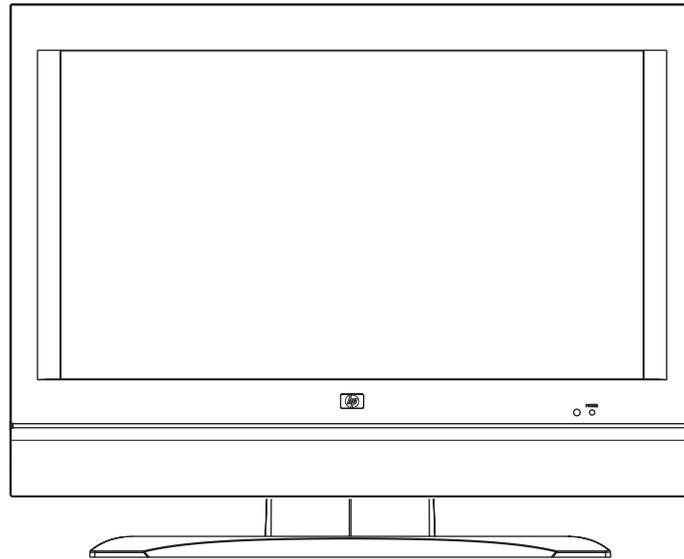


# SERVICE MANUAL



## HP LCD High-Definition Television

**MODEL**  
**HP LC3260N**

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

This document has been published to be used for after sales service only.

The contents are subject to change without notice.

Part number: 5991-4917

Revision 031306



## SERVICING NOTICES ON CHECKING

### 1. KEEP THE NOTICES

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

### 2. AVOID AN ELECTRIC SHOCK

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

### 3. USE THE DESIGNATED PARTS

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

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

### 4. BE CAREFUL WITH THE LCD PANEL

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

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

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

### 6. PERFORM A SAFETY CHECK AFTER SERVICING

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

#### (INSULATION CHECK PROCEDURE)

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

#### **[Note 1]**

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

#### **[Note 2]**

External exposure metal: Antenna terminal  
Earphone jack

## HOW TO ORDER PARTS

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

#### 1. MODEL NUMBER and VERSION LETTER

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

#### 2. PART NO. and DESCRIPTION

You can find it in your SERVICE MANUAL.

## IMPORTANT

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

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## GENERAL SPECIFICATIONS

G-1	TV System	LCD	LCD Size / Visual Size	31.5 inch / 800.4mmV	
			LCD Type	Color TFT LCD	
			Number of Pixels	1366(H) x 768(V)	
			View Range	85/85 degree	
				Left/Right 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
			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	
				at DC	
			Stand by (at AC)		1W at 120V 60Hz
			Energy Star Per Year		Yes
			-- kWh/Year		
	Protector	Power Fuse		Yes	
		Safety Circuit		Yes	
		IC Protector(Micro Fuse)		Yes	
G-5	Regulation	Safety Radiation Laser		UL/CSA FCC/IC --	
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

<b>G-9</b>	<b>Remote Control</b>	Unit	RC-MS	
		Glow in Dark Remocon	No	
		Remocon Format	HP	
		Format	RC-6	
		Custom Code	HP 21bit	
		Power Source	Voltage(D.C) UM size x pcs	3V UM-4 x 2 pcs
		Total Keys		35 Keys
		Keys	POWER	Yes
			SAP/MTS	Yes
			Sound	Yes
			Picture	Yes
			Source	Yes
			Menu	Yes
			Left	Yes
			OK	Yes
			Right	Yes
			Up	Yes
			Down	Yes
			back	Yes
			Aspect	Yes
			Info	Yes
			VOL+	Yes
			VOL-	Yes
			CH+	Yes
			CH-	Yes
			Last	Yes
			Mute	Yes
			CC	Yes
			Sleep	Yes
			Ant	Yes
			1	Yes
			2	Yes
			3	Yes
			4	Yes
			5	Yes
	6	Yes		
	7	Yes		
	8	Yes		
	9	Yes		
	0	Yes		
	-	Yes		
	Enter	Yes		

## GENERAL SPECIFICATIONS

G-10	Features		
	Auto Shut Off		Yes
	Auto Search		No
	Power On Memory		No
	Comb Filter		Yes
			<u>3 -D</u>
	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
	Variable Audio Out		Yes
	Tuning		
	CH Program		Yes
	Air/Cable		Yes
	ADD/DELETE		Yes
	Label		
	CH Label		Yes
	Video Label		Yes
	Favorite CH		No
	V-Chip		Yes
	Type		<u>USA Type</u>
	RRT Setup		Yes
	Lock		
	Hotel Lock		No
	Channel Lock		No
	Video Lock		No
	Panel Lock		No
	OSD Language		English
			French
	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		No
	PIP/POP		No
	Direct Input Selection		Yes
	Digital Out		Yes
	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

## GENERAL SPECIFICATIONS

		HDMI Input	VGA (640 x 480)	Yes (60Hz)
			720X480i (4:3)	Yes (60Hz)
			720X480i (16:9)	Yes (60Hz)
			720X480p (4:3)	Yes (60Hz)
			720X480p (16:9)	Yes (60Hz)
			720X576i (4:3)	No
			720X576i (16:9)	No
			720X576p (4:3)	No
			720X576p (16:9)	No
			1280X720p	Yes (60Hz)
			1920X1080i	Yes (60Hz)
		Component Input		Yes
			720X480i (4:3)	Yes (60Hz)
			720X480i (16:9)	Yes (60Hz)
			720X480p (4:3)	Yes (60Hz)
			720X480p (16:9)	Yes (60Hz)
			720X576i (4:3)	No
			720X576i (16:9)	No
			720X576p (4:3)	No
			720X576p (16:9)	No
			1280X720p	Yes (60Hz)
			1920X1080i	Yes (60Hz)
<b>G-11</b>	<b>Accessories</b>	Owner's Manual	Language w/Guarantee Card	English/French/Spanish 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-4 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
		" Start here" booklet		Yes
		Warranty and support guide		Yes
		Flyer		Yes
		AV Cord (2Pin-1Pin)		No
		Registration Card (NDL Card)		No
		300 to 75ohm Antenna Adapter		No

## GENERAL SPECIFICATIONS

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
		Indicator	Rear	Main Power SW	No
				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	RCA x 3	
			Analog Audio	RCA x 2(L/MONO, R)	
			HDMI Input 1	HDMI x 1	
			Analog Audio	RCA x 2(L/MONO, R)	
HDMI Input 2	HDMI x 1				
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)	823.0 x 279.5 x 669.0	
			w/o Handle, Stand Approx. W x D x H (mm)	823.0 x 116.5 x 592.0	
G-14	Weight		Net (Approx.)	19.5kg (43.0lbs)	
			Net w/o Handle, Stand (Approx.)	17.0kg (37.5lbs)	
			Gross (Approx.)	24.0kg (52.9lbs)	
G-15	Carton	Master Carton		No	
			Content	--- Sets	
			Material	--- / ---	
			Dimensions W x D x H(mm)	---	
		Gift Box	Description of Origin	---	
			Material	Double/Brown	
			W/Color Photo Label	No	
			W/Handle	No	
			Dimensions W x D x H(mm)	917 x 318 x 716	
			Description of Origin	Yes	
Drop Test		1 Corner / 3 Edges / 6 Surfaces			
	Height (cm)	32(ORION SPEC:46)			
	Container Stuffing (40' container)	273 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	
			Pb-free	Phase3(Phase3A)	
			Measures for Whisker	Yes	
			Rohs	Yes	

# DISASSEMBLY INSTRUCTIONS

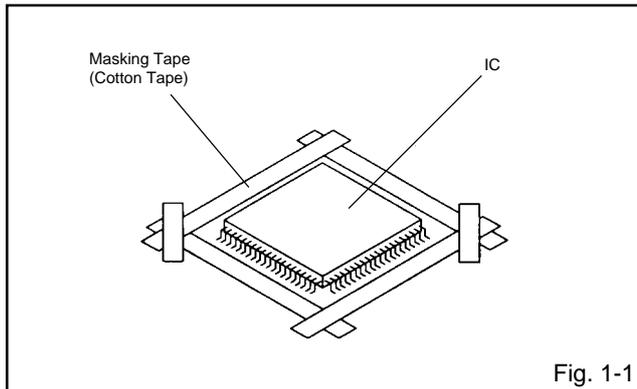
## 1. REMOVAL AND INSTALLATION OF FLAT PACKAGE IC

### REMOVAL

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

#### NOTE

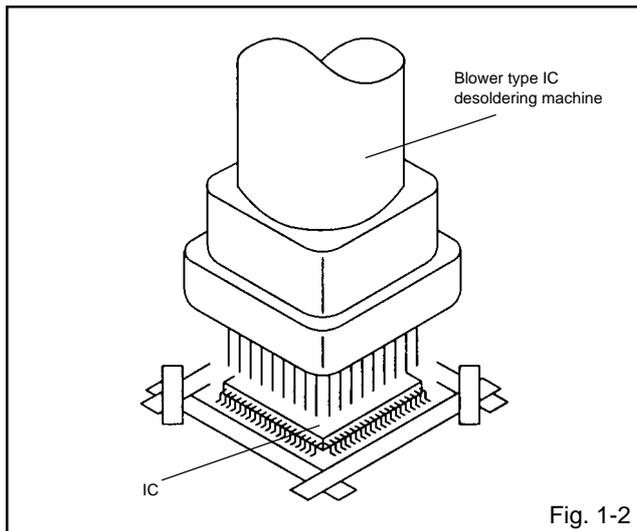
Masking is carried out on all the parts located within 10 mm distance from IC leads.



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

#### NOTE

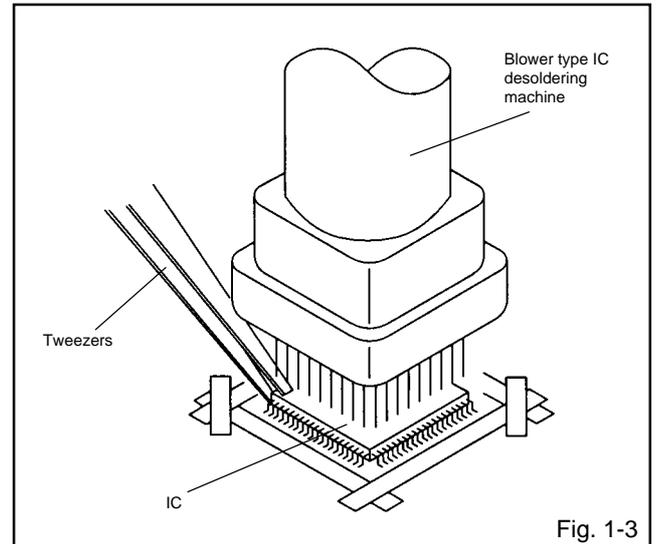
Do not rotate or move the IC back and forth, until IC can move back and forth easily after desoldering the leads completely.



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

#### NOTE

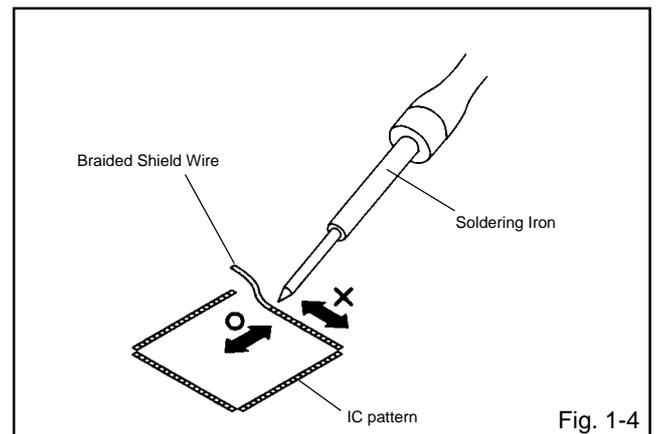
Some ICs on the PCB are affixed with glue, so be careful not to break or damage the foil of each IC leads or solder lands under the IC when removing it.



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

#### NOTE

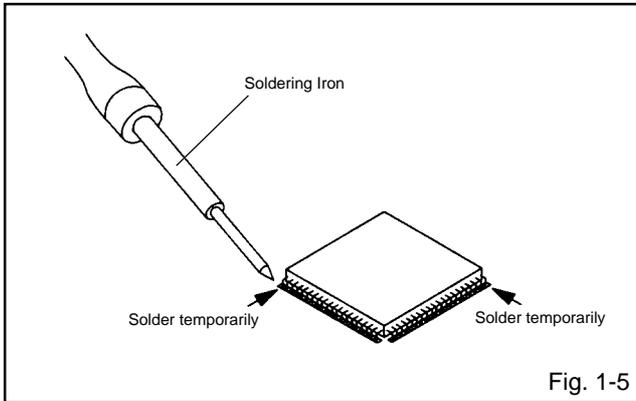
Do not move the Braided Shield Wire in the vertical direction towards the IC pattern.



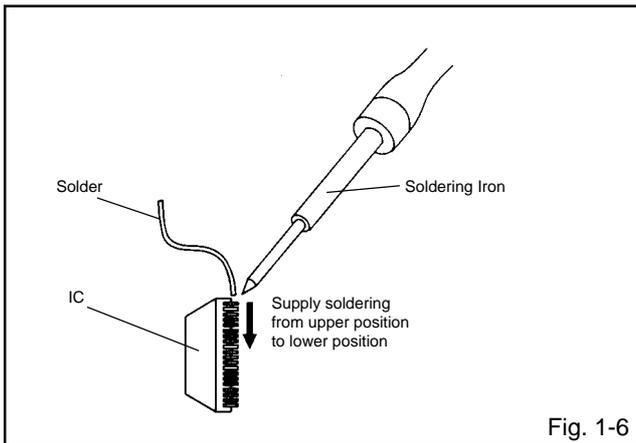
# DISASSEMBLY INSTRUCTIONS

## INSTALLATION

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



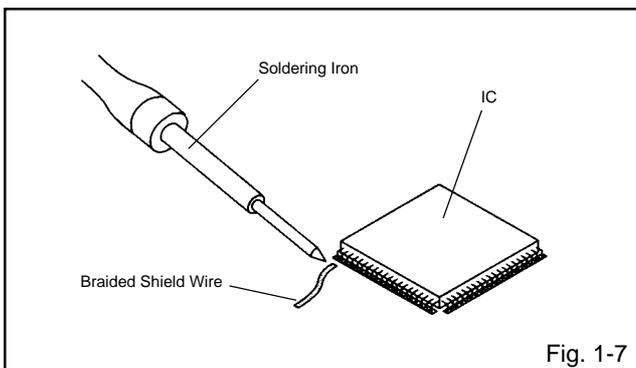
2. Supply the solder from the upper position of IC leads sliding to the lower position of the IC leads. (Refer to Fig. 1-6.)



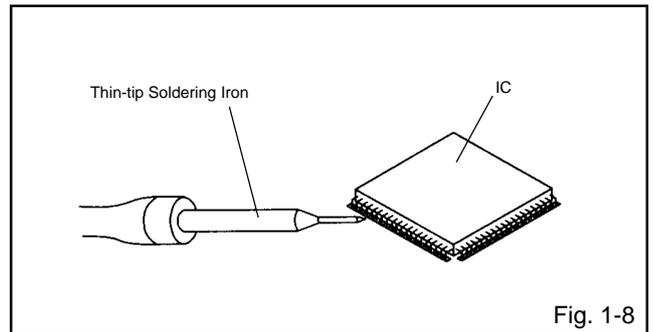
3. Absorb the solder left on the lead using the Braided Shield Wire. (Refer to Fig. 1-7.)

### NOTE

Do not absorb the solder to excess.



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



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

### NOTE

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

## SERVICE MODE LIST

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

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

Set Condition	Set Key	Remocon Key	Standard Time	Operations
TV mode	VOL. DOWN (Minimum)	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.

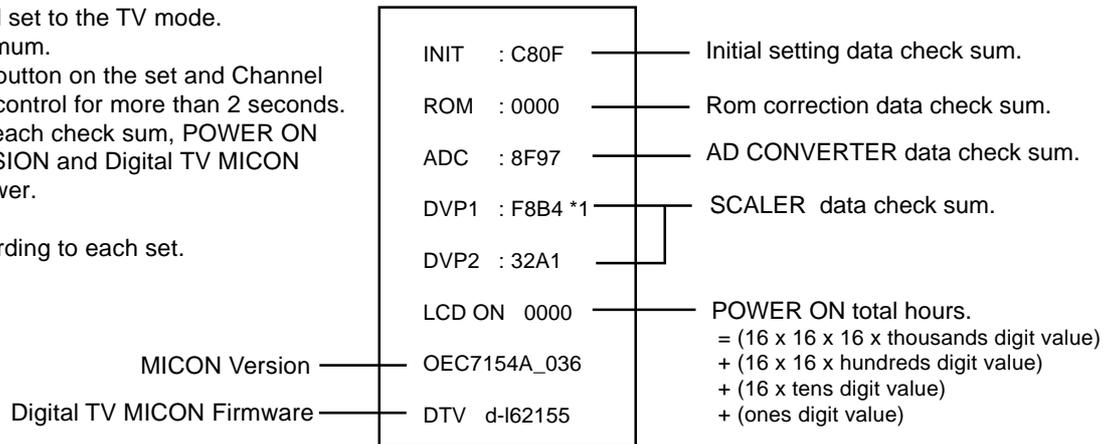


FIG. 1

### 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.

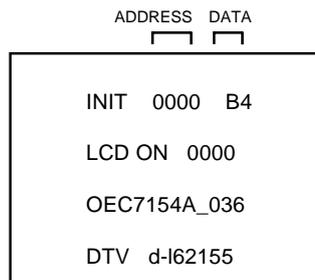


FIG. 2

4. ADDRESS is now selected and should "blink". Using the UP/DOWN button 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



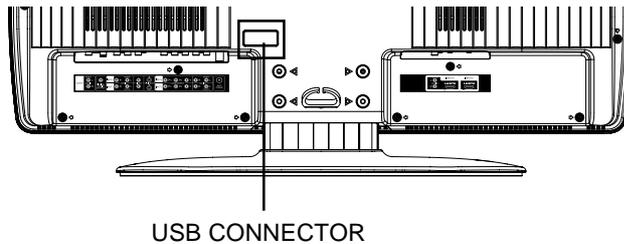
Ref. No.	Part No.	Parts Name	Remarks
JG176	APJG176095	USA HD DTV ROM DISC	Up-Date of the Firmware

**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)



# 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**.

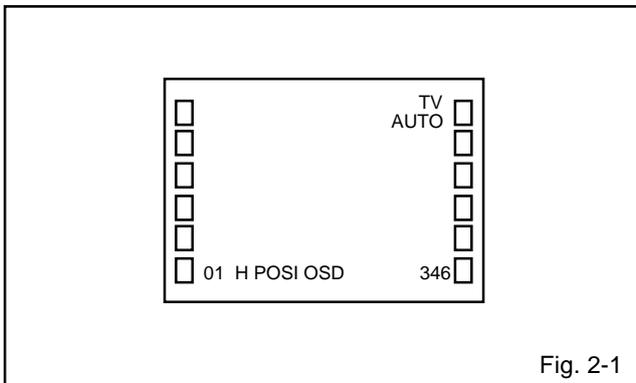


Fig. 2-1

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

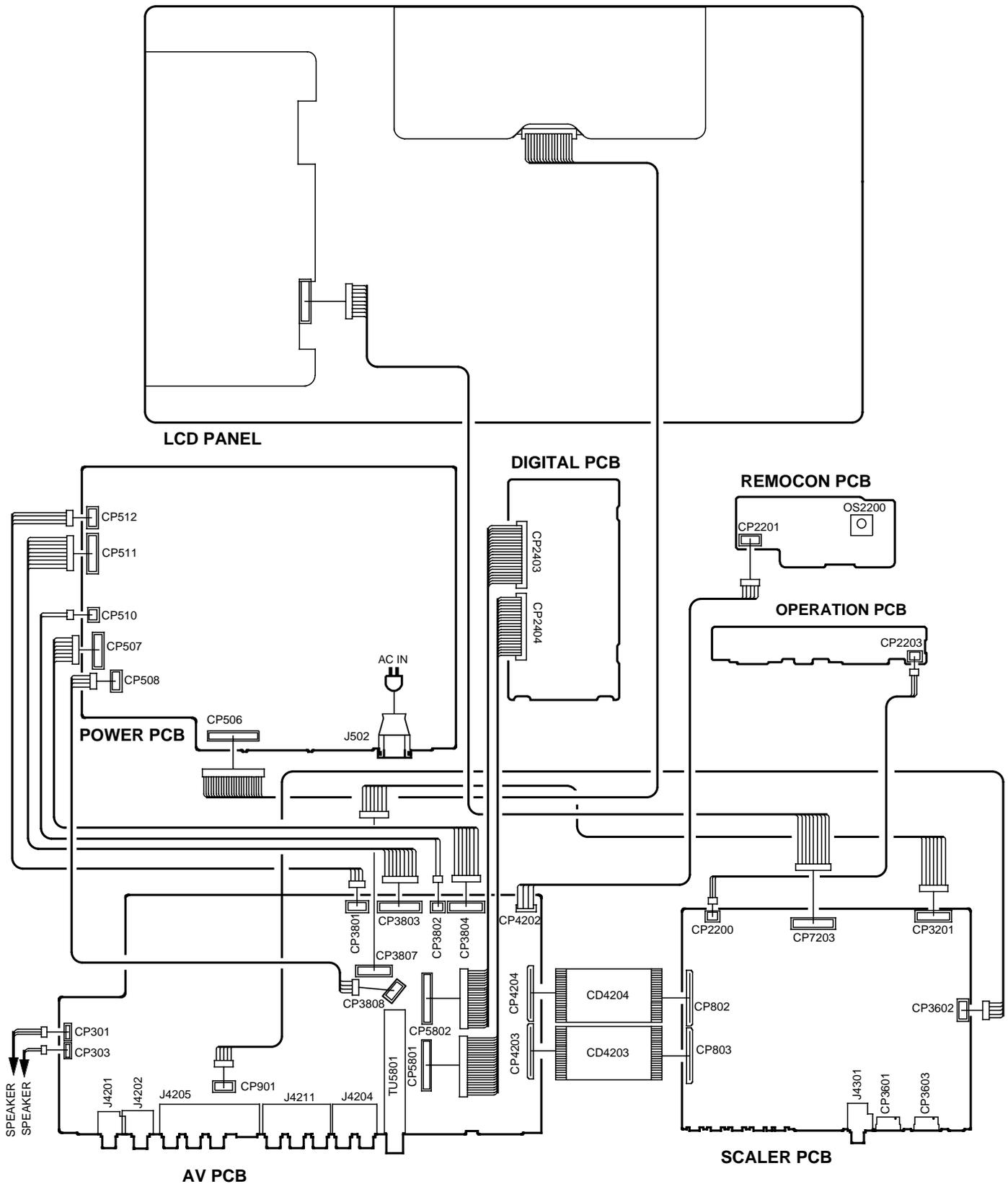
### 2-2: Confirmation of Fixed Value (Step No.)

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

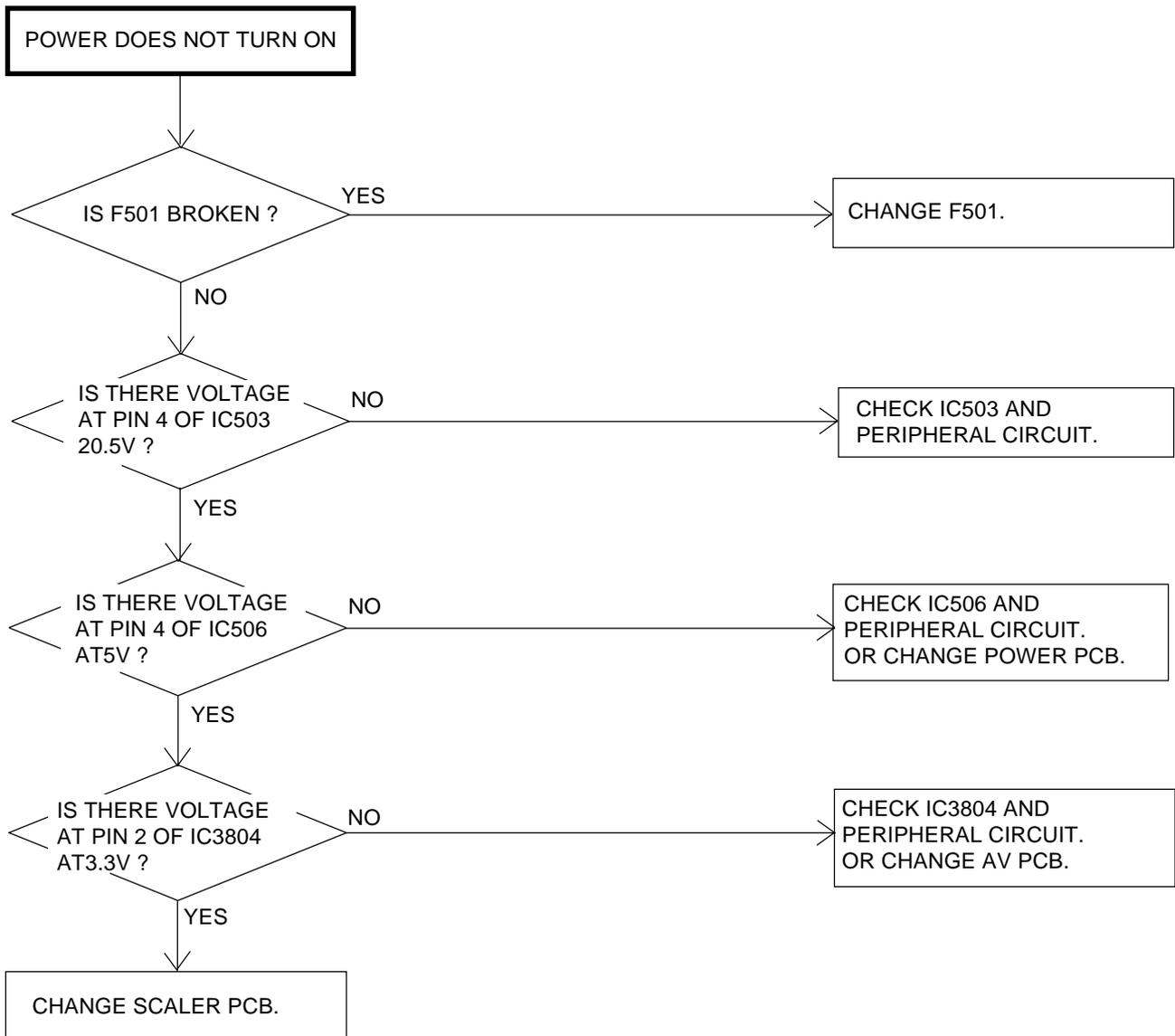
NO.	FUNCTION	TV	TV 720p	AV	AV (S)	CS				HD-MI				
		Step No.	Step No.	Step No.	Step No.	480i	480p	720p	1080i	480i	480p	720p	1080i	VGA
		Step No.												
1	H POSI OSD	346	346	346	346	346	346	346	346	346	346	346	346	346
2	V POSI OSD	85	85	85	85	85	85	85	85	85	85	85	85	85
5	G DRIVE (N)	128	128	128	128	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
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
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
22	H POSI 60Hz	284	326	284	284	284	138	328	132	272	138	290	238	158
24	V POSI 60Hz	34	59	34	34	34	34	56	42	36	35	62	42	35
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	128	128	114	120	128	128	128	128	132	132	132	132	132
35	CONTRAST CENTER	---	---	---	---	---	---	---	---	119	119	119	116	119
36	CONTRAST MAX	---	---	---	---	---	---	---	---	164	164	164	164	164
37	CONTRAST MIN	---	---	---	---	---	---	---	---	50	50	50	50	50
38	COLOR CENT	70	110	88	80	83	104	440	440	73	73	73	73	73
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	---	---	---	---	---	---	---	---	156	156	156	156	156
64	BRIGHT (3F54)	121	128	123	122	122	128	128	128	118	117	118	118	113
65	CONTRAST (3F54)	---	---	---	---	---	170	170	170	113	113	113	113	118
66	SRC TOP	21	21	21	21	21	21	21	21	21	21	21	21	21
67	SRC TOP	21	28	21	21	21	45	29	27	21	44	28	28	43

