SHARP SERVICE MANUAL

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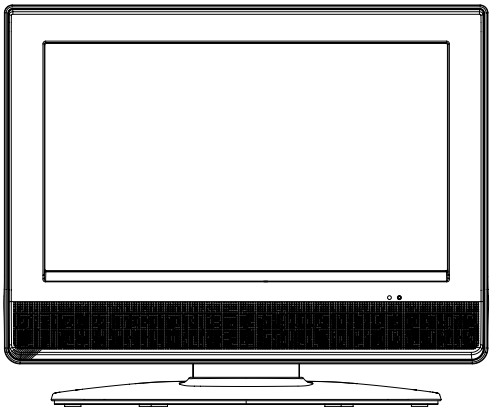


LCD COLOR TELEVISION

MODEL LC-26SH10U

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

CONTENTS

SHARP CORPORATION

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 eternal 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.

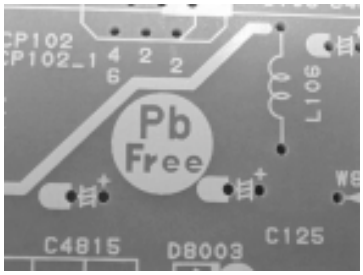
IMPORTANT

When you exchange IC and Transistor with a heat sink, apply silicon grease (YG6260M) 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).

ABOUT LEAD FREE SOLDER (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF printing on the PCB.
(Please refer to figures.)



Caution:

- Pb free solder has a higher melting point than standard solder;
  Typically the melting point is 86°F~104°F(30°C~40°C) higher.
  Please use a soldering iron with temperature control and adjust it to 650°F ± 20°F (350°C ± 10°C).
  In case of using high temperature soldering iron, please be careful not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100°F/ 600°C).
- All products with the printed circuit board with PbF printing must be serviced with lead free solder.
  When soldering or unsoldering, completely remove all of the solder from the pins or solder area,
  and be sure to heat the soldering points with the lead free solder until it melts sufficiently.

Recommendations

Recommended lead free solder composition is Sn-3.0Ag-0.5Cu.

GENERAL SPECIFICATIONS

G-1	**TV System**	LCD	LCD Size / Visual Size		26.0 inch / 660.53mmV
			LCD Type		Color TFT LCD
			Number of Pixels		1366(H) x 768(V)
			View Range	Left/Right	85/85 degree
				Up/Down	85/85 degree
		Color System			NTSC
		Speaker			2 Speaker
			Position		Front
			Size		2.2 x 5.0 inch
			Impedance		4 ohm
		Sound Output	Max		10W + 10W
			10%(Typical)		---
G-2	**Tuning System**	Broadcasting System	Analog		US System M
			Digital		ATSC(8VSB)/QAM
		Tuner and Receive CH	System		1Tuner
			Destination		US (W/CABLE)
			CH Coverage		2~69, 4A, A-5~A-1, A~I, J~W, W+1~W+84
		Intermediate Frequency Digital			44.00MHz
		Intermediate Frequency Analog	Picture(FP)		45.75MHz
			Sound(FS)		41.25MHz
			FP-FS		4.50MHz
		Preset CH			No
		Stereo/Dual TV Sound			US-Stereo
		Tuner Sound Muting			Yes
G-3	**Signal**	Video Signal	Input Level		1 V p-p/75 ohm
			Output Level		--
			S/N Ratio (Weighted)		--
			Horizontal Resolution at DVD Mode		--
					--
		RGB Signal	Output Level		--
		Audio Signal	Input Level		0.85 V p-p/50k ohm
			Output Level	at DVD	--
				at TV	0.85 V p-p/1k ohm
					0-1.70 V p-p/1k ohm (Variable out mode)
			Digital Output Level		0.5 V p-p/75 ohm
			S/N Ratio at DVD (Weighted)		--
			Harmonic Distortion		--
			Frequency Response :	at DVD	--
				at Video CD	--
				at SVCD	--
				at CD	--
G-4	**Power**	Power Source	AC		120V, 60Hz
			DC		--
		Power Consumption		at AC	145W at 120V 60Hz
				at DC	--
			Stand by (at AC)		1W at 120V 60Hz
			Energy Star		Yes
			Per Year		-- kWh/Year
		Protector	Power Fuse		Yes
			Safety Circuit		Yes
			IC Protector(Micro Fuse)		Yes
G-5	**Regulation**		Safety		UL/CSA/NOM
			Radiation		FCC/IC
			Laser		--
G-6	**Temperature**		Operation		0oC ~ +40oC
			Storage		-20oC ~ +60oC
G-7	**Operating Humidity**				Less than 80% RH
G-8	**Clock and Timer**	Clock			Yes
		Sleep Timer	Max Time		120 Min
			Step		10 Min
		On Timer	Program		No
		Off Timer	Program		No
		Game Timer			No
		Wake Up Timer			No
		Timer Back-up (at Power Off Mode)	more than		-- Min Sec

GENERAL SPECIFICATIONS

G-9	**Remote Control**	Unit		RC-MQ
		Glow in Dark Remocon		No
		Remocon Format		SHARP
		Format		SHARP
		Custom Code		10000 / 10001
		Power Source	Voltage(D.C)	3V
			UM size x pcs	UM-3 x 2 pcs
		Total Keys		40 Keys
		Keys	POWER	Yes
			FUNCTION	No
			Source POWER	No
			DISPLAY	Yes
			LIGHT	No
			SEARCH+	No
			SEARCH-	No
			PLAY	No
			REC	No
			STOP	No
			PAUSE	No
			SKIP+	No
			SKIP-	No
			VIEW MODE	Yes
			1	Yes
			2	Yes
			3	Yes
			4	Yes
			5	Yes
			6	Yes
			7	Yes
			8	Yes
			9	Yes
			0	Yes
			.	Yes
			ENT	Yes
			INPUT	Yes
			FLASH BACK	Yes
			VOL+	Yes
			VOL-	Yes
			CH+	Yes
			CH-	Yes
			SURROUND	Yes
			MUTE	Yes
			FREEZE	Yes
			MENU	Yes
			LEFT	Yes
			ENTER	Yes
			RIGHT	Yes
			UP	Yes
			DOWN	Yes
			EXIT	Yes
			RETURN	Yes
			FAVORITE A	Yes
			FAVORITE B	Yes
			FAVORITE C	Yes
			FAVORITE D	Yes
			FAVORITE	No
			SLEEP	Yes
			AUDIO	Yes
			AV MODE	Yes
			CC	Yes

GENERAL SPECIFICATIONS

G-10	Features	Auto Shut Off		Yes
		Auto Search		No
		Power On Memory		No
		Comb Filter		Yes 3 -D
		Game Position		No
		Auto Setup(Language/CH Program)		No
		Picture Setting(TV)		Yes
			AV Mode(Picture Preference)	Yes
			Brightness , Contrast , Color	Yes
			Tint	Yes
			Sharpness	Yes
			Color Temperature	Yes
			Cable Clear	No
		Picture Setting(PC)		No
			BRIGHTNESS , CONTRAST	No
			HOR POSITION , VER POSITION	No
			PHASE , CLOCK	No
			AUTO ADJUST	No
			RED , GREEN , BLUE	No
		Audio	MTS	Yes
			Tone Control (Bass/Treble/Balance)	Yes
			Stable Sound	No
			Surround	No
			BBE	No
			SRS WOW (SRS 3D/Focus/Tru Bass)	Yes
			Valiable Audio Out	Yes
		Tuning	CH Program	Yes
			Air/Cable	Yes
			ADD/DELETE	Yes
		Label	CH Label	Yes
			Video Label	Yes
		Favorite CH		Yes
		V-Chip		Yes
			Type	USA Type
		RRT Setup		Yes
		Lock	Hotel Lock	No
			Channel Lock	No
			Video Lock	No
			Panel Lock	No
		OSD Language		English French Spanish
		Closed Caption		Yes
		CC Advanced		Yes
		View Mode (Picture Size)		Yes
		Picture Scroll		Yes
		Cinema Mode		Yes
		Aspect		Yes
		Backlight		Yes
		PFC(Power Factor circuit)		No
		Freeze frame		Yes
		PIP/POP		No
		Direct Input Selection		Yes
		Digital Out	Dolby Digital	Yes
			MPEG	No
			PCM	Yes
			DTS	No
		PC Monitor Input		No
			VGA (640x480)	No
			VGA (720x400)	No
			WVGA (848x480)	No
			SVGA (800x600)	No
			XGA (1024x768)	No
			WXGA (1280x768)	No
			WXGA (1280x720)	No
			WXGA (1360x768)	No
			SXGA (1280x1024)	No
		HDMI Input		Yes
			VGA (640 x 480)	Yes (60Hz)
			720 x 480i (4:3)	Yes (60Hz)
			720 x 480i (16:9)	Yes (60Hz)
			720 x 480p (4:3)	Yes (60Hz)
			720 x 480p (16:9)	Yes (60Hz)
			720 x 576i (4:3)	No
			720 x 576i (16:9)	No
			720 x 576p (4:3)	No
			720 x 576p (16:9)	No
			1280 x 720p	Yes (60Hz)
			1920 x 1080i	Yes (60Hz)
		Component Input		Yes
			720 x 480i (4:3)	Yes (60Hz)
			720 x 480i (16:9)	Yes (60Hz)
			720 x 480p (4:3)	Yes (60Hz)
			720 x 480p (16:9)	Yes (60Hz)
			720 x 576i (4:3)	No
			720 x 576i (16:9)	No
			720 x 576p (4:3)	No
			720 x 576p (16:9)	No
			1280 x 720p	Yes (60Hz)
			1920 x 1080i	Yes (60Hz)

GENERAL SPECIFICATIONS

G-11	**Accessories**	Owner's Manual		Language	English/French/Spanish
				w/Guarantee Card	Yes
		Remote Control Unit			Yes
		Rod Antenna			No
				Poles	--
				Terminal	--
		Loop Antenna			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
		Dew/AHC Caution Sheet			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 (Flat Polarity Plugs)			Yes
		Cable Cramp			Yes
		Stand			Yes
		Stand Screw			Yes
		Hexagon Wrench			Yes
		AV Cord (2Pin-1Pin)			No
		Registration Card (NDL Card)			Yes
		300 to 75ohm Antenna Adapter			No
G-12	**Interface**	Switch	Top	Power (Tact)	Yes
				Channel Up/Menu Up	Yes
				Channel Down/Menu Down	Yes
				Volume Up/Menu >	Yes
				Volume Down/Menu <	Yes
				Menu	No
				Play	No
				Eject	No
				Skip+, Search+	No
				Skip-, Search-	No
				Still/Pause	No
				Stop	No
				Main Power SW	No
				Input Select	Yes
			Rear	Main Power SW	No
		Indicator		Power/Stand-By	Yes (Green / Red)
				On Timer	No
		Terminals	Rear	Video Input 1	RCA x 1
				Audio Input 1	RCA x 2(L/MONO, R)
				S - Input 1	Yes
				Video Input 2	RCA x 1
				Audio Input 2	RCA x 2(L/MONO, R)
				S - Input 2	Yes
				Video Output	No
				Audio Output	RCA x 2 (Variable) (L, R)
				Component Input 1	RCA x 3
				Analog Audio	RCA x 2(L/MONO, R)
				Component Input 2	No
				Analog Audio	No
				HDMI Input 1	HDMI x 1
				Analog Audio	RCA x 2(L/MONO, R)
				HDMI Input 2	No
				Analog Audio	No
				Sub Woofer Out	No
				PC Monitor Input	No
				Analog Audio	No
				Digital Audio Output	Coaxial
				DC Jack (Center +)	No
				VHF/UHF Antenna Input	F Type
				AC Inlet	Yes
			Side	Video Input 3	No
				Audio Input 3	No
				S - Input 3	No
				Other Terminal	No
G-13	**Set Size**			Approx. W x D x H (mm)	682.0 x 273.5 x 553.0
				w/o Handle, Stand Approx. W x D x H (mm)	682.0 x 115 x 499.0

GENERAL SPECIFICATIONS

G-14	**Weight**		Net (Approx.)	12.9kg (28.4lbs)
			Net w/o Handle, Stand (Approx.)	11.2kg (24.7lbs)
			Gross (Approx.)	15.6kg (34.4lbs)
G-15	**Carton**	Master Carton		No
			Content	--- Sets
			Material	--- / ---
			Dimensions W x D x H(mm)	---
			Description of Origin	---
		Gift Box	Material	Double/Brown
			W/Color Photo Label	No
			W/Handle	No
			Dimensions W x D x H(mm)	781 x 255 x 622
			Description of Origin	Yes
		Drop Test		1 Corner / 3 Edges / 6 Surfaces
			Height (cm)	32(ORION SPEC:46)
		Container Stuffing (40' container)		405 Sets/40' container
G-16	**Material**	Cabinet	Front	PS 94V0 NON-DECABROM
			Rear	PS 94V0 NON-DECABROM
			Jack Panel	--
		PCB	Non-Halogen Demand	No
			Eyelet Demand	Yes
G-17	**Environment**	Environmental standard requirement		Green procurement of SHARP
		Pb-free		Phase3(Phase3A)
			Measures for Whisker	Yes
		Rohs		Yes

DISASSEMBLY INSTRUCTIONS

1. REMOVAL OF MECHANICAL PARTS AND P.C. BOARDS

1-1: BACK CABINET (Refer to Fig. 1-1)

1. Remove the 19 screws ①.
2. Remove the Back Cabinet in the direction of arrow.

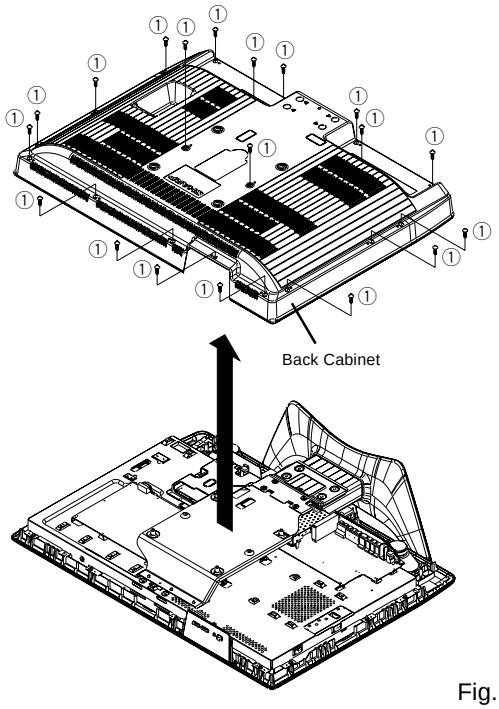


Fig. 1-1

1-2: STAND ASS'Y/ANGLE BACK 1/2/PLATE JACK 1/2 (Refer to Fig. 1-2)

1. Remove the 4 screws ①.
2. Remove the Stand Ass'y in the direction of arrow (A).
3. Remove the 4 screws ②.
4. Remove the 6 screws ③.
5. Remove the Angle Back 1/2 in the direction of arrow (B).
6. Remove the 4 screws ④.
7. Remove the Plate Jack 2 in the direction of arrow (C).
8. Remove the 11 screws ⑤.
9. Remove the Plate Jack 1 and Shield Jack in the direction of arrow (D).

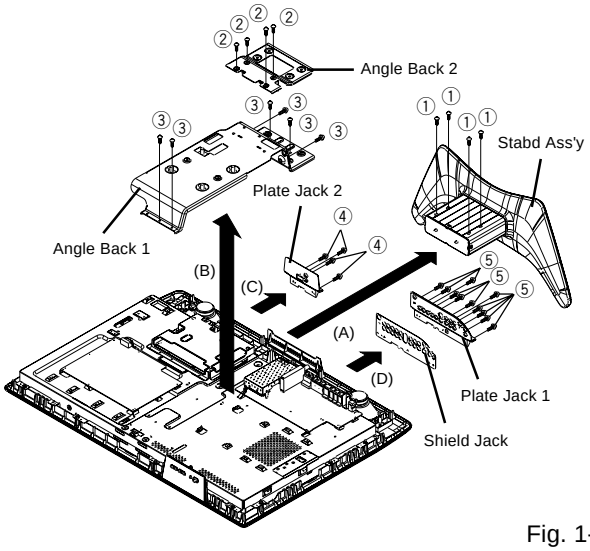


Fig. 1-2

1-3: PCB ASS'Y (Refer to Fig. 1-3)

1. Disconnect the following connectors: (CP506, CP507, CP508, CP510, CP511, CP512).
2. Remove the 9 screws ①.
3. Remove the Holder AC-Inlet and Power PCB in the direction of arrow (A).
4. Disconnect the following connectors: (CP802, CP803, CP2200, CP3201, CP3602, CP7203).
5. Remove the 10 screws ②.
6. Remove the Shield Scaler and Scaler PCB in the direction of arrow (B).
7. Disconnect the following connectors: (CP301, CP302, CP2403, CP2404, CP4202).
8. Remove the 6 screws ③.
9. Remove the DigitalPCB and AV PCB in the direction of arrow (C).
10. Remove the 2 screws ④.
11. Remove the Remocon PCB in the direction of arrow (D).
12. Remove the 5 screws ⑤.
13. Remove the Plate Button and Operation PCB in the direction of arrow (E).

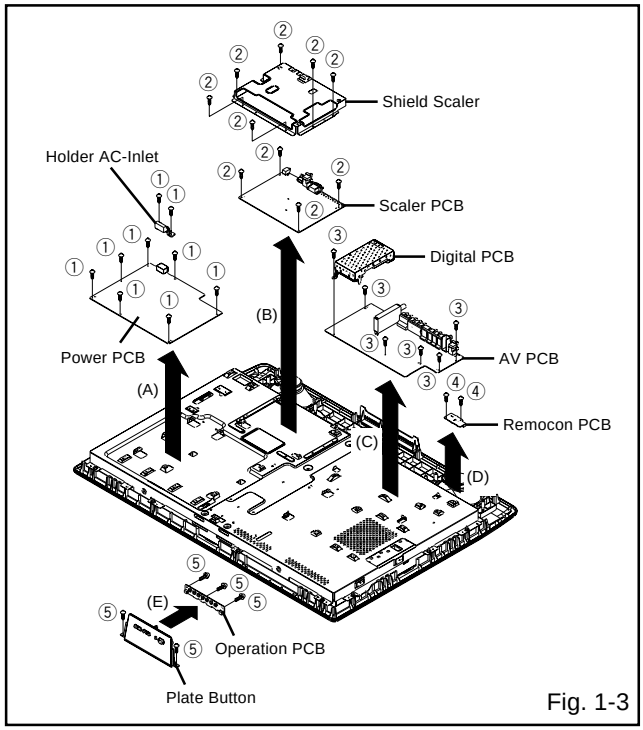


Fig. 1-3

DISASSEMBLY INSTRUCTIONS

1-4: LCD COVER/LCD PANEL (Refer to Fig. 1-4)

1. Remove the 8 screws ①.
2. Remove the LCD Cover in the direction of arrow (A).
3. Remove the 4 screws ②.
4. Remove the LCD Panel in the direction of arrow (B).

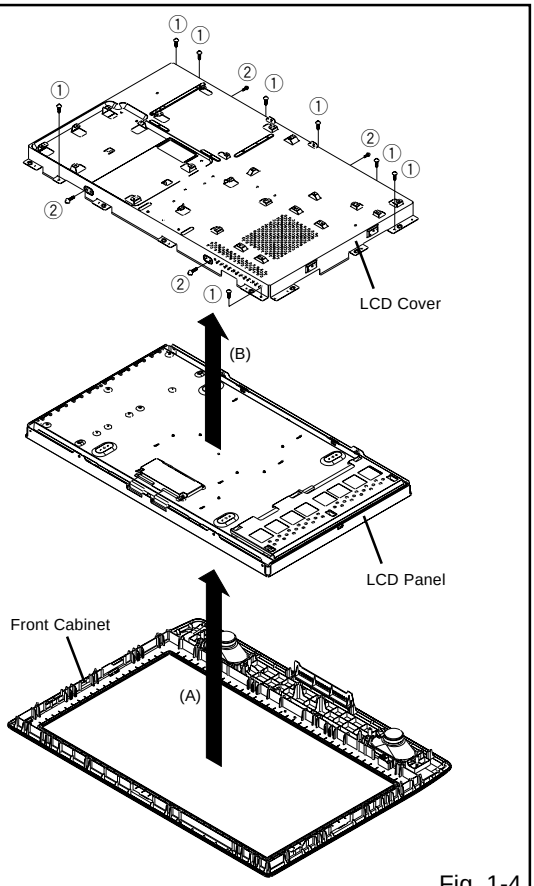


Fig. 1-4

DISASSEMBLY INSTRUCTIONS

2. 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. 2-1.)**

   NOTE

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

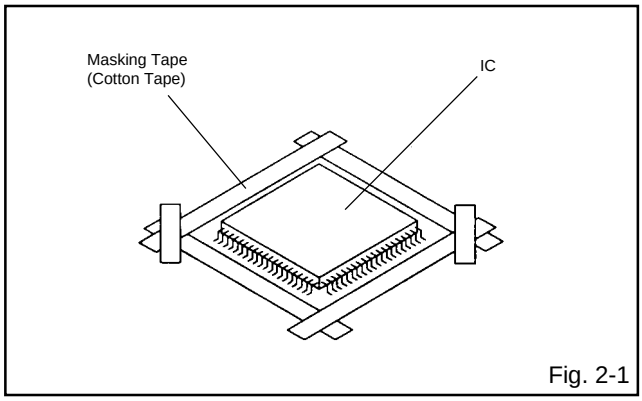


Fig. 2-1

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

   NOTE

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

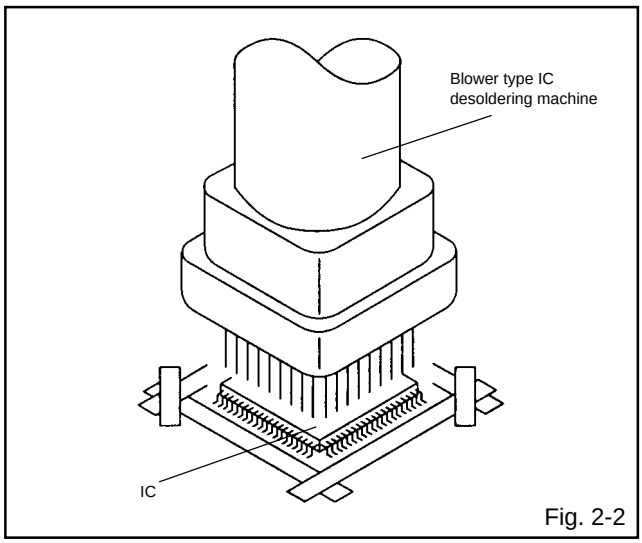


Fig. 2-2

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. 2-3.)**

   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.

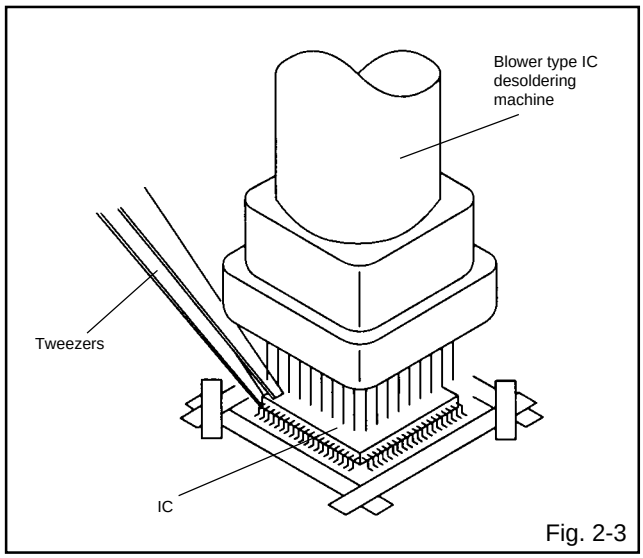


Fig. 2-3

4. Peel off the Masking Tape.

5. Absorb the solder left on the pattern using the Braided Shield Wire. **(Refer to Fig. 2-4.)**

   NOTE

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

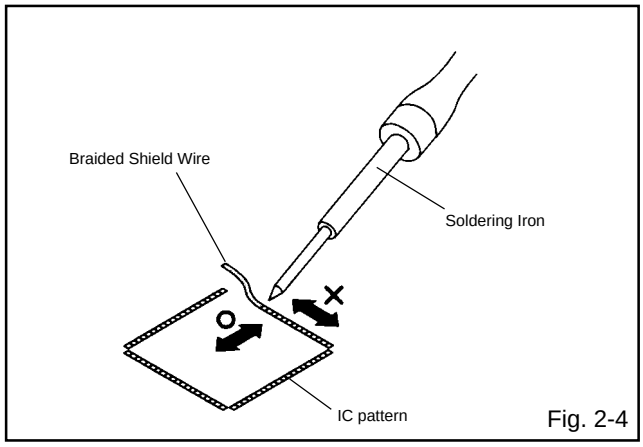


Fig. 2-4

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. 2-5.)**

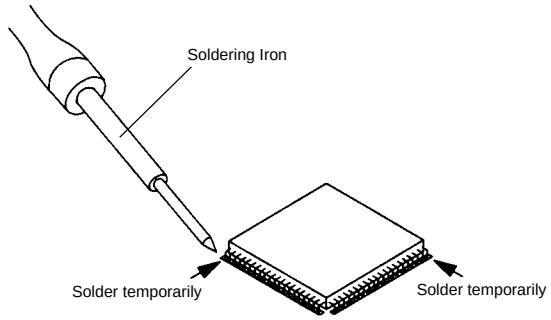


Fig. 2-5

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

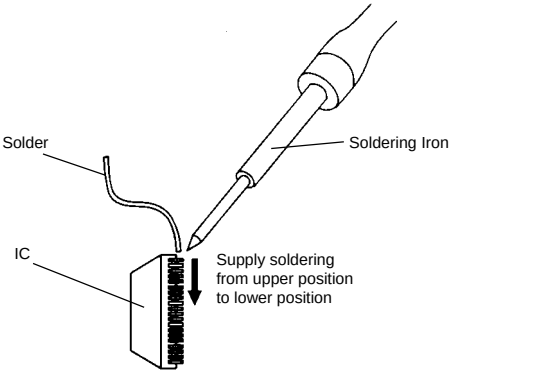


Fig. 2-6

3. Absorb the solder left on the lead using the Braided Shield Wire. **(Refer to Fig. 2-7.)**

   NOTE

   Do not absorb the solder to excess.

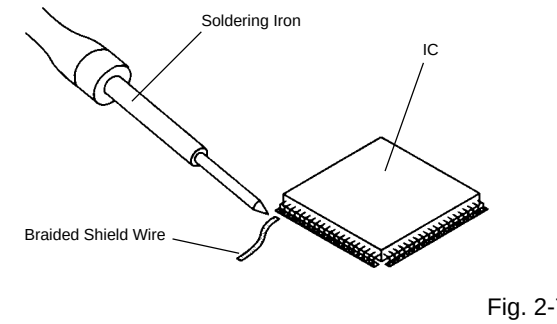


Fig. 2-7

4. When bridge-soldering between terminals and/or the soldering amount are not enough, resolder using a Thin-tip Soldering Iron. **(Refer to Fig. 2-8.)**

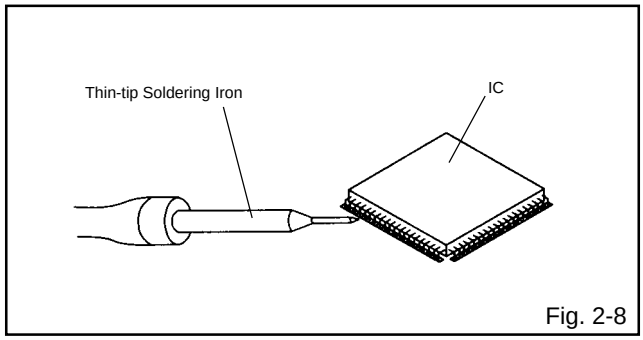


Fig. 2-8

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)	0	2 sec.	Releasing of V-CHIP PASSWORD.
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.
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)	8	2 sec.	Check of the SUM DATA, POWER ON total hours, MICON VERSION and DIGITAL TV MICON FIRMWARE on the screen. 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, MICON VERSION AND DIGITAL TV MICON FIRMWARE

Initial total of MEMORY IC, POWER ON total hours, MICON VERSION and Digital TV MICON Firmware 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 **(8)** on the remote control for more than 2 seconds.
4. After the confirmation of each check sum, POWER ON total hours, MICON VERSION and Digital TV MICON Firmware, turn off the power.

   *1 DVP1 is different according to each set.

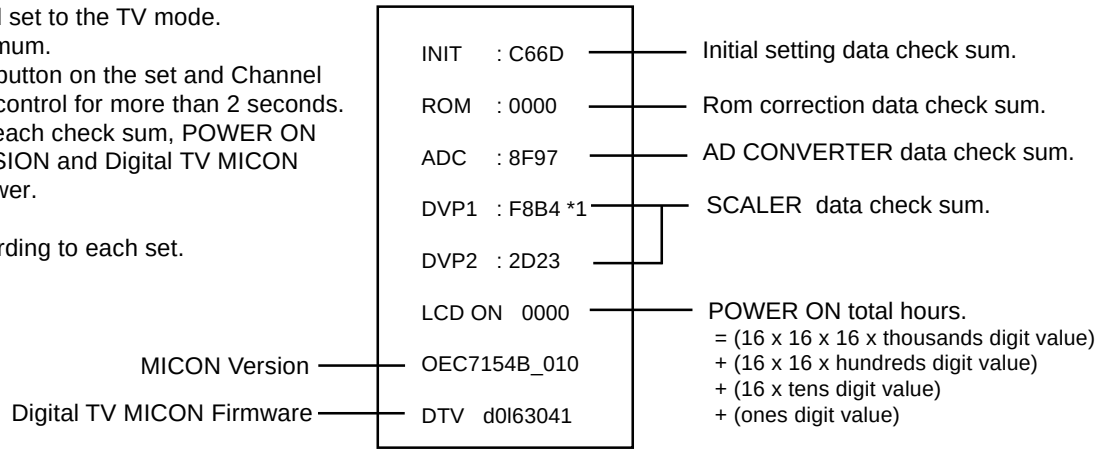


FIG. 1

CONFIRMATION OF INITIAL DATA

If a service repair is undertaken where it has been required to change the MEMORY IC, 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.

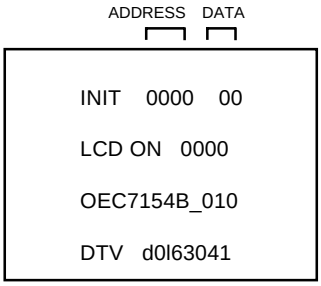


FIG. 2

4. ADDRESS is now selected and should "blink". Using the UP/DOWN buton on the remote, step through the ADDRESS until required ADDRESS to be changed is reached.
5. Press RIGHT/LEFT 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 RIGHT/LEFT 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.

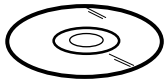
After the data input, set to the initializing of shipping.

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

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

RE-WRITE FOR DIGITAL SOFT FIRMWARE

JG176 USA HD DTV ROM DISC



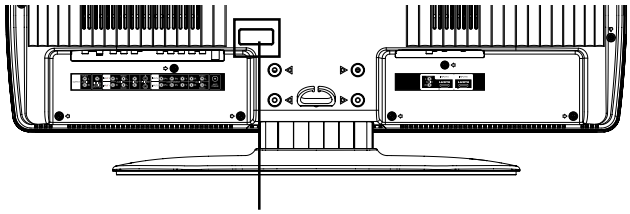
Ref. No.	Part No.	Parts Name	Remarks
JG176	APJG176095	USA HD DTV ROM DISC	Up-Date of the Firmware

NOTE: The operating manual for Re-writing is included in USA HD DTV ROM DISC (JG176).

Prepare the following tools for Up-Date of the Firmware.

1 Computer of WINDOWS2000
2 USB Flash Memory **(Use only SanDisk Cruzer Mini USB Flash Drive 256Mb)**

SET (REAR)



USB CONNECTOR

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 **(YG6260M)** 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**.

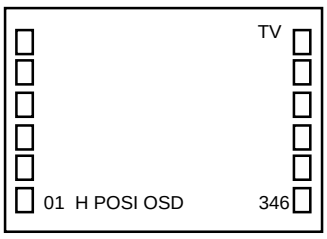


Fig. 2-1

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 MENU button on the remote control to end the adjustments.
5. To display the adjustment screen for AV, CS, HDMI mode, press the INPUT button on the remote control to set to the AV, CS, HDMI mode. 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	H POSI OSD	22	H POSI 60Hz
02	V POSI OSD	24	V POSI 60Hz
03	R DRIVE (N)	25	BAK LIGHT CENT
04	R CUTOFF (N)	26	BAK LIGHT MAX
05	G DRIVE (N)	27	BAK LIGHT MIN
06	G CUTOFF (N)	28	BRIGHT CENT
07	B DRIVE (N)	29	BRIGHT MAX
08	B CUTOFF (N)	30	BRIGHT MIN
09	R DRIVE (C)	31	TINT
10	R CUTOFF (C)	35	CONTRAST CENTER
11	G DRIVE (C)	36	CONTRAST MAX
12	G CUTOFF (C)	37	CONTRAST MIN
13	B DRIVE (C)	38	COLOR CENT
14	B CUTOFF (C)	39	COLOR MAX
15	R DRIVE (W)	40	COLOR MIN
16	R CUTOFF (W)	63	CONTRAST 40
17	G DRIVE (W)	64	BRIGHT (3F54)
18	G CUTOFF (W)	65	CONTRASR (3F54)
19	B DRIVE (W)	66	SRC TOP
20	B CUTOFF (W)	67	DFEA VIMGVT

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 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. 1-1** and press the channel button **(03)** on the remote control to select “R DRIVE (N)”.
6. Press the UP/DOWN button on the remote control to select the “R CUTOFF (N)”, “B DRIVE (N)”, “B CUTOFF (N)”, “R DRIVE (C)”, “R CUTOFF (C)”, “B DRIVE (C)”, “B CUTOFF (C)”, “R DRIVE (W)”, “R CUTOFF (W)”, “B DRIVE (W)” and “B CUTOFF (W)”.
7. Adjust the RIGHT/LEFT button on the remote control to whiten the R CUTOFF (N), B DRIVE (N), B CUTOFF (N), R DRIVE (C), R CUTOFF (C), B DRIVE (C), B CUTOFF (C), R DRIVE (W), R CUTOFF (W), B DRIVE (W) and B CUTOFF (W) at each step tone sections equally.
8. Perform the above adjustments 5 and 6 until the white color is looked like a white.

ELECTRICAL ADJUSTMENTS

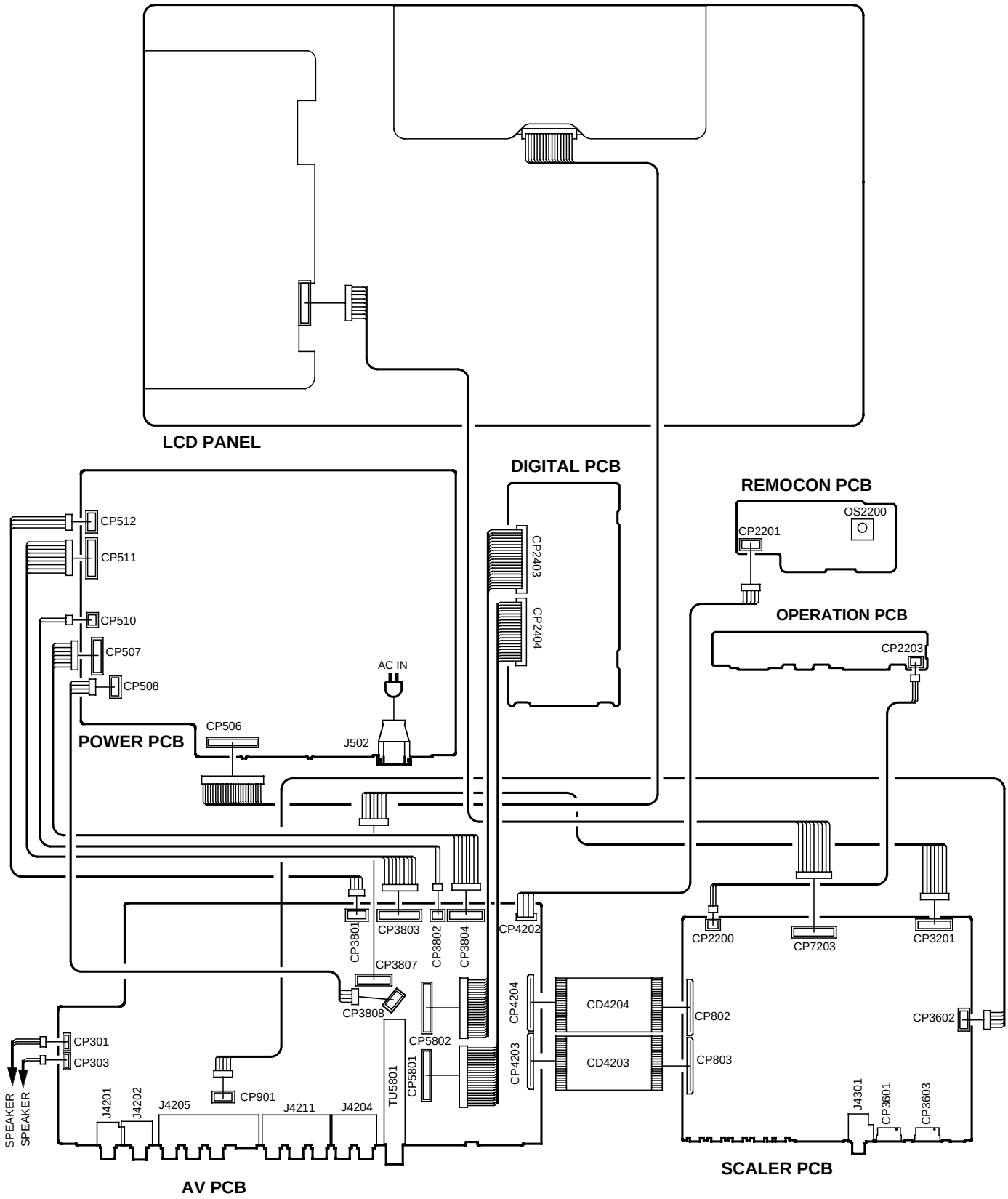
2-2: Confirmation of Fixed Value (Step No.)

