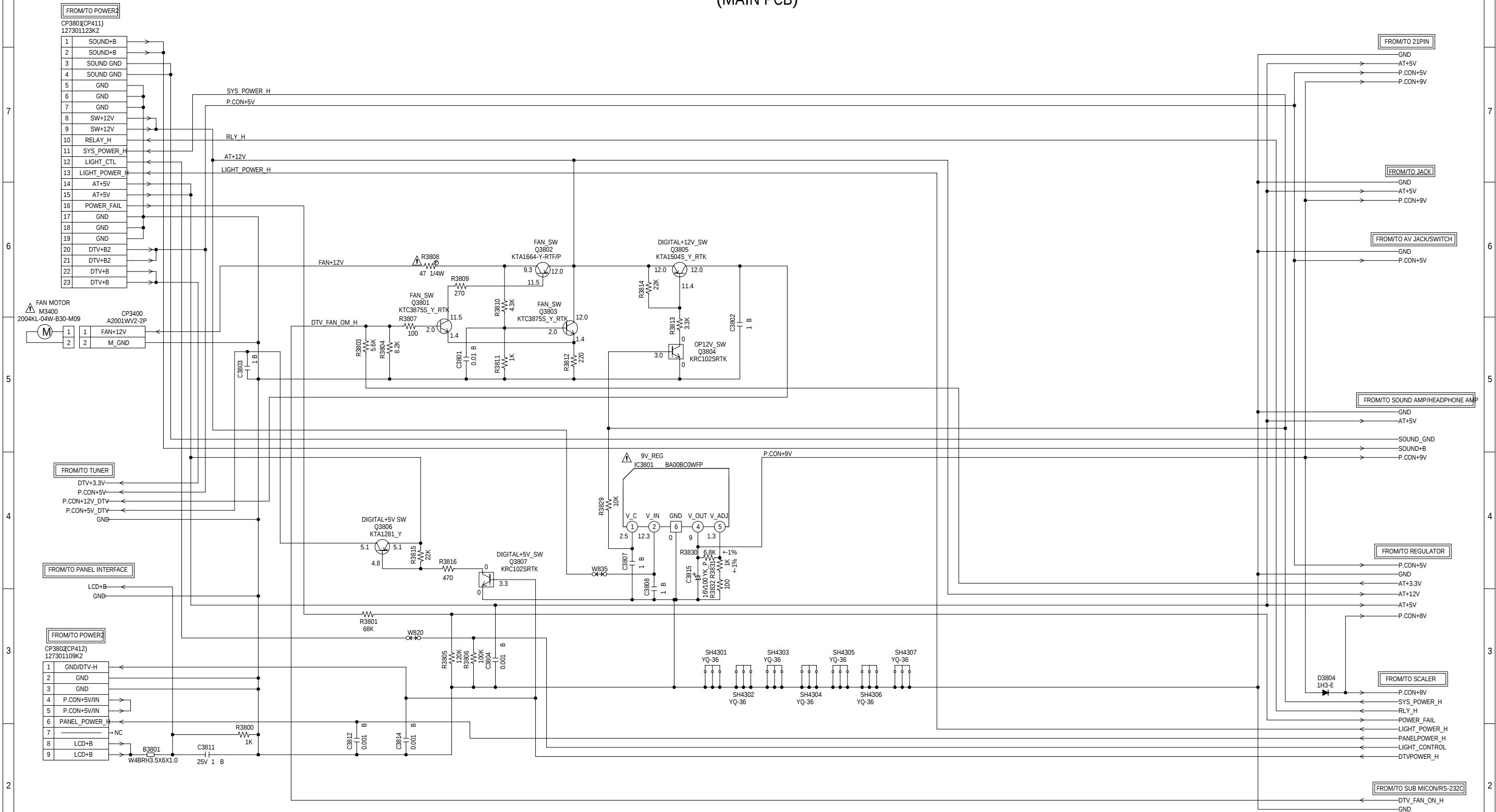


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

PCB#40
CMF111

POWER3 SCHEMATIC DIAGRAM
(MAIN PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

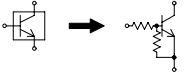
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

CAUTION: SINCE THESE PARTS MARKED BY  ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

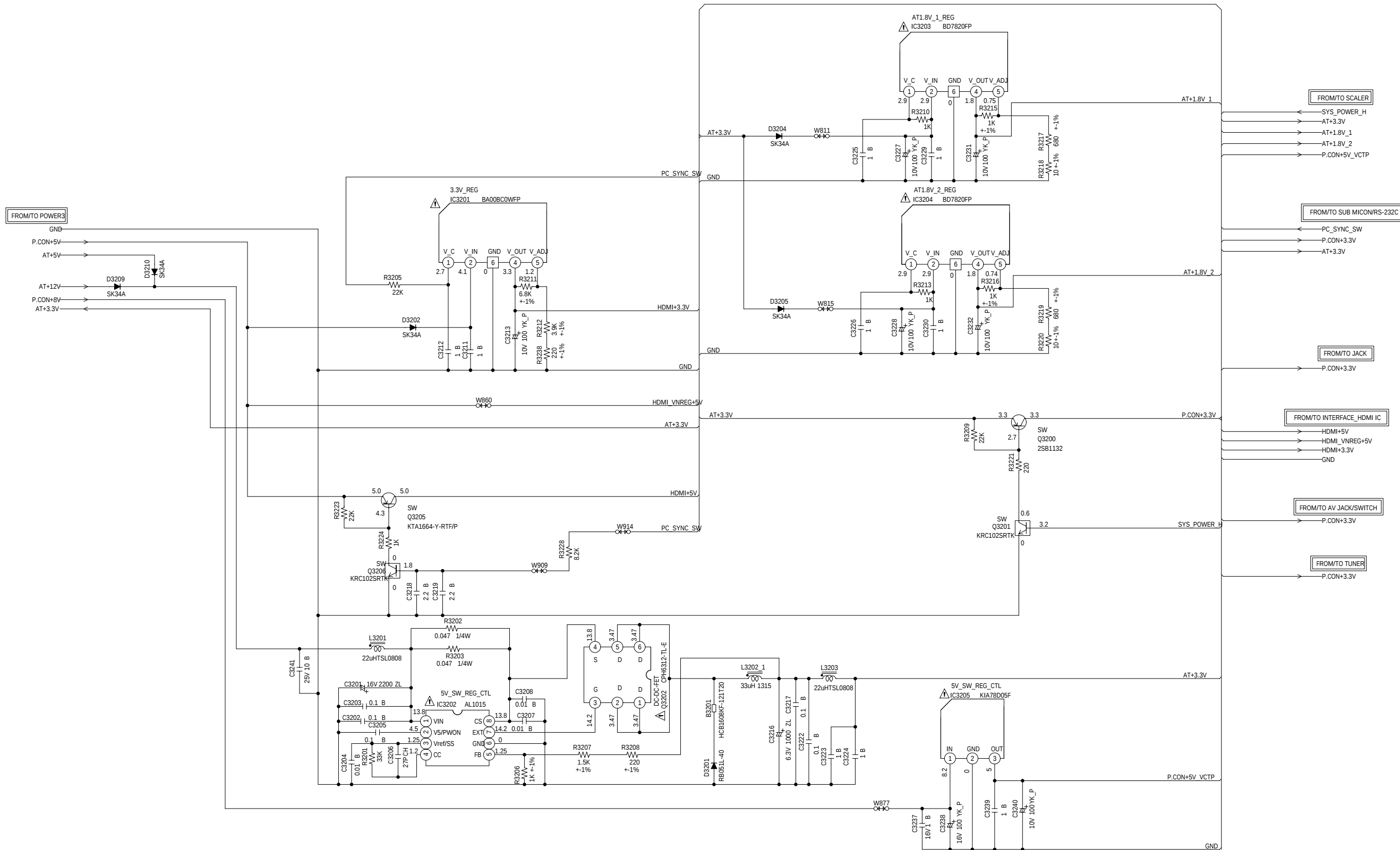
ATTENTION: LES PIECES REPARÉES PAR UN  ÉTANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES.

CAUTION: DIGITAL TRANSISTOR



PCBF40
CMF111

REGULATOR SCHEMATIC DIAGRAM
(MAIN PCB)



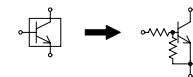
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

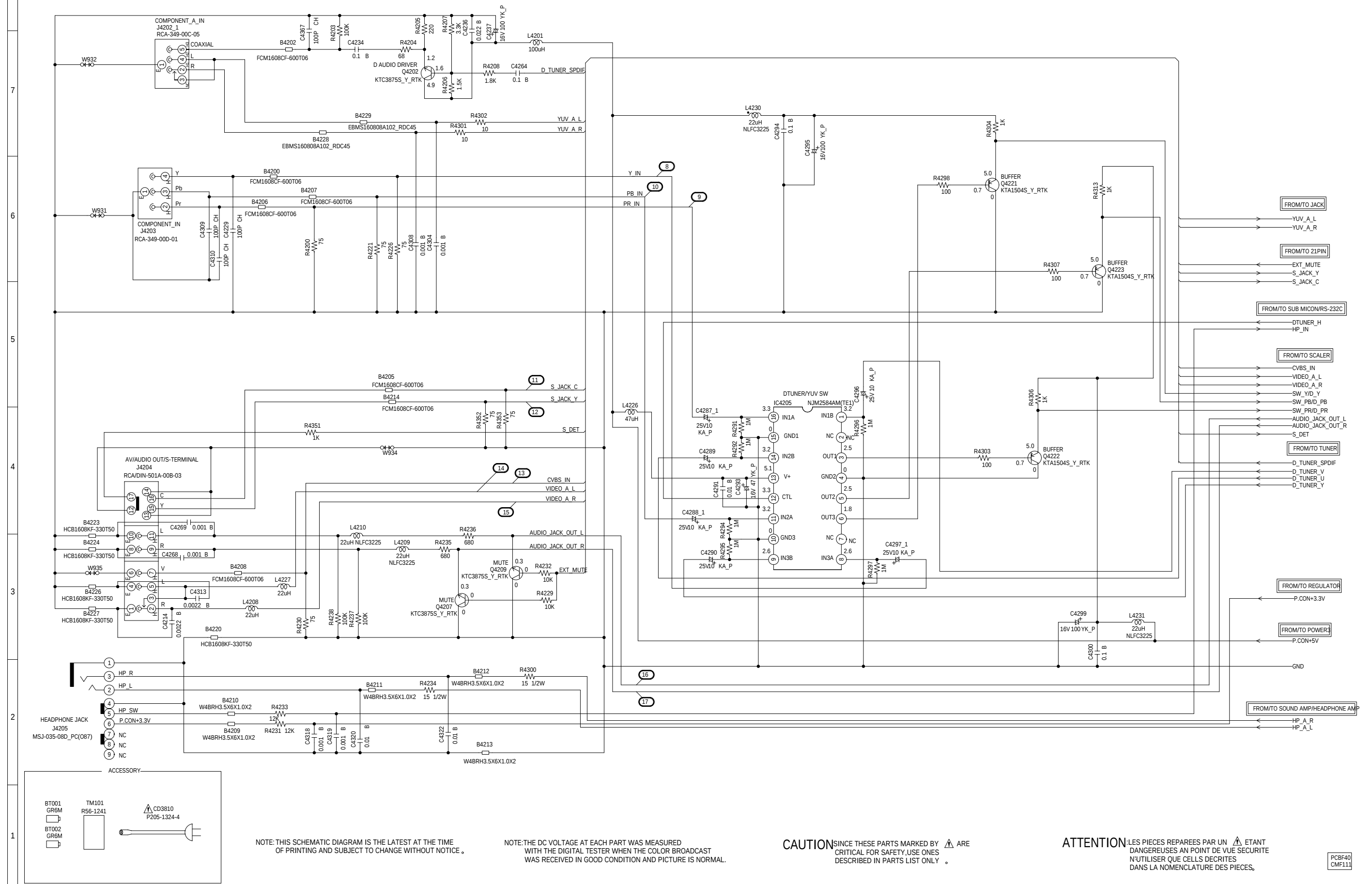
ATTENTION: LES PIECES REPARÉES PAR UN ÉTANT DANGEREUSES AU POINT DE VUE SÉCURITÉ, N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

CAUTION: DIGITAL TRANSISTOR



PCBF40
CMF111

AV JACK/SWITCH SCHEMATIC DIAGRAM (MAIN PCB)

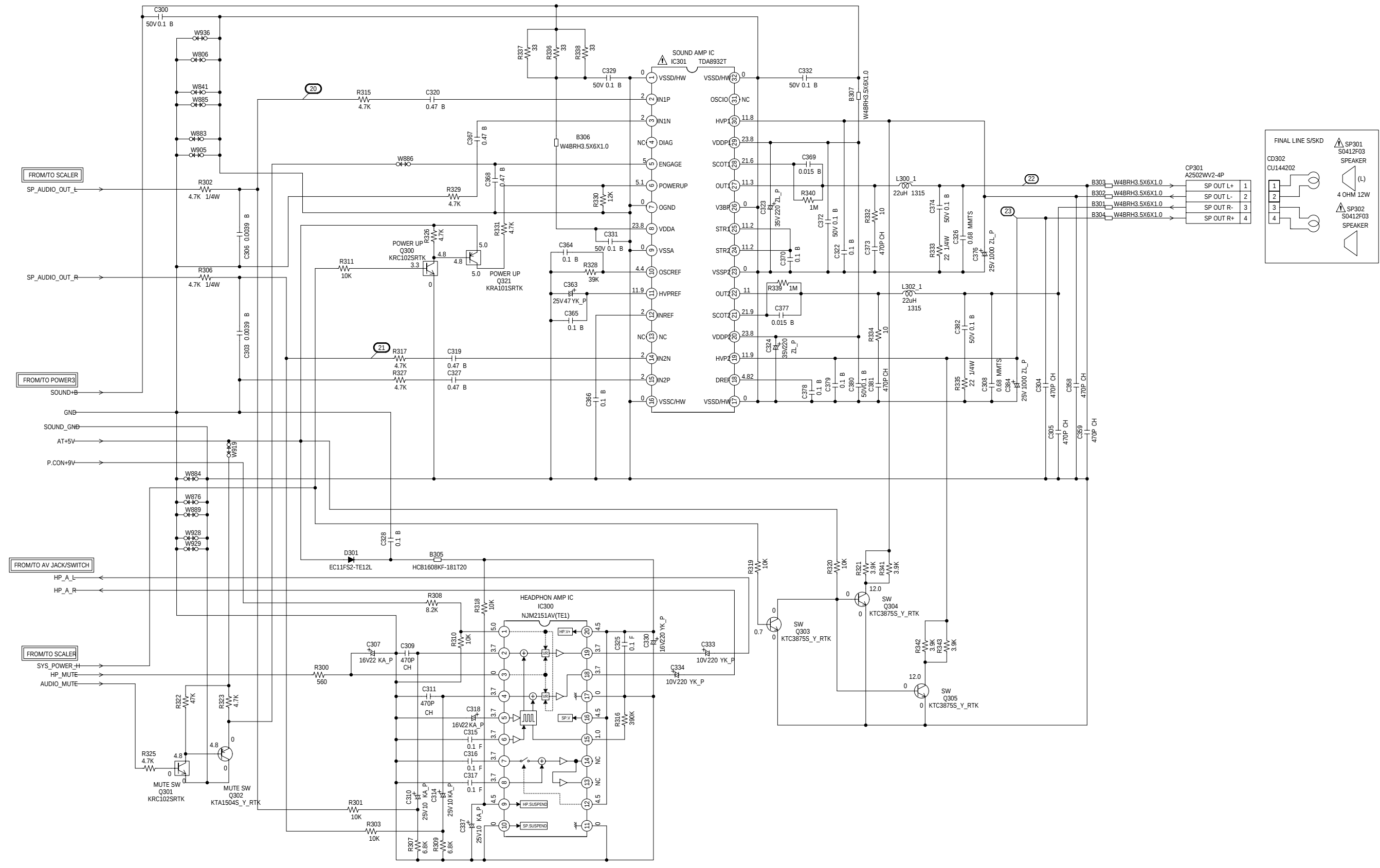


CAUTION SINCE THESE PARTS MARKED BY  ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

ATTENTION: LES PIÈCES RÉPARÉES PAR UN  ÉTANT DANGEREUSES AU POINT DE VUE SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

PCBF40
CMF111

SOUND AMP/HEADPHONE AMP SCHEMATIC DIAGRAM (MAIN PCB)



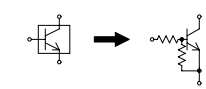
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