# ELECTRICAL ADJUSTMENTS

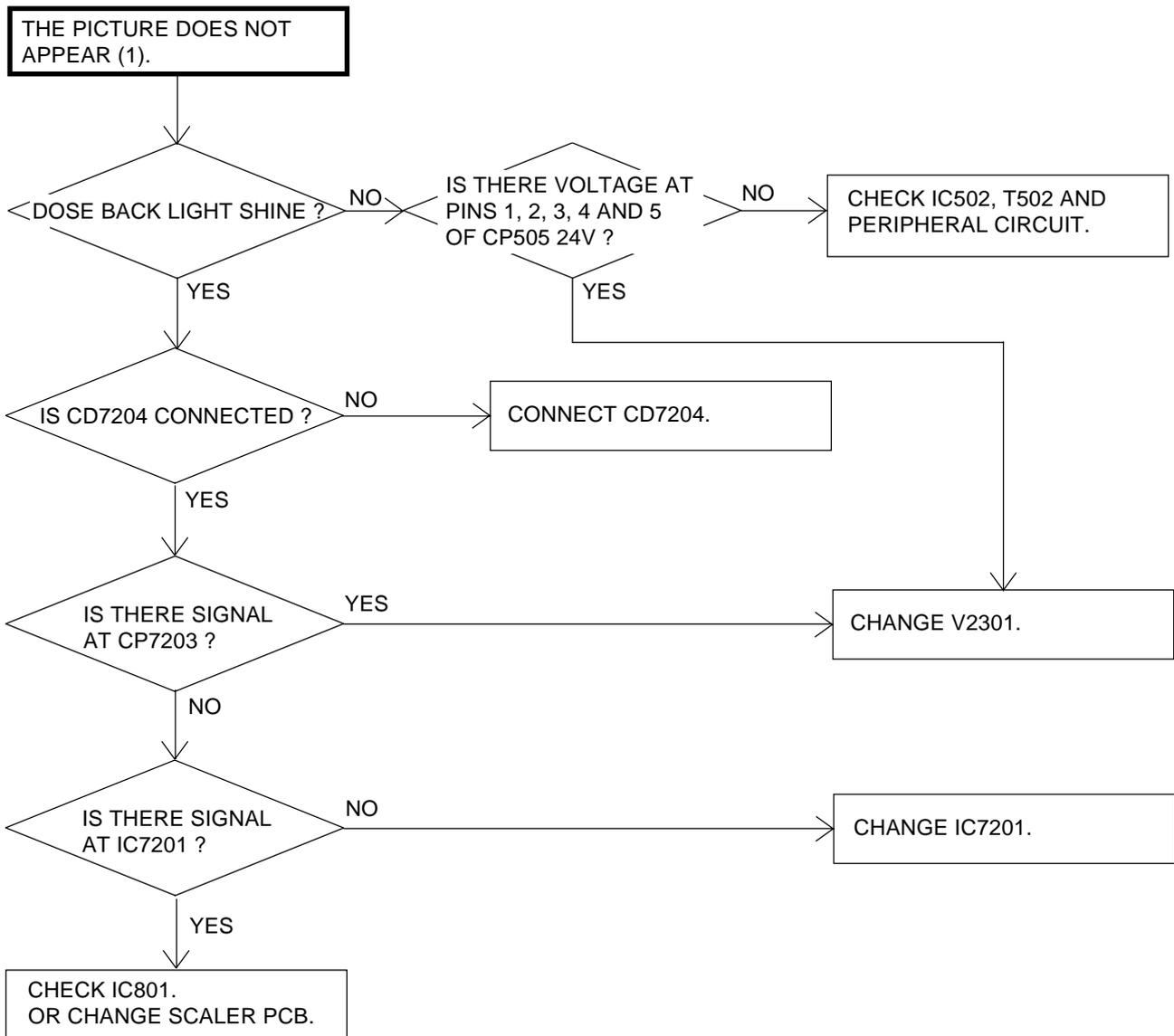
## 3. ELECTRICAL ADJUSTMENT PARTS LOCATION GUIDE (WIRING CONNECTION)