Please check if the fixed values of each of the adjustment items are set correctly referring below. **(TV/AV/CS/HD-MI)**

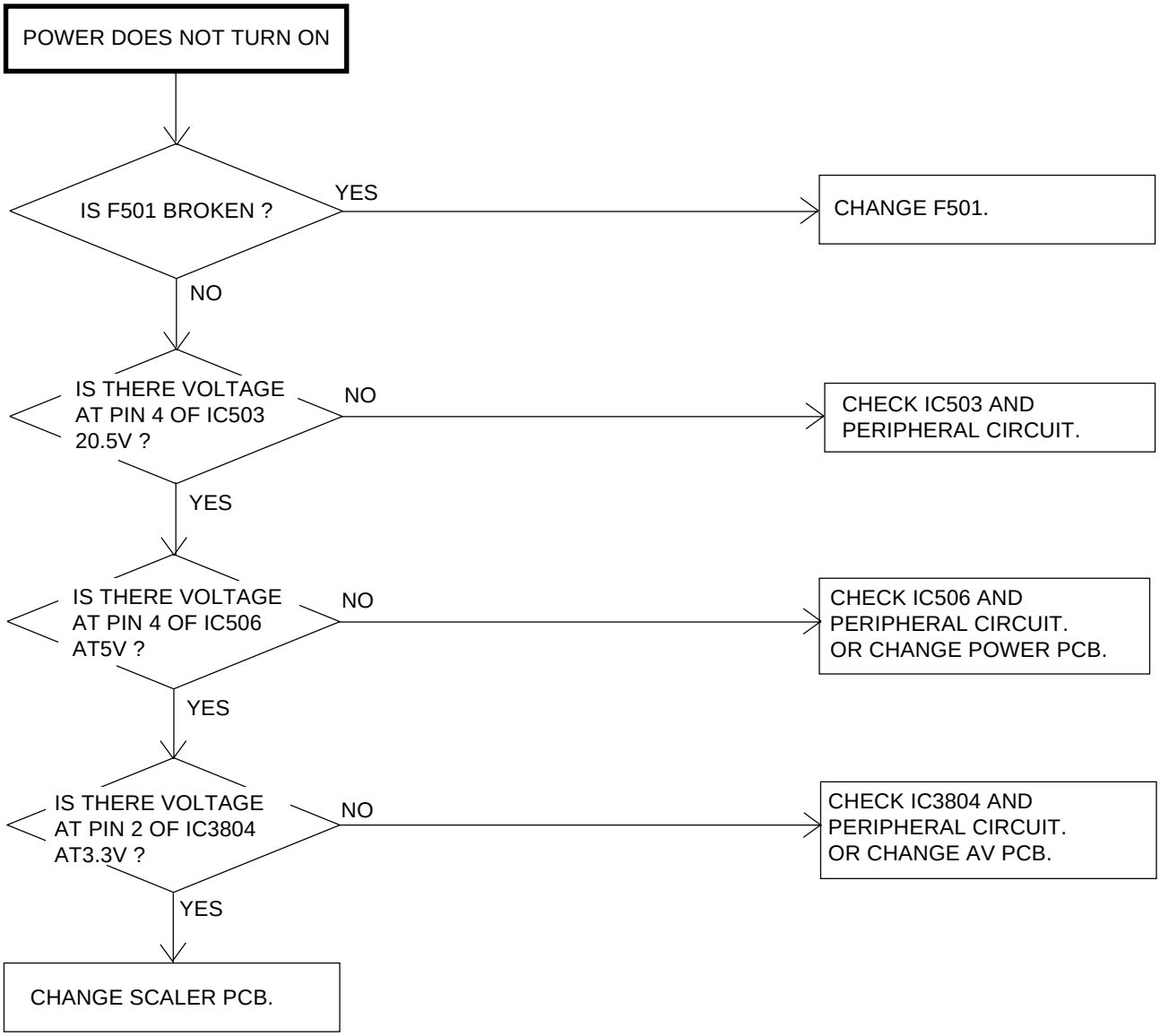
NO.	FUNCTION	TV	TV 720p	AV	AV (S)	CS				HD-MI				
						480i	480p	720p	1080i	480i	480p	720p	1080i	VGA
		Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.
1	H POSI OSD	346	346	346	346	346	346	346	346	346	346	346	346	346
2	V POSI OSD	83	83	83	83	83	83	83	83	83	83	83	83	83
3	R DRIVE (N)	---	137	---	---	138	136	137	137	137	137	137	137	137
4	G CUTOFF (N)	---	129	---	---	127	130	129	129	130	130	130	130	130
5	G DRIVE (N)	128	128	128	128	128	128	128	128	128	128	128	128	128
6	G CUTOFF (N)	128	128	128	128	128	128	128	128	128	128	128	128	128
7	B DRIVE (N)	---	108	---	---	107	106	108	108	107	107	107	107	107
8	B CUTOFF (N)	---	126	---	---	127	128	126	126	127	127	127	127	127
9	B CUTOFF (N)	---	134	---	---	134	135	134	134	135	135	135	135	135
10	R CUTOFF (C)	---	129	---	---	127	128	129	129	128	128	128	128	128
11	G DRIVE (C)	128	128	128	128	128	128	128	128	128	128	128	128	128
12	G CUTOFF (C)	128	128	128	128	128	128	128	128	128	128	128	128	128
13	B DRIVE (C)	---	130	---	---	128	129	130	130	130	130	130	130	130
14	B DRIVE (C)	---	125	---	---	127	125	125	125	124	124	124	124	124
15	R DRIVE (W)	---	159	---	---	160	160	159	159	159	159	159	159	159
16	R CUTOFF (W)	---	128	---	---	127	128	128	128	128	128	128	128	128
17	G DRIVE (W)	128	128	128	128	128	128	128	128	128	128	128	128	128
18	G CUTOFF (W)	128	128	128	128	128	128	128	128	128	128	128	128	128
19	B DRIVE (W)	---	81	---	---	82	81	81	81	81	81	81	81	81
20	B CUTOFF (W)	---	128	---	---	127	128	128	128	128	128	128	128	128
22	H POSI 60Hz	276	320	276	276	276	134	322	122	266	134	284	228	156
22	H POSI (SIDE BAR)	284	322	284	284	284	140	---	---	274	140	---	---	160
24	V POSI 60Hz	23	63	23	23	34	34	55	38	35	34	54	38	34
25	BAK LIGHT CENT	128	128	128	128	128	128	128	128	128	128	128	128	128
26	BAK LIGHT MAX	255	255	255	255	255	255	255	255	255	255	255	255	255
27	BAK LIGHT MIN	00	00	00	00	00	00	00	00	00	00	00	00	00
28	BRIGHT CENT	126	126	126	126	126	126	126	126	126	126	126	126	126
29	BRIGHT MAX	156	156	156	156	156	156	156	156	156	156	156	156	156
30	BRIGHT MIN	70	70	70	70	70	70	70	70	70	70	70	70	70
31	TINT	108	128	108	110	115	122	122	122	122	132	131	132	132
35	CONTRAST CENTER	---	108	---	---	163	107	108	108	113	113	113	113	113
36	CONTRAST MAX	---	148	---	---	223	146	148	148	155	155	155	155	155
37	CONTRAST MIN	50	50	50	50	50	50	50	50	50	50	50	50	50
38	COLOR CENT	90	115	100	96	83	115	115	115	77	77	77	74	77
39	COLOR MAX	127	127	127	127	127	127	127	127	127	127	127	127	127
40	COLOR MIN	00	00	00	00	00	00	00	00	00	00	00	00	00
63	CONTRAST 40	---	142	---	---	215	140	142	142	149	149	149	149	149
64	BRIGHT (3F54)	---	128	---	---	120	126	128	128	113	113	113	113	113
65	CONTRAST (3F54)	---	180	---	140	182	180	180	122	122	122	122	122	122
66	SRC TOP(STRECH)	20	20	20	20	20	20	20	20	20	20	20	20	20
66	SRC TOP(SIDE BAR)	20	20	20	20	20	20	---	---	20	20	---	---	20
66	SRC TOP(CINEMA WIDE1)	18	20	18	18	20	20	---	---	20	20	---	---	20
66	SRC TOP(ZOOM)	43	43	43	43	43	43	---	---	43	43	---	---	43
66	SRC TOP(S.STRECH)	26	26	26	26	26	26	---	---	26	26	---	---	26
67	DEFA VIMGVT(STRECH)	20	25	20	20	20	43	26	24	20	44	32	24	42
67	DEFA VIMGVT(SIDE BAR)	20	25	20	20	20	43	---	---	20	43	---	---	42
67	DEFA VIMGVT(CINEMA WIDE1)	20	28	20	20	20	44	---	---	20	44	---	---	42
67	DEFA VIMGVT(ZOOM)	50	28	50	50	50	104	---	---	50	104	---	---	102
67	SRC TOP	26	25	26	26	26	56	---	---	26	56	---	---	55

ELECTRICAL ADJUSTMENTS

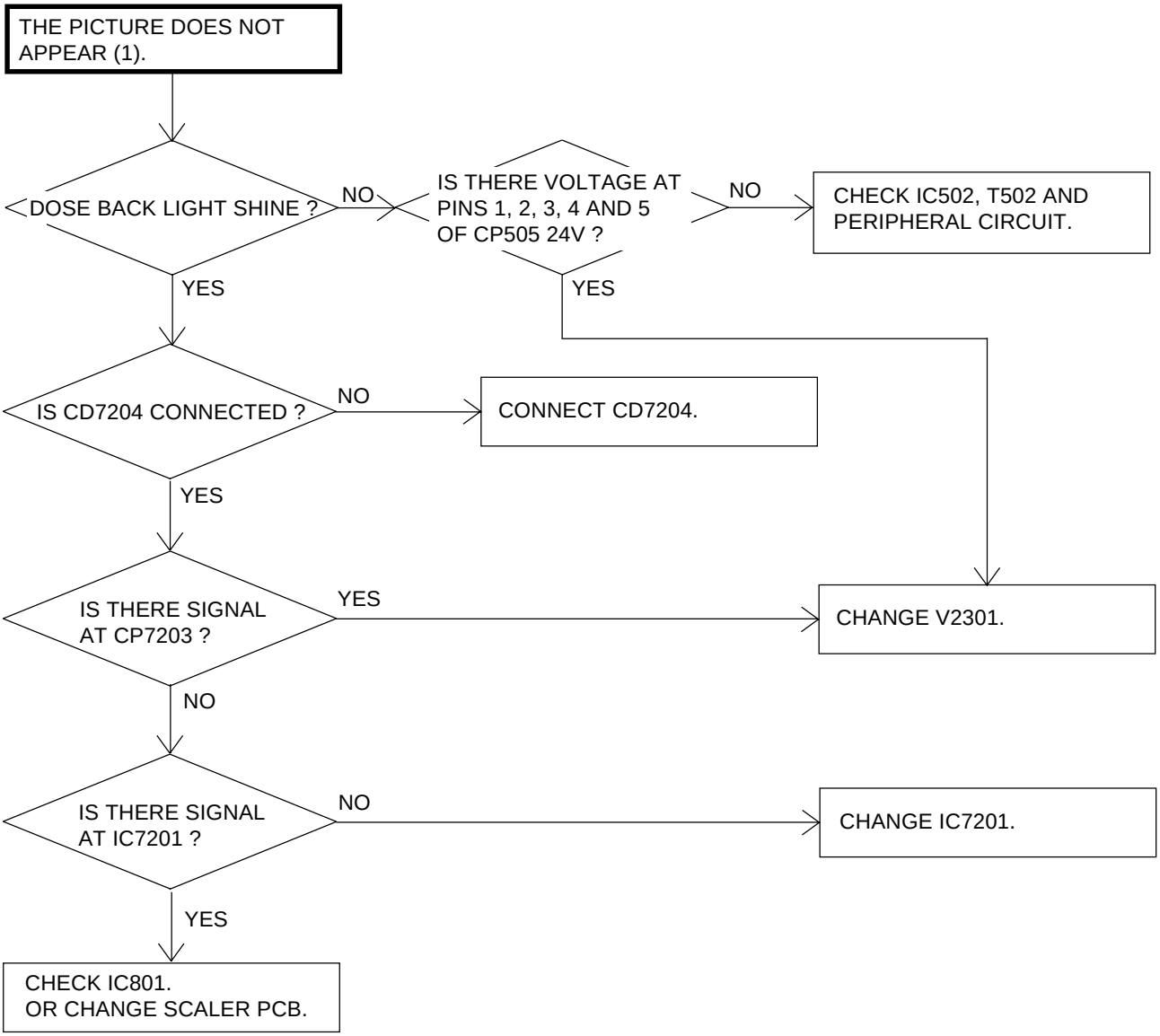
3. ELECTRICAL ADJUSTMENT PARTS LOCATION GUIDE (WIRING CONNECTION)