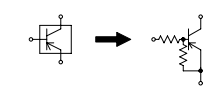
CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

ATTENTION: LES PIECES REPARÉES PAR UN ÉTANT DANGEREUSES AU POINT DE VUE SÉCURITÉ, N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

CAUTION: DIGITAL TRANSISTOR

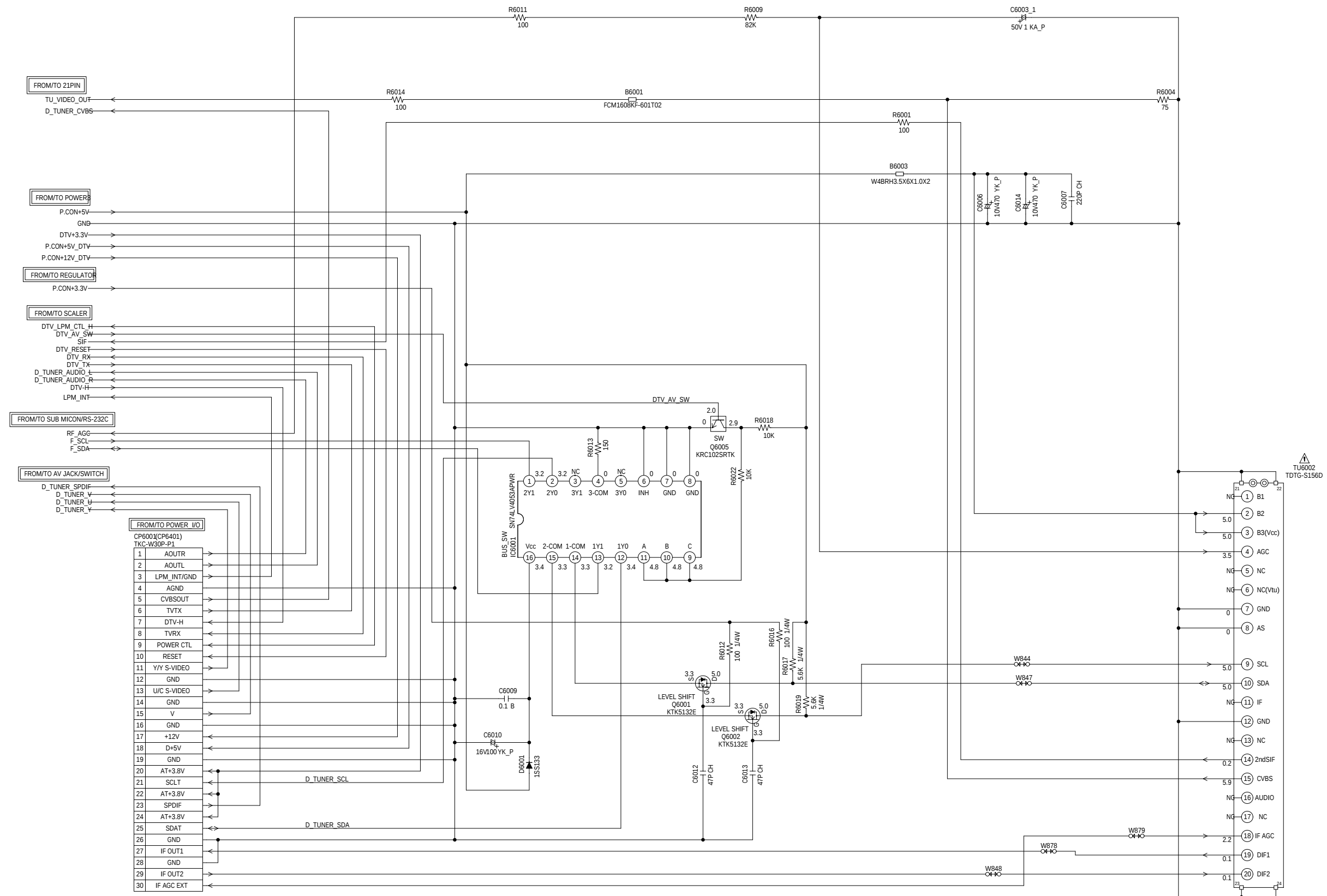


CAUTION: DIGITAL TRANSISTOR



PCB40 CMF111

TUNER SCHEMATIC DIAGRAM



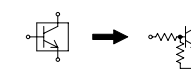
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED
WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST
WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

CAUTION SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

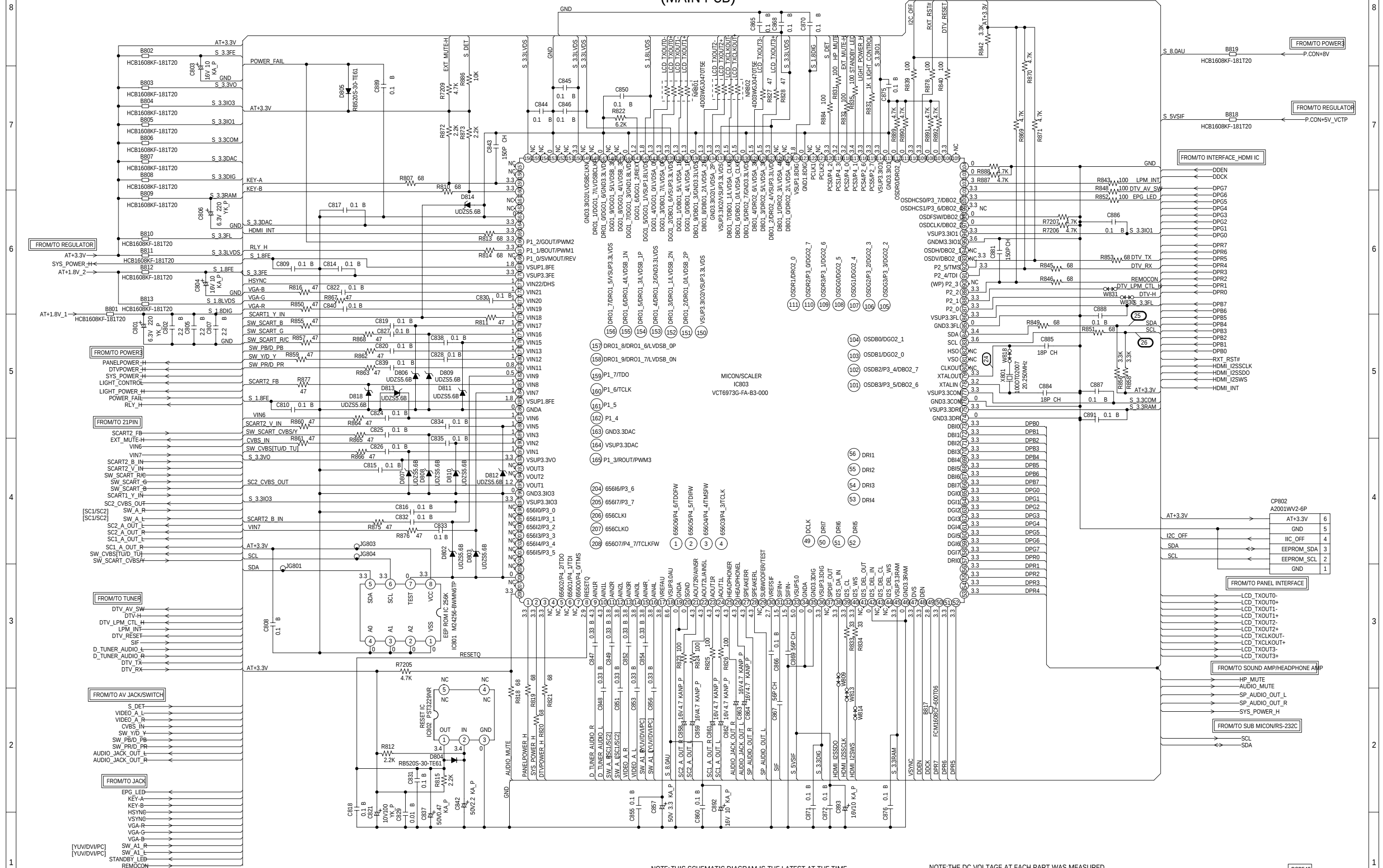
ATTENTION: LES PIÈCES RÉPARÉES PAR UN  ÉTANT DANGEREUSES AU POINT DE VUE SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

CAUTION: DIGITAL TRANSISTOR



PCBF40
CMF111

SCALER SCHEMATIC DIAGRAM (MAIN PCB)

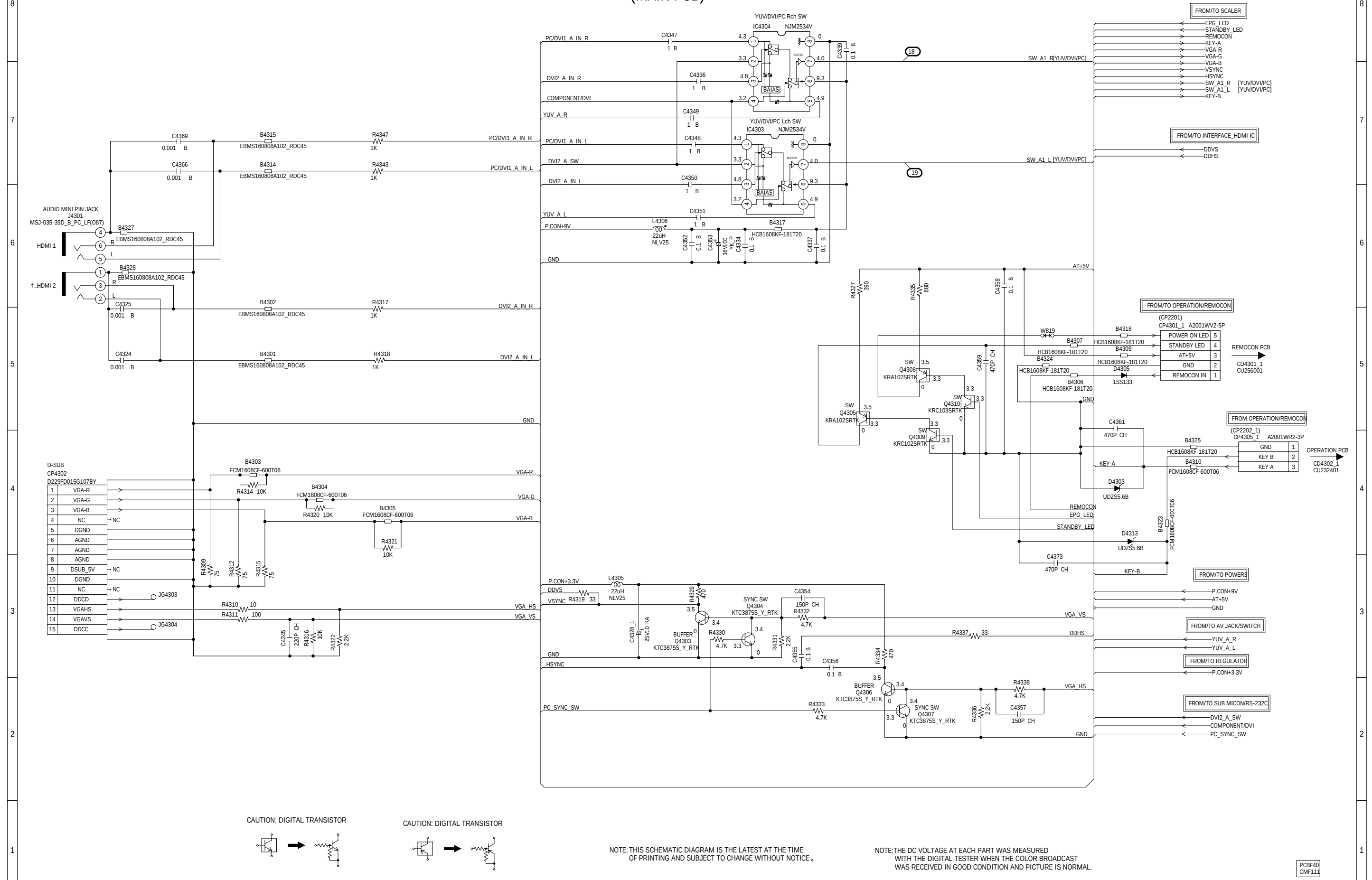


SUB MICON DATA

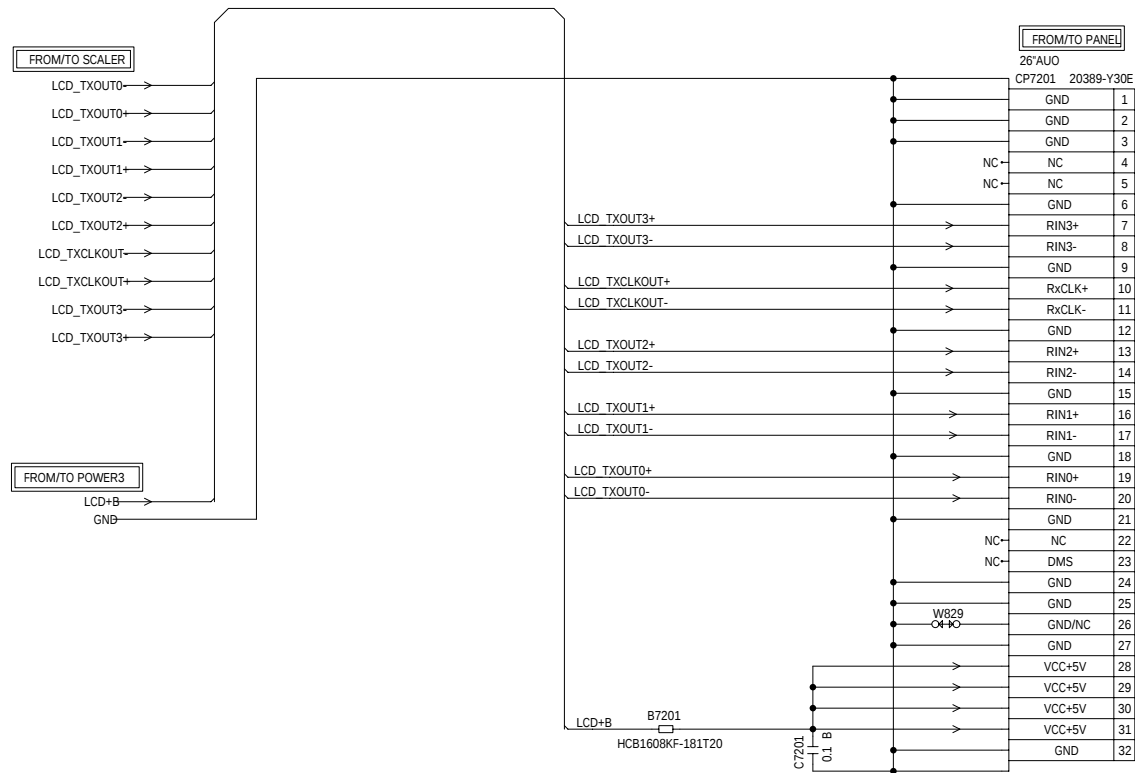
CP101	A2001WV2-6P	
GND	GND	1
TXD	TX	2
MODE	BUSY/MODE	3
P.CON+3.3V	VCC	4
RXD	RX	5
RESET	RESET	6

PCBF40
CMF111

JACK SCHEMATIC DIAGRAM (MAIN PCB)



PANEL INTERFACE DIAGRAM
(MAIN PCB)



LCD PANEL
V2301_1
T260XW03V0
CD7204_1
CHRU2002

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME
OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