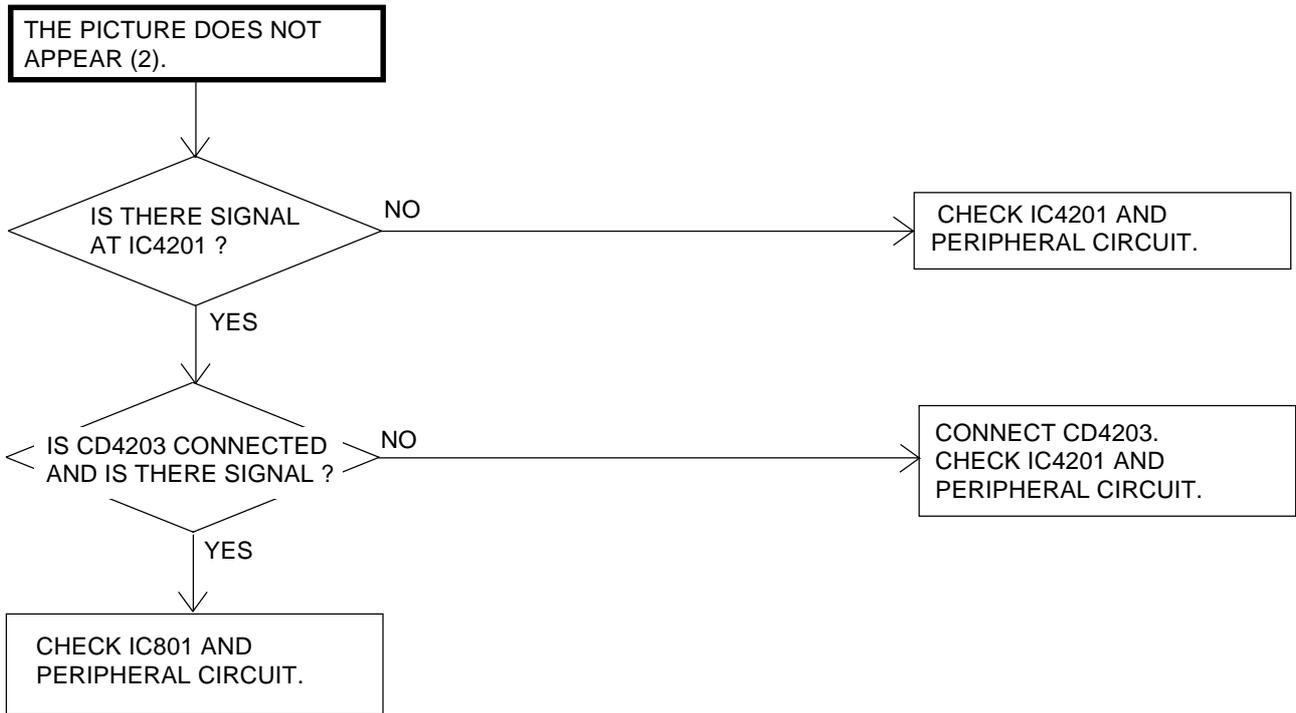
# TROUBLESHOOTING GUIDE



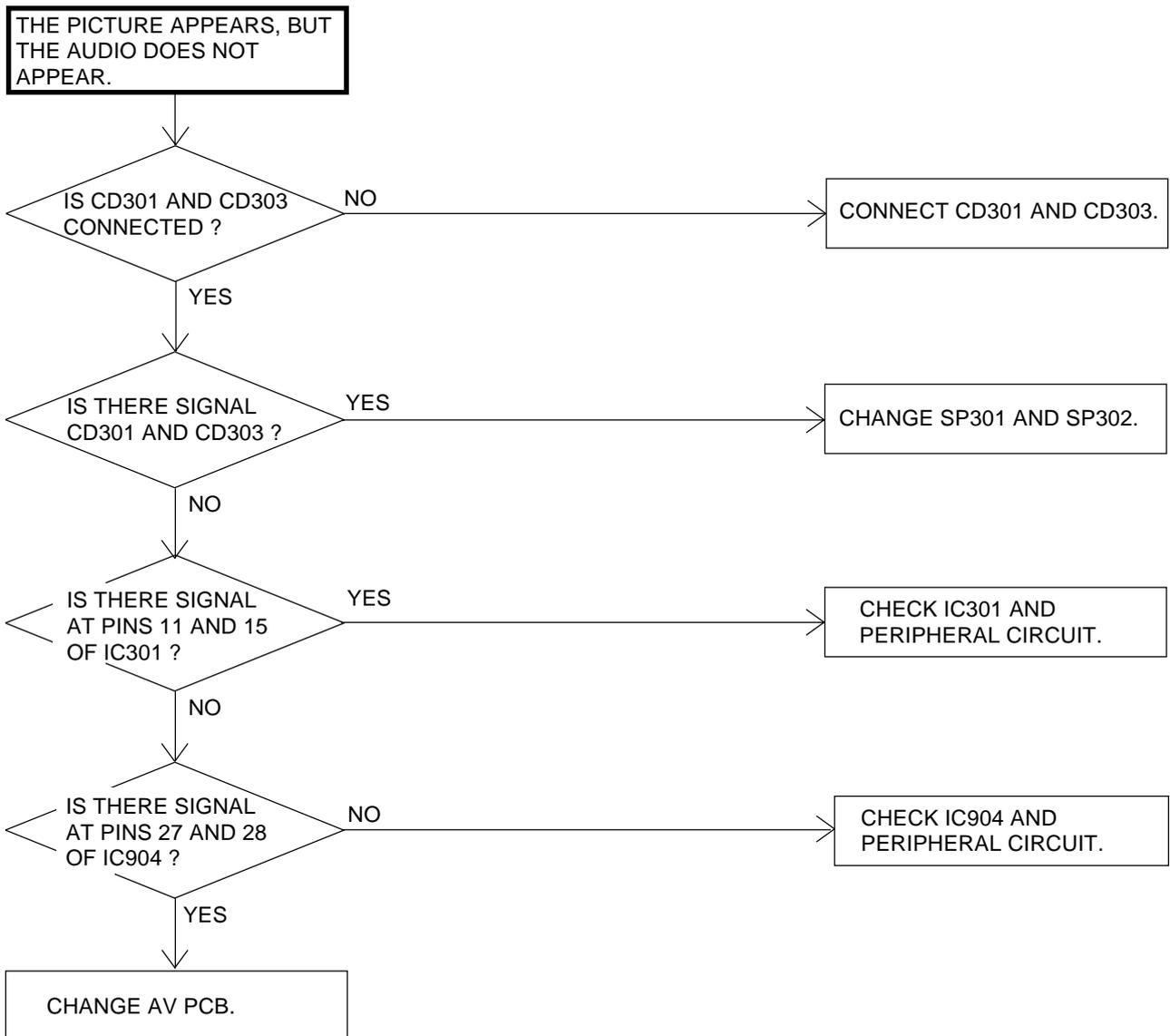
# TROUBLESHOOTING GUIDE



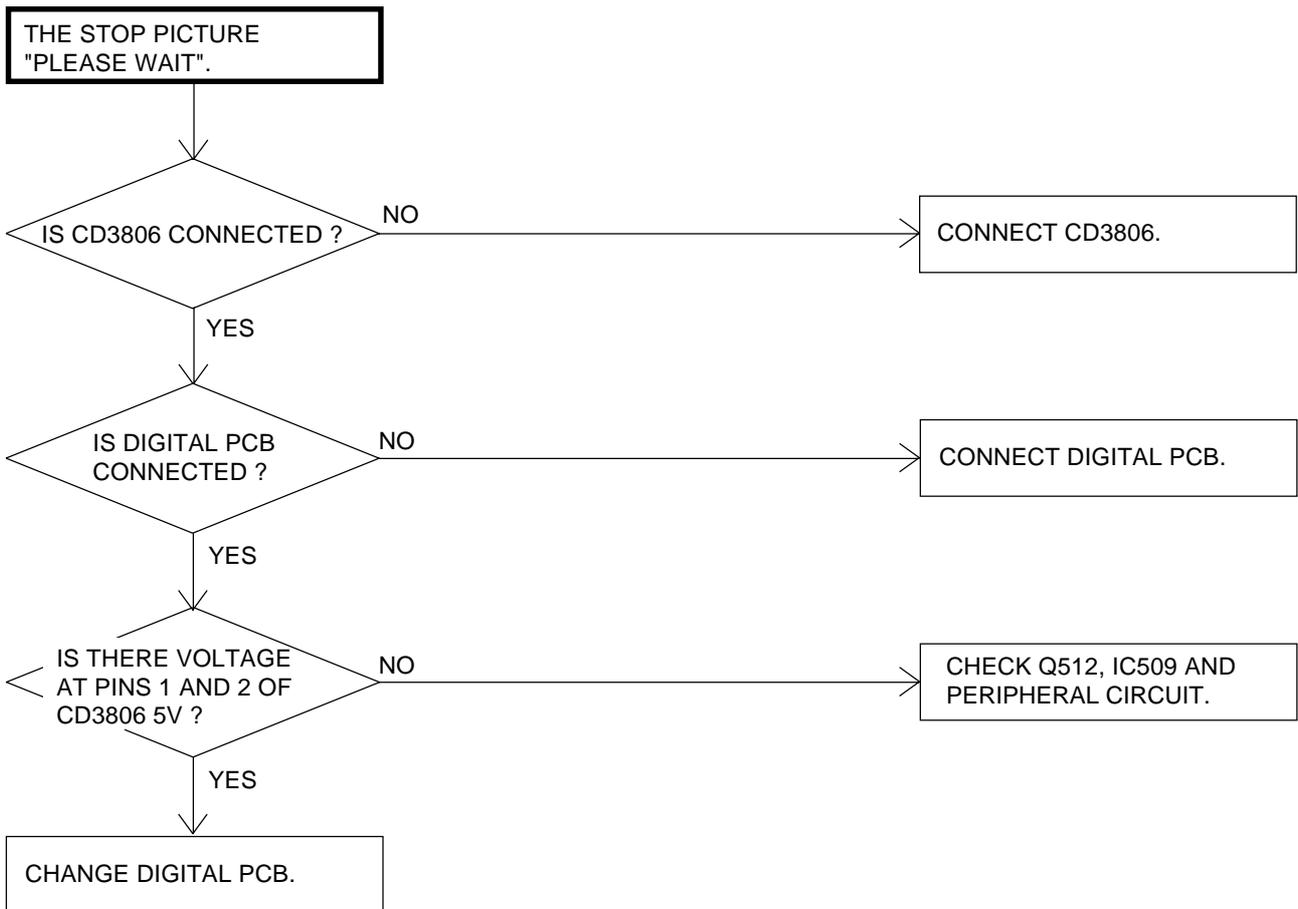
# TROUBLESHOOTING GUIDE



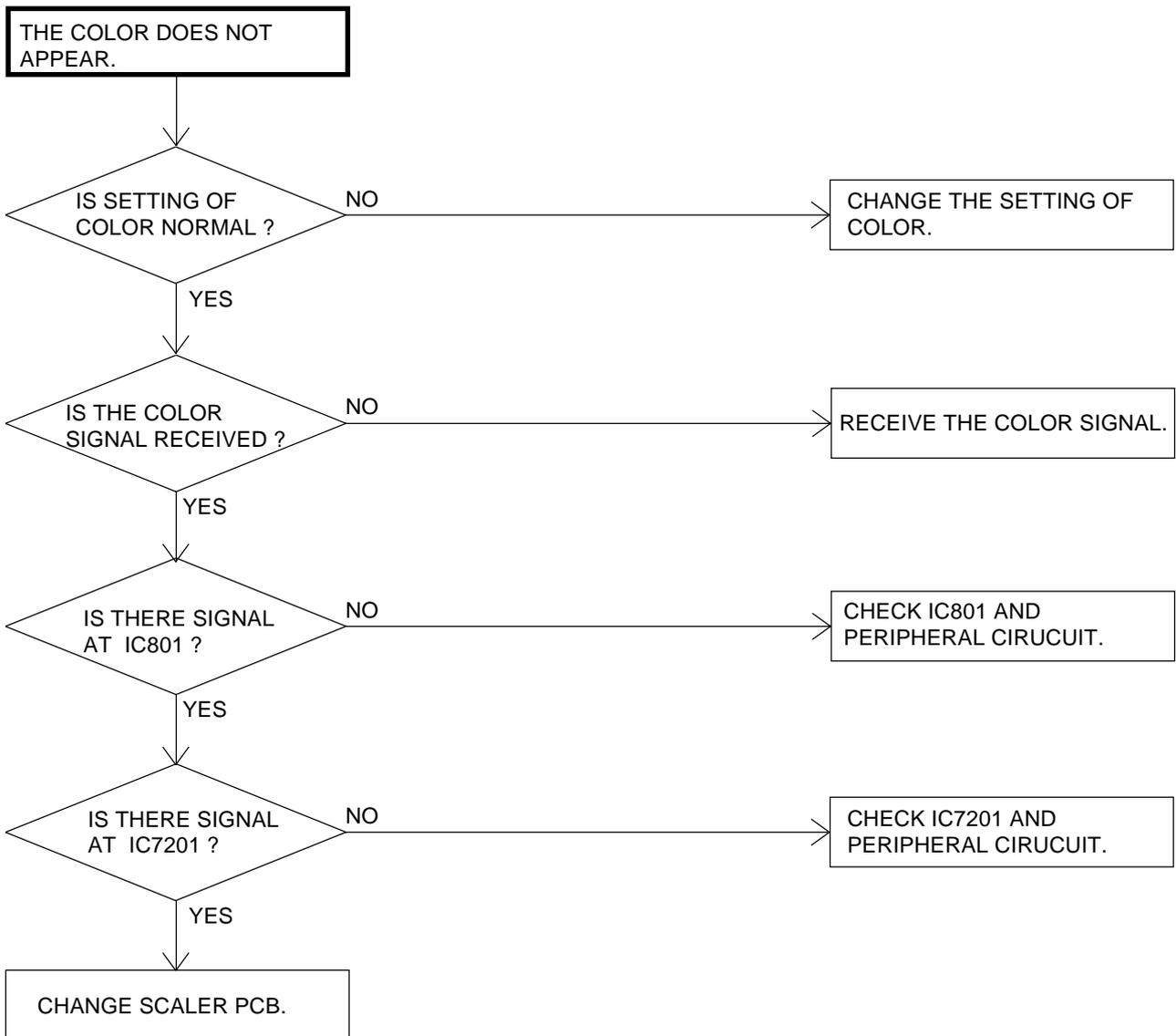
## TROUBLESHOOTING GUIDE



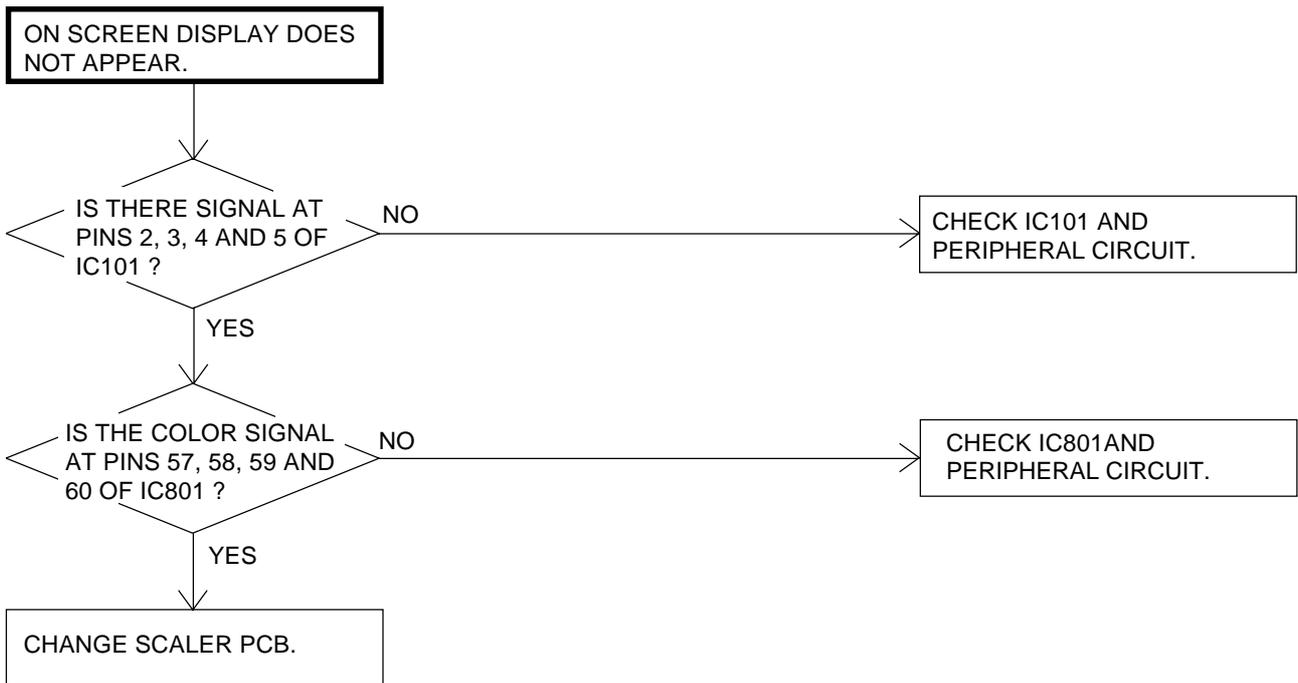
## TROUBLESHOOTING GUIDE



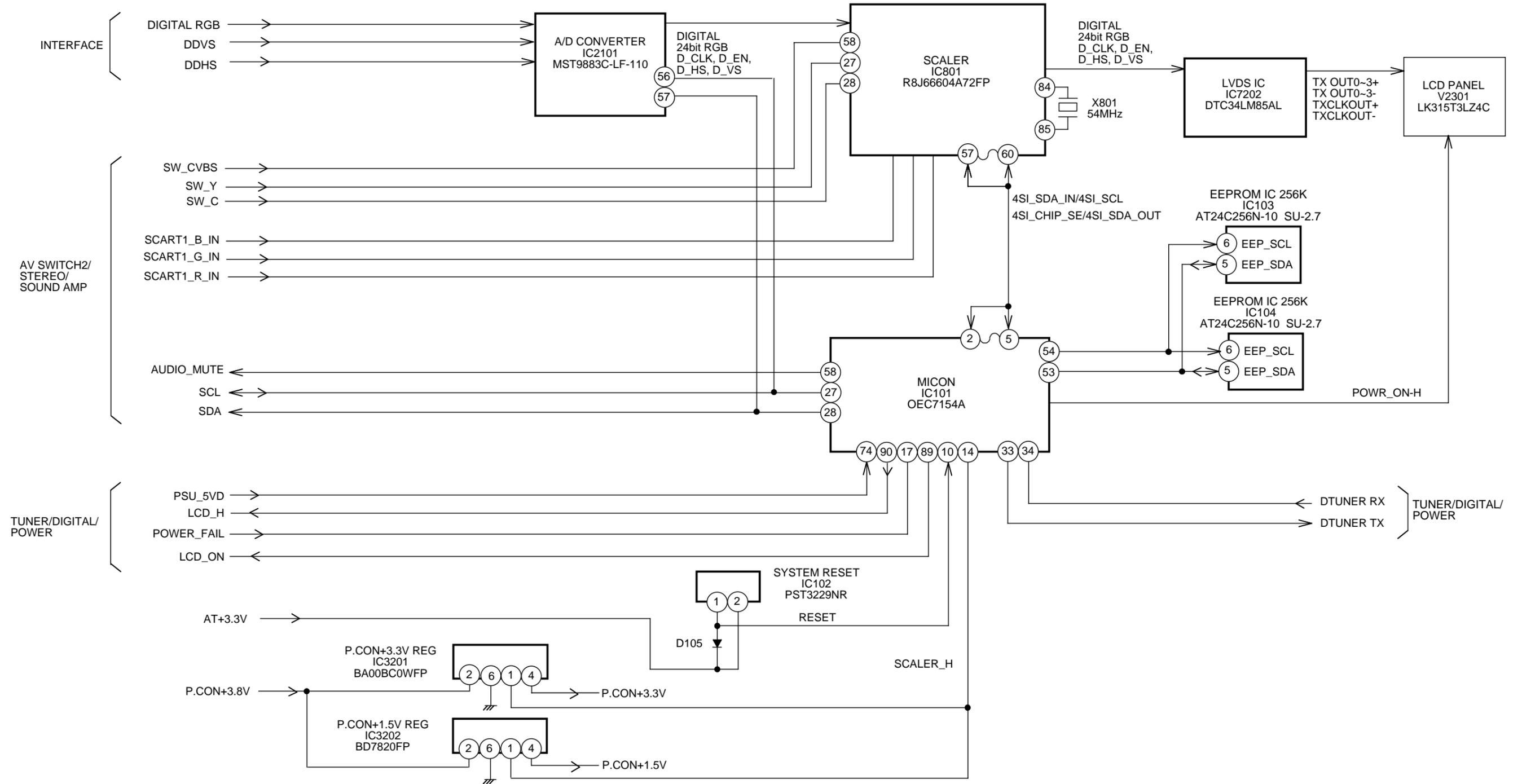
# TROUBLESHOOTING GUIDE



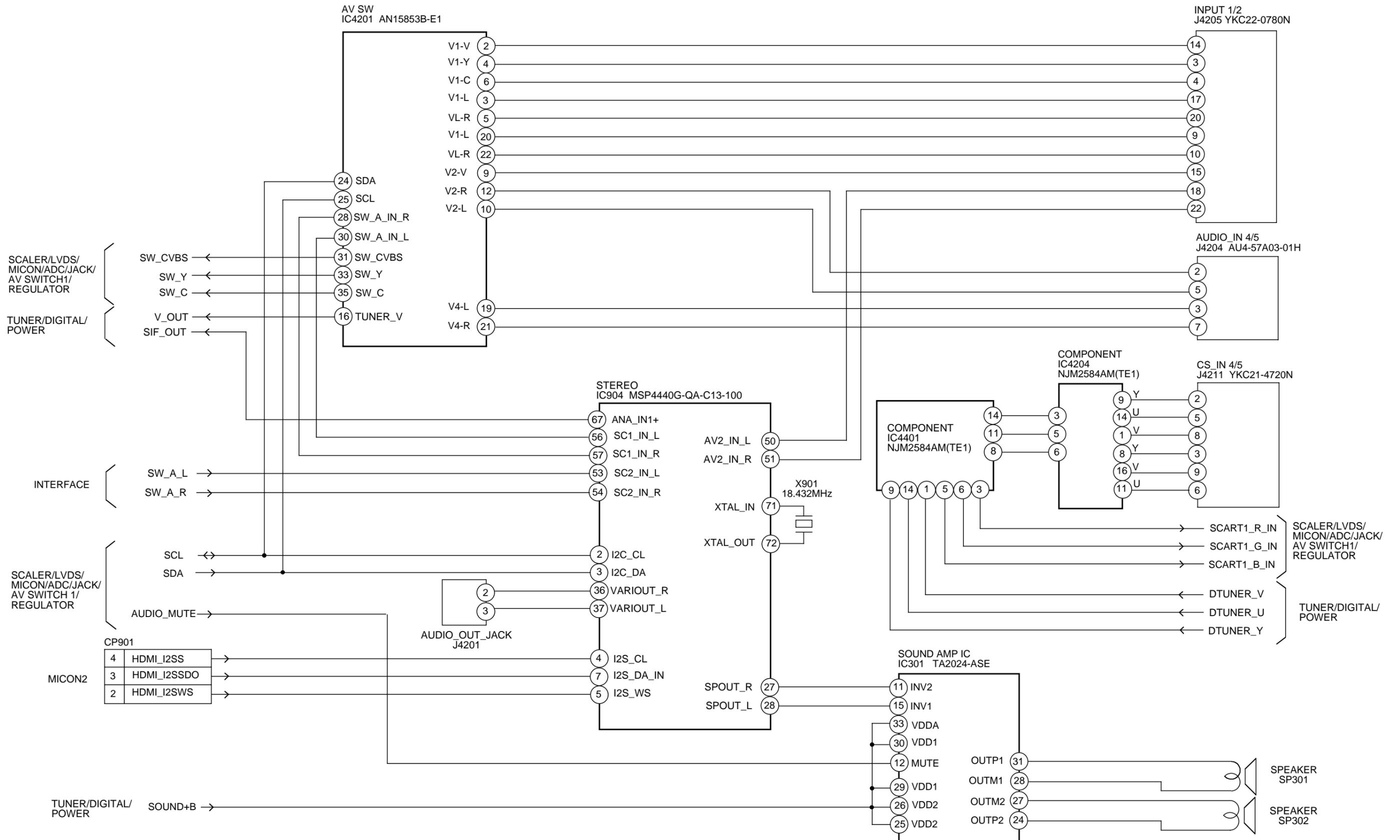
## TROUBLESHOOTING GUIDE



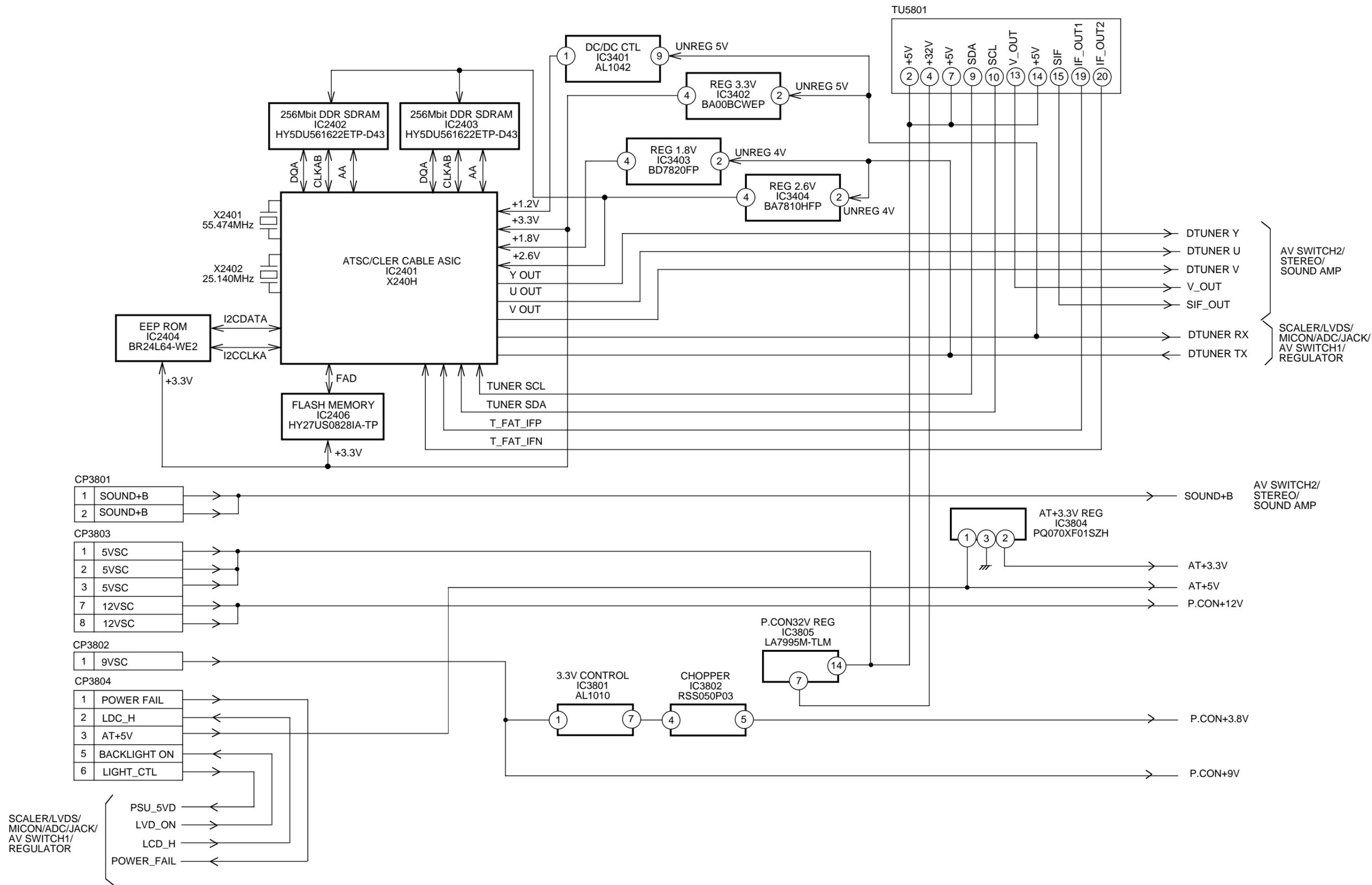
# SCALER/LVDS/MICON/ADC/JACK/AV SWITCH1/REGULATOR BLOCK DIAGRAM



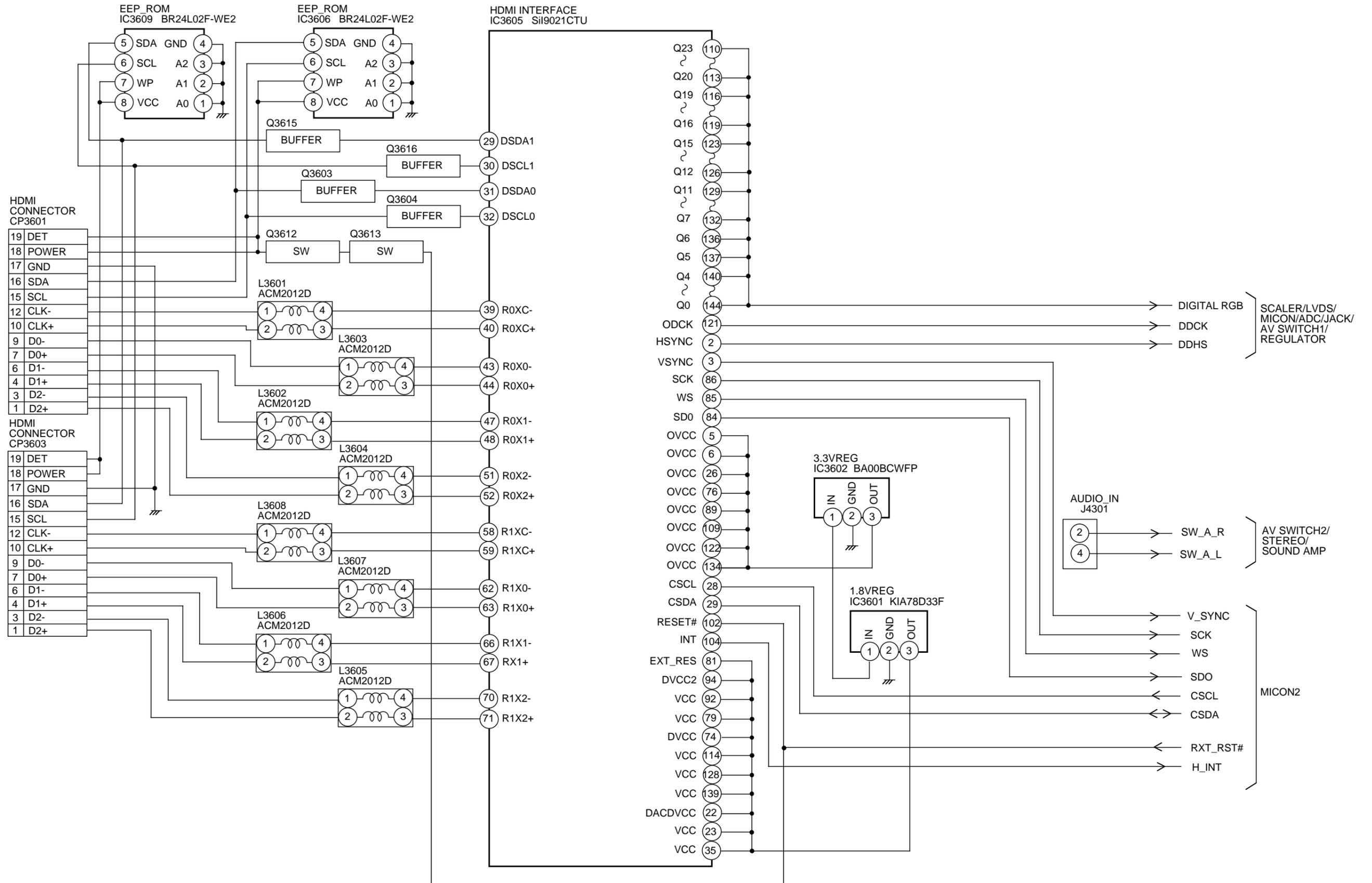
# AV SWITCH2/STEREO/SOUND AMP BLOCK DIAGRAM



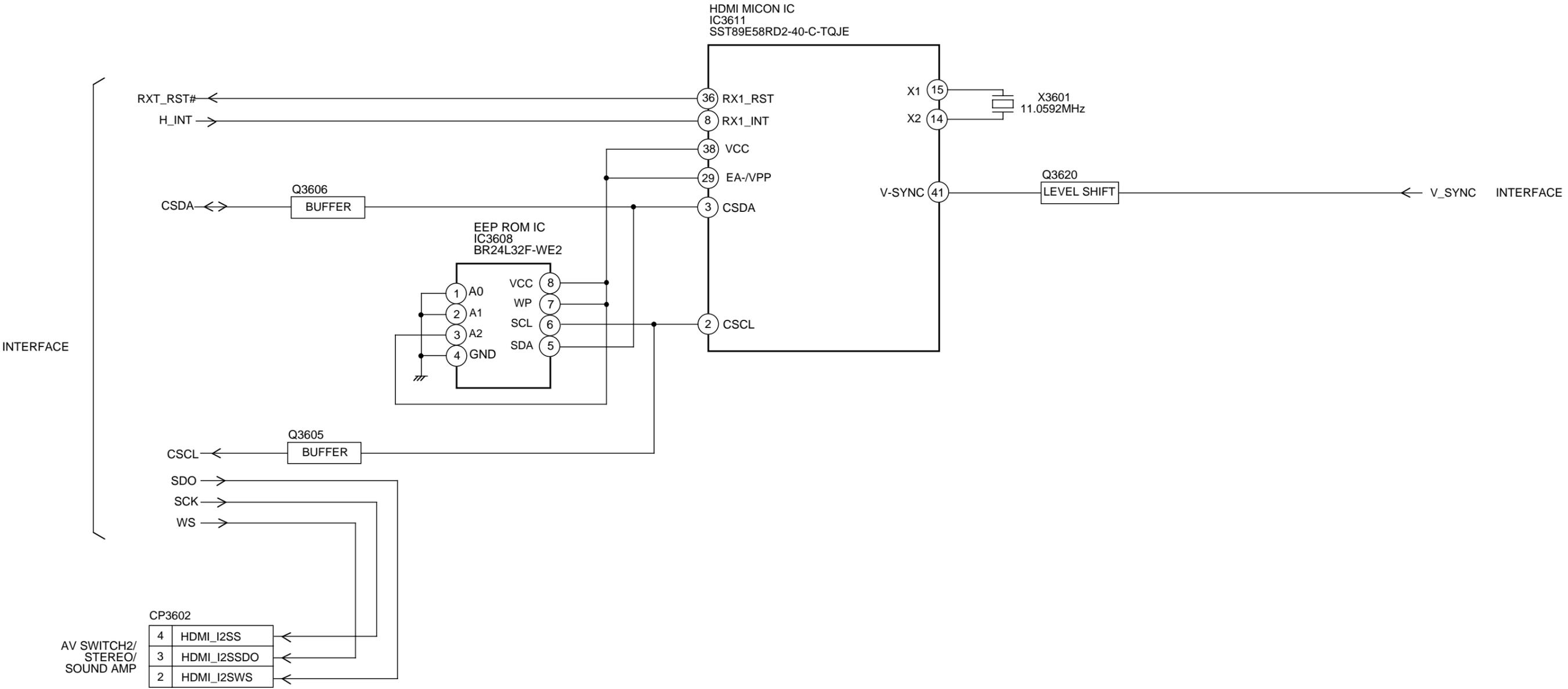
# TUNER/DIGITAL/POWER BLOCK DIAGRAM



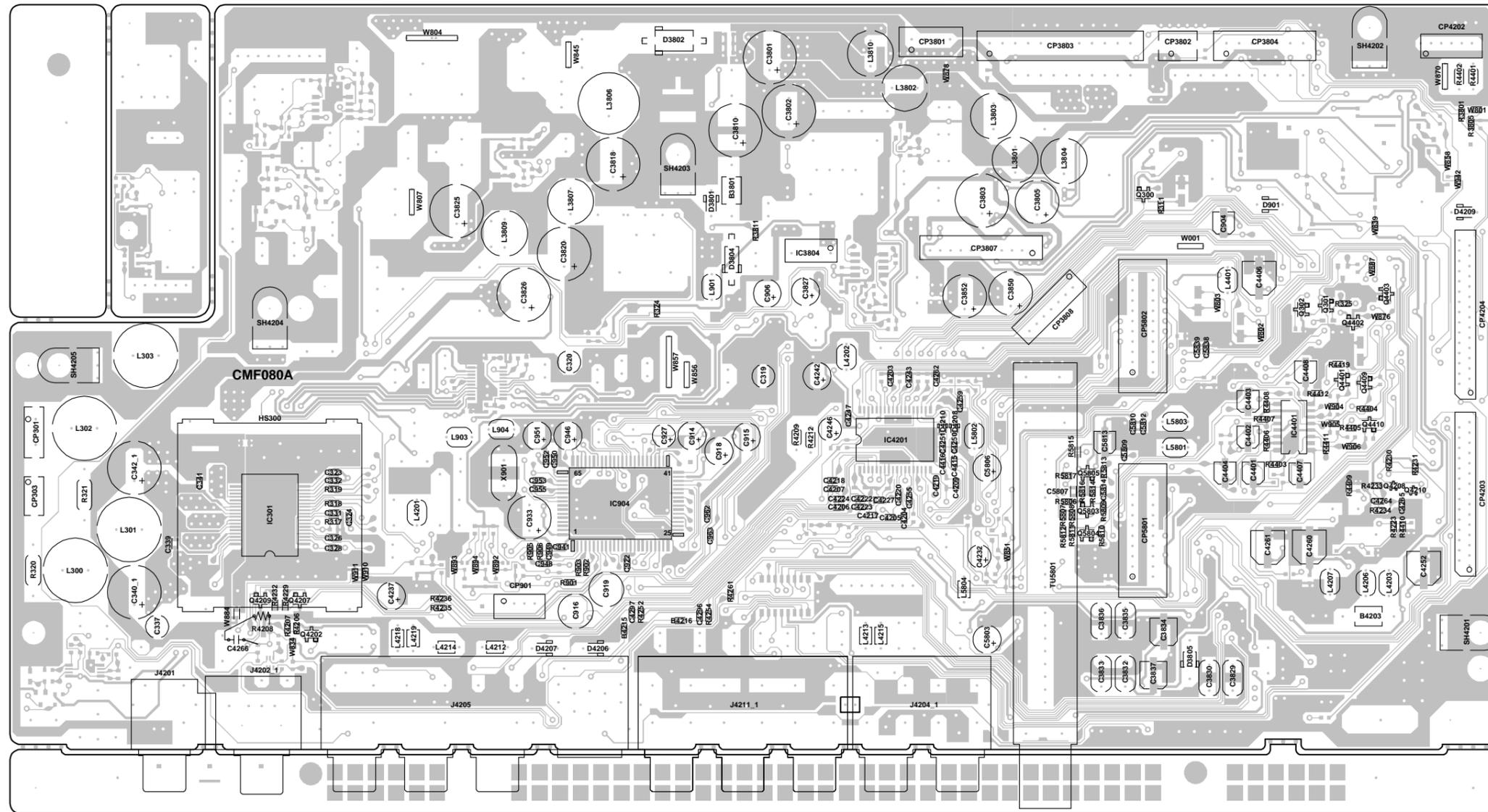
# INTERFACE BLOCK DIAGRAM



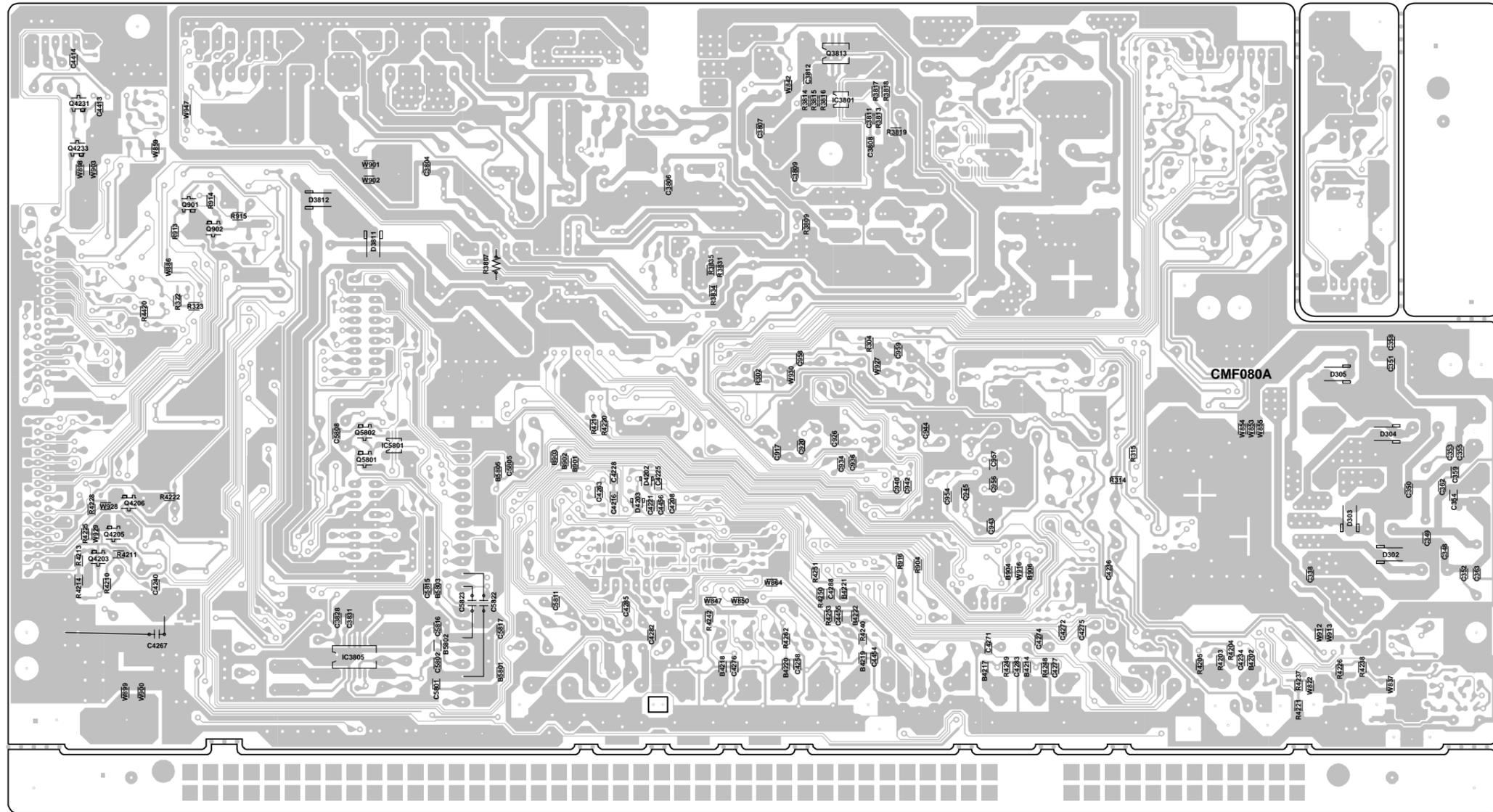
# MICON2 BLOCK DIAGRAM



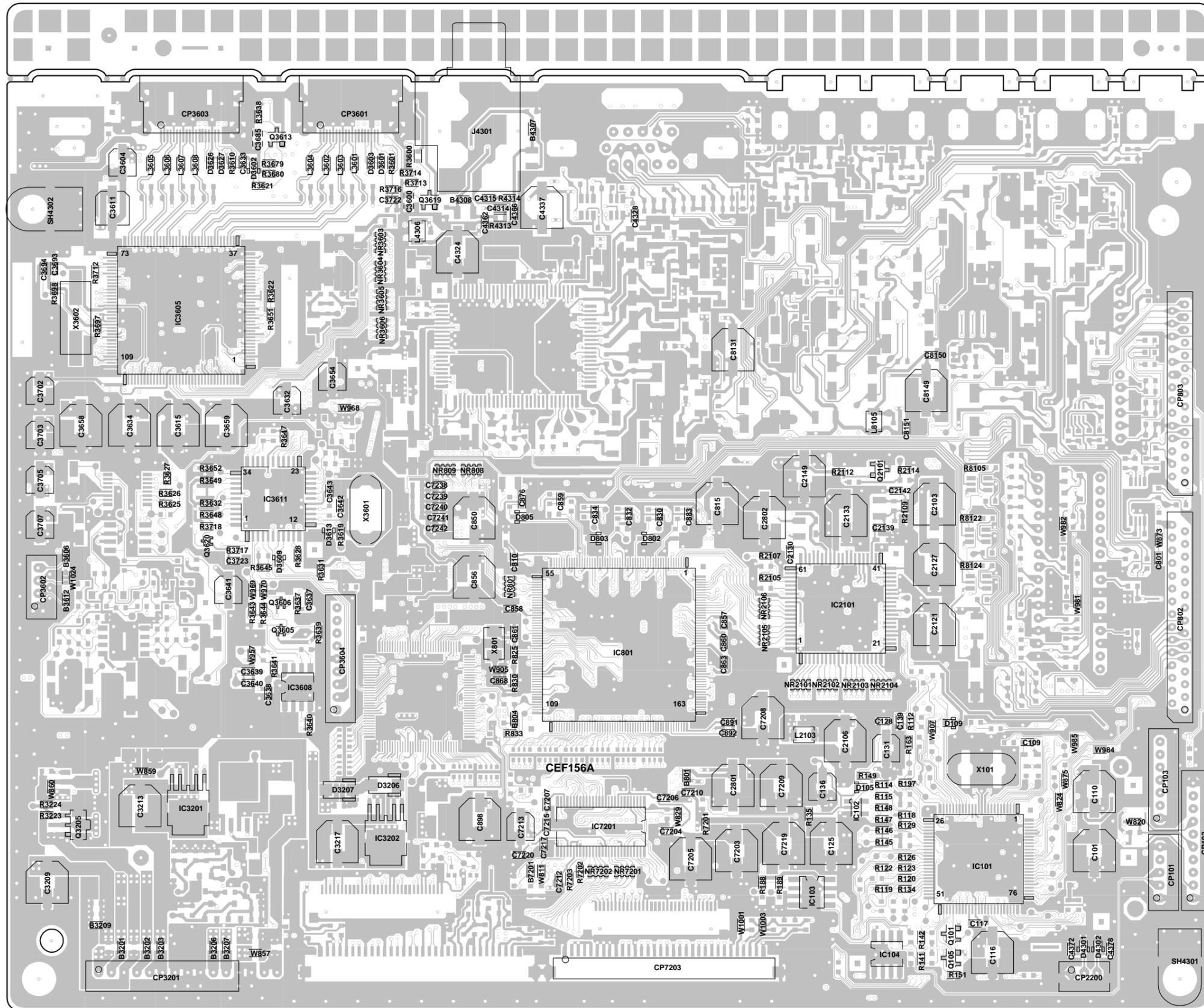
# PRINTED CIRCUIT BOARDS AV (TOP SIDE)



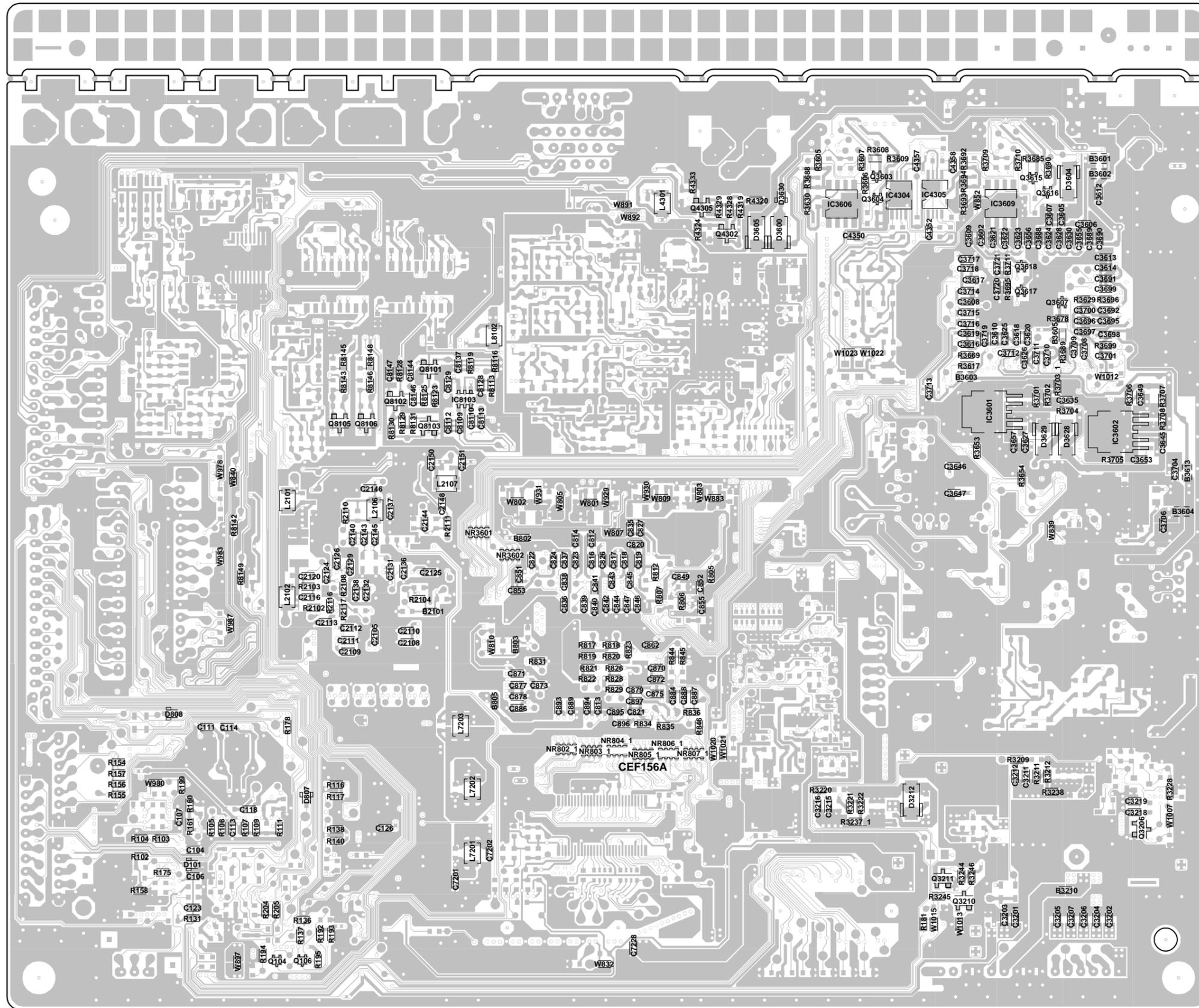
# PRINTED CIRCUIT BOARDS AV (BOTTOM SIDE)



# PRINTED CIRCUIT BOARDS SCALER (TOP SIDE)

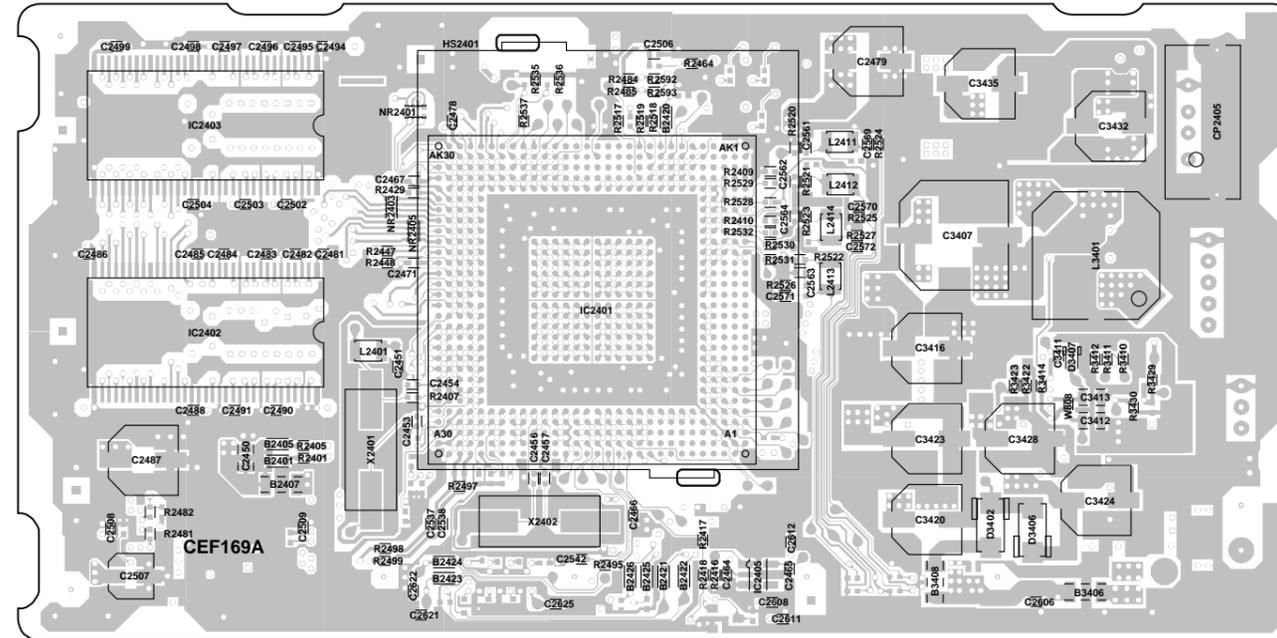


PRINTED CIRCUIT BOARDS  
SCALER (BOTTOM SIDE)