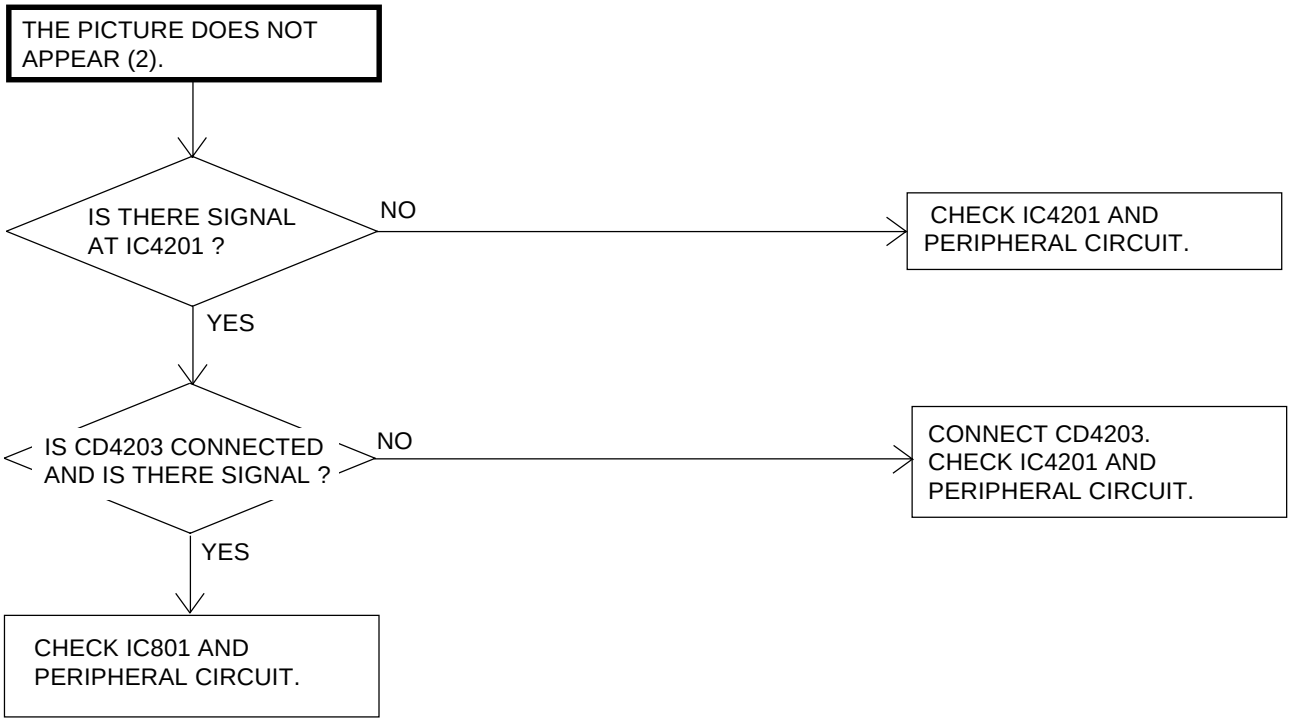
TROUBLESHOOTING GUIDE



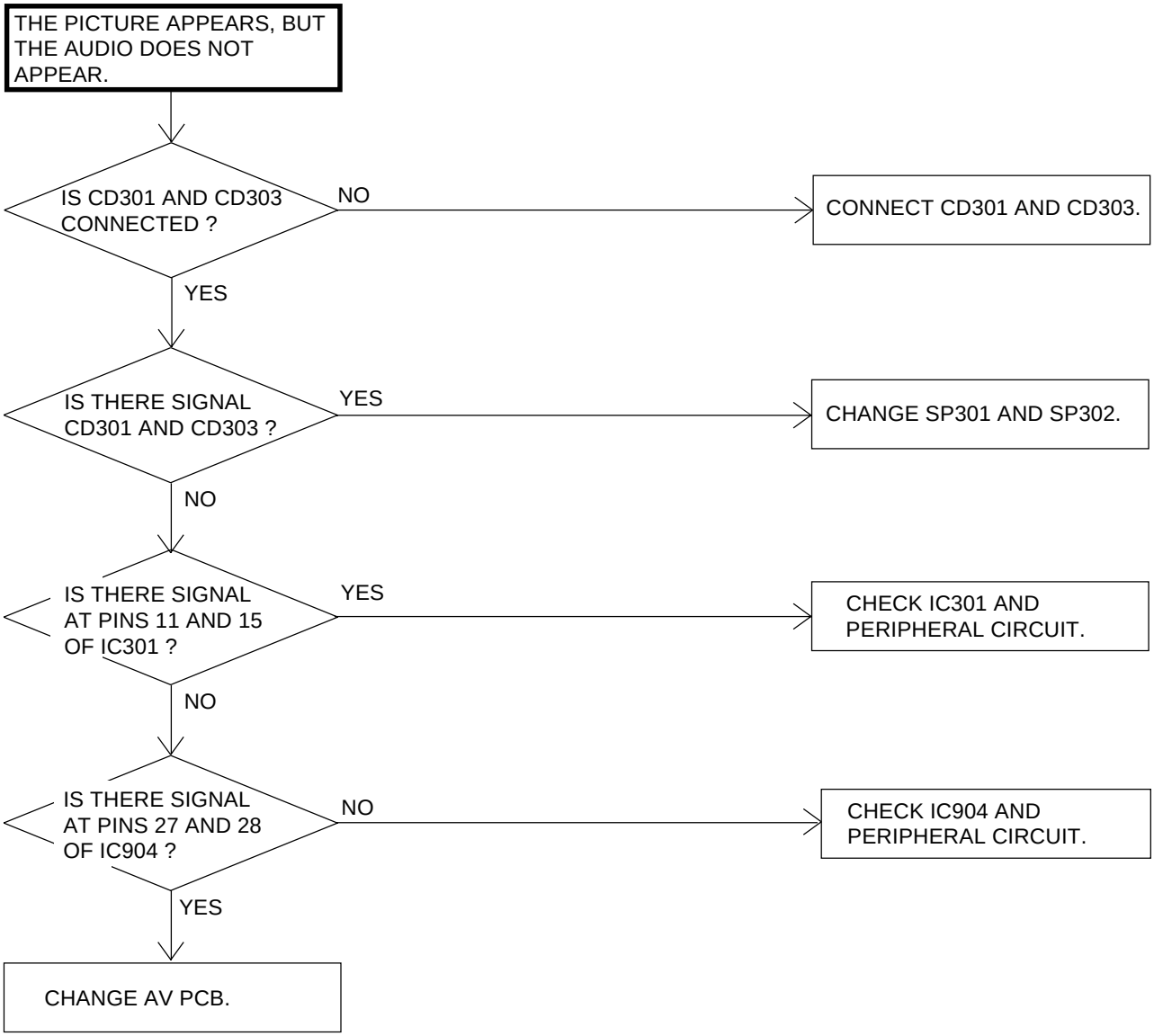
TROUBLESHOOTING GUIDE



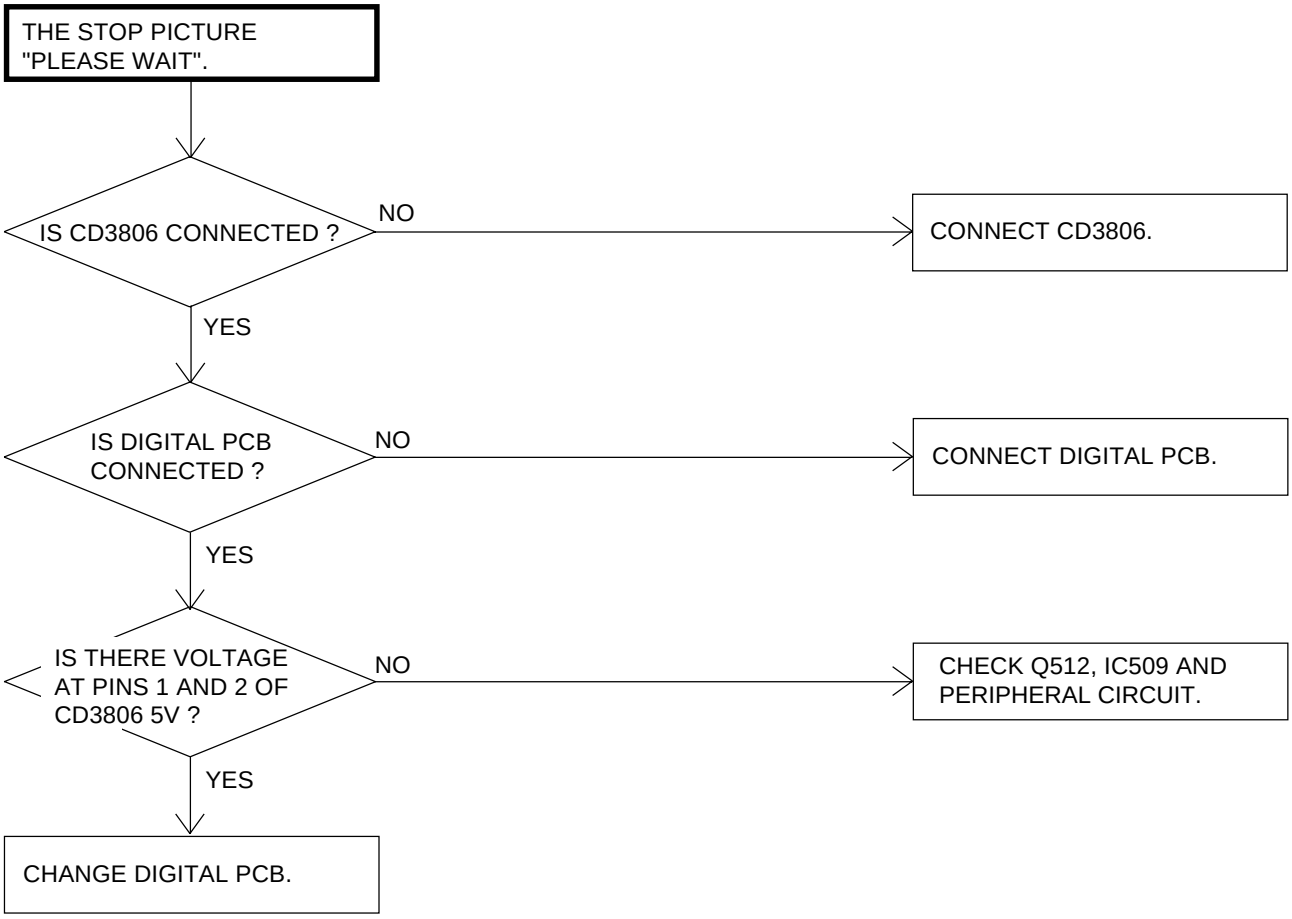
TROUBLESHOOTING GUIDE



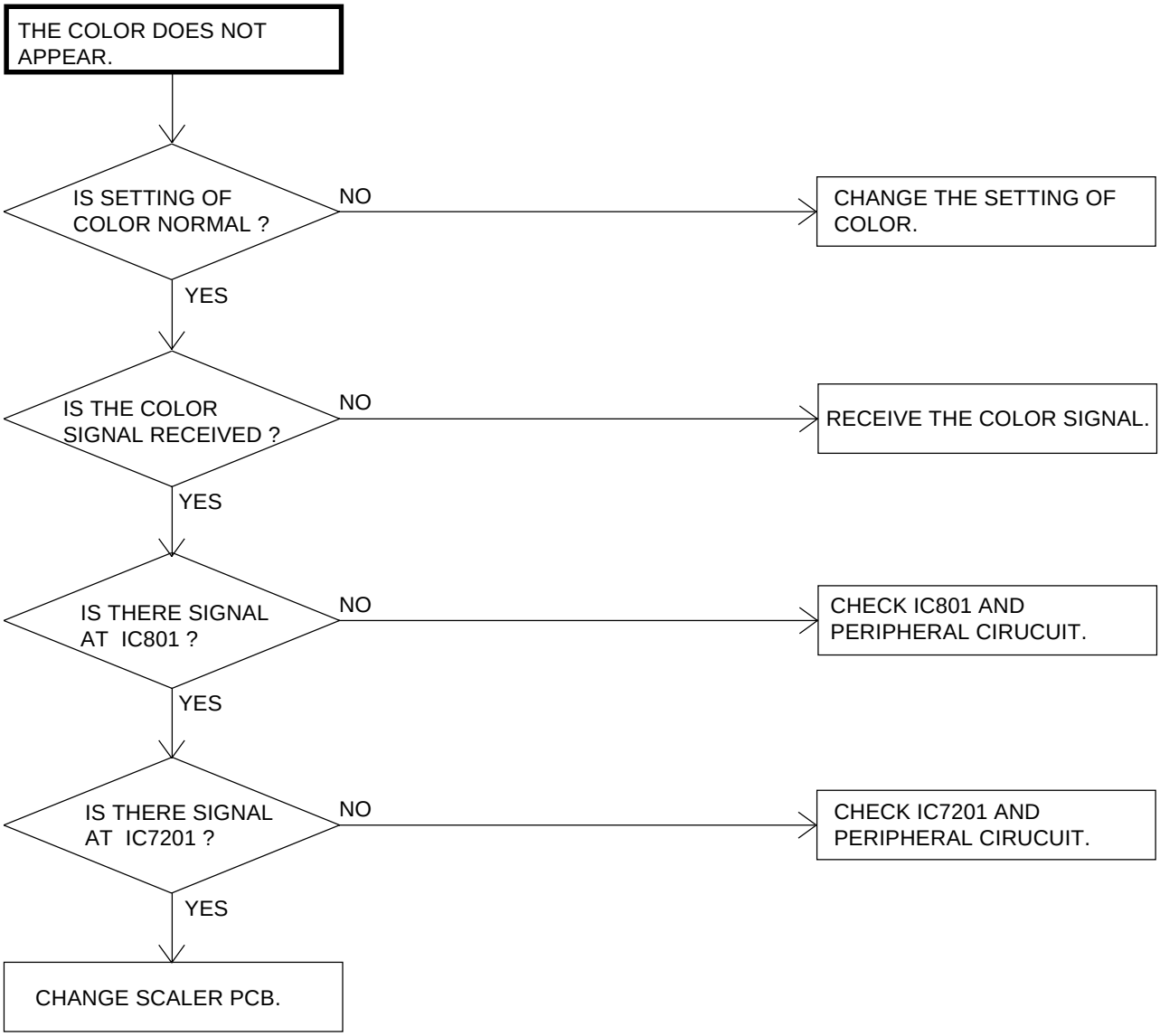
TROUBLESHOOTING GUIDE



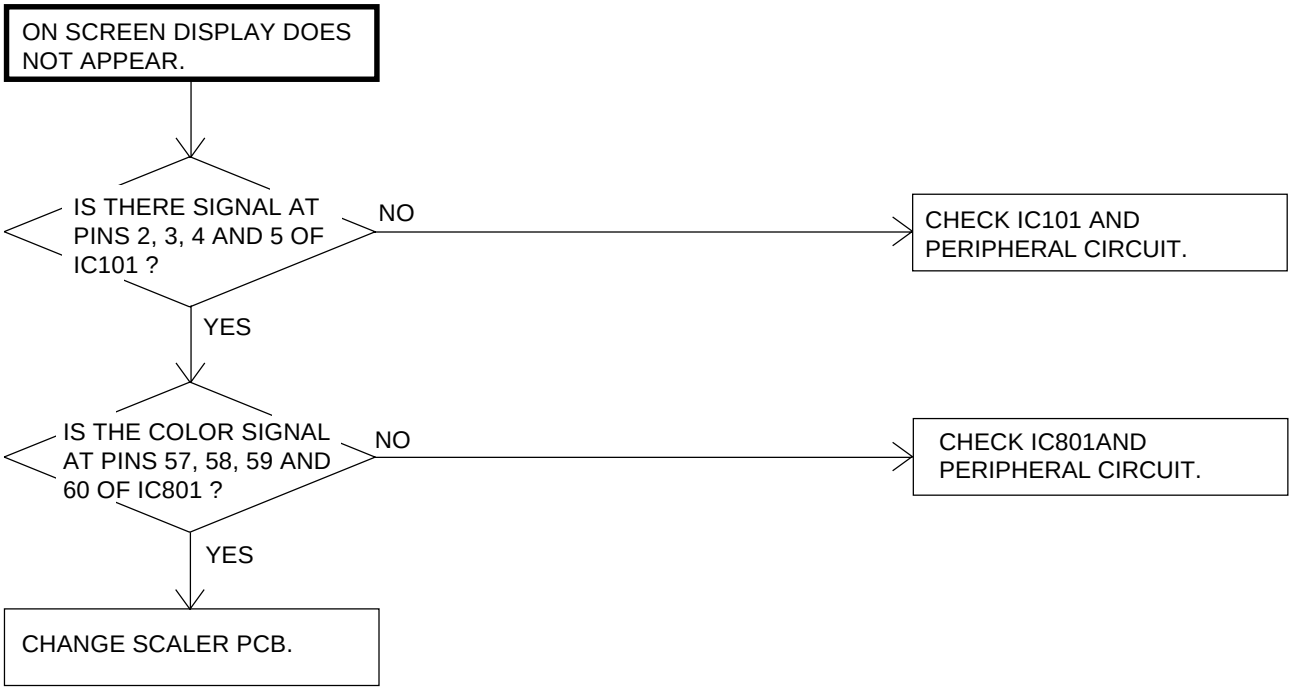
TROUBLESHOOTING GUIDE



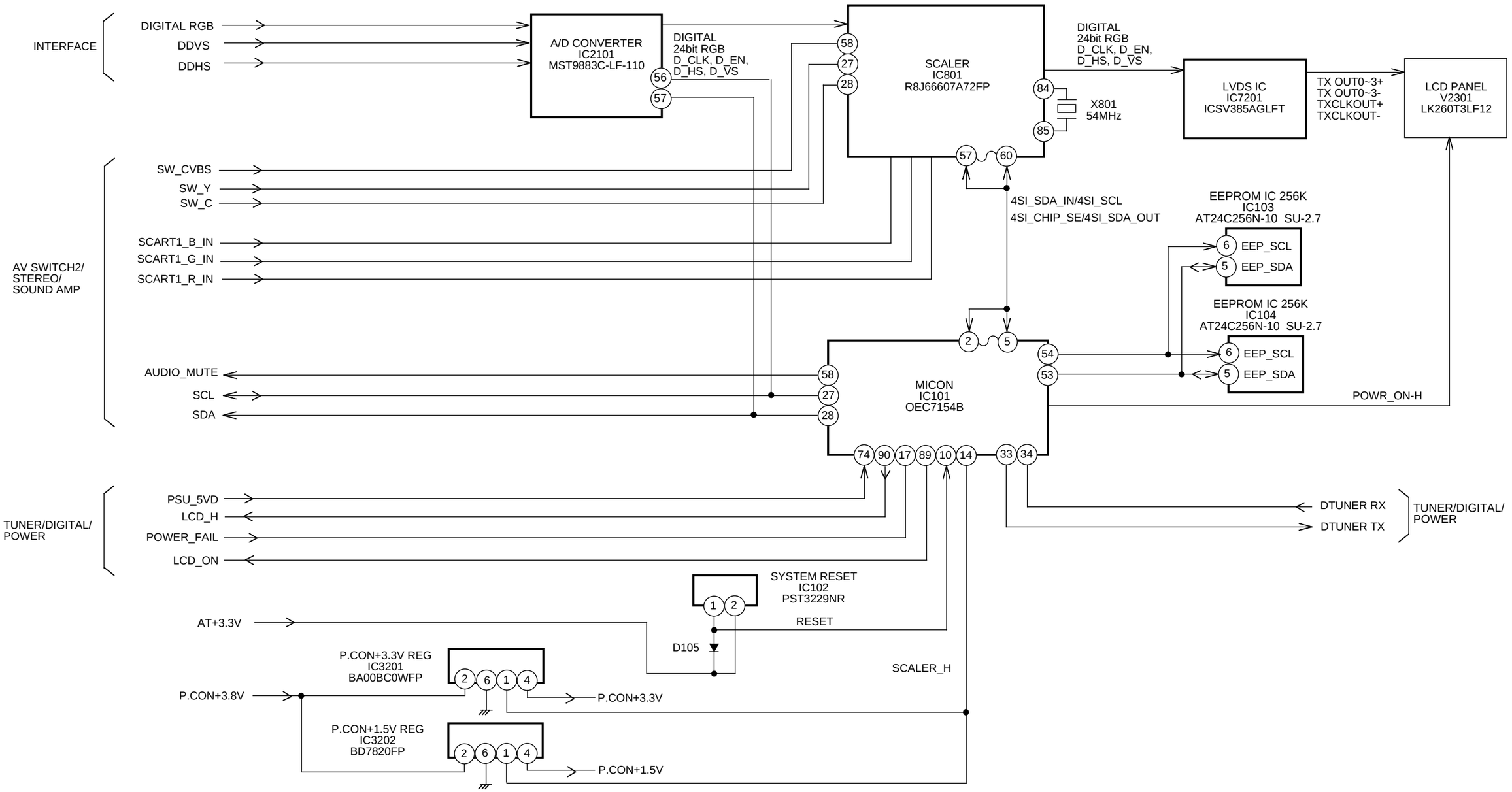
TROUBLESHOOTING GUIDE



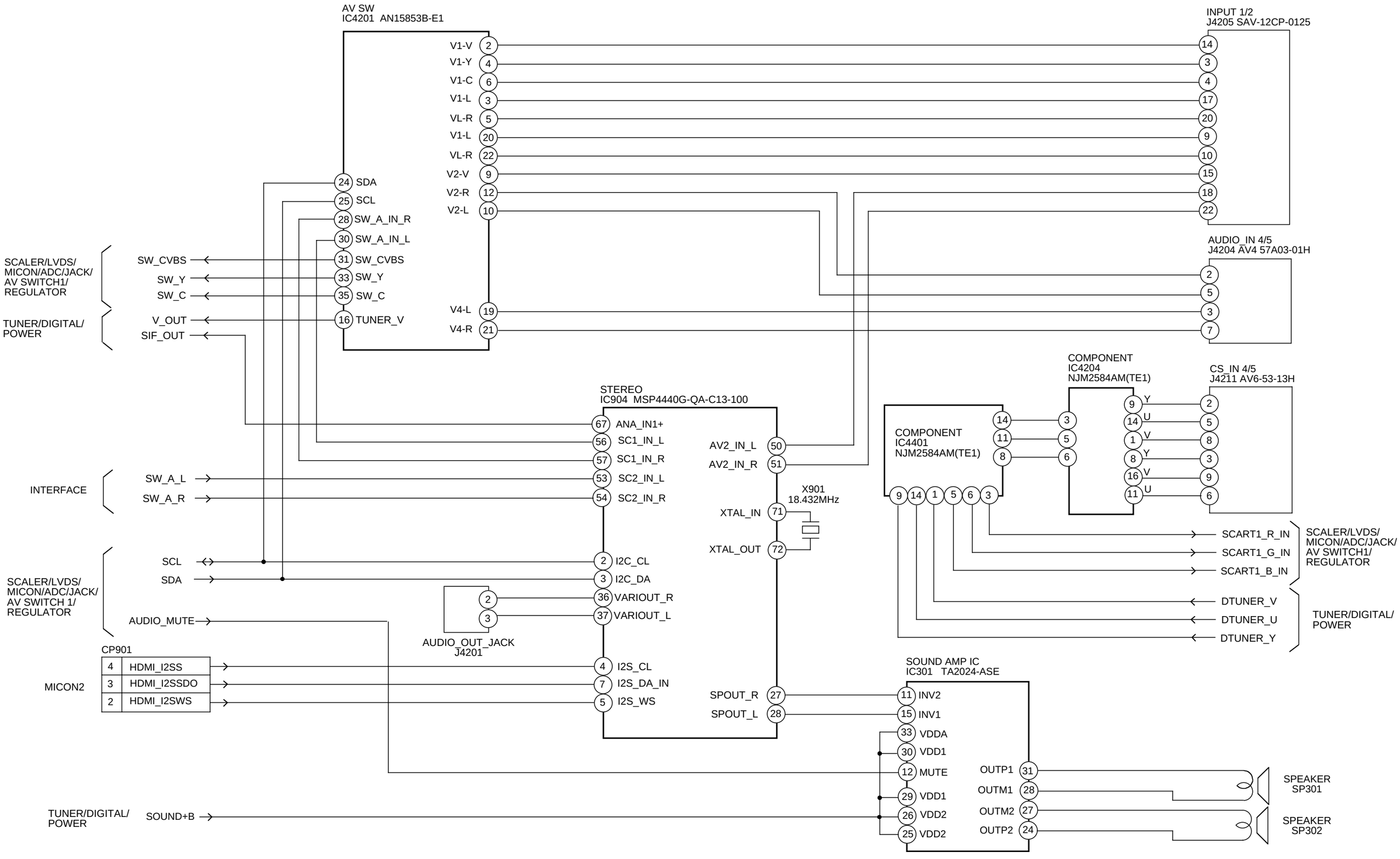
TROUBLESHOOTING GUIDE



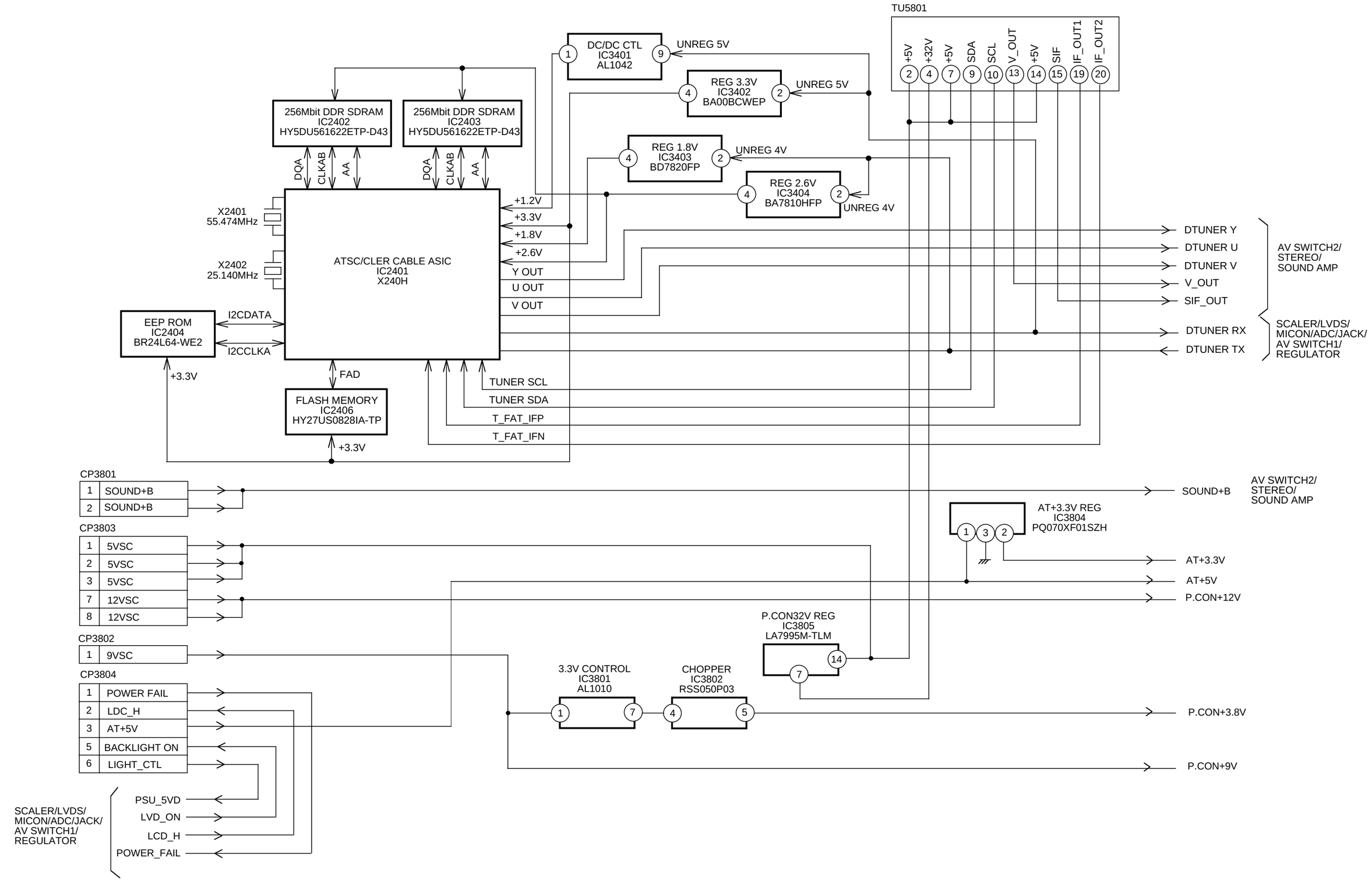
SCALER/LVDS/MICON/ADC/JACK/AV SWITCH1/REGULATOR BLOCK DIAGRAM



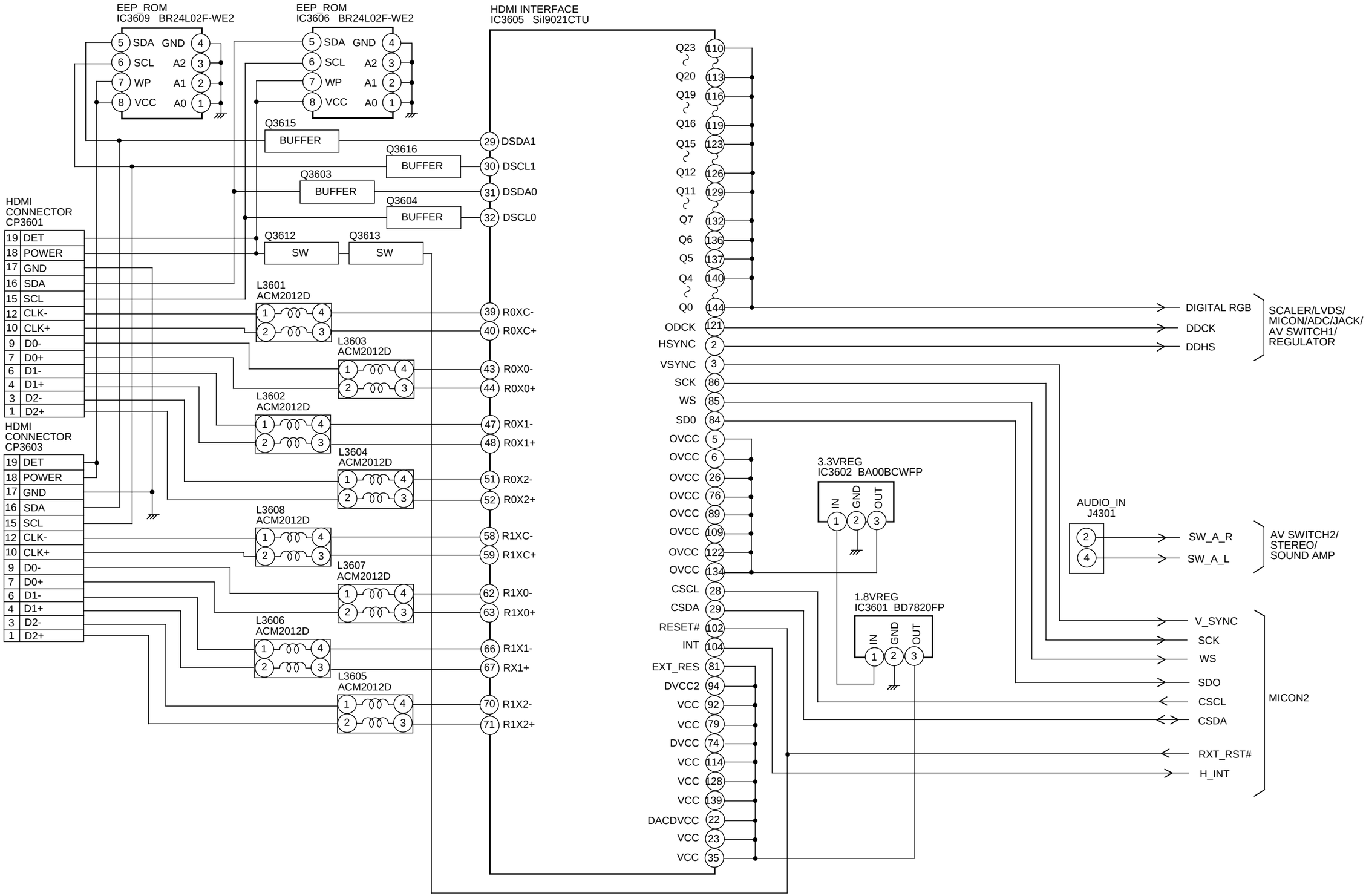
AV SWITCH2/STEREO/SOUND AMP BLOCK DIAGRAM



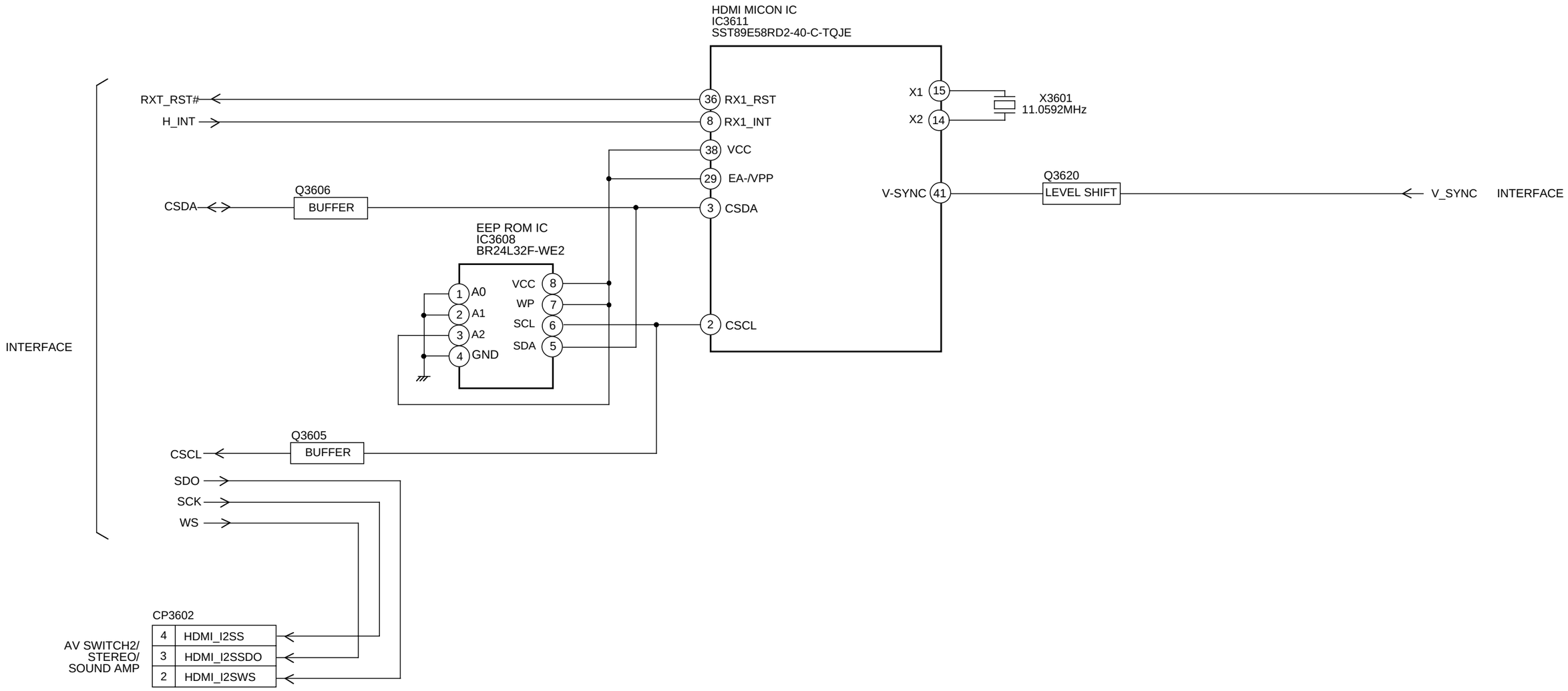
TUNER/DIGITAL/POWER BLOCK DIAGRAM



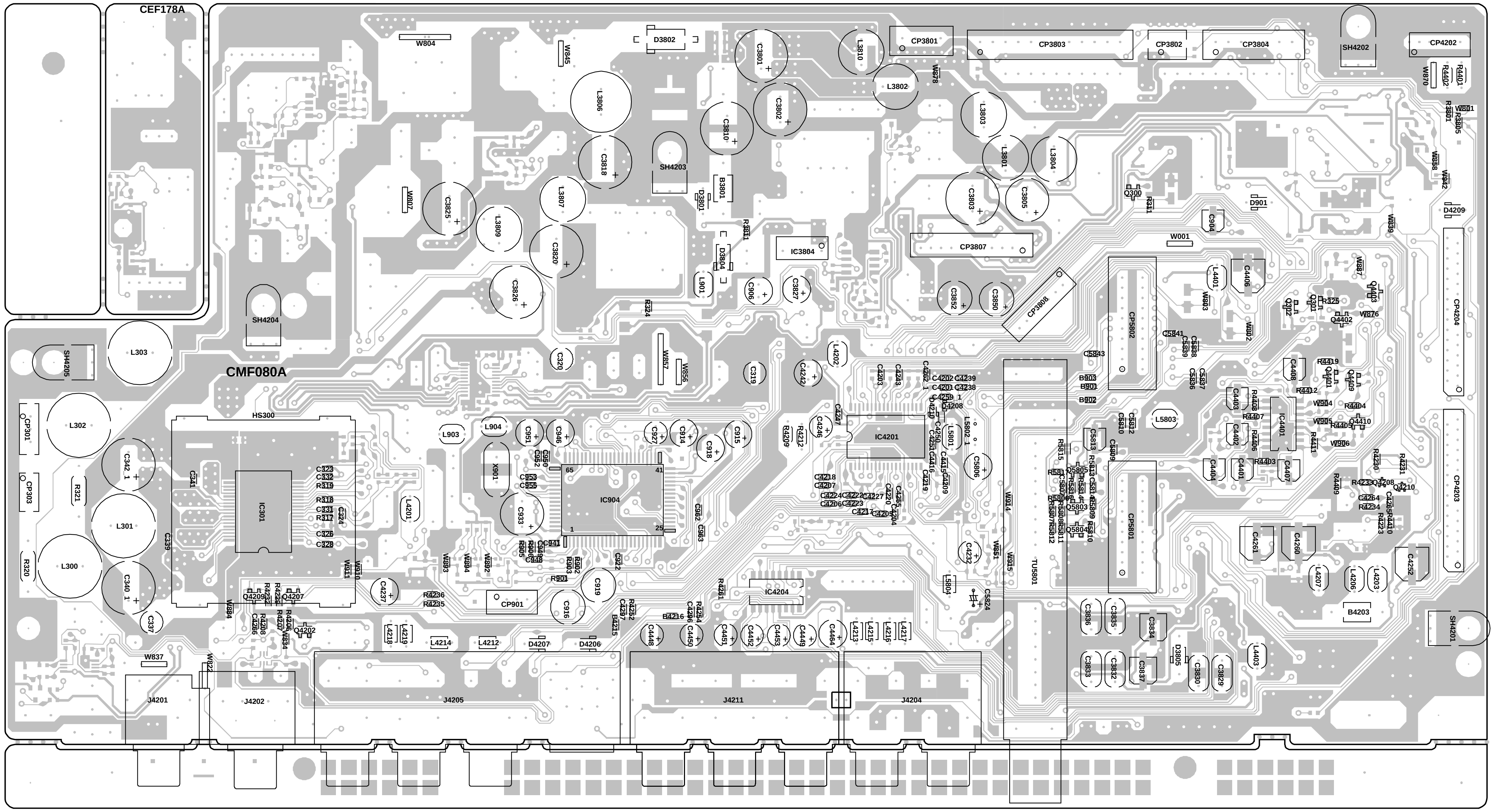
INTERFACE BLOCK DIAGRAM



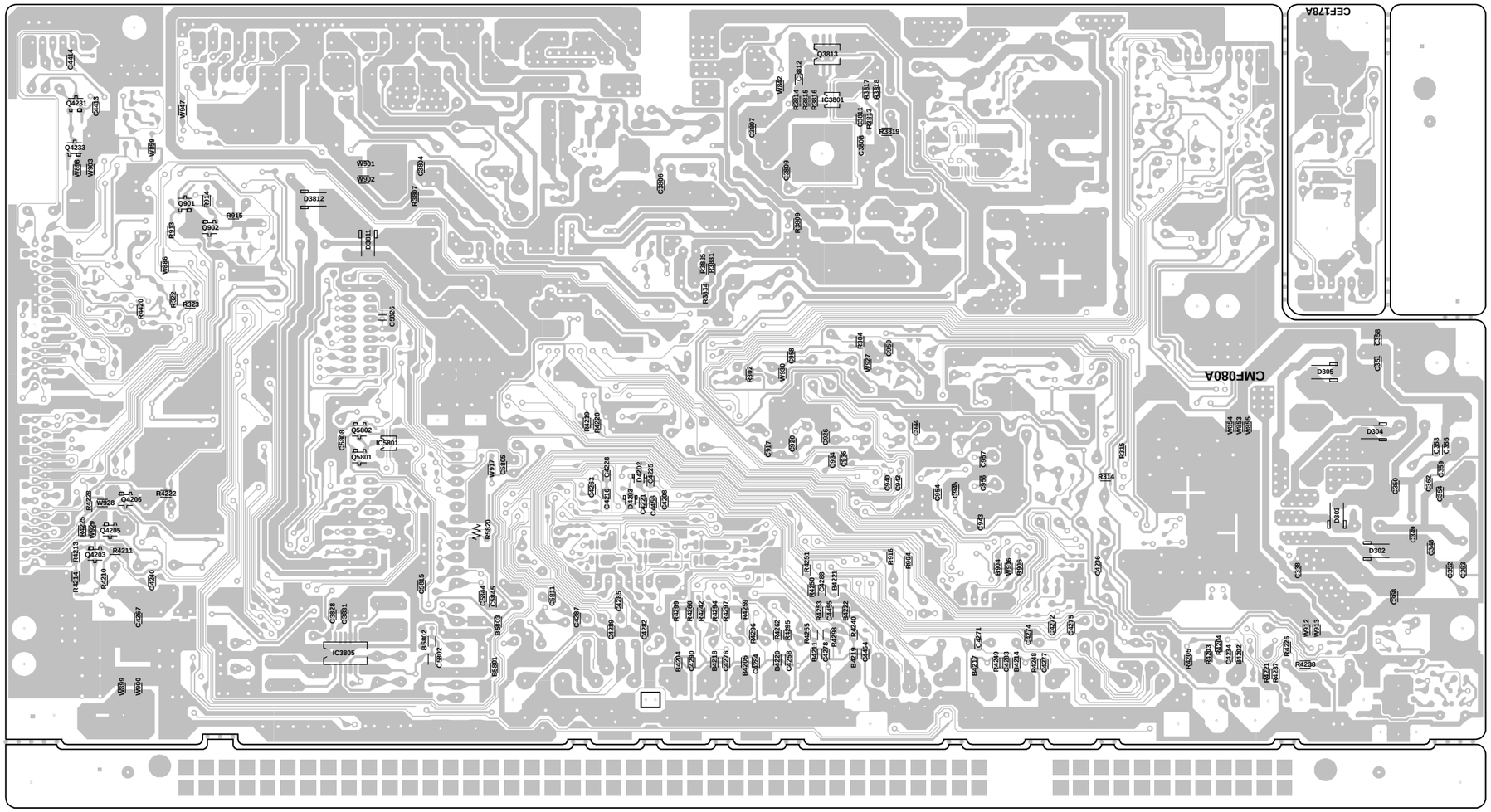
MICON2 BLOCK DIAGRAM



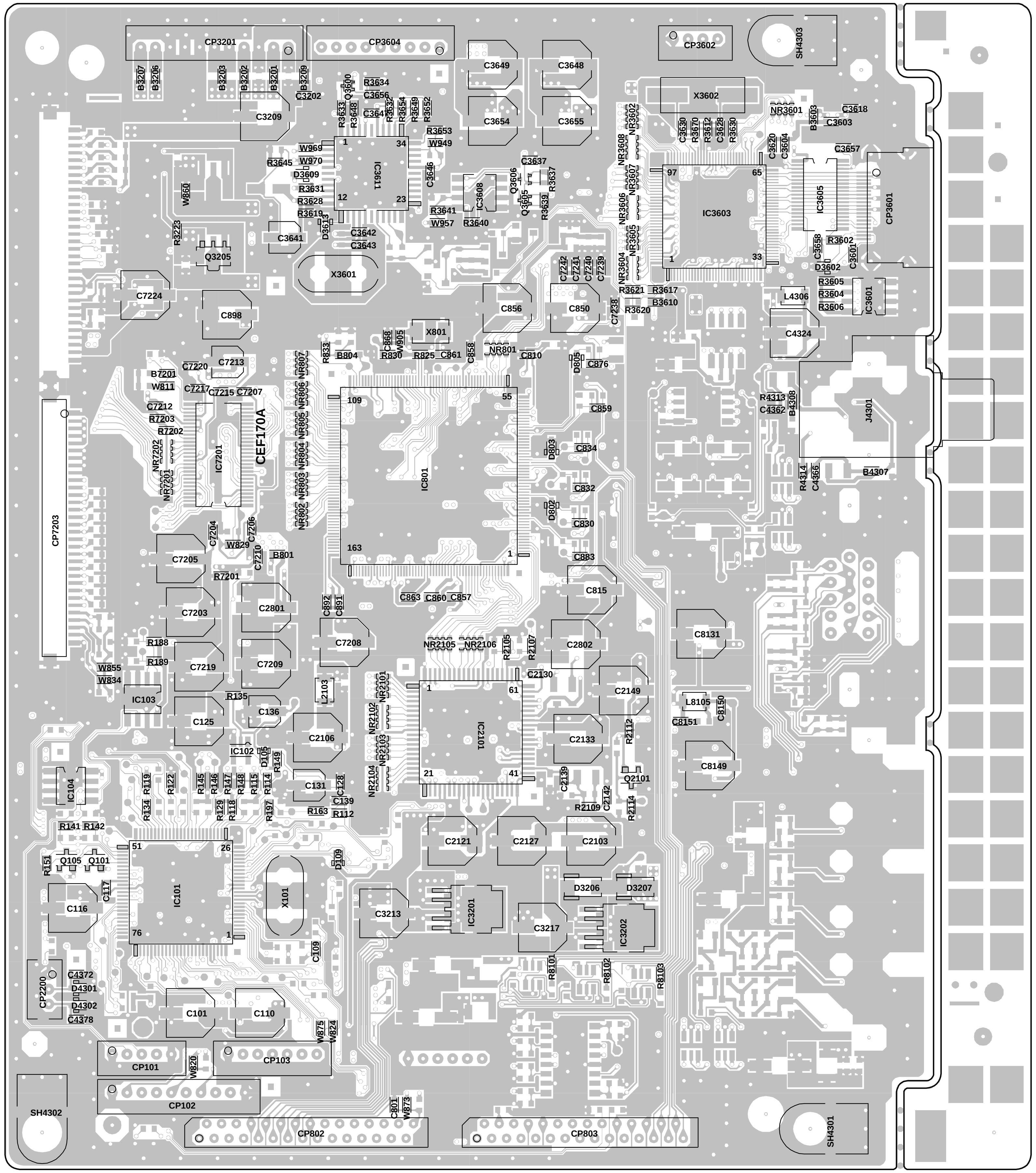
PRINTED CIRCUIT BOARDS
AV (TOP SIDE)



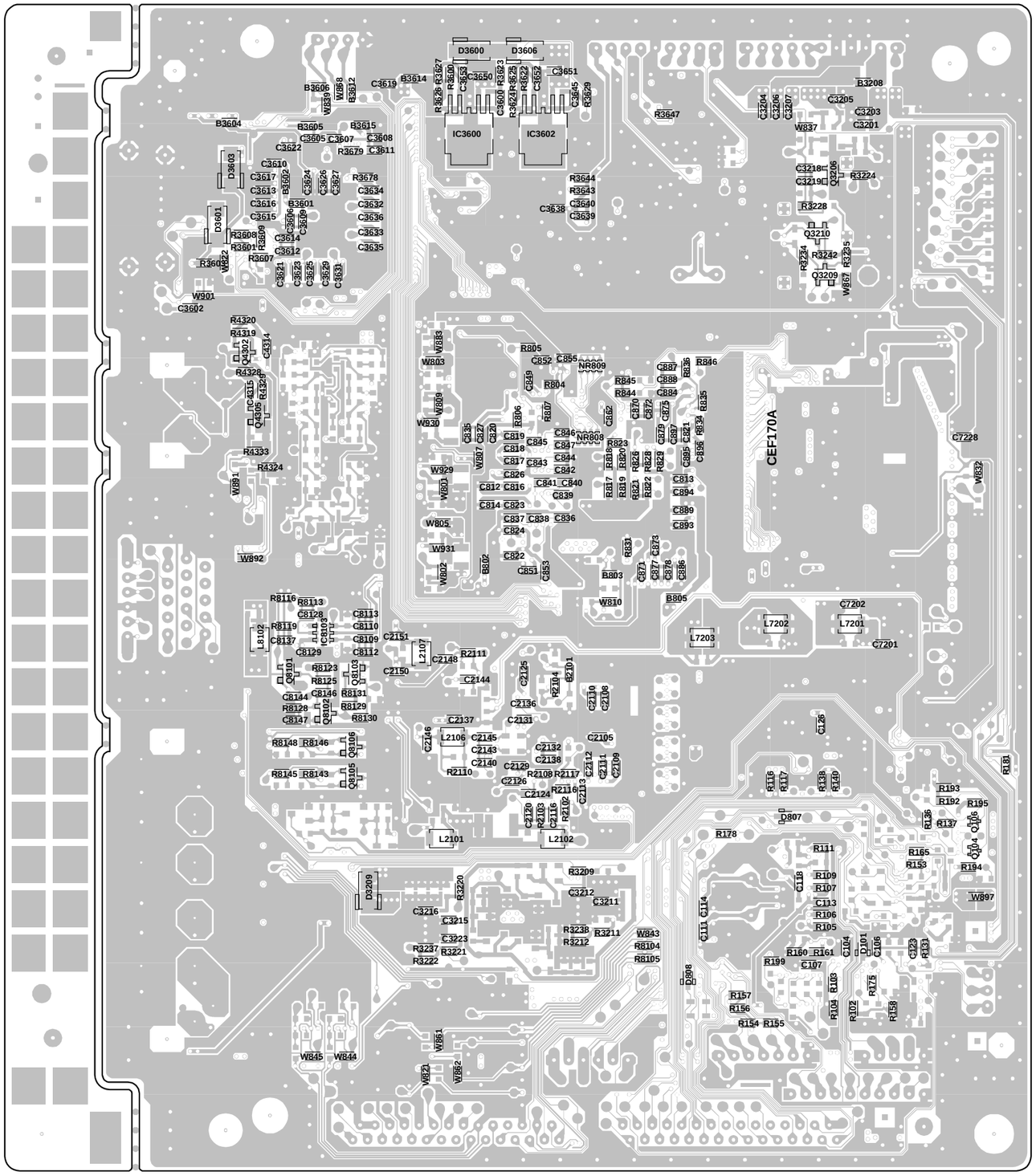
PRINTED CIRCUIT BOARDS
AV (BOTTOM SIDE)



PRINTED CIRCUIT BOARDS
SCALER (TOP SIDE)

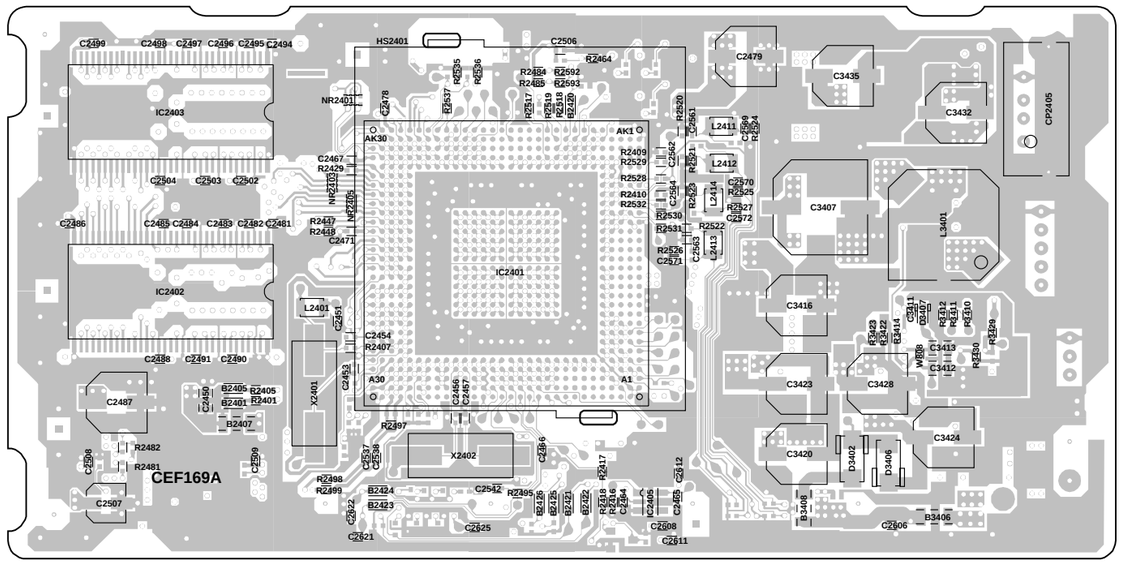


PRINTED CIRCUIT BOARDS
SCALER (BOTTOM SIDE)

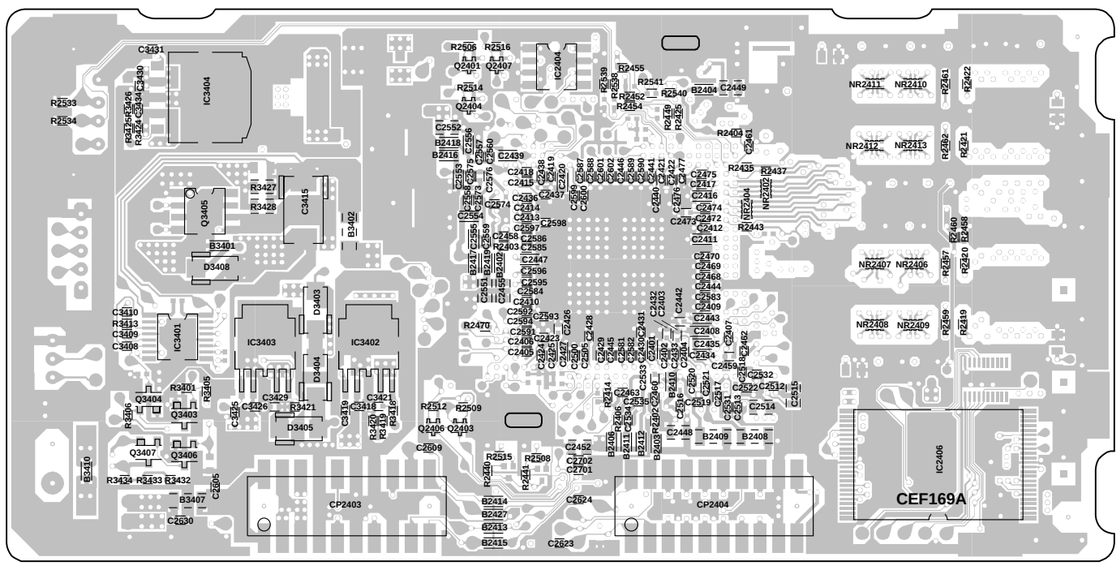


PRINTED CIRCUIT BOARDS

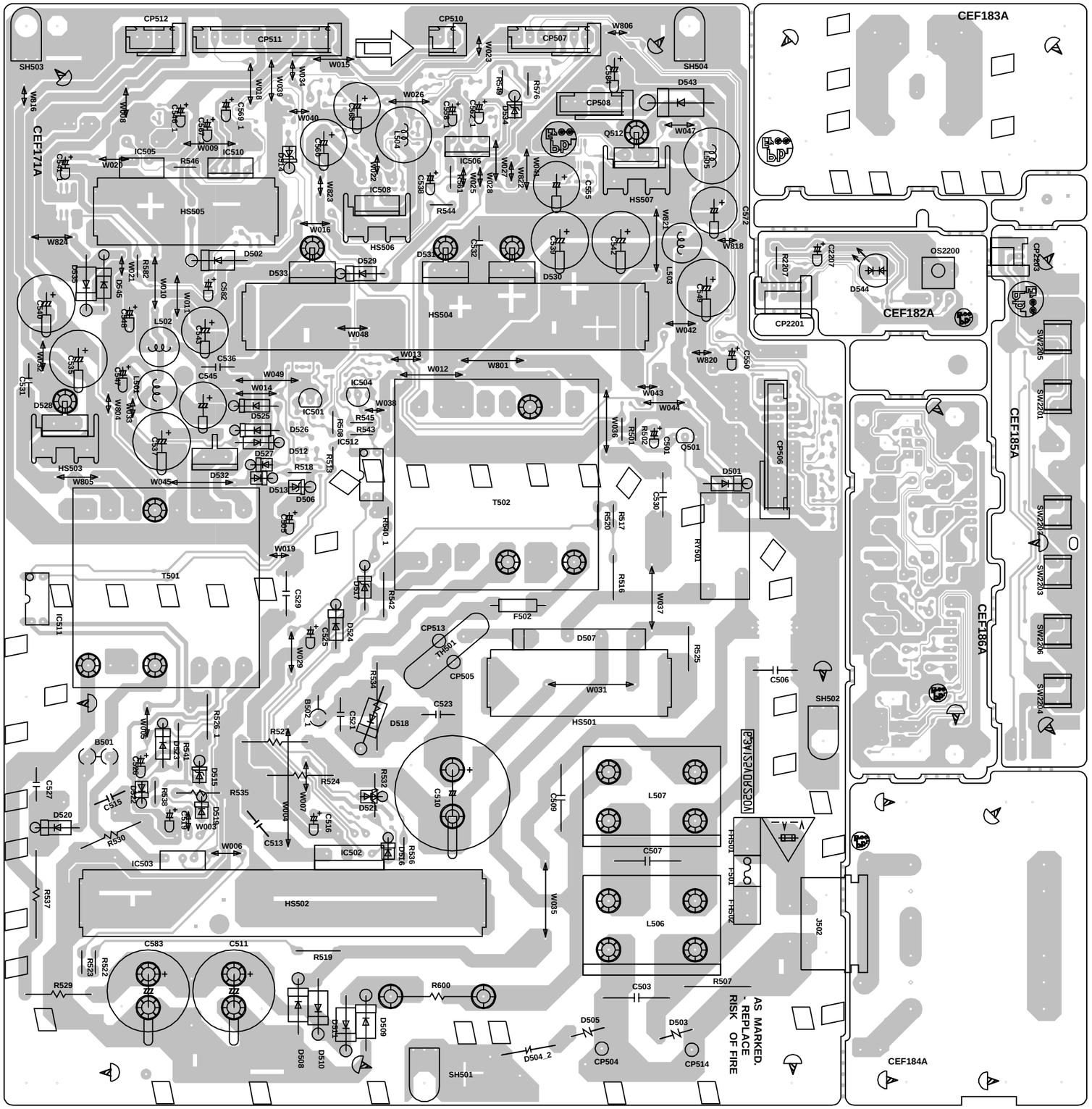
DIGITAL (TOP SIDE)



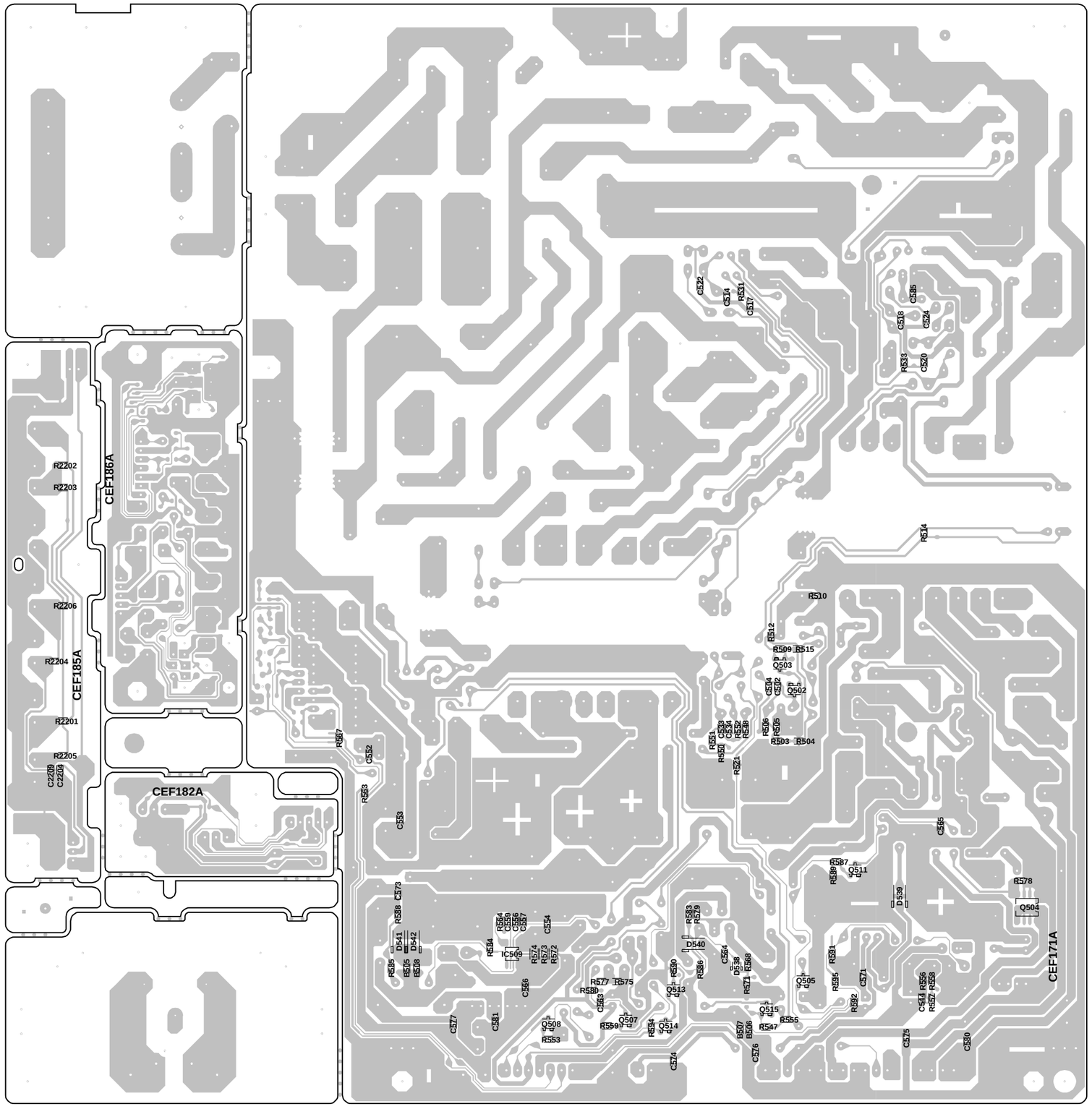
DIGITAL (BOTTOM SIDE)