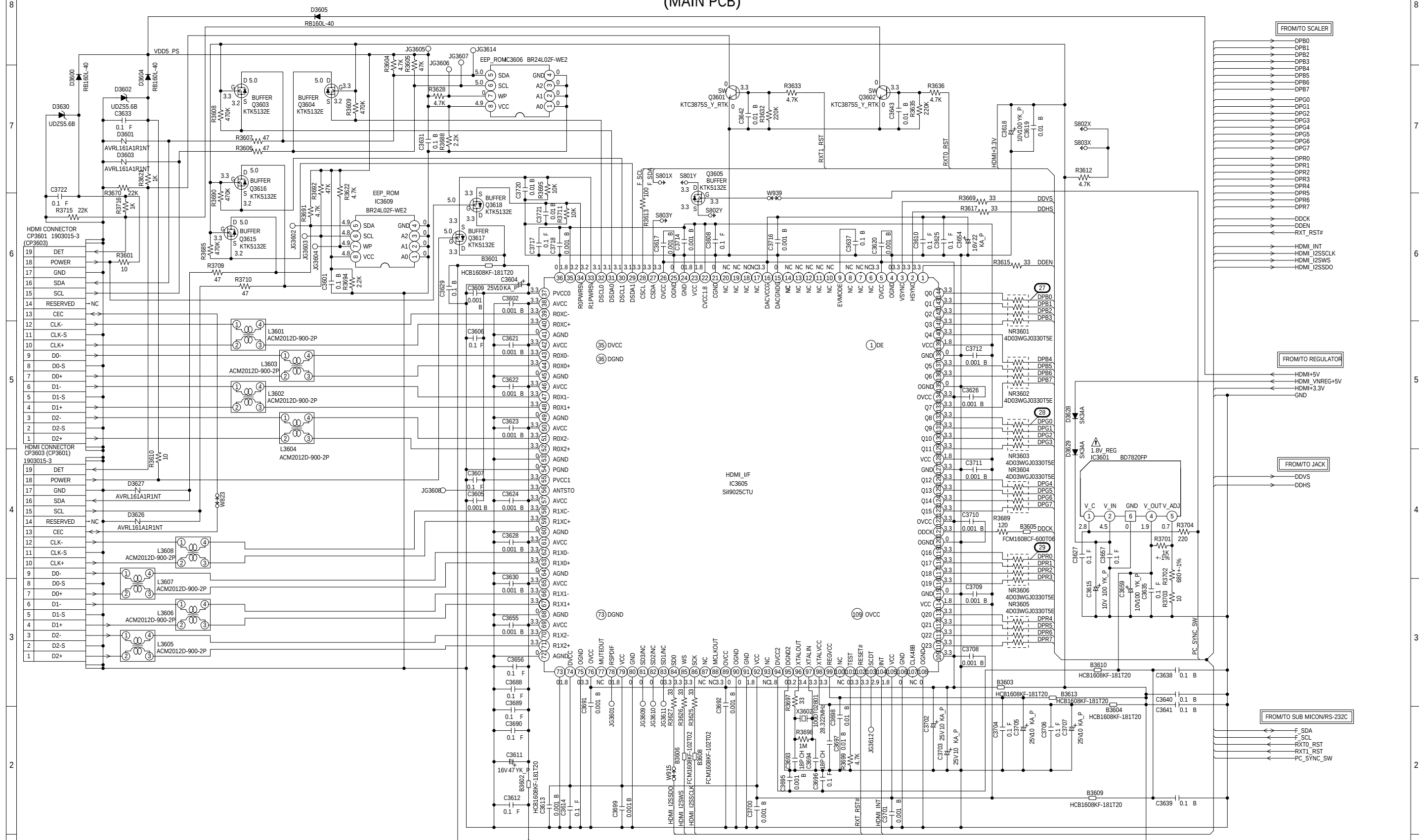
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED
WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST
WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION: SINCE THESE PARTS MARKED BY  ARE
CRITICAL FOR SAFETY, USE ONES
DESCRIBED IN PARTS LIST ONLY.

ATTENTION: LES PIECES REPARÉES PAR UN  ETANT
DANGEREUSES AU POINT DE VUE SECURITE
N'UTILISER QUE CELLES DECRITES
DANS LA NOMENCLATURE DES PIECES.

PCB40
CMF111

INTERFACE_HDMI IC SCHEMATIC DIAGRAM (MAIN PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

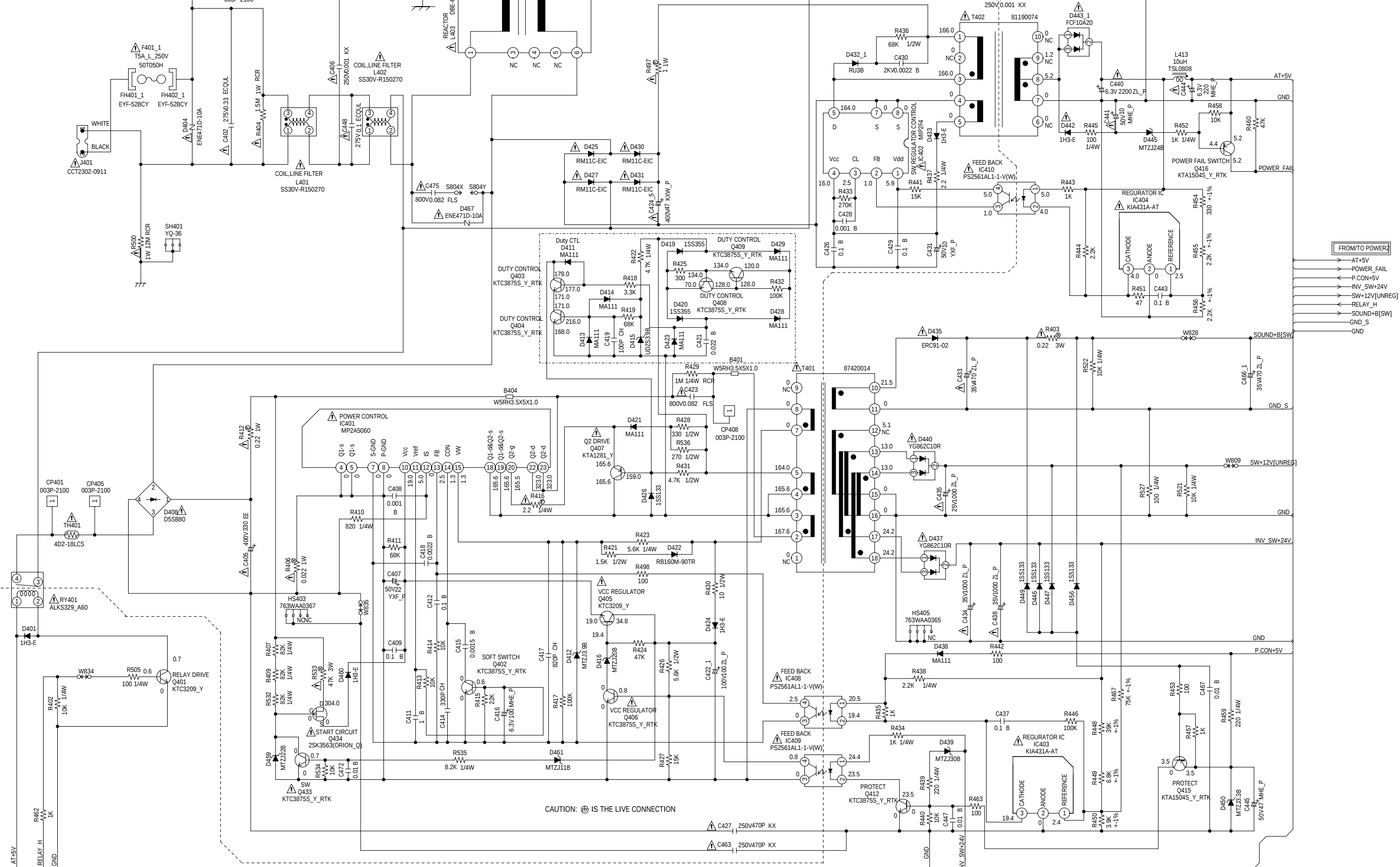
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION SINCE THESE PARTS MARKED BY  ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

ATTENTION: LES PIÈCES RÉPARÉES PAR UN  ÉTANT DANGEREUSES AU POINT DE VUE SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

PCBF40
CMF111

POWER1 SCHEMATIC DIAGRAM (POWER PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

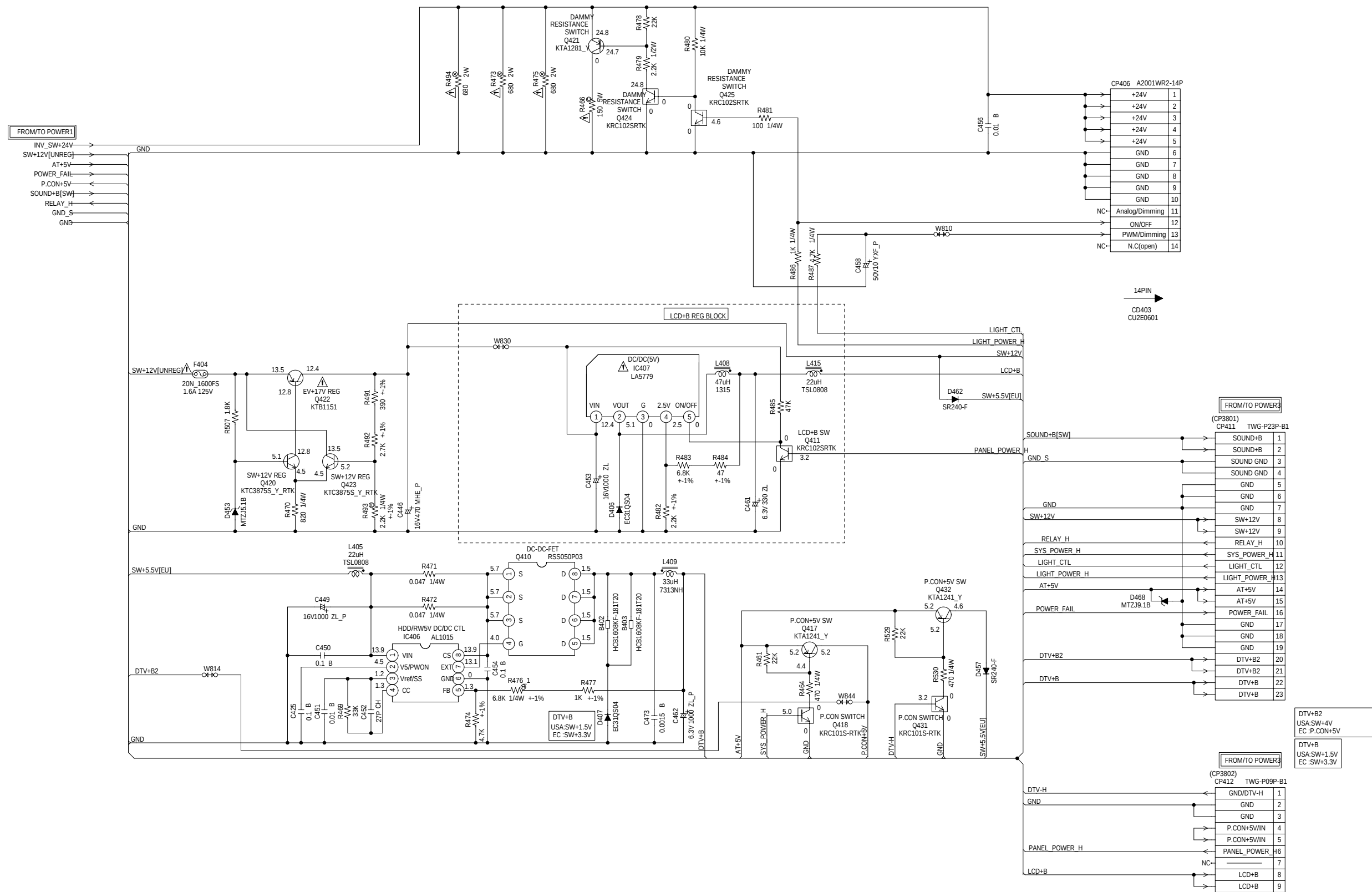
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

ATTENTION: LES PIECES REPAREES PAR UN ETANT DANGEREUSES AN POINT DE VUE SECURITE, N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES.

PCB240
CEF273

POWER2 SCHEMATIC DIAGRAM



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

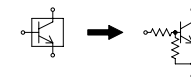
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION:  IS THE LIVE CONNECTION

CAUTION SINCE THESE PARTS MARKED BY  ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY .

ATTENTION: LES PIÈCES RÉPARÉES PAR UN  ÉTANT DANGEREUSES AU POINT DE VUE SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