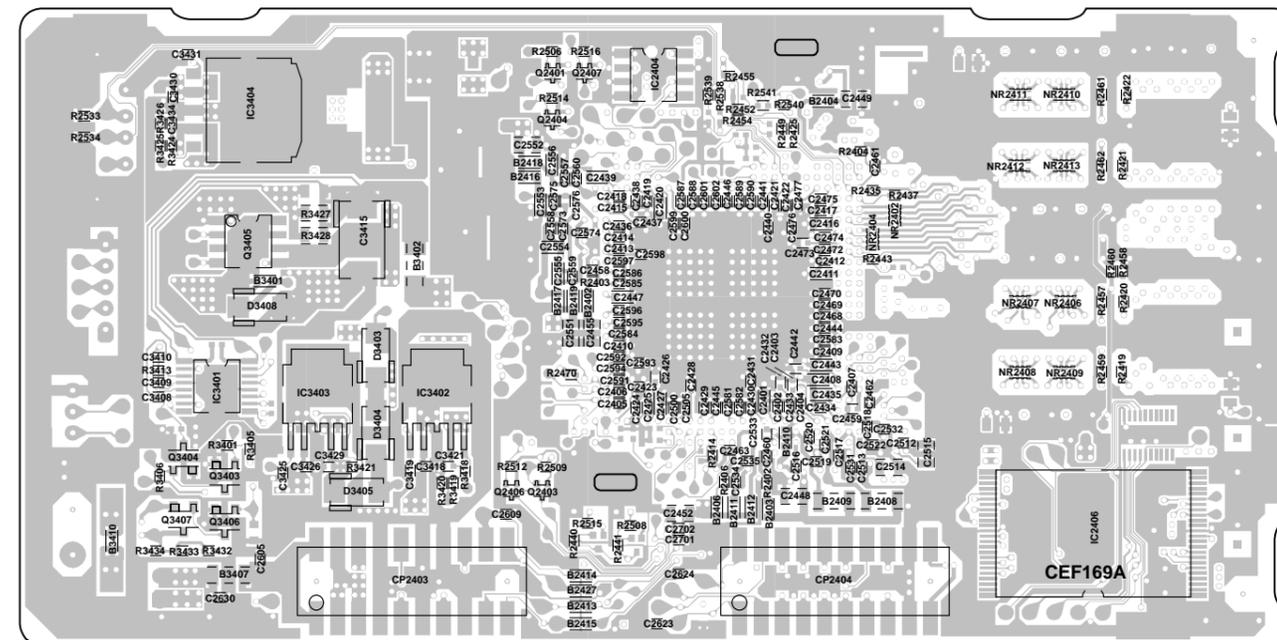


# PRINTED CIRCUIT BOARDS

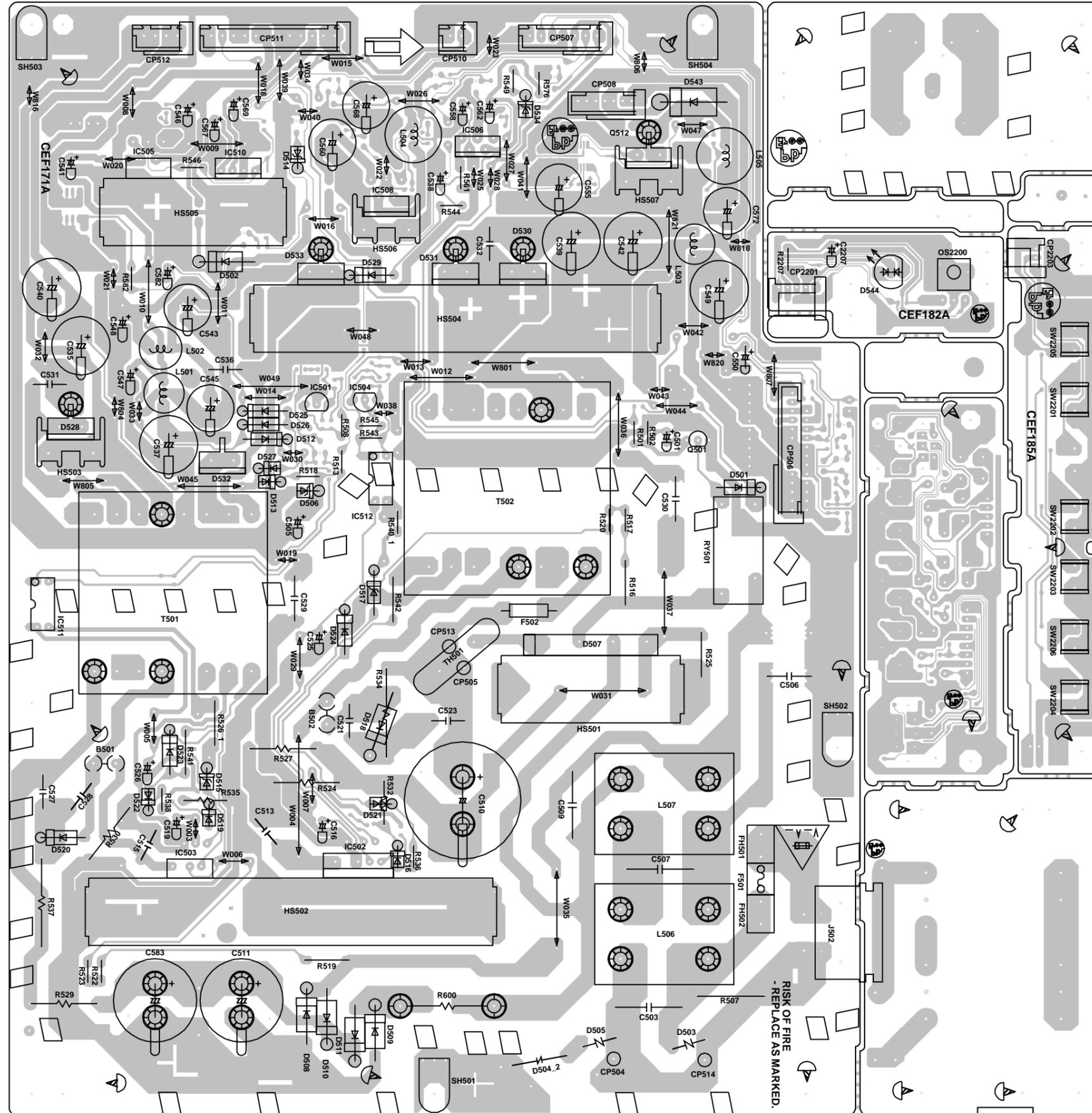
## DIGITAL (TOP SIDE)



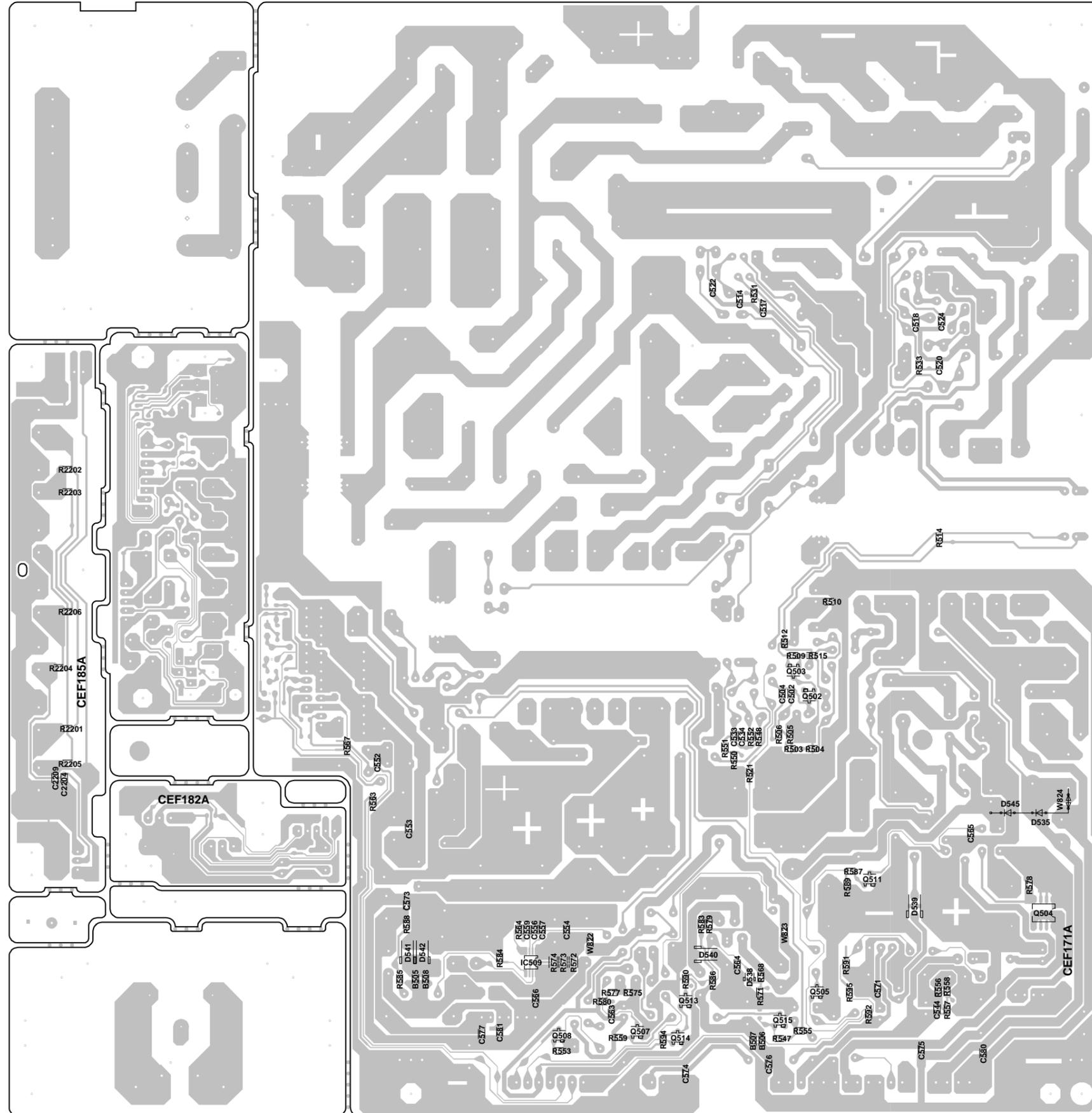
## DIGITAL (BOTTOM SIDE)



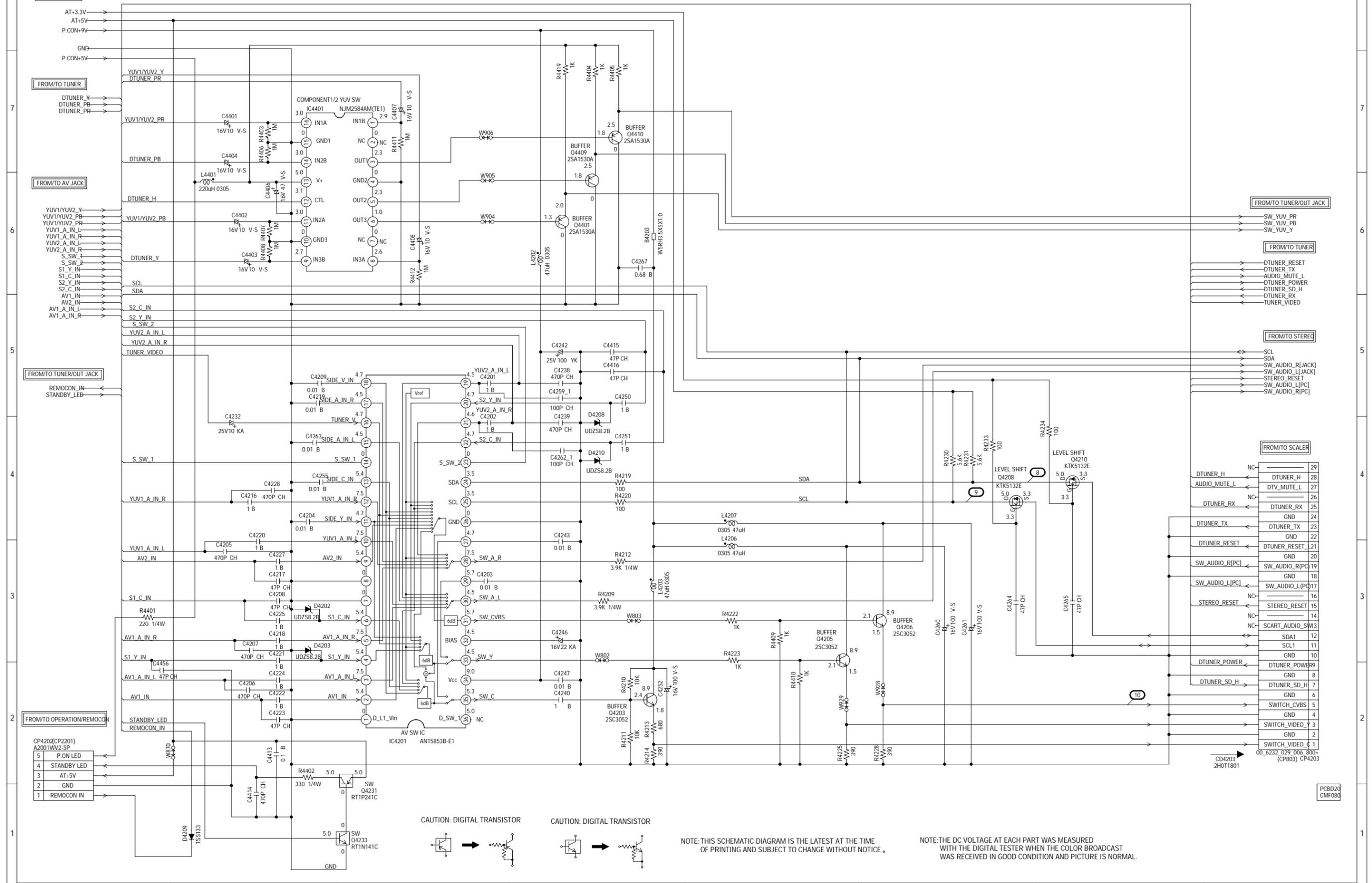
**PRINTED CIRCUIT BOARDS  
POWER/REMOCON/OPERATION (INSERTED PARTS)  
SOLDER SIDE**



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



# AV SWITCH2 SCHEMATIC DIAGRAM (AV PCB)



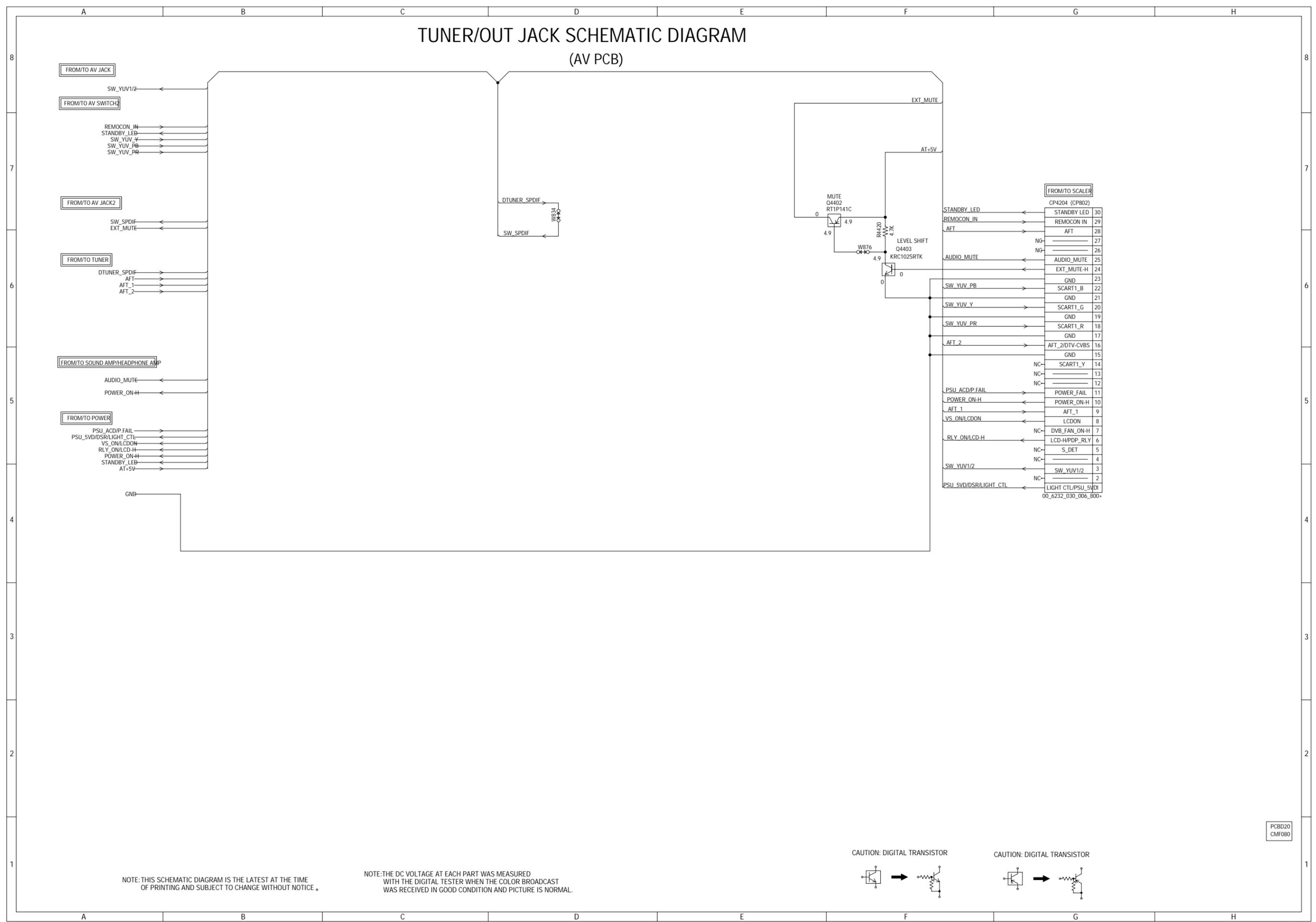
CAUTION: DIGITAL TRANSISTOR

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

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

PCB0201  
CMF083

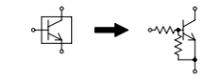
# TUNER/OUT JACK SCHEMATIC DIAGRAM (AV PCB)



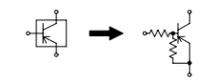
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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

CAUTION: DIGITAL TRANSISTOR

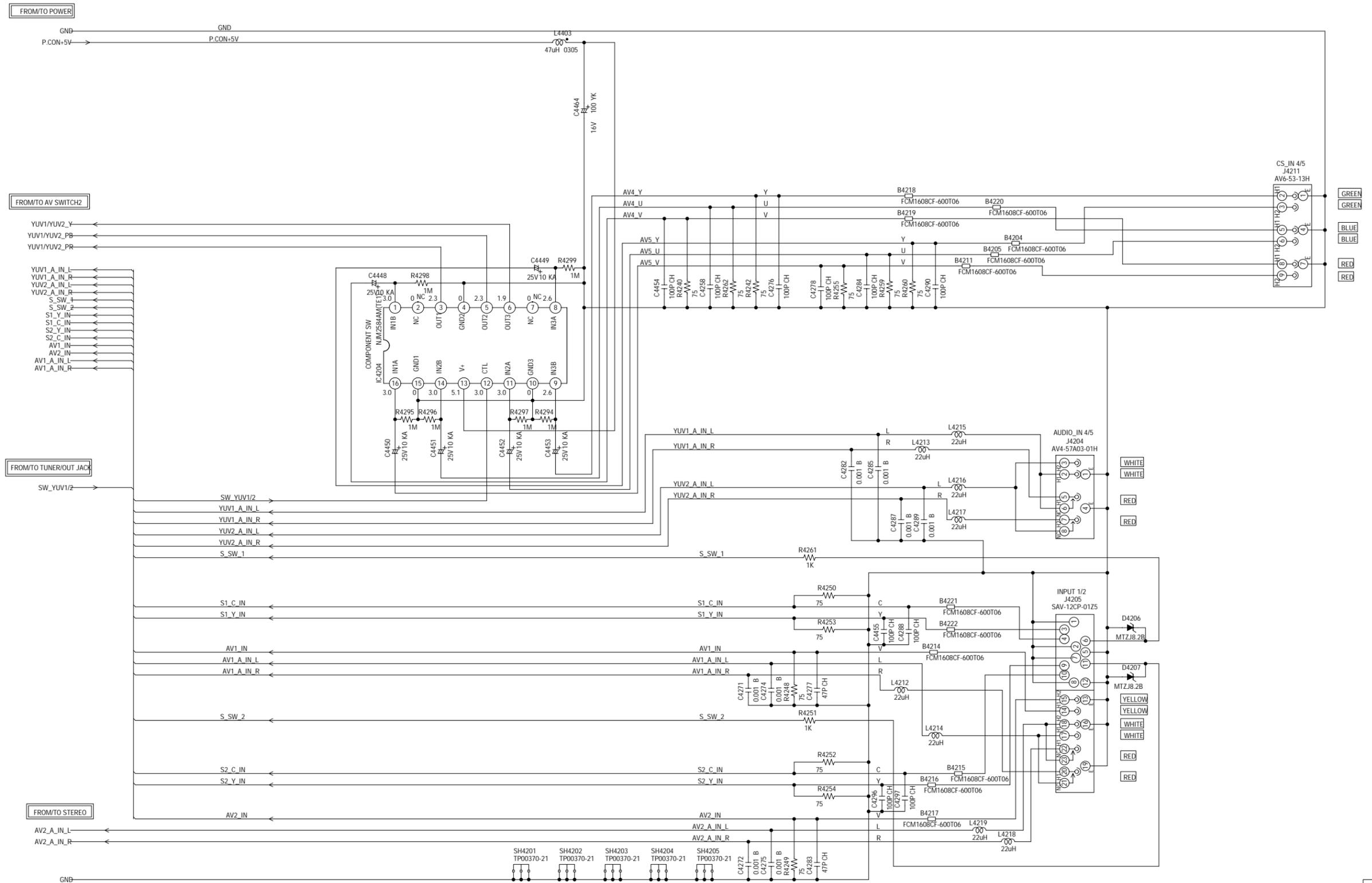


CAUTION: DIGITAL TRANSISTOR



PCBD20  
CMF080

# AV JACK SCHEMATIC DIAGRAM (AV PCB)



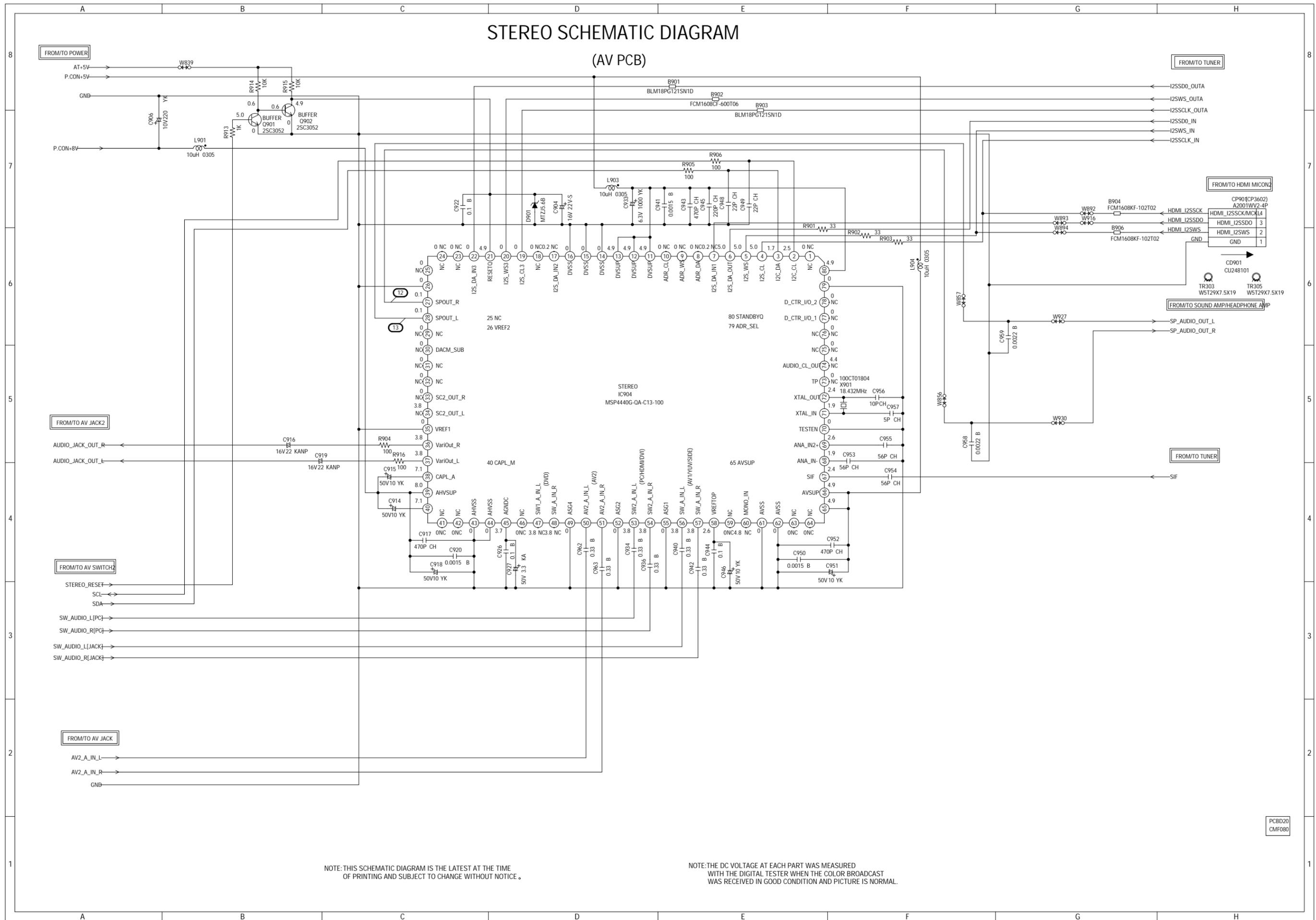
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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

PCBD20  
CMF080

# STEREO SCHEMATIC DIAGRAM

(AV PCB)



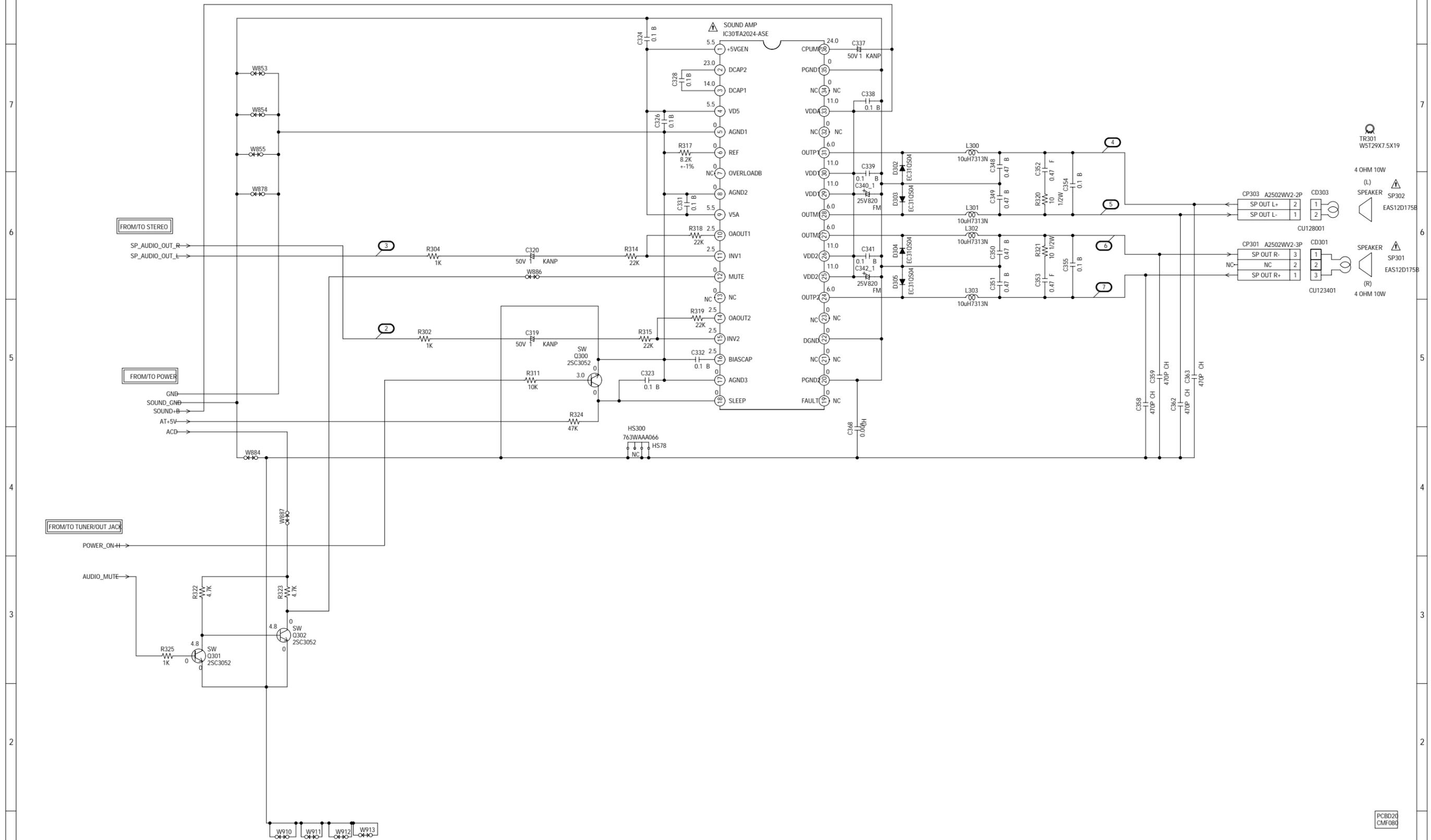
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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

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.