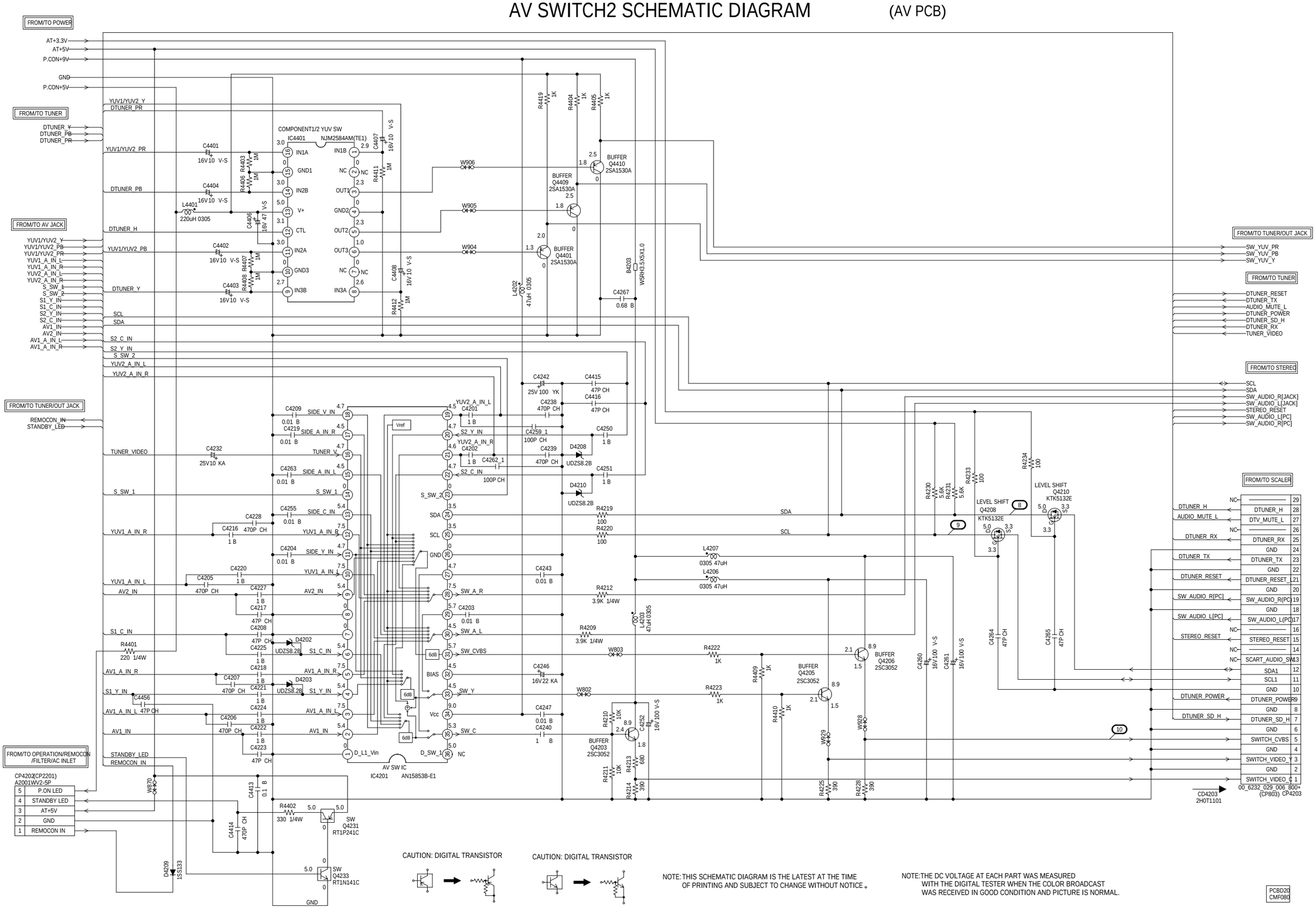
PRINTED CIRCUIT BOARDS
POWER/REMOCON/OPERATION (INSERTED PARTS)
SOLDER SIDE



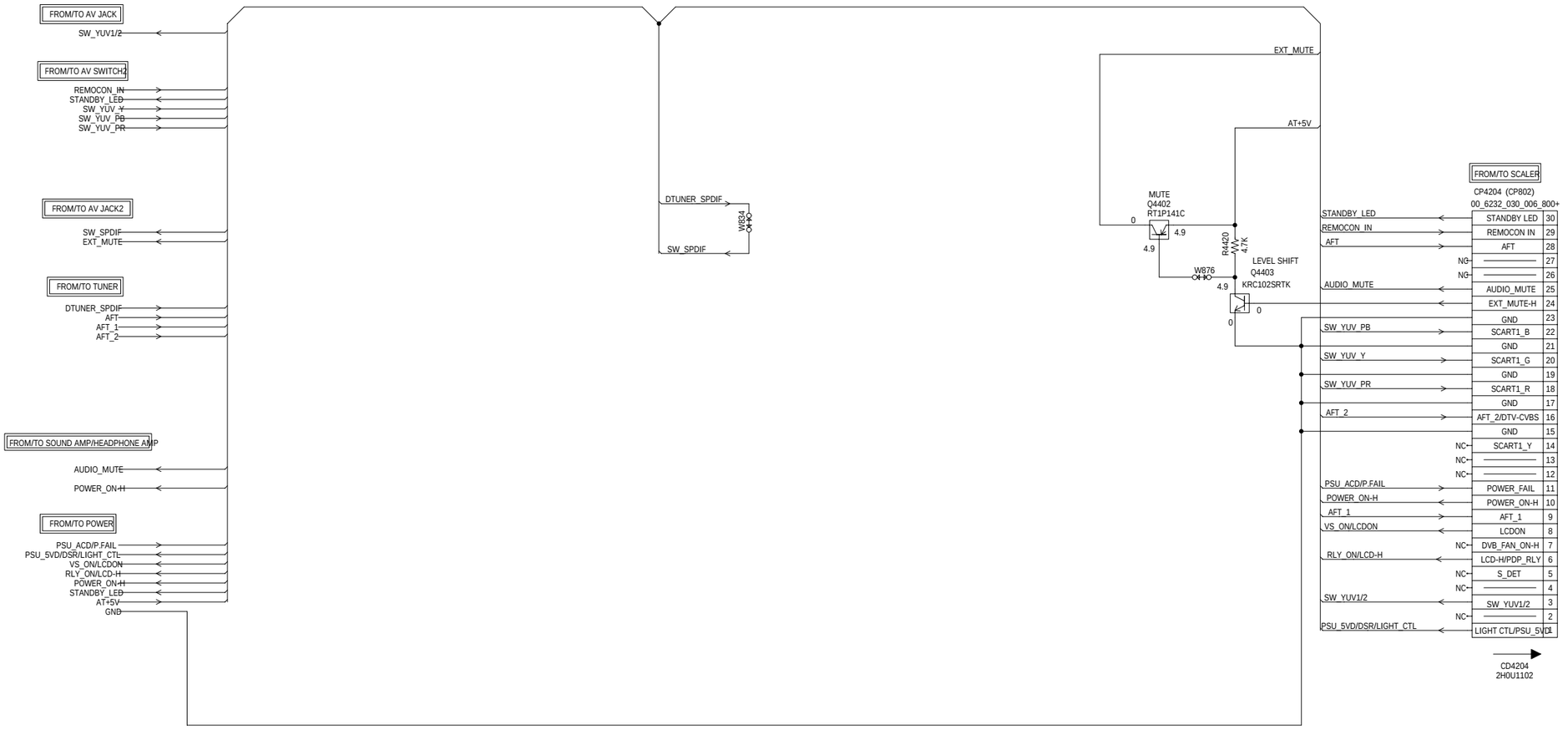
PRINTED CIRCUIT BOARDS
POWER/OPERATION (CHIP MOUNTED PARTS)
SOLDER SIDE



AV SWITCH2 SCHEMATIC DIAGRAM (AV PCB)



TUNER/OUT JACK SCHEMATIC DIAGRAM (AV PCB)



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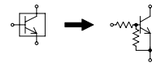
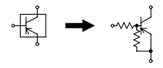
CAUTION: DIGITAL TRANSISTOR

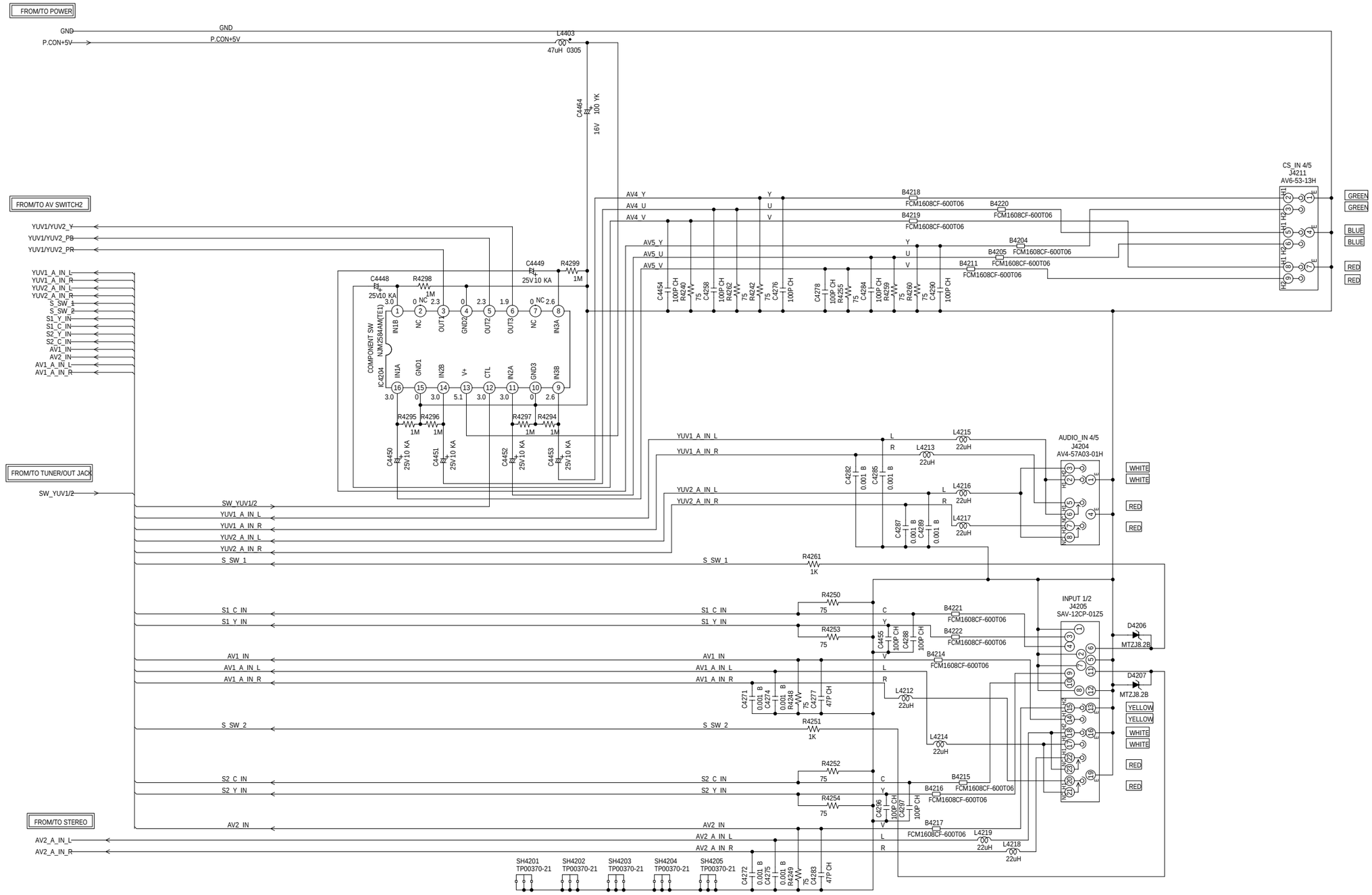


CAUTION: DIGITAL TRANSISTOR



PCBD20
CMF080

AV JACK SCHEMATIC DIAGRAM



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PCBD20
CMF080

STEREO SCHEMATIC DIAGRAM (AV PCB)

FROM/TO POWER
AT+5V
P.CON+5V
GND
P.CON+8V
W839
R914 10K
R915 10K
C906 10V220 YK
R913 1K
BUFFER Q901 2SC3052
BUFFER Q902 2SC3052
L901 10uH 0305
B901 BLM18PG121SN1D
B902 FCM1608CF-600T06
B903 BLM18PG121SN1D
R906 100
R905 100
L903 10uH 0305
C933 6.3V 1000 YK
C922 0.1 B
D901 MTZJ5.6B
C904 16V 22V-S
C941 0.0015 B
C943 470P CH
C945 220P CH
C948 22P CH
C949 22P CH
R901 33
R902 33
R903 33
L904 10uH 0305

FROM/TO TUNER
I2SSD0_OUTA
I2SWS_OUTA
I2SSCLK_OUTA
I2SSD0_IN
I2SWS_IN
I2SSCLK_IN

FROM/TO HDMI MICON2
CP901(CP3602) A2001WV2-4P
W892 W893 W894 W916
B904 FCM1608KF-102T02
B906 FCM1608KF-102T02
HDMI_I2SSCK
HDMI_I2SSDO
HDMI_I2SWS
GND
CD901 CU246601
TR303 W5T29X7.5X19
TR305 W5T29X7.5X19

FROM/TO SOUND AMP/HEADPHONE AMP
W927
W930
W856
W857
C959 0.0022 B
C958 0.0022 B
SP_AUDIO_OUT_L
SP_AUDIO_OUT_R

STEREO
IC904
MSP4440G-QA-C13-100

SPOUT_R
SPOUT_L
NC
DACM_SUB
NC
NC
SC2_OUT_R
SC2_OUT_L
VREF1
VariOut_R
VariOut_L
CAPL_A
AHVSUP
25 NC
26 VREF2
80 STANDBYQ
79 ADR_SEL
D_CTR_I/O_2
D_CTR_I/O_1
AUDIO_CL_OUT
TP
XTAL_OUT
XTAL_IN
TESTEN
ANA_IN2+
ANA_IN-
SIF
AVSUP
X901 18.432MHz
C956 10P CH
C957 5P CH
C955 56P CH
C953 56P CH
C954 56P CH
40 CAPL_M
65 AVSUP
I2S_DA_IN3
RESETQ
I2S_WS3
I2S_CL3
I2S_DA_IN2
I2S_DA_IN1
I2S_DA_OUT
I2S_WS
I2S_CL
I2C_DA
I2C_CL
ADR_CL
ADR_WS
ADR_DA
DVSUP
DVSS
SW1_A_IN_L (DVD)
SW_A_IN_R
AV2_A_IN_L (AV2)
AV2_A_IN_R
SW2_A_IN_L (PC/HDMI/DVI)
SW2_A_IN_R
SW_A_IN_L (AV1/YUV/SIDE)
SW_A_IN_R
VREFTOP
MONO_IN
AVSS
AHVSS
AGNDC
ASG4
ASG2
ASG1
C914 50V10 YK
C915 50V10 YK
C916 16V22 KANP
C917 470P CH
C918 50V10 YK
C919 16V22 KANP
C920 0.0015 B
C926 0.1 B
C927 50V 3.3 KA
C962 0.33 B
C963 0.33 B
C934 0.33 B
C936 0.33 B
C940 0.33 B
C942 0.33 B
C944 0.1 B
C946 50V 10 YK
C950 0.0015 B
C951 50V 10 YK
C952 470P CH
R904 100
R916 100

FROM/TO AV JACK2
AUDIO_JACK_OUT_R
AUDIO_JACK_OUT_L

FROM/TO AV SWITCH2
STEREO_RESET
SCL
SDA
SW_AUDIO_L[PC]
SW_AUDIO_R[PC]
SW_AUDIO_L[JACK]
SW_AUDIO_R[JACK]

FROM/TO AV JACK
AV2_A_IN_L
AV2_A_IN_R

FROM/TO TUNER
SIF

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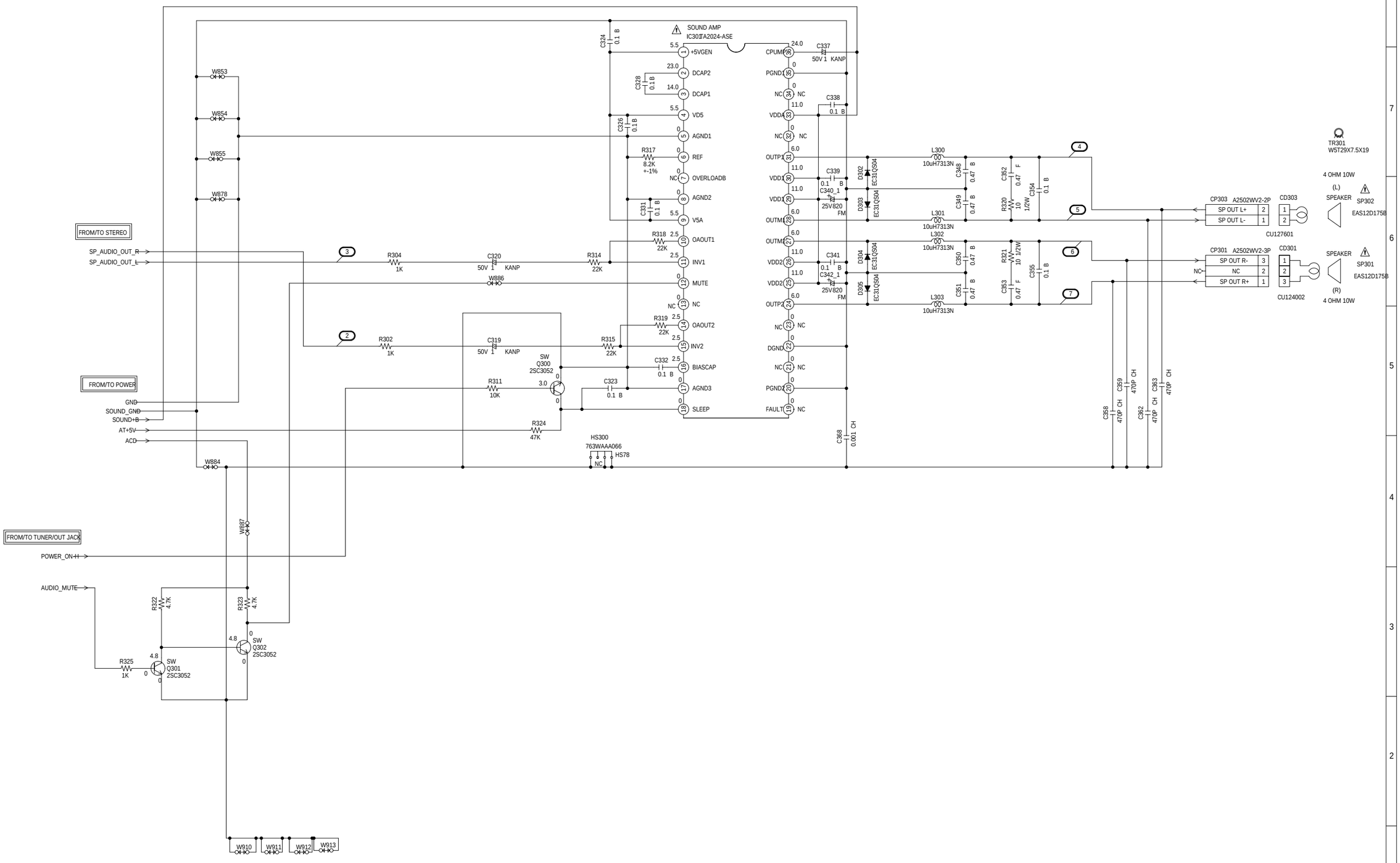
PCBD20
CMF080

SOUND AMP/HEADPHONE AMP SCHEMATIC DIAGRAM (AV PCB)



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。

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PCBD20
CMF080

POWER SCHEMATIC DIAGRAM

(AV PCB)

FROM/TO POWER3
CP3802 (CP510)
A2501WV2-2P
1 9VSC
2 GND
CD3802
CU123701
L3801 22uH TSL0808
C3803 16V1000 FM
L3810 10uH TSL0808
FROM/TO TUNER/OUT JACK
STANDBY_LED
CP3803(CP511)
A2501WV2-12P
1 5VSC
2 5VSC
3 5VSC
4 GND
5 GND
6 GND
7 12VSC
8 12VSC
9 GND
10 GND
11 ST_BY_H
12 NC
CD3803
CU1C4201
L3802 22uH TSL0808
C3807 16V1000 FM
L3803 22uH TSL0808
C3802 16V1000FM
W947
FROM/TO SOUND AMP/HEADPHONE AMP
GND
ACD
FROM/TO POWER3
CP3804(CP507)
A2501WV2-7P
1 POWER_FAIL
2 LCD-H
3 AT+5V
4 GND
5 BACKLIGHT ON
6 LIGHT_CTL
7 POWER_ON_H
CD3804
CU173701
R3801 2.2K
W859
L3804 22uH TSL0808
AT+5V
W858
W801
W942
C3804 0.001 B
R3805 4.7K
C3805 6.3V 1000 YK
FROM/TO POWER3
CP3801 (CP512)
A2501WV2-4P
1 SOUND+B
2 SOUND+B
3 SOUND GND
4 SOUND GND
CD3805
CU144706
W845
B3801 W5RH3.5X5X1.0
C3806 100P CH
C3810 16V1000 FM
C3807 0.1 B
R3814 0.047 1/10W+-1%
R3816 0.047 1/10W+-1%
R3815 0.047 1/10W+-1%
C3808 0.047 B
3.3V CONTROL
IC3801 AL1010
VIN
V5/PWON
Vref/SS
CC
CS
EXT
GND
FB
C3812 0.01 B
R3809 22K
D3801 1SS133
R3813 33K
C3811 27PCH
C3809 0.1 B
R3811 58K
R3818 1.8K +1%
R3819 680 +-1%
R3817 1K +-1%
SWITCHING
Q3813 RSS050P03
GATE
SOURCE
DRAIN
D3802 21DQ04N
L3806 15uH SBPSC
L3807 10uH TSL0808
C3818 16V 680 FM
C3820 6.3V 1000 FM
W842
REGULATOR
IC3804 PQ070XF01SZH
IN
OUT
GND
R3831 15K
R3834 22K
C3827 10V100 YK
R3835 22K
W804
W807
L3809 6.8uH RCH8011NP-6R8L
C3825 25V 820 FM
C3826 25V 820 FM
D3805 1H5-E
P.CON32V REG
IC3805 LA7995M-TLM
CVCC
COSC
NC
CP3
C3831 150P CH
C3835 0.22 MMTS
C3836 0.22 MMTS
C3828 0.01 B
CP1
GND
CP2
CREG
COUT
C3829 0.22 MMTS
C3830 0.22 MMTS
C3832 0.22 MMTS
C3833 0.22 MMTS
C3834 50V 4.7 V-S
C3837 50V 4.7 V-S
CD3806
CU273702
FROM/TO POWER3
CP3808(CP508)
A2001WV2-7P
DTV UNREG+5V 1
DTV UNREG+5V 2
DTV UNREG+4V 3
DTV UNREG+4V 4
GND 5
GND 6
GND 7
D3811 EC31QS04
D3812 EC31QS04
C3850 6.3V 470 MHE
FROM/TO TUNER
UNREG+5V
UNREG+4V
P.CON+32V
C3852 6.3V 470 MHE
FROM/TO AV JACK2
P.CON+5V
GND
FROM/TO STEREO
D3804 1H3-E
P.CON+8V
P.CON+5V
AT+5V
GND
FROM/TO AV JACK
P.CON+5V
GND
FROM/TO AV SWITCH2
AT+5V
AT+3.3V
P.CON+9V
P.CON+5V
GND
FROM/TO TUNER/OUT JACK
AT+5V
PSU_ACD/P.FAIL
PSU_5VD/DSR/LIGHT_CTL
VS_ON/LCDON
RLY_ON/LCD-H
POWER_ON-H
GND
FROM/TO RREGULATOR
CP3807 (CP3201)
A2001WV2-11P
P.CON+12V 1
P.CON+9V 2
P.CON+5V 3
AT+3.3V 4
P.CON+3.8V 5
P.CON+3.8V 6
GND 7
GND 8
GND 9
P.CON+5V 10
AT+5V 11
R3807 3.9K
TR304 W5T29X7.5X19
CD3807 CU2B5501
FROM/TO SOUND AMP/HEADPHONE AMP
AT+5V
GND
SOUND+B
SOUND_GND

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PCBD20
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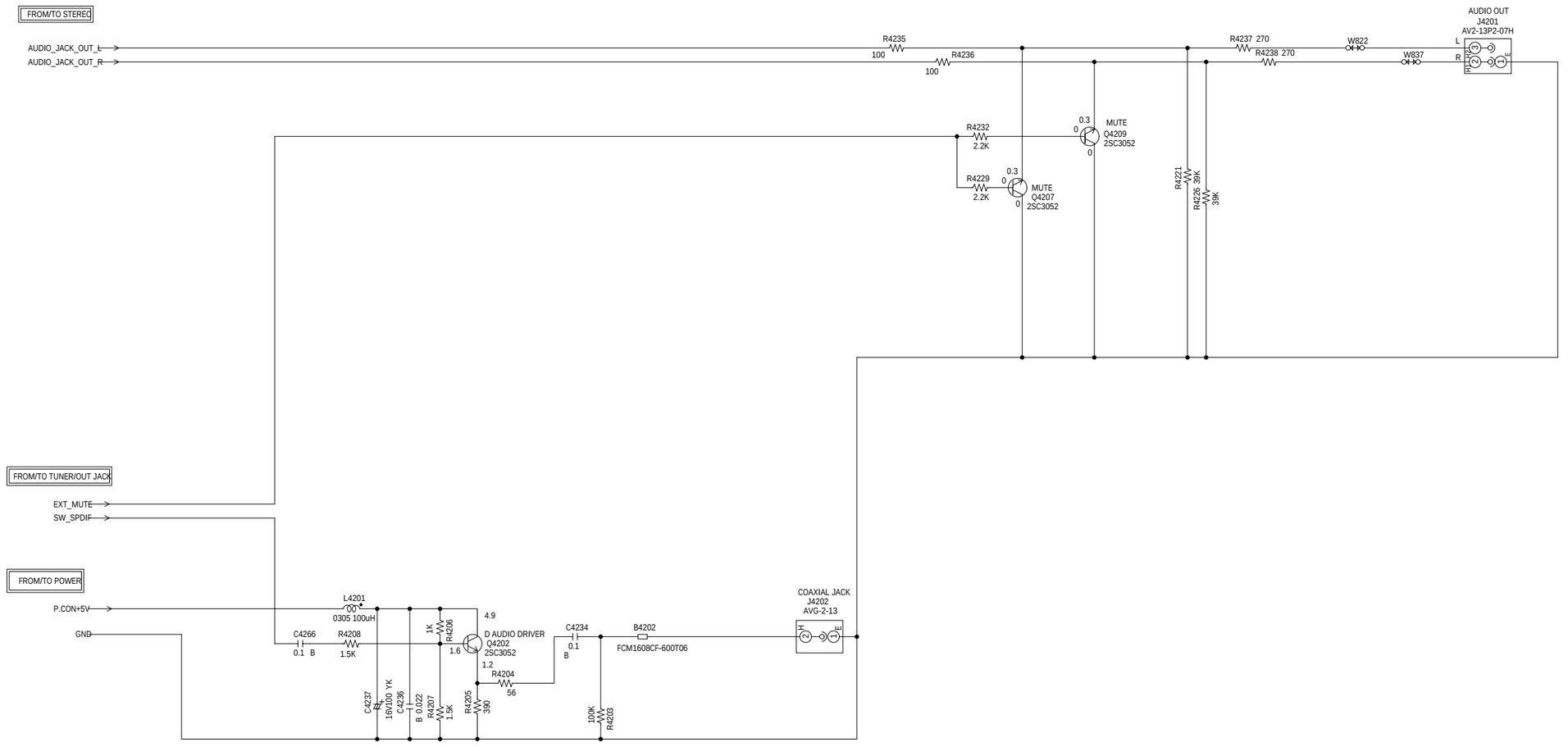
AV JACK2 SCHEMATIC DIAGRAM

(AV PCB)



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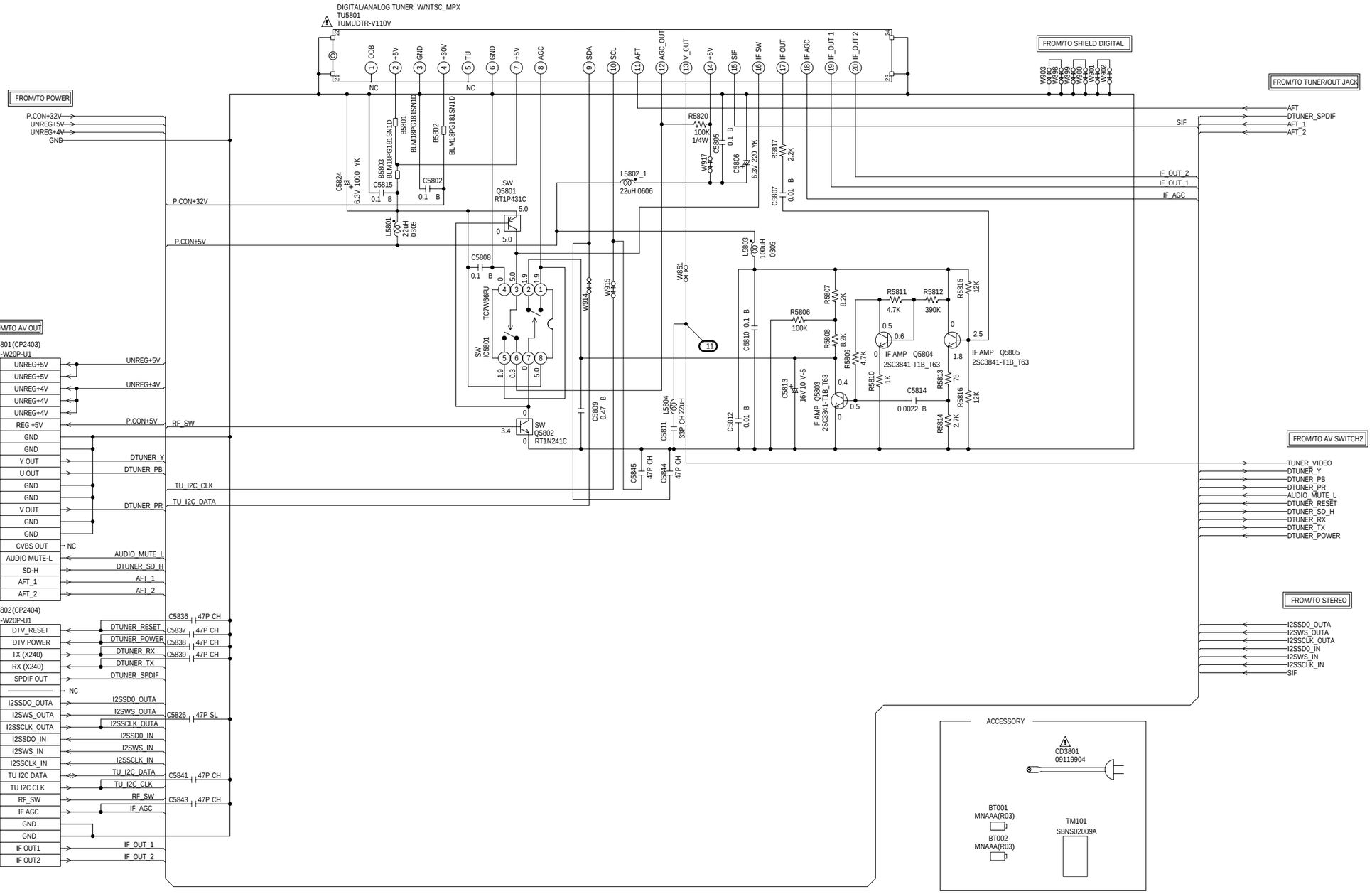
PCBD20
CMF080

TUNER SCHEMATIC DIAGRAM

(AV PCB)



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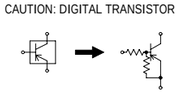
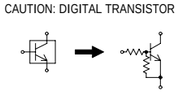
CAUTION: DIGITAL TRANSISTOR

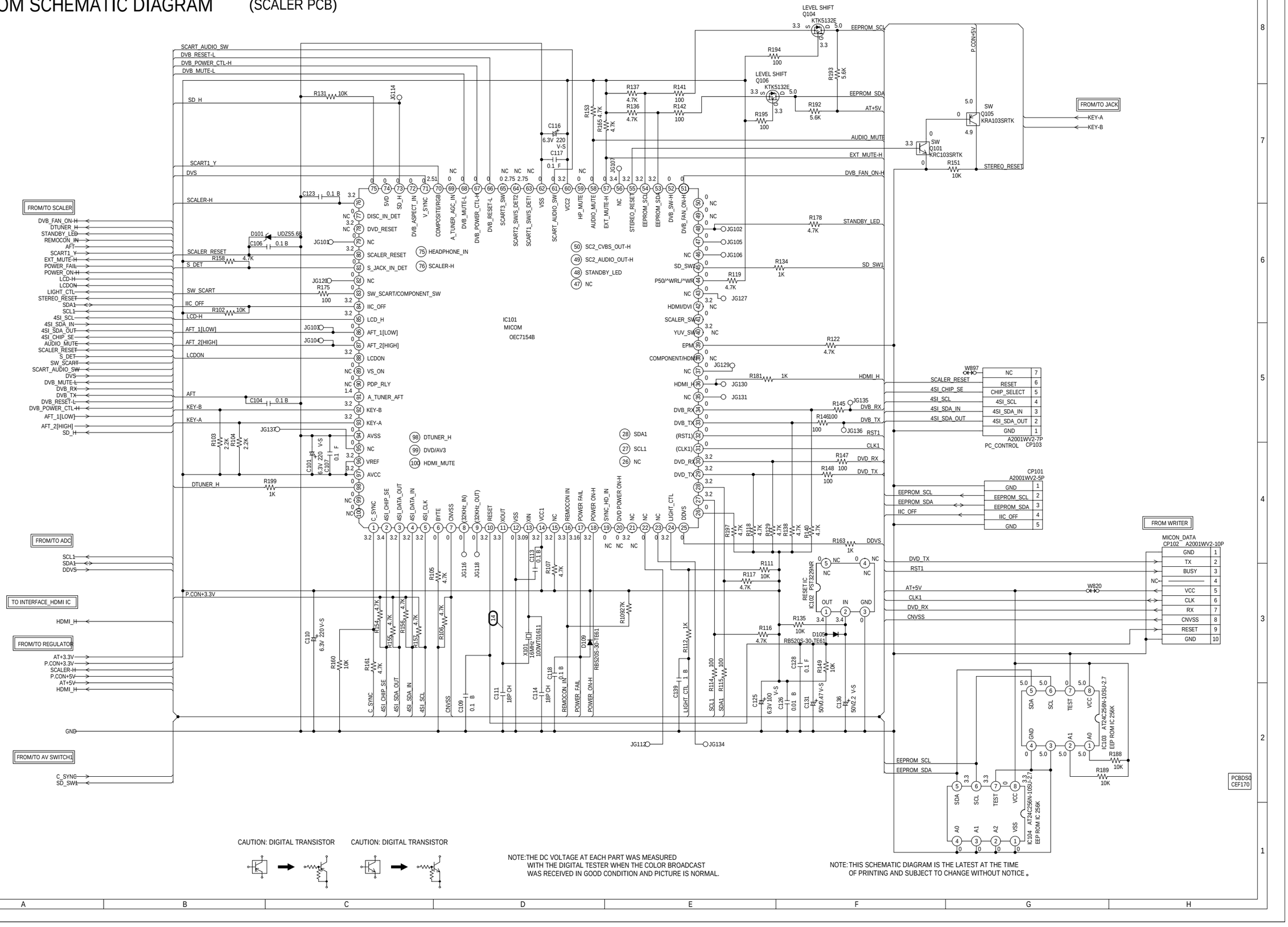


CAUTION: DIGITAL TRANSISTOR



PCBD20
CMF080

MICOM SCHEMATIC DIAGRAM (SCALER PCB)



SCALER SCHEMATIC DIAGRAM (SCALER PCB)

FROM/TO TUNER/OUT JACK

CP802(CP4204)
00_6232_030_006_800+

1	STANDBY LED	STANDBY_LED
2	REMOCON IN	REMOCON_IN
3	AFT	AFT
4	———	NC
5	———	NC
6	AUDIO_MUTE	AUDIO_MUTE
7	EXT_MUTE-H	EXT_MUTE-H
8	GND	
9	SCART1_B	SW2_B/CB
10	GND	
11	SCART1_G	SW2_G/Y
12	GND	
13	SCART1_R	SW2_R/CR
14	GND	
15	AFT_2/DTV_CVBS	AFT_2[HIGH]
16	GND	GND
17	SCART1_Y	SCART1_Y
18	———	NC
19	———	NC
20	POWER_FAIL	POWER_FAIL
21	POWER_ON-H	POWER_ON-H
22	AFT_1	AFT_1[LOW]
23	LCDON	LCDON
24	DVB_FAN_ON-H	DVB_FAN_ON-H
25	LCD-H/PDP_RLY	LCD-H
26	S_DET	S_DET
27	———	NC
28	SW_YUV1/2	SW_SCART
29	———	NC
30	LIGHT CTL/PSU_5VD	LIGHT_CTL

D807 1SS355, D808 1SS355, W824, W875, C801, W873, B 1

FROM/TO AV SWITCH2

CP803(CP4203)
00_6232_029_006_800+

1	———	NC
2	DTUNER_H	DTUNER_H
3	DTV_MUTE_L	DVB_MUTE-L
4	———	NC
5	DTUNER_RX	DVB_RX
6	GND	
7	DTUNER_TX	DVB_TX
8	GND	
9	DTUNER_RESET_L	DVB_RESET-L
10	GND	
11	SW_AUDIO_R(PC)	SW_AUDIO_R[PC]
12	GND	
13	SW_AUDIO_L(PC)	SW_AUDIO_L[PC]
14	———	NC
15	STEREO_RESET	STEREO_RESET
16	———	NC
17	SCART_AUDIO_SW	SCART_AUDIO_SW
18	SDA1	SDA1
19	SCL1	SCL1
20	GND	
21	DTUNER_POWER	DVB_POWER_CTL-H
22	GND	
23	DTUNER_SD_H	SD_H
24	GND	
25	SWITCH_CVBS	
26	GND	
27	SWITCH_VIDEO_Y	
28	GND	
29	SWITCH_VIDEO_C	