CAUTION: DIGITAL TRANSISTOR



PCB240
CEF273

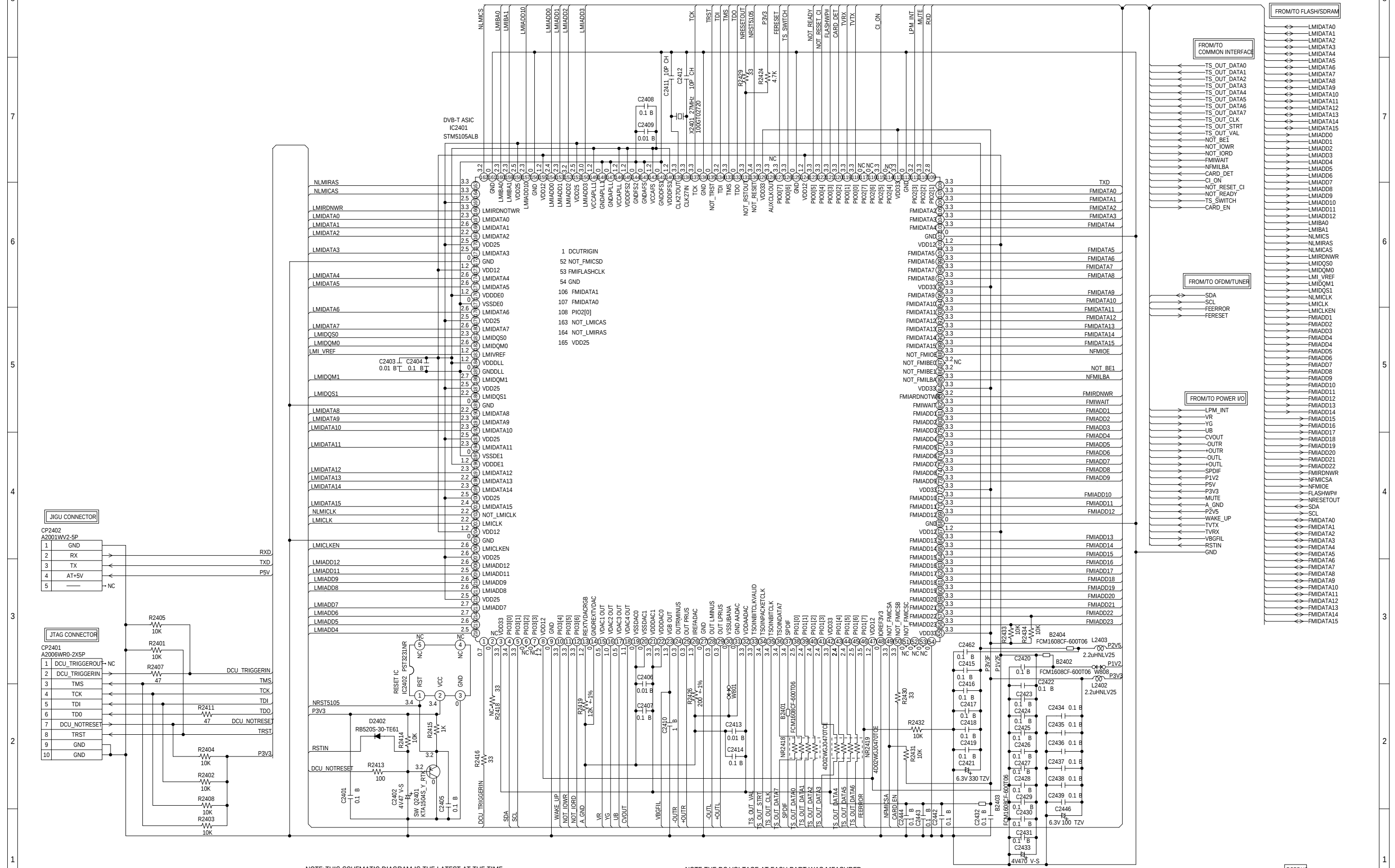
8
7
6
5
4
3
2
1



5

5

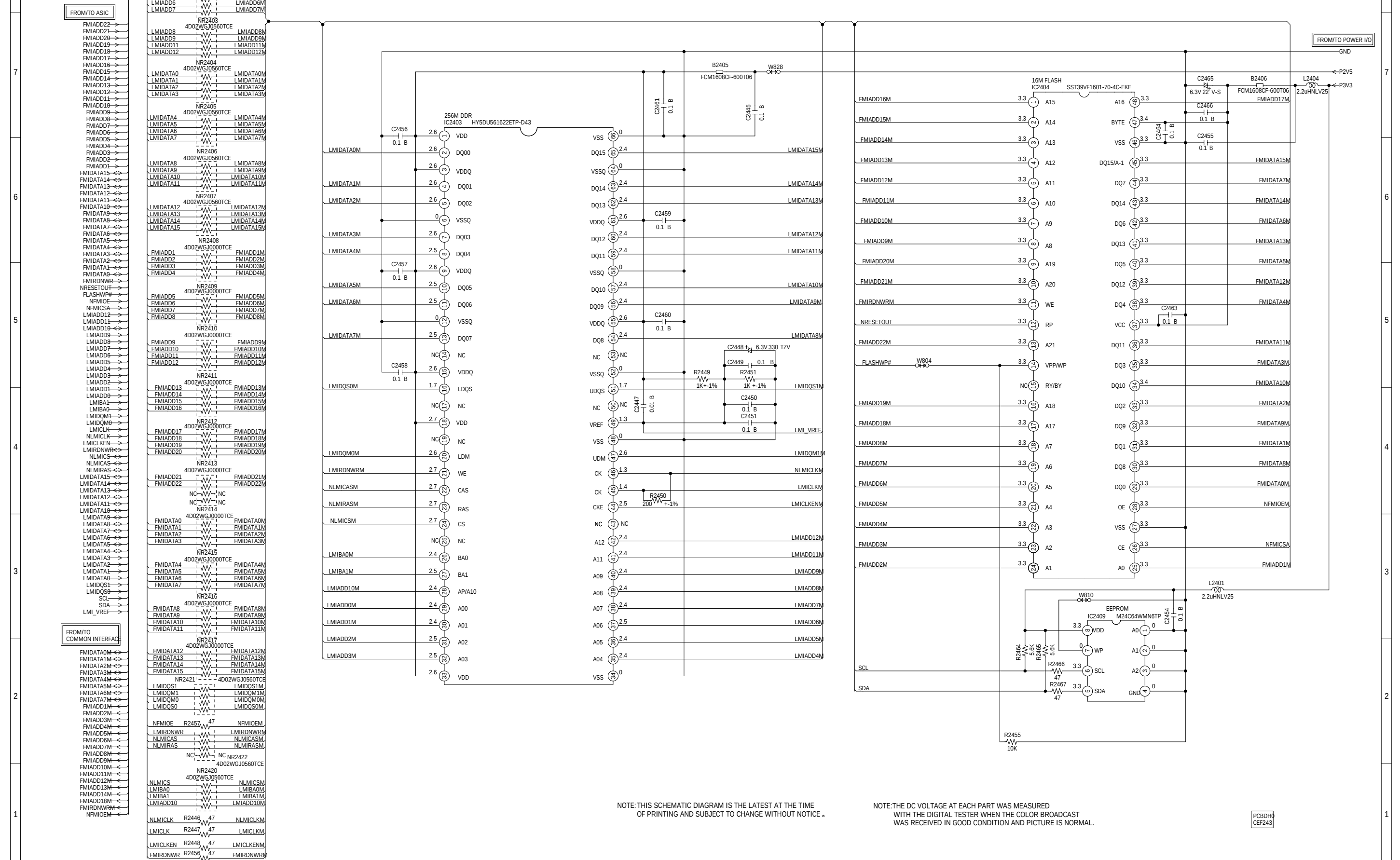
ASIC SCHEMATIC DIAGRAM
(DIGITAL PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

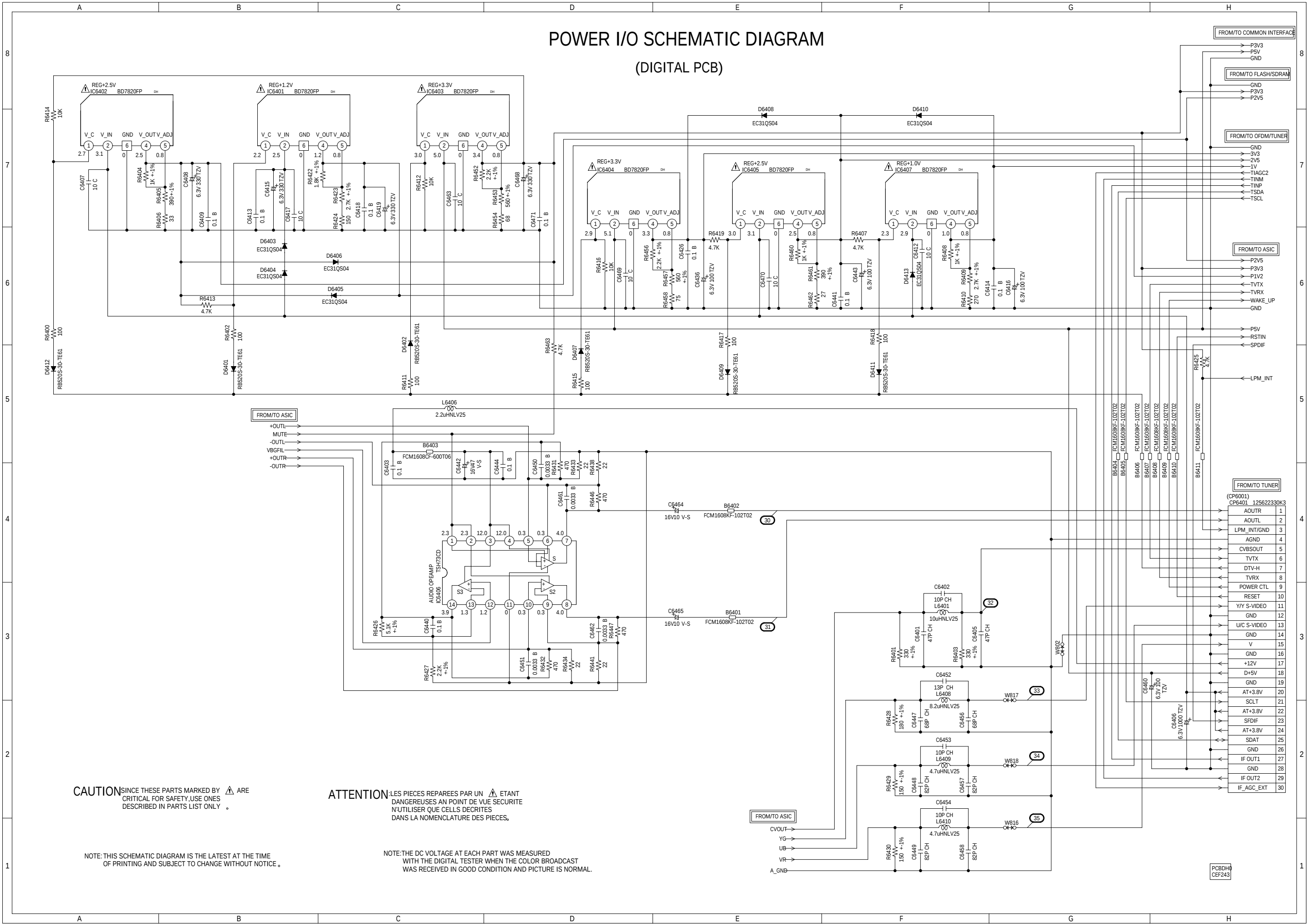
FLASH/ SDRAM SCHEMATIC DIAGRAM (DIGITAL PCB)



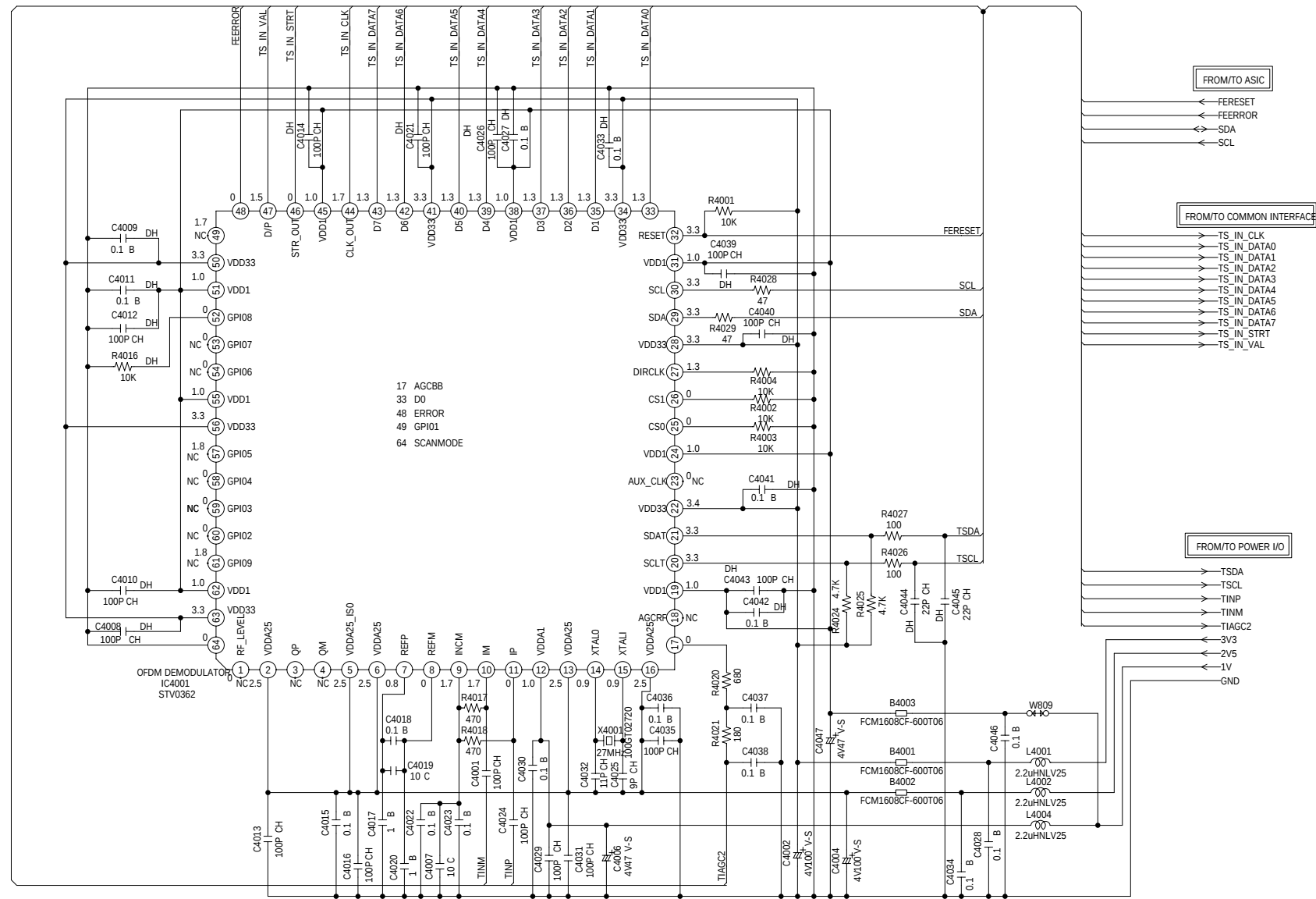
(DIGITAL PCB)



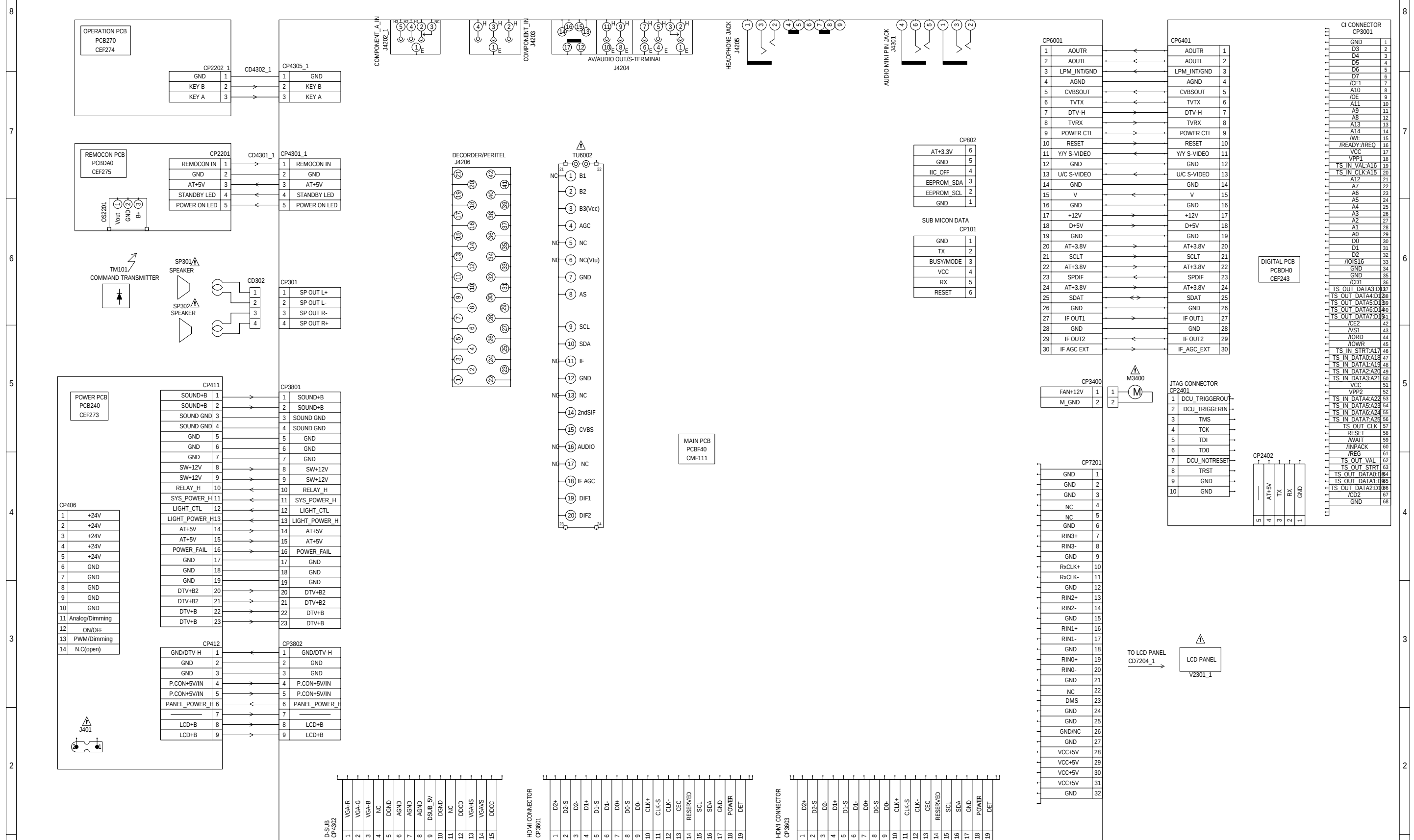
POWER I/O SCHEMATIC DIAGRAM
(DIGITAL PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

PCBDH0
CEF243

INTERCONNECTION DIAGRAM



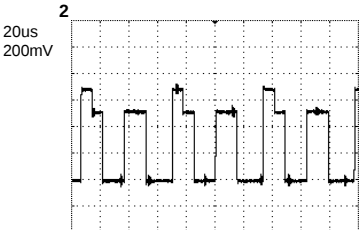
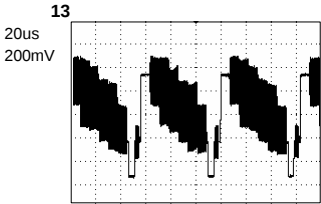
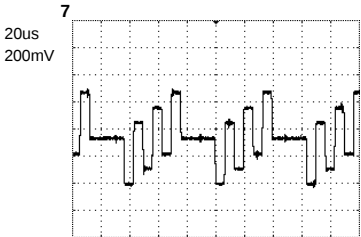
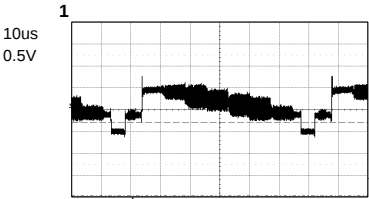
NOTE: THIS INTERCONNECTION DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE .

ATTENTION: LES PIÈCES RÉPARÉES PAR UN  ÉTANT DANGEREUSES AU POINT DE VUE SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

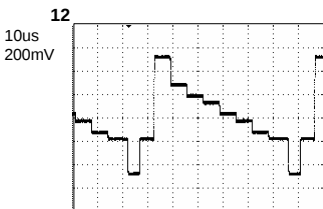
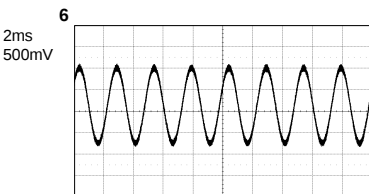
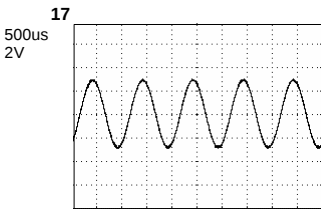
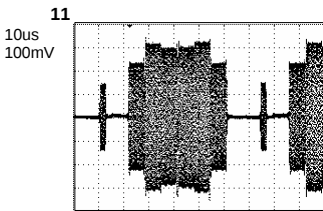
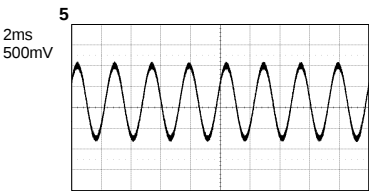
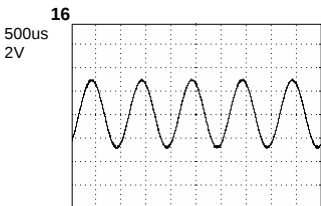
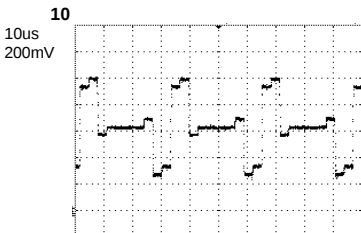
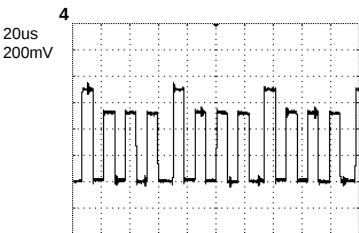
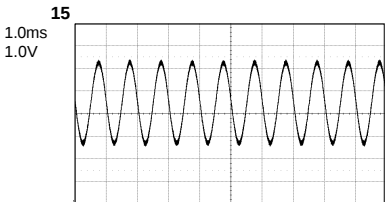
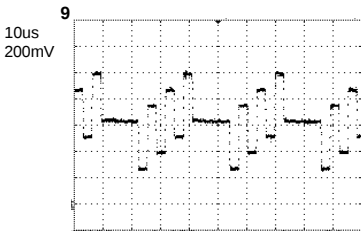
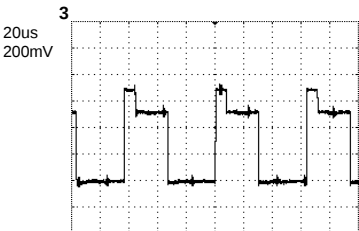
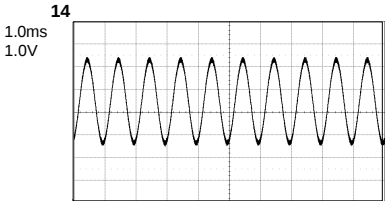
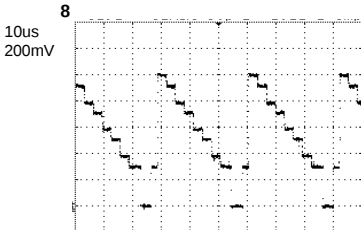
CAUTION SINCE THESE PARTS MARKED BY  ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY .

WAVEFORMS

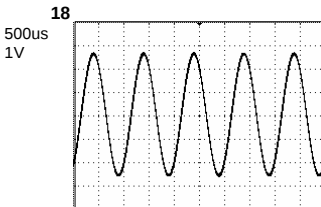
21PIN



AV JACK/SWITCH



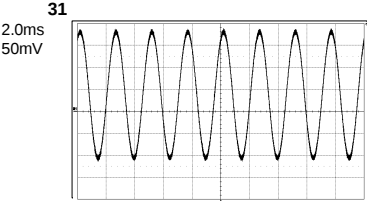
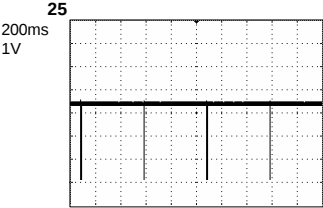
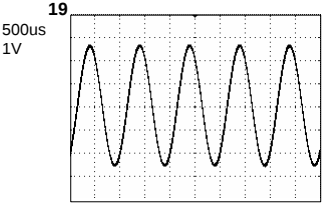
JACK



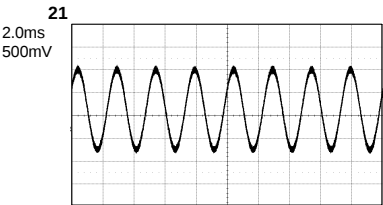
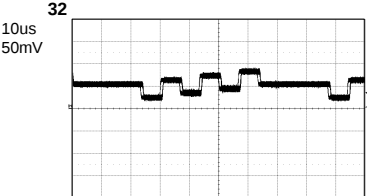
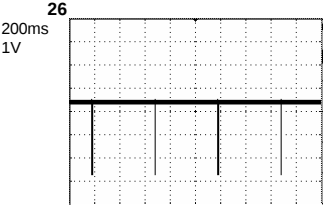
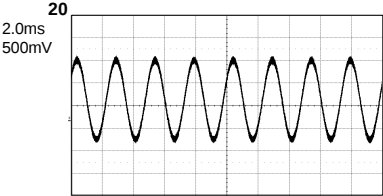
NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

WAVEFORMS

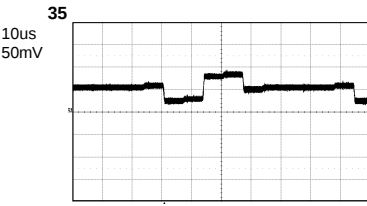
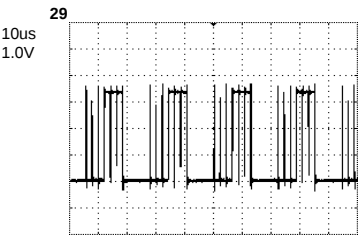
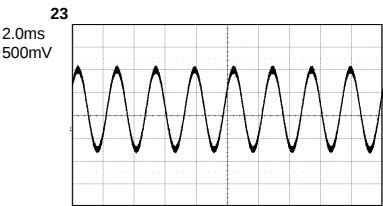
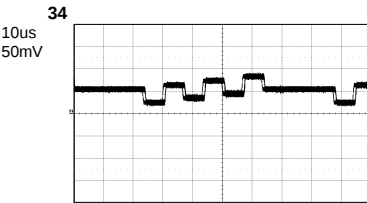
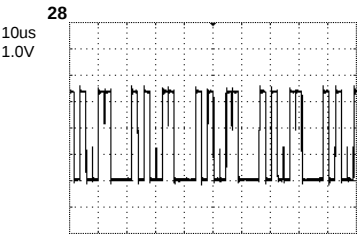
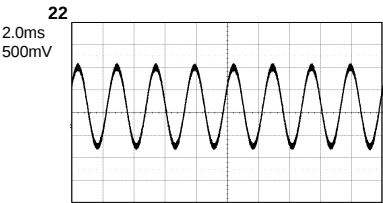
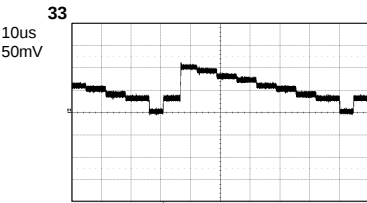
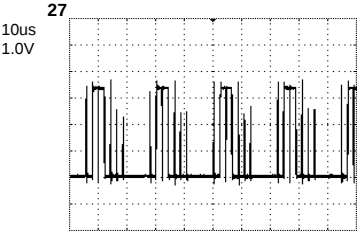
JACK



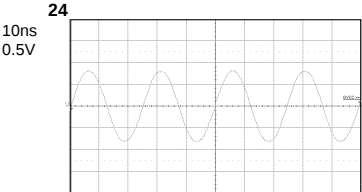
SOUND AMP/HEADPHONE AMP



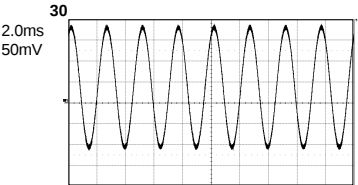
INTERFACE_HDMI IC



SCALER

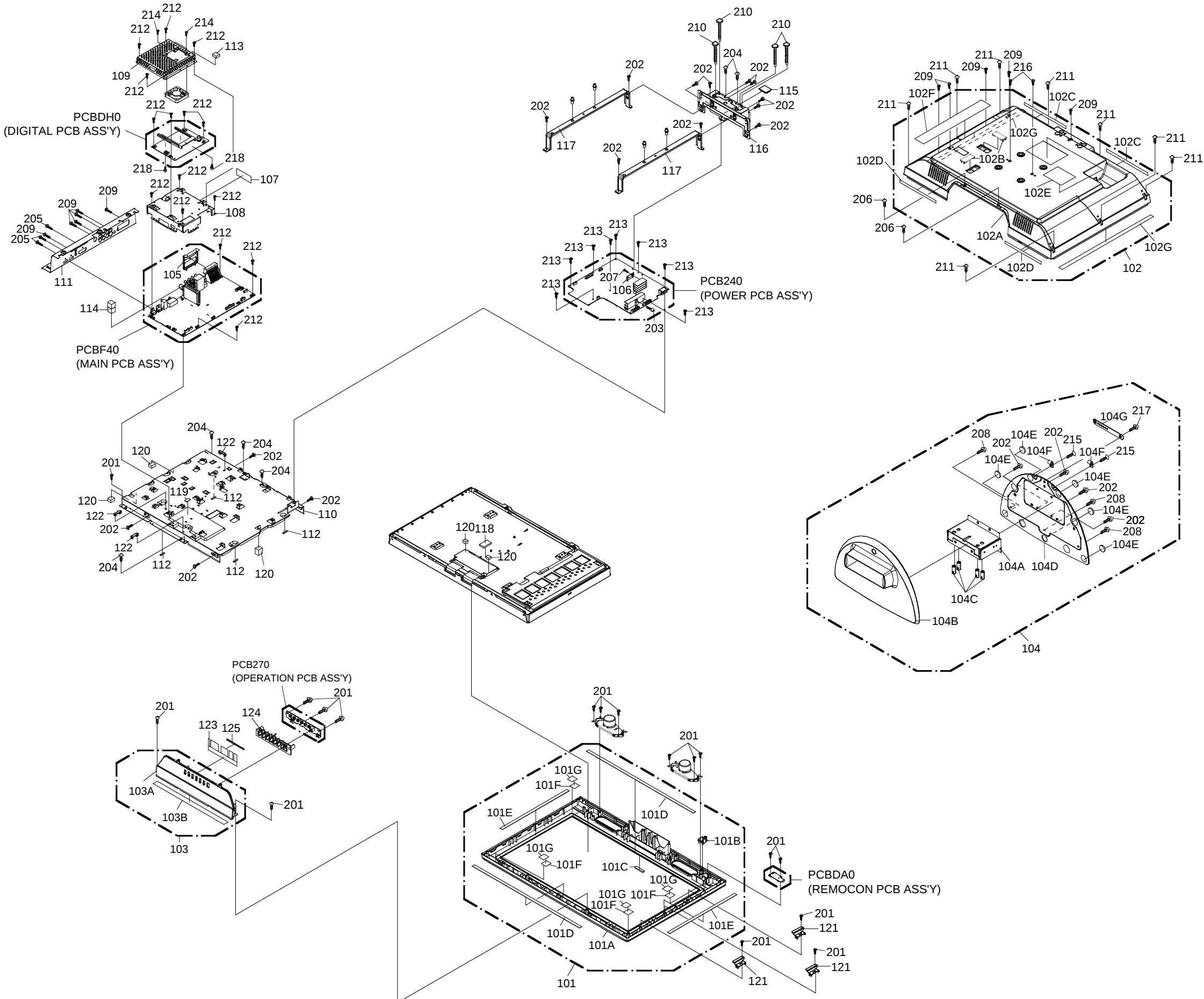


POWER I/O

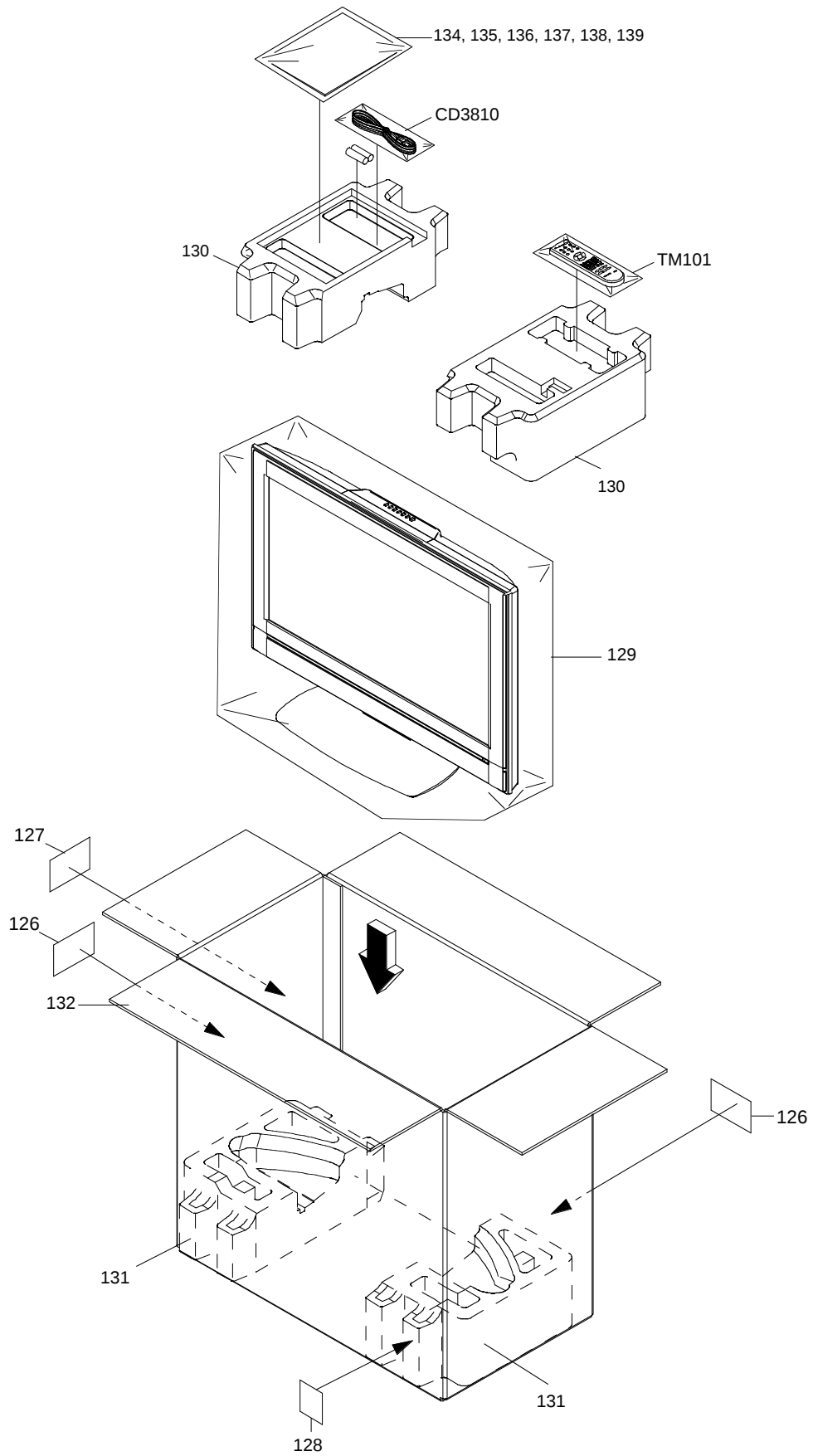


NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

MECHANICAL EXPLODED VIEW



MECHANICAL EXPLODED VIEW (PACKING DIAGRAM)