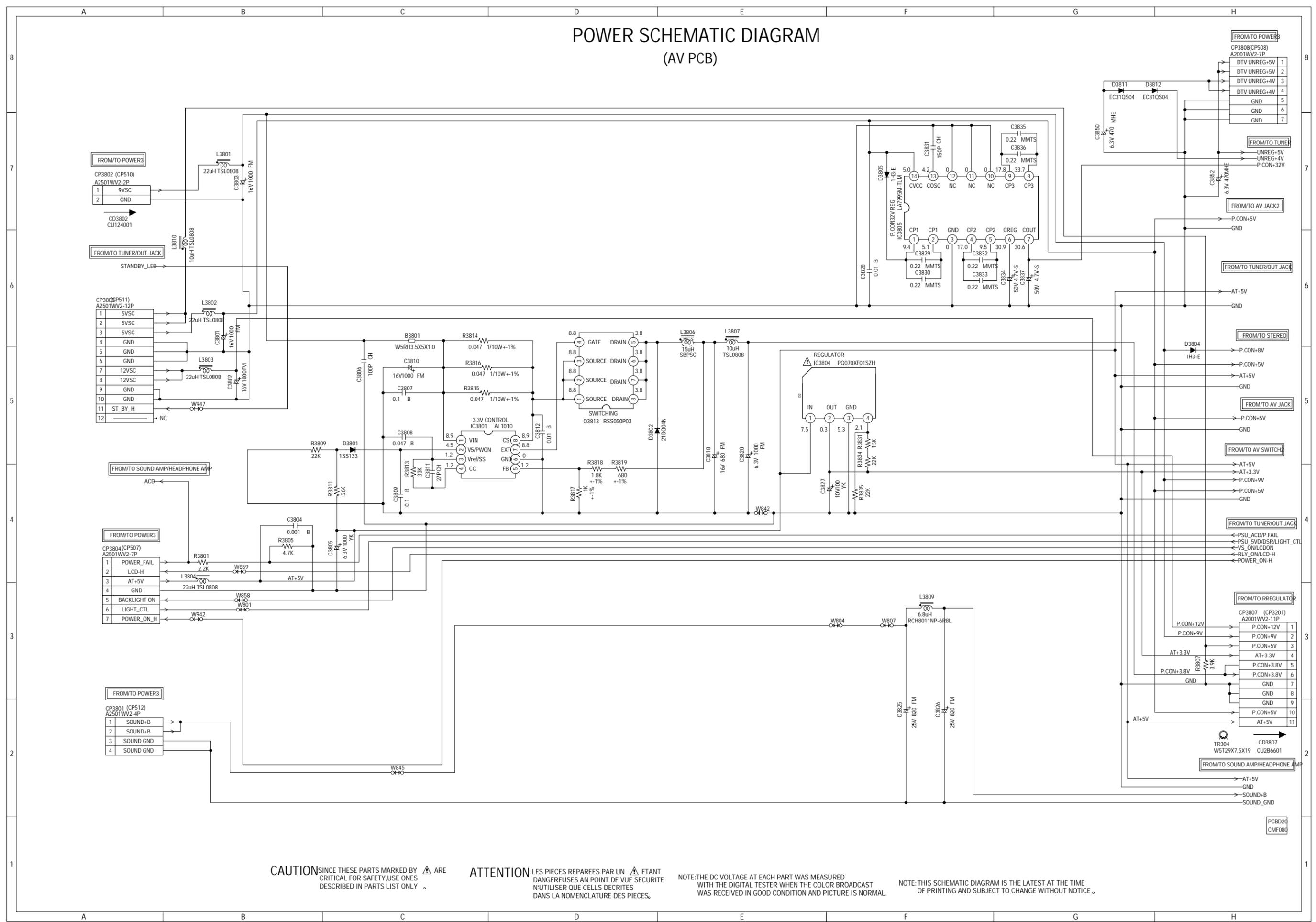
**ATTENTION** - LES PIÈCES REPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLES DECRITES DANS LA NOMENCLATURE DES PIÈCES.

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

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

PCBD20  
CMF083

# POWER SCHEMATIC DIAGRAM (AV PCB)



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

**ATTENTION** LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

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.

# AV JACK2 SCHEMATIC DIAGRAM (AV PCB)

FROM/TO STEREO

AUDIO JACK OUT L  
AUDIO JACK OUT R

FROM/TO TUNER/OUT JACK

EXT\_MUTE  
SW\_SPDIF

FROM/TO POWER

P.CON+5V  
GND

AUDIO OUT  
J4201  
AV2-13P2-07H

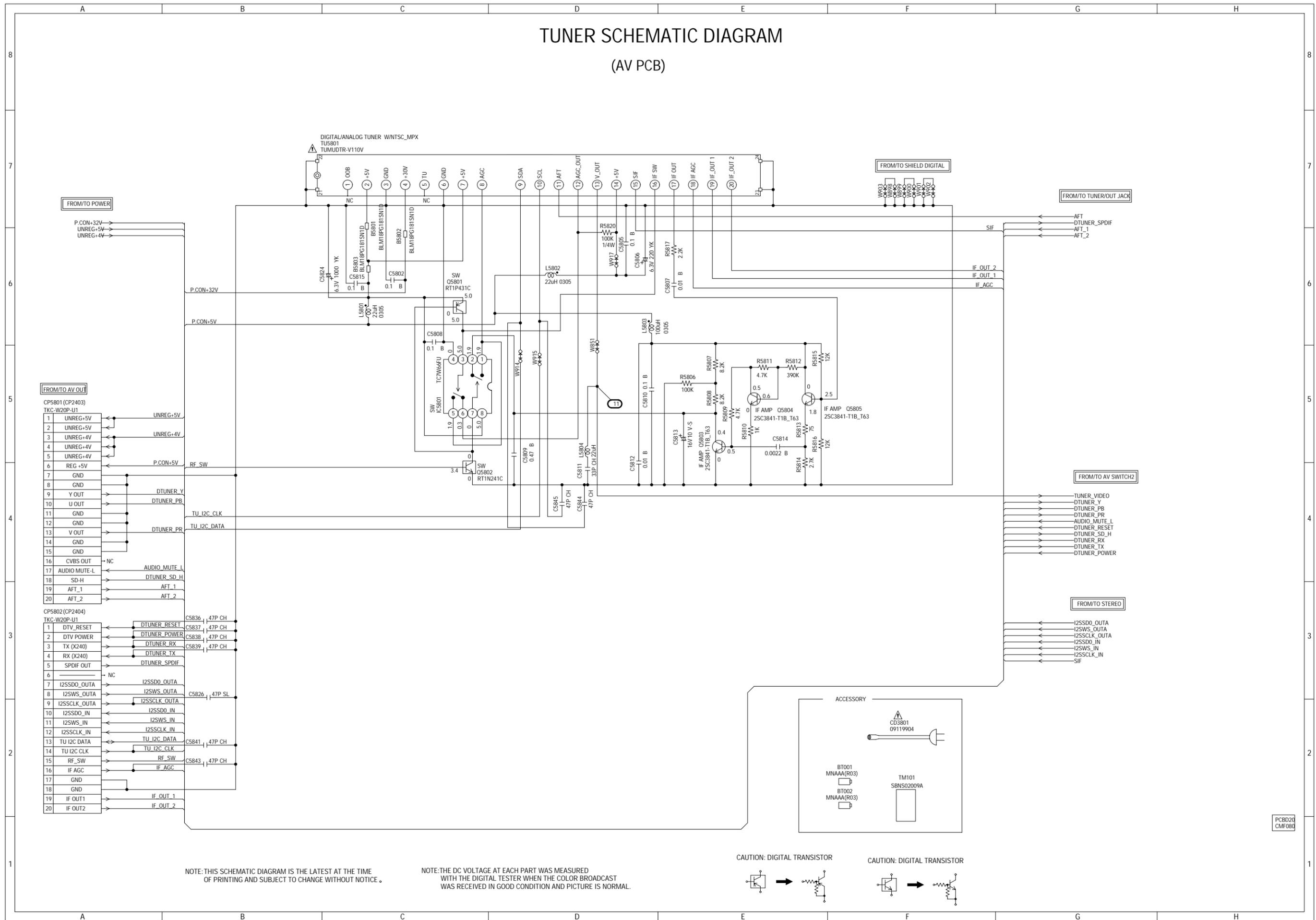
COAXIAL JACK  
J4202  
AVG-2-13

PCBD20  
CMF083

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

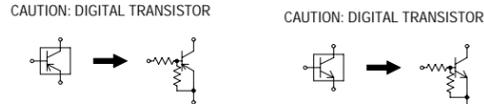
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

# TUNER SCHEMATIC DIAGRAM (AV PCB)



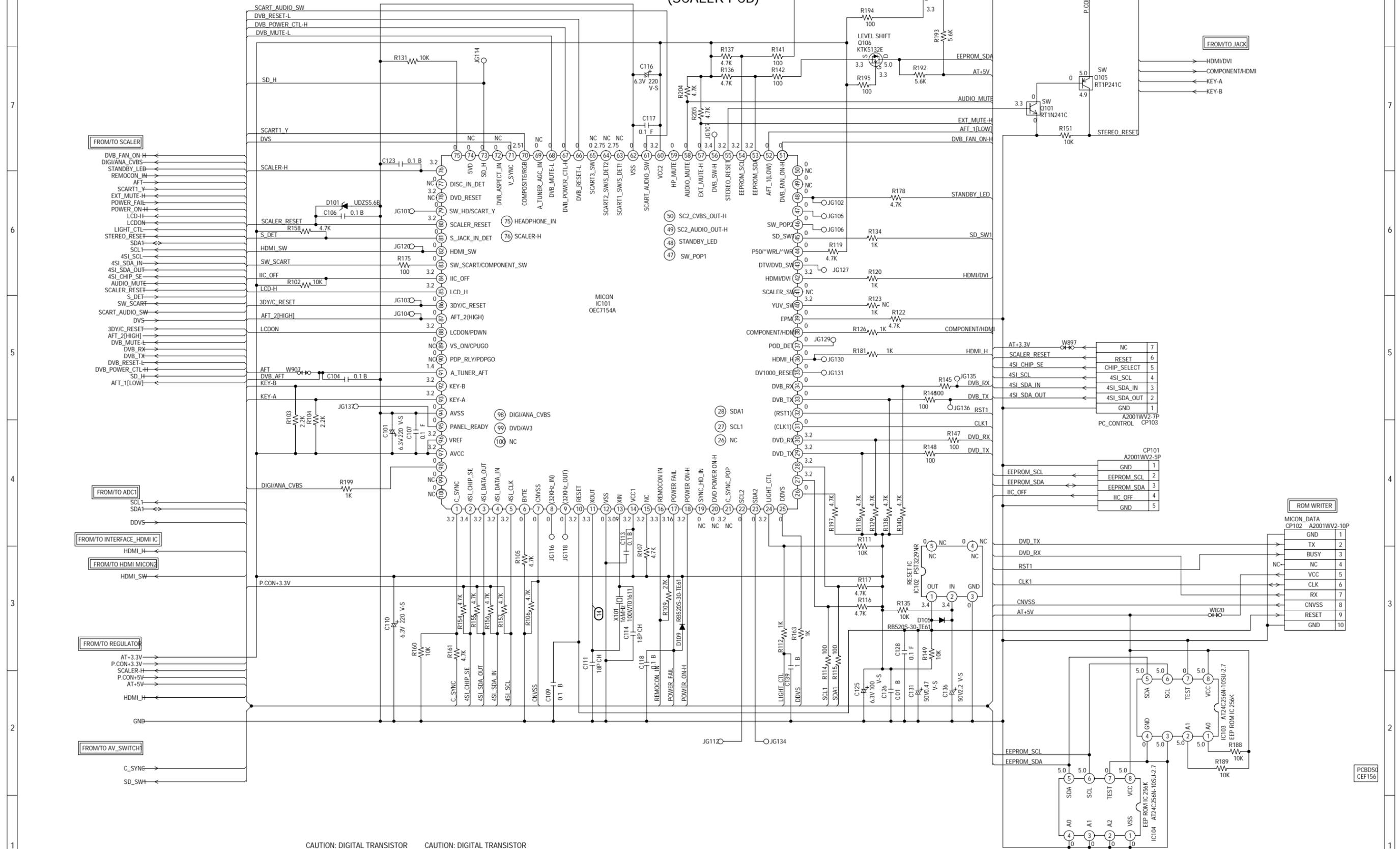
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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

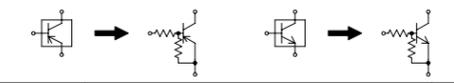


PCB020  
CMF089

# MICON SCHEMATIC DIAGRAM (SCALER PCB)



CAUTION: DIGITAL TRANSISTOR



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.

NC	7
SCALER_RESET	6
4SI_CHIP_SE	5
4SI_SCL	4
4SI_SDA_IN	3
4SI_SDA_OUT	2
GND	1

A2001WV2-7P  
PC\_CONTROL CP103

GND	1
EEPROM_SCL	2
EEPROM_SDA	3
IIC_OFF	4
GND	5

CP101  
A2001WV2-5P

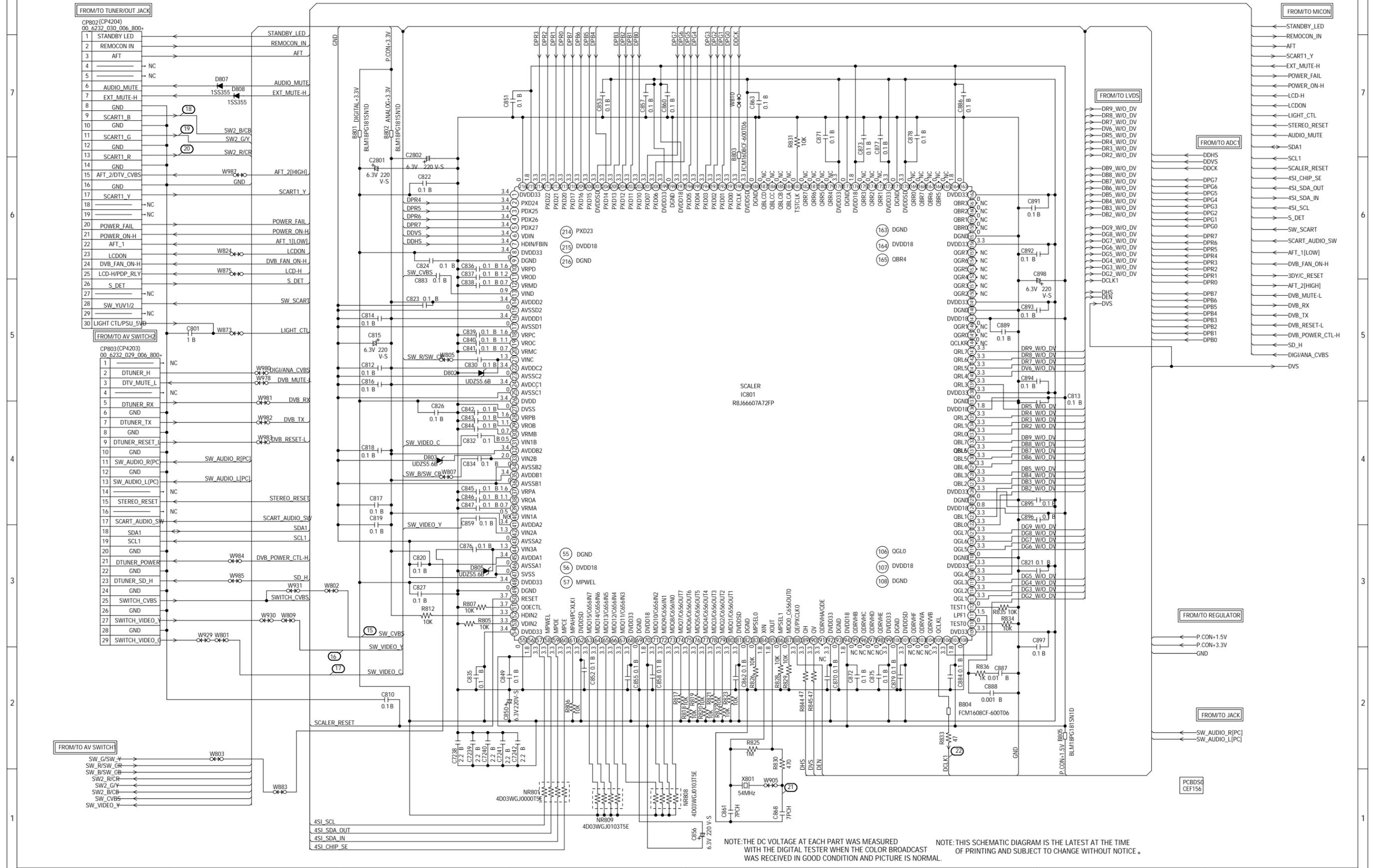
GND	1
TX	2
BUSY	3
NC	4
VCC	5
CLK	6
RX	7
CNVSS	8
RESET	9
GND	10

MICON\_DATA  
CP102 A2001WV2-10P

PCB50  
CEF156

# SCALER SCHEMATIC DIAGRAM

## (SCALER PCB)

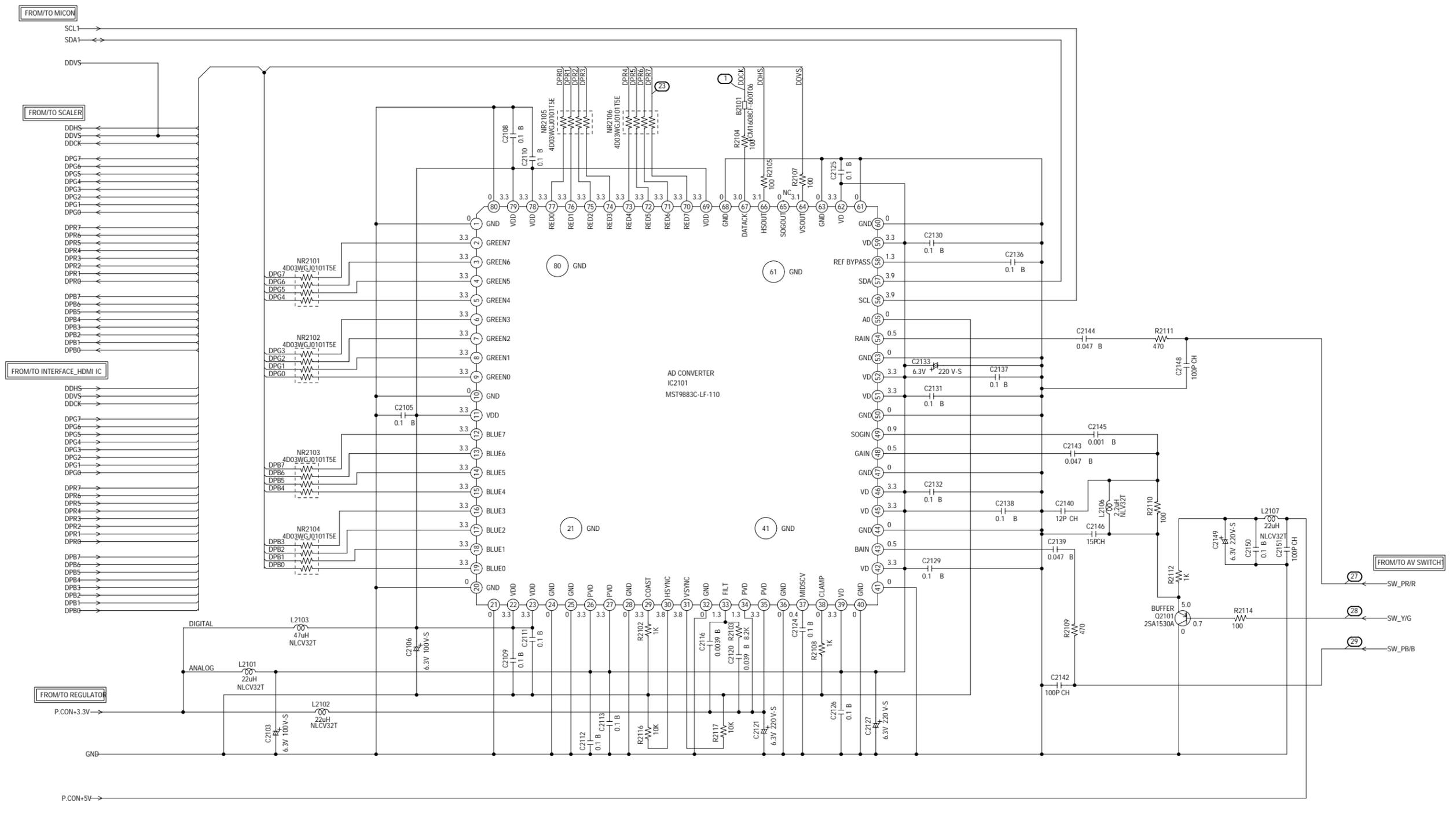


NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

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

# ADC1 SCHEMATIC DIAGRAM

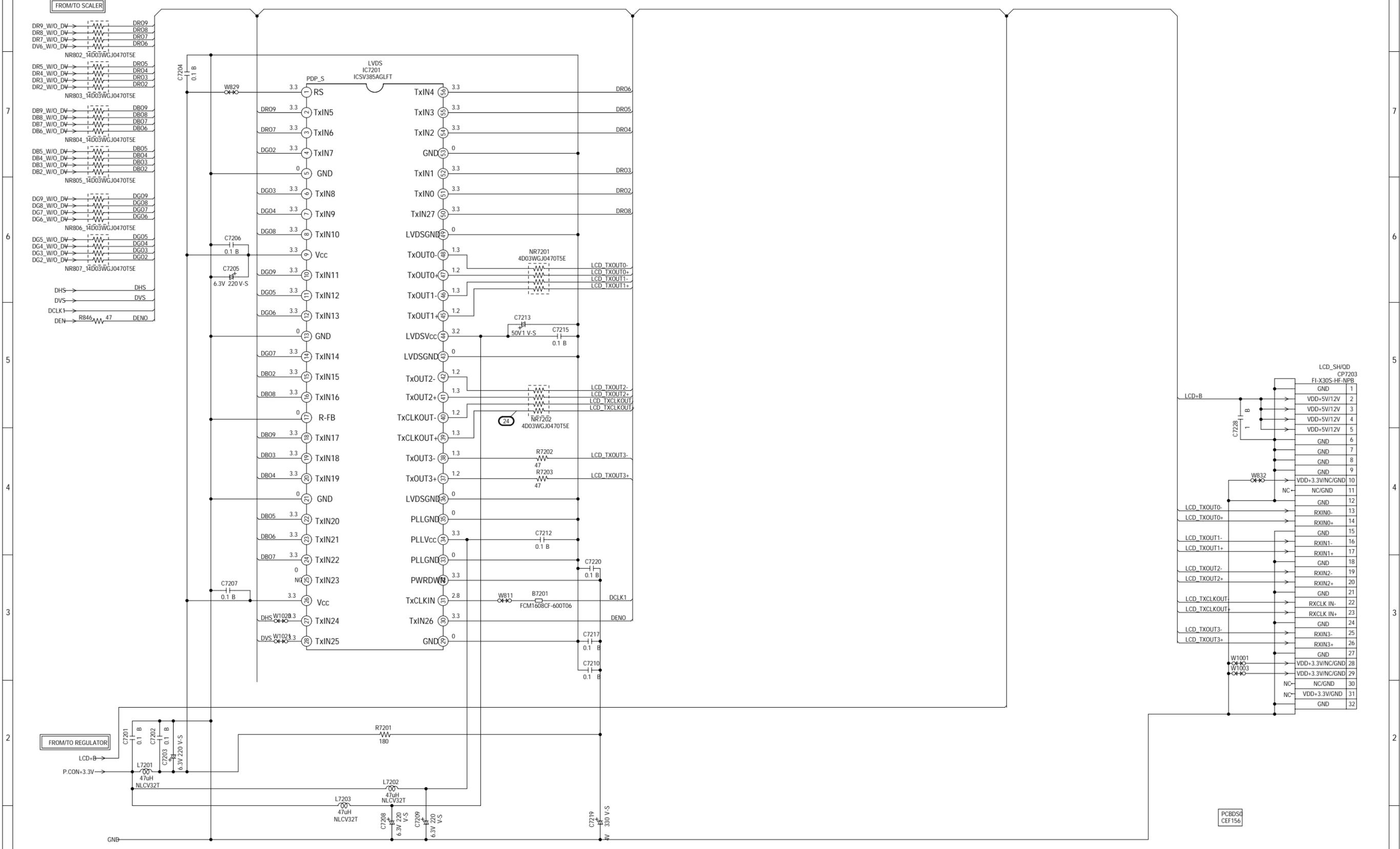
(SCALER PCB)



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.

# LVDS SCHEMATIC DIAGRAM (SCALER PCB)



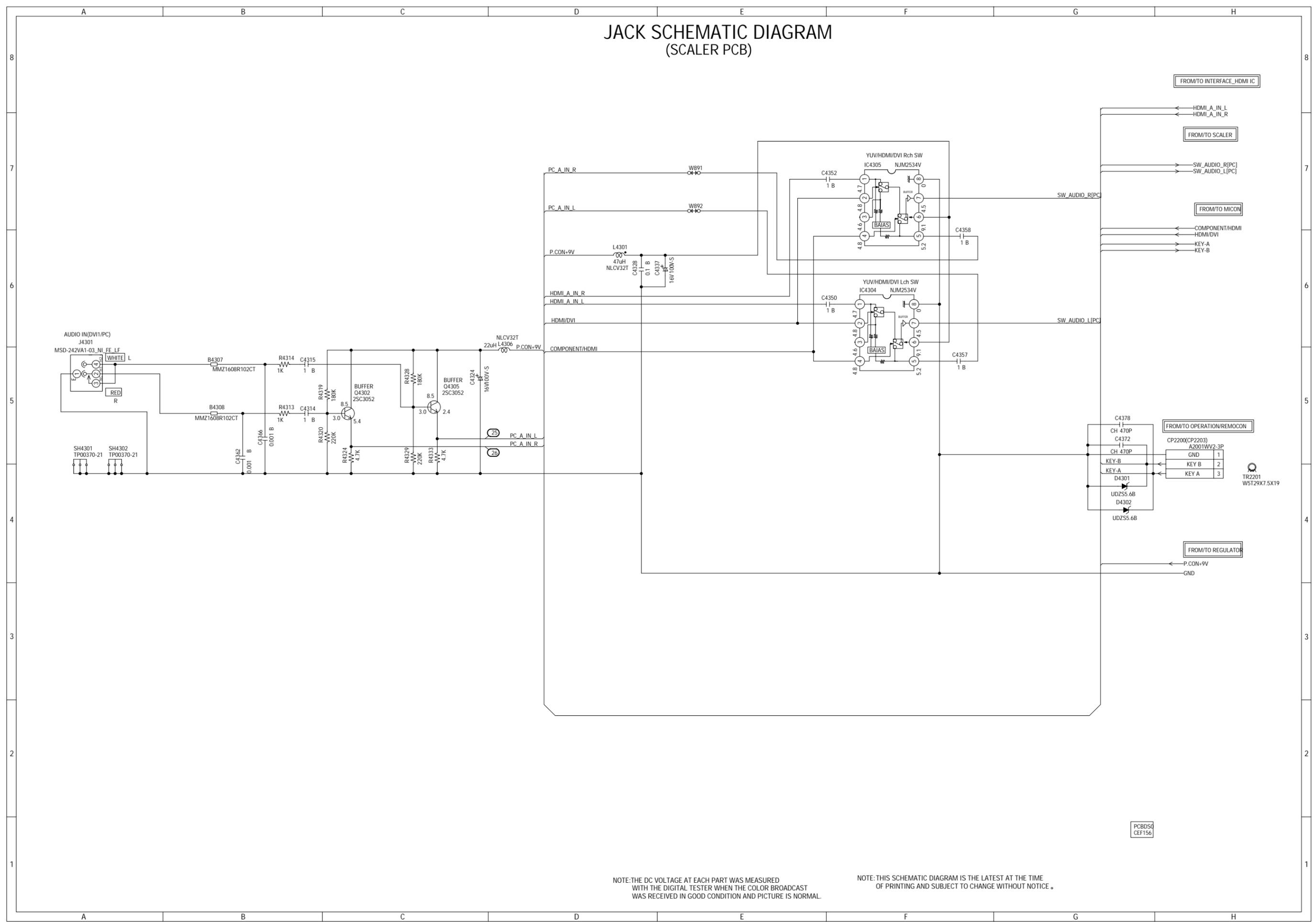
LCD\_SH/OD  
CPT203  
FI-X30S-HF-NPB

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/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/GND	30
VDD+3.3V/GND	31
GND	32

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.