W931, W802, W930, W809, W929, W801, 15 SW_CVBS, 16 SW_VIDEO_Y, 17 SW_VIDEO_C, C810 0.1B

FROM/TO AV SWITCH

SW_G/SW_Y, SW_R/SW_CR, SW_B/SW_CB, SW2_R/CR, SW2_G/Y, SW2_B/CB, SW_CVBS, SW_VIDEO_Y

W803, W883, SCALER_RESET

B801 DIGITAL+3.3V BLM18PG181SN1D, B802 ANALOG+3.3V BLM18PG181SN1D, P.CON+3.3V, GND

C2802 V-S 6.3V 220, C2801 V-S 6.3V 220, C822 0.1 B

SCALER
IC801
R8J66607A72FP

1	DVDD33	3.4	41	VRMD	0.9	81	DVDD33
2	PDX24	3.4	42	VIND	3.4	82	DGND
3	PDX25	3.4	43	AVDDD2	0	83	DVDD18
4	PDX26	3.4	44	AVSSD2	3.4	84	QBR3
5	PDX27	3.4	45	AVDDD1	0	85	QBR2
6	VDIN	3.4	46	AVSSD1	3.4	86	QBR1
7	HDIN/FBIN	3.4	47	VRPC	0	87	QBR0
8	DVDD33	3.4	48	VROC	3.4	88	DGND
9	DGND	0	49	VRMC	1.3	89	DVDD33
10	VRPD	3.4	50	VINC	3.4	90	QGR7
11	VROD	0	51	AVDDC2	0	91	QGR6
12	VRMD	0.9	52	AVSSC2	3.4	92	QGR5
13	VIND	3.4	53	AVDDC1	0	93	QGR4
14	AVDDD2	0	54	AVSSC1	3.4	94	QGR3
15	AVSSD2	3.4	55	DVDD	0	95	DVDD33
16	AVDDD1	0	56	DVSS	3.4	96	DGND
17	AVSSD1	3.4	57	VRPB	0	97	DVDD18
18	VRPC	0	58	VROB	1.3	98	QBLK
19	VROC	3.4	59	VRMB	0.5	99	QBL7
20	VRMC	1.3	60	VIN1B	3.4	100	QBL6
21	VINC	3.4	61	AVDDB2	2.0	101	QBL5
22	AVDDC2	0	62	VIN2B	3.4	102	QBL4
23	AVSSC2	3.4	63	AVSSB2	0	103	QBL3
24	AVDDC1	0	64	AVDDB1	3.4	104	QBL2
25	AVSSC1	3.4	65	AVSSB1	0	105	DVDD33
26	DVDD	0	66	VRPA	3.4	106	QGL0
27	DVSS	3.4	67	VROA	0.5	107	DVDD18
28	VRPB	0	68	VRMA	NC	108	DGND
29	VROB	1.3	69	VIN1A	3.4	109	QGL7
30	VRMB	0.5	70	AVDDA2	1.3	110	QGL6
31	VIN1B	3.4	71	VIN2A	3.4	111	QGL5
32	AVDDB2	2.0	72	AVSSA2	0	112	DGND
33	VIN2B	3.4	73	VIN3A	3.4	113	DVDD33
34	AVSSB2	0	74	AVDDA1	0	114	QGL4
35	AVDDB1	3.4	75	AVSSA1	3.4	115	QGL3
36	AVSSB1	0	76	SVSS	0	116	QGL2
37	VRPA	3.4	77	DVDD33	3.4	117	QGL1
38	VROA	0.5	78	DGND	0	118	TEST1
39	VRMA	NC	79	RESET	3.7	119	LPF1
40	VIN1A	3.4	80	QOECTL	3.7	120	TEST0
41	AVDDA2	1.3	81	HDIN2	3.3	121	DVDD33
42	VIN2A	3.4	82	VDIN2	3.4	122	DGND
43	AVSSA2	0	83	DVDD33	3.4	123	DVDD18
44	VIN3A	3.4	84	DGND	0	124	QRR3
45	AVDDA1	0	85	MPWEL	3.7	125	QRR2
46	AVSSA1	3.4	86	MPOE	3.3	126	QRR1
47	SVSS	0	87	MPCE	3.3	127	QRR0
48	DVDD33	3.4	88	MPAHPC*XLK1	3.3	128	DVDD33
49	DGND	0	89	DVDDSD	3.3	129	DGND
50	DVDD18	1.8	90	MDQ15/C656IN7	3.3	130	DVDDSD
51	QBR3	0	91	MDQ14/C656IN6	3.3	131	QRR0
52	QBR2	0	92	MDQ13/C656IN5	3.3	132	QBR7
53	QBR1	0	93	MDQ12/C656IN4	3.3	133	QBR6
54	QBR0	0	94	MDQ11/C656IN3	3.3	134	QBR5
55	DGND	0	95	DVDD33	3.3	135	QBR4
56	DVDD18	1.8	96	DGND	0		
57	MPWEL	3.3	97	DVDD18	1.8		

214 PXD23, 215 DVDD18, 216 DGND

55 DGND, 56 DVDD18, 57 MPWEL

163 DGND, 164 DVDD18, 165 QBR4

106 QGL0, 107 DVDD18, 108 DGND

C851 0.1 B, C853 0.1 B, C857 0.1 B, C860 0.1 B, W810, C863 0.1 B, C885 0.1 B, R831 10K, C871 0.1 B, C873 0.1 B, C877 0.1 B, C878 0.1 B, B803 FCM1608CF-600T06

C824 0.1 B, SW_CVBS, C883 0.1 B, C836 0.1 B 1.6, C837 0.1 B 1.2, C838 0.1 B 0.7, C823 0.1 B, C814 0.1 B, C815 6.3V 220 V-S, C839 0.1 B 1.6, C840 0.1 B 1.1, C841 0.1 B 0.7, SW_R/SW_CR, W805, C812 0.1 B, C830 0.1 B, D802 UDZS5.6B, C816 0.1 B, C826 0.1 B, C842 0.1 B, C843 0.1 B, C844 0.1 B, SW_VIDEO_C, C832 0.1 B, C818 0.1 B, D803 UDZS5.6B, C834 0.1 B, SW_B/SW_CB, W807, C845 0.1 B 1.6, C846 0.1 B 1.1, C847 0.1 B 0.7, C817 0.1 B, C819 0.1 B, SW_VIDEO_Y, C859 0.1 B, C876 0.1 B, C820 0.1 B, D805 UDZS5.6B, C827 0.1 B, R807 10K, R806 10K, R805 10K

C891 0.1 B, C892 0.1 B, C898 6.3V 220 V-S, C893 0.1 B, C889 0.1 B, NR802, C894 0.1 B, C813 0.1 B, NR803, NR804, NR809, C895 0.1 B, C896 0.1 B, NR806, C821 0.1 B, NR801, R835 10K, R834 10K, C897 0.1 B, R836 1K 0.01 B, C888 0.001 B, C887 B

C835 0.1 B, C849 0.1 B, C850 6.3V 220V-S, C852 0.1 B, C855 0.1 B, C858 0.1 B, C862 0.1 B, R817 10K, R818 10K, R819 10K, R820 10K, R821 10K, R822 10K, R823 10K, R824 10K, R826 10K, R825 10K, R844 47, R845 47, R846 47, C870 0.1 B, C872 0.1 B, C875 0.1 B, C879 0.1 B, C884 0.1 B, B804 FCM1608CF-600T06, R833 47

C7238 2.2 B, C7239 2.2 B, C7240 2.2 B, C7241 2.2 B, C7242 2.2 B, NR808 4D03WGJ0103T5E, NR809 4D03WGJ0103T5E, NR801 4D03WGJ0000T5E, R825 1M, R830 470, X801 54MHz, W905, C856 6.3V 220 V-S, C861 7PCH, C868 7PCH

DHS, DVS, DEN, DCLK1, 22, 21, GND, P.CON+1.5V, B805 BLM18PG181SN1D

4SI_SCL, 4SI_SDA_OUT, 4SI_SDA_IN, 4SI_CHIP_SE

FROM/TO MICOM: DVS

FROM ADC: DDHS, DDVS, DDCK, DPR7, DPR6, DPR5, DPR4, DPR3, DPR2, DPR1, DPR0, DPG7, DPG6, DPG5, DPG4, DPG3, DPG2, DPG1, DPG0, DPB7, DPB6, DPB5, DPB4, DPB3, DPB2, DPB1, DPB0

TO LVDS: DR9, DR8, DR7, DR6, DR5, DR4, DR3, DR2, DR1, DR0, DG9, DG8, DG7, DG6, DG5, DG4, DG3, DG2, DB9, DB8, DB7, DB6, DB5, DB4, DB3, DB2, DCLK1, DVS, DHS, DEN

FROM/TO REGULATOR: P.CON+1.5V, P.CON+3.3V, GND

FROM/TO JACK: SW_AUDIO_R[PC], SW_AUDIO_L[PC]

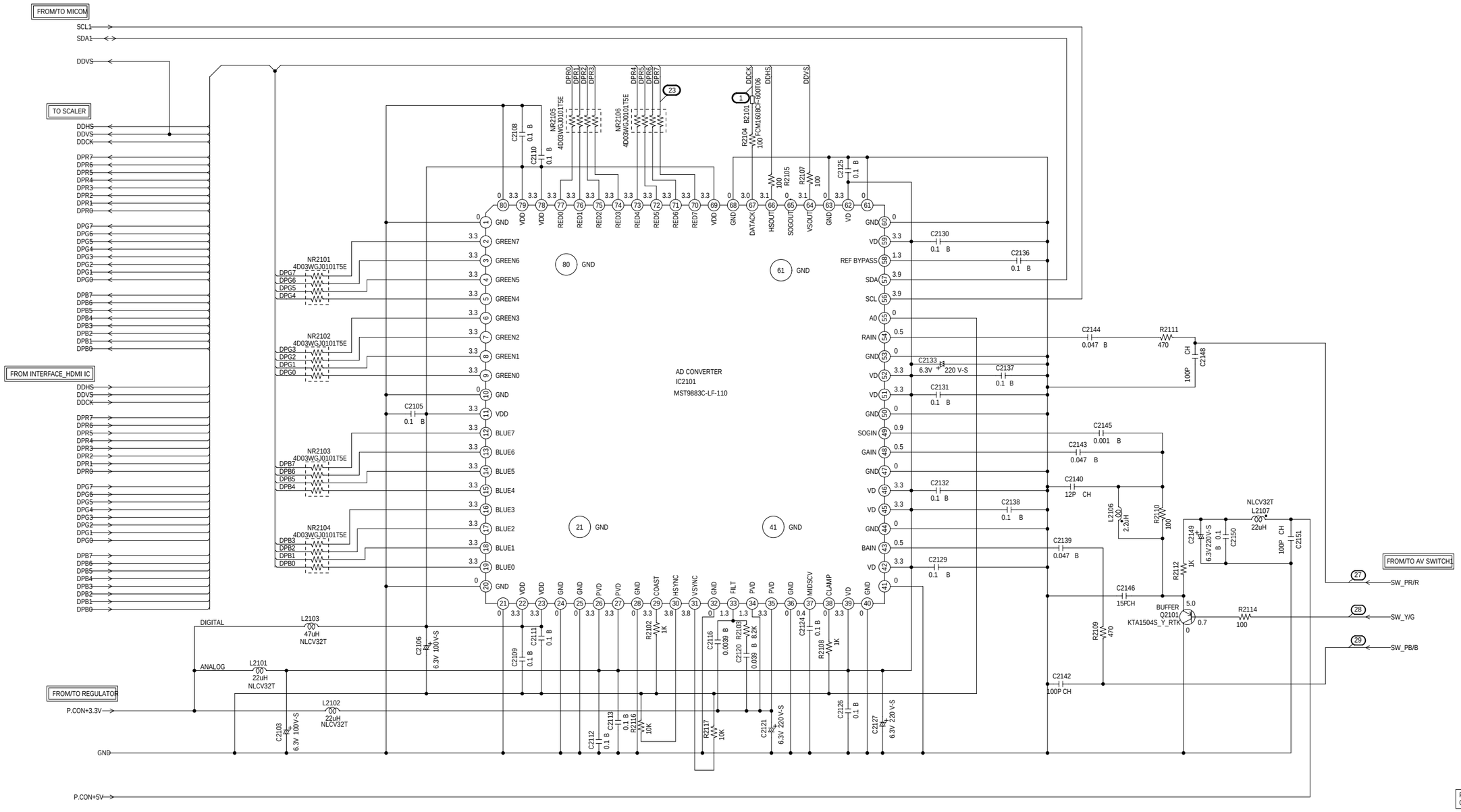
FROM/TO MICOM: STANDBY_LED, REMOCON_IN, AFT, SCART1_Y, EXT_MUTE-H, POWER_FAIL, POWER_ON-H, LCD-H, LCDON, LIGHT_CTL, STEREO_RESET, AUDIO_MUTE, SDA1, SCL1, SCALER_RESET, 4SI_CHIP_SE, 4SI_SDA_OUT, 4SI_SDA_IN, 4SI_SCL, S_DET, SW_SCART, SCART_AUDIO_SW, DVB_FAN_ON-H, DTUNER_H, DVB_MUTE-L, DVB_RX, DVB_TX, DVB_RESET-L, DVB_POWER_CTL-H, SD_H, AFT_1[LOW], AFT_2[HIGH]

PCBDSQCEF170

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。

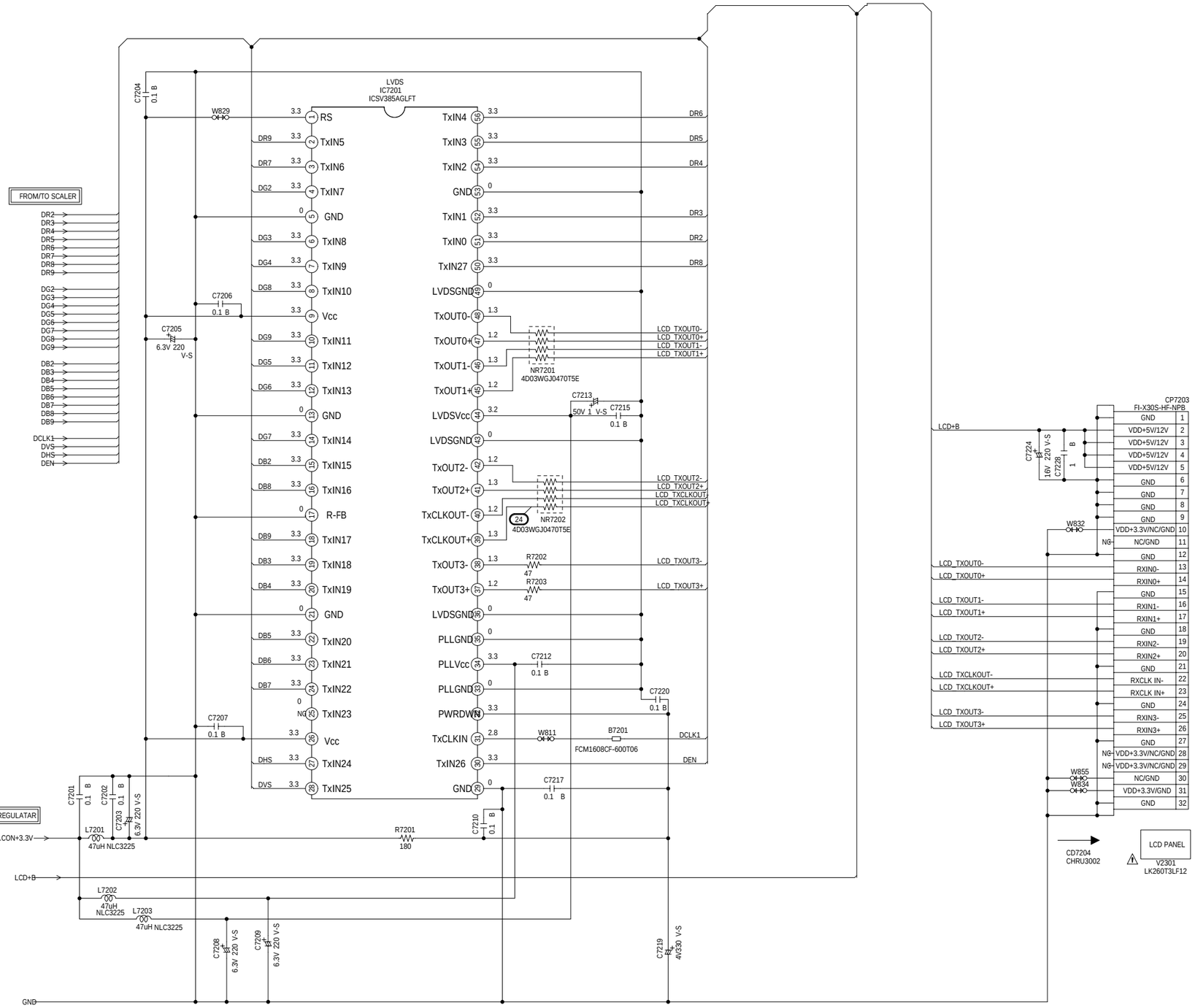
ADC SCHEMATIC DIAGRAM (SCALER PCB)



NOTE:THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

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

LVDS SCHEMATIC DIAGRAM(SCALER PCB)



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

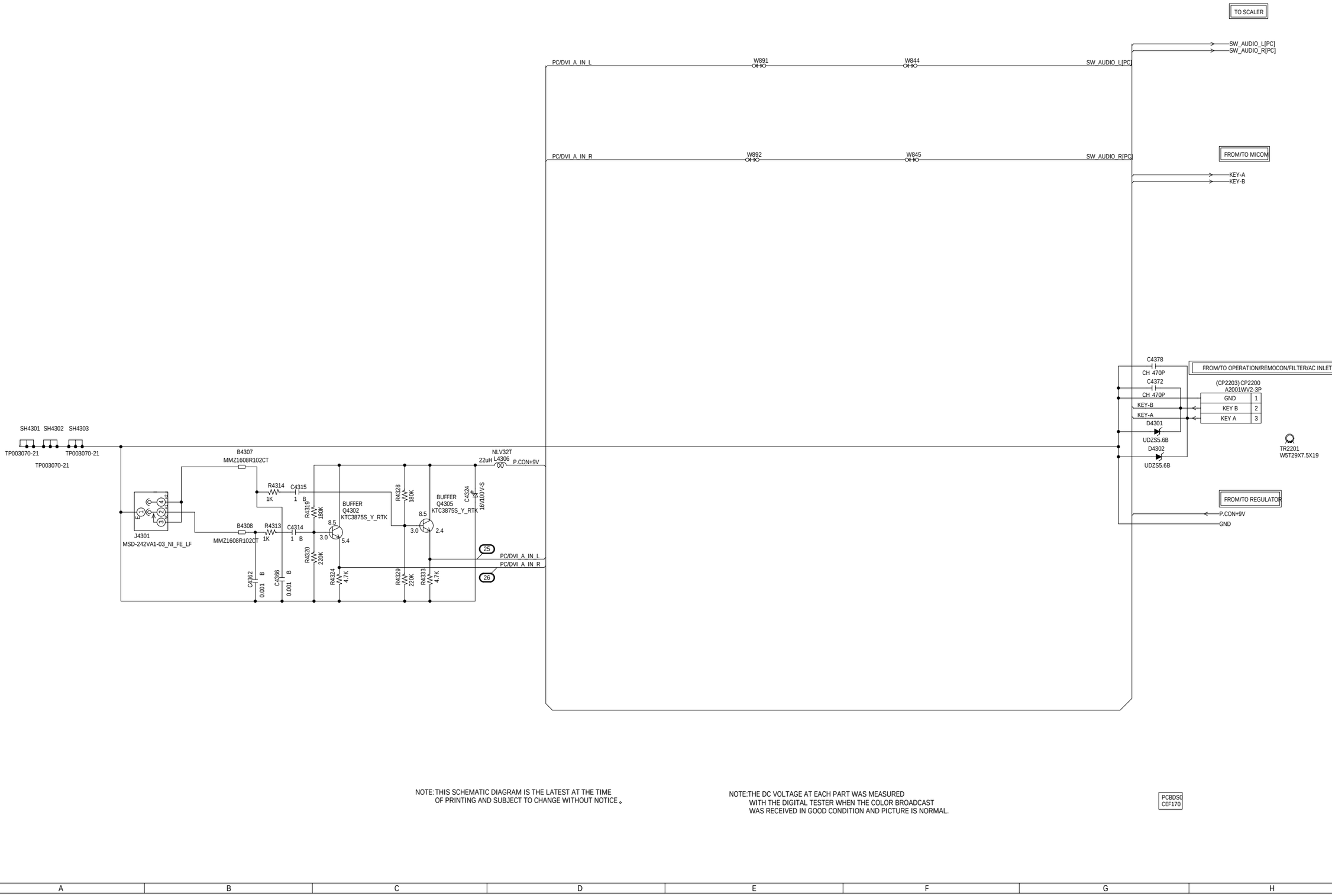
ATTENTION:LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

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 。

PCBDSC CEF170

JACK SCHEMATIC DIAGRAM (SCALER PCB)



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

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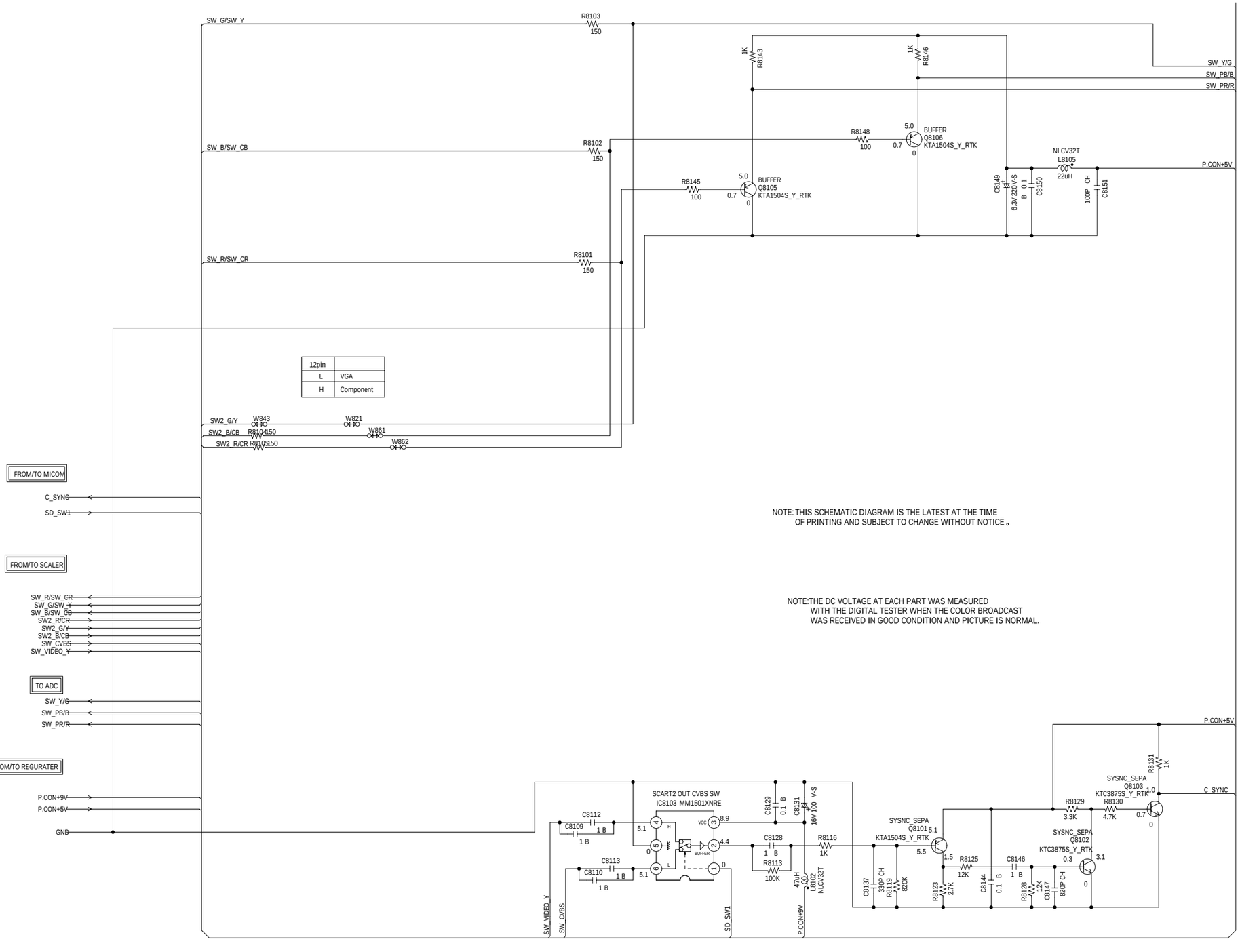
PCBDSC
CEF170

AV SWITCH1 SCHEMATIC DIAGRAM

(SCALER PCB)



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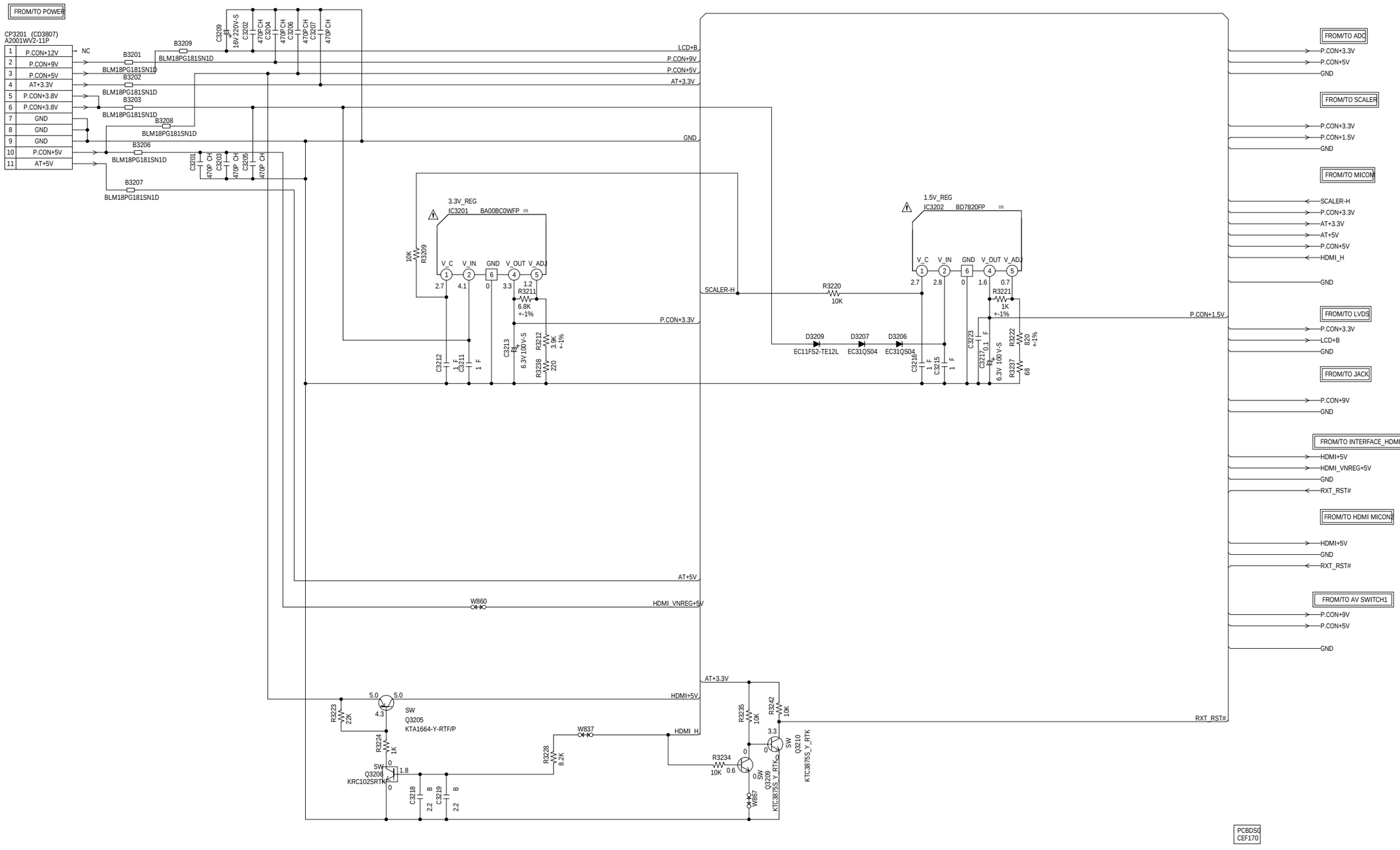
PCBDSC
CEF170

REGULATOR SCHEMATIC DIAGRAM (SCALER PCB)



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。

CAUTION: DIGITAL TRANSISTOR

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INTERFACE_HDMI IC SCHEMATIC DIAGRAM

(SCALER PCB)

EEP_ROM IC
IC3601 BR24L02F-WE2

HDMI RECEIVER
IC3603
SiI9011CLU

HDMI CONNECTOR
CP3601 DC1R019JDA

HDMI Port Protection
IC3605 CM2021-00TR

1.8V_REG
IC3600 BD7820FP

3.3V_REG
IC3602 BA00BC0WFP

NR3601 4D03WGJ0330T5E

NR3604 4D03WGJ0000T5E

NR3605 4D03WGJ0000T5E

NR3606 4D03WGJ0000T5E

NR3607 4D03WGJ0000T5E

NR3608 4D03WGJ0000T5E

NR3602 4D03WGJ0000T5E

TO ADC
DDVS
DDHS
DDCK
DPB0
DPB1
DPB2
DPB3
DPB4
DPB5
DPB6
DPB7
DPG0
DPG1
DPG2
DPG3
DPG4
DPG5
DPG6
DPG7
DPR0
DPR1
DPR2
DPR3
DPR4
DPR5
DPR6
DPR7

FROM/TO MICON
HDMI_H

FROM/TO HDMI MICON2
RXT_RST#
H_INT
I2C_CLKC
I2C_DATC
HPD_RST
I2SCLK_IND
I2SWS_IND
I2SDATA_IND
SW
VDD3
DDVS

FROM/TO REGULATOR
HDMI+5V
HDMI_VNREG+5V
GND
RXT_RST#

PCBDS0
CEF170

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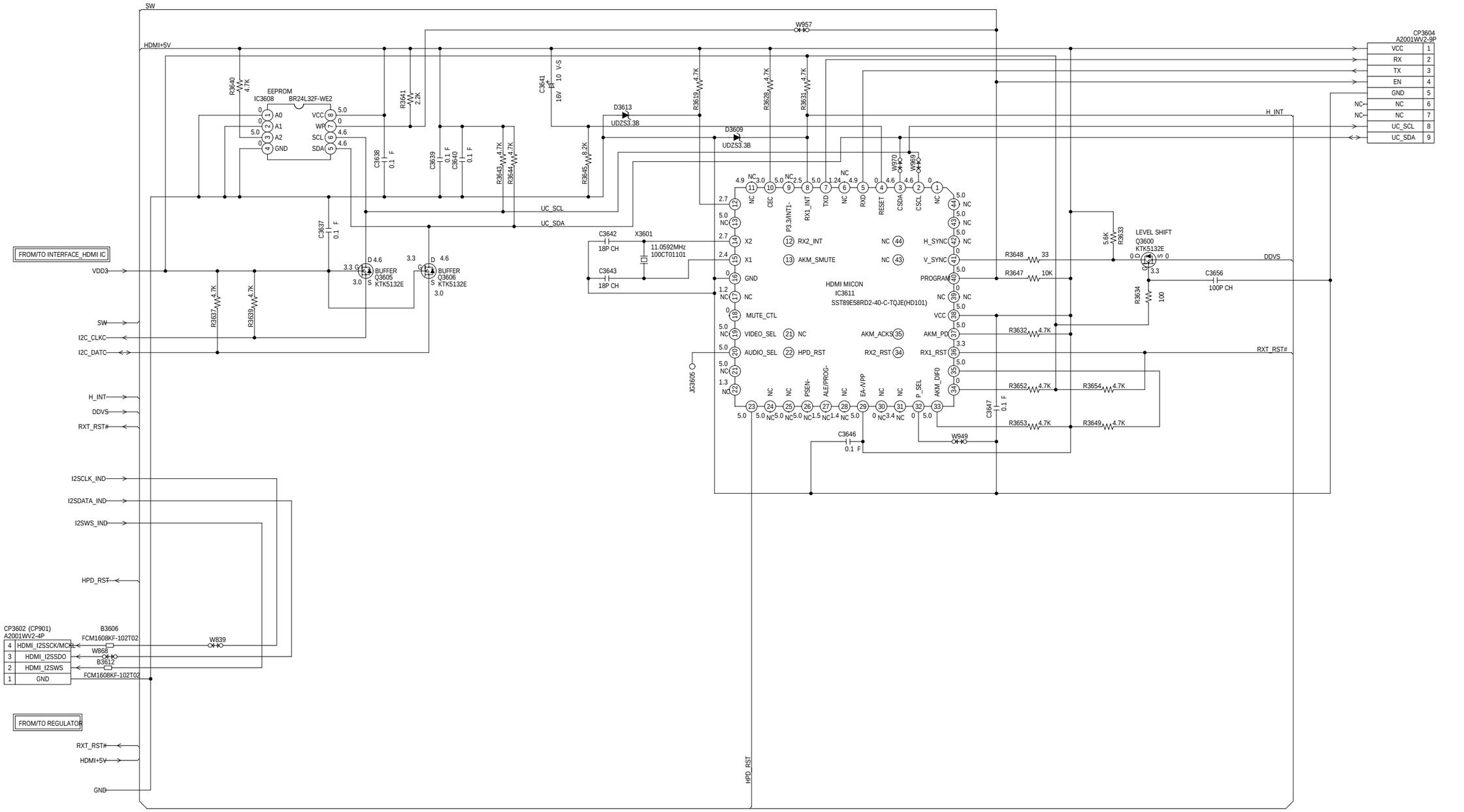
CAUTION: DIGITAL TRANSISTOR

HDMI MICON2 SCHEMATIC DIAGRAM

(SCALER PCB)



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

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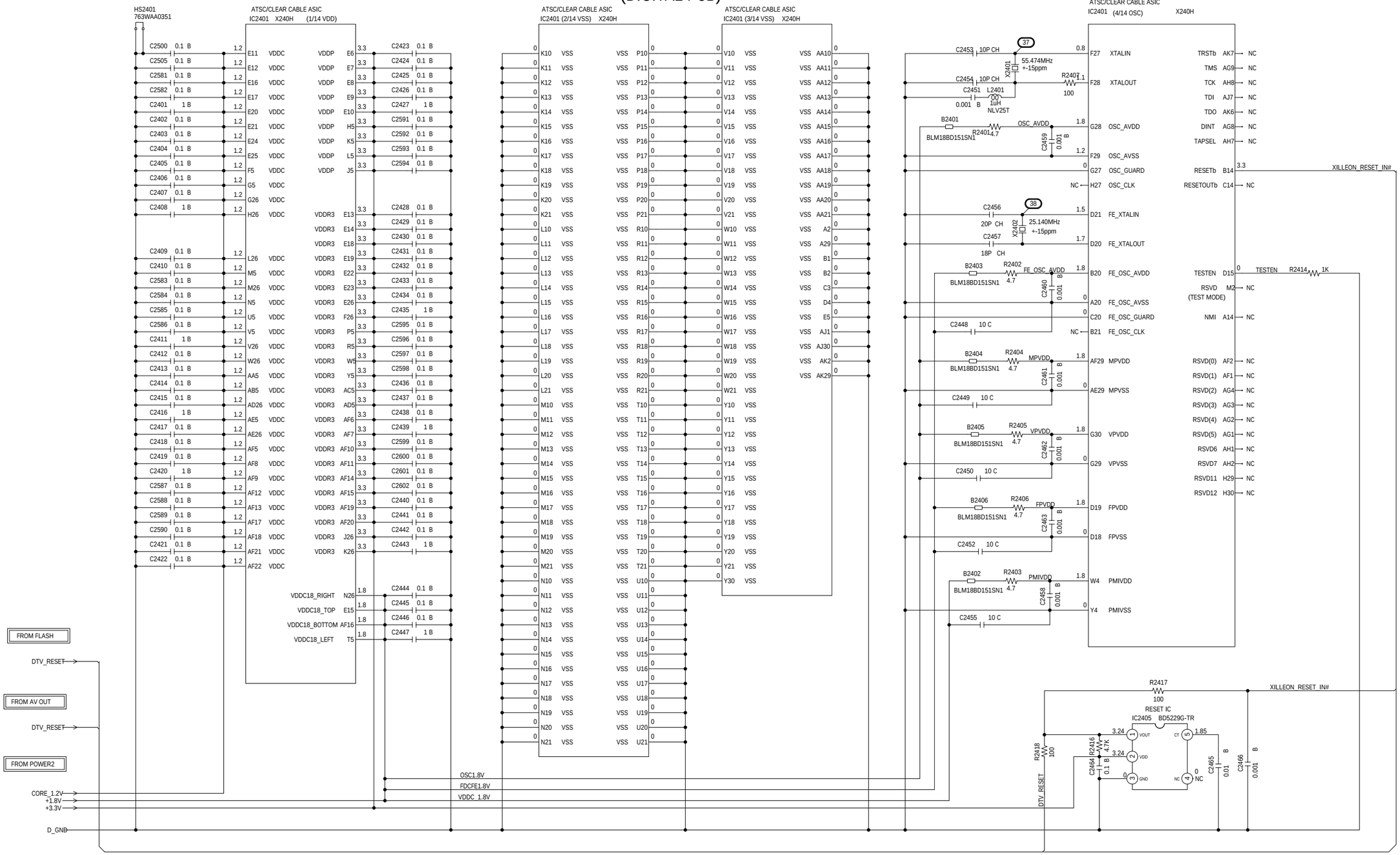
ASIC SCHEMATIC DIAGRAM