MECHANICAL REPLACEMENT PARTS LIST

Location No.	TSB P/N	Reference No.	Description
101	75008085	7A7010312A	FRONT CABI ASS'Y
101A	75008086	701WPJ1513	CABINET FRONT
101B	75006976	713WPA0407	GLASS LED
101C	75008087	7235490096	BADGE BRAND
101D	72781223	800WQ0A099	FELT SHEET
101E	72783111	800WQ0A116	FELT SHEET
101F	75007849	800WQ0A128	FELT SHEET 25*25*T0.5
101G	75007848	800WQ00131	FELT SHEET 25*25*T1.0
102	75008088	7A7020161A	BACK CABI ASS'Y
102A	75008089	702WPA1316	CABINET BACK
102B	75006982	706WPAA007	COVER CONNECTOR
102C	72798775	800WQ0A046	FELT SHEET
102D	72798779	800WQ0A079	FELT SHEET
102E	75008090	7225490270	SHEET RATING
102F	75008091	7230008321	SHEET JACK
102G	72794728	800WQ0A090	FELT SHEET
103	75007107	7A711A013B	PLATE BUTTON ASS'Y
103A	75007108	711WPD0734	PLATE BUTTON
103B	75006988	800WQ0A097	FELT SHEET
104	75008307	7A704A065A	STAND ASS'Y
104A	75008100	7G7610075A	FRAME STAND ASS'Y
104B	75008308	704WPBA045	STAND
104C	75008099	704WPA0081	HOLDER STAND
104D	75008097	761WSA0543	ANGLE STAND
104E	75008098	800WFA0122	CUSHION LEG
104F	75006979	899NAGCL14	CABLE CLAMP
104G	72781312	89900FB118	BAND
105	75006997	761WSA0432	SHIELD 21PIN
106	75007883	761WSA0459	SHIELD IC
107	72784177	7250000607	SHEET PE
108	75007859	752WSA0653	SHIELD SCALER
109	75007877	752WSA0677	SHIELD DIGITAL
110	75008106	761WSA0526	COVER LCD
111	75008105	761WSB0067	PLATE JACK
112	75008108	800WQ00120	FELT SHEET
113	72798807	8965TS1010	CUSHION 65TS10-10(10*10*25)
114	75007872	8965TS2010	CUSHION W8/H20/L10
115	75008102	761WPA0477	COVER HINGE
116	75008104	761WSA0466	ANGLE HINGE
117	75008103	761WSA0563	ANGLE MAIN
118	75007008	800WFAA029	CUSHION
119	75007884	800WQ00134	FELT SHEET 40*60*T0.5
120	75008109	8965TS1210	CUSHION W10/H12/L10
121	75008101	761WSA0561	ANGLE PANEL
122	75008107	899RFC21V0	HOLDER CORD
123	75006996	735WEAA006	SHEET CU
124	75007855	735WPB0370	BUTTON FRAME
125	75003961	8965TS0270	CUSHION W6/H2/L70
126	75008115	7230008353	SHEET CARTON
127	75008110	7230008354	SHEET BAR CODE
128	75007858	7230008369	SHEET DIGITAL
129	75008111	791WHA0129	LAMIFILM BAG
130	75008112	792PHA0019	PACKAGE TOP
131	75008113	792PHA0020	PACKAGE BOTTOM
132	75008114	793PCD0010	GIFT BOX
134	75007882	J32M0101A	INSTRUCTION BOOK(E)
135	75007878	J32M0110A	INSTRUCTION BOOK(I)
136	75007885	J32M0111A	INSTRUCTION BOOK(F)
137	75007879	J32M0114A	INSTRUCTION BOOK(S)
138	75008631	JB5PD500	POLYBAG,(RED CAUTION)INSTRUCTION
139	75008638	J32M0199A	INFORMATION SHEET(CORRECTION)
201	72798791	8110630A0U	SCREW TAP TITE(P) BRAZIER 3*10 CH
202	72781261	810A14080U	SCREW WASHER(A) M4*8 CH
203	72798789	8109I30A0U	SCREW TAP TITE(B) WH7 3*10 CH
204	72781277	8117540A0U	SCREW TAPPING(B0) TRUSS 4*10 CH
205	72784032	810213080S	SCREW PAN M3*8 BK
206	75007028	810223080S	SCREW BIND M3*8 BK
207	72798786	810763080U	SCREW TAP TITE(S) BRAZIER 3*8 CH
208	72798790	811063080U	SCREW TAP TITE(P) BRAZIER 3*8 CH
209	72784034	810923080S	SCREW TAP TITE(B) BIND 3*8 BK

MECHANICAL REPLACEMENT PARTS LIST

Location	No. TSB	P/N	Reference No.	Description
210	75008116		8167160E5U	SCREW WASHER(B) 6*55 CH
211	72784042		8110230A4S	SCREW TAP TITE(P) BIND 3*14 BK
212	72781247		810923060U	SCREW TAP TITE(B) BIND 3*6 CH
213	72781252		8109D30A0U	SCREW TAP TITE(B) WH8 3*10 CH
214	72795782		811022680U	SCREW TAP TITE(P) BIND 2.6*8 CH
215	72781274		8110K30A0U	SCREW TAP TITE(P) LAMI HEAD 3*10 CH
216	75007030		8110230A0S	SCREW,TAP TITE(P) BIND 3*10 BK
217	72781977		814623080U	SCREW TAP TITE(B) BIND 3*5.7+4*2.3 CH
218	75007886		8102220A0U	SCREW,BIND M2*10 CH

ELECTRICAL REPLACEMENT PARTS LIST

Location	No.	TSB P/N	Reference No.	Description	
RESISTORS					
△ R403		72796002	R3X28BR22J	R,METAL OXIDE	0.22 OHM 3W
△ R404		75007740	RC31X1155J	RC	1.5M OHM 1W
△ R406		75007729	R3K681S22J	R,METAL OXIDE	0.022 OHM 1W
△ R412		72794633	R63881R22J	R,FUSE	0.22 OHM 1W
△ R416		72798029	R655842R2J	R,FUSE	2.2 OHM 1/4W
△ R466		75007732	R5X2AD151J	R,CEMENT	150 OHM 5W
△ R473		75007730	R3K78A681J	R,METAL OXIDE	680 OHM 2W
△ R475		75007730	R3K78A681J	R,METAL OXIDE	680 OHM 2W
△ R494		75007730	R3K78A681J	R,METAL OXIDE	680 OHM 2W
△ R497		72795519	R65581010J	R,FUSE	1 OHM 1W
△ R500		75006901	RC31X1126J	RC	12M OHM 1W
△ R533		72797831	R3K28B473J	R,METAL OXIDE	47K OHM 3W
△ R3808		72781756	R65584470J	R,FUSE	47 OHM 1/4W
CAPACITORS					
C376		75007748	E7EYF3102M	CE	1000 UF 25V
C384		75007748	E7EYF3102M	CE	1000 UF 25V
△ C402		72794401	P2122B334M	CMP	0.33 UF 275V ECQUL
△ C405		75007897	E71LHH331D	CE	330 UF 400V
△ C406		72794409	CD39EOM13M	CC	0.001 UF 250V
C422		75007755	E7EY78101D	CE	100 UF 100V
△ C423		75007756	P4NAE6823H	CMPP	0.082 UF 800V
△ C424		75007757	E8E5FH470D	CE	47 UF 400V
△ C427		72797127	CD39B0MQ2K	CC	470 PF 250V
△ C433		75007759	E7EYF4471M	CE	470 UF 35V
△ C434		75008067	E7EYF4102M	CE	1000 UF 35V
△ C435		75007748	E7EYF3102M	CE	1000 UF 25V
△ C436		72794409	CD39EOM13M	CC	0.001 UF 250V
△ C438		75008067	E7EYF4102M	CE	1000 UF 35V
△ C440		75007760	E7EYF0222M	CE	2200 UF 6.3V
△ C441		75007761	E7ESU5100M	CE	10 UF 50V
△ C448		72795567	P2122B104M	CMP	0.1 UF 275V ECQUL
C449		75006425	E7EYF2102M	CE	1000 UF 16V
C453		75006425	E7EYF2102M	CE	1000 UF 16V
C461		75008068	E7EYU0331M	CE	330 UF 6.3V
△ C463		72797127	CD39B0MQ2K	CC	470 PF 250V
C466		75007759	E7EYF4471M	CE	470 UF 35V
△ C475		75007756	P4NAE6823H	CMPP	0.082 UF 800V
C3201		75006904	E7EYF2222M	CE	2200 UF 16V
DIODES					
D105		72781375	DE7RB5R62B	DIODE ZENER	UDZS5.6B TE-17
D107		72781371	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
D108		72781375	DE7RB5R62B	DIODE ZENER	UDZS5.6B TE-17
D301		72783762	D28R11FS20	DIODE	EC11FS2-TE12L
D401		72783759	D4AT01H3E0	DIODE RECTIFIER	1H3-E
△ D404		72784073	D6C047110A	DIODE VARISTA	ENE471D-10A
D406		72797300	D28R1QS040	DIODE	EC31QS04-TE12L
D407		72797300	D28R1QS040	DIODE	EC31QS04-TE12L
△ D408		75006908	D2205SB800	DIODE,BRIDGE	D5SB80
D411		75007775	DGERMA1110	DIODE SILICON	MA111-(TX)
D412		72795542	D97U03R91B	DIODE,ZENER	MTZJ3.9B T-77
D413		75007775	DGERMA1110	DIODE SILICON	MA111-(TX)
D414		75007775	DGERMA1110	DIODE SILICON	MA111-(TX)
D415		75007774	DE7RB3R92B	DIODE ZENER	UDZS3.9B TE-17
D416		72797327	D97U02001B	DIODE,ZENER	MTZJ20B T-77
D419		72795897	DD7R0S3550	DIODE SILICON	1SS355 TE-17
D420		72795897	DD7R0S3550	DIODE SILICON	1SS355 TE-17
D421		75007775	DGERMA1110	DIODE SILICON	MA111-(TX)
D422		75007773	DD7R60M900	DIODE SCHOTTKY	RB160M-90TR
D423		75007775	DGERMA1110	DIODE SILICON	MA111-(TX)
D424		72783759	D4AT01H3E0	DIODE RECTIFIER	1H3-E
△ D425		72794473	D2WTRM11C0	DIODE SILICON	RM11C-EIC
D426		72794491	D1VT001330	DIODE,SILICON	1SS133T-77
△ D427		72794473	D2WTRM11C0	DIODE SILICON	RM11C-EIC
D428		75007775	DGERMA1110	DIODE SILICON	MA111-(TX)
D429		75007775	DGERMA1110	DIODE SILICON	MA111-(TX)
△ D430		72794473	D2WTRM11C0	DIODE SILICON	RM11C-EIC
△ D431		72794473	D2WTRM11C0	DIODE SILICON	RM11C-EIC
D432		75006910	D2BE0RU3B0	DIODE SILICON	RU3B LF-A5
D433		72783759	D4AT01H3E0	DIODE RECTIFIER	1H3-E
△ D435		75007771	D2CFC91020	DIODE SILICON	ERC91-02J11SC
△ D437		75007770	D2CA2C10R0	DIODE SCHOTTKY	YG862C10R
D438		75007775	DGERMA1110	DIODE SILICON	MA111-(TX)
D439		72794471	D97U03001B	DIODE,ZENER	MTZJ30B T-77
△ D440		75007770	D2CA2C10R0	DIODE SCHOTTKY	YG862C10R
△ D442		72783759	D4AT01H3E0	DIODE RECTIFIER	1H3-E
△ D443		75007769	D28A10A200	DIODE SILICON	FCF10A20
D445		72794479	D97U02401B	DIODE,ZENER	MTZJ24B T-77
D446		72794491	D1VT001330	DIODE,SILICON	1SS133T-77
D447		72794491	D1VT001330	DIODE,SILICON	1SS133T-77
D449		72794491	D1VT001330	DIODE,SILICON	1SS133T-77
D450		72797335	D97U03R31B	DIODE,ZENER	MTZJ3.3B T-77

ELECTRICAL REPLACEMENT PARTS LIST

Location	No.	TSB	P/N	Reference	No.	Description
DIODES						
	D453		72794469		D97U05R11B	DIODE,ZENER MTZJ5.1B T-77
	D456		72794491		D1VT001330	DIODE,SILICON 1SS133T-77
	D457		75007772		D2LXSR2400	DIODE SCHOTTKY SR240-F
	D459		72797328		D97U02201B	DIODE ZENER MTZJ22B T-77
	D460		72783759		D4AT01H3E0	DIODE RECTIFIER 1H3-E
	D461		72797325		D97U01101B	DIODE,ZENER MTZJ11B T-77
	D462		75007772		D2LXSR2400	DIODE SCHOTTKY SR240-F
△	D467		72784073		D6C047110A	DIODE VARISTA ENE471D-10A
	D468		72794481		D97U09R11B	DIODE,ZENER MTZJ9.1B T-77
	D802		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D803		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D804		72781371		DD7R20S300	DIODE SCHOTTKY RB520S-30-TE61
	D805		72781371		DD7R20S300	DIODE SCHOTTKY RB520S-30-TE61
	D806		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D807		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D808		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D809		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D810		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D811		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D812		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D813		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D814		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D818		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D2201		72794467		0021E9Q010	LED LTL-1BEFJ-002A
	D2402		72781371		DD7R20S300	DIODE SCHOTTKY RB520S-30-TE61
	D3201		72783766		DD7RB051L0	DIODE SCHOTTKY RB051L-40_TE25
	D3202		75006232		D4CRSK34A0	DIODE SCHOTTKY SK34A
	D3204		75006232		D4CRSK34A0	DIODE SCHOTTKY SK34A
	D3205		75006232		D4CRSK34A0	DIODE SCHOTTKY SK34A
	D3209		75006232		D4CRSK34A0	DIODE SCHOTTKY SK34A
	D3210		75006232		D4CRSK34A0	DIODE SCHOTTKY SK34A
	D3600		72781372		DD7R60L400	DIODE SCHOTTKY RB160L-40-TE25
	D3601		72781361		D77R1A1R10	DIODE VARISTA AVRL161A1R1NT
	D3602		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D3603		72781361		D77R1A1R10	DIODE VARISTA AVRL161A1R1NT
	D3604		72781372		DD7R60L400	DIODE SCHOTTKY RB160L-40-TE25
	D3605		72781372		DD7R60L400	DIODE SCHOTTKY RB160L-40-TE25
	D3626		72781361		D77R1A1R10	DIODE VARISTA AVRL161A1R1NT
	D3627		72781361		D77R1A1R10	DIODE VARISTA AVRL161A1R1NT
	D3628		75006232		D4CRSK34A0	DIODE SCHOTTKY SK34A
	D3629		75006232		D4CRSK34A0	DIODE SCHOTTKY SK34A
	D3630		72781375		DE7RB5R62B	DIODE ZENER UDZS5.6B TE-17
	D3804		72783759		D4AT01H3E0	DIODE RECTIFIER 1H3-E
	D4209		72781376		DE7RB6R82B	DIODE ZENER UDZS6.8B TE-17
	D4210		75006911		DE7RB4R72B	DIODE ZENER UDZS4.7B TE-17
	D4211		75006911		DE7RB4R72B	DIODE ZENER UDZS4.7B TE-17
	D4212		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4213		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4214		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4215		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4216		72781376		DE7RB6R82B	DIODE ZENER UDZS6.8B TE-17
	D4217		72781376		DE7RB6R82B	DIODE ZENER UDZS6.8B TE-17
	D4218		72781376		DE7RB6R82B	DIODE ZENER UDZS6.8B TE-17
	D4219		72781376		DE7RB6R82B	DIODE ZENER UDZS6.8B TE-17
	D4220		72781376		DE7RB6R82B	DIODE ZENER UDZS6.8B TE-17
	D4222		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4223		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4235		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4236		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4237		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4238		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4239		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4240		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4241		72795897		DD7R0S3550	DIODE SILICON 1SS355 TE-17
	D4242		72795897		DD7R0S3550	DIODE SILICON 1SS355 TE-17
	D4243		72795897		DD7R0S3550	DIODE SILICON 1SS355 TE-17
	D4244		72795897		DD7R0S3550	DIODE SILICON 1SS355 TE-17
	D4245		72795897		DD7R0S3550	DIODE SILICON 1SS355 TE-17
	D4246		72795897		DD7R0S3550	DIODE SILICON 1SS355 TE-17
	D4247		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4248		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4249		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4250		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4251		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4252		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4253		72784074		DE7RB1202B	DIODE ZENER UDZS12B TE-177
	D4254		72795897		DD7R0S3550	DIODE SILICON 1SS355 TE-17
	D4255		72795897		DD7R0S3550	DIODE SILICON 1SS355 TE-17
	D4256		72795897		DD7R0S3550	DIODE SILICON 1SS355 TE-17
	D4257		72795897		DD7R0S3550	DIODE SILICON 1SS355 TE-17
	D4258		72795897		DD7R0S3550	DIODE SILICON 1SS355 TE-17