# JACK SCHEMATIC DIAGRAM (SCALER PCB)

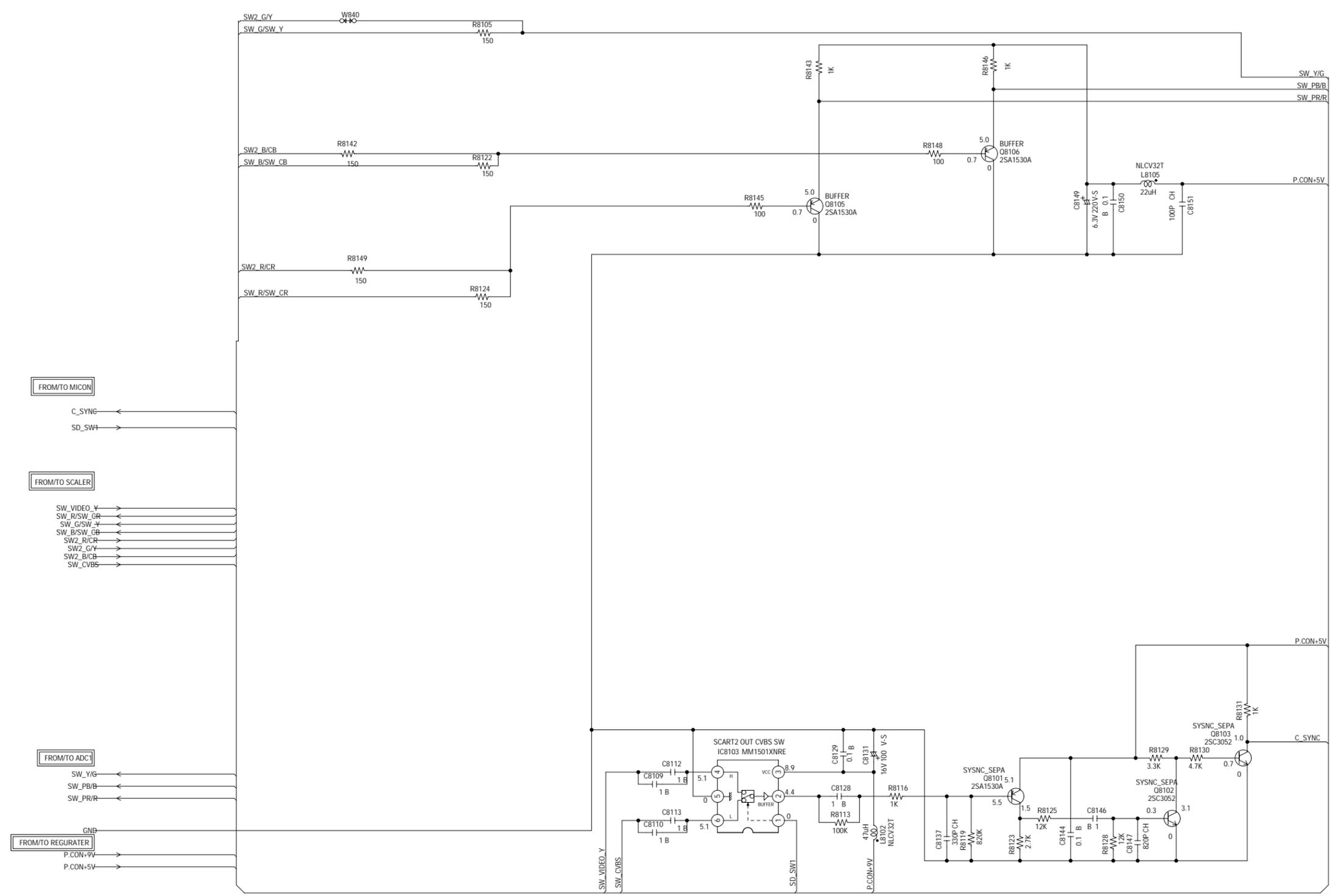


NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

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

PCBDS0  
CEF156

# AV SWITCH1 SCHEMATIC DIAGRAM (SCALER PCB)



PCBDS4  
CEF156

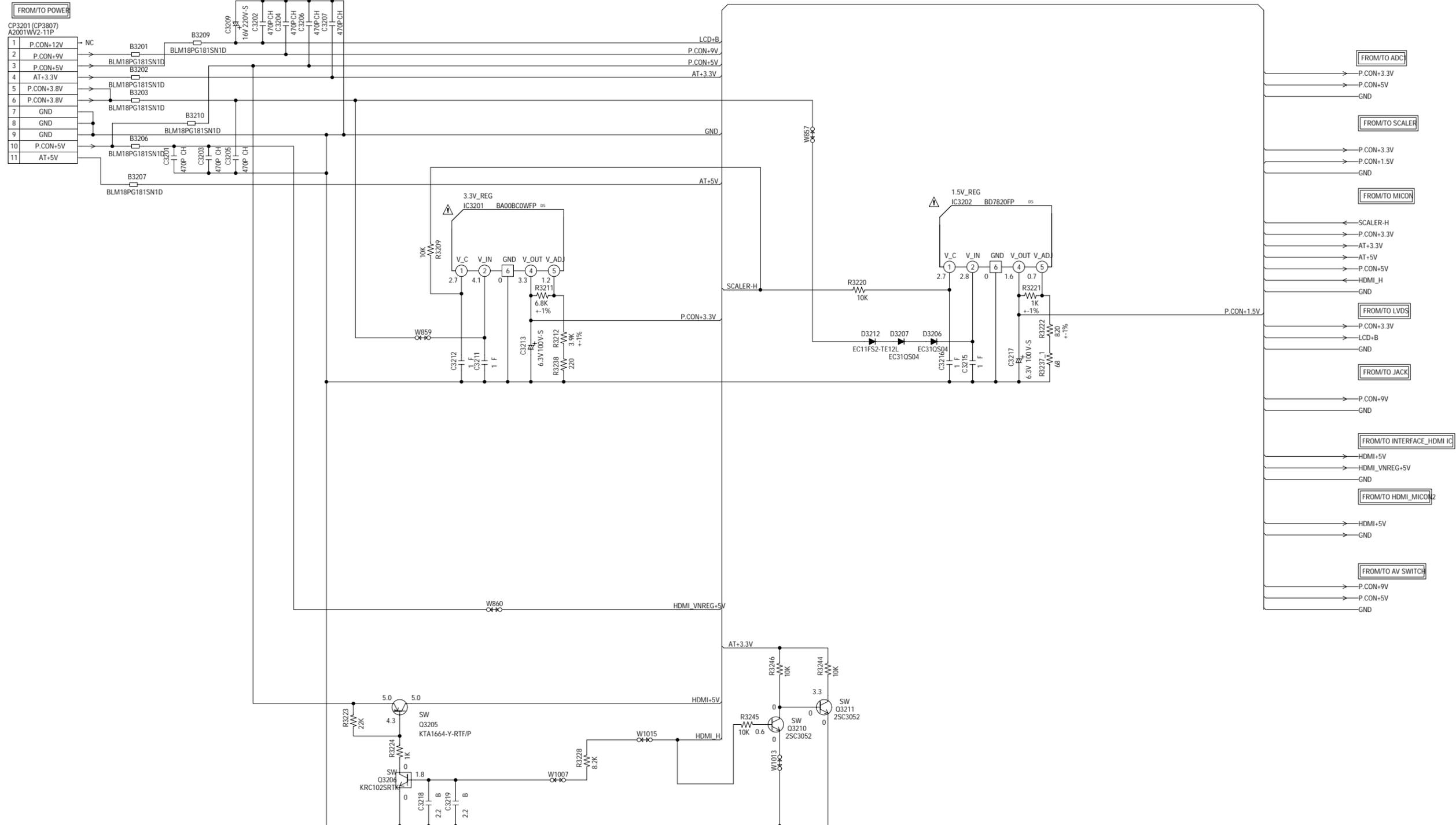
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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

# REGULATOR SCHEMATIC DIAGRAM (SCALER PCB)

FROM/TO POWER

1	P.CON+12V	NC
2	P.CON+9V	BLM18PG181SN1D
3	P.CON+5V	B3202
4	AT+3.3V	BLM18PG181SN1D
5	P.CON+3.8V	B3203
6	P.CON+3.8V	BLM18PG181SN1D
7	GND	B3210
8	GND	BLM18PG181SN1D
9	GND	B3206
10	P.CON+5V	BLM18PG181SN1D
11	AT+5V	B3207



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

**ATTENTION** LES PIÈCES REPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

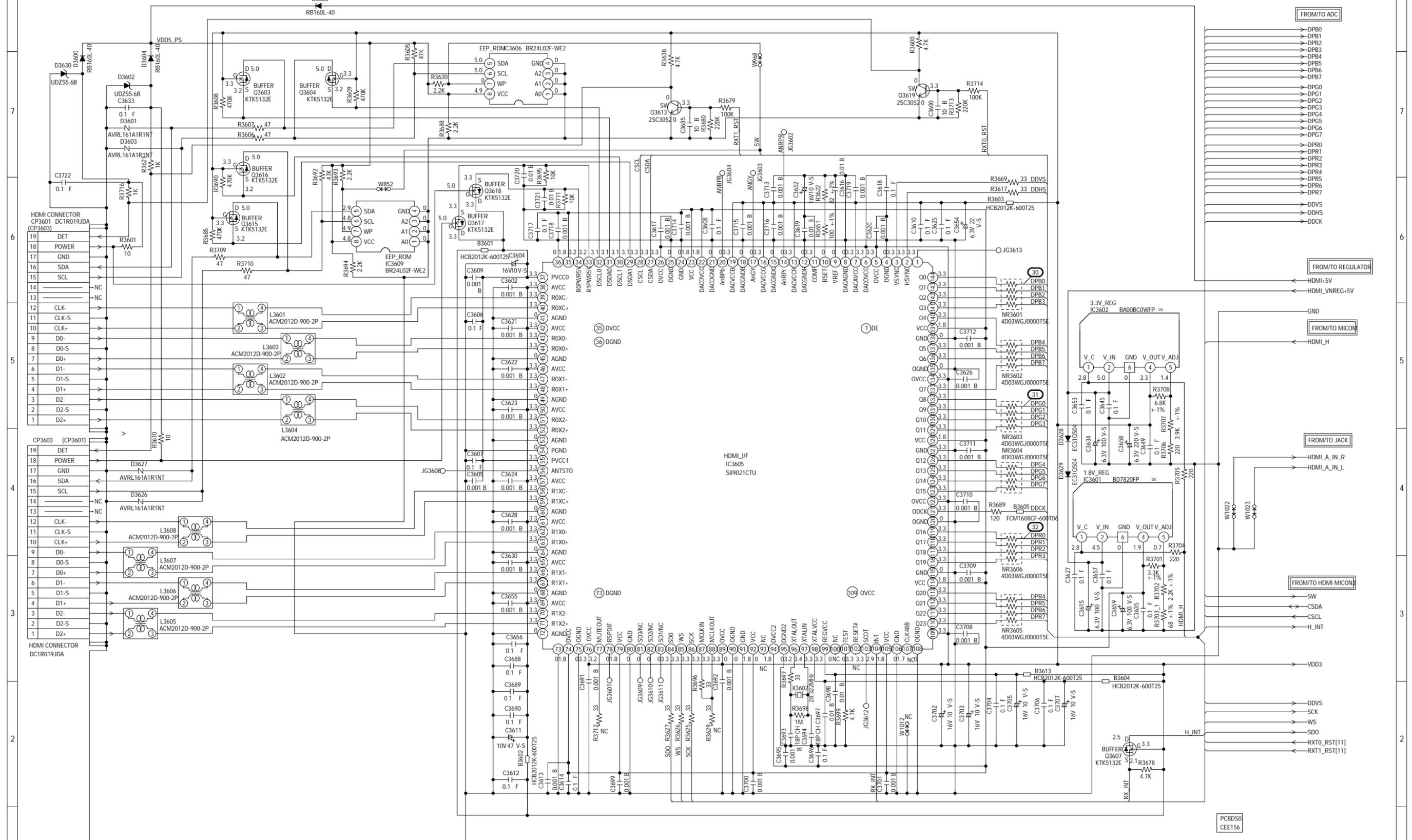
**CAUTION: DIGITAL TRANSISTOR**

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.

PCBDS0  
CEF156

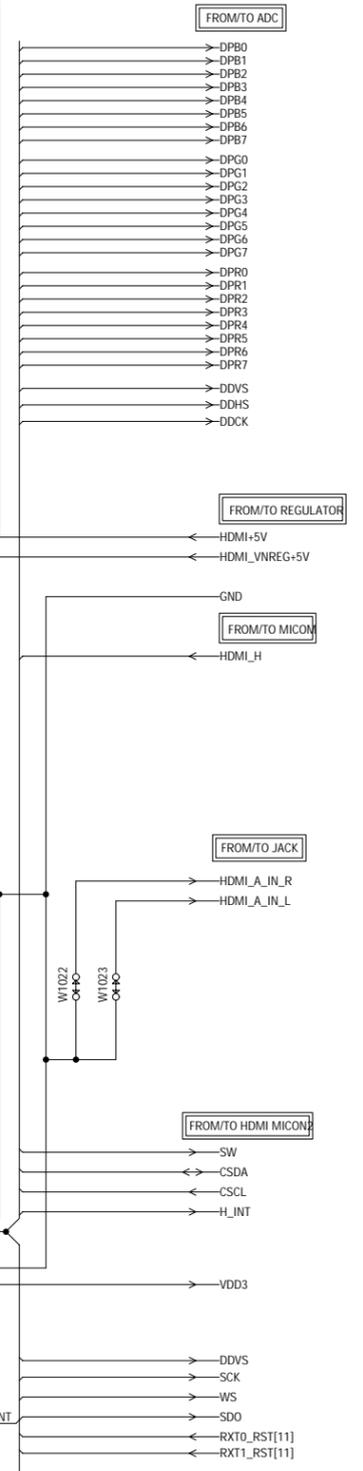
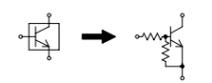
# INTERFACE\_HDMI IC SCHEMATIC DIAGRAM (SCALER PCB)



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

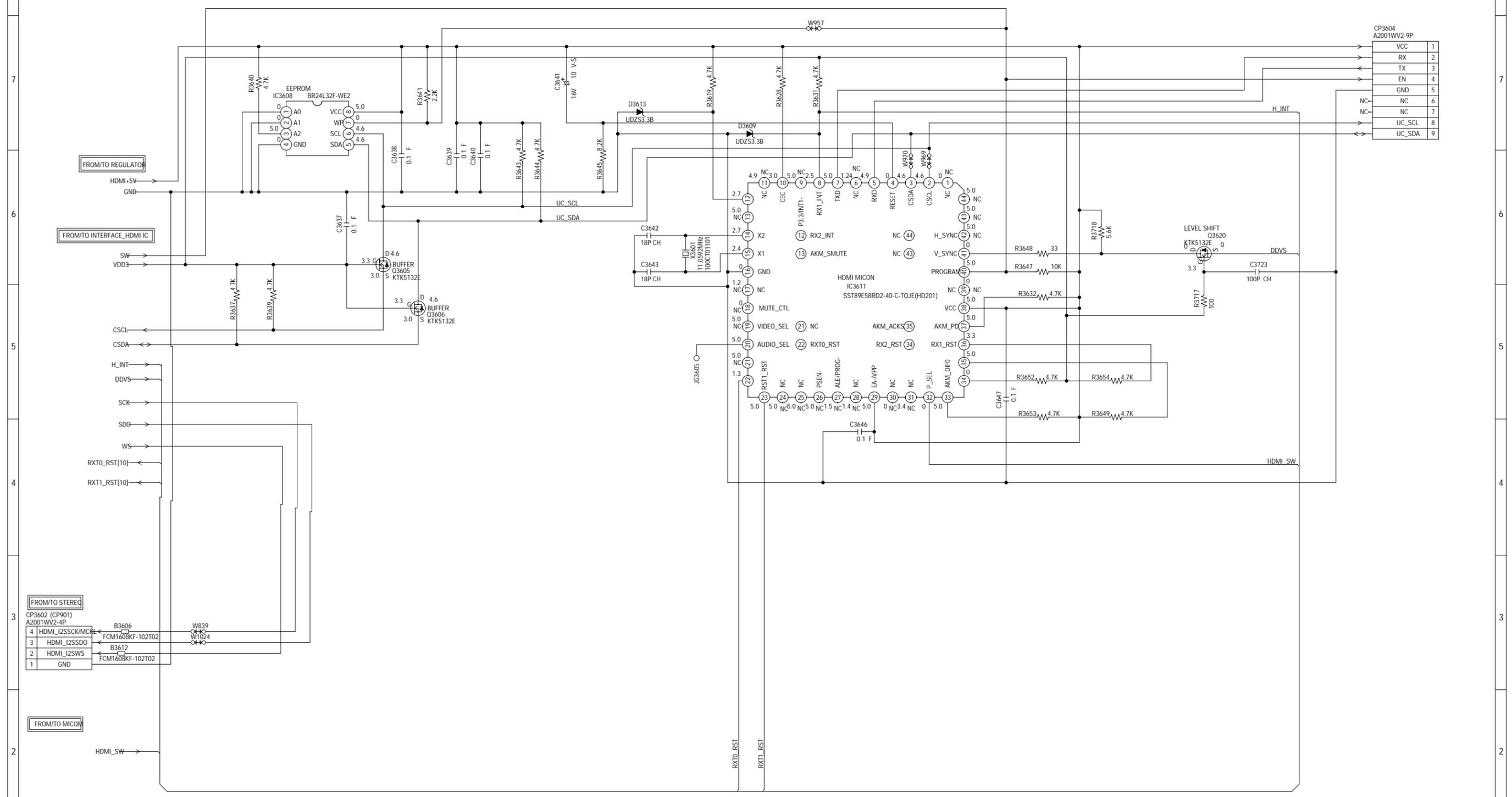
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

CAUTION: DIGITAL TRANSISTOR



PCBDS0  
CEE156

# HDMI MICON2 SCHEMATIC DIAGRAM (SCALER PCB)



CP3604 A2001WV2-9P	
VCC	1
RX	2
TX	3
EN	4
GND	5
NC	6
NC	7
UC_SCL	8
UC_SDA	9

FROM/TO STEREO	
4	HDMI_I2SSCK/MCLK
3	HDMI_I2SSDO
2	HDMI_I2SWS
1	GND

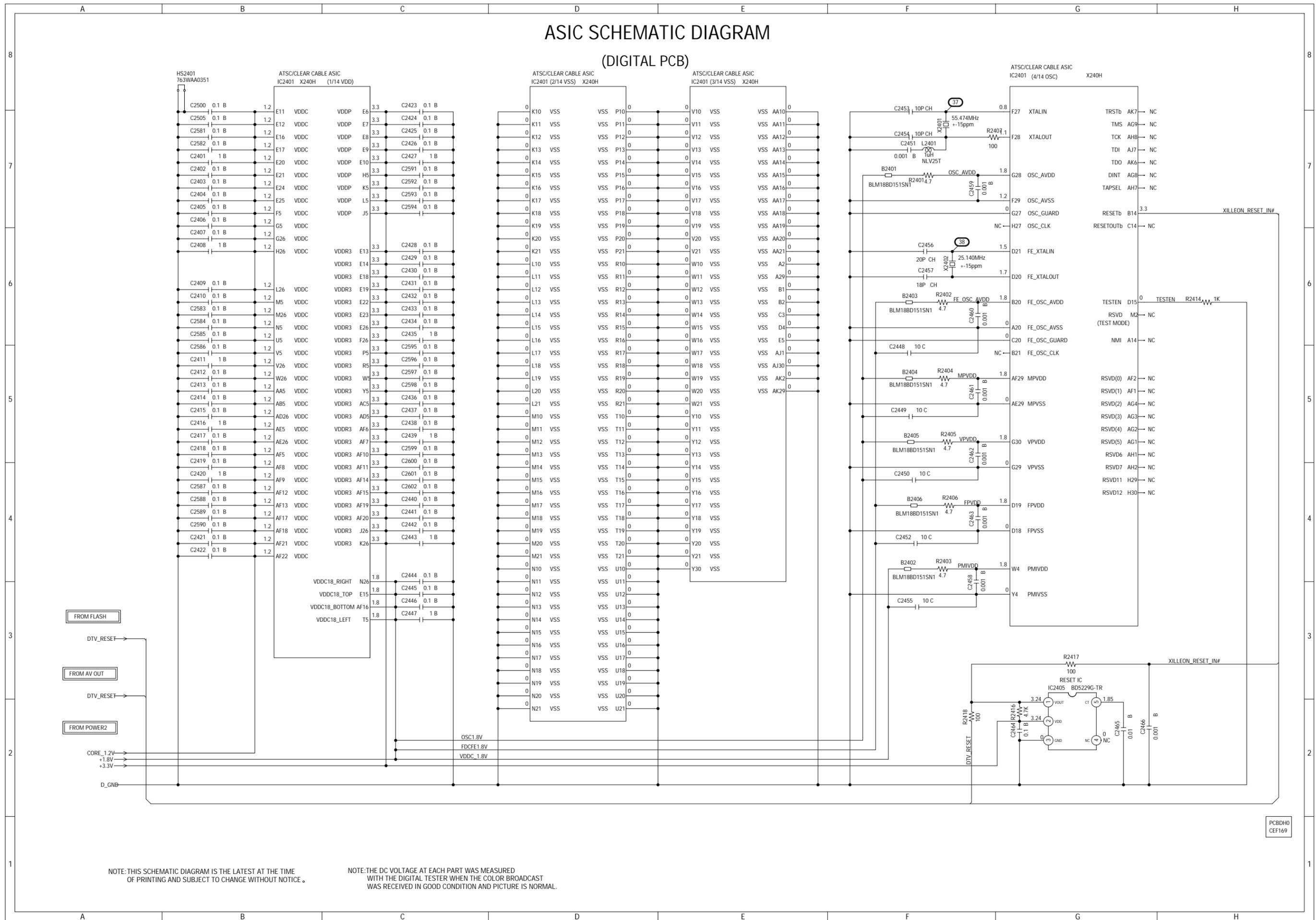
FROM/TO MICOM	
4	HDMI_I2SSCK/MCLK
3	HDMI_I2SSDO
2	HDMI_I2SWS
1	GND

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

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

PCBDS0  
CEF156

# ASIC SCHEMATIC DIAGRAM (DIGITAL PCB)



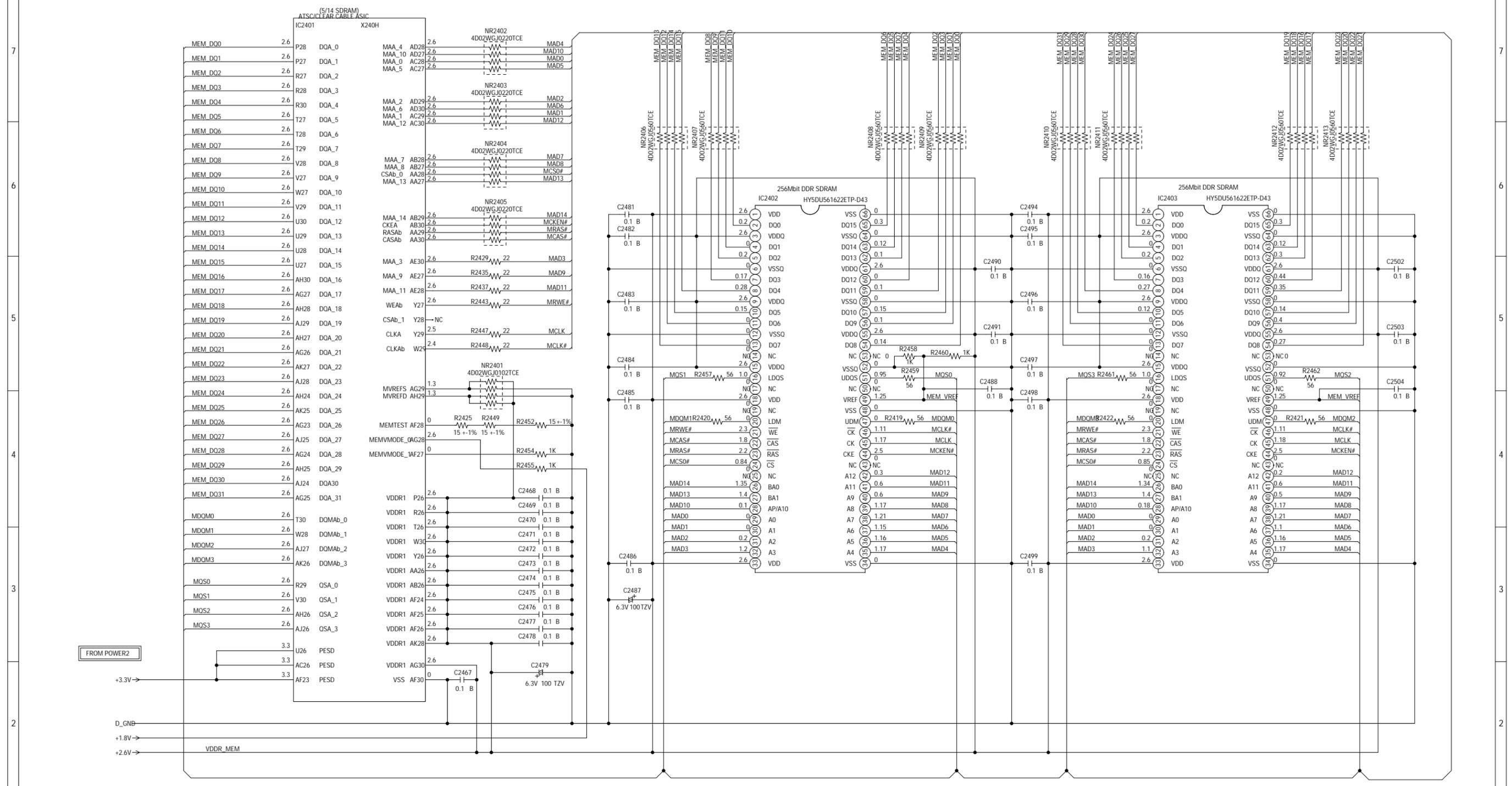
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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