(DIGITAL PCB)



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

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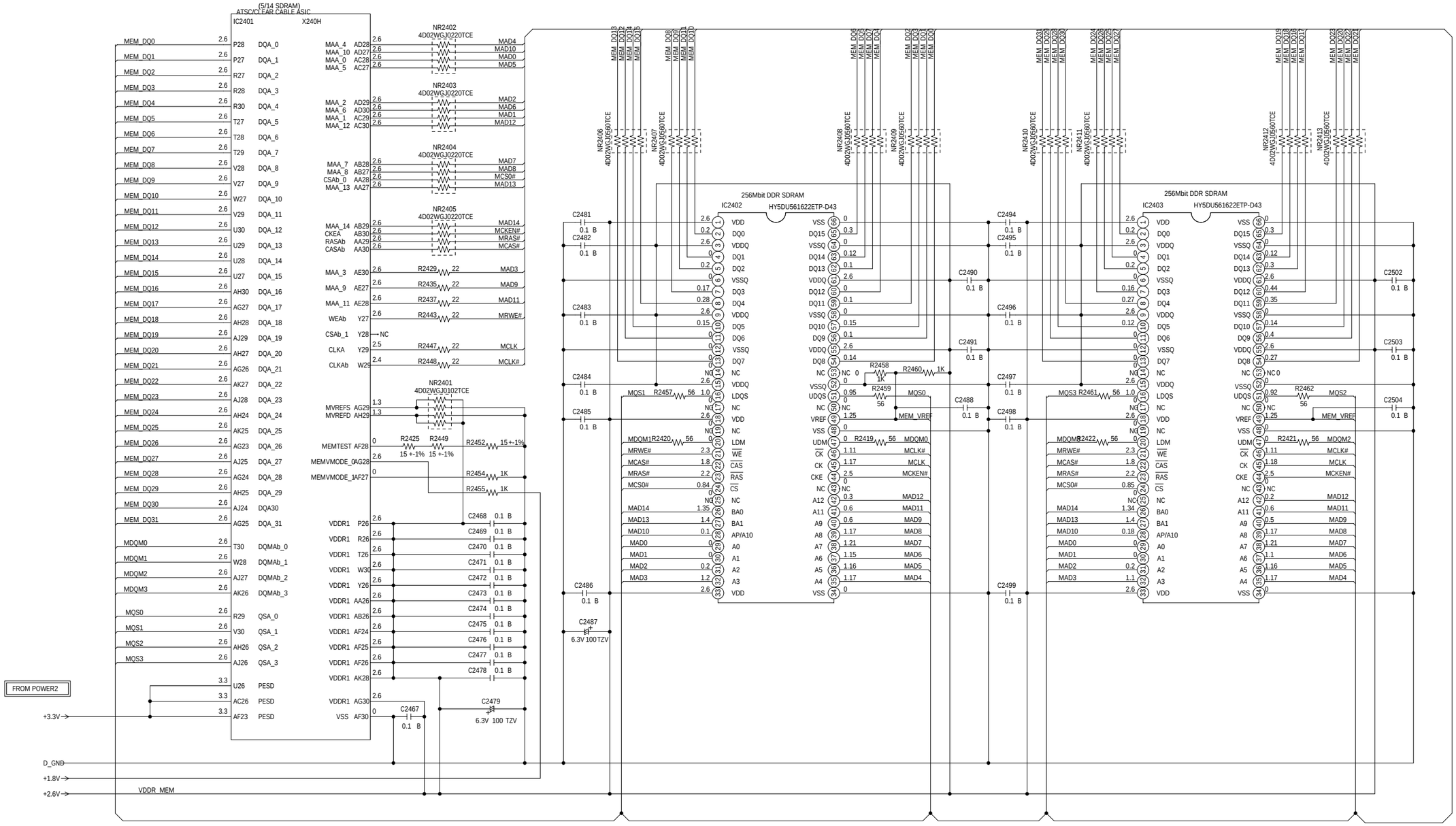
PCBDH0
CEF169

SDRAM SCHEMATIC DIAGRAM

(DIGITAL PCB)



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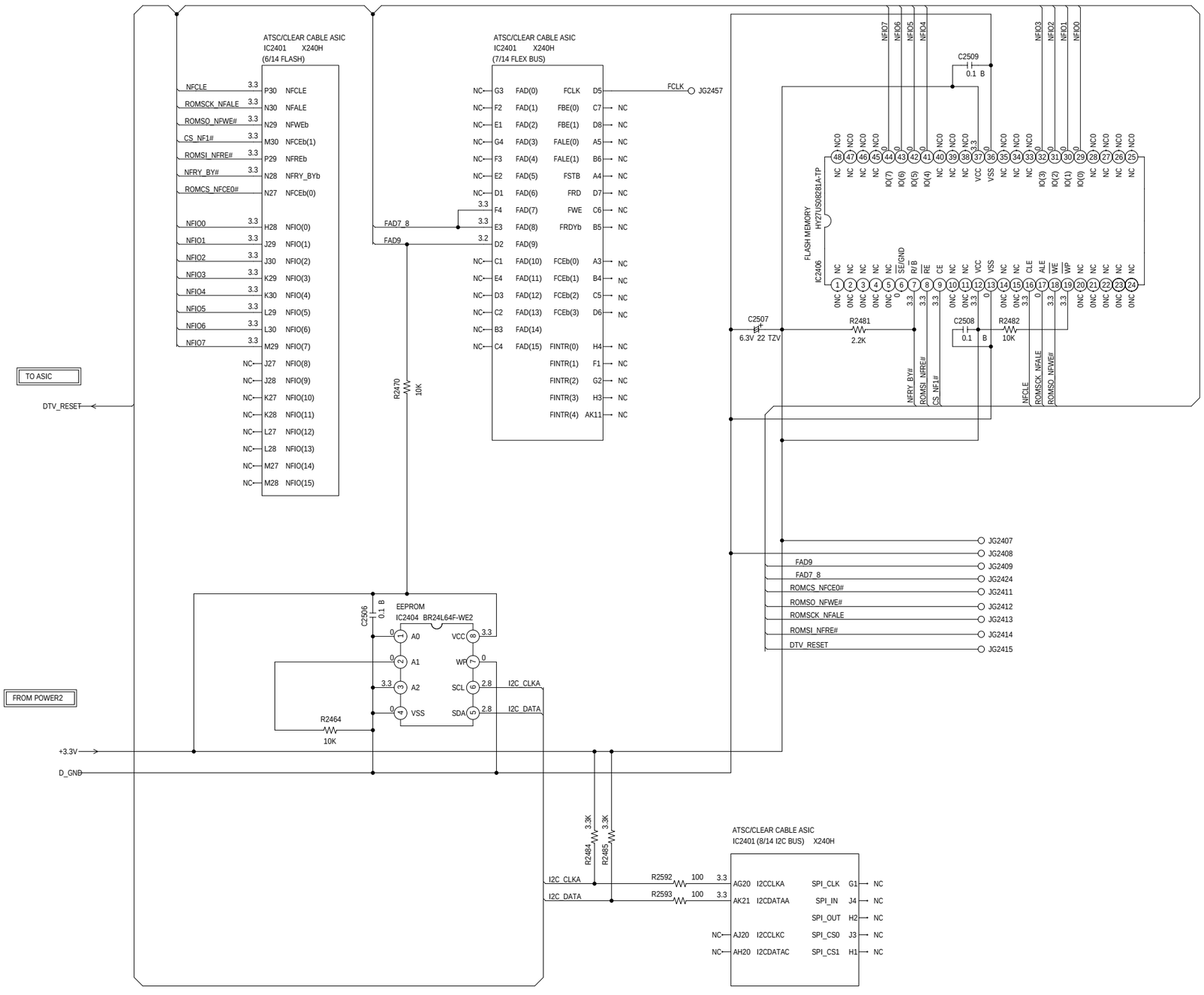
PCBDH0
CEF169

FLASH SCHEMATIC DIAGRAM

(DIGITAL PCB)



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

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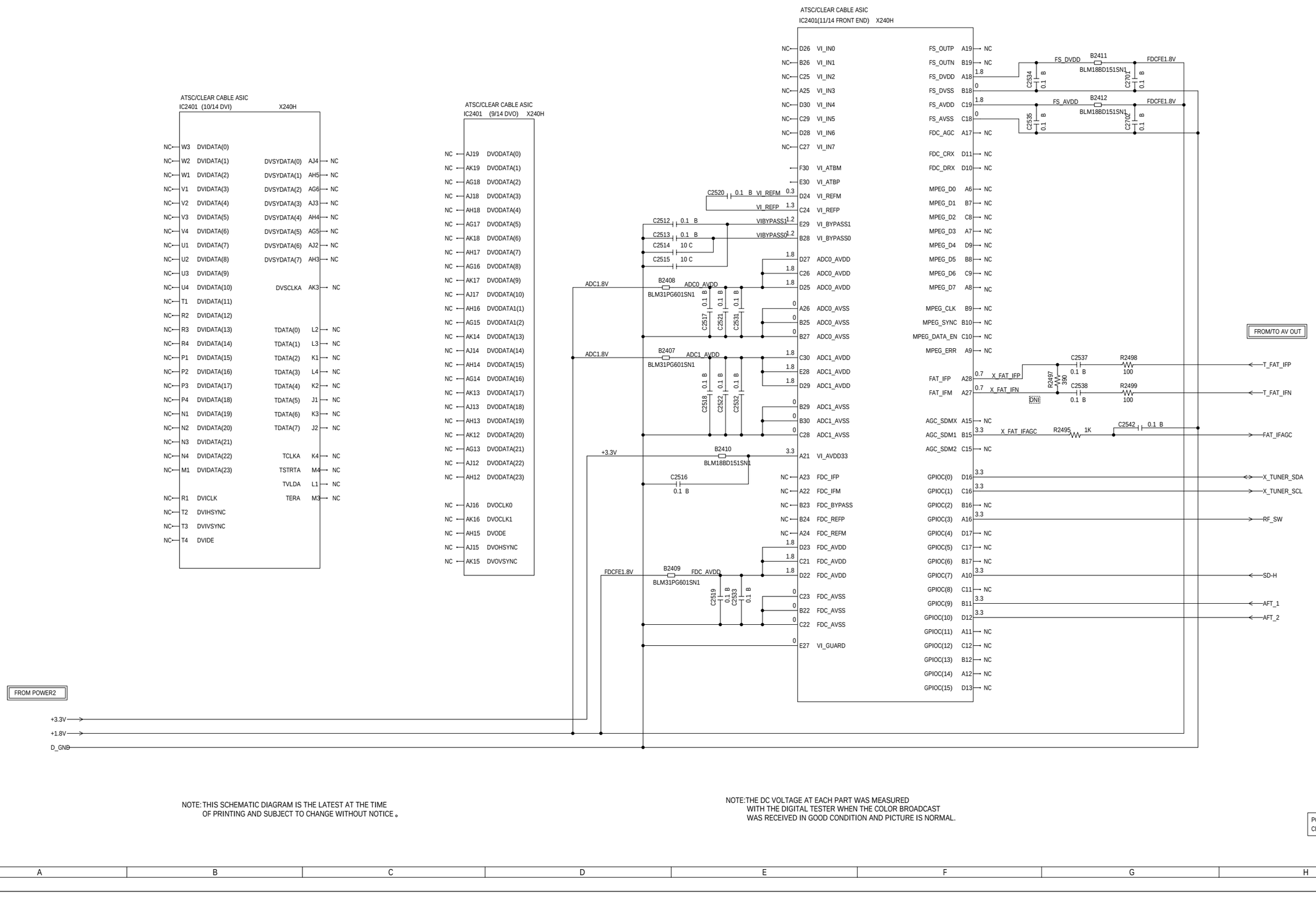
PCBDH0
CEF169

FRONT END SCHEMATIC DIAGRAM

(DIGITAL PCB)



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

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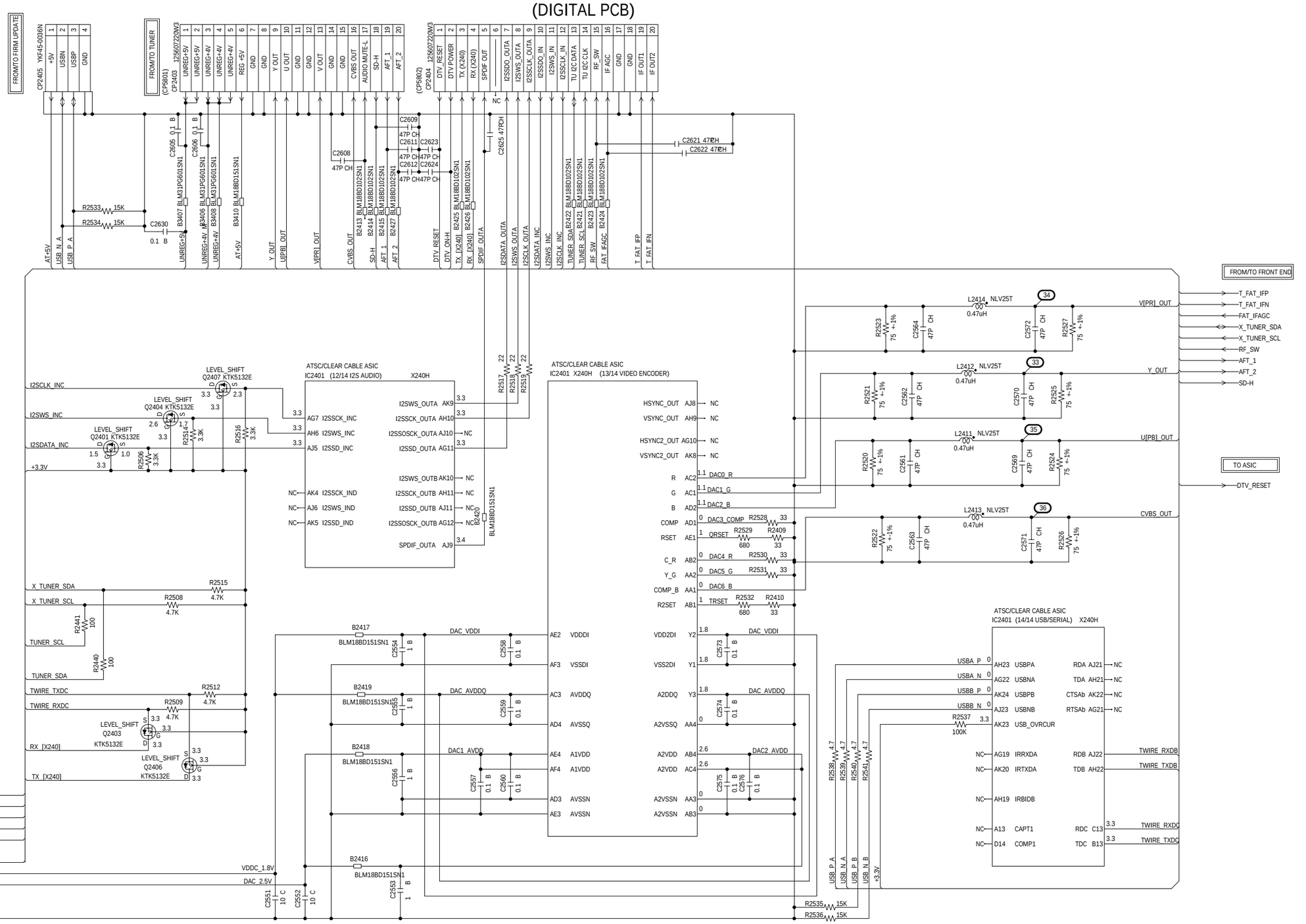
PCBDH0
CEF169

AV OUT SCHEMATIC DIAGRAM

(DIGITAL PCB)



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

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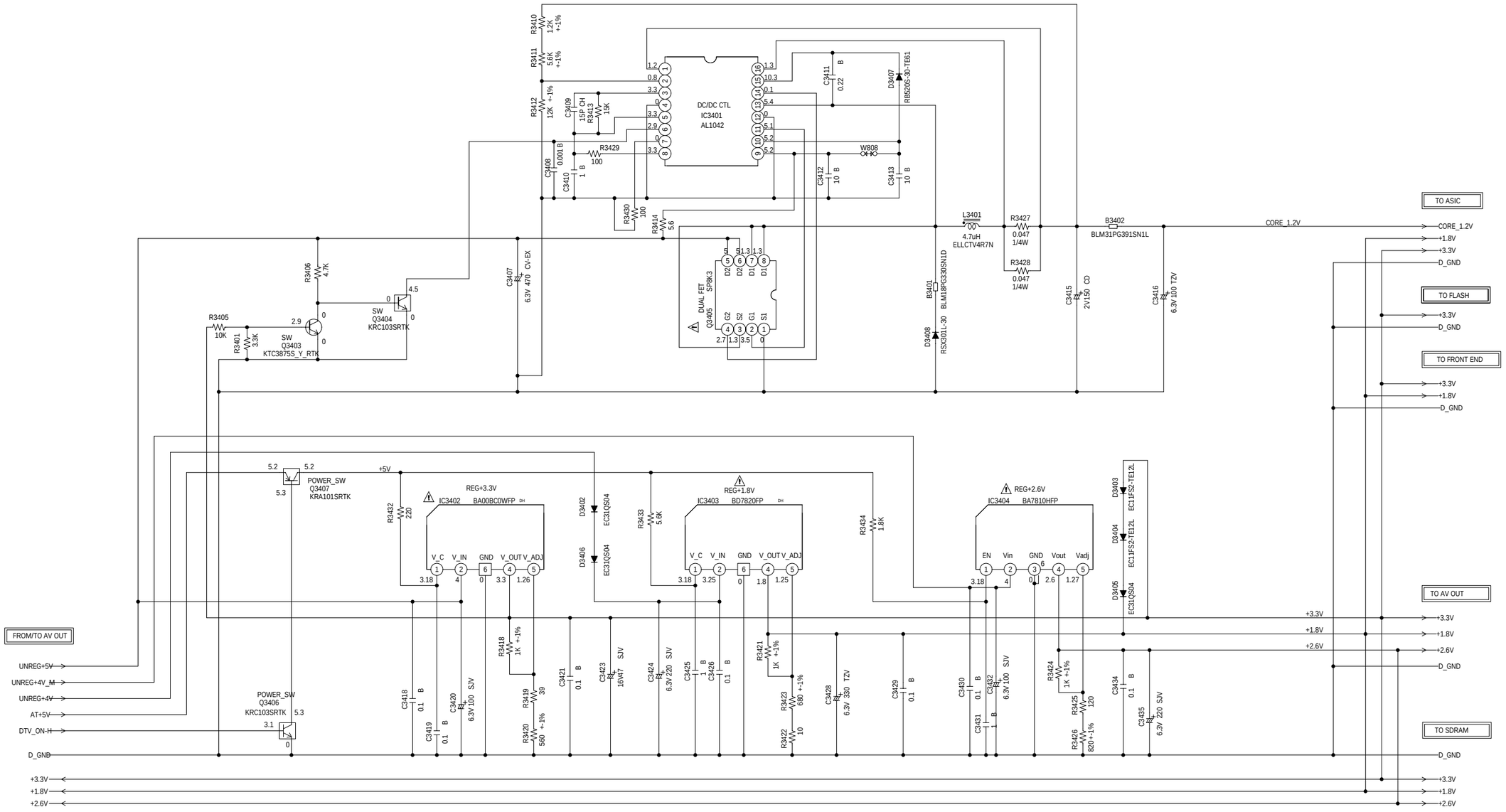
POWER2 SCHEMATIC DIAGRAM

(DIGITAL PCB)



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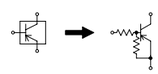
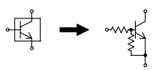
CAUTION: DIGITAL TRANSISTOR



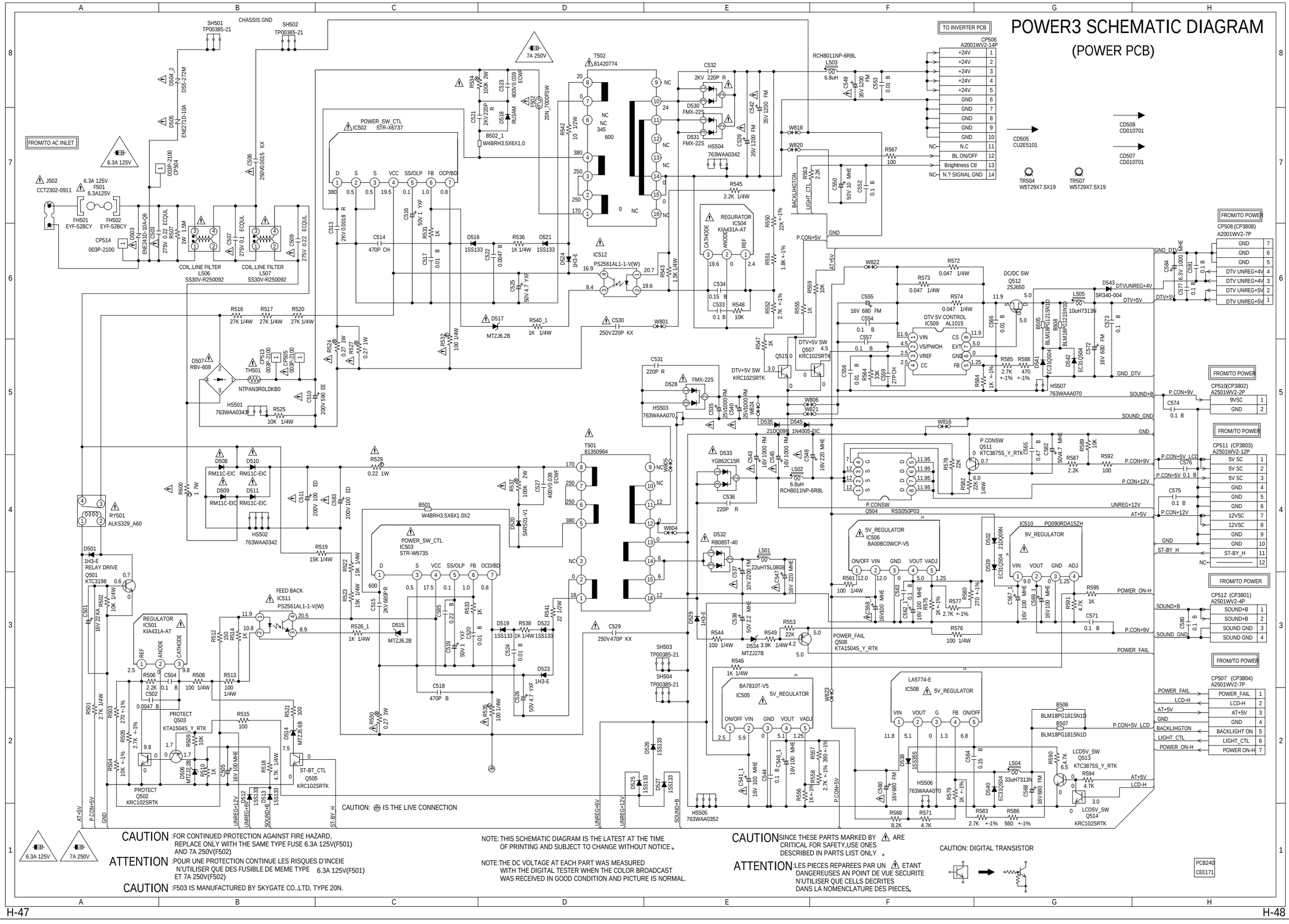
CAUTION: DIGITAL TRANSISTOR



PCBDH0
CEF169

POWER3 SCHEMATIC DIAGRAM

(POWER PCB)



CAUTION :FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE 6.3A 125V(F501) AND 7A 250V(F502)

ATTENTION :POUR UNE PROTECTION CONTINUE LES RISQUES D'INCEIE N'UTILISER QUE DES FUSIBLE DE MEME TYPE 6.3A 125V(F501) ET 7A 250V(F502)

CAUTION :F503 IS MANUFACTURED BY SKYGATE CO.,LTD, TYPE 20N.

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

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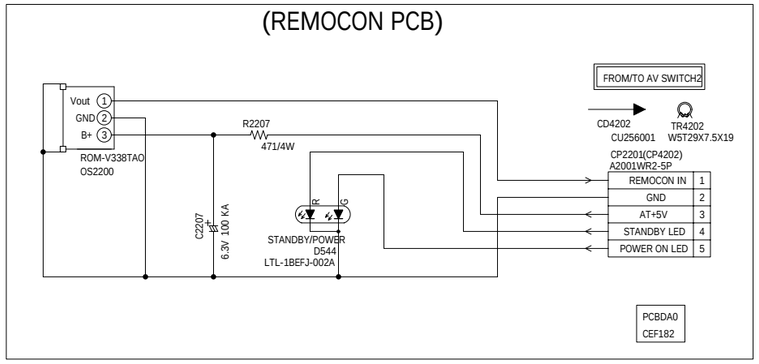
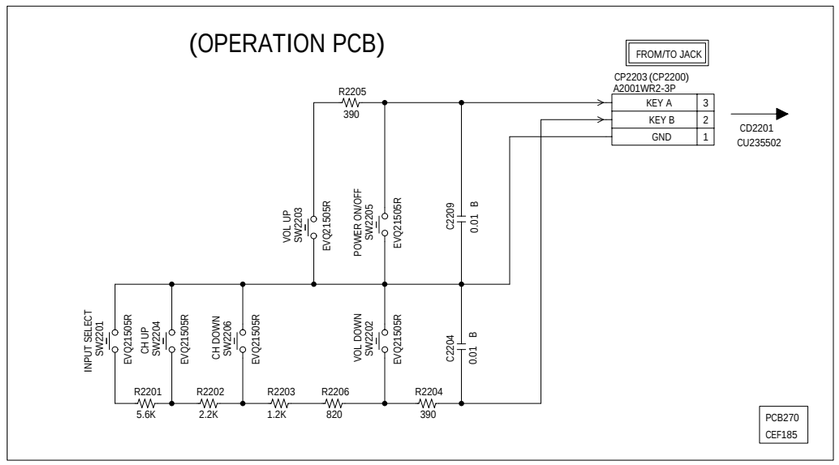
CAUTION: DIGITAL TRANSISTOR

PCB240
CEE171

OPERATION/REMOCON/FILTER/AC INLET SCHEMATIC DIAGRAM





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INTERCONNECTION DIAGRAM

CP506		
1	+24V	
2	+24V	
3	+24V	
4	+24V	
5	+24V	
6	GND	
7	GND	
8	GND	
9	GND	
10	GND	
11	NC	
12	BL ON/OFF	
13	Brightness Ctl	NC
14	N.? SIGNAL GND	

CP510		CD3802	CP3802	
9VSC	1	→	1	9VSC
GND	2	→	2	GND

CP512		CD3805	CP3801	
SOUND+B	1	→	1	SOUND+B
SOUND+B	2	→	2	SOUND+B
SOUND GND	3	→	3	SOUND GND
SOUND GND	4	→	4	SOUND GND

CP508		CD3806	CP3808	
GND	7	→	7	GND
GND	6	←	6	GND
GND	5	→	5	GND
DTV UNREG+4V	4	←	4	DTV UNREG+4V
DTV UNREG+4V	3	→	3	DTV UNREG+4V
DTV UNREG+5V	2	→	2	DTV UNREG+5V
DTV UNREG+5V	1	→	1	DTV UNREG+5V

CP511		CD3803	CP3803	
5VSC	1	→	1	5VSC
5VSC	2	→	2	5VSC
5VSC	3	→	3	5VSC
GND	4	→	4	GND
GND	5	→	5	GND
GND	6	→	6	GND
12VSC	7	→	7	12VSC
12VSC	8	→	8	12VSC
GND	9	→	9	GND
GND	10	→	10	GND
ST-BY_H	11	←	11	ST-BY_H
———	12	←	12	———

CP507			CP3804	
POWER_FAIL	1	→	1	POWER_FAIL
LCD-H	2	→	2	LCD-H
AT+5V	3	→	3	AT+5V
GND	4	→	4	GND
BACKLIGHT ON	5	←	5	BACKLIGHT ON
LIGHT_CTL	6	←	6	LIGHT_CTL
POWER ON-H	7	←	7	POWER ON-H

CD3801 — J502 — POWER PCB PCB240 CEE171

AV PCB PCBD20 CMF080

CP2403		CP5801(CP2403)
UNREG+5V	1	1 UNREG+5V
UNREG+5V	2	2 UNREG+5V
UNREG+4V	3	3 UNREG+4V
UNREG+4V	4	4 UNREG+4V
UNREG+4V	5	5 UNREG+4V
REG +5V	6	6 REG +5V
GND	7	7 GND
GND	8	8 GND
Y OUT	9	9 Y OUT
U OUT	10	10 U OUT
GND	11	11 GND
GND	12	12 GND
V OUT	13	13 V OUT
GND	14	14 GND
GND	15	15 GND
CVBS OUT	16	16 CVBS OUT
AUDIO MUTE-L	17	17 AUDIO MUTE-L
SD-H	18	18 SD-H
AFT(0)	19	19 AFT_1
AFT(1)	20	20 AFT_2

CP2404		CP5802 (CP2404)
DTV_RESET	1	1 DTV_RESET
DTV POWER	2	2 DTV POWER
TX (X240)	3	3 TX (X240)
RX (X240)	4	4 RX (X240)
SPDIF OUT	5	5 SPDIF OUT
———	6	6 ———
I2SSDO_OUTA	7	7 I2SSDO_OUTA
I2SWS_OUTA	8	8 I2SWS_OUTA
I2SSCLK_OUTA	9	9 I2SSCLK_OUTA
I2SSDO_IN	10	10 I2SSDO_IN
I2SWS_IN	11	11 I2SWS_IN
I2SSCLK_IN	12	12 I2SSCLK_IN
TU I2C DATA	13	13 TU I2C DATA
TU I2C CLK	14	14 TU I2C CLK
RF_SW	15	15 RF_SW
IF AGC	16	16 IF AGC
GND	17	17 GND
GND	18	18 GND
IF OUT1	19	19 IF OUT1
IF OUT2	20	20 IF OUT2

CP2405	
1	+5V
2	USBN
3	USBP
4	GND

DIGITAL PCB PCBDH0 CEF169

4 OHM 10W (L) SPEAKER — SP302 — CD303 (1,2)

4 OHM 10W (R) SPEAKER — SP301 — CD301 (1,2,3)

CP303: 2 SP OUT L+ / 1 SP OUT L-

CP301: 3 SP OUT R- / 2 NC / 1 SP OUT R+

CS_IN 4/5 J4211: H2,1 H1 H2,1 H1 H2,1 H1 — RED RED BLUE BLUE GREEN GREEN

AUDIO_IN 4/5 J4204: H2,1 H1 H2,1 H1 — RED RED WHITE WHITE

FFC CD4204

CP4204			CP802
STANDBY LED	30	1	1 STANDBY LED
REMOCON IN	29	2	2 REMOCON IN
AFT	28	3	3 AFT
———	27	4	4 ———
———	26	5	5 ———
AUDIO_MUTE	25	6	6 AUDIO_MUTE
EXT_MUTE-H	24	7	7 EXT_MUTE-H
GND	23	8	8 GND
SCART1_B	22	9	9 SCART1_B
GND	21	10	10 GND
SCART1_G	20	11	11 SCART1_G
GND	19	12	12 GND
SCART1_R	18	13	13 SCART1_R
GND	17	14	14 GND
AFT_2/DTV-CVBS	16	15	15 AFT_2/DTV_CVBS
GND	15	16	16 GND
NC SCART1_Y	14	17	17 SCART1_Y
———	13	18	18 ———
———	12	19	19 ———
POWER_FAIL	11	20	20 POWER_FAIL
POWER_ON-H	10	21	21 POWER_ON-H
AFT_1	9	22	22 AFT_1
LCDON	8	23	23 LCDON
NC DVB_FAN_ON-H	7	24	24 DVB_FAN_ON-H
LCD-H/PDP_RLY	6	25	25 LCD-H/PDP_RLY
NC S_DET	5	26	26 S_DET
———	4	27	27 ———
SW_YUV1/2	3	28	28 SW_YUV1/2
———	2	29	29 ———
LIGHT CTL/PSU_5VD	1	30	30 LIGHT CTL/PSU_5VD NC

DIGITAL/ANALOG TUNER W/NTSC_MPX — TU5801

NC	1	OOB
	2	+5V
	3	GND
	4	+30V
NC	5	TU
	6	GND
	7	+5V
	8	AGC
	9	SDA
	10	SCL
	11	AFT
	12	AGC_OUT
	13	V_OUT
	14	+5V
	15	SIF
	16	IF SW
	17	IF OUT
	18	IF AGC
	19	IF_OUT 1
	20	IF_OUT 2
	21,22,23,24	

COMMAND TRANSMITTER TM101 — OS2200 (3) B+ (2) GND (1) Vout

CP4202		CD4202	CP2201	
REMOCON IN	1	←	1	REMOCON IN
GND	2	→	2	GND
AT+5V	3	→	3	AT+5V
STANDBY LED	4	→	4	STANDBY LED
P.ON LED	5	→	5	P.ON LED

REMOCON PCB PCBDA0 CEF182

OPERATION PCB PCB270 CEF185

CP2203		CD2201
KEY A	3	→
KEY B	2	→
GND	1	→

FFC CD4203

CP4203			CP803
———	29	1	1 ———
DTUNER_H	28	2	2 DTUNER_H
DTV_MUTE_L	27	3	3 DTV_MUTE_L
———	26	4	4 ———
DTUNER_RX	25	5	5 DTUNER_RX
GND	24	6	6 GND
DTUNER_TX	23	7	7 DTUNER_TX
GND	22	8	8 GND
DTUNER_RESET_L	21	9	9 DTUNER_RESET_L
GND	20	10	10 GND
SW_AUDIO_R(PC)	19	11	11 SW_AUDIO_R(PC)
GND	18	12	12 GND
SW_AUDIO_L(PC	17	13	13 SW_AUDIO_L(PC)
———	16	14	14 ———
STEREO_RESET	15	15	15 STEREO_RESET
———	14	16	16 ———
NC SCART_AUDIO_SW	13	17	17 SCART_AUDIO_SW
SDA1	12	18	18 SDA1
SCL1	11	19	19 SCL1
GND	10	20	20 GND
DTUNER_POWER	9	21	21 DTUNER_POWER
GND	8	22	22 GND
DTUNER_SD_H	7	23	23 DTUNER_SD_H
GND	6	24	24 GND
SWITCH_CVBS	5	25	25 SWITCH_CVBS
GND	4	26	26 GND
SWITCH_VIDEO_Y	3	27	27 SWITCH_VIDEO_Y
GND	2	28	28 GND
SWITCH_VIDEO_C	1	29	29 SWITCH_VIDEO_C

CP901		CD901	CP3602	
HDMI_I2SSCK/MCKL	4	←	4	HDMI_I2SSCK/MCKL
HDMI_I2SSDO	3	←	3	HDMI_I2SSDO
HDMI_I2SWS	2	←	2	HDMI_I2SWS
GND	1	←	1	GND

CP3807 (P.CON12V, P.CON+9V, P.CON+5V, AT3.3V, P.CON+3.8V, P.CON+3.8V, GND, GND, GND, P.CON+5V, AT+5V) — CD3807 — CP3201 (same)

AUDIO OUT J4201 (R, L) — COAXIAL JACK J4202

AUDIO IN(DV11/PC) J4301 — WHITE L, RED R

SCALER PCB PCBDS0 CEF156

CP103	
NC	7
RESET	6
CHIP_SELECT	5
4SI_SCL	4
4SI_SDA_IN	3
4SI_SDA_OUT	2
GND	1

CP101	
GND	1
EEPROM_SCL	2
EEPROM_SDA	3
IIC_OFF	4
GND	5

MICON_DATA

CP102		
GND	1	
TX	2	
BUSY	3	
NC ———	4	
VCC	5	
CLK	6	
RX	7	
CNVSS	8	
RESET	9	
GND	10	

CP2200 (GND, KEY B, KEY A) — CD2201

CP3604A (UC_SDA, UC_SCL, NC, NC, GND, EN, TX, RX, VCC)

CP3601		
DET	19	
POWER	18	
GND	17	
SDA	16	
SCL	15	
———	14	
———	13	
CLK-	12	
CLK-S	11	
CLK+	10	
D0-	9	
D0-S	8	
D0+	7	
D1-	6	
D1-S	5	
D1+	4	
D2-	3	
D2-S	2	
D2+	1	

CP3603		
DET	19	
POWER	18	
GND	17	
SDA	16	
SCL	15	
———	14	
———	13	
CLK-	12	
CLK-S	11	
CLK+	10	
D0-	9	
D0-S	8	
D0+	7	
D1-	6	
D1-S	5	
D1+	4	
D2-	3	
D2-S	2	
D2+	1	

CP7203		
GND	1	
VDD+5V/12V	2	
VDD+5V/12V	3	
VDD+5V/12V	4	
VDD+5V/12V	5	
GND	6	
GND	7	
GND	8	
GND	9	
VDD+3.3V/NC/GND	10	
NC NC/GND	11	
GND	12	
RXIN0-	13	
RXIN0+	14	
GND	15	
RXIN1-	16	
RXIN1+	17	
GND	18	
RXIN2-	19	
RXIN2+	20	
GND	21	
RXCLK IN-	22	
RXCLK IN+	23	
GND	24	
RXIN3-	25	
RXIN3+	26	
GND	27	
VDD+3.3V/NC/GND	28	
VDD+3.3V/NC/GND	29	
NC NC/GND	30	
NC VDD+3.3V/GND	31	
GND	32	

TO LCD PANEL CD7204 → PANEL — V2301_1

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

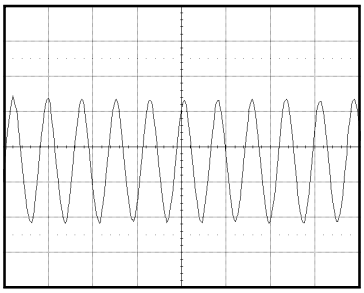
CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY.USE ONES DESCRIBED IN PARTS LIST ONLY 。