ELECTRICAL REPLACEMENT PARTS LIST

Location	No.	TSB P/N	Reference No.	Description	
DIODES					
	D4259	72795897	DD7R0S3550	DIODE SILICON	1SS355 TE-17
	D4260	72794487	D97U01201B	DIODE,ZENER	MTZJ12B T-77
	D4261	72794487	D97U01201B	DIODE,ZENER	MTZJ12B T-77
	D4303	72781375	DE7RB5R62B	DIODE ZENER	UDZS5.6B TE-17
	D4305	72794491	D1VT001330	DIODE,SILICON	1SS133T-77
	D4313	72781375	DE7RB5R62B	DIODE ZENER	UDZS5.6B TE-17
	D6001	72794491	D1VT001330	DIODE,SILICON	1SS133T-77
	D6401	72781371	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
	D6402	72781371	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
	D6403	72797300	D28R1QS040	DIODE	EC31QS04-TE12L
	D6404	72797300	D28R1QS040	DIODE	EC31QS04-TE12L
	D6405	72797300	D28R1QS040	DIODE	EC31QS04-TE12L
	D6406	72797300	D28R1QS040	DIODE	EC31QS04-TE12L
	D6407	72781371	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
	D6408	72797300	D28R1QS040	DIODE	EC31QS04-TE12L
	D6409	72781371	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
	D6410	72797300	D28R1QS040	DIODE	EC31QS04-TE12L
	D6411	72781371	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
	D6412	72781371	DD7R20S300	DIODE SCHOTTKY	RB520S-30-TE61
	D6413	72797300	D28R1QS040	DIODE	EC31QS04-TE12L
ICS					
	IC101	75008069	S32K01CM01	MEMORY DATA	R5F21244SNFP
	IC105	72795101	I9UF032290	IC	PST3229NR
	IC300	72797570	I0QJP21510	IC	NJM2151AV(TE1)
△	IC301	75006915	I0KJP89320	IC	TDA8932T
△	IC401	75007778	I2GT050600	IC	MP2A5060
△	IC402	75007787	I5SD0P2F40	IC	MIP2F4
△	IC403	72794508	I1KJ9A431A	IC	KIA431A-AT
△	IC404	72794508	I1KJ9A431A	IC	KIA431A-AT
	IC406	75003918	I1LF010150	IC	AL1015
△	IC407	75006239	I03T057790	IC	LA5779-E
△	IC408	72794512	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)
△	IC409	72794512	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)
△	IC410	72794512	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)
	IC801	75008070	S32K01CE01	MEMORY DATA	M24256-BWMN6TP
	IC802	72795101	I9UF032290	IC	PST3229NR
	IC803	75008071	S32K01CM02	MEMORY DATA	VCT6973G-FA-B3-000
	IC2401	75007786	I5PK051050	IC	STM5105ALB
	IC2402	72796084	I9UF032310	IC	PST3231NR
	IC2403	72783776	ICLJ022ET5	IC	HY5DU561622ETP-D43
	IC2404	75008072	S32K01CF01	MEMORY DATA	SST39VF1601-70-4C-EKE
	IC2409	75007783	I5PJ0064W0	IC	M24C64WMN6TP
	IC3001	75007780	I55F045FT0	IC	TC74LCX245FT(EL)
	IC3002	75007782	I55J0X2440	IC	TC74LCX244FT(EL,K)
	IC3003	75007782	I55J0X2440	IC	TC74LCX244FT(EL,K)
	IC3004	75007782	I55J0X2440	IC	TC74LCX244FT(EL,K)
	IC3005	75007782	I55J0X2440	IC	TC74LCX244FT(EL,K)
	IC3006	75007781	I55J0CX020	IC	TC74LCX02FT(EL)
	IC3007	75007779	I55F0125F0	IC	TC7SH125FU(TE85L,F
△	IC3201	72781440	I07F0COWF0	IC	BA00BCOWFP-E2
△	IC3202	75003918	I1LF010150	IC	AL1015
△	IC3203	72783780	I07F078200	IC	BD7820FP-E2
△	IC3204	72783780	I07F078200	IC	BD7820FP-E2
△	IC3205	72797596	I1KF98D050	IC	KIA78D05F
△	IC3601	72783780	I07F078200	IC	BD7820FP-E2
	IC3605	75007789	IG1F090250	IC	SI19025CTU
	IC3606	75007791	S32M01DE02	MEMORY DATA	BR24L02F-WE2
	IC3609	75007792	S32M01DE03	MEMORY DATA	BR24L02F-WE2
△	IC3801	72781440	I07F0COWF0	IC	BA00BCOWFP-E2
	IC4001	75007784	I5PK003620	IC	STV0362
	IC4201	72795100	I0UF015020	IC	MM1502XNRE
	IC4202	72794502	I0UF015010	IC	MM1501XNRE
	IC4203	72794502	I0UF015010	IC	MM1501XNRE
	IC4204	72797567	I0QF025840	IC	NJM2584AM(TE1)
	IC4205	72797567	I0QF025840	IC	NJM2584AM(TE1)
	IC4206	72794502	I0UF015010	IC	MM1501XNRE
	IC4303	72795918	I0QF02534V	IC	NJM2534V(TE2)
	IC4304	72795918	I0QF02534V	IC	NJM2534V(TE2)
	IC6001	75007776	I0CJ040530	IC	SN74LV4053APWR
△	IC6401	72783780	I07F078200	IC	BD7820FP-E2
△	IC6402	72783780	I07F078200	IC	BD7820FP-E2
△	IC6403	72783780	I07F078200	IC	BD7820FP-E2
△	IC6404	72783780	I07F078200	IC	BD7820FP-E2
△	IC6405	72783780	I07F078200	IC	BD7820FP-E2
	IC6406	75007777	I0WFOH73C0	IC	TSH73CDT
△	IC6407	72783780	I07F078200	IC	BD7820FP-E2
TRANSISTORS					
	Q101	72783825	T2AA5132E0	FET	KTK5132E-RTK/P
	Q102	72783825	T2AA5132E0	FET	KTK5132E-RTK/P
	Q300	72795962	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
	Q301	72795962	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK

ELECTRICAL REPLACEMENT PARTS LIST

Location	No.	TSB	P/N	Reference	No.	Description
TRANSISTORS						
	Q302		72794566	TAAA1504SY		TRANSISTOR SILICON KTA1504S_Y_RTK
	Q303		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q304		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q305		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q321		72798366	TPAA05001		COMPOUND TRANSISTOR KRA101SRTK
	Q401		72794570	TCAT03209Y		TRANSISTOR SILICON KTC3209_Y-AT
	Q402		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q403		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q404		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
△	Q405		72794570	TCAT03209Y		TRANSISTOR SILICON KTC3209_Y-AT
△	Q406		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
△	Q407		72796092	TAAT01281Y		TRANSISTOR SILICON KTA1281_Y
	Q408		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q409		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q410		72781799	TJ7M50P030		FET RSS050P03_TB
	Q411		72795962	TNAAB05003		COMPOUND TRANSISTOR KRC102SRTK
	Q412		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q415		72794566	TAAA1504SY		TRANSISTOR SILICON KTA1504S_Y_RTK
	Q416		72794566	TAAA1504SY		TRANSISTOR SILICON KTA1504S_Y_RTK
	Q417		72798323	TAAT01241Y		TRANSISTOR SILICON KTA1241_Y-AT
	Q418		72795122	TNAAA05001		COMPOUND TRANSISTOR KRC101S-RTK
	Q420		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q421		72796092	TAAT01281Y		TRANSISTOR SILICON KTA1281_Y
△	Q422		72798329	TBA0011510		TRANSISTOR SILICON KTB1151
	Q423		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q424		72795962	TNAAB05003		COMPOUND TRANSISTOR KRC102SRTK
	Q425		72795962	TNAAB05003		COMPOUND TRANSISTOR KRC102SRTK
	Q431		72795122	TNAAA05001		COMPOUND TRANSISTOR KRC101S-RTK
	Q432		72798323	TAAT01241Y		TRANSISTOR SILICON KTA1241_Y-AT
△	Q433		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
△	Q434		72795539	T25F035630		FET 2SK3563(ORION_Q)
	Q2401		72794566	TAAA1504SY		TRANSISTOR SILICON KTA1504S_Y_RTK
	Q3002		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q3003		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q3004		75003935	TAAA01664Y		TRANSISTOR SILICON KTA1664-Y-RTF/P
	Q3200		72798319	T77J011320		TRANSISTOR SILICON 2SB1132T100(Q,R)
	Q3201		72795962	TNAAB05003		COMPOUND TRANSISTOR KRC102SRTK
△	Q3202		72798375	TS3M000044		COMPOUND TRANSISTOR CPH6312-TL-E
	Q3205		75003935	TAAA01664Y		TRANSISTOR SILICON KTA1664-Y-RTF/P
	Q3206		72795962	TNAAB05003		COMPOUND TRANSISTOR KRC102SRTK
	Q3601		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q3602		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q3603		72783825	T2AA5132E0		FET KTK5132E-RTK/P
	Q3604		72783825	T2AA5132E0		FET KTK5132E-RTK/P
	Q3605		72783825	T2AA5132E0		FET KTK5132E-RTK/P
	Q3615		72783825	T2AA5132E0		FET KTK5132E-RTK/P
	Q3616		72783825	T2AA5132E0		FET KTK5132E-RTK/P
	Q3617		72783825	T2AA5132E0		FET KTK5132E-RTK/P
	Q3618		72783825	T2AA5132E0		FET KTK5132E-RTK/P
	Q3801		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q3802		75003935	TAAA01664Y		TRANSISTOR SILICON KTA1664-Y-RTF/P
	Q3803		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q3804		72795962	TNAAB05003		COMPOUND TRANSISTOR KRC102SRTK
	Q3805		72794566	TAAA1504SY		TRANSISTOR SILICON KTA1504S_Y_RTK
	Q3806		72796092	TAAT01281Y		TRANSISTOR SILICON KTA1281_Y
	Q3807		72795962	TNAAB05003		COMPOUND TRANSISTOR KRC102SRTK
	Q4201		72794566	TAAA1504SY		TRANSISTOR SILICON KTA1504S_Y_RTK
	Q4202		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4203		72794566	TAAA1504SY		TRANSISTOR SILICON KTA1504S_Y_RTK
	Q4204		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4205		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4207		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4208		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4209		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4210		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4214		72794566	TAAA1504SY		TRANSISTOR SILICON KTA1504S_Y_RTK
	Q4216		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4217		72798367	TPAAC05002		COMPOUND TRANSISTOR KRA103SRTK
	Q4218		72795962	TNAAB05003		COMPOUND TRANSISTOR KRC102SRTK
	Q4221		72794566	TAAA1504SY		TRANSISTOR SILICON KTA1504S_Y_RTK
	Q4222		72794566	TAAA1504SY		TRANSISTOR SILICON KTA1504S_Y_RTK
	Q4223		72794566	TAAA1504SY		TRANSISTOR SILICON KTA1504S_Y_RTK
	Q4224		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4303		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4304		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4305		72795963	TPAAB05001		COMPOUND TRANSISTOR KRA102SRTK
	Q4306		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4307		72794571	TCAA3875SY		TRANSISTOR SILICON KTC3875S_Y_RTK
	Q4308		72795963	TPAAB05001		COMPOUND TRANSISTOR KRA102SRTK
	Q4309		72795962	TNAAB05003		COMPOUND TRANSISTOR KRC102SRTK
	Q4310		72794567	TNAAC05002		COMPOUND TRANSISTOR KRC103SRTK

ELECTRICAL REPLACEMENT PARTS LIST

Location	No.	TSB P/N	Reference No.	Description	
TRANSISTORS					
	Q6001	72783825	T2AA5132E0	FET	KTK5132E-RTK/P
	Q6002	72783825	T2AA5132E0	FET	KTK5132E-RTK/P
	Q6005	72795962	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
COILS & TRANSFORMERS					
	L104	72784092	0216SD220J	COIL	22 UH
	L300	75007800	021U0L220M	COIL	22 UH
	L302	75007800	021U0L220M	COIL	22 UH
△	L401	72798950	029X000135	COIL,LINE FILTER	SS30V-R150270
△	L402	72798950	029X000135	COIL,LINE FILTER	SS30V-R150270
△	L403	75007802	02F1000001	COIL CHOKE	DBE-688
	L405	72796513	02167E220K	COIL	22 UH
	L408	75008073	021U0L470M	COIL	47 UH
	L409	75006247	02130G330M	COIL	33 UH
	L413	72796087	02167E100K	COIL	10 UH
	L415	72796513	02167E220K	COIL	22 UH
	L2401	72783800	0216SD2R2J	COIL	2.2 UH
	L2402	72783800	0216SD2R2J	COIL	2.2 UH
	L2403	72783800	0216SD2R2J	COIL	2.2 UH
	L2404	72783800	0216SD2R2J	COIL	2.2 UH
	L3001	72783800	0216SD2R2J	COIL	2.2 UH
	L3002	72783800	0216SD2R2J	COIL	2.2 UH
	L3201	72796513	02167E220K	COIL	22 UH
	L3202	75007801	021U0L330M	COIL	33 UH
	L3203	72796513	02167E220K	COIL	22 UH
	L3601	72798955	02D6000068	COIL CHOKE	ACM2012D-900-2P-T00
	L3602	72798955	02D6000068	COIL CHOKE	ACM2012D-900-2P-T00
	L3603	72798955	02D6000068	COIL CHOKE	ACM2012D-900-2P-T00
	L3604	72798955	02D6000068	COIL CHOKE	ACM2012D-900-2P-T00
	L3605	72798955	02D6000068	COIL CHOKE	ACM2012D-900-2P-T00
	L3606	72798955	02D6000068	COIL CHOKE	ACM2012D-900-2P-T00
	L3607	72798955	02D6000068	COIL CHOKE	ACM2012D-900-2P-T00
	L3608	72798955	02D6000068	COIL CHOKE	ACM2012D-900-2P-T00
	L4001	72783800	0216SD2R2J	COIL	2.2 UH
	L4002	72783800	0216SD2R2J	COIL	2.2 UH
	L4004	72783800	0216SD2R2J	COIL	2.2 UH
	L4201	72796557	021LA6101J	COIL	100 UH
	L4202	72796571	021LA6220J	COIL	22 UH
	L4203	72796571	021LA6220J	COIL	22 UH
	L4204	72796571	021LA6220J	COIL	22 UH
	L4205	72796571	021LA6220J	COIL	22 UH
	L4206	72796571	021LA6220J	COIL	22 UH
	L4207	72796571	021LA6220J	COIL	22 UH
	L4208	72796571	021LA6220J	COIL	22 UH
	L4209	75007796	0216MA220K	COIL	22 UH
	L4210	75007796	0216MA220K	COIL	22 UH
	L4211	72796571	021LA6220J	COIL	22 UH
	L4212	72796571	021LA6220J	COIL	22 UH
	L4213	72794524	021LA6100J	COIL	10 UH
	L4214	72796580	021LA6470J	COIL	47 UH
	L4215	72798913	0216S81R5M	COIL	1.5 UH
	L4216	72798913	0216S81R5M	COIL	1.5 UH
	L4217	72794524	021LA6100J	COIL	10 UH
	L4218	72798913	0216S81R5M	COIL	1.5 UH
	L4219	72796580	021LA6470J	COIL	47 UH
	L4221	72796580	021LA6470J	COIL	47 UH
	L4223	72796580	021LA6470J	COIL	47 UH
	L4224	75007797	0216S91R5M	COIL	1.5 UH
	L4225	72794524	021LA6100J	COIL	10 UH
	L4226	72796580	021LA6470J	COIL	47 UH
	L4227	72796571	021LA6220J	COIL	22 UH
	L4230	75007796	0216MA220K	COIL	22 UH
	L4231	75007796	0216MA220K	COIL	22 UH
	L4232	75007797	0216S91R5M	COIL	1.5 UH
	L4233	72796580	021LA6470J	COIL	47 UH
	L4305	72784092	0216SD220J	COIL	22 UH
	L4306	72784092	0216SD220J	COIL	22 UH
	L6401	75007798	0216SD100J	COIL	10 UH
	L6406	72783800	0216SD2R2J	COIL	2.2 UH
	L6408	75007799	0216SD8R2J	COIL	8.2 UH
	L6409	72798918	0216SD4R7J	COIL	4.7 UH
	L6410	72798918	0216SD4R7J	COIL	4.7 UH
△	T401	75007808	0487420014	TRANSFORMER,SWITCHING	87420014
△	T402	75007804	0481190074	TRANSFORMER,SWITCHING	81190074
JACKS					
△	J401	72799007	064Q1A0003	JACK,AC	CCT2302-0911
	J4202	75007815	060R431037	RCA JACK	RCA-349-00C-05
	J4203	75007814	060R411054	RCA JACK	RCA-349-00D-01
	J4204	75007816	063Y000089	JACK PLATE	RCA/DIN-501A-00B-03
	J4205	75004356	060J131021	HEADPHONE JACK	MSJ-035-08D_PC(O87)
	J4206	72799003	063D000077	SOCKET,21PIN	MRC-021V-27_PC
	J4301	75007811	060J151001	HEADPHONE JACK	MSJ-035-39D_B_PC_LF(O87)