PCBDH0  
CEF169

# SDRAM SCHEMATIC DIAGRAM

## (DIGITAL PCB)

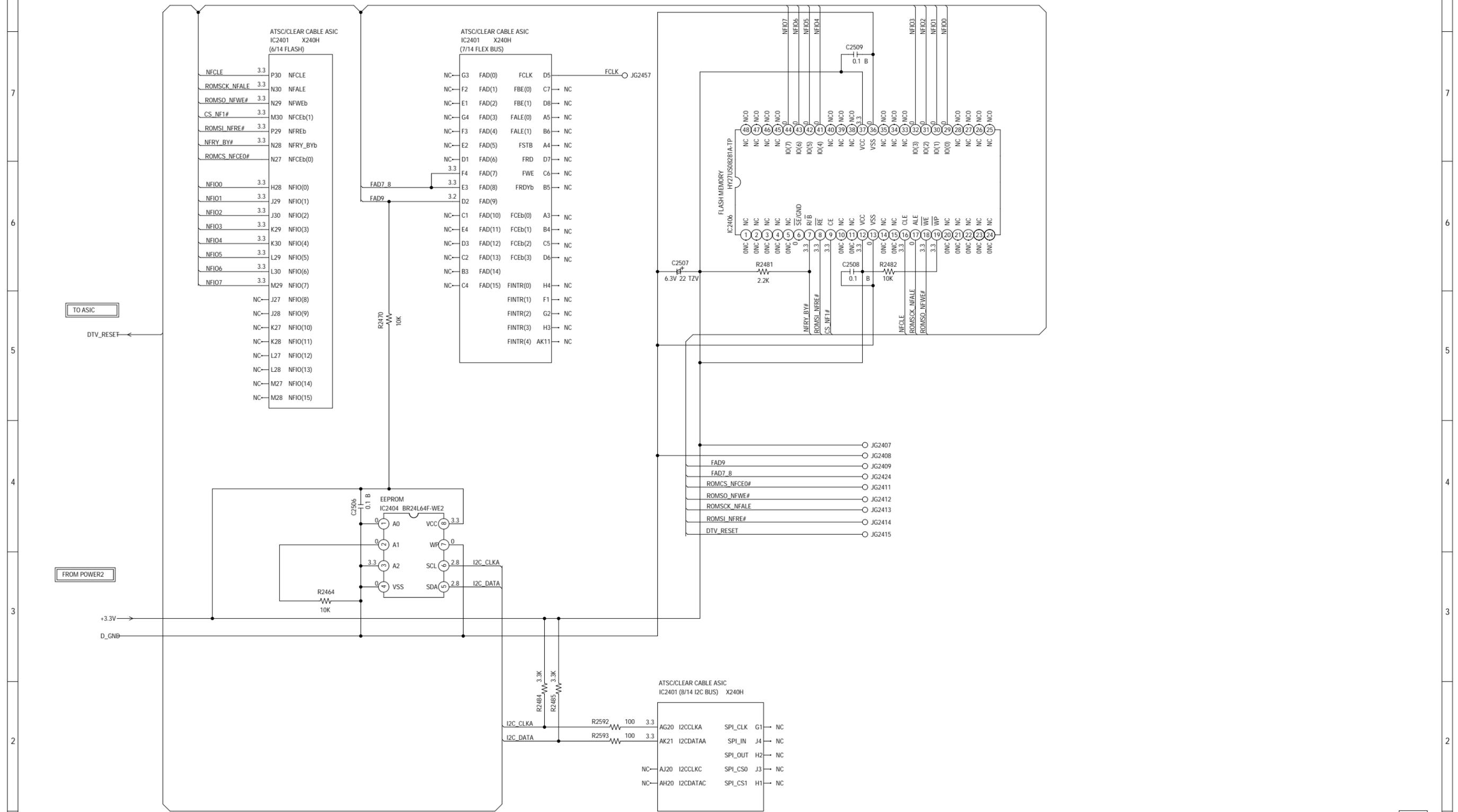


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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

PCBDH0  
CEF169

# FLASH SCHEMATIC DIAGRAM (DIGITAL PCB)

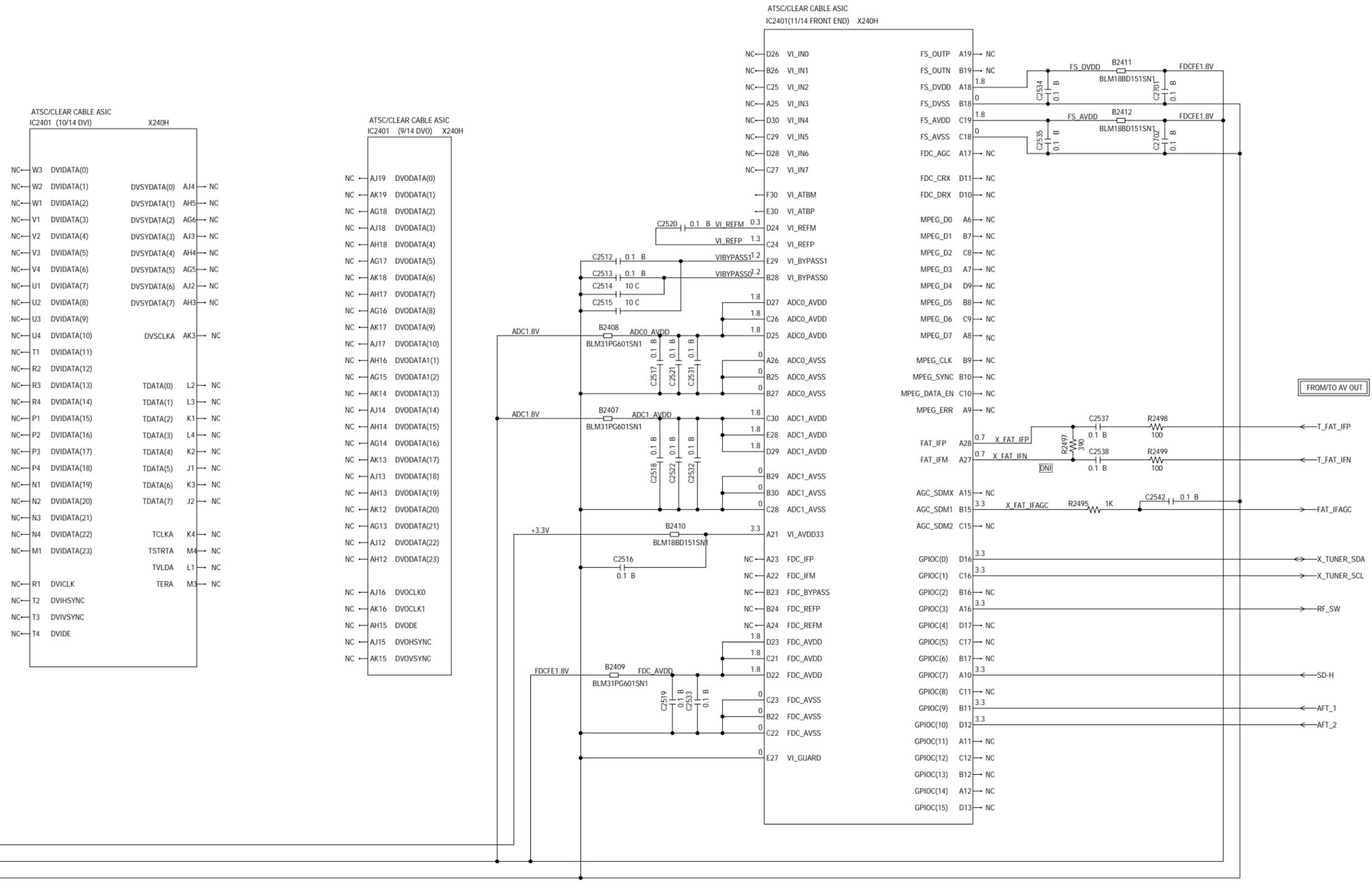


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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.

PCBDH0  
CEF169

# FRONT END SCHEMATIC DIAGRAM (DIGITAL PCB)

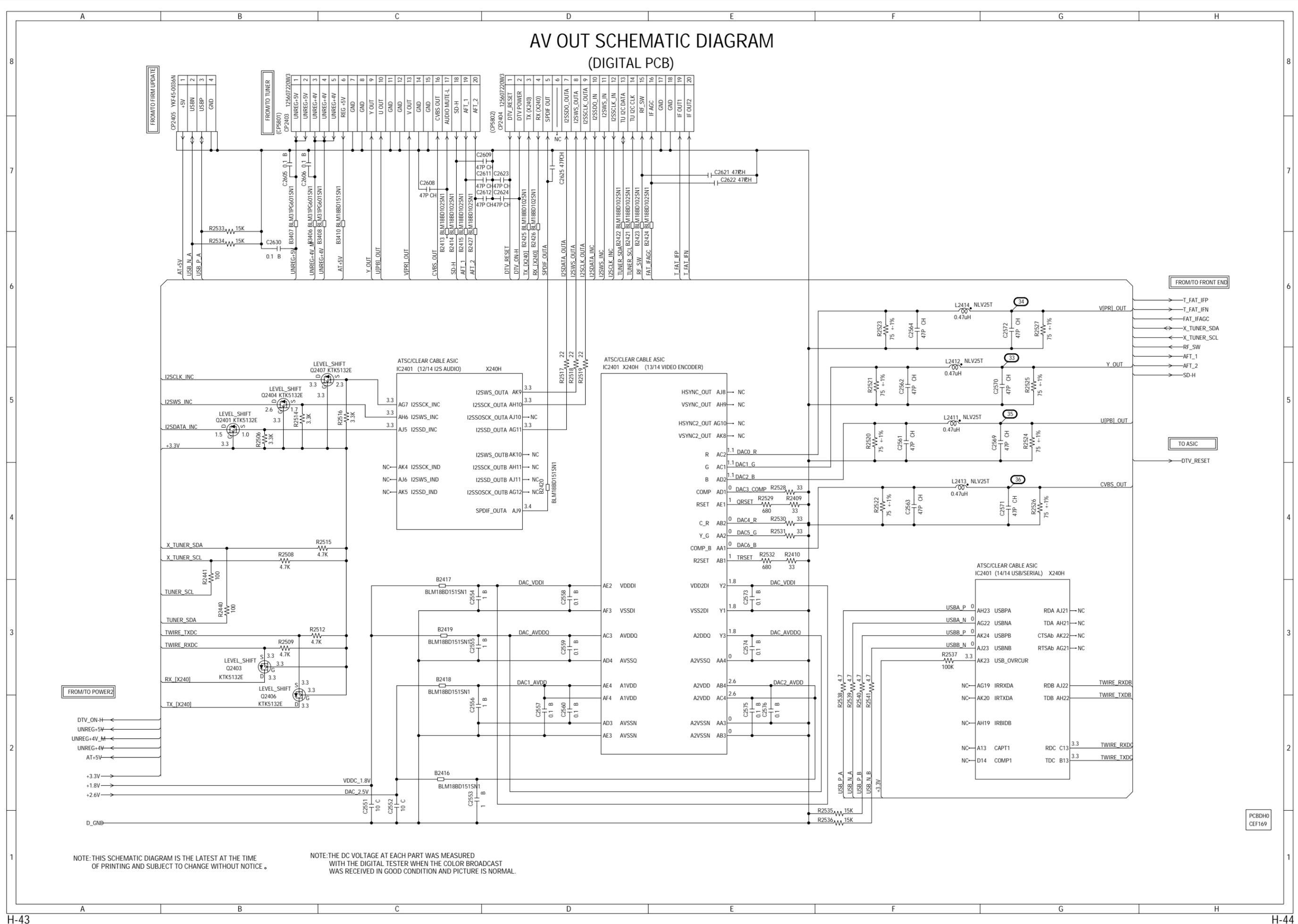


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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.

PCBDH0  
CEF169

# AV OUT SCHEMATIC DIAGRAM (DIGITAL PCB)

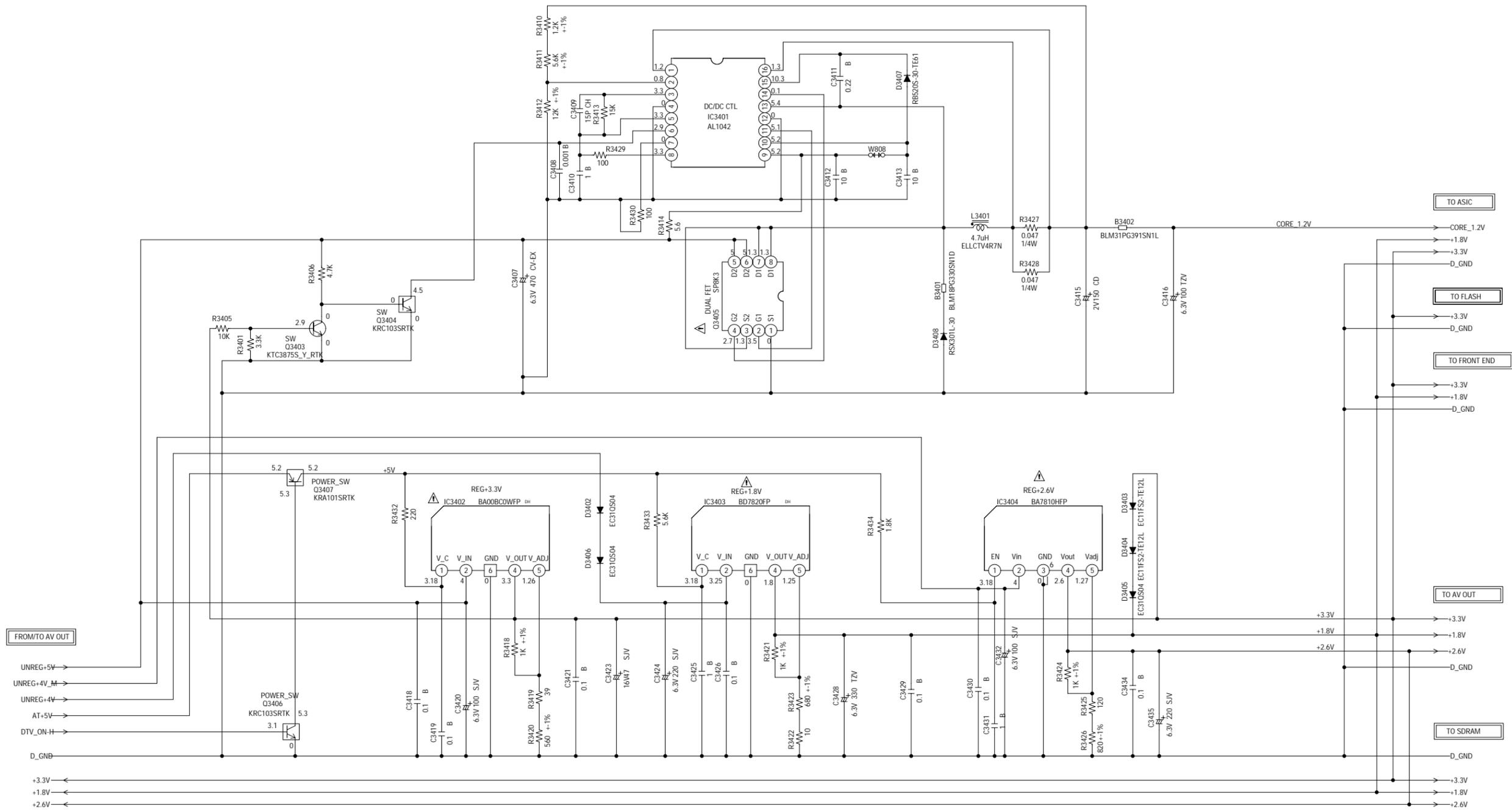


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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.

PCBDH0  
CEF169

# POWER2 SCHEMATIC DIAGRAM (DIGITAL PCB)



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

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

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

**ATTENTION** LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIÈCES.

CAUTION: DIGITAL TRANSISTOR

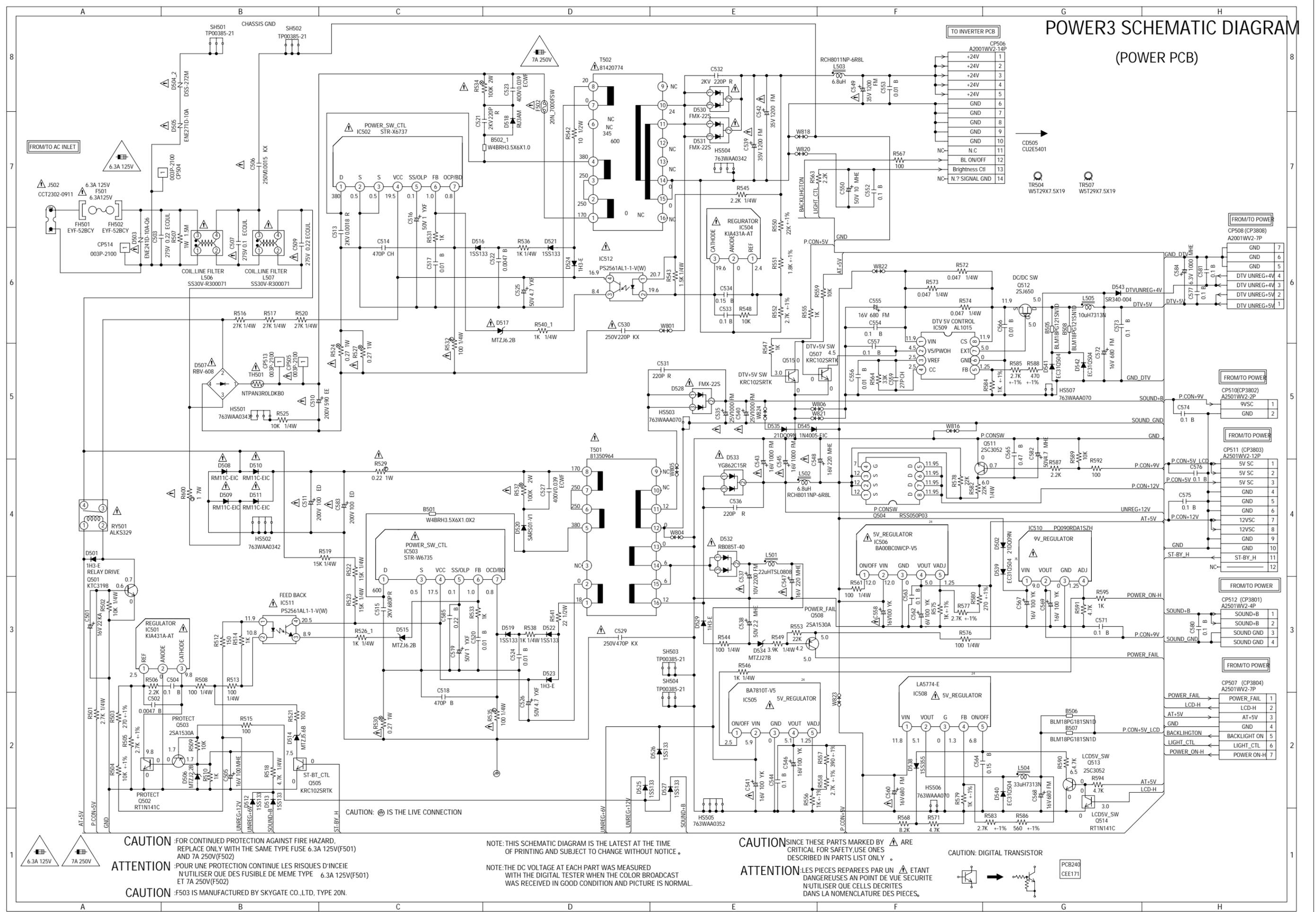
CAUTION: DIGITAL TRANSISTOR



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'INCENDIE 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 .

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

**CAUTION** SINCE THESE PARTS MARKED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

**ATTENTION** LES PIECES REPARÉES PAR UN TECHNICIEN DONT LES CELLULES SONT DÉCRITÉS DANS LA NOMENCLATURE DES PIÈCES.

CAUTION: DIGITAL TRANSISTOR



FROM/TO POWER

POWER_FAIL	1
LCD-H	2
AT+5V	3
GND	4
BACKLIGHTON	5
LIGHT_CTL	6
POWER_ON-H	7

FROM/TO POWER

POWER_ON-H	1
SOUND-B	2
SOUND+GND	3
SOUND_GND	4

FROM/TO POWER

5V SC	1
5V SC	2
5V SC	3
GND	4
GND	5
12V SC	6
12V SC	7
GND	8
GND	9
ST-BY_H	10
ST-BY_H	11
NC	12

FROM/TO POWER

9V SC	1
GND	2

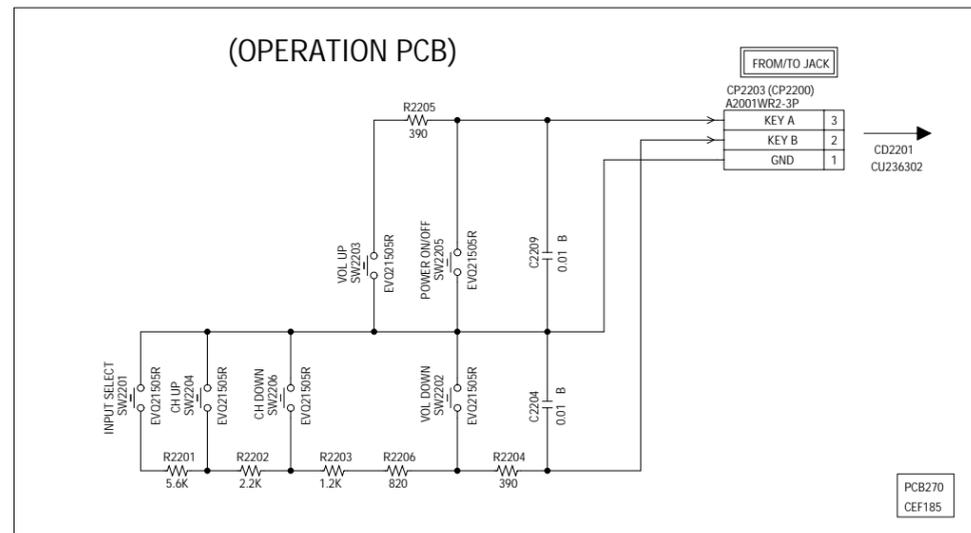
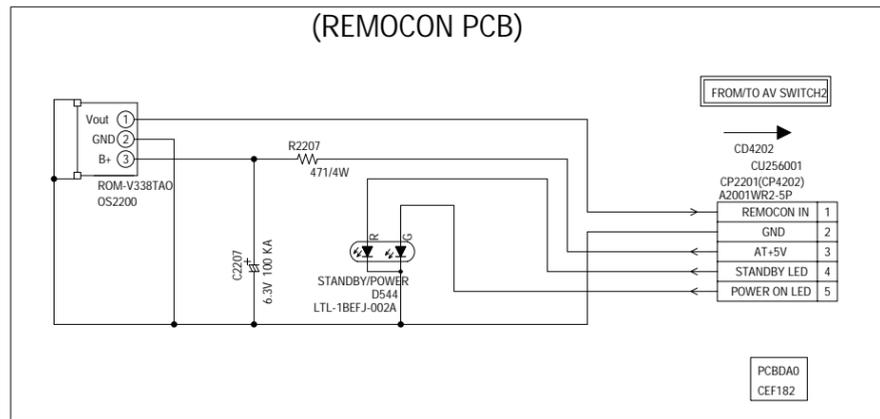
FROM/TO POWER

GND	7
GND	6
GND	5
DTV UNREG+4V	4
DTV UNREG+4V	3
DTV UNREG+5V	2
DTV UNREG+5V	1

TO INVERTER PCB

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

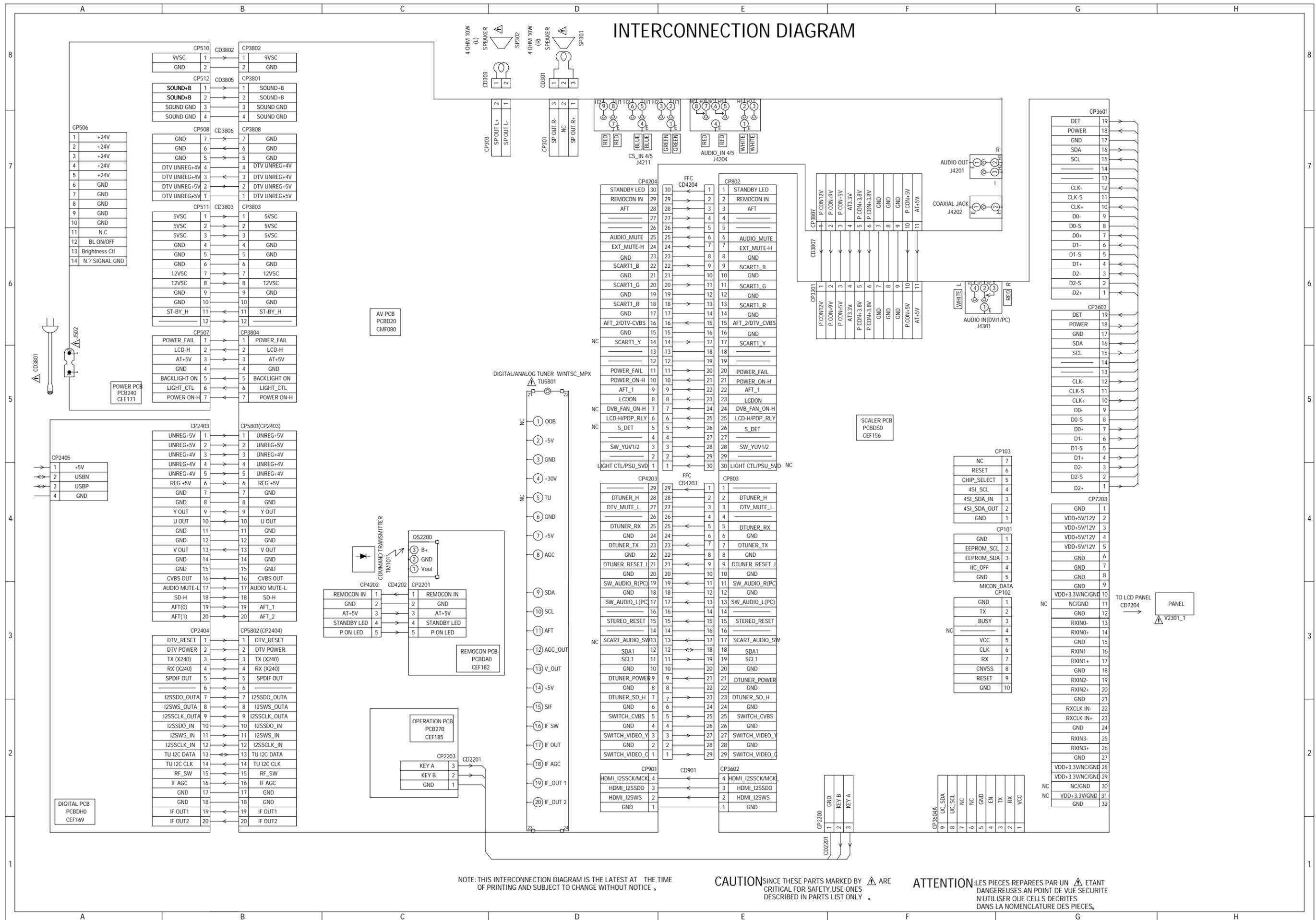
# OPERATION/REMOCON SCHEMATIC DIAGRAM



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

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

# INTERCONNECTION DIAGRAM



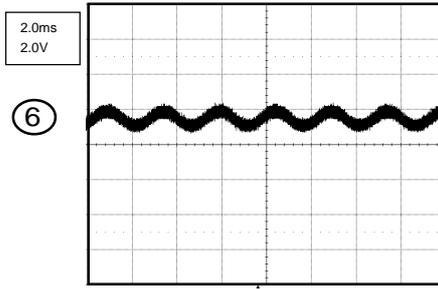
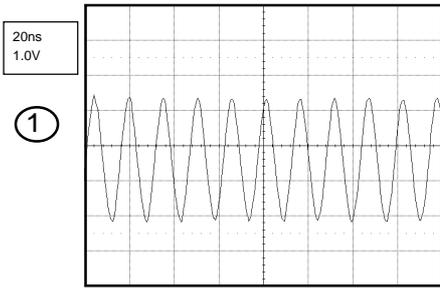
NOTE: THIS INTERCONNECTION DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

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

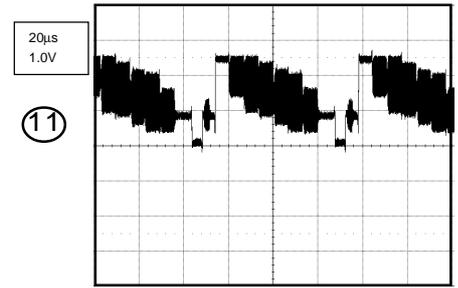
**ATTENTION** LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AU POINT DE VUE SÉCURITÉ, N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

# WAVEFORMS

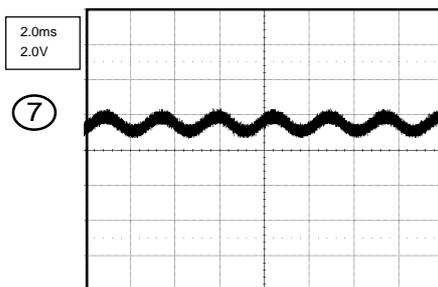
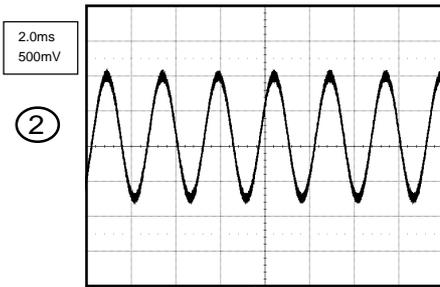
## ADC1