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

WAVEFORMS

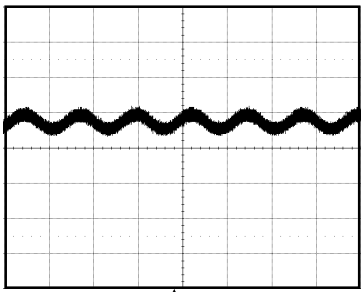
ADC

20ns
1.0V



①

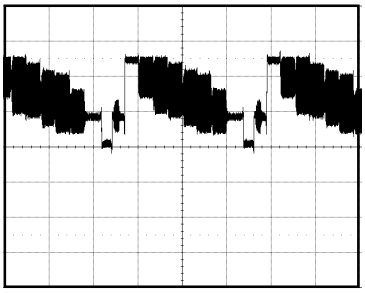
2.0ms
2.0V



⑥

TUNER

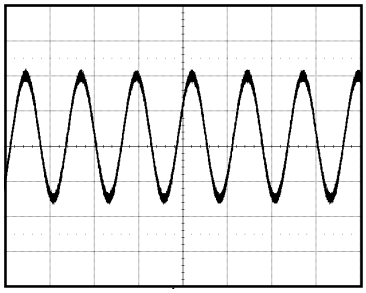
20µs
1.0V



⑪

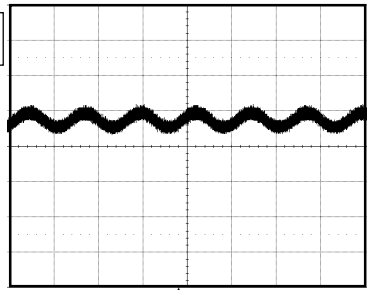
SOUND AMP/HEADPHON AMP

2.0ms
500mV



②

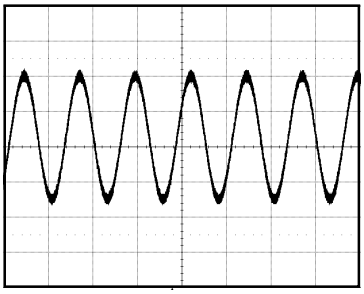
2.0ms
2.0V



⑦

STEREO

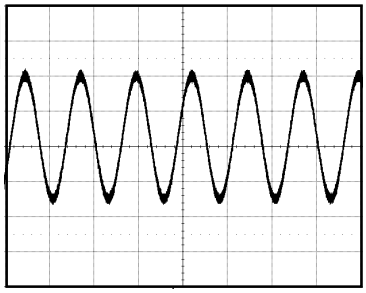
2.0ms
500mV



⑫

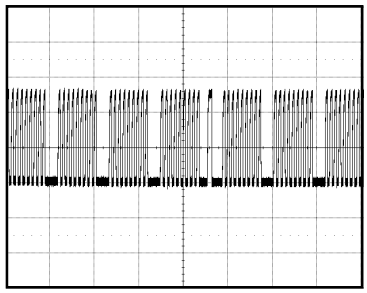
AV SWITCH2

2.0ms
500mV



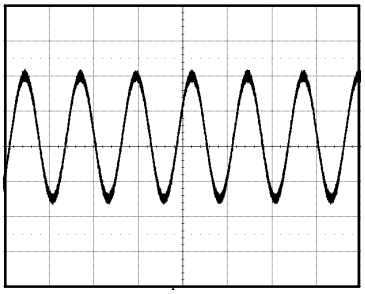
③

100µs
2.0V



⑧

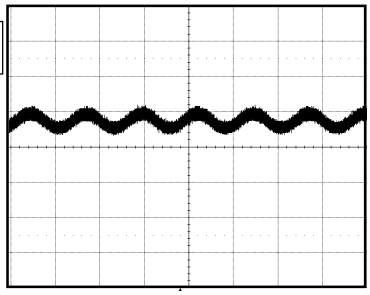
2.0ms
500mV



⑬

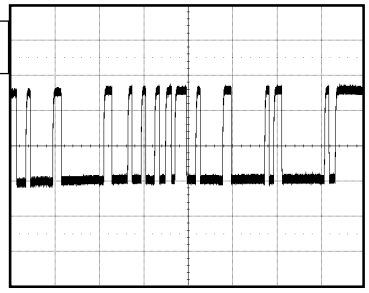
MICON

2.0ms
2.0V



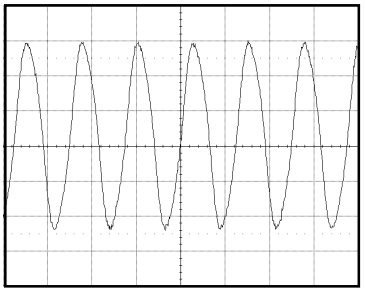
④

100µs
2.0V



⑨

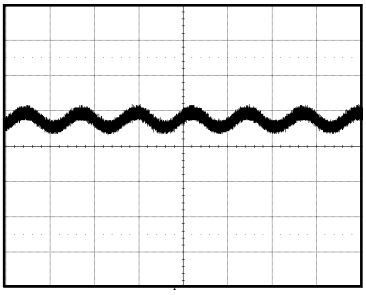
50ns
500mV



⑭

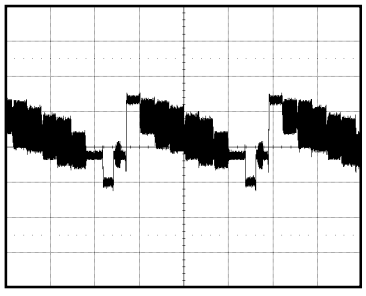
SCALER

2.0ms
2.0V



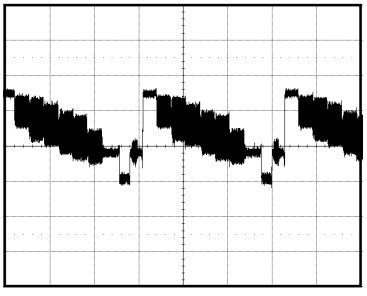
⑤

20µs
500mV



⑩

20µs
500mV



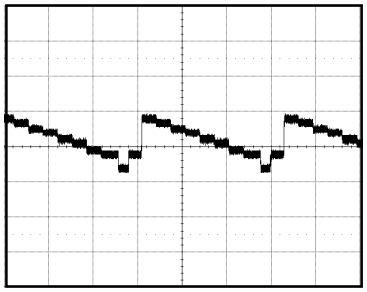
⑮

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

WAVEFORMS

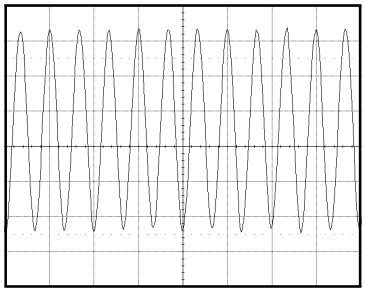
20µs
500mV

16



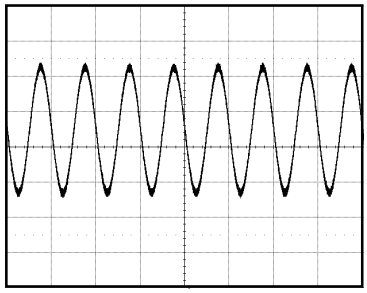
20µs
500mV

21



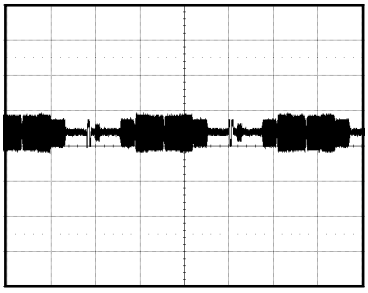
1.0ms
1.0V

26



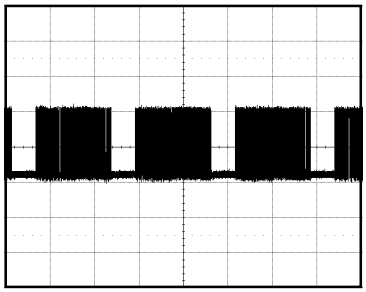
20µs
500mV

17



10µs
2.0V

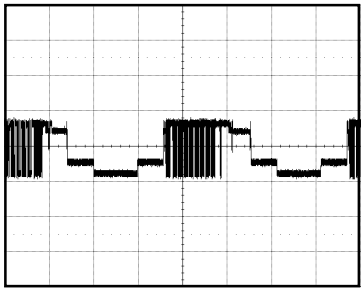
22



ADC

5µs
500mV

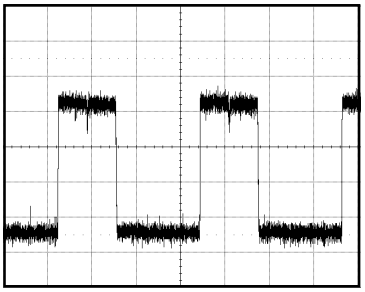
27



ADC

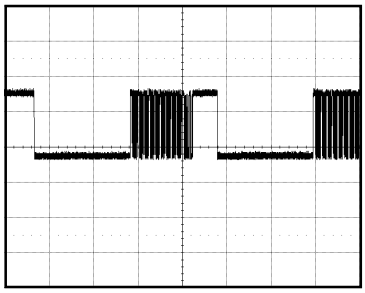
20µs
200mV

18



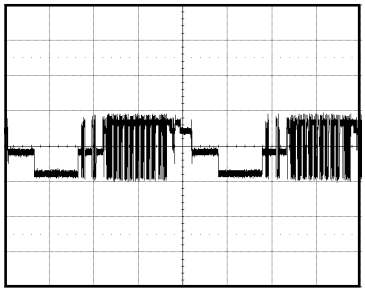
5µs
2.0V

23



5µs
500mV

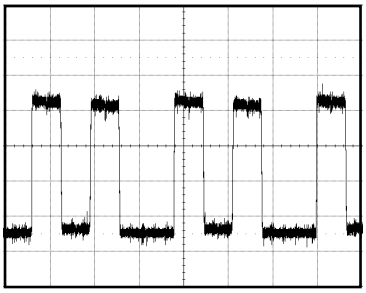
28



LVDS

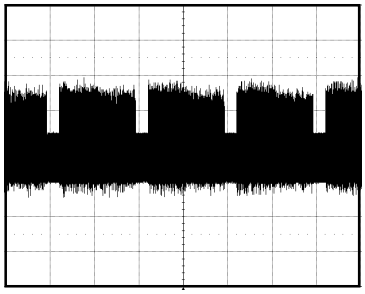
20µs
200mV

19



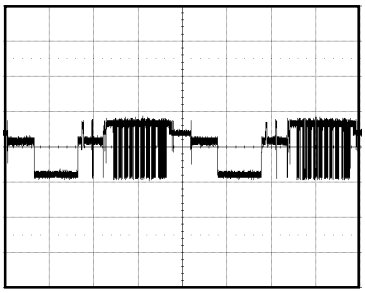
10ms
100mV

24



5µs
500mV

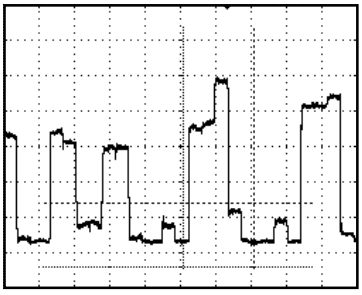
29



JACK

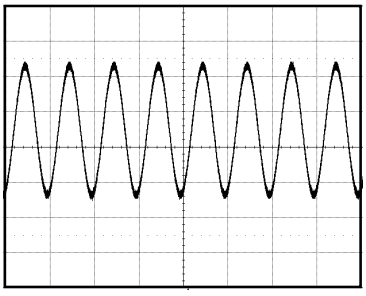
20µs
200mV

20



1.0ms
1.0V

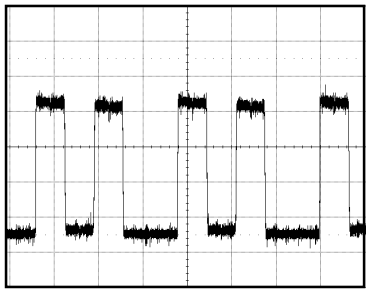
25



INTERFACE_HDMI IC

20µs
1.0V

30

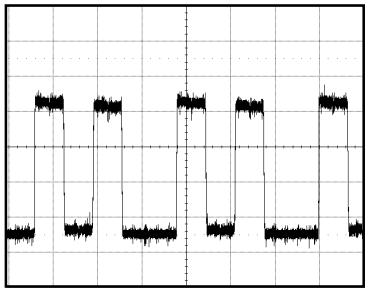


NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

WAVEFORMS

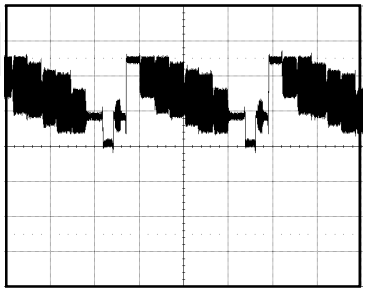
20µs
1.0V

(31)



20µs
1.0V

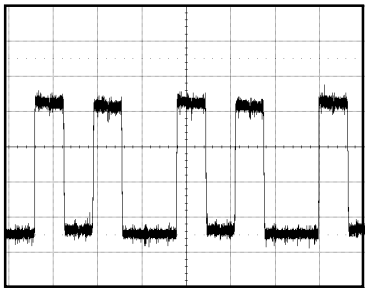
(36)



ASIC

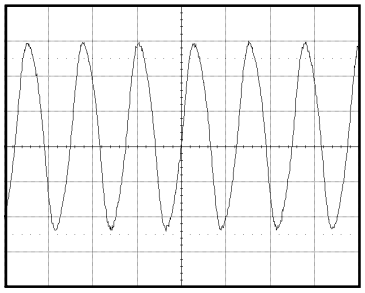
20µs
1.0V

(32)



10ns
50mV

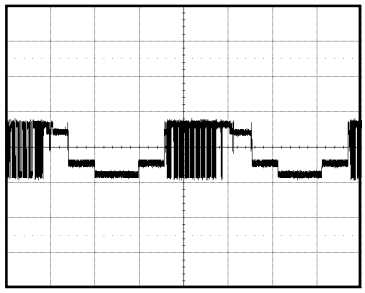
(37)



AV OUT

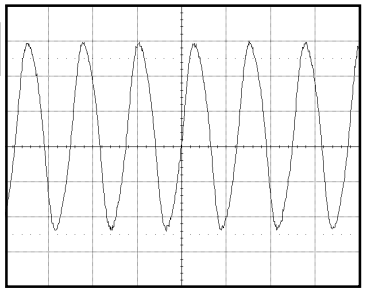
5µs
2.0V

(33)



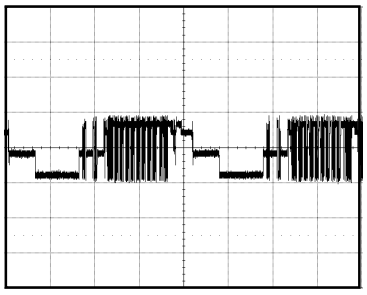
20ns
50mV

(38)



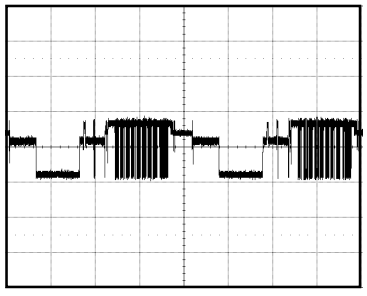
5µs
2.0V

(34)



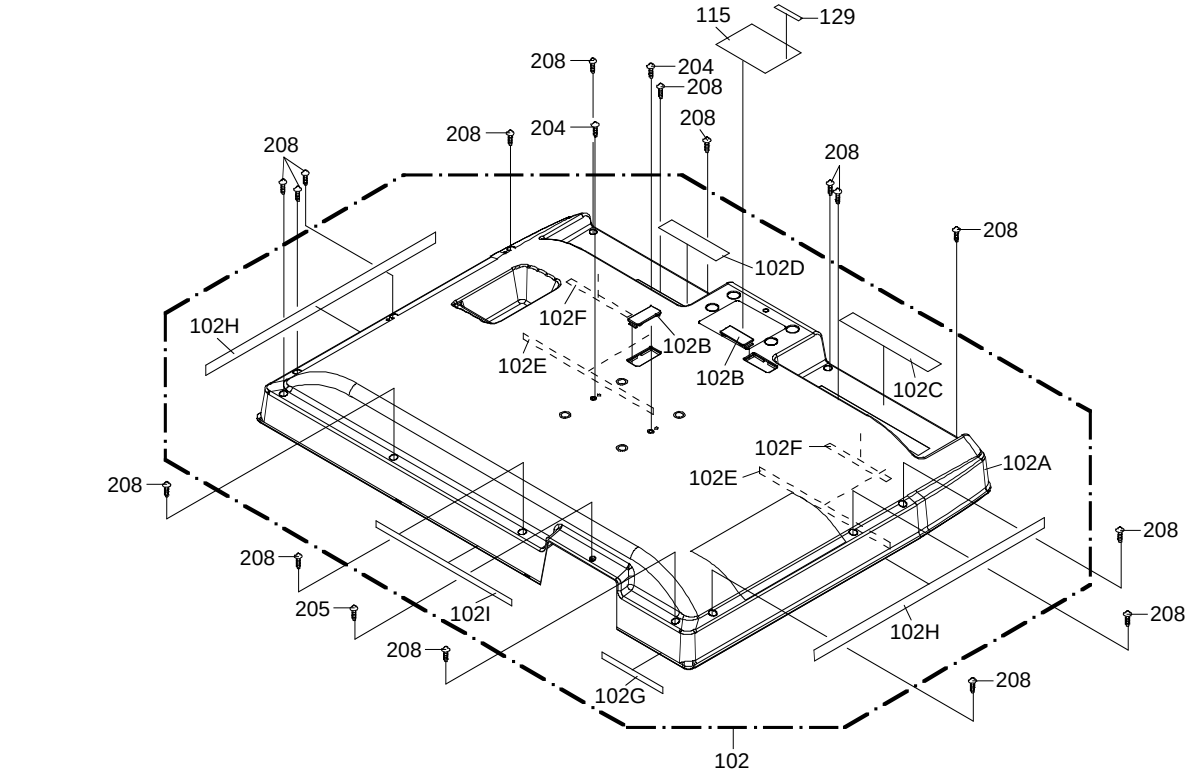
5µs
2.0V

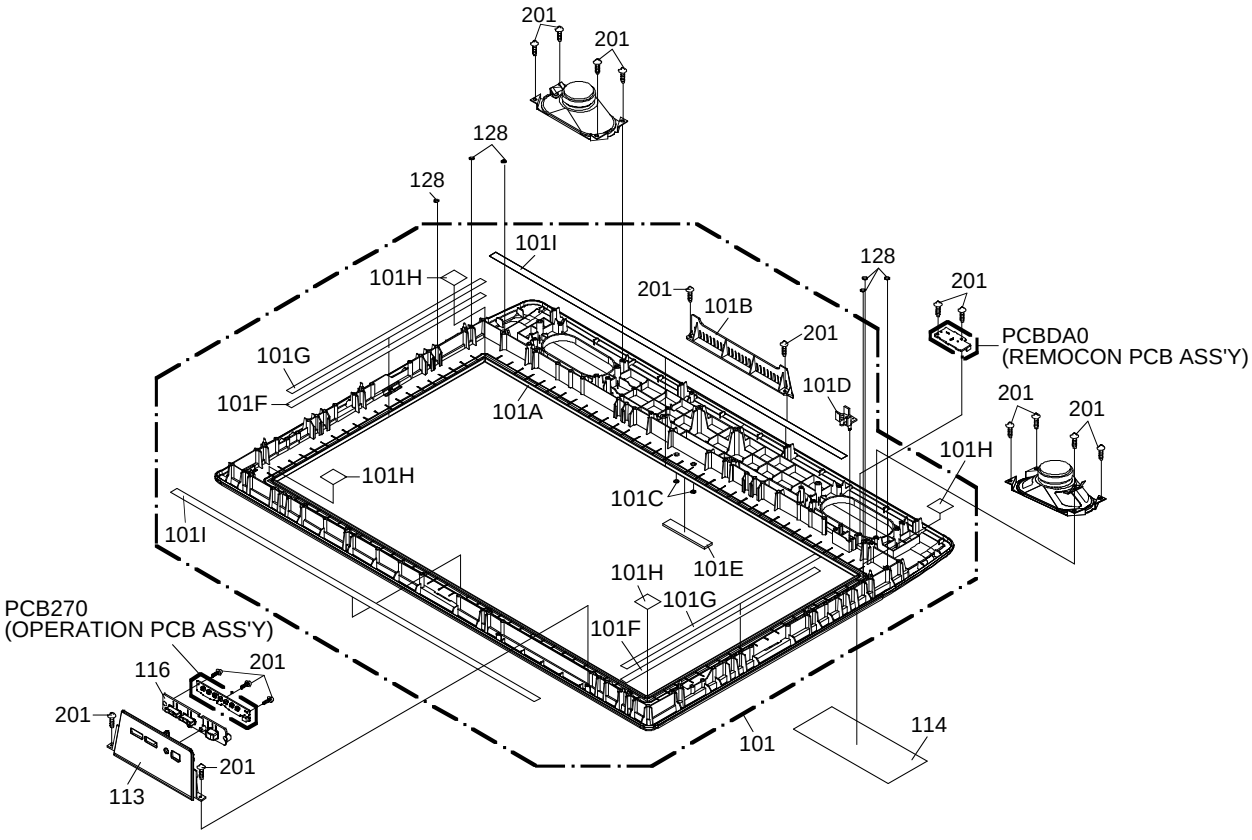
(35)



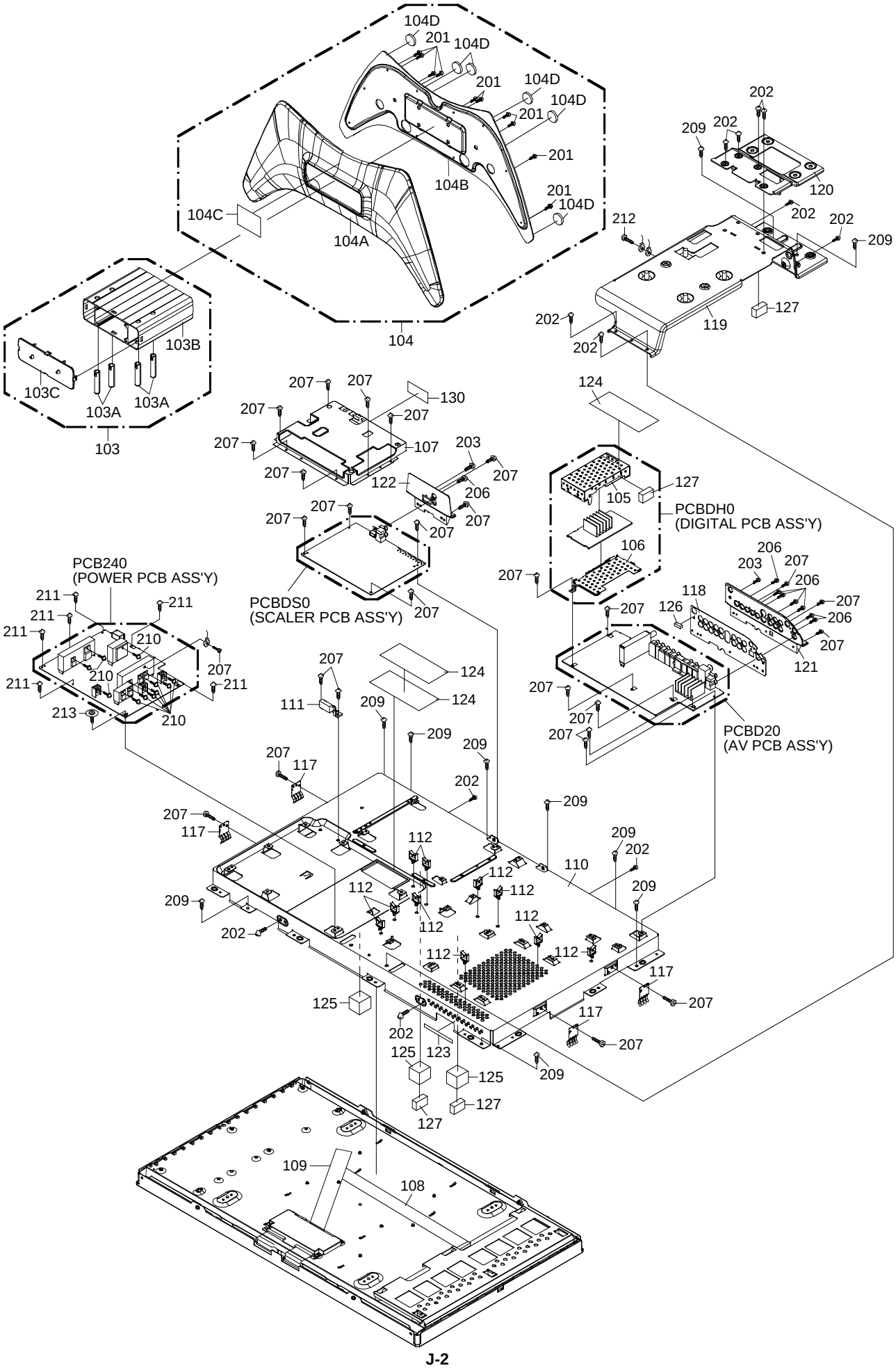
NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

MECHANICAL EXPLODED VIEW

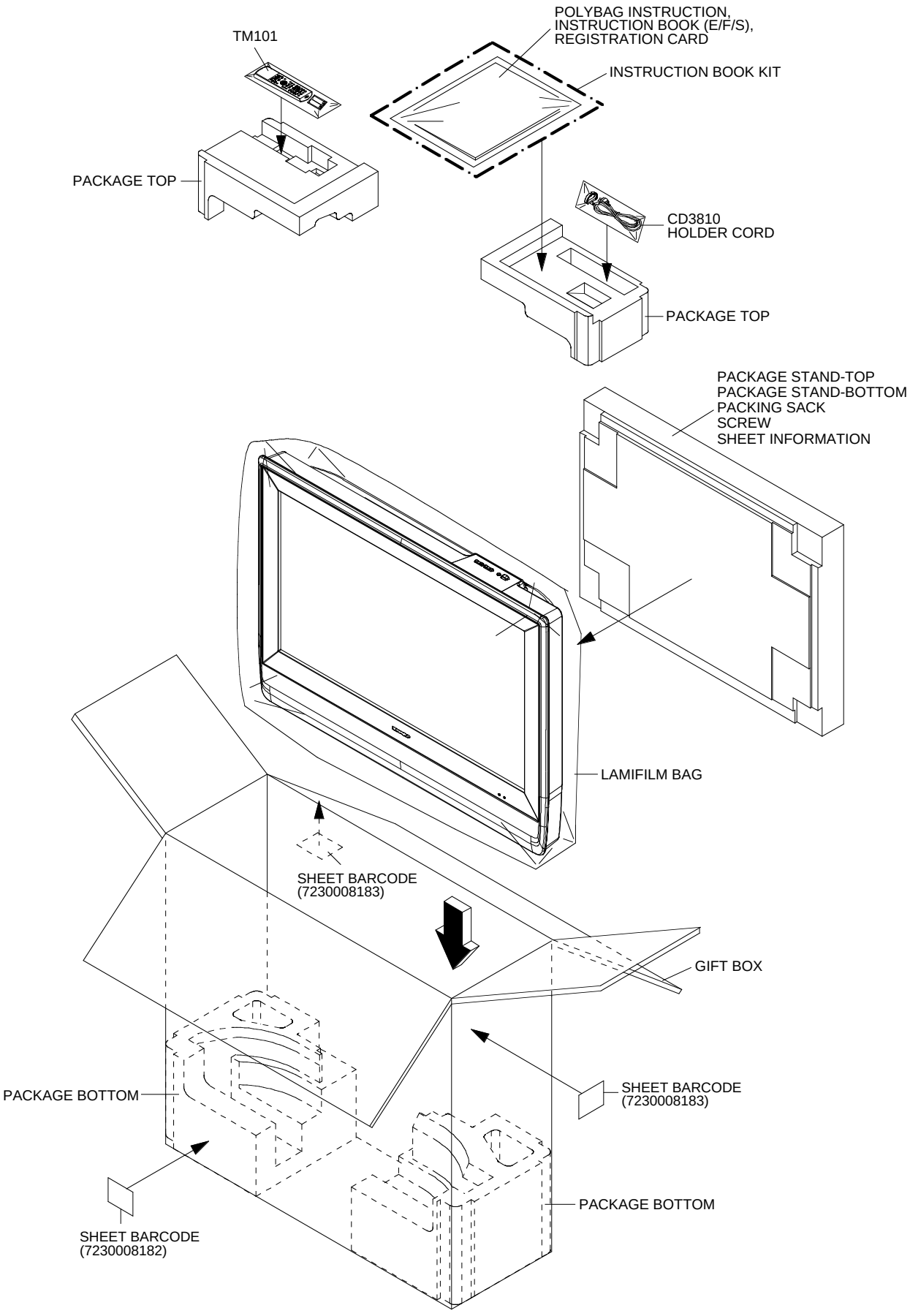




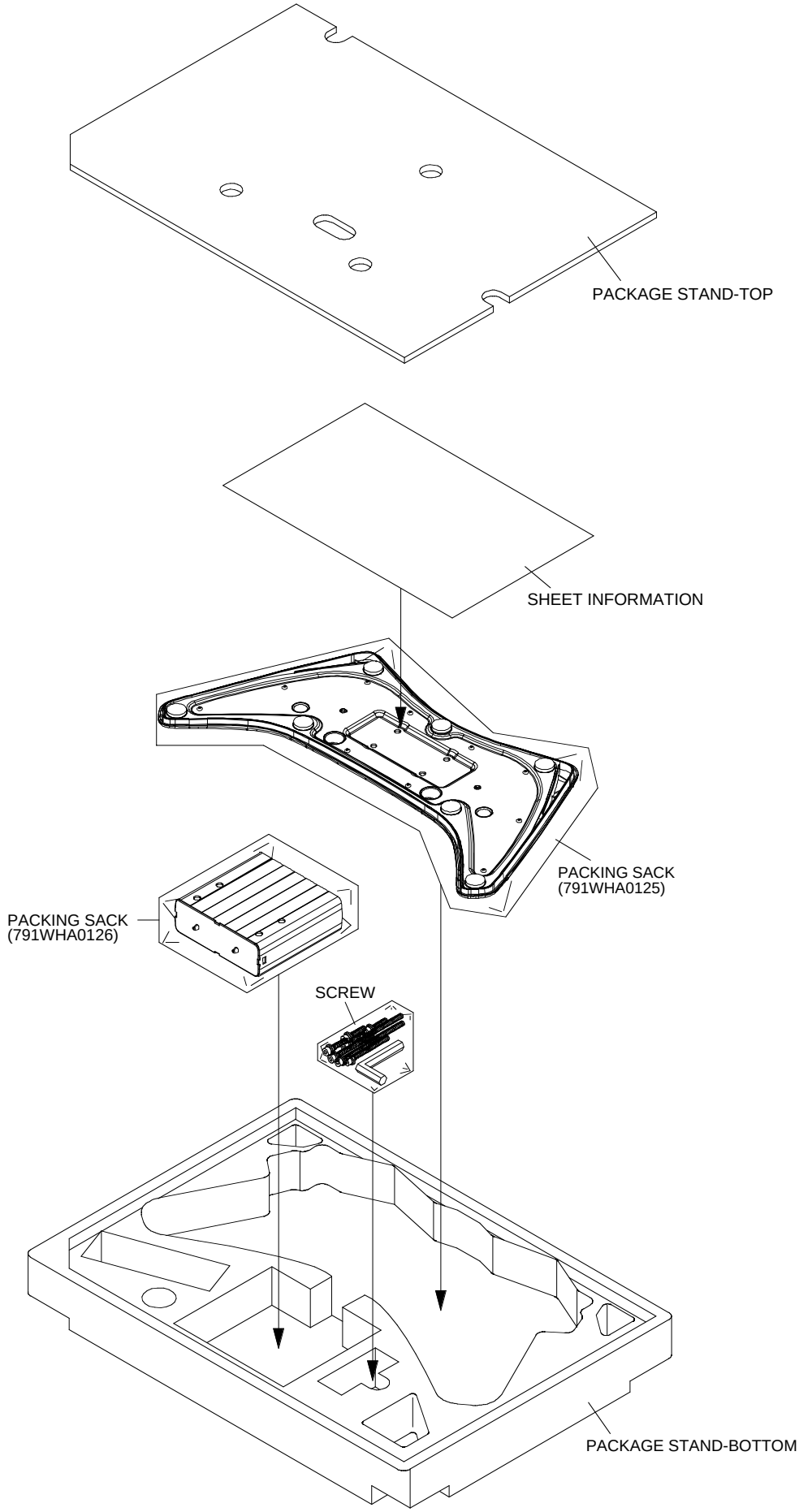
MECHANICAL EXPLODED VIEW



MECHANICAL EXPLODED VIEW
(PACKING DIAGRAM)



MECHANICAL EXPLODED VIEW
(PACKING DIAGRAM)



MECHANICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
101	7A7010220A	FRONT CABI ASS'Y		201	8110630A0U	SCREW TAP TITE(P) BRAZIER	3x10
101A	701WPJ1459	CABINET FRONT		202	810A14080U	SCREW WASHER(A)	M4x8
101B	702WPB0109	COVER STAND		203	810213080S	SCREW PAN	M3x8
101C	83SPN2000W	PUSH NUT		204	810223080S	SCREW BIND	M3x8
101D	713WPA0393	GLASS LED		205	8110630A0S	SCREW TAP TITE(P) BRAZIER	3x10
101E	7235270018	BADGE BRAND		206	810923080S	SCREW TAP TITE(B) BIND	3x8
101F	800WQ0A125	FELT SHEET	18x310xT1.0	207	810923080U	SCREW TAP TITE(B) BIND	3x8
101G	800WQ0A127	FELT SHEET	18x310xT0.5	208	8110230A4S	SCREW TAP TITE(P) BIND	3x14
101H	800WQ0A128	FELT SHEET	25x25xT0.5	209	8117540A2U	SCREW TAPPING(B0) TRUSS	4x12
101I	800WQ0A124	FELT SHEET	18x600xT1.0				
				210	8109I30A0U	SCREW TAP TITE(B) WH7	3x10
102	7A7020085A	BACK CABI ASS'Y		211	8109D30A0U	SCREW TAP TITE(B) WH8	3x10
102A	702WPB0110	CABINET BACK		212	810A13080U	SCREW WASHER(A)	M3x8
102B	706WPB0009	COVER CONNECTOR		213	8159130A0U	SCREW TAPPING(B) WASHER12 PAN	3x10
102C	7230008130	SHEET JACK-1					
102D	7230008131	SHEET JACK-2		---	7230008182	SHEET BARCODE	
102E	800WQ0A049	FELT SHEET		---	7230008183	SHEET BARCODE	
102F	800WQ0A110	FELT SHEET		---	7290000175	SHEET INFORMATION	
102G	800WQ00095	FELT SHEET		---	774WPA0010	HOLDER CORD	
102H	800WQ00103	FELT SHEET	9x250xT0.3	---	791WHA0125	PACKING SACK	
102I	800WQ00112	FELT SHEET	9x390xT0.3	---	791WHA0126	PACKING SACK	
				---	791WHA0130	LAMIFILM BAG	
103	7A7640004A	FRAME STAND ASS'Y		---	792WHA0660	PACKAGE STAND-TOP	
103A	701WPA1423	HOLDER STAND		---	792WHA0661	PACKAGE STAND-BOTTOM	
103B	761WEB0004	FRAME STAND		---	792WHA0664	PACKAGE TOP	
103C	761WPA0436	COVER STAND FRAME		---	792WHA0665	PACKAGE BOTTOM	
				---	793WCD1758	GIFT BOX	
104	7A7040015A	STAND ASS'Y		---	890CDAIA24	SCREW	
104A	704WPB0021	STAND		---	A3Y004E975	INSTRUCTION BOOK KIT	
104B	761WSB0039	ANGLE STAND		---	J3Y00417A	REGISTRATION CARD(SHARP)	
104C	7290000172	SHEET CAUTION		---	J3Y00431A	INSTRUCTION BOOK(E/F/S)	
104D	800WFA0063	CUSHION LEG		---	JA4ND200	POLYBAG INSTRUCTION(RED CAUTION)	
105	752WSA0555	SHIELD DIGITAL					
106	752WSA0556	DIGITAL SHIELD COVER					
107	752WSA0575	SHIELD SCALER					
108	753WEA0030	SHEET CU					
109	753WEA0035	SHEET CU					
110	761WSA0374	COVER LCD					
111	771WPA0343	HOLDER AC-INLET					
112	899CH16000	HOLDER WIRE					
113	711WPJ0077	PLATE BUTTON					
114	7230008200	POP LABEL					
115	7235270017	SHEET RATING					
116	735WPB0336	BUTTON FRAME					
117	744WUA0022	SPRING EARTH					
118	752WSA0566	SHIELD JACK					
119	761WSA0356	ANGLE BACK-1					
120	761WSA0357	ANGLE BACK-2					
121	771WPA0347	PLATE JACK-1					
122	771WPA0348	PLATE JACK-2					
123	7240001125	SHEET PC					
124	890MP2401A	TAPE	50x35				
125	8965TS202A	CUSHION 65TS20-20	20x15x12				
126	8965TS0415	CUSHION 65TS4-2	15x50x16				
127	8965TS1017	CUSHION 65TS10-10	17.5x20x14				
128	800WB00004	FIBER WASHER	7x3.2xT0.5				
129	7220001225	SHEET SERIAL					
130	890MP2401E	TAPE	50x12				