ELECTRICAL REPLACEMENT PARTS LIST

Location	No.	TSB P/N	Reference No.	Description	
SWITCHES					
SW2201		72794688	0504101T34	SWITCH,TACT	EVQ21505R
SW2202		72794688	0504101T34	SWITCH,TACT	EVQ21505R
SW2203		72794688	0504101T34	SWITCH,TACT	EVQ21505R
SW2204		72794688	0504101T34	SWITCH,TACT	EVQ21505R
SW2205		72794688	0504101T34	SWITCH,TACT	EVQ21505R
SW2206		72794688	0504101T34	SWITCH,TACT	EVQ21505R
SW2207		72794688	0504101T34	SWITCH,TACT	EVQ21505R
P.C.BOARD ASSEMBLIES					
PCB240		75008074	A32K01C240L	POWER PCB ASS'Y	CEF273A
PCB270		75008075	A32K01C270L	OPERATION PCB ASS'Y	CEF274A
PCBDA0		75008076	A32K01CDA0L	REMOCON PCB ASS'Y	CEF275A
PCBDH0		75008077	A32K01CDH0L	DIGITAL PCB ASS'Y	CEF243A
PCBF40		75008078	A32K01CF40L	MAIN PCB ASS'Y	CMF111A
MISCELLANEOUS					
B301		72794356	024HT03564	CORE,BEADS	W4BRH3.5X6X1.0
B302		72794356	024HT03564	CORE,BEADS	W4BRH3.5X6X1.0
B303		72794356	024HT03564	CORE,BEADS	W4BRH3.5X6X1.0
B304		72794356	024HT03564	CORE,BEADS	W4BRH3.5X6X1.0
B305		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B306		72794356	024HT03564	CORE,BEADS	W4BRH3.5X6X1.0
B307		72794356	024HT03564	CORE,BEADS	W4BRH3.5X6X1.0
B401		72794357	024HT03553	CORE,BEADS	W5RH3.5X5X1.0
B402		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B403		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B404		72794357	024HT03553	CORE,BEADS	W5RH3.5X5X1.0
B801		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B802		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B803		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B804		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B805		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B806		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B807		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B808		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B809		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B810		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B811		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B812		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B813		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B817		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B818		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B819		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B2401		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B2402		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B2403		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B2404		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B2405		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B2406		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B3001		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B3002		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B3201		75007822	024HC51216	CORE,BEADS	HCB1608KF-121T20
B3601		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B3602		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B3603		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B3604		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B3605		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B3606		72783356	024HC51023	CORE,BEADS	FCM1608KF-102T02
B3608		72783356	024HC51023	CORE,BEADS	FCM1608KF-102T02
B3609		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B3610		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B3613		75006952	024HC51816	CORE,BEADS	HCB1608KF-181T20
B3801		72794356	024HT03564	CORE,BEADS	W4BRH3.5X6X1.0
B4001		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B4002		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B4003		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B4200		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B4202		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B4203		75007824	024HC56013	CORE,BEADS	FCM1608KF-601T02
B4204		75007824	024HC56013	CORE,BEADS	FCM1608KF-601T02
B4205		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B4206		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B4207		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B4208		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B4209		72794355	024HT03563	CORE,BEADS	W4BRH3.5X6X1.0X2
B4210		72794355	024HT03563	CORE,BEADS	W4BRH3.5X6X1.0X2
B4211		72794355	024HT03563	CORE,BEADS	W4BRH3.5X6X1.0X2
B4212		72794355	024HT03563	CORE,BEADS	W4BRH3.5X6X1.0X2
B4213		72794355	024HT03563	CORE,BEADS	W4BRH3.5X6X1.0X2
B4214		72783359	024HC56005	CORE,BEADS	FCM1608CF-600T06
B4215		75007823	024HC53306	CORE,BEADS	HCB1608KF-330T50
B4216		75007823	024HC53306	CORE,BEADS	HCB1608KF-330T50

ELECTRICAL REPLACEMENT PARTS LIST

Location	No.	TSB	P/N	Reference	No.	Description	
MISCELLANEOUS							
B4220	75007823			024HC53306		CORE,BEADS	HCB1608KF-330T50
B4221	75007823			024HC53306		CORE,BEADS	HCB1608KF-330T50
B4222	75007823			024HC53306		CORE,BEADS	HCB1608KF-330T50
B4223	75007823			024HC53306		CORE,BEADS	HCB1608KF-330T50
B4224	75007823			024HC53306		CORE,BEADS	HCB1608KF-330T50
B4226	75007823			024HC53306		CORE,BEADS	HCB1608KF-330T50
B4227	75007823			024HC53306		CORE,BEADS	HCB1608KF-330T50
B4228	75006261			024NC51021		CORE,BEADS	EBMS160808A102_RDC45
B4229	75006261			024NC51021		CORE,BEADS	EBMS160808A102_RDC45
B4301	75006261			024NC51021		CORE,BEADS	EBMS160808A102_RDC45
B4302	75006261			024NC51021		CORE,BEADS	EBMS160808A102_RDC45
B4303	72783359			024HC56005		CORE,BEADS	FCM1608CF-600T06
B4304	72783359			024HC56005		CORE,BEADS	FCM1608CF-600T06
B4305	72783359			024HC56005		CORE,BEADS	FCM1608CF-600T06
B4306	75006952			024HC51816		CORE,BEADS	HCB1608KF-181T20
B4307	75006952			024HC51816		CORE,BEADS	HCB1608KF-181T20
B4309	75006952			024HC51816		CORE,BEADS	HCB1608KF-181T20
B4310	72783359			024HC56005		CORE,BEADS	FCM1608CF-600T06
B4314	75006261			024NC51021		CORE,BEADS	EBMS160808A102_RDC45
B4315	75006261			024NC51021		CORE,BEADS	EBMS160808A102_RDC45
B4317	75006952			024HC51816		CORE,BEADS	HCB1608KF-181T20
B4318	75006952			024HC51816		CORE,BEADS	HCB1608KF-181T20
B4323	72783359			024HC56005		CORE,BEADS	FCM1608CF-600T06
B4324	75006952			024HC51816		CORE,BEADS	HCB1608KF-181T20
B4325	75006952			024HC51816		CORE,BEADS	HCB1608KF-181T20
B4327	75006261			024NC51021		CORE,BEADS	EBMS160808A102_RDC45
B4328	75006261			024NC51021		CORE,BEADS	EBMS160808A102_RDC45
B6001	75007824			024HC56013		CORE,BEADS	FCM1608KF-601T02
B6003	72794355			024HT03563		CORE,BEADS	W4BRH3.5X6X1.0X2
B6401	72783356			024HC51023		CORE,BEADS	FCM1608KF-102T02
B6402	72783356			024HC51023		CORE,BEADS	FCM1608KF-102T02
B6403	72783359			024HC56005		CORE,BEADS	FCM1608CF-600T06
B6404	72783356			024HC51023		CORE,BEADS	FCM1608KF-102T02
B6405	72783356			024HC51023		CORE,BEADS	FCM1608KF-102T02
B6406	72783356			024HC51023		CORE,BEADS	FCM1608KF-102T02
B6407	72783356			024HC51023		CORE,BEADS	FCM1608KF-102T02
B6408	72783356			024HC51023		CORE,BEADS	FCM1608KF-102T02
B6409	72783356			024HC51023		CORE,BEADS	FCM1608KF-102T02
B6410	72783356			024HC51023		CORE,BEADS	FCM1608KF-102T02
B6411	72783356			024HC51023		CORE,BEADS	FCM1608KF-102T02
B7201	75006952			024HC51816		CORE,BEADS	HCB1608KF-181T20
BT001	75006953			141R003018		BATTERY,MANGAN	GR6M
BT002	75006953			141R003018		BATTERY,MANGAN	GR6M
CD302	75008079			06CU144202		CORD CONNECTOR	CU144202
CD403	75008080			06CU2E0601		CORD CONNECTOR	CU2E0601
CP101	72796800			069S260629		CONNECTOR PCB SIDE	A2001WV2-6P
CP301	72796793			069S140419		CONNECTOR PCB SIDE	A2502WV2-4P
CP401	72796768			069D01001A		CONNECTOR PCB SIDE	003P-2100
CP405	72796768			069D01001A		CONNECTOR PCB SIDE	003P-2100
CP406	75006958			069S2E0639		CONNECTOR PCB SIDE	A2001WR2-14P
CP408	72796768			069D01001A		CONNECTOR PCB SIDE	003P-2100
CP411	75006956			06977N001B		CONNECTOR PCB SIDE	TWG-P23P-B1
CP412	75006957			069779001B		CONNECTOR PCB SIDE	TWG-P09P-B1
CP413	72796768			069D01001A		CONNECTOR PCB SIDE	003P-2100
CP802	72796800			069S260629		CONNECTOR PCB SIDE	A2001WV2-6P
△ CD3810	75007836			120Q155804		CORD AC	P205-1324-4
CD4301	75008081			06CU256001		CORD CONNECTOR	CU256001
CD4302	75007832			06CU232401		CORD CONNECTOR	CU232401
CD7204	75008082			06CHRU2002		CORD CONNECTOR	CHRU2002
CP2201	72796799			069S250639		CONNECTOR PCB SIDE	A2001WR2-5P
CP2202	72796795			069S230639		CONNECTOR PCB SIDE	A2001WR2-3P
CP2401	75007829			069S250679		CONNECTOR PCB SIDE	A2006WR0-2X5P
CP2402	72796798			069S250629		CONNECTOR PCB SIDE	A2001WV2-5P
CP3001	75007828			069EN68020		CONNECTOR PCB SIDE	36_5027_068_130_831+
CP3002	75007825			063M800002		HOLDER,IC	30_5027_000_102_000+
CP3400	72796080			069S220629		CONNECTOR PCB SIDE	A2001WV2-2P
CP3601	75006963			0694YJ3018		CONNECTOR PCB SIDE	1903015-3
CP3603	75006963			0694YJ3018		CONNECTOR PCB SIDE	1903015-3
CP3801	75006964			06977NM020		CONNECTOR PCB SIDE	127301123K2
CP3802	75006965			069779M020		CONNECTOR PCB SIDE	127301109K2
CP4301	72796798			069S250629		CONNECTOR PCB SIDE	A2001WV2-5P
CP4302	75007834			06G2S21501		CONNECTOR PCB SIDE	D229FD015G107BY
CP4305	72796795			069S230639		CONNECTOR PCB SIDE	A2001WR2-3P
CP6001	75007826			06972UM018		CONNECTOR PCB SIDE	TKC-W30P-P1
CP6401	75007827			06972UT018		CONNECTOR PCB SIDE	125622330K3
CP7201	75007835			06G3VWT01A		CONNECTOR PCB SIDE	20389-Y30E
CUSF41	72798759			800WFAA006		CUSHION A	
CUSF42	72798759			800WFAA006		CUSHION A	
CUSF43	72798759			800WFAA006		CUSHION A	
CUSF44	72795888			800WFAA008		CUSHION C	
EL2401	72797069			124116281A		EYE LET	XRY16X28BD

ELECTRICAL REPLACEMENT PARTS LIST

Location	No.	TSB P/N	Reference No.	Description	
	EL2402	72797070	124120301A	EYE LET	XRY20X30BD
△	F401	72796945	080NT05004	FUSE	50T050H
△	F404	72799203	0835C01603	MICRO FUSE	20N_1600FS
	FH401	72794496	06710T0009	HOLDER,FUSE	EYF-52BCY
	FH402	72794496	06710T0009	HOLDER,FUSE	EYF-52BCY
△	M3400	75007837	1519Y55L01	FAN MOTOR	2004KL-04W-B30-M09
	NR801	72799240	110P4470M4	R,NETWORK	4D03WGJ0470T5E
	NR802	72799240	110P4470M4	R,NETWORK	4D03WGJ0470T5E
	NR2401	72783803	110P4560M5	R,NETWORK	4D02WGJ0560TCE
	NR2402	72783803	110P4560M5	R,NETWORK	4D02WGJ0560TCE
	NR2403	72783803	110P4560M5	R,NETWORK	4D02WGJ0560TCE
	NR2404	72783803	110P4560M5	R,NETWORK	4D02WGJ0560TCE
	NR2405	72783803	110P4560M5	R,NETWORK	4D02WGJ0560TCE
	NR2406	72783803	110P4560M5	R,NETWORK	4D02WGJ0560TCE
	NR2407	72783803	110P4560M5	R,NETWORK	4D02WGJ0560TCE
	NR2408	75007838	110P4000M5	R,NETWORK	4D02WGJ0000TCE
	NR2409	75007838	110P4000M5	R,NETWORK	4D02WGJ0000TCE
	NR2410	75007838	110P4000M5	R,NETWORK	4D02WGJ0000TCE
	NR2411	75007838	110P4000M5	R,NETWORK	4D02WGJ0000TCE
	NR2412	75007838	110P4000M5	R,NETWORK	4D02WGJ0000TCE
	NR2413	75007838	110P4000M5	R,NETWORK	4D02WGJ0000TCE
	NR2414	75007838	110P4000M5	R,NETWORK	4D02WGJ0000TCE
	NR2415	75007838	110P4000M5	R,NETWORK	4D02WGJ0000TCE
	NR2416	75007838	110P4000M5	R,NETWORK	4D02WGJ0000TCE
	NR2417	75007838	110P4000M5	R,NETWORK	4D02WGJ0000TCE
	NR2418	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR2419	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR2420	72783803	110P4560M5	R,NETWORK	4D02WGJ0560TCE
	NR2421	72783803	110P4560M5	R,NETWORK	4D02WGJ0560TCE
	NR2422	72783803	110P4560M5	R,NETWORK	4D02WGJ0560TCE
	NR3001	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR3002	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR3003	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR3004	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR3005	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR3006	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR3007	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR3008	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR3009	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR3010	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR3011	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR3012	75007437	110P4470M5	R,NETWORK	4D02WGJ0470TCE
	NR3601	75003828	110P4330M4	R,NETWORK	4D03WGJ0330T5E
	NR3602	75003828	110P4330M4	R,NETWORK	4D03WGJ0330T5E
	NR3603	75003828	110P4330M4	R,NETWORK	4D03WGJ0330T5E
	NR3604	75003828	110P4330M4	R,NETWORK	4D03WGJ0330T5E
	NR3605	75003828	110P4330M4	R,NETWORK	4D03WGJ0330T5E
	NR3606	75003828	110P4330M4	R,NETWORK	4D03WGJ0330T5E
	OS2201	72784093	077A033001	REMOTE RECEIVER	ROM-V338TAO
△	RY401	72783830	0560V50119	RELAY	ALKS329 A60
	SH401	75007839	126D000044	TERMINAL PIN	YQ-36
	SH404	75007839	126D000044	TERMINAL PIN	YQ-36
△	SP301	75008083	070Y056003	SPEAKER	S0412F03
△	SP302	75008083	070Y056003	SPEAKER	S0412F03
	SH4301	75007839	126D000044	TERMINAL PIN	YQ-36
	SH4302	75007839	126D000044	TERMINAL PIN	YQ-36
	SH4303	75007839	126D000044	TERMINAL PIN	YQ-36
	SH4304	75007839	126D000044	TERMINAL PIN	YQ-36
	SH4305	75007839	126D000044	TERMINAL PIN	YQ-36
	SH4306	75007839	126D000044	TERMINAL PIN	YQ-36
	SH4307	75007839	126D000044	TERMINAL PIN	YQ-36
△	TH401	75007840	DSQ0VE4R0L	THERMISTOR	4D2-18LCS
	TM101	75007842	076RONY010	TRANSMITTER	R56-1241
△	TU6002	75007843	0164Y03002	DIGITAL TUNER	TDTG-S156D
△	V2301	75008084	09EA126007	LCD	T260XW03V0
	X101	75006971	100GT01615	CRYSTAL	B16000E007
	X801	75007845	100DT02007	CRYSTAL	DSX840GA
	X2401	72783182	100GT02720	CRYSTAL	B27000C005
	X3602	72783835	100DT02801	CRYSTAL	SMD-49
	X4001	72783182	100GT02720	CRYSTAL	B27000C005

ELECTRICAL REPLACEMENT PARTS LIST

RESISTOR

RC..... CARBON RESISTOR

CAPACITORS

CC..... CERAMIC CAPACITOR
CE..... ALUMI ELECTROLYTIC CAPACITOR
CP..... POLYESTER CAPACITOR
CPP..... POLYPROPYLENE CAPACITOR
CPL..... PLASTIC CAPACITOR
CMP..... METAL POLYESTER CAPACITOR
CMPL..... METAL PLASTIC CAPACITOR
CMPP..... METAL POLYPROPYLENE CAPACITOR