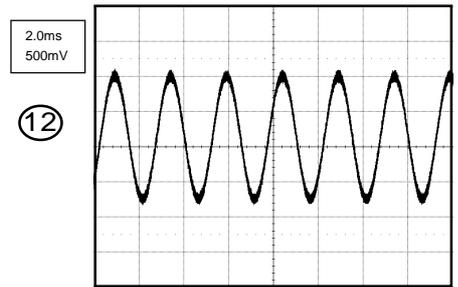
## TUNER



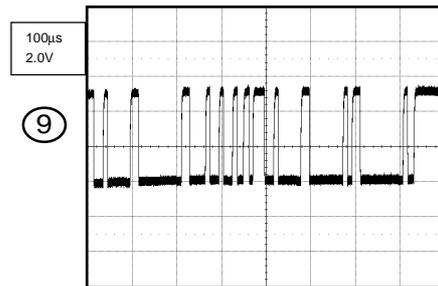
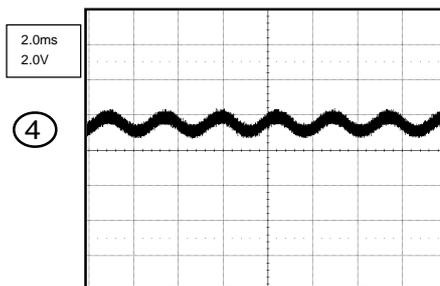
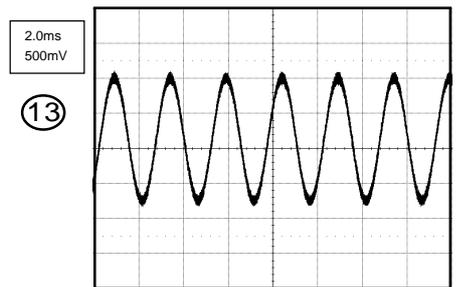
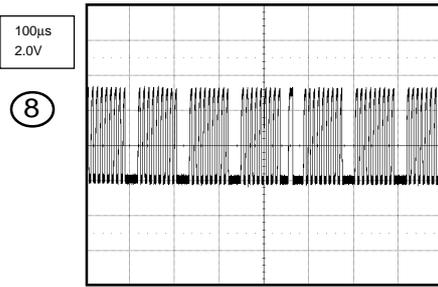
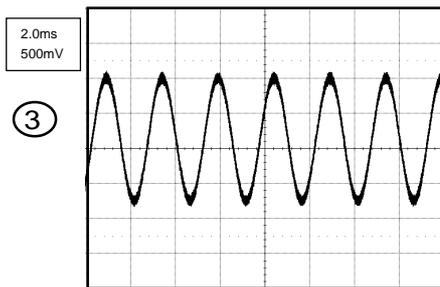
## SOUND AMP/HEADPHON AMP



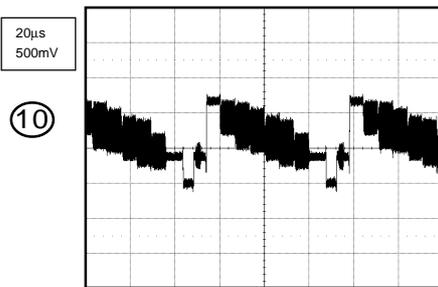
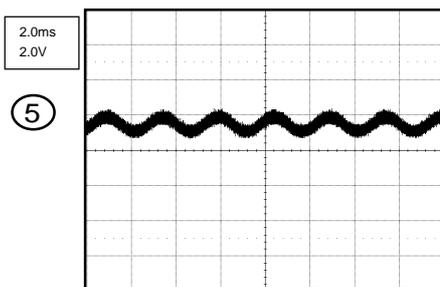
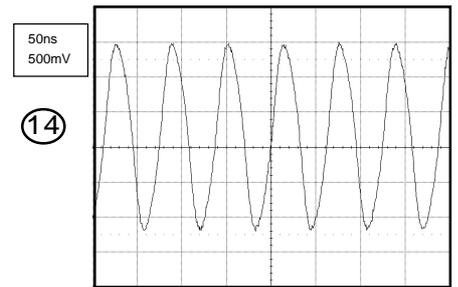
## STEREO



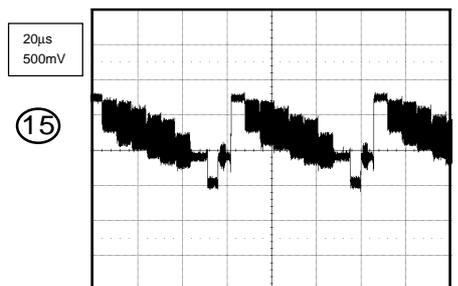
## AV SWITCH2



## MICON

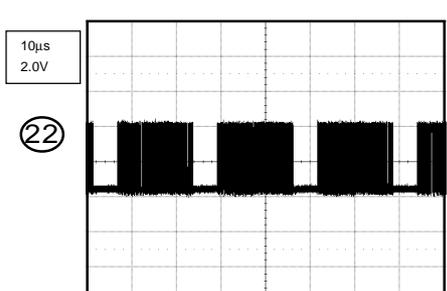
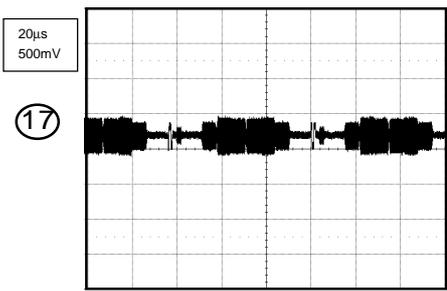
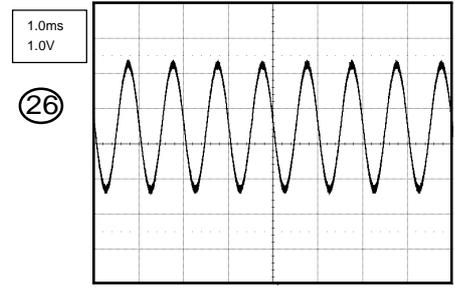
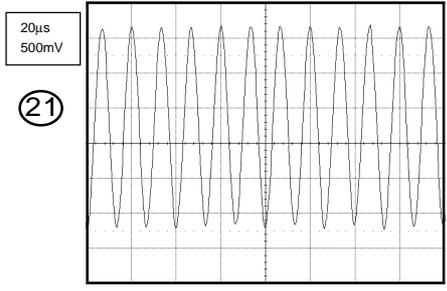
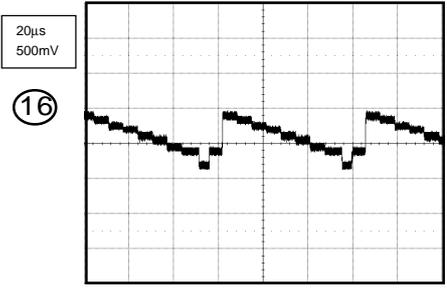


## SCALER

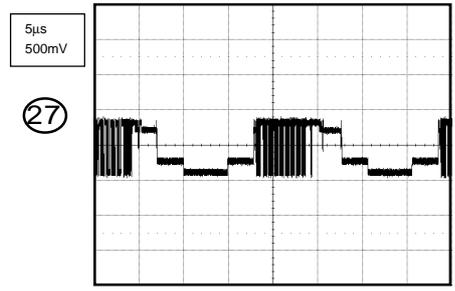


**NOTE:** The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

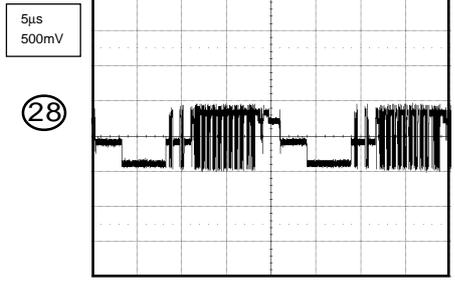
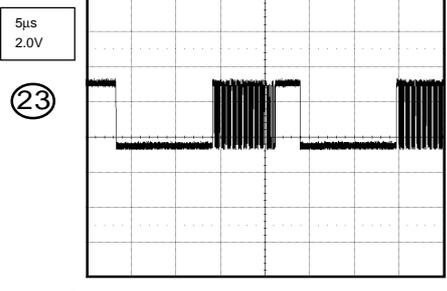
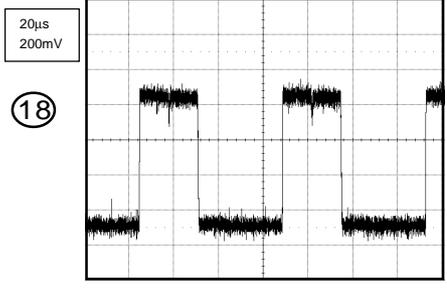
# WAVEFORMS



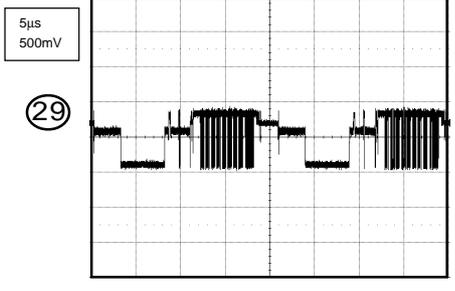
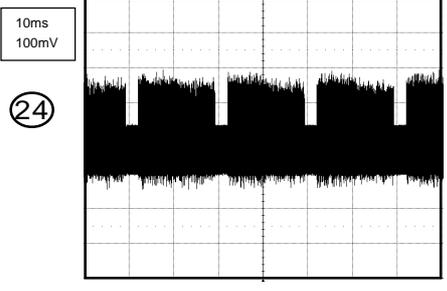
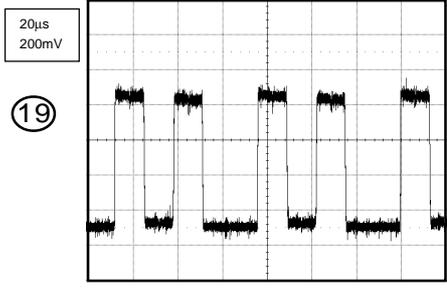
## ADC1



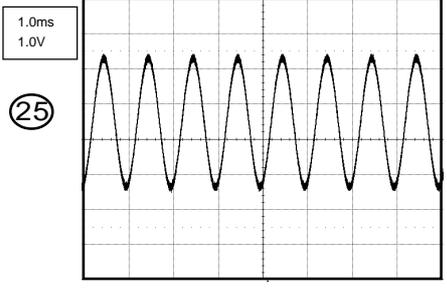
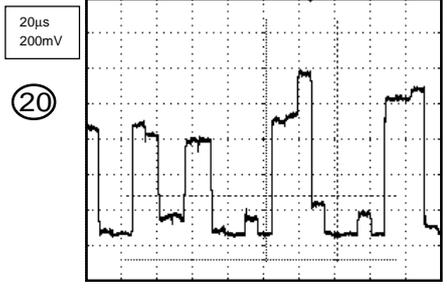
## ADC1



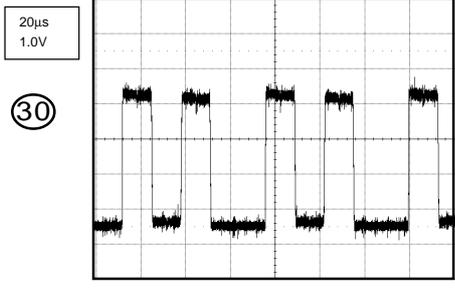
## LVDS



## JACK

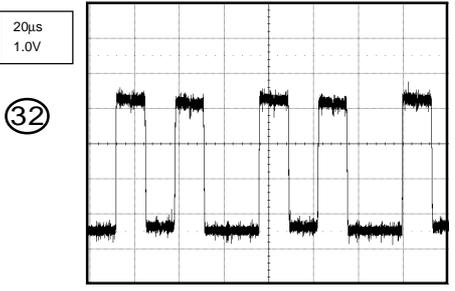
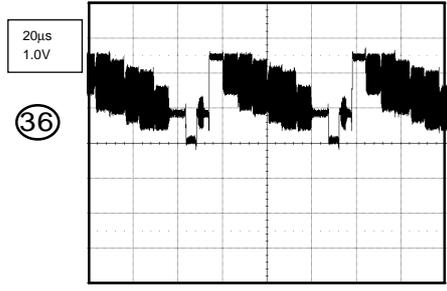
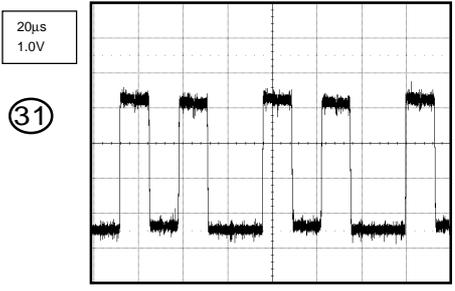


## INTERFACE\_HDMI IC

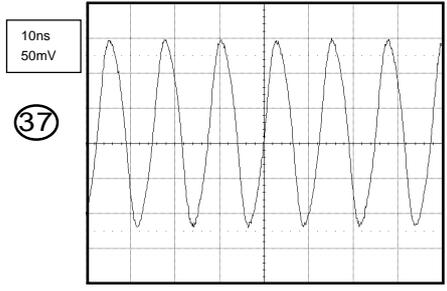


**NOTE:** The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

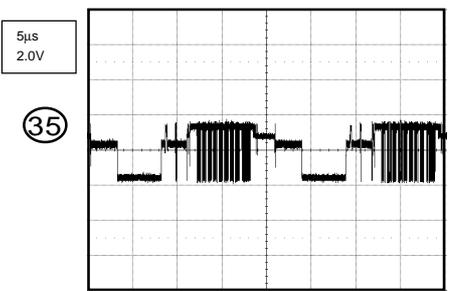
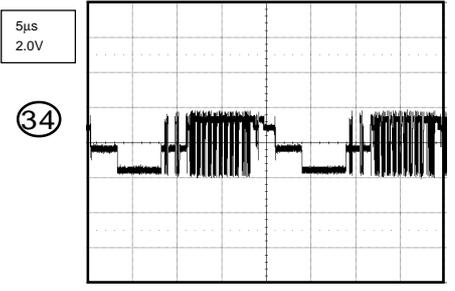
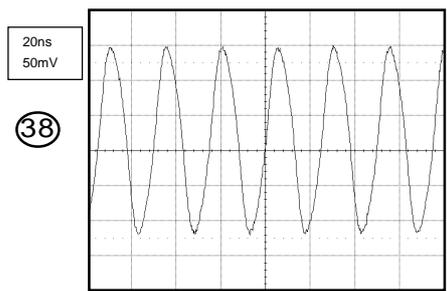
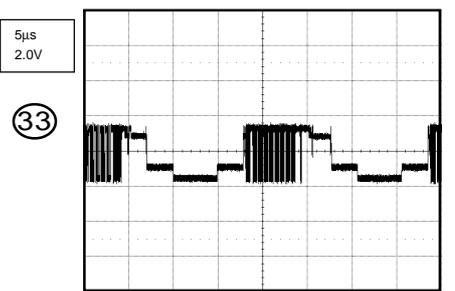
# WAVEFORMS



## ASIC

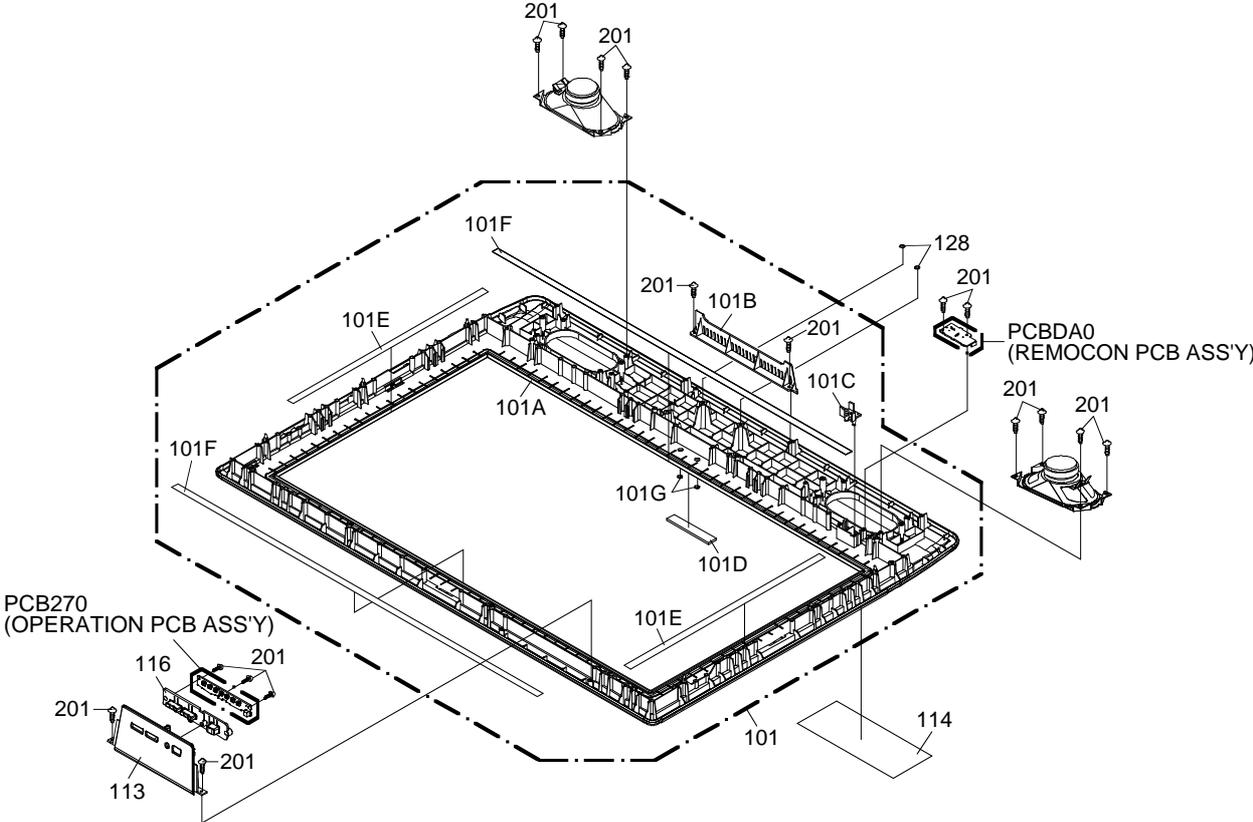
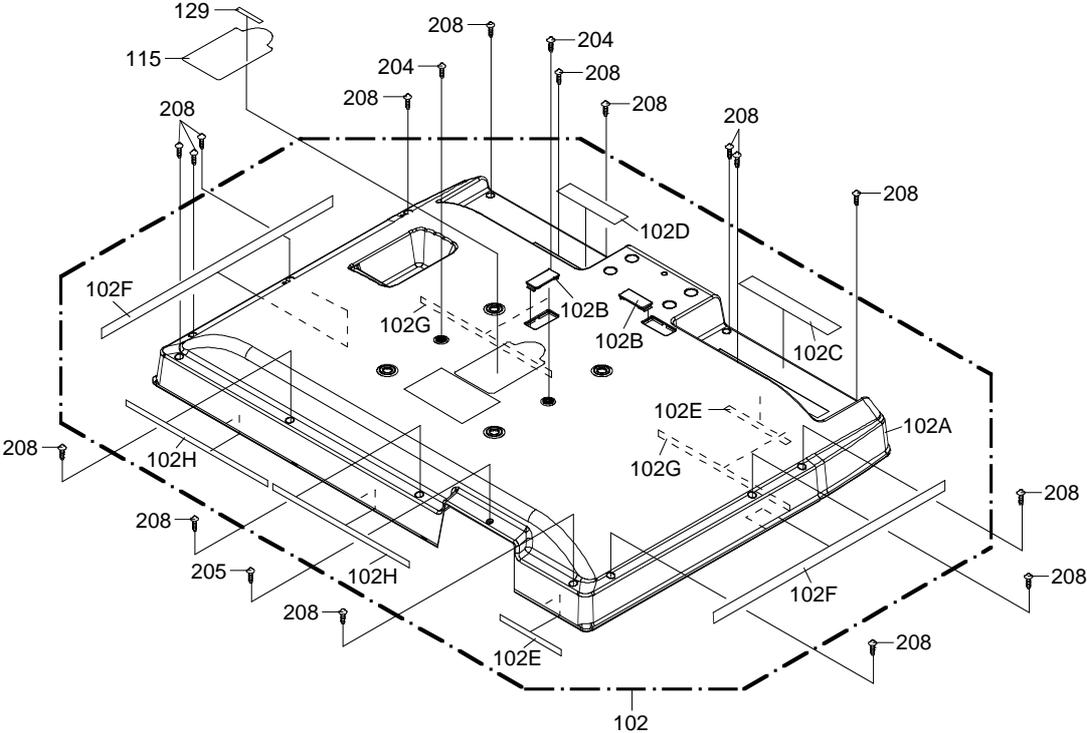


## AV OUT

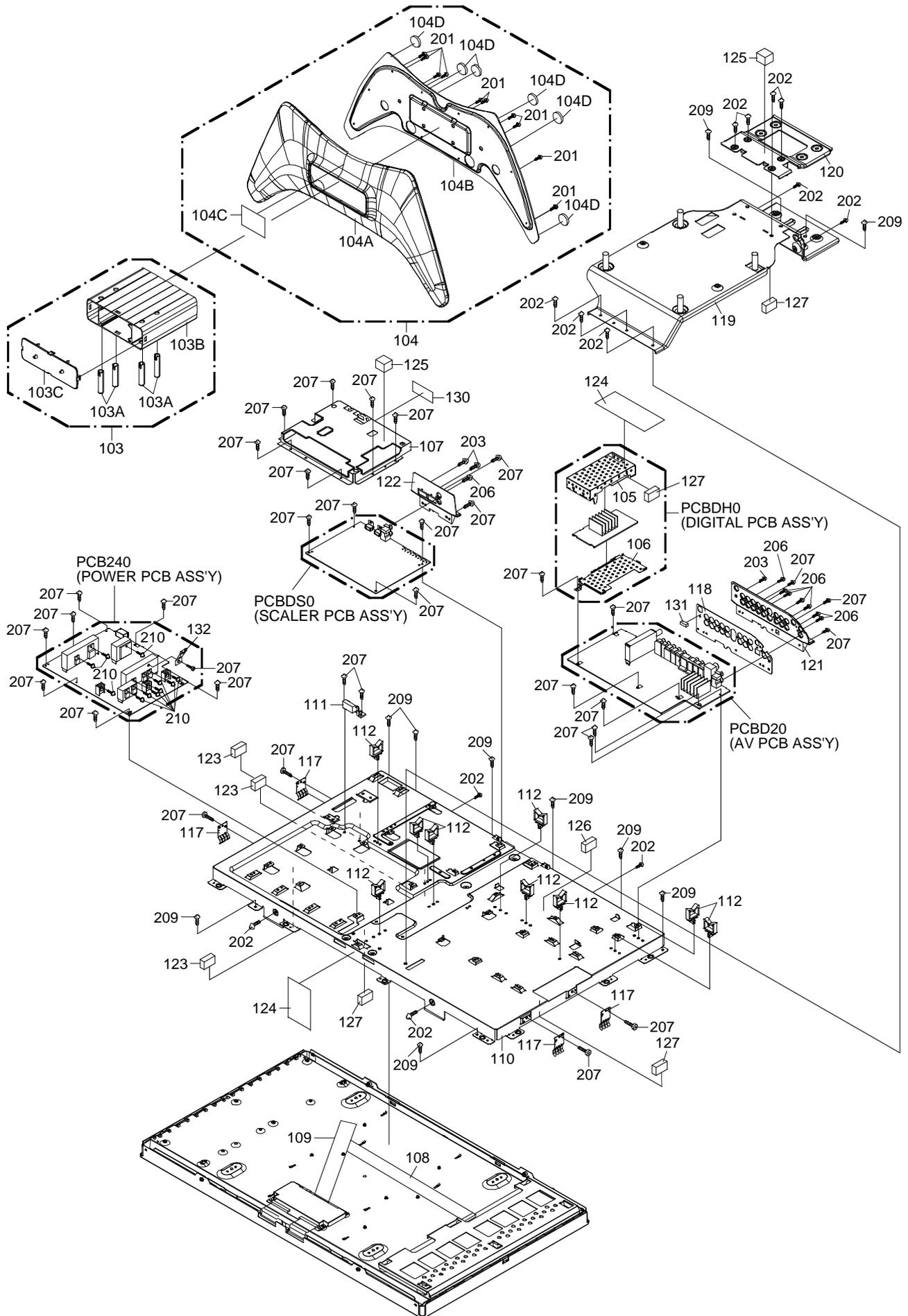


**NOTE:** The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

# MECHANICAL EXPLODED VIEW



# MECHANICAL EXPLODED VIEW



## MECHANICAL REPLACEMENT PARTS LIST

REF No.	PART NO.	DESCRIPTION
101	7A701A749A-S	FRONT, CABI ASSY
102	7A702A227A-S	BACK, CABI ASSY
103	7A764A002A-S	FRAME, STAND ASSY
104	7A704A020A-S	STAND ASSY
108	753WEA0031-S	SHEET, CU
109	753WEA0034-S	SHEET, CU
113	711WPD0702-S	PLATE, BUTTON
115	722678A002-S	SHEET, RATING
116	735WPB0334-S	BUTTON, FRAME
119	761WSA0331-S	ANGLE, BACK-1
	774WPA0010-S	HOLDER, CORD
124	890MP2401A-S	TAPE 50x35
130	890MP2401G-S	TAPE 30x12
201	8110630A0U-S	SCREW TAP TITE(P) BRAZIER 3x10
202	810A14080U-S	SCREW WASHER(A) M4x8
203	810213080S-S	SCREW, PAN M3x8
204	810223080S-S	SCREW, BIND M3x8
205	8110630A0S-S	SCREW TAP TITE(P) BRAZIER 3x10
206	810923080S-S	SCREW, TAP TITE(B) BIND 3X8
207	810923080U-S	SCREW, TAP TITE(B) BIND 3X8
208	8110230A4S-S	SCREW, TAP TITE(P) BIND 3X14
209	8117540A2U-S	SCREW, TAPPING(B0) TRUSS 4X12
	890GDA1A24-S	SCREW
	A3Y107G975-S	INSTRUCTION BOOK KIT
	5188-3634	Remote Control

## ELECTRICAL REPLACEMENT PARTS LIST

REF No.	PART NO.	DESCRIPTION	
<b>PC Board Assemblies</b>			
PCB240	A3Y107G240-S	PCB ASSY(power board)	CEF171A
PCB270	A3Y107G270-S	PCB ASSY(switch operation)	CEF185A
PCBD20	A3Y107GD20-S	PCB ASSY(AV board)	CMF080A
PCBDA0	A3Y107GDA0-S	PCB ASSY(remote control)	CEF182A
PCBDH0	A3Y107GDH0-S	PCB ASSY(digital board)	CEF169A
PCBDS0	A3Y107GDS0-S	PCB ASSY(scalar board)	CEF156A
<b>MISCELLANEOUS</b>			
CD301	06CU123401-S	CORD, CONNECTOR	CU123401
CD303	06CU128001-S	CORD, CONNECTOR	CU128001
CD505	06CU2E5401-S	CORD, CONNECTOR	CU2E5401
CD901	06CU248101-S	CORD, CONNECTOR	CU248101
CD2201	06CU236302-S	CORD, CONNECTOR	CU236302
CD3801	1209119904-S	CORD, SET AC	9119904
CD3802	06CU124001-S	CORD, CONNECTOR	CU124001
CD3803	06CU1C4501-S	CORD, CONNECTOR	CU1C4501
CD3804	06CU174001-S	CORD, CONNECTOR	CU174001
CD3805	06CU145003-S	CORD, CONNECTOR	CU145003
CD3806	06CU274502-S	CORD, CONNECTOR	7PIN L=450MM P=2.0MM
CD3807	06CU2B6601-S	CORD, CONNECTOR	CU2B6601
CD4202	06CU256001-S	CORD, CONNECTOR	CU256001
CD4203	122HOT1801-S	CORD, JUMPER	2HOT1801
CD4204	122HOU1802-S	CORD, JUMPER	2HOU1802
CD7204	06CHRU3201-S	CORD, CONNECTOR	CHRU3201
F501	081PC6R305-S	FUSE	51MS063L
F502	0835A07005-S	MICRO FUSE	20N_700FSW
SP301	0701016002-S	SPEAKER	EAS12D175B
V2301	09E4132004-S	LCD	LK315T3LZ4C

SPEC.NO.	M3Y1-07G
	W643046

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