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		
		POWER PCB ASS'Y		
		*** PCB ***		
PCB240	A3Y004G240	POWER PCB ASS'Y	CEF171A	
		*** RESISTORS ***		
⚠R507	RC31X1155J	RC	1.5M OHM 1W	
⚠R524	R3X181R27J	R,METAL OXIDE	0.27 OHM 1W	
⚠R527	R3X181R27J	R,METAL OXIDE	0.27 OHM 1W	
⚠R529	R63881R22J	R,FUSE	0.22 OHM 1W	
⚠R530	R3X181R27J	R,METAL OXIDE	0.27 OHM 1W	
⚠R532	R65584101J	R,FUSE	100 OHM 1/4W	
⚠R534	R3X18A104J	R,METAL OXIDE	100K OHM 2W	
⚠R535	R65584101J	R,FUSE	100 OHM 1/4W	
⚠R537	R3X18A104J	R,METAL OXIDE	100K OHM 2W	
⚠R600	R5X2AE010J	R,CEMENT	1 OHM 7W	
		*** CAPACITORS ***		
⚠C503	P2122B224M	CMP	0.22 UF 275V ECQUL	
⚠C506	CD39E0ME3M	CC	0.0015UF 250V	
⚠C507	P2122B104M	CMP	0.1 UF 275V ECQUL	
⚠C509	P2122B224M	CMP	0.22 UF 275V ECQUL	
⚠C510	E71LFC591D	CE	590 UF 200V	
⚠C511	E61DFC101D	CE	100 UF 200V	
C513	C0PLRR7G3K	CC	0.0018 UF 2KV R	
C515	C0PLRR7U2K	CC	680 PF 2KV R	
C521	C03L0R7H2K	CC	220 PF 2KV R	or
	C0PLRR7H2K	CC	220 PF 2KV R	
C523	P411F4393J	CMPP	0.039 UF 400V ECWF	
C527	P411F4393J	CMPP	0.039 UF 400V ECWF	
⚠C529	CD39B0MQ2K	CC	470 PF 250V	
⚠C530	CD39B0MH2K	CC	220 PF 250V	
C531	C03L0R7H2K	CC	220 PF 2KV R	or
	C0PLRR7H2K	CC	220 PF 2KV R	
C532	C03L0R7H2K	CC	220 PF 2KV R	or
	C0PLRR7H2K	CC	220 PF 2KV R	
⚠C535	E61FF3102D	CE	1000 UF 25V	
C536	C03L0R7H2K	CC	220 PF 2KV R	or
	C0PLRR7H2K	CC	220 PF 2KV R	
⚠C537	E61FF1222D	CE	2200 UF 10V	
⚠C539	E61FF4122D	CE	1200 UF 35V	
⚠C540	E61FF3102D	CE	1000 UF 25V	
⚠C541	E5EZU2101M	CE	100 UF 16V	
⚠C542	E61FF4122D	CE	1200 UF 35V	
⚠C543	E61FF2102D	CE	1000 UF 16V	
⚠C545	E61FF2102D	CE	1000 UF 16V	
⚠C547	E5EZU2221M	CE	220 UF 16V	
⚠C548	E5EZU2221M	CE	220 UF 16V	
⚠C549	E61FF4122D	CE	1200 UF 35V	
⚠C558	E5EZU2101M	CE	100 UF 16V	
⚠C560	E61FT2681D	CE	680 UF 16V	
⚠C583	E61DFC101D	CE	100 UF 200V	
		*** DIODES ***		
D501	D4AT01H3E0	DIODE,RECTIFIER	1H3-E	or
	D28X0ERB20	DIODE,RECTIFIER	10ERB20-TA2B5	
D502	D28T21DQN9	DIODE,SCHOTTKY	21DQ09N-TA2B1	
⚠D503	D6CE24110A	DIODE,VARISTA	ENE241D-10A-Q6	
⚠D504	DOU002720M	DIODE,VARISTA	DSS-272M-S00B	
⚠D505	D6E027110A	DIODE,VARISTA	ENE271D-10A	
D506	D97U02R21B	DIODE,ZENER	MTZJ2.2B T-77	
⚠D507	D2B0BV6080	DIODE,BRIDGE	RBV-608	
⚠D508	D2WTRM11C0	DIODE,SILICON	RM11C-EIC	
⚠D509	D2WTRM11C0	DIODE,SILICON	RM11C-EIC	
⚠D510	D2WTRM11C0	DIODE,SILICON	RM11C-EIC	

⚠D511	D2WTRM11C0	DIODE,SILICON	RM11C-EIC	
D512	D1VT001330	DIODE,SILICON	1SS133T-77	
D513	D1VT001330	DIODE,SILICON	1SS133T-77	
D514	D97U05R61B	DIODE,ZENER	MTZJ5.6B T-77	
D515	D97U06R21B	DIODE,ZENER	MTZJ6.2B T-77	
D516	D1VT001330	DIODE,SILICON	1SS133T-77	
⚠D517	D97U06R21B	DIODE,ZENER	MTZJ6.2B T-77	
D518	D2B0RU3AM0	DIODE,SILICON	RU3AM	
D519	D1VT001330	DIODE,SILICON	1SS133T-77	
D520	D2BXARS010	DIODE,SILICON	SARS01-V1	
D521	D1VT001330	DIODE,SILICON	1SS133T-77	
D522	D1VT001330	DIODE,SILICON	1SS133T-77	
D523	D4AT01H3E0	DIODE,RECTIFIER	1H3-E	or
	D28T0ERB20	DIODE,RECTIFIER	10ERB20-TA1B2	
D524	D4AT01H3E0	DIODE,RECTIFIER	1H3-E	or
	D28T0ERB20	DIODE,RECTIFIER	10ERB20-TA1B2	
D525	D1VT001330	DIODE,SILICON	1SS133T-77	
D526	D1VT001330	DIODE,SILICON	1SS133T-77	
D527	D1VT001330	DIODE,SILICON	1SS133T-77	
⚠D528	D2BAMX22S0	DIODE,SCHOTTKY	FMX-22S	
D529	D4AT01H3E0	DIODE,RECTIFIER	1H3-E	or
	D28T0ERB20	DIODE,RECTIFIER	10ERB20-TA1B2	
⚠D530	D2BAMX22S0	DIODE,SCHOTTKY	FMX-22S	
⚠D531	D2BAMX22S0	DIODE,SCHOTTKY	FMX-22S	
⚠D532	D27A85T400	DIODE,SCHOTTKY	RB085T-40	
⚠D533	D2CA2C15R0	DIODE,SCHOTTKY BARRIER	YG862C15R	
D534	D97U02701B	DIODE,ZENER	MTZJ27B T-77	
D535	D28T21DQN9	DIODE,SCHOTTKY	21DQ09N-TA2B1	
D538	DD7R0S3550	DIODE,SILICON	1SS355 TE-17	
D539	D28R1QS040	DIODE	EC31QS04-TE12L	
D540	D28R1QS040	DIODE	EC31QS04-TE12L	
D541	D28R1QS040	DIODE	EC31QS04-TE12L	
D542	D28R1QS040	DIODE	EC31QS04-TE12L	
D543	D2LKSR3400	DIODE,SCHOTTKY	SR340-004	or
	D2LKB340F0	DIODE,SCHOTTKY	SB340FL-6737	
D545	D2WXN40050	DIODE,SILICON	1N4005-EIC	
		*** ICS ***		
⚠IC501	I1KJ9A431A	IC	KIA431A-AT	
⚠IC502	I0BT0X6730	IC	STR-X6737	
⚠IC503	I2BT0W6730	IC	STR-W6735	
⚠IC504	I1KJ9A431A	IC	KIA431A-AT	
⚠IC505	I07A078100	IC	BA7810T-V5	
⚠IC506	I07T0BC0W0	IC	BA00BC0WCP-V5E2	
⚠IC508	I03T057740	IC	LA5774-E	
IC509	I1LF010150	IC	AL1015	
⚠IC510	I0GA9090R0	IC	PQ090RDA1SZH	
⚠IC511	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)	
⚠IC512	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)	
		*** TRANSISTORS ***		
Q501	TCATC31980	TRANSISTOR,SILICON	KTC3198-AT(Y,GR)	
Q502	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q503	TAAA1504SY	TRANSISTOR,SILICON	KTA1504S_Y_RTK	
Q504	TJ7M50P030	FET	RSS050P03_TB	
Q505	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q507	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q508	TAAA1504SY	TRANSISTOR,SILICON	KTA1504S_Y_RTK	
Q511	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	
Q512	T0300J6500	FET	2SJ650	
Q513	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	
Q514	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q515	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
		*** COILS ***		
B501	024HT03563	CORE,BEADS	W4BRH3.5X6X1.0X2	
B502	024HT03564	CORE,BEADS	W4BRH3.5X6X1.0	
B505	024BC5121J	CORE,BEADS	BLM18PG121SN1D	
B506	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B507	024AC5181J	CORE,BEADS	BLM18PG181SN1D	

B508	024BC5121J	CORE,BEADS	BLM18PG121SN1D	
L501	02167E220K	COIL	22 UH	
L502	02186I6R8L	COIL	6.8 UH	
L503	02186I6R8L	COIL	6.8 UH	
L504	021W0G330M	COIL	33 UH	
L505	021W0G100M	COIL	10 UH	
⚠L506	029X000144	COIL,LINE FILTER	SS30V-R250092	
⚠L507	029X000144	COIL,LINE FILTER	SS30V-R250092	
		*** TRANSFORMERS ***		
⚠T501	0481350964	TRANSFORMER,SWITCHING	81350964	
⚠T502	0481420774	TRANSFORMER,SWITCHING	81420774	
		*** CONNECTORS ***		
CP504	069D01001A	CONNECTOR PCB SIDE	003P-2100	
⚠CP505	069D01001A	CONNECTOR PCB SIDE	003P-2100	
CP506	069S2E0629	CONNECTOR PCB SIDE	A2001WV2-14P	
CP507	069S170019	CONNECTOR PCB SIDE	A2501WV2-7P	
CP508	069S270629	CONNECTOR PCB SIDE	A2001WV2-7P	
CP510	069S120019	CONNECTOR PCB SIDE	A2501WV2-2P	
CP511	069S1C0019	CONNECTOR PCB SIDE	A2501WV2-12P	
CP512	069S140019	CONNECTOR PCB SIDE	A2501WV2-4P	
CP513	069D01001A	CONNECTOR PCB SIDE	003P-2100	
CP514	069W01001A	CONNECTOR PCB SIDE	003P-2100	
		*** FUSES ***		
⚠F501	081PC6R305	FUSE	51MS063L	
FH501	06710T0009	HOLDER,FUSE	EYF-52BCY	
FH502	06710T0009	HOLDER,FUSE	EYF-52BCY	
		*** RELAYS ***		
⚠RY501	0560V50119	RELAY	ALKS329 A60	or
	0560V50118	RELAY	ALKS329	
		*** THERMISTOR ***		
⚠TH501	DSRFSP3R0L	THERMISTOR	NTPAN3R0LDKB0	
		*** OTHERS ***		
CD507	06CD010701	CORD,CONNECTOR	CD010701	
CD508	06CD010701	CORD,CONNECTOR	CD010701	
EL2401	124116281A	EYE LET	XRY16X28BD	
EL2402	124120301A	EYE LET	XRY20X30BD	
⚠F502	0835A07005	MICRO FUSE	20N_7000FSW	
⚠J502	064Q1A0003	JACK,AC	CCT2302-0911	
SH501	126R000036	TERMINAL PIN	TP00385-21	
SH502	126R000036	TERMINAL PIN	TP00385-21	
SH503	126R000036	TERMINAL PIN	TP00385-21	
SH504	126R000036	TERMINAL PIN	TP00385-21	
		OPERATION PCB ASS'Y		
		*** PCB ***		
PCB270	A3Y004G270	OPERATION PCB ASS'Y	CEF185A	
		*** SWITCHES ***		
SW2201	0504101T34	SWITCH,TACT	EVQ21505R	
SW2202	0504101T34	SWITCH,TACT	EVQ21505R	
SW2203	0504101T34	SWITCH,TACT	EVQ21505R	
SW2204	0504101T34	SWITCH,TACT	EVQ21505R	
SW2205	0504101T34	SWITCH,TACT	EVQ21505R	

SW2206	0504101T34	SWITCH,TACT	EVQ21505R	
		*** CONNECTORS ***		
CP2203	069S230639	CONNECTOR PCB SIDE	A2001WR2-3P	
		AV PCB ASS'Y		
		*** PCB ***		
PCBD20	A3Y004GD20	AV PCB ASS'Y	CMF080A	
		*** RESISTORS ***		
R5820	R002T4104J	RC	100K OHM 1/4W	
		*** CAPACITORS ***		
C340	E61FF3821D	CE	820 UF 25V	
C342	E61FF3821D	CE	820 UF 25V	
C3801	E61FF2102D	CE	1000 UF 16V	
C3802	E61FF2102D	CE	1000 UF 16V	
C3803	E61FF2102D	CE	1000 UF 16V	
C3810	E61FF2102D	CE	1000 UF 16V	
C3825	E61FF3821D	CE	820 UF 25V	
C3826	E61FF3821D	CE	820 UF 25V	
C5824	E02LT0102M	CE	1000 UF 6.3V	
C5826	C0JTSL4Q1J	CC	47 PF 50V SL	
		*** DIODES ***		
D302	D28R1QS040	DIODE	EC31QS04-TE12L	
D303	D28R1QS040	DIODE	EC31QS04-TE12L	
D304	D28R1QS040	DIODE	EC31QS04-TE12L	
D305	D28R1QS040	DIODE	EC31QS04-TE12L	
D901	D97U05R61B	DIODE,ZENER	MTZJ5.6B T-77	
D3801	D1VT001330	DIODE,SILICON	1SS133T-77	
D3802	D28T21DQN4	DIODE,SCHOTTKY	21DQ04N-TA2B1	
D3804	D4AT01H3E0	DIODE,RECTIFIER	1H3-E	or
	D28T0ERB20	DIODE,RECTIFIER	10ERB20-TA1B2	
D3805	D4AT01H3E0	DIODE,RECTIFIER	1H3-E	or
	D28T0ERB20	DIODE,RECTIFIER	10ERB20-TA1B2	
D3811	D28R1QS040	DIODE	EC31QS04-TE12L	
D3812	D28R1QS040	DIODE	EC31QS04-TE12L	
D4202	DE7RB8R22B	DIODE,ZENER	UDZS8.2B TE-17	
D4203	DE7RB8R22B	DIODE,ZENER	UDZS8.2B TE-17	
D4206	D97U08R21B	DIODE,ZENER	MTZJ8.2B T-77	
D4207	D97U08R21B	DIODE,ZENER	MTZJ8.2B T-77	
D4208	DE7RB8R22B	DIODE,ZENER	UDZS8.2B TE-17	
D4209	D1VT001330	DIODE,SILICON	1SS133T-77	
D4210	DE7RB8R22B	DIODE,ZENER	UDZS8.2B TE-17	
		*** ICS ***		
⚠IC301	I1MFPA2020	IC	TA2024-ASE	
IC904	I19FF4440G	IC	MSP4440G-QA-C13-100	
IC3801	I1LF010100	IC	AL1010	
⚠IC3804	I0GA9XF010	IC	PQ070XF01SZH	
IC3805	I03D979950	IC	LA7995M-TLM	
IC4201	I01F05853B	IC	AN15853B-E1	
IC4401	I0QF025840	IC	NJM2584AM(TE1)	
IC5801	I55J07W660	IC	TC7W66FU(TE12L,F)	
		*** TRANSISTORS ***		
Q300	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q301	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q302	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q901	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	

Q902	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q3813	TJ7M50P030	FET	RSS050P03_TB	
Q4202	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4203	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4205	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4206	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4207	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4208	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q4209	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4210	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q4231	TPAAC05002	COMPOUND TRANSISTOR	KRA103SRTK	or
	TPYJC05001	COMPOUND TRANSISTOR	DTA124EKAT146	
Q4233	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q4401	TAAA1504SY	TRANSISTOR,SILICON	KTA1504S_Y_RTK	or
	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	
Q4402	TPAAB05001	COMPOUND TRANSISTOR	KRA102SRTK	
Q4403	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q4409	TAAA1504SY	TRANSISTOR,SILICON	KTA1504S_Y_RTK	or
	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	
Q4410	TAAA1504SY	TRANSISTOR,SILICON	KTA1504S_Y_RTK	or
	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	
Q5801	TPAAA05001	COMPOUND TRANSISTOR	KRA101SRTK	or
	TPRAA05002	COMPOUND TRANSISTOR	RT1P431C-T112-1	
Q5802	TNAAC05002	COMPOUND TRANSISTOR	KRC103SRTK	or
	TNRAC05003	COMPOUND TRANSISTOR	RT1N241C-T112-1	
Q5803	T82A03841Q	TRANSISTOR,SILICON	2SC3841-T1B_T63	
Q5804	T82A03841Q	TRANSISTOR,SILICON	2SC3841-T1B_T63	
Q5805	T82A03841Q	TRANSISTOR,SILICON	2SC3841-T1B_T63	

*** COILS ***

B901	024BC5121J	CORE,BEADS	BLM18PG121SN1D	
B902	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B903	024BC5121J	CORE,BEADS	BLM18PG121SN1D	
B904	024HC51023	CORE,BEADS	FCM1608KF-102T02	or
	024AC5102F	CORE,BEADS	BLM18BD102SN1D	
B906	024HC51023	CORE,BEADS	FCM1608KF-102T02	or
	024AC5102F	CORE,BEADS	BLM18BD102SN1D	
B3801	024HT03553	CORE,BEADS	W5RH3.5X5X1.0	
B4202	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B4203	024HT03553	CORE,BEADS	W5RH3.5X5X1.0	
B4214	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B4215	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B4216	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B4217	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B4218	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B4219	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B4220	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B4221	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B4222	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B5801	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B5802	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B5803	024AC5181J	CORE,BEADS	BLM18PG181SN1D	

L300	021W0G100M	COIL	10 UH
L301	021W0G100M	COIL	10 UH
L302	021W0G100M	COIL	10 UH
L303	021W0G100M	COIL	10 UH
L901	02167F100J	COIL	10 UH
L903	02167F100J	COIL	10 UH
L904	02167F100J	COIL	10 UH
L3801	02167E220K	COIL	22 UH
L3802	02167E220K	COIL	22 UH
L3803	02167E220K	COIL	22 UH
L3804	02167E220K	COIL	22 UH
L3806	021404150M	COIL	15 UH
L3807	02167E100K	COIL	10 UH
L3809	02186I6R8L	COIL	6.8 UH
L3810	02167E100K	COIL	10 UH
L4201	02167F101J	COIL	100 UH
L4202	02167F470J	COIL	47 UH
L4203	02167F470J	COIL	47 UH
L4206	02167F470J	COIL	47 UH
L4207	02167F470J	COIL	47 UH
L4212	021LA6220J	COIL	22 UH
L4213	021LA6220J	COIL	22 UH
L4214	021LA6220J	COIL	22 UH
L4215	021LA6220J	COIL	22 UH
L4218	021LA6220J	COIL	22 UH
L4219	021LA6220J	COIL	22 UH
L4401	02167F221J	COIL	220 UH
L5801	02167F220J	COIL	22 UH
L5802	021673220K	COIL	22 UH
L5803	02167F101J	COIL	100 UH
L5804	021LA6220J	COIL	22 UH
		*** JACKS ***	
J4201	060K411041	RCA JACK	AV2-13P2-07H
J4202	060K401126	RCA JACK	AVG-2-13
J4204	060K431026	RCA JACK	AV2-67A03-01
J4205	063E000082	JACK PLATE	SAV-12CP-01Z5
J4211	060K401128	RCA JACK	AV3-67A02-01H
		*** CONNECTORS ***	
CP301	069S130419	CONNECTOR PCB SIDE	A2502WV2-3P
CP303	069S120419	CONNECTOR PCB SIDE	A2502WV2-2P
CP901	069S240629	CONNECTOR PCB SIDE	A2001WV2-4P
CP3801	069S140019	CONNECTOR PCB SIDE	A2501WV2-4P
CP3802	069S120019	CONNECTOR PCB SIDE	A2501WV2-2P
CP3803	069S1C0019	CONNECTOR PCB SIDE	A2501WV2-12P
CP3804	069S170019	CONNECTOR PCB SIDE	A2501WV2-7P
CP3807	069S2B0629	CONNECTOR PCB SIDE	A2001WV2-11P
CP3808	069S270629	CONNECTOR PCB SIDE	A2001WV2-7P
CP4202	069S250629	CONNECTOR PCB SIDE	A2001WV2-5P
CP4203	069EVT3030	CONNECTOR PCB SIDE	00_6232_029_006_800+
CP4204	069EVU3030	CONNECTOR PCB SIDE	00_6232_030_006_800+
CP5801	06972KM020	CONNECTOR PCB SIDE	TKC-W20P-U1
CP5802	06972KM020	CONNECTOR PCB SIDE	TKC-W20P-U1
		*** CRYSTAL & CERAMIC OSCILLATORS ***	
X901	100CT01804	CRYSTAL	HC-49/U-S
		*** TUNER ***	
⚠TU5801	0164500006	DIGITAL TUNER	TUMUDTR-V110V
		*** OTHERS ***	
CUSD21	800WFAA006	CUSHION A	
CUSD22	800WFAA006	CUSHION A	
SH4201	126R000038	TERMINAL PIN	TP00370-21
SH4202	126R000038	TERMINAL PIN	TP00370-21

SH4203	126R000038	TERMINAL PIN	TP00370-21	
SH4204	126R000038	TERMINAL PIN	TP00370-21	
SH4205	126R000038	TERMINAL PIN	TP00370-21	
		REMOCON PCB ASS'Y		
		*** PCB ***		
PCBDA0	A3Y004GDA0	REMOCON PCB ASS'Y	CEF182A	
		*** DIODES ***		
D544	0021E9Q010	LED	LTL-1BEFJ-002A	
		*** CONNECTORS ***		
CP2201	069S250639	CONNECTOR PCB SIDE	A2001WR2-5P	
		*** OTHERS ***		
OS2200	077A033001	REMOTE RECEIVER	ROM-V338TAO	
		DIGITAL PCB ASS'Y		
		*** PCB ***		
PCBDH0	A3Y004GDH0	DIGITAL PCB ASS'Y	CEF169A	
		*** DIODES ***		
D3402	D28R1QS040	DIODE	EC31QS04-TE12L	
D3403	D28R11FS20	DIODE	EC11FS2-TE12L	
D3404	D28R11FS20	DIODE	EC11FS2-TE12L	
D3405	D28R1QS040	DIODE	EC31QS04-TE12L	
D3406	D28R1QS040	DIODE	EC31QS04-TE12L	
D3407	DD7R20S300	DIODE,SCHOTTKY BARRIER	RB520S-30-TE61	
D3408	D27RX301L0	DIODE,SCHOTTKY	RSX301L-30TE25	
		*** ICS ***		
IC2401	IFNME240H0	IC	X240H(215H48AGA21HG)	
IC2402	ICLJ022ET5	IC	HY5DU561622ETP-D43	
IC2403	ICLJ022ET5	IC	HY5DU561622ETP-D43	
IC2404	I57F04L640	IC	BR24L64F-WE2	
IC2405	I97F052290	IC	BD5229G-TR	
IC2406	S3Y001GF02	MEMORY DATA	HY27US08281A-TPCB	
IC3401	I1LF010420	IC	AL1042	
⚠IC3402	I07F0C0WF0	IC	BA00BC0WFP-E2	
⚠IC3403	I07F078200	IC	BD7820FP-E2	
⚠IC3404	I07F00HFP0	IC	BA7810HFP-TR	
		*** TRANSISTORS ***		
Q2401	T2AA5132E0	FET	KTK5132E-RTK/P	
Q2403	T2AA5132E0	FET	KTK5132E-RTK/P	
Q2404	T2AA5132E0	FET	KTK5132E-RTK/P	
Q2406	T2AA5132E0	FET	KTK5132E-RTK/P	
Q2407	T2AA5132E0	FET	KTK5132E-RTK/P	
Q3403	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA039280	TRANSISTOR,SILICON	2SC3928A-T112-1R	
Q3404	TNAAC05002	COMPOUND TRANSISTOR	KRC103SRTK	or
	TNRAC05003	COMPOUND TRANSISTOR	RT1N241C-T112-1	
⚠Q3405	TJYASP8K30	FET	SP8K3 TB	
Q3406	TNAAC05002	COMPOUND TRANSISTOR	KRC103SRTK	or
	TNRAC05003	COMPOUND TRANSISTOR	RT1N241C-T112-1	
Q3407	TPAAA05001	COMPOUND TRANSISTOR	KRA101SRTK	or
	TPRAA05002	COMPOUND TRANSISTOR	RT1P431C-T112-1	
		*** COILS ***		
B2401	024AC5151E	CORE,BEADS	BLM18BD151SN1D	
B2402	024AC5151E	CORE,BEADS	BLM18BD151SN1D	
B2403	024AC5151E	CORE,BEADS	BLM18BD151SN1D	

B2404	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2405	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2406	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2407	024AC1601G	CORE,BEADS	BLM31PG601SN1L
B2408	024AC1601G	CORE,BEADS	BLM31PG601SN1L
B2409	024AC1601G	CORE,BEADS	BLM31PG601SN1L
B2410	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2411	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2412	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2413	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2414	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2415	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2416	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2417	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2418	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2419	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2420	024AC5151E	CORE,BEADS	BLM18BD151SN1D
B2421	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2422	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2423	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2424	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2425	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2426	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B2427	024AC5102F	CORE,BEADS	BLM18BD102SN1D
B3401	024AC5330J	CORE,BEADS	BLM18PG330SN1D
B3402	024AC1391G	CORE,BEADS	BLM31PG391SN1L
B3406	024AC1601G	CORE,BEADS	BLM31PG601SN1L
B3407	024AC1601G	CORE,BEADS	BLM31PG601SN1L
B3408	024AC1601G	CORE,BEADS	BLM31PG601SN1L
B3410	024AC5151E	CORE,BEADS	BLM18BD151SN1D
L2401	0216SD1R0J	COIL	1 UH
L2411	0216SDR47J	COIL	0.47 UH
L2412	0216SDR47J	COIL	0.47 UH
L2413	0216SDR47J	COIL	0.47 UH
L2414	0216SDR47J	COIL	0.47 UH
L3401	0211M44R7M	COIL	4.7 UH
		*** CONNECTORS ***	
CP2403	06972KT059	CONNECTOR PCB SIDE	125607220W3
CP2404	06972KT059	CONNECTOR PCB SIDE	125607220W3
CP2405	069AAA1009	CONNECTOR PCB SIDE	YKF45-0036N
		*** CRYSTAL & CERAMIC OSCILLATORS ***	
X2401	100DT05501	CRYSTAL	SMD-49
X2402	100DT02503	CRYSTAL	SMD-49
		*** NETWORKS ***	
NR2401	110P4102M5	R,NETWORK	4D02WGJ0102TCE
NR2402	110P4220M6	R,NETWORK	4D02WGJ0220TCE
NR2403	110P4220M6	R,NETWORK	4D02WGJ0220TCE
NR2404	110P4220M6	R,NETWORK	4D02WGJ0220TCE
NR2405	110P4220M6	R,NETWORK	4D02WGJ0220TCE
NR2406	110P4560M5	R,NETWORK	4D02WGJ0560TCE
NR2407	110P4560M5	R,NETWORK	4D02WGJ0560TCE
NR2408	110P4560M5	R,NETWORK	4D02WGJ0560TCE
NR2409	110P4560M5	R,NETWORK	4D02WGJ0560TCE
NR2410	110P4560M5	R,NETWORK	4D02WGJ0560TCE
NR2411	110P4560M5	R,NETWORK	4D02WGJ0560TCE
NR2412	110P4560M5	R,NETWORK	4D02WGJ0560TCE
NR2413	110P4560M5	R,NETWORK	4D02WGJ0560TCE
		SCALER PCB ASS'Y	
		*** PCB ***	
PCBDS0	A3Y004GDS0	SCALER PCB ASS'Y	CEF170A
		*** DIODES ***	

D101	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D105	DD7R20S300	DIODE,SCHOTTKY BARRIER	RB520S-30-TE61	
D109	DD7R20S300	DIODE,SCHOTTKY BARRIER	RB520S-30-TE61	
D802	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D803	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D805	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D807	DD7R0S3550	DIODE,SILICON	1SS355 TE-17	
D808	DD7R0S3550	DIODE,SILICON	1SS355 TE-17	
D3206	D28R1QS040	DIODE	EC31QS04-TE12L	
D3207	D28R1QS040	DIODE	EC31QS04-TE12L	
D3209	D28R11FS20	DIODE	EC11FS2-TE12L	
D3600	D28R1QS040	DIODE	EC31QS04-TE12L	
D3601	DD7R60L400	DIODE,SCHOTTKY	RB160L-40-TE25	
D3602	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D3603	DD7R60L400	DIODE,SCHOTTKY	RB160L-40-TE25	
D3606	D28R1QS040	DIODE	EC31QS04-TE12L	
D3609	DE7RB3R32B	DIODE,ZENER	UDZS3.3B TE-17	
D3613	DE7RB3R32B	DIODE,ZENER	UDZS3.3B TE-17	
D4301	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	
D4302	DE7RB5R62B	DIODE,ZENER	UDZS5.6B TE-17	

*** ICS ***

IC101	S3Y004GM01	MEMORY DATA	OEC7154B	
IC102	I9UF032290	IC	PST3229NR	
IC103	S3Y004GE02	MEMORY DATA	AT24C256N-10SU-2.7	
IC104	S3Y004GE01	MEMORY DATA	AT24C256N-10SU-2.7	
IC801	I56K07A720	IC	R8J66607A72FP	
IC2101	IFSK0883C0	IC	MST9883C-LF-110	
⚠IC3201	I07F0C0WF0	IC	BA00BC0WFP-E2	
⚠IC3202	I07F078200	IC	BD7820FP-E2	
IC3600	I07F078200	IC	BD7820FP-E2	
IC3601	S3Y004GE04	MEMORY DATA	BR24L02F-WE2	
IC3602	I07F0C0WF0	IC	BA00BC0WFP-E2	
IC3603	IG1F090110	IC	SII9011CLU	
IC3605	IG4F020210	IC	CM2021-00TR	
IC3608	S3Y004GE03	MEMORY DATA	BR24L32F-WE2	
IC3611	ICMF089E50	IC	SST89E58RD2-40-C-TQJE	
IC7201	IF8F0385A0	IC	ICSV385AGLFT	
IC8103	I0UF015010	IC	MM1501XNRE	

*** TRANSISTORS ***

Q101	TNAAC05002	COMPOUND TRANSISTOR	KRC103SRTK	
Q104	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q105	TPAAC05002	COMPOUND TRANSISTOR	KRA103SRTK	
Q106	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q2101	TAAA1504SY	TRANSISTOR,SILICON	KTA1504S_Y_RTK	or
	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	
Q3205	TAAA01664Y	TRANSISTOR,SILICON	KTA1664-Y-RTF/P	
Q3206	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q3209	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	
Q3210	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	
Q3600	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q3605	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q3606	T2AA5132E0	FET	KTK5132E-RTK/P	or
	T27T030180	FET	2SK3018T106	
Q4302	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q4305	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q8101	TAAA1504SY	TRANSISTOR,SILICON	KTA1504S_Y_RTK	or
	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	
Q8102	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q8103	TCAA3875SY	TRANSISTOR,SILICON	KTC3875S_Y_RTK	or
	T8RA030520	TRANSISTOR,SILICON	2SC3052-T1	
Q8105	TAAA1504SY	TRANSISTOR,SILICON	KTA1504S_Y_RTK	or
	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	

Q8106	TAAA1504SY	TRANSISTOR,SILICON	KTA1504S_Y_RTK	or
	T6RA015300	TRANSISTOR,SILICON	2SA1530A-T1	
		*** COILS ***		
B801	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B802	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B803	024HC56005	CORE,BEADS	FCM1608CF-600T06	
B804	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B805	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B2101	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B3201	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3202	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3203	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3206	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3207	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3208	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3209	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3601	024HC51513	CORE,BEADS	FCM1608KF-151T06	or
	024AC5151E	CORE,BEADS	BLM18BD151SN1D	
B3602	024HC51513	CORE,BEADS	FCM1608KF-151T06	or
	024AC5151E	CORE,BEADS	BLM18BD151SN1D	
B3603	024HC51513	CORE,BEADS	FCM1608KF-151T06	or
	024AC5151E	CORE,BEADS	BLM18BD151SN1D	
B3604	024HC51513	CORE,BEADS	FCM1608KF-151T06	or
	024AC5151E	CORE,BEADS	BLM18BD151SN1D	
B3605	024HC51513	CORE,BEADS	FCM1608KF-151T06	or
	024AC5151E	CORE,BEADS	BLM18BD151SN1D	
B3606	024HC51023	CORE,BEADS	FCM1608KF-102T02	or
	024AC5102F	CORE,BEADS	BLM18BD102SN1D	
B3610	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B3612	024HC51023	CORE,BEADS	FCM1608KF-102T02	or
	024AC5102F	CORE,BEADS	BLM18BD102SN1D	
B3614	024HC51513	CORE,BEADS	FCM1608KF-151T06	or
	024AC5151E	CORE,BEADS	BLM18BD151SN1D	
B3615	024HC51513	CORE,BEADS	FCM1608KF-151T06	or
	024AC5151E	CORE,BEADS	BLM18BD151SN1D	
B4307	0246C51024	CORE,BEADS	MMZ1608R102CT	
B4308	0246C51024	CORE,BEADS	MMZ1608R102CT	
B7201	024HC56005	CORE,BEADS	FCM1608CF-600T06	
L2101	0216S8220K	COIL	22 UH	
L2102	0216S8220K	COIL	22 UH	
L2103	0216S8470K	COIL	47 UH	
L2106	0216S42R2J	COIL	2.2 UH	
L2107	0216S8220K	COIL	22 UH	
L4306	0216S8220K	COIL	22 UH	
L7201	0216S8470K	COIL	47 UH	
L7202	0216S8470K	COIL	47 UH	
L7203	0216S8470K	COIL	47 UH	
L8102	0216S8470K	COIL	47 UH	
L8105	0216S8220K	COIL	22 UH	
		*** JACKS ***		
J4301	060J431025	RCA JACK	MSD-242VA1-03_NI_FE_LF	
		*** CONNECTORS ***		
CP101	069S250629	CONNECTOR PCB SIDE	A2001WV2-5P	
CP102	069S2A0629	CONNECTOR PCB SIDE	A2001WV2-10P	
CP103	069S270629	CONNECTOR PCB SIDE	A2001WV2-7P	
CP802	069EVU3030	CONNECTOR PCB SIDE	00_6232_030_006_800+	
CP803	069EVT3030	CONNECTOR PCB SIDE	00_6232_029_006_800+	
CP2200	069S230629	CONNECTOR PCB SIDE	A2001WV2-3P	
CP3201	069S2B0629	CONNECTOR PCB SIDE	A2001WV2-11P	
CP3601	069HYJ3010	CONNECTOR PCB SIDE	DC1R019JDA	
CP3602	069S240629	CONNECTOR PCB SIDE	A2001WV2-4P	
CP3604	069S290629	CONNECTOR PCB SIDE	A2001WV2-9P	
CP7203	069HVWT04A	CONNECTOR PCB SIDE	FI-X30S-HF-NPB	

*** CRYSTAL & CERAMIC OSCILLATORS ***

X101	100WT01611	CRYSTAL	HC-49/U-S
X801	100YT05401	CRYSTAL	FCX-03
X3601	100CT01101	CRYSTAL	HC-49/U-S
X3602	100DT02801	CRYSTAL	SMD-49

*** NETWORKS ***

NR801	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR802	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR803	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR804	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR805	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR806	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR807	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR808	110P4103M4	R,NETWORK	4D03WGJ0103T5E
NR809	110P4103M4	R,NETWORK	4D03WGJ0103T5E
NR2101	110P4101M4	R,NETWORK	4D03WGJ0101T5E
NR2102	110P4101M4	R,NETWORK	4D03WGJ0101T5E
NR2103	110P4101M4	R,NETWORK	4D03WGJ0101T5E
NR2104	110P4101M4	R,NETWORK	4D03WGJ0101T5E
NR2105	110P4101M4	R,NETWORK	4D03WGJ0101T5E
NR2106	110P4101M4	R,NETWORK	4D03WGJ0101T5E
NR3601	110P4330M4	R,NETWORK	4D03WGJ0330T5E
NR3602	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR3604	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR3605	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR3606	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR3607	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR3608	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR7201	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR7202	110P4470M4	R,NETWORK	4D03WGJ0470T5E

*** OTHERS ***

SH4301	126R000038	TERMINAL PIN	TP00370-21
SH4302	126R000038	TERMINAL PIN	TP00370-21
SH4303	126R000038	TERMINAL PIN	TP00370-21

AND OTHERS

*** COILS ***

TR301	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR303	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR304	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR305	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR504	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR507	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR2201	02AHB9A972	CORE,FERRITE	W5T29X7.5X19
TR4202	02AHB9A972	CORE,FERRITE	W5T29X7.5X19

*** CONNECTORS ***

CD4203	122H0T1401	CORD,JUMPER	2H0T1401
CD4204	122H0U1401	CORD,JUMPER	2H0U1401

*** AC CORD ***

⚠CD3801	1209119904	CORD,SET AC	9119904

*** OTHERS ***

BT001	141L003010	BATTERY,MANGAN	R6P(AR)XICI
BT002	141L003010	BATTERY,MANGAN	R6P(AR)XICI
CD301	06CU124002	CORD,CONNECTOR	CU124002
CD303	06CU127601	CORD,CONNECTOR	CU127601
CD505	06CU2E5101	CORD,CONNECTOR	CU2E5101
CD901	06CU246601	CORD,CONNECTOR	CU246601
CD2201	06CU235502	CORD,CONNECTOR	CU235502

CD3802	06CU123701	CORD,CONNECTOR	CU123701
CD3803	06CU1C4201	CORD,CONNECTOR	CU1C4201
CD3804	06CU173701	CORD,CONNECTOR	CU173701
CD3805	06CU144706	CORD,CONNECTOR	CU144706
CD3806	06CU273702	CORD,CONNECTOR	CU273702
CD3807	06CU2B5501	CORD,CONNECTOR	CU2B5501
CD4202	06CU256001	CORD,CONNECTOR	CU256001
CD7204	06CHRU3002	CORD,CONNECTOR	CHRU3002
⚠SP301	0701016002	SPEAKER	EAS12D175B
⚠SP302	0701016002	SPEAKER	EAS12D175B
TM101	076B0MQ010	TRANSMITTER	ETR0088-010011
⚠V2301	09E4126002	LCD	LK260T3LF12

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

SHARP

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Design and Production Information	
Design	: OEM
Production	: OEM

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